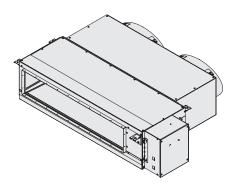
Order No: PAPAMY2509044CE

# Service Manual

Air Conditioner



Indoor Unit S-60PE4R S-71PE4R S-100PE4RN S-125PE4RN S-125PE4RN S-140PE4RN S-140PE4RN S-160PE4RN S-160PE4RN

> Destination Oceania

Please file and use this manual with the Service Manual for Model No. U-60PZ4R5 U-71PZ4R5 U-100PZ4R5 U-125PZ4R5 U-140PZ4R5 U-140PZ4R8 U-140PZ4R8, U-160PZH3R5 U-160PZH3R8 Order No. PAPAMY2509045CE, PAPAMY2308067CE

### **⚠ WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the products dealt with in this service information by anyone else could result in serious injury or death.

### IMPORTANT SAFETY NOTICE =

There are special components used in this equipment which are important for safety. These parts are marked by  $\triangle$  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

### **!** CAUTION

R32 REFRIGERANT – This Air Conditioner contains and operates with refrigerant R32. THIS PRODUCT MUST ONLY BE INSTALLED OR SERVICED BY QUALIFIED PERSONNEL.

Refer to Commonwealth, State, Territory and local legislation, regulations, codes, installation & operation manuals, before the installation, maintenance and/or service of this product.



### **Safety Precautions**

- Read the following "SAFETY PRECAUTIONS" carefully before installation.
- Electrical work must be installed by a licensed electrician. Be sure to use the correct rating of the power plug and main circuit for the model to be installed.
- The caution items stated here must be followed because these important contents are related to safety. The meaning of each indication used is as below.
  - Incorrect installation due to ignoring of the instruction will cause harm or damage, and the seriousness is classified by the following indications.

| <b>⚠ WARNING</b> | This indication shows the possibility of causing death or serious injury.             |
|------------------|---|
| <b>∴</b> CAUTION | This indication shows the possibility of causing injury or damage to properties only. |

The items to be followed are classified by the symbols:

cause fire or electrical shock.

| $\bigcirc$ | Symbol with white background denotes item that is PROHIBITED.      |
|------------|--|
| 0 0        | Symbol with dark background denotes item that must be carried out. |

• Carry out test running to confirm that no abnormality occurs after the installation. Then, explain to user the operation, care and maintenance as stated in instructions. Please remind the customer to keep the operating instructions for future reference.

| $\Diamond$ | Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. Any unfit method or using incompatible material may cause product damage, burst and serious injury.   |
|------------|--|
| $\Diamond$ | Do not install outdoor unit near handrail of veranda. When installing air-conditioner unit on veranda of a high rise building, child may climb up to outdoor unit and cross over the handrail causing an accident.   |
| $\Diamond$ | Do not use unspecified cord, modified cord, joint cord or extension cord for power supply cord. Do not share the single outlet with other electrical appliances. Poor contact, poor insulation or over current will cause electrical shock or fire.  |
| $\Diamond$ | Do not tie up the power supply cord into a bundle by band. Abnormal temperature rise on power supply cord may happen.  |
| $\bigcirc$ | Do not insert your fingers or other objects into the unit, high speed rotating fan may cause injury.   |
| $\Diamond$ | Do not sit or step on the unit, you may fall down accidentally.  |
| $\bigcirc$ | Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing.  |
| 0          | When installing or relocating air conditioner, do not let any substance other than the specifi ed refrigerant, eg. air etc mix into refrigeration cycle (piping). Mixing of air etc. will cause abnormal high pressure in refrigeration cycle and result in explosion, injury etc.   |
| 0          | Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flame, sparks, or other sources of ignition. Else, it may explode and cause injury or death.   |
| $\Diamond$ | Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury etc.  |
| •          | <ul> <li>For R32 model, use new piping, flare nut and tools which is specified for R32 refrigerant. Using of existing (R22) piping, flare nut and tools may cause abnormally high pressure in the refrigerant cycle (piping), and possibly result in explosion and injury. For R32 and R410A, the same flare nut on the outdoor unit side and pipe can be use.</li> <li>Since the working pressure for R32/R410A is higher than that of refrigerant R22 models, replacing conventional piping and flare nuts on the outdoor unit side are recommended.</li> <li>If reuse piping is unavoidable, refer to instruction REFRIGERANT INSTALLATION (IN CASE OF REUSING EXISTING REFRIGERANT PIPING) in outdoor unit installation manual.</li> <li>Thickness for copper pipes used with R32 must be more than 0.8 mm. Never use copper pipes thinner than 0.8 mm. For copper pipe ø15.88 or more use copper pipe thickness 1.0 mm and above. Refer to REFRIGERANT INSTALLATION piping thickness table.</li> <li>It is desirable that the amount of residual oil less than 40 mg/10 m.</li> </ul> |
| 0          | Engage authorized dealer or specialist for installation. If installation done by the user is incorrect, it will cause water leakage, electrical shock or fire.   |
| 0          | For refrigeration system work, install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock or fire.  |
| 0          | Use the attached accessories parts and specifi ed parts for installation. Otherwise, it will cause the set to fall, water leakage, fire or electrical shock.   |
| 0          | Install at a strong and firm location which is able to withstand weight of the set. If the strength is not enough or installation is not properly done, the set will drop and cause injury.  |
| 0          | For electrical work, follow the national regulation, legislation and this installation instruction. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in electrical work, it will cause electrical shock or fire.  |
| 0          | Do not use joint cable for indoor / outdoor connection cable. Use the specified indoor/outdoor connection cable, refer to instruction <b>ELECTRICAL WIRING</b> and connect tightly for indoor/outdoor connection. Clamp the cable so that no external force will have impact on the terminal. If connection or fixing is not perfect, it will cause heat up or fire at the connection.   |
| 0          | Wire routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will   |

# WARNING This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD), with sensitivity of 30mA at 0.1 sec or less. Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown. During installation, install the refrigerant piping properly before running the compressor. Operation of compressor without fixing refrigeration piping and valves at opened position will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in

- explosion, injury etc.

  During pump down operation, stop the compressor before removing the refrigeration piping. Removal of refrigeration piping while compressor is operating and valves are opened will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.
- Tighten the flare nut with torque wrench according to specified method. If the flare nut is over-tightened, after a long period, the flare may break and cause refrigerant gas leakage.
- After completion of installation, confirm there is no leakage of refrigerant gas. It may generate toxic gas when the refrigerant contacts with fire.
- Ventilate if there is refrigerant gas leakage during operation. It may cause toxic gas when the refrigerant contacts with fire.
- Be aware that refrigerants may not contain an odour.

Keep any required ventilation openings clear of obstruction.

This equipment must be properly earthed. Earth line must not be connected to gas pipe, water pipe, earth of lightning rod and telephone. Otherwise, it may cause electrical shock in case of equipment breakdown or insulation breakdown.

|            | <u>-</u>  |
|------------|---|
|            | <u> </u>  |
| $\bigcirc$ | Do not install the unit at place where leakage of flammable gas may occur. In case gas leaks and accumulates at surrounding of the unit, it may cause fire.   |
| 0          | Prevent liquid or vapor from entering sumps or sewers since vapor is heavier than air and may form suffocating atmospheres.   |
| 0          | Do not overcharge the unit, refer to gas charge specification in Outdoor Installation manual. Overcharge will cause over current and damage to compressor.  |
| $\Diamond$ | Do not release refrigerant during piping work for installation, re-installation and during repairing a refrigeration parts.  Take care of the liquid refrigerant, it may cause frostbite.   |
| 0          | Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc.   |
| 0          | Do not touch the sharp aluminium fin, sharp parts may cause injury.   |
| 0          | Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.   |
| 0          | Select an installation location which is easy for maintenance. Incorrect installation, service or repair of this air conditioner may increase the risk of rupture and this may result in loss damage or injury and/or property.   |
| 0          | Power supply connection to the room air conditioner. Use power supply cord type designation 60245 IEC 57 or heavier cord. Connect the power supply cord of the air conditioner to a circuit breaker for the permanent connection. It must be a double pole switch with a minimum 3.0mm contact gap. Power supply point should be in easily accessible place for power disconnection in case of emergency. |
| 0          | Installation work. It may need two people to carry out the installation work.   |
|            |   |

### **Precaution for Using R32 Refrigerant**

to minimize the likelihood hydraulic shock damaging the system.

Protect the refrigerating system from accidental rupture due to moving furniture or reconstruction activities.

To ensure no leaking, field-made refrigerant joints indoors shall be tightness tested. The test method shall have a sensitivity of 5 grams per year of refrigerant or better under a pressure of at least 0,25 times the maximum allowable pressure (>1.04 MPa, max 4.15 MPa).

0

No leak shall be detected.

• The basic installation work procedures are the same as conventional refrigerant (R410A, R22) models. However, pay careful attention to the following points:

### **WARNING** Do not perform flare connection inside a building or dwelling or room, when joining the heat exchanger of indoor unit with interconnecting piping. Refrigerant connection inside a building or dwelling or room must be made by brazing or welding. Joint connection of indoor unit by flaring method can only be made at outdoor or at outside of a building or dwelling or room. Flare connection may cause gas leak and flammable atmosfere. The appliance shall be stored, installed and operated in a well ventilated room with indoor floor area larger than $A_{\min}$ (m²) [refer to Check of Density Limit] and without any continuously operating ignition source. Keep away from open flames, any operating gas appliances or any operating electric heater. Else, it may explode and cause injury or death. The mixing of different refrigerants within a system is prohibited. Models that use refrigerant R32 and R410A have a different charging port thread diameter to prevent erroneous charging with refrigerant R22 and for safety. Therefore, check beforehand. [The charging port thread diameter for R32 and R410A is 12.7 mm (1/2 inch - 20 UNF)]. Ensure that foreign matter (oil, water, etc.) does not enter the piping. 0 Also, when storing the piping, securely seal the opening by pinching, taping, etc. (Handling of R32 is similar to R410A.) Operation, maintenance, repairing and refrigerant recovery should be carried out by trained and certified personnel in the use of flammable refrigerants and as recommended by the manufacturer. Any personnel conducting an operation, servicing or maintenance on a system or associated parts of the equipment should be trained and certified. Any part of refrigerating circuit (evaporators, air coolers, AHU, condensers or liquid receivers) or piping should not be located in the 0 proximity of heat sources, open flames, operating gas appliance or an operating electric heater. The user/owner or their authorized representative shall regularly check the alarms, mechanical ventilation and detectors, at least once a year, where as required by national regulations, to ensure their correct functioning. 0 A logbook shall be maintained. The results of these checks shall be recorded in the logbook. In case of ventilations in occupied spaces shall be checked to confirm no obstruction. Before a new refrigerating system is put into service, the person responsible for placing the system in operation should ensure that trained and certified operating personnel are instructed on the basis of the instruction manual about the construction, supervision, operation and maintenance of the refrigerating system, as well as the safety measures to be observed, and the properties and handling of the refrigerant used. The general requirement of trained and certified personnel are indicated as below: a) Knowledge of legislation, regulations and standards relating to flammable refrigerants; and, b) Detailed knowledge of and skills in handling flammable refrigerants, personal protective equipment, refrigerant leakage prevention, handling of cylinders, charging, leak detection, recovery and disposal; and, c) Able to understand and to apply in practice the requirements in the national legislation, regulations and standards; and, d) Continuously undergo regular and further training to maintain this expertise. Air-conditioner piping in the occupied space shall be installed in such a way to protect against accidental damage in operation and 0 0 Precautions shall be taken to avoid excessive vibration or pulsation to refrigerating piping. Ensure protection devices, refrigerating piping and fittings are well protected against adverse environmental effects (such as the danger of water collecting and freezing in relief pipes or the accumulation of dirt and debris). Expansion and contraction of long runs piping in refrigerating systems shall be designed and installed securely (mounted and guarded)

### **↑** CAUTION

1. General

O

A

0

A

A

0

0

O

0

- · Must ensure the installation of pipe-work shall be kept to a minimum. Avoid use dented pipe and do not allow acute bending.
- Must ensure that pipe-work shall be securely mounted and guarded from physical damage.
- Must comply with national gas regulations, state municipal rules and legislation. Notify relevant authorities in accordance with all applicable regulations.
- Must ensure mechanical connections be accessible for maintenance purposes.
- · In cases that require mechanical ventilation, ventilation openings shall be kept clear of obstruction.
- · When disposal of the product, do follow to the precautions in #10 and comply with national regulations.
- In case of field charge, the effect on refrigerant charge caused by the different pipe length has to be quantified, measured and labelled.

Always contact to local municipal offices for proper handling.

- · Ensure the actual refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed.
- Ensure refrigerant charge not to leak.
- Wear appropriate protective equipment, including respiratory protection, as conditions warrant.
- · Keep all sources of ignition and hot metal surfaces away.
- Explosion-proof electronic components shall only be replaced with parts specified by the appliance manufacturer. Replacement with
  other parts may result in the ignition of refrigerant in the event of a leak.

### 2. Servicing

2-1. Qualification of workers

 Any qualified person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification.

Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance
of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.

Servicing shall be performed only as recommended by the manufacturer.

The system is inspected, regularly supervised and maintained by a trained and certified service personnel who is employed by the person user or party responsible.

2-2. Checks to the area

• Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimised.

For repair to the refrigerating system, the precautions in #2-3 to #2-7 must be followed before conducting work on the system.

2-3. Work procedure
Work shall be underto

Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapour being present while
the work is being performed.

2-4. General work area

All maintenance staff and others working in the local area shall be instructed and supervised on the nature of work being carried out.
Avoid working in confined spaces. Always ensure away from source, at least 2 meter of safety distance, or zoning of free space area of at least 2 meter in radius.

2-5. Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of
potentially flammable atmospheres.

• Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non sparking, adequately sealed or intrinsically safe.

In case of leakage/spillage happened, immediately ventilate area and stay upwind and away from spill/release.

In case of leakage/spillage happened, do notify persons down wind of the leaking/spill, isolate immediate hazard area and keep unauthorized personnel out.

2-6. Presence of fire extinguisher

 If any hot work is to be conducted on the refrigerating equipment or any associated parts, appropriate fi re extinguishing equipment shall be available at hand.

Have a dry powder or CO<sub>2</sub> fire extinguisher adjacent to the charging area.

2-7. No ignition sources

No person carrying out work in relation to a refrigerating system which involves exposing any pipe work that contains or has
contained flammable refrigerant shall use any sources of ignition in such a manner that it can lead to the risk of fire or explosion.
They must not be smoking when carrying out such work.

All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which refrigerant can possibly be released to the surrounding space.

Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or
ignition risks.

"No Smoking" signs shall be displayed.

2-8. Ventilated area

• Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work.

• A degree of ventilation shall continue during the period that the work is carried out.

· The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

2-9. Checks to the refrigerating equipment

- · Where electrical components are being changed, they shall be fit for the purpose and to the correct specification.
- At all times the manufacturer's maintenance and service guidelines shall be followed.
- If in doubt consult the manufacturer's technical department for assistance.
- · The following checks shall be applied to installations using flammable refrigerants.
  - The refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed.
  - The ventilation machinery and outlets are operating adequately and are not obstructed.
  - If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant.
  - Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected.
  - Refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which can corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are properly protected against being so corroded.

### **CAUTION**

### 2-10 Checks to electrical devices

- Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures.
- Initial safety checks shall include but not limit to:-
  - That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking.
  - That there is no live electrical components and wiring are exposed while charging, recovering or purging the system.
  - That there is continuity of earth bonding.
- At all times the manufacturer's maintenance and service guidelines shall be followed.
- If in doubt consult the manufacturer's technical department for assistance.
- If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt
- If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used.
- The owner of the equipment must be informed or reported so all parties are advised thereinafter.
- A

O

- Sealed electrical components
- Sealed electrical components shall not be repaired.
- 4.
- 0

0

0

- Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects
- The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.
- 5. Detection of flammable refrigerants
  - Under no circumstances shall potential sources of ignition be used in the searching or detection of refrigerant leaks.
  - · A halide torch (or any other detector using a naked flame) shall not be used.
  - The following leak detection methods are deemed acceptable for all refrigerant systems.
  - No leaks shall be detected when using detection equipment with a sensitivity of 5 grams per year of refrigerant or better under a pressure of at least 0,25 times the maximum allowable pressure (>1.04 MPa, max 4.15 MPa) for example, a universal sniffer.
  - Electronic leak detectors may be used to detect flammable refrigerants, but the sensitivity can be inadequate, or can need re-calibration
    - (Detection equipment shall be calibrated in a refrigerant-free area.)
  - Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
  - Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed.
  - Leak detection fluids are also suitable for use with most refrigerants, for example, bubble method and fluorescent agent method. The use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work.

  - If a leak is suspected, all naked flames shall be removed/extinguished.

    If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. The precautions in #6 must be followed to remove the refrigerant.
- 6. Refrigerant removal and circuit evacuation
- When breaking into the refrigerant circuit to make repairs or for any other purpose conventional procedures shall be used. However, it is important that best practice is followed since flammability is a consideration. The following procedure shall be adhered to:
  - Safely remove refrigerant following local and national regulations

  - Evacuate
     Purge the circuit with inert gas
  - 4. Evacuate
  - 5. Continuously flush with inert gas when using flame to open circuit
  - Open the circuit
- The refrigerant charge shall be recovered into the correct recovery cylinders.
- Compressed air or oxygen shall not be used for purging refrigerant systems, only use OFN (oxygen free nitrogen) for this task.
- Purging of the refrigerant circuit shall be achieved by breaking the vacuum in the system with inert gas and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to vacuum.
- This process shall be repeated until no refrigerant is within the system.
- The system shall be vented down to atmospheric pressure to enable work to take place.
- Ensure that the outlet of the vacuum pump is not close to any potential ignition sources and there is ventilation available.
- 7. Charging procedures
- In addition to conventional charging procedures, the following requirements shall be followed.
  - Ensure that contamination of different refrigerants does not occur when using charging equipment.
  - Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them.
  - Cylinders shall be kept in an appropriate position according to the instructions.
  - Ensure that the refrigerating system is earthed prior to charging the system with refrigerant.
  - Label the system when charging is complete (if not already labelled).
- Extreme care shall be taken not to over fill the refrigerating system. Prior to recharging the system it shall be pressure tested with OFN (refer to #6).
- The system shall be leak-tested on completion of charging but prior to commissioning.
- A follow up leak test shall be carried out prior to leaving the site.
- Electrostatic charge may accumulate and create a hazardous condition when charging and discharging the refrigerant. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before charging/discharging.

### **↑** CAUTION

- 8. Decommissioning
- Before carrying out this procedure, it is essential that the technician is completely familiar with the
  equipment and all its details.
- It is recommended good practice that all refrigerants are recovered safely.
- Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of recovered refrigerant.
- It is essential that electrical power is available before the task is commenced.
  - a) Become familiar with the equipment and its operation.
  - b) Isolate system electrically.
  - c) Before attempting the procedure ensure that:
    - mechanical handling equipment is available, if required, for handling refrigerant cylinders;
    - all personal protective equipment is available and being used correctly;
    - the recovery process is supervised at all times by a competent person;
    - recovery equipment and cylinders conform to the appropriate standards.



- d) Pump down refrigerant system, if possible.
- e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
- f) Make sure that cylinder is situated on the scales before recovery takes place.
- g) Start the recovery machine and operate in accordance with instructions.
- b) Do not over fill cylinders. (No more than 80 % volume liquid charge).
- i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
- j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
- k) Recovered refrigerant shall not be charged into another refrigerating system unless it has been cleaned and checked.
- Electrostatic charge may accumulate and create a hazardous condition when charging or discharging the refrigerant.
  - To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before charging/discharging.
- 9. Labelling



- Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant.
- The label shall be dated and signed.
- Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

### 10. Recovery

- When removing refrigerant from a system, either for servicing or decommissioning, it is required to follow good practice that all refrigerants are removed safely.
- When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed.
- Ensure that the correct number of cylinders for holding the total system charge are available.
- All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant).
- Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order.
- Recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

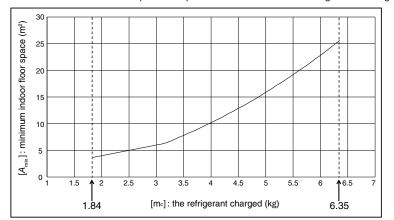
0

- The recovery equipment shall be in good working order with a set of instructions concerning the
  equipment that is at hand and shall be suitable for the recovery of concerning the equipment that is at
  hand and shall be suitable for the recovery of flammable refrigerants. Consult manufacturer if in doubt.
- In addition, a set of calibrated weighing scales shall be available and in good working order.
- · Hoses shall be complete with leak-free disconnect couplings and in good condition.
- The recovered refrigerant shall be processed according to the local legislation in the correct recovery cylinder, and the relevant Waste Transfer Note arranged.
- Do not mix refrigerants in recovery units and especially not in cylinders.
- If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant.
- The compressor body shall not be heated by an open flame or other ignition sources to accelerate this
  process. Draining of oil from a system shall be carried out safely.

### **Check of Density Limit**

The refrigerant (R32), which is used in the air conditioner, is a flammable refrigerant. So the requirements for installation space of appliance are determined according to the refrigerant charge amount [m<sub>c</sub>] used in the appliance.

Regarding the refrigerant charge amount [m<sub>c</sub>] used in the appliance, refer to the installation instructions for the outdoor unit. The minimum indoor floor space compared with the amount of refrigerant is roughly as follows:



| $A_{\text{min}} = (m_c / (2.5 \times (LFL)^{(5/4)} \times h_0))^2$ | ** not less than safety |
|--|-------------------------|
| ( ''''''   | factor margin           |

A<sub>min</sub> = Required minimum room area, in m<sup>2</sup>

= Refrigerant charge in appliance, in kg LFL = Lower flammability limit (0.307 kg/m³)

= Release height is 2.2m.

= Concentration factor with a value of 0.75

The required minimum room area, Amin, shall also be governed by the safety factor margin formula below:

$$\left(A_{\min} = m_c / (CF \times LFL \times h_0)\right)$$

The higher value shall be taken when determining the room area.

m<sub>c</sub> ≤ 1.84 : Can be installed

 $1.84 < m_c \le m_{max}$ : Can be installed above "Density Limit Line" \*1 \*1 Refer to table and the installation instructions of indoor unit when deciding "Density Limit Line".

| [m <sub>c</sub> ] kg | [A <sub>min</sub> ] (m <sup>2</sup> ) |
|----------------------|---------------------------------------|
| 1.84                 | 3.7                                   |
| 1.9                  | 3.8                                   |
| 2.0                  | 4.0                                   |
| 2.1                  | 4.2                                   |
| 2.2                  | 4.4                                   |
| 2.3                  | 4.6                                   |
| 2.4                  | 4.8                                   |
| 2.5                  | 5.0                                   |
| 2.6                  | 5.2                                   |
| 2.7                  | 5.4                                   |

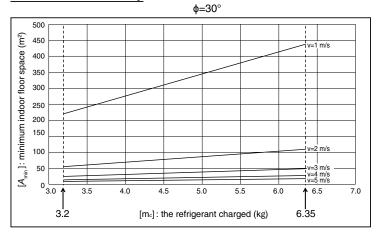
|                      | r                              |  |
|----------------------|--------------------------------|--|
| [m <sub>c</sub> ] kg | $[A_{\min}]$ (m <sup>2</sup> ) |  |
| 2.8                  | 5.6                            |  |
| 2.9                  | 5.8                            |  |
| 3.0                  | 6.0                            |  |
| 3.1                  | 6.2                            |  |
| 3.2                  | 6.5                            |  |
| 3.3                  | 6.9                            |  |
| 3.4                  | 7.4                            |  |
| 3.5                  | 7.8                            |  |
| 3.6                  | 8.3                            |  |
| 3.7                  | 8.7                            |  |

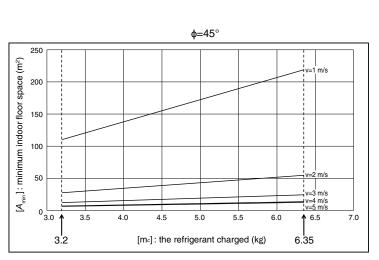
| [m <sub>c</sub> ] kg | [A <sub>min</sub> ] (m <sup>2</sup> ) |
|----------------------|---------------------------------------|
| 3.8                  | 9.2                                   |
| 3.9                  | 9.7                                   |
| 4.0                  | 10.2                                  |
| 4.1                  | 10.7                                  |
| 4.2                  | 11.2                                  |
| 4.3                  | 11.8                                  |
| 4.4                  | 12.3                                  |
| 4.5                  | 12.9                                  |
| 4.6                  | 13.4                                  |
|                      |                                       |

| [m <sub>c</sub> ] kg | [Amin] (m <sup>2</sup> ) |
|----------------------|--------------------------|
| 4.7                  | 14.0                     |
| 4.8                  | 14.6                     |
| 4.9                  | 15.2                     |
| 5.0                  | 15.9                     |
| 5.1                  | 16.5                     |
| 5.2                  | 17.2                     |
| 5.3                  | 17.8                     |
| 5.4                  | 18.5                     |
| 5.5                  | 19.2                     |

| [m <sub>c</sub> ] kg | [Amin] (m <sup>2</sup> ) |
|----------------------|--------------------------|
| 5.6                  | 19.9                     |
| 5.7                  | 20.6                     |
| 5.8                  | 21.3                     |
| 5.9                  | 22.1                     |
| 6.0                  | 22.8                     |
| 6.1                  | 23.6                     |
| 6.2                  | 24.4                     |
| 6.3                  | 25.2                     |
| 6.35                 | 25.6                     |

### For PE4\*A Series Only

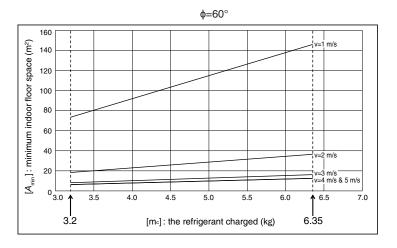


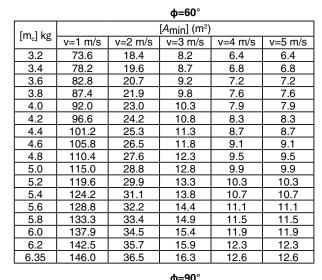


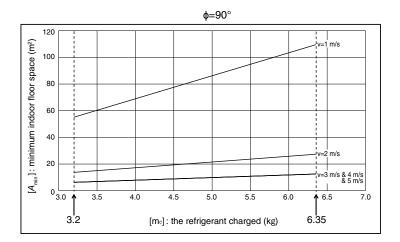
### $[A_{min}]$ $(m^2)$ $[m_c]$ kg v=1 m/s v=2 m/s v=3 m/s v=4 m/s v=5 m/s 3.2 220.7 55.2 24.6 13.8 8.9 3.4 234.5 58.7 26.1 14.7 9.4 248.3 15.6 10.0 3.6 62.1 3.8 262.0 65.5 29.2 16.4 10.5 4.0 275.8 69.0 30.7 17.3 11.1 4.2 289.6 72.4 18.1 11.6 32.2 75.9 44 303.4 33.8 19.0 12.2 4.6 317.2 79.3 35.3 19.9 12.7 4.8 331.0 82.8 36.8 20.7 13.3 5.0 344.8 86.2 38.4 21.6 13.8 5.2 89.7 39.9 14.4 358.6 22.5 23.3 372.4 93.1 41.4 14.9 5.4 5.6 386.2 96.6 43.0 24.2 15.5 399.9 100.0 44.5 25.0 16.0 5.8 25.9 103.5 6.0 <u>413.7</u> 46.0 16.6 6.2 427.5 106.9 47.5 26.8 17.1 6.35 437.9 109.5 48.7 27.4 17.6

φ=30°

|                      | φ=45°       |         |         |         |         |  |
|----------------------|-------------|---------|---------|---------|---------|--|
| [m ] ka              | [Amin] (m²) |         |         |         |         |  |
| [m <sub>c</sub> ] kg | v=1 m/s     | v=2 m/s | v=3 m/s | v=4 m/s | v=5 m/s |  |
| 3.2                  | 110.4       | 27.6    | 12.3    | 6.9     | 6.4     |  |
| 3.4                  | 117.3       | 29.4    | 13.1    | 7.4     | 6.8     |  |
| 3.6                  | 124.2       | 31.1    | 13.8    | 7.8     | 7.2     |  |
| 3.8                  | 131.0       | 32.8    | 14.6    | 8.2     | 7.6     |  |
| 4.0                  | 137.9       | 34.5    | 15.4    | 8.7     | 7.9     |  |
| 4.2                  | 144.8       | 36.2    | 16.1    | 9.1     | 8.3     |  |
| 4.4                  | 151.7       | 38.0    | 16.9    | 9.5     | 8.7     |  |
| 4.6                  | 158.6       | 39.7    | 17.7    | 10.0    | 9.1     |  |
| 4.8                  | 165.5       | 41.4    | 18.4    | 10.4    | 9.5     |  |
| 5.0                  | 172.4       | 43.1    | 19.2    | 10.8    | 9.9     |  |
| 5.2                  | 179.3       | 44.9    | 20.0    | 11.3    | 10.3    |  |
| 5.4                  | 186.2       | 46.6    | 20.7    | 11.7    | 10.7    |  |
| 5.6                  | 193.1       | 48.3    | 21.5    | 12.1    | 11.1    |  |
| 5.8                  | 200.0       | 50.0    | 22.3    | 12.5    | 11.5    |  |
| 6.0                  | 206.9       | 51.8    | 23.0    | 13.0    | 11.9    |  |
| 6.2                  | 213.8       | 53.5    | 23.8    | 13.4    | 12.3    |  |
| 6.35                 | 219.0       | 54.8    | 24.4    | 13.7    | 12.6    |  |







|                      | φ=90°                    |         |         |         |         |  |
|----------------------|--------------------------|---------|---------|---------|---------|--|
| [m ] kg              | [A <sub>min</sub> ] (m²) |         |         |         |         |  |
| [m <sub>c</sub> ] kg | v=1 m/s                  | v=2 m/s | v=3 m/s | v=4 m/s | v=5 m/s |  |
| 3.2                  | 55.2                     | 13.8    | 6.4     | 6.4     | 6.4     |  |
| 3.4                  | 58.7                     | 14.7    | 6.8     | 6.8     | 6.8     |  |
| 3.6                  | 62.1                     | 15.6    | 7.2     | 7.2     | 7.2     |  |
| 3.8                  | 65.5                     | 16.4    | 7.6     | 7.6     | 7.6     |  |
| 4.0                  | 69.0                     | 17.3    | 7.9     | 7.9     | 7.9     |  |
| 4.2                  | 72.4                     | 18.1    | 8.3     | 8.3     | 8.3     |  |
| 4.4                  | 75.9                     | 19.0    | 8.7     | 8.7     | 8.7     |  |
| 4.6                  | 79.3                     | 19.9    | 9.1     | 9.1     | 9.1     |  |
| 4.8                  | 82.8                     | 20.7    | 9.5     | 9.5     | 9.5     |  |
| 5.0                  | 86.2                     | 21.6    | 9.9     | 9.9     | 9.9     |  |
| 5.2                  | 89.7                     | 22.5    | 10.3    | 10.3    | 10.3    |  |
| 5.4                  | 93.1                     | 23.3    | 10.7    | 10.7    | 10.7    |  |
| 5.6                  | 96.6                     | 24.2    | 11.1    | 11.1    | 11.1    |  |
| 5.8                  | 100.0                    | 25.0    | 11.5    | 11.5    | 11.5    |  |
| 6.0                  | 103.5                    | 25.9    | 11.9    | 11.9    | 11.9    |  |
| 6.2                  | 106.9                    | 26.8    | 12.3    | 12.3    | 12.3    |  |
| 6.35                 | 109.5                    | 27.4    | 12.6    | 12.6    | 12.6    |  |
|                      |                          |         |         |         |         |  |

 $A_{\min} = m_c / (CF \times LFL \times h_{ra})$ 

 $\begin{array}{lll} A_{\min}: & \text{Required minimum room area, in } m^2 \\ m_c & : & \text{Refrigerant charge in appliance, in kg} \\ CF & : & \text{Concentration factor with a value of 0.75} \\ LFL & : & \text{Lower flammability limit (0.307 kg/m}^3) \\ h_{\text{ra}} & : & \text{estimated reaching height of airflow, in m.} \end{array}$ 

 $h_{ra} = h_a + h_d$  \*  $h_{ra}$  values max. at 2.2m only.

 $h_{\rm a}$ : Height of upper edge of the air discharge opening = 0m (installation of air discharge at floor only)

 $h_d$ : Dynamic reaching height of airflow in m

|               |      | <u> </u> | \   |   |
|---------------|------|----------|---|---|
| $ _{h}$       | la = | 1+       | 2,35                                      | $x (0,0183 \times v^2 \times \sin^2 \varphi)$ |
| $n_{\rm d} =$ | u    | L        | $LFL\left(1-\frac{1,2}{\rho}\right)+0.05$ | (1,1)   |
| (             |      | (        | ( ' )                                     | '   |

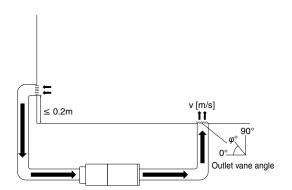
ho~ : Gas density of the refrigerant at 1 atm pressure and 25 °C, which is 2.13 kg/m³

v : Circulation airflow velocity in m/s

 $\phi~$  : Circulation airflow elevation angle from horizontal in degrees  $0^{\circ} < \phi \leq 90^{\circ}$ 

NOTE

Installation with lower edge of air inlet duct within 0.2m from the floor only



### **Precautions for Installation Using New Refrigerant**

### 1. Care regarding tubing

### (1) Process tubing

- Material: Use seamless phosphorous deoxidized copper tube for refrigeration. Wall thickness shall comply with the applicable legislation. For tubes of ø22.22 or larger, use the material of temper 1/2H or H (Hard copper tube). Do not bend the hard copper tube.
- For the renewal tubing size, refer to the Technical Data.
- Use a tube cutter when cutting the tubing, and be sure to remove any flash. This also applies to distribution joints (optional).
- When bending tubing, use a bending radius that is 4 times the outer diameter of the tubing or larger.

Use sufficient care in handling the tubing. Seal the tubing ends with caps or tape to prevent dirt, moisture, or other foreign substances from entering. These substances can result in system malfunction.

(2) Prevent impurities including water, dust and oxide from entering the tubing. Impurities can cause R32 refrigerant deterioration and compressor defects. Due to the features of the refrigerant and refrigerating machine oil, the prevention of water and other impurities becomes more important than ever.

### 2. Be sure to recharge the refrigerant only in liquid form.

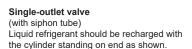
(1) Since refrigerant composition changes and performance decreases when gas leaks, collect the remaining refrigerant and recharge the required total amount of new refrigerant after fixing the leak.

### 3. Different tools required

(1) Tool specifications have been changed due to the characteristics of R32. Some tools for R22- and R407C-type refrigerant systems cannot be used.

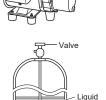
| Item           | Different tools?<br>(From R22 and R407C) | R410A tools compatible with R32? | Remarks   |
|----------------|--|----------------------------------|---|
| Manifold gauge | Yes                                      | Yes                              | Types of refrigerant, refrigerating machine oil, and pressure gauge are different.  |
| Charge hose    | Yes                                      | Yes                              | To resist higher pressure, material must be changed.  |
| Vacuum pump    | Yes                                      | Yes                              | Use a conventional vacuum pump if it is equipped with a check valve. If it has no check valve, purchase and attach a vacuum pump adapter.   |
| Leak detector  | Yes                                      | Yes                              | Leak detectors for CFC and HCFC that react to chlorine do not function because R32 and R410A contains no chlorine. Leak detectors for HFC can be used for R32 and R410A.  |
| Flaring oil    | Yes                                      | Yes                              | For systems that use R22, apply mineral oil (Suniso oil) to the flare nuts on the tubing to prevent refrigerant leakage. For machines that use R32 or R410A, apply synthetic oil (ether oil) to the flare nuts. |

<sup>\*</sup> Using tools for R22 and R407C can cause defects.









### Important Information Regarding The Refrigerant Used

This product contains fluorinated greenhouse gases. Do not vent gases into the atmosphere.

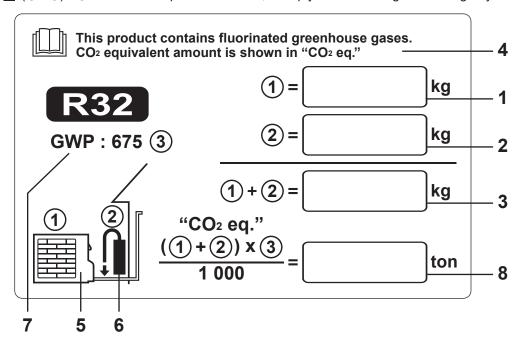
Refrigerant type: R32 GWP<sup>(1)</sup> value: 675

(1)GWP = global warming potential

Periodical inspections for refrigerant leaks may be required depending on European or local legislation. Please contact your local dealer for more information.

Fill in the blanks below with the indelible ink pens.

- ①: the factory refrigerant charge of the product
- 2: the additional refrigerant amount charged in the field
- 1 + 2 : the total refrigerant charge
- (1+2) x3/1000: CO<sub>2</sub> equivalent in tons; multiply the total refrigerant charge by GWP value, then divided by 1000.



- 1. Factory refrigerant charge of the product: see unit name plate
- 2. Additional refrigerant amount charged in the field\*
- 3. Total refrigerant charge
- 4. Contains fluorinated greenhouse gases
- 5. Outdoor unit
- 6. Refrigerant cylinder and manifold for charging
- 7. GWP (global warming potential) of the refrigerant used in this product
- 8. CO<sub>2</sub> equivalent of fluorinated greenhouse gases contained in this product

<sup>\*</sup> See "5. REFRIGERANT INSTALLATION" on page 1-11-2-1-14 to 1-11-2-1-17.

### **Combination of Indoor and Outdoor Units**

Single-phase

|    | 60        | 71        | 100        | 125        | 140        |
|----|-----------|-----------|------------|------------|------------|
| E4 | S-60PE4R  | S-71PE4R  | S-100PE4R  | S-125PE4R  | S-140PE4R  |
|    |           | U-71P74R5 | S-100PE4RN | S-125PE4RN | S-140PE4RN |
|    | U-60PZ4R5 |           | U-100PZ4R5 | U-125PZ4R5 | U-140PZ4R5 |

**PZH3**Single-phase

|    | 71         | 100         | 125         | 140         | 160         |
|----|------------|-------------|-------------|-------------|-------------|
|    |            |             |             |             | S-160PE4R   |
| E4 | S-71PE4R   | S-100PE4R   | S-125PE4R   | S-140PE4R   | S-160PE4RN  |
| E4 | U-71PZH3R5 | U-100PZH3R5 | U-125PZH3R5 | U-140PZH3R5 | S-160PE4RA  |
|    |            |             |             |             | U-160PZH3R5 |

PZ4

3-phase

|    | 100        | 125        | 140        |
|----|------------|------------|------------|
|    | S-100PE4R  | S-125PE4R  | S-140PE4R  |
| E4 | S-100PE4RN | S-125PE4RN | S-140PE4RN |
|    | U-100PZ4R8 | U-125PZ4R8 | U-140PZ4R8 |

PZH3

3-phase

|    | 100         | 125         | 140         | 160         |
|----|-------------|-------------|-------------|-------------|
|    |             |             |             | S-160PE4R   |
|    | S-100PE4R   | S-125PE4R   | S-140PE4R   | S-160PE4RN  |
| E4 | U-100PZH3R8 | U-125PZH3R8 | U-140PZH3R8 | S-160PE4RA  |
|    |             |             |             | U-160PZH3R8 |

### --- CONTENTS ---

| Section 1.  | SPECIFICATIONS   | 1-1-1  |
|-------------|--|--------|
|             | 1-1. Unit Specifications   | 1-1-2  |
|             | 1-2. Major Component Specifications  |        |
|             | 1-3. Dimensional Data  |        |
|             | 1-4. Operating Range   |        |
|             | 1-5. Noise Criterion Curves  | 1-5-1  |
|             | 1-6. Installation Instructions   | 1-6-1  |
| Section 2.  | TEST RUN   | 2-1    |
|             | 2-1. Preparing for Test Run  |        |
|             | 2-2. Precautions   |        |
|             | 2-3. Caution   | 2-4    |
|             | 2-4. Test Run Procedure  | 2-4    |
|             | 2-5. Items to Check Before the Test Run  | 2-5    |
|             | 2-6. Test Run Using the Remote Controller                                      | 2-5    |
|             | 2-7. Contents of Remote Controller Switch Alarm Display                        | 2-8    |
|             | 2-8. System Control  |        |
| Section 3   | ELECTRICAL DATA  | 3_1    |
| occion o.   | 3-1. Indoor Units (Electric Wiring Diagram)                                    |        |
|             |  |        |
| Section 4.  | PROCESS AND FUNCTIONS  |        |
|             | 4-1. Control Functions   |        |
|             | 4-2. Indoor Unit Control PCB Switches and Functions                            |        |
| Section 5.  | TROUBLE DIAGNOSIS  | 5-1    |
|             | 5-1. Contents of Remote Controller Switch Alarm Display                        | 5-2    |
|             | 5-2. PAC System Alarm Codes  | 5-4    |
|             | 5-3. Symptom: Thermostat in OFF continues or cycles OFF & ON too frequently    |        |
|             | 5-4. How to separate the indoor unit   |        |
|             | 5-5. How to assemble middle duct connection                                    |        |
|             | 5-6. For 12.5kW ~16kW unit: Heat exchange unit and Fan motor + fan cover unit  | 5-20   |
|             | 5-7. How to Remove Fan Motor   |        |
|             | 5-8. How to remove Nanoe Generator (S-60/71/100/125/140/160PE4R S-160PE4RA)    | 5-28   |
|             | 5-9. How to remove R32 gas leak detector sensor (S-160PE4RA only)              | 5-31   |
|             | 5-10. Symptom: Thermostat in OFF continues or cycles OFF & ON too frequently   | 5-33   |
| Section 6.  | <b>EEPROM SETTING USING THE CZ-RTC6 SERIES REMOTE CONTROLLI</b>                | ER 6-1 |
| 00011011101 | 6-1. Preparation for EEPROM Setting using the CZ-RTC6 series remote controller |        |
|             | 6-2. EEPROM Setting using the CZ-RTC6 series remote controller                 |        |
| Section 7   | REMOTE CONTROLLER FUNCTIONS SECTION  |        |
| Section 7.  |  |        |
|             | 7-1. Simple Settings Function  |        |
|             | 7-2. List of Simple Setting Items  |        |
|             | 7-3. Detailed Settings Function  |        |
|             | 7-4. List of Detailed Setting Items  |        |
|             | 7-5. Simple Setting Items  |        |
|             | 7-6. Detailed Setting items  |        |
|             | 7-8. Test Run Function   |        |
|             | 7-9. Panasonic H&C Control App   |        |
|             |  | / УТ   |

| Section 8. | HOW TO INSTALL THE WIRELESS (INFRARED) REMOTE CONTROLLER I | RECEIVER 8-i |
|------------|--|--------------|
|            | 8-1. Important Safety Instructions                         | 8-1          |
|            | 8-2. Wireless (Infrared) Remote Controller CZ-RWS3         | 8-2-1-1      |
|            | 8-3. Setting for the Receiver                              | 8-3-1-1      |
| Section 9. | EXPLODED VIEW AND REPLACEMENT PARTS LIST                   | 9-1          |
|            | 9-1. Indoor Unit   | 9-2          |

## 1. SPECIFICATIONS

| 1-1. | Unit Specifications            | 1-1-2 |
|------|--------------------------------|-------|
| 1-2. | Major Component Specifications | 1-2-1 |
| 1-3. | Dimensional Data               | 1-3-1 |
| 1-4. | Operating Range                | 1-4-1 |
| 1-5. | Noise Criterion Curves         | 1-5-1 |
| 1-6. | Installation Instructions      | 1-6-1 |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-60PE4R U-60PZ4R5

| Indoor                         |   | N  | 1odel                   |                                | S-60PE4R           |                         |                        | -                  |                     |            | . 1        |
|--------------------------------|---|--|-------------------------|--------------------------------|--------------------|-------------------------|------------------------|--------------------|---------------------|------------|------------|
| Panel                          |   | riodot   |                         | -                              |                    |                         | -                      |                    |                     | -          |            |
| Outdoor                        |   |  |                         | -                              |                    |                         | U-60PZ4R5              |                    |                     | -          |            |
| Branch pipe                    |   |  |                         |                                |                    |                         |                        |                    |                     |            |            |
| Performance                    | test condition                                | 1  |                         |                                |                    |                         | ISO 13253 / A          |                    |                     |            |            |
| Power supply                   | 1   | Ç  | ð, Hz                   | 0001                           | 1Ø 50Hz            | 0.4017                  | 2001                   | 1Ø 50Hz            | 0.4017              |            |            |
|                                | 1   |  | kW                      | 220V                           | 230V               | 240V                    | 220V                   | 230V               | 240V                | Min<br>2.0 | Max<br>7.1 |
|                                |   |  | TU/h                    | -                              | 6.0<br>20500       | 6.0<br>20500            | -                      | -                  | -                   | 6800       | 24200      |
|                                | Capacity                                      | Sensible   | kW                      | -                              | 4.9                | 4.9                     | -                      | -                  |                     | -          | -          |
|                                |   | Latent   | kW                      | -                              | 1.1                | 1.1                     | -                      | -                  | -                   | -          | -          |
|                                | Current                                       |  | A                       | -                              | 1.06               | 0.94                    | -                      | 8.10               | 7.75                | -          | -          |
|                                | Input power                                   |  | W                       |                                | 160                | 160                     | -                      | -                  | -                   |            | -          |
|                                | Input power                                   | To   | otal W                  |                                | -                  |                         | -                      | 1.84k              | 1.84k               | 380        | 2.36k      |
|                                | Annual consumption                            |  | al kWh                  | -                              | -                  | -                       | -                      | 920                | -                   | -          | -          |
| Cooling                        | EER   |  | l (W/W)                 | -                              | -                  | -                       | -                      | 3.26               | 3.26                | 5.26       | 3.01       |
| 000                            | AEER  | (1   | N/W)                    | -                              | -                  | -                       | -                      | 3.20               | -                   | -          | -          |
|                                | SEER rating<br>TCSPF                          | I 0  | N/W)                    | -                              | -                  | -                       | -                      | Commercial<br>5.65 | Residential<br>4.26 | -          | -          |
|                                | Total Energy consumption                      | kWh  | 74744)                  | -                              | -                  | -                       | -                      | 858                | 521                 | -          | -          |
|                                | Star rating                                   | KVVII  |                         |                                | -                  |                         | -                      |                    | 2.5 Stars           | -          | -          |
|                                | Power factor                                  |  | %                       | -                              | -                  | -                       | -                      | 99                 | 99                  | -          | -          |
|                                |   | dB(A   | ) (H/M/L)               |                                | 38/36/32           |                         |                        | -                  |                     | -          | -          |
|                                | Noise indoor                                  | Powe   | r Level dB              |                                | 65 / 53 / 49       |                         |                        | -                  |                     |            | -          |
|                                | Noise outdoor                                 |  | ) (H/M/L)               |                                | -                  |                         |                        | 47 / -             |                     | -          | -          |
|                                |   |  | r Level dB              |                                | -                  |                         |                        | 65 / -             |                     | -          | -          |
|                                | Capacity                                      |  | kW                      | -                              | 6.0                | 6.0                     | -                      | -                  | -                   | 1.8        | 7.0        |
|                                |   | В  | TU/h                    | -                              | 20500              | 20500                   | -                      | - 0.20             | -                   | 6100       | 23900      |
|                                | Current                                       | <del>                                     </del> | W                       | -                              | 1.06               | 0.94                    |                        | 6.30               | 6.05                | -          | -          |
|                                | Input power                                   | т,   | otal W                  |                                | 160                | 160                     | -                      | -<br>1.42k         | -<br>1.42k          | 330        | -<br>2.48k |
|                                | COP   |  | ıl (W/W)                | -                              | -                  | _                       | -                      | 4.23               | 4.23                | 5.45       | 2.468      |
|                                | ACOP  |  | N/W)                    | -                              | -                  | -                       | -                      | 4.12               | -                   | -          | -          |
| Heating                        | SEER rating                                   |  |                         | -                              | -                  | -                       | -                      | Commercial         | Residential         | -          | -          |
| Heat                           | HSPF  | ()   | N/W)                    | -                              | -                  | -                       | -                      | 4.83               | 4.51                | -          | -          |
| _                              | Total Energy consumption                      |  | kWh                     | -                              | -                  | -                       | -                      | 310                | 722                 | -          |            |
|                                | Star rating                                   |  | -                       | -                              | -                  | -                       | -                      | -                  | 3.0 Stars           | -          | -          |
|                                | Power factor                                  |  | %                       |                                |                    | -                       | 98                     | 98                 | -                   | -          |            |
|                                | Noise indoor                                  |  | ) (H/M/L)               | 38/36/32                       |                    | -                       |                        |                    | -                   | -          |            |
|                                |   |  | r Level dB              |                                | 65 / 53 / 49       |                         | -                      |                    |                     | -          | -          |
|                                | Noise outdoor                                 |  | ) (H/M/L)<br>r Level dB |                                | -                  |                         |                        | 47 / -<br>65 / -   |                     |            | -          |
| LOW TEMP                       | Total capacity (kW) / Inp                     |  |                         |                                |                    |                         | 5.40                   | 1.85k              | 2.92                |            |            |
| EXTRA LOW                      |   |  |                         |                                |                    |                         | 5.40                   | 1.05K              | 2.52                |            |            |
| TEMP                           | Total capacity (kW) / Inp                     | ut power (W                                      | )/COP                   | -                              |                    |                         | -                      | -                  | -                   |            |            |
| Max Current                    | (A) / Max Input Power (W)*                    |  |                         | -                              | 1.45/250           | 1.33 / 250              | -/-                    | 13.1 / 2.65k       | 13.1 / 2.70k        |            |            |
| Starting curre                 | ent (A) (Cooling / Heating)                   |  |                         |                                |                    | -/- 8.10/6.30 7.75/6.05 |                        |                    |                     |            |            |
| Comp output                    |   |  |                         |                                | -                  |                         |                        |                    | 0.90k               |            |            |
|                                | use max size (A)                              |  |                         |                                | -                  |                         |                        | 20                 |                     |            |            |
|                                | edance (ΩMAX)                                 |  |                         | -<br>560                       |                    |                         | -<br>40                |                    |                     |            |            |
|                                | tput (Indoor/Outdoor) W                       |  | I /la                   | 560<br>3.4 (3.4 x 1)           |                    |                         |                        |                    |                     |            |            |
| Moisture rem<br>External stati |   |  | L/h<br>Pa               | 3.4 (3.4 x 1)<br>80 / (10-150) |                    | -                       |                        |                    |                     |            |            |
| Indoor                         | Cooling                                       | m³/min (l  | H/M/L) (m³/h)           | 22 0 / 20 0                    | / 16.0 (1320) / (1 | 200) / (960)            |                        | -                  |                     | -          | -          |
| Air flow                       | Heating                                       |  | H/M/L) (m³/h)           |                                | 16.0 (1320)/(1     |                         |                        | -                  |                     |            | -          |
| Outdoor                        | Cooling                                       |  | in (m³/h)               | -                              |                    |                         |                        | 34.0 (2040)        |                     | -          |            |
| Air flow                       | Heating                                       |  | iin (m³/h)              | -                              |                    |                         | 33.0 (1980)            |                    |                     | -          | -          |
|                                | /pe / amount (ship) kg / amount (r            |  |                         | -                              |                    |                         | R32, 1.220 / 1.520     |                    |                     |            |            |
|                                | GWP   |  |                         |                                |                    |                         |                        |                    |                     |            |            |
| F-Gas                          | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM ( |  |                         | -                              |                    |                         | 675 / 0.82 / 1.03      |                    |                     | •          |            |
|                                |   |  | ht (mm)                 |                                | 300                |                         |                        | 619                |                     |            |            |
| Product dime                   | ension  |  | th (mm)                 |                                | 1297               |                         | 824                    |                    |                     | -          |            |
|                                |   |  | th (mm)                 |                                | 877                |                         | 299                    |                    |                     |            |            |
| Product dime                   | ension (Panel)                                |  | x D (mm)                |                                | - 414              |                         | -                      |                    |                     |            |            |
| Packing dime                   | ancion  |  | th (mm)                 |                                | 414                |                         |                        | 680                |                     |            |            |
| acking until                   | anaiuil                                       |  | th (mm)<br>th (mm)      |                                | 1494<br>1050       |                         |                        | 958<br>416         |                     | -          |            |
|                                |   |  | ET) kg                  |                                | 51                 |                         | 416<br>35              |                    |                     | -          |            |
| Weight                         |   |  | OSS) kg                 |                                | 61                 |                         |                        | 38                 |                     |            |            |
|                                |   |  | l (NET) kg              |                                | -                  |                         |                        |                    |                     |            |            |
|                                | Layers limit (actual                          | )  |                         |                                | 7 (8)              |                         |                        | 5 (6)              |                     |            |            |
| Operation co                   | ndition                                       | Cod  | ol (DBT)                |                                | 18°C ~ 32°C        |                         |                        | -10°C ~ 46°C       |                     |            |            |
| operation C0                   | munuUII                                       | Hea  | nt (DBT)                |                                | 16°C~30°C          |                         |                        | -15°C ~ 24°C       |                     |            |            |
|                                | Max Working Pressure HP/LP M                  |  |                         |                                |                    |                         | /2.55                  |                    |                     |            |            |
|                                | Max High Pressure M                           |  |                         |                                |                    |                         | 00                     |                    |                     |            |            |
|                                | Pipe port diamet                              |  |                         | (Liquid) Ø6.3                  | 35 (1/4) (Gas) Ø   |                         |                        | 35 (1/4) (Gas) Ø   | 312.70 (1/2)        |            |            |
|                                | Pipe diameter mm (in                          |  | _                       |                                |                    | uid) Ø6.35 (1/4         | ) (Gas) Ø12.70 (       |                    |                     |            |            |
| 0.0                            | Connecting metho                              |  | n)                      |                                | flared type        |                         | <u> </u>               | flared type        |                     |            |            |
| Piping                         | Standard le                                   |  |                         |                                |                    |                         | 0m                     |                    |                     |            |            |
| ۵.                             | Pipe length Indoor unit & Outdoor unit        | _  | rence m                 |                                | 15m /OD            | located lower)          | 30m<br>/ 15m (OD locat | ed higher)         |                     |            |            |
|                                | Add gas amount g/i                            |  |                         |                                | 13111 (UD          |                         | g/m                    | ou mentil)         |                     |            |            |
|                                | Pipe length for add                           |  |                         |                                |                    |                         | )m                     |                    |                     |            |            |
|                                | ,   | . 001  |                         |                                |                    |                         |                        |                    |                     |            |            |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-71PE4R U-71PZ4R5

| Indoor                 |   | M                               | lodel                      | S-71PE4R                                    |                  |  | -   |                  |              | -           |              |
|------------------------|---|---------------------------------|----------------------------|---|------------------|--|---|------------------|--------------|-------------|--------------|
| Panel                  |   |                                 |                            |   | -                |  | -<br>11.74D74D5   |                  |              |             |              |
| Outdoor<br>Branch pipe |   |                                 |                            |   | -                |  | U-71PZ4R5<br>-  |                  |              | -           |              |
|                        | test condition  |                                 |                            | ISO 13253 / AS NZS3823.1                    |                  |  |   |                  |              |             |              |
| Power supply           | 1   | Q                               | ó, Hz                      |   | 1ø 50Hz          |  |   | 1ø 50Hz          |              |             |              |
| . отогоаррту           | <u> </u>  |                                 | V                          | 220V  | 230V             | 240V   | 220V  | 230V             | 240V         | Min         | Max          |
|                        |   |                                 | kW<br>TU/h                 | -   | 7.1<br>24200     | 7.1<br>24200   | -   | -                | -            | 2.6<br>8900 | 7.7<br>26300 |
|                        | Capacity  | Sensible                        | kW                         | -   | 5.5              | 5.5  | -   | -                | -            | -           | -            |
|                        |   | Latent                          | kW                         | •   | 1.6              | 1.6  | -   | -                | -            | -           | -            |
|                        | Current   |                                 | A                          | -   | 1.46             | 1.34   | -   | 9.55             | 9.20         | -           | -            |
|                        | Input power   | To                              | tal W                      | -   | 250              | 250  | -   | -<br>2.18k       | -<br>2.18k   | 570         | 2.86k        |
| gu                     | Annual consumption  |                                 | al kWh                     | -   | -                | -  |   | 1090             | 2.10K        | -           | 2.00K        |
|                        | EER   |                                 | l (W/W)                    |   | -                | -  | -   | 3.26             | 3.26         | 4.56        | 2.69         |
| Cooling                | AEER  | (\                              | V/W)                       | -   | -                | -  | -   | 3.20             | -            | -           | -            |
| 0                      | SEER rating<br>TCSPF  | Δ.                              | N/W)                       | -   | -                | -  | -   | Commercial       | Residential  | <u> </u>    | -            |
|                        | Total Energy consumption  | kWh                             | (V/VV)                     | -   | -                | -  | -   | 5.21<br>1117     | 4.12<br>655  |             | -            |
|                        | Star rating   |                                 | -                          |   | -                |  | -   | '-               | 2.5 Stars    | -           | -            |
|                        | Power factor  |                                 | %                          | •   | -                | -  | -   | 99               | 99           | -           | -            |
|                        | Noise indoor  |                                 | ) (H/M/L)                  |   | 43 / 39 / 35     |  |   | -                |              | -           | -            |
|                        |   |                                 | Level dB<br>(H/M/L)        |   | 60 / 56 / 52     |  |   | -<br>47 / -      |              | -           | -            |
|                        | Noise outdoor   |                                 | Level dB                   |   |                  |  |   | 65 /-            |              | -           | -            |
|                        | Capacity  |                                 | kW                         | -   | 7.1              | 7.1  | -   | -                | -            | 2.05        | 8.1          |
|                        |   | В                               | TU/h                       | -   | 24200            | 24200  | -   | -                | -            | 7000        | 27600        |
|                        | Current   |                                 | W                          | -   | 1.46             | 1.34   | -   | 7.35             | 7.05         | -           | -            |
|                        | Input power   | Tr                              | vial W                     |   | 250              | 250  |   | 1.67k            | -<br>1.67k   | 390         | 2.67k        |
|                        | COP   |                                 | l (W/W)                    | -   | -                | -  | -   | 4.25             | 4.25         | 5.26        | 3.03         |
| חמ                     | ACOP  | (\                              | V/W)                       | -   | -                | -  | -   | 4.16             | -            | -           | -            |
| Heating                | SEER rating   |                                 | ****                       | -   | -                | -  | -   | Commercial       | Residential  | -           | -            |
| Ë                      | HSPF<br>Total Energy consumption                                |                                 | W/W)<br>kWh                | -   | -                | -  | -   | 4.75<br>374      | 4.48<br>860  | -           | -            |
|                        | Star rating   |                                 | -                          | -   | -                |  | -   | -                | 2.5 Stars    | -           | -            |
|                        | Power factor  |                                 | %                          |   | -                | -  | -   | 99               | 99           | -           | -            |
|                        | Noise indoor  |                                 | ) (H/M/L)                  | 43 / 39 / 35                                |                  |  |   | -                |              | -           | -            |
|                        |   | Power Level dB<br>dB(A) (H/M/L) |                            | 60 / 56 / 52                                |                  |  | -<br>49 / -   |                  |              |             | -            |
|                        | Noise outdoor   |                                 | Level dB                   |   |                  |  |   | 67 / -           |              |             | -            |
| LOW TEMP               | Total capacity (kW) / Inp                                       |                                 |                            |   | -                |  | 6.50  | 2.40k            | 2.71         |             |              |
| EXTRA LOW              | Total capacity (kW) / Inp                                       | ut power (W                     | )/COP                      | -   |                  |  |   | -                | _            |             |              |
| TEMP<br>May Current    | (A) / Max Input Power (W)*                                      |                                 |                            |   | 2.15/390         | 2.03/390   | -/-   | 14.8 / 3.12k     | 14.8 / 3.22k |             |              |
|                        | ent (A) (Cooling / Heating)                                     |                                 |                            | - 2.137390 2.037390                         |                  | -/- 14.8/3.12k 14.8/3.22k<br>-/- 9.55/7.35 9.20/7.05 |   |                  |              |             |              |
| Comp output            |   |                                 |                            |   | -                |  | - 1.50k 1.50k   |                  |              |             |              |
|                        | ise max size (A)  |                                 |                            |   | -                |  | 20  |                  |              |             |              |
|                        | edance (ΩMAX)<br>tput (Indoor/Outdoor) W                        |                                 |                            | -   |                  |  |   | 40               |              |             |              |
| Moisture rem           |   |                                 | L/h                        | 560<br>4.2 (4.2 x1)                         |                  |  | -   |                  |              |             |              |
| External stati         |   |                                 | Pa                         |   | 80 (10-150)      |  | -   |                  |              |             |              |
| Indoor                 | Cooling   |                                 | 1/M/L) (m <sup>3</sup> /h) | 30.0/26.0/22.0 (1800)/(1560)/(1320)         |                  | -  |   |                  | -            | -           |              |
| Air flow<br>Outdoor    | Heating   |                                 | I/M/L) (m³/h)<br>in (m³/h) | 30.0 / 26.0 / 22.0 (1800) / (1560) / (1320) |                  |  | -<br>45.0 (2700)  |                  |              | -           | -            |
| Air flow               | Cooling<br>Heating  |                                 | in (m³/h)                  |   |                  |  |   | 46.0 (2760)      |              | <u> </u>    | -            |
|                        | rpe / amount (ship) kg / amount (n                              |                                 |                            | -   |                  |  | R32, 1.350 / 1.850  |                  |              |             |              |
|                        | GWP   |                                 |                            |   |                  |  |   |                  |              |             |              |
| F-Gas                  | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM C                   |                                 |                            | -   |                  |  | 675 / 0.91 / 1.25   |                  |              | -           |              |
| Don't '                |   |                                 | ht (mm)                    |   | 300              |  |   | 695              |              |             |              |
| Product dime           | ension  |                                 | th (mm)<br>th (mm)         |   | 1297<br>877      |  | 875<br>320  |                  |              | -           |              |
| Product dime           | ension (Panel)  |                                 | x D (mm)                   |   | -                |  |   | -                |              |             |              |
|                        | . ,   | Heig                            | ht (mm)                    |   | 414              |  |   | 796              |              |             |              |
| Packing dime           | ension  |                                 | th (mm)                    | _   | 1494             |  |   | 1049             |              |             |              |
|                        |   |                                 | th (mm)                    |   | 1050             |  |   | 460              |              |             |              |
| Weight                 |   |                                 | ET) kg<br>OSS) kg          |   | 51<br>61         |  |   | 45<br>49         |              |             |              |
|                        |   | Panel                           | (NET) kg                   |   | -                |  |   |                  |              |             |              |
|                        | Layers limit (actual)   |                                 |                            |   | 7 (8)            |  |   | 3 (4)            |              |             |              |
| Operation co           | ndition   |                                 | ol (DBT)                   |   | 18°C ~ 32°C      |  |   | -10°C ~ 46°C     |              |             |              |
| -                      |   |                                 | it (DBT)                   |   | 16°C ~ 30°C      | 4.4=   | -15°C ~ 24°C  |                  |              |             |              |
|                        | Max Working Pressure HP/LP M  Max High Pressure M               |                                 |                            |   |                  |  | / 2.55<br>00  |                  |              |             |              |
|                        | Pipe port diamete   |                                 |                            | (Liquid) Ø9.                                | 52 (3/8) (Gas) Ø |  |   | 52 (3/8) (Gas) Ø | 15.88 (5/8)  |             |              |
|                        | Pipe diameter mm (in  |                                 | 0m)                        | , , , , , , , , , , , , , , , ,             |                  |  | (Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)<br>) (Gas) Ø15.88 (5/8) |                  |              |             |              |
| חמ                     | Connecting method   |                                 | n)                         |   | flared type      |  |   | flared type      |              |             |              |
| Piping                 | Standard le   |                                 |                            |   |                  |  | 0m<br>30m   |                  |              |             |              |
| <u> </u>               | Pipe length r<br>Indoor unit & Outdoor uni                      |                                 | rence m                    |   | 20m (OD          | located lower) /                                     | 30m<br>′ 20m (OD locat  | ed higher)       |              |             |              |
|                        |   |                                 |                            |   |                  |  | g/m   |                  |              |             |              |
| 1                      | Add gas amount g/m (Under 30m) Pipe length for additional gas m |                                 |                            |   |                  |  | 0m  |                  |              |             |              |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-71PE4R U-71PZH3R5

| Indoor              | idilo i ressure D                               | Model                                  | I  | S-71PE4R         |                  |                       |                    |                     |             |       |
|---------------------|---|--|--|------------------|------------------|-----------------------|--------------------|---------------------|-------------|-------|
| Panel               |   | 110000                                 |  | -                |                  |                       | -                  |                     |             |       |
| Outdoor             |   |  |  | -                |                  |                       | U-71PZH3R5         |                     |             | -     |
| Branch pipe         |   |  |  |                  |                  | -                     |                    |                     |             |       |
| Performance         | test condition                                  | <b></b>                                |  |                  |                  | ISO 13253 / A         |                    | ı                   |             |       |
| Power supply        | 1   | Ø, Hz<br>V                             | 220V   | 1Ø 50Hz<br>230V  | 240V             | 220V                  | 1Ø 50Hz<br>230V    | 240V                | Min         | Max   |
|                     |   | kW                                     | - 2200   | 7.1              | 7.1              | -                     | -                  | -                   | 2.2         | 9.0   |
|                     |   | BTU/h                                  | -  | 24200            | 24200            | -                     | -                  | -                   | 7500        | 30700 |
|                     | Capacity  | Sensible kW                            | -  | 5.5              | 5.5              | -                     | -                  | -                   | -           | -     |
|                     |   | Latent kW                              | -  | 1.6              | 1.6              | -                     | -                  | -                   | -           | -     |
|                     | Current   | Α                                      | -  | 1.46             | 1.34             | -                     | 9.65               | 9.35                |             | -     |
|                     | Input power                                     | W                                      | -  | 250              | 250              | -                     | -                  | -                   | -           |       |
|                     |   | Total W<br>Total kWh                   | _  | -                | _                | -                     | 2.00k              | 2.00k               | 550         | 3.49k |
| nn                  | Annual consumption<br>EER                       | Total (W/W)                            | -  | -                | -                | -                     | 1000<br>3.55       | 3.55                | 4.00        | 2.58  |
| Cooling             | AEER  | (W/W)                                  | -  | -                |                  | -                     | 3.48               | -                   | -           | -     |
| ဝိ                  | SEER rating                                     | ()                                     | -  | -                | -                | -                     | Commercial         | Residential         | -           | -     |
|                     | TCSPF   | (W/W)                                  | -  | -                | -                | -                     | 6.21               | 4.66                | -           | -     |
|                     | Total Energy consumption                        | kWh                                    | -  | -                | -                | -                     | 921                | 563                 | -           | -     |
|                     | Star rating                                     | -                                      | -  | -                | -                | -                     | -                  | 3.0 Stars           | -           | -     |
|                     | Power factor                                    | %                                      | -  | -                | -                | -                     | 90                 | 89                  | -           | -     |
|                     | Noise indoor                                    | dB(A) (H/M/L)                          |  | 43 / 39 / 35     |                  |                       | -                  |                     | -           | -     |
|                     |   | Power Level dB<br>dB(A) (H/M/L)        | <u> </u>   | 60 / 56 / 52     |                  |                       | 48 / -             |                     | -           | -     |
|                     | Noise outdoor                                   | Power Level dB                         |  |                  |                  |                       | 64/-               |                     |             | -     |
|                     | Conneity  | kW                                     | -  | 8.0              | 8.0              | -                     | -                  | -                   | 2.05        | 9.0   |
|                     | Capacity  | BTU/h                                  | -  | 27300            | 27300            | -                     | -                  | -                   | 7000        | 30700 |
|                     | Current   | A                                      | -  | 1.46             | 1.34             | -                     | 9.30               | 9.00                | -           | -     |
|                     | Input power                                     | W                                      | -  | 250              | 250              | -                     | -                  | -                   | -           | -     |
|                     |   | Total W                                |  | -                | 1                | -                     | 1.92k              | 1.92k               | 390         | 3.02k |
|                     | COP   | Total (W/W)                            | -  | -                | -                | -                     | 4.17               | 4.17                | 5.26        | 2.98  |
| 28                  | ACOP<br>SEER rating                             | (W/W)                                  | -  | -                | -                | -                     | 4.08               | -<br>Posidontial    | -           | -     |
| Heating             | SEER rating<br>HSPF                             | (W/W)                                  | -  | -                | -                | -                     | Commercial<br>4.80 | Residential<br>4.51 | -           | -     |
| Ĭ                   | Total Energy consumption                        | (W/W)<br>kWh                           | <del>                                     </del> | <del></del>      | -                | -                     | 4.80               | 962                 | <del></del> |       |
|                     | Star rating                                     | -                                      | -  | -                |                  | -                     | -                  | 3.0 Stars           |             | -     |
|                     | Power factor                                    | %                                      | -  | -                | -                | -                     | 90                 | 89                  | -           | -     |
|                     |   | dB(A) (H/M/L)                          |  | 43 / 39 / 35     |                  |                       | -                  | ,                   | -           | -     |
|                     | Noise indoor                                    | Power Level dB                         |  | 60 / 56 / 52     |                  |                       | -                  |                     | -           | -     |
|                     | Noise outdoor                                   | dB(A) (H/M/L)                          |  | -                |                  |                       | 50 / -             |                     | -           | -     |
|                     |   | Power Level dB                         |  | -                |                  |                       | 66 / -             |                     | -           | -     |
| LOWTEMP             | Total capacity (kW) / Inp                       | out power (W) / COP                    |  | -                |                  | 7.80                  | 2.60k              | 3.00                |             | -     |
| EXTRA LOW           | Total capacity (kW) / Inp                       | out power (W) / COP                    |  | -                |                  | -                     | -                  | -                   |             | -     |
| TEMP                | (A) / Max Input Power (W)*                      |  | _  | 2.15/390         | 2.03/390         | -/-                   | 19.6 / 4.31k       | 19.6 / 4.31k        |             | _     |
|                     | ent (A) (Cooling / Heating)                     |  | -  | 2.137390         | -                | -/-                   | 9.65 / 9.30        | 9.35 / 9.00         |             |       |
| Comp output         |   |  |  | -                | l.               | -                     | 2.00k              | 2.00k               |             |       |
|                     | use max size (A)                                |  |  | -                |                  |                       | 25                 |                     |             | -     |
|                     | edance (ΩMAX)                                   |  |  | -                |                  |                       | -                  |                     |             | -     |
|                     | tput (Indoor/Outdoor) W                         |  |  | 560              |                  |                       | 90                 |                     |             | -     |
| Moisture rem        |   | L/h                                    |  | 4.2 (4.2 x1)     |                  |                       | -                  |                     |             |       |
| External stati      |   | Pa                                     |  | 80 (10-150)      |                  |                       | -                  |                     |             |       |
| Indoor              | Cooling   | m³/min (H/M/L) (m³/h)                  |  | 22.0 (1800)/(1   |                  |                       | -                  |                     | -           | -     |
| Air flow<br>Outdoor | Heating<br>Cooling                              | m³/min (H/M/L) (m³/h)<br>m³/min (m³/h) | 30.0 / 26.0 /                                    | 22.0 (1800)/(1   | 560) / (1320)    |                       | 61.0 (3660)        |                     | -           | -     |
| Air flow            | Heating   | m³/min (m³/h)                          |  |                  |                  |                       | 60.0 (3600)        |                     |             | -     |
|                     | /pe / amount (ship) kg / amount (n              |  |  |                  |                  |                       | R32, 1.950 / 2.85  | 0                   |             |       |
| J                   | GWP   |  |  |                  |                  | İ                     |                    |                     |             |       |
| F-Gas               | CO₂eq (ton) (PRECHA                             |  |  | -                |                  |                       | 675 / 1.32 / 1.92  | 2                   |             |       |
|                     | CO₂eq (ton) (MAXIMUM C                          |  |  |                  |                  |                       |                    |                     |             |       |
|                     | 1   | Height (mm)                            |  | 300              |                  |                       | 996                |                     |             | -     |
| Product dime        | ension  | Width (mm)                             |  | 1297             |                  |                       | 940                |                     |             | -     |
|                     |   | Depth (mm)                             |  | 877              |                  |                       | 340                |                     |             | -     |
| Product dime        | ension (Panel)                                  | HxWxD(mm)                              |  | -                |                  |                       | •                  |                     |             |       |
| L                   |   | Height (mm)                            |  | 414              |                  |                       | 1136               |                     |             | -     |
| Packing dime        | ension  | Width (mm)                             | <u> </u>   | 1494             |                  |                       | 1055               |                     |             |       |
| -                   |   | Depth (mm)                             | 1  | 1050             |                  |                       | 485                |                     |             | -     |
| Weight              |   | (NET) kg<br>(GROSS) kg                 | <u> </u>   | 51<br>61         |                  |                       | 66<br>74           |                     |             |       |
| .veigit             |   | Panel (NET) kg                         |  | - 01             |                  |                       | -                  |                     |             |       |
|                     | Layers limit (actual)                           |  |  | 7 (8)            |                  |                       | 2 (3)              |                     |             | -     |
| _                   |   | Cool (DBT)                             |  | 18°C ~ 32°C      |                  |                       | -15°C ~ 48°C       |                     |             |       |
| Operation co        | ndition   | Heat (DBT)                             | 1  | 16°C~30°C        |                  |                       | -20°C ~ 24°C       |                     |             |       |
|                     | Max Working Pressure HP/LP M                    |  |  |                  | 4.15             | / 2.55                | <u> </u>           |                     |             |       |
|                     | Max High Pressure M                             |  |  |                  |                  | .15                   |                    |                     |             |       |
|                     | Pipe port diamete                               | er mm (inch)                           | (Liquid) Ø9.                                     | 52 (3/8) (Gas) Ø | 15.88 (5/8)      | (Liquid) Ø9.          | 52 (3/8) (Gas) Ø   | 15.88 (5/8)         |             |       |
|                     | Pipe diameter mm (in                            | ich) (Under 50m)                       |  |                  |                  | ) (Gas) Ø15.88 (      |                    |                     |             |       |
|                     | Pipe diameter mm (ir                            |  |  | (Lic             | quid) Ø9.52 (3/8 | ) (Gas) Ø15.88 (      |                    |                     |             |       |
|                     | Connecting method                               |  | 1  | flared type      |                  |                       | flared type        |                     |             |       |
| ing<br>g            | Connecting metho                                |  |  |                  |                  | 0                     | flared type        |                     |             |       |
| Piping              | Standard le                                     |  | 1  |                  |                  | 0m                    |                    |                     |             |       |
|                     | Pipe length r                                   | _                                      |  | 1Fm /01          |                  | 50m<br>30m (OD locate | d higher)          |                     |             |       |
|                     | Indoor unit & Outdoor uni<br>Add gas amount g/r |  |  | тэш (ОГ          |                  | 30m (OD locate<br>g/m | u mgner)           |                     |             | -     |
|                     | Add gas amount g/                               |  | <b> </b>   |                  |                  | g/m                   |                    |                     |             |       |
|                     | Pipe length for add                             |  |  |                  |                  | )m                    |                    |                     |             |       |
| ·                   |   | . 0                                    |  |                  |                  |                       |                    |                     |             |       |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-100PE4RN (1P) U-100PZ4R5

| Indoor         | tatio i roccaro B                  |               | 1odel         | 1001 =              | S-100PE4RN (1P   |                          | 1               |                   |              |       | . 1   |
|----------------|------------------------------------|---------------|---------------|---------------------|------------------|--------------------------|-----------------|-------------------|--------------|-------|-------|
| Panel          |                                    | "             | IOUEL         | •                   | - 100CE4KIN (1P  | 1                        |                 | -                 |              |       |       |
| Outdoor        |                                    |               |               |                     | -                |                          |                 | U-100PZ4R5        |              |       |       |
| Branch pipe    |                                    |               |               |                     |                  |                          | -               |                   |              |       |       |
|                | test condition                     |               |               |                     |                  |                          | ISO 13253 / AS  | S NZS 3823.1      |              |       |       |
|                |                                    | Ç             | ð, Hz         |                     | 1ø 50Hz          |                          |                 | 1ø 50Hz           |              |       |       |
| Power supply   | у                                  | ,             | V             | 220V                | 230V             | 240V                     | 220V            | 230V              | 240V         | Min   | Max   |
|                |                                    |               | kW            | -                   | 9.5              | 9.5                      | -               | -                 | -            | 3.0   | 11.0  |
|                |                                    |               | TU/h          | -                   | 32400            | 32400                    | -               | -                 | -            | 10200 | 37500 |
|                | Capacity                           | Sensible      | kW            | -                   | 8.3              | 8.3                      | -               | -                 | -            | -     | -     |
|                |                                    | Latent        | kW            | -                   | 1.2              | 1.2                      | -               | -                 | -            | -     | -     |
|                | Current                            |               | A             | -                   | 1.82             | 1.70                     | -               | 13.20             | 12.60        | -     | -     |
|                | Input nouser                       |               | W             | -                   | 330              | 330                      | -               | -                 | -            | -     | -     |
|                | Input power                        | To            | otal W        |                     | -                |                          | -               | 3.00k             | 3.00k        | 590   | 3.60k |
|                | Annual consumption                 | Tot           | al kWh        | -                   | -                | -                        | -               | 1500              | -            | -     | -     |
| 20             | EER                                | Tota          | ıl (W/W)      | -                   | -                | -                        | -               | 3.17              | 3.17         | 5.08  | 3.06  |
| Cooling        | AEER                               | (\            | W/W)          | -                   | -                | -                        | -               | 3.11              | -            | -     | -     |
| Ö              | SEER rating                        |               |               | -                   | -                | -                        | -               | Commercial        | Residential  | -     | -     |
|                | TCSPF                              | (\            | W/W)          | -                   | -                | -                        | -               | 5.19              | 4.09         | -     | -     |
|                | Total Energy consumption           | kWh           |               | -                   | -                | -                        | -               | 1499              | 880          | -     | -     |
|                | Star rating                        |               | -             | -                   | -                | -                        | -               | -                 | 2.5 Stars    | -     | -     |
|                | Power factor                       |               | %             | -                   | -                | -                        | -               | 99                | 99           | -     | -     |
|                | Noise indoor                       |               | ) (H/M/L)     |                     | 42/37/34         |                          |                 | -                 |              | -     | -     |
|                |                                    |               | r Level dB    |                     | 64/59/56         |                          |                 | -                 |              | -     | -     |
|                | Noise outdoor                      |               | ) (H/M/L)     |                     | -                |                          |                 | 54 / -            |              | -     | -     |
|                |                                    |               | r Level dB    |                     | -                | 1                        |                 | 72 / -            |              | -     | -     |
|                | Capacity                           |               | kW            | -                   | 10.0             | 10.0                     | -               | -                 | -            | 2.70  | 12.0  |
|                |                                    | В             | STU/h         | -                   | 34100            | 34100                    | -               | -                 | -            | 9200  | 40900 |
|                | Current                            |               | Α             | -                   | 1.82             | 1.70                     | -               | 12.30             | 11.80        | -     | -     |
|                | Input power                        |               | W             | -                   | 330              | 330                      | -               | -                 | -            | -     | -     |
|                |                                    |               | otal W        |                     | -                | ı                        | -               | 2.80k             | 2.80k        | 540   | 3.60k |
|                | COP                                |               | ıl (W/W)      | -                   | -                | -                        | -               | 3.57              | 3.57         | 5.00  | 3.33  |
| 20             | ACOP                               | ()            | W/W)          | -                   | -                | -                        | -               | 3.51              | -            | -     | -     |
| Heating        | SEER rating                        |               | A/AA/)        | -                   | -                | -                        | -               | Commercial        | Residential  | -     | -     |
| 운              | HSPF                               |               | W/W)          | -                   | -                | -                        | -               | 4.37              | 3.98         | -     | -     |
|                | Total Energy consumption           |               | kWh           | -                   | -                | -                        | -               | 573               | 1363         | -     | -     |
|                | Star rating                        |               | -             | -                   | -                | -                        | -               | -                 | 2 Stars      | -     | -     |
|                | Power factor                       | 15/4          | %             | -                   | -                | -                        | -               | 99                | 99           | -     | -     |
|                | Noise indoor                       |               | ) (H/M/L)     |                     | 42 / 37 / 34     |                          |                 | -                 |              | -     | -     |
|                |                                    |               | r Level dB    |                     | 64 / 59 / 56     |                          |                 | -                 |              | -     | -     |
|                | Noise outdoor                      |               | ) (H/M/L)     |                     | -                |                          |                 | 54 / -            |              | -     | -     |
| LOW TEMP       | Total capacity (kW) / Inp          |               | r Level dB    |                     | <u> </u>         |                          | 8.80            | 72 / -<br>3.15k   | 2.79         |       |       |
| EXTRA LOW      | Total capacity (kw) / Ilip         | ut power (w   | ) / COF       |                     | -                |                          | 0.00            | 3.13K             | 2.75         | -     |       |
| TEMP           | Total capacity (kW) / Inp          | ut power (W   | )/COP         |                     | -                |                          | -               | -                 | -            | -     | -     |
|                | (A) / Max Input Power (W)*         |               |               | - 2.95 / 550        |                  | 2.83 / 550               | -/-             | 16.6 / 3.80k      | 16.6 / 3.80k |       |       |
|                | ent (A) (Cooling / Heating)        |               |               | - 2.937330 2.637330 |                  |                          | -/-             | 13.2 / 12.3       | 12.6 / 11.8  |       |       |
| Comp output    |                                    |               |               |                     | -                | <u> </u>                 | -/-             | 1.50k             | 1.50k        |       |       |
|                | use max size (A)                   |               |               |                     | -                |                          |                 | 25                | 1.50K        |       |       |
|                | edance (ΩMAX)                      |               |               |                     | -                |                          |                 | -                 |              |       |       |
|                | utput (Indoor/Outdoor) W           |               |               |                     | 560              |                          |                 | 60                |              | -     |       |
|                | noval volume                       |               | L/h           |                     | 1.6 (1.6 x1)     |                          |                 | -                 |              |       |       |
| External stati | ic pressure                        |               | Pa            | 80                  | (MIN10 - MAX15   | 50)                      |                 | -                 |              |       |       |
| Indoor         | Cooling                            | m³/min (l     | H/M/L) (m³/h) |                     | 29.0 (2520)/(2   |                          |                 | -                 |              | -     | -     |
| Air flow       | Heating                            |               | H/M/L) (m³/h) |                     | 29.0 (2520)/(2   |                          |                 | -                 |              | -     | -     |
| Outdoor        | Cooling                            |               | nin (m³/h)    |                     | -                | , , ,                    |                 | 56.0 (3360)       |              | -     | -     |
| Air flow       | Heating                            |               | nin (m³/h)    |                     | -                |                          |                 | 53.0 (3180)       |              | -     | -     |
|                | ype / amount (ship) kg / amount (n |               |               |                     | -                |                          | ı               | R32, 1.930 / 2.43 | 0            |       |       |
|                | GWP                                |               |               |                     | •                | •                        |                 | •                 |              | •     |       |
| F-Gas          | CO₂eq (ton) (PRECHA                |               | JNT) /        |                     |                  |                          |                 | 675 / 1.30 / 1.64 | .            |       |       |
|                | CO₂eq (ton) (MAXIMUM (             |               |               |                     |                  |                          |                 |                   |              |       |       |
| -              |                                    |               | (ht (mm)      |                     | 300              |                          |                 | 795               |              |       |       |
| Product dime   | ension                             |               | th (mm)       |                     | 1297             |                          |                 | 875               |              |       |       |
|                |                                    |               | th (mm)       |                     | 877              |                          |                 | 320               |              |       |       |
| Product dime   | ension (Panel)                     |               | x D (mm)      |                     | -                |                          |                 | -                 |              |       |       |
| . rouget unite |                                    |               | tht (mm)      |                     | 414              |                          |                 | 899               |              |       |       |
| Packing dime   | ension                             |               | th (mm)       |                     | 1494             |                          |                 | 1049              |              |       |       |
|                |                                    |               | th (mm)       |                     | 1050             |                          |                 | 485               |              | -     |       |
|                |                                    |               | IET) kg       |                     | 51               |                          |                 | 55                |              | -     |       |
| Weight         |                                    |               | OSS) kg       |                     | 61               |                          |                 | 61                |              |       |       |
|                |                                    |               | l (NET) kg    |                     | -                |                          |                 | -                 |              |       |       |
|                | Layers limit (actual               |               |               |                     | 7 (8)            |                          |                 | 3 (4)             |              |       |       |
|                | -                                  |               | ol (DBT)      |                     | 18°C ~ 32°C      |                          |                 | -10°C ~ 46°C      |              |       |       |
| Operation co   | ondition                           |               | at (DBT)      |                     | 16°C~30°C        |                          |                 | -15°C ~ 24°C      |              |       |       |
| <del></del>    | Max Working Pressure HP/LP M       |               |               |                     |                  | 4 15                     | / 2.55          | 10 0 24 0         |              |       |       |
|                | Max High Pressure M                |               |               |                     |                  |                          | 15              |                   |              |       | -     |
| -              | Pipe port diamete                  |               |               | (Liquid) do r       | 52 (3/8) (Gas) Ø |                          |                 | 52 (3/8) (Gas) Ø  | 15 88 /5/9\  |       |       |
| 1              | Pipe port diameter                 |               |               | (Liquid) Ø9.5       |                  | quid) Ø9.52 (3/8)        |                 |                   | 10.00 (0/0)  |       |       |
|                | Connecting                         |               |               |                     | flared type      | 10/6) אם 20.57 (אים יוים | (2007) NT3.08 ( | flared type       |              |       |       |
| 20             | Standard le                        |               |               |                     | патеи туре       | 5.0                      | )m              | патеи туре        |              |       |       |
| Piping         | Pipe length r                      |               |               |                     |                  |                          | 30m             |                   |              | -     |       |
| <u> </u>       | Indoor unit & Outdoor uni          |               | rence m       |                     | 20m (OD          | located lower) /         |                 | ed higher)        |              |       |       |
|                | Add gas amo                        |               | nonec III     |                     | 2011 (00         |                          | g/m             | ou mentil)        |              |       |       |
|                | Pipe length for add                |               | n             |                     |                  |                          | )m              |                   |              |       |       |
|                | i ipe tengui ioi aut               | araonat gas I |               |                     |                  | 10                       |                 |                   |              |       |       |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-100PE4RN (3P) U-100PZ4R8

| Indoor         |                                     |             | 1odel                   |               | S-100PE4RN (3P   |                 |                  | -                  |                  |            |             |
|----------------|-------------------------------------|-------------|-------------------------|---------------|------------------|-----------------|------------------|--------------------|------------------|------------|-------------|
| Panel          |                                     | ·           | iouct                   | '             | -                | 1               |                  | -                  |                  |            |             |
| Outdoor        |                                     |             |                         |               | -                |                 |                  | U-100PZ4R8         |                  |            |             |
| Branch pipe    |                                     |             |                         |               |                  |                 |                  | -                  |                  |            |             |
| Performance    | test condition                      |             |                         |               |                  |                 | ISO 13253 / A    |                    |                  |            |             |
| Power supply   | y                                   | Ç           | ð, Hz                   | 0001/         | 1Ø 50Hz          | 0.401/          | 0001/            | 3Ø 50Hz            | 4451/            | Min        | Man         |
|                |                                     |             | kW                      | 220V<br>-     | 230V<br>10.0     | 240V<br>10.0    | 380V             | 400V<br>-          | 415V<br>-        | Min<br>2.8 | Max<br>11.5 |
|                |                                     |             | BTU/h                   | -             | 34100            | 34100           | -                | -                  | -                | 9600       | 39200       |
|                | Capacity                            | Sensible    | kW                      | -             | 8.5              | 8.5             | -                | -                  | -                | -          | -           |
|                |                                     | Latent      | kW                      | -             | 1.5              | 1.5             | -                | -                  | -                | -          | -           |
|                | Current                             |             | Α                       | -             | 1.82             | 1.70            | -                | 4.60               | 4.45             |            | -           |
|                | Input power                         |             | W                       | -             | 330              | 330             | -                | -                  | -                | -          | -           |
|                |                                     |             | otal W                  |               | -                |                 | -                | 2.90k              | 2.90k            | 580        | 4.84k       |
|                | Annual consumption                  |             | al kWh                  | -             | -                | -               | -                | 1450               | - 0.45           | -          | -           |
| Cooling        | EER<br>AEER                         |             | nl (W/W)<br>W/W)        | -             | -                | -               | -                | 3.45<br>3.39       | 3.45             | 4.83       | 2.38        |
| ő              | SEER rating                         | (1          | **/**)                  | -             | -                |                 | -                | Commercial         | Residential      | -          | -           |
|                | TCSPF                               | (\          | W/W)                    | -             | -                | -               | -                | 5.76               | 4.49             | -          | -           |
|                | Total Energy consumption            | kWh         | ,                       | -             | -                | -               | -                | 1416               | 840              | -          | -           |
|                | Star rating                         |             | -                       | -             | -                | -               | -                | -                  | 2.5 Stars        | -          | -           |
|                | Power factor                        |             | %                       | -             | -                | -               | -                | 91                 | 91               | -          | -           |
|                | Noise indoor                        |             | ) (H/M/L)               |               | 42/37/34         |                 |                  | -                  |                  | -          | -           |
|                |                                     |             | r Level dB              |               | 64 / 59 / 56     |                 |                  | 52 / -             |                  | -          | -           |
|                | Noise outdoor                       |             | ) (H/M/L)<br>r Level dB |               | <del>.</del>     |                 |                  | 70 / -             |                  | -          | -           |
|                | 0                                   |             | kW                      | -             | 10.0             | 10.0            | -                | -                  | -                | 3.20       | 14.0        |
|                | Capacity                            |             | BTU/h                   | -             | 34100            | 34100           | -                | -                  | -                | 10900      | 47800       |
|                | Current                             |             | Α                       | -             | 1.82             | 1.70            | -                | 3.90               | 3.75             | -          | -           |
|                | Input power                         |             | W                       | -             | 330              | 330             | -                | -                  | -                |            | -           |
|                |                                     |             | otal W                  |               | -                |                 | -                | 2.45k              | 2.45k            | 610        | 4.50k       |
|                | COP                                 |             | al (W/W)                | -             | -                | -               | -                | 4.08               | 4.08             | 5.25       | 3.11        |
| 26             | ACOP<br>SEER rating                 | ()          | W/W)                    | -             | -                | -               | -                | 4.00<br>Commercial | -<br>Residential | -          | -           |
| Heating        | HSPF                                | 1 0         | W/W)                    | -             | -                | -               | -                | 4.68               | 4.4              | -          | -           |
| Ĭ              | Total Energy consumption            |             | kWh                     | -             | -                |                 | -                | 535                | 1232             | -          | -           |
|                | Star rating                         |             | -                       | -             | -                | -               | -                | -                  | 2.5 Stars        | -          | -           |
|                | Power factor                        |             | %                       | -             | -                | -               | -                | 91                 | 91               | -          | -           |
|                | Noise indoor                        |             | ) (H/M/L)               |               | 42 /37 / 34      |                 |                  | -                  |                  |            | -           |
|                | TVOISC III GOOT                     |             | r Level dB              |               | 64/59/56         |                 |                  | -                  |                  | -          | -           |
|                | Noise outdoor                       |             | ) (H/M/L)               |               | -                |                 |                  | 52 / -             |                  | -          | -           |
| LOW TEMP       | Total capacity (kW) / Inp           |             | r Level dB              |               | -                |                 | 10.70            | 70 / -<br>3.78k    | 2.83             | -          | -           |
| EXTRA LOW      |                                     |             |                         |               |                  |                 | 10.70            | 3.76K              | 2.00             |            |             |
| TEMP           | Total capacity (kW) / Inp           | ut power (W | )/COP                   |               | -                |                 | -                | -                  | -                |            | -           |
| Max Current    | (A) / Max Input Power (W)*          |             |                         | -             | 2.95 / 550       | 2.83 / 550      | -/-              | 11.9 / 6.29k       | 11.9 / 6.49k     |            |             |
| Starting curre | ent (A) (Cooling / Heating)         |             |                         | -             | -                | -               | -/-              | 4.60 / 3.90        | 4.45 / 3.75      |            |             |
| Comp output    |                                     |             |                         |               | -                |                 | -                | 2.50k              | 2.50k            |            |             |
|                | use max size (A)                    |             |                         |               | -                |                 |                  | 15                 |                  |            | •           |
|                | edance (ΩMAX)                       |             |                         |               | 560              |                 |                  | 120                |                  |            | -           |
|                | ntput (Indoor/Outdoor) W            |             | L/h                     |               | 2.1 (2.1 x1)     |                 |                  | -                  |                  |            |             |
| External stati |                                     |             | Pa                      | 80            | ) (MIN10 - MAX15 | 50)             |                  | _                  |                  |            |             |
| Indoor         | Cooling                             | m³/min (I   | H/M/L) (m³/h)           |               | 29.0 (2520)/(2   |                 |                  | -                  |                  | -          | -           |
| Air flow       | Heating                             |             | H/M/L) (m³/h)           | 42.0 / 34.0 / | 29.0 (2520)/(2   | 040) / (1740)   |                  | -                  |                  |            | -           |
| Outdoor        | Cooling                             |             | nin (m³/h)              |               | -                |                 |                  | 73.0 (4380)        |                  | -          | -           |
| Air flow       | Heating                             |             | nin (m³/h)              |               | -                |                 |                  | 73.0 (4380)        | 0                | -          | -           |
| Retrigerant ty | /pe / amount (ship) kg / amount (r  |             |                         |               | -                |                 |                  | R32, 2.400 / 3.30  | U                |            | -           |
| F-Gas          | GWP<br>CO₂eq (ton) (PRECHA          |             | INT) /                  |               | _                |                 |                  | 675 / 1.62 / 2.23  |                  |            | _           |
| 1 -Od5         | CO <sub>2</sub> eq (ton) (MAXIMUM ( |             |                         |               | -                |                 |                  | J, J, 1.02 / 2.20  | ,                |            |             |
|                |                                     |             | (ht (mm)                |               | 300              |                 |                  | 996                |                  |            |             |
| Product dime   | ension                              |             | th (mm)                 |               | 1297             |                 |                  | 980                |                  |            |             |
|                |                                     |             | th (mm)                 |               | 877              |                 |                  | 370                |                  |            | -           |
| Product dime   | ension (Panel)                      |             | x D (mm)                |               | -                |                 |                  | -                  |                  |            | -           |
|                |                                     |             | (ht (mm)                |               | 414              |                 |                  | 1134               |                  |            | -           |
| Packing dime   | ension                              |             | th (mm)                 |               | 1494             |                 |                  | 1095               |                  |            | -           |
|                |                                     |             | th (mm)                 |               | 1050             |                 |                  | 529                |                  |            | -           |
| Weight         |                                     |             | OSS) kg                 |               | 51<br>61         |                 |                  | 80<br>88           |                  |            |             |
|                |                                     |             | l (NET) kg              |               | -                |                 |                  | -                  |                  |            |             |
|                | Layers limit (actual                |             |                         |               | 7 (8)            |                 |                  | 1 (2)              |                  |            | -           |
| Operation      | andition                            | Cod         | ol (DBT)                |               | 18°C ~ 32°C      |                 |                  | -10°C ~ 46°C       |                  |            |             |
| Operation co   | mundon                              | Hea         | at (DBT)                |               | 16°C~30°C        |                 |                  | -15°C ~ 24°C       |                  |            |             |
|                | Max Working Pressure HP/LP M        |             | )                       |               |                  |                 | / 2.55           |                    |                  |            |             |
| ļ              | Max High Pressure M                 |             |                         |               |                  |                 | 15               |                    |                  |            |             |
|                | Pipe port diamete                   |             |                         | (Liquid) Ø9.  | 52 (3/8) (Gas) Ø |                 |                  | 52 (3/8) (Gas) Ø   | 15.88 (5/8)      |            | -           |
|                | Pipe diameter                       |             |                         |               |                  | uid) Ø9.52 (3/8 | ) (Gas) Ø15.88 ( |                    |                  |            | -           |
| <i>0</i> 0     | Connecting                          |             |                         |               | flared type      | -               | Om.              | flared type        |                  |            |             |
| Piping         | Standard le<br>Pipe length          |             |                         |               |                  |                 | 0m<br>50m        |                    |                  |            |             |
| -              | Indoor unit & Outdoor uni           |             | rence m                 |               | 15m (OD          | located lower)  |                  | ed higher)         |                  |            |             |
|                | Add gas amo                         |             |                         |               | ,35              |                 | g/m              | 5 . ,              |                  |            | -           |
|                | Pipe length for add                 |             | n                       |               |                  |                 | )m               |                    |                  |            | -           |
|                |                                     |             |                         |               |                  |                 |                  |                    |                  |            |             |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-100PE4R (1P\_DIx) U-100PZH3R5

| Parel  | Indoor         |                               | Model                 |                | S-            | -100PE4R (1P_D   | lx)            |   |                   |              |       | -     |
|--|----------------|-------------------------------|-----------------------|----------------|---------------|------------------|----------------|---|-------------------|--------------|-------|-------|
| Material part   Material par |                |                               |                       |                |               | -                |                |   | -                 |              |       | -     |
| ## Technology  | Outdoor        |                               |                       |                |               | -                |                |   | U-100PZH3R5       |              |       | -     |
| March   1999   | Branch pipe    |                               |                       |                |               |                  |                | -                                       |                   |              |       |       |
| ## 1987 Cape   1987   1987   1989   1999   1999   1990   | Performance    | test condition                | 1                     |                |               |                  |                | ISO 13253 / AS                          |                   | ,            |       |       |
| ## Capacity   First  | Power supply   | <b>V</b>                      |                       |                |               |                  | ı              |   |                   |              |       |       |
| March   Capachy   Capac  |                | ,<br>T                        |                       |                |               |                  |                |   |                   |              |       | -     |
| March   Secolar   Secol  |                |                               |                       |                |               |                  |                |   |                   |              |       |       |
| ## PAPER   CALIFORM                   | Capacity                      |                       | ,              |               |                  |                |   |                   |              | 10600 |       |
| A  |                |                               |                       |                |               |                  |                |   |                   |              |       |       |
| ### Part person   N  |                | Current                       |                       |                |               |                  |                |   |                   |              |       |       |
| Mind   Profession   Total NVP  |                | Current                       |                       |                |               |                  |                | -                                       | 12.50             | 12.00        |       |       |
| ## Ammail concurrengemen   |                | Input power                   |                       |                |               |                  | 000            | -                                       | 2.64k             | 2.64k        | 610   | 3.74k |
| ##   Transport   |                | Annual consumption            |                       |                | -             |                  | -              |   |                   |              |       |       |
| Color   Col  | 20             |                               | Total (W/W)           |                | -             | -                | -              | -                                       |                   | 3.79         | 5.08  | 3.34  |
| Color   Col  | oolir          | AEER                          | (W/W)                 |                | -             | -                | -              | -                                       | 3.72              | -            |       | -     |
| First Enter grownward  | ŏ              | SEER rating                   |                       |                |               | -                | -              | -                                       | Commercial        | Residential  |       | -     |
| Start Inform   |                |                               |                       |                | -             | -                | -              | -                                       |                   |              | -     | -     |
| Prove Tector   No.   |                | Total Energy consumption      | kWh                   |                | -             | -                | -              | -                                       | 1367              |              | -     | -     |
| Misse indicate   |                | -                             | -                     |                | -             | -                | -              | -                                       | -                 |              | -     | -     |
| Mode action of   Province Love (B)   |                | Power factor                  |                       |                | -             |                  | -              | -                                       |                   | 92           |       |       |
| Mose outdoor   |                | Noise indoor                  |                       |                |               |                  |                |   |                   |              |       |       |
| Mode Outcoor   Prome Level dil   |                | -                             |                       | -              |               |                  |                |   |                   |              |       | -     |
| ## Capacity   SWV   -   22 5   12 5   -   -   3.30   14.6  |                | Noise outdoor                 |                       | +              |               |                  |                |   |                   |              |       |       |
| Capacity   Capacit   |                |                               |                       | -              |               |                  | 12.5           | _                                       |                   | _            | 3.80  | 1/1 0 |
| Counter  |                | Capacity                      |                       | -+             |               |                  |                |   |                   |              |       |       |
| Imput power  |                | Current                       |                       |                |               |                  |                |   |                   |              |       | -     |
| Pose   |                |                               |                       |                |               |                  |                |   |                   |              |       |       |
| Color  |                | input power                   |                       |                |               |                  |                | -                                       | 3.13k             | 3.13k        | 650   | 3.94k |
| SER rating   |                | СОР                           |                       |                | -             | -                | -              | -                                       |                   |              |       | -     |
| Total Energy consumption   NWh   .   | 700            | ACOP                          | (W/W)                 |                |               | -                | -              | -                                       | 3.93              |              | -     | -     |
| Total Energy consumption   NWh   .   | atin g         |                               |                       | Ţ              |               |                  |                |   |                   |              |       |       |
| Star rating  | ž              |                               |                       |                | -             | -                | -              | -                                       |                   |              | -     | -     |
| Power factor   S   |                |                               |                       |                |               | -                |                | -                                       |                   |              |       |       |
| Molse indoor   |                | -                             |                       |                |               | -                |                | -                                       |                   |              |       |       |
| Note inclored   Power Level dB   |                | Power factor                  |                       |                | -             |                  | -              | -                                       |                   | 92           |       | -     |
| Moise outdoor   MBAI   IMPMI.  |                | Noise indoor                  |                       |                |               |                  |                |   |                   |              | -     | -     |
| Note   Provest   Level   Color   Provest   Color   C |                |                               |                       | •              |               |                  |                |   |                   |              | -     | -     |
| Manual   |                | Noise outdoor                 |                       |                |               |                  |                |   |                   |              |       |       |
| Max Current (A) / Max input Power (W) / COP  | LOW TEMP       | Total capacity (kW) / Inc     |                       | _              |               |                  |                | 12.20                                   |                   | 2.77         |       | -     |
| TEMP   |                |                               |                       |                |               |                  |                |   |                   |              |       |       |
| Starting current (A) (Cooling / Heating)   | 1              | Total capacity (kw) / Inp     | out power (W) / COP   |                |               | -                |                | -                                       | -                 | -            |       | -     |
| Comp outbut (My)   | Max Current    | (A) / Max Input Power (W)*    |                       |                | -             | 2.95 / 550       | 2.83 / 550     | -/-                                     | 27.8 / 6.00k      | 27.8 / 6.20k |       | -     |
| Time Delay tuse max size (A)   | Starting curre | ent (A) (Cooling / Heating)   |                       |                | -             | -                | -              | -/-                                     | 12.5 / 14.8       | 12.0 / 14.2  |       | -     |
| Networkimpedance (QMAX)  |                | • •                           |                       |                |               | -                |                | -                                       |                   | 2.50k        |       | -     |
| Fan Notor output (Indoor/Outdoory)W  |                |                               |                       |                |               | -                |                |   |                   |              |       |       |
| Moisture removal volume  |                |                               |                       | -              |               | -                |                |   |                   |              |       |       |
| Packmal static   Pac  |                |                               | 1.76                  |                |               |                  |                |   |                   |              |       |       |
| Indoor Air flow  |                |                               |                       |                | 80            |                  | 50)            |   |                   |              |       |       |
| Air flow   Heating   m³/min (H/ML) (m³/h)   42.0 / 34.0 / 29.0 (2520) / (2040) / (1740)  |                |                               |                       |                |               | •                |                |   |                   |              |       | _     |
| Cooling  |                |                               |                       |                |               |                  |                |   |                   |              | -     | _     |
| Air flow         Heating         m³/min (m³/h)         -         108.0 (6480)         -         -           F-Gas         GCP / CO₂eq (ton) (PRECHARSED AMOUNT) / CO₂eq (ton) (PRECHARSED AMOUNT) / CO₂eq (ton) (MAXIMUM CHARSED AMOUNT) / CO₂eq (ton) (MAXIMUM CHARSED AMOUNT)         -         675 / 2.06 / 3.73         -  |                |                               |                       | 7              | 2.3.107       |                  | ., \=. 10/     |   |                   |              |       | -     |
| Refrigerant type / amount (ship) kg / amount (max) kg  |                |                               |                       |                |               | -                |                |   |                   |              | -     | -     |
| F-Gas   CO <sub>2</sub> eq (ton) (PRECHARGED AMOUNT)   |                |                               |                       |                |               | -                |                |   |                   | 5            |       |       |
| COpen  |                | GWP                           | /                     | T              |               |                  |                |   |                   |              |       |       |
| Height (mm)   300   1416   | F-Gas          |                               |                       |                |               | -                |                |   | 675 / 2.06 / 3.73 | 3            |       | -     |
| Product dimes   Final State                   | CO₂eq (ton) (MAXIMUM (        | CHARGED AMOUNT)       |                |               |                  |                |   |                   |              |       |       |
| Depth (mm)   877   340   34  |                |                               | Height (mm)           |                |               | 300              |                |   | 1416              |              |       |       |
| Product dimersion (Panel)         HX W X D (mm)         - <t< td=""><td>Product dime</td><td>ension</td><td></td><td></td><td></td><td>1297</td><td></td><td></td><td>940</td><td></td><td></td><td>-</td></t<>  | Product dime   | ension                        |                       |                |               | 1297             |                |   | 940               |              |       | -     |
| Height (mm)  |                |                               |                       | Ţ              |               |                  |                |   |                   |              |       |       |
| Packing dimersion   Depth (mm)   1494   1055   | Product dime   | ension (Panel)                |                       | )              |               |                  |                |   |                   |              |       |       |
| Depth (mm)   1050  |                |                               |                       |                |               |                  |                |   |                   |              |       |       |
| Neight   Neight   S1   99  | Packing dime   | ension                        |                       | -+             |               |                  |                |   |                   |              |       |       |
| Veright   Ver  |                |                               |                       |                |               |                  |                |   |                   |              |       |       |
| Panel (NET) kg   | Weight         |                               |                       |                |               |                  |                |   |                   |              |       |       |
| Cool (DBT)   18°C ~ 32°C   -15°C ~ 48°C  | vvcigill       |                               |                       |                |               |                  |                |   |                   |              |       |       |
| Cool (DBT)         18 ° C ~ 32 ° C         -15 ° C ~ 48 ° C         -           Heat (DBT)         16 ° C ~ 30 ° C         -20 ° C ~ 24 ° C         -           Max Working Pressure HP/LP Mpa (par) (PS)         4.15 ′ 2.55         -           Max High Pressure Mpa         4.15         -           Pipe port diameter mm (inch)         (Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)         -           Pipe diameter mm (inch)         (Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)         -           Connecting method         flared type         flared type                     Standard length m         5.0m         -           Pipe length range m         5.85m         -           Indoor unit & Outdoor unit height difference m         15m (OD located lower) / 30m (OD located higher)         -           Ad gas amount g/m         45 g/m         -  |                | Lavers limit (actual          |                       |                |               |                  |                |   |                   |              |       |       |
| Operation collision         Heat (DBT)         16°C ~ 30°C         -20°C ~ 24°C         -           Max Working Pressure HP/LP Mpa (bar) (PS)         4.15 / 5           Wax High Pressure Mpa         4.15           Pipe port diameter mm (inch)         (Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)         -           Pipe diameter mm (inch)         (Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)         -           Connecting method         flared type         flared type         -           Standard length m         5.0m         -           Pipe length range m         5 ~ 85m         -           Indoor unit & Outdoor unit beight difference m   |                |                               |                       |                |               |                  |                |   |                   |              |       |       |
| Max Working Pressure HP/LP Mpa (bar) (PS)         4.15/2.55           Base HP/LP Mpa (bar) (PS)         4.15/2.55           Base HP/LP Mpa (bar) (PS)         4.15           Base HP/LP Mpa (bar) (PS)         Charles (Liquid) 4.15           Base HP/LP Mpa (base HP/LP Mpa) (Base HP/LP Mpa  | Operation co   | ndition                       |                       |                |               |                  |                |   |                   |              |       |       |
| Max High Pressure Mpa  | <b>-</b>       | Max Working Pressure HP/I P M |                       | <del>-  </del> |               |                  | 4.15           | / 2.55                                  | 20 0 24 0         |              |       |       |
| Pipe port diameter mm (inch)   |                |                               |                       |                |               |                  |                |   |                   |              |       |       |
| Pipe diameter mm (inch)  |                | _                             |                       | $\dashv$       | (Liquid) Ø9 a | 52 (3/8) (Gas) M |                |   | 52 (3/8) (Gas) M  | 15.88 (5/8)  |       |       |
| Connecting method   Flared type   Flared type  |                |                               |                       |                | (Enquiu) posi |                  |                |   |                   |              |       |       |
| Standard length m   5.0m   -   |                |                               |                       |                |               |                  | , -, 102 (5/0  | , |                   |              |       |       |
| Indoor unit & Outdoor unit height difference m 15m (OD located lower) / 30m (OD located higher) - Add gas amount g/m 45 g/m -  | ing            |                               |                       | <u> </u>       |               | . 71. 7          | 5.             | 0m                                      | . 71. 2           |              |       | -     |
| Add gas amount g/m 45 g/m -  | Pip            |                               |                       |                |               |                  |                |   |                   |              |       | -     |
|  |                | Indoor unit & Outdoor uni     | t height difference m |                |               | 15m (OD          | located lower) | 30m (OD locate                          | ed higher)        |              |       | -     |
| Pipe length for additional gas m 30m -   |                |                               |                       | Ţ              |               |                  |                |   |                   |              |       | -     |
|  | 1              | Pipe length for add           | ditional gas m        |                |               |                  | 30             | )m                                      |                   |              |       | -     |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-100PE4RN (3P\_DIx) U-100PZH3R8

| Indoor                     |   |             | lodel                      |               | -100PE4R (3P_DI      |                   | 1001 =:        | -                                 |                     |               |               |
|----------------------------|---|-------------|----------------------------|---------------|----------------------|-------------------|----------------|-----------------------------------|---------------------|---------------|---------------|
| Panel                      |   |             | iouci                      | 9             | -                    |                   |                | -                                 |                     |               |               |
| Outdoor                    |   |             |                            |               | -                    |                   |                | U-100PZH3R8                       |                     |               |               |
| Branch pipe                |   |             |                            |               |                      |                   |                |                                   |                     |               |               |
| Performance                | test condition                                |             |                            |               |                      |                   | ISO 13253 / AS |                                   |                     | -             |               |
| Power supply               | 1   | Ç           | 0, Hz<br>V                 | 0001/         | 1Ø 50Hz              | 0.401/            | 0001           | 3Ø 50Hz                           | 4451/               | M:-           | Man           |
|                            |   |             | kW                         | 220V<br>-     | 230V<br>10.0         | 240V<br>10.0      | 380V<br>-      | 400V<br>-                         | 415V<br>-           | Min<br>3.1    | Max<br>12.5   |
|                            |   |             | TU/h                       | -             | 34100                | 34100             | -              | -                                 | -                   | 10600         | 42700         |
|                            | Capacity                                      | Sensible    | kW                         | -             | 8.5                  | 8.5               | -              | -                                 | -                   | -             | -             |
|                            |   | Latent      | kW                         |               | 1.5                  | 1.5               | -              | -                                 | -                   | -             | -             |
|                            | Current                                       |             | Α                          | -             | 1.82                 | 1.70              | -              | 4.20                              | 4.05                | -             | -             |
|                            | Input power                                   | To          | tal W                      | -             | 330                  | 330               | -              | -<br>2.64k                        | -<br>2.64k          | 610           | -<br>3.74k    |
|                            | Annual consumption                            |             | al kWh                     | -             | -                    | -                 | -              | 1320                              | 2.04K               | -             | 3.74K         |
| 200                        | EER   |             | l (W/W)                    | -             | -                    | -                 | -              | 3.79                              | 3.79                | 5.08          | 3.34          |
| Cooling                    | AEER  |             | N/W)                       |               | -                    | -                 | -              | 3.72                              | -                   | -             | -             |
| Ö                          | SEER rating                                   |             |                            | -             | -                    | -                 | -              | Commercial                        | Residential         | -             | -             |
|                            | TCSPF   |             | N/W)                       | -             | -                    | -                 | -              | 5.96                              | 4.7                 | -             | -             |
|                            | Total Energy consumption<br>Star rating       | ,           | «Wh                        | -             | -                    | -                 | -              | 1367                              | 798<br>3 Stars      | -             | -             |
|                            | Power factor                                  |             | %                          | -             | -                    | -                 | -              | 91                                | 91                  | -             | -             |
|                            |   | dB(A        | ) (H/M/L)                  |               | 42/37/34             |                   |                | -                                 |                     | -             | -             |
|                            | Noise indoor                                  |             | r Level dB                 |               | 64 / 59 / 56         |                   |                | -                                 |                     | -             | -             |
|                            | Noise outdoor                                 |             | (H/M/L)                    |               | -                    |                   |                | 52/-                              |                     | -             | -             |
|                            |   |             | Level dB                   |               | - 40.5               | 10.5              |                | 68 / -                            | I                   | - 0.00        | - 440         |
|                            | Capacity                                      |             | kW<br>TU/h                 | -             | 12.5<br>42700        | 12.5<br>42700     | -              | -                                 | -                   | 3.80<br>12800 | 14.0<br>47800 |
|                            | Current                                       |             | Α                          | -             | 1.82                 | 1.70              | -              | 4.95                              | 4.80                | -             | -             |
| 1                          |   |             | W                          | -             | 330                  | 330               | -              | -                                 | -                   | -             | -             |
| 1                          | Input power                                   |             | tal W                      |               | -                    | _                 | -              | 3.13k                             | 3.13k               | 650           | 3.94k         |
|                            | COP   |             | l (W/W)                    | -             | -                    | -                 | -              | 3.99                              | 3.99                | 5.77          | 3.55          |
| 20                         | ACOP  | (\          | N/W)                       | -             | -                    | -                 | -              | 3.93                              | -                   | -             | -             |
| Heating                    | SEER rating<br>HSPF                           | (1          | N/W)                       | -             | -                    | -                 | -              | Commercial<br>4.95                | Residential<br>4.50 | -             | -             |
| Ĭ                          | Total Energy consumption                      |             | (Wh                        | -             | -                    | -                 | -              | 631                               | 1506                | -             | -             |
|                            | Star rating                                   |             | -                          | -             | -                    | -                 | -              | -                                 | 3 Stars             | -             | -             |
|                            | Power factor                                  |             | %                          |               | -                    |                   | -              | 91                                | 91                  | -             | -             |
|                            | Noise indoor                                  |             | ) (H/M/L)                  |               | 42/37/34             |                   |                | -                                 |                     |               |               |
|                            |   |             | r Level dB                 |               | 64 / 59 / 56         |                   |                |                                   |                     | -             | -             |
|                            | Noise outdoor                                 |             | (H/M/L)<br>Level dB        |               | -                    |                   |                | 52 / -<br>68 / -                  |                     | -             | -             |
| LOW TEMP                   | Total capacity (kW) / Inp                     |             |                            |               | <u> </u>             |                   | 12.20          | 4.40k                             | 2.77                |               |               |
| EXTRA LOW                  |   |             |                            |               |                      |                   |                | 4.400                             | 2.77                |               |               |
| TEMP                       | Total capacity (kW) / Inp                     | ut power (w | ) / COP                    |               | -                    |                   | -              | -                                 | -                   |               |               |
|                            | (A) / Max Input Power (W)*                    |             |                            |               | 2.95 / 550           | 2.83 / 550        | -/-            | 9.80 / 6.30k                      | 9.80 / 6.55k        |               |               |
|                            | ent (A) (Cooling / Heating)                   |             |                            |               | -                    |                   | -/-            | 4.20 / 4.95                       | 4.05 / 4.80         |               |               |
| Comp output                |   |             |                            |               | -                    |                   | -              | 2.50k                             | 2.50k               |               |               |
|                            | se max size (A)<br>edance (ΩMAX)              |             |                            |               |                      |                   |                | 15                                |                     |               |               |
|                            | tput (Indoor/Outdoor) W                       |             |                            |               | 560                  |                   |                | 90 x2                             |                     |               |               |
| Moisture rem               |   |             | L/h                        |               | 2.1 (2.1 x1)         |                   |                | -                                 |                     |               | -             |
| External stati             | c pressure                                    |             | Pa                         |               | (MIN10 ~ MAX15       |                   |                | -                                 |                     |               | -             |
| Indoor                     | Cooling                                       |             | 1/M/L) (m <sup>3</sup> /h) |               | 29.0 (2520)/(2       |                   |                | -                                 |                     | -             | -             |
| Air flow                   | Heating                                       |             | H/M/L) (m³/h)              | 42.0 / 34.0 / | 29.0 (2520)/(20      | 040) / (1740)     |                | - 110.0 (7000)                    |                     | -             | -             |
| Outdoor                    | Cooling                                       |             | in (m³/h)                  |               | -                    |                   |                | 118.0 (7080)                      |                     | -             | -             |
| Air flow<br>Refrigerant ty | Heating<br>/pe / amount (ship) kg / amount (n |             | in (m³/h)                  |               | <del></del>          |                   | -              | 108.0 (6480)<br>R32, 3.050 / 5.52 | 5                   |               |               |
| goruni ty                  | GWP   |             |                            |               |                      |                   | <u>'</u>       | , _,0007 0.02                     | -                   |               |               |
| F-Gas                      | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM C | RGED AMOU   |                            |               | -                    |                   |                | 675 / 2.06 / 3.73                 | 3                   |               |               |
|                            |   | Ů           | ht (mm)                    |               | 300                  |                   |                | 1416                              |                     |               |               |
| Product dime               | ension  |             | th (mm)                    |               | 1297                 |                   |                | 940                               |                     |               |               |
| Droduct dir-               | ancion (Panel)                                |             | th (mm)                    |               | 877                  |                   |                | 340                               |                     |               |               |
| riouuct aime               | ension (Panel)                                |             | x D (mm)<br>ht (mm)        |               | 414                  |                   |                | 1556                              |                     |               |               |
| Packing dime               | ension  |             | th (mm)                    |               | 1494                 |                   |                | 1055                              |                     |               |               |
|                            |   |             | th (mm)                    |               | 1050                 |                   |                | 485                               |                     |               |               |
|                            |   | (N          | ET) kg                     |               | 51                   |                   |                | 99                                |                     |               |               |
| Weight                     |   |             | OSS) kg                    |               | 61                   |                   |                | 111                               |                     |               |               |
|                            | I ayora limit (a -+ : -1)                     |             | (NET) kg                   |               | 7 (0)                |                   |                | 1 (2)                             |                     |               |               |
|                            | Layers limit (actual)                         |             | J (DDT)                    |               | 7 (8)<br>18°C ~ 32°C |                   |                | 1 (2)<br>-15°C ~ 48°C             |                     |               |               |
| Operation co               | ndition                                       |             | ol (DBT)                   |               | 16°C~32°C            |                   |                | -15 C ~ 48 C<br>-20°C ~ 24°C      |                     |               |               |
|                            | Max Working Pressure HP/LP M                  |             | it (DBT)                   |               | 10 C ~ 30 C          | <b>∆</b> 15       | / 2.55         | -20 C~24 C                        |                     |               |               |
|                            | Max High Pressure M                           |             |                            |               |                      |                   | 15             |                                   |                     |               |               |
|                            | Pipe port diamete                             |             |                            | (Liquid) Ø9.5 | 52 (3/8) (Gas) Ø     |                   |                | 52 (3/8) (Gas) Ø                  | 15.88 (5/8)         |               |               |
|                            | Pipe diameter                                 |             |                            | , ,, ,        |                      | juid) Ø9.52 (3/8) |                |                                   |                     |               |               |
|                            | Connecting                                    |             |                            |               | flared type          |                   | ,              | flared type                       |                     |               |               |
| Piping                     | Standard le                                   |             | -                          |               |                      |                   | 0m             |                                   |                     |               |               |
| <u>=</u>                   | Pipe length r                                 |             |                            |               | 40                   |                   | 85m            | - at let at 1.1                   |                     |               |               |
| 1                          | Indoor unit & Outdoor uni                     |             | rence m                    |               | 15m (OD              | located lower) /  |                | ea higher)                        |                     |               |               |
| 1                          | Add gas amo<br>Pipe length for add            |             | n                          |               |                      |                   | g/m<br>Om      |                                   |                     |               |               |
|                            |   |             |                            |               |                      | 30                |                |                                   |                     |               |               |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-100PE4R (1P) U-100PZ4R5

| Indoor         | tatio i roccaro B                  |                | lodel               |               | S-100PE4R (1P)               |                                  | l                |                   |              |                                     | . 1      |
|----------------|------------------------------------|----------------|---------------------|---------------|------------------------------|----------------------------------|------------------|-------------------|--------------|-------------------------------------|----------|
| Panel          |                                    | M              | iouet               |               | 0-100FE4K (1P)               |                                  |                  |                   |              |                                     |          |
| Outdoor        |                                    |                |                     |               | -                            |                                  |                  | U-100PZ4R5        |              |                                     |          |
| Branch pipe    |                                    |                |                     |               |                              |                                  | -                | 0 1001 24110      |              |                                     |          |
|                | test condition                     | l .            |                     |               |                              |                                  | ISO 13253 / AS   | S NZS 3823.1      |              |                                     |          |
|                |                                    | Q              | ó, Hz               |               | 1ø 50Hz                      |                                  |                  | 1ø 50Hz           |              |                                     |          |
| Power supply   | y                                  |                | V                   | 220V          | 230V                         | 240V                             | 220V             | 230V              | 240V         | Min                                 | Max      |
|                |                                    |                | kW                  | -             | 9.5                          | 9.5                              | -                | -                 | -            |                                     | 11.0     |
|                |                                    |                | TU/h                | -             | 32400                        | 32400                            | -                | -                 | -            |                                     | 37500    |
|                | Capacity                           | Sensible       | kW                  | -             | 8.3                          | 8.3                              | -                | -                 | -            | -                                   | -        |
|                |                                    | Latent         | kW                  | -             | 1.2                          | 1.2                              | -                | -                 | -            | -                                   | -        |
|                | Current                            |                | A                   | -             | 1.82                         | 1.70                             | -                | 13.20             | 12.60        | -                                   | -        |
|                | Innut nower                        |                | W                   | -             | 330                          | 330                              | -                | -                 | -            | -                                   | -        |
|                | Input power                        | To             | tal W               |               | -                            |                                  | -                | 3.00k             | 3.00k        | 590                                 | 3.60k    |
|                | Annual consumption                 | Tot            | al kWh              | -             | -                            | -                                | -                | 1500              | -            | -                                   | -        |
| 20             | EER                                | Tota           | l (W/W)             | -             | -                            | -                                | -                | 3.17              | 3.17         | 5.08                                | 3.06     |
| Cooling        | AEER                               | (V             | V/W)                | -             | -                            | -                                | -                | 3.11              | -            | -                                   | -        |
| Ö              | SEER rating                        |                |                     | -             | -                            | -                                | -                | Commercial        | Residential  | -                                   | -        |
|                | TCSPF                              |                | V/W)                | -             | -                            | -                                | -                | 5.19              | 4.09         | -                                   | -        |
|                | Total Energy consumption           | ŀ              | <b>kWh</b>          | -             | -                            | -                                | -                | 1499              | 880          | -                                   | -        |
|                | Star rating                        |                | -                   | -             | -                            | -                                | -                | -                 | 2.5 Stars    | -                                   | -        |
|                | Power factor                       |                | %                   | -             | -                            | -                                | -                | 99                | 99           | -                                   | -        |
|                | Noise indoor                       |                | ) (H/M/L)           |               | 42/37/34                     |                                  |                  | -                 |              | -                                   | -        |
|                |                                    |                | r Level dB          |               | 64 / 59 / 56                 |                                  |                  | -                 |              | -                                   | -        |
|                | Noise outdoor                      |                | ) (H/M/L)           |               | -                            |                                  |                  | 54 / -            |              | -                                   |          |
|                | 1                                  |                | r Level dB          |               |                              |                                  |                  | 72 / -            | ı            |                                     | -        |
|                | Capacity                           |                | kW                  | -             | 10.0                         | 10.0                             | -                | -                 | -            |                                     | 12.0     |
|                |                                    | В              | TU/h                | -             | 34100                        | 34100                            | -                | -                 |              |                                     | 40900    |
|                | Current                            |                | A                   | -             | 1.82                         | 1.70                             | -                | 12.30             | 11.80        |                                     |          |
|                | Input power                        |                | W                   | -             | 330                          | 330                              | -                | - 0.001-          | - 0.001-     | -                                   | - 0.001- |
|                |                                    |                | tal W               |               | -                            |                                  | -                | 2.80k             | 2.80k        |                                     | 3.60k    |
|                | COP                                |                | l (W/W)             | -             | -                            | -                                | -                | 3.57              | 3.57         |                                     | 3.33     |
| Jg.            | ACOP<br>SEER rating                | I (V           | N/W)                | -             | -                            | -                                | -                | 3.51              | Posidor#:-!  |                                     |          |
| Heating        | SEER rating                        | Δ.             | A/0A/)              |               |                              |                                  |                  | Commercial        | Residential  |                                     |          |
| 포              | HSPF                               |                | W/W)<br>kWh         | -             | -                            | •                                | -                | 4.37              | 3.98         |                                     | -        |
|                | Total Energy consumption           |                | -                   | -             | -                            | -                                | -                | 573               | 1363         |                                     | -        |
|                | Star rating<br>Power factor        |                | %                   | -             | -                            | -                                | -                | - 00              | 2 Stars      |                                     |          |
|                | Power factor                       |                |                     | -             |                              | -                                | -                | 99                | 99           |                                     |          |
|                | Noise indoor                       |                | (H/M/L)             |               | 42 / 37 / 34<br>64 / 59 / 56 |                                  |                  | <u> </u>          |              |                                     |          |
|                |                                    |                | Level dB<br>(H/M/L) |               | -                            |                                  |                  | 54/-              |              |                                     |          |
|                | Noise outdoor                      |                | Level dB            |               |                              |                                  |                  | 72 / -            |              |                                     |          |
| LOW TEMP       | Total capacity (kW) / Inp          |                |                     |               | -                            |                                  | 8.80             | 3.15k             | 2.79         | 3.0 11. 10200 375 590 3.6( 590 3.6( |          |
| EXTRA LOW      |                                    |                |                     |               |                              |                                  | 0.00             | 3.13K             | 2.75         |                                     |          |
| TEMP           | Total capacity (kW) / Inp          | ut power (W)   | /COP                |               | -                            |                                  | -                | -                 | -            |                                     |          |
|                | (A) / Max Input Power (W)*         |                |                     | -             | 2.95 / 550                   | 2.83 / 550                       | -/-              | 16.6 / 3.80k      | 16.6 / 3.80k |                                     |          |
|                | ent (A) (Cooling / Heating)        |                |                     | -             | -                            | -                                | -/-              | 13.2 / 12.3       | 12.6 / 11.8  |                                     |          |
| Comp output    |                                    |                |                     |               | -                            |                                  | -                | 1.50k             | 1.50k        |                                     |          |
|                | use max size (A)                   |                |                     |               | _                            |                                  |                  | 25                | 2100K        |                                     |          |
|                | edance (ΩMAX)                      |                |                     |               | -                            |                                  |                  | -                 |              |                                     |          |
|                | itput (Indoor/Outdoor) W           |                |                     |               | 560                          |                                  |                  | 60                |              |                                     |          |
|                | noval volume                       |                | L/h                 |               | 1.6 (1.6 x1)                 |                                  |                  | -                 |              |                                     |          |
| External stati | ic pressure                        |                | Pa                  | 80            | ) (MIN10 - MAX15             | 50)                              |                  | -                 |              |                                     | -        |
| Indoor         | Cooling                            | m³/min (H      | H/M/L) (m³/h)       | 42.0 / 34.0 / | 29.0 (2520)/(2               | 040) / (1740)                    |                  | -                 |              | -                                   | -        |
| Air flow       | Heating                            |                | H/M/L) (m³/h)       |               | 29.0 (2520)/(2               |                                  |                  | -                 |              | -                                   | -        |
| Outdoor        | Cooling                            |                | in (m³/h)           |               | - '                          |                                  |                  | 56.0 (3360)       |              | -                                   |          |
| Air flow       | Heating                            |                | in (m³/h)           |               | -                            |                                  |                  | 53.0 (3180)       |              | -                                   | -        |
| Refrigerant ty | ype / amount (ship) kg / amount (n | nax) kg        |                     |               | -                            |                                  |                  | R32, 1.930 / 2.43 | 0            |                                     |          |
|                | GWP                                | /              |                     |               |                              |                                  |                  |                   |              |                                     |          |
| F-Gas          | CO₂eq (ton) (PRECHA                |                | INT) /              |               | -                            |                                  |                  | 675 / 1.30 / 1.64 |              |                                     |          |
|                | CO₂eq (ton) (MAXIMUM (             |                |                     |               |                              |                                  |                  | -                 |              |                                     |          |
| <b>-</b>       | 1                                  |                | ht (mm)             |               | 300                          |                                  |                  | 795               |              |                                     |          |
| Product dime   | ension                             |                | th (mm)             |               | 1297                         |                                  |                  | 875               |              |                                     |          |
|                |                                    |                | th (mm)             |               | 877                          |                                  |                  | 320               |              |                                     |          |
| Product dime   | ension (Panel)                     |                | x D (mm)            |               | -                            |                                  |                  | -                 |              |                                     |          |
| . rouget unite |                                    |                | ht (mm)             |               | 414                          |                                  |                  | 899               |              |                                     |          |
| Packing dime   | ension                             |                | th (mm)             |               | 1494                         |                                  |                  | 1049              |              |                                     |          |
|                |                                    |                | th (mm)             |               | 1050                         |                                  |                  | 485               |              |                                     |          |
|                |                                    |                | ET) kg              |               | 51                           |                                  |                  | 55                |              |                                     |          |
| Weight         |                                    |                | OSS) kg             |               | 61                           |                                  |                  | 61                |              |                                     |          |
|                |                                    |                | (NET) kg            |               | -                            |                                  |                  | -                 |              |                                     |          |
|                | Layers limit (actual               |                |                     |               | 7 (8)                        |                                  |                  | 3 (4)             |              |                                     |          |
|                |                                    |                | ol (DBT)            |               | 18°C~32°C                    |                                  |                  | -10°C ~ 46°C      |              |                                     |          |
| Operation co   | ndition                            |                | it (DBT)            |               | 16°C~30°C                    |                                  |                  | -15°C ~ 24°C      |              |                                     |          |
| <b>-</b>       | Max Working Pressure HP/LP M       |                |                     |               | 10 0 00 0                    | ₫ 15                             | / 2.55           | 10 0 24 0         |              | <u> </u>                            |          |
| <b>-</b>       | Max High Pressure M                |                |                     |               |                              |                                  | 15               |                   |              |                                     |          |
|                | Pipe port diamete                  |                |                     | (Liquid) do   | 52 (3/8) (Gas) Ø             |                                  |                  | 52 (3/8) (Gas) Ø  | 15 88 /5/9\  |                                     |          |
|                | Pipe port diameter                 |                |                     | (Liquid) Ø9.  |                              | 15.88 (5/8)<br>Juid) Ø9.52 (3/8) |                  |                   | 10.00 (0/0)  |                                     |          |
|                | Connecting                         |                |                     |               | flared type                  | uiu) שיים, ארן (אים)             | ) (3a5) W15.68 ( | flared type       |              |                                     | -        |
| 20             | Standard le                        |                |                     |               | патеи туре                   | E /                              | 0m               | патеи туре        |              |                                     |          |
| Piping         | Pipe length r                      | _              |                     |               |                              |                                  | om<br>30m        |                   |              |                                     |          |
| <u> </u>       | Indoor unit & Outdoor uni          |                | rence m             |               | 20m (OD                      | located lower) /                 |                  | nd higher)        |              |                                     |          |
|                | Add gas amo                        |                | TOTICE III          |               | 2011 (UD                     |                                  | g/m              | ou migner)        |              |                                     |          |
|                | Pipe length for add                |                | n                   |               |                              |                                  | g/III<br>Om      |                   |              | ·                                   |          |
| L              | i ipe teligili itti aut            | araonut gas II |                     | ·             |                              | 10                               |                  |                   |              |                                     |          |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-100PE4R (3P) U-100PZ4R8

| Indoor                | tatio i roccaro B                             |                                       | lodel                  |               | S-100PE4R (3P)   |                  |                  | -                          |                     |       | . 1        |
|-----------------------|---|---------------------------------------|------------------------|---------------|------------------|------------------|------------------|----------------------------|---------------------|-------|------------|
| Panel                 |   |                                       |                        |               | -                |                  |                  | -                          |                     |       |            |
| Outdoor               |   |                                       |                        |               | -                |                  |                  | U-100PZ4R8                 |                     |       |            |
| Branch pipe           |   |                                       |                        |               |                  |                  |                  |                            |                     |       |            |
| Performance           | e test condition                              | 1 .                                   | 6.11=                  |               | 1ø 50Hz          |                  | ISO 13253 / A    | 3Ø 50Hz                    |                     |       |            |
| Power supply          | у   | , , , , , , , , , , , , , , , , , , , | V V                    | 220V          | 230V             | 240V             | 380V             | 400V                       | 415V                | Min   | Max        |
|                       |   |                                       | kW                     | -             | 10.0             | 10.0             | -                | -                          | -                   | 2.8   | 11.5       |
|                       | Capacity                                      | В                                     | TU/h                   |               | 34100            | 34100            | -                | -                          | -                   | 9600  | 39200      |
|                       | Сараспу                                       | Sensible                              | kW                     | -             | 8.5              | 8.5              | -                | -                          | -                   | -     | -          |
|                       |   | Latent                                | kW                     | -             | 1.5              | 1.5              | -                | -                          | -                   | -     | -          |
|                       | Current                                       |                                       | A<br>W                 | -             | 1.82<br>330      | 1.70<br>330      | -                | 4.60                       | 4.45                | -     | -          |
|                       | Input power                                   | To                                    | otal W                 | -             | -                | 330              | -                | 2.90K                      | 2.90K               | 580   | 4.84k      |
|                       | Annual consumption                            | Tot                                   | al kWh                 | -             | -                | -                | -                | 1450                       | -                   | -     | -          |
| 20                    | EER   |                                       | l (W/W)                | -             | -                | -                | -                | 3.45                       | 3.45                | 4.83  | 2.38       |
| Cooling               | AEER  | (\                                    | N/W)                   | -             | -                | -                | -                | 3.39                       | -                   | -     | -          |
| 0                     | SEER rating<br>TCSPF                          | Ι Λ                                   | N/W)                   | -             | -                | -                | -                | Commercial<br>5.76         | Residential<br>4.49 | -     | -          |
|                       | Total Energy consumption                      |                                       | (Wh                    | -             | -                |                  | -                | 1416                       | 840                 |       | -          |
|                       | Star rating                                   |                                       | -                      | -             | -                |                  | -                | -                          | 2.5 Stars           | -     | -          |
|                       | Power factor                                  |                                       | %                      | -             | -                |                  | -                | 91                         | 91                  | -     | -          |
|                       | Noise indoor                                  |                                       | ) (H/M/L)              |               | 42 / 37/ 34      |                  |                  | -                          |                     | -     | -          |
|                       |   |                                       | Level dB<br>(H/M/L)    |               | 64 / 59 / 56     |                  |                  | 52 / -                     |                     | -     | -          |
|                       | Noise outdoor                                 |                                       | Level dB               |               |                  |                  |                  | 70 / -                     |                     |       | -          |
|                       | Canacity                                      |                                       | kW                     | -             | 10.0             | 10.0             | -                | -                          | -                   | 3.20  | 14.0       |
|                       | Capacity                                      | В                                     | TU/h                   | -             | 34100            | 34100            | -                | -                          | -                   | 10900 | 47800      |
|                       | Current                                       |                                       | Α                      | -             | 1.82             | 1.70             | -                | 3.90                       | 3.75                | -     | -          |
|                       | Input power                                   | т.                                    | tal W                  | -             | 330              | 330              | -                | -<br>2.45k                 | -<br>2.45k          | 610   | -<br>4.50k |
|                       | COP   |                                       | l (W/W)                | -             | -                | -                | -                | 4.08                       | 4.08                | 5.25  | 3.11       |
|                       | ACOP  |                                       | N/W)                   | -             | -                | -                | -                | 4.00                       | -                   | -     | -          |
| Heating               | SEER rating                                   |                                       |                        | -             | -                | -                | -                | Commercial                 | Residential         | -     | -          |
| 至                     | HSPF  |                                       | N/W)                   | -             | -                | -                | -                | 4.68                       | 4.40                | -     | -          |
|                       | Total Energy consumption                      |                                       | «Wh                    | -             | -                | •                | -                | 535                        | 1232                | -     | -          |
|                       | Star rating<br>Power factor                   |                                       | %                      | -             | -                | -                | -                | 91                         | 2.5 Stars<br>91     | -     | -          |
|                       |   | dB(A                                  | ) (H/M/L)              |               | 42 / 37 / 34     |                  |                  | -                          | - 51                | -     | -          |
|                       | Noise indoor                                  |                                       | r Level dB             |               | 64/59/56         |                  |                  |                            |                     | -     | -          |
|                       | Noise outdoor                                 |                                       | ) (H/M/L)              |               | -                |                  |                  | 52 / -                     |                     | •     | -          |
| LOWITEME              |   |                                       | Level dB               |               | -                |                  | 40.70            | 70 / -                     | 0.00                | -     | -          |
| LOW TEMP<br>EXTRA LOW | Total capacity (kW) / Inp                     | ut power (w                           | ) / COP                |               | -                |                  | 10.70            | 3.78k                      | 2.83                |       | •          |
| TEMP                  | Total capacity (kW) / Inp                     | ut power (W                           | /COP                   |               | -                |                  | -                | -                          | -                   |       |            |
|                       | (A) / Max Input Power (W)*                    |                                       |                        | -             | 2.95 / 550       | 2.83 / 550       | -/-              | 11.9 / 6.29k               | 11.9 / 6.49k        |       |            |
| Starting curre        | ent (A) (Cooling / Heating)                   |                                       |                        | -             | -                | -                | -/-              | 4.60/3.90                  | 4.45 / 3.75         |       |            |
| Comp output           |   |                                       |                        |               | -                |                  | -                | 2.50k                      | 2.50k               |       |            |
|                       | use max size (A)<br>edance (ΩMAX)             |                                       |                        |               | <u> </u>         |                  |                  | 15                         |                     |       |            |
|                       | utput (Indoor/Outdoor) W                      |                                       |                        |               | 560              |                  |                  | 120                        |                     |       |            |
|                       | noval volume                                  |                                       | L/h                    |               | 2.1 (2.1 x1)     |                  |                  | -                          |                     |       |            |
| External stati        | ic pressure                                   |                                       | Pa                     |               | ) (MIN10 - MAX15 |                  |                  | -                          |                     |       |            |
| Indoor                | Cooling                                       |                                       | 1/M/L) (m³/h)          |               | 29.0 (2520)/(2   |                  |                  | -                          |                     | -     | -          |
| Air flow              | Heating<br>Cooling                            |                                       | H/M/L) (m³/h)          | 42.0 / 34.0 / | 29.0 (2520)/(2   | 040) / (1740)    |                  | - 72.0 (4200)              |                     | -     | -          |
| Outdoor<br>Air flow   | Heating                                       |                                       | in (m³/h)<br>in (m³/h) |               | <u> </u>         |                  |                  | 73.0 (4380)<br>73.0 (4380) |                     |       | -          |
|                       | ype / amount (ship) kg / amount (n            |                                       | ()                     |               | -                |                  |                  | R32, 2.400 / 3.30          | 0                   |       |            |
|                       | GWP   |                                       |                        |               |                  |                  |                  |                            |                     |       |            |
| F-Gas                 | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM C |                                       |                        |               | -                |                  |                  | 675 / 1.62 / 2.23          | 3                   |       |            |
|                       |   |                                       | ht (mm)                |               | 300              |                  |                  | 996                        |                     |       |            |
| Product dime          | ension  |                                       | th (mm)                |               | 1297             |                  |                  | 980                        |                     |       |            |
| Product dime          | ension (Panel)                                |                                       | th (mm)<br>x D (mm)    |               | 877              |                  |                  | 370                        |                     |       |            |
| . rouget diffit       |   |                                       | ht (mm)                |               | 414              |                  |                  | 1134                       |                     |       |            |
| Packing dime          | ension  | Wid                                   | th (mm)                |               | 1494             |                  |                  | 1095                       |                     |       |            |
|                       |   |                                       | th (mm)                |               | 1050             |                  |                  | 529                        |                     |       |            |
| Weight                |   |                                       | ET) kg<br>OSS) kg      |               | 51<br>61         |                  |                  | 80<br>88                   |                     |       |            |
| AACIRIII              |   |                                       | (NET) kg               |               | - 61             |                  |                  | - 88                       |                     |       |            |
|                       | Layers limit (actual                          |                                       | . , .0                 |               | 7 (8)            |                  |                  | 1 (2)                      |                     |       |            |
| Operation             | andition                                      | Cod                                   | ol (DBT)               |               | 18°C ~ 32°C      |                  |                  | -10°C ~ 46°C               |                     |       |            |
| Operation co          |   |                                       | it (DBT)               |               | 16°C~30°C        |                  |                  | -15°C ~ 24°C               |                     |       |            |
|                       | Max Working Pressure HP/LP M                  |                                       |                        |               |                  |                  | / 2.55           |                            |                     |       |            |
|                       | Max High Pressure M                           |                                       |                        | n:            | =2 (2/2) /5 : :  |                  | 15               | F2 /2/2\ /= · ·            | 15.00 (5/0)         |       |            |
|                       | Pipe port diameter                            |                                       |                        | (Liquid) Ø9.  | 52 (3/8) (Gas) Ø |                  |                  | 52 (3/8) (Gas) Ø           | 15.88 (5/8)         |       |            |
|                       | Pipe diameter<br>Connecting                   |                                       |                        |               | flared type      | uid) Ø9.52 (3/8) | ) (Gas) W15.88 ( | flared type                |                     |       |            |
| 200                   | Standard le                                   |                                       |                        |               | narea type       | 5.0              | 0m               | rou type                   |                     |       |            |
| Piping                | Pipe length r                                 | range m                               |                        |               |                  | 5~               | 50m              |                            |                     |       |            |
|                       | Indoor unit & Outdoor uni                     |                                       | rence m                |               | 15m (OD          | located lower) / | -                | ted higher)                |                     |       |            |
|                       | Add gas amo                                   |                                       |                        |               |                  |                  | g/m              |                            |                     |       |            |
|                       | Pipe length for add                           | uitional gas n                        | 11                     |               |                  | 30               | )m               |                            |                     |       |            |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-125PE4R U-125PZ4R5

| Indoor         |   | Model                           |                 | S-125PE4R                    |                  |  | -                 |                 |       |       |
|----------------|---|---------------------------------|-----------------|------------------------------|------------------|--|-------------------|-----------------|-------|-------|
| Panel          |   |                                 |                 | -                            |                  |  | -                 |                 |       | -     |
| Outdoor        |   |                                 |                 | -                            |                  |  | U-125PZ4R5        |                 |       | -     |
| Branch pipe    |   |                                 |                 |                              |                  | -  |                   |                 |       |       |
| Performance    | test condition                            |                                 |                 |                              |                  | ISO 13253 / A                                    | S NZS 3823.1      |                 |       |       |
| Power supply   | ı   | Ø, Hz                           |                 | 1ø 50Hz                      |                  |  | 1ø 50Hz           |                 |       |       |
| . orror ouppty | ,   | V                               | 220V            | 230V                         | 240V             | 220V   | 230V              | 240V            | Min   | Max   |
|                |   | kW                              | -               | 12.5                         | 12.5             | -  | -                 | -               | 3.2   | 13.5  |
|                | Capacity                                  | BTU/h                           | -               | 42700                        | 42700            | -  | -                 | -               | 10900 | 46100 |
|                |   | Sensible kW<br>Latent kW        | -               | 9.5                          | 9.5              | -  | -                 | -               | -     | -     |
|                | Current                                   | Latent kW<br>A                  | -               | 3.0<br>1.83                  | 3.0<br>1.71      | -  | 17.00             | 16.30           | -     | -     |
|                |   | w                               | -               | 330                          | 330              | -  | -                 | -               |       | _     |
|                | Input power                               | Total W                         |                 | -                            | 555              | -  | 3.52k             | 3.52k           | 630   | 4.90k |
|                | Annual consumption                        | Total kWh                       | -               | -                            | -                | -  | 1760              | -               |       | -     |
| 50             | EER                                       | Total (W/W)                     | -               | -                            | -                | -  | 3.55              | 3.55            | 5.08  | 2.76  |
| Cooling        | AEER                                      | (W/W)                           | -               | -                            | -                | -  | 3.49              | -               | -     | -     |
| Ö              | SEER rating                               |                                 | -               | -                            | -                | -  | Commercial        | Residential     | -     | -     |
|                | TCSPF                                     | (W/W)                           | -               | -                            | -                | -  | 5.86              | 4.54            | -     | -     |
|                | Total Energy consumption                  | kWh                             | -               | -                            | -                | -  | 1739              | 1035            | -     | -     |
|                | Star rating                               | - 0/                            | -               | -                            | -                | -  | -                 | 3.0 Stars       | -     | -     |
|                | Power factor                              | %<br>dB(A) (H/M/L)              | -               | - 42 / 20 / 24               | -                | -  | 90                | 90              | -     | -     |
|                | Noise indoor                              | dB(A) (H/M/L)<br>Power Level dB |                 | 42 / 39 / 34<br>64 / 61 / 56 |                  | <del>                                     </del> | <u> </u>          |                 | -     | -     |
|                |   | dB(A) (H/M/L)                   |                 | -                            |                  |  | 55 / -            |                 | -     | -     |
|                | Noise outdoor                             | Power Level dB                  |                 | -                            |                  | <b>†</b>   | 73 / -            |                 | -     | _     |
|                | 0   | kW                              | -               | 12.5                         | 12.5             | -  | -                 | -               | 3.3   | 15.0  |
|                | Capacity                                  | BTU/h                           | -               | 42700                        | 42700            | -  | -                 | -               | 11300 | 51200 |
|                | Current                                   | A                               | -               | 1.83                         | 1.71             | -  | 14.00             | 13.40           | -     | -     |
|                | Innut nower                               | W                               | -               | 330                          | 330              | -  | -                 | -               | -     | -     |
|                | Input power                               | Total W                         |                 | -                            |                  | -  | 2.90k             | 2.90k           | 630   | 4.74k |
|                | COP                                       | Total (W/W)                     | -               | -                            | -                | -  | 4.31              | 4.31            | 5.24  | 3.16  |
| 0.0            | ACOP                                      | (W/W)                           | -               | -                            | -                | -  | 4.22              | -               | -     | -     |
| Heating        | SEER rating                               | 0.47-1                          | -               | -                            | -                | -  | Commercial        | Residential     | -     | -     |
| 운              | HSPF                                      | (W/W)                           | -               | -                            | -                | -  | 4.81              | 4.56            | -     | -     |
|                | Total Energy consumption                  | kWh<br>-                        | -               | -                            | -                | -  | 649               | 1487            | -     | -     |
|                | Star rating<br>Bower factor               | - %                             | -               | -                            | -                | -  | 90                | 3.0 Stars<br>90 | -     | -     |
|                | Power factor                              | dB(A) (H/M/L)                   | <del>-</del>    | 42 / 39 / 34                 | -                | -  | -                 | 90              | -     | -     |
|                | Noise indoor                              | Power Level dB                  |                 | 64/61/56                     |                  |  |                   |                 |       | _     |
|                |   | dB(A) (H/M/L)                   |                 | -                            |                  |  | 55 / -            |                 |       | _     |
|                | Noise outdoor                             | Power Level dB                  |                 | -                            |                  |  | 73 / -            |                 | -     | -     |
| LOW TEMP       | Total capacity (kW) / Inp                 | ut power (W) / COP              |                 | -                            |                  | 12.90  | 4.50k             | 2.87            |       | -     |
| EXTRA LOW      | Total capacity (kW) / Inp                 | ut nower (M) / COR              |                 |                              |                  |  |                   |                 |       |       |
| TEMP           | Total capacity (kw) / IIIp                | ut power (w) / COP              |                 | -                            |                  | -  | -                 | -               |       | -     |
| Max Current    | (A) / Max Input Power (W)*                |                                 | -               | 3.50 / 600                   | 3.38 / 600       | -/-  | 31.9 / 6.74k      | 31.9 / 7.04k    |       | -     |
|                | ent (A) (Cooling / Heating)               |                                 | -               | -                            | -                | -/-  | 17.0 / 14.0       | 16.3 / 13.4     |       | -     |
| Comp output    | • •                                       |                                 |                 | -                            |                  | -  | 3.00k             | 3.00k           |       | -     |
|                | use max size (A)                          |                                 |                 | -                            |                  | 1  | 40                |                 |       | -     |
|                | edance (ΩMAX)<br>itput (Indoor/Outdoor) W |                                 | +               | 560                          |                  | 1  | 120               |                 |       | -     |
|                | noval volume                              | L/h                             |                 | 7.9 (7.9 x1)                 |                  |  | -                 |                 |       |       |
| External stati |   | Pa                              |                 | 80 / (10 / 150)              |                  |  | -                 |                 |       |       |
| Indoor         | Cooling                                   | m³/min (H/M/L) (m³              | (h) 50.0 / 46.0 | /36.0 (3000)/(2              | 2760) / (2160)   |  | -                 |                 | -     | -     |
| Air flow       | Heating                                   | m³/min (H/M/L) (m³              |                 | /36.0 (3000)/(2              |                  |  | -                 |                 | -     | -     |
| Outdoor        | Cooling                                   | m³/min (m³/h)                   |                 | -                            |                  |  | 82.0 (4920)       |                 | -     | -     |
| Air flow       | Heating                                   | m³/min (m³/h)                   |                 | -                            |                  |  | 80.0 (4800)       |                 | -     | -     |
| Refrigerant ty | ype / amount (ship) kg / amount (n        | nax) kg                         |                 | -                            |                  |  | R32, 2.800 / 3.70 | 0               |       | -     |
|                | GWP                                       |                                 |                 |                              |                  |  |                   |                 |       |       |
| F-Gas          | CO₂eq (ton) (PRECHA                       |                                 |                 | -                            |                  |  | 675 / 1.89 / 2.50 | )               |       | -     |
|                | CO₂eq (ton) (MAXIMUM C                    |                                 |                 |                              |                  |  |                   |                 |       |       |
|                |   | Height (mm)                     |                 | 400                          |                  |  | 996               |                 |       | -     |
| Product dime   | ension                                    | Width (mm)                      |                 | 1297                         |                  | <b></b>  | 980               |                 |       | -     |
| Drading "      | anaian (Dana!)                            | Depth (mm)                      |                 | 949                          |                  | -  | 370               |                 |       | -     |
| Product dime   | ension (Panel)                            | H x W x D (mm)                  | -               | -<br>51/                     |                  | <b>-</b>   | - 113/            |                 |       | -     |
| Packing dime   | ension                                    | Height (mm)<br>Width (mm)       |                 | 514<br>1494                  |                  | <del> </del>                                     | 1134<br>1095      |                 |       | -     |
| Packing dime   | snami                                     | Depth (mm)                      |                 | 1122                         |                  | <del>                                     </del> | 529               |                 |       | -     |
|                |   | (NET) kg                        |                 | 61                           |                  | <b>†</b>   | 83                |                 |       | -     |
| Weight         |   | (GROSS) kg                      |                 | 73                           |                  |  | 91                |                 |       |       |
| "              |   | Panel (NET) kg                  |                 | -                            |                  |  |                   |                 |       | -     |
|                | Layers limit (actual)                     |                                 |                 | 6 (7)                        |                  |  | 1 (2)             |                 |       | -     |
| Oncretion      | undition                                  | Cool (DBT)                      |                 | 18°C ~ 32°C                  |                  |  | -10°C ~ 46°C      |                 |       | -     |
| Operation co   | mundOH                                    | Heat (DBT)                      |                 | 16°C ~ 30°C                  |                  |  | -15°C ~ 24°C      |                 |       | -     |
|                | Max Working Pressure HP/LP M              |                                 |                 |                              |                  | / 2.55   |                   |                 |       |       |
|                | Max High Pressure M                       |                                 |                 |                              | 4.               | .15  |                   |                 |       |       |
|                | Pipe port diamete                         | er mm (inch)                    | (Liquid) Ø9     | .52 (3/8) (Gas) Ø            |                  |  | 52 (3/8) (Gas) Ø  | 15.88 (5/8)     |       | -     |
|                | Pipe diameter i                           | mm (inch)                       |                 | (Li                          | quid) Ø9.52 (3/8 | ) (Gas) Ø15.88 (                                 | 5/8)              |                 |       | -     |
|                | Connecting                                |                                 |                 | flared type                  |                  |  | flared type       |                 |       |       |
| Piping         | Standard le                               |                                 |                 |                              |                  | 0m   |                   |                 |       | -     |
| <u>a</u>       | Pipe length r                             |                                 |                 |                              |                  | 50m  |                   |                 |       | -     |
|                | Indoor unit & Outdoor uni                 |                                 | _               | 15m (OE                      | located lower)   |  | ea nigner)        |                 |       | -     |
|                | Add gas amo                               | _                               | _               |                              |                  | g/m  |                   |                 |       | -     |
|                | Pipe length for add                       | artional gas m                  | 1               |                              | 30               | 0m   |                   |                 |       | -     |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-125PE4R U-125PZ4R8

| Indoor              |   | l M             | lodel                  |   | S-125PE4R            |                 |               | -                            |              |            | . 1         |
|---------------------|---|-----------------|------------------------|---|----------------------|-----------------|---------------|------------------------------|--------------|------------|-------------|
| Panel               |   | , r             |                        |   |                      |                 |               | -                            |              |            |             |
| Outdoor             |   |                 |                        |   | -                    |                 |               | U-125PZ4R8                   |              |            |             |
| Branch pipe         |   |                 |                        |   |                      |                 |               |                              |              |            |             |
| Performance         | e test condition                              |                 |                        |   |                      |                 | ISO 13253 / A |                              |              |            |             |
| Power supply        | y   | <u> </u>        | V V                    | 220V                                    | 1Ø 50Hz<br>230V      | 240V            | 380V          | 3Ø 50Hz<br>400V              | 415V         | Min        | May         |
|                     |   |                 | kW                     |   | 12.5                 | 12.5            | 3007          | -                            | 4150         | Min<br>3.2 | Max<br>13.5 |
|                     |   |                 | TU/h                   | -                                       | 42700                | 42700           | -             | -                            | -            | 10900      | 46100       |
|                     | Capacity                                      | Sensible        | kW                     | -                                       | 9.5                  | 9.5             | -             | -                            | -            | -          | -           |
|                     |   | Latent          | kW                     | -                                       | 3.0                  | 3.0             | -             | -                            | -            | -          | -           |
|                     | Current                                       |                 | Α                      | -                                       | 1.83                 | 1.71            | -             | 5.40                         | 5.20         | •          | -           |
|                     | Input power                                   |                 | W                      | -                                       | 330                  | 330             | -             | -                            | -            | -          | -           |
|                     |   |                 | otal W                 |   | -                    |                 | -             | 3.52k                        | 3.52k        | 630        | 4.90k       |
| 70                  | Annual consumption<br>EER                     |                 | al kWh<br>l (W/W)      | -                                       | -                    | -               | -             | 1760<br>3.55                 | 3.55         | 5.08       | 2.76        |
| Cooling             | AEER  |                 | N/W)                   | -                                       | -                    |                 | -             | 3.49                         | -            | -          | -           |
| ဝိ                  | SEER rating                                   |                 | ,                      | -                                       | -                    | -               | -             | Commercial                   | Residential  | -          | -           |
|                     | TCSPF   | (\              | N/W)                   | -                                       | -                    | -               | -             | 5.86                         | 4.54         | -          | -           |
|                     | Total Energy consumption                      |                 | <b>W</b> h             | -                                       | -                    | -               | -             | 1739                         | 1035         | •          | -           |
|                     | Star rating                                   |                 | -                      | -                                       | -                    | -               | -             | -                            | 3.0 Stars    | -          | -           |
|                     | Power factor                                  | dD/A            | %                      | -                                       | - 40 / 20 / 24       | -               | -             | 94                           | 94           | -          | -           |
|                     | Noise indoor                                  |                 | (H/M/L)<br>Level dB    |   | 42/39/34<br>64/61/56 |                 |               | -                            |              |            | -           |
|                     |   |                 | ) (H/M/L)              |   | -                    |                 |               | 55 / -                       |              | -          | -           |
|                     | Noise outdoor                                 |                 | Level dB               |   | -                    |                 |               | 73 / -                       |              | -          | -           |
|                     | Canacity                                      |                 | kW                     | -                                       | 12.5                 | 12.5            | -             | -                            | -            | 3.3        | 15.0        |
|                     | Capacity                                      | В               | TU/h                   | -                                       | 42700                | 42700           | -             | -                            | -            | 11300      | 51200       |
|                     | Current                                       |                 | Α                      | -                                       | 1.83                 | 1.71            | -             | 4.45                         | 4.30         | -          | -           |
|                     | Input power                                   | <u> </u>        | W                      | -                                       | 330                  | 330             | -             | - 0.001-                     | - 0.001-     | -          | 4.740       |
|                     |   |                 | tal W<br>I (W/W)       |   | -                    |                 | -             | 2.90k                        | 2.90k        | 630        | 4.74k       |
|                     | COP<br>ACOP                                   |                 | V/W)                   | -                                       | -                    | -               | -             | 4.31<br>4.22                 | 4.31         | 5.24       | 3.16        |
| ii.                 | SEER rating                                   |                 | ,                      | -                                       | -                    | -               | -             | Commercial                   | Residential  | -          | -           |
| Heating             | HSPF  | (\              | N/W)                   | -                                       | -                    | -               | -             | 4.81                         | 4.56         | -          | -           |
| _                   | Total Energy consumption                      | ı               | άWh                    | -                                       | -                    | -               | -             | 649                          | 1487         | -          | -           |
|                     | Star rating                                   |                 | -                      | -                                       | -                    | -               | -             | -                            | 3.0 Stars    | -          | -           |
|                     | Power factor                                  |                 | %                      | -                                       | -                    | -               | -             | 94                           | 94           | -          | -           |
|                     | Noise indoor                                  |                 | (H/M/L)                |   | 42 / 39 / 34         |                 |               | -                            |              | -          | -           |
|                     |   |                 | Level dB<br>(H/M/L)    |   | 64/61/56             |                 |               | 55 / -                       |              | -          | -           |
|                     | Noise outdoor                                 |                 | Level dB               |   |                      |                 |               | 73 / -                       |              |            | -           |
| LOW TEMP            | Total capacity (kW) / Inp                     |                 |                        |   | -                    |                 | 12.90         | 4.50k                        | 2.87         |            |             |
| EXTRA LOW           | Total capacity (kW) / Inp                     |                 |                        |   |                      |                 |               |                              |              |            |             |
| TEMP                |   | ut power (w     | ) / COF                |   |                      |                 | -             | -                            | -            |            |             |
|                     | (A) / Max Input Power (W)*                    |                 |                        | -                                       | 3.50 / 600           | 3.38 /600       | -/-           | 12.9 / 6.94k                 | 12,9 / 7.19k |            |             |
|                     | ent (A) (Cooling / Heating)                   |                 |                        | -                                       | -                    | -               | -/-           | 5.40 / 4.45                  | 5.20 / 4.30  |            |             |
| Comp output         | t (w)<br>use max size (A)                     |                 |                        |   | <del>.</del>         |                 | -             | 3.00k<br>20                  | 3.00k        |            |             |
|                     | edance (ΩMAX)                                 |                 |                        |   | -                    |                 |               | -                            |              |            |             |
|                     | itput (Indoor/Outdoor) W                      |                 |                        |   | 560                  |                 |               | 120                          |              |            |             |
| Moisture rem        | noval volume                                  |                 | L/h                    |   | 7.9 (7.9 x1)         |                 |               | -                            |              |            |             |
| External stati      | ic pressure                                   |                 | Pa                     |   | 80 / (10/150)        |                 |               | -                            |              |            | -           |
| Indoor              | Cooling                                       |                 | 1/M/L) (m³/h)          |   | 36.0 (3000) / (2     |                 |               | -                            |              | -          | -           |
| Air flow            | Heating                                       |                 | H/M/L) (m³/h)          | 50.0 / 46.0 /                           | 36.0 (3000) / (2     | 760) / (2160)   |               | -                            |              | -          | -           |
| Outdoor<br>Air flow | Cooling<br>Heating                            |                 | in (m³/h)<br>in (m³/h) |   | -                    |                 |               | 82.0 (4920)<br>80.0 (4800)   |              | -          | -           |
|                     | ype / amount (ship) kg / amount (n            |                 | ( /11)                 |   |                      |                 |               | R32, 2.800 / 3.70            | 0            |            |             |
|                     | GWP   |                 |                        |   |                      |                 |               |                              |              |            |             |
| F-Gas               | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM ( | RGED AMOU       |                        |   | -                    |                 |               | 675 / 1.89 / 2.50            |              |            |             |
|                     | <u> </u>                                      |                 | ht (mm)                |   | 400                  |                 |               | 996                          |              |            |             |
| Product dime        | ension  |                 | th (mm)                |   | 1297                 |                 |               | 980                          |              |            |             |
| Drodust dis-        | ension (Panel)                                |                 | th (mm)                |   | 949                  |                 |               | 370                          |              |            |             |
| rroduct dime        | ension (Panel)                                |                 | x D (mm)<br>ht (mm)    |   | 514                  |                 |               | 1134                         |              |            |             |
| Packing dime        | ension  |                 | th (mm)                |   | 1494                 |                 |               | 1095                         |              |            |             |
|                     |   |                 | th (mm)                |   | 1122                 |                 |               | 529                          |              |            |             |
|                     |   | (N              | ET) kg                 |   | 61                   |                 |               | 82                           |              |            |             |
| Weight              |   |                 | OSS) kg                |   | 73                   |                 |               | 90                           |              |            |             |
| <u> </u>            | I account time to the time                    |                 | (NET) kg               |   | - (7)                |                 |               | 1 (2)                        |              |            |             |
| -                   | Layers limit (actual                          |                 | J (DDT)                |   | 6 (7)<br>18°C ~ 32°C |                 |               | 1 (2)<br>-10°C ~ 46°C        |              |            |             |
| Operation co        | ondition                                      |                 | ol (DBT)               |   | 18 C ~ 32 C          |                 |               | -10 C ~ 46 C<br>-15°C ~ 24°C |              |            |             |
|                     | Max Working Pressure HP/LP M                  |                 | it (DBT)               |   | 10 C ~ 30 C          | // 15           | / 2.55        | -10 U~ 24 U                  |              |            | •           |
|                     | Max High Pressure M                           |                 |                        |   |                      |                 | 15            |                              |              |            |             |
|                     | Pipe port diamete                             |                 |                        | (Liquid) Ø9.                            | 52 (3/8) (Gas) Ø     |                 |               | 52 (3/8) (Gas) Ø             | 15.88 (5/8)  |            |             |
|                     | Pipe diameter                                 |                 |                        | , , -, -, -, -, -, -, -, -, -, -, -, -, |                      | uid) Ø9.52 (3/8 |               |                              | 11           |            |             |
|                     | Connecting                                    |                 |                        |   | flared type          |                 |               | flared type                  |              |            |             |
| Piping              | Standard le                                   |                 | -                      |   |                      |                 | 0m            |                              |              |            |             |
| <u>=</u>            | Pipe length i                                 |                 |                        |   |                      |                 | 50m           |                              |              |            | •           |
|                     | Indoor unit & Outdoor uni                     |                 | rence m                |   | 15m (OI              | located lower)  | -             | a nigher)                    |              |            | •           |
|                     | Add gas amo<br>Pipe length for add            |                 | n                      |   |                      |                 | g/m<br>Om     |                              |              |            |             |
|                     | i ipe tengtii itti aut                        | andoniut gas II | •                      |   |                      | ગ               | ,             |                              |              |            |             |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-125PE4RN U-125PZ4R5

| Indoor          |   | Mode                   | el         |               | S-125PE4RN                   |                   |                | -                 |                 |       |       |
|-----------------|---|------------------------|------------|---------------|------------------------------|-------------------|----------------|-------------------|-----------------|-------|-------|
| Panel           |   |                        |            |               | -                            |                   |                | -                 |                 |       | -     |
| Outdoor         |   |                        |            |               | -                            |                   |                | U-125PZ4R5        |                 |       | -     |
| Branch pipe     |   |                        |            |               |                              |                   | -              |                   |                 |       |       |
| Performance     | test condition                                |                        |            |               |                              |                   | ISO 13253 / AS | S NZS 3823.1      |                 |       |       |
| Power supply    | ı   | Ø, H                   | Z          |               | 1ø 50Hz                      |                   |                | 1ø 50Hz           |                 |       |       |
| . ovioi ouppty  | 1   | V                      |            | 220V          | 230V                         | 240V              | 220V           | 230V              | 240V            | Min   | Max   |
|                 |   | kW                     |            | -             | 12.5                         | 12.5              | -              | -                 | -               | 3.2   | 13.5  |
|                 | Capacity                                      | BTU/                   |            |               | 42700                        | 42700             | -              | -                 | -               | 10900 | 46100 |
|                 |   | Sensible               | kW         |               | 9.5                          | 9.5               | -              | -                 | -               | -     | -     |
|                 | Current                                       | Latent A               | KVV        | -             | 3.0                          | 3.0               | -              |                   |                 | -     | -     |
|                 | Current                                       | W                      |            | -             | 1.83<br>330                  | 1.71<br>330       | -              | 17.00             | 16.30           | -     | -     |
|                 | Input power                                   | Total                  | M          | -             | -                            | 330               |                | 3.52k             | 3.52k           | 630   | 4.90k |
|                 | Annual consumption                            | Total k                |            | -             | -                            | -                 | -              | 1760              |                 | -     |       |
| 0.0             | EER   | Total (W               |            | -             | -                            | -                 | -              | 3.55              | 3.55            | 5.08  | 2.76  |
| Cooling         | AEER  | (W/W)                  | <i>'</i> ) |               | -                            | -                 | -              | 3.49              | -               | -     | -     |
| ŏ               | SEER rating                                   |                        |            | -             | -                            | -                 | -              | Commercial        | Residential     |       | -     |
|                 | TCSPF   | (W/W                   | /)         | -             | -                            | -                 | -              | 5.86              | 4.54            | -     | -     |
|                 | Total Energy consumption                      | kWh                    |            | -             | -                            | -                 | -              | 1739              | 1035            |       | -     |
|                 | Star rating                                   | -                      |            | -             | -                            | -                 | -              | -                 | 3.0 Stars       | -     | -     |
|                 | Power factor                                  | %<br>-ID(A) (II        | 0.4.0.     |               | - 40 / 00 / 04               | -                 | -              | 90                | 90              | -     | -     |
|                 | Noise indoor                                  | dB(A) (H/<br>Power Lev | _          |               | 42 / 39 / 34<br>64 / 61 / 56 |                   |                | -                 |                 | -     | -     |
|                 | 1   | dB(A) (H/              |            |               | -                            |                   |                | 55 / -            |                 | -     | -     |
|                 | Noise outdoor                                 | Power Lev              | _          |               | <u> </u>                     |                   |                | 73 / -            |                 | -     |       |
|                 |   | kW                     | . 5. 40    |               | 12.5                         | 12.5              | -              |                   | -               | 3.3   | 15.0  |
|                 | Capacity                                      | BTU/                   | h          | -             | 42700                        | 42700             | -              | -                 | -               | 11300 | 51200 |
|                 | Current                                       | A                      |            | -             | 1.83                         | 1.71              | -              | 14.00             | 13.40           | -     | -     |
|                 |   | W                      |            |               | 330                          | 330               | -              | -                 | -               |       | -     |
|                 | Input power                                   | Total                  |            |               | -                            |                   | -              | 2.90k             | 2.90k           | 630   | 4.74k |
|                 | COP   | Total (W               | ,          |               | -                            | -                 | -              | 4.31              | 4.31            | 5.24  | 3.16  |
| 0.0             | ACOP  | (W/W                   | /)         | -             | -                            | -                 | -              | 4.22              | -               | -     | -     |
| Heating         | SEER rating                                   |                        | n          | -             | -                            | -                 | -              | Commercial        | Residential     | -     | -     |
| 운               | HSPF  | (W/W)                  | ,          | -             | -                            | -                 | -              | 4.81              | 4.56            | -     | -     |
|                 | Total Energy consumption                      | kWh<br>-               |            |               | -                            | -                 | -              | 649               | 1487            | -     | -     |
|                 | Star rating<br>Power factor                   | %                      |            | -             | -                            | -                 | -              | 90                | 3.0 Stars<br>90 | -     | -     |
|                 |   | dB(A) (H/              | M/L)       |               | 42 / 39 / 34                 | <u> </u>          |                | -                 | 30              | -     | -     |
|                 | Noise indoor                                  | Power Lev              | _          |               | 64/61/56                     |                   |                | -                 |                 |       | _     |
|                 |   | dB(A) (H/              |            |               | -                            |                   |                | 55 / -            |                 |       | -     |
|                 | Noise outdoor                                 | Power Lev              | _          |               | -                            |                   |                | 73/-              |                 | -     | -     |
| LOWTEMP         | Total capacity (kW) / Inp                     | ut power (W) / C       | OP         |               | -                            |                   | 12.90          | 4.50k             | 2.87            |       | -     |
| EXTRA LOW       | Total capacity (kW) / Inp                     | ut nower (M/) / C      | OD         |               |                              |                   |                |                   |                 |       |       |
| TEMP            |   | at power (**) 7 O      | 01         |               |                              |                   |                | _                 | _               |       |       |
|                 | (A) / Max Input Power (W)*                    |                        |            | -             | 3.50/600                     | 3.38/600          | -/-            | 31.9 / 6.74k      | 31.9 / 7.04k    |       | -     |
|                 | ent (A) (Cooling / Heating)                   |                        |            | -             | -                            | -                 | -/-            | 17.0 / 14.0       | 16.3 / 13.4     |       | -     |
| Comp output     | • •   |                        |            |               | <u> </u>                     |                   | -              | 3.00k             | 3.00k           |       |       |
|                 | use max size (A)<br>edance (ΩMAX)             |                        |            |               |                              |                   |                | 40                |                 |       |       |
|                 | itput (Indoor/Outdoor) W                      |                        |            |               | 560                          |                   |                | 120               |                 |       |       |
|                 | noval volume                                  |                        | L/h        |               | 7.9 (7.9 x1)                 |                   |                | -                 |                 |       | -     |
| External stati  | ic pressure                                   |                        | Pa         |               | 80 / (10 / 150)              |                   |                | -                 |                 |       | -     |
| Indoor          | Cooling                                       | m³/min (H/M/           | 'L) (m³/h) | 50.0 / 46.0 / | 36.0 (3000)/(2               | 760) / (2160)     |                | -                 |                 |       | -     |
| Air flow        | Heating                                       | m³/min (H/M/           | 'L) (m³/h) | 50.0 / 46.0 / | 36.0 (3000)/(2               | 760) / (2160)     |                | -                 |                 |       | -     |
| Outdoor         | Cooling                                       | m³/min (r              |            |               | -                            |                   |                | 82.0 (4920)       |                 | -     | -     |
| Air flow        | Heating                                       | m³/min (r              | n³/h)      |               | -                            |                   |                | 80.0 (4800)       |                 | -     | -     |
| Refrigerant ty  | ype / amount (ship) kg / amount (n            |                        |            |               | -                            |                   |                | R32, 2.800 / 3.70 | 0               |       | -     |
|                 | GWP.  |                        |            |               |                              |                   |                |                   |                 |       |       |
| F-Gas           | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM C |                        |            |               | -                            |                   |                | 675 / 1.89 / 2.50 | ,               | ,     | -     |
|                 | CO₂eq (ton) (MAXIMUM C                        |                        |            |               | ***                          |                   |                | ***               |                 |       |       |
| Product dime    | ancion  | Height (r              | _          |               | 400                          |                   |                | 996               |                 |       |       |
| 1 TOUUCE UIME   | SHOIUII                                       | Width (r<br>Depth (r   | _          |               | 1297<br>949                  |                   |                | 980<br>370        |                 |       | -     |
| Product dime    | ension (Panel)                                | HxWxD                  |            |               | - 949                        |                   |                | -                 |                 |       |       |
| . Todact diffic |   | Height (r              |            |               | 514                          |                   |                | 1134              |                 |       |       |
| Packing dime    | ension  | Width (r               |            |               | 1494                         |                   |                | 1095              |                 |       | -     |
|                 |   | Depth (r               | _          |               | 1122                         |                   |                | 529               |                 |       | -     |
|                 |   | (NET)                  | kg         |               | 61                           |                   |                | 83                |                 |       | -     |
| Weight          |   | (GROSS                 |            |               | 73                           |                   |                | 91                |                 |       | -     |
|                 |   | Panel (NE              | T) kg      |               | -                            |                   |                | -                 |                 |       |       |
|                 | Layers limit (actual                          |                        |            |               | 6 (7)                        |                   |                | 1 (2)             |                 |       | -     |
| Operation co    | ondition                                      | Cool (D                |            |               | 18°C ~ 32°C                  |                   |                | -10°C ~ 46°C      |                 |       | -     |
|                 |   | Heat (D                | BT)        |               | 16°C ~ 30°C                  |                   |                | -15°C ~ 24°C      |                 |       | -     |
|                 | Max Working Pressure HP/LP M                  |                        |            |               |                              |                   | / 2.55         |                   |                 |       |       |
|                 | Max High Pressure M                           |                        |            |               | -0 (0 (0)                    |                   | 15             | == (0/0) ::       | 45.00 (5.5)     |       |       |
|                 | Pipe port diamete                             |                        |            | (Liquid) Ø9.  | 52 (3/8) (Gas) Ø             |                   |                | 52 (3/8) (Gas) Ø  | 15.88 (5/8)     |       | •     |
|                 | Pipe diameter i                               |                        |            |               |                              | quid) Ø9.52 (3/8) | (Gas) Ø15.88 ( |                   |                 |       | -     |
| 26              | Connecting s<br>Standard le                   |                        |            |               | flared type                  | E /               | Om             | flared type       |                 |       | -     |
| Piping          | Pipe length r                                 |                        |            |               |                              |                   | 50m            |                   |                 |       |       |
| -               | Indoor unit & Outdoor uni                     |                        | ce m       |               | 15m (OD                      | located lower) /  |                | ed higher)        |                 |       | -     |
|                 | Add gas amo                                   |                        |            |               |                              |                   | g/m            |                   |                 |       | -     |
|                 | Pipe length for add                           | litional gas m         |            |               |                              |                   | )m             |                   |                 |       | -     |
|                 |   |                        |            |               |                              |                   |                |                   |                 |       |       |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-125PE4RN U-125PZ4R8

| Indoor              |   | l M            | lodel                  |   | S-125PE4RN                   |                 |               | -                            |              |            | . 1         |
|---------------------|---|----------------|------------------------|---|------------------------------|-----------------|---------------|------------------------------|--------------|------------|-------------|
| Panel               |   | , r            |                        |   |                              |                 |               | -                            |              |            |             |
| Outdoor             |   |                |                        |   | -                            |                 |               | U-125PZ4R8                   |              |            |             |
| Branch pipe         |   |                |                        |   |                              |                 |               |                              |              |            |             |
| Performance         | e test condition                              |                |                        |   | . 7 5011                     |                 | ISO 13253 / A |                              |              |            |             |
| Power supply        | y   | <u> </u>       | V V                    | 220V                                    | 1Ø 50Hz<br>230V              | 240V            | 380V          | 3Ø 50Hz<br>400V              | 415V         | Min        | May         |
|                     |   |                | kW                     | - 2200                                  | 12.5                         | 12.5            | 3607          | - 4007                       | 4150         | Min<br>3.2 | Max<br>13.5 |
|                     |   |                | TU/h                   | -                                       | 42700                        | 42700           | -             | -                            | -            | 10900      | 46100       |
|                     | Capacity                                      | Sensible       | kW                     | -                                       | 9.5                          | 9.5             | -             | -                            | -            | -          | -           |
|                     |   | Latent         | kW                     | -                                       | 3.0                          | 3.0             | -             | -                            | -            | -          |             |
|                     | Current                                       |                | Α                      | -                                       | 1.83                         | 1.71            | -             | 5.40                         | 5.20         | -          | -           |
|                     | Input power                                   |                | W                      | -                                       | 330                          | 330             | -             | -                            | -            | -          | -           |
|                     |   |                | otal W                 |   | -                            |                 | -             | 3.52k                        | 3.52k        | 630        | 4.90k       |
| 70                  | Annual consumption<br>EER                     |                | al kWh<br>l (W/W)      | -                                       | -                            | -               | -             | 1760<br>3.55                 | 3.55         | 5.08       | 2.76        |
| Cooling             | AEER  |                | N/W)                   | -                                       | -                            |                 | -             | 3.49                         | -            | -          | -           |
| ဝိ                  | SEER rating                                   |                | ,                      | -                                       | -                            | -               | -             | Commercial                   | Residential  | -          | -           |
|                     | TCSPF   | (\             | N/W)                   | -                                       | -                            | -               | -             | 5.86                         | 4.54         | -          |             |
|                     | Total Energy consumption                      | -              | <b>W</b> h             | -                                       | -                            | -               | -             | 1739                         | 1035         | -          | -           |
|                     | Star rating                                   |                | -                      | -                                       | -                            | -               | -             | -                            | 3.0 Stars    | -          | -           |
|                     | Power factor                                  | -ID/A          | %                      | -                                       | - 40 / 00 / 04               | -               | -             | 94                           | 94           | -          | -           |
|                     | Noise indoor                                  |                | (H/M/L)<br>Level dB    |   | 42 / 39 / 34<br>64 / 61 / 56 |                 |               | <u> </u>                     |              |            | -           |
|                     |   |                | ) (H/M/L)              |   | -                            |                 |               | 55 / -                       |              | -          | -           |
|                     | Noise outdoor                                 |                | Level dB               |   | -                            |                 |               | 73 / -                       |              | -          | -           |
|                     | Canacity                                      |                | kW                     | -                                       | 12.5                         | 12.5            | -             | -                            | -            | 3.3        | 15.0        |
|                     | Capacity                                      | В              | TU/h                   | -                                       | 42700                        | 42700           | -             | -                            | -            | 11300      | 51200       |
|                     | Current                                       |                | Α                      | -                                       | 1.83                         | 1.71            | -             | 4.45                         | 4.30         | -          | -           |
|                     | Input power                                   | <u> </u>       | W                      | -                                       | 330                          | 330             | -             | - 0.001-                     | - 0.001-     | -          | 4.741       |
|                     |   |                | tal W<br>I (W/W)       |   | -                            |                 | -             | 2.90k                        | 2.90k        | 630        | 4.74k       |
|                     | COP<br>ACOP                                   |                | V/W)                   | -                                       | -                            | -               | -             | 4.31<br>4.22                 | 4.31         | 5.24       | 3.16        |
| ii.                 | SEER rating                                   |                | ,                      | -                                       | -                            | -               | -             | Commercial                   | Residential  | -          | -           |
| Heating             | HSPF  | (\             | N/W)                   | -                                       | -                            | -               | -             | 4.81                         | 4.56         | -          | -           |
| _                   | Total Energy consumption                      | ı              | άWh                    | -                                       | -                            | -               | -             | 649                          | 1487         | -          | -           |
|                     | Star rating                                   |                | -                      | -                                       | -                            | -               | -             | -                            | 3.0 Stars    | -          | -           |
|                     | Power factor                                  |                | %                      | -                                       | -                            | -               | -             | 94                           | 94           | -          | -           |
|                     | Noise indoor                                  |                | (H/M/L)                |   | 42/39/34                     |                 |               | -                            |              | -          | -           |
|                     |   |                | Level dB<br>(H/M/L)    |   | 64/61/56                     |                 |               | 55 / -                       |              | -          | -           |
|                     | Noise outdoor                                 |                | Level dB               |   |                              |                 |               | 73 / -                       |              |            | -           |
| LOW TEMP            | Total capacity (kW) / Inp                     |                |                        |   | -                            |                 | 12.90         | 4.50k                        | 2.87         |            |             |
| EXTRA LOW           | Total capacity (kW) / Inp                     |                |                        |   |                              |                 |               |                              |              |            |             |
| TEMP                |   | ut power (w    | ) / COF                |   | -                            |                 | -             | -                            | -            |            |             |
|                     | (A) / Max Input Power (W)*                    |                |                        | -                                       | 3.50/600                     | 3.38 /600       | -/-           | 12.9 / 6.94k                 | 12.9 / 7.19k |            |             |
|                     | ent (A) (Cooling / Heating)                   |                |                        | -                                       | -                            | -               | -/-           | 5.40 / 4.45                  | 5.20 / 4.30  |            |             |
| Comp output         | t (w)<br>use max size (A)                     |                |                        |   |                              |                 | -             | 3.00k<br>20                  | 3.00k        |            |             |
|                     | edance (ΩMAX)                                 |                |                        |   | -                            |                 |               | -                            |              |            |             |
|                     | itput (Indoor/Outdoor) W                      |                |                        |   | 560                          |                 |               | 120                          |              |            |             |
| Moisture rem        | noval volume                                  |                | L/h                    |   | 7.9 (7.9 x1)                 |                 |               | -                            |              |            |             |
| External stati      | ic pressure                                   |                | Pa                     |   | 80 / (10/150)                |                 |               | -                            |              |            | -           |
| Indoor              | Cooling                                       |                | 1/M/L) (m³/h)          |   | 36.0 (3000) / (2             |                 |               | -                            |              | -          | -           |
| Air flow            | Heating                                       |                | H/M/L) (m³/h)          | 50.0 / 46.0 /                           | 36.0 (3000) / (2             | 760) / (2160)   |               |                              |              | -          | -           |
| Outdoor<br>Air flow | Cooling<br>Heating                            |                | in (m³/h)<br>in (m³/h) |   | -                            |                 |               | 82.0 (4920)<br>80.0 (4800)   |              | -          | -           |
|                     | ype / amount (ship) kg / amount (n            |                | ( /11)                 |   | -                            |                 |               | R32, 2.800 / 3.70            | 0            |            |             |
|                     | GWP   |                |                        |   |                              |                 |               |                              |              |            |             |
| F-Gas               | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM ( | RGED AMOU      |                        |   | -                            |                 |               | 675 / 1.89 / 2.50            |              |            |             |
|                     | <u> </u>                                      |                | ht (mm)                |   | 400                          |                 |               | 996                          |              |            |             |
| Product dime        | ension  |                | th (mm)                |   | 1297                         |                 |               | 980                          |              |            |             |
| Drodust dis-        | ension (Panel)                                |                | th (mm)                |   | 949                          |                 |               | 370                          |              |            |             |
| rroduct dime        | ension (Panel)                                |                | x D (mm)<br>ht (mm)    |   | 514                          |                 |               | 1134                         |              |            |             |
| Packing dime        | ension  |                | th (mm)                |   | 1494                         |                 |               | 1095                         |              |            |             |
|                     |   |                | th (mm)                |   | 1122                         |                 |               | 529                          |              |            |             |
|                     |   | (N             | ET) kg                 |   | 61                           |                 |               | 82                           |              |            |             |
| Weight              |   |                | OSS) kg                |   | 73                           |                 |               | 90                           |              |            |             |
| <u> </u>            | I account time to the time                    |                | (NET) kg               |   | - (7)                        |                 |               | 1 (2)                        |              |            |             |
| -                   | Layers limit (actual                          |                | J (DDT)                |   | 6 (7)<br>18°C ~ 32°C         |                 |               | 1 (2)<br>-10°C ~ 46°C        |              |            |             |
| Operation co        | ondition                                      |                | ol (DBT)               |   | 18 C ~ 32 C                  |                 |               | -10 C ~ 46 C<br>-15°C ~ 24°C |              |            |             |
|                     | Max Working Pressure HP/LP M                  |                | it (DBT)               |   | 10 C ~ 30 C                  | // 15           | / 2.55        | -10 U~ 24 U                  |              |            | •           |
|                     | Max High Pressure M                           |                |                        |   |                              |                 | 15            |                              |              |            |             |
|                     | Pipe port diamete                             |                |                        | (Liquid) Ø9.                            | 52 (3/8) (Gas) Ø             |                 |               | 52 (3/8) (Gas) Ø             | 15.88 (5/8)  |            |             |
|                     | Pipe diameter                                 |                |                        | , , -, -, -, -, -, -, -, -, -, -, -, -, |                              | uid) Ø9.52 (3/8 |               |                              | 11           |            |             |
|                     | Connecting                                    |                |                        |   | flared type                  |                 | ,             | flared type                  |              |            |             |
| Piping              | Standard le                                   |                | -                      |   |                              |                 | 0m            |                              |              |            |             |
| ā                   | Pipe length i                                 |                |                        |   | /                            |                 | 50m           | at to trade a las            |              |            |             |
|                     | Indoor unit & Outdoor uni<br>Add gas amo      |                | rence m                |   | 15m (OE                      | located lower)  |               | u nigner)                    |              |            |             |
|                     | Add gas amo<br>Pipe length for add            |                | n                      |   |                              |                 | g/m<br>Om     |                              |              |            |             |
|                     | i ipe tengtii itti aut                        | andonut gas II | •                      |   |                              | ગ               | ····          |                              |              |            |             |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-125PE4R U-125PZH3R5

| Indoor            |  | l M           | lodel                 |              | S-125PE4R                       |                  |               |                    |                  |             |             |
|-------------------|--|---------------|-----------------------|--------------|---------------------------------|------------------|---------------|--------------------|------------------|-------------|-------------|
| Panel             |  |               | iouci                 |              | -                               |                  |               | -                  |                  |             |             |
| Outdoor           |  |               |                       |              | -                               |                  |               | U-125PZH3R5        |                  |             |             |
| Branch pipe       |  |               |                       |              |                                 |                  |               | •                  |                  |             |             |
| Performance       | e test condition                         |               |                       |              |                                 |                  | ISO 13253 / A |                    | - 1              |             |             |
| Power supply      | y  | Ç             | 5, Hz                 | 0001/        | 1Ø 50Hz                         | 0.401/           | 0001/         | 1Ø 50Hz            | 0.401/           | M:          | Mari        |
|                   |  |               | kW                    | 220V         | 230V<br>12.5                    | 240V<br>12.5     | 220V          | 230V<br>-          | 240V             | Min<br>3.2  | Max<br>14.0 |
|                   |  |               | TU/h                  | -            | 42700                           | 42700            | -             | -                  | -                | 10900       | 47800       |
|                   | Capacity                                 | Sensible      | kW                    | -            | 9.5                             | 9.5              | -             | -                  | -                | -           | -           |
|                   |  | Latent        | kW                    | -            | 3.0                             | 3.0              | -             | -                  | -                | -           | -           |
|                   | Current                                  |               | Α                     | -            | 1.83                            | 1.71             | -             | 15.80              | 15.10            | -           | -           |
|                   | Input power                              |               | W                     | -            | 330                             | 330              | -             | -                  | -                | -           | -           |
|                   |  |               | ital W                |              | -                               | 1                | -             | 3.30k              | 3.30k            | 665         | 4.66k       |
|                   | Annual consumption                       |               | al kWh                | -            | -                               | -                | -             | 1650               | -                | -           | -           |
| Cooling           | EER AFER                                 |               | l (W/W)               | -            | -                               | -                | -             | 3.79               | 3.79             | 4.81        | 3.00        |
| o<br>S            | AEER<br>SEER rating                      | (1            | N/W)                  | -            | -                               | -                | -             | 3.72<br>Commercial | -<br>Residential | <del></del> | -           |
|                   | TCSPF                                    | (\            | N/W)                  | -            | -                               |                  | -             | 6.46               | 4.93             | -           | -           |
|                   | Total Energy consumption                 |               | κWh                   | -            | -                               | -                | -             | 1568               | 943              | -           | -           |
|                   | Star rating                              |               | -                     | -            | -                               | -                | -             | -                  | 3.0 Stars        | -           | -           |
|                   | Power factor                             |               | %                     | -            | -                               | -                | -             | 91                 | 91               | -           | -           |
|                   | Noise indoor                             |               | (H/M/L)               |              | 42/39/34                        |                  |               | -                  |                  | -           | -           |
|                   |  |               | Level dB              |              | 64/61/56                        |                  |               | -                  |                  | -           | -           |
|                   | Noise outdoor                            |               | (H/M/L)               |              | -                               |                  |               | 53 / -<br>69 / -   |                  | -           | -           |
| <b>-</b>          |  |               | r Level dB<br>kW      |              | 14.0                            | 14.0             | -             | - 109              | -                | 3.6         | 16.0        |
|                   | Capacity                                 |               | TU/h                  | -            | 47800                           | 47800            | -             | -                  | -                | 12300       | 54600       |
|                   | Current                                  |               | Α                     | -            | 1.83                            | 1.71             | -             | 15.80              | 15.10            | -           | -           |
|                   |  |               | W                     | -            | 330                             | 330              | -             | -                  | -                | -           | -           |
|                   | Input power                              |               | tal W                 |              | -                               |                  | -             | 3.30k              | 3.30k            | 620         | 4.86k       |
|                   | COP                                      |               | l (W/W)               | -            | -                               | -                | -             | 4.24               | 4.24             | 5.81        | 3.29        |
| <i>5</i> 0        | ACOP                                     | (\            | N/W)                  | -            | -                               | -                | -             | 4.16               | -                | -           | -           |
| Heating           | SEER rating                              |               | A/AA/\                | -            | -                               | -                | -             | Commercial         | Residential      | -           | -           |
| 포                 | HSPF<br>Total Energy consumption         |               | W/W)<br>kWh           |              | -                               | -                | -             | 5.12<br>684        | 4.69<br>1620     | <u> </u>    | -           |
|                   | Star rating                              |               | -                     | -            | -                               | -                | -             | -                  | 3.0 Stars        |             | -           |
|                   | Power factor                             |               | %                     | -            | -                               | -                | -             | 91                 | 91               | -           | -           |
|                   |  | dB(A          | ) (H/M/L)             |              | 42/39/34                        |                  |               | -                  |                  | -           | -           |
|                   | Noise indoor                             | Power         | r Level dB            |              | 64/61/56                        |                  |               | -                  |                  | -           | -           |
|                   | Noise outdoor                            |               | ) (H/M/L)             |              | -                               |                  |               | 53 / -             |                  | -           | -           |
|                   |  |               | Level dB              |              | -                               |                  |               | 69 / -             |                  | -           | -           |
| LOW TEMP          | Total capacity (kW) / Inp                | ut power (W   | ) / COP               |              | -                               |                  | 14.50         | 4.98k              | 2.91             |             | -           |
| EXTRA LOW<br>TEMP | Total capacity (kW) / Inp                | ut power (W   | /COP                  |              | -                               |                  | -             | -                  | -                |             | -           |
|                   | (A) / Max Input Power (W)^               |               |                       | -            | 3.50 / 600                      | 3.38 / 600       | -/-           | 30.6 / 6.78k       | 30.6 / 6.78k     |             |             |
|                   | ent (A) (Cooling / Heating)              |               |                       | -            | -                               | -                | -/-           | 15.8 / 15.8        | 15.1 / 15.1      |             |             |
| Comp output       |  |               |                       |              | -                               | •                | -             | 2.80k              | 2.80k            |             | -           |
|                   | use max size (A)                         |               |                       |              | -                               |                  |               | 35                 |                  |             | -           |
|                   | edance (ΩMAX)                            |               |                       |              | -                               |                  |               | -                  |                  |             |             |
|                   | utput (Indoor/Outdoor) W<br>noval volume |               | 1.0-                  |              | 560                             |                  |               | 90 x2              |                  |             |             |
| External stati    |  |               | L/h<br>Pa             |              | 7.9 (7.9 x1)<br>80 / (10 / 150) |                  |               | -                  |                  |             |             |
| Indoor            | Cooling                                  | m³/min (l     | га<br>- H/M/L) (m³/h) | 50.0746.07   | 36.0 (3000) / (2                | 760) / (2160)    |               |                    |                  | -           | -           |
| Air flow          | Heating                                  |               | 1/M/L) (m³/h)         |              | 36.0 (3000) / (2                |                  |               | -                  |                  | -           | -           |
| Outdoor           | Cooling                                  |               | in (m³/h)             |              | -                               |                  |               | 125.0 (7500)       |                  | -           | -           |
| Air flow          | Heating                                  |               | in (m³/h)             |              | -                               |                  |               | 112.0 (6720)       |                  | -           | -           |
| Refrigerant ty    | ype / amount (ship) kg / amount (n       |               |                       |              | -                               |                  |               | R32, 3.050 / 5.52  | 5                |             |             |
|                   | GWP                                      |               |                       |              |                                 |                  |               |                    |                  |             |             |
| F-Gas             | CO₂eq (ton) (PRECHA                      |               |                       |              | -                               |                  |               | 675 / 2.06 / 3.73  | 1                |             |             |
|                   | CO₂eq (ton) (MAXIMUM (                   |               |                       |              |                                 |                  |               |                    |                  |             |             |
| Drodu-+ -1:       | oneien                                   |               | ht (mm)               |              | 400                             |                  |               | 1416               |                  |             |             |
| Product dime      | ensi0fi                                  |               | th (mm)<br>th (mm)    |              | 1297                            |                  |               | 940<br>340         |                  |             |             |
| Product dime      | ension (Panel)                           |               | x D (mm)              |              | 949                             |                  |               | 340                |                  |             |             |
| , roduct unite    |  |               | ht (mm)               |              | 514                             |                  |               | 1556               |                  |             |             |
| Packing dime      | ension                                   |               | th (mm)               |              | 1494                            |                  |               | 1055               |                  |             |             |
|                   |  |               | th (mm)               |              | 1122                            |                  |               | 485                |                  |             |             |
|                   |  |               | ET) kg                |              | 61                              | -                |               | 99                 |                  |             |             |
| Weight            |  |               | OSS) kg               |              | 73                              |                  |               | 111                |                  |             |             |
| <u> </u>          | I account time to the time               |               | (NET) kg              |              | - (7)                           |                  |               | 1 (2)              |                  |             |             |
| -                 | Layers limit (actual                     |               | J (DDT)               |              | 6 (7)                           |                  |               | 1 (2)              |                  |             |             |
| Operation co      | ondition                                 |               | ol (DBT)              |              | 18°C ~ 32°C                     |                  |               | -15°C ~ 48°C       |                  |             |             |
| -                 | Max Working Pressure HP/LP M             |               | it (DBT)              |              | 16°C ~ 30°C                     | 415              | / 2.55        | -20°C ~ 24°C       |                  |             | •           |
|                   | Max High Pressure M                      |               |                       |              |                                 |                  | 15            |                    |                  |             |             |
|                   | Pipe port diamete                        |               |                       | (Liquid) Ø9  | 52 (3/8) (Gas) Ø                |                  |               | 52 (3/8) (Gas) Ø   | 15.88 (5/8)      |             |             |
|                   | Pipe diameter                            |               |                       | (=:qa:a) 903 |                                 | uid) Ø9.52 (3/8) |               |                    | (5.0)            |             |             |
|                   | Connecting                               |               |                       |              | flared type                     |                  |               | flared type        |                  |             |             |
| Piping            | Standard le                              | ngth m        |                       |              |                                 |                  | 0m            |                    |                  |             |             |
| i <u>q</u>        | Pipe length r                            |               |                       |              | -                               |                  | 85m           |                    |                  |             |             |
|                   | Indoor unit & Outdoor uni                |               | rence m               |              | 15m (OD                         | located lower) / |               | ed higher)         |                  |             |             |
|                   | Add gas amo                              |               |                       |              |                                 |                  | g/m           |                    |                  |             |             |
| 1                 | Pipe length for add                      | utional gas n | n                     |              |                                 | 30               | )m            |                    |                  |             |             |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-125PE4R U-125PZH3R8

| Indoor   |  | Model  |  |   | C 10EDE4D  |   |  |  |              |                            |       |
|--|--|--|--|---|--|---|--|--|--------------|----------------------------|-------|
| Panel  |  | l*   | louei  |   | S-125PE4R  |   |  | -  | -            |                            |       |
|  |  |  |  | -   |  |   |  | U-125PZH3R8  | -            |                            |       |
| Outdoor<br>Drangh ning                                     |  |  |  | - 1   |  |   |  | U-125PZH3R6  |              |                            |       |
| Branch pipe  | tost condition   | l .  |  |   |  |   | ISO 12252 / AS   | C NI7C 2022 1  |              |                            |       |
| Periormance  | test condition   |  | C 11-  | 1ø 50Hz                                     |  |   | ISO 13253 / AS   |  |              |                            |       |
| Power supply   | У  | , ,  | 5, Hz  | 0001/                                       |  | 0.401/  | 0001/  | 3Ø 50Hz  | 445)/        | Min                        | N4    |
| -  | 1  |  | V  | 220V  | 230V   | 240V  | 380V   | 400V   | 415V         | Min                        | Max   |
|  |  |  | kW   | -   | 12.5   | 12.5  | -  | -  | -            | 3.2                        | 14.0  |
|  | Capacity   |  | TU/h   | -   | 42700  | 42700   | -  | -  | -            | 10900                      | 47800 |
|  |  | Sensible   | kW   | -   | 9.5  | 9.5   | -  | -  | -            | -                          | -     |
|  |  | Latent   | kW   | -   | 3.0  | 3.0   | -  | -  | -            | -                          | -     |
|  | Current  |  | Α  | -   | 1.83   | 1.71  | -  | 5.05   | 4.90         | -                          | -     |
|  | Input power  |  | W  | -   | 330  | 330   | -  | -  | -            | -                          | -     |
|  |  | Total W  |  |   | -  |   | -  | 3.30k  | 3.30k        | 665                        | 4.66k |
|  | Annual consumption   | Total kWh  |  | -   | -  | -   | -  | 1650   | -            | -                          | -     |
| 200  | EER  |  | l (W/W)  | -   | -  | -   | -  | 3.79   | 3.79         | 4.81                       | 3.00  |
| Cooling  | AEER   | (\   | V/W)   | -   | -  | -   | -  | 3.72   | -            | -                          | -     |
| Ö  | SEER rating  |  |  | -   | -  | -   | -  | Commercial   | Residential  | -                          | -     |
|  | TCSPF  | (\   | V/W)   | -   | -  | -   | -  | 6.46   | 4.93         | -                          | -     |
|  | Total Energy consumption   |  | άWh  | -   | -  | -   |  | 1568   | 943          | -                          | -     |
|  | Star rating  |  | -  | -   | -  | -   | -  | -  | 3.0 Stars    | -                          | -     |
|  | Power factor   |  | %  | -   | -  | -   | -  | 94   | 94           | -                          | -     |
|  |  | dB(A   | (H/M/L)  |   | 42/39/34   | •   |  | -  |              | -                          | -     |
|  | Noise indoor   |  | Level dB   |   | 64/61/56   |   |  | -  | İ            | -                          | -     |
|  | Naine and  |  | (H/M/L)  |   | -  |   |  | 53 / -   | İ            | -                          | -     |
| 1  | Noise outdoor  |  | Level dB   |   | -  |   |  | 69 / -   |              | -                          | -     |
|  | İ  |  | kW   | -   | 14.0   | 14.0  | -  | -  | -            | 3.6                        | 16.0  |
|  | Capacity   |  | TU/h   | -   | 47800  | 47800   | -  | -  | _            | 12300                      | 54600 |
|  | Current  | <u> </u>   | Α  | -   | 1.83   | 1.71  | -  | 5.05   | 4.90         | -                          | -     |
|  | Sanon  |  | W  | -   | 330  | 330   |  | 5.05   | 4.90         | -                          | -     |
|  | Input power  |  |  | -   | 330  | 330   | -  |  |              |                            |       |
|  | COD  |  | tal W  |   |  |   |  | 3.30k  | 3.30k        | 620                        | 4.86k |
|  | COP  |  | l (W/W)  | -   | -  | -   | -  | 4.24   | 4.24         | 5.81                       | 3.29  |
| 20   | ACOP   | (\   | V/W)   | -   | -  | -   | -  | 4.16   |              | -                          | -     |
| Heating  | SEER rating  | ı  | 1/010  | -   | -  | -   | -  | Commercial   | Residential  | -                          | -     |
| 훈  | HSPF   | ,  | V/W)   | -   | -  | -   | -  | 5.12   | 4.69         | -                          | -     |
|  | Total Energy consumption   | - 1  | (Wh  | -   | -  | -   | -  | 684  | 1620         | -                          | -     |
|  | Star rating  |  | -  | -   | -  | -   | -  | -  | 3.0 Stars    | -                          | -     |
|  | Power factor   |  | %  | -   | -  | -   | -  | 94   | 94           | -                          | -     |
|  | Noise indoor   | dB(A   | (H/M/L)  |   | 42/39/34   |   |  | -  |              | -                          | -     |
|  | Noise illuooi  | Power  | Level dB   |   | 64/61/56   |   |  | -  |              | -                          | -     |
|  | Nicion contrators  | dB(A   | (H/M/L)  |   | -  |   |  | 53 / -   |              | -                          | -     |
|  | Noise outdoor  | Power  | Level dB   |   | -  |   |  | 69 / -   |              | -                          | -     |
| LOW TEMP   | Total capacity (kW) / Inp  | ut power (W  | / COP  |   | -  |   | 14.50  | 4.98k  | 2.91         |                            |       |
| EXTRA LOW  |  |  |  |   |  |   |  |  |              |                            |       |
| TEMP   | Total capacity (kW) / Inp  | ut power (W  | / COP  |   | -  |   | -  | -  | -            | -                          |       |
|  | (A) / Max Input Power (W)*   |  |  | -   | 3.50/600   | 3.38 /600   | -/-  | 10.8 / 7.08k   | 10.8 / 7.08k | -                          |       |
|  | ent (A) (Cooling / Heating)  |  |  | _   | -  | -   | -/-  | 5.05 / 5.05  | 4.90 / 4.90  |                            |       |
| Comp output  |  |  |  |   | -  |   | -  | 2.80k  | 2.80k        | -                          |       |
|  | use max size (A)   |  |  |   | -  |   |  | 20   | 2.000        | -                          |       |
|  | edance (ΩMAX)  |  |  |   | -  |   |  | -  |              |                            |       |
|  | itput (Indoor/Outdoor) W   |  |  | 560   |  |   |  | 90 x2  |              |                            |       |
| Moisture rem   |  |  | L/h  |   |  |   |  |  |              |                            |       |
|  |  |  |  | 7.9 (7.9 x1)                                |  |   |  | -  |              |                            |       |
| External stati   |  | 3/: (1   | Pa   | 80 / (10/150)                               |  |   |  |  | 1            |                            |       |
| Indoor   | Cooling  |  | I/M/L) (m³/h)  | 50.0 / 46.0 / 36.0 (3000) / (2760) / (2160) |  |   |  | -  | -            | -                          |       |
| Air flow   | Heating  |  | I/M/L) (m³/h)  | 50.0 / 46.0 /                               | 0 / 36.0 (3000) / (2760) / (2160)  |   | -  |  |              | -                          | -     |
| Outdoor  | Cooling  |  | in (m³/h)  |   | -  |   |  | 125.0 (7500)   |              | -                          | -     |
| Air flow   | Heating  |  | in (m³/h)  |   | -  |   |  | 112.0 (6720)   |              |                            |       |
| Refrigerant ty   | ype / amount (ship) kg / amount (n   | nax) kg  |  |   | -  |   |  | R32, 3.050 / 5.52  |              |                            |       |
| I  | GWP  |  |  |   |  |   |  |  |              |                            |       |
|  |  | GWP / CO₂eq (ton) (PRECHARGED AMOUNT) /  |  |   |  |   |  |  |              |                            |       |
| F-Gas  |  |  | NT) /  |   | -  |   |  | 675 / 2.06 / 3.73  |              | -                          |       |
| F-Gas  |  | RGED AMOU  |  |   | -  |   |  | 675 / 2.06 / 3.73  |              | -                          |       |
| F-Gas  | CO₂eq (ton) (PRECHA  | RGED AMOU  | IOUNT)   |   | - 400  |   |  |  |              | -                          |       |
|  | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM 0  | RGED AMOU<br>CHARGED AN<br>Heig  | 1OUNT)<br>ht (mm)  |   | 400  |   |  | 1416   |              | -                          | -     |
| F-Gas Product dime   | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM 0  | RGED AMOU<br>CHARGED AN<br>Heig<br>Widt  | ht (mm)  |   | 1297   |   |  | 1416<br>940  |              |                            |       |
| Product dime   | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM C  | RGED AMOU<br>CHARGED AN<br>Heig<br>Wid   | ht (mm)<br>th (mm)<br>th (mm)  |   | 1297<br>949  |   |  | 1416<br>940<br>340   |              | -                          |       |
| Product dime   | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM 0  | RGED AMOU<br>CHARGED AN<br>Heig<br>Widt<br>Dep   | ht (mm)<br>th (mm)<br>th (mm)<br>th (mm)<br>x D (mm)   |   | 1297<br>949<br>-   |   |  | 1416<br>940<br>340<br>-  |              | -                          |       |
| Product dime   | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM (<br>ension  | RGED AMOU<br>CHARGED AN<br>Heig<br>Widt<br>Dep<br>H x W<br>Heig  | ht (mm) th (mm) th (mm) x D (mm) ht (mm)   |   | 1297<br>949<br>-<br>514  |   |  | 1416<br>940<br>340<br>-<br>1556  |              | -                          |       |
| Product dime   | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM (<br>ension  | RGED AMOU<br>CHARGED AN<br>Heig<br>Wid<br>Dep<br>H x W<br>Heig   | ht (mm) th (mm) th (mm) th (mm) x D (mm) ht (mm)   |   | 1297<br>949<br>-<br>514<br>1494  |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055  |              | -<br>-<br>-<br>-           |       |
| Product dime   | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM (<br>ension  | RGED AMOU<br>CHARGED AN<br>Heig<br>Wid<br>Dep<br>HxW<br>Heig<br>Wid<br>Dep   | ht (mm) th (mm) th (mm) th (mm) x D (mm) ht (mm) th (mm)   |   | 1297<br>949<br>-<br>514<br>1494<br>1122  |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485   |              | -<br>-<br>-<br>-           |       |
| Product dime<br>Product dime<br>Packing dime               | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM (<br>ension  | RGED AMOU<br>CHARGED AN<br>Heig<br>Wid<br>Dep<br>HxW<br>Heig<br>Wid<br>Dep<br>(N   | ht (mm) th (mm) th (mm) th (mm) x D (mm) ht (mm) th (mm) th (mm) th (mm)   |   | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61  |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99   |              | -<br>-<br>-<br>-           |       |
| Product dime   | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM (<br>ension  | RGED AMOU<br>CHARGED AN<br>Heig<br>Wid<br>Dep<br>H x W<br>Heig<br>Wid<br>Dep<br>(N<br>(GR  | nount)  th (mm)  th (mm)  th (mm)  x D (mm)  th (mm)  th (mm)  th (mm)  th (mm)  th (mm)   |   | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61<br>73  |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111  |              | -<br>-<br>-<br>-<br>-      |       |
| Product dime<br>Product dime<br>Packing dime               | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM of<br>ension<br>ension (Panel)   | RGED AMOU<br>CHARGED AN<br>Heig<br>Widt<br>Dep<br>HxW<br>Heig<br>Widt<br>Dep<br>(N<br>(GR  | ht (mm) th (mm) th (mm) th (mm) x D (mm) ht (mm) th (mm) th (mm) th (mm)   |   | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61<br>73  |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111  |              | -<br>-<br>-<br>-<br>-<br>- |       |
| Product dime<br>Product dime<br>Packing dime               | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM (<br>ension  | RGED AMOU<br>CHARGED AN<br>Heig<br>Widt<br>Dep<br>HxW<br>Heig<br>Widt<br>Dep<br>(N<br>(GR<br>Panel   | ht (mm) th (mm) th (mm) x D (mm) ht (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) ET) kg DSS) kg (NET) kg   |   | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61<br>73<br>-<br>6 (7)                              |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)                                 |              | -<br>-<br>-<br>-<br>-      |       |
| Product dime<br>Product dime<br>Packing dime<br>Weight     | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM (<br>ension<br>ension (Panel)<br>ension  | RGED AMOU<br>CHARGED AN<br>Heig<br>Widt<br>Dep<br>HxW<br>Heig<br>Widt<br>Dep<br>(N<br>(GR<br>Panel   | nount)  th (mm)  th (mm)  th (mm)  x D (mm)  th (mm)  th (mm)  th (mm)  th (mm)  th (mm)   |   | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61<br>73  |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C                 |              | -<br>-<br>-<br>-<br>-<br>- |       |
| Product dime<br>Product dime<br>Packing dime               | CO <sub>2</sub> eq (ton) (PRECHA<br>CO <sub>2</sub> eq (ton) (MAXIMUM (<br>ension<br>ension (Panel)<br>ension  | RGED AMOUDHARGED AM Heige Widd Dep HxW Heige Widd Dep (NM GRE Panele)  | ht (mm) th (mm) th (mm) x D (mm) ht (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) ET) kg DSS) kg (NET) kg   |   | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61<br>73<br>-<br>6 (7)                              |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)                                 |              | -                          |       |
| Product dime<br>Product dime<br>Packing dime<br>Weight     | CO <sub>2</sub> eq (ton) (PRECHA CO <sub>2</sub> eq (ton) (MAXIMUM (consion (Panel)))  ension  Layers limit (actual (actual))  | RGED AMOUCHARGED AM HeiggED AM HeiggED AM Dep H x W HeiggED Widt Dep (N (GR Panel ) Coo  | tount)  th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) (th (mm) (th (mm) (th (mm) (th (mm)) th (mm)   |   | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61<br>73<br>-<br>6 (7)<br>18°C ~ 32°C               | 4.15  |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C                 |              | -                          |       |
| Product dime<br>Product dime<br>Packing dime<br>Weight     | CO <sub>2</sub> eq (ton) (PRECHA CO <sub>2</sub> eq (ton) (MAXIMUM of ension ension (Panel) ension  Layers limit (actual endition  Max Working Pressure HP/LP M  | RGED AMOUCHARGED AM Heige Width Dep H x W Heige Width Dep (N GR: GR- Panel) Coc Heac pa (bar) (PS)   | tount)  th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) (th (mm) (th (mm) (th (mm) (th (mm)) th (mm)   |   | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61<br>73<br>-<br>6 (7)<br>18°C ~ 32°C               |   |  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C                 |              | -                          |       |
| Product dime<br>Product dime<br>Packing dime<br>Weight     | CO <sub>2</sub> eq (ton) (PRECHA CO <sub>2</sub> eq (ton) (MAXIMUM of the content of the | RGED AMOUCHARGED A | tount)  th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) (th (mm) (th (mm) (th (mm) (th (mm)) th (mm)   | (Limita) do                                 | 1297<br>949<br>-<br>514<br>1494<br>1122<br>61<br>73<br>-<br>6(7)<br>18°C ~ 32°C<br>16°C ~ 30°C | 4.  | / 2.55<br>15   | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C<br>-20°C ~ 24°C |              |                            |       |
| Product dime<br>Product dime<br>Packing dime<br>Weight     | CO <sub>2</sub> eq (ton) (PRECHA CO <sub>2</sub> eq (ton) (MAXIMUM of ension ension (Panel) ension  Layers limit (actual endition  Max Working Pressure HP/LP M Max High Pressure M Pipe port diamete  | RGED AMOUCHARGED AN Heige Width Dep HxW Heige Width Dep (N (GR Panel)) Coo Head pa (bar) (PS) pa   | tount)  th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) (th (mm) (th (mm) (th (mm) (th (mm)) th (mm)   | (Liquid) Ø9.                                | 1297 949 - 514 1494 1122 61 73 - 6(7) 18°C ~ 32°C 16°C ~ 30°C                                  | 4.<br>15.88 (5/8)   | /2.55<br>15<br>(Liquid) Ø9.  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C<br>-20°C ~ 24°C |              |                            |       |
| Product dime<br>Product dime<br>Packing dime<br>Weight     | CO2eq (ton) (PRECHA CO2eq (ton) (MAXIMUM CO ension ension (Panel) ension  Layers limit (actual endition  Max Working Pressure HP/LP M Max High Pressure M Pipe port diameter Pipe diameter   | RGED AMOUCHARGED AM Heige Widt Dep HxW Widt Heige Widt Dep (N GRE Panel ) Coc Heave pa (bar) (PS) pa   | tount)  th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) (th (mm) (th (mm) (th (mm) (th (mm)) th (mm)   | (Liquid)                                    | 1297 949 - 514 1494 1122 61 73 - 6 (7) 18*C ~ 32*C 16*C ~ 30*C                                 | 4.<br>15.88 (5/8)   | / 2.55<br>15   | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C<br>-20°C ~ 24°C |              |                            |       |
| Product dime Product dime Packing dime Weight Operation co | CO <sub>2</sub> eq (ton) (PRECHA CO <sub>2</sub> eq (ton) (MAXIMUM ( ension ension (Panel) ension  Layers limit (actual endition  Max Working Pressure HP/LP M Max High Pressure M Pipe port diamete Pipe diameter Connecting  | RGED AMOUDHARGED A | tount)  th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) (th (mm) (th (mm) (th (mm) (th (mm)) th (mm)   | (Liquid) Ø9.                                | 1297 949 - 514 1494 1122 61 73 - 6(7) 18°C ~ 32°C 16°C ~ 30°C                                  | 4.<br>15.88 (5/8)<br>uid) Ø9.52 (3/8)                                     | /2.55<br>15<br>(Liquid) Ø9.<br>(Gas) Ø15.88 (                                  | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C<br>-20°C ~ 24°C |              |                            |       |
| Product dime Product dime Packing dime Weight Operation co | CO2eq (ton) (PRECHA CO2eq (ton) (MAXIMUM CO2ension  ension  Layers limit (actual condition  Max Working Pressure HP/LP M  Max High Pressure M  Pipe port diameter  Connecting  Standard le   | RGED AMOUDHARGED ANOUHARGED AMOUDHARGED ANOUHARGED ANOU | tount)  th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) (th (mm) (th (mm) (th (mm) (th (mm)) th (mm)   | (Liquid) Ø9.                                | 1297 949 - 514 1494 1122 61 73 - 6 (7) 18*C ~ 32*C 16*C ~ 30*C                                 | 4.<br>15.88 (5/8)<br>juid) Ø9.52 (3/8)                                    | / 2.55<br>15<br>(Liquid) Ø9.<br>(Gas) Ø15.88 (                                 | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C<br>-20°C ~ 24°C |              |                            |       |
| Product dime<br>Product dime<br>Packing dime<br>Weight     | CO2eq (ton) (PRECHA CO2eq (ton) (MAXIMUM ( ension ension (Panel) ension  Layers limit (actual oudition  Max Working Pressure HP/LP M Max High Pressure M Pipe port diameter Pipe diameter Connecting Standard le Pipe length   | RGED AMOUCHARGED AN Heig Widt Dep HxW Heig Widt Dep (N (GR Panel ) Coo Hez pa (bar) (PS) pa er mm (inch) mm (inch) mm (inch) mg h m ange m   | HOUNT)  tht (mm) th (mm) th (mm) x D (mm) ht (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm)  | (Liquid) Ø9.                                | 1297 949 - 514 1494 1122 61 73 - 6(7) 18°C ~ 32°C 16°C ~ 30°C                                  | 4.<br>15.88 (5/8)<br>juid) Ø9.52 (3/8)<br>5.0                             | / 2.55<br>15<br>(Liquid) Ø9.<br>(Gas) Ø15.88 (                                 | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C<br>-20°C ~ 24°C |              |                            |       |
| Product dime Product dime Packing dime Weight Operation co | CO2eq (ton) (PRECHA CO2eq (ton) (MAXIMUM CO2ension  ension  Layers limit (actual endition  Max Working Pressure HP/LP M  Max High Pressure M  Pipe port diameter  Connecting Standard le  Pipe length I Indoor unit & Outdoor unit   | RGED AMOUCHARGED AN Height Wildi Dep HxW Height Wildi Dep (N) (GR Panele) Coo Hea pa (bar) (PS) pa er mm (inch) mm (inch) method magth m ange m t height diffe   | HOUNT)  tht (mm) th (mm) th (mm) x D (mm) ht (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm) th (mm)  | (Liquid) Ø9.                                | 1297 949 - 514 1494 1122 61 73 - 6(7) 18°C ~ 32°C 16°C ~ 30°C                                  | 4.<br>15.88 (5/8)<br>uid) Ø9.52 (3/8)<br>5.4<br>5 ~ 1                     | / 2.55<br>15<br>(Liquid) Ø9.<br>(Gas) Ø15.88 (<br>Om<br>85m<br>/ 30m (OD Icate | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C<br>-20°C ~ 24°C |              |                            |       |
| Product dime Product dime Packing dime Weight Operation co | CO2eq (ton) (PRECHA CO2eq (ton) (MAXIMUM ( ension ension (Panel) ension  Layers limit (actual oudition  Max Working Pressure HP/LP M Max High Pressure M Pipe port diameter Pipe diameter Connecting Standard le Pipe length   | RGED AMOUDHARGED A | HOUNT)  Int (mm) | (Liquid) Ø9.                                | 1297 949 - 514 1494 1122 61 73 - 6(7) 18°C ~ 32°C 16°C ~ 30°C                                  | 4.<br>15.88 (5/8)<br>uid) Ø9.52 (3/8)<br>5.4<br>5 ~ 1<br>0 located lower) | / 2.55<br>15<br>(Liquid) Ø9.<br>(Gas) Ø15.88 (                                 | 1416<br>940<br>340<br>-<br>1556<br>1055<br>485<br>99<br>111<br>-<br>1(2)<br>-15°C ~ 48°C<br>-20°C ~ 24°C |              |                            |       |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-140PE4R U-140PZ4R5

| Indoor            |                                    | Model                          |               | S-140PE4R                                   |                   |               | -                 | -             |       |        |
|-------------------|------------------------------------|--------------------------------|---------------|---|-------------------|---------------|-------------------|---------------|-------|--------|
| Panel             |                                    |                                |               | -   |                   |               | -                 |               |       | -      |
| Outdoor           |                                    |                                |               | -   |                   |               | U-140PZ4R5        | -             |       |        |
| Branch pipe       |                                    |                                |               |   |                   |               |                   |               |       |        |
| Performance       | test condition                     |                                |               |   |                   | ISO 13253 / A | S NZS 3823.1      |               |       |        |
| Power supply      | ı                                  | Ø, Hz                          |               | 1ø 50Hz                                     |                   |               | 1ø 50Hz           |               |       |        |
| . orror ouppty    | ,                                  | V                              | 220V          | 230V  | 240V              | 220V          | 230V              | 240V          | Min   | Max    |
|                   |                                    | kW                             | -             | 14.0  | 14.0              | -             | -                 | -             | 3.3   | 15.0   |
|                   | Capacity                           | BTU/h                          | -             | 47800                                       | 47800             | -             | -                 | -             | 11300 | 51200  |
|                   |                                    | Sensible kW<br>Latent kW       | -             | 10.2  | 10.2              | -             | -                 | -             | -     | -      |
|                   | Current                            | Latent kW                      | -             | 3.8   | 3.8               | -             |                   |               | -     | -      |
|                   | Current                            | W                              | -             | 2.61<br>490                                 | 2.47<br>490       | -             | 20.60             | 19.70         | -     | -      |
|                   | Input power                        | Total W                        | -             | -   | 450               | -             | 4.31k             | 4.31k         | 650   | 5.86k  |
|                   | Annual consumption                 | Total kWh                      | _             | -   | -                 | -             | 2155              | 4.51K         | -     | J.00K  |
| 0.0               | EER                                | Total (W/W)                    | _             | _   | _                 | _             | 3.25              | 3.25          | 5.08  | 2.56   |
| Cooling           | AEER                               | (W/W)                          | -             | -   | -                 | -             | 3.20              | -             |       | -      |
| ပိ                | SEER rating                        | . , ,                          | -             | -   | -                 | -             | Commercial        | Residential   | -     | -      |
|                   | TCSPF                              | (W/W)                          | -             | -   | -                 | -             | 5.20              | 4.12          | -     | -      |
|                   | Total Energy consumption           | kWh                            | -             | -   | -                 | -             | 2218              | 1307          | -     | -      |
|                   | Star rating                        | -                              | -             | -   | -                 | -             | -                 | 2.5 Stars     |       | -      |
|                   | Power factor                       | %                              | -             | -   | -                 | -             | 91                | 91            | -     | -      |
|                   | Noise indoor                       | dB(A) (H/M/L)                  |               | 45 / 41 / 37                                |                   |               | -                 |               | -     | -      |
|                   |                                    | Power Level dB                 | $\rightarrow$ | 67 / 63 / 59                                |                   |               | -                 |               | -     | -      |
|                   | Noise outdoor                      | dB(A) (H/M/L)                  |               | -   |                   | 1             | 56 / -            |               | -     | -      |
|                   |                                    | Power Level dB                 | _             | - 14.0                                      | 140               |               | 74 / -            | l             | -     | - 40.0 |
|                   | Capacity                           | kW<br>PTII/b                   | -             | 14.0  | 14.0              | -             | -                 | -             | 3.5   | 16.0   |
|                   | Current                            | BTU/h                          | -             | 47800<br>2.61                               | 47800<br>2.47     | -             | 16.90             | 16.10         | 11800 | 54600  |
|                   | Current                            | A<br>W                         | -             | 2.61<br>490                                 | 490               | -             | 16.80             | 16.10         | -     | -      |
|                   | Input power                        | Total W                        |               | 490   | 450               | -             | 3.52k             | 3.52k         | 720   | 5.28k  |
|                   | COP                                | Total (W/W)                    | <del></del>   |   |                   | <del>-</del>  | 3.52k<br>3.98     | 3.52k<br>3.98 | 4.79  | 3.03   |
|                   | ACOP                               | (W/W)                          | -             | -   | -                 | -             | 3.91              | -             | -     | -      |
| Heating           | SEER rating                        |                                | -             | -   | -                 | -             | Commercial        | Residential   | -     | -      |
| leat              | HSPF                               | (W/W)                          | -             | -   | -                 | -             | 4.45              | 4.23          |       | -      |
| _                 | Total Energy consumption           | kWh                            | -             | -   | -                 | -             | 786               | 1795          | -     | -      |
|                   | Star rating                        | -                              | -             | -   | -                 | -             | -                 | 2.5 Stars     | -     | -      |
|                   | Power factor                       | %                              | -             | -   | -                 | -             | 91                | 91            | -     | -      |
|                   | Noise indoor                       | dB(A) (H/M/L)                  |               | 45 / 41 / 37                                |                   |               | -                 |               |       | -      |
|                   | Noise muooi                        | Power Level dB                 |               | 67 / 63 / 59                                |                   |               | -                 |               | -     | -      |
|                   | Noise outdoor                      | dB(A) (H/M/L)                  |               | -   |                   |               | 56 / -            | -             | -     |        |
|                   |                                    | Power Level dB                 |               | -   |                   |               | 74/-              |               | -     | -      |
| LOW TEMP          | Total capacity (kW) / Inp          | ut power (W) / COP             |               | -   |                   | 13.60         | 4.90k             | 2.78          |       | -      |
| EXTRA LOW<br>TEMP | Total capacity (kW) / Inp          | ut power (W) / COP             |               | -   |                   | -             | -                 | -             |       | -      |
|                   | (A) / Max Input Power (W)*         |                                | _             | 4.50 / 805                                  | 4.36 / 805        | -/-           | 32.9 / 6.94k      | 32.9 / 7.24k  |       | -      |
|                   | ent (A) (Cooling / Heating)        |                                | -             | 4.307603                                    | 4.307 003         | -/-           | 20.6 / 16.8       | 19.7 / 16.1   |       | -      |
| Comp output       |                                    |                                |               |   | 1                 | -             | 3.00k             | 3.00k         |       | -      |
|                   | use max size (A)                   |                                |               | -   |                   |               | 40                |               |       | -      |
|                   | edance (ΩMAX)                      |                                |               | -   |                   |               | -                 |               | -     |        |
|                   | itput (Indoor/Outdoor) W           |                                |               | 750   |                   |               | 120               |               | -     |        |
| Moisture rem      | noval volume                       | L/h                            |               | 9.0 (9.0 x1)                                |                   | -             |                   |               | -     |        |
| External stati    | ic pressure                        | Pa                             |               | 80 / (50 / 150)                             |                   |               | -                 |               |       | -      |
| Indoor            | Cooling                            | m³/min (H/M/L) (m <sup>3</sup> |               | 60.0 / 50.0 / 42.0 (3600) / (3000) / (2520) |                   |               | -                 | -             | -     |        |
| Air flow          | Heating                            | m³/min (H/M/L) (m³             | (h) 60.0 / 50 | 60.0 / 50.0 / 42.0 (3600) / (3000) / (2520) |                   |               | -                 | -             | -     |        |
| Outdoor           | Cooling                            | m³/min (m³/h)                  | $\rightarrow$ | -   |                   |               | 84.0 (5040)       |               | -     | -      |
| Air flow          | Heating                            | m³/min (m³/h)                  |               | -   |                   |               | 82.0 (4920)       | -             | -     |        |
| Retrigerant ty    | ype / amount (ship) kg / amount (n |                                | -             | -   |                   |               | R32, 2.800 / 3.70 | ıu            |       | -      |
|                   | GWP.                               |                                |               |   |                   |               |                   |               |       |        |
| F-Gas             | CO₂eq (ton) (PRECHA                |                                |               | -   |                   |               | 675 / 1.89 / 2.50 | )             |       | -      |
|                   | CO₂eq (ton) (MAXIMUM C             |                                |               |   |                   |               |                   |               |       |        |
| Drodu-+ -1:       | nnoion                             | Height (mm)                    |               | 400   |                   |               | 996               |               |       | -      |
| Product dime      | пои                                | Width (mm)                     | -+            | 1297  |                   |               | 980               |               |       | -      |
| Droduct dic-      | ancion (Banol)                     | Depth (mm)                     |               | 949   |                   |               | 370               |               |       | -      |
| rroduct aime      | ension (Panel)                     | H x W x D (mm)<br>Height (mm)  | +             | 514   |                   |               | 1134              |               |       | -      |
| Packing dime      | ension                             | Width (mm)                     | -             | 1494  |                   | -             | 1095              |               |       | -      |
| . doming diffic   |                                    | Depth (mm)                     | 1             | 1122  |                   |               | 529               |               |       | -      |
|                   |                                    | (NET) kg                       | 1             | 61  |                   |               | 83                |               |       | -      |
| Weight            |                                    | (GROSS) kg                     |               | 73  |                   |               | 91                |               |       | -      |
|                   |                                    | Panel (NET) kg                 |               | -   |                   |               | -                 |               |       | -      |
|                   | Layers limit (actual)              | )                              |               | 6 (7) 1 (2)                                 |                   |               |                   |               |       | -      |
| Operation         | andition                           | Cool (DBT)                     |               | 18°C ~ 32°C                                 |                   |               | -10°C ~ 46°C      |               |       | -      |
| Operation co      | mundUll                            | Heat (DBT)                     |               | 16°C ~ 30°C                                 | :                 |               | -15°C ~ 24°C      |               |       | -      |
|                   | Max Working Pressure HP/LP M       |                                |               |   |                   | / 2.55        |                   |               |       |        |
|                   | Max High Pressure M                | ра                             |               |   | 4                 | .15           |                   |               |       |        |
|                   | Pipe port diamete                  | er mm (inch)                   | (Liquid) (    | ð9.52 (3/8) (Gas) (                         |                   |               | 52 (3/8) (Gas) Ø  | 15.88 (5/8)   |       | -      |
|                   | Pipe diameter i                    | mm (inch)                      |               | (Li   | iquid) Ø9.52 (3/8 | (Gas) Ø15.88  | 5/8)              |               |       | -      |
|                   | Connecting                         |                                |               | flared type                                 |                   |               | flared type       |               |       |        |
| Piping            | Standard le                        |                                |               |   |                   | .0m           |                   |               |       | -      |
| <u>a</u>          | Pipe length r                      |                                |               |   |                   | 50m           |                   |               |       | -      |
|                   | Indoor unit & Outdoor uni          |                                | -             | 15m (O                                      | D located lower)  |               | ea nigner)        |               |       | -      |
|                   | Add gas amo                        | _                              | -+            |   |                   | g/m<br>0m     |                   |               |       | -      |
|                   | Pipe length for add                | iiuonat gas M                  | ı             |   | -                 |               |                   |               |       |        |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-140PE4R U-140PZ4R8

| Indoor           |   | Model                     |                | S-140PE4R                                   |                         |  | -                                | -            |              |               |  |
|------------------|---|---------------------------|----------------|---|-------------------------|--|----------------------------------|--------------|--------------|---------------|--|
| Panel            |   |                           |                | -   |                         |  | -                                |              |              | -             |  |
| Outdoor          |   |                           |                | -   |                         |  | U-140PZ4R8                       | -            |              |               |  |
| Branch pipe      |   |                           |                |   |                         | -  |                                  |              |              |               |  |
| Performance      | test condition                                |                           |                |   |                         | ISO 13253 / A                                    | S NZS 3823.1                     |              |              |               |  |
| Power supply     | ı   | Ø, Hz                     |                | 1ø 50Hz                                     |                         |  | 3ø 50Hz                          |              |              |               |  |
| . ovioi ouppty   | 1   | V                         | 220V           | 230V  | 240V                    | 380V   | 400V                             | 415V         | Min          | Max           |  |
|                  |   | kW                        | -              | 14.0  | 14.0                    | -  | -                                | -            | 3.3          | 15.0          |  |
|                  | Capacity                                      | BTU/h                     | -              | 47800                                       | 47800                   | -  | -                                | -            | 11300        | 51200         |  |
|                  |   | Sensible kW<br>Latent kW  | -              | 10.2  | 10.2                    | -  | -                                | -            | -            | -             |  |
|                  | Current                                       | Latent kW<br>A            | -              | 3.8   | 3.8                     | -  |                                  |              | -            | -             |  |
|                  | Current                                       | W                         | -              | 2.61<br>490                                 | 2.47<br>490             | -  | 6.60                             | 6.40         | -            | -             |  |
|                  | Input power                                   | Total W                   | + -            | -   | 490                     | -  | 4.31k                            | 4.31k        | 650          | 5.86k         |  |
|                  | Annual consumption                            | Total kWh                 | -              | -   | -                       | -  | 2155                             | 4.01K        | -            | - J.JOK       |  |
| 0.0              | EER   | Total (W/W)               | <u> </u>       | -   | -                       | -  | 3.25                             | 3.25         | 5.08         | 2.56          |  |
| Cooling          | AEER  | (W/W)                     | -              | -   | -                       | -  | 3.20                             | -            | -            | -             |  |
| ŏ                | SEER rating                                   |                           | -              | -   | -                       | -  | Commercial                       | Residential  | -            | -             |  |
|                  | TCSPF   | (W/W)                     | -              | -   | -                       | -  | 5.20                             | 4.12         | -            | -             |  |
|                  | Total Energy consumption                      | kWh                       | -              | -   | -                       | -  | 2218                             | 1307         | -            | -             |  |
|                  | Star rating                                   | -                         | -              | -   | -                       | -  | -                                | 2.5 Stars    | -            | -             |  |
|                  | Power factor                                  | %                         | -              | -   | -                       | -  | 94                               | 94           | -            | -             |  |
|                  | Noise indoor                                  | dB(A) (H/M/L)             |                | 45 / 41 / 37                                |                         |  | •                                |              | -            | -             |  |
|                  |   | Power Level dB            | _              | 67 / 63 / 59                                |                         | 1  | -<br>FC /                        |              | -            | -             |  |
|                  | Noise outdoor                                 | dB(A) (H/M/L)             |                | -   |                         | <del>                                     </del> | 56 / -<br>74 / -                 |              | -            | -             |  |
|                  |   | Power Level dB<br>kW      | _              | 1   | 140                     | _  | 747-                             | _            | 2 5          | 16.0          |  |
|                  | Capacity                                      | BTU/h                     | -              | 14.0<br>47800                               | 14.0<br>47800           | -  | -                                | -            | 3.5<br>11800 | 16.0<br>54600 |  |
|                  | Current                                       | A BIU/II                  | -              | 2.61  | 2.47                    | -  | 5.40                             | 5.20         | 11800        | 54600         |  |
|                  |   | W                         | -              | 490   | 490                     | -  | 5.40                             | 5.20         | -            | -             |  |
|                  | Input power                                   | Total W                   | <del>-  </del> | -   | 700                     | -  | 3.52k                            | 3.52k        | 720          | 5.28k         |  |
|                  | СОР   | Total (W/W)               | -              | -   | -                       | -  | 3.98                             | 3.98         | 4.79         | 3.03          |  |
|                  | ACOP  | (W/W)                     | -              | -   | -                       | -  | 3.91                             | -            | -            | -             |  |
| Heating          | SEER rating                                   |                           | -              | -   | -                       | -  | Commercial                       | Residential  | -            | -             |  |
| <del>Le</del> at | HSPF  | (W/W)                     | -              | -   | -                       | -  | 4.45                             | 4.23         | -            | -             |  |
| _                | Total Energy consumption                      | kWh                       | -              | -   | -                       | -  | 786                              | 1795         | -            | -             |  |
|                  | Star rating                                   | -                         | -              | -   | -                       | -  | -                                | 2.5 Stars    |              | -             |  |
|                  | Power factor                                  | %                         | -              | -   | -                       | -  | 94                               | 94           | -            | -             |  |
|                  | Noise indoor                                  | dB(A) (H/M/L)             | _              | 45 / 41 / 37                                |                         |  | -                                |              |              | -             |  |
|                  |   | Power Level dB            |                | 67 / 63 / 59                                |                         |  | -                                |              | -            | -             |  |
|                  | Noise outdoor                                 | dB(A) (H/M/L)             | -              | -   |                         |  | 56 / -                           |              | -            | -             |  |
| LOW TEMP         | Total conscitu (IAM) / Inn                    | Power Level dB            |                | -   |                         | 13.60  | 74 / -<br>4.90k                  | 2.78         | -            | -             |  |
| EXTRA LOW        | Total capacity (kW) / Inp                     |                           | +              |   |                         | 13.00  | 4.50K                            | 2.76         |              | -             |  |
| TEMP             | Total capacity (kW) / Inp                     | ut power (W) / COP        |                | -   |                         | -  | -                                | -            |              | -             |  |
|                  | (A) / Max Input Power (W)*                    |                           | _              | 4.50 / 805                                  | 4.36 /805               | -/-  | 13.4 / 7.29k                     | 13.4 / 7.54k |              | -             |  |
|                  | ent (A) (Cooling / Heating)                   |                           | <u> </u>       | -   | -                       | -/-  | 6.60 / 5.40                      | 6.40 / 5.20  | -            |               |  |
| Comp output      |   |                           |                | -   |                         | -  | 3.00k                            | 3.00k        |              | -             |  |
|                  | use max size (A)                              |                           |                | -   |                         |  | 20                               |              |              | -             |  |
| Network Imp      | edance (ΩMAX)                                 |                           |                | -   |                         |  | -                                |              | -            |               |  |
| Fan Motor ou     | itput (Indoor/Outdoor) W                      |                           |                | 750   |                         |  | 120                              |              | -            |               |  |
| Moisture rem     |   | L/h                       |                | 9.0 (9.0 x1)                                |                         | -  |                                  |              | -            |               |  |
| External stati   |   | Pa                        | _              | 80 / (50/150)                               |                         | -  |                                  |              |              | -             |  |
| Indoor           | Cooling                                       | m³/min (H/M/L) (m³/h      |                | 60.0 / 50.0 / 42.0 (3600) / (3000) / (2520) |                         |  | -                                | -            | -            |               |  |
| Air flow         | Heating                                       | m³/min (H/M/L) (m³/h      | ) 60.0 / 50.0  | 60.0 / 50.0 / 42.0 (3600) / (3000) / (2520) |                         |  | -                                | -            | -            |               |  |
| Outdoor          | Cooling                                       | m³/min (m³/h)             |                | -   |                         |  | 84.0 (5040)                      | -            | -            |               |  |
| Air flow         | Heating<br>ype / amount (ship) kg / amount (n | m³/min (m³/h)             |                | -   |                         | <b>.</b>   | 82.0 (4920)<br>R32, 2.800 / 3.70 | -            | -            |               |  |
| Reingeraniciy    |   |                           | +              | -   |                         | <u> </u>   | N32, 2.800 / 3.70                | 10           |              | -             |  |
| F 0              | GWP   |                           |                |   |                         |  | 675 / 1.89 / 2.50                | ,            |              |               |  |
| F-Gas            | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM C |                           |                | -   |                         |  | 6/5/1.69/2.50                    | ,            |              | -             |  |
| -                | Sozeq (ton) (MAXIMOM C                        |                           | -              | 400   |                         | <del>                                     </del> | 000                              |              |              |               |  |
| Product dime     | ension  | Height (mm)<br>Width (mm) | -              | 400<br>1297                                 |                         | -  | 996<br>980                       |              |              | -             |  |
| . roduct unlik   | 51151511                                      | Depth (mm)                | +              | 949   |                         | <del>                                     </del> | 370                              |              |              | -             |  |
| Product dime     | ension (Panel)                                | H x W x D (mm)            |                | -   |                         | <b>†</b>   | -                                |              |              | -             |  |
| . Todact diffic  |   | Height (mm)               |                | 514   |                         | <b>†</b>   | 1134                             |              |              | -             |  |
| Packing dime     | ension  | Width (mm)                |                | 1494  |                         |  | 1095                             |              |              | -             |  |
|                  |   | Depth (mm)                |                | 1122  |                         |  | 529                              |              |              | -             |  |
|                  |   | (NET) kg                  |                | 61  |                         |  | 82                               |              |              | -             |  |
| Weight           |   | (GROSS) kg                |                | 73  |                         |  | 90                               |              |              | -             |  |
|                  |   | Panel (NET) kg            |                | -   |                         |  |                                  |              |              | -             |  |
|                  | Layers limit (actual)                         |                           |                | 6 (7)                                       |                         |  | 1 (2)                            |              |              | -             |  |
| Operation co     | ndition                                       | Cool (DBT)                |                | 18°C ~ 32°C                                 |                         |  | -10°C ~ 46°C                     |              |              | -             |  |
| 5 po. ation 60   |   | Heat (DBT)                |                | 16°C ~ 30°C                                 |                         |  | -15°C ~ 24°C                     |              |              | -             |  |
|                  | Max Working Pressure HP/LP M                  |                           |                |   |                         | / 2.55   |                                  |              |              |               |  |
|                  | Max High Pressure M                           |                           |                |   |                         | .15  |                                  |              |              |               |  |
|                  | Pipe port diamete                             |                           | (Liquid) Ø9.   | .52 (3/8) (Gas) Ø                           |                         |  | 52 (3/8) (Gas) Ø                 | 15.88 (5/8)  |              | -             |  |
|                  | Pipe diameter i                               |                           |                |   | quid) Ø9.52 (3/8        | ) (Gas) Ø15.88 (                                 |                                  |              |              | -             |  |
| ממי              | Connecting                                    |                           |                | flared type                                 |                         | <u></u>  | flared type                      |              |              | -             |  |
| Piping           | Standard le                                   |                           | -              |   |                         | 0m   |                                  |              |              | -             |  |
| ۵                | Pipe length r                                 |                           | -              | 15 m /0                                     | 5 ~<br>(D located lower | 50m  | ud highor\                       |              |              | -             |  |
|                  | Indoor unit & Outdoor uni<br>Add gas amo      |                           |                | 13III (U                                    |                         | g/m  | u iligilei)                      |              |              | -             |  |
|                  | Pipe length for add                           | _                         | -              |   |                         |  |                                  |              |              | -             |  |
|                  |   | araginat saa III          | 1              | 30m   |                         |  |                                  |              |              |               |  |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-140PE4RN U-140PZ4R5

| Indoor         |                                    |                          | Model            |   | S-140PE4RN                   |                  |                         | -                 | -               |       |       |
|----------------|------------------------------------|--------------------------|------------------|---|------------------------------|------------------|-------------------------|-------------------|-----------------|-------|-------|
| Panel          |                                    |                          |                  |   | -                            |                  |                         | -                 |                 |       | -     |
| Outdoor        |                                    |                          |                  |   | -                            |                  |                         | U-140PZ4R5        | -               |       |       |
| Branch pipe    |                                    |                          |                  |   |                              |                  | -                       |                   |                 |       |       |
| Performance    | test condition                     |                          |                  |   |                              |                  | ISO 13253 / AS          | S NZS 3823.1      |                 |       |       |
| Power supply   | ı                                  | Ø, Hz                    |                  |   | 1ø 50Hz                      |                  |                         | 1ø 50Hz           |                 |       |       |
| · owor ouppt;  | ,                                  | V                        |                  | 220V  | 230V                         | 240V             | 220V                    | 230V              | 240V            | Min   | Max   |
|                |                                    | kW                       |                  | -   | 14.0                         | 14.0             | -                       | -                 | -               | 3.3   | 15.0  |
|                | Capacity                           | BTU/h                    | 144/             | -   | 47800                        | 47800            | -                       | -                 | -               | 11300 | 51200 |
|                |                                    | Sensible                 | kW               | -   | 10.2                         | 10.2             | -                       | -                 | -               | -     | -     |
|                | Current                            | Latent A                 | KVV              | -   | 3.8                          | 3.8              | -                       |                   |                 | -     | -     |
|                | Current                            | W                        |                  | -   | 2.61<br>490                  | 2.47<br>490      | -                       | 20.60             | 19.70           | -     | -     |
|                | Input power                        | Total W                  | ı                | -   | -                            | 450              | -                       | 4.31k             | 4.31k           | 650   | 5.86k |
|                | Annual consumption                 | Total kWh                |                  | -   | -                            | _                | -                       | 2155              | 4.01K           | -     |       |
| 200            | EER                                | Total (W/                |                  | -   | -                            | -                | -                       | 3.25              | 3.25            | 5.08  | 2.56  |
| Cooling        | AEER                               | (W/W)                    | ,                | -   | -                            | -                | -                       | 3.20              | -               | -     | -     |
| ŏ              | SEER rating                        |                          |                  | -   | -                            | -                | -                       | Commercial        | Residential     |       | -     |
|                | TCSPF                              | (W/W)                    |                  | -   | -                            | -                | -                       | 5.20              | 4.12            | -     | -     |
|                | Total Energy consumption           | kWh                      |                  | -   | -                            | -                | -                       | 2218              | 1307            | -     | -     |
|                | Star rating                        | -                        |                  | -   | -                            | -                | -                       | -                 | 2.5 Stars       | -     | -     |
|                | Power factor                       | %<br>-ID(A)(II(A)        | 4.0. \           | -   | 45 / 44 / 07                 | -                | -                       | 91                | 91              |       | -     |
|                | Noise indoor                       | dB(A) (H/N<br>Power Leve | _                |   | 45 / 41 / 37<br>67 / 63 / 59 |                  |                         | -                 |                 | -     | -     |
|                | 1                                  | dB(A) (H/N               |                  |   | -                            |                  |                         | 56 / -            |                 | -     | -     |
|                | Noise outdoor                      | Power Leve               | _                |   | <u> </u>                     |                  |                         | 74/-              |                 | -     |       |
|                |                                    | kW                       |                  | _   | 14.0                         | 14.0             | _                       | -                 | -               | 3.5   | 16.0  |
|                | Capacity                           | BTU/h                    |                  | -   | 47800                        | 47800            | -                       | -                 | -               | 11800 | 54600 |
|                | Current                            | A                        |                  | -   | 2.61                         | 2.47             | -                       | 16.80             | 16.10           | -     | -     |
|                |                                    | W                        |                  | -   | 490                          | 490              | -                       | -                 | -               |       | -     |
|                | Input power                        | Total W                  |                  |   | -                            | _                | -                       | 3.52k             | 3.52k           | 720   | 5.28k |
|                | COP                                | Total (W/                | W)               | -   | -                            | -                | -                       | 3.98              | 3.98            | 4.79  | 3.03  |
| 0.0            | ACOP                               | (W/W)                    |                  | -   | -                            | -                | -                       | 3.91              | -               | -     | -     |
| Heating        | SEER rating                        |                          |                  | -   | -                            | -                | -                       | Commercial        | Residential     | -     | -     |
| 운              | HSPF                               | (W/W)                    |                  | -   | -                            | -                | -                       | 4.45              | 4.23            | -     | -     |
|                | Total Energy consumption           | kWh<br>-                 |                  | -   | -                            | -                | -                       | 786               | 1795            | -     | -     |
|                | Star rating<br>Power factor        | - %                      |                  | -   | -                            | -                | -                       | 91                | 2.5 Stars<br>91 | -     | -     |
|                |                                    | dB(A) (H/N               | 4/1)             |   | 45 / 41 / 37                 |                  |                         | -                 | 31              | -     | -     |
|                | Noise indoor                       | Power Leve               | _                |   | 67 / 63 / 59                 |                  |                         | _                 |                 | -     | _     |
|                |                                    | dB(A) (H/N               |                  |   | -                            |                  |                         | 56 / -            |                 |       | -     |
|                | Noise outdoor                      | Power Leve               | _                |   | -                            |                  |                         | 74/-              |                 | -     | -     |
| LOWTEMP        | Total capacity (kW) / Inp          | ut power (W) / CC        | )P               |   | -                            |                  | 13.60                   | 4.90k             | 2.78            |       | -     |
| EXTRA LOW      | Total capacity (kW) / Inp          | ut nower (M) / CC        | D                |   |                              |                  |                         |                   |                 |       |       |
| TEMP           |                                    | at power (W) / Oc        | ,,               |   |                              |                  | _                       | _                 | _               |       |       |
|                | (A) / Max Input Power (W)*         |                          |                  | -   | 4.50 / 805                   | 4.36 / 805       | -/-                     | 32.9 / 6.94k      | 32.9 / 7.24k    |       | -     |
|                | ent (A) (Cooling / Heating)        |                          |                  | -   | -                            | -                | -/- 20.6/16.8 19.7/16.1 |                   |                 |       | -     |
| Comp output    |                                    |                          |                  |   | -                            |                  | -                       | 3.00k             | 3.00k           |       | -     |
|                | use max size (A)<br>edance (ΩMAX)  |                          |                  | -   |                              |                  |                         | 40                | -               |       |       |
|                | itput (Indoor/Outdoor) W           |                          |                  | -<br>750                                    |                              |                  |                         | 120               | -               |       |       |
|                | noval volume                       |                          | L/h              |   | 9.0 (9.0 x1)                 |                  | -                       |                   |                 | -     |       |
| External stat  | ic pressure                        |                          | Pa               |   | 80 / (50 / 150)              |                  | -                       |                   |                 | -     |       |
| Indoor         | Cooling                            | m³/min (H/M/L            | .) (m³/h)        | 60.0 / 50.0 /                               | 42.0 (3600)/(3               | 000) / (2520)    |                         | -                 |                 | -     |       |
| Air flow       | Heating                            | m³/min (H/M/L            |                  | 60.0 / 50.0 / 42.0 (3600) / (3000) / (2520) |                              |                  |                         | -                 |                 |       | -     |
| Outdoor        | Cooling                            | m³/min (m                |                  |   | -                            |                  |                         | 84.0 (5040)       | -               | -     |       |
| Air flow       | Heating                            | m³/min (m                | <sup>3</sup> /h) |   | -                            |                  | 82.0 (4920)             |                   |                 | -     | -     |
| Refrigerant ty | ype / amount (ship) kg / amount (n |                          |                  |   | -                            |                  |                         | 32, 2.800 / 3.70  | 0               |       | -     |
|                | GWP                                |                          |                  |   |                              |                  |                         |                   |                 |       |       |
| F-Gas          | CO₂eq (ton) (PRECHA                |                          |                  |   | -                            |                  |                         | 675 / 1.89 / 2.50 | )               |       | -     |
|                | CO₂eq (ton) (MAXIMUM C             |                          |                  |   | 100                          |                  |                         | ***               |                 |       |       |
| Product dime   | ancion                             | Height (m                | _                |   | 400                          |                  |                         | 996               |                 |       | -     |
| i rouuct uime  | SHOIUII                            | Width (m<br>Depth (m     | _                |   | 1297<br>949                  |                  |                         | 980<br>370        |                 |       | -     |
| Product dime   | ension (Panel)                     | H x W x D (i             |                  |   | -                            |                  |                         | -                 |                 |       |       |
| oddot dillit   |                                    | Height (m                |                  |   | 514                          |                  |                         | 1134              |                 |       |       |
| Packing dime   | ension                             | Width (m                 |                  |   | 1494                         |                  |                         | 1095              |                 |       | -     |
|                |                                    | Depth (m                 | _                |   | 1122                         |                  |                         | 529               |                 |       | -     |
|                |                                    | (NET) k                  |                  |   | 61                           |                  |                         | 83                |                 |       | -     |
| Weight         |                                    | GROSS (I                 |                  |   | 73                           |                  |                         | 91                |                 |       | -     |
|                |                                    | Panel (NET               | Γ) kg            |   | -                            |                  |                         | •                 |                 |       | -     |
|                | Layers limit (actual)              |                          |                  |   | 6 (7)                        |                  |                         | 1(2)              |                 |       | •     |
| Operation co   | ondition                           | Cool (DB                 |                  |   | 18°C ~ 32°C                  |                  |                         | -10°C ~ 46°C      |                 |       | -     |
|                |                                    | Heat (DB                 | ST)              |   | 16°C ~ 30°C                  |                  |                         | -15°C ~ 24°C      |                 |       |       |
|                | Max Working Pressure HP/LP M       |                          |                  |   |                              |                  | / 2.55                  |                   |                 |       |       |
| -              | Max High Pressure M                |                          |                  |   | == (0/0) ::                  |                  | 15                      | -0 (0(0)          | 45.00 (5.5)     |       |       |
|                | Pipe port diamete                  |                          |                  | (Liquid) Ø9.                                | 52 (3/8) (Gas) Ø             |                  |                         | 52 (3/8) (Gas) Ø  | 15.88 (5/8)     |       | •     |
|                | Pipe diameter i                    |                          |                  |   |                              | quid) Ø9.52 (3/8 | ) (Gas) Ø15.88 (        |                   |                 |       | -     |
| 20             | Connecting s<br>Standard le        |                          |                  |   | flared type                  | E :              | 0m                      | flared type       |                 |       | -     |
| Piping         | Pipe length r                      |                          |                  |   |                              |                  | 50m                     |                   |                 |       |       |
| -              | Indoor unit & Outdoor uni          |                          | e m              |   | 15m (OD                      | located lower)   |                         | ed higher)        |                 |       | -     |
|                | Add gas amo                        |                          |                  |   |                              |                  | g/m                     |                   |                 |       | -     |
| 1              | Pipe length for add                | ditional gas m           |                  |   |                              |                  |                         |                   |                 |       | -     |
|                | 1 0 0                              |                          | nal gas m 30m    |   |                              |                  |                         |                   |                 |       |       |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-140PE4RN U-140PZ4R8

| Indoor         |   | Model         |                            |   | S-140PE4RN       |                           |  | -                                | -                    |            |             |
|----------------|---|---------------|----------------------------|---|------------------|---------------------------|--|----------------------------------|----------------------|------------|-------------|
| Panel          |   |               |                            |   |                  |                           |  | -                                | -                    |            |             |
| Outdoor        |   |               |                            |   | -                |                           |  | U-140PZ4R8                       |                      |            |             |
| Branch pipe    |   |               |                            |   |                  |                           |  |                                  |                      |            |             |
| Performance    | test condition                                | 1             |                            |   |                  |                           | ISO 13253 / A                                |                                  |                      |            |             |
| Power supply   | y   | <u> </u>      | ð, Hz<br>V                 | 1Ø 50Hz<br>220V 230V 240V                   |                  | 3Ø 50Hz<br>380V 400V 415V |  |                                  | Min                  | May        |             |
|                |   |               | kW                         |   | 14.0             | 14.0                      | 3007   | -                                | 4150                 | Min<br>3.3 | Max<br>15.0 |
|                |   |               | TU/h                       | -   | 47800            | 47800                     | -  | -                                | -                    | 11300      | 51200       |
|                | Capacity                                      | Sensible      | kW                         | -   | 10.2             | 10.2                      | -  | -                                | -                    | -          | -           |
|                |   | Latent        | kW                         | -   | 3.8              | 3.8                       | -  | -                                | -                    | -          | -           |
|                | Current                                       |               | Α                          | -   | 2.61             | 2.47                      | -  | 6.60                             | 6.40                 | -          | -           |
|                | Input power                                   |               | W                          | -   | 490              | 490                       | -  | -                                | -                    | -          | -           |
|                |   | Total W       |                            |   | -                |                           | -  | 4.31k                            | 4.31k                | 650        | 5.86k       |
|                | Annual consumption                            |               | al kWh                     | -   | -                | -                         | -  | 2155                             | -                    | -          | -           |
| Cooling        | EER<br>AEER                                   |               | l (W/W)<br>W/W)            | -   | -                | -                         | -  | 3.25<br>3.20                     | 3.25                 | 5.08       | 2.56        |
| ő              | SEER rating                                   | (1            | /V/VV)                     | -   | -                | -                         | -  | Commercial                       | Residential          |            | -           |
|                | TCSPF   | (\            | N/W)                       | -   | -                |                           | -  | 5.20                             | 4.12                 | -          | -           |
|                | Total Energy consumption                      |               | kWh                        | -   | -                | -                         | -  | 2218                             | 1307                 | -          | -           |
|                | Star rating                                   |               |                            | -   | -                | -                         | -  | -                                | 2.5 Stars            | -          | -           |
|                | Power factor                                  |               | %                          | -   | -                | -                         | -  | 94                               | 94                   | -          | -           |
|                | Noise indoor                                  |               | ) (H/M/L)                  |   | 45 / 41 / 37     |                           |  | -                                |                      | -          | -           |
|                |   |               | r Level dB                 |   | 67 / 63 / 59     |                           |  | -                                |                      | •          | -           |
|                | Noise outdoor                                 |               | (H/M/L)                    |   | -                |                           |  | 56 / -<br>74 / -                 |                      | -          | -           |
| <b>-</b>       |   |               | r Level dB<br>kW           | -   | 14.0             | 14.0                      | -  | - 147-                           | -                    | 3.5        | 16.0        |
|                | Capacity                                      |               | TU/h                       | -   | 47800            | 47800                     | -  | -                                | -                    | 11800      | 54600       |
|                | Current                                       | <u> </u>      | Α                          | -   | 2.61             | 2.47                      | -  | 5.40                             | 5.20                 | -          | -           |
|                |   |               | W                          | -   | 490              | 490                       | -  | -                                | -                    | -          | -           |
|                | Input power                                   |               | otal W                     |   |                  |                           | -  | 3.52k                            | 3.52k                | 720        | 5.28k       |
|                | COP   |               | ıl (W/W)                   | -   | -                | -                         | -  | 3.98                             | 3.98                 | 4.79       | 3.03        |
| 0.0            | ACOP  | (\            | N/W)                       | -   | -                | -                         | -  | 3.91                             | -                    | -          | -           |
| Heating        | SEER rating                                   |               | *****                      | -   | -                | -                         | -  | Commercial                       | Residential          | -          | -           |
| 운              | HSPF  |               | N/W)                       | -   | -                | •                         | -  | 4.45                             | 4.23                 | -          | -           |
|                | Total Energy consumption<br>Star rating       | kWh<br>-      |                            | -   | -                | -                         | -  | 786                              | 1795<br>2.5 Stars    | -          | -           |
|                | Power factor                                  |               | %                          | -   | -                | -                         | -  | 94                               | 2.5 Stars<br>94      |            | -           |
| i              |   | dB(A          | ) (H/M/L)                  |   | 45 / 41 / 37     | -                         | -  | -                                | 34                   | -          | -           |
|                | Noise indoor                                  |               | r Level dB                 |   | 67 / 63 / 59     |                           |  | _                                |                      |            | _           |
|                | Naine authori                                 |               | ) (H/M/L)                  |   | -                |                           |  | 56 / -                           |                      | -          | -           |
|                | Noise outdoor                                 | Power         | r Level dB                 |   | -                |                           |  | 74 / -                           |                      | -          | -           |
| LOW TEMP       | Total capacity (kW) / Inp                     | ut power (W   | ) / COP                    |   | -                |                           | 13.60  | 4.90k                            | 2.78                 |            | -           |
| EXTRA LOW      | Total capacity (kW) / Inp                     | ut power (W   | )/COP                      |   | -                |                           | _  | _                                | _                    |            | _           |
| TEMP           |   |               | ,                          |   |                  |                           |  |                                  |                      |            |             |
|                | (A) / Max Input Power (W)*                    |               |                            | -   | 4.50 / 805       | 4.36 /805                 | -/- 13.4/7.29k 13.4/7<br>-/- 6.60/5.40 6.40/ |                                  |                      | -          |             |
|                | ent (A) (Cooling / Heating)                   |               |                            | -   | -                | -                         | -/-  | 3.00k                            | 6.40 / 5.20<br>3.00k |            |             |
| Comp output    | use max size (A)                              |               |                            |   |                  |                           | 20   |                                  |                      |            |             |
|                | edance (ΩMAX)                                 |               |                            |   | -                |                           | -  |                                  |                      |            |             |
|                | itput (Indoor/Outdoor) W                      |               |                            |   | 750              |                           | 120  |                                  |                      | -          |             |
|                | noval volume                                  |               | L/h                        | 9.0 (9.0 x1)                                |                  |                           |  | -                                | -                    |            |             |
| External stati | ic pressure                                   |               | Pa                         |   | 80 / (50/150)    |                           | -  |                                  |                      |            | -           |
| Indoor         | Cooling                                       |               | H/M/L) (m³/h)              |   | 42.0 (3600)/(3   |                           |  | -                                | -                    | -          |             |
| Air flow       | Heating                                       |               | H/M/L) (m <sup>3</sup> /h) | 60.0 / 50.0 / 42.0 (3600) / (3000) / (2520) |                  |                           |  | -                                | -                    | -          |             |
| Outdoor        | Cooling                                       |               | in (m³/h)                  |   | -                |                           |  | 84.0 (5040)                      |                      | -          | -           |
| Air flow       | Heating<br>ype / amount (ship) kg / amount (n |               | iin (m³/h)                 |   |                  |                           |  | 82.0 (4920)<br>R32, 2.800 / 3.70 | 0                    |            | -           |
| Reingeranitty  |   |               |                            |   | -                |                           |  | N32, 2.800 / 3.70                | U                    |            |             |
| F-Gas          | GWP<br>CO₂eq (ton) (PRECHA                    | RGED AMOU     |                            |   | -                |                           |  | 675 / 1.89 / 2.50                | )                    |            |             |
| -              | CO₂eq (ton) (MAXIMUM (                        |               |                            | 400   |                  |                           |  | one                              |                      |            |             |
| Product dime   | ension  |               | th (mm)                    |   | 400<br>1297      |                           |  | 996<br>980                       |                      |            |             |
|                |   |               | th (mm)                    |   | 949              |                           |  | 370                              |                      |            |             |
| Product dime   | ension (Panel)                                |               | x D (mm)                   |   | -                |                           |  | -                                |                      |            |             |
|                | ·   |               | ht (mm)                    |   | 514              |                           |  | 1134                             |                      |            |             |
| Packing dime   | ension  |               | th (mm)                    |   | 1494             |                           |  | 1095                             |                      |            |             |
|                |   |               | th (mm)                    |   | 1122             |                           |  | 529                              |                      |            |             |
| Mariah:        |   |               | ET) kg                     |   | 61               |                           |  | 82                               |                      |            |             |
| Weight         |   |               | OSS) kg                    |   | 73               |                           |  | 90                               |                      |            |             |
| -              | Layers limit (actual                          |               | l (NET) kg                 |   | 6 (7)            |                           |  | 1 (2)                            |                      |            |             |
| <b>-</b>       | Layers unint factual                          |               | ol (DBT)                   |   | 18°C ~ 32°C      |                           |  | -10°C ~ 46°C                     |                      |            |             |
| Operation co   | ondition                                      |               | nt (DBT)                   |   | 16°C ~ 30°C      |                           |  | -15 °C ~ 24 °C                   |                      |            |             |
|                | Max Working Pressure HP/LP M                  |               |                            |   | 10 0 00 0        | 4.15                      | / 2.55                                       | 10 0 24 0                        |                      |            |             |
|                | Max High Pressure M                           |               |                            |   |                  |                           | 15   |                                  |                      |            |             |
|                | Pipe port diamete                             | •             |                            | (Liquid) Ø9.                                | 52 (3/8) (Gas) Ø |                           |  | 52 (3/8) (Gas) Ø                 | 15.88 (5/8)          |            |             |
|                | Pipe diameter                                 |               |                            | , , -, , -,                                 |                  | uid) Ø9.52 (3/8           |  |                                  | \· =/                |            |             |
|                | Connecting                                    |               |                            |   | flared type      |                           |  | flared type                      |                      |            |             |
| Piping         | Standard le                                   | ngth m        |                            |   |                  |                           | 0m   |                                  |                      |            |             |
| 골              | Pipe length r                                 |               |                            |   | -                |                           | 50m  |                                  |                      |            |             |
|                | Indoor unit & Outdoor uni                     |               | rence m                    |   | 15m (OI          | located lower)            |  | d higher)                        |                      |            |             |
|                | Add gas amo                                   |               |                            |   |                  |                           | g/m  |                                  |                      |            |             |
|                | Pipe length for add                           | utional gas n | n                          |   |                  | 30                        | )m   |                                  |                      |            |             |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-140PE4R U-140PZH3R5

| Indoor         |  | Mode                   | el .       |   | S-140PE4R        |                  |                        | -                 | -            |       |       |
|----------------|--|------------------------|------------|---|------------------|------------------|------------------------|-------------------|--------------|-------|-------|
| Panel          |  |                        |            |   | -                |                  |                        | -                 |              |       | -     |
| Outdoor        |  |                        |            |   | -                |                  |                        | U-140PZH3R5       | -            |       |       |
| Branch pipe    |  |                        |            |   |                  |                  |                        |                   |              |       |       |
| Performance    | test condition                             |                        |            |   |                  |                  | ISO 13253 / A          | S NZS 3823.1      |              |       |       |
| Power supply   | ı  | Ø, Hz                  | <u> </u>   |   | 1ø 50Hz          |                  |                        | 1ø 50Hz           |              |       |       |
| . orror ouppty | ,  | V                      |            | 220V  | 230V             | 240V             | 220V                   | 230V              | 240V         | Min   | Max   |
|                |  | kW                     |            | -   | 14.0             | 14.0             | -                      | -                 | -            | 3.3   | 16.0  |
|                | Capacity                                   | BTU/I                  |            | -   | 47800            | 47800            | -                      | -                 | -            | 11300 | 54600 |
|                |  | Sensible               | kW         | -   | 10.2             | 10.2             | -                      | -                 | -            | -     | -     |
|                | Current                                    | Latent A               | KVV        | -   | 3.8              | 3.8              | -                      |                   |              | -     | -     |
|                | Current                                    | W                      |            | -   | 2.61<br>490      | 2.47<br>490      | -                      | 19.80             | 19.00        | -     | -     |
|                | Input power                                | Total                  | N          | -   | -                | 450              | -                      | 4.15k             | 4.15k        | 730   | 6.00k |
|                | Annual consumption                         | Total kWh              |            | -   | -                | _                | -                      | 2075              | 4.10K        | -     |       |
| 0.0            | EER  | Total (W               |            | -   | -                | -                | -                      | 3.37              | 3.37         | 4.52  | 2.67  |
| Cooling        | AEER                                       | (W/W                   | )          | -   | -                | -                | -                      | 3.32              | -            | -     | -     |
| ŏ              | SEER rating                                | , ,                    |            | -   | -                | -                | -                      | Commercial        | Residential  | -     | -     |
|                | TCSPF                                      | (W/W                   | ')         | -   | -                | -                | -                      | 5.90              | 4.56         |       | -     |
|                | Total Energy consumption                   | kWh                    |            | -   | -                | -                | -                      | 1943              | 1169         | -     | -     |
|                | Star rating                                | -                      |            | -   | -                | -                | -                      | -                 | 3.0 Stars    |       | -     |
|                | Power factor                               | %                      |            | -   | <u> </u>         | -                | -                      | 91                | 91           | -     | -     |
|                | Noise indoor                               | dB(A) (H/              | _          |   | 45 / 41 / 37     |                  |                        | -                 |              | -     | -     |
|                | -  | Power Lev<br>dB(A) (H/ |            |   | 67 / 63 / 59     |                  |                        | -<br>54 / -       |              | -     | -     |
|                | Noise outdoor                              | Power Lev              | _          |   | <u> </u>         |                  |                        | 70 / -            |              | -     |       |
|                |  | kW                     | C. UD      |   | 16.0             | 16.0             | _                      | - 107-            | _            | 3.3   | 18.0  |
|                | Capacity                                   | BTU/I                  | n          | -   | 54600            | 54600            | -                      | -                 | -            | 11300 | 61400 |
|                | Current                                    | A                      |            | -   | 2.61             | 2.47             | -                      | 18.60             | 17.90        | -     | -     |
|                |  | W                      |            | -   | 490              | 490              | -                      | -                 | -            | -     | -     |
|                | Input power                                | Total \                | N          |   |                  |                  | -                      | 3.90k             | 3.90k        | 700   | 5.65k |
|                | COP  | Total (W               |            | -   |                  | -                | -                      | 4.10              | 4.10         | 4.71  | 3.19  |
| nn             | ACOP                                       | (W/W                   | )          | -   | -                | -                | -                      | 4.04              | -            | -     | -     |
| Heating        | SEER rating                                | T                      |            | -   | -                | -                | -                      | Commercial        | Residential  | -     | -     |
| 훈              | HSPF                                       | (W/W                   | ,          | -   | -                | -                | -                      | 4.54              | 4.36         | -     | -     |
|                | Total Energy consumption                   | kWh                    |            | -   | -                | -                | -                      | 880               | 1992         | -     | -     |
|                | Star rating                                | - %                    |            | -   | -                | -                | -                      | -                 | 2.5 Stars    | -     | -     |
|                | Power factor                               | dB(A) (H/              | M/L)       | -   | 45 / 41 / 37     | -                | -                      | 91                | 91           | -     | -     |
|                | Noise indoor                               | Power Lev              | _          |   | 67/63/59         |                  |                        |                   |              | -     |       |
|                |  | dB(A) (H/              |            |   | -                |                  |                        | 54/-              |              | -     | -     |
|                | Noise outdoor                              | Power Lev              | _          |   | _                |                  |                        | 70 / -            |              | -     | _     |
| LOW TEMP       | Total capacity (kW) / Inp                  |                        |            |   | -                |                  | 15.20                  | 5.30k             | 2.87         |       | -     |
| EXTRA LOW      | Total capacity (kW) / Inp                  |                        |            |   |                  |                  |                        |                   |              |       |       |
| TEMP           | Total capacity (kw) / inp                  | ut power (w) / C       | UP         |   | -                |                  | -                      | -                 | -            |       | -     |
| Max Current    | (A) / Max Input Power (W)*                 |                        |            | -   | 4.50 / 805       | 4.36 / 805       | -/-                    | 32.7 / 7.46k      | 32.7 / 7.46k |       | -     |
|                | ent (A) (Cooling / Heating)                |                        |            | -   | -                | -                | -/-                    | 19.8 / 18.6       | 19.0 / 17.9  |       | -     |
| Comp output    |  |                        |            |   | -                |                  | -                      | 3.00k             | 3.00k        |       | -     |
|                | use max size (A)                           |                        |            | -   |                  |                  |                        | 40                |              |       |       |
|                | edance (ΩMAX)<br>itput (Indoor/Outdoor) W  |                        |            | 750   |                  |                  |                        | - 00 v2           | -            |       |       |
|                | noval volume                               |                        | L/h        |   | 9.0 (9.0 x1)     |                  | 90 x2<br>-             |                   |              | -     |       |
| External stati |  |                        | Pa         |   | 80 / (50 / 150)  |                  |                        | -                 |              | -     |       |
| Indoor         | Cooling                                    | m³/min (H/M/           |            | 60.0 / 50.0 /                               | 42.0 (3600) / (3 | 000) / (2520)    |                        | -                 | -            | -     |       |
| Air flow       | Heating                                    | m³/min (H/M/           | 'L) (m³/h) | 60.0 / 50.0 / 42.0 (3600) / (3000) / (2520) |                  |                  |                        | -                 | -            | -     |       |
| Outdoor        | Cooling                                    | m³/min (r              | n³/h)      | -   |                  |                  |                        | 129.0 (7740)      | -            | -     |       |
| Air flow       | Heating                                    | m³/min (r              | n³/h)      |   | -                |                  | 116.0 (6960)           |                   |              | -     | -     |
| Refrigerant ty | ype / amount (ship) kg / amount (n         | nax) kg                |            |   | -                |                  | 1                      | R32, 3.050 / 5.52 | 5            |       | -     |
|                | GWP  |                        |            |   |                  |                  |                        |                   |              |       |       |
| F-Gas          | CO₂eq (ton) (PRECHA                        |                        |            |   | -                |                  |                        | 675 / 2.06 / 3.73 | 3            |       | -     |
|                | CO₂eq (ton) (MAXIMUM C                     |                        |            |   |                  |                  |                        |                   |              |       |       |
|                |  | Height (r              | _          |   | 400              |                  |                        | 1416              |              |       | -     |
| Product dime   | ension                                     | Width (n               | _          |   | 1297             |                  |                        | 940               |              |       | -     |
| Droduot din-   | ancion (Danol)                             | Depth (n               |            |   | 949              |                  |                        | 340               |              |       |       |
| rroduct aime   | ension (Panel)                             | H x W x D<br>Height (r |            |   | 514              |                  |                        | 1556              |              |       |       |
| Packing dime   | ension                                     | Width (n               |            |   | 1494             |                  |                        | 1055              |              |       |       |
|                |  | Depth (r               | _          |   | 1122             |                  |                        | 485               |              |       |       |
|                |  | (NET)                  |            |   | 61               |                  |                        | 99                |              |       | -     |
| Weight         |  | GROSS                  |            |   | 73               |                  |                        | 111               |              |       |       |
|                |  | Panel (NE              | T) kg      |   | -                |                  |                        | -                 |              |       | -     |
|                | Layers limit (actual)                      |                        |            | 6 (7) 1 (2)                                 |                  |                  |                        |                   |              |       | -     |
| Operation co   | ndition                                    | Cool (D                | BT)        |   | 18°C ~ 32°C      |                  |                        | -15°C ~ 48°C      |              |       | -     |
| эрстаноп со    |  | Heat (D                | BT)        |   | 16°C~30°C        |                  |                        | -20°C ~ 24°C      |              |       |       |
|                | Max Working Pressure HP/LP M               |                        |            |   |                  |                  | / 2.55                 |                   |              |       |       |
|                | Max High Pressure M                        |                        |            |   |                  |                  | 15                     |                   |              |       |       |
|                | Pipe port diamete                          |                        |            | (Liquid) Ø9.                                | 52 (3/8) (Gas) Ø |                  |                        | 52 (3/8) (Gas) Ø  | 15.88 (5/8)  |       | -     |
|                | Pipe diameter i                            |                        |            |   |                  | quid) Ø9.52 (3/8 | ) (Gas) Ø15.88 (       |                   |              |       | -     |
| ממי            | Connecting                                 |                        |            |   | flared type      |                  | <u> </u>               | flared type       |              |       |       |
| Piping         | Standard le                                |                        |            |   |                  |                  | 0m                     |                   |              |       | -     |
|                | Pipe length r<br>Indoor unit & Outdoor uni |                        | e m        |   | 15m /00          | located lower)   | 85m<br>/ 30m (OD locat | ed higher)        |              |       |       |
|                | Add gas amo                                |                        | JC III     |   | 10111 (UD        |                  | g/m                    | ou mgner)         |              |       |       |
| 1              |  | ditional gas m         |            |   |                  |                  | Om                     |                   |              |       |       |
|                |  |                        |            |   |                  |                  |                        |                   | -            |       |       |

## 1-1. Unit Specifications High Static Pressure Ducted Type S-140PE4R U-140PZH3R8

| Indoor                |   | Model          |                        |   | S-140PE4R        |                 |                  | -                            | -                   |       |            |
|-----------------------|---|----------------|------------------------|---|------------------|-----------------|------------------|------------------------------|---------------------|-------|------------|
| Panel                 |   | 5400           |                        | -   |                  |                 |                  | -                            | -                   |       |            |
| Outdoor               |   |                |                        |   | -                |                 |                  | U-140PZH3R8                  | -                   |       |            |
| Branch pipe           |   |                |                        |   |                  |                 |                  |                              |                     |       |            |
| Performance           | e test condition                              |                | 6 1.1-                 |   | 44 50112         |                 | ISO 13253 / A    | 3Ø 50Hz                      |                     |       |            |
| Power supply          | у   | , v            | V V                    | 220V  | 1Ø 50Hz<br>230V  | 240V            | 380V 400V 415V   |                              | /15V                | Min   | Max        |
|                       |   |                | kW                     | -   | 14.0             | 14.0            | -                | -                            | -                   | 3.3   | 16.0       |
|                       | Capacity                                      | В              | TU/h                   |   | 47800            | 47800           | -                | -                            | -                   | 11300 | 54600      |
|                       | Сарасну                                       | Sensible       | kW                     |   | 10.2             | 10.2            | -                | -                            | -                   |       | -          |
|                       |   | Latent         | kW                     | -   | 3.8              | 3.8             | -                | -                            | -                   | -     | -          |
|                       | Current                                       |                | A<br>W                 | -   | 2.61<br>490      | 2.47<br>490     | -                | 6.35                         | 6.15                | -     | -          |
|                       | Input power                                   | Total W        |                        | -   | - 490            | 430             | -                | 4.15k                        | 4.15k               | 730   | 6.00k      |
|                       | Annual consumption                            |                | al kWh                 | -   | -                | -               | -                | 2075                         | -                   | -     | -          |
| 200                   | EER   |                | l (W/W)                | -   | -                | -               | -                | 3.37                         | 3.37                | 4.52  | 2.67       |
| Cooling               | AEER  | (\             | N/W)                   | -   | -                | -               | -                | 3.32                         |                     | -     | -          |
| 0                     | SEER rating<br>TCSPF                          | (W/W)          |                        | -   | -                | -               | -                | Commercial<br>5.90           | Residential<br>4.56 | -     | -          |
|                       | Total Energy consumption                      |                | (Wh                    | -   | -                | -               | -                | 1943                         | 1169                | -     | -          |
|                       | Star rating                                   |                | -                      | -   | -                | -               | -                | -                            | 3.0 Stars           | -     | -          |
|                       | Power factor                                  |                | %                      | -   | -                | -               | -                | 94                           | 94                  |       | -          |
|                       | Noise indoor                                  |                | ) (H/M/L)              |   | 45 / 41 / 37     |                 |                  | -                            |                     | -     | -          |
|                       |   |                | Level dB<br>(H/M/L)    |   | 67 / 63 / 59     |                 |                  | 54/-                         |                     | -     | -          |
|                       | Noise outdoor                                 |                | Level dB               |   | -                |                 |                  | 70 / -                       |                     | -     | -          |
|                       | Canacity                                      |                | kW                     | -   | 16.0             | 16.0            | -                | -                            | -                   | 3.3   | 18.0       |
|                       | Capacity                                      | В              | TU/h                   | -   | 54600            | 54600           | -                | -                            | -                   | 11300 | 61400      |
|                       | Current                                       |                | Α                      | -   | 2.61             | 2.47            | -                | 6.00                         | 5.75                | -     | -          |
|                       | Input power                                   | т.             | tal W                  | -   | 490              | 490             | -                | -<br>3.90k                   | -<br>3.90k          | 700   | -<br>5.65k |
|                       | СОР   |                | l (W/W)                | -   | -                | -               | -                | 4.10                         | 4.10                | 4.71  | 3.19       |
|                       | ACOP  |                | V/W)                   | -   | -                | -               | -                | 4.04                         | -                   | -     | -          |
| Heating               | SEER rating                                   |                |                        | -   | -                | -               | -                | Commercial                   | Residential         | -     | -          |
| 至                     | HSPF  |                | N/W)                   | -   | -                | -               | -                | 4.54                         | 4.36                | -     | -          |
|                       | Total Energy consumption                      | kWh<br>-       |                        | -   | -                | -               | -                | 880                          | 1992                | -     | -          |
|                       | Star rating<br>Power factor                   |                | %                      | -   | -                | -               | -                | 94                           | 2.5 Stars<br>94     | -     | -          |
| i                     |   | dB(A           | ) (H/M/L)              |   | 45 / 41 / 37     |                 |                  | -                            |                     | -     | -          |
|                       | Noise indoor                                  | Power Level dB |                        |   | 67/63/59         |                 |                  | -                            |                     |       | -          |
|                       | Noise outdoor                                 |                | ) (H/M/L)              | -   |                  |                 | 54 / -           |                              |                     |       | -          |
| LOWITEME              |   |                | Level dB               |   | -                |                 | 45.00            | 70 / -                       | 0.07                | -     | -          |
| LOW TEMP<br>EXTRA LOW | Total capacity (kW) / Inp                     | ut power (w    | ) / COP                |   | -                |                 | 15.20            | 5.30k                        | 2.87                |       |            |
| TEMP                  | Total capacity (kW) / Inp                     | ut power (W    | /COP                   |   | -                |                 | -                | -                            | -                   |       | -          |
|                       | (A) / Max Input Power (W)*                    |                |                        | -   | 4.50 / 805       | 4.36 /805       | -/-              | 11.4 / 7.71k                 | 11.4 / 7.71k        |       |            |
| Starting curre        | ent (A) (Cooling / Heating)                   |                |                        | -   | -                | -               | -/-              | 6.35 / 6.00                  | 6.15 / 5.75         |       | -          |
| Comp output           |   |                |                        |   | -                |                 | -                | 3.00k                        | 3.00k               |       | -          |
|                       | use max size (A)<br>edance (ΩMAX)             |                |                        | -   |                  | 20              |                  |                              |                     | -     |            |
|                       | utput (Indoor/Outdoor) W                      |                |                        | 750   |                  |                 |                  | 90 x2                        | -                   |       |            |
|                       | noval volume                                  |                | L/h                    | 9.0 (9.0 x1)                                |                  |                 |                  |                              | -                   |       |            |
| External stati        | ic pressure                                   |                | Pa                     | 80 / (50/150)                               |                  |                 | -                |                              |                     | -     |            |
| Indoor                | Cooling                                       |                | 1/M/L) (m³/h)          |   | 42.0 (3600) / (3 |                 |                  | -                            |                     | -     | -          |
| Air flow              | Heating                                       |                | H/M/L) (m³/h)          | 60.0 / 50.0 / 42.0 (3600) / (3000) / (2520) |                  |                 |                  | 120.0 (7740)                 | -                   | -     |            |
| Outdoor<br>Air flow   | Cooling<br>Heating                            |                | in (m³/h)<br>in (m³/h) |   | <u> </u>         |                 |                  | 129.0 (7740)<br>116.0 (6960) |                     | -     | -          |
|                       | ype / amount (ship) kg / amount (n            |                | ()                     |   | -                |                 |                  | R32, 3.050 / 5.52            | 5                   |       |            |
|                       | GWP   |                |                        |   |                  |                 |                  |                              |                     |       |            |
| F-Gas                 | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM C |                |                        |   | -                |                 |                  | 675 / 2.06 / 3.73            | 3                   |       | -          |
|                       |   |                | ht (mm)                |   | 400              |                 |                  | 1416                         |                     |       | -          |
| Product dime          | ension  |                | th (mm)                |   | 1297             |                 |                  | 940                          |                     |       | -          |
| Product dime          | ension (Panel)                                |                | th (mm)<br>x D (mm)    |   | 949              |                 |                  | 340                          |                     |       | -          |
| . rouget diffit       |   |                | ht (mm)                |   | 514              |                 |                  | 1556                         |                     |       |            |
| Packing dime          | ension  | Wid            | th (mm)                |   | 1494             |                 |                  | 1055                         |                     |       | -          |
|                       |   |                | th (mm)                |   | 1122             |                 |                  | 485                          |                     |       | -          |
| Weight                |   |                | ET) kg<br>DSS (kg)     |   | 61<br>73         |                 |                  | 99<br>111                    |                     |       | -          |
| AACIRIII              |   |                | (NET) kg               |   | -                |                 |                  | - 111                        |                     |       | -          |
|                       | Layers limit (actual                          |                | . , .0                 |   | 6 (7)            |                 |                  | 1 (2)                        |                     |       | -          |
| Operation             | andition                                      | Cod            | ol (DBT)               |   | 18°C ~ 32°C      |                 |                  | -15°C ~ 48°C                 |                     |       | -          |
| Operation co          |   |                | it (DBT)               |   | 16°C~30°C        |                 |                  | -20°C ~ 24°C                 |                     |       | -          |
|                       | Max Working Pressure HP/LP M                  |                |                        |   | -                |                 | / 2.55           |                              |                     |       |            |
|                       | Max High Pressure M                           |                |                        | n:  | E2 (2/2) /5 · ·  |                 | 15               | F2 /2/2\ /= · ·              | 15 00 (5 (0)        |       |            |
|                       | Pipe port diameter                            |                |                        | (Liquid) Ø9.                                | 52 (3/8) (Gas) Ø |                 |                  | 52 (3/8) (Gas) Ø             | 15.88 (5/8)         |       | -          |
|                       | Pipe diameter<br>Connecting                   |                |                        |   | flared type      | uid) Ø9.52 (3/8 | ) (Gas) W15.88 ( | flared type                  |                     |       | -          |
| 200                   | Standard le                                   |                |                        |   | narea type       | 5.              | 0m               | rou type                     |                     |       | -          |
| Piping                | Pipe length r                                 |                |                        |   |                  | 5~              | 85m              |                              |                     |       | -          |
|                       | Indoor unit & Outdoor uni                     |                | rence m                |   | 15m (OI          | located lower)  |                  | ed higher)                   |                     |       | -          |
|                       | Add gas amo                                   |                |                        |   |                  |                 | g/m              |                              |                     |       | -          |
| L                     | Pipe length for add                           | มเนบเาลเ gas n | 0                      |   |                  | 30              | )m               |                              |                     |       | -          |

# 1-1. Unit Specifications High Static Pressure Ducted Type S-160PE4R U-160PZH3R5

| Indoor  | ndoor Model   |                     |                          | S-160PE4R        |                 | 1                                    | -   |                                   |                      |             |       |
|---|---|---------------------|--------------------------|------------------|-----------------|--------------------------------------|---|-----------------------------------|----------------------|-------------|-------|
| Panel   |   | Mout                | zi.                      |                  | 3-100FE4N       |                                      |   |                                   |                      |             |       |
| Outdoor   |   |                     |                          |                  | -               |                                      |   | U-160PZH3R5                       |                      |             |       |
| Branch pipe   |   |                     |                          |                  |                 |                                      | -   |                                   |                      |             |       |
|   | test condition  |                     |                          |                  |                 |                                      | ISO 13253 / AS                                | S NZS 3823.1                      |                      |             |       |
| Power supply  | ı.  | Ø, H                | Z                        |                  | 1ø 50Hz         |                                      |   | 1ø 50Hz                           |                      |             |       |
| rower supply  | ,   | V                   |                          | 220V             | 230V            | 240V                                 | 220V  | 230V                              | 240V                 | Min         | Max   |
|   |   | kW                  |                          | -                | 16.0            | 16.0                                 | -   | -                                 | -                    | 5.4         | 18.0  |
|   | Capacity  | BTU/                |                          | -                | 54600           | 54600                                | -   | -                                 | -                    | 18400       | 61400 |
|   | , ,   | Sensible            | kW                       | -                | 13.2            | 13.2                                 | -   | -                                 | -                    | -           | -     |
|   | 0   | Latent              | kW                       | -                | 2.8             | 2.8                                  | -   | -                                 | - 04.50              | -           | -     |
|   | Current   | A<br>W              |                          | -                | 2.61<br>490     | 2.47<br>490                          | -   | 22.40                             | 21.50                | <del></del> | -     |
|   | Input power   | Total               | w                        |                  | -               | 430                                  | -   | 4.85k                             | 4.85k                | 1.12k       | 5.95k |
|   | Annual consumption  | Total k             |                          | -                | -               | -                                    | -   | 2425                              | -                    | -           | -     |
| , po  | EER   | Total (W            | //W)                     | -                | -               | -                                    | -   | 3.30                              | 3.30                 | 4.82        | 3.03  |
| Cooling   | AEER  | (W/W                |                          | -                | -               | -                                    | -   | 3.24                              | -                    | -           | -     |
| ŏ   | SEER rating   |                     |                          |                  | -               | -                                    | -   | Commercial                        | Residential          | -           | -     |
|   | TCSPF   | (W/W                | _                        | -                | -               | -                                    | -   | 5.40                              | 4.24                 | -           | -     |
|   | Total Energy consumption  | kWh                 | 1                        | -                | -               | -                                    | -   | 2425                              | 1432                 | -           | -     |
|   | Starrating  | -                   |                          | -                | -               | -                                    | -   | -                                 | 2.5 Stars            | -           | -     |
|   | Power factor  | %<br>dB(A) (H.      | /M/II.)                  | -                | 45 / 41 / 37    | -                                    | -   | 94                                | 94                   | -           | -     |
|   | Noise indoor  | Power Le            |                          |                  | 67/63/59        |                                      |   | -                                 |                      |             | -     |
|   |   | dB(A) (H            |                          |                  | -               |                                      |   | 58/-                              |                      |             | -     |
|   | Noise outdoor   | Power Le            | _                        |                  | -               |                                      |   | 76/-                              |                      | -           | -     |
|   | Canacity  | kW                  |                          | -                | 18.0            | 18.0                                 | -   | -                                 | -                    | 5.5         | 20.0  |
|   | Capacity  | BTU/                |                          | -                | 61400           | 61400                                | -   | -                                 | -                    | 18800       | 68200 |
|   | Current   | Α                   |                          |                  | 2.61            | 2.47                                 | -   | 22.20                             | 21.30                | -           | -     |
|   | Input power   | W                   |                          |                  | 490             | 490                                  | -   | -                                 | -                    | -           | -     |
|   |   | Total               |                          |                  | -               |                                      | -   | 4.80k                             | 4.80k                | 1.01k       | 6.15k |
|   | COP   | Total (W            |                          | -                | -               | -                                    | -   | 3.75                              | 3.75                 | 5.45        | 3.25  |
| 20  | ACOP  | (W/W                | /)                       | -                | -               | -                                    | -   | 3.69                              |                      | -           | -     |
| Heating   | SEER rating   | 04/04               | 0                        | -                | -               | -                                    | -   | Commercial                        | Residential          | -           | -     |
| 운   | HSPF  | (W/W                |                          |                  | -               | -                                    | -   | 4.69                              | 4.28                 | -           | -     |
|   | Total Energy consumption<br>Star rating                         | KVVI                | ı                        | -                | -               | -                                    | -   | 959                               | 2280<br>2.5 Stars    | -           | -     |
|   | Power factor  | %                   |                          |                  | -               |                                      | -   | 94                                | 2.5 Stars<br>94      |             | -     |
|   |   | dB(A) (H            | /M/L)                    |                  | 45 / 41 / 37    | l.                                   |   | -                                 |                      | -           | -     |
|   | Noise indoor  | Power Le            | _                        |                  | 67/63/59        |                                      |   | -                                 |                      | -           | -     |
|   | Nieles estales e  | dB(A) (H            |                          |                  | -               |                                      |   | 60 / -                            |                      | -           | -     |
|   | Noise outdoor   | Power Le            | vel dB                   |                  | -               |                                      |   | 78 / -                            |                      | -           | -     |
| LOW TEMP  | Total capacity (kW) / Inp                                       | ut power (W) / C    | OP                       |                  | -               |                                      | 16.00   | 5.68k                             | 2.82                 |             | -     |
| EXTRA LOW Total capacity (kW) / Input power (W) / COP |   |                     |                          | -                |                 | -                                    | _   | -                                 |                      |             |       |
| TEMP  |   |                     |                          |                  | T               | 1                                    |   |                                   |                      |             |       |
|   | (A) / Max Input Power (W)*                                      |                     |                          | -                | 4.50 / 805      | 4.36 / 805                           | -/-   | 29.0 / 6.27k                      | 29.0 / 6.54k         |             |       |
|   | ent (A) (Cooling / Heating)                                     |                     |                          | -                | -               | -                                    | -/-   | 22.4 / 22.2<br>3.80k              | 21.5 / 21.3<br>3.80k |             | -     |
| Comp output   | use max size (A)  |                     |                          |                  |                 |                                      | -   | 40                                | 3.60K                |             |       |
|   | edance (ΩMAX)   |                     |                          |                  | -               |                                      |   | -                                 |                      |             |       |
|   | itput (Indoor/Outdoor) W  |                     |                          |                  | 750             |                                      |   | 120 x2                            |                      |             | -     |
| Moisture rem  | noval volume  |                     | L/h                      |                  | 4.0 (4.0 x1)    |                                      |   | -                                 |                      |             | -     |
| External stati  | ic pressure   |                     | Pa                       | 80               | / (MIN50 - MAX1 | 50)                                  |   | -                                 |                      |             | -     |
| Indoor  | Cooling   | m³/min (H/M         |                          |                  | 42.0 (3600)/(3  |                                      |   | -                                 |                      |             | -     |
| Air flow  | Heating   | m³/min (H/M         |                          | 60.0 / 50.0 /    | 42.0 (3600)/(3  | 000) / (2520)                        |   | -                                 |                      | •           | -     |
| Outdoor   | Cooling   | m³/min (            |                          |                  |                 |                                      |   | 164.0 (9840)                      |                      | -           | -     |
| Air flow<br>Refrigerant to                            | Heating<br>ype / amount (ship) kg / amount (n                   | m³/min (<br>nax) kø | 111 /11)                 |                  |                 |                                      |   | 164.0 (9840)<br>R32, 3.200 / 6.35 | i0                   | -           | -     |
| . remgerant t)  | GWP   |                     |                          |                  | -               |                                      | <u> </u>                                      | , 0.20010.33                      |                      |             |       |
| F-Gas   | GWP.<br>CO₂eq (ton) (PRECHA                                     |                     | .,                       |                  | _               |                                      |   | 675 / 2.16 / 4.29                 | ,                    |             | .     |
| 1-043   | CO₂eq (ton) (MAXIMUM C  |                     |                          |                  |                 |                                      | 6/5 / 2.16 / 4.29                             |                                   |                      |             |       |
|   |   | Height (            |                          |                  | 400             |                                      |   | 1500                              |                      |             |       |
| Product dime  | ension  | Width (r            | _                        |                  | 1297            |                                      |   | 980                               |                      |             |       |
|   |   | Depth (i            |                          |                  | 949             |                                      |   | 370                               |                      |             |       |
| Product dime  | ension (Panel)  | HxWxD               | _                        |                  | -               |                                      |   | -                                 |                      |             |       |
|   |   | Height (            |                          |                  | 514             |                                      |   | 1642                              |                      |             |       |
| Packing dime  | ension  | Width (r            | mm)                      |                  | 1494            |                                      |   | 1095                              |                      |             |       |
|   |   | Depth (i            |                          |                  | 1122            |                                      |   | 529                               |                      |             | -     |
| L   |   | (NET)               |                          |                  | 61              |                                      |   | 117                               |                      |             |       |
| Weight  |   | (GROSS              |                          |                  | 73              |                                      |   | 129                               |                      |             |       |
| <u> </u>  | Panel (NET) kg  |                     |                          | - (7)            |                 |                                      | 1 (2)   |                                   |                      |             |       |
| Layers limit (actual)                                 |   |                     | 6 (7)<br>18°C ~ 32°C     |                  |                 | 1 (2)                                |   | <u> </u>                          | -                    |             |       |
| Operation condition Cool (DBT)                        |   |                     |                          |                  |                 | -15°C ~ 52°C                         |   |                                   | -                    |             |       |
| Heat (DBT)  |   |                     | 16°C ~ 30°C              | 4 4 5            | -20°C ~ 24°C    |                                      |   |                                   |                      |             |       |
| Max Working Pressure HP/LP Mpa (bar) (PS)             |   |                     |                          |                  | / 2.55<br>15    |                                      |   |                                   |                      |             |       |
|   | Max High Pressure Mpa Pipe port diameter mm (inch)              |                     | (Liquid) do 1            | 52 (3/8) (Gas) Ø |                 |                                      | 15<br>(Liquid) Ø9.52 (3/8) (Gas) Ø19.05 (3/4) |                                   |                      |             |       |
| 1   | Pipe port diameter Pipe diameter mm (inc                        |                     | 1)                       | (Liquid) Ø9.     |                 | quid) Ø9.52 (3/8                     |   |                                   | 12.03 (3/4)          |             |       |
| 1   | Pipe diameter mm (in  |                     |                          |                  |                 | quid) Ø9.52 (3/8<br>quid) Ø9.52 (3/8 |   |                                   |                      |             |       |
| 1   | Connecting method   |                     | ,                        |                  |                 | 1-14/ 20.02 (0/0                     |   | ıid) & (Gas) flared               | d type               |             |       |
| ng<br>B   | Connecting metho  |                     |                          |                  | flared type     |                                      |   | iid) & (Gas) flared               |                      |             |       |
| Piping  | Standard le   |                     |                          |                  |                 | 7.                                   | 5m  | , , ,                             |                      |             |       |
| 1   | Pipe length r   |                     |                          |                  |                 |                                      | 100m  |                                   |                      |             |       |
|   | Indoor unit & Outdoor uni                                       | t height differen   | ce m                     |                  | 30m (OD         | located lower)                       | / 30m (OD locate                              | ed higher)                        |                      |             | -     |
| i   | Indoor unit & Outdoor unit height difference m                  |                     | 30m (OD located lower) / |                  |                 | g/m                                  |   |                                   |                      |             |       |
|   | Add gas amount g/m (Over 30m)  Pipe length for additional gas m |                     |                          |                  |                 |                                      |   |                                   |                      |             |       |
|   |   |                     |                          |                  |                 |                                      | Om .  |                                   |                      |             | -     |

# 1-1. Unit Specifications High Static Pressure Ducted Type S-160PE4R U-160PZH3R8

|  | tatio i ressare D                                   |   |                  |                  |                  |   |                |                     |                  |              |       |
|--|---|---|------------------|------------------|------------------|---|----------------|---------------------|------------------|--------------|-------|
| Indoor   |   | M   | odel             |                  | S-160PE4R        |   |                | -                   |                  |              |       |
| Panel  |   |   |                  |                  |                  |   |                | -                   |                  |              |       |
| Outdoor<br>Pranch pine   |   |   |                  |                  | -                |   |                | U-160PZH3R8         | ļ                |              | -     |
| Branch pipe  | test condition                                      |   |                  |                  |                  |   | ISO 13253 / AS | C NIZC 2022 1       |                  |              |       |
| renomiance   | test condition                                      |   | i, Hz            |                  | 1ø 50Hz          |   | 130 132337 A   | 3Ø 50Hz             |                  |              |       |
| Power supply   | /   | <u>, , , , , , , , , , , , , , , , , , , </u> | V                | 220V             | 230V             | 240V  | 380V           | 400V                | 415V             | Min          | Max   |
|  | 1   |   | kW               | -                | 16.0             | 16.0  | -              | -                   | -                | 5.4          | 18.0  |
|  |   |   | TU/h             | -                | 54600            | 54600   | -              | -                   | -                | 18400        | 61400 |
|  | Capacity  | Sensible                                      | kW               | -                | 13.2             | 13.2  | -              | -                   | -                | -            | -     |
|  |   | Latent  | kW               | -                | 2.8              | 2.8   | -              | -                   | _                | -            | -     |
|  | Current   | Editint                                       | A                | -                | 2.61             | 2.47  | -              | 7.80                | 7.50             | -            | -     |
|  |   |   | W                | -                | 490              | 490   |                | -                   | -                | -            | -     |
|  | Input power   |   | tal W            |                  | -                | 450   | -              | 4.85k               | 4.85k            | 1.12k        | 5.95k |
|  | Annual consumption                                  |   | al kWh           | -                | -                | _   | -              | 2425                | -                | -            | -     |
| 0.0  | EER   |   | l (W/W)          | -                | -                | -   | -              | 3.30                | 3.30             | 4.82         | 3.03  |
| Cooling  | AEER  |   | V/W)             | -                | -                | -   | -              | 3.24                | -                | -            | -     |
| Ö  | SEER rating   | (.  | ,                | -                | _                | _   | -              | Commercial          | Residential      | -            | -     |
|  | TCSPF   | ()  | V/W)             | -                | -                | -   | -              | 5.40                | 4.24             | -            | -     |
|  | Total Energy consumption                            |   | :Wh              | -                | -                | _   | -              | 2425                | 1432             | -            | -     |
|  | Star rating   |   | -                | -                | -                | -   | -              | -                   | 2.5 Stars        | -            | _     |
|  | Power factor  |   | %                | -                | _                | -   | -              | 90                  | 90               | -            | -     |
|  | 1 OWEI ILLEGI                                       |   | (H/M/L)          |                  | 45 / 41 / 37     | l   |                | -                   | 30               | -            | -     |
|  | Noise indoor  |   | Level dB         |                  | 67/63/59         |   |                | -                   |                  | -            | _     |
|  |   |   | (H/M/L)          |                  | -                |   |                | 58 / -              |                  |              | -     |
|  | Noise outdoor                                       |   | Level dB         |                  |                  |   |                | 76/-                |                  | -            | -     |
| <b>—</b>   |   |   | kW               | -                | 18.0             | 18.0  | -              | - 107               | _                | 5.5          | 20.0  |
|  | Capacity  |   | TU/h             | -                | 61400            | 61400   | -              | -                   | -                | 18800        | 68200 |
|  | Current   | В   | Α                | -                | 2.61             | 2.47  | -              | 7.70                | 7.40             | -            | -     |
|  |   |   | W                | -                | 490              | 490   | -              | 7.70                | 7.40             | <del>-</del> | -     |
|  | Input power   |   | tal W            | •                | 490              | 490   | -              | -<br>4.80k          | -<br>4.80k       | 1.01k        | 6.15k |
|  | COP   |   | tal W<br>l (W/W) |                  | -<br>I -         | _   |                |                     |                  |              |       |
|  | ACOP  |   | V/W)             |                  |                  |   |                | 3.75                | 3.75             | 5.45         | 3.25  |
| Jg.  |   | (\  | */ VV J          | -                | -                | -   | -              | 3.69<br>Commercial  | -<br>Posidontial | -            | -     |
| Heating  | SEER rating   | Λ.  | V/AA/\           |                  |                  |   |                |                     | Residential      |              |       |
| 포  | HSPF  |   | V/W)<br>:Wh      |                  | -                | -   | -              | 4.69                | 4.28             | -            | -     |
|  | Total Energy consumption                            |   |                  | -                | -                | -   | -              | 959                 | 2280             | -            | -     |
|  | Star rating   |   | -                | -                | -                | -   | -              | -                   | 2.5 Stars        | -            | -     |
|  | Power factor  | 15/41   | %                | -                | -                | -   | -              | 90                  | 90               | -            | -     |
|  | Noise indoor  |   | (H/M/L)          |                  | 45 / 41 / 37     |   |                | -                   |                  | -            | -     |
|  |   |   | Level dB         |                  | 67 / 63 / 59     |   |                | -                   |                  | -            | -     |
|  | Noise outdoor                                       |   | (H/M/L)          |                  | -                |   |                | 60 / -              |                  | -            | -     |
|  |   |   | Level dB         |                  | -                |   |                | 78 / -              |                  | -            | -     |
| LOWTEMP  | Total capacity (kW) / Inp                           | ut power (W)                                  | /COP             |                  | -                |   | 16.00          | 5.68k               | 2.82             |              | -     |
| EXTRA LOW  | Total capacity (kW) / Inp                           | ut power (W                                   | /COP             |                  |                  |   | -              | -                   | _                |              |       |
| TEMP   |   |   |                  |                  |                  | 1   |                |                     |                  |              |       |
|  | (A) / Max Input Power (W)                           |   |                  | -                | 4.50 / 805       | 4.36 /805                                     | -/-            | 10.5 / 6.54k        | 10.5 / 6.78k     |              | -     |
|  | ent (A) (Cooling / Heating)                         |   |                  | -                | -                | -   | -/-            | 7.80 / 7.70         | 7.50 / 7.40      |              |       |
| Comp output  |   |   |                  |                  | -                |   | -              | 3.80k               | 3.80k            |              | -     |
|  | use max size (A)                                    |   |                  |                  | -                |   |                | 16                  |                  |              |       |
|  | edance (ΩMAX)                                       |   |                  |                  | -                |   | -<br>120 v2    |                     |                  |              |       |
|  | tput (Indoor/Outdoor) W                             | -   |                  | 750              |                  |   | 120 x2         |                     |                  |              |       |
| Moisture rem   |   |   | L/h              |                  | 4.0 (4.0 x1)     |   |                | -                   |                  |              |       |
| External stati   |   | 2   | Pa               |                  | (MIN50 - MAX1    |   |                | -                   |                  |              |       |
| Indoor   | Cooling   |   | I/M/L) (m³/h)    |                  | 42.0 (3600) / (3 |   |                | -                   |                  | -            | -     |
| Air flow   | Heating   |   | I/M/L) (m³/h)    | 60.0 / 50.0 /    | 42.0 (3600) / (3 | 000) / (2520)                                 |                | -                   |                  | -            | -     |
| Outdoor  | Cooling   |   | in (m³/h)        |                  | -                |   |                | 164.0 (9840)        |                  | -            | -     |
| Air flow   | Heating   |   | in (m³/h)        |                  | -                |   |                | 164.0 (9840)        |                  | -            | -     |
| Refrigerant ty   | /pe / amount (ship) kg / amount (n                  |   |                  |                  | -                |   | -              | R32, 3.200 / 6.35   | U                |              | -     |
|  | GWP.  |   |                  |                  |                  |   |                |                     |                  |              |       |
| F-Gas  | CO₂eq (ton) (PRECHA                                 |   |                  |                  | -                |   |                | 675 / 2.16 / 4.29   | 9                |              | -     |
|  | CO₂eq (ton) (MAXIMUM C                              | CHARGED AM                                    | IOUNT)           |                  |                  |   |                |                     |                  |              |       |
|  |   | Heig  | ht (mm)          |                  | 400              |   |                | 1500                | İ                |              |       |
| Product dime   | ension  |   | h (mm)           |                  | 1297             |   |                | 980                 |                  |              |       |
| <u></u>  |   |   | h (mm)           |                  | 949              |   |                | 370                 |                  |              |       |
| Product dime   | ension (Panel)                                      | HxW   | x D (mm)         |                  | -                |   |                | -                   |                  |              |       |
|  |   | Heig  | ht (mm)          |                  | 514              |   |                | 1642                |                  |              |       |
| Packing dime   | ension  |   | h (mm)           |                  | 1494             |   |                | 1095                |                  |              |       |
| <u> </u>   |   |   | h (mm)           |                  | 1122             |   |                | 529                 |                  |              |       |
|  |   |   | ET) kg           |                  | 61               |   |                | 115                 |                  |              |       |
| Weight   |   |   | OSS) kg          |                  | 73               |   |                | 127                 |                  |              |       |
| <u></u>  |   |   | (NET) kg         |                  | -                |   |                | -                   |                  |              | -     |
|  | Layers limit (actual)                               |   |                  | 6 (7)            |                  |   | 1 (2)          |                     |                  |              |       |
| Cool (DBT)   |   |   | 18°C ~ 32°C      |                  |                  | -15°C ~ 52°C                                  |                |                     | -                |              |       |
| Operation condition Heat (DBT)                                   |   |   | 16°C~30°C        |                  |                  | -20°C ~ 24°C                                  |                |                     | -                |              |       |
| Max Working Pressure HP/LP Mpa (bar) (PS)                        |   |   |                  | 4.15             | / 2.55           |   |                |                     |                  |              |       |
| Max Working Pressure HP/LP Mpa (bar) (PS)  Max High Pressure Mpa |   |   |                  |                  | 15               |   |                |                     |                  |              |       |
|  | Max High Pressure Mpa  Pipe port diameter mm (inch) |   | (Liquid) do      | 52 (3/8) (Gas) Ø |                  | 15<br>(Liquid) Ø9.52 (3/8) (Gas) Ø19.05 (3/4) |                |                     |                  |              |       |
|  | Pipe diameter mm (in                                |   | Om)              | (Elquid) Ø9.     |                  |   |                |                     | (0/4)            |              |       |
|  |   |   |                  |                  |                  | quid) Ø9.52 (3/8)                             |                |                     |                  |              | -     |
|  | Pipe diameter mm (in                                |   | _                |                  | (Lic             | quid) Ø9.52 (3/8)                             |                |                     | d tuno           |              |       |
|  | Connecting method                                   |   | •                |                  | flared type      |   |                | iid) & (Gas) flared |                  |              |       |
| Piping   | Connecting metho                                    |   | )                |                  |                  |   |                | iid) & (Gas) flared | и туре           |              |       |
| Pi<br>G  | Standard le   |   |                  |                  |                  |   | 5m             |                     |                  |              |       |
|  | Pipe length r                                       | _   |                  |                  |                  |   | .00m           |                     |                  |              |       |
|  | Indoor unit & Outdoor uni                           |   |                  |                  | 30m (OI          | O located lower)                              |                | a nigner)           |                  |              |       |
|  | Add gas amount g/n                                  |   |                  |                  |                  |   |                |                     |                  |              | •     |
|  | Add gas amount g/                                   | _   |                  |                  |                  |   | g/m            |                     |                  |              | -     |
| Pipe length for additional gas m                                 |   |   |                  |                  | 30               | )m  |                |                     |                  | -            |       |

# 1-1. Unit Specifications High Static Pressure Ducted Type S-160PE4RN U-160PZH3R5

| Indoor   | door Model  |             | S-160PE4RN              |                  |                              | -                                    |                   |                    |             |        |       |
|--|---|-------------|-------------------------|------------------|------------------------------|--------------------------------------|-------------------|--------------------|-------------|--------|-------|
| Panel  |   |             |                         |                  | -                            |                                      |                   | -                  |             |        | -     |
| Outdoor  |   |             |                         |                  | -                            |                                      |                   | U-160PZH3R5        |             |        | -     |
| Branch pipe  |   |             |                         |                  |                              |                                      | -                 |                    |             |        |       |
| Performance  | test condition                                      |             |                         |                  |                              |                                      | ISO 13253 / AS    | NZS 3823.1         |             |        |       |
| Dower cumply   | 1   | Q           | ó, Hz                   |                  | 1ø 50Hz                      |                                      |                   | 1ø 50Hz            |             |        |       |
| Power supply   |   |             | V                       | 220V             | 230V                         | 240V                                 | 220V              | 230V               | 240V        | Min    | Max   |
|  |   |             | kW                      | -                | 16.0                         | 16.0                                 | -                 | -                  | -           | 5.4    | 18.0  |
|  | Capacity  |             | TU/h                    | -                | 54600                        | 54600                                | -                 | -                  | -           | 18400  | 61400 |
|  |   | Sensible    | kW                      | -                | 13.2                         | 13.2                                 | -                 | -                  | -           | -      | -     |
|  |   | Latent      | kW                      | -                | 2.8                          | 2.8                                  | -                 | -                  | -           | -      | -     |
|  | Current   |             | A                       | -                | 2.61                         | 2.47                                 | -                 | 22.40              | 21.50       | -      | -     |
|  | Input power   |             | W                       | -                | 490                          | 490                                  | -                 | -                  | -           | -      | -     |
|  |   |             | otal W                  |                  | -                            | 1                                    | -                 | 4.85k              | 4.85k       | 1.12k  | 5.95k |
|  | Annual consumption<br>EER                           |             | al kWh<br>il (W/W)      | -                | -                            | -                                    | -                 | 2425<br>3.30       | 3.30        | 4.82   | 3.03  |
| Cooling  | AEER  |             | N/W)                    | -                | -                            | -                                    | -                 | 3.24               | 3.30        | - 4.02 | -     |
| CO   | SEER rating   | ,           | 14744)                  | -                |                              | _                                    |                   | Commercial         | Residential | -      |       |
|  | TCSPF   | (\          | N/W)                    | -                | -                            | -                                    | _                 | 5.40               | 4.24        | -      | -     |
|  | Total Energy consumption                            |             | kWh                     | -                | -                            | -                                    | -                 | 2425               | 1432        | -      | -     |
|  | Star rating   |             | -                       | -                | -                            | -                                    | -                 | -                  | 2.5 Stars   | -      | -     |
|  | Power factor  |             | %                       | -                | -                            | -                                    | -                 | 94                 | 94          | -      | -     |
|  |   | dB(A        | ) (H/M/L)               |                  | 45 / 41 / 37                 | •                                    |                   | -                  |             | -      | -     |
|  | Noise indoor  | Power       | r Level dB              |                  | 67 / 63 / 59                 |                                      |                   | -                  |             | -      | -     |
|  | Noice outdoor                                       |             | ) (H/M/L)               |                  | -                            |                                      |                   | 58 / -             |             | -      | -     |
|  | Noise outdoor                                       |             | r Level dB              |                  | -                            |                                      |                   | 76 / -             |             | -      | -     |
|  | Capacity  |             | kW                      | -                | 18.0                         | 18.0                                 | -                 | -                  | -           | 5.5    | 20.0  |
|  | опрасну   | В           | TU/h                    | -                | 61400                        | 61400                                | -                 | -                  | -           | 18800  | 68200 |
|  | Current   |             | Α                       | -                | 2.61                         | 2.47                                 | -                 | 22.20              | 21.30       | -      | -     |
|  | Input power   |             | W                       | -                | 490                          | 490                                  | -                 | -                  | -           | -      | -     |
|  |   |             | otal W                  |                  | -                            |                                      | -                 | 4.80k              | 4.80k       | 1.01k  | 6.15k |
|  | COP   |             | l (W/W)                 | -                | -                            | -                                    | -                 | 3.75               | 3.75        | 5.45   | 3.25  |
| 0.0  | ACOP  | (\          | N/W)                    | -                | -                            | -                                    | -                 | 3.69               | -           | -      | -     |
| Heating  | SEER rating   |             |                         | -                | -                            | -                                    | -                 | Commercial         | Residential | -      | -     |
| 훈  | HSPF  | ,           | N/W)                    | -                | -                            | -                                    | -                 | 4.69               | 4.28        | -      | -     |
|  | Total Energy consumption                            |             | kWh                     | -                | -                            | -                                    | -                 | 959                | 2280        | -      | -     |
|  | Star rating   |             |                         | -                | -                            | -                                    | -                 | -                  | 2.5 Stars   | -      | -     |
|  | Power factor  | -ID(A)      | %                       | -                | 45 / 44 / 07                 | -                                    | -                 | 94                 | 94          | -      | -     |
|  | Noise indoor  |             | ) (H/M/L)<br>r Level dB |                  | 45 / 41 / 37<br>67 / 63 / 59 |                                      |                   |                    |             | -      | -     |
|  |   |             | ) (H/M/L)               |                  | -                            |                                      |                   | 60 / -             |             |        | -     |
|  | Noise outdoor                                       |             | r Level dB              |                  |                              |                                      |                   | 78 / -             |             |        | -     |
| LOW TEMP   | Total capacity (kW) / Inp                           |             |                         |                  |                              |                                      | 16.00             | 5.68k              | 2.82        |        |       |
| EXTRA LOW  |   |             |                         |                  |                              |                                      | 10.00             | 0.00K              | 2.02        |        |       |
| TEMP   | Total capacity (kW) / Inp                           | ut power (W | )/COP                   |                  | -                            |                                      | -                 | -                  | -           |        | -     |
| Max Current (A) / Max Input Power (W)*                           |   | -           | 4.50 / 805              | 4.36 / 805       | -/-                          | 29.0 / 6.27k                         | 29.0 / 6.54k      |                    | -           |        |       |
|  | Starting current (A) (Cooling / Heating)            |             | -                       | -                | -                            | -/-                                  | 22.4 / 22.2       | 21.5 / 21.3        |             | -      |       |
| Comp output  |   |             |                         |                  | -                            | •                                    | -                 | 3.80k              | 3.80k       |        |       |
| Time Delay fu  | use max size (A)                                    |             |                         |                  | -                            |                                      |                   | 40                 |             |        | -     |
| Network Imp  | edance (ΩMAX)                                       |             |                         | -                |                              |                                      | -                 |                    |             |        | -     |
|  | tput (Indoor/Outdoor) W                             |             |                         | 750              |                              |                                      | 120 x2            |                    |             |        | -     |
| Moisture rem   |   |             | L/h                     | 4.0 (4.0 x1)     |                              |                                      | -                 |                    |             |        | -     |
| External stati   | ·   |             | Pa                      |                  | / (MIN50 - MAX1              |                                      |                   | -                  |             |        |       |
| Indoor   | Cooling   | _           | H/M/L) (m³/h)           |                  | 42.0 (3600)/(3               | , , ,                                |                   | -                  |             | -      | -     |
| Air flow   | Heating   |             | H/M/L) (m³/h)           | 60.0 / 50.0 /    | 42.0 (3600) / (3             | 000) / (2520)                        |                   |                    |             | -      | -     |
| Outdoor  | Cooling   |             | iin (m³/h)              |                  | -                            |                                      |                   | 164.0 (9840)       |             | -      | -     |
| Air flow   | Heating   |             | iin (m³/h)              |                  | -                            |                                      | ļ .               | 164.0 (9840)       | 0           | -      | -     |
| Reirigerant ty   | /pe / amount (ship) kg / amount (n                  |             |                         |                  | -                            |                                      | R32, 3.200 /      |                    | U           |        | -     |
|  | GWP.  |             | INITS /                 |                  |                              |                                      |                   |                    |             |        |       |
| F-Gas  | CO₂eq (ton) (PRECHA                                 |             | ,                       | -                |                              |                                      | 675 / 2.16 / 4.29 |                    |             |        |       |
|  | CO₂eq (ton) (MAXIMUM C                              |             |                         |                  |                              |                                      |                   |                    |             |        |       |
|  |   |             | ht (mm)                 |                  | 400                          |                                      |                   | 1500               |             |        |       |
| Product dime   | ension  |             | th (mm)                 |                  | 1297                         |                                      |                   | 980                |             |        | -     |
| Dunado : "   | i (DI)  |             | th (mm)                 |                  | 949                          |                                      |                   | 370                |             |        | -     |
| Product dime   | ension (Panel)                                      |             | x D (mm)                |                  |                              |                                      |                   | - 1040             |             |        |       |
| Dooking dir  | oncion  |             | th (mm)                 |                  | 514<br>1494                  |                                      |                   | 1642<br>1095       |             |        |       |
| Packing dime   | HoloII  |             | th (mm)<br>th (mm)      |                  | 1122                         |                                      |                   | 1095<br>529        |             |        |       |
|  |   |             | tn (mm)<br>ET) kg       |                  | 61                           |                                      |                   | 117                |             |        |       |
| Weight   |   |             | OSS) kg                 |                  | 73                           |                                      |                   | 129                |             |        |       |
| . voignt   |   |             |                         |                  | -                            |                                      |                   | -                  |             |        |       |
| Panel (NET) kg  Layers limit (actual)                            |   |             | 6 (7)                   |                  |                              | 1 (2)                                |                   |                    | -           |        |       |
| Cool (DBT)   |   |             | 18°C ~ 32°C             |                  |                              | -15°C ~ 52°C                         |                   |                    |             |        |       |
| Operation condition Heat (DBT)                                   |   |             | 16°C ~ 30°C             |                  |                              | -20°C ~ 24°C                         |                   |                    |             |        |       |
| Max Working Pressure HP/LP Mpa (bar) (PS)                        |   |             | 10 0 · 30 C             |                  | / 2.55                       | 20 0 - 24 0                          |                   |                    |             |        |       |
| Max Working Pressure HP/LP Mpa (Dar) (PS)  Max High Pressure Mpa |   |             |                         |                  | 15                           |                                      |                   |                    |             |        |       |
|  | Max High Pressure Mpa  Pipe port diameter mm (inch) |             | (Liquid) do             | 52 (3/8) (Gas) Ø |                              |                                      | 52 (3/8) (Gas) Ø  | 19 05 (3/4)        |             |        |       |
|  | Pipe diameter mm (inc                               |             |                         | (Liquid) Ø9.     |                              | quid) Ø9.52 (3/8                     |                   |                    | 20.00 (0/4) |        |       |
|  | Pipe diameter mm (in                                |             |                         |                  |                              | quid) Ø9.52 (3/8<br>quid) Ø9.52 (3/8 |                   |                    |             |        |       |
|  | Connecting method                                   |             |                         |                  |                              | <sub>4</sub> uiu) ⋈ฮ.ਹ∠ (3/8         |                   | id) & (Gas) flared | d tyne      |        |       |
|  | Connecting metho                                    |             |                         |                  | flared type                  |                                      |                   | id) & (Gas) flared |             |        |       |
| Piping   | Standard le   |             | .,                      |                  |                              | 7                                    | (Liqu<br>5m       | , a (ous) naiel    | ,100        |        |       |
| i <del>d</del>   | Pipe length r                                       |             |                         |                  |                              |                                      | 100m              |                    |             |        |       |
|  | Indoor unit & Outdoor uni                           | _           | rence m                 |                  | 30m (OF                      | located lower)                       |                   | ed higher)         |             |        |       |
|  | Add gas amount g/n                                  |             |                         |                  |                              |                                      | -                 | J ·-·/             |             |        |       |
|  | Add gas amount g/                                   |             |                         |                  |                              | 45                                   | g/m               |                    |             |        |       |
|  |   |             |                         |                  |                              |                                      | )m                |                    |             |        |       |
| Pipe length for additional gas m                                 |   |             |                         |                  |                              |                                      |                   |                    |             |        |       |

# 1-1. Unit Specifications High Static Pressure Ducted Type S-160PE4RN U-160PZH3R8

| Indoor  | atio i ressure D                                    | Mod                  |                      |                  | S-160PE4RN       |                       | 1                |                     |               |               |               |
|---|---|----------------------|----------------------|------------------|------------------|-----------------------|------------------|---------------------|---------------|---------------|---------------|
| Panel   |   | 1100                 | ici.                 |                  | 3-1001 L4111V    |                       |                  | -                   |               |               |               |
| Outdoor   |   |                      |                      |                  | -                |                       |                  | U-160PZH3R8         |               |               | -             |
| Branch pipe   |   |                      |                      |                  |                  |                       | -                |                     |               |               |               |
| Performance   | test condition                                      |                      |                      |                  |                  |                       | ISO 13253 / AS   | S NZS 3823.1        |               |               |               |
| Power supply  | 1   | Ø, ⊦                 |                      |                  | 1ø 50Hz          |                       |                  | 3Ø 50Hz             |               |               |               |
|   | 1   | V                    |                      | 220V             | 230V             | 240V                  | 380V             | 400V                | 415V          | Min           | Max           |
|   |   | kW                   |                      | -                | 16.0             | 16.0                  | -                | -                   | -             | 5.4           | 18.0          |
|   | Capacity  | Sancible             | /n<br>kW             | -                | 54600<br>13.2    | 54600<br>13.2         | -                | -                   | -             | 18400         | 61400         |
|   |   | Sensible<br>Latent   | kW                   | -                | 2.8              | 2.8                   | -                | -                   | -             |               | -             |
|   | Current   | A                    | KVV                  | -                | 2.61             | 2.47                  | -                | 7.80                | 7.50          | -             | -             |
|   |   | W                    |                      | -                | 490              | 490                   | -                | -                   | -             | -             | -             |
|   | Input power   | Total                | .W                   |                  | -                |                       | -                | 4.85k               | 4.85k         | 1.12k         | 5.95k         |
|   | Annual consumption                                  | Total k              |                      | -                | -                | -                     | -                | 2425                | -             | -             | -             |
| ng  | EER   | Total (V             |                      | -                | -                | -                     | -                | 3.30                | 3.30          | 4.82          | 3.03          |
| Cooling   | AEER  | (W/V                 | V)                   | -                | -                | -                     | -                | 3.24                | -             |               | -             |
| 0   | SEER rating   |                      | •••                  | -                | -                | -                     | -                | Commercial          | Residential   | -             | -             |
|   | TCSPF   | (W/V                 | _                    | -                | -                | -                     | -                | 5.40<br>2425        | 4.24<br>1432  | -             | -             |
|   | Total Energy consumption<br>Star rating             | KVV                  |                      | -                | -                | -                     | -                | - 2425              | 2.5 Stars     |               | -             |
|   | Power factor  | %                    |                      | -                | -                | -                     | -                | 90                  | 90            |               | -             |
|   |   | dB(A) (H             |                      |                  | 45 / 41 / 37     |                       |                  | -                   |               | -             | -             |
|   | Noise indoor  | Power Le             |                      |                  | 67/63/59         |                       |                  | -                   |               | -             | -             |
|   | Noise outdoor                                       | dB(A) (H             |                      |                  | -                |                       |                  | 58 / -              |               | -             | -             |
|   |   | Power Le             |                      |                  | -                |                       |                  | 76 / -              |               | -             | -             |
|   | Capacity  | kW                   |                      | -                | 18.0             | 18.0                  | -                | -                   | -             | 5.5           | 20.0          |
|   |   | BTU                  |                      | -                | 61400            | 61400                 | -                | -                   | -             | 18800         | 68200         |
|   | Current   | Α                    |                      | -                | 2.61             | 2.47                  | -                | 7.70                | 7.40          | -             | -             |
|   | Input power   | W                    |                      | -                | 490              | 490                   | -                | 4 80k               | - 4 80k       | -<br>1 01k    | - 6 15k       |
|   | COP   | Total<br>Total (V    |                      | -                | -<br>I -         | -                     | -                | 4.80k<br>3.75       | 4.80k<br>3.75 | 1.01k<br>5.45 | 6.15k<br>3.25 |
|   | ACOP  | (W/V                 |                      | -                | -                | -                     | -                | 3.69                | 3.75          |               | - 3.25        |
| ii.   | SEER rating   | (                    |                      | -                | -                | -                     | -                | Commercial          | Residential   | -             | -             |
| Heating   | HSPF  | (W/V                 | V)                   | -                | -                | -                     | -                | 4.69                | 4.28          | -             | -             |
| _   | Total Energy consumption                            | kW                   | h                    | -                | -                | -                     | -                | 959                 | 2280          | -             | -             |
|   | Star rating   | -                    |                      | -                | -                | -                     | -                | -                   | 2.5 Stars     | -             | -             |
|   | Power factor  | %                    |                      | -                | -                | -                     | -                | 90                  | 90            | -             | -             |
|   | Noise indoor  | dB(A) (H             |                      |                  | 45 / 41 / 37     |                       |                  | -                   |               | -             | -             |
|   |   | Power Le             |                      |                  | 67 / 63 / 59     |                       |                  | -                   |               | -             | -             |
|   | Noise outdoor                                       | dB(A) (H<br>Power Le |                      |                  | <u> </u>         |                       |                  | 60 / -<br>78 / -    |               | -             | -             |
| LOW TEMP  | Total capacity (kW) / Inp                           |                      |                      |                  |                  |                       | 16.00            | 5.68k               | 2.82          |               |               |
| EXTRA LOW   |   |                      |                      |                  |                  |                       | 10.00            | 0.00K               | 2.02          |               |               |
| Total capacity (kW) / Input power (W) / COP           |   |                      |                      | -                |                  | -                     | -                | -                   |               | -             |               |
| Max Current (A) / Max Input Power (W)*                |   | -                    | 4.50 / 805           | 4.36 /805        | -/-              | 10.5 / 6.54k          | 10.5 / 6.78k     |                     | -             |               |               |
| Starting curre  | Starting current (A) (Cooling / Heating)            |                      | -                    | -                | -                | -/-                   | 7.80 / 7.70      | 7.50 / 7.40         |               | -             |               |
| Comp output   |   |                      |                      |                  | -                |                       | -                | 3.80k               | 3.80k         |               | -             |
|   | ise max size (A)                                    |                      |                      |                  | <u> </u>         |                       | 16               |                     |               |               | -             |
|   | edance (ΩMAX)<br>tput (Indoor/Outdoor) W            |                      |                      |                  | 750              |                       | 120 x2           |                     |               |               |               |
| Moisture rem  |   |                      | L/h                  | 4.0 (4.0 x1)     |                  |                       |                  | -                   |               |               |               |
| External stati  |   |                      | Pa                   | 80               | (MIN50 - MAX1    | 50)                   |                  | -                   |               |               | -             |
| Indoor  | Cooling   | m³/min (H/M          | 1/L) (m³/h)          |                  | 42.0 (3600) / (3 |                       |                  | -                   |               | -             | -             |
| Air flow  | Heating   | m³/min (H/M          |                      | 60.0 / 50.0 /    | 42.0 (3600)/(3   | 000) / (2520)         |                  | -                   |               |               | -             |
| Outdoor   | Cooling   | m³/min (             |                      |                  | -                |                       |                  | 164.0 (9840)        |               | -             | -             |
| Air flow  | Heating   | m³/min (             | (m³/h)               |                  | -                |                       |                  | 164.0 (9840)        | 0             | -             | -             |
| нетгіgerant ty  | rpe / amount (ship) kg / amount (n                  |                      |                      |                  | -                |                       | F                | R32, 3.200 / 6.35   | U             |               | -             |
| - 0   | GWP.  |                      |                      |                  |                  |                       |                  | 075 10 10 11        |               |               |               |
| F-Gas   | CO₂eq (ton) (PRECHA<br>CO₂eq (ton) (MAXIMUM C       |                      |                      | -                |                  |                       |                  | 675 / 2.16 / 4.29   | ,             |               | •             |
|   | OO₂Eq (ton) (MAXIMUM C                              |                      |                      |                  | 400              |                       |                  | 4500                |               |               |               |
| Product dime  | ension  | Height (             |                      |                  | 400<br>1297      |                       |                  | 1500<br>980         |               |               | -             |
| . roduct unite  | , nordii  | Width (<br>Depth (   |                      |                  | 949              |                       |                  | 370                 |               |               |               |
| Product dime  | ension (Panel)                                      | HxWxD                |                      |                  | -                |                       |                  | -                   |               |               |               |
|   | 1 7   | Height (             |                      |                  | 514              |                       |                  | 1642                |               |               | -             |
| Packing dime  | ension  | Width (              |                      |                  | 1494             |                       |                  | 1095                |               |               |               |
|   |   | Depth (              | mm)                  |                  | 1122             |                       |                  | 529                 |               |               | -             |
| <u> </u>  | ·   | (NET)                |                      |                  | 61               |                       |                  | 115                 |               |               |               |
| Weight  |   | (GROS                |                      |                  | 73               |                       |                  | 127                 |               |               |               |
|   | Lavora Best ( 1                                     | Panel (N             | ⊫I) Kg               |                  | -<br>6 (7)       |                       |                  | 1 (2)               |               |               |               |
| Layers limit (actual)                                 |   |                      | 6 (7)<br>18°C ~ 32°C |                  |                  | 1 (2)<br>-15°C ~ 52°C |                  |                     | -             |               |               |
| Operation condition Cool (DBT)                        |   |                      | 16°C~32°C            |                  |                  | -15 C ~ 52 C          |                  |                     | -             |               |               |
| Heat (DBT)  Max Working Pressure HP/LP Mpa (bar) (PS) |   |                      | 10 C ~ 30 C          | // 15            | / 2.55           | -20 U ~ 24 U          |                  |                     | -             |               |               |
|   | Max High Pressure M                                 |                      |                      |                  |                  |                       | 15               |                     |               |               |               |
|   | Max High Pressure Mpa  Pipe port diameter mm (inch) |                      | (Liquid) øa          | 52 (3/8) (Gas) Ø |                  |                       | 52 (3/8) (Gas) Ø | 519.05 (3/4)        |               |               |               |
|   | Pipe diameter mm (in                                |                      | 1)                   | (=1quiu) p3.     |                  |                       | ) (Gas) Ø19.05 ( |                     | (5,7)         |               |               |
|   | Pipe diameter mm (in                                |                      |                      |                  |                  |                       | ) (Gas) Ø19.05 ( |                     |               |               |               |
|   | Connecting method                                   |                      |                      |                  |                  | ,                     |                  | iid) & (Gas) flared | d type        |               |               |
| 20  | Connecting metho                                    |                      |                      |                  | flared type      |                       | (Liqu            | iid) & (Gas) flared |               |               |               |
| Piping  | Standard le   |                      | ·                    |                  |                  |                       | 5m               |                     |               |               |               |
| -   | Pipe length r                                       | _                    |                      |                  |                  |                       | 100m             |                     |               |               |               |
|   | Indoor unit & Outdoor uni                           |                      | nce m                |                  | 30m (OI          |                       | / 30m (OD Icate  | d higher)           |               |               |               |
|   | Add gas amount g/n                                  |                      |                      |                  |                  |                       | -<br>«Im         |                     |               |               | -             |
|   | Add gas amount g/                                   |                      |                      |                  |                  |                       | g/m<br>Om        |                     |               |               |               |
| L   | Pipe length for additional gas m                    |                      |                      |                  |                  |                       |                  |                     |               |               |               |

# 1-1. Unit Specifications High Static Pressure Ducted Type S-160PE4RA U-160PZH3R5

| Indoor                                      | atio i ressure D                         |                    | del               |              | S-160PE4RA                      |                  | 1                |                     |               |               |       |
|---|--|--------------------|-------------------|--------------|---------------------------------|------------------|------------------|---------------------|---------------|---------------|-------|
| Panel                                       |  | 110                | uci               |              | 3-1001 L411A                    |                  |                  | -                   |               |               |       |
| Outdoor                                     |  |                    |                   |              | -                               |                  |                  | U-160PZH3R5         |               |               | -     |
| Branch pipe                                 |  |                    |                   |              |                                 |                  | -                |                     |               |               |       |
| Performance                                 | test condition                           |                    |                   |              |                                 |                  | ISO 13253 / AS   | S NZS 3823.1        |               |               |       |
| Power supply                                | 1  |                    | Hz                |              | 1ø 50Hz                         |                  |                  | 1ø 50Hz             |               |               |       |
|   | 1  |                    | /                 | 220V         | 230V                            | 240V             | 220V             | 230V                | 240V          | Min           | Max   |
|   |  | K¹                 |                   | -            | 16.0                            | 16.0             | -                | -                   | -             | 5.4           | 18.0  |
|   | Capacity                                 |                    | U/h<br>kW         | -            | 54600<br>13.2                   | 54600<br>13.2    | -                | -                   | -             | 18400         | 61400 |
|   |  | Sensible<br>Latent | kW                | -            | 2.8                             | 2.8              | -                | -                   | -             |               | -     |
|   | Current                                  |                    | A                 | -            | 2.61                            | 2.47             | -                | 22.40               | 21.50         |               | -     |
|   |  |                    | V                 | -            | 490                             | 490              | -                | -                   | -             | -             | -     |
|   | Input power                              | Tota               | al W              |              | -                               |                  | -                | 4.85k               | 4.85k         | 1.12k         | 5.95k |
|   | Annual consumption                       | Total              |                   | -            | -                               | -                | -                | 2425                | -             | -             | -     |
| ng  | EER                                      | Total              |                   | -            | -                               | -                | -                | 3.30                | 3.30          | 4.82          | 3.03  |
| Cooling                                     | AEER                                     | (W                 | /W)               | -            | -                               | -                | -                | 3.24                | -             |               | -     |
| 0   | SEER rating                              |                    | ***               | -            | -                               | -                | -                | Commercial          | Residential   | -             | -     |
|   | TCSPF                                    | (W                 | _                 |              | -                               | -                | -                | 5.40                | 4.24<br>1432  | -             | -     |
|   | Total Energy consumption<br>Star rating  | kV                 |                   | -            | -                               | -                | -                | 2425                | 2.5 Stars     |               | -     |
|   | Power factor                             |                    | /6                | -            | -                               | -                | -                | 94                  | 94            |               | -     |
|   |  | dB(A) (            |                   |              | 45 / 41 / 37                    | I                |                  | -                   | 0             | -             | -     |
|   | Noise indoor                             |                    | _evel dB          |              | 67/63/59                        |                  |                  | -                   |               | -             | -     |
|   | Noise outdoor                            | dB(A) (            |                   |              |                                 |                  |                  | 58 / -              |               | -             | -     |
|   | เรอเอธ บนเนปปI                           | Power L            |                   |              | -                               |                  |                  | 76 / -              |               | -             | -     |
|   | Capacity                                 | k¹                 |                   | -            | 18.0                            | 18.0             | -                | -                   | -             | 5.5           | 20.0  |
|   |  | BTI                |                   | -            | 61400                           | 61400            | -                | -                   | -             | 18800         | 68200 |
|   | Current                                  |                    | 4                 | -            | 2.61                            | 2.47             | -                | 22.20               | 21.30         | -             | -     |
|   | Input power                              |                    | V                 | -            | 490                             | 490              | -                | -                   | -             | -             |       |
|   | COP                                      | Total (            |                   | -            | -                               | -                | -                | 4.80k               | 4.80k<br>3.75 | 1.01k<br>5.45 | 6.15k |
|   | ACOP                                     | (W.                |                   |              | -                               | -                | -                | 3.75<br>3.69        | 3.75          | 5.45          | 3.25  |
| in &  | SEER rating                              | (***               | , , ,             | -            | -                               |                  | -                | Commercial          | Residential   | -             | -     |
| Heating                                     | HSPF                                     | (W                 | /W)               | -            | -                               | -                | -                | 4.69                | 4.28          |               | -     |
| _   | Total Energy consumption                 | kV                 | Vh                |              | -                               | -                | -                | 959                 | 2280          | -             | -     |
|   | Star rating                              |                    | -                 | -            | -                               | -                | -                | -                   | 2.5 Stars     | -             | -     |
|   | Power factor                             |                    | %                 |              | -                               | -                | -                | 94                  | 94            | -             | -     |
|   | Noise indoor                             | dB(A) (            |                   |              | 45/41/37                        |                  |                  | -                   |               | -             | -     |
|   |  |                    | _evel dB          |              | 67/63/59                        |                  |                  | -                   |               | -             | -     |
|   | Noise outdoor                            | dB(A) (            |                   |              | -                               |                  |                  | 60 / -              |               | -             | -     |
| LOW TEMP                                    | Total consoity (IAM) / Inn               | Power L            |                   |              | -                               |                  | 10.00            | 78 / -<br>5.68k     | 2.02          | -             | -     |
| EXTRA LOW                                   | Total capacity (kW) / Inp                | ut power (w) /     | COP               |              | -                               |                  | 16.00            | 3.06K               | 2.82          |               | -     |
| Total capacity (kW) / Input power (W) / COP |  |                    |                   | -            |                                 | -                | -                | -                   |               | -             |       |
| Max Current (A) / Max Input Power (W)*      |  | -                  | 4.50 / 805        | 4.36 / 805   | -/-                             | 29.0 / 6.27k     | 29.0 / 6.54k     |                     | -             |               |       |
|   | Starting current (A) (Cooling / Heating) |                    |                   | -            | -                               | -                | -/-              | 22.4 / 22.2         | 21.5 / 21.3   |               | -     |
| Comp output                                 | (W)                                      |                    |                   |              | -                               |                  | -                | 3.80k               | 3.80k         |               | -     |
| Time Delay fu                               | ıse max size (A)                         |                    |                   |              | -                               |                  | 40               |                     |               |               | -     |
|   | edance (ΩMAX)                            |                    |                   | -            |                                 |                  | 120 v2           |                     |               |               | -     |
|   | tput (Indoor/Outdoor) W                  |                    |                   | 750          |                                 |                  | 120 x2           |                     |               |               |       |
| Moisture rem<br>External stati              |  |                    | L/h               | 00           | 4.0 (4.0 x1)<br>/ (MIN50 - MAX1 | EO)              |                  |                     |               |               |       |
| Indoor                                      | Cooling                                  | m³/min /H/         | Pa<br>M/L) (m³/h) |              | 42.0 (3600) / (3                |                  |                  | <u> </u>            |               |               | -     |
| Air flow                                    | Heating                                  |                    | M/L) (m³/h)       |              | 42.0 (3600) / (3                |                  |                  |                     |               |               | -     |
| Outdoor                                     | Cooling                                  | m³/mir             |                   |              | -                               | ,. (====)        |                  | 164.0 (9840)        |               | -             | -     |
| Air flow                                    | Heating                                  | m³/mir             |                   |              | -                               |                  |                  | 164.0 (9840)        |               | -             | -     |
|   | pe / amount (ship) kg / amount (n        |                    |                   |              |                                 |                  | F                | R32, 3.200 / 6.35   | 0             |               |       |
|   | GWP                                      | /                  |                   |              |                                 |                  |                  |                     |               |               |       |
| F-Gas                                       | CO₂eq (ton) (PRECHA                      |                    |                   |              | -                               |                  |                  | 675 / 2.16 / 4.29   | )             |               | -     |
|   | CO₂eq (ton) (MAXIMUM C                   | CHARGED AMO        | DUNT)             |              |                                 |                  |                  |                     |               |               |       |
|   |  | Height             | t (mm)            |              | 400                             |                  |                  | 1500                |               |               | -     |
| Product dime                                | ension                                   |                    | (mm)              |              | 1297                            |                  |                  | 980                 |               |               |       |
|   |  |                    | (mm)              |              | 949                             |                  |                  | 370                 |               |               |       |
| Product dime                                | ension (Panel)                           |                    | D (mm)            |              |                                 |                  |                  | - 1040              |               |               |       |
| Dacking dim -                               | ncion                                    |                    | t (mm)            |              | 514                             |                  |                  | 1642                |               |               | -     |
| Packing dime                                | :IIJIUII                                 | Width              | (mm)<br>(mm)      |              | 1494<br>1122                    |                  |                  | 1095<br>529         |               |               |       |
|   |  |                    | T) kg             |              | 61                              |                  |                  | 117                 |               |               |       |
| Weight                                      |  |                    | SS) kg            |              | 73                              |                  |                  | 129                 |               |               |       |
|   |  |                    | NET) kg           |              | -                               |                  |                  | -                   |               |               |       |
|   | Layers limit (actual)                    |                    |                   | 6 (7)        |                                 |                  | 1 (2)            |                     |               | -             |       |
| Cool (DBT)                                  |  |                    | 18°C ~ 32°C       |              |                                 | -15°C ~ 52°C     |                  |                     |               |               |       |
| Operation condition Heat (DBT)              |  |                    | 16°C ~ 30°C       |              |                                 | -20°C ~ 24°C     |                  |                     |               |               |       |
| Max Working Pressure HP/LP Mpa (bar) (PS)   |  |                    |                   | 4.15         | / 2.55                          |                  |                  |                     |               |               |       |
|   | Max High Pressure M                      | ра                 |                   |              |                                 |                  | 15               | -                   | -             |               |       |
|   | Pipe port diamete                        |                    |                   | (Liquid) Ø9. | 52 (3/8) (Gas) Ø                |                  |                  | 52 (3/8) (Gas) Ø    | 19.05 (3/4)   |               | ]     |
|   | Pipe diameter mm (inc                    |                    |                   |              |                                 |                  | ) (Gas) Ø19.05 ( |                     |               |               |       |
|   | Pipe diameter mm (in                     |                    | _                 |              | (Lic                            | quid) Ø9.52 (3/8 | ) (Gas) Ø19.05 ( |                     |               |               |       |
|   | Connecting method                        |                    | •                 |              | flared type                     |                  |                  | iid) & (Gas) flared |               |               |       |
| Piping                                      | Connecting metho                         |                    |                   |              |                                 | 7                |                  | iid) & (Gas) flared | і туре        |               |       |
| Pi<br>G                                     | Standard le<br>Pipe length r             |                    |                   |              |                                 |                  | 5m<br>100m       |                     |               |               |       |
|   | Indoor unit & Outdoor uni                | _                  | ence m            |              | 30m (OD                         |                  | / 30m (OD locate | ed higher)          |               |               |       |
|   | Add gas amount g/n                       |                    |                   |              | 30111 (01)                      |                  |                  | ou mignet)          |               |               |       |
|   | Add gas amount g/                        |                    |                   |              |                                 |                  | g/m              |                     |               |               |       |
|   |  |                    |                   |              |                                 |                  |                  |                     |               |               |       |
| Pipe length for additional gas m            |  |                    |                   | 30m          |                                 |                  |                  |                     |               |               |       |

# 1-1. Unit Specifications High Static Pressure Ducted Type S-160PE4RA U-160PZH3R8

| Indoor                                      | atio i ressure D                                | Model                                |               | S-160PE4RA         |                            | 1  |                     |                     |       |       |
|---|---|--------------------------------------|---------------|--------------------|----------------------------|--|---------------------|---------------------|-------|-------|
| Panel                                       |   | riouet                               |               | 3-1001 E4NA        |                            |  |                     |                     |       |       |
| Outdoor                                     |   |                                      |               | -                  |                            |  | U-160PZH3R8         |                     |       |       |
| Branch pipe                                 |   |                                      |               |                    |                            | -  |                     |                     |       |       |
| Performance                                 | test condition                                  |                                      |               |                    |                            | ISO 13253 / A                                    | S NZS 3823.1        |                     |       |       |
| Power supply                                | 1   | Ø, Hz                                |               | 1ø 50Hz            |                            |  | 3ø 50Hz             |                     |       |       |
|   | 1   | V                                    | 220V          | 230V               | 240V                       | 380V   | 400V                | 415V                | Min   | Max   |
|   |   | kW                                   | -             | 16.0               | 16.0                       | -  | -                   | -                   | 5.4   | 18.0  |
|   | Capacity  | BTU/h                                | -             | 54600              | 54600                      | -  | -                   | -                   | 18400 | 61400 |
|   |   | Sensible kW<br>Latent kW             | -             | 13.2               | 13.2                       | -  | -                   | -                   | -     | -     |
|   | Current   | Latent kW<br>A                       | -             | 2.8<br>2.61        | 2.8<br>2.47                | -  | 7.80                | 7.50                | -     | -     |
|   | Current   | w                                    | -             | 490                | 490                        | -  | 7.00                | 7.50                | -     | -     |
|   | Input power                                     | Total W                              |               | -                  | 400                        | -  | 4.85k               | 4.85k               | 1.12k | 5.95k |
|   | Annual consumption                              | Total kWh                            | -             | -                  | -                          | -  | 2425                | -                   | -     | -     |
| 26  | EER   | Total (W/W)                          | -             | -                  | -                          | -  | 3.30                | 3.30                | 4.82  | 3.03  |
| Cooling                                     | AEER  | (W/W)                                | -             | -                  | -                          | -  | 3.24                | -                   |       | -     |
| O   | SEER rating                                     | ı                                    | -             | -                  | -                          | -  | Commercial          | Residential         |       | -     |
|   | TCSPF   | (W/W)                                | -             | -                  | -                          | -  | 5.40                | 4.24                | -     | -     |
|   | Total Energy consumption                        | kWh                                  | -             | -                  | -                          | -  | 2425                | 1432                | -     | -     |
|   | Star rating<br>Power factor                     | - %                                  | -             | -                  | -                          | -  | 90                  | 2.5 Stars<br>90     | -     | -     |
|   | rower factor                                    | dB(A) (H/M/L)                        | -             | 45 / 41 / 37       |                            | -  | -                   | 90                  | -     |       |
|   | Noise indoor                                    | Power Level dB                       |               | 67/63/59           |                            | <b>†</b>   |                     |                     | -     | -     |
|   |   | dB(A) (H/M/L)                        | 1             |                    |                            |  | 58/-                |                     | -     | -     |
|   | Noise outdoor                                   | Power Level dB                       |               | -                  |                            |  | 76/-                |                     | -     | -     |
|   | Canacity  | kW                                   | -             | 18.0               | 18.0                       | -  | -                   | -                   | 5.5   | 20.0  |
|   | Capacity  | BTU/h                                | -             | 61400              | 61400                      | -  | -                   | -                   | 18800 | 68200 |
|   | Current   | A                                    | -             | 2.61               | 2.47                       | -  | 7.70                | 7.40                |       | -     |
|   | Input power                                     | W                                    | -             | 490                | 490                        | -  | -                   | -                   | -     | -     |
|   |   | Total W                              |               | -                  |                            | -  | 4.80k               | 4.80k               | 1.01k | 6.15k |
|   | COP   | Total (W/W)                          | -             | -                  | -                          | -  | 3.75                | 3.75                | 5.45  | 3.25  |
| 26  | ACOP<br>SEED roting                             | (W/W)                                | -             | -                  | -                          | -  | 3.69                | - Desidential       | -     | -     |
| Heating                                     | SEER rating<br>HSPF                             | (W/W)                                | -             | -                  | -                          | -  | Commercial<br>4.69  | Residential<br>4.28 | -     | -     |
| Ĭ   | Total Energy consumption                        | kWh                                  | + -           | + :-               | <del></del>                | -  | 959                 | 2280                | -     | -     |
|   | Star rating                                     | -                                    | _             | -                  | -                          | -  | -                   | 2.5 Stars           | -     | -     |
|   | Power factor                                    | %                                    | -             | -                  | -                          | -  | 90                  | 90                  |       | -     |
|   |   | dB(A) (H/M/L)                        |               | 45/41/37           | •                          |  | -                   | ,                   | -     | -     |
|   | Noise indoor                                    | Power Level dB                       |               | 67/63/59           |                            |  | -                   |                     |       | -     |
|   | Noise outdoor                                   | dB(A) (H/M/L)                        |               | -                  |                            |  | 60 / -              |                     |       | -     |
|   |   | Power Level dB                       |               | -                  |                            |  | 78 / -              |                     | -     | -     |
| LOW TEMP                                    | Total capacity (kW) / Inp                       | ut power (W) / COP                   |               | -                  |                            | 16.00  | 5.68k               | 2.82                |       | -     |
| EXTRA LOW                                   | Total capacity (kW) / Inp                       | ut power (W) / COP                   |               | -                  |                            | -  | -                   | -                   |       | -     |
| TEMP Max Current (A) / Max Input Power (W)* |   | -                                    | 4.50 / 805    | 4.20 (DDE          | -/-                        | 10.5 / 6.54k                                     | 10.5 / 6.78k        |                     |       |       |
| Starting current (A) (Cooling / Heating)    |   | -                                    | 4.50 / 805    | 4.36 /805          | -/-                        | 7.80 / 7.70                                      | 7.50 / 7.40         |                     |       |       |
| Comp output                                 |   |                                      |               | -                  | 1                          | -  | 3.80k               | 3.80k               |       |       |
|   | ise max size (A)                                |                                      |               | -                  |                            |  | 16                  |                     |       |       |
|   | edance (ΩMAX)                                   |                                      |               | -                  |                            |  | -                   |                     |       | -     |
| Fan Motor ou                                | tput (Indoor/Outdoor) W                         |                                      |               | 750                |                            |  | 120 x2              |                     |       | -     |
| Moisture rem                                |   | L/h                                  |               | 4.0 (4.0 x1)       |                            |  | -                   |                     |       |       |
| External stati                              | ·   | Pa                                   |               | 0 (MIN50 - MAX1    |                            |  | -                   |                     |       |       |
| Indoor                                      | Cooling<br>Heating                              | m³/min (H/M/L) (m³/                  |               | / 42.0 (3600) / (3 |                            | 1  | -                   |                     | -     | -     |
| Air flow<br>Outdoor                         | Cooling   | m³/min (H/M/L) (m³/<br>m³/min (m³/h) | 1) 60.0750.07 | / 42.0 (3600) / (3 | (2520)                     | -  | 164.0 (9840)        |                     | -     | -     |
| Air flow                                    | Heating   | m³/min (m³/h)<br>m³/min (m³/h)       | +             | <u> </u>           |                            | <del>                                     </del> | 164.0 (9840)        |                     | -     | -     |
|   | reating<br>rpe / amount (ship) kg / amount (n   |                                      |               |                    |                            |  | R32, 3.200 / 6.35   | i0                  |       |       |
| J. 2  | GWP   |                                      |               |                    |                            |  |                     |                     |       |       |
| F-Gas                                       | CO₂eq (ton) (PRECHA                             |                                      | 1             | -                  |                            | 1  | 675 / 2.16 / 4.29   | )                   | ,     |       |
|   | CO₂eq (ton) (MAXIMUM C                          |                                      | 1             | · '                |                            |  |                     |                     |       |       |
|   |   | Height (mm)                          | 1             | 400                |                            | t  | 1500                |                     |       |       |
| Product dime                                | ension  | Width (mm)                           |               | 1297               |                            |  | 980                 |                     |       | -     |
|   |   | Depth (mm)                           |               | 949                |                            |  | 370                 |                     |       | -     |
| Product dime                                | ension (Panel)                                  | H x W x D (mm)                       |               |                    |                            |  | -                   |                     |       |       |
|   |   | Height (mm)                          |               | 514                |                            |  | 1642                |                     |       | -     |
| Packing dime                                | ension  | Width (mm)                           |               | 1494               |                            | <b></b>  | 1095                |                     |       |       |
|   |   | Depth (mm)                           | +             | 1122               |                            | <del>                                     </del> | 529                 |                     |       | -     |
| Weight                                      |   | (NET) kg<br>(GROSS) kg               | +             | 61<br>73           |                            | <del> </del>                                     | 115<br>127          |                     |       |       |
| **cigiit                                    |   | Panel (NET) kg                       | +             | - 73               |                            |  | -                   |                     |       |       |
|   | Layers limit (actual)                           |                                      | 1             | 6 (7)              |                            | <b>†</b>   | 1 (2)               |                     |       |       |
| Cool (DBT)                                  |   |                                      | 18°C ~ 32°C   |                    |                            | -15°C ~ 52°C                                     |                     |                     |       |       |
| Operation condition Heat (DBT)              |   |                                      | 16°C~30°C     |                    |                            | -20°C ~ 24°C                                     |                     |                     |       |       |
| Max Working Pressure HP/LP Mpa (bar) (PS)   |   |                                      |               |                    | / 2.55                     |  |                     |                     |       |       |
|   | Max High Pressure M                             |                                      |               |                    |                            | .15  |                     |                     |       |       |
|   | Pipe port diamete                               | er mm (inch)                         | (Liquid) Ø9   | .52 (3/8) (Gas) (  | ð19.05 ( <mark>3/4)</mark> | (Liquid) Ø9                                      | .52 (3/8) (Gas) Ø   | 919.05 (3/4)        |       |       |
|   | Pipe diameter mm (in                            | ch) (Under 30m)                      |               | (Li                | quid) Ø9.52 (3/8           | ) (Gas) Ø19.05 (                                 | 3/4)                |                     |       | -     |
|   | Pipe diameter mm (ir                            |                                      |               | (Li                | quid) Ø9.52 (3/8           |  |                     |                     |       |       |
|   | Connecting method                               |                                      | <b>⊣</b>      | flared type        |                            |  | uid) & (Gas) flared |                     |       | -     |
| ing.  | Connecting metho                                |                                      |               | 7 F 2              |                            |  | uid) & (Gas) flared | d type              |       |       |
| Piping                                      | Standard le                                     |                                      | +             |                    |                            | 5m   |                     |                     |       |       |
|   | Pipe length r                                   | _                                    | +             | 20 10-5            | 5 ~ 5<br>( located lower   | 100m<br>/ 30m (OD locat                          | ed higher)          |                     |       |       |
|   | Indoor unit & Outdoor uni<br>Add gas amount g/n |                                      | +             | JUIII(UL           |                            | - 30m (OD tocati                                 | ou mgner)           |                     |       |       |
|   | Add gas amount g/                               |                                      |               |                    |                            | g/m  |                     |                     |       |       |
|   |   |                                      | 1             |                    |                            |  |                     |                     |       |       |
|   | Pipe length for additional gas m                |                                      |               | 30m                |                            |  |                     |                     |       |       |

## 1-2. Major Component Specifications

(A) Indoor Units

High Static Pressure Duct Type

| Model Name                                       |     | S-60PE4R                         |  |  |  |  |
|--|-----|----------------------------------|--|--|--|--|
| Source   |     | 230 - 240V, single phase, 50Hz   |  |  |  |  |
| Controller PCB Ass'y                             |     | ACXA74C22520                     |  |  |  |  |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø200)               |  |  |  |  |
| Fan motor  |     |                                  |  |  |  |  |
| ModelNominal output                              | W   | L6CBYYYL0548 560W                |  |  |  |  |
| Power source                                     |     | DC 200V-390V                     |  |  |  |  |
| No. of pole / r.p.m                              | rpm | 10P / 1160                       |  |  |  |  |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 2.7                              |  |  |  |  |
| Heat exchanger                                   |     |                                  |  |  |  |  |
| Coil resistance                                  |     | Aluminum plate fin / Copper tube |  |  |  |  |
| Row x Stage x FPI                                |     | 3 x 16 x 18                      |  |  |  |  |
| WxHxL  | mm  | 38.1 x 336 x 950                 |  |  |  |  |

| Model Name                                       | _   | S-71PE4R                         |  |  |  |  |
|--|-----|----------------------------------|--|--|--|--|
| Source   |     | 230 - 240V, single phase, 50Hz   |  |  |  |  |
| Controller PCB Ass'y                             |     | ACXA74C22530                     |  |  |  |  |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø200)               |  |  |  |  |
| Fan motor  |     |                                  |  |  |  |  |
| ModelNominal output                              | W   | L6CBYYYL0548 560W                |  |  |  |  |
| Power source                                     |     | DC 200V-390V                     |  |  |  |  |
| No. of pole / r.p.m                              | rpm | 10P / 1340                       |  |  |  |  |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 2.7                              |  |  |  |  |
| Heat exchanger                                   |     |                                  |  |  |  |  |
| Coil resistance                                  |     | Aluminum plate fin / Copper tube |  |  |  |  |
| Row x Stage x FPI                                |     | 3 x 16 x 18                      |  |  |  |  |
| WxHxL  | mm  | 38.1 x 336 x 950                 |  |  |  |  |

| Model Name                                       |     | S-100PE4R                        |  |  |  |  |
|--|-----|----------------------------------|--|--|--|--|
| Source   |     | 230 - 240V, single phase, 50Hz   |  |  |  |  |
| Controller PCB Ass'y                             |     | ACXA74C22540                     |  |  |  |  |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø200)               |  |  |  |  |
| Fan motor  |     |                                  |  |  |  |  |
| ModelNominal output                              | W   | L6CBYYYL0548 560W                |  |  |  |  |
| Power source                                     |     | DC 200V-390V                     |  |  |  |  |
| No. of pole / r.p.m                              | rpm | 10P/1300                         |  |  |  |  |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 2.7                              |  |  |  |  |
| Heat exchanger                                   |     |                                  |  |  |  |  |
| Coil resistance                                  |     | Aluminum plate fin / Copper tube |  |  |  |  |
| Row x Stage x FPI                                |     | 3 x 16 x 18                      |  |  |  |  |
| WxHxL  | mm  | 38.1 x 336 x 950                 |  |  |  |  |

| Model Name                                    |     | S-100PE4RN                       |  |  |  |  |
|---|-----|----------------------------------|--|--|--|--|
| Source  |     | 230 - 240V, single phase, 50Hz   |  |  |  |  |
| Controller PCB Ass'y                          |     | ACXA74C22550                     |  |  |  |  |
| Fan (Numberdiameter)                          | mm  | Sirocco (2 / Ø200)               |  |  |  |  |
| Fan motor                                     |     |                                  |  |  |  |  |
| ModelNominal output                           | W   | L6CBYYYL0548 560W                |  |  |  |  |
| Power source                                  |     | DC 200V-390V                     |  |  |  |  |
| No. of pole / r.p.m                           | rpm | 10P / 1300                       |  |  |  |  |
| Coil resistance (ambient temperature at 20°C) | Ω   | 2.7                              |  |  |  |  |
| Heat exchanger                                |     |                                  |  |  |  |  |
| Coil resistance                               |     | Aluminum plate fin / Copper tube |  |  |  |  |
| Row x Stage x FPI                             |     | 3 x 16 x 18                      |  |  |  |  |
| WxHxL mm                                      |     | 38.1 x 336 x 950                 |  |  |  |  |

| Model Name                                       |     | S-125PE4R                        |
|--|-----|----------------------------------|
| Source   |     | 230 - 240V, single phase, 50Hz   |
| Controller PCB Ass'y                             |     | ACXA74C22560                     |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø255)               |
| Fan motor  |     |                                  |
| ModelNominal output                              | W   | L6CBYYYL0548 560W                |
| Power source                                     |     | DC 200V-390V                     |
| No. of pole / r.p.m                              | rpm | 10P / 970                        |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 2.7                              |
| Heat exchanger                                   |     |                                  |
| Coil resistance                                  |     | Aluminum plate fin / Copper tube |
| Row x Stage x FPI                                |     | 3 x 22 x 18                      |
| WxHxL  | mm  | 38.1 x 462 x 950                 |

| Model Name                                       |     | S-125PE4RN                       |
|--|-----|----------------------------------|
| Source   |     | 230 - 240V, single phase, 50Hz   |
| Controller PCB Ass'y                             |     | ACXA74C22570                     |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø255)               |
| Fan motor  |     |                                  |
| ModelNominal output                              | W   | L6CBYYYL0548 560W                |
| Power source                                     |     | DC 200V-390V                     |
| No. of pole / r.p.m                              | rpm | 10P / 970                        |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 2.7                              |
| Heat exchanger                                   |     |                                  |
| Coil resistance                                  |     | Aluminum plate fin / Copper tube |
| Row x Stage x FPI                                |     | 3 x 22 x 18                      |
| WxHxL  | mm  | 38.1 x 462 x 950                 |

| Model Name                                       |     | S-140PE4R                        |  |
|--|-----|----------------------------------|--|
| Source   |     | 230 - 240V, single phase, 50Hz   |  |
| Controller PCB Ass'y                             |     | ACXA74C22580                     |  |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø255)               |  |
| Fan motor  |     |                                  |  |
| ModelNominal output                              | W   | L6CBYYYL0549 750W                |  |
| Power source                                     |     | DC 200V-373V                     |  |
| No. of pole / r.p.m                              | rpm | 10P / 1080                       |  |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 3.5                              |  |
| Heat exchanger                                   |     |                                  |  |
| Coil resistance                                  | •   | Aluminum plate fin / Copper tube |  |
| Row x Stage x FPI                                | ·   | 3 x 22 x 18                      |  |
| WxHxL  | mm  | 38.1 x 462 x 950                 |  |

| Model Name                                       |     | S-140PE4RN                       |  |
|--|-----|----------------------------------|--|
| Source   |     | 230 - 240V, single phase, 50Hz   |  |
| Controller PCB Ass'y                             |     | ACXA74C22590                     |  |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø255)               |  |
| Fan motor  |     |                                  |  |
| ModelNominal output                              | W   | L6CBYYYL0549 750W                |  |
| Power source                                     |     | DC 200V-373V                     |  |
| No. of pole / r.p.m                              | rpm | 10P / 1080                       |  |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 3.5                              |  |
| Heat exchanger Coil resistance                   |     |                                  |  |
|  |     | Aluminum plate fin / Copper tube |  |
| Row x Stage x FPI                                |     | 3 x 22 x 18                      |  |
| WxHxL  | mm  | 38.1 x 462 x 950                 |  |

| Model Name                                       |     | S-160PE4R                        |  |
|--|-----|----------------------------------|--|
| Source   |     | 230 - 240V, single phase, 50Hz   |  |
| Controller PCB Ass'y                             |     | ACXA74C22600                     |  |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø255)               |  |
| Fan motor  |     |                                  |  |
| ModelNominal output                              | W   | L6CBYYYL0549 750W                |  |
| Power source                                     |     | DC 200V-373V                     |  |
| No. of pole / r.p.m                              | rpm | 10P / 1080                       |  |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 3.5                              |  |
| Heat exchanger                                   |     |                                  |  |
| Coil resistance                                  |     | Aluminum plate fin / Copper tube |  |
| Row x Stage x FPI                                |     | 3 x 22 x 18                      |  |
| WxHxL  | mm  | 38.1 x 462 x 950                 |  |

| Model Name                                       |     | S-160PE4RN                       |  |
|--|-----|----------------------------------|--|
| Source 230 - 240V, single phase, 50Hz            |     | 230 - 240V, single phase, 50Hz   |  |
| Controller PCB Ass'y ACXA74C22610                |     | ACXA74C22610                     |  |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø255)               |  |
| Fan motor  |     |                                  |  |
| ModelNominal output                              | W   | L6CBYYYL0549 750W                |  |
| Power source                                     |     | DC 200V-373V                     |  |
| No. of pole / r.p.m                              | rpm | 10P / 1080                       |  |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 3.5                              |  |
| Heat exchanger Coil resistance                   |     |                                  |  |
|  |     | Aluminum plate fin / Copper tube |  |
| Row x Stage x FPI                                |     | 3 x 22 x 18                      |  |
| WxHxL  | mm  | 38.1 x 462 x 950                 |  |

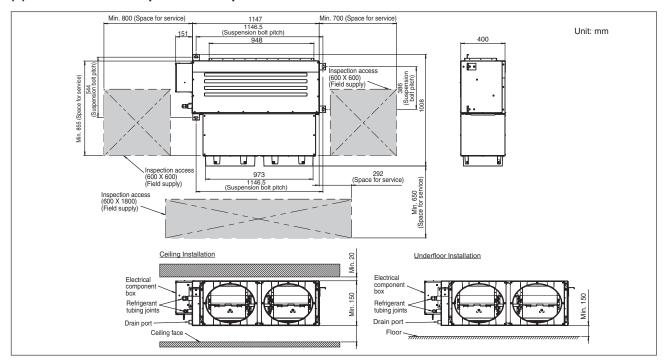
| Model Name                                       |     | S-160PE4RA                       |  |
|--|-----|----------------------------------|--|
| Source   |     | 230 - 240V, single phase, 50Hz   |  |
| Controller PCB Ass'y                             |     | ACXA74C22620                     |  |
| Fan (Numberdiameter)                             | mm  | Sirocco (2 / Ø255)               |  |
| Fan motor  |     |                                  |  |
| ModelNominal output                              | W   | L6CBYYYL0549 750W                |  |
| Power source                                     |     | DC 200V-373V                     |  |
| No. of pole / r.p.m                              | rpm | 10P / 1080                       |  |
| Coil resistance<br>(ambient temperature at 20°C) | Ω   | 3.5                              |  |
| Heat exchanger  Coil resistance                  |     |                                  |  |
|  |     | Aluminum plate fin / Copper tube |  |
| Row x Stage x FPI                                |     | 3 x 22 x 18                      |  |
| WxHxL  | mm  | 38.1 x 462 x 950                 |  |

#### 1-3. Dimensional Data

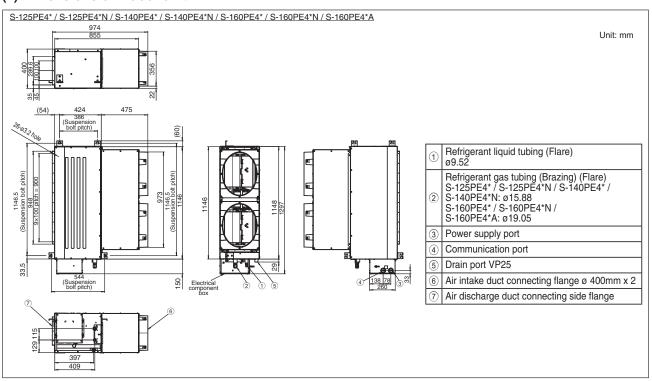
#### (A) Indoor Units

#### **Required Minimum Space for Installation and Service**

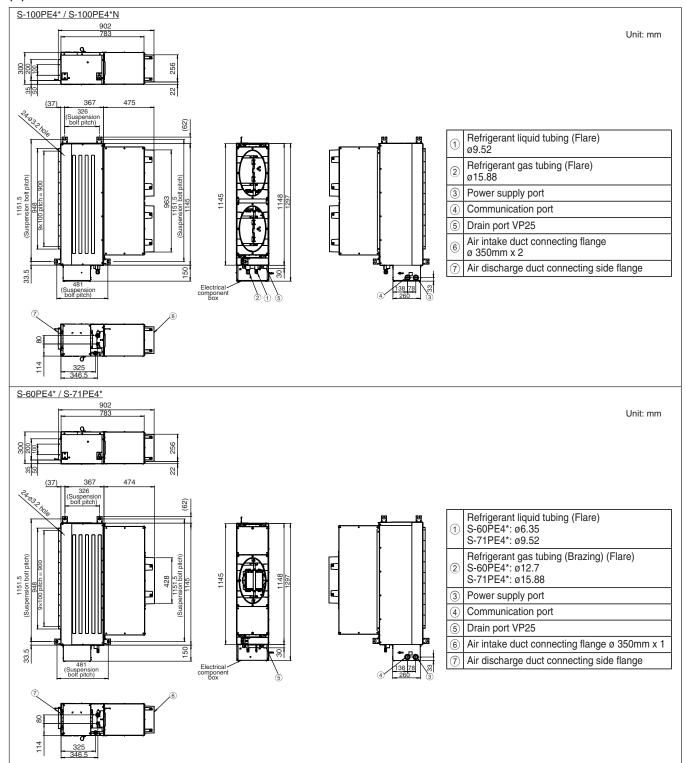
### (1) Dimensions of suspension bolt pitch and unit



#### (2) Dimensions of indoor unit



#### (A) Indoor Units

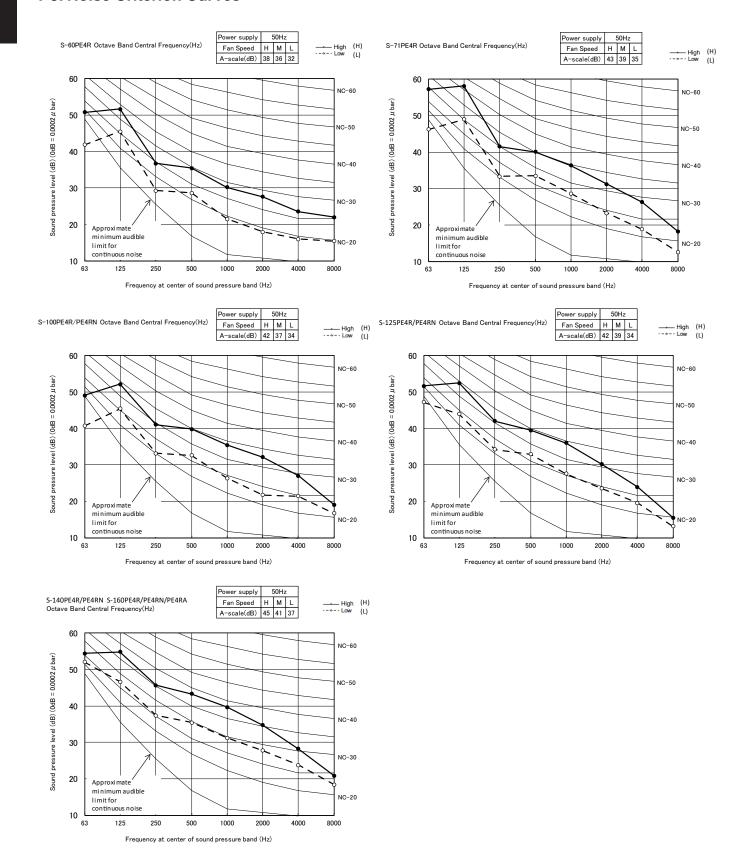


## 1-4. Operating Range

## S-60PE4R S-71PE4R S-100PE4R S-100PE4RN S-125PE4R S-125PE4RN S-140PE4R S-140PE4RN S-160PE4R S-160PE4RN S-160PE4RA

| Temperature °C (°F) |      | Indoor    |
|---------------------|------|-----------|
| HEAT                | Max. | 30 (80.6) |
|                     | Min. | 16 (60.8) |
| COOL                | Max. | 32 (89.6) |
|                     | Min. | 18 (64.4) |

### 1-5. Noise Criterion Curves



#### 1-6. Installation Instructions

#### ■ SELECT THE INDOOR UNIT INSTALLATION LOCATION

#### 1-1. Indoor Unit

- Provide a check port on the piping side ceiling for repair and maintenance.

   Install the indoor unit once the following conditions are satisfied and after receiving the customer approval.

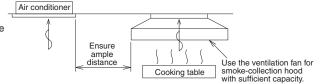
  - The indoor unit must be within a maintenance space.
     The indoor unit must be free from any obstacles in path of the air inlet and outlet, and must allow spread of air throughout the room.
- If the height from the floor to ceiling exceeds three meters, air flow distribution deteriorates and the effect is decreased.

#### WARNING

- The installation position must be able to support a load four times the indoor unit weight.
  The indoor unit must be away from heat and sources of steam, but avoiding installation near an entrance.
  The indoor unit must allow easy draining.
  The indoor unit must allow easy connection to the outdoor unit.
  The indoor unit must be at least 3 m away from any noise-generating equipment. The electrical wiring must be shielded with a steel conduit.
  If the power supply is subject to noise generation, add a suppressor.
  Do not install the indoor unit in a laundry. Electric shocks may result.
- 10. Installation height is more than 2.5m (except PE4\*A series).

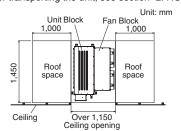
#### Thoroughly study the following installation locations

- In such places as restaurants and kitchens, considerable amount of oil steam and flour adhere to the fan, the fin of the heat exchanger, resulting in heat exchange reduction, spraying, dispersing of water drops, etc. In these cases, take the following actions:
- Make sure that the ventilation fan for smoke-collecting hood on a cooking table has sufficient capacity so that it draws oily steam which should not flow into the suction of the air conditioner.
- Make sure there is enough distance from the cooking room to install the air conditioner in such place where it may not suck in
- Avoid installing the air conditioner in such circumstances where cutting oil mist or iron powder exist, especially in factories, etc.
- Avoid places where inflammable gas is generated, flows-in, contaminated, or leaked.
- Avoid places where sulphurous acid gas or corrosive gas can
- Avoid places near high frequency generators.



#### 1-2. When transporting the indoor unit to the roof space through the ceiling opening

Transport is possible without separation with a ceiling opening dimension of over 1,450  $\times$  1,150 mm and a roof space dimension as shown below. After transporting the unit, see section "2. HOW TO INSTALL THE INDOOR UNIT"



Criteria for ceiling opening dimension and height of roof space

| Width of ceiling opening | Height of roof space | Necessity of<br>separating indoor<br>unit |
|--------------------------|----------------------|---|
| 1,150                    | 1,450                | Unnecessary                               |
| 1,150                    | 850                  | Necessary                                 |
| 650                      | 1,450                | Necessary                                 |

Unit: mm

It is possible to separate the indoor unit into Fan Block and Unit Block. Separated transport if necessary

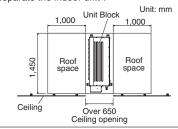
#### <Case 1>

If a ceiling opening dimension is over 850 x 1,150 mm and a roof space dimension is shown below, the indoor unit can be separated to fit through the space. For separating procedure, see section "1-3. How to separate the indoor unit"

Unit Block 1,400 1,400 Roo Roof space space Ceiling Over 1,150 Ceiling opening

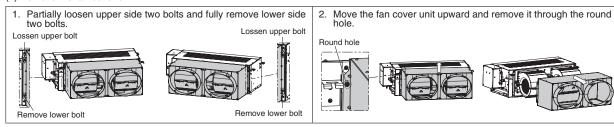
#### <Case 2>

If a ceiling opening dimension is over  $1,450 \times 650$  mm and a roof space dimension is shown below, the indoor unit can be separated to fit through the space. For separating procedure, see section "1-3. How to separate the indoor unit"

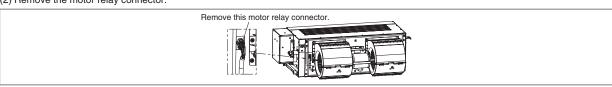


### 1-3. How to separate the indoor unit

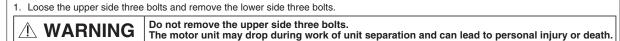
(1) Remove the fan cover unit.

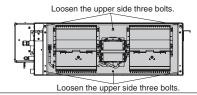


(2) Remove the motor relay connector.



(3) Separate the fan motor unit and heat exchanger unit.





2. Move upward and remove the fan motor unit through the round hole.



#### 1-4. How to assemble the indoor unit

(1) Attach the fan motor unit.

Attach the fan motor unit in reverse order of separating unit.

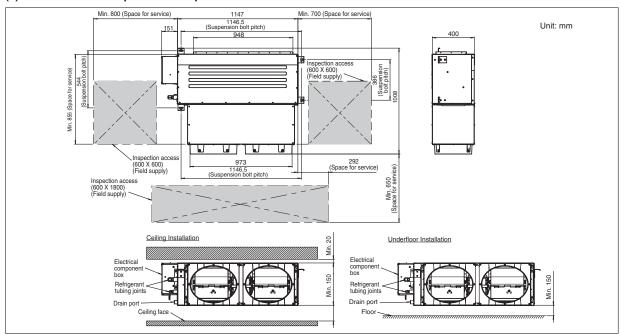
(2) Attach the fan cover unit and wire cover.

Attach the fan cover unit and wire cover in reverse order of separating unit.

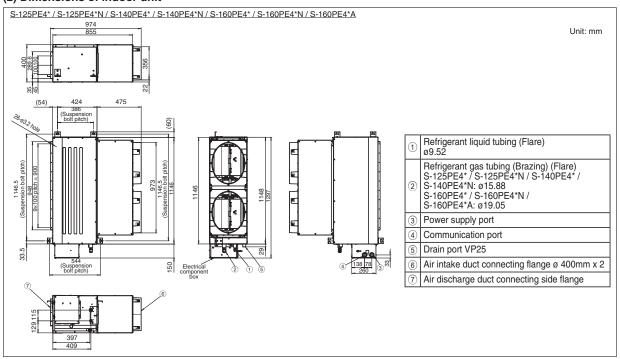
### **■ HOW TO INSTALL THE INDOOR UNIT**

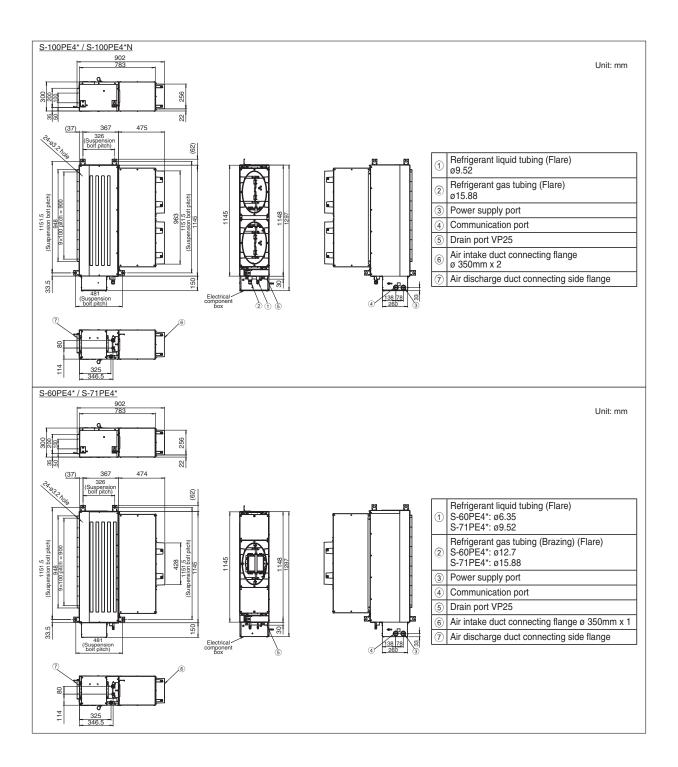
### 2-1. Required Minimum Space for Installation and Service

#### (1) Dimensions of suspension bolt pitch and unit



#### (2) Dimensions of indoor unit

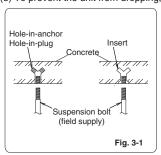


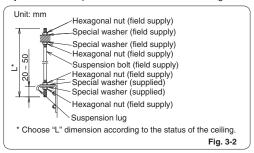


#### 2-2. Suspending the Indoor Unit

Depending on the ceiling type:

- (1) Check the suspension bolt pitch.
- (2) Ensure that the ceiling is strong enough to support the weight of the unit.
- (3) To prevent the unit from dropping, firmly fasten the suspension bolts as shown in the figure below.





NOTE

Suspension bolt M10 or 3/8' (field supply)

#### WARNING

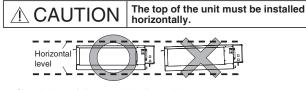
It is important that you use extreme care in supporting the indoor unit inside the

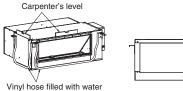
ceiling.

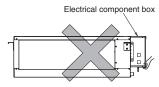
Ensure that the ceiling is strong enough to support the weight of the unit. Before suspending the unit, test the strength of each attached suspension bolt.

(1) When placing the unit inside the ceiling, determine the pitch of the suspension bolts referring to the dimensional data given previously. Tubing must be laid and connected inside the ceiling when suspending the unit.
If the ceiling is already constructed, lay the tubing into position for connection to the unit before placing the unit inside the ceiling.

(2) Screw in the suspension bolts allowing them to protrude from the ceiling as shown in Fig. 3-1.
(Cut the ceiling material, if necessary.)
(3) Suspend and fix the indoor unit using the 2 hexagonal nuts (field supply) and special washers (supplied with the unit) as shown in Fig. 3-2.







Check the unit is placed horizontally.

Make sure the unit is installed level using a level or a vinyl hose filled with water.

In using a vinyl hose instead of a level, adjust the top surface of the unit to the surface of the water at both ends of the vinyl hose and make horizontal adjustment on all 4 corners of the unit.

If the air discharge side of the unit is installed downward, splashing water or water leak may occur. Also, the dust may accumulate inside the drain pan caused by draining residual water.

When lifting the unit, do not attempt to hold the electrical component box in hand.

#### 2-3. Underfloor Installation

#### 1. Ventilation and Airflow

The installation location must be in a well-ventilated space to ensure no stagnation of leaking refrigerant can occur.
Always use Panasonic-authorized CZ parts for controlling the ventilation damper to maintain system compatibility and ensure operational safety.
For the installation or servicing of R32 gas leak ventilation systems, consult a Panasonic-authorized dealer or specialist. Improper installation may

compromise safety and regulatory compliance.

#### 2. Drainage Considerations

A proper drainage system must be in place to handle condensate water to prevent corrosion and mold build up.

#### 3. Structural Support

- The unit must be installed on a stable, vibration-resistant platform to avoid excessive movement and noise.
- If mounted on a suspended floor, ensure adequate bracing or reinforcement to support the unit's weight.

#### 4. Service and Maintenance Access

- Allow enough space for future servicing, including access to:
- o Electrical connections
- o Refrigerant piping
- o Filters and drainage systems
- A minimum 600 mm clearance around service panels is recommended for easy maintenance.

#### 5. Compliance with AS/NZS Standards

- AS/NZS 3000 (Wiring Rules) Regulates electrical connections and safety requirements.
- AS/NZS 60335.2.40 Covers safety for heat pumps and air conditioners, including refrigerant considerations.
- AS/NZS 1668.1 Ensures proper ventilation to prevent refrigerant accumulation in confined spaces.

#### 2-4. Installing the Refrigerant Tubing

The size of the refrigerant tubing is as shown in the table below.

#### Table 2-1

| Туре           | S-60PE4*  | S-71PE4* / S-100PE4* / S-100PE4*N / S-125PE4* / S-125PE4*N / S-140PE4*N                                    | S-160PE4* / S-160PE4*N / S-160PE4*A  |  |  |  |
|----------------|---|--|--|--|--|--|
| Gas<br>tube    | ø12.7 (Flare connection) Tightening torque (approximate): 49 ~ 55 N•m Thickness of connecting tube: 0.8mm | ø15.88 (Flare connection) Tightening torque (approximate): 68 ~ 82 N•m Thickness of connecting tube: 1.0mm | ø19.05 (Flare connection) Tightening torque (approximate): 100 ~ 120 N•m Thickness of connecting tube: 1.0mm |  |  |  |
| Liquid<br>tube | ø6.35 (Flare connection) Tightening torque (approximate): 14 ~ 18 N•m Thickness of connecting tube: 0.8mm | ø9.52 (Flare connection) Tightening torque (approximate): 34 ~ 42 N•m Thickness of connecting tube: 0.8 mm |  |  |  |  |

#### 2-5. Installing the Drain Piping

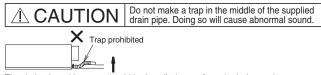
#### 2-5-1. Before Performing the Installation Drain Piping

(1) (Prepare standard hard PVC pipe (O.D. 32 mm) for the drain and use the supplied drain socket to prevent water leaks. The PVC pipe must be purchased separately.

When doing this, apply adhesive for the PVC pipe at the connection point.

See section "2-5-2. Installing the Drain Pipe".

(2) Limitations of Drain Hose Connection



The drain pipe with a trap should be installed away from the indoor unit. Do not attach any air purge equipment. If attached, drain water may result in splashing

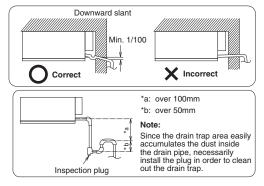
(6) When the drain piping is completed, perform the water leak test and check for a water

leak. If detected, it may result in water leakage or condensation.

(7) When the drain piping is completed, perform the drainage test if the water drains smoothly. If not draining smoothly, it may result in water leakage or condensation.

(8) When the drain piping work is finished securely, wrap the insulation material around the indoor side drain pipe. At this time, do not wrap together with the refrigerant tubing. If wraped together, the drain pipe is lifted and water drainage will not be operated. Consequently, the water comes out of the drain pan and it can lead to water leakage.

(3) Ensure the drain pipe has a downward slant (1/100 or



#### 2-5-2. Installing the Drain Pipe

#### **⚠ CAUTION**

(1) How to Connect Drain Port and Drain Hose

First insert the supplied hose band into the drain port pipe. Then make sure the head of the screw is facing toward a technical engineer when placing the screw of the hose band at an upward angle.
Insert the soft PVC socket of the supplied drain hose to the drain port pipe.

Never apply the adhesive to the both ends of the soft PVC socket and the drain port pipe.

Insert the drain hose to the point where there is a difference in level as shown in the figure below and fasten it with the hose band 5 mm away from that position.

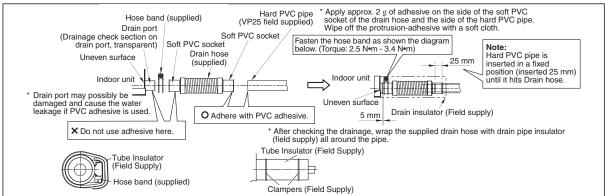
Tightening torque must be 2.5 ~ 3.4 N•m.
Tightening position of the hose band must be upward.

(2) How to Install the Drain Pipe

Connect the hard PVC pipe (O.D. 32 mm) to the side of the soft PVC socket of the drain hose.

Apply approx. 2 g of adhesive on the side of the soft PVC socket of the drain hose and the side of the hard PVC pipe.

Do not apply force to the drain port when connecting the drain pipe. Install and fix it near the indoor unit as close as possible.



Selection of heat insulation materials for drain hose (Drain insulator). When using the heat insulation materials (field supply), kindly use the same size and performance as refrigerant tubes. Check for its size as below table.

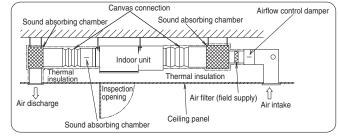
|  | Insulation Material   | Thermal insulation thickness              |  |  |
|--|---|---|--|--|
|  | Polyethylene foam (same as heat insulators for refrigerant tubes) | Insulation thickness must 10mm or greater |  |  |

#### 2-6. Caution for Ducting Work

This unit has high static pressure. In case of small pressure resistance (for instance, a short duct), install an airflow control damper (field supply) for adjusting airflow volume as airflow volume / airflow noise increases.

If the air conditioner is to be installed in a room such as an office or meeting room which needs a low sound level, provide a supply and return sound absorption chamber with an acoustic liner.

Use a flexible canvas connection or vibration isolation hanger (field supply) to break transmission of mechanical vibration of the unit.



## CAUTION

Use incombustible duct materials.

Use thermal insulation to prevent duct condensation.

An air filter (field supply) must be installed at the air intake side. If not installed, the heat exchanger will get dirty and the unit will

reduce the quality.

Obtain and install an air filter (field supply) which can easily wash away the dust by lukewarm, soapy water or suck up with a vacuum cleaner

Clean the air filter periodically to collect dust and other particles from the air. Use duct static pressure within a range of specification value.

#### **■ ELECTRICAL WIRING**

**↑** WARNING

As to main power source and cable size of outdoor unit, read the installation manual attached to the outdoor unit.

#### 3-1. General Precautions on Wiring

- This air conditioner must be installed in accordance with national wiring regulations.
- Cables connected to indoor unit must be approved polychloroprene sheathed type 60245 IEC 57 or heavier.
- The units must be connected to the supply cables for fixed wiring by qualified technician. Circuit breaker must be incorporated in the fixed wiring in accordance with the national wiring regulations. The circuit breaker must be approved, suitable for the voltage and current ratings of equipment and have a contact separation by 3mm in all poles.

When the supply cable is damaged, it must be replaced by qualified technician.

- Be sure to install a current leakage breaker, main switch and fuse to the main power supply, otherwise electric shocks may result.
- Be sure to connect the unit to secure earth connection.
   If the earthing work is not carried out properly, electric shocks may result.
- Wiring shall be connected securely by using specified cables and fix them securely so that external force of the cables may not transfer to the terminal connection section. Imperfect connection and fixing leads to fire, etc.
- Select a power source that is capable of supplying the current required by the air conditioner.
   Feed the power source to the unit via a distribution switch board designed for this purpose, the switch should disconnect all poles with a contact separation of at least 3 mm.

- contact separation of at least 3 mm.

  (3) Always ground the air conditioner with a grounding wire and screw to meet the LOCAL REGULATIONS.

  (4) Be sure to connect the indoor/outdoor unit connection wires correctly to terminal board.

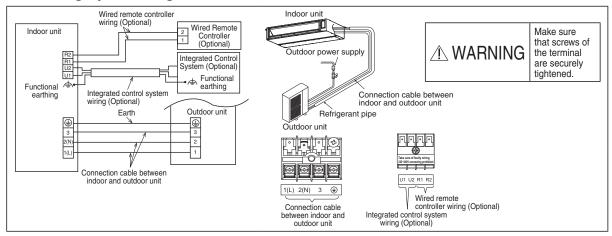
  (5) Be sure to turn off the main power before installing and connecting the remote controller.

  (6) Each wiring connection must be done in accordance with the wiring system diagram.

  Wrong wiring may cause the wires overloaded and overheated.

If momentarily turning on the power supply for both the indoor and outdoor units, do not turn the power off after at least 1 minute has passed. (For the system's automatic setting.) Turning off the power supply on the way may cause an abnormal operation.

#### 3-2. Wiring System Diagrams



### 3-3. Recommended Wire Length and Wire Size

Connection cable between Indoor and Outdoor Unit

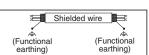
| Wire Size          | Length   |
|--------------------|----------|
| 2.5mm <sup>2</sup> | Max.100m |

Wired Remote Controller

| Wire Size           | Length                                 |
|---------------------|--|
| 0.75mm²<br>(AWG#18) | Max. 500m<br>Max .100m<br>(CZ-RTC6BLW) |

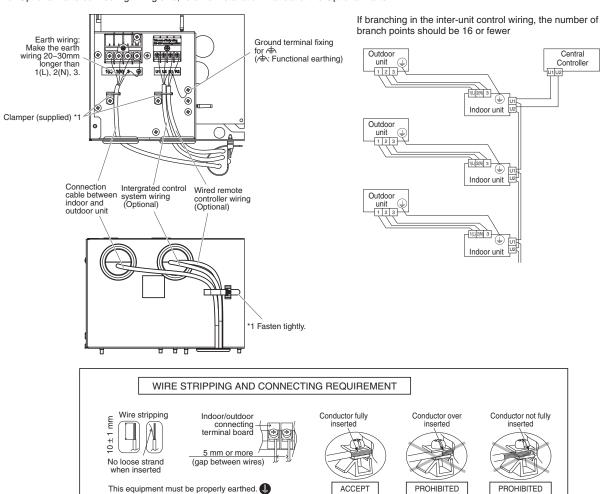
Wired Remote Controller (Optional)

Use shielded wires for integrated control system wiring and ground the shield on both sides, otherwise misoperation from noise may occur. Connect wiring as shown in Section 3-2 Wiring System Diagrams.



#### NOTE

For Optional Parts connecting wiring size, refer to Installation Manual of the Optional Parts



Note:
Isolating Devices (Disconnecting means) should have minimum 3.0 mm contact gap.

Earth wire shall be Yellow/Green (Y/G) in colour and longer than other AC wires for safety reasons.

Earth lead wire shall be longer than other lead wires as shown in the figure for the electrical safety in case of the cord slipping out of anchorage.

ACCEPT

#### ■ REFRIGERANT PIPING

Must ensure mechanical connections be accessible for maintenance purposes. The liquid tubing side is connected by a flare nut, and the gas tubing side is connected by brazing.

#### 4-1. Connecting the Refrigerant Tubing

**Cautions During Brazing** 

- Replace air inside the tube with nitrogen gas to prevent copper oxide film from forming during the brazing process. (Oxygen, carbon dioxide and Freon are not acceptable.)

  Do not allow the tubing to get too hot during brazing. The nitrogen gas inside the tubing may overheat, causing refrigerant system valves to become damaged. Therefore allow the tubing to cool when brazing.

Use a reducing valve for the nitrogen cylinder.

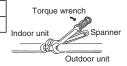
Do not use agents intended to prevent the formation of oxide film. These agents adversely affect the refrigerant and refrigerant oil, and may cause damage or malfunctions.

#### 4-2. Connecting Tubing Between Indoor and Outdoor Units

(1) Tightly connect the indoor-side refrigerant tubing extended from the wall with the outdoor-side tubing.

#### **Indoor Unit Tubing Connection**

| Indoor unit type   | S-60PE4* | S-71PE4* / S-100PE4* / S-100PE4* N /<br>S-125PE4* / S-125PE4* N / S-140PE4* /<br>S-140PE4* N | S-160PE4* /<br>S-160PE4*N /<br>S-160PE4*A |
|--------------------|----------|--|---|
| Gas tubing (mm)    | ø12.7    | ø15.88   | ø19.05                                    |
| Liquid tubing (mm) | ø6.35    | ø9.52  |   |



(2) To fasten the flare nuts, apply specified torque.

- When removing the flare nuts from the tubing connections, or when tightening them after connecting the tubing, be sure to use a torque wrench and a spanner. If the flare nuts are over-tightened, the flare may be damaged, which could result in refrigerant leakage and cause injury or asphyxiation to room occupants.
- For the flare nuts at tubing connections, be sure to use the flare nuts that were supplied with the unit, or else flare nuts for R410A, R32 (type 2). The refrigerant tubing that is used must be of the correct wall thickness as shown in the table below.

| Tube diameter | Flare nut tightening torque (approximate) | Min. tube thickness |  |
|---------------|---|---------------------|--|
| ø6.35 (1/4")  | 16±2 N•m {160±20 kgf•m}                   | 0.8 mm              |  |
| ø9.52 (3/8")  | 38±4 N•m {380±40 kgf•cm} 0.8 mr           |                     |  |
| ø12.7 (1/2")  | 52±3 N•m {520±30 kgf•cm} 0.8 mm           |                     |  |
| ø15.88 (5/8") | 75±7 N•m {750±70 kgf•cm} 1.0 mi           |                     |  |
| ø19.05 (6/8") | 110±10 N•m {1100±100 kgf•cm} 1.0 mm       |                     |  |

- Because the pressure is approximately 1.6 times higher than conventional refrigerant R22 pressure, the use of ordinary flare nuts (type 1) or thin-walled tubes may result in tube rupture, injury, or asphyxiation caused by refrigerant leakage.

  In order to prevent damage to the flare caused by over-tightening of the flare nuts, use the table above as a guide when tightening.
- When tightening the flare nut on the liquid tube, use an adjustable wrench with a nominal handle length of 200 mm.
- 4-3. Insulating the Refrigerant

## CAUTION

Be sure to perform heat insulation on the drain, liquid and gas piping. Imperfection in heat insulation work leads to water leakage.

- (1) Selection of heat insulation materials for refrigerant tube. When using heat insulation materials (field supply), kindly check for its sizes and performance.

- Material for insulation material: Polyethylene foam.
  Heat transfer rate: less than 0.051W/m·K.
  Material withstand temperature: 120°C or above (gas tubing).
  For other tubing 80°C or above

- Must be easy to use, age resistance and not easily absorb moisture. Be sure to match the below insulation material size with tube sizes.

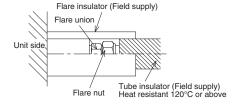
| Piping size, mm (In) | Thermal insulation size (I.D.) | Thermal insulation Thickness                 |
|----------------------|--------------------------------|--|
| 6.35 (1/4")          | 10 ~ 13 mm                     |  |
| 9.52 (3/8")          | 12 ~ 15 mm                     | ]  |
| 12.7 (1/2")          | 14 ~ 16 mm                     | Inculation thickness must be 10mm or greater |
| 15.88 (5/8")         | 17 ~ 20 mm                     | Insulation thickness must be 10mm or greater |
| 19.05 (3/4")         | 20 ~ 24 mm                     |  |
| ø25.4 (1")           | 25 ~ 28 mm                     | 1  |

#### (2) Taping the flare nuts

- Wind the white insulating tape around the flare nuts at the gas tube connection. Then cover up the tubing connection with tube insulator (field supply) and fill in the
- gap with black insulation tape. Finally fasten with clampers (field supply)

#### NOTE

If noise bothers you from the area between indoor and outdoor units' connection pipes, it is effective to wind the soundproofing materials (field supply) to reduce noise.



## **⚠** CAUTION

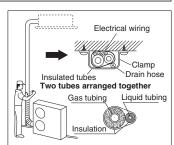
After a tube has been insulated, never try to bend it into a narrow curve because it can cause the tube to break or crack. Never grasp the drain or refrigerant connecting outlets when moving the unit.

#### (3) Taping the tubes

- Refrigerant tubes (and electrical wiring if local permit) should be taped together with armouring tape in 1 bundle. Keep the drain hose separate from refrigerant tube to prevent condensation.
- Wrap the armouring tape from bottom of the outdoor unit to the tubing here it enters the wall. Overlap half of each previous turn.

  Clamp the tubing to the wall, using 1 clamp approx. per each meter apart.

Do not wind the armouring tape too tightly since this will decrease the heat insulation effect. Also ensure that the condensation drain hose splits away from the bundle and drips clear of the unit and the tubing





If the exterior of the outdoor unit valves has been finished with a square Duct covering, make sure you allow sufficient space to access the valves and to allow the panels to be attached and removed.

#### (4) Finishing the Installation

After finishing insulating and taping over the tubing, use sealing putty to seal off the hole in the wall to prevent rain and draft from entering.

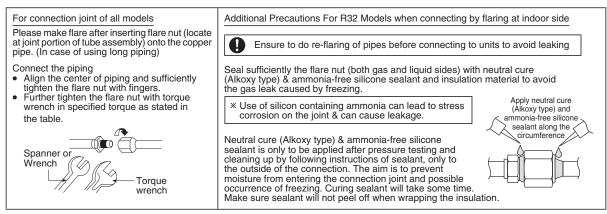
#### (5) Precautions in high humidity circumstances

- This air-conditioner has been tested according to the "JIS Standard Conditions with Mist" and have been confirmed that there are no faults. However, if it is operated for a long time in high humid atmosphere (dew point temperature: more than 23 °C ), water drops are liable to fall. In this case, add heat insulation material according to the following procedures:

  1. Heat insulation material to be prepared. Adiabatic glass wool with thickness 10~20mm

  - 2. Stick the wool on all air-conditioners that are located in the ceiling atmosphere
  - 3. In addition to the normal heat insulation (thickness: more than 10mm) refrigerant piping, add a further of 10~30 mm thickness material.

#### 4-4. Additional Precautions for R32 models



(1) Vacuum Drying

After completing the piping connection, execute vacuum drying for the connecting piping and the indoor unit. The vacuum drying must be carried out by using the service ports of both the liquid and gas side valves.

## ■ HOW TO INSTALL THE TIMER REMOTE CONTROLLER OR HIGH-SPEC WIRED REMOTE **CONTROLLER (OPTIONAL PART)**

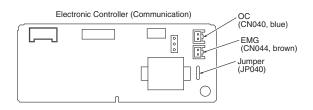
NOTE

Refer to the Installation Instructions attached to the optional Timer Remote Controller or optional High-spec Wired Remote Controller.

### ■ PRECAUTIONS ON TEST RUN

- Request that the customer be present when the test run is performed. At this time, explain the operation manual and have the customer perform the actual steps
- Check that the 230 –240 VAC power is not connected to the U1 & U2 terminal board terminal.
  \* If 230 –240 VAC is accidentally applied, the Fuse on indoor unit
  - Electronic Controller (Communication) will blow in order to protect

In this case, recover the connection by disconnect 2P connector wires that originally connected to the indoor unit Electronic Controller (Communication) OC connector and shift the connector wires to EMG connector on same indoor unit Electronic Controller (Communication). If operation is still not possible after shift to EMG connector, cut the jumper JP040 on the same indoor unit Electronic Controller (Communication).



#### **■ EXTERNAL STATIC PRESSURE SETTING**

Choose one of the methods (selection of "a", "b", "c" within the range of dotted line as shown in the flowchart below) and make settings.

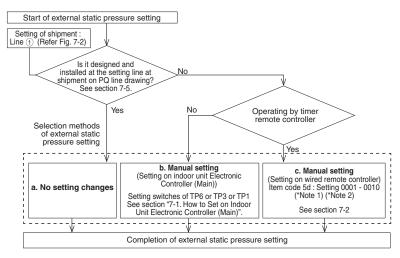
a. No setting changes: When using as it is factory preset at shipment.

(If resetting after external static pressure setting once, it might be different from factory preset.)

b. Manual setting (on indoor unit Electronic Controller (Main)): This is static pressure setting excepting factory preset at shipment. Dip switch select method.

- c. Manual setting (by wired remote controller): Static pressure setting excepting factory preset at shipment.

#### Flow of External Static Pressure



#### NOTE

- (1) Refer to Table 7-2 and Fig. 7-2 for details on the relationship between the value of item code "5d" and the external static pressure.
- (When set in group control (connecting multiple indoor units with one timer remote controller), set each indoor unit to item code "5d".

When amending the setting after selecting [b. Manual when tarterituing it is setting after selecting [b. Manual setting] (due to airflow path changes, etc.), it is necessary to cancel [b. Manual setting] (switching OFF positions). When [b. Manual setting] has not been cancelled, [c. Manual setting] will be activated if selected, but [b. Manual setting] takes precedence when the power is switched back on after power outages, etc.

#### CAUTION

- Make sure the external static pressure is in a range of specifications.
  - Then proceed the external static pressure setting. Improper settings can cause noise, a shortage of airflow volume and water leakage.
  - Refer to Fig. 7-2 for the external static pressure setting range.
- Be sure to set the [External Static Pressure Setting] once again after amending the airflow path for the duct or air outlet after setting the external static pressure.

#### 7-1. How to Set on Indoor Unit Electronic Controller (Main)

- (1) Turn off the power breaker to halt the supply of electricity to the indoor unit Electronic Controller (Main).
  (2) Open the lid of the electrical component box and confirm the location where the Select switch on the indoor unit Electronic Controller (Main) is
- placed. (Fig. 7-1)

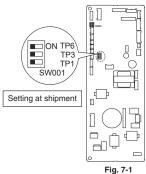
  (3) Set the On/Off switches in the Off position which are now set in the On position.

  Select the positions of the Select SW001 switches respectively to make the desired external static pressure settings referring to the Table 7-1.

Table 7-1 External static pressure SW setting

| External static pressure at the time of rated airflow volume |          |                           |                           | SW001                     |   |     |         |     |
|--|----------|---------------------------|---------------------------|---------------------------|---|-----|---------|-----|
| S-60PE4*   | S-71PE4* | S-100PE4* /<br>S-100PE4*N | S-125PE4* /<br>S-125PE4*N | S-140PE4* /<br>S-140PE4*N | S-160PE4* /<br>S-160PE4*N /<br>S-160PE4*A | TP6 | TP3     | TP1 |
| 110Pa  |          | 110Pa                     |                           | ON1                       | 2   | 3   |         |     |
| 50Pa   |          | 70Pa                      |                           | 1                         | ON<br>2                                   | 3   |         |     |
| 10Pa   |          |                           | 50                        | )Pa                       | 1   | 2   | ON<br>3 |     |

Indoor Unit Electronic Controller (Main)



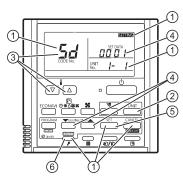
#### 7-2. Operating the Timer Remote Controller (CZ-RTC4A)

### How to set the external static pressure

- (1) Press and hold down the \_\_\_\_, \_\_\_ and \_\_\_\_ buttons simultaneously for 4 or more seconds. (SETTING) the Unit No., Item Code and Detailed Data will blink on the LCD display.)
- (2) The indoor unit numbers in the group control will be sequentially displayed whenever the Unit Select button is pressed Only the fan motor for the selected indoor unit will operate during this time.
- (3) Specify the "5d" item code by pressing the  $\bigcirc$  /  $\triangle$  buttons for the temperature setting buttons and confirm the values. (" $\square$   $\square$   $\square$   $\square$  set at shipment) (4) Press the  $\bigcirc$  /  $\bigcirc$  buttons for the time to amend the values for the set data.
- 4) Press the \_\_\_/ \_\_\_ buttons for the time to amend the values for the set data Refer to Table 7-2 and Fig. 7-2 and select a value "@@ # " "@@ #@".
- (5) Press the \_\_\_\_ button.
  - The display will stop blinking and remain illuminated.
- (6) Press the button. The fan motor will stop operating and the LCD display will return to the normal stop mode.

Table 7-2 Setting the external static pressure

| Indoor unit |             |           |                      |                | Item code |            |  |
|-------------|-------------|-----------|----------------------|----------------|-----------|------------|--|
| 60          | 71          | 100       | 125                  | 140            | 160       | <i>.</i> . |  |
| Externa     | l static pr | essure of | f the rate           | d airflow volu | ıme (Pa)  | 5 <i>d</i> |  |
|             | 15          | 50        |                      | 150            |           | 00 10      |  |
|             | 14          | 10        |                      | 14             | 10        | 00 09      |  |
|             | 13          | 30        |                      | 130            |           | 00 08      |  |
| 120         |             |           | 120 120 <b>00 07</b> |                | 00 07     |            |  |
| 110         |             |           | 110 110              |                | 10        | 00 06      |  |
| 90          |             |           | 90                   |                | 100       |            |  |
| 70          |             |           | 70                   |                | 90        |            |  |
| 50          |             |           | 50 70                |                | 00 03     |            |  |
| 30          |             |           | 30 60 <b>CC</b>      |                | 60        |            |  |
| 10          |             |           | 50                   |                | 00 0 1    |            |  |
| 80*         |             |           | 80*                  |                | 00 00     |            |  |



#### NOTE:

Failure to set this parameter may result in decreased airflow and condensation.

# 7-3. Operating the High-spec Wired Remote Controller (CZ-RTC5B) How to set the external static pressure



- (1) Keep pressing the , , and buttons simultaneously for 4 or more seconds.

  The "Maintenance func" screen appears on the LCD
  - display.
- (2) Press the or button to see each menu. If you wish to see the next screen instantly, press the button.
  - Select "8. Detailed settings" on the LCD display and press the 

    button.

The "Detailed settings" screen appears on the LCD display. Select the "Unit no." by pressing the v or button for changes.

- (3) Select the "Code no." by pressing the or button.

  Change the "Code no." to "5D" by pressing the or button (or keeping it pressed).
- (4) Select the "Set data" by pressing the
- button.

  Select one of the "Set data" among "0001" "0010" according to the desired external static pressure setting by pressing the or button.

  (See Table 7-2 and Fig. 7-2.)

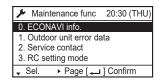
  Then press the button.
- (5) Select the "Unit no." by pressing the 

  or 

  button and press the 
  button.

  The "Exit detailed settings and restart?" (Detailed settingend) screen appears on the LCD display.

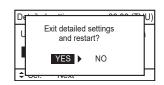
  Select "YES" and press the 
  button.



| Maintenance func               | 20:30 (THU) |  |  |  |
|--------------------------------|-------------|--|--|--|
| 5. Sensor info.                |             |  |  |  |
| Servicing check                |             |  |  |  |
| 7. Simple settings             |             |  |  |  |
| Detailed settings              |             |  |  |  |
| \$ Sel. ◆ ▶ Page [ ← ] Confirm |             |  |  |  |

| Detailed | settings | 20:30 (THU) |  |  |
|----------|----------|-------------|--|--|
| Unit no. | Code no. | Set data    |  |  |
| 3-1      | 10       | 0006        |  |  |
| \$ Sel.  | ▶ Next   |             |  |  |

| Detailed s | 20:30 (THU) |          |
|------------|-------------|----------|
| Unit no.   | Code no.    | Set data |
| 3-1        | 5D          | 0001     |
| \$ Sel. →  | Next        |          |



<sup>\*</sup> Setting at Shipment

### 7-4. Operating the Wired Remote Controller (CZ-RTC6 series)

Stop the system before performing these steps. How to set the external static pressure

(1) Keep pressing the ≡, △ and → buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.





(2) Press the ☑ or ☑ button to see each menu.
Select "Detailed settings" on the LCD display and press the ☑ button.



The "Detailed settings" screen appears on the LCD display.

- (3) Select the "Unit no." by pressing the vor button.

  After selecting "Unit no.", press the button and proceed to Step 4.

  If the button is pressed, proceed to Step 6.
- (4) Keep pressing the Jutton for 2 seconds or more during selecting "Code no.".

Change the "Code no." one digit at a time so that it becomes [00005D] along with the following procedures.

Change the value by pressing the or button.

After changing the value, press the 🖵 button and set the next digit.

Change the value by pressing the vor button.

After changing the value, press the - button and set the next digit.

Change the value by pressing the or button.

After changing all digits, press the - button and proceed to Step 5.

(5) Select one of the "Set data" among

"0001" - "0010" according to the desired external static pressure setting by pressing the volume or button. (See Table 7-2.)

After selecting "Set data", press the Ubutton.

(If setting continuously, follow the procedures from Fig. A.)

If you wish to change the selected indoor unit or finish setting, press the button twice (the display returns to Step 3).

#### NOTE

Failure to set this parameter may result in decreased airflow and condensation.

(6) If the ■ button is pressed under the display Step 3, the following display (Detailed setting-end screen) appears. Then select "YES" by pressing the vor button and press the button.













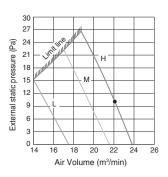
Fig. D



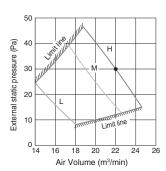
#### 7-5. Indoor Fan Performance

Type S-60PE4\*

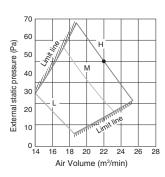
(External Static Pressure 10 Pa) Item Code 5d = 0001



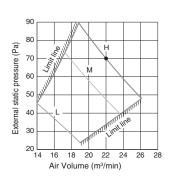
(External Static Pressure 30 Pa) Item Code 5d = 0002



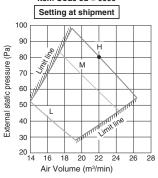
(External Static Pressure 50 Pa) Item Code 5d = 0003



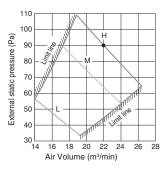
(External Static Pressure 70 Pa) Item Code 5d = 0004



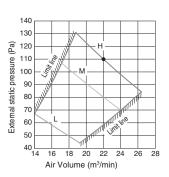
(External Static Pressure 80 Pa) Item Code 5d = 0000



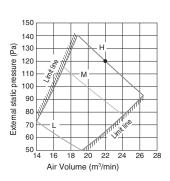
(External Static Pressure 90 Pa) Item Code 5d = 0005



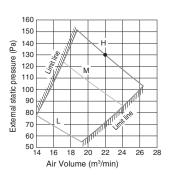
(External Static Pressure 110 Pa) Item Code 5d = 0006



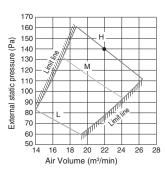
(External Static Pressure 120 Pa) Item Code 5d = 0007



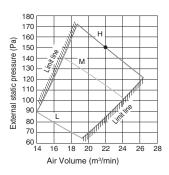
(External Static Pressure 130 Pa) Item Code 5d = 0008



(External Static Pressure 140 Pa) Item Code 5d = 0009

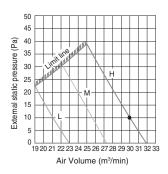


(External Static Pressure 150 Pa) Item Code 5d = 0010

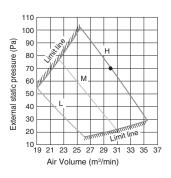


## Type S-71PE4\*

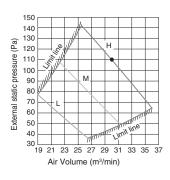
#### (External Static Pressure 10 Pa) Item Code 5d = 0001



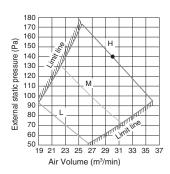
#### (External Static Pressure 70 Pa) Item Code 5d = 0004



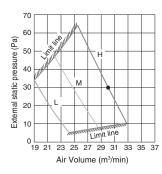
#### (External Static Pressure 110 Pa) Item Code 5d = 0006



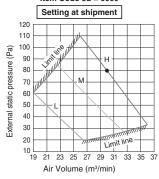
#### (External Static Pressure 140 Pa) Item Code 5d = 0009



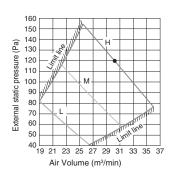
#### (External Static Pressure 30 Pa) Item Code 5d = 0002



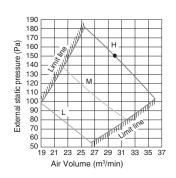
#### (External Static Pressure 80 Pa) Item Code 5d = 0000



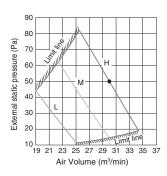
#### (External Static Pressure 120 Pa) Item Code 5d = 0007



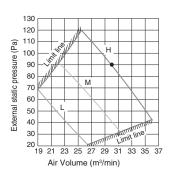
#### (External Static Pressure 150 Pa) Item Code 5d = 0010



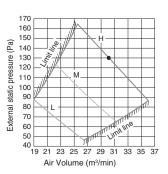
#### (External Static Pressure 50 Pa) Item Code 5d = 0003



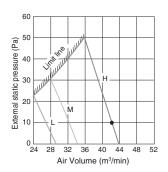
#### (External Static Pressure 90 Pa) Item Code 5d = 0005



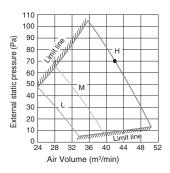
#### (External Static Pressure 130 Pa) Item Code 5d = 0008



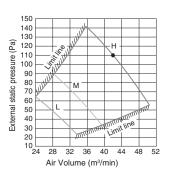
#### Type S-100PE4\* / S-100PE4\*N (External Static Pressure 10 Pa) Item Code 5d = 0001



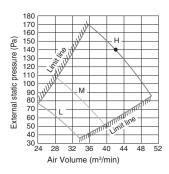
#### (External Static Pressure 70 Pa) Item Code 5d = 0004



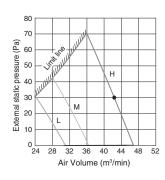
#### (External Static Pressure 110 Pa) Item Code 5d = 0006



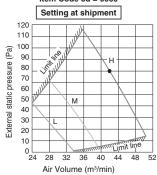
#### (External Static Pressure 140 Pa) Item Code 5d = 0009



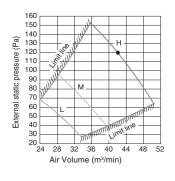
#### (External Static Pressure 30 Pa) Item Code 5d = 0002



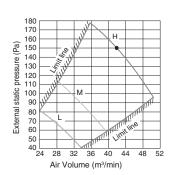
#### (External Static Pressure 80 Pa) Item Code 5d = 0000



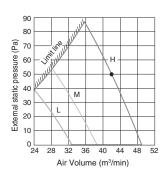
#### (External Static Pressure 120 Pa) Item Code 5d = 0007



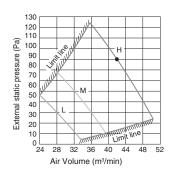
#### (External Static Pressure 150 Pa) Item Code 5d = 0010



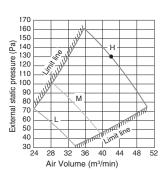
#### (External Static Pressure 50 Pa) Item Code 5d = 0003



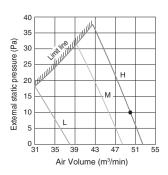
#### (External Static Pressure 90 Pa) Item Code 5d = 0005



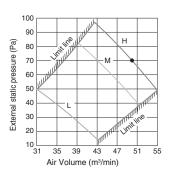
#### (External Static Pressure 130 Pa) Item Code 5d = 0008



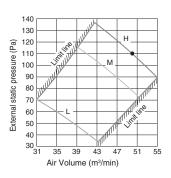
#### Type S-125PE4\* / S-125PE4\*N (External Static Pressure 10 Pa) Item Code 5d = 0001



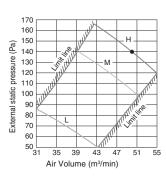
#### (External Static Pressure 70 Pa) Item Code 5d = 0004



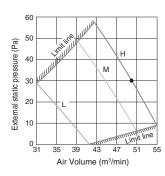
(External Static Pressure 110 Pa) Item Code 5d = 0006



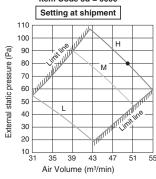
(External Static Pressure 140 Pa) Item Code 5d = 0009



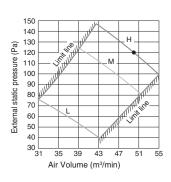
#### (External Static Pressure 30 Pa) Item Code 5d = 0002



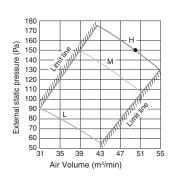
(External Static Pressure 80 Pa) Item Code 5d = 0000



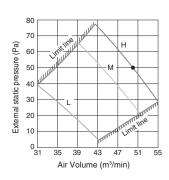
(External Static Pressure 120 Pa) Item Code 5d = 0007



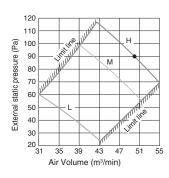
(External Static Pressure 150 Pa) Item Code 5d = 0010



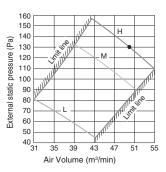
#### (External Static Pressure 50 Pa) Item Code 5d = 0003



(External Static Pressure 90 Pa) Item Code 5d = 0005



(External Static Pressure 130 Pa) Item Code 5d = 0008

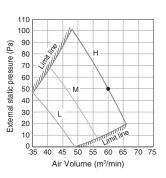


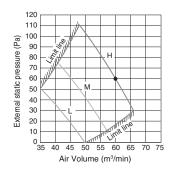
#### Type S-140PE4\* / S-140PE4\*N & S-160PE4\* / S-160PE4\*N / S-160PE4\*A

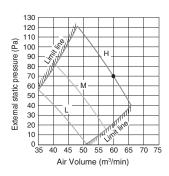
(External Static Pressure 50 Pa) Item Code 5d = 0001



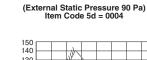




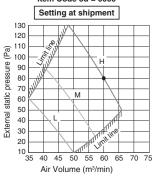


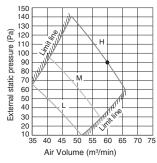


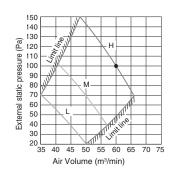
(External Static Pressure 80 Pa) Item Code 5d = 0000







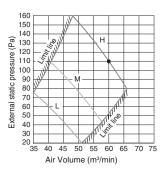


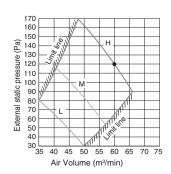


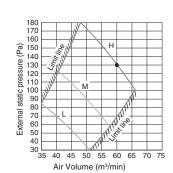
#### (External Static Pressure 110 Pa) Item Code 5d = 0006

(External Static Pressure 120 Pa) Item Code 5d = 0007

(External Static Pressure 130 Pa) Item Code 5d = 0008

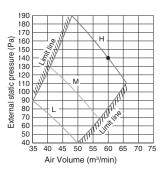






(External Static Pressure 140 Pa) Item Code 5d = 0009

(External Static Pressure 150 Pa) Item Code 5d = 0010



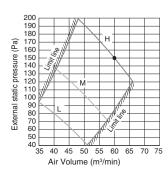
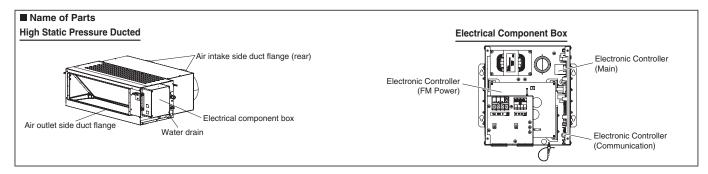


Fig. 7-2

#### APPENDIX



#### ■ Care and Cleaning



#### **⚠ WARNING**

- Engage authorized dealer or specialist for cleaning. For safety, be sure to turn the air conditioner off and also to disconnect the power before cleaning.
- Do not pour water on the indoor unit to clean it. This will damage the internal components and cause an electric shock hazard.

#### Air intake and outlet side (Indoor unit)

Clean the air intake and outlet side of the indoor unit with a vacuum cleaner brush, or wipe them with a clean, soft cloth. If these parts are stained, use a clean cloth moistened with water. When cleaning the air outlet side, be careful not to force the vanes out of place.

## **↑** CAUTION

- Never use solvents or harsh chemicals when cleaning the indoor unit. Do not wipe plastic parts using very hot water.
- Some metal edges and the fins are sharp and may cause injury if handled improperly; be especially careful when you clean these parts.
- The internal coil and other components of outdoor unit must be cleaned regularly. Consult your dealer or service center.

#### Air filter

In case of Installing the Duct (field supply)

Period

(Depends on filter's specifications)

When cleaning the air filter, consult your dealer or service center.



- Certain metal edges and the condenser fins are sharp and may cause injury if handled improperly; special care
- should be taken when you clean these parts.
  The internal coil and other components must also be cleaned periodically. Consult your dealer or service center.

#### Care: After a prolonged idle period

Check the indoor and outdoor unit air intakes and outlets for blockage; if there is a blockage, remove it.

## Care: Before a prolonged idle period

- Operate the fan for half a day to dry out the inside.
- Disconnect the power supply and also turn off the circuit breaker.
- Clean the air filter and replace it in its original position.

#### NOTE

#### Should the power fail while the unit is running

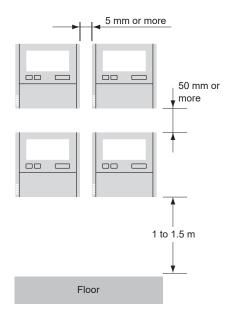
If the power supply for this unit is temporarily cut off, the unit will automatically resume operation once power is restored using the same settings before the power was interrupted.

#### Important Information Regarding The Refrigerant Used

Refer to the Installation Instructions attached to the outdoor unit.

# ■ REMOTE CONTROLLER INSTALLATION INSTRUCTION CZ-RTC4

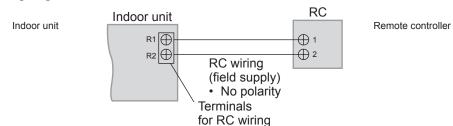
# Installation Precautions Installation Location



- Install at the height of 1 to 1.5 m from the floor (Location where average room temperature can be detected).
- Install vertically against the floor.
- When installing more than 1 remote controller next to each other, keep distance of 5 mm on the right and left and 50 mm on top and bottom.
- Avoid the following locations for installation.
- By the window, etc. exposed to direct sunlight or direct air
- In the shadow or backside of objects deviated from the room airflow.
- Location where condensation occurs (The remote controller is not moisture proof or drip proof.)
- · Location near heat source
- · Uneven surface
- Keep distance of 1 m or more from the TV, radio and PC. (Cause of fuzzy images or noise)

### Remote control wiring

#### ■ Wiring diagram



#### **■** Type of wiring

Use cables of 0.5 to 1.25 mm<sup>2</sup>.

■ Total wire length: 500 m or less

(The wire length between indoor units should be 200 m or less.)

■ Number of connectable units

Remote controller: Max. 2 Indoor unit: Max. 8

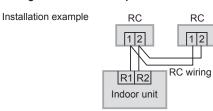
#### Attention

• Use the field supplied RC wiring with at least 1 mm in thickness of insulation part including the sheath.

Regulations on wire diameters di er from locally to locally. For field wiring rules, please refer to your LOCAL ELECTRICAL CODES before beginning. You must ensure that installation complies with relevant rules and regulations.

- Be careful not to connect cables to other terminals of indoor units (e.g. power source wiring terminal). Malfunction may occur.
- Do not bundle together with the power source wiring or store in the same metal tube.
   Operation error may occur.
- If noise is induced to the unit power supply, attach a noise filter.

#### \*Wiring as shown below is prohibited.

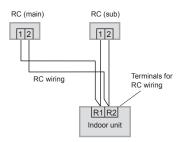


#### When setting both the main and sub remote controllers

After installation, set one remote controller to [Main] and the other to [Sub] for [Main/sub] for "Setting" (P.1-11-1-2-18).

Installation example

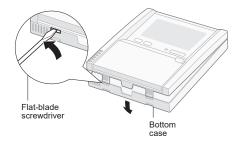
#### Using 1 indoor unit



\*Remote controllers can be connected to any indoor unit for operation.

# Mounting

Remove the bottom case.
Insert the driver and slightly turn.
\*Do not insert the screw driver too deep. Doing so may cause the claw to be broken.



#### Attention

#### Mounting the bottom case

- Tighten the screws securely until the screw heads touch the bottom case.
  - (Otherwise, loose screw heads may hit the PCB and cause malfunction when mounting the top case.)
- Do not over-tighten the screws.
   (The bottom case may be deformed, resulting in fall of the unit.)

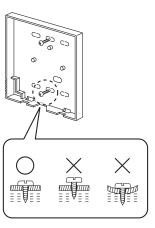
#### Connecting the remote control wiring

- Arrange the wires as shown in the illustration for
   in step 2 (P.1-11-1-2-17) and
   (P.1-11-1-2-17), avoiding unnecessary wires being stored in the case.
- Avoid the wires touching parts on the PCB.
- Avoid the wires coming in contact with the metallic object protruded from the PCB.

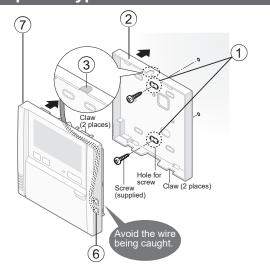
(Caught wires may destroy the PCB.)

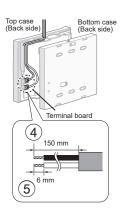
#### Mounting the top case

Do not push the top case with excessive force.
 (Doing so may cause the protrusions of the bottom case to hit and destroy the PCB.)



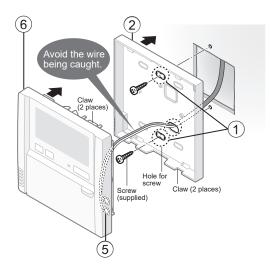
# **Exposed type**

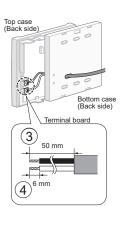




- ① Make 2 holes for screws using a driver.
- 2 Mount the bottom case to the wall.
- 3 Cut here with a nipper and remove the burr with a file.
- 4 Remove the sheath. Approx. 150 mm
- (5) Remove the coating. Approx. 6 mm
- (6) Connect the remote control wiring.
  - Make sure the wiring connection is in the correct direction.
  - Arrange the wires along the groove of the case.
  - · Avoid the wire being caught.
- 7 Mount the top case.
  - Align the claws of the top case and then align the claws of the bottom case.

# **Embedded type**





- $\ensuremath{\textcircled{1}}$  Make 2 holes for screws using a driver.
- 2 Mount the bottom case to the wall.
  - Pass the wire through the hole in the centre of the bottom case.
- $\ensuremath{\ensuremath}\amb}\amb}\amb}}}}}}}}}}}}}}$
- ④ Remove the coating. Approx. 6 mm
- 5 Connect the remote control wiring.
  - Make sure the wiring connection is in the correct direction.
  - Avoid the wire being caught.
- 6 Mount the top case.
  - Align the claws of the top case and then align the claws of the bottom case.

## **Setting / Test operation / Specifications**

#### Setting

- Clock
- RC. setting mode (Main/sub, Clock type)
- Detailed setting mode (Ventilation fan output setting, Room temperature sensor, Temperature display setting)

#### Clock

- Press and hold for several seconds.
- 2 Set day of the week, hour and minute. ▼DAY/TIME/TIMER → SET "▼": Su ↔ Mo ↔ ... ↔ Sa (Repeat)

#### RC. setting mode

Press and hold the 2 buttons for several seconds simultaneously.

 $\mathbf{2} \overset{\text{Select the Code no.}}{\triangledown} \triangle$ 



The indicator illuminates after blinking.

| Press  | $\Box$ | ) |
|--------|--------|---|
| 1 1000 | - 1    | • |

| Code | Itom       | Set      | data             |
|------|------------|----------|------------------|
| no.  | Item       | 0000     | 0001             |
| 01   | Main/sub   | Sub      | Main             |
| 02   | Clock type | 24 hours | 12 hours (AM/PM) |

#### **Detailed setting mode**

Press and hold the 3 buttons for several seconds simultaneously.

2 Select the Code no.  $\nabla \Delta$ 

3 Select the Unit no.

4 Select the Set data.

▼DAY/TIME/TIMER → SET

The indicator illuminates after blinking.

Press -

| Code | Item                              | Set data      |           |  |  |
|------|-----------------------------------|---------------|-----------|--|--|
| no.  | item                              | 0000          | 0001      |  |  |
| 31   | Ventilation fan<br>output setting | Not connected | Connected |  |  |
| 32   | Room temperature sensor           | Main unit     | RC        |  |  |
| 33   | Temperature display setting       | °C            | °F        |  |  |

#### **Test operation**

Turn on the circuit breaker beforehand, referring to the operating instructions for the unit. The remote controller starts.

Press and hold for several seconds.

[TEST] display appears. (The unit enters the test operation mode.)

Press Perform the test operation.

[TEST] is displayed during the test operation.

3 Press . Finish the test operation [TEST] display disappears.

Delete the error history. Press and hold the 2 buttons for several seconds simultaneously.

F, SET

Information of errors is displayed. To delete the error history, press CANCEL Press to finish service mode.

#### Attention

· Do not use this mode for purposes other than the test operation.

(To prevent overload of the units)

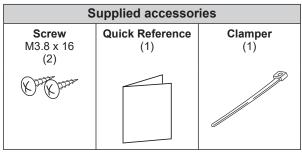
- · Read the installation instructions supplied with the units.
- · Any of the Heat, Cool and Fan operations can only be performed.
- Temperature cannot be changed.
- · The test operation mode is automatically turned off in 60 minutes. (To prevent continuous test operation)
- Outdoor units do not operate for approx. 3 minutes after the power is turned on or operation is stopped.

#### **Specifications**

| Model                            | No.                 | CZ-RTC4   |  |
|----------------------------------|---------------------|---|--|
| Dimens                           | sions               | (H) 120 mm × (W) 120 mm<br>× (D) 20 + 4.75 mm   |  |
| Weight                           |                     | 160 g   |  |
| Temper<br>Humidi                 | rature/<br>ty range | 0 °C to 40 °C / 20 % to 80 % (no condensation) *Indoor use only.                      |  |
| Power                            | Source              | DC16 V (supplied with indoor unit)  |  |
|                                  | Precision           | ±30 seconds/month<br>(at normal temperature 25 °C)<br>*Adjust periodically.           |  |
| Clock                            | Holding<br>time     | 24 hours<br>(when fully charged)<br>*Approx. 8 hours are required<br>for full charge. |  |
| Number of connected indoor units |                     | Up to 8 units   |  |

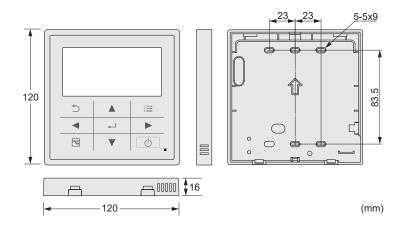
# CZ-RTC5B Specifications

| Model No.                          | CZ-RTC5B   |
|------------------------------------|--|
| Dimensions                         | (H) 120 mm x (W) 120 mm x (D) 16 mm                                    |
| Weight                             | 180 g  |
| Temperature/<br>Humidity range     | 0 °C to 40 °C / 20 % to 80 % (no condensation) *Indoor use only.       |
| Power Source                       | DC16 V (supplied with indoor unit)                                     |
| Clock precision                    | ± 30 seconds/month (at normal temperature 25 °C) *Adjust periodically. |
| Number of connectable indoor units | Up to 8 units  |

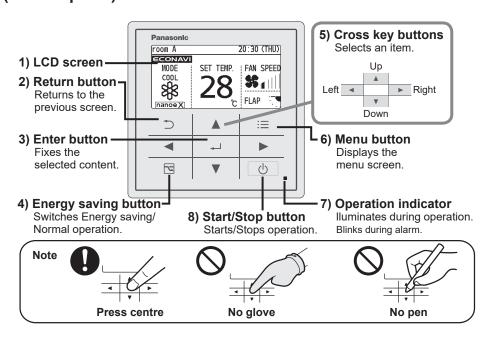


\*Remote control wiring is not supplied. (field supplied item)

#### **Dimensions**

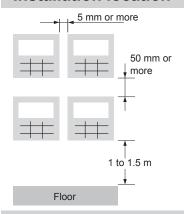


## **Part Names (Control panel)**



#### **Installation Precautions**

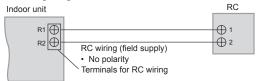
#### **Installation location**



- Install at the height of 1 to 1.5 m from the floor (Location where average room temperature can be detected).
- Install vertically against the floor.
- When installing more than 1 remote controller next to each other, keep distance of 5 mm on the right and left and 50 mm on top and bottom.
- Avoid the following locations for installation.
- By the window, etc. exposed to direct sunlight or direct air
- In the shadow or backside of objects deviated from the room airflow.
- Location where condensation occurs (The remote controller is not moisture proof or drip proof.)
- · Location near heat source
- Uneven surface
- Keep distance of 1 m or more from the TV, radio and PC. (Cause of fuzzy images or noise)

# Remote control wiring

Wiring diagram

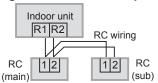


- Type of wiring
- Use cables of 0.5 to 1.25 mm<sup>2</sup>.
- Total wire length: 500 m or less
  (The wire length between indoor units should be 200 m or less.)
- Number of connectable units Remote controller: Max. 2 Indoor unit: Max. 8

#### Attention

- Use the field supplied RC wiring with at least 1 mm in thickness of insulation part including the sheath. Regulations on wire diameters differ from locally to locally. For field wiring rules, please refer to your LOCAL ELECTRICAL CODES before beginning. You must ensure that installation complies with relevant rules and regulations.
- Be careful not to connect cables to other terminals of indoor units (e.g. power source wiring terminal).
   Malfunction may occur.
- Do not bundle together with the power source wiring or store in the same metal tube. Operation error may occur.
- If noise is induced to the unit power supply, attach a noise filter.

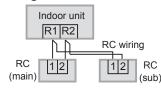
#### Wiring as shown below is prohibited.



#### When setting both the main and sub remote controllers

After installation, set one remote controller to [Main] and the other to [Sub] for [Main/sub] for "Setting". (See the other side) When using the remote controllers\* in combination, set this unit to [Main]. \*CZ-RTC2, CZ-RTC4, CZ-RE2C2, CZ-RELC2

#### ■ Using 1 indoor unit

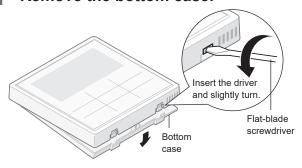


Note

Remote controllers can be connected to any indoor unit for operation.

## Mounting

# 1 Remove the bottom case.



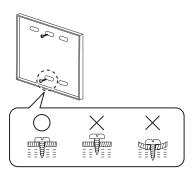
#### Attention

#### Mounting the bottom case

- Tighten the screws securely until the screw heads touch the bottom case. (Otherwise, loose screw heads may hit the PCB and cause malfunction when mounting the top case.)
- Do not over-tighten the screws.
   (The bottom case may be deformed, resulting in fall of the unit.)

#### Connecting the remote control wiring

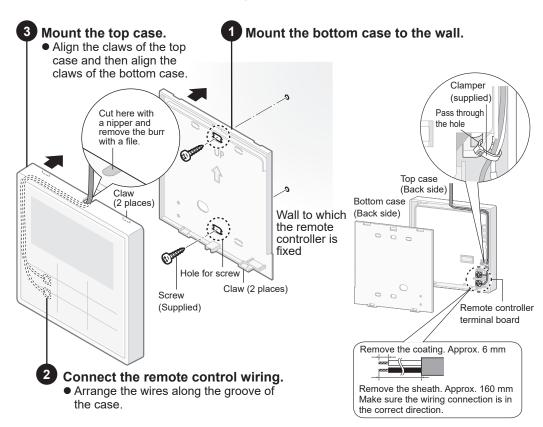
- Arrange the wires as shown in the illustration for ② in step 2, avoiding unnecessary wires being stored in the remote controller case. (Caught wires may destroy the PCB.)
- Avoid wires touching parts on the PCB. (Caught wires may destroy the PCB.)



# 2 Mount to the wall.

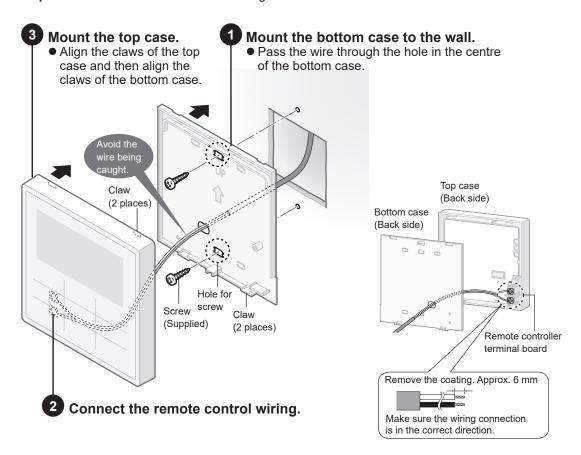
## **Exposed type**

Preparation: Make 2 holes for screws using a driver.



# **Embedded type**

Preparation: Make 2 holes for screws using a driver.



# 1 .

# **Setting**

**Preparation:** Turn on the circuit breaker of units and then turn the power on. The remote controller starts, and wait until the [Assigning] display disappears.

(If [Assigning] continues to blink for 10 minutes or more, check the address setting of indoor units.)

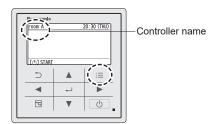
Note

To return to the previous screen

Press 5.

■ Language ■ Clock ■ Controller name

Press \overline{\overl



20:30 (THU)

Select [Initial settings].

 $\blacktriangle \ \lor \rightarrow \mathord{\longleftarrow}$ 

Select the item to set.





## Language

4 Set.



Default setting: English

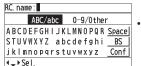
#### Clock



#### **Controller** name

4 Set. **A** ▼ **→ →** 

(Repeat the same procedure for all characters.)



 Up to 16 characters (Space is included in the number of characters.)

■ To change the character type

Select the character type with 

▼ ▼ ■ and press □.

■To delete 1 character

Select [BS] with ▲ ▼ ◀ ▶ and

press 

.

■ To enter space

Select [Space] with ▲ ▼ ◀ ▶

and press ←.

Select [Conf].

A ▼ ◀ ▶ → □



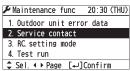
#### ■ Service contact

Press and hold the 3 buttons for 4 seconds or more simultaneously.



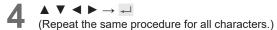


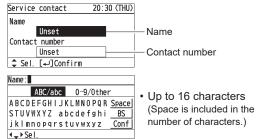
Select the item to set.  $\blacktriangle$   $\blacktriangledown$   $\multimap$ 

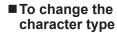


#### **Service contact**

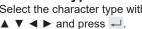
Select. (Name)  $\blacktriangle$   $\blacktriangledown$   $\multimap$ 







Select the character type with



■ To delete 1 character Select [BS] with ▲ ▼ ◀ ▶ and press -.

■ To enter space Select [Space] with ▲ ▼ ◀ ▶ and press ←.

Select [Conf].  $\blacktriangle \ \blacktriangledown \ \bullet \ \multimap \ \multimap$ 

Select on the screen for step 3. (Contact number)

 $\blacktriangle$   $\blacktriangledown$   $\multimap$ 

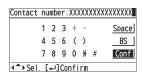
(Repeat the same procedure for all characters.)

Select [Conf].  $\blacktriangle$   $\blacktriangledown$   $\blacksquare$   $\blacksquare$ 





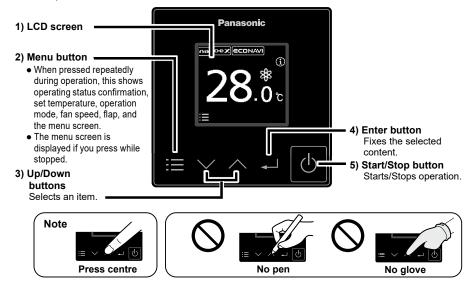
• Up to 16 characters (Space is included in the number of characters.)



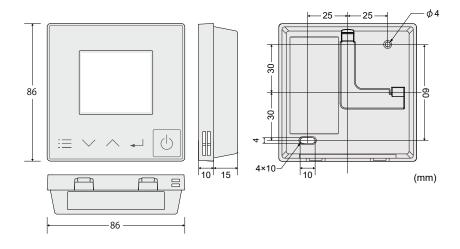
#### CZ-RTC6/CZ-RTC6W

# **Part Names (Control panel)**

The control panel colour of CZ-RTC6W is white.



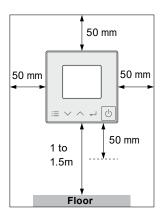
#### **Dimensions**



|                               | Supplied accessories       |                               |             |  |  |  |  |
|-------------------------------|----------------------------|-------------------------------|-------------|--|--|--|--|
| <b>Screw</b><br>M3.8 x 16 (2) | Operating Instructions (1) | Installation Instructions (1) | Clamper (1) |  |  |  |  |
| (Chill pur                    |                            |                               | 3           |  |  |  |  |

<sup>\*</sup>Remote control wiring is not supplied. (field supplied item)

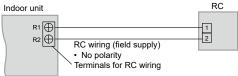
#### Installation location



- Install at the height of 1 to 1.5 m from the floor (Location where average room temperature can be detected).
- Install vertically against a wall or suitable supporting structure.
- Keep a space around the remote controller as detailed on the figure shown left.
- Avoid the following locations for installation.
- · By a window, etc. exposed to direct sunlight or external airflow
- In the shadow or backside of objects deviated from the room airflow
- Location where condensation occurs (The remote controller is not moisture proof or drip proof)
- · Location near heat source
- Uneven surface
- Keep distance of 1 m or more from the TV, radio and PC. (Image blur or related noise may occur)

# Remote control wiring

# Wiring diagram



- Type of wiring
  - Use cables of 0.75 to 1.25 mm<sup>2</sup>.
- Total wire length: 500 m or less (The wire length between indoor units should be 200 m or less.)
- Number of connectable units
  - Remote controller: Max. 2
  - Indoor unit:Max. 8

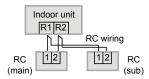
#### Attention

Use the field supplied RC wiring with at least 1 mm in thickness of insulation part including the sheath.
 Wiring Regulations may differ depending on location. For field wiring rules, please refer to your LOCAL ELECTRICAL CODES.

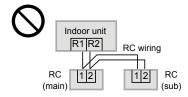
You must ensure that installation complies with relevant rules and regulations.

- Be careful not to connect cables to other terminals of indoor units (e.g. power source wiring terminal).
   Malfunction may occur.
- Do not bundle together with the power source wiring or store in the same metal tube. Operation error
  may occur.
- If noise is induced to the unit power supply, attach a noise filter.

#### ■ Using 1 indoor unit



#### Wiring as shown below is prohibited.



#### When setting both the main and sub remote controllers

After installation, set one remote controller to [Main] and the other to [Sub] for [Main/sub] for "Setting". (See "Setting" section - "RC. setting mode")

When using the remote controllers\* in combination, set the CZ-RTC6(CZ-RTC6W) unit to [Sub].

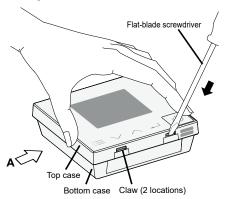
\*CZ-RTC5B, CZ-RTC6BL(CZ-RTC6WBL)

Note Remote controllers can be connected to any indoor unit for operation.

# Remove the top case.

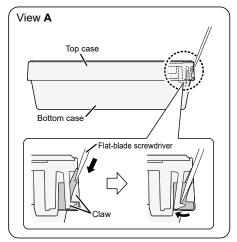
#### 1 Insert the screwdriver to the bottom case.

Insert the flat-blade screwdriver to the claws as show in the figure.



#### 2 Push the flat-blade screwdriver in.

Push down the flat-blade screwdriver along with the slope of the claws until the top case comes off.



# 2 Mount to the wall.

There are 2 types of wall-mounting methods: Exposed type and Embedded type.

#### Attention

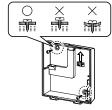
#### Mounting the bottom case

• Tighten the screws securely until the screw heads touch the bottom

(Otherwise, loose screw heads may hit the PCB and cause malfunction when mounting the top case.)

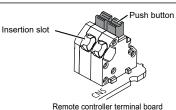
• Do not over-tighten the screws.

(The bottom case may be deformed, resulting in the unit becoming detached from the surface it is fixed to.)



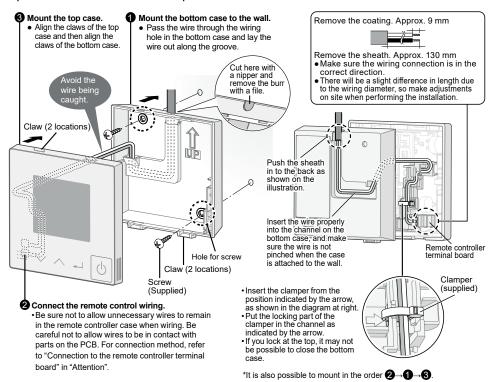
#### Connection to the remote controller terminal board

- Depress the push button using a round bar or finger, insert the remote control wiring securely from the wiring insertion slot and release the push button.
- Pull the remote control wiring lightly, and confirm it is secured.
   There is the danger of shorting if copper wire is exposed. Make sure the wire is properly inserted.



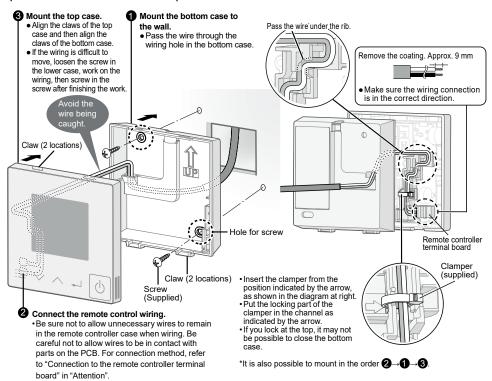
#### **Exposed type**

A protective film is attached on the Control panel.



#### **Embedded type**

A protective film is attached on the Control panel.



# 2

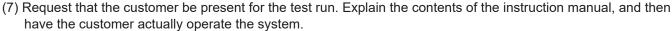
# 2. TEST RUN

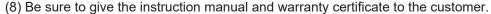
| 2-1. | Preparing for Test Run                             | 2-2  |
|------|--|------|
| 2-2. | Precautions  | 2-3  |
| ■ In | door Units   |      |
| 2-3. | Caution  | 2-4  |
| 2-4. | Test Run Procedure                                 | 2-4  |
| 2-5. | Items to Check Before the Test Run                 | 2-5  |
| 2-6. | Test Run Using the Remote Controller               | 2-5  |
| 2-7. | Contents of Remote Controller Switch Alarm Display | 2-8  |
| 2-8. | System Control                                     | 2-12 |

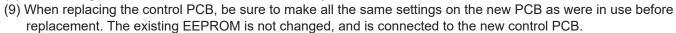
#### 2-1. Preparing for Test Run

#### • Before attempting to start the air conditioner, check the following:

- (1) All loose matter is removed from the cabinet especially steel filings, bits of wire, and clips.
- (2) The control wiring is correctly connected and all electrical connections are tight.
- (3) The protective spacers for the compressor used for transportation have been removed. If not, remove them now.
- (4) The transportation pads for the indoor fan have been removed. If not, remove them now.
- (5) The power has been supplied to the unit for at least 12 hours before starting the compressor. The bottom of the compressor should be warm to the touch and the crankcase heater around the feet of the compressor
- (6) Both the gas and liquid tube service valves are open. If not, open them now. (Fig. 2-2)







# should be hot to the touch. (Fig. 2-1) Liquid tube

#### **Check Before Test Run**

|  | Content check   |
|--|---|
| Outdoor unit   | <ul> <li>Check that the insulation resistant value is more than 1MΩ.         Use the 500 V mega-testers to measure the insulation.         Check point: between power supply terminal block (L1, L2, L3, or L, N) to earth.         Do not use the mega-tester for any other circuit except for voltage of 230-240V~ or 400-415V 3N~.     </li> </ul>   |
| Power supply cable<br>Indoor / outdoor connection wire<br>Earth wire | <ul> <li>Is the wire set up and connected as described in the instructions? Check for any phase sequence.</li> <li>Are the wire connection's screws loose?</li> <li>Is the open and close device / leakage breaker installed?</li> <li>Is the power supply cable's thickness and length appropriately measured as described in the instructions?</li> <li>Is it earthed (grounded)?</li> <li>Are the wire connections for the indoor / outdoor units connected as described in the instructions? Are there any looped wires?</li> <li>Was the "N-phase" surely connected when connecting the power supply wire on the three-phase model?</li> <li>If N-phase is not connected, only the fan may repeat turning ON/OFF without the compressor operating. In that case, check if there is any problem with N-phase connection.</li> </ul> |
| Refrigerant tube   | <ul> <li>Is the tubing installed as described in the instructions?</li> <li>Are the tubes sizes appropriate?</li> <li>Does the tube's length adhere to the specifications?</li> <li>Is the branch tube slant being appropriately done as described in the instructions?</li> <li>Was vacuum removal sufficiently carried out?</li> <li>Was the leak tightness test carried out with nitrogen gas? Use the testing pressure of 4.15 MPa.</li> <li>Is the tubing insulation material appropriately installed? (Insulation material is necessary for both gas and liquid tubing.)</li> <li>Is the 3-way valve for the liquid tube and gas tube open?</li> </ul>  |

- Always be sure to use a properly insulated tool to operate the short-circuit pin on the circuit board. (Do not use your finger.)
- Never switch the power supply ON until the installation has completed.
- Supply electrical current through all indoor units and check the voltage.
- Supply electrical current through all the outdoor units and check each inter-phase voltage.
- Before the test run, ensure to check that the 3-way valve is open. Operating while the valve is closed causes the compressor to fail.

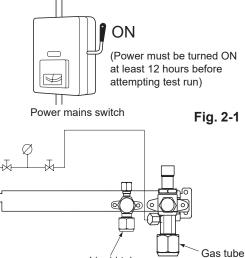


Fig. 2-2

#### 2-2. Precautions

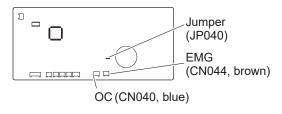
Request that the customer be present when the test run is performed.
 At this time, explain the operation manual and have the customer perform the actual steps.

#### INDOOR UNIT MAIN PCB (CR)

- Request that the customer be present when the test run is performed. At this time, explain the operation manual and have the customer perform the actual steps.
- Check that the 230 –240 VAC power is not connected to the U1 & U2 terminal board terminal.
- \* If 230 –240 VAC is accidentally applied, the Fuse on indoor unit Electronic Controller (Communication) will blow in order to protect the PCB.

In this case, recover the connection by disconnect 2P connector wires that originally connected to the indoor unit Electronic Controller (Communication) OC connector and shift the connector wires to EMG connector on same indoor unit Electronic Controller (Communication). If operation is still not possible after shift to EMG connector, cut the jumper JP040 on the same indoor unit Electronic Controller (Communication).

#### High Static Pressure Duct Type S-160PE3R



# High Static Pressure Ducted Type S-180PE4R, S-200PE4R, S-224PE4R

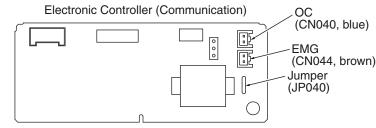


Fig. 2-3

#### **■ Indoor Units**

#### 2-3. Caution

- This unit may be used in a single-type refrigerant system where 1 outdoor unit is connected to 1 indoor unit.
- The indoor and outdoor unit control PCB utilizes a semiconductor memory element (EEPROM).
   The settings required for operation were made at the time of shipment.
   Only the correct combinations of indoor and outdoor units can be used.
- This test run section describes primarily the procedure when using the wired remote controller.

#### 2-4. Test Run Procedure

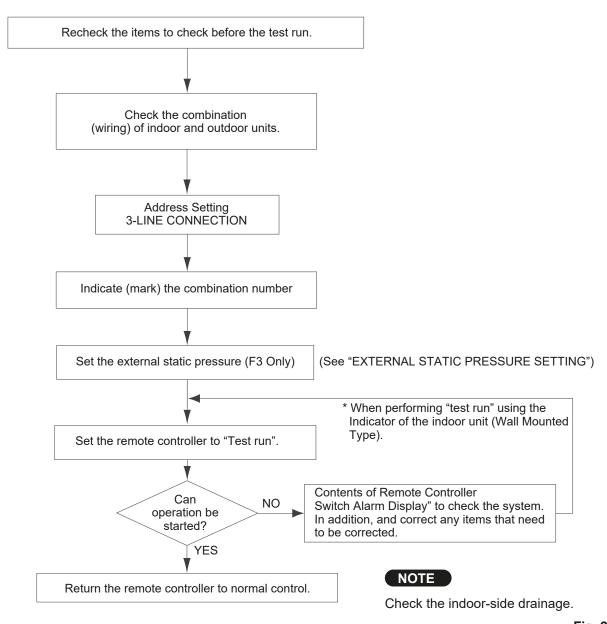


Fig. 2-4

#### 2-5. Items to Check Before the Test Run

- (1) Turn the remote power switch ON at least 12 hours in advance in order to energize the crankcase heater.
- (2) Fully open the closed valves on the liquid-tube and gas-tube sides.

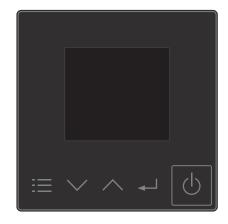
# 2-6. Test Run Using the Remote Controller < Procedure of CZ-RTC6 series >

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

(1) Keep pressing the ≡, and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.





**CZ-RTC6** series

(2) Press the or button to see each menu.

Select "Test run" on the LCD display and press the button.

Change the display from "OFF" to "ON" by pressing the

✓ or ∧ button.

Then press the — button.

(3) Press the == button.

"TEST" will be displayed on the LCD display.

- (4) Press the button. Test run will be started.

  Test run setting mode screen appears on the LCD display.
  - The test run can be performed using the HEAT, COOL, or FAN operation mode.
  - The temperature cannot be adjusted when in test run mode.
  - If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see "2-3-1-5. Contents of Remote Controller Switch Alarm Display".)
- (5) After the test run is completed, proceed from Step (1) and change to "OFF" at Step (2).
  - To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.

#### NOTE

- The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.
- If the test run is performed using the wired remote controller, operation is possible even if the cassette-type ceiling panel has not been installed. ("P09" display does not occur.)







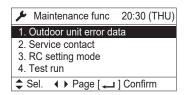


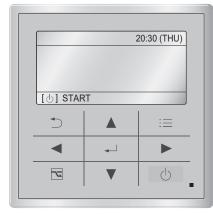
#### <Pre><Pre>cedure of CZ-RTC5B>

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

(1) Keep pressing the □ , □ and □ buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.

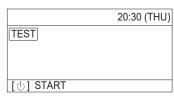




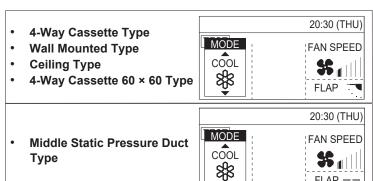
CZ-RTC5B

FLAP --

- (2) Press the ▼ or ▲ button to see each menu. If you wish to see the next screen instantly, press the ✓ or ► button. Select "4. Test run" on the LCD display and press the | \( \ldots \) button. Change the display from "OFF" to "ON" by pressing the ▼ or ▲ button. Then press the ← button.
- 20:30 (THU) Maintenance func 1. Outdoor unit error data 2. Service contact 3. RC setting mode 4. Test run \$ Sel. ◆ Page [ → ] Confirm Test run 20:30 (THU) Test run ON Change [ 🛶 ] Confirm
- (3) Press the button. "TEST" will be displayed on the LCD display.



- (4) Press the button. Test run will be started. Test run setting mode screen appears on the LCD display.
  - The test run can be performed using the HEAT, COOL, or FAN operation mode.
  - The temperature cannot be adjusted when in test run mode.
  - If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see "2-3-1-5. Contents of Remote Controller Switch Alarm Display".)



- (5) After the test run is completed, proceed from Step (1) and change to "OFF" at Step (2).
  - To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.

#### NOTE

- The outdoor units will not operate for approximately 3 minutes after the power is turned ONand after operation is stopped.
- If the test run is performed using the wired remote controller, operation is possible even if the cassette-type ceiling panel has not been installed. ("P09" display does not occur.)

#### <Pre><Pre>cedure of CZ-RTC4>

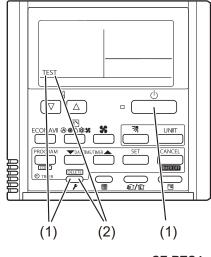
This mode places a heavy load on the machines. Therefore use it only when performing the test run.

(1) Press the remote controller button for 4 seconds or longer.

Then press the \_\_\_\_\_ button.

"TEST" appears on the LCD display while the test run is in progress.

- The test run can be performed using the HEAT, COOL, or FAN operation mode.
- The temperature cannot be adjusted when in test run mode.
- If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see "2-3-1-5.
   Contents of Remote Controller Switch Alarm Display")
- (2) After the test run is completed, press the putton again. Check that "TEST" disappears from the LCD display.
  - To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.



#### CZ-RTC4

#### NOTE

- The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.
- If the test run is performed using the wired remote controller, operation is possible even if the cassette-type ceiling panel has not been installed. ("P09" display does not occur.)

# 2.7. Contents of Remote Controller Switch Alarm Display

ON: ○ Blinking: ☆ OFF: ●

|                                 |     | C                | ess re<br>ontroll<br>ver dis | er                    |  |  |   |               |  |  |
|---------------------------------|-----|------------------|------------------------------|-----------------------|--|--|---|---------------|--|--|
| Abno                            | -   | ☼∪               | 0                            | *                     | Alarm contents   | Error location   |   |               |  |  |
| display                         |     | Operation        | Timer                        | Standby               |  |  |   |               |  |  |
|                                 |     |                  |                              |                       | Faulty remote  | e controller   | Replace the remote controller   |               |  |  |
|                                 |     |                  |                              |                       |  | / Contact failure of remote controller wiring  | Correct the remote controller wiring  |               |  |  |
|                                 | E01 |                  | ating la                     | mp                    | In the case of Power supp  | pins on the indoor unit control PCB are short f non-group control: ly OFF of outdoor unit on / Contact failure of indoor / outdoor                           | Remove the short     Execute auto address setting   |               |  |  |
|                                 |     | blinkir          | ig<br>•                      |                       | In the case of   | f group control:<br>s operation was not carried out  |   |               |  |  |
|                                 |     | *                | •                            | •                     |  | of EEPROM (IC010) on indoor unit   | Replace the indoor unit EEPROM  |               |  |  |
| Ì                               | F00 |                  |                              |                       | Faulty remote  | , ,  | Replace the remote controller   |               |  |  |
|                                 | E02 |                  |                              |                       | Wrong wiring   | of remote controller   | Correct the remote controller wiring  |               |  |  |
|                                 | E03 |                  |                              |                       | Error in indoc<br>controller (ce   | r unit receiving signal from remote<br>ntral)  | Check the indoor unit control PCB     Check the remote controller wiring     Check the indoor / outdoor control line*   |               |  |  |
|                                 |     |                  |                              |                       | Disconnectio line*   | n / Contact failure of indoor / outdoor control  | Check the electrical connection of indoor / outdoor controlline*  |               |  |  |
|                                 | E04 |                  | itandby lam<br>linking       | amp<br>‡              | Faulty indoo     Faulty outdo     Communica     PCB opene  |  | Replace the indoor unit control PCB Replace the outdoor unit control PCB Check the electrical connection of fuse (F302) on indoor unit control PCB In the case of the fuse opened on an indoor unit control PCB, after correcting wiring connection, it substitutes an EMG plug for OC plug |               |  |  |
| or Unit                         |     | •                | •                            |                       | Since failure cause, both  | door unit control PCB opened<br>of an outdoor fan motor is considered as a<br>outdoor unit control PCB(CR/HIC) and<br>fan motor are exchanged simultaneously | In the case of the fuse opened on an outdoor unit control PCB, replace both outdoor unit control PCB (CR / HIC) an outdoor unit fan motor simultaneously  |               |  |  |
| • Indoo                         |     |                  |                              |                       | Capacity of  | or of indoor unit address<br>f indoor / outdoor units is mismatched.   | Capacity and address re-setting after correcting the combination of units   |               |  |  |
| le.                             | E08 |                  |                              |                       | -  | f indoor unit address setting  | Indoor unit address re-setting  |               |  |  |
| ntro                            | E09 |                  |                              | . !                   | to main  | e of more than one remote controller setting   | Correct the setting   |               |  |  |
| Remote controller • Indoor Unit | E14 | blinkir          | ating la<br>ng               | mp<br>!               |  | f main unit in group control   | Check the indoor / outdoor control line*     Check the indoor unit combination  |               |  |  |
| Rer                             | E18 | * • •            |                              | units • Contact faile | on of wiring between main unit and additional<br>ure of wiring<br>or unit control PCB (Main or Addition) | Correct the wiring connection     Replace the wiring     Replace the indoor unit control PCB   |   |               |  |  |
| Ī                               | E15 | 04               |                              | i                     |  | The total capacity of indoor units is too low.   | Check the indoor / outdoor control line*  |               |  |  |
|                                 | E16 | blinkir          | lby lam<br>ng<br>●           | <b></b>               | Auto<br>address<br>alarm   | The total capacity of indoor units is too high The numbers of indoor units is too many  The numbers of indoor units is too many                              | Check the indoor and outdoor unit control PCB     Check the power supply     Capacity and address re-setting after correcting the combination of units  |               |  |  |
|                                 | F01 | Opera            | perating                     |                       | Indoor heat e  | xchanger temperature sensor (E1) trouble   | Check the indoor unit heat exchanger temperature sens (E1)     Check the indoor unit control PCB  |               |  |  |
|                                 | F02 | lamp l<br>altern | blinkino<br>ately            | ng<br>:               | 9  | ı  | g<br>:  | Indoor heat e | xchanger temperature sensor (E2) trouble | Check the indoor unit heat exchanger temperature sens (E2)     Check the indoor unit control PCB |
|                                 | F10 | <b>*</b>         | *                            | •                     | Indoor air temperature sensor (TA) trouble   |  | Check the indoor unit air temperature sensor (TA)     Check the indoor unit control PCB   |               |  |  |
|                                 | F29 | simult           | mer<br>blinking<br>aneous    |                       | Indoor unit E  | EPROM trouble  | Check the indoor unit EEPROM     Check the indoor unit control PCB  |               |  |  |
|                                 | L02 | *                | *                            |                       |  | indoor / outdoor unit type /   | Address re-setting after correcting the combination of unit   |               |  |  |
| }                               | L03 | Opera            | ating<br>tandby              |                       | model misma  | tched f main indoor unit address in group control  | Correct the group (main and addition)   |               |  |  |
|                                 | L03 | lamps            | blinkir<br>aneous            | ng                    |  | I wiring is connected to individual control  | Correct the indoor unit address   |               |  |  |
| ŀ                               | L08 | *                | •                            | *                     |  | ddress is not set  | Correct the indoor unit address   |               |  |  |
| Ì                               | L09 | '`               |                              |                       | Indoor unit ca   | apacity is not set   | Correct the capacity setting of indoor units  |               |  |  |

 $<sup>^{\</sup>star}$  indoor / outdoor control line  $\!\!^{\star}$  : Connection cable between outdoor and indoor unit

|                                 |         |   | ess re<br>ontrolle<br>ver dis | er     |  |   |  |                    |  |                    |  |                   |                  |
|---------------------------------|---------|---|-------------------------------|--------|--|---|--|--------------------|--|--------------------|--|-------------------|------------------|
| Abno                            | ormal   | -\$-O ⊕ (                                       |                               | *      | Alema contents   | Franklanden   |  |                    |  |                    |  |                   |                  |
| dis                             | display |   | Timer<br>Standby              |        | Alarm contents   | Error location  |  |                    |  |                    |  |                   |                  |
|                                 |         |   |                               |        | Indoor unit fan motor locked   | Remove the cause  |  |                    |  |                    |  |                   |                  |
|                                 | P01     |   |                               |        | Indoor unit fan motor layer short  | Replace the fan motor   |  |                    |  |                    |  |                   |                  |
|                                 |         |   |                               |        | Contact failure in thermostat protector circuit                                    | Correct the wiring  |  |                    |  |                    |  |                   |                  |
|                                 | P09     | P09   |                               |        | Faulty wiring connections of (ceiling) indoor unit panel                           | Correct the wiring connection     Correct insertion direction of connector. (Hook is outside) |  |                    |  |                    |  |                   |                  |
| ±                               |         | Timer and                                       |                               |        | Faulty drain pump  | Repair / Replace  |  |                    |  |                    |  |                   |                  |
| j                               |         | standby<br>lamp blinking<br>alternately         |                               |        | Drainage failure   | • Correct   |  |                    |  |                    |  |                   |                  |
| oop                             | P10     |   |                               |        |  | g   | ıg   |                    | Contact failure of float switch wiring | Correct the wiring |  |                   |                  |
| Remote controller • Indoor Unit |         | •   | , , ,                         |        | * *  | *   | High water alarm for the case of Middle static pressure duct (PF) model installed vertically | Change the setting |  |                    |  |                   |                  |
| tro                             | P11     |   |                               |        |  | į   |  |                    |  |                    |  | Faulty drain pump | Repair / Replace |
| 00                              | PII     |   |                               |        |  |   |  | Drain pump locked  | Remove the cause                       |                    |  |                   |                  |
| mote                            | P12     |   |                               |        | Indoor unit fan motor locked<br>Faulty wiring connections of indoor unit fan motor | Remove the cause     Correct the wiring   |  |                    |  |                    |  |                   |                  |
| Re                              | P31     | Operating and standby lamp blinking alternately |                               | ;<br>* | Indoor unit in group control trouble   | Repair indoor unit which blinking alarm   |  |                    |  |                    |  |                   |                  |

|              |            | C   | ess rei<br>ontrolle<br>ver dis | er  |  |   |   |  |                                    |  |   |
|--------------|------------|---|--------------------------------|---|--|---|---|--|------------------------------------|--|---|
|              | ormal      | ☼U ⊕ (*)  |                                | *   | Alarm contents   |   | Error location  |  |                                    |  |   |
| dis          | display    |   | Operation                      |   |  |   | Enoriocation  |  |                                    |  |   |
|              |            | Stand   | by lamı                        | n   | Disconnection     line*  | on / Contact failure of indoor / outdoor control                          | Correct the indoor / outdoor control line*  • Check the electrical connection of fuse(F302) on indoor unit control PCB                    |  |                                    |  |   |
|              | E06        | blinkir   |                                | <b>*</b>                                  | Communicate     PCB opened   |   | In the case of the fuse opened on an indoor unit control PCB, After correcting wiring connection, it substitutes an EMG plug for OC plug. |  |                                    |  |   |
|              |            |   |                                |   | Indoor unit co   | ntrol PCB address setting error   | Indoor unit address re-setting  |  |                                    |  |   |
|              | E15        | Stand   | i<br>by lamı                   | 1   | A  | The total capacity of indoor units is too low.                            | Check the power supply  |  |                                    |  |   |
|              | E16        | blinkir   | ng iairi                       |   | Auto<br>address<br>alarm   | The total capacity of indoor units is too<br>high                         | Check the indoor and outdoor unit control PCB     Check the power supply     Capacity and address re-setting after correcting the         |  |                                    |  |   |
|              | F00        | •   | •                              | *   | GIGITI.  | The numbers of indoor units is too many  No indoor unit connected         | combination of units  |  |                                    |  |   |
|              | E20<br>F04 |   |                                |   | Compressor of  | lischarge temperature sensor (TD) trouble                                 | Check the Compressor discharge temperature sensor (TD)     Check the control SCR  |  |                                    |  |   |
|              | F06        | 0   | 4:                             |   |  | exchanger temperature sensor (C1) trouble                                 | Check the outdoor unit control PCB     Check the outdoor unit heat exchanger temperature sensor (C1)                                      |  |                                    |  |   |
|              |            |   |                                |   | perating<br>nd timer   |   | - Cutacor riout   |  | Check the outdoor unit control PCB |  |   |
|              | F07        | -   #   #   o                                       | Outdoor heat                   | exchanger temperature sensor (C2) trouble | Check the outdoor unit heat exchanger temperature sensor (C2)     Check the outdoor unit control PCB |   |   |  |                                    |  |   |
|              | F08        |   | 0                              | Outdoor air te                            | mperature sensor (TO) trouble  | Check the outdoor unit control PCB     Check the outdoor unit control PCB |   |  |                                    |  |   |
| Ļ            | F12        |   |                                |   | Compressor s   | uction temperature sensor (TS) trouble                                    | Check the Compressor suction temperature sensor (TS)     Check the outdoor unit control PCB   |  |                                    |  |   |
| Outdoor Unit | F31        | Opera<br>and til<br>lamp l<br>altern                | mer<br>olinking                | 0   | Outdoor unit E   | EEPROM trouble  | Check the outdoor unit EEPROM     Check the outdoor unit control PCB  |  |                                    |  |   |
|              | H01        | ~   | <u>~</u>                       |   | Primary (inpu  | t) overcurrent detected   | Check the Refrigerant cycle (abnormal overload operation) Check the outdoor unit control PCB Check the power supply                       |  |                                    |  |   |
|              | H02        | Timer<br>blinkir                                    |                                |   |  |   |   |  | PAM trouble                        |  | Check the outdoor unit control PCB     Compressor locked     Check the power supply |
|              | H03        | •   | *                              | •   | Primary curre  | nt CT sensor failure  | Check the outdoor unit control PCB     Check the power supply   |  |                                    |  |   |
|              | H31        |   |                                |   | HIC trouble<br>DC voltage no   | ot detected   | Check the outdoor unit control PCB Check the HIC Compressor locked Valve blockage   |  |                                    |  |   |
|              | L10        | Oners   | nting                          |   | Outdoor unit   | capacity is not set or setting error                                      | Replace the outdoor unit EEPROM   |  |                                    |  |   |
|              | L13        | Operating and standby lamps blinking simultaneously | standby<br>s blinking          |   |  | pe setting error<br>r / outdoor units is different                        | Replace the indoor unit EEPROM     Check the outdoor unit control PCB     Check the type of IU and OU, and re-set address                 |  |                                    |  |   |
|              | L18        | *   | 0                              | *   | 4-way valve lo   | ocked trouble / operation failure   | Check the 4-way valve     Check the 4-way valve wiring     Check the outdoor unit control PCB   |  |                                    |  |   |
|              | P03        | Oper  |                                |   | Compressor of  | lischarge temperature trouble   | Check the refrigerant cycle (gas leak)     Trouble with the electronic expansion valve     Check the discharge temperature sensor (TD)    |  |                                    |  |   |
|              | P04        | lamp  | standby<br>blinkin<br>nately   |   | Compressor of  | lischarge pressure trouble  | Check the refrigerant cycle     Valve blockage     Heat exchanger obstruction   |  |                                    |  |   |
|              | P05        | *   | •                              | *   | Open phase of AC power sup   |   | Check the power supply     Check the outdoor unit control PCB     Check the compressor wiring ,and reactor wiring                         |  |                                    |  |   |

 $<sup>\</sup>ensuremath{^*}$  indoor / outdoor control line  $\ensuremath{^*}$  : Connection cable between outdoor and indoor unit

|              |       | Wireless remote controller receiver display         |                             | er      |   |  |
|--------------|-------|---|-----------------------------|---------|---|--|
| Abno         | ormal |   |                             | *       |   |  |
| display      |       | Operation   | Timer                       | Standby | Alarm contents  | Error location   |
|              | P13   | Timerand<br>standby<br>lamp blinking<br>alternately |                             | ı<br>*  | Valve error<br>Refrigerant circuit error.<br>Wrong installation for refrigerant piping and wiring | Valve blockage     Check the refrigerant circuit     Check the refrigerant piping and wiring installation  |
| hit          | P15   |   |                             |         | Insufficient gas level detected   | Check the refrigerant cycle (gas leak)     Trouble with the electronic expansion valve     Valve (or refrigerant circuit) blockage   |
| Outdoor Unit | P16   | Opera   |                             |         | Compressor overcurrent trouble  | Layer short on the compressor     Check the outdoor unit control PCB     Compressor locked   |
| Ŏ            | P22   |   | tandby<br>blinking<br>ately | I       | Outdoor unit fan motor trouble<br>Outdoor unit fan trouble  | Check the outdoor unit fan motor, connector     Check the outdoor unit control PCB   |
|              | P29   | *   | •                           | *       | Inverter compressor trouble   | Layer short on the compressor     Check the outdoor unit control PCB     Check the inverter compressor wiring (Open phase / Reverse phase)     Compressor actuation failure (include lock)     Valve (or refrigerant circuit) blockage |
|              | P31   |   |                             |         | Indoor unit in group control trouble  | Repair indoor unit which blinking alarm  |

# 2.8. System Control

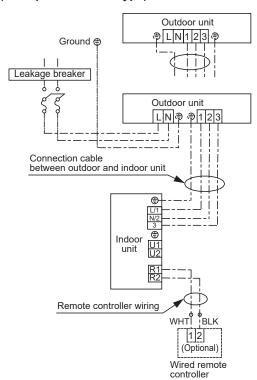
System control refers to the link wiring connection for control of simultaneous-operation multi systems, group control, and main-sub remote controller control.

#### 2-3-1-6-1. Basic wiring diagram: 3-LINE CONNECTION

• Be careful to avoid miswiring when connecting the wires. (Miswiring will damage the units.)

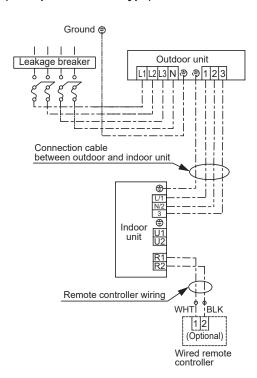
#### (for 1-phase Outdoor unit)

(Example of SINGLE type)



#### (for 3-phase Outdoor unit)

## (Example of SINGLE type)



#### (Wiring procedure)

- (1) Connect the remote controller to the indoor unit remote controller wiring terminal plate (R1, R2). (Remote controller wiring)
- (2) Connect the indoor units (L / 1, N / 2, 3) and the outdoor units (1, 2, 3).

  Connect the remote controller communication wiring to the indoor units (R1, R2) for each refrigerant system. (Remote controller wiring)
- (3) Connect the remote controller communication wiring (2 wires) from the remote controller wiring terminal plate (R1, R2) on the indoor unit (unit where the remote controller is connected) to the remote controller terminal plates (R1, R2) on the other indoor units. (Remote controller communication wiring)
- (4) Turn ON both the indoor and outdoor unit power and perform auto address setting from the remote controller. (For the auto address setting procedure, see 2-3-1-6-3.)

#### NOTE

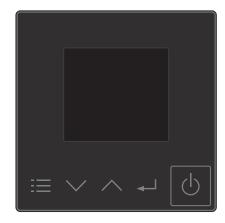
\* Be sure to use the indoor unit temperature sensor (body sensor) when using this control. (Status at shipment.)

# 2-3-1-6-3. Auto Address Setting Using the Remote Controller < Procedure of CZ-RTC6 series>

(1) Keep pressing the ≡, and buttons simultaneously for 4 or more seconds.

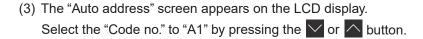
The "Maintenance func" screen appears on the LCD display.





**CZ-RTC6** series

(2) Press the or button to see each menu.
Select "Auto address" on the LCD display and press the button.





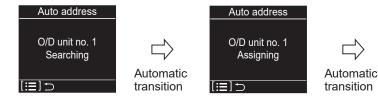
Simple settings

After selecting "Code no.", press the button and proceed to Step (4). If the button is pressed, proceed to Step (5).

(4) Select one of the "O/D unit no." for auto address by pressing the or button.



After selecting "O/D unit no.", press the - button.





Approximately 10 minutes are required.

When auto address setting is completed, the units return to normal stopped status.

(5) If the button is pressed under the display Step (3), the following display (Auto address-end screen) appears.

Then select "YES" by pressing the or button and press the button.

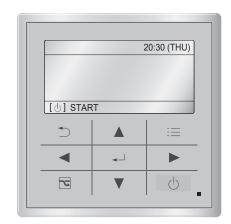


#### <Pre><Pre>cedure of CZ-RTC5B>

(1) Keep pressing the \_\_\_\_\_, \_\_\_ and \_\_\_\_ buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.



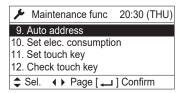


CZ-RTC5B

(2) Press the ▼ or ▲ button to see each menu.

If you wish to see the next screen instantly, press the or button.

Select "9. Auto address" on the LCD display and press the button.



(3) The "Auto address" screen appears on the LCD display.

Change the "Code no." to "A1" by pressing the ▼ or ▲ button.



(4) Select the "O/D unit no." by pressing the 

or 

button.

Select one of the "O/D unit no." by pressing the ▼ or ▲ button and press the ← button for auto address setting.

Approximately 10 minutes are required.

When auto address setting is completed, the units return to normal stopped status.

#### <Pre><Pre>cedure of CZ-RTC4>

#### NOTE

- · Selecting each refrigerant system individually for auto address setting
- · Auto address setting for each system : Item code "A1"
- (1) Press the remote controller timer time button and button at the same time.(Press and hold for 4 seconds or longer.)
- (2) Next, press either the temperature setting ▽/△ button. (Check that the item code is "A1".)
- (3) Use either the button to set the system No. to perform auto address setting.
- (4) Then press the set button.

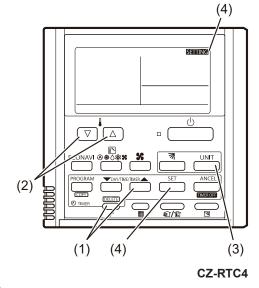
(Auto address setting for one refrigerant system begins.) (When auto address setting for one system is completed, the system returns to normal stopped status.)

<Approximately 10 minutes are required.>

(During auto address setting, "SETTING" is displayed on the remote controller.

This message disappears when auto address setting is completed.)

(5) Repeat the same steps to perform auto address setting for each successive system.



#### 2-3-1-6-4. How to Set Refrigerant System Address (Only outdoor PZ2 and PZH2 series)

- Turn on the power in the indoor and outdoor units of the refrigerant system 1.
- Switch the power on and wait at least 1 minute and 30 seconds or more. Short-circuit the auto address pin of
  the outdoor unit with turned on and release. (LED1 and LED2 of the outdoor unit control PCB blink alternately
  and the address setting of the indoor unit is started. When completed, LEDs go off.)
  - <It takes about 10 minutes until it finished.>
  - Auto address pin: If you once again short-circuit the auto address pin before completion when the auto address started, the auto address will stop.
- Turn on the different refrigerant system's indoor and outdoor units and wait at least 1 minute and 30 seconds or more. Then short-circuit the auto address pin of the outdoor unit and release.
- · Repeat the same procedure and complete the auto address setting of each system.
- When the address setting is completed, wait at least 1 minute and 30 seconds or more. Then start the operation.

#### 2-3-1-6-5. Checking the Indoor Unit Addresses

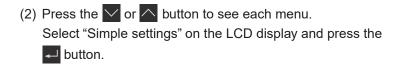
Use the remote controller to check the indoor unit address.

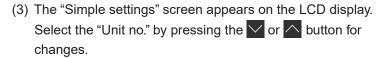
#### <Pre><Pre>cedure of CZ-RTC6 series>

(1) Keep pressing the ≡, and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.



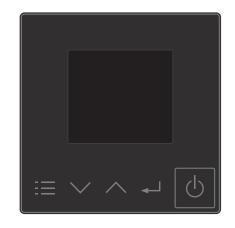




\* The initial display is "ALL".

The indoor unit fan operates only at the selected indoor unit.

(4) Press the button and select "YES" to restart.



**CZ-RTC6** series

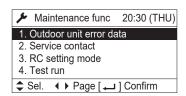




#### <Pre><Pre>cedure of CZ-RTC5B>

(1) Keep pressing the \_\_\_\_\_, \_\_\_ and \_\_\_\_ buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.



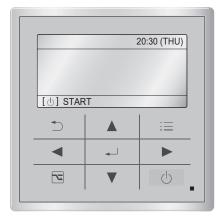


Select "7. Simple settings" on the LCD display and press the  $\begin{tabular}{c} \end{tabular}$  button.

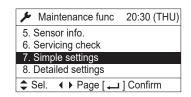
- (3) The "Simple settings" screen appears on the LCD display. Select the "Unit no." by pressing the ▼ or ▲ button for changes.
  - \* The initial display is "ALL".

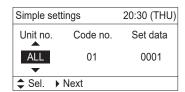
The indoor unit fan operates only at the selected indoor unit.

(4) Press the button and select "YES" to restart.



CZ-RTC5B

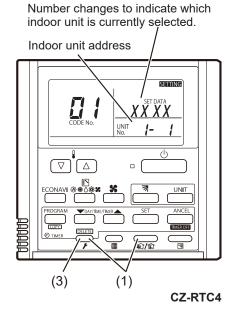




#### <Pre><Pre>cedure of CZ-RTC4>

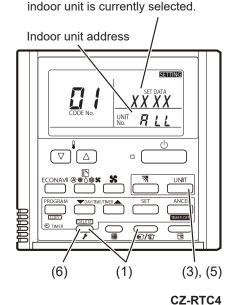
#### <If 1 indoor unit is connected to 1 remote controller>

- (1) Press and hold the button and button for 4 seconds or longer (simple settings mode).
- (2) The address is displayed for the indoor unit that is connected to the remote controller.(Only the address of the indoor unit that is connected to the remote controller can be checked.)
- (3) Press the putton again to return to normal remote controller mode.



#### <If multiple indoor units are connected to 1 remote controller (group control)>

- (1) Press and hold the button and button for 4 seconds or longer (simple settings mode).
- (2) "ALL" is displayed on the remote controller.
- (3) Next, press the \_\_\_\_ button.
- (4) The address is displayed for 1 of the indoor units which is connected to the remote controller. Check that the fan of that indoor unit starts and that air is discharged.
- (5) Press the button again and check the address of each indoor unit in sequence.
- (6) Press the button again to return to normal remote controller mode.

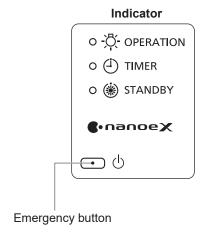


Number changes to indicate which

#### 2-3-1-6-6. Test run using the indicator of the indoor unit (Wall Mounted Type)

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

- (1) Press and hold the Emergency button for 4 seconds or more.
  The indication lamps (OPERATION, TIMER, STANDBY)
  - epeatedly light one after the other for 1 second.
  - The wireless remote controller address setting mode is set.
- (2) Press and hold the Emergency button for 4 seconds or more again. The indication lamps (OPERATION, TIMER, STANDBY) blink during test operation.
  - The test run can be performed using the HEAT, COOL, or FAN operation mode.
  - The temperature cannot be adjusted when in test run mode.
  - If correct operation is not possible, some of the display lamps (OPERATION, TIMER, STANDBY) will turn ON or OFF. (Regarding the alarm contents, see 2-3-1-5. Contents of Remote Controller Switch Alarm Display.)



- (3) To stop test operation, press and hold the Emergency button.
  - To prevent continuous test run, this mode includes a timer function that cancels the test run after 60 minutes.

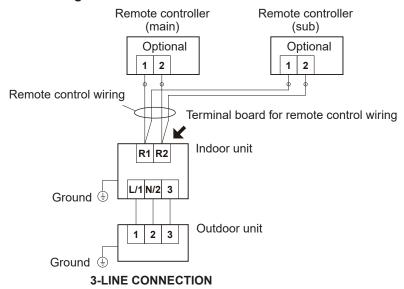
#### NOTE

• The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.

#### 2-3-1-6-7. Main-Sub Remote Controller Control

One (1) indoor unit can be controlled by two (2) wired remote controllers. In the case of using 2 remote controllers, one of them needs to be designated as the sub remote controller.

#### Connecting 2 remote controllers to control 1 Indoor unit



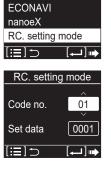
### <Pre><Pre>cedure of CZ-RTC6 series>

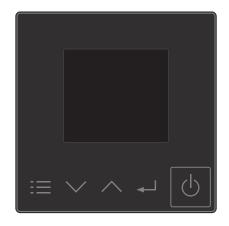
- (2) Select "RC. setting mode".



(3) Select the "Code no." and " Set data".







**CZ-RTC6** series

| Code no. | Item     | Set data |      |  |
|----------|----------|----------|------|--|
| Code no. | item     | 0000     | 0001 |  |
| 01       | Main/Sub | Sub      | Main |  |

- (4) Press **≡** 
  - After selecting "YES", the unit restarts.

#### <Pre><Pre>cedure of CZ-RTC5B>

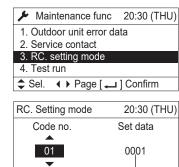
(1) Press and hold the \_\_\_\_\_, \_\_\_ and \_\_\_\_ for 4 seconds or more simultaneously.

(2) Select "3. RC. setting mode".

lack lac

(3) Select the "Code no." and "Set data".





Set data

\$ Sel.

Code no.

▶ Next

|          |          | 20:30 (THU) |  |
|----------|----------|-------------|--|
|          |          |             |  |
| [①] STAR | T.       |             |  |
| <b>5</b> |          |             |  |
| -        | 4        | <b></b>     |  |
|          | <b>V</b> | (h)         |  |

CZ-RTC5B

| Code no. | Item       | Set data |      |  |
|----------|------------|----------|------|--|
| Code no. | item       | 0000     | 0001 |  |
| 01       | Main / Sub | Sub      | Main |  |

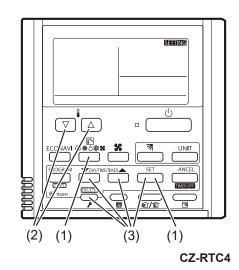
- (4) Press \_\_\_\_\_.
  - After selecting "YES", the unit restarts.

### <Pre><Pre>cedure of CZ-RTC4>

- (1) Press and hold the seconds simultaneously.
- (2) Select the Code no. ▽/△
- (3) Select the Set data. ▼DAY/TIME/TIME/TIMER → □

The indicator illuminates after blinking. Press  $\bigcirc$ .

| Code no. | Itam       | Set data |      |  |
|----------|------------|----------|------|--|
|          | Item       | 0000     | 0001 |  |
| 01       | Main / Sub | Sub      | Main |  |



2-25

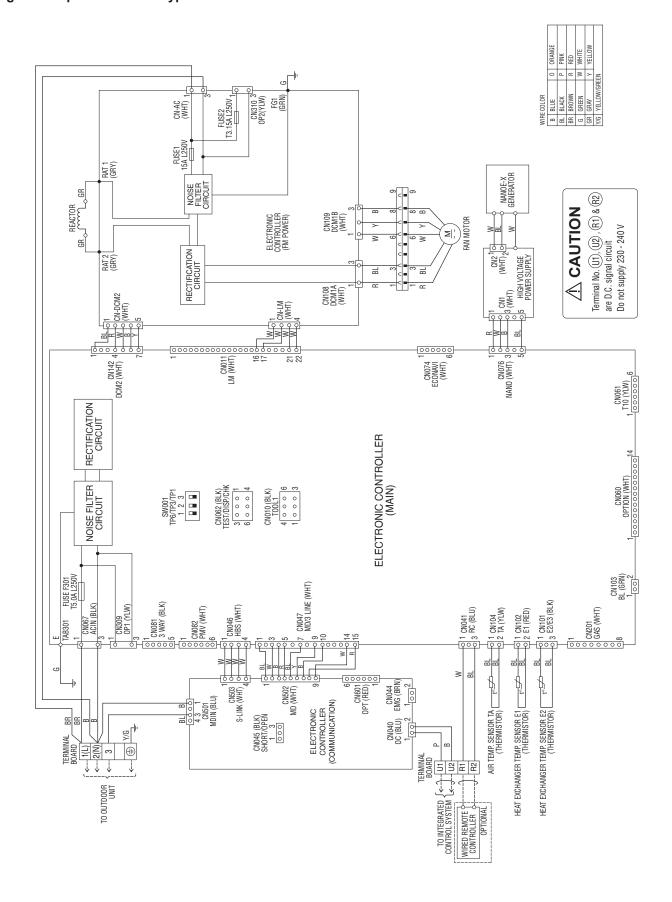
## 3

# 3. ELECTRICAL DATA

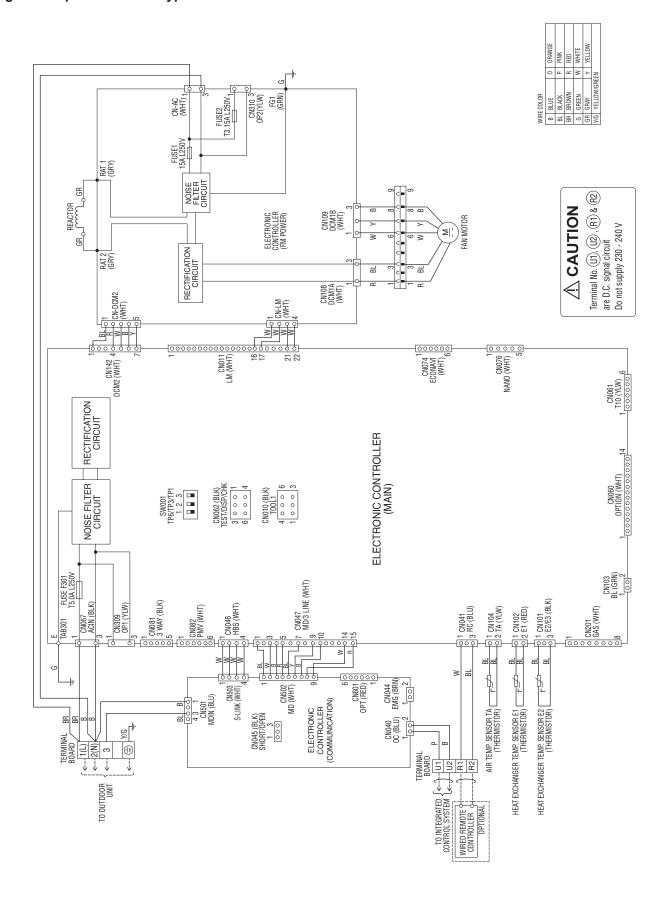
| 3-1. | Indoor Units (Electric Wiring Diagram) |   |  |  |  |  |
|------|--|---|--|--|--|--|
|      | •                                      | S-60PE4R S-71PE4R S-100PE4R S-125PE4R S-140PE4R S-160PE4F |  |  |  |  |
|      | High Static Pressure Duct Type         | S-100PE4RN S-125PE4RN S-140PE4RN S-160PE4RN               |  |  |  |  |
|      | High Static Pressure Duct Type         | S-160PE4RA  |  |  |  |  |

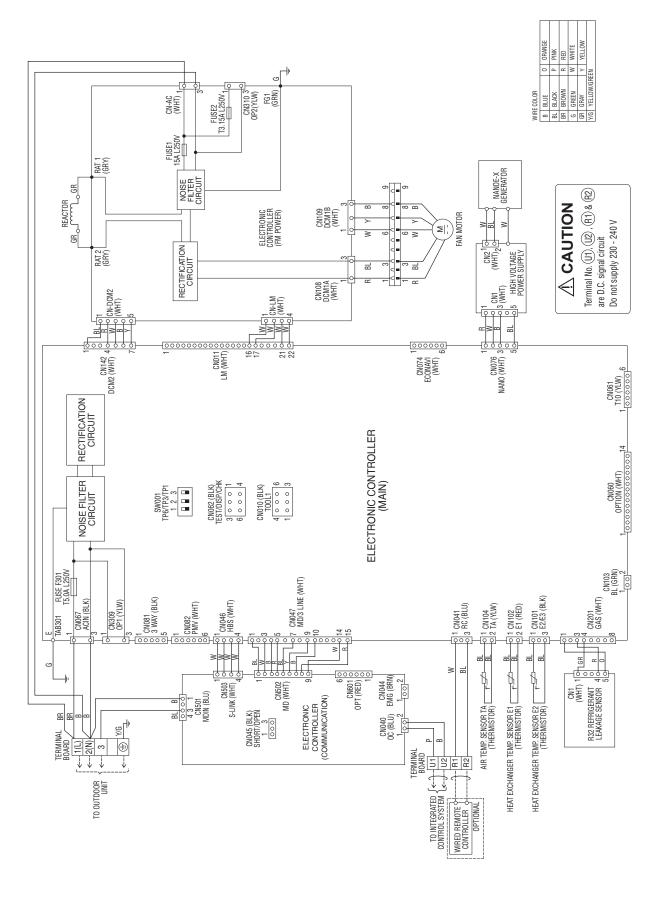
### 3-1. Indoor Units (Electric Wiring Diagram)

### High Static pressure Duct Type S-60PE4R S-71PE4R S-100PE4R S-125PE4R S-140PE4R S-160PE4R



### High Static pressure Duct Type S-100PE4RN S-125PE4RN S-140PE4RN S-160PE4RN





### 4

# 4. PROCESS AND FUNCTIONS

| 4-1.         | Control Functions                              | 4 - 2 |
|--------------|--|-------|
| <b>4-2</b> . | Indoor Unit Control PCB Switches and Functions | 4 - 7 |

#### 4-1. Control Functions

#### 1) Indoor Air Temperature Control

By the control method, not only the thermostat is switched on and off, as explained section "1. Indoor Air Temperature Control", but also the frequency of the compressor's inverter is controlled in accordance with  $\triangle$  T and fluctuations in indoor air temperature. Inverter frequency is controlled as follows:

| When $\triangle T$ is high (not yet reached the temperature set with the remote controller).                                  | Controlled so that the inverter frequency is increased.         |
|---|---|
| When $\triangle T$ is low (approximately +1.0 or less in the cooling mode or approximately -1.0 or more in the heating mode). | Controlled so that the inverter frequency is decreased or kept. |

#### 2) Maximum and Minimum Frequency Control

The compressor's inverter frequency is controlled in accordance with the model and operation mode.

The maximum and minimum frequencies for each model are shown in the table below.

- \* There are cases in which frequency is limited with other control functions depending on operational conditions, so operations are not always carried out in accordance with the maximum frequencies listed below.
  - · Maximum and Minimum Frequency

| Model          |         | U-60PZ4R5 | U-71PZ4R5 | U-100PZ4R5 | U-100PZ4R8 | U-125PZ4R5 | U-125PZ4R8 | U-140PZ4R5 | U-140PZ4R8 |
|----------------|---------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| Maximum        | Cooling | 88        | 72        | 81         | 70         | 67         | 67         | 78         | 78         |
| Frequency (Hz) | Heating | 106       | 90        | 90         | 99         | 70         | 70         | 83         | 83         |
| Minimum        | Cooling | 12        | 13        | 17         | 12         | 10         | 10         | 10         | 10         |
| Frequency (Hz) | Heating | 15        | 15        | 18         | 15         | 10         | 10         | 10         | 10         |

\* There is a case in which the frequency set at maximum and minimum may sometimes decrease in accordance with ambient temperature and indoor loads.

### 3) Current Control

The inverter frequency is controlled so that the current value for the inverter compressor is less than the figure listed in the table below in order to prevent abnormal increases in the inverter circuit located within the outdoor unit's electrical box.

Current control with primary current: The limited values are modified in accordance with ambient temperature.

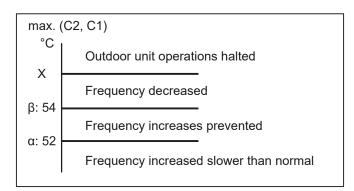
| Mode        | I       | U-60PZ4R5 | U-71PZ4R5 | U-100PZ4R5 | U-100PZ4R8 | U-125PZ4R5 | U-125PZ4R8 | U-140PZ4R5 | U-140PZ4R8 |
|-------------|---------|-----------|-----------|------------|------------|------------|------------|------------|------------|
|             | Cooling | 10.41     | 13.67     | 16.29      | 8.2        | 26         | 9          | 27         | 9.5        |
| Current (A) | Heating | 8.69      | 12.22     | 14.48      | 8.5        | 26         | 9          | 27         | 9.5        |

#### 4) Condensation Temperature Control (cooling)

This system control is performed to limit the inverter frequency in order to restrict high pressure's abnormal increase and high-load operating prevention in the cooling mode.

In accordance with the temperature of the outdoor heat exchanger temperature sensors (C1, C2), such controls are performed as to halting the operations of the indoor unit, decreasing the inverter frequency and restricting its increase, etc.

- (a) The threshold value is decreased in accordance with the compressor frequency or indoor load (differences of temperature).
- (b) When "X" values are lowered, the results basically become  $\beta$ =X-2,  $\alpha$ =X-3.



CODE: 30D (for X setting \*2)

| Setting No. | 1  | 2    | 3    | 4 *1 | 5  |
|-------------|----|------|------|------|----|
| X (°C)      | 52 | 56.5 | 58.5 | 60   | 62 |

CODE: 30E (for  $\alpha$  setting \*2) CODE: 30F (for  $\beta$  setting \*2)

| EEPROM |     |   | *1 |
|--------|-----|---|----|
| α      | -10 | ~ | 0  |
| β      | -10 | ~ | 0  |

- \*1 Setting at factory shipment
- \*2 Use the CZ-RTC6 series remote controller for setting

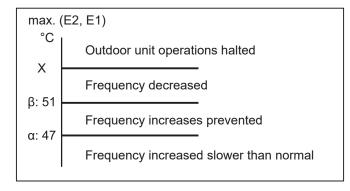
See "7-3. Detailed Settings Function"

### 5) Condensation Temperature Control (heating)

This system control is performed to limit the inverter frequency in order to restrict high pressure's abnormal increase and high-load operating prevention in the heating mode.

In accordance with the temperature of the indoor heat exchanger temperatures sensor (E1, E2), such controls are performed as to halting the operations of the indoor unit, decreasing the inverter frequency and restricting its increase, etc.

- (a) The threshold value is decreased in accordance with the compressor frequency or indoor load (differences of temperature).
- (b) When "X" values are lowered, the results basically become  $\beta$ =X-2,  $\alpha$ =X-3.



CODE: 30D (for X setting \*2)

| Setting No. | 1  | 2    | 3    | 4 *1 | 5  |
|-------------|----|------|------|------|----|
| X (°C)      | 52 | 56.5 | 58.5 | 60   | 62 |

CODE: 308 (for  $\alpha$  setting \*2) CODE: 309 (for  $\beta$  setting \*2)

| EEPROM |     |   | *1 |
|--------|-----|---|----|
| α      | -10 | ~ | 0  |
| β      | -10 | ~ | 0  |

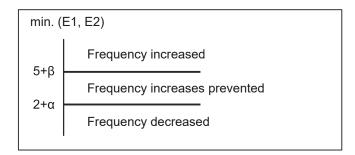
- \*1 Setting at factory shipment
- \*2 Use the CZ-RTC6 series remote controller for setting

See "7-3. Detailed Settings Function"

### 6) Cooling Freeze Prevention Control

The following control is performed during cooling operations (including dry mode operation), in accordance with whichever of the indoor heat exchanger temperatures (E1 or E2) is lower. (See the chart below.)

- (a) Frequency will not be decreased less than 6 minutes after thermostat ON.
- (b) The threshold value is increased in accordance with the indoor load (differences of temperature).



Outdoor EEPROM : Amendment of  $\alpha$  and  $\beta$  values can be made due to 30A or 30B.

EEPROM setting in outdoor unit

CODE: 30A (for a setting)

| Setting No. | -15 | <br>0 * | <br>9 |
|-------------|-----|---------|-------|
| α           | -15 | <br>0   | <br>9 |

CODE: 30B (for β setting)

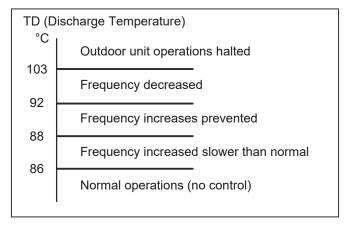
| •           | •   | 0, |     |       |
|-------------|-----|----|-----|-------|
| Setting No. | -15 |    | 0 * | <br>9 |
| β           | -15 | ]  | 0   | <br>9 |

<sup>\*</sup> Setting at factory shipment

#### 7) Discharge Temperature Control

The following control is performed to prevent the discharge temperature from rising abnormally in order to protect the inverter compressor.

In accordance with the temperature of the discharge sensor TD, such controls are performed as to limiting the increase of inverter frequency, decreasing it or halting operation of the compressor.



<sup>\*</sup> If the discharge temperature exceeds 103°C, operations of the compressor are halted and restarted after 3 minutes.

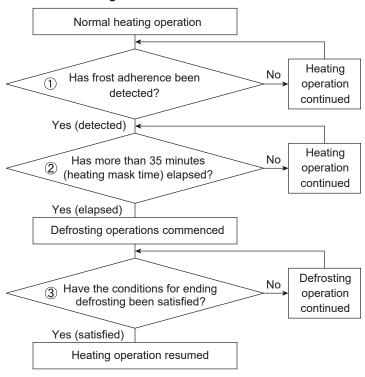
If this start/stop activity is repeated 5 times, the alarm "P03" (abnormal discharge temperature) occurs.

### 8) Defrosting Control

This control function removes frost that has adhered to the outdoor heat exchanger during the heating operation. The control is performed to prevent the deterioration of the heating capabilities attributed to the adherence of frost, and to prevent the crack or crush of pipes attributed to the accretion of ice.

The following control is performed in accordance with the ambient temperature and the outdoor heat exchanger temperature sensor (C1).

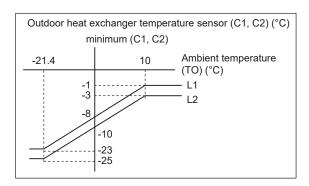
#### **Overall Flow Chart of Defrosting Control**



### 1) Frost adherence detection

- · If the following conditions are satisfied during heating operations, it is regarded as "frost adherence is detected".
- Frost adherence detection is performed in accordance with the ambient temperature (TO) and the outdoor heat exchanger temperature sensor min(C1, C2).
- Frost adherence detection conditions
  - (a) Following satisfied condition is detected for accumulation of 60 minutes.

    Outdoor heat exchanger temperature sensor min(C1, C2) < L1
  - (b) Following satisfied condition is detected for consecutive 4 minutes or more, 2 times. Outdoor heat exchanger temperature sensor  $min(C1, C2) \le L2$



(c) Following satisfied condition is detected for accumulation of over 80 minutes. Outdoor heat exchanger temperature sensor min(C1, C2) < -3  $^{\circ}$ C

### 2 Heating Mask Time

This refers to the shortest time that heating operations must be performed without defrosting operations being executed. The mask time for this model is 35 minutes.

\* Defrosting operations will not be commenced until the defrosting mask time has elapsed, even if frost adherence has been detected.

### 3 Ending Defrosting

Defrosting operations are ended when the following conditions are satisfied.

- · Ending defrosting conditions
  - (a) When the temperature of the outdoor heat exchanger temperature sensor (C1) is 10°C or higher.
  - (b) When the temperature of the outdoor heat exchanger temperature sensor (C1) is 6°C or higher for consecutive 60 seconds
  - (c) When a maximum of 15 minutes defrosting time has elaped.

#### 9) Outdoor Unit Fan Control

The appropriate rotations per minute for the outdoor unit fan are determined in accordance with the ambient temperature and the frequency of the compressor inverter.

The outdoor unit fan step is controlled between a range of W0 (Step 1) and WF (Step 15).

### 4-2. Indoor Unit Control PCB Switches and Functions

#### [Indoor unit control PCB]

T10 (CN061): 6P plug (YEL) / Used for remote control operation. (Refer to the Remote Control Section.)

Control items: (1) Start/stop input (2) Remote controller prohibit input

(3) Start signal output (4) Alarm signal output

**EXCT (CN073):** 2P plug (RED) / Can be used for demand control. When input is present, forces the unit to

operate with the thermostat OFF.

DISP (CN063): 2P plug (BLK) Type E3/E4:

Short-circuiting this plug allows operation to be controlled by the remote controller even when an outdoor unit is not connected. (In this case, alarm "E04," which indicates trouble in the

serial communication between the indoor and outdoor unit, does not occur.)

CHK (CN062): 2P plug (BLK) Type E3/E4:

Test pin. Short-circuiting this pin allows the indoor FM (H fan speed), drain pump, flap motor

(F1 position), and electronic expansion valve full-open position to be checked. However this function turns OFF if the indoor unit protection mechanism is activated. The components will operate even if the remote controller and outdoor unit are not connected, however the remote control cannot be used for control even if it is connected.

This plug can be used for short-term tests.

JP1 (JP001): Jumper wire / Allows selection of the T10 terminal start/stop signal. (Refer to the Remote

Control Section.)

Setting at time of shipment: Pulse signal

Jumper wire cut: Static signal (continuous signal)

Fan drive (CN032): 2P plug (WHT) / This terminal sends the signal to the ventilation fan when a commercially

available ventilation fan is operated by the FAN button on the wired remote controller. (Refer

to the Remote Control Section.)

Use a ventilation fan which can accept the no-voltage contact A signal as the external input

signal.

Power LED: LED (RED) / Illuminates when the power is ON. Flashes when there is trouble with the

EEPROM (IC10, IC010: nonvolatile memory).

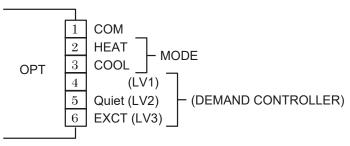
**EEPROM (IC010):** Nonvolatile memory / Used to store model information and other data. When replacing

the PCB, remove the EEPROM from the old PCB and install it onto the new PCB. If there is IC trouble, replace with a new IC (provided with the servicing PCB), and set the necessary information using the wired remote controller. (For the setting procedure, refer to the

servicing technical materials.)

OPT(CN601): Used for 6P plug (RED) / MODE, DEMAND control.

1 pin: For COM setting, 2-3 pin: For MODE setting, 4-6 pin: For DEMAND / Quiet, EXCT setting



Indoor unit control PCB

\* When using these functions, use the lead wires described below. Lead wire with 6P socket (Service parts: Parts code / ACPA60C7898)

Check the delivery date in advance because of BTO (build-to- order manufacturing). To activate OTP function, it need to change the detailed setting by remote control. Can set the following 2 types from settling item "0002EE".

"0000": (Initial setting) Quiet/EXCT can be set from OTP terminal

"0001": Demand Lv1/Lv2/Lv3 will be enabled. (Except Oceania model)

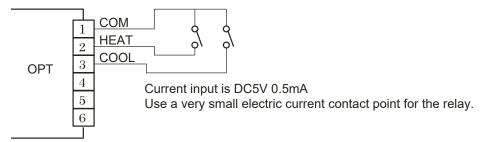
#### NOTE:

- Wire length between the indoor control PCB and the electrical contact should be less than 2 m.
- Nonuse lead wires should be insulated.

### 1. MODE / Indoor Unit Cooling and Heating mode select pin

- 1-2 pin short circuit: Heating mode, 1-3 pin short circuit: Cooling mode
  - When the heating side is shorted in cooling mode, it changes to heating mode. When the cooling side is shorted in heating mode, it changes to cooling mode.

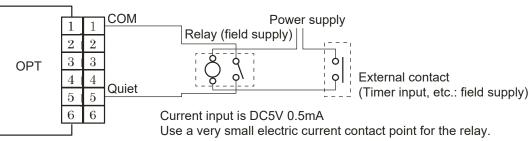
### Wiring example



Indoor unit control PCB

- 2. Quiet / Low noise mode operation is available.
  - · Operating with limited outdoor fan and compressor frequencies.
  - When the relay is switched ON, low noise operation is performed. (Non-voltage contact "a")

### Wiring example

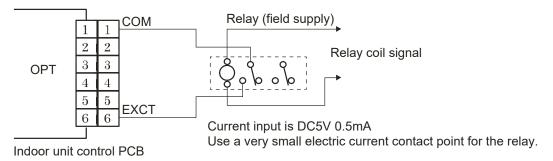


Indoor unit control PCB

### 3. EXCT / DEMAND control available

• When input, the thermos is forcibly switched OFF.

#### Wiring example



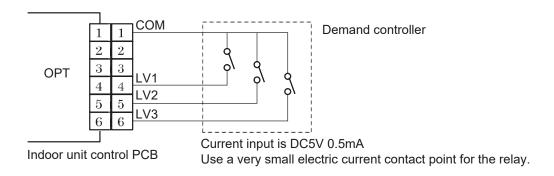
### 4. LV1, LV2, LV3 / Use this terminal for demand control.

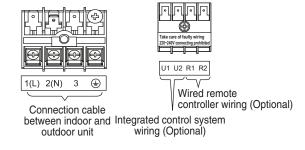
- When using the demand function, use the CZ-RTC6 series remote controller for setting.
- The below table shows the operating range. Select the operating range. See the following table.

| pin no. for demand section | Operating range              |
|----------------------------|------------------------------|
| LV1                        | Approx. 75% of rated current |
| LV2                        | Approx. 50% of rated current |
| LV3                        | Stop                         |

#### Wiring example

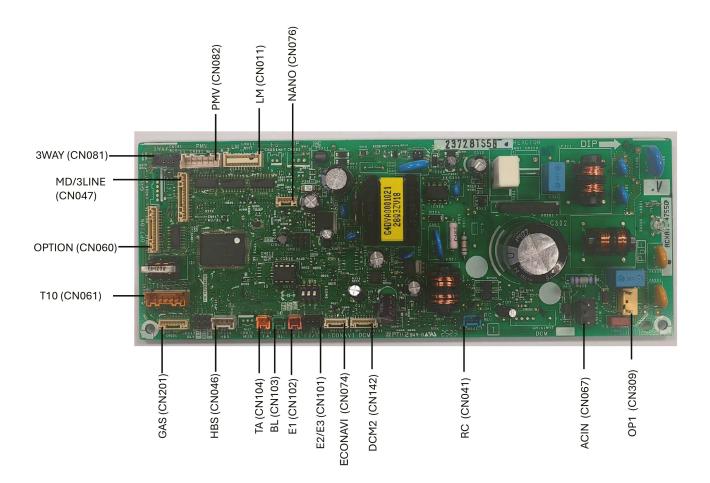
Connect the wires. See the below diagram and above table.



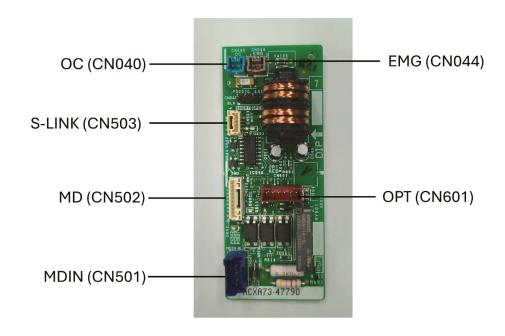


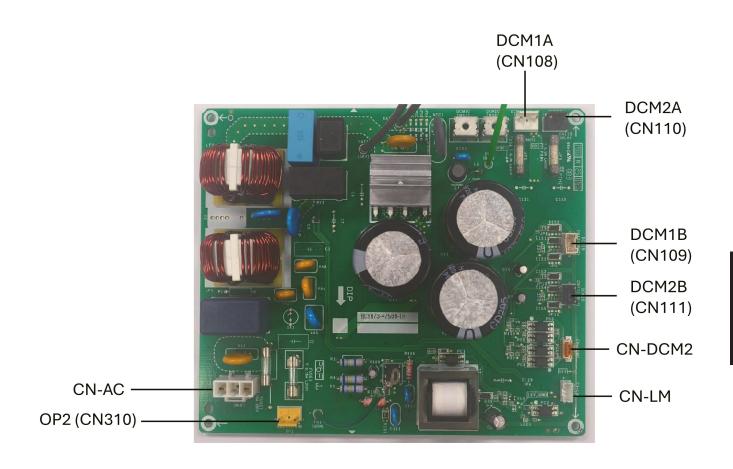
**High Static Pressure Ducted Type** 

# High Static Pressure Ducted Type Indoor Unit Control Board - Main



### **Indoor Unit Control Board - Communication**





# 5. TROUBLE DIAGNOSIS

| 5-1.  | Contents of Remote Controller Switch Alarm Display                       | 5-2  |
|-------|--|------|
| 5-2.  | PAC System Alarm Codes   | 5-4  |
| 5-3.  | Symptom: Thermostat in OFF continues or cycles OFF & ON too frequently   | 5-17 |
| 5-4.  | How to separate the indoor unit  | 5-18 |
| 5-5.  | How to assemble middle duct connection                                   | 5-19 |
| 5-6.  | For 12.5kW ~16kW unit: Heat exchange unit and Fan motor + fan cover unit | 5-20 |
| 5-7.  | How to Remove Fan Motor  | 5-21 |
| 5-8.  | How to remove Nanoe Generator (S-60/71/100/125/140/160PE4R S-160PE4RA)   | 5-28 |
| 5-9.  | How to remove R32 gas leak detector sensor (S-160PE4RA only)             | 5-31 |
| 5-10. | Symptom: Thermostat in OFF continues or cycles OFF & ON too frequently   | 5-33 |

### 5-1. Contents of Remote Controller Switch Alarm Display

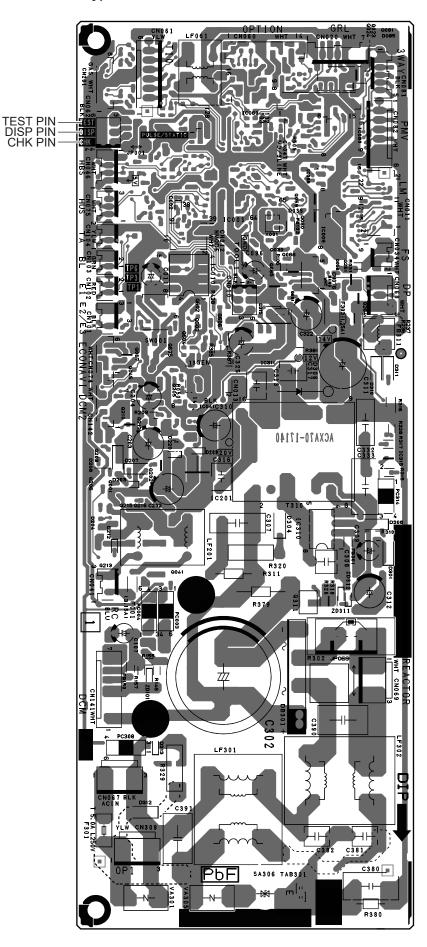
Wireless remote controller receiver display Wired remote Ŭ-(J) (J) ۱ Possible cause of malfunction control display Faulty remote controller Failure in receiving serial signal from remote controller's Disconnection/Contact failure of remote controller wiring indoor unit CHK(check) pins on the indoor unit control PCB are short circuited In the case of non-group control: Settings of system address, · Power supply OFF of outdoor unit E01 indoor unit address and group · Disconnection / Contact failure of inter-unit wiring Operating lamp blinking control are not made In the case of group control: Automatic address operation was not carried out. ₩ Setting failure of nonvolatile Faulty setting of EEPROM on indoor unit memory IC Faulty remote controller Failure in indoor unit serial E02 signal from remote controller Wrong wiring of remote controller Error in indoor unit receiving signal from remote controller (central) E03 Disconnection / Contact failure of inter-unit wiring · Faulty indoor unit control PCB Faulty outdoor unit control PCB · Communication circuit fuse on indoor unit control PCB opened Failure in indoor unit receiving E04 serial signal from outdoor unit · Fuse on outdoor unit control PCB opened Since failure of an outdoor fan motor is considered as a cause, Standby both outdoor unit control PCB and outdoor unit fan motor are lamp blinking exchanged simultaneously. · Disconnection / Contact failure of inter-unit wiring Failure in outdoor unit · Disconnection of inter-unit wiring receiving serial signal from E06 · Communication circuit fuse on indoor unit control PCB opened indoor unit Indoor unit control PCB address setting error Serial Duplication of indoor unit address communication Duplication of indoor unit address setting E08 errors Duplication of main remote Error because of more than one remote controller setting to main E09 Missetting controller setting Operating lamp Automatic address setting start is prohibited E12 blinking Improper setting Duplication of main unit in group control E14 · Disconnection of wiring between main unit and additional units Communication error between · Contact failure of wiring E18 main and sub indoor units · Faulty indoor unit control PCB (Main or Addition) Automatic Address Alarm E15 The total capacity of indoor units is too low Automatic address settings Automatic Address Alarm E16 Standby lamp failure The total capacity of indoor units is too high blinking Automatic Address Alarm E20 No indoor unit connected Outdoor unit Communication error E24 Outdoor unit Communication error E29 Indoor & outdoor unit type Setting error, indoor/outdoor unit type/model miss-matched L02 miss-matched Operating and Duplication of group control's standby Duplication of main indoor unit address in group control L03 main indoor unit lamps blinking Group control wiring is connected simultaneously Group control wiring is connected to individual control indoor unit L07 to individual control indoor unit ₩ <del>\</del> Indoor unit address is not set L08 Indoor unit capacity is not set L09 Operating and L04 Duplication of outdoor unit address standby Outdoor unit capacity is not set or setting error L10 lamps blinking Indoor unit type setting error simultaneously L13 Type of indoor/outdoor units is different 0 L18 4-way valve locked trouble / operation failure

ON: ○ Blinking: ☆ OFF: ●

|                                       |   |  | Wired                        | remo           | Vireles<br>te con<br>iver di                    | trolle                                  |  |
|---------------------------------------|---|--|------------------------------|----------------|---|---|--|
|                                       | Pos   | sible cause of malfunction   | remote<br>control<br>display | Operation      | Timer   | Standby (                               |  |
|                                       | Faulty wiring connections of (co  | eiling) indoor unit panel  | P09                          | ō              | F   | 3                                       |  |
|                                       | yg(c  | Indoor unit fan motor locked   |                              | -              | į   |   |  |
|                                       | Indoor unit fan motor trouble   | Indoor unit fan motor layer short  | P01                          |                |   |   |  |
|                                       | (AC fan)  | Contact failure in thermostat protector circuit  |                              |                | İ   |   |  |
|                                       |   | Faulty drain pump  |                              | Time           | :<br>r and s                                    | tondi                                   |  |
|                                       | Activation of float switch  | Drainage failure   | P10                          | lamp           | blinkin   |   |  |
|                                       | wiring  | Contact failure of float switch wiring   |                              | alteri         | nately<br>:                                     | :                                       |  |
|                                       |   | Faulty drain pump  |                              |                |   |   |  |
|                                       | Faulty drain pump   | Drain pump locked  | —— P11                       | •              | <b>\</b>  | #                                       |  |
|                                       | Indoor unit fan motor trouble (DC fan)  | P12  |                              |                |   |   |  |
|                                       | Valve error   | Valve error<br>Refrigerant circuit error<br>Wrong installation for refrigerant piping and wiring | P13                          |                |   |   |  |
|                                       | O <sub>2</sub> sensor error   | O <sub>2</sub> sensor detected   | P14                          |                | }   |   |  |
| <b>.</b>                              | Discharge temperature protective alarm  | Compressor discharge temperature trouble   | P03                          |                | 1   | 1 |  |
| Activation of<br>protective<br>device | Activation of high pressure switch  | Compressor discharge pressure trouble  | P04                          |                |   |   |  |
| ic vice                               | Power supply failure  | Open phase detected AC power supply trouble  | P05                          |                | i<br>ating an<br>by lamp                        |   |  |
|                                       | Insufficient gas  | Insufficient gas level detected  | P15                          |                | ng alter  |   |  |
|                                       | Compressor overcurrent trouble  | е  | P16                          | - <del> </del> |   | 1                                       |  |
|                                       | Fan motor locked/reversed airflow detected  | P22  |                              |                | 1 1   |   |  |
|                                       | Inverter compressor trouble   |  | P29                          |                |   |   |  |
|                                       | Group control trouble   | Indoor unit in group control trouble   | P31                          |                | -   | 1                                       |  |
|                                       | Activation of current control compressor's protective device                                | Primary (input) overcurrent detected   | H01                          |                |   |   |  |
|                                       | PAM trouble (overcurrent/over-<br>voltage), Activation of<br>compressor's protective device | tage), Activation of PAM trouble H02   |                              | Timer          | lamp blir                                       | linkin                                  |  |
|                                       | Primary current control,<br>Activation of compressor's<br>protective device                 | Primary current CT sensor failure  | H03                          |                | \\ \P\\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \        | •                                       |  |
|                                       | HIC trouble DC voltage not detected   |  | H31                          |                |   |   |  |
|                                       | In the second Office of the   | Indoor heat exchanger temperature sensor (E1) trouble  | F01                          |                | ating ar<br>lamp b                              |   |  |
|                                       | Indoor unit thermistor open/short   | Indoor heat exchanger temperature sensor (E2) trouble  | F02                          |                | nately  |   |  |
|                                       |   | Indoor air temperature sensor (TA) trouble   | F10                          | *              | *   | •                                       |  |
| Thermistor                            |   | Compressor discharge temperature sensor (TD) trouble   | F04                          | 0.1            |   |   |  |
| ault                                  | Outdoor unit the arms !- t  | Outdoor heat exchanger temperature sensor (C1) trouble   | F06                          | timer          | ating ar<br>Iamp b                              |   |  |
|                                       | Outdoor unit thermistor open/short  | Outdoor heat exchanger temperature sensor (C2) trouble   | F07                          |                | nately<br>نا                                    | i -                                     |  |
|                                       | ,   | Outdoor air temperature sensor (TO) trouble  | F08                          | 7 🌣            | *   | 0                                       |  |
|                                       |   | Compressor suction temperature sensor (TS) trouble   | F12                          | 1              |   | 1 |  |
| Nonvolatile me                        | emory failure   | Indoor unit EEPROM trouble   | F29                          | timer          | ating ar<br>lamp b<br>taneous                   | linking                                 |  |
| Nonvolatile memory failure            |   |  |                              |                | Operating and timer lamp blinkin simultaneously |   |  |

### 5-2. PAC System Alarm Codes

Indoor Unit Control Board High Static Pressure Ducted Type



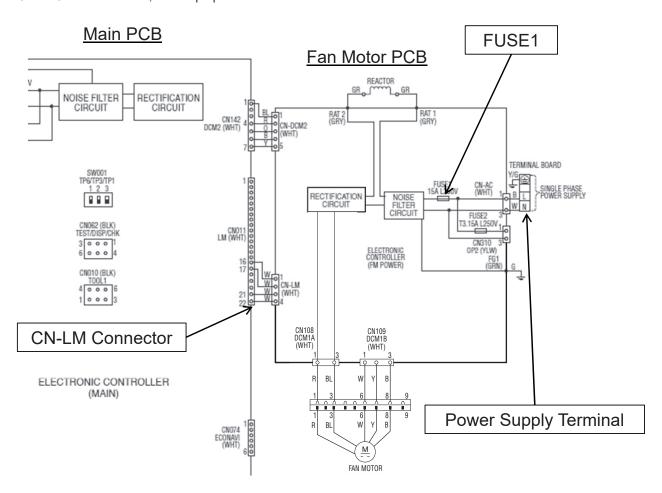
### E10 Communication Error Between Fan Motor and Main PCB for Indoor Unit

### 1. Possible Cause:

- Power supply for fan motor PCB is OFF/disconnected/wrong connection.
- · Indoor unit fan motor PCB fuse open.
- Indoor unit fan motor PCB malfunction.
- · CN-LM connector disconnected/unplug.

### 2. Troubleshoot & Check Method:

- · Power ON/reconnected power supply for fan motor PCB.
- · Check fan motor PCB FUSE1.
- · Check CN-LM connector, ensure proper connected.



### E15 Automatic Address Alarm (The total capacity of indoor units is too low.)

### 1. Error Detection Method

Connecting indoor unit

It is judged an error the total capacity of indoor units replied by communication is lower than that of outdoor unit.

- · The total capacity of indoor units is lower than that of outdoor unit.
- Some indoor unit(s) are connected but power is not turned on.
- The CHK pin (CN062/CN071) and/or TEST pin (CN064) of the indoor unit is shorted when its power is turned on.
- High voltage was applied (over AC200V) in the indoor/outdoor operations line circuit.

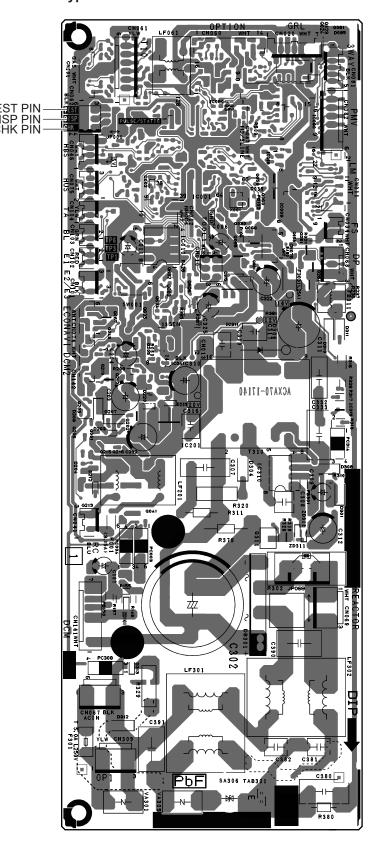
| 1 Power   | 1-1 | Is the indoor unit powered off?  | Yes | Power on.           |  |  |
|---|-----|--|-----|---------------------|--|--|
| Source  | 1-1 | is the masor unit powered on:  |     | 2-1                 |  |  |
| 2 Indoor/   | 2-1 | Us the indoor/outdoor control line opened or shorted?  |     | Correct the wiring. |  |  |
| outdoor   | 2-1 |  |     | 2-2                 |  |  |
| control line  | 2-2 | Was a high voltage (over AC200V) applied in the indoor/outdoor   | Yes | 3-2                 |  |  |
|   | 2-2 | operations line circuit?   | No  | 3-1                 |  |  |
| 3 No. of  | 3-1 | Was the number of indoor units changed after auto address setting  | Yes | 3-2                 |  |  |
| Indoor  | 3-1 | finished?  |     | 4-1                 |  |  |
| Units   | 3-2 | Conduct checks prior to auto address setting.  |     |                     |  |  |
| 4 Indoor  | 4-1 | Are the CHK pin and TEST pin on the indoor unit control board  | Yes | Remove the short.   |  |  |
| unit  |     | short-circuited?   |     | 4-2                 |  |  |
| control<br>PC board   | 4-2 |  | Yes | 4-3                 |  |  |
| 1 C board   |     |  | No  | 4-5                 |  |  |
|   | 4-3 | Disconnect the connector mentioned above on the control PC board of the indoor unit control PC board and see whether the E15 goes off after several minutes. (When doing so, if two remote controllers are   | Yes | 4-4                 |  |  |
|   |     | being wood and the windless namets controlled in the major namets  | No  | 4-5                 |  |  |
|   | 4-4 | Replace wireless remote control parts including wiring.  |     |                     |  |  |
|   | 15  | Is the LED blinking on the indoor unit's control PC board?   | Yes | 4-6                 |  |  |
|   | 4-5 | is the LED billiking off the indoor drift's control PC board?  | No  | 5-1                 |  |  |
|   | 4-6 | The nonvolatile memory (EEPROM) on the indoor unit's control board is either not installed, improperly installed or the nonvolatile memory is faulty. Correct this or after replacing the nonvolatile memory, write model data to it in the remote control detailed settings mode. |     |                     |  |  |
| 5 Outdoor unit control PC board  5-1 Check all items under the section "Check Prior to Auto Address Setting". |     |  |     |                     |  |  |

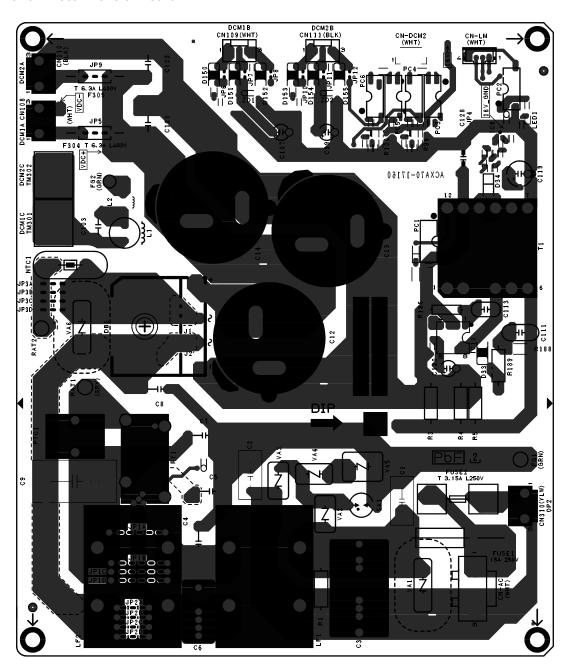
<sup>•</sup> For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit, refer to the manual that is packaged with the indoor unit service board.

<sup>·</sup> For information on the remote control's detailed settings, refer to the Reference Materials.

5

### Indoor Unit Control Board High Static Pressure Ducted Type





### E16 Automatic Address Alarm (The total capacity of indoor units is too high.)

#### 1. Error Detection Method

It is judged an error the total capacity of indoor units is too high or the total number of indoor units is too many.

- · The total capacity of indoor units is too high.
- The total number of indoor units is too many.

### 2. Error Diagnosis

| 1 Auto<br>Address | 1-1 | Check all items under the section "Check Prior to Auto Address Setting". |
|-------------------|-----|--|
|                   |     |  |

### F04 Compressor Discharge Temperature Sensor (TD) Trouble

### 1. Error Detection Method

It is judged an error based on the criteria listed below.

· Open circuit or Short circuit

| 1 Sensor    | 1-1 | Sanger connector is connected to DC heard properly                  | Yes | 1-2                               |
|-------------|-----|---|-----|-----------------------------------|
|             | '-' | Sensor connector is connected to PC board properly.                 | No  | Reconnect and check.              |
|             |     |   | Yes | Replace sensor.                   |
|             | 1-2 | Sensor is correctly installed at holder side.                       | No  | Correct and see what happens.     |
|             | 4.0 | Abnormal temperature exists even after replacing concer             | Yes | 2-1                               |
|             | 1-3 | Abnormal temperature exists even after replacing sensor.            | No  | See what happens.                 |
| 2 PC board  | 2-1 | Resistance between connector pins on PC board is less than 1 k ohm. | Yes | Replace PC board.                 |
|             |     |   | No  | 2-2                               |
|             | 2-2 | Abnormal temperature exists even after replacing PC board.          | Yes | 3-1                               |
|             |     |   | No  | See what happens.                 |
| 3 Operating | 3-1 | Peripheral temperature of outdoor unit is over 46°C.                | Yes | Correct                           |
| status      | 3-1 | Periprieral temperature of outdoor unit is over 40 °C.              | No  | 3-2                               |
|             | 3-2 | Tends to have insufficient refrigerant charge in the system.        | Yes | Adjust the amount of refrigerant. |
|             |     |   | No  | 3-3                               |
|             | 3-3 | Check noise.  |     |                                   |

### F06 Inlet Temperature Sensor (C1) in Heat Exchanger Trouble

### 1. Error Detection Method

· In case of open or short

### 2. Error Diagnosis

| 1 Sensor                    | 1-1 | Is the connector properly connected to PCB?                     | Yes | 1-2                |  |
|-----------------------------|-----|---|-----|--------------------|--|
| Trouble                     | 1-1 | is the connector property connected to FGB:                     | No  | Reconnect & check. |  |
|                             | 1 2 | Is the resistor between the sockets infinity or 0 ohm?          | Yes | Replace sensor.    |  |
|                             | 1-2 |   | No  | 2-1                |  |
| 2 Control<br>PCB<br>Failure | 2-1 | Outdoor unit control PCB failure<br>Replace PCB with a new one. |     |                    |  |

### F07 Intermediate Temperature Sensor (C2) in Heat Exchanger Trouble

### 1. Error Detection Method

It is judged an error when open circuit or short circuit.

### 2. Error Diagnosis

| 1 Sensor   | 1-1 | Sensor connector is connected to PC board properly.           | Yes | 1-2                  |
|------------|-----|---|-----|----------------------|
|            | 1-1 | Sensor connector is connected to PC board property.           | No  | Reconnect and check. |
|            | 1 2 | Resistance between sockets is infinity or 0 ohm.              | Yes | Replace sensor.      |
|            | 1-2 | Resistance between sockets is infinity of 0 offin.            | No  | 2-1                  |
| 2 PC board | 2-1 | Replace PC board because of outdoor control PC board failure. |     |                      |

### F08 Outdoor Air Temperature Sensor (TO) Trouble

### 1. Error Detection Method

It is judged an error when open circuit or short circuit.

| 1 Sensor  | 1-1  | Sensor connector is connected to PC board properly. | Yes | 1-2                  |
|---|--|---|-----|----------------------|
|   | 1-1  | Sensor connector is connected to PC board properly. | No  | Reconnect and check. |
|   | 1-2 Resistance between sockets is infinity or 0 oh |   | Yes | Replace sensor.      |
|   | 1-2  | Resistance between sockets is infinity or 0 ohm.    | No  | 2-1                  |
| 2 PC board 2-1 Replace PC board because of outdoor control PC board fails |  |   |     |                      |

### F12 Compressor inlet Suction Temperature Sensor (TS) Trouble

### 1. Error Detection Method

It is judged an error when open circuit or short circuit.

### 2. Error Diagnosis

| 1 Sensor                         | 4 4   | Concer comporter is comported to DC beard properly            | Yes | 1-2                  |
|----------------------------------|---|---|-----|----------------------|
|                                  | 1-1 Sensor connector is connected to PC board properly. |   | No  | Reconnect and check. |
|                                  | 1-2   | Resistance between sockets is infinity or 0 ohm.              | Yes | Replace sensor.      |
|                                  |   |   | No  | 2-1                  |
| 2 Outdoor<br>control<br>PC board | 2-1   | Replace PC board because of outdoor control PC board failure. |     |                      |

### F31 Outdoor Unit Nonvolatile Memory (EEPROM) Trouble

### 1. Error Detection Method

It is judged an error based on the criteria listed below.

- When power initially turned ON for the first time, nonvolatile memory (EEPROM) is not installed.
- · Read values after writing onto nonvolatile memory (EEPROM) is inconsistent.

| 1 PC board | 1-1 | Does EEPROM exist on the control PC board?           | Yes | 1-2             |
|------------|-----|--|-----|-----------------|
|            |     |  | No  | Install EEPROM. |
|            | 1-2 | Is EEPROM installed properly?                        | Yes | 1-3             |
|            |     | (Check: Bent IC pin or incorrect installation, etc.) | No  | Correct         |
|            | 1-3 | Incorrect EEPROM Replace with correct EEPROM.        |     |                 |

## L13 Indoor Unit Type Setting Error

### 1. Error Detection method

• Discordance model(s) between outdoor and indoor units are detected.

| 1 Discordance                                | 1-1 | Are models for outdoor and indoor units matched respectively:  | Yes |                       |  |
|--|-----|--|-----|-----------------------|--|
| Unit   | ' ' |  | No  | Replace indoor units. |  |
| 2 Installation<br>Failure 2-1                | 2-1 | 1 settings mode (2C code) and commercial indoor unit is set to "2" and   | Yes | 3-1                   |  |
|  | 2-1 |  | No  | Change installation.  |  |
| 3 Operating Wires for Indoor & Outdoor Units | 3-1 | Check whether or not indoor and outdoor unit operating wires are short circuit, disconnection, oose connection or earth fault. |     |                       |  |

### **P04 High Pressure Trouble**

#### 1. Error Detection Method

It is judged an error if the internal circuit of the high pressure switch is dead.

The electronic circuitry of the high pressure switch is cut off if the pressure at the pressure sensor port of the high pressure switch reaches 3.80 MPa. Once it is cut off, it remains cut off until the pressure drops to 3.15 MPa.

- · The high pressure switch is malfunctioning.
- · Service valve inside the outdoor unit closed
- There is a short air circuit through the outdoor unit's heat exchanger. (when cooling)
- The outdoor unit's fan is broken. (when cooling)
- · The outdoor unit's heat exchanger is clogged. (when cooling)
- There is a short air circuit at the indoor unit. (when heating)
- The filter of the indoor unit is clogged. (when heating)
- · The fan of the indoor unit is broken or the fan motor is malfunctioning. (when heating)
- The refrigerant circuit is closed and the high pressure is increasing abnormally high. (Solenoid valve or expansion valve not activated, a stuck check valve, etc.)
- Refrigerant overcharged
- · Nitrogen or air contaminated in the refrigerant system

| 1 High             |     | The socket of the high pressure switch is securely inserted in the PC board. The wiring is not opened.   | Yes | 1-2   |  |  |  |
|--------------------|-----|--|-----|---|--|--|--|
| pressure<br>switch | 1-1 |  | No  | Correct connection and/or wiring.                               |  |  |  |
|                    | 1-2 | Even if parts near the high pressure switch are shaken quite a lot, the high pressure cut off will be activated.  Even if the covering is in good condition, in several cases vibration  |     | Replace the high pressure switch (wiring).                      |  |  |  |
|                    |     | has caused wiring inside to open.  | No  | 2-1   |  |  |  |
| 2 Service valve    | 2-1 | Service valve inside the outdoor unit closed   | Yes | Open the service valve.   |  |  |  |
|                    |     |  | No  | 2-2   |  |  |  |
|                    | 0.0 | There is an extreme difference in temperature in/out of the service  | Yes | 2-3   |  |  |  |
|                    | 2-2 | valve.   | No  | 3-1   |  |  |  |
|                    | 2-3 | Check the flare connection, someone may have forgotten to remove the bonnet.  If there is a problem within the service valve, replace the valve.   |     |   |  |  |  |
| 3 Problem          | 3-1 | While cooling is operating an alarm is occurred.   | Yes | 3-2   |  |  |  |
| around the         |     |  | No  | 3-5   |  |  |  |
| heat<br>exchanger  | 3-2 | The intake temperature (ambient temperature) of the outdoor unit's heat exchanger is above 46°C.   | Yes | Prevent air short circuit.                                      |  |  |  |
|                    |     | Heat exchanger is above 40 C.  | No  | 3-3   |  |  |  |
|                    | 3-3 | The outdoor unit's heat exchanger is clogged.  | Yes | Clean the heat exchanger.                                       |  |  |  |
|                    |     |  | No  | 3-4   |  |  |  |
|                    |     |  | Yes | 4-1   |  |  |  |
|                    | 3-4 | Check whether the outdoor unit fan is normal or if the sockets are firmly pressed onto the plugs on the outdoor PC board, as well as if any wiring is opened.  Are these checking finished without fail?   | No  | Replace the outdoor unit fan. Correct connection and/or wiring. |  |  |  |
|                    | 2.5 | Militaria de la compania del compania del compania de la compania del compania del compania de la compania del compania de | Yes | 3-6   |  |  |  |
|                    | 3-5 | While heating is operating an alarm is occurred.   | No  | 1 1   |  |  |  |

| 1                                   |     |  |       |   |
|-------------------------------------|-----|--|-------|---|
| 3 Problem around the heat exchanger | 3-6 | The intake temperature (ambient temperature) of the indoor unit is above 36°C.   | Yes   | Prevent air short circuit.                                  |
|                                     |     | above 30 C.  | No    | 3-7   |
| exchanger                           | 2.7 | The filter of the indeer unit is closed  | Yes   | Clean the filter.   |
|                                     | 3-7 | The filter of the indoor unit is clogged.  | No    | 3-8   |
|                                     | 3-8 | The fan of the indoor unit is broken or the fan motor is faulty.   | Yes   | Replace the indoor fan (motor).                             |
|                                     |     |  | No    | 4-1   |
| 4 Blockage                          |     | le the outdoor unit's electronic control valve energting correctly?  | Yes   | 4-3   |
| in the refrigerant circuit          | 4-1 | Is the outdoor unit's electronic control valve operating correctly? (Check for debris clogging the electronic control valve, a problem with the electronical coil and/or the control PC board.)  | No    | Repair the electronic control valve of the outdoor unit.    |
|                                     |     | The indeer unit's even engine valve is energting correctly   | Yes   | 4-3   |
|                                     | 4-2 | The indoor unit's expansion valve is operating correctly. (Check for debris clogging the valve, a problem with the electronical coil and/or the control PC board.)   | No    | Repair the expansion valve of the indoor unit.              |
|                                     |     | If an also also are also also also also also also also also  | Yes   | 4-4   |
|                                     | 4-3 | If an alarm is occurred with the high pressure below 3.80 MPa, with the pressure measured as displayed by the manifold gauge, check the check valve in the compressor discharge line.  Are these checking finished without fail?   | No    | Replace the check valve in the compressor discharge line.   |
|                                     | 4-4 | The electronic control valve is faulty. In systems where the solenoid valve kits and the ice thermal storage tank are connected, check these solenoid valves.  | Yes   | Replace the electronic control valve and/or solenoid valve. |
|                                     |     |  | No    | 5-1   |
| 5                                   | 5-1 | Error occurs when the system is operating in cooling mode.   | Yes   | 5-3   |
| Overcharging                        |     |  | No    | 5-2   |
|                                     | 5-2 | Error occurs when the system is operating in heating mode.   | Yes   | 5-4   |
|                                     |     |  | No    | 5-5   |
|                                     | 5-3 | An alarm is occurred with the high pressure at 3.80 MPa, with the pressure measured either as displayed by the monitoring software or with a manifold gauge, at which time the temperature of liquid in the outdoor unit's heat exchanger is detected to be at the temperature of the outside air. | Yes   | 5-5   |
|                                     |     |  | No    | Contact the service representative.                         |
|                                     | 5-4 | An alarm is occurred with the high pressure at 3.80 MPa, with the pressure measured either as displayed by the monitoring software or with a manifold gauge, at which time the temperature of liquid in the indoor heat exchanger is detected to be at room temperature (intake temperature).      | Yes   | 5-5   |
|                                     |     |  | No    | Contact the service representative.                         |
|                                     | 5-5 | The system may be overcharged. Check how much refrigerant was a When a system is inspected for airtightness, it is seldom that enough expelled, so some remains in the circuit.  In this case, it is necessary to collect the refrigerant and then recharge  | nitro | ogen has been   |

## P14 O<sub>2</sub> Sensor Detect

### 1. Error Detection Method

- It is judged an error whenever the outdoor unit receives the signal "O2 Alarm Occurred" from the indoor unit.
- With the indoor unit's EEPROM setting (item code 0B) set to 0001, the EXCT input was shorted.

| 1 System configuration    | 1-1 | Is an O2 sensor being used?  | Yes<br>No |                      |  |
|---------------------------|-----|--|-----------|----------------------|--|
| 2 Indoor unit's<br>EEPROM | 2-1 | Is the indoor EEPROM setting, item code 0B, on the indoor unit's control PC board set to 0001? |           | After correcting the |  |
| setting                   |     |  | No        | 4-1                  |  |
| 3 Indoor EXCT             | 3-1 | Is the indoor EXCT socket (wire) shorted?  | Yes       | Correct wiring.      |  |
| wiring                    |     |  | No        | 4-1                  |  |
| 4 Indoor unit's           | 4-1 |  | Yes       | 4-3                  |  |
| control                   |     |  | No        | 4-2                  |  |
| PC board                  | 4-2 | Since there is no error, see what happens.   |           |                      |  |
|                           | 4-3 | Indoor unit control PC board error → Replace PC board.   |           |                      |  |

## P31 Group Control Error

### 1. Error Detection Method

Other indoor unit alarms within the group.

| 1 Other indoor | 1 1 | Survey the indoor unit that alarms other than "P31" in the indoor unit group and specify the |
|----------------|-----|--|
| unit           | 1-1 | causes of failure.   |

### 5-3. Symptom: Thermostat in OFF continues or cycles OFF & ON too frequently

### 1. How to detect abnormality

 Abnormality does not occur. Protective function can be checked when the outdoor maintenance remote controller is connected.

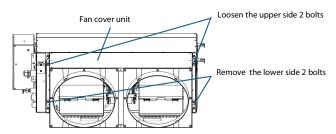
| 1 Indoor control  |     | Setting temperature reaches the level set ON thermostat.  | .,  | Adjust setting                              |
|-------------------|-----|---|-----|---|
| PC board          | 1-1 | Setting temperature is too low in heating mode and too high in cooling and dry mode.  | Yes | temperature.                                |
|                   |     |   | No  | 1-2   |
|                   | 4.0 | Room temp. (TA) in vellow, heat exchanger (F1) in red   | Yes | Connect correctly.                          |
|                   | 1-2 |   | No  | 1-3   |
|                   | 4.0 |   | Yes | Turn OFF(OPEN).                             |
|                   | 1-3 | DISP (display mode) is applied.   | No  | 1-4   |
|                   | 4.4 | With a thermostat OFF in heating mode, wind speed (item code 05) is out of range 0 - 6. (Use Simple Setting Function on standard timer remote controller.)  | Yes | Choose one of 0 to 6.                       |
|                   | 1-4 |   | No  | 1-5   |
|                   | 1 5 | DEMAND is applied.  | Yes | Turn OFF(OPEN).                             |
|                   | 1-5 |   | No  | 2-1   |
| 2 Outdoor control | 2-1 | Outdoor unit and protective function of a system are operating. (Connect outdoor maintenance remote controller to RC socket on outdoor unit main control PC board and check alarm messages.)                      | Yes | See operational status.                     |
| PC board          |     |   |     | 2-2   |
|                   | 2-2 | Discharge temperature is over 80°C in stop mode and does not decrease. (Connect outdoor maintenance remote controller to RC socket on outdoor unit main control PC board and check                                | Yes | Replace discharge temperature sensor.       |
|                   |     | alarm messages.)  | No  | 2-3   |
|                   | 2-3 | Demand value always stays low. (The value is lower than 70. Excluding -1 (unlimited))(Connect outdoor maintenance remote controller to RC socket on outdoor unit main control PC board and check alarm messages.) | Yes | Increase values (over 70).                  |
|                   |     |   | No  | 2-4   |
|                   | 2-4 | DEMAND is applied.  | Yes | Turn OFF(OPEN).                             |
|                   |     |   | No  | 3-1   |
| 3 Control         | 3-1 | Demand setting is made by control units (P-AIMS, Seri-Para I/O unit for outdoor unit, Seri-Para I/O each indoor unit.)  | Yes | Turn OFF.                                   |
| equipment         | 3-1 |   | No  | 4-1   |
| 4 System          | 4-1 | When operating in cooling (including auto cooling & heating) and dry mode, lowest temp. of indoor E1 and E2 sensor is less  | Yes | Wait until more than 2°C reaches.           |
|                   |     | than 2°C (under anti-freeze control).   | No  | 4-2   |
|                   | 4-2 | During defrosting operation   | Yes | Wait for a few minutes to 10 minutes or so. |
|                   |     |   | No  | 4-3   |
|                   | 4-3 | Outdoor unit PC board failure → Replacement   |     |   |

- According to a type of model, the indoor sensors will not be supplied in some cases.
- According to a type of model, the outdoor DEMAND will not be supplied in some cases.
- When LINE Checker is used, the temperature sensors can be observed (display, record) simultaneously.
- According to some areas, some of the models are unreleased.

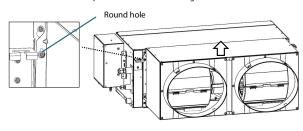
### 5-4. How to separate the indoor unit

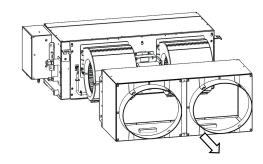
### Remove the fan cover unit.

 $\boldsymbol{1}$  . Move the fan cover unit upward and remove it through the round hole.

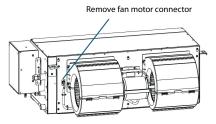


 $\boldsymbol{2}$  . Move the fan cover unit upward and remove it through the round hole.

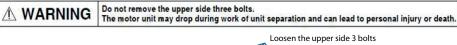


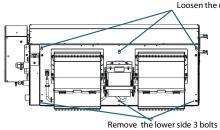


3 . Romove fan motor connector.

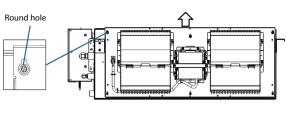


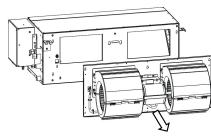
- 4 . Separate the fan motor unit and heat exchanger unit.
  - i . Loose the upper side three bolts and remove the lower side three bolts .





ii . Move upward and remove the fan motor unit through the round hole  $\,$ 

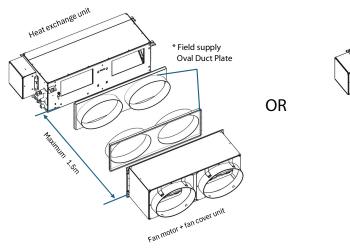


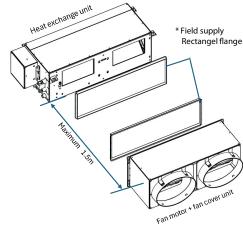


### 5-5. How to assemble middle duct connection

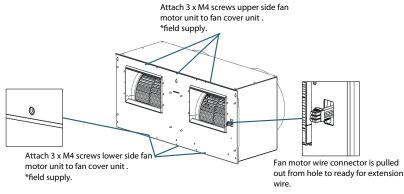
### Attach duct plate to heat exchange unit and fan motor + fan cover unit.

- 1. Heat exchange unit and fan motor unit +fan cover unit is in 2 split compartment.
- 2. Heat exchange unit to fan motor + fan cover unit extension distance is max 1.5m  $\,$

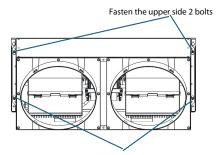




- 3. Assembly fan motor unit to fan cover unit
  - i) . Attach M4 screw and extend fan motor wires .



ii) Fasten bolts x4 from fan cover unit.

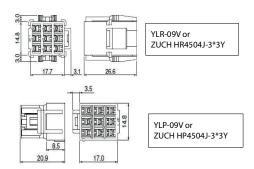


Attach and fasten the lower side 2 bolts

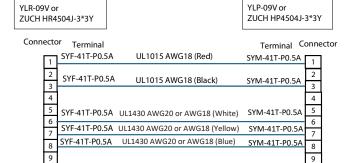
9

3. Prepare fan motor wire etension with connector.









Wire Length 1.6m

# 5-6. For 12.5kW ~16kW unit: Heat exchange unit and Fan motor + fan cover unit

Dimension of heat exchange unit & Fan Motor + fan cover unit after splitted.

Heat exchange unit

1145 Fan motor + fan cover unit 1076 0 0 1. Field supply duct plate spec (recommended) 1000 1000 350 OR Oval duct Rectangle flange duct 2. Duct plate attached to heat exchange unit and Fan motor  $\,+\,$  fan cover.unit Heat exchange unit Heat exchange unit 40 + 5 1000 105 1000 350 0 0 Fasten screws (field supply) to ensure duct plate fix firmly. Fasten screws (field supply) to ensure duct OR plate fix firmly. Fan motor unit & fan cover unit Fan motor unit & fan cover unit 38 1000 1000 38 350 350 Fasten screws (field supply) to ensure duct Fasten screws (field supply) to ensure duct

## Middle duct connection illustration.

plate fix firmly.

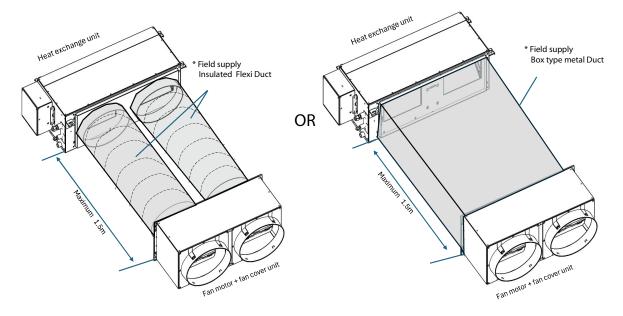
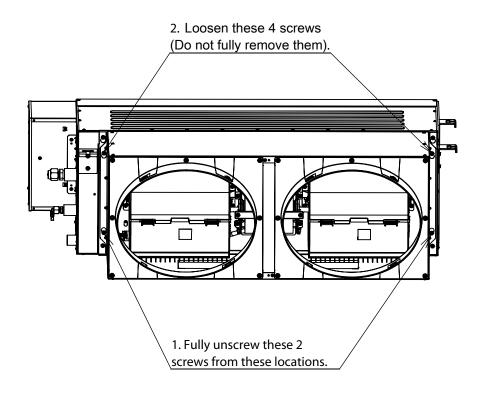
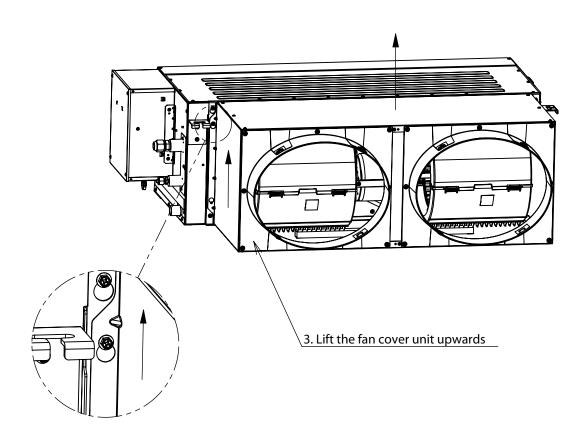
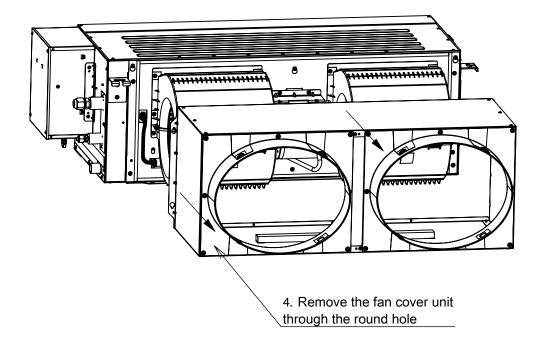


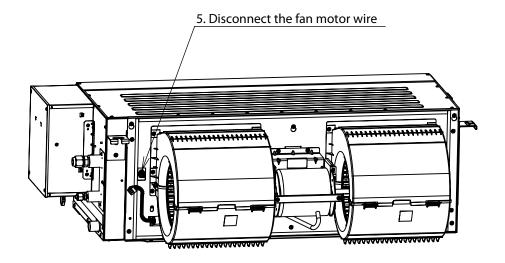
plate fix firmly.

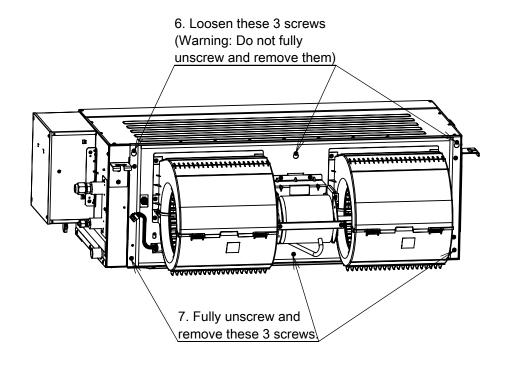
## 5-7. How to Remove Fan Motor

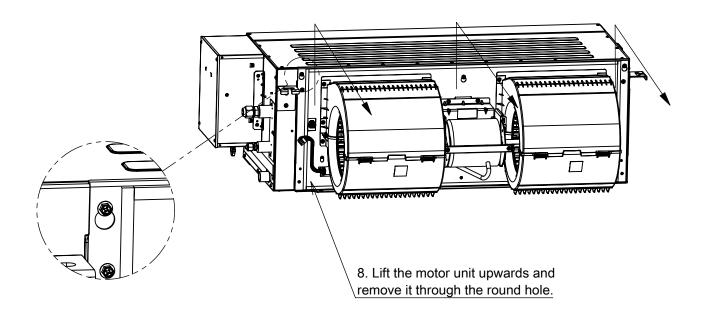


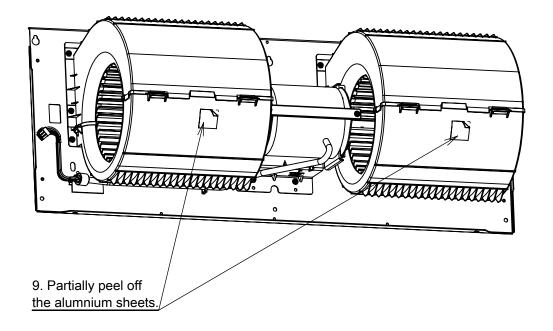


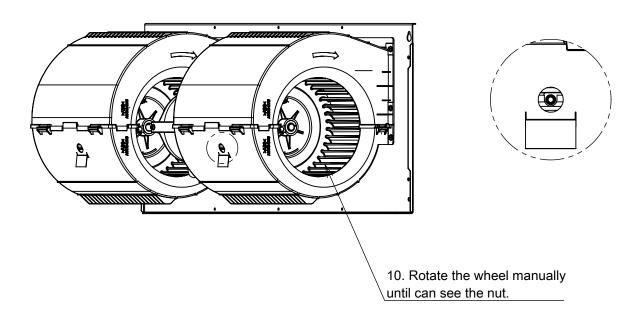


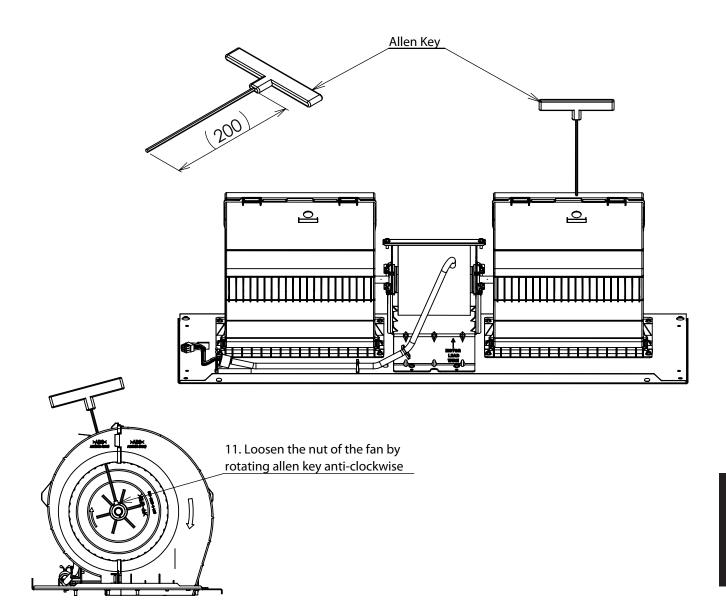


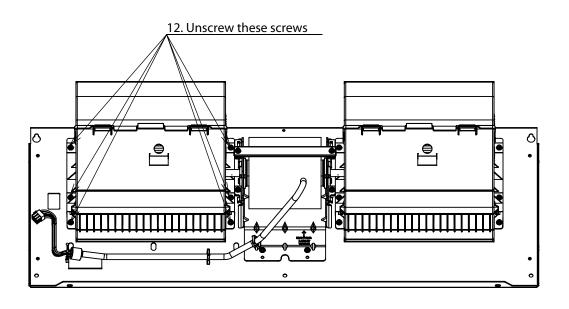




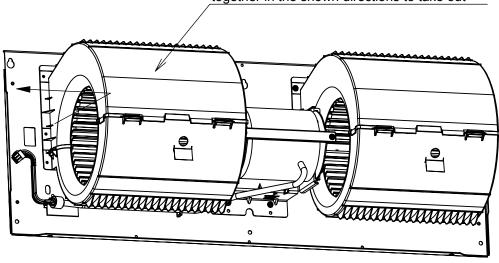


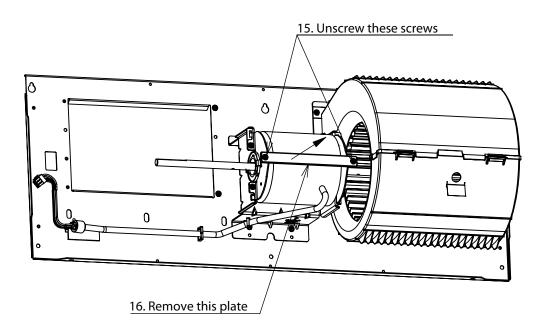


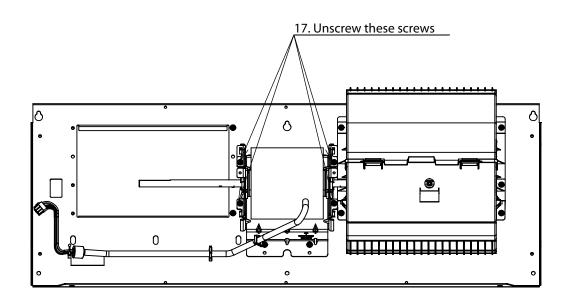


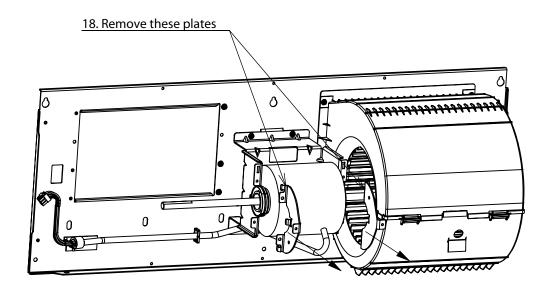


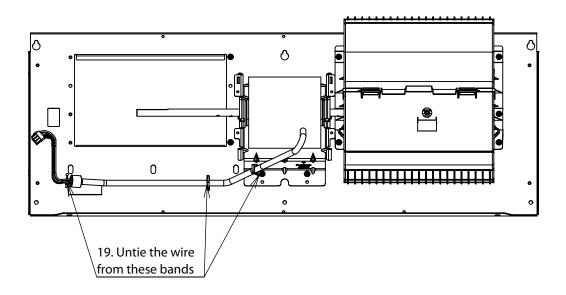
14. Lift and move the casing and blower wheel together in the shown directions to take out

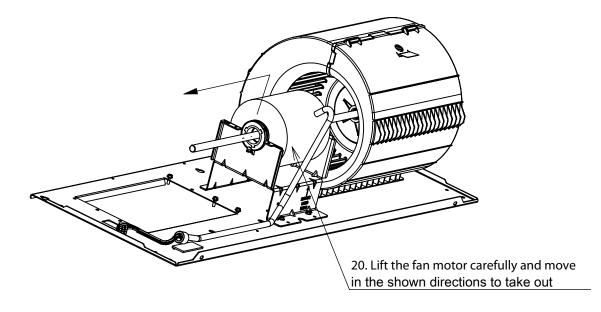






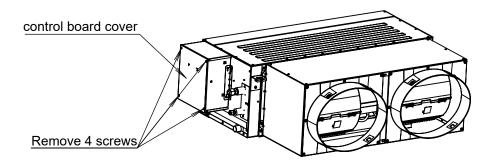




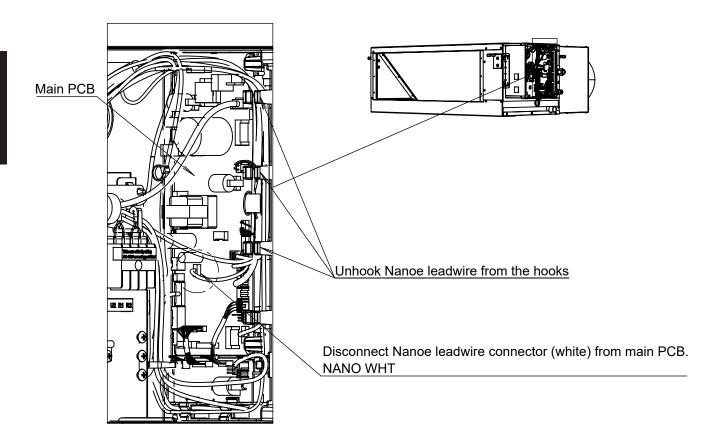


# 5-8. How to remove Nanoe Generator (S-60/71/100/125/140/160PE4R S-160PE4RA)

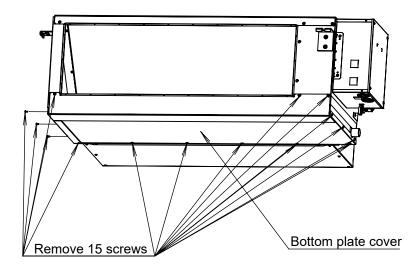
1. Remove the control board cover.



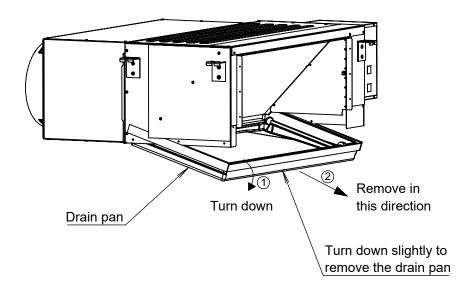
2. Disconnect Nanoe leadwire connector (NANO WHT) from the main PCB.



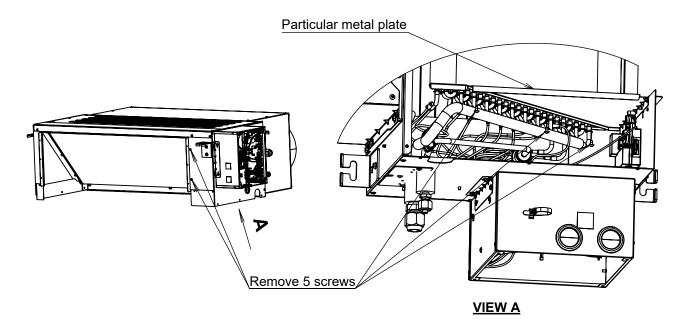
# 3. Remove bottom plate cover.



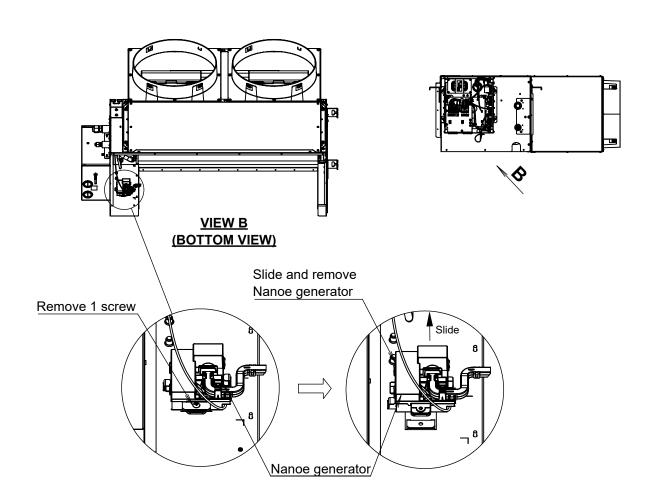
# 4. Remove the drain pan.



# 5. Remove the particular metal plate.

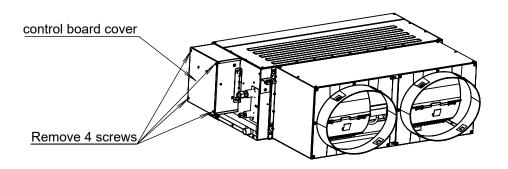


# 6. Remove the nanoe generator.

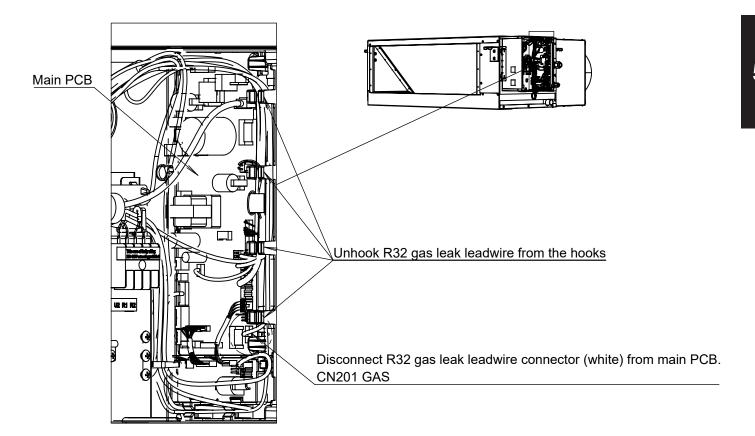


# 5-9. How to remove R32 gas leak detector sensor (S-160PE4RA only)

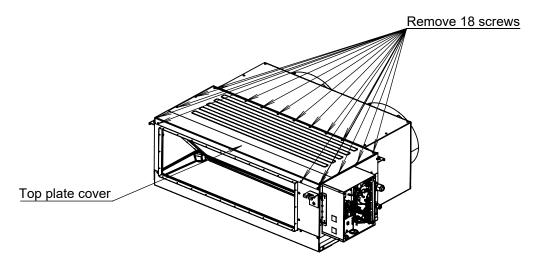
1. Remove the control board cover.



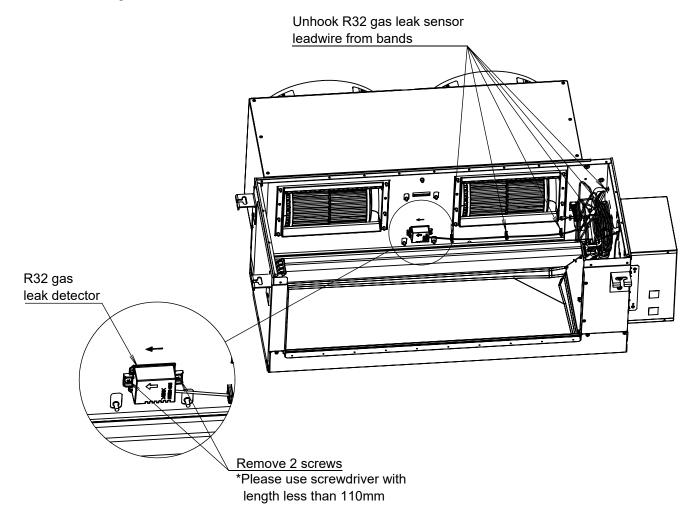
2. Disconnect R32 gas leak detector sensor leadwire connector (CN201 GAS) from the main PCB.



## 3. Remove top plate cover.



# 4. Remove the R32 gas leak sensor.



# 5.10. Symptom: Thermostat in OFF continues or cycles OFF & ON too frequently

### 1. How to detect abnormality

 Abnormality does not occur. Protective function can be checked when the outdoor maintenance remote controller is connected.

### 2. Error Diagnosis

| 1 Indoor control<br>PC board | 1-1 | Setting temperature reaches the level set ON thermostat. Setting temperature is too low in heating mode and too high   | Yes | Adjust setting temperature.                 |
|------------------------------|-----|--|-----|---|
|                              |     | in cooling and dry mode.   | No  | 1-2   |
|                              |     | Check if the sensors are connected correctly.  Are all connection made properly?   | Yes | Connect correctly.                          |
|                              | 1-2 | Room temp. (TA) in yellow, heat exchanger (E1) in red, heat exchanger (E2) in black.   | No  | 1-3   |
|                              |     | DIOD ( 11  | Yes | Turn OFF(OPEN).                             |
|                              | 1-3 | DISP (display mode) is applied.  | No  | 1-4   |
|                              |     | With a thermostat OFF in heating mode, wind speed  | Yes | Choose one of 0 to 6.                       |
|                              | 1-4 | (item code 05) is out of range 0 - 6. (Use Simple Setting Function on standard timer remote controller.)   | No  | 1-5   |
|                              | 4.5 | EVOT(I and I and I all I   | Yes | Turn OFF(OPEN).                             |
|                              | 1-5 | EXCT(demand control) is applied.   | No  | 2-1   |
| 2 Outdoor control            | 2-1 | Outdoor unit and protective function of a system are operating. (Connect outdoor maintenance remote controller to RC socket  | Yes | See operational status.                     |
| PC board                     |     | on outdoor unit main control PC board and check alarm messages.)   | No  | 2-2   |
|                              | 2-2 | Discharge temperature is over 80°C in stop mode and does not decrease. (Connect outdoor maintenance remote controller to RC socket on outdoor unit main control PC board and check | Yes | Replace discharge temperature sensor.       |
|                              |     | alarm messages.)   | No  | 2-3   |
|                              | 2-3 | Demand value always stays low. (The value is lower than 70. Excluding -1 (unlimited)) (Connect outdoor maintenance remote  | Yes | Increase values (over 70).                  |
|                              |     | controller to RC socket on outdoor unit main control PC board and check alarm messages.)   | No  | 2-4   |
|                              | 2-4 | DEMAND or EXCT(demand control) is applied.   | Yes | Turn OFF(OPEN).                             |
|                              |     | DEMINATE OF EXCITATION OF APPRICA.   | No  | 3-1   |
| 3 Control                    | 3-1 | Demand setting is made by control units (P-AIMS, Seri-Para I/O   |     | Turn OFF.                                   |
| equipment                    |     | unit for outdoor unit, Seri-Para I/O each indoor unit.)  |     | 4-1   |
| 4 System                     | 4-1 | When operating in cooling (including auto cooling & heating) and dry mode, lowest temp. of indoor E1 and E2 sensor is less   | Yes | Wait until more than 2°C reaches.           |
|                              |     | than 2°C (under anti-freeze control).  | No  | 4-2   |
|                              | 4-2 | During defrosting operation  | Yes | Wait for a few minutes to 10 minutes or so. |
|                              |     |  | No  | 4-3   |
|                              | 4-3 | Outdoor unit PC board failure → Replacement  |     |   |

- According to the type of models, the indoor sensors will not be supplied in some cases.
- According to the type of models, the outdoor DEMAND or EXCT will not be supplied in some cases.
- When LINE Checker is used, the temperature sensors can be observed (display, record) simultaneously.
- According to some areas, some of the models are unreleased.

# 6

# 6. EEPROM SETTING USING THE CZ-RTC6 SERIES REMOTE CONTROLLER

| 6-1. Preparation for EEPROM Setting using the CZ-RTC6 series remote controller |     |  |  |  |
|--|-----|--|--|--|
| 6-2. EEPROM Setting using the CZ-RTC6 series remote controller                 |     |  |  |  |
| 6-2-1. Detailed Settings Function  | 6-3 |  |  |  |
| 6-2-2. List of Detailed Setting Items  |     |  |  |  |

## 6-1. Preparation for EEPROM Setting using the CZ-RTC6 series remote controller

To set EEPROM, you can use the 6 series remote control (CZ-RTC6 series) or install the Panasonic H&C Control App.

You can use the "Panasonic H&C Control App" on your mobile device to operate the air conditioning unit, see "7-9 Panasonic H&C Control App" for details on installation and initial settings.

This app is compatible with the following remote controllers.

Check the model number shown in the label on the bottom of the remote controllers.

Models: CZ-RTC6BL / CZ-RTC6BLW (CZ-RTC6 incompatible)



## 6-2. EEPROM Setting using the CZ-RTC6 series remote controller

### 6-2-1. Detailed Settings Function

This allows the system address, indoor unit address, and other settings to be made for the individual or group-control indoor unit to which the remote controller used for detailed settings is connected. When detailed settings mode is engaged, operation stops at the individual or group-control indoor unit where the remote controller used for detailed settings is connected. Simple settings items can also be set at this time.

#### <Pre><Pre>cedure of CZ-RTC6 series>

Stop the system before performing these steps.

(1) Keep pressing the , and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen (Fig. 6-2-1) appears on the LCD display.



Fig. 6-2-1



**CZ-RTC6** series

(2) Press the ✓ or ✓ button to see each menu.

Select "Detailed settings" (Fig. 6-2-2) on the LCD display and press the ✓ button.

The "Detailed settings" screen (Fig. 6-2-3) appears on the LCD display.

(3) Select the "Unit no." (Fig. 6-2-3) by pressing the or button.

After selecting "Unit no.", press the button and proceed to Step (4).



If the address setting is not set up correctly, the "ALL" will be displayed in the "Unit no.".

If the button is pressed, proceed to Step (6).

(4) Keep pressing the button for 2 seconds or more during selecting "Code no.". (Fig. 6-2-4)

Change the "Code no." one digit at a time so that it becomes [0000XX] along with the following procedures.

Change the value (Fig. 6-2-5) by pressing the ✓ or △ button.

After changing the value, press the ✓ button and set the next digit.

Change the value (Fig. 6-2-6) by pressing the ✓ or ✓ button.

After changing the value, press the ✓ button and set the next digit.



Fig. 6-2-2



Fig. 6-2-3



Fig. 6-2-4



Fig. 6-2-5



Fig. 6-2-6

Change the value (Fig. 6-2-7) by pressing the or button.

After changing all digits, press the button and proceed to Step (5).



Fig. 6-2-7

(5) Select one of the Setting Data "YYYY" by pressing the ✓ or ✓ button. After selecting "Set data", press the ✓ button. (If setting continuously, follow the procedures from Fig. 6-2-5.)

If you wish to change the selected indoor unit or finish setting, press the button twice (the display returns to Step (3)).



Fig. 6-2-8

(6) If the button is pressed under the display Step (3) the following display (Detailed setting-end screen) (Fig. 6-2-9) appears.

Then select "YES" by pressing the or button and press the button. (Return to normal remote controller display.)



Fig. 6-2-9

### <Procedure of Panasonic H&C Control App>

1. Tap " 📋 "

Open Menu list.



2. Tap " or 3 seconds or longer and release.

Tap " for 3 seconds or longer and release again.

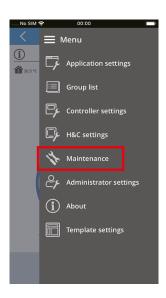


3. If successful, the menu screen will close. If Menu list does not close, perform step 2 again.



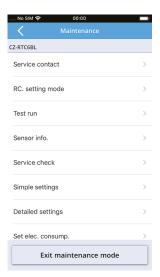
4. Open Menu list again,





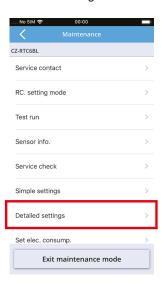


Open Menu list of "Maintenance" .

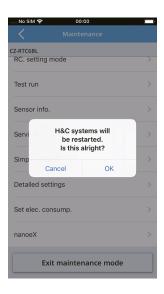


Menu list of "Maintenance"

# 6. Tap " Detailed settings "

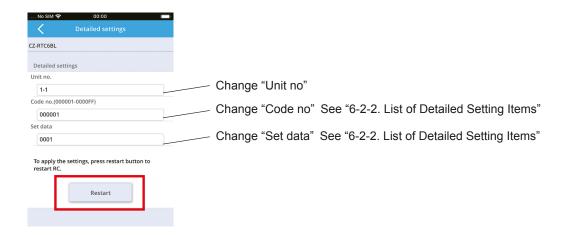


7. A dialog will appear stating that a reboot will occur. If there is no problem, tap "  $\mathsf{OK}$  " .

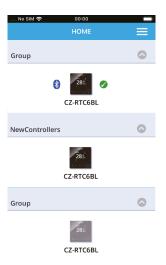


8. Set "Unit no." / "Code no." / "Set data".

Then tap " Restart "



9. The unit will restart and return to the HOME screen.



# 6-2-2. List of Detailed Setting Items

| Item code | Item                      | Setting data |                             |  |
|-----------|---------------------------|--------------|-----------------------------|--|
|           | -                         | 0000         | normal                      | (Setting at factory shipment)                          |
| 0002ED    | Silent mode               | 0001         | Auto silent                 |  |
|           |                           | 0002         | Capacity priority           |  |
| 0002EE    | ODT made Setting          | 0000         | Quiet/EXCT                  | (Setting at factory shipment)                          |
| 0002EE    | OPT mode Setting          | 0001         | DEMAND                      |  |
| 0002F0    | Measures against smell    | 0000         | Invalid                     | (Setting at factory shipment)                          |
| 00021 0   | when indoor unit cooling  | 0001         | Measures against smell      |  |
|           |                           | 0000         | 40%                         |  |
|           |                           | 0001         | 45%                         |  |
|           |                           | 0002         | 50%                         |  |
|           |                           |              |                             |  |
| 0002F2    | Demand 1 current (%)      | 0007         | 75%                         | (Setting at factory shipment)                          |
| 0002. 2   | Domana i barrone (70)     |              |                             |  |
|           |                           | 0012         | 100%                        |  |
|           |                           |              |                             |  |
|           |                           | 0018         | 130%                        |  |
|           |                           | 0019         | No control                  |  |
|           |                           | 0000         | 40%                         |  |
|           | Demand 2 current (%)      | 0001         | 45%                         |  |
|           |                           | 0002         | 50%                         | (Setting at factory shipment                           |
|           |                           |              |                             |  |
| 0002F3    |                           | 0007         | 75%                         |  |
|           |                           |              |                             |  |
|           |                           | 0012         | 100%                        |  |
|           |                           |              |                             |  |
|           |                           | 0018         | 130%                        |  |
|           |                           | 0019         | No control                  |  |
|           |                           | 0000         | 40%                         |  |
|           |                           | 0001         | 45%                         |  |
|           |                           | 0002         | 50%                         |  |
|           |                           |              | 750/                        | (0.4); (5.4)   |
| 0002F4    | Energy saving current (%) | 0007         | 75%                         | (Setting at factory shipment)                          |
|           |                           |              | 4000/                       |  |
|           |                           | 0012         | 100%                        |  |
|           |                           |              | 1200/                       |  |
|           |                           | 0018         | 130%                        |  |
|           |                           | 0019         | No control                  | (Cotting at factors shipment)                          |
| 000301    | Outdoor unit silont mode  | 0001         | Silent mode 1 Silent mode 2 | (Setting at factory shipment)                          |
|           | Outdoor unit silent mode  | 0002         | Silent mode 2               |  |
|           |                           | 0003         |                             | of the outdoor unit                                    |
|           |                           | 0000         | Depending on the settings   | s of the outdoor unit<br>(Setting at factory shipment) |
| 000303    | Capacity matching ignored | 0001         | Invalid                     | (Octung at lactory shipment)                           |
|           |                           |              |                             |  |
|           |                           | 0002         | Valid                       |  |

# 7

# 7. REMOTE CONTROLLER FUNCTIONS SECTION

| 7-1. | Simple Settings Function              | 7-2  |
|------|---------------------------------------|------|
| 7-2. | List of Simple Setting Items          | 7-5  |
| 7-3. | Detailed Settings Function            | 7-6  |
| 7-4. | List of Detailed Setting Items        | 7-10 |
| 7-5. | Simple Setting Items                  | 7-14 |
| 7-6. | Detailed Setting Items                | 7-16 |
| 7-7. | Remote Controller Servicing Functions | 7-19 |
| 7-8. | Test Run Function                     | 7-21 |
| 7-9. | Panasonic H&C Control App             | 7-34 |

## 7-1. Simple Settings Function

This allows the filter lifetime, operating mode priority change, central control address, and other settings to be made for an individual or groupcontrol indoor unit to which the remote controller used for simple settings is connected. When simple settings mode is engaged, operation stops at the individual or group-control indoor unit to which the remote controller for simple settings is connected.

#### <Pre><Pre>cedure of CZ-RTC6 series>

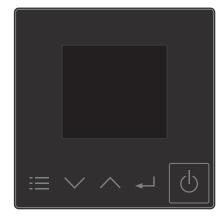
Stop the system before performing these steps.

(1) Keep pressing the ≡, △ and ✓ buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen (Fig. 7-1-1) appears on the LCD display.



Fig. 7-1-1



**CZ-RTC6** series

(2) Press the ✓ or ✓ button to see each menu.

Select "Simple settings" (Fig. 7-1-2) on the LCD display and press the ✓ button.

The "Simple settings" screen (Fig. 7-1-3) appears on the LCD display.

(3) Select the "Unit no." (Fig. 7-1-3) by pressing the or button.

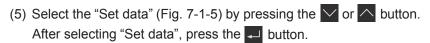
After selecting "Unit no.", press the button and proceed to Step (4).



If the button is pressed, proceed to Step (6).

(4) Select the "Code no." (Fig. 7-1-4) by pressing the ✓ or ✓ button.

After selecting "Code no.", press the ✓ button and proceed to Step (5).



The "Simple settings" screen (Fig. 7-1-6) appears on the LCD display (proceed to Step (6)).

(6) If the button is pressed under the display (Fig. 7-1-6), the following display (Simple setting-end screen) (Fig. 7-1-7) appears.

Then select "YES" by pressing the or button and press the button. (Return to normal remote controller display.)



Fig. 7-1-6



Fig. 7-1-2



Fig. 7-1-3

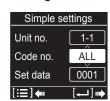


Fig. 7-1-4

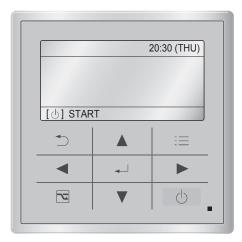


Fig. 7-1-5



Fig. 7-1-7

#### <Pre><Pre>cedure of CZ-RTC5B>



CZ-RTC5B

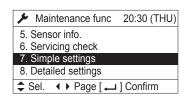
(1) Keep pressing the \_\_\_\_\_, \_\_\_ and \_\_\_\_ buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.



(2) Press the or button to see each menu.

If you wish to see the next screen instantly, press the or button.

Select "7. Simple settings" on the LCD display and press the button.



The "Simple settings" screen appears on the LCD display.

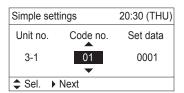
Select the "Unit no." by pressing the ▼ or button for changes.



(3) Select the "Code no." by pressing the 
button.

Change the "Code no." by pressing the 
or

a button.



(4) Select the "Set data" by pressing the or button.

Select one of the "Set data" by pressing the ▼ or ▲ button.

Then press the button.



(5) Select the "Unit no." by pressing the or button and press the button.

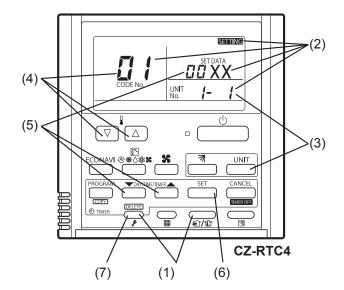
The "Exit simple settings and restart?" (Simple setting-end) screen appears on the LCD display. Select "YES" and press the button.



#### <Pre><Pre>cedure of CZ-RTC4>

- (1) Press and hold the  $\bigcap_{\digamma}$  and  $\bigcap_{\widehat{\mathfrak{sl}}/\widehat{\mathfrak{sl}}}$  buttons simultaneously for 4 seconds or longer.
- (2) "SETING", unit No. " !- !" (or " !! !!" in the case of group control), item code "!!!" !," and settings data "!!!" XX" are displayed blinking on the remote controller LCD display (figure at right). At this time, the indoor unit fan (or all indoor unit fans in the case of group control) begins operating.
- (3) If group control is in effect, press the button and select the address (unit No.) of the indoor unit to set. At this time, the fan at the indoor unit begins operating.

  \*If unit No. " # !!" is displayed, the same setting will be made for all indoor units.
- (4) Press the temperature setting ▽ / △ buttons to select the item code to change.
- (5) Press the timer time buttons to select the desired setting data.\*For item codes and setting data, see the following
- (6) Press the button. (The display stops blinking and remains lit, and setting is completed.)
- (7) Press the putton to return to normal remote controller display.



# 7-2. List of Simple Setting Items

| Code no. | Item                                      | Set data     |  |                |  |  |
|----------|---|--------------|--|----------------|--|--|
| oode no. | nom                                       | No.          | •  |                |  |  |
|          |   | 0000         | Not displayed  |                |  |  |
|          |   | 0001         | 150 hours  |                |  |  |
| O 1      | Filter sign ON time                       | 0002         | 2,500 hours  |                |  |  |
|          | (filter life time)                        | 0003         | 5,000 hours  |                |  |  |
|          |   | 0004         | 10,000 hours   |                |  |  |
|          |   | 0005         | Use the filter clogging ser  |                |  |  |
|          |   | 0000         | Standard (setting at time of shipping)                                   |                |  |  |
| 02       | Degree of filter fouling                  | 0001         | Highly fouled (Filter sign ON time is reduced to one-half the set time.) |                |  |  |
|          |   | 0001         | Central control address 1  |                |  |  |
|          |   | 0002         | Central control address 2  |                |  |  |
|          |   | 0003         | Central control address 3  |                |  |  |
| 83       | Central control address                   | >            | >  |                |  |  |
|          |   | 0064         | Central control address 64   |                |  |  |
|          |   | 0099         | No central control address set (setting at time of shipping)             |                |  |  |
| ПП       | Operating mode                            | 0000         | Normal ( setting at time of shipping)                                    |                |  |  |
| 04       | priority change                           | 0001         | Priority   |                |  |  |
|          |   |              | Compressor ON  | Compressor OFF |  |  |
|          | Fan speed when heating thermostat is OFF  | 0000         | Lo 1 min., LL 3 min.   | LL             |  |  |
|          |   | 0001         | Lo   | LL             |  |  |
| 05       |   | 0002         | LL   | LL             |  |  |
|          |   | 0004         | Lo 1 min., LL 3 min. Lo  | Lo             |  |  |
|          |   | 0005         | Lo   | Lo             |  |  |
|          |   | 0006         | LL   | Lo             |  |  |
|          | Heating intake temperature shift          | 0000         | No shift   |                |  |  |
|          |   | 0001         | Shifts intake temperature 1 °C down.                                     |                |  |  |
| nr       |   | 0002         | Shifts intake temperature 2 °C down.                                     |                |  |  |
| 85       |   | 0003         | Shifts intake temperature 3 °C down.                                     |                |  |  |
|          |   | 0004         | Shifts intake temperature 4 °C down.                                     |                |  |  |
|          |   | 0005         | Shifts intake temperature 5 °C down.                                     |                |  |  |
|          | Electric bester                           | 0006         | Shifts intake temperature 6 °C down.                                     |                |  |  |
|          | Electric heater installation              | 0000<br>0001 | No heater  |                |  |  |
|          |   | 0000         | Heater installed  No (setting at time of shipping)                       |                |  |  |
| 08       | Humidifying when heater thermostat is OFF |              |  | hind)          |  |  |
| LICI     |   | 0001         | Yes  |                |  |  |
| 570 4    | Permit/prohibit                           | 0000         | Permit   |                |  |  |
| Od       | automatic<br>heating/cooling              | 0001         | Prohibit   |                |  |  |
| OF.      | Cool-only                                 | 0000         | Normal   |                |  |  |
| ri.      |   | 0001         | Cool only (Set "1" for item  | code OD.)      |  |  |

# NOTE

- In order to avoid water leakage and damage to the fan, do not set for humidifying when the thermostat is OFF unless a vaporizing humidifier is used.
- Consider the device purpose and type when changing the settings. Incorrect settings may result in malfunction.
- Do not change any setting data that does not appear in this list.

## 7-3. Detailed Settings Function

This allows the system address, indoor unit address, and other settings to be made for the individual or group-control indoor unit to which the remote controller used for detailed settings is connected. When detailed settings mode is engaged, operation stops at the individual or group-control indoor unit where the remote controller used for detailed settings is connected. Simple settings items can also be set at this time.

#### <Pre><Pre>cedure of CZ-RTC6 series>

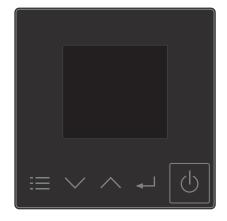
Stop the system before performing these steps.

(1) Keep pressing the ≡, and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen (Fig. 7-3-1) appears on the LCD display.



Fig. 7-3-1



**CZ-RTC6** series

(2) Press the ✓ or ✓ button to see each menu.

Select "Detailed settings" (Fig. 7-3-2) on the LCD display and press the ✓ button.

The "Detailed settings" screen (Fig. 7-3-3) appears on the LCD display.

(3) Select the "Unit no." (Fig. 7-3-3) by pressing the or button.

After selecting "Unit no.", press the button and proceed to Step (4).



If the address setting is not set up correctly, the "ALL" will be displayed in the "Unit no.".

If the button is pressed, proceed to Step (6).

(4) Keep pressing the button for 2 seconds or more during selecting "Code no.". (Fig. 7-3-4)

Change the "Code no." one digit at a time so that it becomes [0000XX] along with the following procedures.

Change the value (Fig. 7-3-5) by pressing the ✓ or △ button.

After changing the value, press the ← button and set the next digit.

Change the value (Fig. 7-3-6) by pressing the  $\checkmark$  or  $\land$  button. After changing the value, press the  $\checkmark$  button and set the next digit.

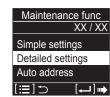


Fig. 7-3-2

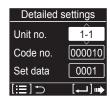


Fig. 7-3-3



Fig. 7-3-4



Fig. 7-3-5



Fig. 7-3-6

Change the value (Fig. 7-3-7) by pressing the or button.

After changing all digits, press the button and proceed to Step (5).



Fig. 7-3-7

(5) Select one of the Setting Data "YYYY" by pressing the or button. After selecting "Set data", press the button. (If setting continuously, follow the procedures from Fig. 7-3-5.)

If you wish to change the selected indoor unit or finish setting, press the

If you wish to change the selected indoor unit or finish setting, press the button twice (the display returns to Step (3)).



Fig. 7-3-8

(6) If the button is pressed under the display Step (3) the following display (Detailed setting-end screen) (Fig. 7-3-9) appears.

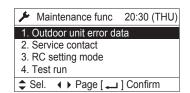
Then select "YES" by pressing the or button and press the button. (Return to normal remote controller display.)



Fig. 7-3-9

CZ-RTC5B

(1) Keep pressing the \_\_\_\_\_, \_\_\_ and \_\_\_\_ buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.



(2) Press the or button to see each menu.

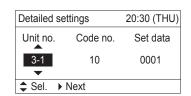
If you wish to see the next screen instantly, press the or button.

Select "8. Detailed settings" on the LCD display and press the button.



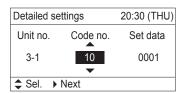
The "Detailed settings" screen appears on the LCD display.

Select the "Unit no." by pressing the ▼ or button for changes.



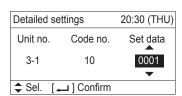
(3) Select the "Code no." by pressing the button.

Change the "Code no." by pressing the ▼ or button (or keeping it pressed).



Select one of the "Set data" by pressing the or button.

Then press the button.

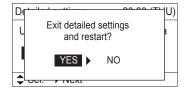


(5) Select the "Unit no." by pressing the 

■ or

button and press the 
button.

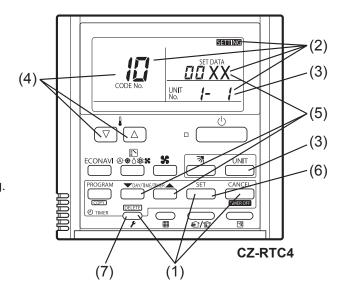
The "Exit detailed settings and restart?" (Detailed setting-end) screen appears on the LCD display. Select "YES" and press the button.



7

#### <Pre><Pre>cedure of CZ-RTC4>

- (1) Press and hold the  $\nearrow$ ,  $\stackrel{\text{\tiny SET}}{\longrightarrow}$  and  $\stackrel{\text{\tiny CANCEL}}{\longrightarrow}$  buttons simultaneously for 4 seconds or longer.
- (2) "SETTING", unit No. " !- !" (or " !! !!" in the case of group control), item code " !!!", and settings data "!!!! XX" are displayed blinking on the remote controller LCD display (figure at right). At this time, the indoor unit fan (or all indoor unit fans in the case of group control) begins operating.
- (3) If group control is in effect, press the button and select the address (unit No.) of the indoor unit to set. At this time, the fan at the indoor unit begins operating.
- (4) Press the temperature setting ▽ / △ buttons to select the item code to change.
- (5) Press the timer time buttons to select the desired setting data.
  - \*For item codes and setting data, see the following page.
- (6) Press the \_\_\_\_ button. (The display stops blinking and remains lit, and setting is completed.)
- (7) Press the putton to return to normal remote controller display.



# 7-4. List of Detailed Setting Items

| Code no.    | Item                       | Set data |  |            |                      |      |   |  |  |  |
|-------------|----------------------------|----------|--|------------|----------------------|------|---|--|--|--|
|             |                            | No.      | Description  | No.        | Description          | No.  | Description   |  |  |  |
| 10          |                            | 0000     |  | 0001       |                      | 0002 |   |  |  |  |
|             | Туре                       | 0003     |  | 0005       |                      | 0006 | High Static Pressure Duct<br>S-160PE3R<br>High Static Pressure Ducte<br>S-180, 200, 224PE4R |  |  |  |
|             |                            | 0007     |  | 8000       |                      | 0010 |   |  |  |  |
|             |                            | 0011     |  |            |                      |      |   |  |  |  |
|             |                            | 0001     |  | 0003       |                      | 0005 |   |  |  |  |
|             | la de en coit              | 0007     |  | 0009       |                      | 0011 |   |  |  |  |
| 11          | Indoor unit capacity       | 0012     |  | 0015       |                      | 0017 |   |  |  |  |
| • •         | Capacity                   | 0019     | 180 (Type 160)   | 0020       | 200 (Type 180)       | 0021 | 224 (Type 200)  |  |  |  |
|             |                            | 0022     | 250 (Type 224)   |            |                      |      |   |  |  |  |
|             |                            | 0001     | Unit no. 1   |            |                      | 1    |   |  |  |  |
|             | System address             | 0002     | Unit no. 2   |            |                      |      |   |  |  |  |
| , –,        |                            | 0003     | Unit no. 3   |            |                      |      |   |  |  |  |
| 12          |                            | (        | (  |            |                      |      |   |  |  |  |
|             |                            | 0030     | Unit no. 30  |            |                      |      |   |  |  |  |
|             |                            | 0099     | Not set  |            |                      |      |   |  |  |  |
|             |                            | 0001     | Unit no. 1   |            |                      |      |   |  |  |  |
|             |                            | 0002     | Unit no. 2   |            |                      |      |   |  |  |  |
| 17          | Indoor unit                | 0003     | Unit no. 3   |            |                      |      |   |  |  |  |
| 13          | address                    | 5        | ζ  |            |                      |      |   |  |  |  |
|             |                            | 0064     | Unit no. 64  |            |                      |      |   |  |  |  |
|             |                            | 0099     | Not set  |            |                      |      |   |  |  |  |
|             | Group control address      | 0000     | Individual (1:1 = In   | door unit  | with no group wiring | g)   |   |  |  |  |
| 11.1        |                            | 0001     | Main unit (One of the group-control indoor units)              |            |                      |      |   |  |  |  |
| <b>!</b> -{ |                            | 0002     | Sub unit (All group-control indoor units except for main unit) |            |                      |      |   |  |  |  |
|             |                            | 0099     | Not set  |            |                      |      |   |  |  |  |
| 17          |                            | -010     | Shifts intake temper   | erature 10 | O°C down.            |      |   |  |  |  |
|             | Cooling intake temperature | -009     | Shifts intake temper   | erature 9° | °C down.             |      |   |  |  |  |
|             |                            | 5        | · ·  |            |                      |      |   |  |  |  |
|             |                            | -001     | Shifts intake temperature 1°C down.                            |            |                      |      |   |  |  |  |
|             |                            | 0000     | No intake temperature shift                                    |            |                      |      |   |  |  |  |
|             | shift                      | 0001     | Shifts intake temperature 1°C up.                              |            |                      |      |   |  |  |  |
|             |                            | 5        | 5  |            |                      |      |   |  |  |  |
|             |                            | 0009     | Shifts intake temper   |            |                      |      |   |  |  |  |
|             |                            | 0010     | Shifts intake temper   | erature 10 | )°C up.              |      |   |  |  |  |

(Continued)

| 2.1              | 14 0                           |                |              | Set data  |
|------------------|--------------------------------|----------------|--------------|---|
| Code no.         | Item                           |                | No.          | Description   |
|                  |                                |                | 0000         | Function disabled   |
|                  | Automatic stop                 |                | 0001         | Stops automatically 5 minutes after operation starts.                     |
|                  | time after                     |                | 0002         | Stops automatically 10 minutes after operation starts.                    |
| 18               | operation start                |                | >            | }   |
|                  | *Can be set in 5-minute units. |                | 0123         | Stops automatically 615 minutes after operation starts.                   |
|                  |                                |                | 0124         | Stops automatically 620 minutes after operation starts.                   |
|                  |                                |                | 0125         | Stops automatically 625 minutes after operation starts.                   |
| <b>(1</b> B)     | Forced thermostat ON ti        | me             | 0000         | 5 minutes   |
| , <b>L</b> , ( ) |                                |                | 0001         | 4 minutes   |
|                  | Temperature shift for          | or             | 0001         | ± 1°C   |
|                  | cooling/heating                | -              | 0002         | ± 2°C   |
| lE lE            | change in auto                 | -              | 0003         | ± 3°C   |
|                  | heat/cool mode                 |                | 7            | \ \ \   |
|                  |                                | ļ              | 0007         | ± 7°C   |
|                  |                                |                | 0018         | 18°C (Lower limit at shipment)  |
| IF               |                                | 0              | 0019         | 19°C  |
| (Upper limit)    |                                | Cooling        | >            |   |
| 20               |                                | ပြ             | 0029         | 29°C  |
| (Lower limit)    |                                |                | 0029         | 30°C (Upper limit at shipment)  |
|                  |                                |                | 0016         | 16°C (Lower limit at shipment)  |
| 7 !              |                                | _              | 0017         | 17°C  |
| (Upper limit)    |                                | ting           | )            | )   |
| 22               |                                | Heating        | (            | (   |
| (Lower limit)    | Change to remote               |                | 0029         | 29°C  |
|                  | control<br>temperature         |                | 0030         | 30°C (Upper limit at shipment)  |
| ככ               | setting range                  |                | 0018         | 18°C (Lower limit at shipment)  |
| (Upper limit)    |                                | ng             | 0019         | 19°C  |
| (Opper minit)    |                                | Dryir          | >            | \ \ \   |
| (Lower limit)    |                                |                | 0029         | 29°C  |
| ,                |                                |                | 0030         | 30°C (Upper limit at shipment)  |
|                  |                                | _              | 0017         | 17°C (Lower limit at shipment)  |
| 25               |                                | Ö,             | 0018         | 18°C  |
| (Upper limit)    |                                | Auto heat/cool | >            | }   |
| (Lower limit)    |                                | 육              | 0026         | 26°C  |
| ,                |                                | <b>     </b>   | 0027         | 27°C (Upper limit at shipment)  |
| 29               | Humidifier operation           | n T            | 0000         | Normal  |
|                  | . Idillidilloi opoidiloi       | •              | 0001         | Ignore heat exchanger temperature conditions.                             |
|                  |                                |                | 0000         | Filter input (differential pressure switch input)                         |
| 28               | Filter (CN70) input switching  |                | 0001         | Alarm input (for trouble input about air cleaner or similar device)       |
|                  | Switching                      |                | 0002         | Humidifier input (Operates linked with drain pump when humidifier is ON.) |
| 20               | Indoor unit electronic         |                | 0000         | None  |
| <u> </u>         | control valve                  |                | 0002         | Present (Setting at shipment)   |
| 28               | T10 terminal switch            | ina            | 0000         | Normal (Used as optional relay PCB or JEMA standard HA terminal.)         |
| [ [              | 1 10 terminal switching        |                | 0001<br>0002 | Used for OFF reminder   |
|                  |                                |                |              | Fire prevention input   |

(Continued)

| 0.4      | léa ma   | Set data        |   |  |
|----------|--|-----------------|---|--|
| Code no. | Item   | No. Description |   |  |
|          |  | 0000            | No forced operation   |  |
| 75       | Automatic drain pump                           | 0001            | Forced operation for 1 minute   |  |
| 2F       | operation                                      | >               | >   |  |
|          |  | 0060            | Continuous operation  |  |
| 7,1      | Ventilation fan                                | 0000            | None  |  |
| 3 (      | operation                                      | 0001            | Ventilation fan operated by remote controller.  |  |
| 77       | Wired remote controller                        | 0000            | Not used. (Body sensor is used.)  |  |
| 32       | sensor   | 0001            | Remote control sensor is used.  |  |
| 34       | "Operation change control in progress"         | 0000            | Normal (displayed)  |  |
|          | display  | 0001            | Not displayed   |  |
| 35       | OFF reminder function for when weekly timer is | 0000            | None  |  |
|          | used   | 0001            | Only stop time setting is enabled.  |  |
|          | Heat exchanger                                 | -001            | Control temperature -1°C  |  |
|          | temperature for cold air                       | 0000            | Control temperature 0°C   |  |
| 30       | discharge<br>(Heat exchanger control           | >               | >   |  |
|          | point for control to                           | 0025            | Control temperature 25°C  |  |
|          | prevent cold air)                              | 0026            | Control temperature 26°C  |  |
| 34       | Fan output switching                           | 0000            | Output linked with fan.(ON when indoor unit fan is operating.)  |  |
|          |  | 0001            | Fan mode operation output   |  |
|          |  | 0000            | No delayed stop   |  |
|          |  | 0001            | 1minutes delayed stop   |  |
|          | Drain pump delayed                             | 0002            | 2minutes delayed stop   |  |
| 36       | stop time                                      | >               | >   |  |
|          | . [  | 0058            | 58minutes delayed stop  |  |
|          |  | 0059            | 59minutes delayed stop  |  |
|          |  | 0060            | 60minutes delayed stop  |  |
|          |  | 0000            | Humidifier output OFF. Drain pump stopped.  |  |
|          |  | 0001            | Humidifier output ON. Drain pump operates.  |  |
| 40       | Humidifier setting                             | 0002            | Humidifier output ON. Drain pump operates for 1 minute when total humidifier operating time reaches 60 minutes. |  |
|          |  | 0003            | Humidifier output ON. Drain pump stopped.   |  |
|          |  | 0000            | Standard setting  |  |
| 45       | Flap operation mode                            | 0001            | Draft reduction mode (Flap lower-limit position is shifted upwards.)  |  |
|          |  | 0000            | Smudging reduction mode (Flap swing upper-limit position is shifted downwards.)                                 |  |
| 45       | Flap swing mode                                | 0001            | Normal mode   |  |
|          | · · · · · · · · · · · · · · · · · · ·          | 0002            | Draft reduction mode (Flap swing lower-limit position is shifted upwards.)                                      |  |
| -        |  |                 | (Continued)   |  |

(Continued)

| Code no. | Item                                     | Set data |   |  |
|----------|--|----------|---|--|
| Code no. | item                                     | No.      | Description   |  |
|          |  |          | Purpose   |  |
|          | Fan tap setting                          | 0000     | Standard (factory setting)                            |  |
|          | (Fan tap change in order to prevent drop |          | High ceiling setting 1 (U3, T3)                       |  |
| 58       | in air discharge                         | 0001     | Air-flow blocking kit (when a duct is connected : U3) |  |
|          | caused by filter                         |          | Air-flow blocking kit (for 3-way air flow : U3)       |  |
|          | installation)                            | 0003     | High ceiling setting 2 (U3)                           |  |
|          |  | 0006     | Air-flow blocking kit (for 2-way air flow : U3)       |  |
|          |  | 0000     | No humidifier output                                  |  |
|          |  | 0001     | 1 second  |  |
|          | Humidifier ON time                       | 0002     | 2 seconds   |  |
| 58       | (ON time per 60                          | >        | ζ   |  |
|          | seconds)                                 | 0058     | 58 seconds  |  |
|          |  | 0059     | 59 seconds  |  |
|          |  | 0060     | Continuously ON                                       |  |
|          | Timer function change                    | 0000     | Function disabled                                     |  |
| 60       | prohibit                                 | 0001     | Function enabled                                      |  |
| 52       | Smudging control                         | 0000     | No smudging control                                   |  |
|          | Fan speed when                           | 0000     | Fan speed setting                                     |  |
| 85       | cooling thermostat                       | 0003     | LL 3min.→ Fan speed setting                           |  |
|          | OFF                                      | 0009     | LL  |  |
| rr       | Refrigerant                              | 0000     | None  |  |
| F[       | adaptability                             | 0001     | Standard (factory setting)                            |  |

- Consider the device purpose and type when changing the settings. Incorrect settings may result in malfunction. Do not change any setting data that does not appear in this list.

## 7-5. Simple Setting Items

| Item code                      | Item                        | Description   |
|--------------------------------|-----------------------------|---|
| 01                             | Filter sign ON time setting | Changes the indoor unit filter lifetime when a high-performance filter or   |
| 01                             | (filter lifetime)           | other optional product is installed.  |
| 02 Degree of filter facilities |                             | Reduces the filter sign ON time to 1/2 of the standard time (setting at the |
| 02                             | Degree of filter fouling    | time of shipping) for cases when filter fouling is more severe than normal. |

# Filter sign ON times for each model

| Model<br>data |  | Filter sign |                       | ON time  |              |
|---------------|--|-------------|-----------------------|----------|--------------|
|               | Model  | Stan        | Standard High fouling |          | g-life       |
|               |  | Standard    | High fouling          | Standard | High fouling |
| 0006          | High Static Pressure Duct<br>S-160PE3R<br>High Static Pressure Ducted<br>S-180, 200, 224PE4R | ×           | ×                     | ×        | ×            |

## NOTE

• × indicates that there is no corresponding filter.

| Item code | Item                    | Description   |
|-----------|-------------------------|---|
| 03        | Central control address | Set when using a central control device. Used when setting the central control address manually from the remote controller. |

When the operating mode at the priority remote controller is changed, the operating modes of other remote controllers change as shown below.

| Mode change at priority remote controller |          | Operating modes at other remote controllers |                       |  |
|---|----------|---|-----------------------|--|
| Current mode                              | New mode | Current mode                                | New mode              |  |
| Cooling or dry                            | Heating  | Cooling or dry                              | Heating               |  |
| Cooling or dry                            | ricating | Fan   | Fan (not changed)     |  |
| Heating                                   | Cooling  | Heating                                     | Cooling               |  |
| rieating                                  | Cooling  | Fan   | Fan (not changed)     |  |
| Cooling                                   | Dry      | Cooling                                     | Cooling (not changed) |  |
| Cooming                                   | Dry      | Dry   | Dry (not changed)     |  |
| Heating                                   | Dry      | Heating                                     | Cooling               |  |
| ricating                                  | Dry      | Fan   | Fan (not changed)     |  |
|   |          | Cooling                                     | Cooling (not changed) |  |
| Cooling or dry                            | Fan      | Dry   | Dry (not changed)     |  |
|   |          | Fan   | Fan (not changed)     |  |
| Heating                                   | Fan      | Heating                                     | Heating (not changed) |  |
| Heating                                   | ran      | Fan   | Fan (not changed)     |  |

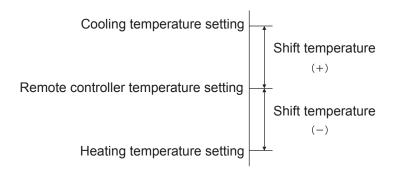
| Code no. | Item   | Description  |
|----------|--|--|
| 05       | Fan speed setting when heating thermostat is OFF | Changes the fan speed setting when the heating thermostat is OFF.  |
| 06       | Heating intake temperature shift                 | Shifts the intake temperature during heating. Can be set when the body thermostat is used.   |
| 07       | Electric heater installation                     | Set when cost distribution is performed using an AMY central control system or similar system, and when an optional electric heater is installed. (This is unrelated to control of the electric heater.)   |
| 08       | Humidifying when heater thermostat is OFF        | Normally humidifying does not occur when the thermostat is OFF during heating operation. However, this setting can be changed in order to increase the amount of humidifying.  Caution: In order to avoid water leakage and damage to the fan, do not use this setting unless a vaporizing humidifier is used. |
| 0D       | Permit/prohibit automatic heating/cooling        | This setting can be used to prevent the automatic heating/cooling display on the remote control if the unit configuration permits automatic heating/cooling operation.   |
| 0F       | Cooling-only                                     | This setting allows a heat pump indoor unit to be operated as a cooling only unit.   |

- In order to avoid water leakage and damage to the fan, do not set for humidifying when the thermostat is OFF unless a vaporizing humidifier is used.
- Consider the device purpose and type when changing the settings. Incorrect settings may result in malfunction.
- Do not change any setting data that does not appear in this list.

## 7-6. Detailed Setting Items

| Code no. | Item  | Description   |
|----------|---|---|
| 10       | Unit type   | Number for each type of indoor unit   |
| 11       | Indoor unit capacity  | (U3, F3, K3, T3) These are not set at the time of shipping from the factory. These need to be set by auto address setting after installation. (Y3) Number for each type of indoor unit  |
| 12       | System (outdoor unit) address   | These are not set at the time of shipping from the factory.   |
| 13       | Indoor unit address   | These need to be set by auto address setting after installation.  |
| 14       | Group address   |   |
| 17       | Cooling intake temperature shift                                      | Shifts the intake temperature during cooling and dry operation. (Enabled only when the body thermostat is used.) Increase this value when it is difficult to turn the thermostat ON.  |
| 18       | Automatic stop time after operation start                             | The time at which an indoor unit is automatically stopped after operation starts can be set in increments of 5 minutes  |
| 1b       | Forced thermostat ON time   | Use this setting to change the time for forced operation at installation or servicing from 5 minutes to 4 minutes.  (Enabled only with PAC models.)   |
| 1E       | Temperature shift for cooling/heating change in "auto heat/cool" mode | "Auto heat/cool" selects the operating mode automatically based on the difference between the room temperature and the temperature set on the remote controller.  This setting establishes a shift temperature for the heating/cooling temperature setting relative to the remote controller temperature setting. |

(Continued)



| Code no.  | Item   |                   | Description   |  |
|---|--|-------------------|---|--|
| <b>1F</b> (Upper limit) <b>20</b> (Lower limit) |  | Cooling           |   |  |
| 21 (Upper limit)<br>22 (Lower limit)            | Change to the remote control                             | Heating           | This setting changes the temperature range (upper limit and lower limit) which is set from the remote controller or central control device. The set upper limit must be greater than or equal to the  |  |
| 23 (Upper limit)<br>24 (Lower limit)            | temperature setting range                                | Drying            | lower limit. If the temperature setting is to be a single point, set the upper limit and lower limit to the same temperature.   |  |
| 25 (Upper limit)<br>26 (Lower limit)            |  | Auto<br>heat/cool |   |  |
| 29  | Humidifier operating ignores the heat of temperature     |                   | During heating operation, the humidifier operates when the heat exchanger temperature is suitable for humidifying. This setting is used to ignore this condition for humidifier operation and operate the humidifier more.  |  |
| 2A  | Filter input switch                                      | ing               | This setting switches the filter input according to the purpose of use.   |  |
| 2C  | Indoor unit electro                                      | onic              | This setting indicates whether or not an indoor unit electronic control valve is present.  At the time of shipping, this setting is set according to the conditions of the indoor unit.   |  |
| 2E  | T10 terminal input switching                             |                   | Ordinarily, the T10 terminal is used as the HA terminal at the time of shipping. However, this setting is used when the T10 terminal is used for OFF reminder or for fire prevention input.   |  |
| 31  | Ventilation fan operation from remote controller         |                   | It is possible to install a total heat exchanger and ventilation fan in the system, which can be started and stopped by the wired remote controller. The ventilation fan can operate linked with the start and stop of the indoor unit, or can be operated even when the indoor unit is stopped.  Use a ventilation fan that can accept the no-voltage A contact as the external input signal.  In the case of group control, the fans are operated together. They cannot be operated individually. |  |
| 32  | Switching to remote controller sensor                    |                   | This setting is used to switch from the body sensor to the remote controller sensor.  Check that "remote controller sensor" is displayed.  Do not use this setting with models that do not include a remote controller sensor.  Do not use this setting if both the body sensor and remote sensor are used.   |  |
| 34  | ON/OFF of "Operation change control in progress" display |                   | In a MULTI system with multiple remote controllers, switching between heating and cooling is restricted, and "Operation change control in progress" is displayed. This setting is used to prevent this display from appearing. See the item concerned with operating mode priorities.   |  |
| 35  | OFF reminder function for weekly timer                   |                   | This setting switches the operation when the weekly timer is connected to the remote controller.  This can be used to prevent cases in which the unit is accidentally left ON. There is no change when this setting is ON, however, it is necessary to set the weekly timer ON time.  |  |

(Continued)

## (Continued from previous page)

| Code no. | Item  | Description   |
|----------|---|---|
| 3C       | Heat exchanger temperature for cold air discharge | The heat exchanger temperature control point for prevention of cold air discharge during heating operation can be changed.  |
| 3d       | Fan output switching                              | The indoor unit PCB optional output for the fan can be switched according to the purpose of use.  |
| 3E       | Drain pump delayed stop time                      | The drain pump stops for the set time delay after cooling operation stops.  |
| 40       | Humidifier drain pump setting                     | This specifies the humidifier and drain pump setting.   |
| 45       | DC flap operation mode                            | Changes flap operation to draft reduction mode.   |
| 46       | DC flap swing mode                                | Selects the swing operation mode for the flap.  |
| 5d       | DC fan tap setting                                | Sets the DC fan tap according to the purpose of use. Change the settings data at the same time.   |
| 5E       | Humidifier ON time                                | Sets the humidifier output ON time for when the humidifier is operating. ON/OFF control is performed during humidifier operation. This setting therefore sets the ON time per 60-second interval. |
| 60       | Timer function change prohibit                    | This function prohibits changes from being made to the remote controller time setting.  |
| 62       | Smudging control                                  | Smudging control is disabled when 0000 is set.  |
| FC       | Refrigerant adaptability                          | This item is set to 01 when the indoor unit model adapted with both R410A and R32.  |

- Consider the device purpose and type when changing the settings. Incorrect settings may result in malfunction. Do not change any setting data that does not appear in this list.

#### 7-7. Remote Controller Servicing Functions

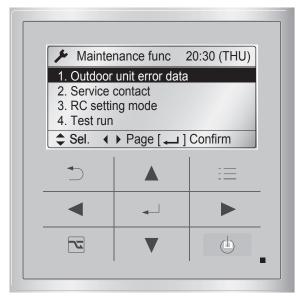
The remote controller includes a number of servicing functions. Use these as needed for test runs and inspections.

#### <Pre><Pre>cedure of CZ-RTC5B>

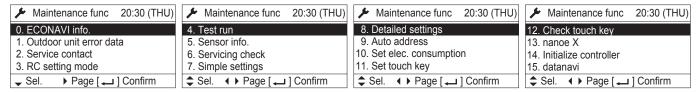
Display of "maintenance function" screen

- (1) Keep pressing the \_\_\_\_\_\_, \_\_\_\_ and \_\_\_\_\_ buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.
- (2) Press the ▼ or ▲ button to see each menu.

If you wish to see the next screen instantly, press the  $\bigcirc$  or  $\bigcirc$  button.



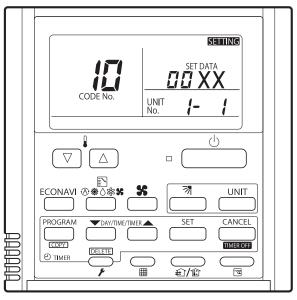
CZ-RTC5B



Maintenance function screen

#### **List of Servicing Functions**

| Functions  | Description  | Menu selection       | Reset operation   | Unit status   |
|--|--|----------------------|-------------------|---|
| ECONAVI  CZ-KPU3A  CZ-KPU3AW  CZ-KPY4  CZ-CENSC1 | Display from each sensor   | 0. ECONAVI info.     |                   |   |
| Test run   | Operation with forced thermostat ON  | 4. Test run          | Press the button. |   |
| Sensor temperature display                       | Temperature display from each sensor   | 5. Sensor info       |                   |   |
| Servicing check display                          | Alarm history display  | 6. Service check     |                   |   |
| Simple settings                                  | Filter lifetime, operating mode priority, central control address, and other settings. | 7. Simple settings   | Press the button. | When settings are made from a remote controller, the indoor |
| Detailed settings                                | System address, indoor unit address, central control address, and other settings       | 8. Detailed settings | (Postart)         | unit where that remote controller is connected stops.       |
| Auto address                                     | Auto address setting based on command from the wired remote controller                 | 9. Auto address      | Automatic reset   | Entire system stops.  |
| nanoe™ X<br>(CZ-RTC5B only)                      | Display status of nanoe™ X   | 13. nanoe X          | Press the button. |   |



CZ-RTC4

## **List of Servicing Functions**

| Functions                        | Description   | Button operation   | Reset operation   | Unit status   |
|----------------------------------|---|--|-------------------|---|
| Test run                         | Operation with forced thermostat ON   | Press and hold the $\nearrow$ button for 4 seconds or longer.  |                   |   |
| Sensor<br>temperature<br>display | Temperature display from each sensor  | Press and hold the $\nearrow$ and $\stackrel{\text{\tiny CANCEL}}{\longrightarrow}$ buttons for 4 seconds or longer. |                   | Current operation is maintained.  |
| Servicing check display          | Alarm history display   | Press and hold the $\nearrow$ and $\stackrel{\text{\tiny set}}{-}$ buttons for 4 seconds or longer.                  | Press the         |   |
| Simple settings                  | Filter lifetime, operating mode priority, central control address, and other settings |  | button.           | When settings are made from a remote controller, the indoor unit where that remote controller is connected stops. |
| Detailed settings                | System address, indoor unit address, central control address, and other settings      | Press and hold the , and buttons for 4 seconds or longer.  |                   |   |
| Auto address                     | Auto address setting based on command from the wired remote controller                | Press and hold the $\nearrow$ and the timer operation buttons for 4 seconds or longer.                               | Automatic reset   | Entire system   |
| Address<br>change                | Change of indoor unit address   | Press and hold the  and the timer operation  buttons for 4 seconds or longer.  | Press the putton. | stops.  |

#### 7-8. Test Run Function

# Test Run Using the Remote Controller < Procedure of CZ-RTC6 series>

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

(1) Keep pressing the ≡, and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.





**CZ-RTC6** series

(2) Press the or button to see each menu.

Select "Test run" on the LCD display and press the button.

Change the display from "OFF" to "ON" by pressing the

✓ or ∧ button.

Then press the — button.

(3) Press the button.

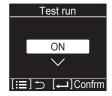
"TEST" will be displayed on the LCD display.

- (4) Press the button. Test run will be started.

  Test run setting mode screen appears on the LCD display.
  - The test run can be performed using the HEAT, COOL, or FAN operation mode.
  - The temperature cannot be adjusted when in test run mode.
  - If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see "2-3-1-5. Contents of Remote Controller Switch Alarm Display".)
- (5) After the test run is completed, proceed from Step (1) and change to "OFF" at Step (2).
  - To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.

- The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.
- If the test run is performed using the wired remote controller, operation is possible even if the cassette-type ceiling panel has not been installed. ("P09" display does not occur.)









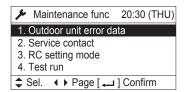
## 7

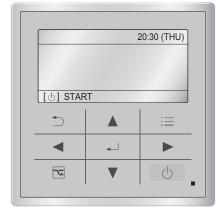
#### <Pre><Pre>cedure of CZ-RTC5B>

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

(1) Keep pressing the , and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.





Maintenance func 21. Outdoor unit error data

2. Service contact

Test run

Test run

Change

3. RC setting mode

 \$\Delta\$ Sel.
 \$\Delta\$ Page [ \$\lefta\$] Confirm

Test run
ON

[ Langle ] Confirm

CZ-RTC5B

20:30 (THU)

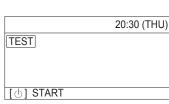
20:30 (THU)

- (2) Press the or button to see each menu.

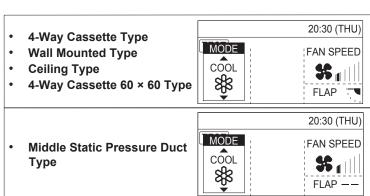
  If you wish to see the next screen instantly, press the or button.

  Select "4. Test run" on the LCD display and press the button.
  - Change the display from "OFF" to "ON" by pressing the 

    ▼ or ▲ button. Then press the ← button.
- (3) Press the button. "TEST" will be displayed on the LCD display.



- (4) Press the \_\_\_\_ button. Test run will be started. Test run setting mode screen appears on the LCD display.
  - The test run can be performed using the HEAT, COOL, or FAN operation mode.
  - The temperature cannot be adjusted when in test run mode.
  - If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see "2-3-1-5. Contents of Remote Controller Switch Alarm Display".)



- (5) After the test run is completed, proceed from Step (1) and change to "OFF" at Step (2).
  - To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.

- The outdoor units will not operate for approximately 3 minutes after the power is turned ONand after operation is stopped.
- If the test run is performed using the wired remote controller, operation is possible even if the cassette-type ceiling panel has not been installed. ("P09" display does not occur.)

#### <Pre><Pre>cedure of CZ-RTC4>

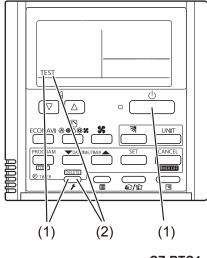
This mode places a heavy load on the machines. Therefore use it only when performing the test run.

(1) Press the remote controller button for 4 seconds or longer.

Then press the button.

"TEST" appears on the LCD display while the test run is in progress.

- The test run can be performed using the HEAT, COOL, or FAN operation mode.
- The temperature cannot be adjusted when in test run mode.
- If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see "2-3-1-5.
   Contents of Remote Controller Switch Alarm Display")
- (2) After the test run is completed, press the putton again. Check that "TEST" disappears from the LCD display.
  - To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.



#### CZ-RTC4

- The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.
- If the test run is performed using the wired remote controller, operation is possible even if the cassette-type ceiling panel has not been installed. ("P09" display does not occur.)

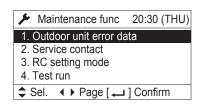
#### Sensor Temperature Display Function (displayed regardless of whether unit is operating or stopped)

The procedure below displays the sensor temperatures from the remote controller, indoor unit, and outdoor unit on the remote controller.

#### <Pre><Pre>cedure of CZ-RTC5B>

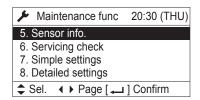
(1) Keep pressing the , and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.

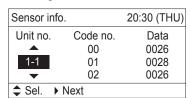


(2) Press the or button to see each menu. If you wish to see the next screen instantly, press the or button.

Select "5. Sensor info." on the LCD display and press the button.



Select the "Unit no." by pressing the ▼ or ▲ button for changes.



Then press the button.

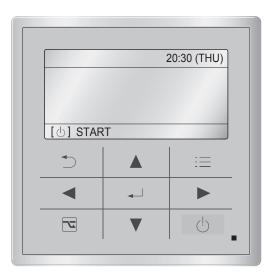
Display sensor information of the unit.

| Sensor info. | 20:30 (TH | U)   |   |
|--------------|-----------|------|---|
| Unit no.     | Code no.  | Data |   |
|              | 00        | 0026 | • |
| 1-1          | 01        | 0028 |   |
|              | 02        | 0026 | ▼ |
|              |           |      |   |

Refer the information by pressing the 

▼ or

button.

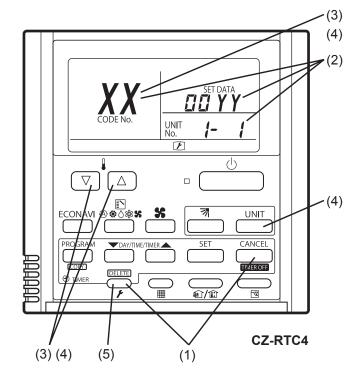


CZ-RTC5B

#### <Pre><Pre>cedure of CZ-RTC4>

- (1) Press and hold the and buttons simultaneously for 4 seconds or longer.
- (2) The unit No. "X-X" (main unit No.), item code "XX" (sensor address), and servicing monitor "ΔΩ Υ Υ" (sensor temperature) are displayed on the remote controller LCD display (figure at right).
- (3) Press the temperature setting ▽ / △ buttons and select the item code to the address of the sensor to monitor.
- (4) If group control is in effect, press the button to select the unit to monitor.

  Press the temperature setting buttons to select the item code to change.
- (5) Press the putton to return to normal remote controller display.



|                   | Item code | Meaning of Code                        |  |
|-------------------|-----------|--|--|
|                   |           |  |  |
| Indoor unit data  | 02        | Indoor unit intake temp.               |  |
|                   | 03        | Indoor unit heat exchanger temp. (E1)  |  |
|                   | 04        | Indoor unit heat exchanger temp. (E2)  |  |
|                   | 05        | _                                      |  |
|                   | 06        | _                                      |  |
|                   | 07        | _                                      |  |
|                   | 08        | _                                      |  |
|                   | 09        |  |  |
| Outdoor unit data | 0A        | Discharge temp. (TD)                   |  |
|                   | 0b        | _                                      |  |
|                   | 0C        | _                                      |  |
|                   | 0d        | Intake temp. (TS)                      |  |
|                   | 0E        | Outdoor unit heat exchanger temp. (C1) |  |
|                   | 0F        | Outdoor unit heat exchanger temp. (C2) |  |
|                   | 10        | _                                      |  |
|                   | 11        | Outdoor air temp. (TO)                 |  |
|                   | 12        | _                                      |  |
|                   | 13        | Current value (CTL2)                   |  |
|                   | 14        | Current value (CTL1)                   |  |
|                   | 15        | Outdoor MV value (MOV1)                |  |
|                   | 16        | _                                      |  |
| l .               | 19        | Frequency                              |  |

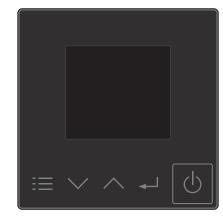
<sup>\*</sup> Depending on the model, some items may not be displayed.

#### <Pre><Pre>cedure of CZ-RTC6 series>

(1) Keep pressing the ≡, and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.





**CZ-RTC6** series

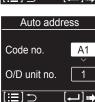
(2) Press the or button to see each menu.

Select "Auto address" on the LCD display and press the button.



(3) The "Auto address" screen appears on the LCD display.

Select the "Code no." to "A1" by pressing the or button.



After selecting "Code no.", press the button and proceed to Step (4). If the button is pressed, proceed to Step (5).

(4) Select one of the "O/D unit no." for auto address by pressing the or button.



After selecting "O/D unit no.", press the button.











Approximately 10 minutes are required.

When auto address setting is completed, the units return to normal stopped status.

(5) If the button is pressed under the display Step (3), the following display (Auto address-end screen) appears.

Then select "YES" by pressing the ✓ or ✓ button and press the button.



7

#### <Pre><Pre>cedure of CZ-RTC5B>

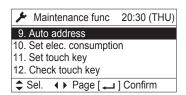
(1) Keep pressing the , and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.

(2) Press the ▼ or ▲ button to see each menu.

If you wish to see the next screen instantly, press the or button.

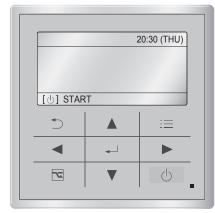
Select "9. Auto address" on the LCD display and press the button.



(3) The "Auto address" screen appears on the LCD display.

Change the "Code no." to "A1" by pressing the ▼ or ▲ button.





CZ-RTC5B

(4) Select the O/D unit no." by pressing the

or button.

Select one of the "O/D unit no." for auto address by pressing the ▼ or ▲ button for auto address setting.

Approximately 10 minutes are required.

When auto address setting is completed, the units return to normal stopped status.

#### <Pre><Pre>cedure of CZ-RTC4>

#### NOTE

- · Selecting each refrigerant system individually for auto address setting
- Auto address setting for each system : Item code "A1"
- (1) Press the remote controller timer time button and button at the same time.

(Press and hold for 4 seconds or longer.)

- (2) Next, press either the temperature setting ▽/△ button. (Check that the item code is "A1".)
- (3) Use either the button to set the system No. to perform auto address setting.
- (4) Then press the set button.

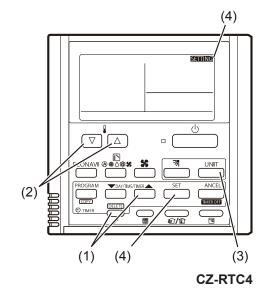
(Auto address setting for one refrigerant system begins.) (When auto address setting for one system is completed, the system returns to normal stopped status.)

<Approximately 4 – 5 minutes is required.>

(During auto address setting, "STING" is displayed on the remote controller.

This message disappears when auto address setting is completed.)

(5) Repeat the same steps to perform auto address setting for each successive system.



#### Checking indoor unit addresses

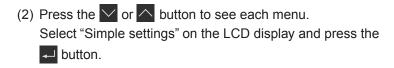
Use the remote controller to check the indoor unit address.

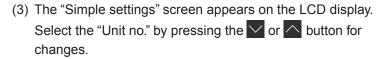
#### <Pre><Pre>cedure of CZ-RTC6 series>

(1) Keep pressing the ≡, and buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.



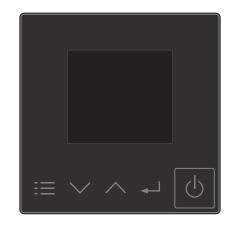




\* The initial display is "ALL".

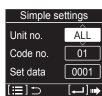
The indoor unit fan operates only at the selected indoor unit.

(4) Press the button and select "YES" to restart.



**CZ-RTC6** series

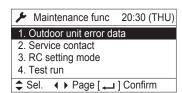




#### <Pre><Pre>cedure of CZ-RTC5B>

(1) Keep pressing the \_\_\_\_\_, \_\_\_ and \_\_\_\_ buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.

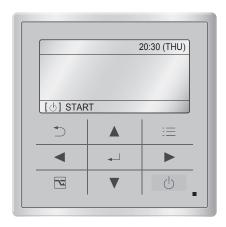


Select "7. Simple settings" on the LCD display and press the  $\begin{tabular}{c} \bot \end{tabular}$  button.

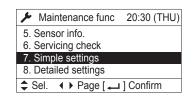
- (3) The "Simple settings" screen appears on the LCD display. Select the "Unit no." by pressing the ▼ or ▲ button for changes.
  - \* The initial display is "ALL".

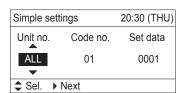
The indoor unit fan operates only at the selected indoor unit.

(4) Press the button and select "YES" to restart.



CZ-RTC5B

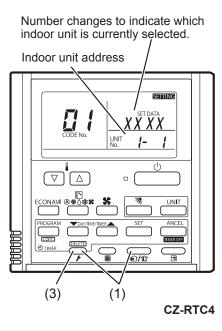




#### <Pre><Pre>cedure of CZ-RTC4>

#### <If 1 indoor unit is connected to 1 remote controller>

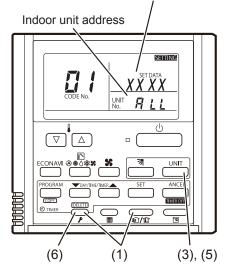
- (1) Press and hold the button and button for 4 seconds or longer (simple settings mode).
- (2) The address is displayed for the indoor unit that is connected to the remote controller.
  - (Only the address of the indoor unit that is connected to the remote controller can be checked.)
- (3) Press the putton again to return to normal remote controller mode.



#### <If multiple indoor units are connected to 1 remote controller (group control)>

- (1) Press and hold the button and button for 4 seconds or longer (simple settings mode).
- (2) "ALL" is displayed on the remote controller.
- (3) Next, press the  $\bigcirc$  button.
- (4) The address is displayed for 1 of the indoor units which is connected to the remote controller. Check that the fan of that indoor unit starts and that air is discharged.
- (5) Press the \_\_\_\_\_ button again and check the address of each indoor unit in sequence.
- (6) Press the button again to return to normal remote controller mode.

Number changes to indicate which indoor unit is currently selected.



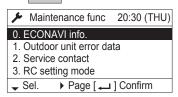
CZ-RTC4

#### **Check of ECONAVI Operational Status**

The status of ECONAVI operation can be checked instantly. It is available to check the operation when installing the indoor unit.

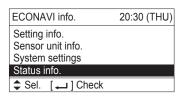
#### <Pre><Pre>cedure of CZ-RTC5B>

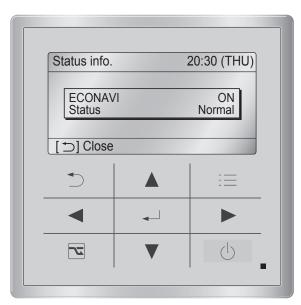
- (1) Keep pressing the \_\_\_\_\_\_, \_\_\_\_ and \_\_\_\_\_ buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.
- (2) Select "0. ECONAVI info." on the LCD display and press the button.



(3) Press the or button to see each menu.

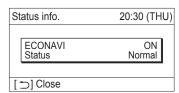
Select "Status info." on the LCD display and press the button.





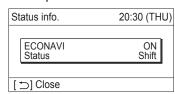
CZ-RTC5B

- (4) There are four patterns of operational status display as shown below.
  - 1. Under normal operation



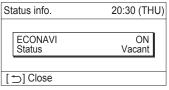
State of no energy-saving operation

2. Under temperature shift



State of energy-saving (temperature shift) operation

3. Under suspension with absentee

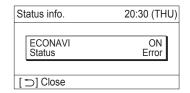


State of energy-saving (suspended) operation

\*Shows that air conditioner operation was suspended because no person was detected for a certain period.

This state remains until operation is restarted.

4. Under sensor communication error



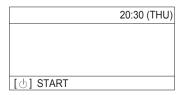
Shows that the connected ECONAVI sensor is in error state.

#### nanoe™ X Display

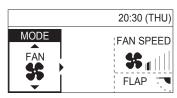
When the  $\bigwedge$  **nanoe** appears on the remote controller (CZ-RTC5B), the status of the nanoe<sup>TM</sup> X can be checked in the following way.

#### <Pre><Pre>cedure of CZ-RTC5B>

- (1) Switch On the earth leakage circuit breaker.
- (2) Wait until the remote control display returns to normal.

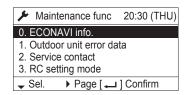


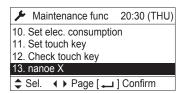
(3) Operate the unit in FAN mode.



(4) While operating in FAN mode (more than 5 minutes have elapsed), press the \_\_\_\_\_\_, \_\_\_\_ and \_\_\_\_\_ buttons simultaneously for 4 or more seconds.

The "Maintenance func" screen appears on the LCD display.







CZ-RTC5B

(6) Check that the nanoe™ X module status is "Normal". The indoor unit on the display can be scrolled up or down using ▼ / ▲ buttons.

| nanoe X  | 20:30 (THU)   |  |  |
|----------|---------------|--|--|
| Unit no. | Status        |  |  |
| 1- 1     | Normal        |  |  |
| 1- 2     | Not connected |  |  |
| 1- 3     | Unsupported   |  |  |
| → Scroll |               |  |  |

The nanoe<sup>TM</sup> X module status of all indoor units will be displayed.

Normal : The nanoe<sup>TM</sup> X module is operating normally. Unsupported : The indoor unit is not available to the nanoe<sup>TM</sup> X function.

\*1-1 and 1-2 represent the unit number.

\*In the case of "Unsupported", select "8. Detailed settings" and check the setting data of the Code no. 9.
\*If the setting data is "0000", the nanoe™ X module is not recognized. Check the status of the connection.
If the display other than "Normal" or "Unsupported" appears, check the Step (7) next page.

(7) In the case of the nanoe™ X module status other than "Normal" or "Unsupported"

If the menu "13. nanoe X" is not displayed or the module status becomes other than "Normal" or "Unsupported" even though the nanoe™ X module is connected, there is a probability that the following symptoms happen.

| Display           | Symptom  | Countermeasure  |  |
|-------------------|--|---|--|
| Discharge error   | The probability of occurrence of nanoe™ X is deviated from the room temperature and humidity conditions.  Outside the range of temperature: Below 5°C or over 35°C Outside the range of humidity: Over 86% | There is no abnormality in the nanoe™ X module. Use in the range of appropriate temperature and humidity. |  |
| Humidity error    | Humidity sensor not connected or sensor failure  | Check if connected to the indoor unit PCB of the humidity sensor or replace the sensor.                   |  |
| Faulty connection | The wiring between the indoor unit and nanoe $^{\text{TM}}$ X module is not connected.   | Specialize the target indoor unit and check the connection to the indoor unit PCB of the                  |  |
| Not connected     | There is no abnormality in the nanoe™ X module. Use in the range of appropriate room temperature and humidity.   | nanoe™ X module.  |  |

<sup>\*</sup>Specialization of the indoor unit can be checked by the operation of the airflow.

#### Checking method:

1. Stop the maintenance function.

Press the 😑 button to show the maintenance func display. Then press the 💆 button.

2. Operate the airflow.

Select the Unit no. under the E "2. Airflow setting". Make the airflow setting.

The unit which is corresponded to the preset flap operation will become the target unit.

When the unit is specialized, switch off the earth leakage circuit breaker and unplug the connector of the nanoe™ X module wiring from the PCB. Then plug it in again. Switch on the earth leakage circuit breaker and once again check the Steps 1 to 3. Then check the status by selecting the menu "13. nanoe X". If "Disconnection failure" or "Not connected" appears on the display, it is necessary to replace the nanoe™ X module with a new one.

#### 7-9. Panasonic H&C Control App

#### Panasonic H&C Control App

You can use the "Panasonic H&C Control App" on your mobile device to operate the air conditioning unit, make detailed settings for functions such as the energy saving function, etc.

This app is compatible with the following remote controllers.

Check the model number shown in the label on the bottom of the remote controllers.

Models: CZ-RTC6BL / CZ-RTC6BLW (CZ-RTC6 incompatible)



#### Functions that can be set with the "Panasonic H&C Control App" (some examples)

· Weekly timer

The operation ON/OFF schedule or temperature setting schedule can be set by setting the day and time.

- Energy saving operation On/Off
  - Operates in an energy saving mode.
- Power consumption monitor \*1

Displays the approximate power consumption for a day, a week or a year.

- Rotation and Backup functions \*2
  - The rotation functions helps you equalize the operating times.
  - The backup function allows operation to continue even when an error has occurred.
- \*1 Supported only by models that support the power consumption monitor
- \*2 Rotation operation is available only when there is a control group of 2 PAC systems (each system being a combination of 1 outdoor unit and 1 indoor unit).

#### 7-9-1. Bluetooth® settings

Before use, confirm the version of the OS on the mobile device and the Bluetooth® version see table below, and install the "Panasonic H&C Control App" onto the mobile device. In addition, be sure to read the "General precautions for Bluetooth® functionality" see page 7-9-1-2.

#### Required environment

| OS version on the<br>mobile device for<br>"Panasonic H&C<br>Control App" | iOS: 10.0 or later<br>Android™: 6.0 or later |
|--|--|
| Bluetooth® version   | 4.2 or later                                 |

- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Panasonic Corporation is under license. Other trademarks and trade names are those of their respective owners.
- iOS is the name of the OS of Apple Inc. IOS is a trademark or registered trademark of Cisco in the US and other countries which has been licensed for use.
- Apple and the Apple logo are trademarks of Apple Inc. that are registered in the US and other countries. App Store is a service mark of Apple Inc.
- Android<sup>™</sup>, Google Play<sup>™</sup> and Google Play<sup>™</sup> logos are registered trademarks of Google LLC.

#### [General precautions for Bluetooth® functionality]



#### **WARNING**

- Do not use the remote controller where pacemaker users may be around. If used, turn off Bluetooth® functionality.
  - Bluetooth® functionality may cause pacemakers to malfunction and lead to an accident.
- · Do not use the remote controller near electrical medical devices. If used, turn off Bluetooth® functionality.
  - Bluetooth® functionality may cause these devices to malfunction and lead to an accident.
- Do not use the remote controller near automatic doors, fire alarms, or other automatically controlled devices. If used, turn off Bluetooth® functionality.
  - Bluetooth® functionality may cause these devices to malfunction and lead to an accident.



## **CAUTION**

- This product is permitted for use only in the country where it was purchased.
- · This product uses signals in the 2.4 GHz band.
  - Signals in the 2.4 GHz band are used by medical devices, other similar devices, and nonlicensed amateur radio stations (hereafter referred to as other radio stations).
    - 1. Before using this product, make sure there are no other radio stations in the vicinity.
    - 2. If a radio interference occurs between this product and other radio stations, move the product or stop using the product (turn off Bluetooth® functionality).
    - 3. If problems with radio interference occur, consult the dealer from which the product was purchased.
- Keep an appropriate distance between the product and radio-emitting devices, such as cordless phones, microwave ovens, and wireless LANs, to prevent Bluetooth® interference from these devices that can affect normal operation and performance of the product.
- · The following actions may be punishable by law.
  - Disassembling or alteration of this product
  - Removal of certification labels
- · The maximum line-of-sight distance of this product is 10 meters.
  - This distance will be shorter when obstacles or people are in the path of radio waves or radio interference from appliances (e.g., microwave ovens) exists.

- Open Download on the App Store
- Search for "Panasonic H&C Control App".
- · Download and install.

For Android™ user

- Open Google Play
- Search for "Panasonic H&C Control App".
- · Download and install.
- The "Panasonic H&C Control App" is free, but the communication fees for downloading it and updating it are at the customer's expense.
- The "Panasonic H&C Control App" screen may change without notice due to updates.
- Functions are not displayed in the "Panasonic H&C Control App" screen if the air conditioner does not support them.
- The screen operations are the same on iOS and Android™. The iOS screen has been used in the examples.

#### Bluetooth® functionality

- Display the menu screen.
  - When stopped Press .
  - When operating

Press repeatedly until the menu screen is displayed.

- To return to the top screen, press 
  .
- Select [Bluetooth].





▲ Select [Enable].

Press  $\wedge \vee \rightarrow \downarrow \downarrow \rightarrow \sqsubseteq$ .

(Press twice to finish.)

#### To disable Bluetooth® functionality

- 1. Start with step 1 and select [Disable] in step 4.
- 2. Press 🚚
- 3. Press ≡ twice to finish.











You can also set [Enable/disable] wireless communication with the following procedure.

1. Display the wireless setting screen.

Press on the top screen.
(Press and hold for 4 seconds or more.)

2. Select ✓ (enable) or — (disable).

Press  $\longrightarrow$   $\Longrightarrow$  .

(Press to finish.)

• This setting is the same as step 4 on this page.



#### Connecting with the "Panasonic H&C Control App"

Before connecting, set Bluetooth<sup>®</sup> functionality to [Enable] on the remote controller. (See page 7-9-2-1) When connecting, try getting the mobile device as close as possible to the remote controller.

- Start the "Panasonic H&C Control App".
  - Remote controllers in the vicinity are displayed on the Home screen.
  - Remote controllers that have been paired have "
     is a displayed to the left.
    - : Remote controller last connected
    - : Unconnected remote controller within Bluetooth® communication range
    - Connected remote controller outside Bluetooth® communication range



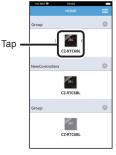
■ Mobile device

Тар " 🌁 ".

• If the remote controller is not displayed, slide down to update and the remote controller is detected.









- When making Bluetooth<sup>®</sup> connection for the first time, go to step 3.
- For the second and subsequent Bluetooth® connections, go to step 5.
- Confirm the numbers on the mobile device match the 6 digits on the remote controller.
  - If the numbers do not match, check the remote controller you want to connect again. (step 2)





- Start connecting.
  - Mobile device Tap "Pair".
  - Remote controller

Press ←.





- 5 Confirm that the Bluetooth® connection is completed.
  - " \( \mathbb{g}\) " is displayed on the top screen when connection is complete.
  - After the first time, connection is automatic and "\" is displayed on the top screen when connection is complete.





When Bluetooth® connection is complete, mobile device information is stored, and the above steps 3 and 4 are unnecessary next time Bluetooth® connection is made. See "
To delete all mobile device information stored" on page 7-9-2-3.

#### ■ To delete all mobile device information stored

At first, set Bluetooth® functionality to [Enable]. See "Bluetooth® functionality" on page 7-9-2-1.

- 1. Display the menu screen.
  - When stopped

Press ■ .

■ When operating

Press repeatedly until the menu screen is displayed.

- To return to the top screen, press .
- 2. Select [Bluetooth].

Press  $\wedge \vee \rightarrow \bot$ .

3. Select [Initialization].

Press  $\land \lor \rightarrow \blacktriangleleft$ .

4. Start initialization.

Press  $\longrightarrow \bigwedge \bigvee \longrightarrow \biguplus$ . (Select [YES])

- Do not connect the mobile device via Bluetooth® functionality while initializing.
- 5. Confirm that initialization has completed.

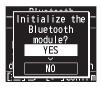
Confirm, then press = .

(Press 3 times to finish.)











#### Note

Delete information of Bluetooth® connection with the remote controller stored on the mobile device as well.

#### 7-9-3. Simple Settings Function

This App allows the filter lifetime, operating mode priority change, central control address, and other settings to be made for an individual or groupcontrol indoor / outdoor unit.

When simple settings mode is engaged, operation stops at the individual or group-control indoor / outdoor unit.

#### <Procedure of Panasonic H&C Control App>

1. Tap " 🚞 "

Open Menu list.



- 2. Tap " a for 3 seconds or longer and release.
  - Tap " for 3 seconds or longer and release again.

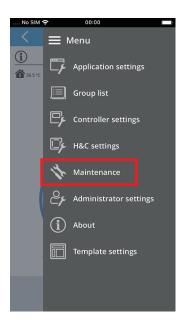


3. If successful, the menu screen will close. If Menu list does not close, perform step 2 again.



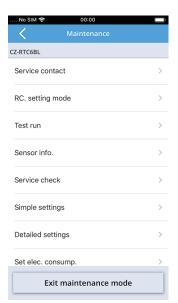
4. Open Menu list again,





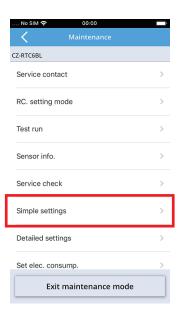
# 5. Tap " Maintenance "

Open Menu list of "Maintenance" .



Menu list of "Maintenance"

#### 6. Tap "Simple settings"

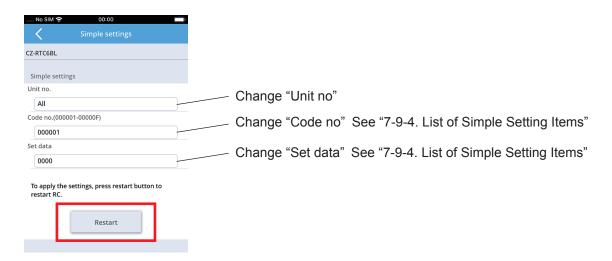


7. A dialog will appear stating that a reboot will occur. If there is no problem, tap " OK " .



8. Set "Unit no." / "Code no." / "Set data".

Then tap " Restart "



9. The unit will restart and return to the HOME screen.



7-9-4. List of Simple Setting Items

| Codo no  | Itom                         | Set data        |  |                |  |
|----------|------------------------------|-----------------|--|----------------|--|
| Code no. | Item                         | No. Description |  |                |  |
|          |                              | 0000            | Not displayed  |                |  |
|          |                              | 0001            | 150 hours  |                |  |
| 00000 (  | Filter sign ON time          | 0002            | 2,500 hours  |                |  |
|          | (filter life time)           | 0003            | 5,000 hours  |                |  |
|          |                              | 0004            | 10,000 hours   |                |  |
|          |                              | 0005            | Use the filter clogging sensor.  |                |  |
|          |                              | 0000            | Standard (setting at time of shipping)                                   |                |  |
| 000002   | Degree of filter fouling     | 0001            | Highly fouled (Filter sign ON time is reduced to one-half the set time.) |                |  |
|          |                              | 0001            | Central control address 1  |                |  |
|          |                              | 0002            | Central control address 2  |                |  |
|          |                              | 0003            | Central control address 3  |                |  |
| 000003   | Central control address      | >               | ?  |                |  |
|          |                              | 0064            | Central control address 64   |                |  |
|          |                              | 0099            | No central control address set (setting at time of shipping)             |                |  |
| 00000Y   | Operating mode               | 0000            | Normal ( setting at time of shipping)                                    |                |  |
|          | priority change              | 0001            | Priority   |                |  |
|          |                              |                 | Compressor ON  | Compressor OFF |  |
|          |                              | 0000            | Lo 1 min., LL 3 min.   | LL             |  |
|          | Fan speed when               | 0001            | Lo   | LL             |  |
| 000005   | heating thermostat is        | 0002            | LL   | LL             |  |
|          | OFF                          | 0004            | Lo 1 min., LL 3 min. Lo  | Lo             |  |
|          |                              | 0005            | Lo   | Lo             |  |
|          |                              | 0006            | LL   | Lo             |  |
|          |                              | 0000            | No shift   |                |  |
|          |                              | 0001            | Shifts intake temperature 1 °C down.                                     |                |  |
|          | Heating intake               | 0002            | Shifts intake temperature 2 °C down.                                     |                |  |
| 000008   | temperature shift            | 0003            | Shifts intake temperature 3 °C down.                                     |                |  |
|          |                              | 0004            | Shifts intake temperature 4 °C down.                                     |                |  |
|          |                              | 0005            | Shifts intake temperature 5 °C down.                                     |                |  |
|          |                              | 0006            | Shifts intake temperature 6 °C down.                                     |                |  |
| 000007   | Electric heater              | 0000            | No heater  |                |  |
|          | installation                 | 0001            | Heater installed   |                |  |
| 000000   | Humidifying when             | 0000            | No (setting at time of shipping)   |                |  |
| 000008   | heater thermostat is<br>OFF  | 0001            | Yes  |                |  |
|          | Permit/prohibit              | 0000            | Permit   |                |  |
| 0000d    | automatic<br>heating/cooling | 0001            | Prohibit   |                |  |
|          | Cool-only                    | 0000            | Normal   |                |  |
| 00000F   | O O O I II y                 | 0001            | Cool only (Set "1" for item code OD.)                                    |                |  |

- In order to avoid water leakage and damage to the fan, do not set for humidifying when the thermostat is OFF unless a vaporizing humidifier is used.
- Consider the device purpose and type when changing the settings. Incorrect settings may result in malfunction.
- · Do not change any setting data that does not appear in this list.

#### 7-9-5. Detailed Settings Function

This app allows to set the system address, indoor unit address, and other settings for connected individual or group-controlled indoor / outdoor units.

When detailed settings mode is engaged, operation stops at the individual or group-control indoor / outdoor unit. Simple settings items can also be set at this time.

#### <Pre><Procedure of Panasonic H&C Control App>

1. Tap " \_\_\_\_ "

Open Menu list.



- 2. Tap " == " for 3 seconds or longer and release.
  - Tap " for 3 seconds or longer and release again.

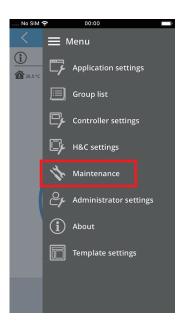


3. If successful, the menu screen will close. If Menu list does not close, perform step 2 again.



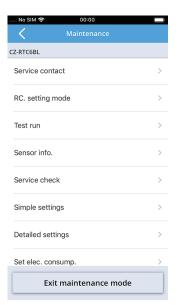
4. Open Menu list again,





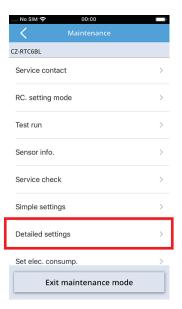


## Open Menu list of "Maintenance" .

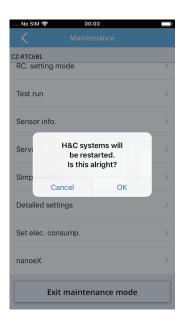


Menu list of "Maintenance"

#### 6. Tap "Detailed settings"

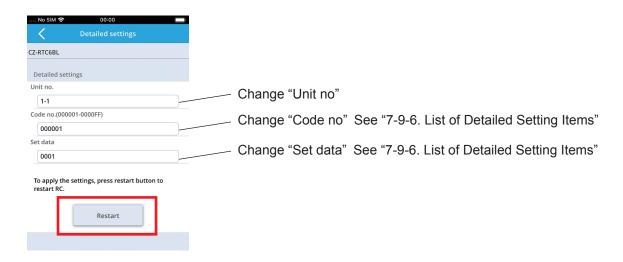


7. A dialog will appear stating that a reboot will occur. If there is no problem, tap " OK " .

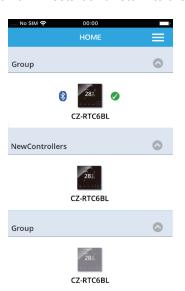


8. Set "Unit no." / "Code no." / "Set data".

Then tap " Restart "



9. The unit will restart and return to the HOME screen.



## 7-9-6. List of Detailed Setting Items

| Code no. | Item                  |      |  | Set data   |                      |      |  |  |
|----------|-----------------------|------|--|------------|----------------------|------|--|--|
| Code no. | item                  | No.  | Description  | No.        | Description          | No.  | Description  |  |
| 000010   |                       | 0000 |  | 0001       |                      | 0002 |  |  |
|          |                       | 0003 |  | 0005       |                      | 0006 | High Static Pressure Duct<br>S-160PE3R<br>High Static Pressure Ducted<br>S-180, 200, 224PE4R |  |
|          |                       | 0007 |  | 8000       |                      | 0010 |  |  |
|          |                       | 0011 |  |            |                      |      |  |  |
|          |                       | 0001 |  | 0003       |                      | 0005 |  |  |
|          | Indoor unit           | 0007 |  | 0009       |                      | 0011 |  |  |
| 000011   | capacity              | 0012 |  | 0015       |                      | 0017 |  |  |
|          | Сараску               | 0019 | 180 (Type 160)   | 0020       | 200 (Type 180)       | 0021 | 224 (Type 200)   |  |
|          |                       | 0022 | 250 (Type 224)   |            |                      |      |  |  |
|          | System                | 0001 | Unit no. 1   |            |                      |      |  |  |
|          |                       | 0002 | Unit no. 2   |            |                      |      |  |  |
| 000017   |                       | 0003 | Unit no. 3   |            |                      |      |  |  |
| 0000IS   | address               | 5    | \( \)  |            |                      |      |  |  |
|          |                       | 0030 | Unit no. 30  |            |                      |      |  |  |
|          |                       | 0099 | Not set  |            |                      |      |  |  |
|          |                       | 0001 | Unit no. 1   |            |                      |      |  |  |
|          |                       | 0002 | Unit no. 2   |            |                      |      |  |  |
| 000017   | Indoor unit           | 0003 | Unit no. 3   |            |                      |      |  |  |
| 000013   | address               | 5    | ζ  |            |                      |      |  |  |
|          |                       | 0064 | Unit no. 64  |            |                      |      |  |  |
|          |                       | 0099 | Not set  |            |                      |      |  |  |
|          |                       | 0000 | Individual (1:1 = In   | door unit  | with no group wiring | g)   |  |  |
| 000014   | Group control address | 0001 | Main unit (One of the group-control indoor units)              |            |                      |      |  |  |
| רוטטטט   |                       | 0002 | Sub unit (All group-control indoor units except for main unit) |            |                      |      |  |  |
|          |                       | 0099 | Not set  |            |                      |      | ·  |  |
|          |                       | -010 | Shifts intake tempe  | erature 10 | )°C down.            |      |  |  |
|          |                       | -009 | Shifts intake temperature 9°C down.                            |            |                      |      |  |  |
|          |                       | ζ.   |  |            |                      |      |  |  |
|          | Cooling intake        | -001 | Shifts intake temperature 1°C down.                            |            |                      |      |  |  |
| 710000   | temperature           | 0000 | No intake temperature shift                                    |            |                      |      |  |  |
|          | shift                 | 0001 | Shifts intake tempe  |            | C up.                |      |  |  |
|          |                       | ζ    | ΄ ΄  |            | · ·                  |      |  |  |
|          |                       | 0009 | Shifts intake tempe  | erature 9° | C up.                |      |  |  |
|          |                       | 0010 | Shifts intake temperature 10°C up.                             |            |                      |      |  |  |

(Continued)

|                    | 14                                   |           |      | Set data  |
|--------------------|--------------------------------------|-----------|------|---|
| Code no.           | Item                                 |           | No.  | Description   |
|                    | Automatic stop                       |           | 0000 | Function disabled   |
|                    |                                      |           | 0001 | Stops automatically 5 minutes after operation starts.                     |
|                    | time after                           |           | 0002 | Stops automatically 10 minutes after operation starts.                    |
| 000018             | operation start                      |           | >    | >   |
|                    | *Can be set in 5-minute units.       |           | 0123 | Stops automatically 615 minutes after operation starts.                   |
|                    |                                      |           | 0124 | Stops automatically 620 minutes after operation starts.                   |
|                    |                                      |           | 0125 | Stops automatically 625 minutes after operation starts.                   |
| <b>000016</b> (1B) | Forced thermostat ON ti              | me        | 0000 | 5 minutes   |
|                    |                                      |           | 0001 | 4 minutes   |
|                    | Temperature shift for                | or        | 0001 | ± 1°C   |
|                    | cooling/heating                      | -         | 0002 | ± 2°C   |
| 0000IE             | change in auto                       | -         | 0003 | ± 3°C   |
|                    | heat/cool mode                       |           | 7    | \ \ \   |
|                    |                                      |           | 0007 | ± 7°C   |
|                    |                                      |           | 0018 | 18°C (Lower limit at shipment)  |
| <u> </u>           |                                      | 0         | 0019 | 19°C  |
| (Upper limit)      |                                      | Cooling   | >    | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \                                     |
|                    |                                      | ပိ        | 0029 | 29°C  |
| (Lower limit)      |                                      |           | 0030 | 30°C (Upper limit at shipment)  |
|                    |                                      |           | 0016 | 16°C (Lower limit at shipment)  |
| 00002 (            |                                      |           | 0017 | 17°C  |
| (Upper limit)      |                                      | Heating   | )    | )   |
| 000022             | Change to remate                     |           | 0000 | 0000  |
| (Lower limit)      | Change to remote control temperature |           | 0029 | 29°C 30°C (Upper limit at shipment)                                       |
|                    |                                      |           | 0030 | 18°C (Lower limit at shipment)  |
| 000023             | setting range                        |           | 0019 | 19°C  |
| (Upper limit)      |                                      | ing       | )    | )   |
| 000024             |                                      | Dryi      | (    | (   |
| (Lower limit)      |                                      |           | 0029 | 29°C  |
|                    | _                                    |           | 0030 | 30°C (Upper limit at shipment)  |
| 000025             |                                      | 0         | 0017 | 17°C (Lower limit at shipment)  |
| (Upper limit)      |                                      | heat/cool | 0018 | 18°C  |
| 000026             |                                      | pe        | 7    | (   |
| (Lower limit)      |                                      | Auto      | 0026 | 26°C  |
| ,                  |                                      | <b> </b>  | 0027 | 27°C (Upper limit at shipment)  |
| 000029             | Humidifier operation                 | n [       | 0000 | Normal  |
|                    | - Sporation                          |           | 0001 | Ignore heat exchanger temperature conditions.                             |
|                    |                                      |           | 0000 | Filter input (differential pressure switch input)                         |
| 00002A             | Filter (CN70) input switching        |           | 0001 | Alarm input (for trouble input about air cleaner or similar device)       |
|                    |                                      |           | 0002 | Humidifier input (Operates linked with drain pump when humidifier is ON.) |
| 000020             | Indoor unit electron                 | ic        | 0000 | None  |
|                    | control valve                        |           | 0002 | Present (Setting at shipment)   |
| 000028             | T10 terminal switch                  | ina       | 0000 | Normal (Used as optional relay PCB or JEMA standard HA terminal.)         |
|                    | i to terminal switching              |           | 0001 | Used for OFF reminder   |
|                    |                                      |           | 0002 | Fire prevention input   |

(Continued)

| Codono   | Itam   | Set data  |  |  |  |  |
|----------|--|---|--|--|--|--|
| Code no. | Item   | No.   | Description  |  |  |  |
|          |  | 0000  | No forced operation  |  |  |  |
| 000076   | Automatic drain pump                           | 0001  | Forced operation for 1 minute  |  |  |  |
| 00002F   | operation                                      | >   | >  |  |  |  |
|          |  | 0060  | Continuous operation   |  |  |  |
| 00003 (  | Ventilation fan                                | 0000  | None   |  |  |  |
|          | operation                                      | 0001  | Ventilation fan operated by remote controller.   |  |  |  |
| 000032   | Wired remote controller                        | 0000  | Not used. (Body sensor is used.)   |  |  |  |
| חחחחקב   | sensor   | 0001  | Remote control sensor is used.   |  |  |  |
| กกกกวน   | "Operation change control in progress"         | 0000  | Normal (displayed)   |  |  |  |
| 000034   | display  | 0001  | Not displayed  |  |  |  |
| 000035   | OFF reminder function for when weekly timer is | 0000  | None   |  |  |  |
|          | used   | No.         Description           0000         No forced operation           0001         Forced operation for 1 minute |  |  |  |  |
|          | Heat exchanger                                 | -001  |  |  |  |  |
|          | temperature for cold air                       | 0000  | Control temperature 0°C  |  |  |  |
| 000030   | discharge<br>(Heat exchanger control           | >   | >  |  |  |  |
|          | point for control to                           | 0025  | ·  |  |  |  |
|          | prevent cold air)                              | 0026  | No forced operation Forced operation for 1 minute  ⟨ Continuous operation None  Ventilation fan operated by remote controller. Not used. (Body sensor is used.) Remote control sensor is used. Normal (displayed)  Not displayed  None  Only stop time setting is enabled.  Control temperature -1°C Control temperature 25°C Control temperature 26°C  Output linked with fan.(ON when indoor unit fan i operating.) Fan mode operation output No delayed stop 1minutes delayed stop 2minutes delayed stop 59minutes delayed stop 60minutes delayed stop Humidifier output ON. Drain pump operates. Humidifier output ON. Drain pump operates for 1 minute when total humidifier operating time reaches 60 minutes. Humidifier output ON. Drain pump stopped. Standard setting Draft reduction mode (Flap lower-limit position is shifted upwards.) Smudging reduction mode (Flap swing upper-lim position is shifted downwards.) Normal mode Draft reduction mode (Flap swing lower-limit position is shifted downwards.)  |  |  |  |
| 000034   | Fan output switching                           | 0000  | Output linked with fan.(ON when indoor unit fan is operating.)   |  |  |  |
|          |  | 0001  | Fan mode operation output  |  |  |  |
|          |  | 0000  | No delayed stop  |  |  |  |
|          |  | 0001  | 1minutes delayed stop  |  |  |  |
|          | Drain pump delayed                             | 0002  | 2minutes delayed stop  |  |  |  |
| 000038   | stop time                                      | >   | >  |  |  |  |
|          |  | 0058  | •  |  |  |  |
|          |  | 0059  |  |  |  |  |
|          |  | 0060  | Output linked with fan.(ON when indoor unit fan i operating.)  Fan mode operation output  No delayed stop  1minutes delayed stop  2minutes delayed stop  58minutes delayed stop  59minutes delayed stop  60minutes delayed stop  Humidifier output OFF. Drain pump stopped.  Humidifier output ON. Drain pump operates.  Humidifier output ON. Drain pump operates for 1 minute when total humidifier operating time reaches 60 minutes.   |  |  |  |
|          |  |   |  |  |  |  |
|          |  | 0001  | Humidifier output ON. Drain pump operates.   |  |  |  |
| 000040   | Humidifier setting                             | 0002  | 1 minute when total humidifier operating time  |  |  |  |
|          |  | 0003  | Humidifier output ON. Drain pump stopped.  |  |  |  |
|          |  | 0000  | Standard setting   |  |  |  |
| 000045   | Flap operation mode                            | 0001  | Control temperature 0°C  Control temperature 25°C Control temperature 26°C Control temperature 26°C Control temperature 26°C Control temperature 26°C Control temperature 26°C Control temperature 26°C Control temperature 26°C Control temperature 26°C Control temperature 26°C Control temperature 26°C Control temperature 25°C Control temperature 2 |  |  |  |
|          |  | 0000  | Smudging reduction mode (Flap swing upper-limit position is shifted downwards.)  |  |  |  |
| 000048   | Flap swing mode                                | 0001  | Normal mode  |  |  |  |
|          |  | 0002  | Draft reduction mode (Flap swing lower-limit position is shifted upwards.)   |  |  |  |

(Continued)

| Code no. | Item   |      | Set data   |  |  |
|----------|--|------|--|--|--|
| Code no. | item   | No.  | Description  |  |  |
|          |  |      | Purpose  |  |  |
|          | Fan tap setting (Fan tap change in order to prevent drop | 0000 | Standard (factory setting)   |  |  |
|          |  |      | High ceiling setting 1 (U3, T3)  |  |  |
| 000054   | in air discharge   | 0001 | Air-flow blocking kit (when a duct is connected : U3)  |  |  |
|          | caused by filter   |      | Air-flow blocking kit (for 3-way air flow : U3)  |  |  |
|          | installation)  | 0003 | High ceiling setting 2 (U3)  |  |  |
|          |  | 0006 | Purpose  Standard (factory setting)  High ceiling setting 1 (U3, T3)  Air-flow blocking kit (when a duct is connected : U3)  Air-flow blocking kit (for 3-way air flow : U3)  High ceiling setting 2 (U3)  Air-flow blocking kit (for 2-way air flow : U3)  No humidifier output  1 second  2 seconds     58 seconds  Continuously ON  Function disabled  Function enabled  No smudging control  Fan speed setting  LL 3min.→Fan speed setting  LL  None |  |  |
|          |  | 0000 | No humidifier output   |  |  |
|          |  | 0001 | 1 second   |  |  |
|          | Humidifier ON time<br>(ON time per 60<br>seconds)        | 0002 | 2 seconds  |  |  |
| 000058   |  | >    | >  |  |  |
|          |  | 0058 | 58 seconds   |  |  |
|          |  | 0059 | 59 seconds   |  |  |
|          |  | 0060 | Purpose  Standard (factory setting)  High ceiling setting 1 (U3, T3)  Air-flow blocking kit (when a duct is connected : U3)  Air-flow blocking kit (for 3-way air flow : U3)  High ceiling setting 2 (U3)  Air-flow blocking kit (for 2-way air flow : U3)  No humidifier output  1 second 2 seconds   |  |  |
| 000060   | Timer function change                                    | 0000 | Function disabled  |  |  |
|          | prohibit   | 0001 | Purpose  Standard (factory setting)  High ceiling setting 1 (U3, T3)  Air-flow blocking kit (when a duct is connected : U3)  Air-flow blocking kit (for 3-way air flow : U3)  High ceiling setting 2 (U3)  Air-flow blocking kit (for 2-way air flow : U3)  No humidifier output  1 second  2 seconds     58 seconds  Continuously ON  Function disabled  Function enabled  No smudging control  Fan speed setting  LL 3min.→Fan speed setting  LL       |  |  |
| 280000   | Smudging control   | 0000 | No smudging control  |  |  |
|          | Fan speed when   | 0000 | Fan speed setting  |  |  |
| 000086   | cooling thermostat                                       | 0003 | LL 3min.→Fan speed setting   |  |  |
|          | OFF  | 0009 |  |  |  |
| 0000FC   | Refrigerant  | 0000 | None   |  |  |
| הההה, ר  | adaptability   | 0001 | Standard (factory setting)   |  |  |

## NOTE

- Consider the device purpose and type when changing the settings. Incorrect settings may result in malfunction.
  Do not change any setting data that does not appear in this list.

## 8. HOW TO INSTALL THE WIRELESS (INFRARED) REMOTE CONTROLLER RECEIVER

| 8-1. Important Safety Instructions  | 8-1       |
|---|-----------|
| 8-2. Wireless (Infrared) Remote Controller CZ-RWS3                              | 8-2-1-1   |
| 8-2-1. Operating Instructions   | 8-2-1-1   |
| 8-2-1-1. Names and Operations   | 8-2-1-1   |
| 8-2-1-2. Installing Batteries   |           |
| 8-2-1-3. Setting the Current Time   | 8-2-1-3   |
| 8-2-1-4. Operation  |           |
| 8-2-1-5. Timer Operation  | 8-2-1-5   |
| 8-2-1-6. Lock Individual Flap   |           |
| 8-2-1-7. Operating Multiple In / Outdoor Units Simultaneously (Group Control)   | 8-2-1-6   |
| 8-2-1-8. Using the Remote Controller  |           |
| 8-2-1-9. Pairing Addresses  | 8-2-1-7   |
| 8-2-1-10. Emergency Operation   | 8-2-1-9   |
| 8-2-1-11. Miscellaneous Settings  | 8-2-1-10  |
| 8-2-1-12. Button Control  | 8-2-1-10  |
| 8-2-1-13. nanoe™X Setting   | 8-2-1-11  |
| 8-2-1-14. ECONAVI Setting   | 8-2-1-11  |
| 8-2-1-15. Ventilation Setting   | 8-2-1-11  |
| 8-2-1-16. Energy Saving Setting   | 8-2-1-11  |
| 8-2-1-17. Temperature Automatic Return  | 8-2-1-12  |
| 8-2-1-18. Troubleshooting   |           |
| 8-2-2. Installation Instructions  | 8-2-2-1   |
| 8-3. Setting for the Receiver   | 8-3-1-1   |
| 8-3-1. Infrared Receiver  | 8-3-1-1   |
| 8-3-1-1. Common to Infrared Receiver  | 8-3-1-1   |
| 8-3-1-2. CZ-RWRU3, CZ-RWRU3W  | 8-3-1-3   |
| 8-3-1-3. CZ-RWRC3   | 8-3-1-5   |
| 8-3-1-4. CZ-RWRT3   | 8-3-1-8   |
| 8-3-1-5. CZ-RWRY3   | 8-3-1-11  |
| 8-3-2. When Using Wireless Remote Controller Instead of Wired Remote Controlle  | er8-3-2-1 |
| 8-3-2-1. Wall Mounted Type  |           |
| 8-3-3. Test Operation   |           |
| 8-3-3-1. Test run using the an infrared receiver.(Except for Wall Mounted Type) |           |
| 8-3-3-2. Test run using the indicator of the indoor unit (Wall Mounted Type)    | 8-3-3-1   |

## 8-1. Important Safety Instructions

## **⚠ WARNING**

## **Installation Precautions**

Do not install yourself
 Installation should always be performed by your dealer or a professional service provider.

 Electric shock or fire may result if an inexperienced person performs any installation or wiring procedures incorrectly.

Use only specified air conditioners
 Always use only air conditions specified by the dealer.

## **Precautions for Use**

- Do not touch switches with wet hands
   Electric shock and damage to the system can result.
- · Protect the remote controller from water Damage to the system can result.
- Stop the system and turn the power off if you sense unusual smells or other irregularities
   Continuing operation when the system is out of order can result in electric shock, fire, and damage to the system.
   Contact your dealer.
- · Do not swallow the battery.

## **Moving and Repair Precautions**

Do not repair
 Never repair the system by yourself.

• Contact your dealer before moving the system

Contact your dealer or a professional service provider about moving and reinstalling the system.

Electric shock or fire may result if an inexperienced person performs any installation procedures incorrectly.

## 8-2. Wireless (Infrared) Remote Controller CZ-RWS3

## 8-2-1. Operating Instructions

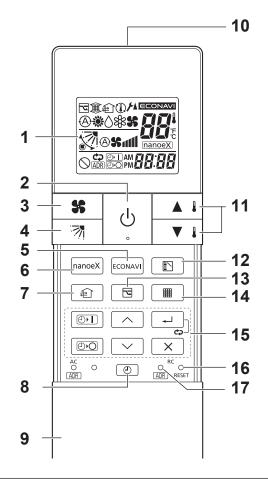
1 remote controller can control a group of up to 8 indoor units. (See "8-2-1-7. Operating Multiple In / Outdoor Units simultaneously (Group Control)")

## 8-2-1-1. Names and Operations

## REMOTE CONTROLLER

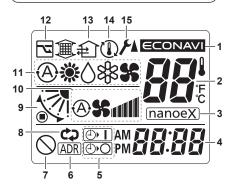
| 1. Operation Display            | Displays the operation status. (The figure shows all the statuses.)                                    |
|---------------------------------|--|
| 2. Start/Stop                   | Pressing this button once starts and pressing again stops the operation.                               |
| 3. Fan speed speed button       | Press to change the fan speed.   |
| 4. Flap button                  | Press to change the flap direction.  |
| 5. ECONAVI button               | Press to set ECONAVI.  |
| 6. nanoe™ X button              | Press to set nanoe™ X.   |
| 7. Ventilation button           | Use this when connected to an aftermarket fan.   |
| 8. Clock button                 | Use this to set the clock.   |
| 9. Cover                        | Press at the top centre and then slide down.   |
| 10. Transmitter                 |  |
| 11. Temperature setting buttons | a i raises the temperature setting 1 °C at a time.  ▼ i lowers the temperature setting 1 °C at a time. |
| 12. Mode Select button          | Press to switch the operation mode.  |
| 13. Energy saving button        | Press to enable or disable energy saving.  |

|                           | 14. Filter button               | Press to turn off the filter lamp on the receiver. |  |
|---------------------------|---------------------------------|--|--|
| 15. Timer setting buttons |                                 | Use for operating with a timer.                    |  |
|                           | 16. RC reset button  RC O RESET | Use this button after changing the batteries.      |  |
|                           | 17.RC address button  RC ADR    | Press to set addresses.                            |  |



From this page, the names of remote controller's buttons will be indicated with the above illustrations. E.g.: Start/Stop button  $\rightarrow \boxed{\circlearrowleft}$ 

## Screen display



- Appears when ECONAVI is being set to ON.
- 2 Indicates the set temperature.

- 3 Appears when nanoe™ X is being set to ON.
- **4** Displays the present time.
- 5 Timer program indication

  1: The indoor unit starts operation at the programmed time.

  1: The indoor unit stops operation at the programmed time.
- 6 Indicates the remote controller addresses are set.
- **7** Appears when the function is not available.
- 8 The ON timer or the OFF timer will operate repeatedly every day.
- 9 Indicates the flap position.

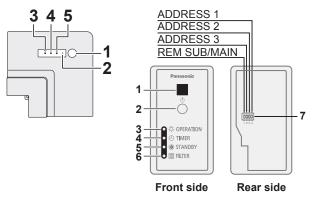
- 10 Indicates the fan speed.
- 11 Displays the selected operation mode. (AUTO ♠ /HEAT ☀ / DRY ♦ /COOL ※ /FAN ♣)
- **12** Energy saving operation is in process.
- **13** Appears when a fan available in the market is installed and is operating.
- **14** "Temperature Automatic Return" is set.
- **15** Appears when the setting screen is displayed.

## **RECEIVER**)

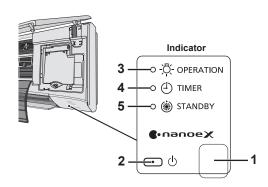
| 1. Receiver                   | Receives the signal sent from the remote controller.  |  |
|-------------------------------|---|--|
| 2. Emergency operation button | See "8-2-1-10.<br>Emergency Operation".   |  |
|                               | Indicator lamps   |  |
|                               | When an error occurs, one of the lamps flashes. When an indicator lamp is flashing, see "8-2-1-18. Troubleshooting".                        |  |
| 3. OPERATION lamp             | Lights up when the unit is operating.   |  |
| 4. TIMER lamp                 | Lights up when the timer is set.  |  |
| 5. STANDBY lamp               | The lamp in the HEAT mode lights up at the following times: during the startup, during the thermostat operation, and during the defrosting. |  |
| 6. FILTER lamp                | This lamp is for notifying you when the filter needs to be cleaned.   |  |
| 7. Address switch             | See "8-2-1-9. Pairing Addresses".   |  |

## CZ-RWRU3 CZ-RWRU3W

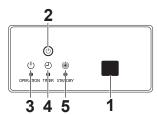
# CZ-RWRC3



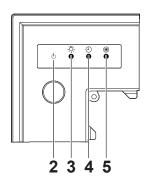
## **Indoor Unit: Wall Mounted Type**



## **CZ-RWRT3**



## CZ-RWRY3



## NOTE

- If a heat pump type is being used, it will beep twice and the operating lamp will light up on the display; if the timer
  and standby lamps blink alternately, a conflict between the heating and cooling exists, so the unit cannot operate
  in the desired mode. (On models that do not have an Auto function, even if Auto is selected, it works in the same
  way.)
- When the local operation is disabled by centralized control or similar cause, and if the Start/Stop \_\_\_\_\_\_\_,

  Mode \_ or Temperature setting button \_ ▲ ↓ ▼ ↓ is pressed, the unit will beep five times and the change will not be made.

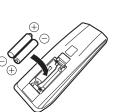
## 8-2-1-2. Installing Batteries

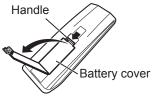
## 1. Remove the battery cover.

• Pinch the handle and open while pressing it towards the  $\vee$  mark.

## 2. Insert two LR03 size batteries.

Put the batteries in with the polarity [+/-] as shown in the figure.





3. Gently insert one end of an unfolded paper clip (or a similar object that can fit) into the RC reset hole and press the RC reset button inside the hole.

• Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and insert again if the time display is not " Take the batteries out and the batteries out and the batteries out and the batteries out again if the time display is not " Take the batteries out and the batteries out again in the batterie







### ■ Notes on batteries

- The battery life is approximately 1 year.
- Reception may become poor or display on the remote controller fades when batteries are low.
- If the remote controller will not be used for a long period of time, remove the batteries. (In order to avoid a battery leak.)
- Emergency operations can be performed on the unit when the batteries run out. (See "8-2-1-10. Emergency Operation")

## ■ Replacing batteries

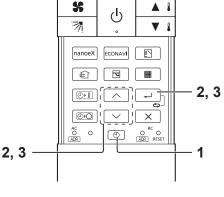
- Replace both batteries at the same time with 2 LR03 size batteries.
- Do not use rechargeable batteries (NiCd, NiMH, etc.) because their size, shape, and some performance are different.
- Dispose of the old batteries at the designated sites in your community.
- The unit is restored with the factory setting when batteries are removed.
- After changing the batteries, reset the current time. (See "8-2-1-3. Setting the Current Time")

## 8-2-1-3. Setting the Current Time

- 1. Press ① for 2 seconds or longer.
  - The time display flashes. (The colon lights up.)

## Note

- If the buttons are not pressed for a certain duration while setting the time, the displayed time is set.
- Adjust the time periodically.



## 8-2-1-4. **Operation**

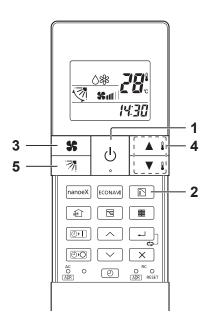
Hold the remote controller with your hand and point its transmitter at the receiver.

Power: Turn on the circuit breaker beforehand, see Section "2. TEST RUN".

- 1. Press 🕒.
- 2. Press 🗈 to select the operation mode.
  - Every time you press 

     it cycles from "Auto (A) → Heat \*
     Dry (A) → Cool (A) → Fan (B) ".
  - Models that only provide the cooling function cannot operate in the Auto or Heat mode.
  - The available functions differ depending on the indoor unit being used. See "8-2-1-11. Miscellaneous Settings" for how to change the operation mode display.
- 3. Press st to select the fan speed.

  - Auto does not work in Fan mode.
  - If the unit is not heating very effectively with a fan speed "
    switch the fan speed to "
    or "
    or "
    or "
    or ".
  - The available functions differ depending on the indoor unit being used.
  - "\(\sigma^{\infty}\) is displayed if the function is not available.



## 4. Press ▲ 1 / ▼ 1 to set the temperature.

|                 | MAX (°C) | MIN (°C) |
|-----------------|----------|----------|
| Auto (A)        | 27       | 17       |
| Heat 🔆          | 30       | 16       |
| Dry ⟨⟩ / Cool ∰ | 30       | 18       |

- Temperature settings cannot be made in Fan mode.
- The temperature range that can be set varies depending on the model.
- The maximum temperature varies depending on the system and operating condition. See "8-2-1-11. Miscellaneous Settings" for how to change the maximum temperature.

## 5. Press 7 to select the flap direction. (This section is not used.)

- Every time you press  $\boxed{3}$ , it cycles from " $\boxed{3}$   $\rightarrow$   $\boxed{3}$   $\rightarrow$   $\boxed{3}$  (Swing)  $\rightarrow$   $\boxed{3}$  (Stop)".
- If you press again while the flap is swinging, you can stop the flap from swinging and set it in place as desired
- When the unit is in heating standby, the flap (up-down wind direction plate) faces upwards.
- The available functions differ depending on the indoor unit being used.
- "\(\sigma\)" is displayed if the function is not available.
- Never try to manually move the flap (up-down wind direction plate) that is operated by the remote controller.

## Stop: Press 🕛 .

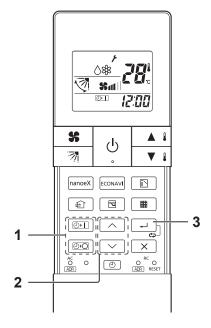
- If you cannot turn the air conditioner off in the normal way, disconnect the power to the indoor unit and contact the dealer where the product was purchased.
- When the unit is stopped with the remote controller, the fan on the outdoor unit may continue to run for a while.

## < Auto operation >

It heats or cools automatically via the differences between the set temperature and the room temperature. Auto operation is available only when identical refrigerant system inside all the indoor units or cooling/heating free-type are under control as 1 group.

## 8-2-1-5. Timer Operation

- When setting the timer, make sure the current time on the remote controller is accurate.
- The timer's clock can only be set when the display of the remote controller is ON.
- After setting the timer, put the remote controller for in a place where its signal will reach the receiver of the indoor unit.
- 1. Press or bo twice.
  - The time last set on the timer starts blinking. (" - : - " blinks when the timer is not set or after replacing batteries.)
- 2. Press \( \sigma \) to set the timer to the desired time.
  - Every time you press \( \subseteq / \subseteq \), the time changes in 10 minute increments.
  - If you press and hold the button, the time changes quickly.
- 3. Press → .
  - The timer display stops blinking and the display reverts to the current time after 3 seconds.
  - " [ ] / [ ] " is displayed when set.



## **Combining ON and OFF Timers**

1. The ON and OFF timers can be set respectively.

## Checking the timer setting

- 1. Press or .
  - The scheduled time is displayed for 4 seconds.
  - When the timer is not set or after replacing batteries, it displays " - - ". (Initial setting)

## Changing a timer setting

1. Perform Step 1 to 3 noted above as you did when setting.

## Canceling a timer setting

- 1. Press  $\times$  .
  - If you wish to cancel the setting for either the on the other, press x while the scheduled time is displayed.

## Using the same timer setting every day

- 1. Press for 2 seconds or longer.
  - " 🗘 " is displayed when set.
  - If you press → again for 2 seconds or longer, " co " goes off and the timer operates only once.

## 8-2-1-6. Lock Individual Flap (This section is not used.)

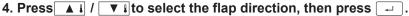
(Supported models: 4-way ceiling cassette type)

You can set the flap for each air outlet individually according to the room condition.

- Even if the flap setting is changed with [7] (See Step 5. of "8-2-1-4. Operation"), the flap directions set here are not changed.
- 1. Press and at the same time for 4 seconds or longer.
  - " F " starts blinking and the setting screen is displayed.
- 2. Press ▲ 1 / ▼ 1 to select the indoor unit to set, then press .
  - Every time you press / to switch between "U1 ↔ U2 ↔ ...
     ↔ U8 ↔ AL (All indoor units that are connected to the remote controller)", the buzzer sounds from the corresponding receiver.
  - When settable: 1 short beep
  - When not settable\*: 1 short beep followed by 1 long beep
  - \* When the indoor unit is not connected or does not support this function.
- - The square mark (indented □) on the panel of the indoor unit indicates air outlet No. 1.

There are some models that do not have a square mark (indented  $\square$ ).

• The air outlet No. changes according to the installation direction. Check by actual operation.



## 5. Press $\times$ .

• You can return to Step 2 to continue setting if you press instead of x.

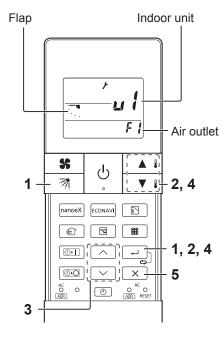
## Note

• Press  $\overline{\phantom{a}}$  to stop operation in the middle.

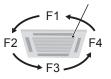
## 8-2-1-7. Operating Multiple In / Outdoor Units Simultaneously (Group Control)

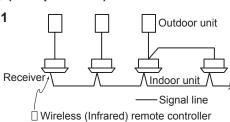
Group control works well for providing air conditioning to 1 large room with more than 1 air conditioning units.

- 1 remote controller can operate up to 8 indoor units.
- All the indoor units have identical settings.
- Set temperature sensing to the indoor unit (Main sensor).
   (See "8-2-1-1. Names and Operations")



Square mark (indented □)





## 8-2-1-8. Using the Remote Controller

- Hold the remote controller with your hand and point its transmitter at the receiver. When the signal is received properly, it will beep.
- Signals can travel a direct distance of 6 metres. This distance should be used only as a guide. It depends on battery strength.
- Make sure nothing is between the remote controller and the receiver that could block the signal.
- Do not leave the remote controller in direct sunlight, where the wind from the air conditioner can blow directly on it, or near any other heat source.
- Take care not to drop, throw, or wash the remote controller with water.
- The signal from the remote controller may not be received in rooms with rapid start fluorescent lighting or inverter lights.

For more information, please contact the dealer where the product was purchased.

## **Wall Mount Use**

## ■ Mounting the holder

1. Fasten the remote control holder with screws.



Remote control holder

#### 2. Slide the remote controller down into the holder.

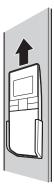
#### Note

 You cannot operate if the distance between the remote controller and the receiver is greater than that signals can travel.



## ■ Detaching the controller

1. Pull the remote controller up.



## 8-2-1-9. Pairing Addresses

When more than 1 indoor units are installed in the same room with a compatible remote controller, addresses can be set up to avoid crosstalk.

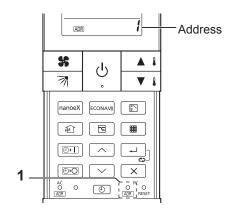
You can control up to 6 indoor units individually by the supported remote controller by pairing the address on the remote controller and the number on the address switch on the receiver.

There are separate address settings: receiver addresses for the receivers, and transmitter addresses for the remote controller.

Units will not be controlled if the setting do not match.

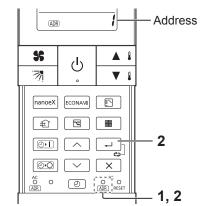
## **Checking Addresses**

- 1. Press or with one end of an unfolded paper clip (or a similar object that can fit).
  - Its current address appears on the display for 5 seconds.
  - If this address corresponds to the address of a receiver, the buzzer sounds. (If it is on ALL, the buzzer will always sound.)
  - If it is on ALL, it can be operated regardless of receiver addresses.
     Point the remote controller at the receiver you wish to operate and transmit.



## **Matching Up Addresses**

- ■If not wall mounted type indoor unit
- < Setting Remote Controller Addresses >
- 1. Press with one end of an unfolded paper clip (or a similar object that can fit) for 4 seconds or longer.
  - · The current address number starts blinking.
- 2. Press to select the address of the receiver you want to control, and press.
  - Every time you press  $\frac{|\circ|^{RC}}{|\triangle|^{RC}}$ , it cycles from "ALL (All the addresses)  $\rightarrow 1 \rightarrow 2 \rightarrow 3 \rightarrow 4 \rightarrow 5 \rightarrow 6$ ".
  - If it corresponds to the receiver's address setting, the buzzer sounds.



## Note

 Set the address of the receiver as instructed in the operating instructions of your receiver. Do not set by yourself. Contact the dealer where the product was purchased.

## ■For wall mounted type indoor unit

- < Setting the address of the indoor unit >
- 1. Press [Emergency Operation] (1) of the indoor unit for 4 seconds or longer.
  - OPERATION lamp, TIMER lamp, and then STANDBY lamp repeatedly light one after the other for 1 second each to indicate the unit is ready for address setting.
- < Setting Remote Controller Addresses >
- 2. Set the address for the remote controller following the procedure under the section
  - "■If not wall mounted type indoor unit" (see this section noted above).
  - Repeat Step 2 under "■If not wall mounted type indoor unit" if you are setting more units.
  - The address setting ready status of the indoor unit ends if data transmission is not received from the remote controller for 3 minutes.
  - Press [Emergency Operation] (I) on the receiver to end the address setting ready status of the indoor unit.

## 8-2-1-10. Emergency Operation

Use [Emergency Operation] () in the following situations when there is an urgent need.

- When the remote controller's batteries have failed.
- · When the remote controller is broken.
- · When the remote controller is lost.
- \* See the following figures regarding Emergency button.

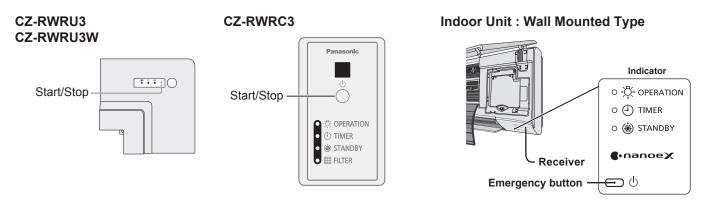
## 1. Press [Emergency Operation] (1) of the receiver.

- · The OPERATION lamp is lit.
- Auto operation starts. If Auto operation is not possible, the unit starts cooling if the room temperature at the time is 24 °C or higher; otherwise, the unit starts heating.
- The operation stops if you press [Emergency Operation] (1) again.

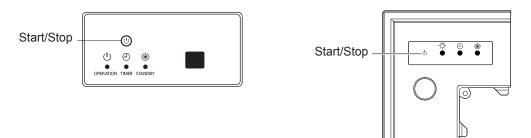
## Note

- If non-cooling/heating free type is being used, it will beep twice and the operating lamp will light up on the display; if the timer and standby lamps blink alternately, a conflict between the heating and cooling exists, so the unit cannot operate in the desired mode. (On models that do not have an Auto function, even if Auto is selected, it works in the same way.)
- When the local operation is disabled by a central control device or similar cause, and if the Start/Stop ⋃, Fan speed ೄ, Flap ℳ, Temperature setting ▲ ।/ ▼ ।, Mode select ⑤ or Energy saving ⑤ button is pressed, the unit will beep 5 times and the change will not be made.

## CZ-RWRU3, CZ-RWRU3W, CZ-RWRC3, Indoor Unit: Wall Mounted Type, CZ-RWRT3, CZ-RWRY3



### CZ-RWRT3 CZ-RWRY3



## 8-2-1-11. Miscellaneous Settings

A variety of changes can be made to settings, depending on the indoor unit being used.

## Operation mode indicator, time display (24 hour, AM/PM), heating maximum temperature

- These settings are saved in nonvolatile memory in the remote controller, so even when its batteries are changed, the settings do not have to be made again.
- First check the display of the remote controller when the unit is stopped and then make any desired settings

## **How to Operate**

- While holding down the buttons below, the remote controller's display changes every time \_\_\_\_ is pressed.
- Whatever is being displayed when you release is set.

| Setting Item  | Operation Button                                     | Setting Content                                    | Remote Controller<br>Display |
|---|--|--|------------------------------|
| Remote controller operation mode display setting when |  | Heat Pump<br>(with Auto)                           | @ <b>*</b> \ <b>*</b> \$     |
|   | Press \( \triangle \) while pressing \( \triangle \) | Heat Pump<br>(without Auto)                        | *\^ <b>*</b> \$              |
| is pressed  |  | Dedicated air conditioner                          | <b>\*</b> \$                 |
| Clock display setting                                 | Press \( \triangle \) while pressing \( \triangle \) | 24-hour  | 2359                         |
| Clock display setting                                 |  | AM/PM  | PM / 159                     |
| Max possible temperature setting in the Heat mode     | Press  while pressing  a i                           | Maximum heating temperature range is 26 °C – 30 °C | <u>76~27~28</u><br>_30~29√   |

#### 8-2-1-12. Button Control

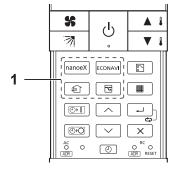
You can enable or disable the following buttons for some indoor units.

## nanoe™ X, ECONAVI, Ventilation, Energy saving

- 1. Press the button for desired setting for 4 seconds or longer.
  - You can toggle between enable and disable each time you press the button for 4 seconds or longer.
  - " 

    " is displayed when you press a disabled button, and the function cannot be used.

| Buttons | Setting content                                     |
|---------|---|
| nanoeX  | Enabling or disabling the button for nanoe™ X.      |
| ECONAVI | Enabling or disabling the button for ECONAVI.       |
| € E     | Enabling or disabling the button for ventilation.   |
|         | Enabling or disabling the button for energy saving. |



## 8-2-1-13. nanoe™ X Setting

## 1. Press nanoeX during operation.

- You can toggle between ON and OFF each time you press [nanoeX].
- "nanoeX" is displayed when this setting is ON.
- When the nanoe™ X setting is ON, "nanoe" (atomised water particle) is released from the indoor unit while in operation (Cool, Dry, Heat, Fan, Auto).
- If the receiver emits 1 short beep followed by 1 long beep after pressing [nanoex], the indoor unit does not support this function. See "8-2-1-12. Button Control" for how to enable or disable the button.
- "\(\sigma\)" is displayed if the function is not available.

## 

## 8-2-1-14. ECONAVI Setting

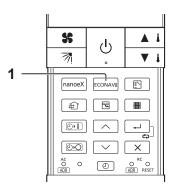
(ECONAVI can be set using the separately sold ECONAVI panel or by connecting the holder on the wall.)

## 1. Press during operation.

- You can toggle between ON and OFF each time you press ECONAM .
- " ECONAVI " is displayed when this setting is ON. \*
- The ECONAVI sensor detects human activity and conserves energy based on the activity level.
- Even when target temperature is changed through the ECONAVI function, the set temperature shown in the remote controller does not change.
- When operating more than 1 indoor unit, the energy-saving effect may be reduced depending on the room condition.
- If the receiver emits 1 short beep followed by 1 long beep after pressing [ECONAVI], the indoor unit does not support this function.

See "8-2-1-12. Button Control" for how to enable or disable the button.

- "\(\sigma\)" is displayed if the function is not available.
- " " ECONAVI " is not displayed in Fan mode.



## 8-2-1-15. Ventilation Setting

(When connected to an aftermarket fan)

button is disabled as the factory setting. Enable the button if you have connected the ventilation fan.

(See "8-2-1-12. Button Control")

## 1. Press 🛍 .

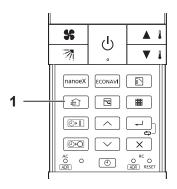
- You can toggle between ON and OFF each time you press 📵.
- " appears on the display of the remote controller when the fan is operating.
- When the air conditioner is started or stopped, the fan starts or stops at the same time.
- " \(\sigma\)" is displayed if the function is not available.

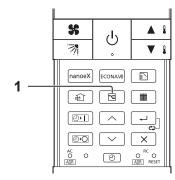
## 8-2-1-16. Energy Saving Setting

## 1. Press 🔁 during operation.

- You can toggle between ON and OFF each time you press 🖼 .
- " \sqrt{\sqrt{}}" is displayed when this setting is ON.
- The energy saving operation restricts the maximum current value, resulting in decreased cooling/heating performance. (If the current of outdoor units does not reach the peak due to low load operation, the current value is not restricted.)
- If the receiver emits 1 short beep followed by 1 long beep after pressing 
  ☐, the indoor unit does not support this function.

  See "8-2-1-12. Button Control" for how to enable or disable the button.
- "(\(\cap\)" is displayed if the function is not available.





You can restore the changed temperature to the originally set temperature automatically after a specified time elapses.

- Set the time and temperature for each operation mode.
- 1. Press and and at the same time for 4 seconds or longer.
  - " F" starts blinking and the setting screen is displayed.
- 2. Press 🛐 to select the operation mode, then press 🔟.
  - Every time you press ⑤ to switch between "Dry ♦ / Cool ♦ → Heat ♦ → Auto ♠", the buzzer sounds from the corresponding receiver.
  - When not set: 1 short beep
  - · When already set: 2 short beeps
- 3. Press \( \sigma \) to set the time to return to the set temperature.
  - Setting range: 10 to 240 min (by the 10 min)
- 4. Press ▲ 1 / ▼ 1 to set the temperature, then press .

|                 | MAX (°C) | MIN (°C) |
|-----------------|----------|----------|
| Auto 倒          | 27       | 17       |
| Heat 🔆          | 30       | 16       |
| Dry ⟨⟩ / Cool 🞇 | 30       | 18       |

- The temperature range that can be set varies depending on the model.
- 5. Press  $\times$  .
  - You can return to Step 2 to continue setting if you press instead of x.

## Changing the setting

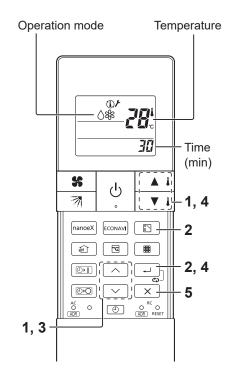
Perform Step 1 to 5 noted above as you did when setting.

## Cancelling the setting

- 1. Press 🛕 and 🗸 at the same time for 4 seconds or longer.
- 2. Press to select the operation mode, then press x for 4 seconds or longer.
  - The receiver emits 1 short beep.
  - Press x for 10 seconds or longer to cancel settings for all operation modes.

#### Note

• Press  $\times$  to stop operation in the middle.



## 8-2-1-18. Troubleshooting

Before requesting service, please check the followings.

| Problem   | Cause  | Solution  |
|---|--|---|
| The unit doesn't work even                                    | The power to the indoor unit is not ON.  | Make sure the power to the indoor unit is ON.   |
| when big is pressed on the remote controller.                 | Are the remote controller's batteries dead?  | Change the batteries.   |
|   | Is there a mismatch between the display lamp<br>and cooling/heating or is it set to something<br>other than Auto? (The operating lamp stays lit,<br>while the timer lamp and the standby lamp<br>blink alternately.) | Change the operating mode.  |
|   | Do the addresses match one another?  | Check the addresses of the receiver and the remote controller. (See "Checking Addresses" on page 8-2-1-8) |
| The air conditioner starts and stops on its own.              | Has the timer been set to repeat?  | Check the timer settings. (See "Checking the timer setting" on page 8-2-1-5)                              |
| Although the unit is for air cor in the display.              | nditioning only, either Auto or Heat is indicated  | Make settings to the remote controller's operation mode display. (See "8-2-1-11. Miscellaneous Settings") |
| After the batteries are put in t the display does not change. | he remote controller, even when it is operated,  | Press the RC reset button on the remote controller. (See Step 3. of "8-2-1-2. Installing Batteries")      |
| The timer cannot be set.                                      |  | Make the settings when the remote controller is in Operation Display. (See "8-2-1-5. Timer Operation")    |

If the problem persists even after you check the foregoing items, stop the unit, disconnect the power to the indoor unit and contact the dealer where the product was purchased with the model number and problem you are having. As it is dangerous, under no circumstances should you undertake repairs yourself.

Further, when the receiver's lamps are blinking; please contact your retailer with that information.

## **Specifications**

## CZ-RWS3

| Model No.                    | CZ-RWS3   |
|------------------------------|---|
| Dimensions                   | (H) 165 mm × (W) 59 mm × (D) 22 mm                              |
| Weight                       | 100 g (Batteries and remote control holder are not included)    |
| Temperature / Humidity range | 0 °C to 40 °C / 20 % to 80 % (No condensation) *Indoor use only |
| Power Source                 | Two LR03 size batteries   |

## CZ-RWRU3, CZ-RWRU3W

| Model No.      | CZ-RWRU3, CZ-RWRU3W                          |  |  |
|----------------|--|--|--|
| Dimensions     | (H) 29.7 mm × (W) 211.8 mm × (D) 211.8 mm    |  |  |
| Weight         | 160 g  |  |  |
|                | 0 °C to 40 °C / 20% to 80% (No condensation) |  |  |
| Humidity range | *Indoor use only.                            |  |  |
| Power Source   | DC16 V (supplied from indoor unit)           |  |  |

## CZ-RWRC3

| Model No.             | CZ-RWRC3                                       |
|-----------------------|--|
| Dimensions            | (H) 120 mm × (W) 70 mm × (D) 20 mm             |
| Weight                | 75 g   |
| Temperature /         | 0 °C to 40 °C / 20 % to 80 % (No condensation) |
| <b>Humidity range</b> | *Indoor use only.                              |
| Power Source          | DC16 V (supplied from indoor unit)             |

## CZ-RWRT3

| Model No.      | CZ-RWRT3                                       |
|----------------|--|
| Dimensions     | (H) 65 mm × (W) 141 mm × (D) 22.5 mm           |
| Weight         | 85 g   |
|                | 0 °C to 40 °C / 20 % to 80 % (No condensation) |
| Humidity range | *Indoor use only.                              |
| Power Source   | DC16 V (supplied from indoor unit)             |

## CZ-RWRY3

| Model No.      | CZ-RWRY3                                     |
|----------------|--|
| Dimensions     | (H) 125 mm × (W) 125 mm × (D) 29 mm          |
| Weight         | 100 g  |
|                | 0 °C to 40 °C / 20% to 80% (No condensation) |
| Humidity range | *Indoor use only.                            |
| Power Source   | DC16 V (supplied from indoor unit)           |

#### 8-2-2. Installation Instructions

#### Read before installation

This controller must be installed by the sales dealer or installer. These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales / service outlet or your certified dealer for additional instructions.

#### **Safety Precautions**

We assume no responsibility for accidents or damages resulting from methods other than those described in the installation instructions or methods without using specified parts. Malfunctions that occurred due to the unauthorised installation methods are not covered by the product warranty.

- Read the installation instructions supplied with indoor units as well.
- After the installation is complete, perform test operation to confirm that no abnormality is present.
- When relocating or repairing this controller, provide the Installation Instructions to the servicing personnel.
- Do not clean inside the controller by users. Engage authorised dealer or specialist for cleaning.



This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

## **↑** WARNING

- · Turn off the circuit breaker of the units before installation.
- Select an installation location which is rigid and strong enough to support or hold the controller, and select a location for easy maintenance.
- This controller must not be modified or disassembled under any circumstances. Modified or disassembled controller may cause fire, electric shock or injury.

## **⚠**CAUTION

- Do not allow infants and small children to prevent them from accidentally swallowing the batteries.
- Do not use the controller at the following locations.
  - · Location where condensation occurs
  - · Location where flammable gases, etc. may leak
  - Location where corrosive gases, etc. may leak
  - Location with lots of water or oil droplets (including machine oil)
  - Location where there is a machine producing electromagnetic radiation
  - Location where droplets of organic solvents spread
  - Location where acidic or alkaline solutions or special sprays are frequently used
- Do not wash with water.
- Do not operate with wet hands.
- Do not drop or throw. (It may cause malfunction.)
- Do not insert the battery the wrong terminals (+ and -). (It may cause electrolyte leakage and may cause a fire.)

(NOTICE)

The English text is the original instructions. Other languages are translation of the original instructions.

## Supplied accessories

Remote Control Holder
Screw M4×15.5
LR03 Size Battery (for test)
Operating Instructions
Installation Instructions
Instructions Disc

## **Installation Precautions**

- The controller uses a very weak infrared light for its signal, which can result in the signal not being received because of the following influences, so take care in where the indoor unit is installed.
  - Inverter or rapid-start type fluorescent lights (Models without glow lamps)
  - · Plasma display or LCD televisions
  - Direct sunlight or other sources of bright light
- Install in a location that does not interfere the operation
  - You cannot operate if the distance between the remote controller and the receiver is greater than that signals can travel.
  - Make sure nothing is between the remote controller and the receiver that could block the signal.
  - Confirm that the normal operation is possible at the location to install.
- Avoid the following locations for installation.
  - · Under direct sunlight
  - · Location near heat source
  - Location where the controller will be splashed with water or affected by dampness or humidity
  - · Uneven surface
  - Location that is subject to excessive vibration or physical impacts. (Fixing screws may come off, and the controller may drop.)
  - Location with large amount of oil smoke or steam (such as kitchen or machine factory)
- · Install the controller vertically to the floor.
- Install the controller at a location with suitable temperature and humidity for using.
- Do not install controller at the locations with the equipment (medical equipment, etc.) which
  generates the high-frequency emissions. (It may interfere
  with the equipment and may cause accidents due to
  malfunction.)
- Install at least 1 m away from TV, radio, PC, etc. (To prevent fuzzy images or noise)
- If a remote controller is to be operated from a remote control holder that is hung on a wall, turn on the lights in the room as well as any electrical appliances and then check to make sure the air conditioner works with the remote controller in the location where it will be installed. If it works, continue with installation.

## **Before Starting**

Install this controller see "8-2-1. Operating Instructions".

- (1) Insert the batteries. (Installing Batteries)
- (2) Set the current time. (Setting the Current Time)
- (3) Install the remote control holder. (Using the Remote Controller)
- (4) Perform the pairing address setting, if required. (Paring Addresses)

## When using the Wall Mounted Type indoor unit

## Note

Also see "8-3-2. When Using Wireless Remote Controller Instead of Wired Remote Controller".

- When using the infrared remote controller and the wired remote controller in combination, set the wired remote controller to [Main].
- When only using the infrared remote controller, it is necessary to set the selector switch on the indoor unit circuit board (SW502) from "OFF" to "ON". When group-controlling the multiple indoor units, set "OFF" to "ON" on only one unit.

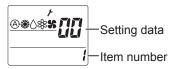
## Miscellaneous Settings

The functions of the wireless (infrared) remote controller can be set on site.

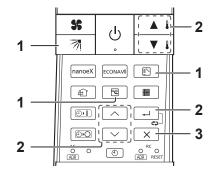
## Note

Only service personnel should make the settings because the operation of the air conditioner may be affected, depending on the settings made.

- These settings are saved in nonvolatile memory in the remote controller, so even when its batteries are changed, the settings do not have to be made again.
- Furthermore, making changes to these settings may cause actual operation to deviate from what is printed in the Operating Instructions, so be sure to fully explain this to the customer.
- Do not change any settings other than those items in table below.
- 1. Press, , and at the same time for 4 seconds or longer when the unit is stopped (displaying the current time only).
  - "F" starts blinking and the setting screen is displayed.



2. Press ▲ 1 / ▼ 1 to select item number, press △ / ∨ to select setting data, and press → .



3. Press  $\times$  .

| Item<br>Number | Setting item              | Setting data  |   | Factory setting                                      | Check |
|----------------|---------------------------|---|---|--|-------|
| 1              | Operation Mode*1          | 00: @ / * / \ / * / \$<br>01: * / \ / * / \$<br>02: \ / * / \$  | 03: \$ / \$\$<br>04: @ / \$ / \$ / \$\$<br>05: \$ / \$ / \$\$ | 00: ⑧/豪/ ◇/ 緣/ 緣                                     |       |
| 2              | Flap Display              | 00: 5 levels (Cool in 5 levels) + Swing + Stop<br>01: 5 levels (Cool in 3 levels) + Swing + Stop<br>02: 5 levels (Cool in 3 levels) + Swing | 03: Swing<br>04: No switchable function                       | 00: 5 levels<br>(Cool in 5 levels) +<br>Swing + Stop |       |
| 3              | Select Fan Speed          | 00: 5 levels (1 to 5, Auto)<br>01: 3 levels (Low (1), Medium (3), High (5), Auto)<br>02: 3 levels (Low (1), Medium (3), High (5))           | 03: Low (1), Medium (3)<br>04: No switchable function         | 00: Speed 5<br>(1 to 5, Auto)                        |       |
| 4              | Temperature Display       | 00: °C  | 01: °F  | 00: °C   |       |
| 5              | Clock Display             | 00: 24-hour   | 01: AM/PM   | 00: 24-hour  |       |
| 6              | Ventilation Fan Setting*2 | 00: Off   | 01: On  | 00: Off  |       |
| 7              | Cool Temp Max             | 5 – 35°C  |   | 30   |       |
| 8              | Cool Temp Min             | 5 – 35°C  |   | 18   |       |
| 9              | Heat Temp Max             | 5 – 35°C  |   | 30   |       |
| 10             | Heat Temp Min             | 5 – 35°C  |   | 16   |       |
| 11             | Dry Temp Max              | 5 – 35°C  |   | 30   |       |
| 12             | Dry Temp Min              | 5 – 35°C  |   | 18   |       |
| 13             | Auto Temp Max             | 5 – 35°C  |   | 27   |       |
| 14             | Auto Temp Min             | 5 – 35°C  |   | 17   |       |
| 18             | Energy Saving Setting*2   | 00: Off   | 01: On  | 01: On   |       |
| 19             | ECONAVI Setting*2         | 00: Off   | 01: On  | 01: On   |       |
| 20             | nanoe™ X Setting*²        | 00: Off   | 01: On  | 01: On   |       |

- \*1 Set to [02: \( \delta \ / \\$ / \\$ ] or [03: \( \sigma / \\$ ] if you are using the unit only for cooling.
- \*2 Press the function setting button for 4 seconds or longer while current time is displayed to switch the function On/Off.

## Note

Make sure to fill the setting status in the check column after making changes to these settings.

Set the Auto Address for each O/D unit no. (outdoor unit number) Select the O/D unit no. for Auto Address.

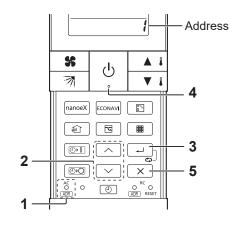
- 1. Press AC | for 4 seconds or longer.
  - " F " starts blinking and the setting screen is displayed.
- 2. Press \( \sigma \) to select the unit number (O/D unit no.) from 1 to 30.
- 3. Press \_\_ to set the Auto Address.
- 4. Press (b) to check the Auto Address status.

(See the following table for the Auto Address status.)

- Proceed to step 5 when the status is "Completion" or "Error" .
- If "Running" keeps for 10 minutes or longer, check the unit number.

| Auto              | Buzzer             | Indication lamp on the receiver |       |              |  |  |
|-------------------|--------------------|---------------------------------|-------|--------------|--|--|
| Address<br>Status | of the<br>receiver | OPERATION                       | TIMER | STANDBY      |  |  |
| Running           | 2 times            |                                 | → ◎ — | <b>→</b> ∅ ] |  |  |
| Completion        | 1 time             | -                               | -     | -            |  |  |
| Error             | 5 times            |                                 |       |              |  |  |





- 5. Press  $\times$  for 4 seconds or longer to exit the Auto Address setting.
  - Auto Address setting is canceled while running or error occurring.
     Set the Auto Address again after resolve the error cause if an error occurs.

## Attention

- Set Auto address after all units are turned on and 90 seconds or more have passed.
- Operate the units after Auto address is set and 90 seconds or more have passed.

## 8-3. Setting for the Receiver 8-3-1. Infrared Receiver

8-3-1-1. Common to Infrared Receiver CZ-RWRU3, CZ-RWRU3W, CZ-RWRC3, CZ-RWRT3, CZ-RWRY3

## Read before installation

This receiver must be installed by the sales dealer or installer. These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

## **Safety Precautions**

We assume no responsibility for accidents or damages resulting from methods other than those described in the installation instructions or methods without using specified parts. Malfunctions that occurred due to the unauthorised installation methods are not covered by the product warranty.

- Read the installation instructions supplied with indoor units as well.
- After the installation is complete, perform test operation to confirm that no abnormality is present.
- When relocating or repairing this receiver, provide the Installation Instructions to the servicing personnel.
- Do not clean inside the receiver by users. Engage authorised dealer or specialist for cleaning.

## **⚠** WARNING

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

## **MARNING**

- Turn off the circuit breaker of the units before installation.
- This receiver shall be installed in accordance with National Wiring Regulations.
- Connect and fix the specified cables for wiring securely.
- Do not allow the connection to be exposed to the external force of the cables.
- Select an installation location which is rigid and strong enough to support or hold the receiver, and select a location for easy maintenance.
- This receiver must not be modified or disassembled under any circumstances.
   Modified or disassembled receiver may cause fire, electric shock or injury.

## **CAUTION**

- Do not use the receiver at the following locations.
  - · Location where flammable gases, etc. may leak
  - Location where corrosive gases, etc. may leak
  - Location with lots of water or oil droplets (including machine oil)
  - Location where droplets of organic solvents spread
  - Location where acidic or alkaline solutions or special sprays are frequently used
- Do not wash with water.
- Do not operate with wet hands.

#### NOTICE

The English text is the original instructions. Other languages are translation of the original instructions.

## **Installation Precautions**

- The receiver uses a very weak infrared light for its signal, which can result in the signal not being received because of the following influences, so take care in where the indoor unit is installed.
  - Inverter or rapid-start type fluorescent lights (Models without glow lamps)
  - Plasma display or LCD televisions
  - Direct sunlight or other sources of bright light
- Do not bundle together with the power source wiring or store in the same metal tube. Operation error may occur.
- Be careful not to connect cables to other terminals of indoor units (e.g.power source wiring terminal).
   Malfunction may occur.
- Avoid the following locations for installation.
  - Location where condensation occurs
  - Location where voltage fluctuation frequently occurs
  - Location where there is a machine producing electromagnetic radiation

## Wiring

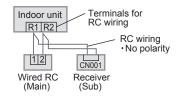
Installation when setting Main/Sub for the remote controller and the receiver

It is possible to operate one or more indoor units using two remote controllers.

After installation, set one to [Main] and the other to [Sub].

When using the infrared remote controller and the wired remote controller in combination, set the wired remote controller to [Main].

## <Installation example> ■Using 1 indoor unit

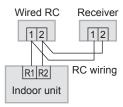


## Note

- The receiver can be connected to any indoor unit for operation.
- · Wiring connected via remote controllers is prohibited.
- Also see "1-11-1. Installation Instructions of Indoor Unit" or refer to the "Installation Instructions" supplied with the wired remote controller when performing remote control with the main and sub remote controllers or group-controlling.

## **Attention**

- Multiple wireless (infrared) remote controllers cannot be used simultaneously for a single indoor unit.
- Be careful not to connect cables to other terminals of indoor units (e.g. power source wiring terminal).
   Malfunction may occur.
- Do not bundle together with the power source wiring or store in the same metal tube. Operation error may
  occur.
- · If noise is induced to the unit power supply, attach a noise filter.
- \* Wiring shown below is prohibited.

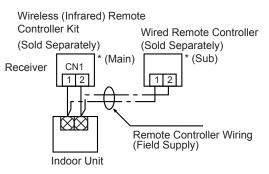


## Note

The remote controller and the receiver can be connected to any indoor unit for operation.

## When 1 indoor unit is operated by 2 remote controllers:

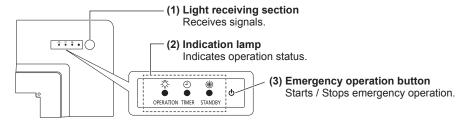
\* Either of the remote controllers can be set to main/sub.



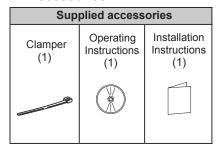
- Use wiring of 0.5 mm² to 2 mm² for field supply.
- Use a total wire length of no more than 400 m.

## 8-3-1-2. CZ-RWRU3, CZ-RWRU3W

## **Part Names**

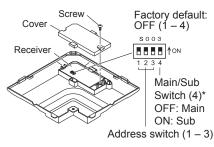


## 1. Accessories



## 2. Setting

Before installing the receiver, check the settings of the receiver address switches. Remove the cover from the receiver when performing the settings.



\* When using the infrared remote controller and the wired remote controller in combination, set the wired remote controller to [Main].

## **Address Setting**

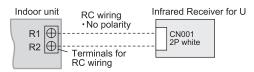
- When more than 1 receiver is installed in the same room, setting addresses prevents interference.
- For how to change addresses of infrared remote controller, see the operating instructions of infrared remote controller.

| Infrared remote controller address display | Address<br><b>ALL</b>                           | Address<br>1 | Address 2 | Address 3 | Address 4 | Address<br>5 | Address 6 | ON/OFF<br>States |
|--|---|--------------|-----------|-----------|-----------|--------------|-----------|------------------|
|  | Receiving is possible at all address positions. | 1 2 3 4      | 1 2 3 4   | 1 2 3 4   | 1 2 3 4   | 1 2 3 4      | 1 2 3 4   | OFF ON           |

## 3. Wiring

Connect the wires from the receiver to the terminals for RC wiring on the indoor unit.

## **Wiring Diagram**



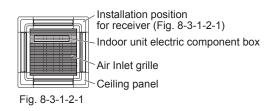
## NOTE

- The receiver can be connected to any indoor unit for operation.
- Multiple infrared remote controllers cannot be used simultaneously for a single indoor unit.
- · Wiring connected via remote controllers is prohibited.
- Also see "1-11-1. Installation Instructions of Indoor Unit" or refer to the "Installation Instructions" supplied with the wired remote controller when performing remote control with the main and sub remote controllers or group-controlling.

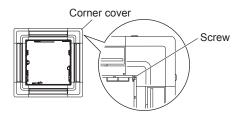
## 4. Mounting

## See "2. Setting" before mounting.

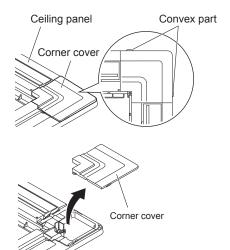
- The receiver can be installed only on the corner shown in Fig. 8-3-1-2-1. Consider the direction where the panel is attached to the indoor unit.
- 1 Remove the air inlet grille



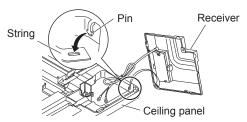
2 Remove the screw fixing the corner cover.



3 Place a hand on both the right and left convex parts of the corner cover to remove it.



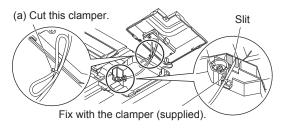
4 Hang the string of the receiver on the pin of the ceiling panel.



5 Pass the wiring from the receiver section into the slit.

For more wiring information, see the section "Wiring".

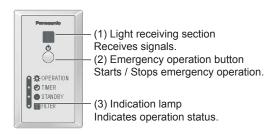
- 6 Fix the wiring with the clamper (supplied) while leaving enough length of wiring to remove the receiver.
  - When attaching the filter chamber, cut the clamper (a), and attach the receiver.



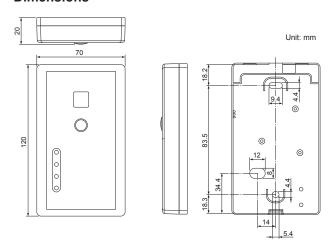
- 7 Fit the receiver to the ceiling panel so the 5 claws are properly set, and fix it with the removed screw.
  - Make sure the wire is not caught.
  - Refer to the installation instructions supplied with the panel.

## 8-3-1-3. CZ-RWRC3

#### **Part Names**



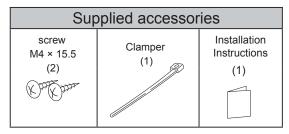
## **Dimensions**



## **Installation Precautions**

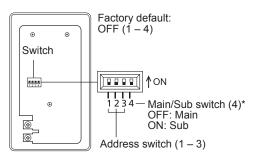
- Install at the height of 1 to 1.5 m from the floor.
- · Install vertically against the floor.
- When installing more than 1 remote controller next to each other, keep distance of 5 mm on the right and left and 50 mm on top and bottom.
- · Install the receiver at a location with suitable temperature and humidity for using.

#### 1. Accessories



## 2. Setting

Remove the cover from the receiver when performing the settings.



\* When using the infrared remote controller and the wired remote controller in combination, set the wired remote controller to [Main].

## **Address Setting**

- When more than 1 receiver is installed in the same room, setting addresses prevents interference.
- For how to change addresses of infrared remote controller, see "8-2-1. Operating Instructions".

| Infrared remote controller address display | Address<br><b>ALL</b>                           | Address<br>1 | Address 2 | Address 3 | Address 4 | Address<br>5 | Address 6 | ON/OFF<br>States |
|--|---|--------------|-----------|-----------|-----------|--------------|-----------|------------------|
|  | Receiving is possible at all address positions. | 1 2 3 4      | 1 2 3 4   | 1 2 3 4   | 1 2 3 4   | 1 2 3 4      | 1 2 3 4   | OFF ON           |

## 3. Wiring

Connect the wires from the receiver to the terminals for RC wiring on the indoor unit.

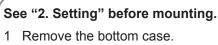
# Wiring Diagram Indoor unit RC wiring (field supply) No polarity Infrared Receiver for C 1 2 Terminals for RC wiring

- Type of wiring: Use cables of 0.5 to 1.25 mm<sup>2</sup>.
- Total wire length: 400 m or less (The wire length between indoor units should be 200 m or less.)
- Number of connectable units Remote controller and receiver: Max. 2, Indoor unit: Max. 8

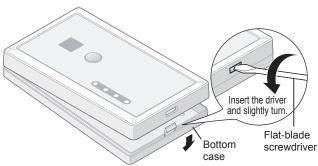
## Note

- The receiver can be connected to any indoor unit for operation.
- · Wiring connected via remote controllers is prohibited.
- Also see "1-11-1. Installation Instructions of Indoor Unit" or refer to the "Installation Instructions" supplied with the wired remote controller when performing remote control with the main and sub remote controllers or group-controlling.
- Use the field supplied RC wiring with at least 1 mm in thickness of insulation part including the sheath. Regulations on wire diameters differ from locally to locally.
  - For field wiring rules, please refer to your LOCAL ELECTRICAL CODES before beginning.
  - You must ensure that installation complies with relevant rules and regulations.

## 4. Mounting



**Bottom case** 



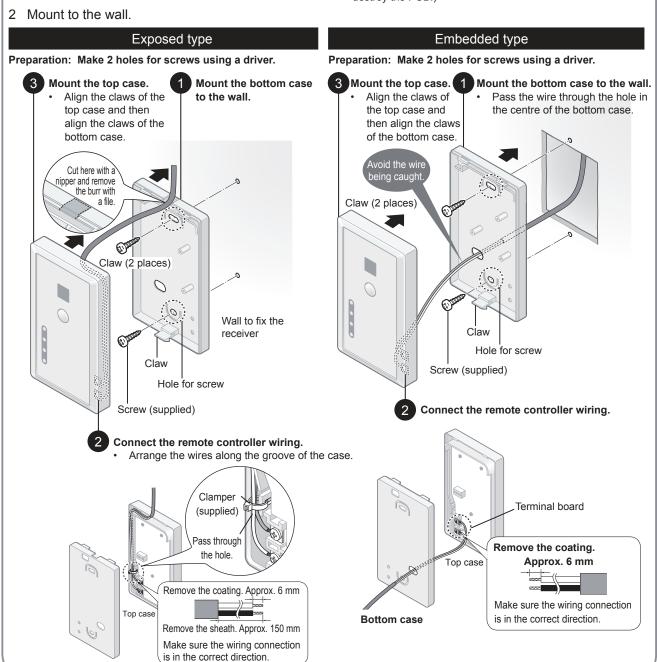
## **Attention**

## Mounting the bottom case

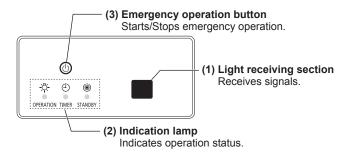
- Tighten the screws securely until the screw heads touch the bottom case.
   (Otherwise, loose screw heads may hit the PCB and cause malfunction when mounting the top case.)
- Do not over-tighten the screws.
   (The bottom case may be deformed, resulting in fall of the unit.)

## Connecting the remote control wiring

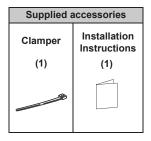
- Arrange the wires as shown in the illustration for ② in step 2, avoiding unnecessary wires being stored in the case. (Caught wires may destroy the PCB.)
- Avoid wires touching parts on the PCB. (Caught wires may destroy the PCB.)



## **Part Names**

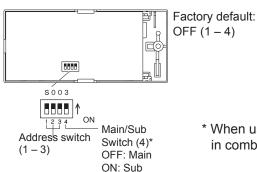


## 1. Accessories



## 2. Setting

Remove the cover from the receiver when performing the settings.



\* When using the infrared remote controller and the wired remote controller in combination, set the wired remote controller to [Main].

## **Address Setting**

- When more than 1 receiver is installed in the same room, setting addresses prevents interference.
- For how to change addresses of infrared remote controller, see "8-2-1. Operating Instructions".

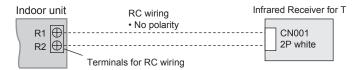
| C | nfrared remote<br>controller<br>address display | Address<br><b>ALL</b>                           | Address<br>1 | Address 2 | Address 3 | Address 4 | Address<br>5 | Address<br>6 | ON/OFF<br>States |
|---|---|---|--------------|-----------|-----------|-----------|--------------|--------------|------------------|
| a |   | Receiving is possible at all address positions. | 1 2 3 4      | 1 2 3 4   | 1 2 3 4   | 1 2 3 4   | 1 2 3 4      | 1 2 3 4      | OFF ON           |

Ω

## 3. Wiring

Connect the wires from the receiver to the terminals for RC wiring on the indoor unit.

## Wiring Diagram



## Note

- The receiver can be connected to any indoor unit for operation.
- · Multiple infrared remote controllers cannot be used simultaneously for a single indoor unit.
- · Wiring connected via remote controllers is prohibited.
- Also refer to the "Installation Instructions" supplied with the indoor unit or wired remote controller when performing remote control with the main and sub remote controllers or group-controlling.

## 4. Mounting

## See "2. Setting" before mounting.

1 Remove the screw, and slide the latch to open the air-intake grille. (Fig. 8-3-1-4-1)

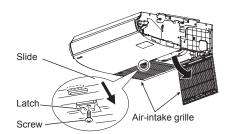


Fig. 8-3-1-4-1

2 Insert a flat-head screwdriver from the side, and remove the cover while pressing down on the two cover tabs. (Fig. 8-3-1-4-2)

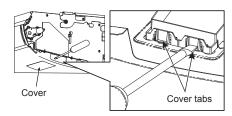


Fig. 8-3-1-4-2

- 3 Route the remote control wiring through the panel, and mount the receiver into the panel holes. (Fig. 8-3-1-4-3)
- 4 Route the remote control wiring through the adjustable clamper, and draw in the wire from the remote control wiring inlet to the inside of the indoor unit. (Fig. 8-3-1-4-3) (See Fig. 8-3-1-4-4 for how to loosen the adjustable clamper.)

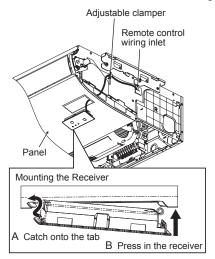


Fig. 8-3-1-4-3

- 5 Route the remote control wiring through the three saddles, and draw the wire into the electrical box. (Fig. 8-3-1-4-4)
  - \* Draw in the power wire and remote control wiring separately.

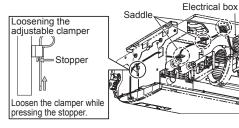


Fig. 8-3-1-4-4

- 6 Connect the remote control wiring to the terminal board, route through the clamper (supplied) to the holding clamp, and secure the remote control wiring. (Fig. 8-3-1-4-5)
- 7 Mount the side cover, and close the air-intake grille.
  - For more information about wiring and test runs, see "3. Wiring" and "8-3-3. Test Operation".

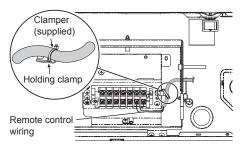


Fig. 8-3-1-4-5

## ■ Removing and Mounting the Side Cover

## Removing the side cover

Remove the side cover mounting screw, and slide the side cover to the front side (direction of arrow in Fig. 8-3-1-4-6) to remove.

## Mounting the side cover

Slide in the side cover from the indoor unit front side, mount to the latch tabs, and secure using the side cover mounting screw.

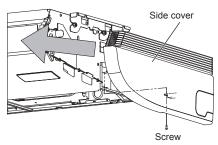
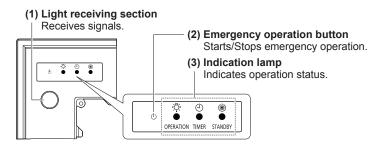


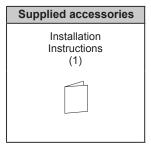
Fig. 8-3-1-4-6

## 8-3-1-5. CZ-RWRY3

## **Part Names**

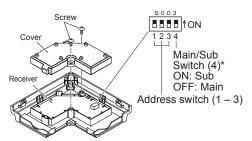


## 1. Accessories



## 2. Setting

Before installing the receiver, check the settings of the receiver address switches. Remove the cover from the receiver when performing the settings.



\* When using the receiver and wired remote controller in combination, set the receiver to [Sub].

## **Address Setting**

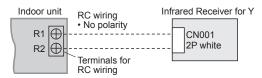
- When more than 1 receiver is installed in the same room, setting addresses prevents interference.
- For how to change addresses of infrared remote controller, see the operating instructions of infrared remote controller.
- · Settings are all off at the time of shipping.

| Infrared remote controller address display | Address<br><b>ALL</b>                           | Address<br>1 | Address 2 | Address<br>3 | Address 4 | Address<br>5 | Address<br>6 | ON/OFF<br>States |
|--|---|--------------|-----------|--------------|-----------|--------------|--------------|------------------|
| address switch                             | Receiving is possible at all address positions. | 1 2 3 4      | 1 2 3 4   | 1 2 3 4      | 1 2 3 4   | 1 2 3 4      | 1 2 3 4      | OFF ON           |

## 3. Wiring

Connect the wires from the receiver to the terminals for RC wiring on the indoor unit.

## **Wiring Diagram**



## NOTE

- The receiver can be connected to any indoor unit for operation.
- Multiple infrared remote controllers cannot be used simultaneously for a single indoor unit.
- · Wiring connected via remote controllers is prohibited.
- Also see "1-11-1. Installation Instructions of Indoor Unit" or refer to the "Installation Instructions" supplied with the wired remote controller when performing remote control with the main and sub remote controllers or group-controlling.

## 4. Mounting

## See "2. Setting" before mounting.

- The receiver can be installed only on the corner shown in Fig. 8-3-1-5-1. Consider the direction where the panel is attached to the indoor unit.
- 1 Remove the air inlet grille

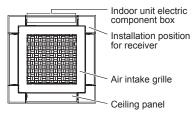
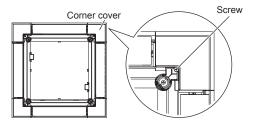
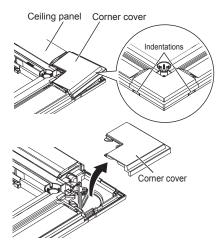


Fig. 8-3-1-5-1

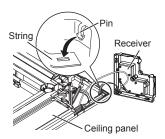
2 Remove the screw fixing the corner cover



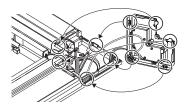
3 Put your hands into the indentations on the left and right of the ceiling panel and remove the corner cover.



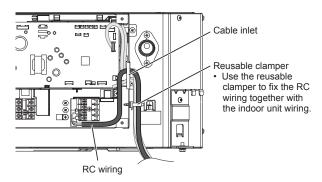
4 Hang the string of the receiver on the pin of the ceiling panel.



- 5 Fit the receiver to the ceiling panel so the 5 claws are properly set, and fix it with the removed screw.
  - · Make sure the wire is not caught.
  - Refer to the installation instructions supplied with the panel.



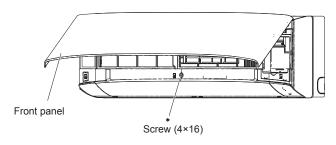
6 Pass the RC wiring through the cable inlet and connect to the terminals for RC wiring.



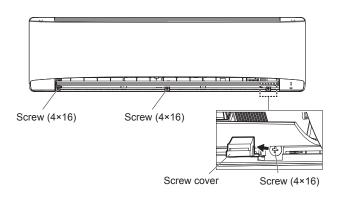
# 8-3-2. When Using Wireless Remote Controller Instead of Wired Remote Controller 8-3-2-1. Wall Mounted Type S-3650PK3E, S-6010PK3E

## <Optional parts setting and wiring>

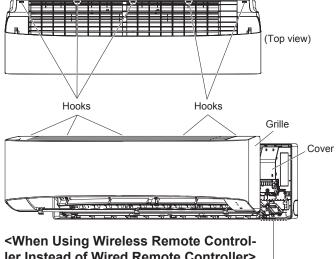
(1) Open the front panel and remove the screw (×1). Then close the panel.



(2) Open the flap and then disengage the screw covers (×3). Then remove the screws (×3).



(3) Disengage the hooks holding and lifting both ends of the grille. Remove the cover of electrical component box.



<When Using Wireless Remote Controller Instead of Wired Remote Controller>
When the wireless remote controller is to be used, slide the switch (SW502) to the ON position.

 If this setting is not made, an alarm will occur. (The operation lamp on the display blinks.)



Setting status
ON: Wireless: main,
Wired: sub
OFF: Wired: main,
Wireless: sub (at shipment)



### 8-3-3. Test Operation

### 8-3-3-1. Test run using the an infrared receiver. (Except for Wall Mounted Type)

Preparation: Turn on the circuit breaker of units and then turn the power on. After the power is turned on, infrared remote controller operation is ignored for approx. 1 minute because setting is being made. This is not malfunction. (Contents received while setting are disabled.)

- 1 Press and hold the emergency operation button for 10 seconds.
- 2 The indication lamps (OPERATION, TIMER, STANDBY) blink during test operation.
- 3 To finish test operation, press and hold the emergency operation button for 10 seconds.

### **ATTENTION**

- Do not use this mode for purposes other than the test operation. (To prevent overload of the units)
- Read the installation instructions supplied with the units.
   The test operation can be performed in Heat or Cool mode.
- · Temperature cannot be changed.
- The test operation mode is automatically turned off in 60 minutes. (To prevent continuous test operation)
- Outdoor units do not operate for approx. 3 minutes after the power is turned on or operation is stopped.

### 8-3-3-2. Test run using the indicator of the indoor unit (Wall Mounted Type)

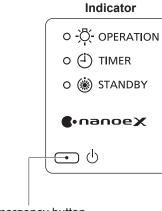
This mode places a heavy load on the machines. Therefore use it only when performing the test run.

(1) Press and hold the Emergency button for 4 seconds or more.

The indication lamps (OPERATION, TIMER, STANDBY) epeatedly light one after the other for 1 second.

- The wireless remote controller address setting mode is set.
- (2) Press and hold the Emergency button for 4 seconds or more again. The indication lamps (OPERATION, TIMER, STANDBY) blink during test operation.
  - The test run can be performed using the HEAT, COOL, or FAN operation mode.
  - The temperature cannot be adjusted when in test run mode.
  - If correct operation is not possible, some of the display lamps (OPERATION, TIMER, STANDBY) will turn ON or OFF.

(Regarding the alarm contents, see 2-3-1-5. Contents of Remote Controller Switch Alarm Display.)



- **Emergency button**
- (3) To stop test operation, press and hold the Emergency button.
  - To prevent continuous test run, this mode includes a timer function that cancels the test run after 60 minutes.

### ATTENTION

• The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.

# Self-diagnostics table and detected contents

The "Alarm Display" shown in the table below expresses the alarm contents displayed when the wired remote controller is connected. For how to handle the alarms, see Section 2 "Contents of Remote Controller Switch Alarm Display" and Section 5 "Contents of Remote Controller Switch Alarm Display".

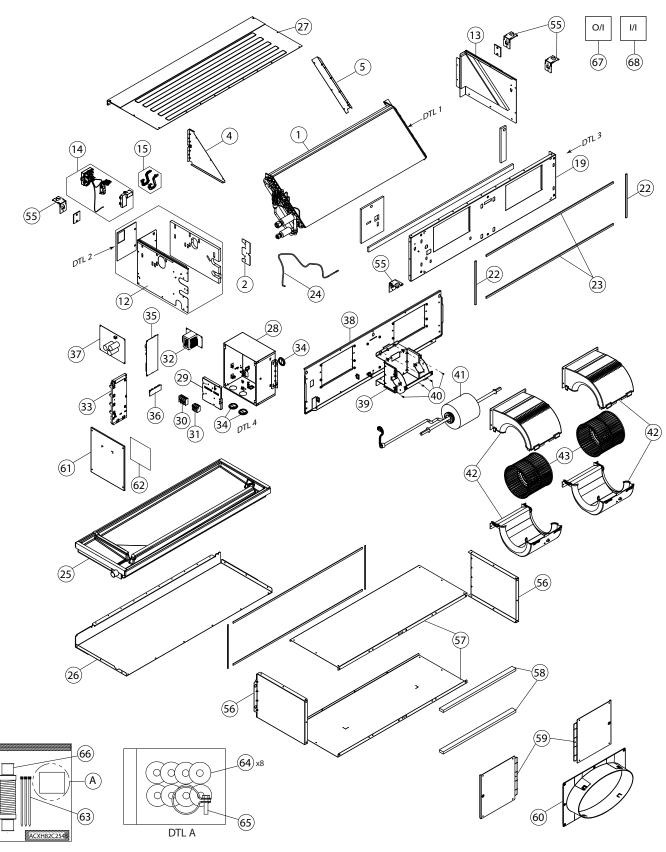
| Detected conten  | its                              | Indicat   | Indication lamp on the receiver |             |                |  |
|--|----------------------------------|-----------|---------------------------------|-------------|----------------|--|
|  | Alarm<br>Display                 | OPERATION | TIMER                           | STANDBY     | Blinking       |  |
| Communication error in the remote controller circuit   | E01–E03,<br>E08–E14,<br>E17, E18 | 0         | •                               | •           |                |  |
| Communication error<br>either in the in / outdoor<br>operation line or the sub-<br>bus of the outdoor unit | E04–E07,<br>E15, E16,<br>E19–E31 | •         | •                               | 0           |                |  |
| Operation of indoor protection device  | P01,<br>P09–P14                  | •         | 0                               | 0           | Alternately    |  |
| Operation of outdoor protection device   | P02–P08,<br>P15–P31              | 0         | •                               | 0           | Alternately    |  |
| Error in the indoor thermistor   | F01–F03,<br>F10–F11              | 0         | 0                               | •           | Alternately    |  |
| Error in the outdoor thermistor  | F04–F09,<br>F12–F28              | 0         | 0                               | 0           | Alternately    |  |
| Error in the indoor EEPROM   | F29                              | 0         | 0                               | •           | Simultaneously |  |
| Error in the outdoor EEPROM  | F30, F31                         | 0         | 0                               | 0           | Simultaneously |  |
| Error related to the compressor  | H01–H31                          | •         | 0                               | •           |                |  |
| Error in indoor settings   | L01–L03,<br>L05–L09              | 0         | •                               | 0           | Simultaneously |  |
| Error in outdoor settings  | L04,<br>L10–L31                  | 0         | 0                               | 0           | Simultaneously |  |
| Error in the gas heat pump air conditioner   | A01–A31                          | •         | 0                               | 0           | Simultaneously |  |
| Inconsistency in Cooling/h<br>(Including an auto-temp so<br>a model without auto-temp                      | 0                                | 0         | 0                               | Alternately |                |  |
| Oil alarm (Same as opera outdoor protection device   | 0                                | •         | 0                               | Alternately |                |  |
| Auto addressing in progre<br>(when it is performed with<br>infrared remote controller                      | n an                             | - ○       | . (                             | → ◎ □       | Sequentially   |  |
| Test operation   |                                  | 0         | 0                               | 0           | Simultaneously |  |

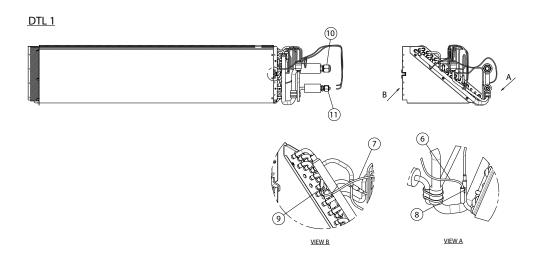
●: OFF ○: ON (Illuminated) ◎: Blinking (0.5 seconds interval)

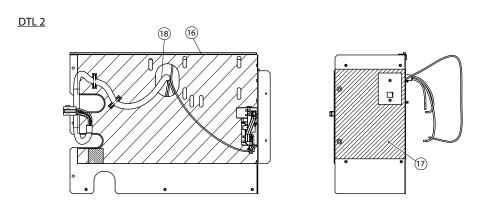
# 9

# 9. EXPLODED VIEW AND REPLACEMENT PARTS LIST

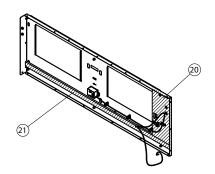
| 9-1. Indoor Unit                                 | 9-2  |
|--|------|
| 9-1-1. S-60PE4R S-71PE4R                         | 9-2  |
| 9-1-2. S-100PE4R S-100PE4RN                      | 9-8  |
| 9-1-3. S-125PE4R S-125PE4RN S-140PE4R S-140PE4RN | 9-14 |
| 9-1-4. S-160PE4R S-160PE4RN S-160PE4RA           | 9-22 |



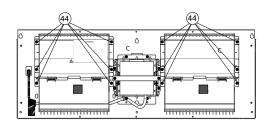




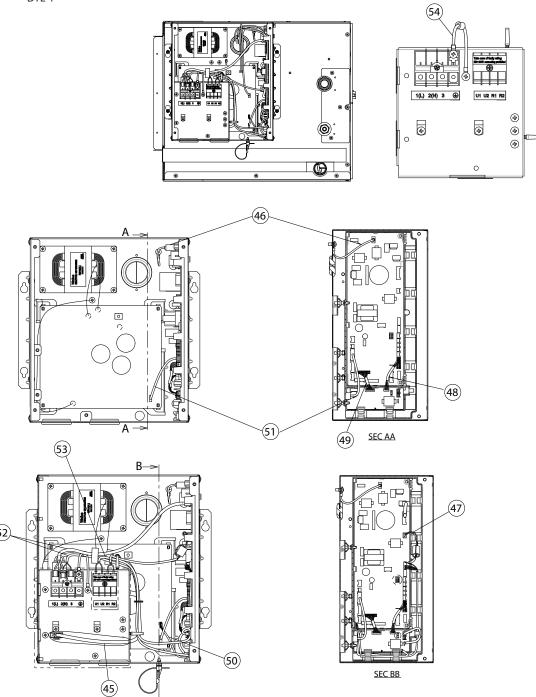
DTL 3

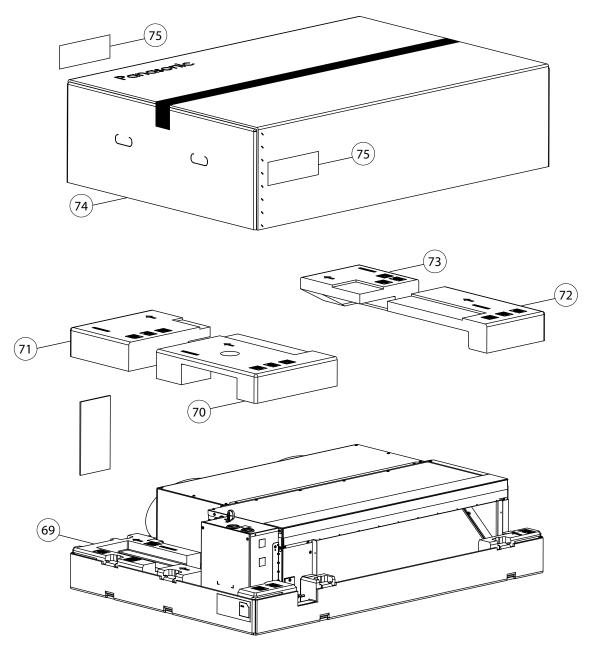


DTL 5



Note





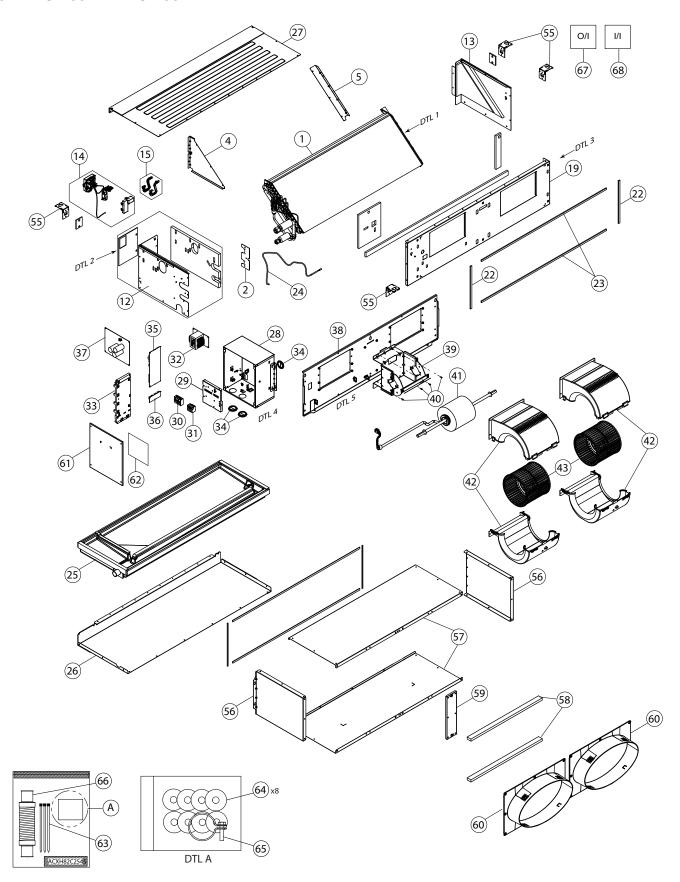
Note The above exploded view is for the purpose of parts disassembly and replacement. The non-numbered parts are not kept as standard service parts.

| SAFETY                  | REF. NO. | PART NAME & DESCRIPTION               | QTY. | S-60PE4R                     | S-71PE4R     | REMARK |
|-------------------------|----------|---------------------------------------|------|------------------------------|--------------|--------|
|                         | 1        | EVAPORATOR ASSY                       | 1    | ACXB30K02710                 | ACXB30K02650 | 0      |
|                         | 2        | EVAPORATOR COVER-COMPLETE             | 1    | ACXD11C00050                 | <b>←</b>     |        |
|                         | 3        | STRAINER                              | 1    | CWB111092                    | <b>←</b>     |        |
|                         | 4        | AIR REGULATING PLATE                  | 1    | ACXD21-00270                 | <b>←</b>     |        |
|                         | 5        | AIR REGULATING PLATE                  | 1    | ACXD21-00280                 | <b>←</b>     |        |
| $\triangle$             | 6        | SENSOR COMPLETE                       | 1    | ACXA50C22310                 | <b>←</b>     | 0      |
| $\overline{\mathbb{A}}$ | 7        | SENSOR COMPLETE                       | 1    | ACXA50C22320                 | <b>←</b>     | 0      |
|                         | 8        | PLATE SPRING (E1)                     | 1    | CWH711010                    | <b>←</b>     |        |
|                         | 9        | PLATE SPRING (E2)                     | 1    | CWH711013                    | <b>←</b>     |        |
|                         | 10       | UNION NUT                             | 1    | CWT251032                    | CWT251033    |        |
|                         | 11       | UNION NUT                             | 1    | CWT251030                    | CWT251031    |        |
|                         | 12       | CABINET SIDE PLATE                    | 1    | ACXE04-14740                 | <b>←</b>     |        |
|                         | 13       | CABINET SIDE PLATE-COMPLETE           | 1    | ACXE04C09510                 | <b>←</b>     |        |
| <u> </u>                | 14       | GENERATOR COMPLETE                    | 1    | ACXH94C01810                 | <b>←</b>     | 0      |
|                         | 15       | DUCT-COMPLETE                         | 1    | ACXD22C00610                 | <b>←</b>     |        |
|                         | 16       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44530                 | <b>←</b>     |        |
|                         | 17       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44540                 | <b>←</b>     |        |
|                         | 18       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08631                 | <b>←</b>     |        |
|                         | 19       | CABINET REAR PLATE-ASSY               | 1    | ACXE02K01120                 | <b>←</b>     |        |
|                         | 20       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44580                 | <b>←</b>     |        |
|                         | 21       | POLY-E.FOAM                           | 1    | ACXE10A30-1139               | <b>←</b>     |        |
|                         | 22       | EPT SEAL                              | 2    | ACXD5A10-295                 | <b>←</b>     |        |
|                         | 23       | EPT SEAL                              | 2    | ACXD5A10-1000                | <b>←</b>     |        |
| /i\                     | 24       | SENSOR-COMPLETE                       | 1    | ACXA50C22330                 | <b>←</b>     | 0      |
|                         | 25       | DRAIN PAN-COMPLETE                    | 1    | ACXH40C02330                 | <b>←</b>     |        |
|                         | 26       | CABINET BOTTOM PLATE-COMPLETE         | 1    | ACXE05C00820                 | <b>←</b>     |        |
|                         | 27       | CABINET TOP PLATE-COMPLETE            | 1    | ACXE03C02960                 | <b>←</b>     |        |
|                         | 28       | CONTROL BOARD ASSY                    | 1    | ACXH10K03670                 | <b>←</b>     |        |
|                         | 29       | CONTROL BOARD                         | 1    | ACXH10-11420                 | <b>←</b>     |        |
| $\triangle$             | 30       | TERMINAL BOARD ASSY (POWER SUPPLY)    | 1    | CWA28K1188                   | <b>←</b>     | 0      |
| $\triangle$             | 31       | TERMINAL BOARD                        | 1    | ACXA28-00140                 | <b>←</b>     | 0      |
| $\triangle$             | 32       | REACTOR                               | 1    | G0C193J00023                 | <b>←</b>     | 0      |
| $\triangle$             | 33       | PARTICULAR PIECE                      | 1    | ACXD93-29280                 | <b>←</b>     | 0      |
| 7.5                     | 34       | PACKING                               | 3    | ACXB81-00030                 | <b>←</b>     |        |
| $\triangle$             | 35       | ELECTRONIC CONTROLLER - MAIN          | 1    | ACXA74C22520                 | ACXA74C22530 | 0      |
| $\triangle$             | 36       | ELECTRONIC CONTROLLER - COMMUNICATION | 1    | ACXA73-47790                 | <b>←</b>     | 0      |
| <u> </u>                | 37       | ELECTRONIC CONTROLLER - FM POWER      | 1    | ACXA73-56150                 | <b>←</b>     | 0      |
| /:>                     | 38       | BULKHEAD                              | 1    | ACXD53-02190                 | <b>←</b>     |        |
|                         | 39       | FAN MOTOR BRACKET                     | 1    | ACXD54-05640                 | <b>←</b>     |        |
|                         | 40       | SCREW                                 | 4    | CWH55440J                    | <b>←</b>     |        |
| $\triangle$             | 41       | FAN MOTOR                             | 1    | L6CBYYYL0548                 | <b>←</b>     | 0      |
| <u> </u>                | 42       | AIR GUIDER B.W.ASSY                   | 2    | ACXD32K00510                 | <b>←</b>     |        |
|                         | 43       | BLOWER WHEEL ASSY                     | 2    | ACXH01K00750                 | <b>←</b>     |        |
|                         | 44       | SCREW                                 | 12   | CWH55440J                    | <u> </u>     |        |
| <u> </u>                | 45       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08960                 | <u> </u>     | 0      |
| <u> </u>                | 46       | LEAD WIRE-COMPLETE                    | 1    | ACXA60C32970                 | <u>`</u>     | 0      |
|                         | 47       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08970                 | <u>←</u>     | 0      |
|                         | 48       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08980                 | <u>←</u>     | 0      |
|                         | 49       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08980<br>ACXA61C08990 |              | 0      |
| <u> </u>                |          |                                       |      |                              | ←            |        |
| <u> </u>                | 50       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C09000                 | <b>←</b>     | 0      |

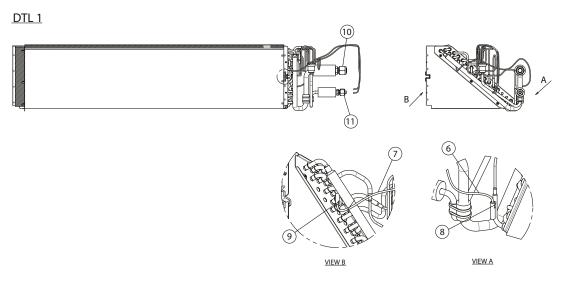
| SAFETY      | REF. NO. | PART NAME & DESCRIPTION  | QTY. | S-60PE4R      | S-71PE4R     | REMARK |
|-------------|----------|--------------------------|------|---------------|--------------|--------|
| <u> </u>    | 51       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09010  | <b>←</b>     | 0      |
| $\triangle$ | 52       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09020  | <b>←</b>     | 0      |
| $\triangle$ | 53       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09030  | <b>←</b>     | 0      |
| $\triangle$ | 54       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09041  | <b>←</b>     | 0      |
|             | 55       | PARTICULAR PLATE         | 4    | CWD912571     | <b>←</b>     |        |
|             | 56       | CABINET                  | 2    | ACXE00-00800  | <b>←</b>     |        |
|             | 57       | CABINET                  | 2    | ACXE00-00820  | <b>←</b>     |        |
|             | 58       | POLY-E.FOAM              | 2    | ACXE15A30-572 | <b>←</b>     |        |
|             | 59       | PARTICULAR PIECE         | 2    | ACXD93-29290  | ←            |        |
|             | 60       | DUCT                     | 1    | ACXD22-02680  | <b>←</b>     |        |
|             | 61       | CONTROL BOARD COVER      | 1    | ACXH13-10250  | ←            |        |
|             | 62       | WIRING DIAGRAM (CS)      | 1    | ACXF20-17550  | <b>←</b>     |        |
|             | 63       | BAND                     | 3    | ACXH88-00090  | <b>←</b>     |        |
|             | 64       | PLAIN WASHER             | 8    | XWH10J34FJ    | ←            |        |
|             | 65       | WIRE SPRING              | 1    | CWH722003     | ←            |        |
|             | 66       | FLEXIBLE PIPE            | 1    | CWH851032     | ←            |        |
|             | 67       | OPERATING INSTRUCTION    | 1    | ACXF55-41960  | ←            |        |
|             | 68       | INSTALLATION INSTRUCTION | 1    | ACXF60-59520  | <b>←</b>     |        |
|             | 69       | BASE BOARD-COMPLETE      | 1    | ACXG62C03360  | ←            |        |
|             | 70       | SHOCK ABSORBER           | 1    | ACXG70-17600  | <b>←</b>     |        |
|             | 71       | SHOCK ABSORBER           | 1    | ACXG70-17610  | ←            |        |
|             | 72       | SHOCK ABSORBER           | 1    | ACXG70-17620  | <b>←</b>     |        |
|             | 73       | SHOCK ABSORBER           | 1    | ACXG70-17630  | ←            |        |
|             | 74       | C.C.CASE                 | 1    | ACXG50-68541  | <b>←</b>     |        |
|             | 75       | MODEL LABEL              | 2    | ACXF87-52660  | ACXF87-52670 |        |

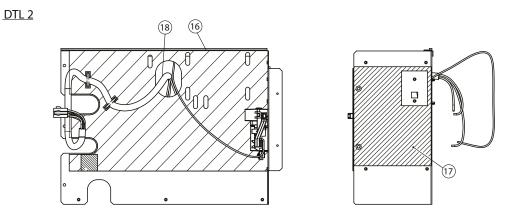
- (Note)All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488)."O" marked parts are recommended to be kept in stock.

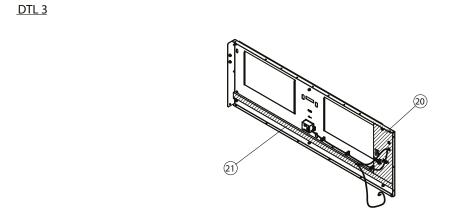
# 9-1-2. S-100PE4R S-100PE4RN



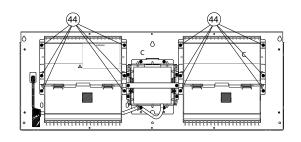
### Note

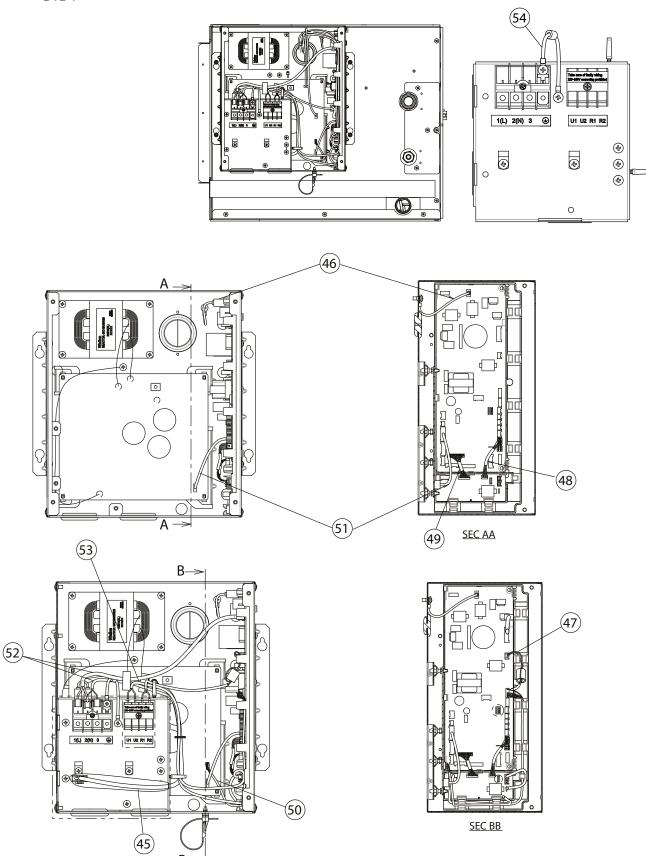




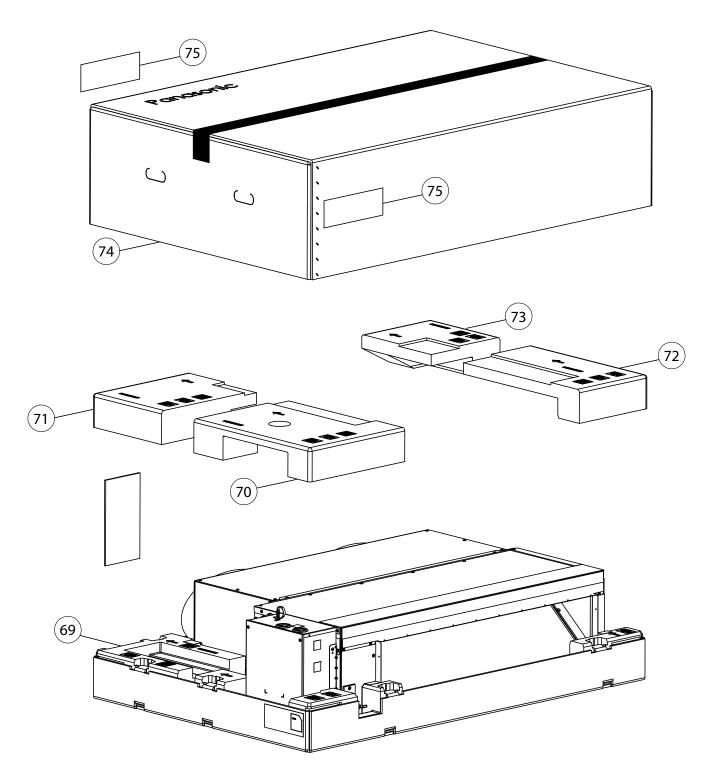


DTL 5





Note

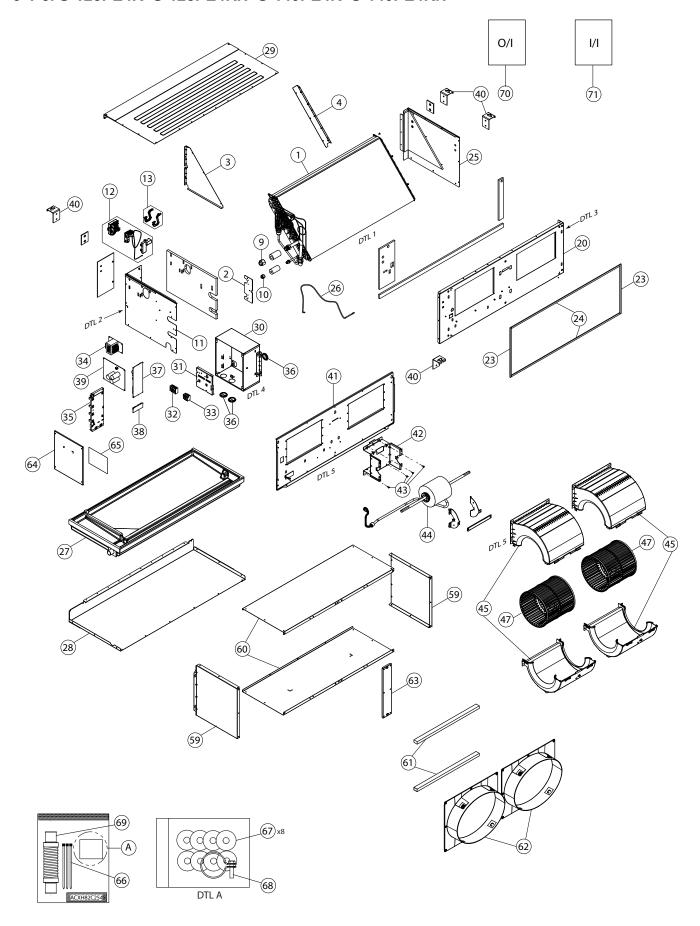


| SAFETY                    | REF. NO. | PART NAME & DESCRIPTION               | QTY. | S-100PE4R                    | S-100PE4RN          | REMARK |
|---------------------------|----------|---------------------------------------|------|------------------------------|---------------------|--------|
|                           | 1        | EVAPORATOR ASSY                       | 1    | ACXB30K02650                 | <b>←</b>            | 0      |
|                           | 2        | EVAPORATOR COVER-COMPLETE             | 1    | ACXD11C00050                 | ←                   |        |
|                           | 4        | AIR REGULATING PLATE                  | 1    | ACXD21-00270                 | <b>←</b>            |        |
|                           | 5        | AIR REGULATING PLATE                  | 1    | ACXD21-00280                 | ←                   |        |
| <u> </u>                  | 6        | SENSOR COMPLETE                       | 1    | ACXA50C22310                 | <b>←</b>            | 0      |
| $\triangle$               | 7        | SENSOR COMPLETE                       | 1    | ACXA50C22320                 | <b>←</b>            | 0      |
|                           | 8        | PLATE SPRING (E1)                     | 1    | CWH711010                    | <b>←</b>            |        |
|                           | 9        | PLATE SPRING (E2)                     | 1    | CWH711013                    | <b>←</b>            |        |
|                           | 10       | UNION NUT                             | 1    | CWT251033                    | <b>←</b>            |        |
|                           | 11       | UNION NUT                             | 1    | CWT251031                    | <b>←</b>            |        |
|                           | 12       | CABINET SIDE PLATE                    | 1    | ACXE04-14740                 | <b>←</b>            |        |
|                           | 13       | CABINET SIDE PLATE-COMPLETE           | 1    | ACXE04C09510                 | <b>←</b>            |        |
| $\triangle$               | 14       | GENERATOR COMPLETE                    | 1    | ACXH94C01810                 | -                   | 0      |
|                           | 15       | DUCT-COMPLETE                         | 1    | ACXD22C00610                 | -                   |        |
|                           | 16       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44530                 | <b>←</b>            |        |
|                           | 17       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44540                 | <b>←</b>            |        |
|                           | 18       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08631                 | <b>←</b>            |        |
|                           | 19       | CABINET REAR PLATE-ASSY               | 1    | ACXE02K01120                 | <b>←</b>            |        |
|                           | 20       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44580                 | <b>←</b>            |        |
|                           | 21       | POLY-E.FOAM                           | 1    | ACXE10A30-1139               | <b>←</b>            |        |
|                           | 22       | EPT SEAL                              | 2    | ACXD5A10-295                 | <b>←</b>            |        |
|                           | 23       | EPT SEAL                              | 2    | ACXD5A10-1000                | <b>←</b>            |        |
| $\triangle$               | 24       | SENSOR-COMPLETE                       | 1    | ACXA50C22330                 | ←                   | 0      |
| <u> </u>                  | 25       | DRAIN PAN-COMPLETE                    | 1    | ACXH40C02330                 | ←                   |        |
|                           | 26       | CABINET BOTTOM PLATE-COMPLETE         | 1    | ACXE05C00820                 | ←                   |        |
|                           | 27       | CABINET TOP PLATE-COMPLETE            | 1    | ACXE03C02960                 | ←                   |        |
|                           | 28       | CONTROL BOARD ASSY                    | 1    | ACXH10K03670                 | ←                   |        |
|                           | 29       | CONTROL BOARD                         | 1    | ACXH10-11420                 | ←                   |        |
| $\triangle$               | 30       | TERMINAL BOARD ASSY (POWER SUPPLY)    | 1    | CWA28K1188                   | ←                   | 0      |
| Α                         | 31       | TERMINAL BOARD                        | 1    | ACXA28-00140                 | <u>←</u>            | 0      |
| <u>/!\</u>                | 32       | REACTOR                               | 1    | G0C193J00023                 | ·<br>←              | 0      |
| $\frac{\Lambda}{\Lambda}$ | 33       | PARTICULAR PIECE                      | 1    | ACXD93-29280                 | <b>←</b>            | 0      |
| $\triangle$               | 34       | PACKING                               | 3    | ACXB81-00030                 |                     |        |
| <u> </u>                  | 35       | ELECTRONIC CONTROLLER - MAIN          |      | ACXB61-00030<br>ACXA74C22540 | ←<br>^^^^^74^^?2550 | 0      |
| <u> </u>                  |          |                                       | 1    |                              | ACXA74C22550        | -      |
| <u> </u>                  | 36       | ELECTRONIC CONTROLLER - COMMUNICATION | 1    | ACXA73-47790                 | ←                   | 0      |
| <u> </u>                  | 37       | ELECTRONIC CONTROLLER - FM POWER      | 1    | ACXA73-56150                 | <b>←</b>            | 0      |
|                           | 38       | BULKHEAD                              | 1    | ACXD53-02190                 | ←                   |        |
|                           | 39       | FAN MOTOR BRACKET                     | 1    | ACXD54-05640                 | <b>←</b>            |        |
| Α                         | 40       | SCREW                                 | 4    | CWH55440J                    | <b>←</b>            |        |
| <u> </u>                  | 41       | FAN MOTOR                             | 1    | L6CBYYYL0548                 | <b>←</b>            | 0      |
|                           | 42       | AIR GUIDER B.W.ASSY                   | 2    | ACXD32K00510                 | <b>←</b>            |        |
|                           | 43       | BLOWER WHEEL ASSY                     | 2    | ACXH01K00750                 | <b>←</b>            |        |
| ^                         | 44       | SCREW                                 | 12   | CWH55440J                    | <b>←</b>            | _      |
|                           | 45       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08960                 | <b>←</b>            | 0      |
| <u></u>                   | 46       | LEAD WIRE-COMPLETE                    | 1    | ACXA60C32970                 | <b>←</b>            | 0      |
| $\triangle$               | 47       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08970                 | <b>←</b>            | 0      |
| <u> </u>                  | 48       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08980                 | <b>←</b>            | 0      |
| $\triangle$               | 49       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08990                 | ←                   | 0      |
| $\triangle$               | 50       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C09000                 | ←                   | 0      |
| $\triangle$               | 51       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C09010                 | ←                   | 0      |
|                           |          |                                       |      |                              |                     |        |

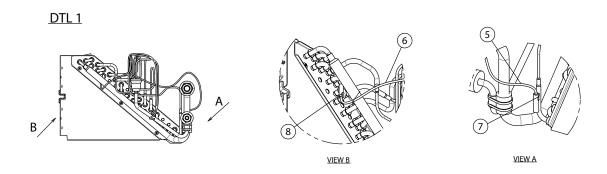
| SAFETY      | REF. NO. | PART NAME & DESCRIPTION  | QTY. | S-100PE4R     | S-100PE4RN   | REMARK |
|-------------|----------|--------------------------|------|---------------|--------------|--------|
| <u> </u>    | 52       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09020  | <b>←</b>     | 0      |
| $\triangle$ | 53       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09030  | <b>←</b>     | 0      |
| $\triangle$ | 54       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09041  | <b>←</b>     | 0      |
|             | 55       | PARTICULAR PLATE         | 4    | CWD912571     | ←            |        |
|             | 56       | CABINET                  | 2    | ACXE00-00800  | <b>←</b>     |        |
|             | 57       | CABINET                  | 2    | ACXE00-00820  | <b>←</b>     |        |
|             | 58       | POLY-E.FOAM              | 2    | ACXE15A30-572 | <b>←</b>     |        |
|             | 59       | PARTICULAR PIECE         | 1    | ACXD93-29260  | <b>←</b>     |        |
|             | 60       | DUCT                     | 2    | ACXD22-02680  | <b>←</b>     |        |
|             | 61       | CONTROL BOARD COVER      | 1    | ACXH13-10250  | <b>←</b>     |        |
|             | 62       | WIRING DIAGRAM (CS)      | 1    | ACXF20-17550  | ←            |        |
|             | 63       | BAND                     | 3    | ACXH88-00090  | ←            |        |
|             | 64       | PLAIN WASHER             | 8    | XWH10J34FJ    | ←            |        |
|             | 65       | WIRE SPRING              | 1    | CWH722003     | ←            |        |
|             | 66       | FLEXIBLE PIPE            | 1    | CWH851032     | ←            |        |
|             | 67       | OPERATING INSTRUCTION    | 1    | ACXF55-41960  | ←            |        |
|             | 68       | INSTALLATION INSTRUCTION | 1    | ACXF60-59520  | ←            |        |
|             | 69       | BASE BOARD-COMPLETE      | 1    | ACXG62C03360  | ←            |        |
|             | 70       | SHOCK ABSORBER           | 1    | ACXG70-17600  | <b>←</b>     |        |
|             | 71       | SHOCK ABSORBER           | 1    | ACXG70-17610  | ←            |        |
|             | 72       | SHOCK ABSORBER           | 1    | ACXG70-17620  | ←            |        |
|             | 73       | SHOCK ABSORBER           | 1    | ACXG70-17630  | ←            |        |
|             | 74       | C.C.CASE                 | 1    | ACXG50-68541  | ←            |        |
|             | 75       | MODEL LABEL              | 2    | ACXF87-52680  | ACXF87-52690 |        |

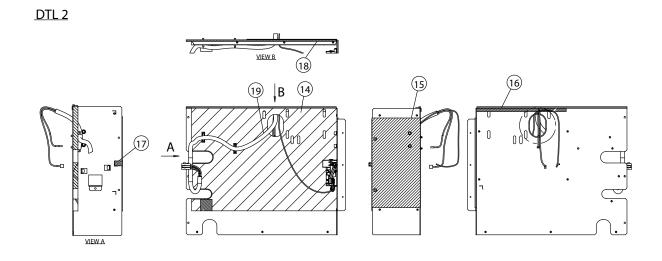
- (Note)
  All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488).
  "O" marked parts are recommended to be kept in stock.

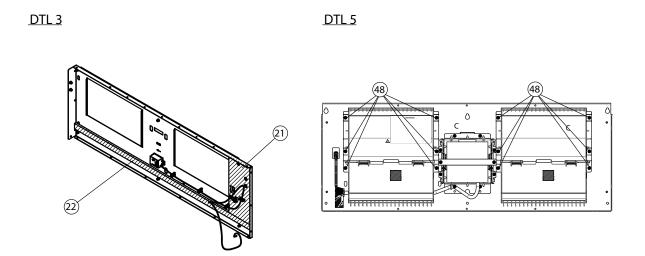
# 9-1-3. S-125PE4R S-125PE4RN S-140PE4R S-140PE4RN



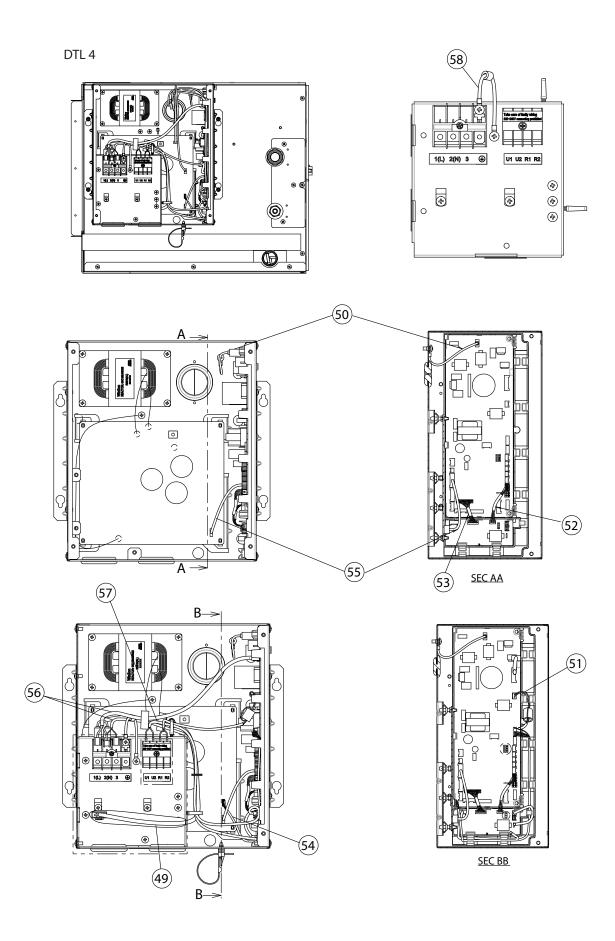
Note

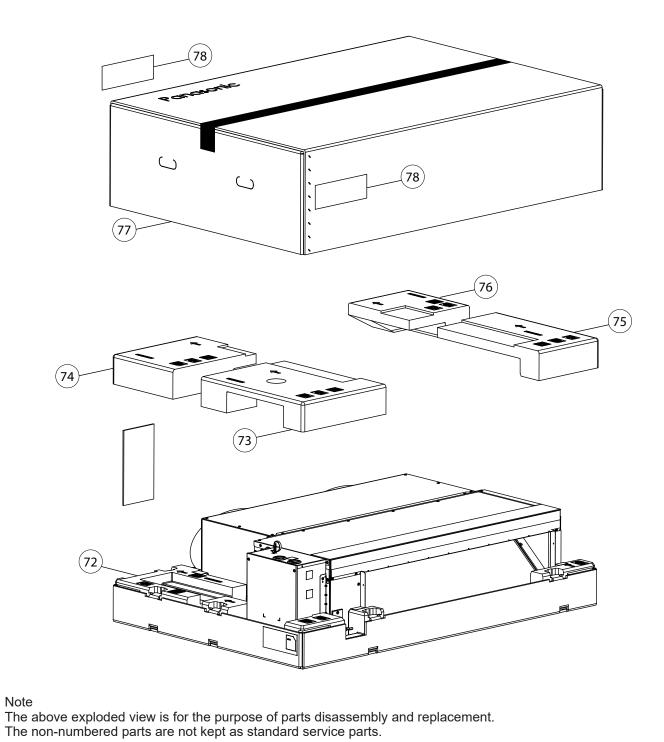






Note The above exploded view is for the purpose of parts disassembly and replacement. The non-numbered parts are not kept as standard service parts.





| SAFETY                    | REF. NO. | PART NAME & DESCRIPTION               | QTY. | S-125PE4R                     | S-125PE4RN   | REMARK |
|---------------------------|----------|---------------------------------------|------|-------------------------------|--------------|--------|
|                           | 1        | EVAPORATOR ASSY                       | 1    | ACXB30K02720                  | <b>←</b>     | 0      |
|                           | 2        | EVAPORATOR COVER-COMPLETE             | 1    | ACXD11C00060                  | <b>←</b>     |        |
|                           | 3        | AIR REGULATING PLATE                  | 1    | ACXD21-00290                  | <b>←</b>     |        |
|                           | 4        | AIR REGULATING PLATE                  | 1    | ACXD21-00300                  | <b>←</b>     |        |
| <u> </u>                  | 5        | SENSOR COMPLETE                       | 1    | ACXA50C22310                  | <b>←</b>     | 0      |
| $\overline{\wedge}$       | 6        | SENSOR COMPLETE                       | 1    | ACXA50C22320                  | <b>←</b>     | 0      |
|                           | 7        | PLATE SPRING (E1)                     | 1    | CWH711010                     | <b>←</b>     |        |
|                           | 8        | PLATE SPRING (E2)                     | 1    | CWH711013                     | <b>←</b>     |        |
|                           | 9        | UNION NUT                             | 1    | CWT251033                     | <b>←</b>     |        |
|                           | 10       | UNION NUT                             | 1    | CWT251031                     | <b>←</b>     |        |
|                           | 11       | CABINET SIDE PLATE ASSY               | 1    | ACXE04K03770                  | <b>←</b>     |        |
| $\triangle$               | 12       | GENERATOR COMPLETE                    | 1    | ACXH94C01810                  | -            | 0      |
|                           | 13       | DUCT-COMPLETE                         | 1    | ACXD22C00610                  | _            |        |
|                           | 14       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44650                  | <b>←</b>     |        |
|                           | 15       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44670                  | <b>←</b>     |        |
|                           | 16       | POLY-E.FOAM                           | 1    | ACXE2A10-280                  | <b>←</b>     |        |
|                           | 17       | POLY-E.FOAM                           | 1    | -                             | ACXE15A15-25 |        |
|                           | 18       | EPT SEAL                              | 1    | ACXD3A5-469                   | <i>←</i>     |        |
|                           | 19       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08631                  | <u>`</u>     | 0      |
|                           | 20       | CABINET REAR PLATE-ASSY               | 1    | ACXE02K01140                  | <u>`</u>     |        |
|                           | 21       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44700                  | <u>←</u>     |        |
|                           | 22       | POLY-E.FOAM                           | 1    | ACXE10A30-1139                | <u> </u>     |        |
|                           | 23       | EPT SEAL                              | 2    | ACXD5A10-394                  |              |        |
|                           | 23       | EPT SEAL                              | 2    | ACXD5A10-394<br>ACXD5A10-1000 | <b>←</b>     |        |
|                           | +        |                                       |      |                               | ←            |        |
| <u> </u>                  | 25       | CABINET SIDE PLATE-COMPLETE           | 1    | ACXE04C09530                  | <b>←</b>     |        |
| <u> </u>                  | 26       | SENSOR-COMPLETE                       | 1    | ACXA50C22330                  | <b>←</b>     | 0      |
|                           | 27       | DRAIN PAN-COMPLETE                    | 1    | ACXH40C02340                  | <b>←</b>     |        |
|                           | 28       | CABINET FOR PLATE COMPLETE            | 1    | ACXE05C00830                  | <b>←</b>     |        |
|                           | 29       | CABINET TOP PLATE-COMPLETE            | 1    | ACXE03C02970                  | <b>←</b>     |        |
|                           | 30       | CONTROL BOARD ASSY                    | 1    | ACXH10K03670                  | <b>←</b>     |        |
| ^                         | 31       | CONTROL BOARD                         | 1    | ACXH10-11420                  | <u>←</u>     |        |
|                           | 32       | TERMINAL BOARD ASSY (POWER SUPPLY)    | 1    | CWA28K1188                    | <b>←</b>     | 0      |
| <u> </u>                  | 33       | TERMINAL BOARD                        | 1    | ACXA28-00140                  | <b>←</b>     | 0      |
| <u> </u>                  | 34       | REACTOR                               | 1    | G0C193J00023                  | <b>←</b>     | 0      |
| <u> </u>                  | 35       | PARTICULAR PIECE                      | 1    | ACXD93-29280                  | <b>←</b>     | 0      |
|                           | 36       | PACKING                               | 3    | ACXB81-00030                  | <b>←</b>     |        |
| $\triangle$               | 37       | ELECTRONIC CONTROLLER - MAIN          | 1    | ACXA74C22560                  | ACXA74C22570 | 0      |
| $\triangle$               | 38       | ELECTRONIC CONTROLLER - COMMUNICATION | 1    | ACXA73-47790                  | <b>←</b>     | 0      |
| <u> </u>                  | 39       | ELECTRONIC CONTROLLER - FM POWER      | 1    | ACXA73-56150                  | <b>←</b>     | 0      |
|                           | 40       | INSTALLING HOLDER                     | 4    | ACXH36-00580                  | <b>←</b>     |        |
|                           | 41       | BULKHEAD                              | 1    | ACXD53-02200                  | <b>←</b>     |        |
|                           | 42       | FAN MOTOR BRACKET                     | 1    | ACXD54-05640                  | <b>←</b>     |        |
|                           | 43       | SCREW                                 | 4    | CWH55440J                     | <b>←</b>     |        |
| $\triangle$               | 44       | FAN MOTOR                             | 1    | L6CBYYYL0548                  | <b>←</b>     | 0      |
|                           | 45       | AIR GUIDER B.W.ASSY                   | 2    | ACXD32K00520                  | <b>←</b>     |        |
|                           | 47       | BLOWER WHEEL ASSY                     | 1    | ACXH01K00760                  | <b>←</b>     |        |
|                           | 48       | SCREW                                 | 12   | CWH55440J                     | <b>←</b>     |        |
|                           | 49       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08960                  | <u> </u>     | 0      |
| Λ                         | 45       |                                       | i .  |                               | •            | , ,    |
| $\frac{\Lambda}{\Lambda}$ | 50       | LEAD WIRE-COMPLETE                    | 1    | ACXA60C32970                  | <b>←</b>     | 0      |

| SAFETY               | REF. NO. | PART NAME & DESCRIPTION  | QTY. | S-125PE4R     | S-125PE4RN   | REMARK |
|----------------------|----------|--------------------------|------|---------------|--------------|--------|
| $\triangle$          | 52       | LEAD WIRE-COMPLETE       | 1    | ACXA61C08980  | <b>←</b>     | 0      |
| $\triangle$          | 53       | LEAD WIRE-COMPLETE       | 1    | ACXA61C08990  | <b>←</b>     | 0      |
| $\triangle$          | 54       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09000  | <b>←</b>     | 0      |
| $\triangle$          | 55       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09010  | <b>←</b>     | 0      |
| <u> </u>             | 56       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09020  | <b>←</b>     | 0      |
| $\overline{\Lambda}$ | 57       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09030  | <b>←</b>     | 0      |
| $\overline{\Lambda}$ | 58       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09041  | <b>←</b>     | 0      |
|                      | 59       | CABINET                  | 2    | ACXE00-00810  | <b>←</b>     |        |
|                      | 60       | CABINET                  | 2    | ACXE00-00820  | <b>←</b>     |        |
|                      | 61       | POLY-E.FOAM              | 2    | ACXE20A30-572 | <b>←</b>     |        |
|                      | 62       | DUCT                     | 2    | ACXD22-02690  | <b>←</b>     |        |
|                      | 63       | PARTICULAR PIECE         | 1    | ACXD93-29270  | <b>←</b>     |        |
|                      | 64       | CONTROL BOARD COVER      | 1    | ACXH13-10250  | <b>←</b>     |        |
|                      | 65       | WIRING DIAGRAM (CS)      | 1    | ACXF20-17550  | ACXF20-17830 |        |
|                      | 66       | BAND                     | 3    | ACXH88-00090  | ←            |        |
|                      | 67       | PLAIN WASHER             | 8    | XWH10J34FJ    | ←            |        |
|                      | 68       | WIRE SPRING              | 1    | CWH722003     | ←            |        |
|                      | 69       | FLEXIBLE PIPE            | 1    | CWH851032     | ←            |        |
|                      | 70       | OPERATING INSTRUCTION    | 1    | ACXF55-41960  | ←            |        |
|                      | 71       | INSTALLATION INSTRUCTION | 1    | ACXF60-59520  | ←            |        |
|                      | 72       | BASE BOARD-COMPLETE      | 1    | ACXG62C03370  | ←            |        |
|                      | 73       | SHOCK ABSORBER           | 1    | ACXG70-17600  | ←            |        |
|                      | 74       | SHOCK ABSORBER           | 1    | ACXG70-17610  | <b>←</b>     |        |
|                      | 75       | SHOCK ABSORBER           | 1    | ACXG70-17620  | <b>←</b>     |        |
|                      | 76       | SHOCK ABSORBER           | 1    | ACXG70-17630  | <b>←</b>     |        |
|                      | 77       | C.C.CASE                 | 1    | ACXG50-68551  | <b>←</b>     |        |
|                      | 78       | MODEL LABEL              | 2    | ACXF87-52700  | ACXF87-52710 |        |

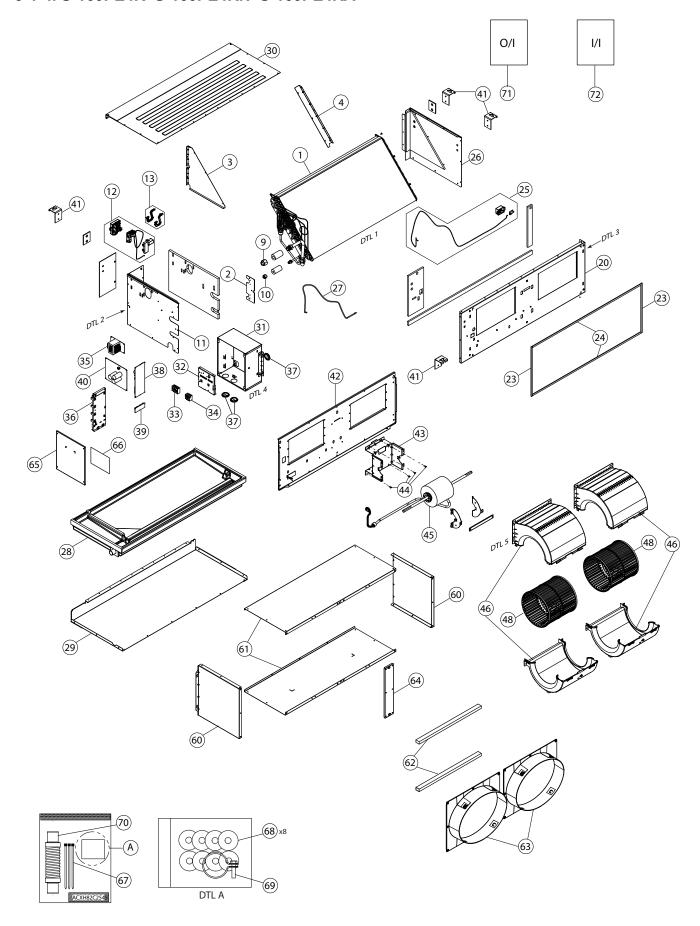
(Note)
All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488).
"O" marked parts are recommended to be kept in stock.

| SAFETY      | REF. NO. | PART NAME & DESCRIPTION               | QTY. | S-140PE4R      | S-140PE4RN   | REMARK |
|-------------|----------|---------------------------------------|------|----------------|--------------|--------|
|             | 1        | EVAPORATOR ASSY                       | 1    | ACXB30K02720   | <b>←</b>     | 0      |
|             | 2        | EVAPORATOR COVER-COMPLETE             | 1    | ACXD11C00060   | <b>←</b>     |        |
|             | 3        | AIR REGULATING PLATE                  | 1    | ACXD21-00290   | <b>←</b>     |        |
|             | 4        | AIR REGULATING PLATE                  | 1    | ACXD21-00300   | <b>←</b>     |        |
| $\triangle$ | 5        | SENSOR COMPLETE                       | 1    | ACXA50C22310   | <b>←</b>     | 0      |
| $\triangle$ | 6        | SENSOR COMPLETE                       | 1    | ACXA50C22320   | <b>←</b>     | 0      |
|             | 7        | PLATE SPRING (E1)                     | 1    | CWH711010      | <b>←</b>     |        |
|             | 8        | PLATE SPRING (E2)                     | 1    | CWH711013      | <b>←</b>     |        |
|             | 9        | UNION NUT                             | 1    | CWT251033      | <b>←</b>     |        |
|             | 10       | UNION NUT                             | 1    | CWT251031      | <b>←</b>     |        |
|             | 11       | CABINET SIDE PLATE ASSY               | 1    | ACXE04K03770   | <b>←</b>     |        |
| <u> </u>    | 12       | GENERATOR COMPLETE                    | 1    | ACXH94C01810   | -            | 0      |
|             | 13       | DUCT-COMPLETE                         | 1    | ACXD22C00610   | -            |        |
|             | 14       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44650   | <b>←</b>     |        |
|             | 15       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44670   | <b>←</b>     |        |
|             | 16       | POLY-E.FOAM                           | 1    | ACXE2A10-280   | <b>←</b>     |        |
|             | 17       | POLY-E.FOAM                           | 1    | -              | ACXE15A15-25 |        |
|             | 18       | EPT SEAL                              | 1    | ACXD3A5-469    | <b>←</b>     |        |
|             | 19       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08631   | <b>←</b>     | 0      |
|             | 20       | CABINET REAR PLATE-ASSY               | 1    | ACXE02K01140   | <b>←</b>     |        |
|             | 21       | ADH. POLY-E. FOAM                     | 1    | ACXG12-44700   | <b>←</b>     |        |
|             | 22       | POLY-E.FOAM                           | 1    | ACXE10A30-1139 | <b>←</b>     |        |
|             | 23       | EPT SEAL                              | 2    | ACXD5A10-394   | <b>←</b>     |        |
|             | 24       | EPT SEAL                              | 2    | ACXD5A10-1000  | <b>←</b>     |        |
|             | 25       | CABINET SIDE PLATE-COMPLETE           | 1    | ACXE04C09530   | <b>←</b>     |        |
| Â           | 26       | SENSOR-COMPLETE                       | 1    | ACXA50C22330   | <b>←</b>     | 0      |
|             | 27       | DRAIN PAN-COMPLETE                    | 1    | ACXH40C02340   | <b>←</b>     |        |
|             | 28       | CABINET BOTTOM PLATE-COMPLETE         | 1    | ACXE05C00830   | <b>←</b>     |        |
|             | 29       | CABINET TOP PLATE-COMPLETE            | 1    | ACXE03C02970   | <b>←</b>     |        |
|             | 30       | CONTROL BOARD ASSY                    | 1    | ACXH10K03670   | <b>←</b>     |        |
|             | 31       | CONTROL BOARD                         | 1    | ACXH10-11420   | <b>←</b>     |        |
| <u> </u>    | 32       | TERMINAL BOARD ASSY (POWER SUPPLY)    | 1    | CWA28K1188     | <b>←</b>     | 0      |
| Â           | 33       | TERMINAL BOARD                        | 1    | ACXA28-00140   | <b>←</b>     | 0      |
| $\triangle$ | 34       | REACTOR                               | 1    | G0C193J00023   | <b>←</b>     | 0      |
| $\triangle$ | 35       | PARTICULAR PIECE                      | 1    | ACXD93-29280   | <b>←</b>     | 0      |
| <u> </u>    | 36       | PACKING                               | 3    | ACXB81-00030   | <b>←</b>     |        |
| <u> </u>    | 37       | ELECTRONIC CONTROLLER - MAIN          | 1    | ACXA74C22580   | ACXA74C22590 | 0      |
| <u> </u>    | 38       | ELECTRONIC CONTROLLER - COMMUNICATION | 1    | ACXA73-47790   | <b>←</b>     | 0      |
| <u> </u>    | 39       | ELECTRONIC CONTROLLER - FM POWER      | 1    | ACXA73-56150   | ←            | 0      |
| <b></b>     | 40       | INSTALLING HOLDER                     | 4    | ACXH36-00580   | · ←          | -      |
|             | 41       | BULKHEAD                              | 1    | ACXD53-02200   | <u>`</u>     |        |
|             | 42       | FAN MOTOR BRACKET                     | 1    | ACXD54-05640   | <u>`</u>     |        |
|             | 43       | SCREW                                 | 4    | CWH55440J      | ·<br>←       |        |
| <u> </u>    | 44       | FAN MOTOR                             | 1    | L6CBYYYL0549   | <u>`</u>     | 0      |
| <u> </u>    | 45       | AIR GUIDER B.W.ASSY                   | 2    | ACXD32K00520   | <u>`</u>     |        |
|             | 47       | BLOWER WHEEL ASSY                     | 1    | ACXH01K00760   | <b>←</b>     |        |
|             | 48       | SCREW                                 | 12   | CWH55440J      | <u>←</u>     |        |
| $\wedge$    | 49       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08960   | <u>←</u>     | 0      |
| <u> </u>    | 50       | LEAD WIRE-COMPLETE                    | 1    | ACXA60C32970   | <b>←</b>     | 0      |
| <u> </u>    |          |                                       |      |                |              |        |
| <u></u>     | 51       | LEAD WIRE-COMPLETE                    | 1    | ACXA61C08970   | <b>←</b>     | 0      |

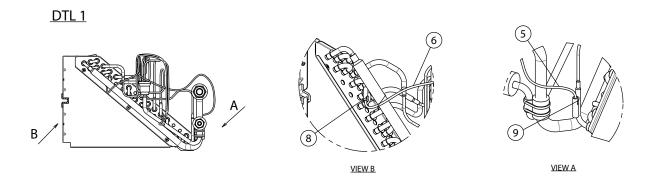
| SAFETY                  | REF. NO. | PART NAME & DESCRIPTION  | QTY. | S-140PE4R     | S-140PE4RN   | REMARK |
|-------------------------|----------|--------------------------|------|---------------|--------------|--------|
| $\triangle$             | 52       | LEAD WIRE-COMPLETE       | 1    | ACXA61C08980  | <b>←</b>     | 0      |
| $\triangle$             | 53       | LEAD WIRE-COMPLETE       | 1    | ACXA61C08990  | <b>←</b>     | 0      |
| $\triangle$             | 54       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09000  | <b>←</b>     | 0      |
| $\overline{\Lambda}$    | 55       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09010  | <b>←</b>     | 0      |
| $\overline{\mathbb{A}}$ | 56       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09020  | <b>←</b>     | 0      |
| $\triangle$             | 57       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09030  | <b>←</b>     | 0      |
| $\triangle$             | 58       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09041  | <b>←</b>     | 0      |
|                         | 59       | CABINET                  | 2    | ACXE00-00810  | <b>←</b>     |        |
|                         | 60       | CABINET                  | 2    | ACXE00-00820  | <b>←</b>     |        |
|                         | 61       | POLY-E.FOAM              | 2    | ACXE20A30-572 | <b>←</b>     |        |
|                         | 62       | DUCT                     | 2    | ACXD22-02690  | <b>←</b>     |        |
|                         | 63       | PARTICULAR PIECE         | 1    | ACXD93-29270  | <b>←</b>     |        |
|                         | 64       | CONTROL BOARD COVER      | 1    | ACXH13-10250  | <b>←</b>     |        |
|                         | 65       | WIRING DIAGRAM (CS)      | 1    | ACXF20-17550  | ACXF20-17830 |        |
|                         | 66       | BAND                     | 3    | ACXH88-00090  | ←            |        |
|                         | 67       | PLAIN WASHER             | 8    | XWH10J34FJ    | <b>←</b>     |        |
|                         | 68       | WIRE SPRING              | 1    | CWH722003     | ←            |        |
|                         | 69       | FLEXIBLE PIPE            | 1    | CWH851032     | ←            |        |
|                         | 70       | OPERATING INSTRUCTION    | 1    | ACXF55-41960  | <b>←</b>     |        |
|                         | 71       | INSTALLATION INSTRUCTION | 1    | ACXF60-59520  | ←            |        |
|                         | 72       | BASE BOARD-COMPLETE      | 1    | ACXG62C03370  | ←            |        |
|                         | 73       | SHOCK ABSORBER           | 1    | ACXG70-17600  | ←            |        |
|                         | 74       | SHOCK ABSORBER           | 1    | ACXG70-17610  | ←            |        |
|                         | 75       | SHOCK ABSORBER           | 1    | ACXG70-17620  | <b>←</b>     |        |
|                         | 76       | SHOCK ABSORBER           | 1    | ACXG70-17630  | <b>←</b>     |        |
|                         | 77       | C.C.CASE                 | 1    | ACXG50-68551  | ←            |        |
|                         | 78       | MODEL LABEL              | 2    | ACXF87-52720  | ACXF87-52730 |        |

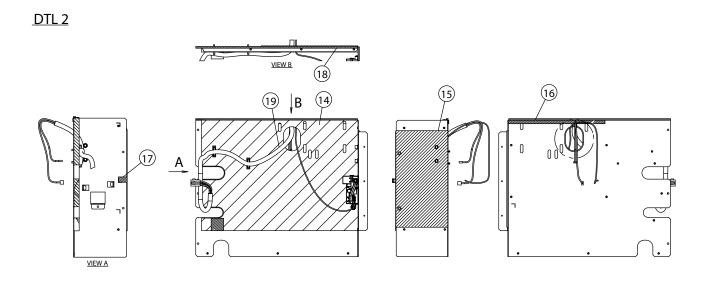
(Note)
All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488).
"O" marked parts are recommended to be kept in stock.

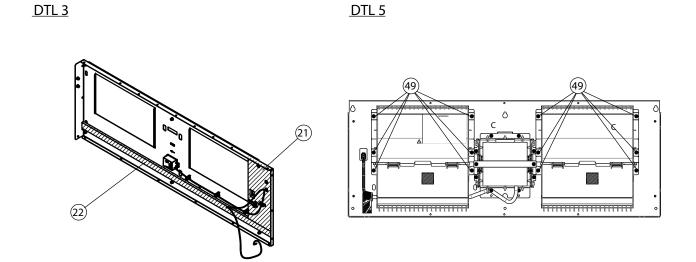
# 9-1-4. S-160PE4R S-160PE4RN S-160PE4RA



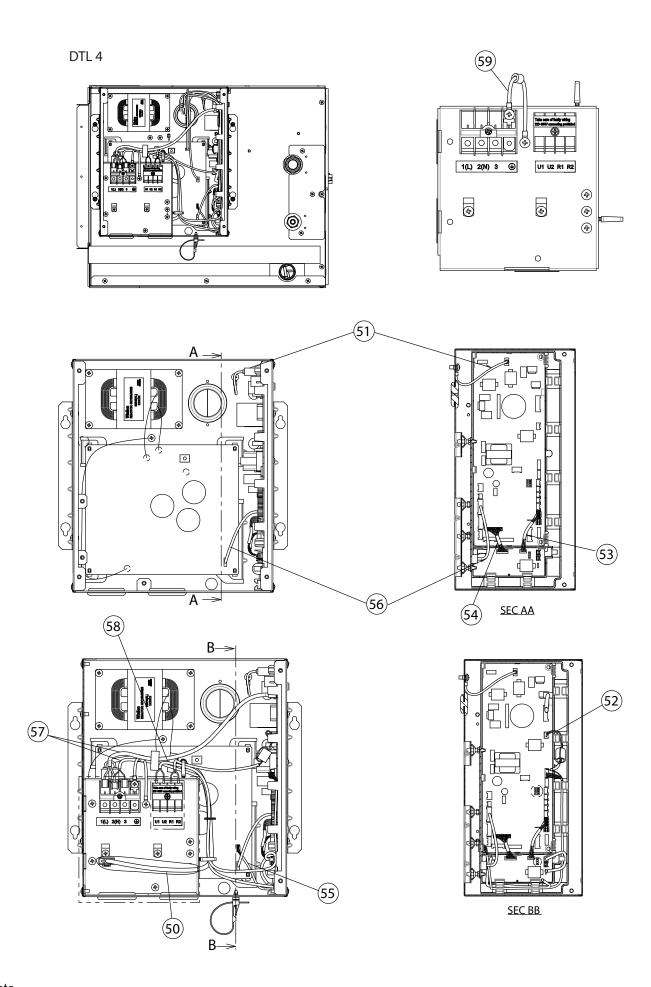
Note



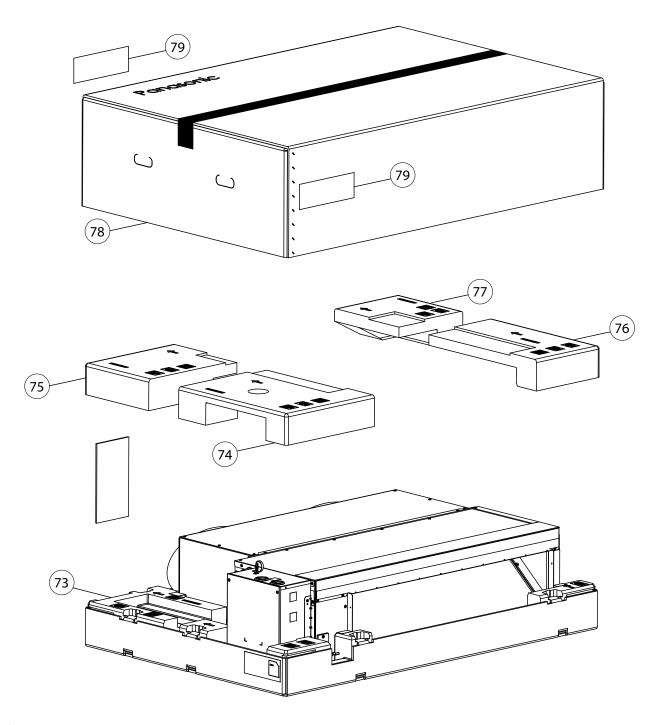




Note The above exploded view is for the purpose of parts disassembly and replacement. The non-numbered parts are not kept as standard service parts.



Note



Note

| SAFETY                 | REF. NO. | PART NAME & DESCRIPTION                  | QTY. | S-160PE4R      | S-160PE4RN   | S-160PE4RA        | REMARK |
|------------------------|----------|--|------|----------------|--------------|-------------------|--------|
|                        | 1        | EVAPORATOR ASSY                          | 1    | ACXB30K02670   | <b>←</b>     | <b>←</b>          | 0      |
|                        | 2        | EVAPORATOR COVER-<br>COMPLETE            | 1    | ACXD11C00060   | <b>←</b>     | <b>←</b>          |        |
|                        | 3        | AIR REGULATING PLATE                     | 1    | ACXD21-00290   | <b>←</b>     | <b>←</b>          |        |
|                        | 4        | AIR REGULATING PLATE                     | 1    | ACXD21-00300   | <b>←</b>     | <b>←</b>          |        |
| <u> </u>               | 5        | SENSOR COMPLETE                          | 1    | ACXA50C22310   | <b>←</b>     | <b>←</b>          | 0      |
| $\triangle$            | 6        | SENSOR COMPLETE                          | 1    | ACXA50C22320   | <b>←</b>     | <b>←</b>          | 0      |
|                        | 7        | PLATE SPRING (E1)                        | 1    | CWH711010      | ←            | <b>←</b>          |        |
|                        | 8        | PLATE SPRING (E2)                        | 1    | CWH711013      | ←            | <b>←</b>          |        |
|                        | 9        | UNION NUT                                | 1    | CWT251037      | ←            | <b>←</b>          |        |
|                        | 10       | UNION NUT                                | 1    | CWT251031      | <b>←</b>     | <b>←</b>          |        |
|                        | 11       | CABINET SIDE PLATE ASSY                  | 1    | ACXE04K03770   | ←            | <b>←</b>          |        |
| $\triangle$            | 12       | GENERATOR COMPLETE                       | 1    | ACXH94C01810   | -            | ACXH94C01810      | 0      |
| <u> </u>               | 13       | DUCT-COMPLETE                            | 1    | ACXD22C00610   | -            | ACXD22C00610      |        |
|                        | 14       | ADH. POLY-E. FOAM                        | 1    | ACXG12-44650   | ←            | ←                 |        |
|                        | 15       | ADH. POLY-E. FOAM                        | 1    | ACXG12-44670   | <b>←</b>     | <b>←</b>          |        |
|                        | 16       | POLY-E.FOAM                              | 1    | ACXE2A10-280   | <u>←</u>     | <b>←</b>          |        |
|                        | 17       | POLY-E.FOAM                              | 1    | -              | ACXE15A15-25 | _                 |        |
|                        | 18       | EPT SEAL                                 | 1    | ACXD3A5-469    | ←            | <b>←</b>          |        |
|                        | 19       | LEAD WIRE-COMPLETE                       | 1    | ACXA61C08631   | <u>`</u>     | <u>`</u>          |        |
|                        | 20       | CABINET REAR PLATE-ASSY                  | 1    | ACXE02K01140   | <b>←</b>     | ACXE02K01130      |        |
|                        | 21       | ADH. POLY-E. FOAM                        | 1    | ACXG12-44700   | <b>←</b>     | ← ←               |        |
|                        | 22       | POLY-E.FOAM                              | 1    | ACXE10A30-1139 | <b>←</b>     | <b>←</b>          |        |
|                        | 23       | EPT SEAL                                 | 2    | ACXD5A10-394   |              |                   |        |
|                        | 23       | EPT SEAL                                 | 2    |                | ←            | ←                 |        |
|                        | +        | SENSOR-COMPLETE                          |      | ACXD5A10-1000  | ←            | ←<br>ACVAE0C22470 |        |
|                        | 25       | CABINET SIDE PLATE-                      | 1    | -              | -            | ACXA50C22470      |        |
|                        | 26       | COMPLETE                                 | 1    | ACXE04C09530   | ←            | <b>←</b>          |        |
| $\triangle$            | 27       | SENSOR-COMPLETE                          | 1    | ACXA50C22330   | ←            | <b>←</b>          | 0      |
|                        | 28       | DRAIN PAN-COMPLETE                       | 1    | ACXH40C02340   | ←            | <b>←</b>          |        |
|                        | 29       | CABINET BOTTOM PLATE-<br>COMPLETE        | 1    | ACXE05C00830   | <b>←</b>     | <b>←</b>          |        |
|                        | 30       | CABINET TOP PLATE-COMPLETE               | 1    | ACXE03C02970   | ←            | <b>←</b>          |        |
|                        | 31       | CONTROL BOARD ASSY                       | 1    | ACXH10K03670   | <b>←</b>     | <b>←</b>          |        |
|                        | 32       | CONTROL BOARD                            | 1    | ACXH10-11420   | <b>←</b>     | <b>←</b>          |        |
| $\triangle$            | 33       | TERMINAL BOARD ASSY (POWER SUPPLY)       | 1    | CWA28K1188     | <b>←</b>     | <b>←</b>          | 0      |
| $\triangle$            | 34       | TERMINAL BOARD                           | 1    | ACXA28-00140   | <b>←</b>     | <b>←</b>          | 0      |
| $\triangle$            | 35       | REACTOR                                  | 1    | G0C193J00023   | <b>←</b>     | <b>←</b>          | 0      |
| $\overline{\triangle}$ | 36       | PARTICULAR PIECE                         | 1    | ACXD93-29280   | <b>←</b>     | <b>←</b>          | 0      |
|                        | 37       | PACKING                                  | 3    | ACXB81-00030   | <b>←</b>     | <b>←</b>          |        |
| Λ.                     | 38       | ELECTRONIC CONTROLLER -                  | 1    | ACXA74C22600   | ACXA74C22610 | ACXA74C22620      | 0      |
| <u> </u>               | 30       | MAIN                                     | '    | ACAA74C22000   | ACAA74C22010 | ACAA74C22020      | U      |
| $\triangle$            | 39       | ELECTRONIC CONTROLLER -<br>COMMUNICATION | 1    | ACXA73-47790   | <b>←</b>     | <b>←</b>          | 0      |
| $\triangle$            | 40       | ELECTRONIC CONTROLLER -<br>FM POWER      | 1    | ACXA73-56150   | <b>←</b>     | <b>←</b>          | 0      |
|                        | 41       | INSTALLING HOLDER                        | 4    | ACXH36-00580   | <b>←</b>     | <b>←</b>          |        |
|                        | 42       | BULKHEAD                                 | 1    | ACXD53-02200   | <b>←</b>     | <b>←</b>          |        |
|                        | 43       | FAN MOTOR BRACKET                        | 1    | ACXD54-05640   | <b>←</b>     | <b>←</b>          |        |
|                        | 44       | SCREW                                    | 4    | CWH55440J      | <b>←</b>     | <b>←</b>          |        |
| $\triangle$            | 45       | FAN MOTOR                                | 1    | L6CBYYYL0549   | <b>←</b>     | <b>←</b>          | 0      |
|                        | 46       | AIR GUIDER B.W.ASSY                      | 2    | ACXD32K00520   | <b>←</b>     | <b>←</b>          |        |

| SAFETY                  | REF. NO. | PART NAME & DESCRIPTION  | QTY. | S-160PE4R     | S-160PE4RN   | S-160PE4RA   | REMARK |
|-------------------------|----------|--------------------------|------|---------------|--------------|--------------|--------|
|                         | 48       | BLOWER WHEEL ASSY        | 1    | ACXH01K00760  | <b>←</b>     | ←            |        |
|                         | 49       | SCREW                    | 12   | CWH55440J     | <b>←</b>     | <b>←</b>     |        |
| $\triangle$             | 50       | LEAD WIRE-COMPLETE       | 1    | ACXA61C08960  | <b>←</b>     | ←            | 0      |
| <u> </u>                | 51       | LEAD WIRE-COMPLETE       | 1    | ACXA60C32970  | <b>←</b>     | ←            | 0      |
| $\overline{\mathbb{A}}$ | 52       | LEAD WIRE-COMPLETE       | 1    | ACXA61C08970  | <b>←</b>     | ←            | 0      |
| $\overline{\mathbb{A}}$ | 53       | LEAD WIRE-COMPLETE       | 1    | ACXA61C08980  | <b>←</b>     | ←            | 0      |
| $\triangle$             | 54       | LEAD WIRE-COMPLETE       | 1    | ACXA61C08990  | <b>←</b>     | <b>←</b>     | 0      |
| $\triangle$             | 55       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09000  | <b>←</b>     | <b>←</b>     | 0      |
| $\triangle$             | 56       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09010  | <b>←</b>     | <b>←</b>     | 0      |
| $\triangle$             | 57       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09020  | <b>←</b>     | <b>←</b>     | 0      |
| $\triangle$             | 58       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09030  | <b>←</b>     | ←            | 0      |
| $\overline{\mathbb{A}}$ | 59       | LEAD WIRE-COMPLETE       | 1    | ACXA61C09041  | <b>←</b>     | <b>←</b>     | 0      |
|                         | 60       | CABINET                  | 2    | ACXE00-00810  | <b>←</b>     | ←            |        |
|                         | 61       | CABINET                  | 2    | ACXE00-00820  | <b>←</b>     | ←            |        |
|                         | 62       | POLY-E.FOAM              | 2    | ACXE20A30-572 | <b>←</b>     | ←            |        |
|                         | 63       | DUCT                     | 2    | ACXD22-02690  | <b>←</b>     | <b>←</b>     |        |
|                         | 64       | PARTICULAR PIECE         | 1    | ACXD93-29270  | <b>←</b>     | <b>←</b>     |        |
|                         | 65       | CONTROL BOARD COVER      | 1    | ACXH13-10250  | <b>←</b>     | <b>←</b>     |        |
|                         | 66       | WIRING DIAGRAM (CS)      | 1    | ACXF20-17550  | ACXF20-17830 | ACXF20-17560 |        |
|                         | 67       | BAND                     | 3    | ACXH88-00090  | <b>←</b>     | <b>←</b>     |        |
|                         | 68       | PLAIN WASHER             | 8    | XWH10J34FJ    | <b>←</b>     | <b>←</b>     |        |
|                         | 69       | WIRE SPRING              | 1    | CWH722003     | <b>←</b>     | <b>←</b>     |        |
|                         | 70       | FLEXIBLE PIPE            | 1    | CWH851032     | <b>←</b>     | ←            |        |
|                         | 71       | OPERATING INSTRUCTION    | 1    | ACXF55-41960  | <b>←</b>     | ←            |        |
|                         | 72       | INSTALLATION INSTRUCTION | 1    | ACXF60-59520  | <b>←</b>     | ←            |        |
|                         | 73       | BASE BOARD-COMPLETE      | 1    | ACXG62C03370  | <b>←</b>     | ←            |        |
|                         | 74       | SHOCK ABSORBER           | 1    | ACXG70-17600  | ←            | ←            |        |
|                         | 75       | SHOCK ABSORBER           | 1    | ACXG70-17610  | <b>←</b>     | ←            |        |
|                         | 76       | SHOCK ABSORBER           | 1    | ACXG70-17620  | <b>←</b>     | ←            |        |
|                         | 77       | SHOCK ABSORBER           | 1    | ACXG70-17630  | <b>←</b>     | <b>←</b>     |        |
|                         | 78       | C.C.CASE                 | 1    | ACXG50-68551  | <b>←</b>     | ←            |        |
|                         | 79       | MODEL LABEL              | 2    | ACXF87-52740  | ACXF87-52750 | ACXF87-52760 |        |

(Note)
All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488).
"O" marked parts are recommended to be kept in stock.