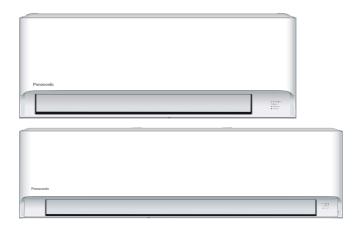
Service Manual





Indoor Unit S-25PK4R S-50PK4R S-71PK4R S-100PK4R

Destination Australia New Zealand

Please file and use this manual together with the service manual for Model No. CU-RZ25AKR, CU-RZ50AKR, CU-RZ71AKR, CU-RZ95AKR, U-100PZ3R8, U-100PZ4R8, Order No. PAPAMY2407049CE, PAPAMY2407050CE, SBPAC2011013CE, PAPAMY2509045CE.

↑ 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.

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



TABLE OF CONTENTS

| 1. | Safe | ety Precautions | 3 |
|----------------------------|--|---|--|
| 2. | Pred | caution for Using R32 Refrigerant | 5 |
| 3. | | cifications | |
| 3 3 3 3 3 3 | 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 | Unit Specifications Dimensional Data Capacity Correction Noise Criterion Curves Airflow Distance Chart Electrical Wiring Installation Instruction Capacity Table Tube Length and Elevation Difference | .12 .14 .19 .22 .24 .29 |
| 4. | Elec | trical Data | .55 |
| 4 | .1 | Wall Mounted Type | .55 |
| 5. | Con | trol Functions | .56 |
| 5 | 5.1 | Indoor Unit Control PCB Switches and Functions | .56 |
| 6. | Trou | uble Diagnosis | .59 |
| _ | 5.1 5.2 | PAC System Alarm CodesIndoor Electronic Controllers, Cross Flow Fan and Indoor Fan Motor Removal Procedures (S-25PK4R S-50PK4R) | |
| 6 | .3 | Indoor Electronic Controllers, Cross Flow Fan and Indoor Fan Motor Removal Procedures (S-71PK4R S-100PK4R) | |
| 7. | | loded View and Replacement Parts | .90 |
| | 7.1 7.2 | S-25PK4R S-50PK4R S-71PK4R S-100PK4R | .90 |

1. 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.

| CAUTION | |
|---------|--|

The items to be followed are classified by the symbols:

| \Diamond | Symbol with white background denotes item that is PROHIBITED. |
|--|---|
| 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.

| | <u></u> MARNING | |
|-----|--|------------|
| 1. | 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. | 0 |
| 2. | 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 |
| 3. | 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 |
| 4. | Do not tie up the power supply cord into a bundle by band. Abnormal temperature rise on power supply cord may happen. | \Diamond |
| 5. | Do not insert your fingers or other objects into the unit, high speed rotating fan may cause injury. | 0 |
| 6. | Do not sit or step on the unit, you may fall down accidentally. | \Diamond |
| 7. | Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing. | \Diamond |
| 8. | When installing or relocating air conditioner, do not let any substance other than the specified 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. | \Diamond |
| 9. | 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 |
| 10. | Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury etc. | \Diamond |
| 11. | Do not use joint cable for indoor / outdoor connection cable. Use the specified indoor/outdoor connection cable, refer to instruction ELECTRICAL WIRING 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. | \Diamond |
| 12. | 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. 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. If reuse piping is unavoidable, refer to instruction REFRIGERANT INSTALLATION (IN CASE OF REUSING EXISTING REFRIGERANT PIPING) in outdoor unit installation manual. 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. It is desirable that the amount of residual oil less than 40 mg/10 m. | 9 |
| 13. | 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 |
| 14. | 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 |
| 15. | Use the attached accessories parts and specified parts for installation. Otherwise, it will cause the set to fall, water leakage, fire or electrical shock. | 0 |
| 16. | 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 |

| | <u></u> WARNING | |
|-----|---|---|
| 17. | 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 the electrical work, it will cause electrical shock or fire. | 0 |
| 18. | Wire routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will cause fire or electrical shock. | 0 |
| 19. | 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. | 0 |
| 20. | 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. | 0 |
| 21. | 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. | 0 |
| 22. | 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. | 0 |
| 23. | After completion of installation, confirm there is no leakage of refrigerant gas. It may generate toxic gas when the refrigerant contacts with fire. | 0 |
| 24. | Ventilate if there is refrigerant gas leakage during operation. It may cause toxic gas when the refrigerant contacts with fire. | 0 |
| 25. | Be aware that refrigerants may not contain an odour. | 0 |
| 26. | 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> | |
|-----|---|------------|
| 1. | 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. | \Diamond |
| 2. | Prevent liquid or vapor from entering sumps or sewers since vapor is heavier than air and may form suffocating atmospheres. | 0 |
| 3. | Do not overcharge the unit, refer to gas charge specification in Outdoor Installation manual. Overcharge will cause over current and damage to compressor. | 0 |
| 4. | 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 |
| 5. | Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc. | 0 |
| 6. | Do not touch the sharp aluminium fin, sharp parts may cause injury. | 0 |
| 7. | Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture. | 0 |
| 8. | 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 |
| 9. | 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 3.0 mm contact gap. Power supply point should be in easily accessible place for power disconnection in case of emergency. | 0 |
| 10. | Installation work. It may need two people to carry out the installation work. | 0 |
| 11. | Keep any required ventilation openings clear of obstruction. | 0 |

2. Precaution for Using R32 Refrigerant

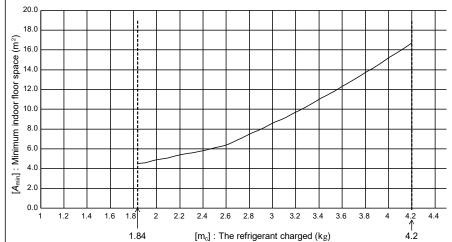
• The basic installation work procedures are the same as conventional refrigerant (R410A, R22) models. However, pay careful attention to the following points:

| | <u></u> WARNING | |
|----|---|------------|
| 1. | 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. | \Diamond |
| 2. | The appliance shall be stored, installed and operated in a well ventilated room with indoor floor area larger than A_{min} (m ²) [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. | 0 |
| 3. | Refer to "PRECAUTION FOR USING R32 REFRIGERANT" in outdoor unit installation manual for other precautions that need to pay attention to. | 0 |

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_c] used in the appliance. Regarding the refrigerant charge amount [m_c] 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_{min} = Required minimum room area, in m² = Refrigerant charge in appliance, in kg LFL = Lower flammability limit (0.307 kg/m³)

= Release height is 1.8m.

u₀ = Release height is 1.8m.

CF = Concentration factor with a value of 0.75

** The required minimum. 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.

: Can be installed m_c ≤ 1.84

 $1.84 < m_c \le m_{max}$: 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 _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 1.8 | 4.5 |
| 1.9 | 4.6 |
| 2.0 | 4.9 |
| 2.1 | 5.1 |
| 2.2 | 5.4 |

| [m _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 2.3 | 5.6 |
| 2.4 | 5.8 |
| 2.5 | 6.1 |
| 2.6 | 6.4 |
| 2.7 | 6.9 |

| [m _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 2.8 | 7.5 |
| 2.9 | 8.0 |
| 3.0 | 8.6 |
| 3.1 | 9.1 |
| 3.2 | 9.7 |

| [m _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 3.3 | 10.3 |
| 3.4 | 11.0 |
| 3.5 | 11.6 |
| 3.6 | 12.3 |
| 3.7 | 13.0 |

| [m _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 3.8 | 13.7 |
| 3.9 | 14.4 |
| 4.0 | 15.2 |
| 4.1 | 15.9 |
| 4.2 | 16.7 |

| | IDU Model name | Single | | |
|--------|----------------|------------|--|--|
| 2.5kW | S-25PK4R | CU-RZ25AKR | | |
| 5.0kW | S-50PK4R | CU-RZ50AKR | | |
| 7.1kW | S-71PK4R | CU-RZ71AKR | | |
| 0.0144 | C 400DK4D | CU-RZ95AKR | | |
| 9.0kW | S-100PK4R | U-100PZ4R8 | | |

3. Specifications

3.1 **Unit Specifications**

| | | MODEL | | S-25PK4R | | | | | | | |
|--------------------|--|--|-------------|--|---|------------------|------------------------------|----------------------|------------|------------|--|
| | INDOOR | POS (EAN) | | 5025232981984 | | | | | | | |
| | PANEL | MODEL | | | | | | | | | |
| | OUTDOOR | MODEL POS (EAN) | | - | | | CU-RZ25AKR 5025232962051 | | | | |
| | Branch pipe | MODEL | | • | | - | 5025252562051 | | | | |
| | Performance te | st condition | | | IS | 05151 / AS NZS 3 | | | | | |
| F | Power supply | Ø, Hz V | 2201/ | 1Ø 50Hz | 240V | 2201/ | 1Ø 50Hz | 240)/ | M:- | Mari | |
| | | kW | 220V | 230V 2.5 | 2.5 | 220V | 230V | 240V | Min 1.0 | Max 3.7 | |
| | Capacity | BTU/h | - | 8500 | 8500 | - | - | - | 3200 | 12600 | |
| | Сарасну | Sensible kW | - | 2.3 | 2.3 | - | - | - | - | - | |
| | Current | Latent kW | | 0.2 0.28 | 0.2 0.27 | - | 2.65 | 2.55 | - | - | |
| | | W | _ | 28 | 28 | - | - | - | - | - | |
| С | Input power | TOTAL W | | | | - | 0.58k | 0.58k | 200 | 1.20k | |
| 0 A | nnual consumption EER | TOTAL kWh TOTAL (W/W) | - | - | - | - | 290 4.31 | 4.31 | 4.75 | 3.08 | |
| 1 | AEER | (W/W) | - | - | - | | 4.16 | 4.31 | 4.75 | - | |
| 1 | SEER | rating | - | - | - | - | Commercial | Residential | - | - | |
| N G Total | TCSPF | (W/W) | | - | - | - | 7.15 | 5.03 | <u> </u> | - | |
| Tota | I Energy consumption Star rating | kWh - | - | - | - | - | 270 | 170 3.5 Stars | - | - | |
| | Power factor | % | - | - | - | - | 95 | 95 | - | - | |
| | Noise indoor | dB-A (H/M/L) | | 40 / 33 / 25 | | | - | | - | - | |
| I | | Power Level dB dB-A (H/L) | | 56 / 49 / 41 | | - | 48 / - | | <u>-</u> | - | |
| 1 1 | Noise outdoor | Power Level dB | | - | | | 63 / - | | - | - | |
| | Capacity | kW | - | 3.0 | 3.0 | - | - | - | 1.0 | 4.4 | |
| I | | BTU/h | - | 10200 | 10200 | - | - 3.00 | 2.90 | 3400 | 15000 | |
| I ⊢ | Current | A W | - | 0.28 28 | 0.27 28 | - | 3.00 | 2.90 | - | - | |
| | Input power | TOTAL W | | - | | - | 0.65k | 0.65k | 190 | 1.29k | |
| H E | COP | TOTAL (W/W) | - | - | - | - | 4.62 | 4.62 | 5.26 | 3.41 | |
| Α | ACOP SEER | (W/W) | <u> </u> | - | - | - | 4.48 Commercial | - Residential | <u> </u> | - | |
| Ţ | HSPF | (W/W) | - | - | - | | 5.00 | 4.82 | - | - | |
| N Tota | I Energy consumption | | - | - | - | - | 150 | 337 | - | - | |
| G | Star rating | - | - | - | - | - | - | 3.0 Stars | - | - | |
| - | Power factor % dB-A (H/M/L) | | - | 40 / 34 / 27 | - | - | 94 | 93 | - | - | |
| | Power Level dB | | | 56 / 50 / 43 | | | - | | - | - | |
| | Noise outdoor | dB-A (H/L) | | - | | | 49 / - | | - | - | |
| LOW | 1 | Power Level dB | | | | | 64 / - | 1 | | - | |
| TEMP | Total capacity (kV | V) / Input power (W) / COP | | - | | 2.85 | 0.92k | 3.10 | - | | |
| EXTRA LOW | LOW Total capacity (kW) / Input power (W) / COP | | | - | | | - | - | - | | |
| TEMP | | | 0.00 / 00 | | | -/- | 201 | 1.00 | <u> </u> | | |
| <u> </u> | Max Current (A) / Max Input power (W) * Starting current (A) (Cooling/Heating) | | | | | | 2.65 / 3.00 | 1.38k 2.55 / 2.90 | - | | |
| | Comp outp | | | - | | -/- | 0.55k | 0.55k | - | | |
| | Time Delay fuse | | | - | | | 15 | | | | |
| | Network Impeda Fan motor output (In | | | 30 | | | 40 | | | | |
| | Moisture removal volu | | 0.3 | (0.3 × 1) | | | - | | - | | |
| | External static press | | | - | | | - | | | 1 | |
| Indoor Air flow | | m³/min (H/M/L) (m³/h) m³/min (H/M/L) (m³/h) | | 3 / 8.0 / 5.8 (678) / (480) / (3 0 / 8.8 / 6.6 (720) / (528) / (3 | | | - | | - | - | |
| Outdoor | | m³/min (m³/h) | 12.0 | - | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | 32 (1896) | - | - | | |
| Air flow | / Heating | m³/min (m³/h) | | - | | | 30 (1782) | | = | - | |
| Refrige | erant type / amount (sh | nip) kg / amount (max) kg GWP / | | - | | R32 | 0.540 | 0.665 | - | | |
| F-Gas | CO ₂ eq (ton) (I | ECHARGED AMOUNT) / MAXIMUM CHARGED AMOUNT) | | - | | 675 | 0.36 | 0.45 | - | | |
| Pro | oduct dimension | Height mm Width mm | | 290 765 | | - | 542 780 | | <u>-</u> | | |
| | | Depth mm | | 214 | | | 289 | | - | | |
| Produc | t dimension (Panel) | H×W×D mm | <u> </u> | - | | | - | | - | | |
| Par | cking dimension | Height mm Width mm | | 260 847 | | | 603 891 | | | | |
| r at | og dimonsion | Depth mm | | 364 | | <u> </u> | 396 | | - | | |
| | | (NET) kg | | 9 | | | 25 | | - | | |
| | Mass | (GROSS) kg Panel | | 10 | | 1 | 27 | | | | |
| | | (NET) kg | | - | | | - | | - | | |
| | Layers limit (actually) Operation condition | | • | 11 (12) | | | 5 (6) | | - | | |
| Оре | | | | 18°C ~ 32°C 16°C ~ 30°C | | 1 | -10°C ~ 46°C -15°C ~ 24°C | | - | | |
| | | | | 10 0 4 30 0 | 4.15 / 2.55 | I | -10 0 ~ 24 0 | | | | |
| | Max High Pres | ssure MPa | | | 5.00 | | | | | | |
| 1_ [- | | neter mm (inch) | (Liqui | id) Ø6.35 (1/4) (Gas) Ø9.52 | | | Ø6.35 (1/4) (Gas) Ø | 9.52 (3/8) | - | · | |
| P | Pipe diamet Connectir | er mm (inch) ng method | | flared type | uid) Ø6.35 (1/4) (Gas) Ø9 | 2.02 (3/0) | flared type | | | | |
| Р | Standard | l length m | | . 215- | 5.0 m | • | - 75- | | | | |
| I N I | | th range m | | 45 | 3 ~ 20 m | Viscoted IV V | | | | | |
| G | | unit height difference m mount g/m | | 15 m (OD l | ocated lower) / 15 m (OD 10 g/m | iocated higher) | | | - | | |
| 1 | | additional gas m | | | 7.5 m | | | | | | |
| | | | | | | | | | | | |

^{*} In the case of nanoe X OFF

^{*} In case it is necessary to indicate the air flow volume in (I/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal

point.
* AEER and ACOP classification is at 230V (400V) only in accordance with GEMS2019.

^{*} TCSPF, HSPF and Total Energy consumption indicate the value of average temperature zone.

* Max Current (A) / Max Input power (W) value in the outdoor side equal to total system (Indoor + Outdoor)

H: High at setting 5 stage (Level 5), M: Middle at setting 5 stage (Level 3), L: Low at setting 5 stage (Level 1)

| | IND | DOOR | MODEL POS (EAN) | | S-50PK4R 5025232981991 | | | | | | : |
|----------|---|--------------------------------|---|----------------------------|---------------------------------|------------------------------------|---|--------------------|----------------------|-------------|--------------|
| | PA | ANEL | MODEL | | - | | | - | | | |
| | OUT | DOOR | MODEL | | • | | | CU-RZ50AKR | | | |
| - | | ch pipe | POS (EAN) MODEL | | - | | | 5025232962082 | | | |
| | Diane | Performance tes | | | | IS | O5151 / AS NZS 3 | 823.1 | | | |
| | Power | er supply | Ø, Hz | | 1Ø 50Hz | | | 1Ø 50Hz | | | |
| \vdash | rowei | п зирріу | V | 220V | 230V | 240V | 220V | 230V | 240V | Min | Max |
| | | | kW BTU/h | - | 5.0 17100 | 5.0 17100 | - | - | - | 1.2 4100 | 6.1 20800 |
| | С | Capacity | Sensible kW | - | 3.7 | 3.7 | - | - | - | - | - |
| | | | Latent kW | - | 1.3 | 1.3 | - | - | - | - | - |
| | | Current | A W | - | 0.58 41 | 0.56 41 | - | 6.70 | 6.50 | - | - |
| С | Inp | put power | TOTAL W | - | - | 41 | - | 1.51k | 1.51k | 220 | 2.10k |
| 0 | Annual | l consumption | TOTAL kWh | - | - | - | - | 755 | - | - | - |
| 0 | | AEER . | TOTAL (W/W) (W/W) | - | - | - | - | 3.31 3.27 | 3.31 | 5.45 | 2.90 |
| L | | SEER | | | - | - | - | Commercial | Residential | - | - |
| N | | TCSPF | (W/W) | - | - | | - | 7.01 | 4.83 | - | - |
| G | | rgy consumption | kWh | - | - | - | - | 583 | 397 | - | - |
| 1 1 | | tar rating wer factor | - % | - | - | - | - | 98 | 3.0 Stars 97 | - | - |
| li | | | dB-A (H/M/L) | | 44 / 39 / 34 | | | - | | - | - |
| | INOI | ise indoor | Power Level dB | | 60 / 55 / 50 | | | - | | - | - |
| | Nois | se outdoor | dB-A (H/L) Power Level dB | | - | | | 48 / - 63 / - | | <u> </u> | - |
| H | - | | kW | - | 6.0 | 6.0 | - | - 63/- | - | 1.1 | 7.7 |
| | | Capacity | BTU/h | - | 20500 | 20500 | - | - | - | 3800 | 26300 |
| | (| Current | A W | - | 0.58 | 0.56 | - | 7.80 | 7.50 | - | - |
| | Inp | put power | TOTAL W | - | 41 - | 41 | - | - 1.78k | - 1.78k | 240 | 2.50k |
| Н | | COP | TOTAL (W/W) | - | | <u>-</u> | <u> </u> | 3.37 | 3.37 | 4.67 | 3.08 |
| E A | | ACOP | (W/W) | - | - | • | - | 3.33 | - | - | - |
| T | | SEER HSPF | rating (W/W) | - | - | - | - | Commercial 4.37 | Residential 4.04 | - | - |
| I N | | rgy consumption | kWh | | - | - | - | 344 | 806 | - | - |
| G | St | tar rating | - | - | - | - | - | - | 2.5 Stars | - | - |
| | Pov | wer factor | % dB-A (H/M/L) | - | 44 / 40 / 33 | - | - | 99 | 99 | <u>-</u> | - |
| | Noi | ise indoor | Power Level dB | | 60 / 56 / 49 | | | | | - | - |
| li | Nois | se outdoor | dB-A (H/L) | | - | | | 49 / - | | - | - |
| ш | | se outdoor | Power Level dB | | - | | | 64 / - | 1 | - | - |
| | OW EMP | Γotal capacity (kW | /) / Input power (W) / COP | | - | | 5.50 | 2.20k | 2.50 | | |
| E) | KTRA | | | | | | | | | | |
| | OW T | Γotal capacity (kW | /) / Input power (W) / COP | | - | | - | - | - | | • |
| Η. | | Current (A) / Max | Input power (W) * | - 0.58 / 41 0.56 / 41 | | | -/- | 11.0 / | - | | |
| | Star | rting current (A) (0 | | | | | -/- | 6.70 / 7.80 | 6.50 / 7.50 0.90k | | |
| - | | Comp outp Time Delay fuse | | | - | | - | 0.90k 15 | - | | |
| | | Network Impedar | | | - | | | - | | | |
| | Fan | motor output (Inc | door/Outdoor) W | | 30 | | | 40 | | | |
| | | ture removal volu | | 1.9 | (1.9 × 1) | | | - | | - | |
| Ir | door | ernal static pressu Cooling | ure Pa m³/min (H/M/L) (m³/h) | 12.5 | / 10.0 / 8.3 (750) / (600) / (4 | 198) | | | | | _ |
| | r flow | Heating | m³/min (H/M/L) (m³/h) | | / 10.6 / 8.3 (822) / (636) / (4 | | | - | | - | - |
| | itdoor r flow | Cooling | m³/min (m³/h) | | - | | | 33 (1962) | - | - | |
| | r flow efrigerant t | Heating type / amount (sh | m³/min (m³/h) iip) kg / amount (max) kg | | - | | R32 | 33 (1962) 1.100 | 1.400 | | - |
| <u> </u> | | | GWP / | | | | 1 | | | | |
| F | -Gas | CO ₂ ea (ton) (N | ECHARGED AMOUNT) / MAXIMUM CHARGED MOUNT) | | - | | 675 | 0.74 | 0.95 | <u> </u> | |
| | Product | dimension | Height mm Width mm | | 290 765 | | | 619 824 | | | |
| | i roudot | aioiisioii | Depth mm | | 214 | | 1 | 299 | | | |
| Pi | oduct dime | ension (Panel) | H×W×D mm | | - | | | - | | - | |
| | Dackin- | dimension | Height mm | | 260 | | 1 | 680 | | - | |
| | racking | dimension | Width mm Depth mm | | 847 364 | | 1 | 958 416 | | | |
| | Mass | | (NET) kg | | 9 | | | 35 | | | |
| | | | | | 10 | | <u> </u> | 38 | | - | |
| | | | | - | | | - | | | . | |
| | Layers limit (actually) | | | 11 (12) | | | 5 (6) | | | | |
| | Operation condition Cool (DBT) Heat (DBT) | | | 18°C ~ 32°C 16°C ~ 30°C | | 1 | -10°C ~ 46°C -15°C ~ 24°C | | | | |
| \vdash | Max Working Pressure HP/LP MPa (PS) | | | 10 0 7 30 0 | 4.15 / 2.55 | 1 | -15°C ~ 24°C | | | | |
| | Max High Pressure MPa | | | | 5.00 | | | | | | |
| | | Pipe port diam | | (Liqui | d) Ø6.35 (1/4) (Gas) Ø12.70 | (1/2) | (Liquid) Ø6.35 (1/4) (Gas) Ø12.70 (1/2) | | | | |
| P | | Pipe diamete Connectin | er mm (inch) ig method | | flared type | d) Ø6.35 (1/4) (Gas) Ø1 | 2.10 (1/2) | flared type | | | |
| P | | Standard | length m | | | 5.0 m | • | | | | |
| I N | 1. 1. | Pipe lengtl | | | 15 (65.) | 3 ~ 30 m | Name of Part of | | | | |
| G | indoor | | unit height difference m mount g/m | | 15 m (OD lo | ocated lower) / 15 m (OD 15 g/m | located higher) | | | - | |
| L | | Pipe length for a | | | | 10 m | | | | | |
| _ | | | | 10111 | | | | | | | |

^{*} In the case of nanoe X OFF
* In case it is necessary to indicate the air flow volume in (I/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal * TCSPF, HSPF and Total Energy consumption indicate the value of average temperature zone.

* Max Current (A) / Max Input power (W) value in the outdoor side equal to total system (Indoor + Outdoor)

H: High at setting 5 stage (Level 5), M: Middle at setting 5 stage (Level 3), L: Low at setting 5 stage (Level 1)

| | IND | OOR | MODEL POS (EAN) | | S-71PK4R 5025232982004 | | | - | 1 | | |
|----------|---|--|---|------------------------|--|------------------------------------|--|---------------------|---------------|-------------|---------------|
| - | PA | NEL | MODEL | | - | | | | | | |
| | OUTI | DOOR | MODEL | | - | | | CU-RZ71AKR | | | |
| - | | ch pipe | POS (EAN) MODEL | | - | | 1 | 5025232962105 | | - | |
| | | Performance te | | | | IS | O5151 / AS NZS 3 | 823.1 | | | |
| | | r supply | Ø, Hz | | 1Ø 50Hz | | | 1Ø 50Hz | | | |
| \vdash | | . одрр., | V kW | 220V | 230V 7.1 | 240V 7.1 | 220V | 230V | 240V | Min 1.9 | Max 8.5 |
| | | | BTU/h | - | 24200 | 24200 | - | - | - | 6500 | 29000 |
| | C | Capacity | Sensible kW | - | 5.6 | 5.6 | - | - | - | - | - |
| 1 1 | | Current | Latent kW A | - | 1.5 0.89 | 1.5 0.87 | - | 9.15 | - 8.75 | - | - |
| | | | w | - | 90 | 90 | - | 9.15 | - | | - |
| С | | out power | TOTAL W | | - | , | - | 2.06k | 2.06k | 420 | 2.90k |
| 0 | | consumption EER | TOTAL kWh TOTAL (W/W) | | - | - | - | 1030 3.45 | 3.45 | 4.52 | 2.93 |
| Ľ | | AEER | (W/W) | - | - | - | - | 3.41 | - | - | - |
| I N | | SEER | | - | - | - | - | Commercial | Residential | - | - |
| G | | TCSPF rgy consumption | (W/W) kWh | - | - | - | - | 7.05 836 | 5.02 558 | - | - |
| | | tar rating | - | - | - | - | - | - | 3.5 Stars | - | - |
| | Pov | wer factor | % | - | <u> </u> | - | - | 98 | 98 | - | - |
| | Nois | ise indoor | dB-A (H/M/L) Power Level dB | | 49 / 43 / 37 65 / 59 / 53 | | + | - | | - | - |
| | Nois | se outdoor | dB-A (H/L) | | - | | | 54 / - | _ | | - |
| \vdash | INOIS | sc outdoor | Power Level dB | | | | | 68 / - | | - | - |
| | С | Capacity | kW BTU/h | - | 8.0 27300 | 8.0 27300 | - | - | - | 1.9 6500 | 10.6 36200 |
| | | Current | A | - | 0.89 | 0.87 | - | 9.25 | 8.90 | - | - |
| | Inp | out power | W | - | 90 | 90 | - | - 0.001 | - | - | - |
| н | | COP | TOTAL W TOTAL (W/W) | _ | | 1 - | | 2.09k 3.83 | 2.09k 3.83 | 400 4.75 | 3.30k 3.21 |
| E | | ACOP | (W/W) | - | - | - | - | 3.79 | - | - | - |
| A T | | SEER | | - | - | - | - | Commercial | Residential | - | - |
| 1 | | HSPF rgy consumption | (W/W) kWh | - | - | - | - | 4.74 422 | 4.45 976 | - | - |
| N G | Sta | ar rating | - | - | - | - | - | - | 2.5 Stars | - | - |
| 1 1 | Pov | wer factor | % dB-A (H/M/L) | - | 49 / 43 / 37 | - | - | 98 | 98 | - | - |
| | Noise indoor Power Level dB | | | 65 / 59 / 53 | | + | - | | - | - | |
| | Nois | se outdoor | dB-A (H/L) | | - | | | 54 / - | | - | - |
| H | OW | | Power Level dB | | - | | + | 68 / - | | - | - |
| Т | EMP I | otal capacity (kW | V) / Input power (W) / COP | | - | | 7.30 | 2.70k | 2.70 | - | |
| L | EXTRA LOW Total capacity (kW) / Input power (W) / COP TEMP Max Current (A) / Max Input power (W) * Starting current (A) (Cooling/Heating) Comp output (W) | | V) / Input power (W) / COP | - 0.89 / 90 0.87 / 90 | | | - | - | - | - | |
| | | | Input power (W) * | | | | -/- | 14.8 / | 3.30k | - | |
| | | | | | | -/- | 9.15 / 9.25 1.50k | 8.75 / 8.90 | - | | |
| - | 1 | Time Delay fuse | | | - | | _ | 20 | 1.50k | - | |
| | | Network Impedar | | | | | | - | | | |
| - | | motor output (Inc ture removal volu | | 2.2 | 30 (2.2 × 1) | | † | 40 | | | |
| | Exte | ernal static pressi | ure Pa | | - | | | - | | - | |
| | r flow | Cooling Heating | m³/min (H/M/L) (m³/h) m³/min (H/M/L) (m³/h) | | 18.3 / 14.1 (1350) / (1098) 18.3 / 14.1 (1350) / (1098) | | 1 | - | | <u> </u> | - |
| _ | utdoor | Cooling | m³/min (m³/h) | 22.51 | - | 7 (040) | | 45 (2682) | | - | |
| Ai | r flow | Heating | m³/min (m³/h) | _ | - | | B.00 | 46 (2754) | 4.0== | - | - |
| R | errigerant t | type / amount (sh | nip) kg / amount (max) kg GWP / | | - | | R32 | 1.350 | 1.850 | - | |
| F | -Gas | CO2eq (ton) (N | ECHARGED AMOUNT) / MAXIMUM CHARGED MOUNT) | | - | | 675 | 0.91 | 1.25 | - | |
| | Product of | dimension | Height mm Width mm | | 295 1060 | | + | 695 875 | | - | |
| | | | Depth mm | | 249 | | | 320 | | - | |
| Pr | roduct dime | ension (Panel) | H × W × D mm Height mm | | 314 | | + | 796 | | | |
| | Packing (| dimension | Width mm | | 1168 | | | 1049 | | | |
| <u> </u> | 3 | | Depth mm | | 383 | | 1 | 460 | | - | |
| | (NET) kg (GROSS) kg Panel (NET) kg (NET) kg (NET) (NET) | | | | 14 16 | | | 45 49 | | | |
| | | | | - | | | - | | - | | |
| - | | | | 11 (12) 18°C ~ 32°C | | + | 3 (4) -10°C ~ 46°C | | - | | |
| | | | Heat (DBT) | | 16°C ~ 30°C | | | -15°C ~ 24°C | | - | |
| | Max V | Norking Pressure Max High Pres | HP/LP MPa (PS) | | | 4.15 / 2.55 5.00 | | | | | |
| \vdash | | Pipe port diam | | (Liquid | d) Ø6.35 (1/4) (Gas) Ø15.8 | 8 (5/8) | | Ø6.35 (1/4) (Gas) Ø | 15.88 (5/8) | - | |
| Р | | Pipe diamete | er mm (inch) | , 1 | (Liqu | iid) Ø6.35 (1/4) (Gas) Ø1 | | | | | |
| I P | | Connectin Standard | ng method length m | | flared type | 5.0 m | 1 | flared type | | - | |
| 1 | | Pipe lengt | h range m | | | 3 ~ 30 m | | | | - | |
| N G | Indoor | | unit height difference m mount g/m | | 20 m (OD I | ocated lower) / 20 m (OI 25 g/m | D located higher) | | | - | |
| | | | additional gas m | | | 25 g/m 10 m | | | | - | |
| | | | - ' | | | | | | | | |

^{*} In the case of nanoe X OFF
* In case it is necessary to indicate the air flow volume in (I/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal * TCSPF, HSPF and Total Energy consumption indicate the value of average temperature zone.

* Max Current (A) / Max Input power (W) value in the outdoor side equal to total system (Indoor + Outdoor)

H: High at setting 5 stage (Level 5), M: Middle at setting 5 stage (Level 3), L: Low at setting 5 stage (Level 1)

| | II | NDOOR | MODEL POS (EAN) | | S-100PK4R_1P 5025232981977 | | | | | | - | |
|----------|--|--|--|---|-------------------------------|--|--|-----------------------------|------------------|--|--|--|
| | | PANEL | MODEL | | • | | | - | | | • | |
| | Ol | JTDOOR | MODEL POS (EAN) | | <u>-</u> | | | CU-RZ95AKR 5025232962112 | | | <u>- </u> | |
| | Bra | anch pipe | MODEL | | - | | - | 3023232302112 | l. | | | |
| | | Performance tes | | | | ISC | 05151 / AS NZS 3 | 823.1 | | | | |
| | Pos | wer supply | Ø, Hz | | 1Ø 50Hz | | | 1Ø 50Hz | | | | |
| | 101 | wei suppiy | V | 220V | 230V | 240V | 220V | 230V | 240V | Min | Max | |
| | | | kW BTU/h | - | 8.8 30000 | 8.8 30000 | - | - | - | 2.8 | 9.7 33100 | |
| | | Capacity | Sensible kW | - | 6.1 | 6.1 | - | - | - | 9600 | - 33100 | |
| | | | Latent kW | - | 2.7 | 2.7 | - | _ | - | - | - | |
| | | Current | Ä | - | 0.89 | 0.87 | - | 11.80 | 11.30 | - | - | |
| | | Input power | W | - | 90 | 90 | - | | - | | - | |
| С | | | TOTAL W TOTAL kWh | _ | - | - | - | 2.65k 1325 | 2.65k | 520 | 3.10k | |
| 0 | Annu | ual consumption EER | TOTAL (W/W) | - | - | - | - | 3.32 | 3.32 | 5.38 | 3.13 | |
| L | | AEER | (W/W) | - | _ | - | - | 3.29 | - | - | - | |
| - 1 | | SEER | rating | - | - | - | - | Commercial | Residential | - | - | |
| N | | TCSPF | (W/W) | - | - | - | - | 5.91 | 4.66 | - | - | |
| G | Total E | nergy consumption | kWh | - | - | - | - | 1245 | 750 | - | - | |
| | | Star rating Power factor | - % | - | - | - | - | 98 | 3.0 Stars 98 | - | - | |
| | | | dB-A (H/M/L) | | 49 / 45 / 41 | | - | - | 30 | | - | |
| | ^ | Noise indoor | Power Level dB | | 65 / 61 / 57 | | | - | | - | - | |
| | N | loise outdoor | dB-A (H/L) | | - | | | 55 / - | | - | - | |
| <u></u> | - 18 | 5 54,4501 | Power Level dB | | - | 0.0 | _ | 69 / - | | - | - 40.5 | |
| | | Capacity | kW BTU/h | - | 9.0 30700 | 9.0 30700 | - | - | - | 2.7 9200 | 10.5 35800 | |
| | | Current | A A | - | 0.89 | 0.87 | - | 10.10 | 9.65 | - | - | |
| | | | W | - | 90 | 90 | - | - | - | - | - | |
| ļ,, | | Input power | TOTAL W | | | | - | 2.29k | 2.29k | 480 | 2.95k | |
| H E | | COP | TOTAL (W/W) | - | - | - | - | 3.93 | 3.93 | 5.63 | 3.56 | |
| Α | | ACOP SEER | (W/W) | - | - | - | - | 3.89 Commercial | - Residential | - | - | |
| Т | | HSPF | rating (W/W) | - | - | - | - | 4.87 | 4.44 | - | - | |
| I | Total E | nergy consumption | kWh | | - | - | - | 463 | 1099 | | - | |
| N G | | Star rating | - | - | - | - | - | - | 2.5 Stars | - | - | |
| - | F | Power factor | % | - | - | - | - | 99 | 99 | - | - | |
| | ١ | Noise indoor | dB-A (H/M/L) | | 49 / 45 / 41 | | | - | | - | - | |
| | Power Level dB Main and B-A (H/L) | | | | 65 / 61 / 57 | | - | 55 / - | | | - | |
| | N | loise outdoor | Power Level dB | | <u> </u> | | † | 69 / - | | | - | |
| | OW | T | | | | | 0.75 | | 0.70 | | • | |
| | EMP | I otal capacity (KVI | /) / Input power (W) / COP | | - | | 8.75 | 3.20k | 2.73 | | - | |
| 1 | XTRA _OW TEMP | Total capacity (kW | /) / Input power (W) / COP | - | | | - | - | - | | - | |
| | | x Current (A) / Max | Input power (W) * | - | -/- | 16.6 / | 3.80k | | - | | | |
| | S | tarting current (A) (0 | | - | - | - | -/- | 11.80 / 10.10 | 11.30 / 9.65 | - | | |
| | | Comp outp | | | - | 1.50k | 1.50k | | - | | | |
| - | | Time Delay fuse Network Impedar | | | - | 25 | | | | | | |
| - | F | an motor output (Inc | | - 30 | | | | 60 | | | - - | |
| | | oisture removal volu | | 3.8 | (3.8 × 1) | | - | | | | - | |
| | | xternal static pressu | | | - | | | - | | - | | |
| | ndoor | Cooling | m³/min (H/M/L) (m³/h) | 22.5 / 20.0 / 17.5 (1350) / (1200) / (1050) | | | | - | | - | | |
| _ | ir flow utdoor | Heating Cooling | m³/min (H/M/L) (m³/h) m³/min (m³/h) | 22.5 / 20.0 / 17.5 (1350) / (1200) / (1050) | | | | | | - | | |
| | ir flow | Heating | m³/min (m³/h) | | <u> </u> | | 56 (3336) 53 (3180) | | | | - | |
| | | nt type / amount (sh | ip) kg / amount (max) kg | | | | R32 | 1.930 | 2.430 | | - | |
| F | -Gas | CO ₂ eq (ton) (PRE CO ₂ ea (ton) (M | GWP / ECHARGED AMOUNT) / MAXIMUM CHARGED MOUNT) | | - | | 675 | 1.30 | 1.64 | | - | |
| 1 | ъ. | | Height mm | | 295 | | ļ | 795 | | | - | |
| 1 | Produ | ct dimension | Width mm Depth mm | | 1060 249 | | - | 875 320 | | | <u>- </u> | |
| Р | roduct di | imension (Panel) | H × W × D mm | | 249 | | | 320 | + | | - | |
| Ħ | . Judot U | (i diloi) | Height mm | | 314 | | 1 | 899 | İ | | - | |
| 1 | Packir | ng dimension | Width mm | | 1168 | | | 1049 | | | - | |
| L | Depth mm (NET) kg (GROSS) kg Panel NET) kg (GROSS) kg Depth mm NET) kg (NET) kg | | | 383 | | | 485 | | | - | | |
| 1 | | | | 14 16 | | | 55 61 | | | - | | |
| 1 | | | | | | | | 1 | | | | |
| L | | | | - | | | - | | | - | | |
| F | Layers limit (actually) | | 11 (12) | | | 3 (4) | | | | - | | |
| l | Operation condition Cool (DBT) Heat (DBT) | | | 18°C ~ 32°C 16°C ~ 30°C | | - | -10°C ~ 46°C | | | <u>- </u> | | |
| \vdash | Max Working Pressure HP/LP MPa (PS) | | | 10 0 30 0 | 4.15 / 2.55 | -15°C ~ 24°C | | | | - | | |
| | ivia | Max High Pres | sure MPa | | | 4.15 / 2.55 | | | İ | | | |
| | | Pipe port diam | eter mm (inch) | (Liquid |) Ø6.35 (1/4) (Gas) Ø15.88 | 3 (5/8) | (Liquid) & | Ø6.35 (1/4) (Gas) Ø | 15.88 (5/8) | | - | |
| Ρ | | Pipe diamete | | | | id) Ø6.35 (1/4) (Gas) Ø1 | 5.88 (5/8) | | | | · | |
| I P | | Connectin Standard | g method length m | | flared type | 5.0 m | i | flared type | | | - | |
| ľ | | Pipe lengtl | | | | 3 ~ 30 m | | | 1 | | - | |
| | | | nit height difference m | | 20 m (OD l | ocated lower) / 20 m (OD | located higher) | | | | - | |
| N | Indo | | | | | | | | | | | |
| | Indo | Add gas ar Pipe length for a | mount g/m | | | 25 g/m 10 m | | | | | - | |

^{*} In the case of nanoe X OFF
* In case it is necessary to indicate the air flow volume in (I/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal * TCSPF, HSPF and Total Energy consumption indicate the value of average temperature zone.

* Max Current (A) / Max Input power (W) value in the outdoor side equal to total system (Indoor + Outdoor)

H: High at setting 5 stage (Level 5), M: Middle at setting 5 stage (Level 3), L: Low at setting 5 stage (Level 1)

| В | PANEL | POS (EAN) | | 5025232981977 | | | | | | | |
|--------------|---|--|-------------------|------------------------------|--------------------------------------|--|-----------------------------|------------------|--|-------|--|
| В | | | | | | | | | | | |
| В | OUTDOOR | MODEL | | • | | | U-100PZ4R8 5025232982219 | | | | |
| | | POS (EAN) MODEL | | - | | | 5025232982219 | l | - | | |
| | Branch pipe Performance tes | | | | IS | O5151 / AS NZS 3 | 823 1 | | | | |
| | | Ø, Hz | | 1Ø 50Hz | | 1 | 3Ø 50Hz | | | | |
| P | ower supply | V | 220V | 230V | 240V | 380V | 400V | 415V | Min | Max | |
| | | kW | - | 9.0 | 9.0 | - | - | - | 2.8 | 9.7 | |
| . | Capacity | BTU/h | - | 30700 | 30700 | - | - | - | 9600 | 33100 | |
| . | , , | Sensible kW Latent kW | - | 6.2 2.8 | 6.2 2.8 | - | - | - | - | - | |
| | Current | A A | - | 0.89 | 0.87 | - | 4.10 | 3.95 | | - | |
| | | W | - | 90 | 90 | - | - | - | _ | - | |
| С | Input power | TOTAL W | | - | | - | 2.65k | 2.65k | 500 | 3.10k | |
| O An | nual consumption | TOTAL kWh | - | - | - | - | 1325 | - | - | - | |
| 0 | EER | TOTAL (W/W) | - | - | - | - | 3.40 | 3.40 | 5.60 | 3.13 | |
| <u> </u> | AEER SEER | (W/W) | - | - | - | - | 3.33 Commercial | - Residential | - | - | |
| N | TCSPF | (W/W) | | | 1 | 1 | 5.48 | 4.31 | | | |
| _ | Energy consumption | kWh | - | - | - | _ | 1335 | 782 | _ | - | |
| | Star rating | - | - | - | - | - | - | 2.5 Stars | - | - | |
| | Power factor | % | - | - | - | - | 93 | 93 | - | - | |
| . 1 | Noise indoor | dB-A (H/M/L) | | 49 / 45 / 41 | | <u> </u> | - | | - | - | |
| | | Power Level dB | | 65 / 61 / 57 | | | - | | - | - | |
| . 1 | Noise outdoor | dB-A (H/L) | | <u> </u> | | + | 52 / - | | - | - | |
| +- | | Power Level dB kW | | 9.0 | 9.0 | - | 70 / - | | 3.0 | 10.5 | |
| . 1 | Capacity | BTU/h | | 30700 | 30700 | - | - | - | 10200 | 35800 | |
| | Current | A | - | 0.89 | 0.87 | - | 3.65 | 3.50 | - | - | |
| . 1 | | W | - | 90 | 90 | <u> </u> | - | | - | - | |
| 🖵 | Input power | TOTAL W | | | | - | 2.34k | 2.34k | 560 | 2.95k | |
| H | COP | TOTAL (W/W) | - | - | - | - | 3.85 | 3.85 | 5.36 | 3.56 | |
| E A T | ACOP | (W/W) | - | - | - | - | 3.76 | - | - | - | |
| Ϋ́ — | SEER | | - | - | - | - | Commercial | Residential | - | - | |
| T-4-1 | HSPF Energy consumption | (W/W) kWh | - | - | - | - | 4.72 477 | 4.41 1107 | - | - | |
| 14 | Star rating | - KVVII | | - | | - | - 4// | 2.5 Stars | <u> </u> | - | |
| G | Power factor | % | - | - | - | | 93 | 93 | - | - | |
| | dB-A (H/M/L) | | | 49 / 45 / 41 | ı | | - | | - | - | |
| . L | Noise indoor | Power Level dB | | 65 / 61 / 57 | | | - | | - | - | |
| | Noise outdoor | dB-A (H/L) | | - | | | 52 / - | | - | - | |
| 1.0111 | 110,000 04,40001 | Power Level dB | | - | | | 70 / - | | - | - | |
| LOW TEMP | Total capacity (kW | /) / Input power (W) / COP | | - | | 10.00 | 4.35k | 2.30 | - | | |
| EXTRA LOW | Total capacity (kW | /) / Input power (W) / COP | | - | | - | - | - | - | | |
| TEMP | Max Current (A) / Max | Input power (M) * | - | 0.89 / 90 | 0.87 / 90 | -/- | 11.9 / 6.29k | 11.9 / 6.49k | | | |
| | Starting current (A) (| | - 0.69790 0.67790 | | | -/- | 4.10 / 3.65 | 3.95 / 3.50 | - | | |
| | Comp outp | | | | | | 2.50k | 2.50k | - | | |
| | Time Delay fuse | max size (A) | | - | | | 15 | | | | |
| | Network Impedar | | | - | | | - | | - | | |
| | Fan motor output (Inc | | 4.0 | 30 | | | 120 | | | | |
| | Moisture removal volu External static pressu | | 4.0 | (4.0 × 1) | | | - | | - | | |
| Indoor | Cooling | m³/min (H/M/L) (m³/h) | 22 5 / 2 | 0.0 / 17.5 (1350) / (1200) / | (1050) | | - | | | | |
| Air flow | Heating | m³/min (H/M/L) (m³/h) | | 0.0 / 17.5 (1350) / (1200) / | | 1 | - | 1 | - | - | |
| Outdoor | Cooling | m³/min (m³/h) | | | | 73 (4380) | | | - | - | |
| Air flow | Heating | m³/min (m³/h) | | - | | 1 | 73 (4380) | | - | - | |
| Refriger | rant type / amount (sh | nip) kg / amount (max) kg | | - | | R32 | 2.400 | 3.300 | - | | |
| F-Gas | CO ₂ ea (ton) (N | GWP / ECHARGED AMOUNT) / MAXIMUM CHARGED MOUNT) | | - | | 675 | 1.62 | 2.23 | - | | |
| _ | Land Parama | Height mm | | 295 | | | 996 | | - | | |
| Proc | duct dimension | Width mm | | 1060 | | + | 980 | - | - | | |
| Product | dimension (Panel) | Depth mm H × W × D mm | | 249 | | + | 370 | | | | |
| rioduct | umension (Paner) | H×W×D mm Height mm | | 314 | | 1 | 1134 | + | | | |
| Pac | king dimension | Width mm | | 1168 | | † | 1095 | + | | | |
| Mass | | Depth mm | | 383 | | | 529 | | - | | |
| | | (NET) kg | | 14 | | | 80 | | - | | |
| | | (GROSS) kg | | 16 | | 1 | 88 | | - | | |
| | | Panel (NET) kg | | - | | 1 | - | | - | | |
| | Layers limit (| | | 11 (12) | | | 1 (2) | <u> </u> | - | | |
| Cool (DRT) | | | 18°C ~ 32°C | | | -10°C ~ 46°C | | - | | | |
| | ration condition | Heat (DBT) | | 16°C ~ 30°C | | | -15°C ~ 24°C | | - | | |
| N | Max Working Pressure | | · | <u> </u> | 4.15 / 2.55 | | | | · | | |
| | Max High Pres | | a |) OC 25 (4/4) (2) O: | 4.15 | 41 | 30 F0 (2/0) (2 · · · · | 4E 00 (E/0) | | | |
| | Pipe port diame | | (Liquid |) Ø6.35 (1/4) (Gas) Ø15.8 | 8 (5/8) ıid) Ø9.52 (3/8) (Gas) Ø1 | Liquid) 9 | Ø9.52 (3/8) (Gas) Ø | 15.68 (5/8) | - | | |
| P | | er mm (incn) ig method | | flared type | 114) (38) (3/6) (Gas) W | 10.00 (0/0) | flared type | | - | | |
| P | Standard | | | пагоч туре | 5.0 m | | narou type | + | | | |
| i | Pipe lengt | | | | 5 ~ 50 m | | | 1 | - | | |
| | idoor unit & Outdoor u | unit height difference m | | 15 m (OD I | ocated lower) / 30 m (OE | O located higher) | | | - | | |
| N In | Add goo or | mount g/m | | | 45 g/m 30 m | | - | | - | - | |
| | Pipe length for a | | | | | | | | _ | | |

^{*} In the case of standard installation (Horizontal Installation in the ceiling, rear side air intake)
* In the case of nanoe X OFF

^{*} In case it is necessary to indicate the air flow volume in (I/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

* AEER and ACOP classification is at 230V (400V) only in accordance with GEMS2019.

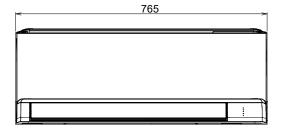
* TCSPF, HSPF and Total Energy consumption indicate the value of average temperature zone.

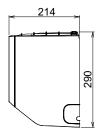
^{*} Max Current (A) / Max Input power (W) value in the outdoor side equal to total system (Indoor + Outdoor)
H: High at setting 5 stage (Level 5), M: Middle at setting 5 stage (Level 3), L: Low at setting 5 stage (Level 1)

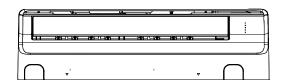
Dimensional Data 3.2

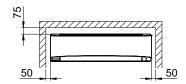
3.2.1 Wall Mounted Type S-25PK4R S-50PK4R



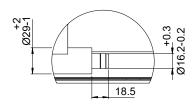




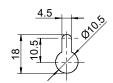




Minimum space requirements for installation



Detailed view B



Detailed view C

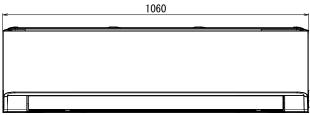
- Refrigerant tubing (liquid tube) S-25PK4R : ø6.35 S-50PK4R : ø6.35
- S-25PK4R : ø9.52 S-50PK4R : ø12.70 Refrigerant tubing (gas tube) (2)
- 3 Drain hose
- Rear panel 4
- (5)
- Rear panel fixing holes (Ø5.0 holes or as shown in figure "C")
- 6 Tubing and wiring holes (Ø70)

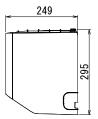
unit:mm

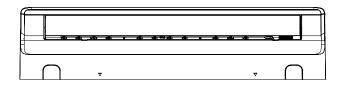
3.2.2 Wall Mounted Type S-71PK4R S-100PK4R

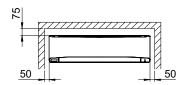
1060

unit:mm

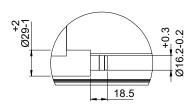




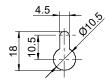




Minimum space requirements for installation



Detailed view B



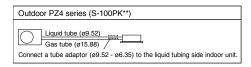
Detailed view C

Refrigerant tubing (liquid tube) S-71PK4R: Ø6.35 S-100PK4R: Ø6.35 (Single phase), Ø9.52 (Three phase)

Refrigerant tubing (gas tube) S-71PK4R: Ø15.88 S-100PK4R: Ø15.88

Train hose
Rear panel
Rear panel fixing holes (Ø5.0 holes or as shown in figure "C")

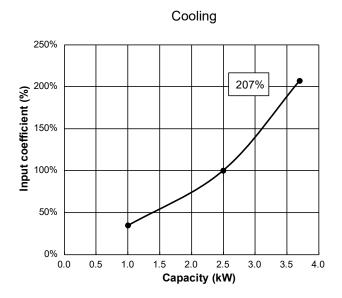
Tubing and wiring holes (Ø70)

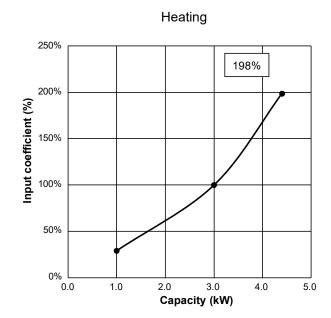


3.3 Capacity Correction

3.3.1 Rated Capacity Ratio

3.3.1.1 PK4R (CU-RZ25AKR)



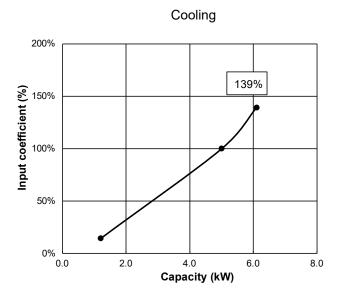


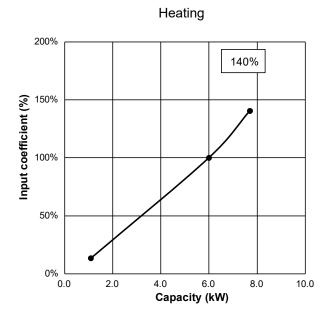
NOTE

1. Each type of the characteristics shows the value under the following conditions.

Equivalent tubing length : 5m
Difference of elevation : 0m
Wind speed : High

PK4R (CU-RZ50AKR) 3.3.1.2

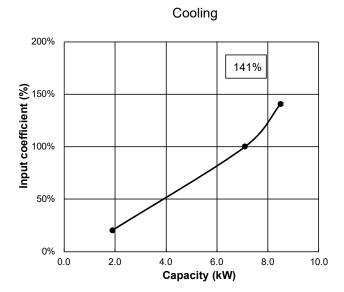


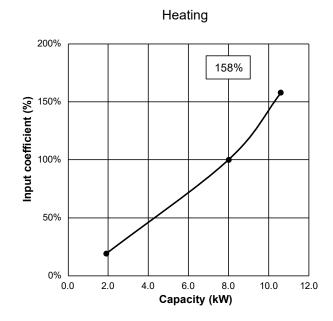


NOTE

 Each type of the characteristics shows the value under the following conditions.
 Equivalent tubing length : 5m
 Difference of elevation : 0m Wind speed : High

3.3.1.3 PK4R (CU-RZ71AKR)



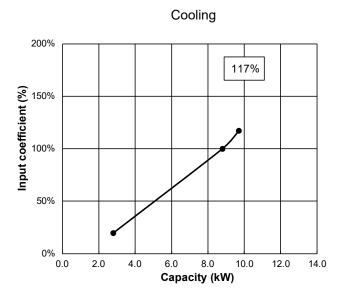


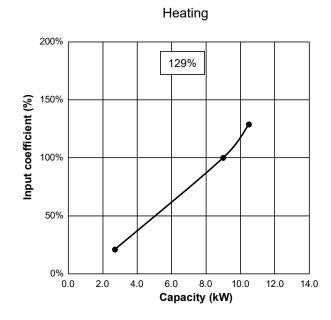
NOTE

1. Each type of the characteristics shows the value under the following conditions.

Equivalent tubing length : 5m
Difference of elevation : 0m
Wind speed : High

PK4R (CU-RZ95AKR) 3.3.1.4

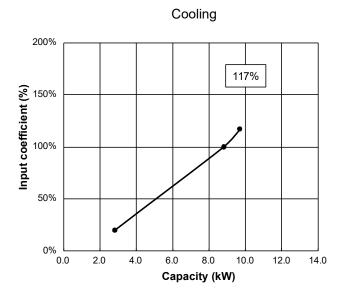


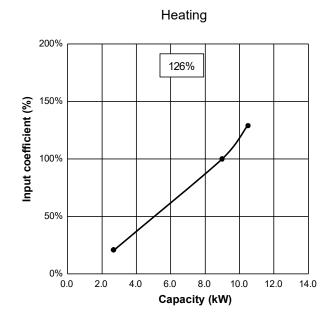


NOTE

 Each type of the characteristics shows the value under the following conditions.
 Equivalent tubing length : 5m
 Difference of elevation : 0m Wind speed : High

3.3.1.5 PK4R (U-100PZ4R8)





NOTE

1. Each type of the characteristics shows the value under the following conditions.

Equivalent tubing length : 5m
Difference of elevation : 0m
Wind speed : High

Noise Criterion Curves

20

10

63

Approximate minimum audible

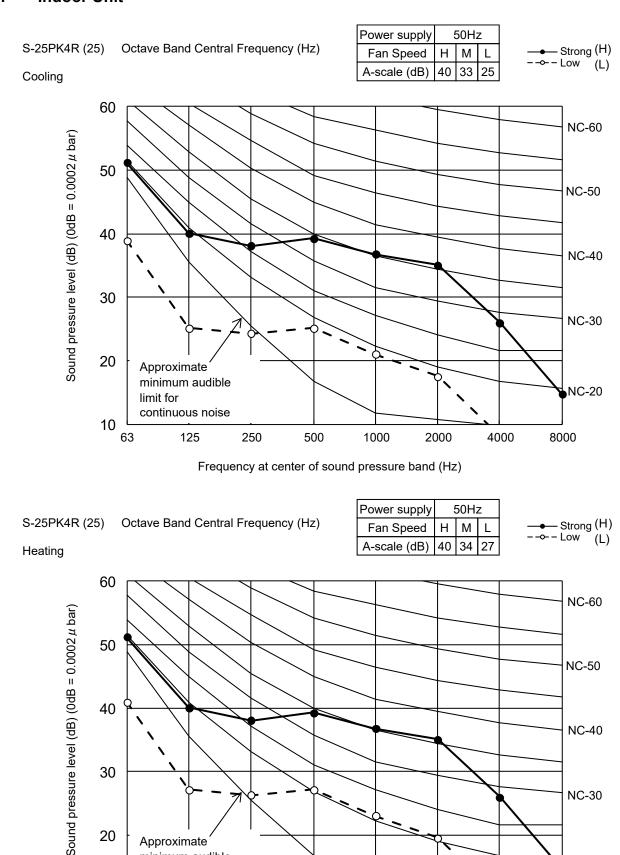
continuous noise

125

250

limit for

3.4.1 **Indoor Unit**



Frequency at center of sound pressure band (Hz)

1000

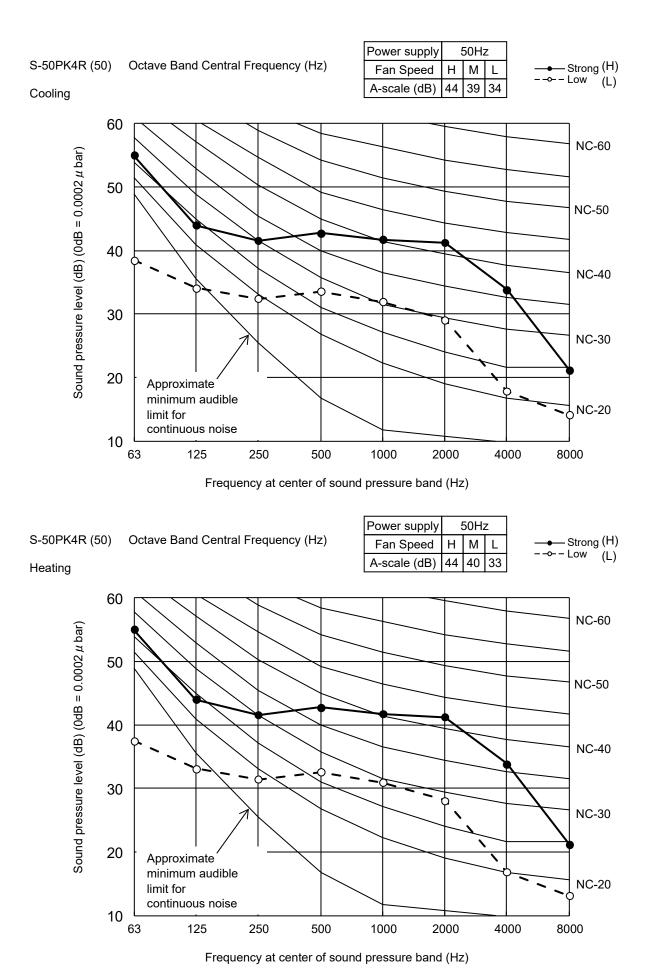
2000

NC-20

8000

4000

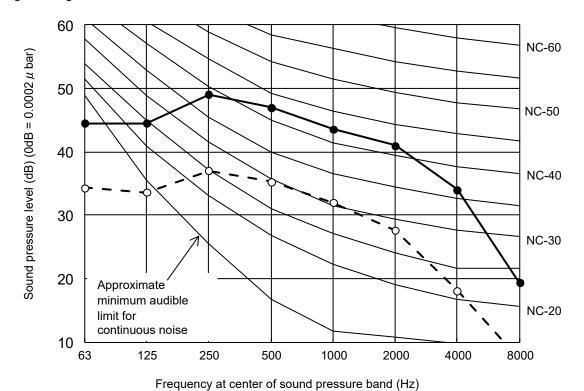
500



S-71PK4R (71) Octave Band Central Frequency (Hz)
Cooling / Heating

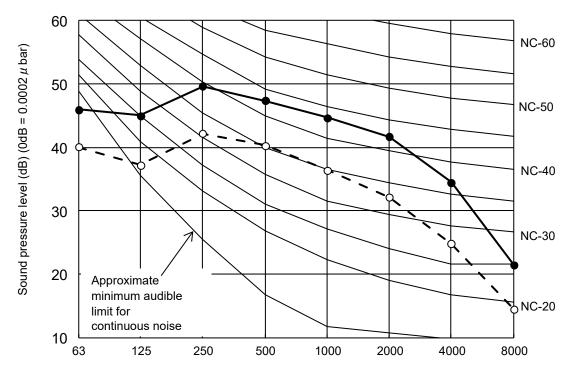
| Power supply | 50Hz | | | | |
|--------------|------|----|----|--|--|
| Fan Speed | Н | М | L | | |
| A-scale (dB) | 49 | 43 | 37 | | |

—— Strong (H) - → Low (L)



S-100PK4R (95 / 100) Octave Band Central Frequency (Hz) Cooling / Heating

| Power supply | ; | 50H: | Z | |
|--------------|----|------|----|------------|
| Fan Speed | Н | М | L | Strong (H) |
| A-scale (dB) | 49 | 45 | 41 | Low (L) |

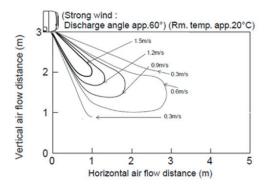


Frequency at center of sound pressure band (Hz)

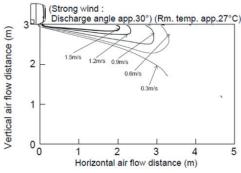
Airflow Distance Chart 3.5

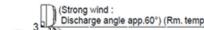
S-25PK4R (25)

Heating: Distribution of wind velocity

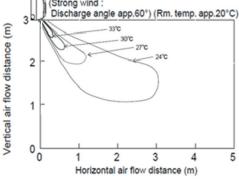


Cooling: Distribution of wind velocity

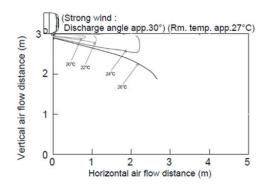




Heating: Distribution of temperature

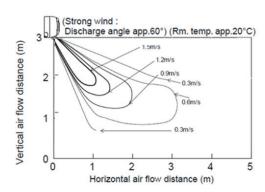


Cooling: Distribution of temperature

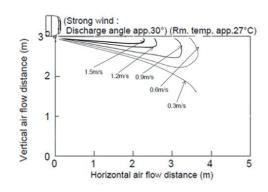


S-50PK4R (50)

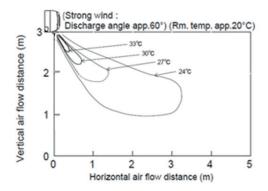
Heating: Distribution of wind velocity



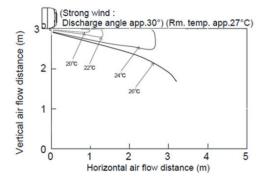
Cooling: Distribution of wind velocity



Heating: Distribution of temperature

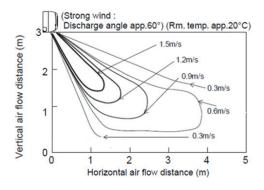


Cooling: Distribution of temperature

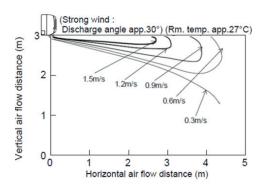


S-71PK4R (71)

Heating: Distribution of wind velocity

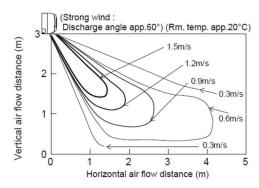


Cooling: Distribution of wind velocity

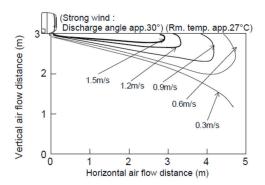


S-100PK4R (95 / 100)

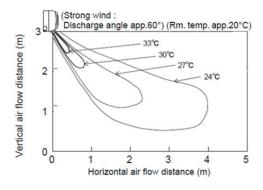
Heating: Distribution of wind velocity



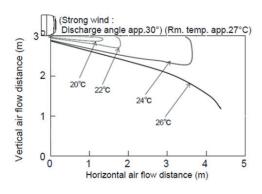
Cooling: Distribution of wind velocity



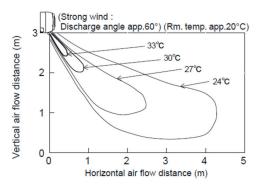
Heating: Distribution of temperature



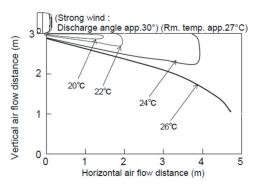
Cooling: Distribution of temperature



Heating: Distribution of temperature



Cooling: Distribution of temperature



3.6 Electrical Wiring

General Precautions on Wiring

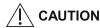
(1) Before wiring, confirm the rated voltage of the unit as shown on its nameplate, then carry out the wiring closely following the wiring diagram.

N WARNING

(2) This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown. The ELCB must be incorporated in the fixed wiring in accordance with the wiring regulations. The ELCB must be an approved circuit capacity, having a contact separation in all poles.

The ELCB or RCD suitable for use with inverters, resistant to high frequency noise, is most suitable. The ELCB's or RCD's intended for protection to include high frequency currents are unnecessary and should be avoided, as potentially causing nuisance tripping, in this application.

- (3) To prevent possible hazards from insulation failure, the unit must be grounded.
- (4) Each wiring connection must be done in accordance with the wiring system diagram. Wrong wiring may cause the unit to misoperate or become damaged.
- (5) Do not allow wiring to touch the refrigerant tubing, compressor, or any moving parts of the fan.
- (6) Unauthorized changes in the internal wiring can be very dangerous. The manufacturer will accept no responsibility for any damage or misoperation that occurs as a result of such unauthorized changes.
- (7) Regulations on wire diameters differ from locality to locality. For field wiring rules, please refer to your LOCAL ELECTRICAL CODES before beginning.
 - You must ensure that installation complies with all relevant rules and regulations.
- (8) To prevent malfunction of the air conditioner caused by electrical noise, care must be taken when wiring as follows:
 - The remote control wiring and the inter-unit control wiring should be wired apart from the inter-unit power wiring.
 - Use shielded wires for inter-unit control wiring between units and ground the shield on both sides.



Check local electrical codes and regulations before wiring. Also, check any specified instruction or limitations.

Recommended Wire Length and Wire Size

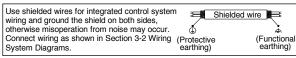
Connection cable between Indoor and Different Outdoor Unit (G)

| Outdoor Unit | Wire Size | Length |
|-----------------------|--------------------|----------|
| CU-25/50/ 71/95AKR | 1.5mm ² | Max. 30m |
| U-100PZ4R8 | 1.5mm ² | Max. 40m |
| 0-100P24R8 | 2.5mm ² | Max. 50m |

Wired Remote Controller (Optional) (R1 / R2) (D)

| Wire Size | Length |
|---------------------------------|-----------|
| 0.75mm ² (AWG#18) | Max. 500m |

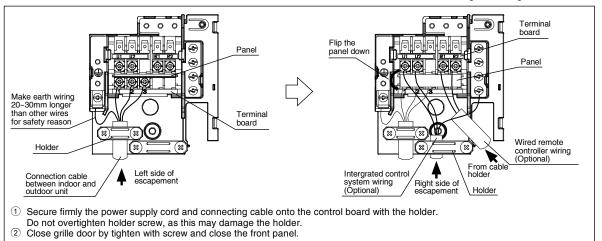
Integrated Control System (Optional) (U1 / U2) (C)



NOTE

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

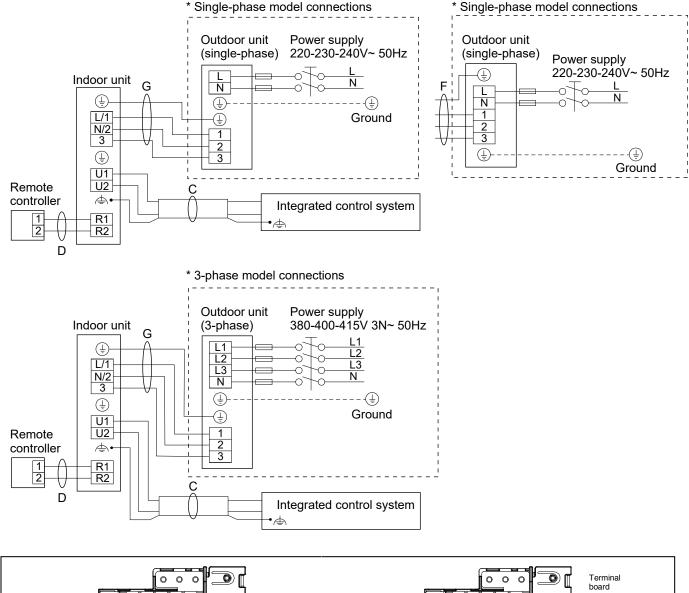
Connect the wired remote controller wire and connection cable between indoor unit and outdoor unit according to the diagram below.

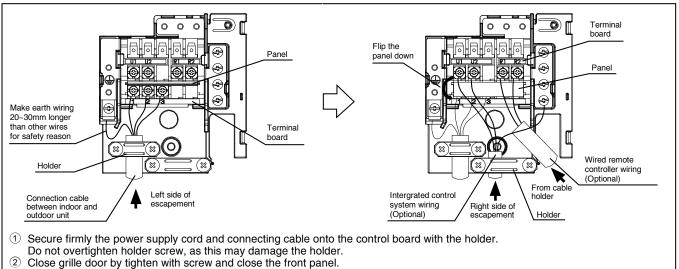


■ Wiring System Diagrams

3-LINE CONNECTION

Example: Single connection

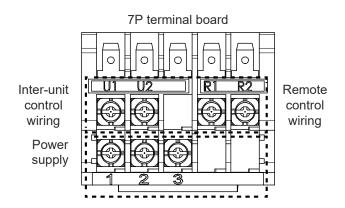




NOTE

- (1) See "■Recommended Wire Length and Wire Diameter for Power Supply System" on page 24 for the explanation of "C", "D" and "G" under "■ Wiring System Diagrams" on page 25.
- (2) The basic connection diagram of the indoor unit shows the terminal boards, so the terminal boards in your equipment may differ from the diagram.
- (3) Refrigerant Circuit address should be set before turning the power on.
- (4) Regarding Refrigerant Circuit address setting, refer to the installation instructions supplied with the remote controller (Optional).

Auto address setting can be executed by remote controller automatically.

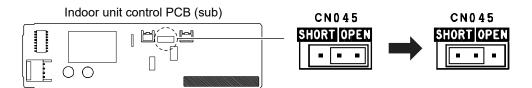


/ CAUTION

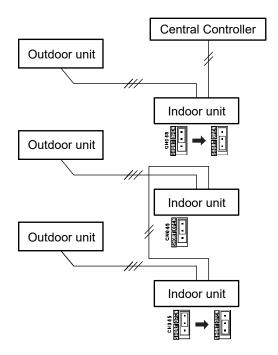
- (1) When connecting to the integrated control system, the setting of the terminating resistance is required. Even more connection with the integrated control system is required, all indoor units in the link of 3-line connection should be connected with 2-line link wiring.
 - How to set the terminating resistance of the indoor unit
 The setting of the terminating resistance should be made by CN045 on the indoor unit control PCB.

The setting of indoor unit terminating resistance at shipment is OPEN side. If the shorting socket is moved as shown below, the terminating resistance is SHORT side (operative).

It is not necessary to install all units' terminating resistance. Follow the steps on the next page which unit's terminating resistance to install.



In case that the inter-unit control wiring in the link are all 3-line connection:

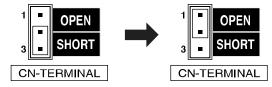


In case that the inter-unit control wiring in the link are mixed with 3-line and 2-line connections:
 Set the terminating resistance with the TERMINAL pin (CN-TERMINAL) on the *outdoor unit control PCB.

The setting of the outdoor unit terminating resistance at shipment is SHORT side (operative). Leave one unit in short circuit among outdoor units in the link.

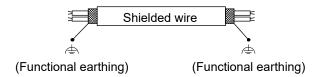
Change to OPEN for other units. It is not necessary to install all units' terminating resistance to OPEN side.

It is not necessary to install all units' terminating resistance. Follow the steps on the next page which unit's terminating resistance to install.



* Outdoor unit is connected by 2-line connection.

(2) Use shielded wires for inter-unit control wiring (C) and ground the shield on both sides, otherwise misoperation from noise may occur. Connect wiring as shown in Section "■ Wiring System Diagrams" on page 25.



- (3) In the case of 3-line connection, connection cable between outdoor and indoor unit shall be approved polychloroprene sheathed flexible cord. Type designation 60245 IEC57 (H05RN-F, GP85PCP etc.) or heavier cord.
 - Use the standard power supply cables for Europe (such as H05RN-F or H07RN-F which conform to CENELEC (HAR) rating specifications) or use the cables based on IEC standard. (60245 IEC57, 60245 IEC66)



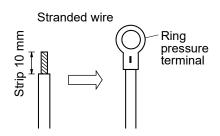
Loose wiring may cause the terminal to overheat or result in unit malfunction.

A fire hazard may also occur. Therefore, ensure that all wiring is tightly connected.

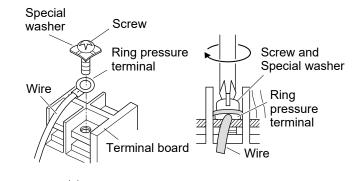
When connecting each power wire to the terminal, follow the instructions on "\textstyle=How to connect wiring to the terminal" and fasten the wire securely with the terminal screw.

How to connect wiring to the terminal For stranded wiring

(1) Cut the wire end with cutting pliers, then strip the insulation to expose the stranded wiring about 10 mm and tightly twist the wire ends.

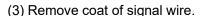


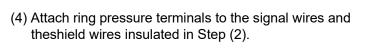
- (2) Using a Phillips head screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Using a ring connector fastener or pliers, securely clamp each stripped wire end with a ring pressure terminal.
- (4) Place the ring pressure terminal, and replace and tighten the removed terminal screw using a screwdriver.

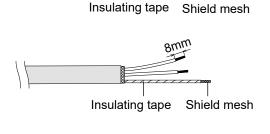


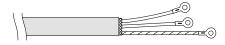
Examples of shield wires

- (1) Remove cable coat not to scratch braided shield.
- (2) Unbraid the braided shield carefully and twist the unbraided shield wires tightly together. Insulate the shiel wires by covering them with an insulation tube or wrapping insulating tape around them.









3.7 Installation Instruction

3.7.1 Indoor Unit Installation

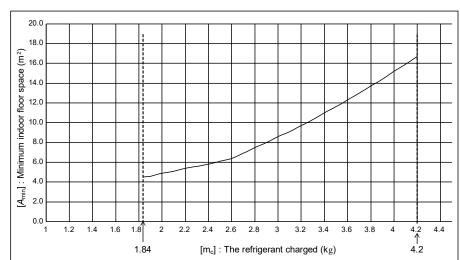
Explanation of symbols displayed on the indoor unit or outdoor unit.

| | | This symbol shows that this equipment uses a flammable refrigerant. If the refrigerant is leaked, together with an external ignition source, there is a possibility of ignition. |
|--|---------|---|
| | CAUTION | This symbol shows that the Operating Instructions should be read carefully. |
| | CAUTION | This symbol shows that a service personnel should be handling this equipment with reference to the Technical Manual. |

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 $[m_c]$ 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:



| $A_{\text{min}} = (m_c / (2.5 \text{ x } (LFL)^{(5/4)})$ | x h ₀)) ² |
|--|----------------------------------|
|--|----------------------------------|

** not less than safety factor margin

 A_{min} = Required minimum room area, in m² m_c = Refrigerant charge in appliance, in kg LFL = Lower flammability limit (0.307 kg/m³)

 h_0 = Release height is 1.8m.

** The required minimum room area, A_{min}, 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. $m_c \le 1.84$: Can be installed

 $m_c \le 1.84$: 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 _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 1.8 | 4.5 |
| 1.9 | 4.6 |
| 2.0 | 4.9 |
| 2.1 | 5.1 |
| 2.2 | 5.4 |

| [m _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 2.3 | 5.6 |
| 2.4 | 5.8 |
| 2.5 | 6.1 |
| 2.6 | 6.4 |
| 2.7 | 6.9 |

| [m _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 2.8 | 7.5 |
| 2.9 | 8.0 |
| 3.0 | 8.6 |
| 3.1 | 9.1 |
| 3.2 | 9.7 |

| [m _c] (kg) | [Amin] (m ²) |
|------------------------|--------------------------|
| 3.3 | 10.3 |
| 3.4 | 11.0 |
| 3.5 | 11.6 |
| 3.6 | 12.3 |
| 3.7 | 13.0 |

| $[m_c]$ (kg) | [A _{min}] (m ²) |
|--------------|---------------------------------------|
| 3.8 | 13.7 |
| 3.9 | 14.4 |
| 4.0 | 15.2 |
| 4.1 | 15.9 |
| 4.2 | 16.7 |

3.7.1.1 Select the Indoor Unit Installation Location

3.7.1.1.1 Indoor Unit

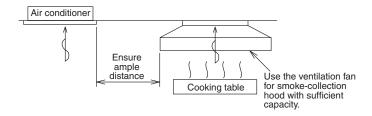
- Install the indoor unit once the following conditions are satisfied and after receiving the customer approval.
 - 1. The indoor unit must be within a maintenance space.
 - 2. The indoor unit must be free from any obstacles in path of the air inlet and outlet, and must allow spread of air throughout 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.
- 4. The indoor unit must be away from heat and sources of steam, but avoiding installation near an entrance.
- 5. The indoor unit must allow easy draining.
- 6. The indoor unit must allow easy connection to the outdoor unit.
- 7. 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.
- 8. If the power supply is subject to noise generation, add a suppressor.
- 9. Do not install the indoor unit in a laundry. Electric shocks may result.
- 10. Installation height is more than 1.8m.

Note

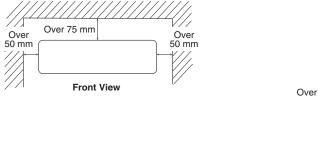
- Thoroughly study the following installation locations.
 - 1. In such places as restaurants and kitchens, considerable amount of oil steam and flour adhere to the fan, the fin of the heat exchanger, resulting in heat exchange reduction, spraying, dispersing of water drops, etc. In these cases, take 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 oily steam.
 - 2. Avoid installing the air conditioner in such circumstances where cutting oil mist or iron powder exist, especially in factories, etc.
 - 3. Avoid places where inflammable gas is generated, flows-in, contaminated, or leaked.
 - 4. Avoid places where sulphurous acid gas or corrosive gas can be generated.
 - 5. Avoid places near high frequency generators.

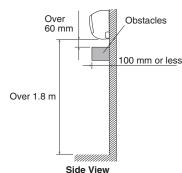


Wall Mounted

The air inlet and outlet of the indoor unit must be free of any obstructions to allow air to spread throughout the room.

1 The indoor unit must be within a maintenance space.





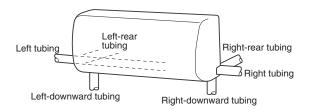
3.7.1.2 How to Install the Indoor Unit

3.7.1.2.1 Starting the Installation

(1) Remove the rear panel.

Note

Tubing can be extended in 6 directions as shown below. Select the direction you need providing the shortest run to the outside unit.

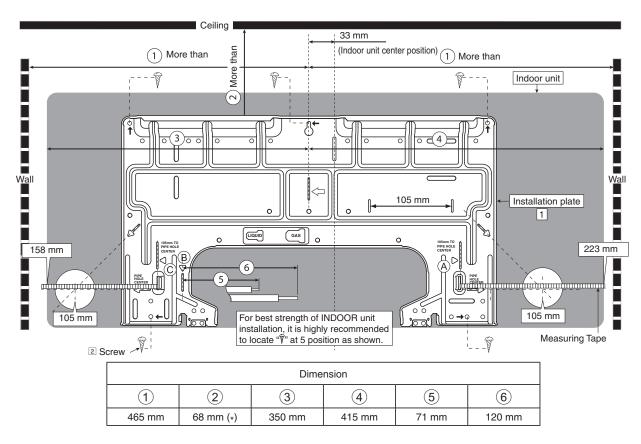


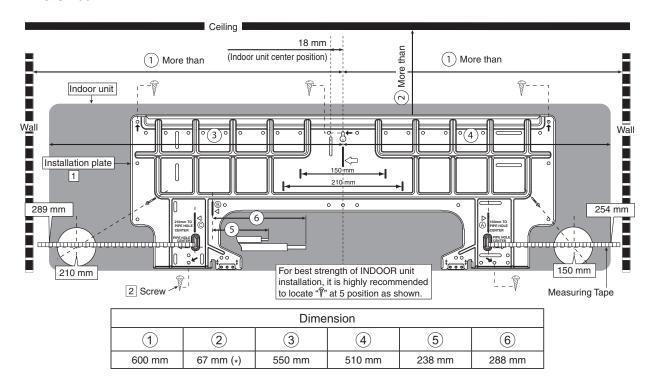
3.7.1.2.2 How to Fix Installation Plate

The mounting wall should be strong and solid enough to withstand the unit's vibration.

1 Place the installation plate from the indoor unit on the wall at the location selected.

S-25PK** & S-50PK**





- The center of installation plate should be at more than (1) at right and left of the wall.
- The distance from installation plate edge to ceiling should more than (2).
- From installation plate center to unit's left side is (3).
- From installation plate center to unit's right side is (4).
 - For left side piping, piping connection for liquid should be about ⑤ from this line.
 - For left side piping, piping connection for gas should be about **6** from this line.
- Dimension (*):If holder at the rear of chassis (Refer column "6.1.4 Indoor Unit Installation") need to be used to prop up the unit, this distance shall be 83 mm (S-25PK** & S-50PK**) / 82 mm (S-71PK** & S-100PK**) or more.
- Mount the installation plate on the wall with 5 screws or more (at least 5 screws). (If mounting the unit on the concrete wall, consider using anchor bolts.)
 - Always mount the installation plate horizontally by aligning the marking-off line with the thread and using a level gauge.

If Wooden Wall

(B)

- (1) Attach the installation plate to the wall with the 5 screws (4×20) provided.
- (2) Double check with a carpenter's level or tape measure that the panel is level. This is important to install the unit properly.



(3) Make sure the panel is flush against the wall. Any space between the wall and unit will cause noise and vibration.

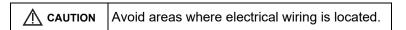
If Concrete Wall

- (1) When attaching the installation plate to the concrete wall, use the screws (field supply) for concrete or an optional anchor plug and fix to the hole of ø5 mm of the installation plate as shown in the figure under Section 6.1.2.2.
 - When fixing with bolt, attach to the hole of ø8 mm.
- (2) Double check with a carpenter's level or tape measure that the plate is level. This is important to install the unit properly.
- (3) Make sure the installation plate is flush against the wall. Any space between the wall and unit will cause noise and vibration.

- 2 Drill the piping plate hole with ø70 mm hole-core drill.
 - Line according to the left and right side of the installation plate. The meeting point of the extended line is the center of the hole.
 - Another method is by putting measuring tape at position as shown in the diagram above.
 - For S-25PK** & S-50PK**, the hole center is obtained by measuring the distance namely 105 mm for left and right hole respectively.
 - For S-71PK** & S-100PK**, the hole center is obtained by measuring the distance namely 210 mm for left hole and 150 mm for right hole respectively.
 - Drill the piping hole at either the right or the left and the hole should be slightly slanting to the outdoor side.

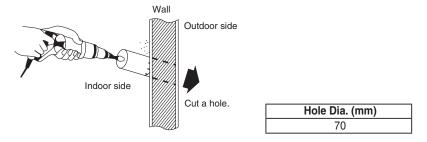
3.7.1.3 To Drill a Hole in the Wall and Install a Sleeve of Piping

1 Before making the hole, check carefully that no studs or pipes are directly run behind the spot to be cut.



The above precautions are also applicable if tubing goes through the wall in any other location.

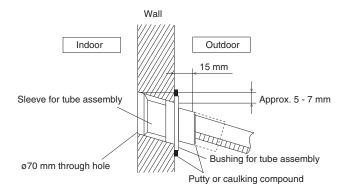
2 Using a sabre saw, keyhole saw or hole-cutting drill attachment, cut a hole of ø70 mm in the wall. Hole should be made at a slight downward slant to the outdoor side.



3 Place a plastic cover over the end of the pipe (for indoor side only) and insert the pipe in the wall.

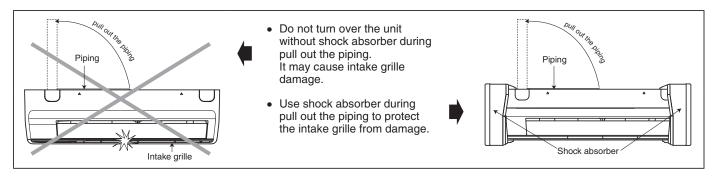
This will protect the tube from contacting the metal lath or wire lath, leakage due to condensation or entering small animals through the hole.

When the wall is hollow, please be sure to use the piping sleeve assembly to prevent dangers caused by mice biting the connection cable.

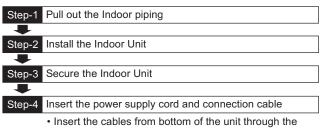


- 1 Insert the piping sleeve to the hole.
- 2 Fix the bushing to the sleeve.
- 3 Cut the sleeve until it extrudes about 15 mm from the wall.
- 4 Finish by sealing the sleeve with putty or caulking compound at the final stage.

3.7.1.4 Indoor Unit Installation

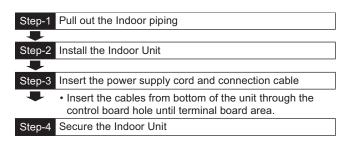


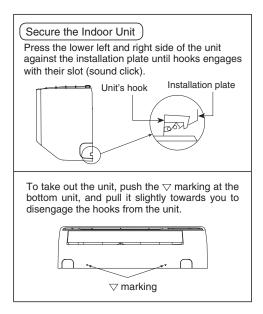
3.7.1.4.1 For the Right Rear Piping

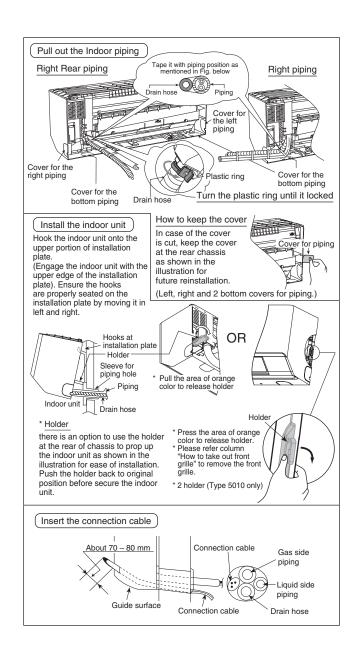


 Insert the cables from bottom of the unit through the control board hole until terminal board area.

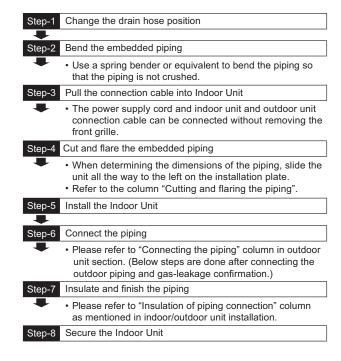
3.7.1.4.2 For the Right and Right Bottom Piping



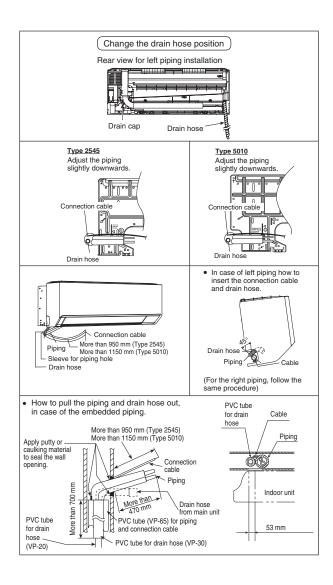




3.7.1.4.3 For the Embedded Piping



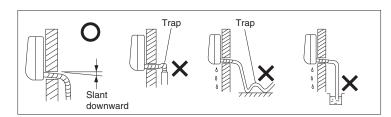
(This can be used for left rear piping also.)



Note

When there is a long horizontal drain hose runs with very little slope to the run, water is likely to remain inside the hose. Slant the drain hose downward slightly to the outdoors and insulate it with the insulation.

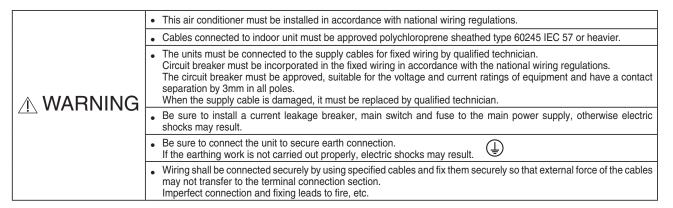
- 1 Slant downward not to remain water inside the drain hose.
- 2 Make sure tubing does not become trapped.
- 3 Do not let the tip of the drain hose dip into the drain water.
- 4 Do not leave the drain hose in the sewerage. This will cause the heat exchanger erosion damage caused by the corrosive gas such as hydrogen sulfide occurred inside the sewerage and lead to a gas leak.



3.7.1.5 Electrical Wiring

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

3.7.1.5.1 General Precautions on Wiring



- (1) Select a power source that is capable of supplying the current required by the air conditioner.
- (2) 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.
- (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.

Note

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.

Front panel

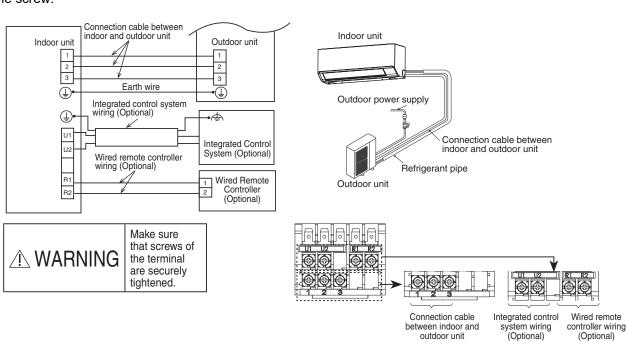
Grille door

Screw

3.7.1.5.2 Wiring System Diagrams

The indoor and outdoor unit connection cable and wired remote controller wire can be connected without removing the front grille.

- 1 Install the indoor unit on the installing holder that mounted on the wall.
- 2 Open the front panel and grille door by loosening the screw.



3.7.1.5.3 Recommended Wire Length and Wire Size

Connection cable between Indoor and Different Outdoor Unit

 Outdoor Unit
 Wire Size
 Length

 CU-25/50/ 71/95AKR
 1.5mm²
 Max. 30m

 1.5mm²
 Max. 40m

 U-100PZ4R8
 2.5mm²
 Max. 50m
 Wired Remote Controller (Optional) (R1 / R2)

| Wire Size | Length |
|---------------------|-----------|
| 0.75mm² (AWG#18) | Max. 500m |

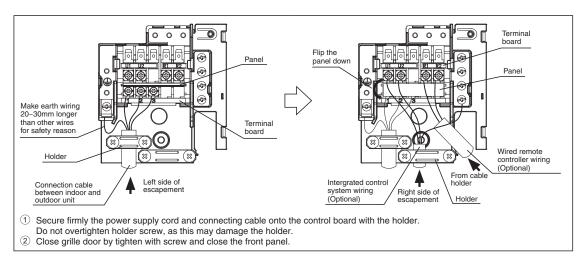
Integrated Control System (Optional) (U1 / U2)

| 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 6.1.5.2 Wirin System Diagrams. | ⊕ Silleidei | (Functional earthing) |
|---|-------------|-----------------------|
|---|-------------|-----------------------|

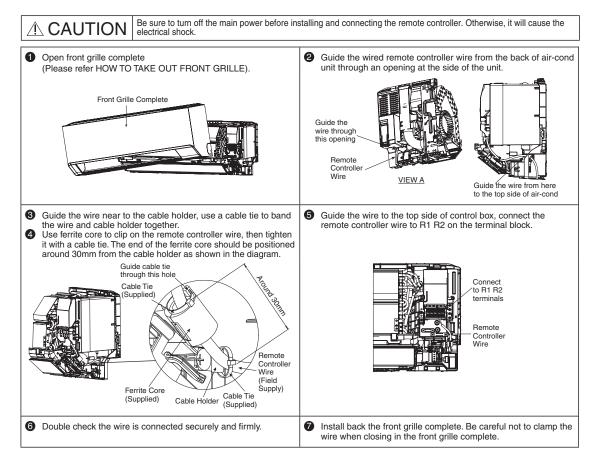
Note

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

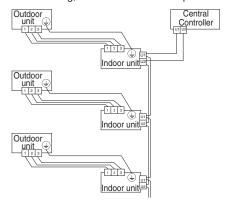
Connect the wired remote controller wire and connection cable between indoor unit and outdoor unit according to the diagram below.

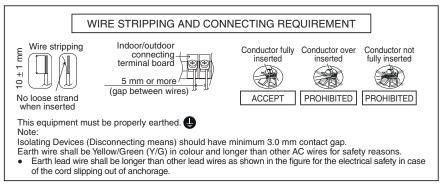


How To Connect Wired Remote Controller to The Indoor Unit



If branching in the inter-unit control wiring, the number of branch points should be 16 or fewer









RISK OF FIRE JOINING OF WIRES MAY CAUSE OVERHEATING

AND FIRE.





3.7.1.6 Refrigerant Piping

Must ensure mechanical connections be accessible for maintenance purposes.

3.7.1.6.1 Connecting the Refrigerant Tubing

Use of the Flaring Method

Many of conventional split system air conditioners employ the flaring method to connect refrigerant tubes that run between indoor and outdoor units. In this method, the copper tubes are flared at each end and connected with flare nuts.

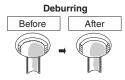
Flaring Procedure with a Flare Tool

- (1) Cut the copper tube to the required length with a tube cutter.

 It is recommended to cut approx. 30 50 cm longer than the tubing length you estimate.
- (2) Remove burrs at each end of the copper tubing with a tube reamer or a similar tool.

 This process is important and should be done carefully to make a good flare.

 Be sure to keep any contaminants (moisture, dirt, metal filings, etc.) from entering the tubing.



Note

When reaming, hold the tube end downward and be sure that no copper scraps fall into the tube.

- (3) Remove the flare nut from the unit and be sure to mount it on the copper tube.
- (4) Make a flare at the end of the copper tube with a flare tool.

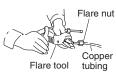


Note

When flared joints are reused, the flare part shall be re-fabricated.

A good flare should have the following characteristics:

- 1 inside surface is glossy and smooth
- 2 edge is smooth
- 3 tapered sides are of uniform length



Caution Before Connecting Tubes Tightly

- (1) Apply a sealing cap or water-proof tape to prevent dust or water from entering the tubes before they are used.
- (2) Be sure to apply refrigerant lubricant (ether oil) to the inside of the flare nut before making piping connections. This is effective for reducing gas leaks.
- (3) For proper connection, align the union tube and flare tube straight with each other, then screw on the flare nut lightly at first to obtain a smooth match.
- Adjust the shape of the liquid tube using a tube bender at the installation site and connect it to the liquid tubing side valve using a flare.



3.7.1.6.2 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

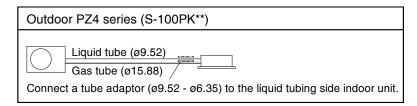
Unit: mm

| Indoor unit type | S-25PK** | S-50PK** | S-71PK** | S-100PK** |
|------------------|----------|----------|----------|---------------|
| Gas tube | ø9.52 | ø12.7 | ø15.88 | ø15.88 |
| Liquid tube | ø6.35 | ø6.35 | ø6.35 | ø6.35 (ø9.52) |

Different-diameter-tube joint for the indoor unit tubing connection part is not supply with the unit (Field supply). The size of parenthesis indicates the connection tube diameter when using the different-diameter-tube joint.

How to use different-diameter-tube joint (field supply)

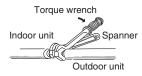
(1) When using with single connection.



The following examples show the multiple connections.

- Connectable or disconnectable units vary depending on a series of outdoor units. Refer to the installation instructions for the outdoor unit as well.
- Two, three or four indoor units can be operated simultaneously with a single remote controller.
 Note that individual operation is not possible.

 Master unit and slave unit can be set automatically in twin, triple and double twin system. No address setting is necessary.



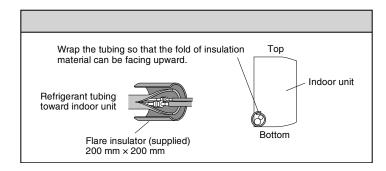
- (2) To fasten the flare nuts, apply specified torque.
- When removing the flare nuts from the tubing connections, or when tightening them after connecting the tubing, be sure to use a torque wrench and a spanner. If the flare nuts are over-tightened, the flare may be damaged, which could result in 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. 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·cm} | 0.8 mm |
| ø9.52 (3/8") | 38± 4 N·m {380± 40 kgf·cm} | 0.8 mm |
| 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 mm |

- Because the pressure is approximately 1.6 times higher than conventional refrigerant R22 pressure, the use of
 ordinary flare nuts 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.

3.7.1.6.3 Insulating the Refrigerant Tubing

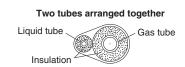
Unless the insulation is made, condensation can cause damage to the interior of a property. Use the supplied insulation material.



Tubing Insulation

Must ensure that pipe-work shall be protected from physical damage

Thermal insulation must be applied to all units tubing, including distribution joint (field supply).
 * For gas tubing, the insulation material must be heat resistant to 120°C or above. For other tubing, it must be heat resistant to 80°C or above. Insulation material thickness must be 10 mm or greater.



Note

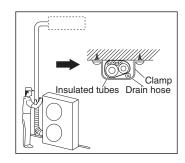
If noise bothers you from the area between indoor and outdoor units' connection pipes, it is effective to wind the soundproofing materials (field supply) to reduce noise.

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.

3.7.1.6.4 Taping the Tubes

- (1) At this time, the refrigerant tubes (and electrical wiring if local codes permit) should be taped together with armoring tape in 1 bundle. To prevent condensation from overflowing the drain pan, keep the drain hose separate from the refrigerant tubing.
- (2) Wrap the armoring tape from the bottom of the outdoor unit to the top of the tubing where it enters the wall.
 - As you wrap the tubing, overlap half of each previous tape turn.
- (3) Clamp the tubing bundle to the wall, using 1 clamp approx. each meter.



Note

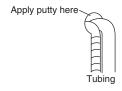
Do not wind the armoring tape too tightly since this will decrease the heat insulation effect. Also ensure that the condensation drain hose splits away from the bundle and drips clear of the unit and the tubing.



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.

3.7.1.6.5 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.



Apply neutral cure (Alkoxy type) and ammonia-free silicone

sealant along the circumference

3.7.1.6.6 Additional Precautions for R32 models

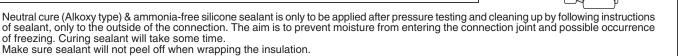
Additional Precautions For R32 Models when connecting by flaring at indoor side



Ensure to do re-flaring of pipes before connecting to units to avoid leaking

Seal sufficiently the flare nut (both gas and liquid sides) with neutral cure (Alkoxy type) & ammonia-free silicone sealant and insulation material to avoid the gas leak caused by freezing.

 ${\mathbb X}$ Use of silicon containing ammonia can lead to stress corrosion on the joint ${\mathbb A}$ can cause leakage.



3.7.1.7 How to Install the Timer Remote Controller or High-Spec Wired Remote Controller (Optional Part)

Note

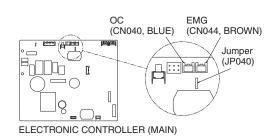
Refer to the Installation Instructions attached to the optional Timer Remote Controller or optional High-spec Wired Remote Controller.

3.7.1.8 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 220-230-240 VAC power is not connected to the U1 & U2 terminal board terminal.

 * If 220-230-240 VAC is accidentally applied, the Fuse on indoor unit Electronic Controller (Main) 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 OC connector and shift the connector wires to EMG connector on same indoor unit Electronic Controller (Main). If operation is still not possible after shift to EMG connector, cut the jumper JP040 on the same indoor unit Electronic Controller (Main).



Items to Check Before the Test Run

- (1) Check that the indoor and outdoor units have correct combination.
- (2) Turn the remote power switch ON at least 5 hours in advance in order to energize.
- (3) Fully open the closed valves on the liquid tubing and gas tubing sides.
- (4) Separate the power supply in accordance with the types of system.
- (5) In the case of conditions below, restore the detailed setting code nos. 11, 12, 13, 14 of all indoor units in the system to the factory setting and then set up the auto address setting.
 - o Indoor unit has been communicated with another outdoor unit before.
 - o One or more PCBs of indoor units in the system are replaced.
 - o Detailed setting "Code no." 11 is different from correct indoor unit capacity.
 - o Detailed setting "Code no." 12, 13 or 14 doesn't match for system.
 - o E15, E16 or L09 alarm occurs.
 - o The "Assigning" screen appears on the LCD display for more than 10 minutes.

* Factory setting

| XX : Code no. | Item | YYYY : Set data | XX : Code no. | Item | YYYY : Set data |
|---------------|----------------------|-----------------|---------------|-----------------------|-----------------|
| 11 | Indoor unit capacity | 0000 | 13 | Indoor unit address | 0099 |
| 12 | System address | 0099 | 14 | Group control address | 0099 |

List of detailed setting items code nos. 11, 12, 13, 14

| Code no. | Item | | | Se | et data | | | | | | | | | |
|----------|-------------------------|------|------------|------------------------------------|--------------|-----------|---------------|--|--|--|--|--|--|--|
| Code no. | item | No. | | Description | No. | | Description | | | | | | | |
| 11 | Indoor unit capacity | 0003 | 28 | S-25PK** (25) | 0009 | 56 | S-50PK** (50) | | | | | | | |
| 11 | Indoor unit capacity | 0015 | 112 | S-100PK** (100) | 0012 | 80 | S-71PK** (71) | | | | | | | |
| | | 0001 | Unit no | . 1 | | | | | | | | | | |
| | | 0002 | Unit no | . 2 | | | | | | | | | | |
| | | 0003 | Unit no. 3 | | | | | | | | | | | |
| 12 | System address | 5 | 5 | | | | | | | | | | | |
| | | 0030 | Unit no | . 30 | | | | | | | | | | |
| | | 0099 | Not set | | | | | | | | | | | |
| | | 0001 | Unit no | . 1 | | | | | | | | | | |
| | | 0002 | Unit no | . 2 | | | | | | | | | | |
| | | 0003 | Unit no | . 3 | | | | | | | | | | |
| 13 | Indoor unit address | 5 | 5 | | | | | | | | | | | |
| | | 0064 | Unit no | . 64 | | | | | | | | | | |
| | | 0099 | Not set | | · | | _ | | | | | | | |
| · | | 0000 | Individu | ıal (1:1 = Indoor unit with no gro | oup wiring) | · | | | | | | | | |
| 14 | Croup control address | 0001 | Main ur | nit (One of the group-control ind | oor units) | • | | | | | | | | |
| 14 | Group control address — | 0002 | Sub un | it (All group-control indoor units | except for m | ain unit) | | | | | | | | |
| | | 0099 | Not set | | | | | | | | | | | |

^{*} Code no. is displayed with 6 digits in wired remote controller, CZ-RTC6 series. In this case, read as follows. e.g. 11 → 000011

Note

The Item code numbers 11, 12, 13 and 14 can automatically be changed to the appropriate settings from factory settings listed above by making the auto address settings according to the connected outdoor unit capacity and the number of indoor units. If needed to reset the settings after once changed, return all the item codes to the factory shipment-time settings. It is necessary to set the auto address settings once again.

Note

In case of checking and changing before setting up the address settings in group connection, turn on only the power of the system to be checked and changed. If you turn on the power to all systems before address settings, the settings of all indoor units may not be seen correctly.

After changing, turn off the power supply within 2 minutes or carry out the auto address setting procedures immediately. If the power of the system switched on for a while, the auto address setting may start as a single system and it might not match the multiple systems.

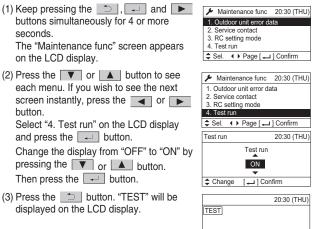
3.7.1.9 Test Run

3.7.1.9.1 Test Run Using the Wired Remote Controller

CZ-RTC5B (High-spec wired remote controller)

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

- 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 "4. Test run" on the LCD display and press the Jutton. Change the display from "OFF" to "ON" by pressing the vor button. Then press the ___ button.
- (3) Press the button. "TEST" will be displayed on the LCD display.



[也] START

- (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 the SUPPLEMENT at the end of this manual.)





- (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

CZ-RTC4 / CZ-RTC4A (Timer remote controller)

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

- (1) Press the remote controller \bigcirc 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 the SUPPLEMENT at the end of this manual.)
- (2) After the test run is completed, press the \bigcirc button 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-RTC6 series (Wired Remote Controller)

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.
- (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 the SUPPLEMENT at the end of this manual.)



(2)

(1)

(1)



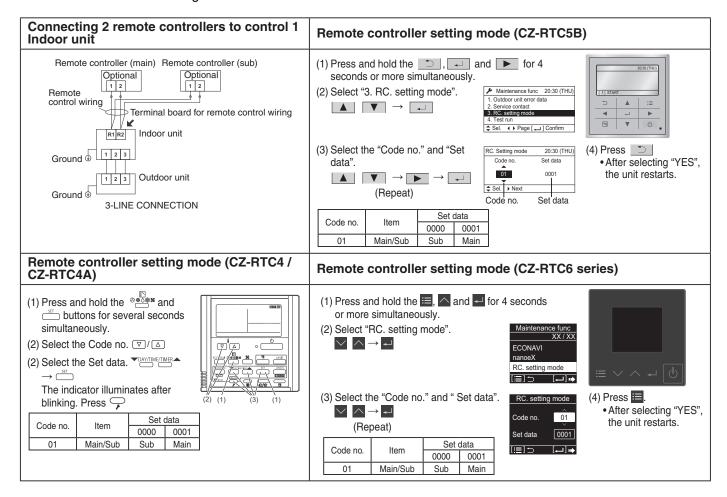
- (5) After the test run is completed, proceed from Step (1) and change to "OFF" at Step (2).
 - •To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.

NOTE

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

3.7.1.9.2 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.



3.7.1.10 Appendix

3.7.1.10.1 How to Take Out Front Grille

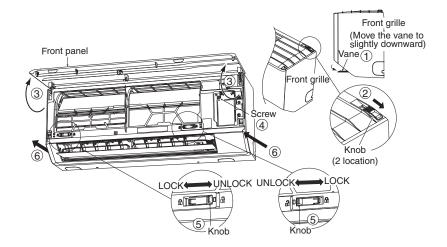
S-25PK** & S-50PK**

Please follow the steps below to take out front grille if necessary such as when installing or servicing.

- 1 Set the vertical airflow vane to slightly downward.
- ② Slide the 2 knobs on the upside of front grille away from the center to release them.
- 3 Open front panel.
- 4 Remove the 1 screw on the front grille as shown in the illustration.
- ⑤ Slide the 2 knobs on the front grille to unlock position.
- 6 Pull the front grille towards you to remove the front grille.

When reinstalling the front grille, carry out above steps in the reverse order.

After sliders are slide to lock position, please confirm front grille is securely fixed by pulling the front grille towards you.



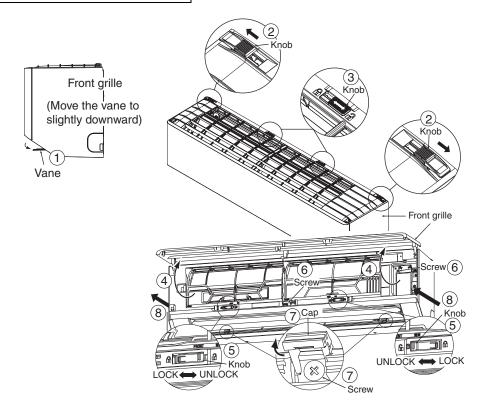
S-71PK** & S-100PK**

Please follow the steps below to take out front grille if necessary such as when installing or servicing.

- 1 Set the vertical airflow vane to slightly downward.
- 2 Slide 2 knobs on the upside of front grille (left and right) away from the center to release them.
- 3 Slide 2 knobs on the upside of front grille to unlock position.
- 4 Open front panel.
- 5 Slide 2 knobs on the front grille to unlock position.
- 6 Remove 2 screws on the front grille as shown in the illustration.
- 7 Push 2 caps upward and remove 2 screws on the front grille as shown in the illustration.
- 8 Pull the front grille towards you to remove the front grille.

When reinstalling the front grille, carry out above steps in the reverse order.

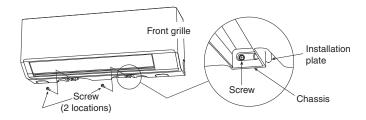
After sliders are slide to lock position, please confirm front grille is securely fixed by pulling the front grille towards you.



3.7.1.10.2 Screw Chassis to Installation Plate

Fasten the chassis to the installation plate with screws (Self purchase, Screw size: M4, max. length 10 mm) to provide a neat appearance of indoor unit.

Please refer column "How to take out front grille" to remove the front grille.



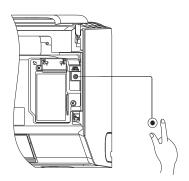
3.7.1.10.3 Auto Switch Operation

The below operations will be performed by pressing the "AUTO" switch.

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) repeatedly 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.

- 3. To stop test operation, press 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.

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.

3.8 Capacity Table

3.8.1 Cooling Capacity Performance Data

3.8.1.1 Wall Mounted Type

3.8.1.1.1 S-25PK4R (25)

| Ambient | | Outdoor air intake temp (°C D.B.) | | | | | | | | | | | | | | |
|----------|-----|-----------------------------------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| Return | -10 |)°C | -5 | °C | 0° | C. | 5°C | | 9°C | | 10 | °C | 10 | °C | 15 | °C |
| Air (WB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 3.5 | 0.63 | 3.5 | 0.63 | 3.5 | 0.63 | 3.5 | 0.63 | 3.5 | 0.63 | 3.5 | 0.63 | 3.7 | 0.38 | 3.7 | 0.46 |
| 19°C | 3.9 | 0.63 | 3.9 | 0.63 | 3.9 | 0.63 | 3.9 | 0.63 | 3.9 | 0.63 | 3.9 | 0.63 | 4.2 | 0.38 | 4.1 | 0.46 |
| 22°C | 4.3 | 0.62 | 4.3 | 0.62 | 4.3 | 0.62 | 4.3 | 0.62 | 4.3 | 0.62 | 4.3 | 0.62 | 4.6 | 0.37 | 4.5 | 0.45 |

| Ambient | | Outdoor air intake temp (°C D.B.) | | | | | | | | | | | | | | |
|----------|-----|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Return | 20 |)°C | 25°C | | 30°C | | 35°C | | 38°C | | 40°C | | 43°C | | 46°C | |
| Air (WB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 3.6 | 0.57 | 3.4 | 0.67 | 3.2 | 0.68 | 3.0 | 0.90 | 2.9 | 0.98 | 2.9 | 1.03 | 2.8 | 1.10 | 1.9 | 0.91 |
| 19°C | 4.0 | 0.56 | 3.8 | 0.67 | 3.8 | 0.79 | 3.4 | 0.90 | 3.3 | 0.98 | 3.2 | 1.02 | 3.1 | 1.09 | 2.1 | 0.91 |
| 22°C | 4.4 | 0.55 | 4.2 | 0.66 | 4.0 | 0.67 | 3.8 | 0.89 | 3.6 | 0.96 | 3.5 | 1.01 | 3.4 | 1.08 | 2.4 | 0.90 |

3.8.1.1.2 S-50PK4R (50)

| Ambient | | Outdoor air intake temp (°C D.B.) | | | | | | | | | | | | | | |
|----------|-----|-----------------------------------|-----|------|-----|------|-----|------|------|------|------|------|-----|------|------|------|
| Return | -10 |)°C | -5 | °C | 0° | ,C | 5° | C. | 10°C | | 10°C | | 15 | °C | 20°C | |
| Air (WB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 4.9 | 0.97 | 4.9 | 0.97 | 4.9 | 0.97 | 4.9 | 0.97 | 4.9 | 0.97 | 5.4 | 0.64 | 5.2 | 0.78 | 5.0 | 0.93 |
| 19°C | 5.3 | 0.98 | 5.3 | 0.98 | 5.3 | 0.98 | 5.3 | 0.98 | 5.3 | 0.98 | 5.9 | 0.65 | 5.7 | 0.79 | 5.4 | 0.94 |
| 22°C | 5.8 | 0.98 | 5.8 | 0.98 | 5.8 | 0.98 | 5.8 | 0.98 | 5.8 | 0.98 | 6.5 | 0.65 | 6.2 | 0.79 | 5.9 | 0.94 |

| Ambient | | Outdoor air intake temp (°C D.B.) | | | | | | | | | | | | |
|----------|-------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Return | Return 25°C | | 30°C | | 35°C | | 38°C | | 40°C | | 43°C | | 46°C | |
| Air (WB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 4.7 | 1.09 | 4.4 | 1.25 | 4.2 | 1.43 | 4.0 | 1.54 | 3.9 | 1.62 | 3.7 | 1.74 | 2.5 | 1.44 |
| 19°C | 5.1 | 1.09 | 4.8 | 1.26 | 4.6 | 1.44 | 4.4 | 1.55 | 4.3 | 1.63 | 4.0 | 1.75 | 2.7 | 1.45 |
| 22°C | 5.6 | 1.09 | 5.3 | 1.26 | 5.1 | 1.44 | 4.8 | 1.55 | 4.7 | 1.63 | 4.4 | 1.75 | 3.0 | 1.45 |

3.8.1.1.3 S-71PK4R (71)

| Ambient | Outdoor air intake temp (°C D.B.) | | | | | | | | | | | | | |
|----------|-----------------------------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|
| Return | -10°C -5°C | | | | 0°C | | 5°C | | 7°C | | 8°C | | 9°C | |
| Air (WB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 7.7 | 1.24 | 7.7 | 1.24 | 7.7 | 1.24 | 7.5 | 1.40 | 7.4 | 1.47 | 7.3 | 1.50 | 7.3 | 1.53 |
| 19°C | 8.5 | 1.26 | 8.5 | 1.26 | 8.5 | 1.26 | 8.3 | 1.42 | 8.2 | 1.49 | 8.1 | 1.53 | 8.1 | 1.56 |
| 22°C | 9.6 | 1.28 | 9.6 | 1.28 | 9.6 | 1.28 | 9.3 | 1.44 | 9.1 | 1.51 | 9.1 | 1.55 | 9.0 | 1.58 |

| Ambient | | Outdoor air intake temp (°C D.B.) | | | | | | | | | | | | | | |
|----------|-----|-----------------------------------|------|------|------|------|------|------|------|------|-----|------|-----|------|--|--|
| Return | 10 | °C | 10 | °C | 15°C | | 20°C | | 25°C | | 30 | °C | 35 | °C | | |
| Air (WB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | | |
| 16°C | 7.2 | 1.57 | 8.1 | 1.04 | 7.7 | 1.24 | 7.4 | 1.42 | 7.1 | 1.63 | 6.7 | 1.82 | 6.4 | 2.06 | | |
| 19°C | 8.0 | 1.59 | 8.9 | 1.05 | 8.5 | 1.25 | 8.2 | 1.44 | 7.9 | 1.65 | 7.4 | 1.85 | 7.1 | 2.09 | | |
| 22°C | 9.0 | 1.62 | 10.0 | 1.07 | 9.6 | 1.27 | 9.2 | 1.46 | 8.8 | 1.68 | 8.3 | 1.89 | 8.0 | 2.12 | | |

| Ambient | | | | Outdoo | r air intak | e temp (° | C D.B.) | | | |
|----------|-----|------|-----|--------|-------------|-----------|---------|------|-----|------|
| Return | 38 | °C | 40 | °C | 41 | °C | 43 | °C | 46 | °C |
| Air (WB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 6.0 | 2.17 | 5.7 | 2.25 | 5.5 | 2.28 | 5.2 | 2.33 | 3.9 | 1.82 |
| 19°C | 6.6 | 2.20 | 6.3 | 2.28 | 6.1 | 2.31 | 5.7 | 2.36 | 4.3 | 1.85 |
| 22°C | 7.4 | 2.23 | 7.1 | 2.32 | 6.8 | 2.35 | 6.4 | 2.40 | 4.9 | 1.88 |

3.8.1.1.4 S-100PK4R (95 / 100)

| Λml | oient | | | | | | | С | utdoor | air intak | e temp | (°C D.B | 5.) | | | | | | |
|-----|-------|------|-------|------|------|------|------|------|--------|-----------|--------|---------|------|-------|------|------|-------|------|------|
| Ret | turn | | -10°C | | | -5°C | | | 0°C | | | 0°C | | | 5°C | | | 10°C | |
| Air | (°C) | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT |
| DB | WB | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW |
| | 17 | 7.68 | 5.03 | 1.21 | 7.68 | 5.03 | 1.21 | 7.68 | 5.04 | 1.21 | 10.40 | 6.47 | 1.47 | 10.26 | 6.46 | 1.47 | 10.12 | 6.45 | 1.46 |
| 23 | 19 | 8.21 | 5.02 | 1.27 | 8.21 | 5.02 | 1.27 | 8.21 | 5.04 | 1.27 | 11.10 | 6.46 | 1.53 | 10.96 | 6.45 | 1.53 | 10.81 | 6.45 | 1.52 |
| | 22 | 8.99 | 4.94 | 1.31 | 8.99 | 4.94 | 1.31 | 8.99 | 4.96 | 1.31 | 12.17 | 6.36 | 1.59 | 12.01 | 6.35 | 1.58 | 11.84 | 6.35 | 1.57 |
| | 17 | 7.95 | 5.65 | 1.24 | 7.95 | 5.65 | 1.24 | 7.95 | 5.66 | 1.24 | 10.76 | 7.27 | 1.50 | 10.62 | 7.26 | 1.49 | 10.47 | 7.25 | 1.48 |
| 25 | 19 | 8.50 | 5.64 | 1.29 | 8.50 | 5.64 | 1.29 | 8.50 | 5.66 | 1.29 | 11.50 | 7.26 | 1.56 | 11.34 | 7.25 | 1.55 | 11.19 | 7.24 | 1.55 |
| | 22 | 9.31 | 5.55 | 1.33 | 9.31 | 5.55 | 1.33 | 9.31 | 5.57 | 1.33 | 12.60 | 7.15 | 1.61 | 12.43 | 7.14 | 1.61 | 12.26 | 7.13 | 1.60 |
| | 17 | 8.23 | 6.45 | 1.26 | 8.23 | 6.45 | 1.26 | 8.23 | 6.47 | 1.26 | 11.13 | 8.31 | 1.52 | 10.98 | 8.30 | 1.51 | 10.83 | 8.29 | 1.51 |
| 27 | 19 | 8.79 | 6.23 | 1.31 | 8.79 | 6.23 | 1.31 | 8.79 | 6.25 | 1.31 | 11.89 | 8.01 | 1.59 | 11.73 | 8.00 | 1.58 | 11.57 | 8.00 | 1.57 |
| | 22 | 9.63 | 5.77 | 1.36 | 9.63 | 5.77 | 1.36 | 9.63 | 5.79 | 1.36 | 13.03 | 7.43 | 1.64 | 12.85 | 7.42 | 1.63 | 12.68 | 7.41 | 1.63 |
| | 17 | 8.35 | 6.80 | 1.26 | 8.35 | 6.80 | 1.26 | 8.35 | 6.83 | 1.26 | 11.30 | 8.76 | 1.52 | 11.14 | 8.75 | 1.52 | 10.99 | 8.74 | 1.51 |
| 29 | 19 | 8.92 | 6.79 | 1.31 | 8.92 | 6.79 | 1.31 | 8.92 | 6.82 | 1.31 | 12.07 | 8.74 | 1.59 | 11.90 | 8.73 | 1.58 | 11.74 | 8.72 | 1.58 |
| | 22 | 9.77 | 6.69 | 1.36 | 9.77 | 6.69 | 1.36 | 9.77 | 6.71 | 1.36 | 13.22 | 8.61 | 1.65 | 13.04 | 8.60 | 1.64 | 12.87 | 8.59 | 1.63 |
| | 17 | 8.47 | 7.05 | 1.26 | 8.47 | 7.05 | 1.26 | 8.47 | 7.08 | 1.26 | 11.46 | 9.08 | 1.53 | 11.31 | 9.06 | 1.52 | 11.15 | 9.06 | 1.52 |
| 32 | 19 | 9.05 | 7.33 | 1.32 | 9.05 | 7.33 | 1.32 | 9.05 | 7.36 | 1.32 | 12.24 | 9.44 | 1.59 | 12.08 | 9.42 | 1.59 | 11.91 | 9.42 | 1.58 |
| | 22 | 9.91 | 7.22 | 1.36 | 9.91 | 7.22 | 1.36 | 9.91 | 7.24 | 1.36 | 13.42 | 9.29 | 1.65 | 13.23 | 9.28 | 1.64 | 13.05 | 9.27 | 1.64 |

| Δmł | oient | | | | | | | 0 | utdoor | air intak | e temp | (°C D.B | .) | | | | | | |
|-----|-------|-------|------|------|-------|------|------|-------|--------|-----------|--------|---------|------|-------|------|------|-------|------|------|
| Ret | turn | | 18°C | | | 18°C | | | 20°C | | | 25°C | | | 30°C | | | 35°C | |
| Air | (°C) | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT |
| DB | WB | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW |
| | 17 | 9.89 | 6.47 | 1.45 | 10.78 | 6.69 | 1.93 | 10.54 | 6.59 | 1.99 | 9.94 | 6.35 | 2.13 | 9.30 | 6.07 | 2.28 | 8.75 | 5.40 | 2.43 |
| 23 | 19 | 10.57 | 6.46 | 1.51 | 11.51 | 6.68 | 2.01 | 11.25 | 6.58 | 2.07 | 10.62 | 6.34 | 2.23 | 9.93 | 6.06 | 2.38 | 9.34 | 5.04 | 2.53 |
| | 22 | 11.58 | 6.36 | 1.56 | 12.61 | 6.58 | 2.08 | 12.33 | 6.48 | 2.14 | 11.63 | 6.24 | 2.30 | 10.88 | 5.97 | 2.46 | 10.24 | 4.46 | 2.62 |
| | 17 | 10.24 | 7.27 | 1.47 | 11.16 | 7.52 | 1.96 | 10.91 | 7.41 | 2.02 | 10.29 | 7.13 | 2.17 | 9.62 | 6.82 | 2.32 | 9.05 | 6.58 | 2.47 |
| 25 | 19 | 10.94 | 7.26 | 1.54 | 11.91 | 7.51 | 2.04 | 11.65 | 7.40 | 2.11 | 10.99 | 7.12 | 2.26 | 10.28 | 6.81 | 2.42 | 9.67 | 6.14 | 2.58 |
| | 22 | 11.99 | 7.15 | 1.59 | 13.06 | 7.39 | 2.12 | 12.77 | 7.28 | 2.18 | 12.04 | 7.01 | 2.34 | 11.26 | 6.71 | 2.50 | 10.60 | 5.44 | 2.67 |
| | 17 | 10.59 | 8.31 | 1.50 | 11.54 | 8.59 | 1.99 | 11.28 | 8.47 | 2.05 | 10.64 | 8.15 | 2.21 | 9.95 | 7.79 | 2.36 | 9.50 | 8.44 | 2.51 |
| 27 | 19 | 11.31 | 8.02 | 1.56 | 12.32 | 8.29 | 2.08 | 12.05 | 8.17 | 2.14 | 11.37 | 7.86 | 2.30 | 10.63 | 7.52 | 2.46 | 10.00 | 7.25 | 2.62 |
| | 22 | 12.40 | 7.43 | 1.62 | 13.50 | 7.68 | 2.15 | 13.20 | 7.57 | 2.22 | 12.45 | 7.29 | 2.38 | 11.65 | 6.97 | 2.55 | 10.96 | 5.68 | 2.71 |
| | 17 | 10.75 | 8.76 | 1.50 | 11.71 | 9.06 | 2.00 | 11.45 | 8.92 | 2.06 | 10.80 | 8.59 | 2.21 | 10.10 | 8.22 | 2.36 | 9.50 | 9.11 | 2.52 |
| 29 | 19 | 11.48 | 8.75 | 1.57 | 12.50 | 9.04 | 2.08 | 12.23 | 8.91 | 2.15 | 11.53 | 8.58 | 2.31 | 10.79 | 8.21 | 2.47 | 10.15 | 8.50 | 2.63 |
| | 22 | 12.58 | 8.61 | 1.62 | 13.70 | 8.91 | 2.16 | 13.40 | 8.78 | 2.22 | 12.64 | 8.45 | 2.39 | 11.82 | 8.08 | 2.55 | 11.12 | 7.53 | 2.72 |
| | 17 | 10.91 | 9.08 | 1.51 | 11.88 | 9.39 | 2.00 | 11.62 | 9.25 | 2.06 | 10.96 | 8.91 | 2.22 | 10.25 | 8.52 | 2.37 | 9.64 | 9.64 | 2.52 |
| 32 | 19 | 11.65 | 9.44 | 1.57 | 12.69 | 9.76 | 2.09 | 12.41 | 9.62 | 2.15 | 11.70 | 9.26 | 2.31 | 10.95 | 8.86 | 2.47 | 10.30 | 9.76 | 2.63 |
| | 22 | 12.77 | 9.30 | 1.62 | 13.90 | 9.61 | 2.16 | 13.60 | 9.47 | 2.23 | 12.83 | 9.12 | 2.39 | 12.00 | 8.72 | 2.56 | 11.28 | 8.64 | 2.72 |

| Amh | oient | | | | 0 | utdoor | air intak | e temp | (°C D.B | 5.) | | | |
|-----|-------|-------|------|------|------|--------|-----------|--------|---------|------|------|------|------|
| Ret | urn | | 40°C | | | 43°C | | | 45°C | | | 46°C | |
| Air | (°C) | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT | TC | SHC | IPT |
| DB | WB | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW |
| | 17 | 7.95 | 4.98 | 2.43 | 6.12 | 4.08 | 1.82 | 4.96 | 3.48 | 1.42 | 4.96 | 3.63 | 1.42 |
| 23 | 19 | 8.49 | 4.65 | 2.53 | 6.54 | 3.81 | 1.90 | 5.30 | 3.25 | 1.48 | 5.30 | 3.39 | 1.48 |
| | 22 | 9.30 | 4.11 | 2.62 | 7.17 | 3.37 | 1.97 | 5.80 | 2.88 | 1.53 | 5.80 | 3.00 | 1.53 |
| | 17 | 8.23 | 6.07 | 2.47 | 6.34 | 4.97 | 1.85 | 5.13 | 4.24 | 1.44 | 5.13 | 4.43 | 1.44 |
| 25 | 19 | 8.79 | 5.66 | 2.58 | 6.77 | 4.64 | 1.93 | 5.48 | 3.96 | 1.50 | 5.48 | 4.13 | 1.50 |
| | 22 | 9.63 | 5.01 | 2.67 | 7.42 | 4.11 | 2.00 | 6.01 | 3.51 | 1.56 | 6.01 | 3.66 | 1.56 |
| | 17 | 8.51 | 7.66 | 2.51 | 6.55 | 6.29 | 1.88 | 5.31 | 5.31 | 1.47 | 5.31 | 5.31 | 1.47 |
| 27 | 19 | 9.09 | 6.68 | 2.62 | 7.00 | 5.48 | 1.97 | 5.67 | 4.67 | 1.53 | 5.67 | 4.88 | 1.53 |
| | 22 | 9.96 | 5.23 | 2.71 | 7.67 | 4.29 | 2.03 | 6.21 | 3.66 | 1.58 | 6.21 | 3.82 | 1.58 |
| | 17 | 8.64 | 8.39 | 2.52 | 6.65 | 6.65 | 1.89 | 5.39 | 5.39 | 1.47 | 5.39 | 5.39 | 1.47 |
| 29 | 19 | 9.23 | 7.83 | 2.63 | 7.10 | 6.43 | 1.97 | 5.75 | 5.48 | 1.53 | 5.75 | 5.72 | 1.53 |
| | 22 | 10.11 | 6.94 | 2.72 | 7.78 | 5.69 | 2.04 | 6.31 | 4.85 | 1.59 | 6.31 | 5.06 | 1.59 |
| | 17 | 8.76 | 8.76 | 2.52 | 6.75 | 6.75 | 1.89 | 5.47 | 5.47 | 1.47 | 5.47 | 5.47 | 1.47 |
| 32 | 19 | 9.36 | 8.99 | 2.63 | 7.21 | 7.21 | 1.97 | 5.84 | 5.84 | 1.54 | 5.84 | 5.84 | 1.54 |
| | 22 | 10.26 | 7.96 | 2.72 | 7.90 | 6.53 | 2.04 | 6.40 | 5.57 | 1.59 | 6.40 | 5.81 | 1.59 |

TC : Cooling Capacity SHC : Sensible Heat Capacity IPT : Cooling Power Consumption

Unit: kW

3.8.2 Heating Capacity Performance Data

3.8.2.1 Wall Mounted Type

3.8.2.1.1 S-25PK4R (25)

| Ambient | | | | Outo | door air intak | e temp (°C W | V.B.) | | | |
|----------|-----|------|-----|------|----------------|--------------|-------|------|-----|------|
| Return | -16 | 3°C | -11 | I°C | -8 | °C | 1' | °C | 6 | °C |
| Air (DB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 2.0 | 0.65 | 2.4 | 0.68 | 2.6 | 0.69 | 3.1 | 0.76 | 4.8 | 0.79 |
| 20°C | 2.0 | 0.69 | 2.3 | 0.72 | 2.5 | 0.74 | 3.1 | 0.81 | 3.6 | 0.84 |
| 24°C | 2.0 | 0.73 | 2.3 | 0.77 | 2.5 | 0.79 | 3.0 | 0.86 | 4.6 | 0.89 |

| Ambient | | | | Out | door air intak | e temp (°C V | V.B.) | | | |
|----------|-----|------|-----|------|----------------|--------------|-------|------|-----|------|
| Return | 10 | °C | 11 | °C | 15 | i°C | 17 | °C | 18 | °C |
| Air (DB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 4.0 | 0.82 | 4.1 | 0.84 | 4.4 | 0.87 | 4.6 | 0.89 | 4.7 | 0.90 |
| 20°C | 3.9 | 0.87 | 4.0 | 0.89 | 4.3 | 0.92 | 4.6 | 0.95 | 4.7 | 0.96 |
| 24°C | 3.9 | 0.93 | 4.0 | 0.95 | 4.3 | 0.98 | 4.5 | 1.00 | 4.6 | 1.02 |

3.8.2.1.2 S-50PK4R (50)

| Ambient | | | | | Outdo | oor air intak | e temp (°C | W.B.) | | | | |
|----------|-----|------|-----|------|-------|---------------|------------|-------|-----|------|-----|------|
| Return | -16 | 6°C | -11 | °C | -8 | °C | 1' | C. | 6' | C. | 10 | °C |
| Air (DB) | TC | | | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 2.9 | 1.01 | 3.4 | 1.09 | 3.7 | 1.13 | 4.6 | 1.25 | 5.1 | 1.30 | 5.5 | 1.37 |
| 20°C | 2.9 | 1.08 | 3.4 | 1.16 | 3.6 | 1.20 | 4.6 | 1.32 | 5.0 | 1.38 | 5.4 | 1.46 |
| 24°C | 2.8 | 1.14 | 3.3 | 1.23 | 3.5 | 1.28 | 4.5 | 1.41 | 4.9 | 1.47 | 5.3 | 1.55 |

| Ambient | | | | Outdo | or air intak | e temp (°C | W.B.) | | | |
|----------|-----|------|-----|-------|--------------|------------|-------|------|-----|------|
| Return | 14 | °C | 16 | °C | 17 | °C | 17 | °C | 18 | °C |
| Air (DB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 5.9 | 1.43 | 6.1 | 1.46 | 6.2 | 1.48 | 5.6 | 1.09 | 5.7 | 1.09 |
| 20°C | 5.8 | 1.52 | 6.0 | 1.55 | 6.2 | 1.57 | 5.5 | 1.09 | 5.6 | 1.09 |
| 24°C | 5.7 | 1.61 | 5.9 | 1.61 | 6.0 | 1.61 | 5.4 | 1.09 | 5.5 | 1.09 |

3.8.2.1.3 S-71PK4R (71)

| Ambient | | | | | Outdo | oor air intak | e temp (°C | W.B.) | | | | |
|----------|-----|------|-----|------|-------|---------------|------------|-------|-----|------|-----|------|
| Return | -16 | 6°C | -11 | I°C | -8 | °C | 1' | C. | 5° | C. | 6' | ,C |
| Air (DB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 4.7 | 1.66 | 5.3 | 1.79 | 5.8 | 1.88 | 7.3 | 2.16 | 8.0 | 2.28 | 8.2 | 2.30 |
| 20°C | 4.7 | 1.78 | 5.3 | 1.92 | 5.8 | 2.02 | 7.2 | 2.27 | 7.9 | 2.38 | 8.1 | 2.40 |
| 24°C | 4.5 | 1.90 | 5.1 | 2.06 | 5.6 | 2.16 | 7.0 | 2.40 | 7.7 | 2.50 | 7.8 | 2.50 |

| Ambient | | | | | Outdo | oor air intak | e temp (°C | W.B.) | | | | |
|----------|-----|------|-----|------|-------|---------------|------------|-------|-----|------|-----|------|
| Return | 8° | °C | 10 | °C | 12 | °C | 12 | °C | 16 | °C | 18 | °C |
| Air (DB) | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| 16°C | 8.5 | 2.35 | 8.8 | 2.40 | 9.2 | 2.43 | 8.3 | 2.25 | 9.1 | 2.25 | 9.5 | 2.25 |
| 20°C | 8.3 | 2.45 | 8.7 | 2.50 | 8.8 | 2.50 | 8.3 | 2.25 | 9.0 | 2.25 | 9.4 | 2.25 |
| 24°C | 8.0 | 2.50 | 8.2 | 2.50 | 8.4 | 2.50 | 8.1 | 2.25 | 8.8 | 2.25 | 9.2 | 2.25 |

3.8.2.1.4 S-100PK4R (95 / 100)

| | | | | | | Outdo | or air intak | e temp (°C | : W.B.) | | | | |
|---------------|----|------|------|------|------|-------|--------------|------------|---------|------|------|------|------|
| Ambient | DB | -15 | 5°C | -10 |)°C | -7 | °C | -2 | °C | -2 | °C | 2° | ,C |
| Return Air | WB | -16 | S°C | -11 | l°C | -8 | °C | -3 | °C | -3 | °C | 1' | °C |
| | | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| DB | | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW |
| 16°C | | 5.72 | 2.21 | 8.74 | 2.40 | 9.07 | 2.41 | 9.62 | 2.44 | 8.00 | 1.79 | 9.36 | 1.84 |
| 20°C | | 5.30 | 2.33 | 8.10 | 2.54 | 8.40 | 2.55 | 8.91 | 2.58 | 7.41 | 1.89 | 8.67 | 1.95 |
| 24°C | • | 4.96 | 2.37 | 7.58 | 2.58 | 7.87 | 2.59 | 8.35 | 2.62 | 6.94 | 1.92 | 8.12 | 1.98 |

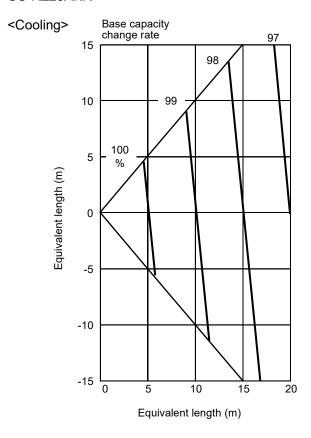
| | | | | | | Outdo | or air intak | e temp (°C | : W.B.) | | | | |
|---------------|----|-------|------|-------|------|-------|--------------|------------|---------|-------|------|-------|------|
| Ambient | DB | 7° | C. | 11 | °C | 11 | °C | 20 | °C | 20 | °C | 24 | °C |
| Return Air | WB | 6° | ,C | 8° | C | 8° | C | 15 | °C | 15 | °C | 18 | °C |
| | | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT | TC | IPT |
| DB | | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW | KW |
| 16°C | | 10.79 | 1.92 | 11.46 | 1.95 | 10.74 | 1.75 | 12.88 | 1.92 | 11.69 | 1.61 | 12.92 | 1.69 |
| 20°C | | 10.00 | 2.03 | 10.62 | 2.07 | 9.95 | 1.85 | 11.94 | 2.04 | 10.83 | 1.70 | 11.97 | 1.79 |
| 24°C | | 9.36 | 2.06 | 9.94 | 2.10 | 9.31 | 1.88 | 11.18 | 2.07 | 10.14 | 1.73 | 11.21 | 1.82 |

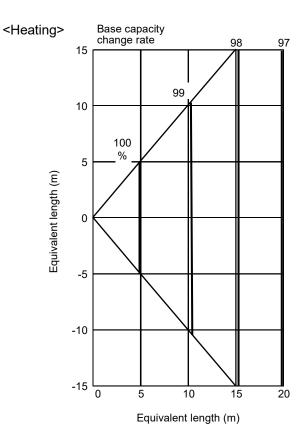
TC : Heating Capacity IPT : Heating Power Consumption

Unit: kW

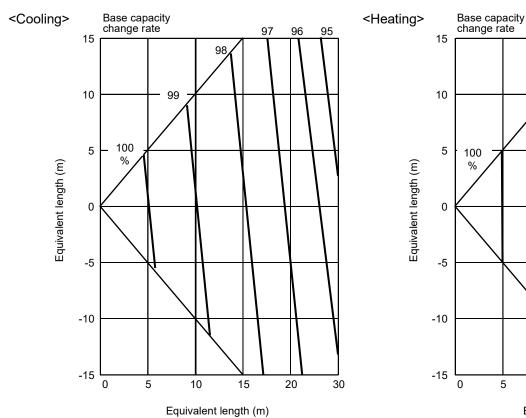
3.9 Tube Length and Elevation Difference

CU-RZ25AKR





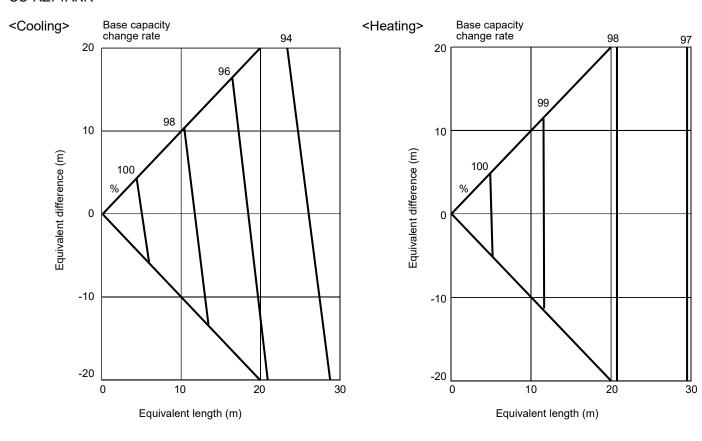
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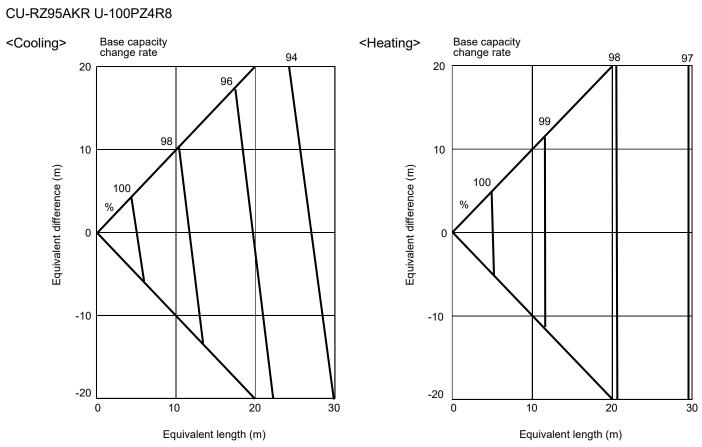


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CU-RZ71AKR

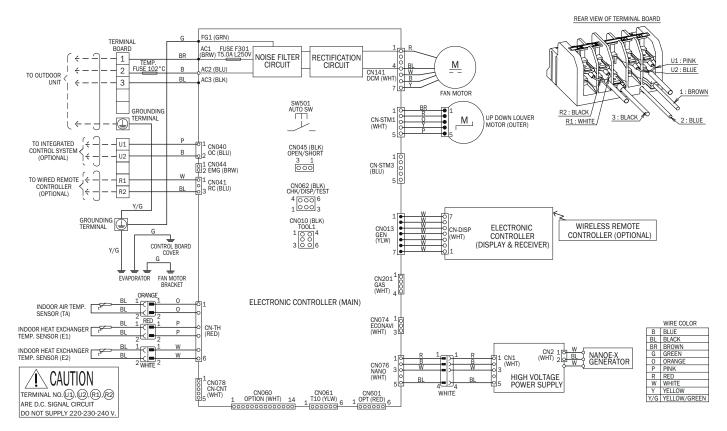




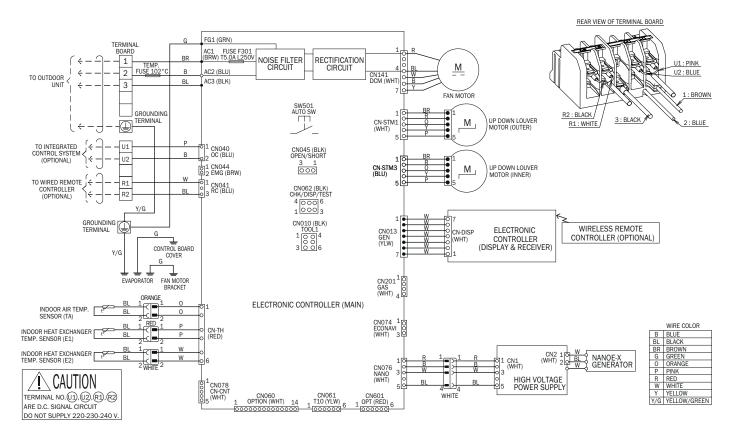
4. Electrical Data

4.1 Wall Mounted Type

S-25PK4R S-50PK4R



S-71PK4R S-100PK4R



5. Control Functions

5.1 Indoor Unit Control PCB Switches and Functions

[Indoor unit control PCB]

T10 (CN061): 6P plug (YEL) / Used for remote control operation. (See 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 (CN062): 6P plug (BLK) 2-5pin / Short-circuiting this pin 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): 6P plug (BLK) 1-4pin / 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 pin can be used for short-term tests.

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

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 (IC010: nonvolatile memory).

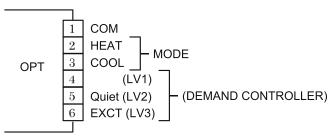
EEPROM (IC010): Nonvolatile memory / Used to store model information and other data. When replacing

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, see 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)

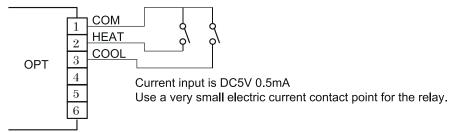
Check the delivery date in advance because of BTO (build-to- order manufacturing).

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.

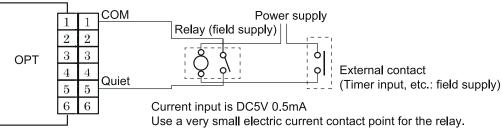
Wiring example



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

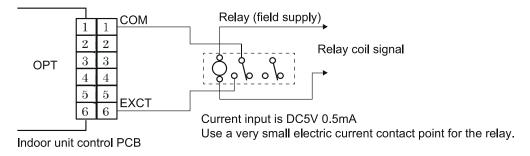


Indoor unit control PCB

3. EXCT / DEMAND control available

· When input, the thermos is forcibly switched OFF.

Wiring example



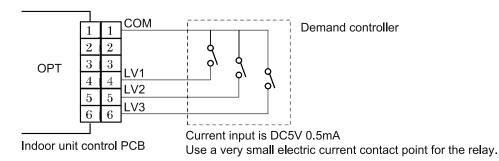
4. LV1, LV2, LV3 / Use this terminal for demand control.

- 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.



Wall Mounted Type



6. Trouble Diagnosis

6.1 PAC System Alarm Codes

6.1.1 Indoor

Alarms for indoor units

| Alarm Code | Alarm Meaning |
|---------------|--|
| E01 | Remote Controller Reception Error |
| E02 | Remote Controller Transmission Error |
| E03 | Error in Indoor Unit Receiving Signal from Remote Controller (central) |
| E04 | Error in Indoor Unit Receiving Signal from the Outdoor Unit |
| E08 | Duplicate Indoor Unit Address Settings Error |
| E09 | More Than One Remote Controller Set to Main Error |
| E14 | Main Unit duplication in Simultaneous-operation Multi Control (detected outdoor unit) |
| E15 | Auto Address Alarm (The total capacity of indoor units is too low.) |
| E16 | Auto Address Alarm (The total capacity of indoor units is too high or the total number of indoor units is too many.) |
| E18 | Faulty Communication in Group Control Wiring |

| P09 | Faulty wiring connections of (ceiling) indoor unit panel |
|-----|--|
| P31 | Group Control Error |

Check Prior to Auto Address Setting

In the case of below, conduct this process after diagnosing the problem.

- The remote controller or the outdoor unit displays an alarm
- The "Assigning" screen appears on the LCD display for more than 10 minutes

| 1 Auto Address | 1-1 | -1 Is the power of the indoor unit(s) and outdoor unit(s) on? | | Yes | 2-1 | |
|-----------------------------------|--|---|-----|------------------------|------------------------------|--|
| Addiess | is the power of the indoor drift(s) and outdoor drift(s) on: | | | No | Power on | |
| 2 Indoor / | | | Yes | 3-1 | | |
| outdoor wiring | 2-1 | Has the wiring of the indoor / outdoor been completed? Is it all connected correctly? | | No | Connect the wiring correctly | |
| 3 Installation or setting | 3-1 | Be sure that the indoor and outdoor units are connected | Yes | 3-2 | | |
| related | With correct complication written in catalog | | No | Coı | rect the connection | |
| | 3-2 | Is the remote control wiring connected with two indoor / outdoor combinations or more for group control? | | Yes | 3-3 | |
| | J-Z | | | No | 3-4 | |
| | 3-3 | Turn on the power of only one system and run auto address setting again. Upon completi the auto address setting, turn on the power for the next system and run auto address setting while still power switched on, units whose auto address setting have completed. (In the conformal formultiple systems, run the auto address setting respectively in due order for each system.) | | | | |
| | 3-4 | Run the auto address setting. | | | | |
| 4 Relocation | 4-1 | Be sure that the indoor and outdoor units are connected with | Yes | 4-2 | | |
| and resetting | | correct combination described in the catalog. | | Correct the connection | | |
| of address | 12 | Be sure that the detailed setting items are made at factory setting. | | Yes | 4-3 | |
| | 4-2 | | | No | Correct the setting | |
| 4-3 Run the auto address setting. | | | | | | |

• For information on the remote control's detailed settings, see 7-3 and 7-4.

Factory setting

| Item code | Item | Value |
|-----------|-----------------------|-------|
| 11 | Indoor unit capacity | 0 |
| 12 | System address | 99 |
| 13 | Indoor unit address | 99 |
| 14 | Group control address | 99 |

NOTE

The Item code numbers 11, 12, 13 and 14 can automatically be changed to the appropriate settings from factory settings listed above by making the auto address settings according to the connected outdoor unit capacity and the number of indoor units.

If needed to reset the settings after once changed, return all the item codes to the factory shipment-time settings. It is necessary to set the auto address settings once again.

1. Error Detection Method

It is judged an error if no self-addressed communication is sent to the remote controller in a 3-minute period.

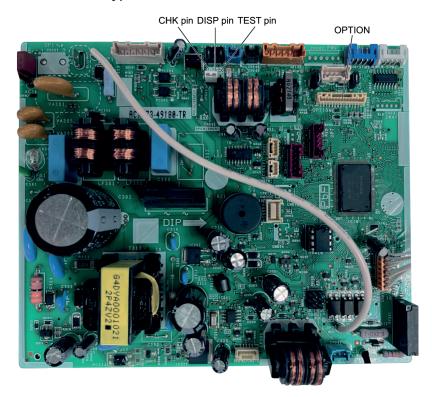
- When a remote controller is set to sub remote controller.
- When there are nine or more indoor units in a remote control group's wiring.
- When the CHK (check pin) and / or TEST (test pin) on the indoor unit control PC board are short circuited.
- The nonvolatile memory (EEPROM) is not installed or faulty when turning on the power.
- Indoor unit control PC board error.
- Remote controller check mode.
- Malfunctions of the remote controller itself (reception circuit error).

2. Error Diagnosis

| 1 Auto | 1-1 | Is auto address setting complete? | Yes | 1-2 |
|----------------|--|---|--------------------|--|
| Address | 1-1 | is auto address setting complete: | | 1-3 |
| | 1-2 | Is there an auto address setting error (Is the outdoor unit showing | Yes | 1-3 |
| | 1-2 | an alarm)? | No | 2-1 |
| | 1-3 | Conduct checks prior to auto address setting. | | |
| 2 Group | 2-1 | Is that indoor unit under group control? | Yes | 2-2 |
| Control | 2-1 | is that indoor unit under group control? | No | 3-1 |
| Wiring | 2-2 | | Yes | Power on |
| | 2-2 | | No | 2-3 |
| | 2-3 | Are nine or more indoor units connected in one remote control | Yes | Correct the wiring |
| | 2-3 | group's wiring? | No | 2-4 |
| | | Was the remote control group's wiring changed after auto address | Yes | 2-5 |
| | 2-4 | setting was complete? Alternatively, were group settings changed in the remote control detailed settings mode? | No | 3-1 |
| | 2-5 | No main unit in the remote control group's wiring? Re-execute auto ad | s setting. | |
| 3 Installation | 3-1 | Are the CHK pin and TEST pin on the indoor unit control board short-circuited? | Yes | Remove the short |
| or setting | | | No | 3-2 |
| related | 3-2 | le the wholese formete controlled controlled to on the macer and e | Yes | 3-3 |
| | | | No | 3-5 |
| | 3-3 | Disconnect the connector mentioned above on the PC board of the indoor unit control PC board, and see whether the E01 goes off after several minutes. (When doing so, if two remote controllers are | Yes | 3-4 |
| | | being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.) | No | 3-5 |
| | 3-4 | Replace wireless remote control parts including wiring. | | |
| | 3-5 Is the LED blinking on the | Is the LED blinking on the indoor unit's control PC board? | Yes | 3-6 |
| | | is the LED billiking on the indoor drift's control P C board: | | 3-7 |
| | 3-6 | The nonvolatile memory (EEPROM) on the indoor unit's control PC bo installed, improperly installed or the nonvolatile memory is faulty. Corresplacing the nonvolatile memory, write model data to it in the remote settings mode. | ect th | nis or after |
| | le there a chart minusing disconnection wrong contest or | Yes | Correct the wiring | |
| | 3-7 | Is there a short, miswiring, disconnection, wrong contact or grounding in the remote control's wiring? | No | Replace the indoor unit's control board. |

- Regarding the remote controller check, refer to the Reference Materials.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit and / or replacing the indoor unit's control board, refer to the manual that is packaged with the indoor unit service board.

Wall Mounted Type Indoor Unit Control Board



E02 Remote Controller Transmission Error

1. Error Detection Method

When the remote controller itself cannot transmit. Or when it cannot receive the signal it transmitted itself, or when they are different and judged an error.

• Malfunction of the remote controller itself (transmit circuit error).

2. Error Diagnosis

| 1 Remote Control | 1-1 | Is the indoor unit under group control? | Yes | 1-2 |
|---------------------|-----|---|-----|--|
| | | | No | 2-1 |
| Group | 1-2 | Are the wires 1 (white) & 2 (black) to the remote control group | Yes | Correct the wiring |
| Wiring | 1-2 | shorted or opened? | No | 2-1 |
| 2 Group | 2-1 | Is the wireless remote controller connected to on the indoor unit's | Yes | 2-2 |
| Control | 2-1 | control PC board? | No | 2-4 |
| Wiring | 2-2 | several minutes. (When doing so, if two remote controllers are | Yes | 2-3 |
| | | | No | 2-4 |
| | 2-3 | Replace wireless remote control parts including wiring. | | |
| | 2-4 | Is there a short, miswiring, open, wrong contact or grounding | Yes | Correct the wiring |
| | | | No | Replace the indoor unit's control PC board |

- Regarding the remote controller check, refer to the Reference Materials.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit and / or replacing the indoor unit's control board, refer to the manual that is packaged with the indoor unit service board.

E03 Error in Indoor Unit Receiving Signal from Remote Controller (central)

(When indoor unit(s) are connected)

1. Error Detection Method

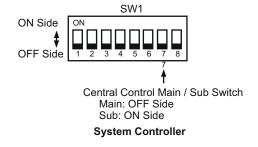
It is judged an error when there is no communication from any remote controller (collectively) in a 3-minute period or if there is no communication from the central device in a 15-minute period.

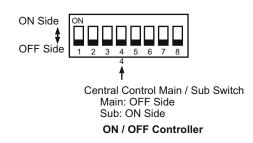
- When there was once communication, but during use the remote control wiring is opened or miswired.
- The line to the central control unit for indoor / outdoor operations is opened.
- Settings are made only for sub remote controller.
- The power to the central control unit is not on and remote controllers are not being used (or the inter-unit control wiring to the central control unit is opened).
- · When remote controller are not being used, only the sub remote controller is set up.

2. Error Diagnosis

| 1 Central | 1-1 | Us the central control unit connected? ⊢ | | 1-2 | | | |
|--------------|---|---|---|---------------------------------------|--|--|--|
| control unit | 1-1 | | | 2-1 | | | |
| | 1-2 | Is the central control unit's powered off? | Yes | Power on | | | |
| | 1-2 | is the central control unit's powered on: | No | 1-3 | | | |
| | 1-3 | Are all the Main / Sub switches on the connected central control unit | Yes | 1-4 | | | |
| | 1-3 | set to Sub? | No | 1-5 | | | |
| | 1-4 | 1 | the central control units that are connected, set only the uppermost central control unit to an and the others to Sub. The order from top to bottom is communication adaptor system controller \rightarrow ON / OFF controller. | | | | |
| | 1-5 | Is the inter-unit control wiring connected to the central control unit | Yes | Correct the setting | | | |
| | 1-5 | opened? | No | 2-1 | | | |
| 2 Remote | 2-1 | Is the indoor unit under group control? | Yes | 2-2 | | | |
| controller | 2-1 | is the masor unit under group control: | No | 3-1 | | | |
| | 2-2 | Are the wires 1 (white) & 2 (black) to the remote control group | Yes | Correct the setting | | | |
| | 2-2 | opened, have wrong contact or grounded? | No | 3-1 | | | |
| 3 Indoor | 3-1 | Is the wireless remote controller connected to on the indoor unit's | Yes | 3-2 | | | |
| unit | 3-1 | control PC board? | No | 3-4 | | | |
| PC board | of the indoor unit control PC board, and see whether the E03 goes off | Yes | 3-3 | | | | |
| | 3-2 | after several minutes. (When doing so, if two remote controllers are being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.) | No | 3-4 | | | |
| | 3-3 | Replace wireless remote control parts including wiring. | | | | | |
| | | | Yes | Correct the wiring | | | |
| | 3-4 | Is there a short, miswiring, open, wrong contact or grounding in the remote control's wiring? | No | Replace the indoor unit control board | | | |

- · Regarding the remote controller check, refer to the Reference Materials.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit and / or replacing the indoor unit's control board, refer to the manual that is packaged with the indoor unit service board.





- 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.
- For information on the remote control's detailed settings, see 7-3 and 7-4.
- The alarm also occurs when the indoor unit cannot be recognized (indoor unit only blackout, disconnection of indoor / outdoor control line*, etc.) during auto address setting.
 - * indoor / outdoor control line* : Connection cable between outdoor and indoor unit

Wall Mounted Type Indoor Unit Control Board



E04 Error in Indoor Unit Receiving Signal from the Outdoor unit

1. Error Detection Method

When there is no communication within a 3-minute period from the outdoor unit. Or, judged an error when no reply comes from the outdoor unit.

- The outdoor unit is not turned on.
- When the power was turned on after auto address setting was completed, the number of indoor units had been changed.
- Forgot to turn on the indoor unit.
- The CHK pin and / or TEST pin on the indoor unit's control PC board are shorted.
- Forgot to install the nonvolatile memory (EEPROM) when replacing the indoor unit control PC board.
- Mistakenly set the indoor unit address to Not Set in the remote control's detailed setting mode.
- · When indoor unit addresses are duplicated.
- · There is a short, open, wrong contact or grounding of the indoor / outdoor control line*.
- There is an error in the receiving circuit on the signal output PC board (optional control PC board).
- · Malfunctions of the outdoor unit
- The thermistor inside the indoor unit is grounded.
- The capacity setting is mismatched between indoor units and the outdoor unit.

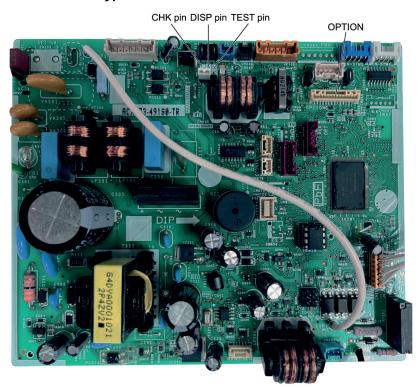
2. Error Diagnosis

| 1 Power | | | Yes | | r turning the power wait three minutes | |
|-----------------------|---|--|-------|----------------------------|--|--|
| Source | 1-1 | Is / was the power to the outdoor unit cut off? | No | 1-2 | | |
| | 4.0 | | | Yes Power on No 2-1 | | |
| | 1-2 | Is the indoor unit powered off? | | | | |
| 2 Indoor / outdoor | 2-1 | Is the indoor / outdoor wiring connected correctly? | | Yes | 3-1 | |
| wiring | _ ' | to the mader / databet witing defined as defectly. | | No | Correct the wiring | |
| 3 Number | 3-1 | Was the number of indoor units increased or decreased after | | Yes | 3-2 | |
| and setting of indoor | J-1 | auto address setting was complete? | | No | 3-3 | |
| units | 3-2 | Conduct checks prior to auto address setting. | | | | |
| | | Check the indoor unit addresses from the remote control's | | Yes | 3-2 | |
| | 3-3 | detailed settings mode. Is it Not Set (99), or is the indoor unit's address duplicated? | | No | 3-4 | |
| | | Check the indoor unit capacity from the remote control's detailed | | Yes | 4-1 | |
| | 3-4 | l sottings mode | | No | 3-2 | |
| 4 Indoor | 4-1 | Are the CHK pin and / or TEST pin on the indoor unit control PC | Yes | Remove the short | | |
| unit control | 7-1 | board short-circuited? | | No | 4-2 | |
| PC board | 4-2 Is the wireless remote controller connected to on the indoor unit's | | Yes | | | |
| l o board | T | control PC 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 E04 goe after several minutes. (When doing so, if two remote controllers a | s off | Yes | 4-4 | |
| | being used and the wireless remote controller is the n | being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.) | | No | 4-5 | |
| | 4-4 | Replace wireless remote control parts including wiring. | | | | |
| | 4-5 | Is the LED on the indoor unit control PC board blinking? | | Yes | | |
| | | To the LLB on the massi time senter i a board billining. | | No | 4-7 | |
| | 4-6 | The nonvolatile memory (EEPROM) on the indoor unit's control Poimproperly installed or the nonvolatile memory is faulty. Correct the nonvolatile memory, write model data to it in the remote control details. | is or | after | replacing the | |
| | Are all the remote controllers of the other indoor Yes Replace the | | he o | outdoor unit control board | | |
| | -1 -1 | nits connected to that outdoor unit displaying E04? No Replace the inc | | indoor unit control board | | |

^{*} indoor / outdoor control line*: Connection cable between outdoor and indoor unit

- · Regarding the remote controller check, refer to the Reference Materials.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit and / or replacing the indoor unit's control board, refer to the manual that is packaged with the indoor unit service board.

Indoor Unit Control PCB Wall Mounted Type Indoor Unit Control Board



E08 Duplicate Indoor Unit Address Settings Error

1. Error Detection Method

It is judged an error if the addresses of indoor units are duplicated.

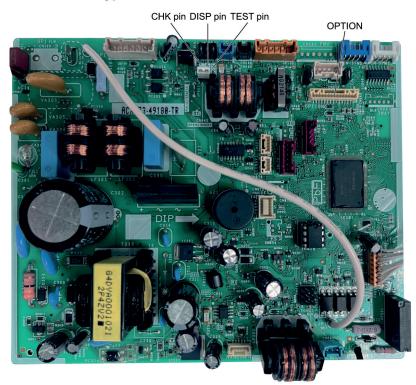
- The indoor unit address settings are duplicated in the remote control detailed settings mode.
- The multiple unit DISP pin is shorted across the indoor unit whose address is Not Set.

2. Error Diagnosis

| 1 Indoor unit | 1-1 | Is the DISP pin on the indoor unit control PC board shorted? | Yes | Remove the short |
|---------------------|-----|--|-------|------------------|
| | | is the bish pin on the indoor drift control he board shorted? | No | 1-2 |
| control PC board | 1-2 | Conduct checks prior to auto address setting. | Yes | 1-3 |
| | 1-2 | Does E08 fail to go off even after running auto address setting again? | No | 1-4 |
| | 1-3 | The nonvolatile memory (EEPROM) on the indoor unit board has failed Replace the EEPROM. | d. | |
| | 1-4 | Do not make changes to indoor unit addresses with the detailed setting controller. Make them in the remote control address change mode. | gs of | the remote |

- 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.
 - 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.
 - For information on the remote control's detailed settings, see 7-3 and 7-4.
 - The alarm also occurs when the indoor unit cannot be recognized (indoor unit only blackout, disconnection of indoor / outdoor control line*, etc.) during auto address setting.

Wall Mounted Type Indoor Unit Control Board



^{*} indoor / outdoor control line* : Connection cable between outdoor and indoor unit

E09 More Than One Remote Controller Set to Main Error

1. Error Detection Method

It is judged an error when more than one remote controller in a remote control group is set as the main remote controller.

- Forgot to set one remote controller to sub in a 2-remote control group.
- When using one wireless and one wired remote controller in a control group, forgot to set one of them to sub.

2. Error Diagnosis

| 1 Remote controller | 1-1 | Set one of the 2 remote controllers to sub. |
|---------------------|-----|---|
|---------------------|-----|---|

· Method for setting a remote controller to sub

<CZ-RTC6 series>

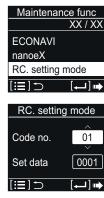
- (1) Press and hold the , and for 4 seconds or more simultaneously.
- (2) Select "RC. setting mode".

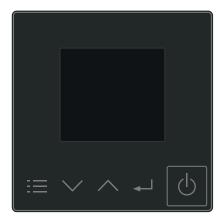


(3) Select the "Code no." and "Set data".









CZ-RTC6 series

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

(4) Press **=** .

· After selecting "YES", the unit restarts.

<CZ-RTC5B>

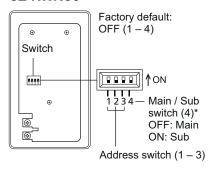
- 1. Press and hold + + + buttons for 4 seconds or more simultaneously.
- 2. Press 🔻 / 🛕 buttons to select the "3. RC. setting mode" and press the 💷 button.
- 3. The Code no. "01" and the Set data "0001" or the like on the remote controller's display.
- 4. Press ▼ / ▲ buttons to select the Code no. to "01" and press the ▶ button.
- 5. Press 🔻 / 🔺 buttons to select the Set data to "0000" (0000: Sub 0001: Main) and press the 🖵 button.
- 6. Press button. After selecting [YES], the unit restarts.

<CZ-RTC4>

- 1. Press and hold ⊗ ★○★★ + SET buttons for several seconds simultaneously.
- 2. This will display **SETTING**, the CODE No. "01" and the SET DATA "0001" or the like on the remote controller's display.
- 3. Press ▽/ △ buttons to select the CODE No. to "01".
- 4. Press buttons to select the SET DATA to "0000". (0000: Sub 0001: Main)
- 5. Press ET button (Once the display changes from flashing to steady, the setting is complete).
- 6. Once you press \bigcirc button, the remote controller returns to its normal display.

Wireless remote controller

CZ-RWRC3

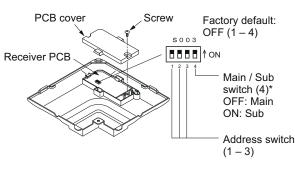


Main / Sub setting

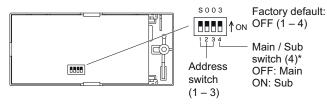
- · Use this to set Main / Sub for the remote controller and the receiver.
- · Set one to [Main] and the other to [Sub].
- Factory default: [Main]
- · It is recommended to set the wired remote controller to [Main].

| Main / Sub | MAIN | SUB | | |
|----------------------------|---------|---------|--|--|
| Main / Sub switch position | 1 2 3 4 | 1 2 3 4 | | |

CZ-RWRU3, CZ-RWRU3W

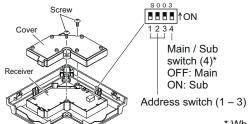


CZ-RWRT3



* When using the infrared remote controller and the wired remote controller in combination, set the wired remote controller to [Main].

CZ-RWRY3

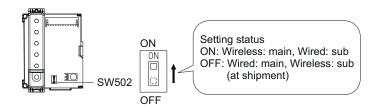


* When using the receiver and wired remote controller in combination, set the receiver to [Sub].

Wall Mounted Type

<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.)
 See "8-3-2-1. < Optional parts setting and wiring>".



E14 Main Unit duplication in Simultaneous-operation Multi Control (detected outdoor unit)

1. Error Detection Method

It is judged an error that the main units are duplicated in the indoor unit group.

• Main unit setting was made in the indoor unit group control setting of the remote control detailed settings mode.

2. Failure Diagnosis

| 1 Group Control | 1_1 | Are multiple indoor units set up as the main unit? | Yes | 2-1 |
|--------------------|--|--|-----|-----|
| Address | 1-1 Are multiple indoor units set up as the main unit: | | No | 2-2 |
| 2 Installation | 2-1 | Set up only one indoor unit as the main unit and other indoor units to the sub-unit. | | |
| & Setting | 2-2 | Carry out the auto address setting. | | |

E15 Auto 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.

2. Error Diagnosis

| 1 Power Source | 1-1 | Is the indoor unit powered off? | Yes | Power on | | |
|---------------------------------------|-----|--|-----|---|--|--|
| | | | No | 2-1 | | |
| 2 Indoor / outdoor wiring | 2-1 | Is the indoor / outdoor wiring connected correctly? | Yes | 3-1 | | |
| | | | No | Correct the wiring | | |
| 3 Number of Indoor | 3-1 | Was the number of indoor units changed after auto address setting finished? | Yes | 3-2 | | |
| | | | No | 4-1 | | |
| Units | 3-2 | Conduct checks prior to auto address setting. | | | | |
| 4 Indoor | 4-1 | Be sure that the detailed setting items are made at factory setting. | Yes | 4-2 | | |
| unit control PC board | | | No | Correct the setting Run the auto address | | |
| | 4-2 | Are the CHK pin and TEST pin on the indoor unit control board short-circuited? | Yes | Remove the short | | |
| | | | No | 4-3 | | |
| | 4-3 | Is the wireless remote controller connected to on the indoor unit's control PC board? | Yes | 4-4 | | |
| | 4-3 | | No | 4-6 | | |
| | 4-4 | 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 | 4-5 | | |
| | | being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.) | No | 4-6 | | |
| | 4-5 | Replace wireless remote control parts including wiring. | | | | |
| | 4.6 | Is the LED blinking on the indoor unit's control PC board? | Yes | 4-7 | | |
| | 4-0 | | No | 5-1 | | |
| | 4-7 | 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 | g". | | | |

Factory setting

| Item code | Item | Value |
|-----------|-----------------------|-------|
| 11 | Indoor unit capacity | 0 |
| 12 | System address | 99 |
| 13 | Indoor unit address | 99 |
| 14 | Group control address | 99 |

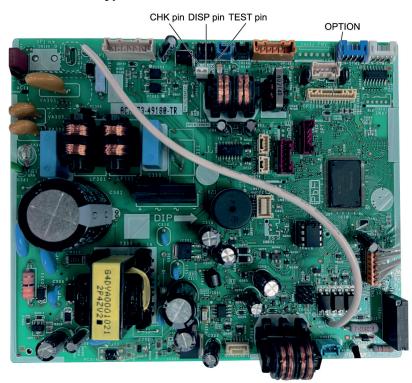
NOTE

The Item code numbers 11, 12, 13 and 14 can automatically be changed to the appropriate settings from factory settings listed above by making the auto address settings according to the connected outdoor unit capacity and the number of indoor units.

If needed to reset the settings after once changed, return all the item codes to the factory shipment-time settings. It is necessary to set the auto address settings once again.

- 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.
- For information on the remote control's detailed settings, see 7-3 and 7-4.
- The alarm also occurs when the indoor unit cannot be recognized (indoor unit only blackout, disconnection of indoor / outdoor control line*, etc.) during auto address setting.
 - * indoor / outdoor control line* : Connection cable between outdoor and indoor unit

Wall Mounted Type Indoor Unit Control Board



E16 Auto 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.
- When making group control of the different refrigerant system, the steps to turn on the systems one at a time have not been performed.

2. Error Diagnosis

E18 Faulty Communication in Group Control Wiring

1. Error Detection Method

When the main remote controller cannot communicate with a sub remote controller in the remote control group. It is judged an error if a sub remote controller in a remote control group fails to communicate with the main remote controller for a period of three minutes.

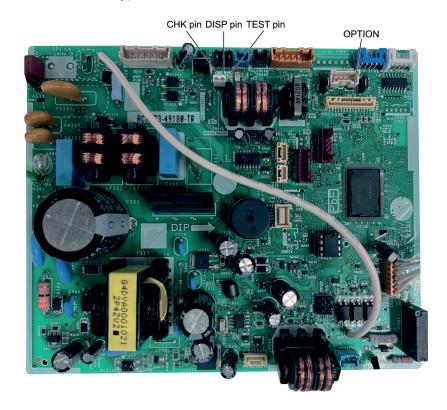
- An indoor unit within the control group does not have its power on.
- The CHK pin and TEXT pin on the indoor unit in the control group are shorted.
- The DISP pin of an indoor unit sub remote controller in the control group is shorted.
- Remote control group wiring is opened.
- More than one indoor unit in the control group is set to Main.
- An indoor unit in the control group is set to Separate.

2. Error Diagnosis

| 1 Indoor Unit | 1-1 | Is the indoor unit powered off? | | Power on | | | | | |
|----------------|-----|--|--|--------------------|--|--|--|--|--|
| | | | | 1-2 | | | | | |
| | 1-2 | 7 to the office purchase purchase made and contact | | Remove the short | | | | | |
| | | | | 2-1 | | | | | |
| 2 Substitute | 2.4 | Us the remote control group's wiring opened? | | Correct the wiring | | | | | |
| Sub Remote | 2-1 | | | 2-2 | | | | | |
| Controller | 2-2 | detailed settings mode. Is the main remote controller (1) set to more | | 2-3 | | | | | |
| | | | | 3-1 | | | | | |
| | 2-3 | is the ming of the femole contact group mice according to the | | 2-4 | | | | | |
| | | | | 2-5 | | | | | |
| | 2-4 | Run the auto address setting again. | | | | | | | |
| | 2-5 | Run the auto address setting again after correcting the wiring of the remote control group. | | | | | | | |
| 3 Indoor | 3-1 | | | 3-2 | | | | | |
| unit | | | | 3-4 | | | | | |
| control PCB | 3-2 | Disconnect the connector mentioned above on the control PC board of the indoor unit control PC board, and see whether the E18 goes off after several minutes. (When doing so, if two remote controllers are being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.) | | 3-3 | | | | | |
| | | | | 3-4 | | | | | |
| | 3-3 | Replace wireless remote control parts including wiring. | | | | | | | |
| | 3-4 | Replace the indoor unit control PC board. | | | | | | | |

- For information on the remote control's detailed settings, see 7-3 and 7-4.
- For information on the procedures for replacing the Indoor unit control PCB, refer to the manual that is packaged with the indoor unit service board.

Wall Mounted Type Indoor Unit Control 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. |

↑ WARNING

High Voltage is generated in the electrical parts area by the capacitor. Ensure that the capacitor has discharged sufficiently before proceeding with repair work. Failure to heed this caution may result in electric shocks.

Working at a height involves risk of a person falling. Practice safety standards according to each country requirement.

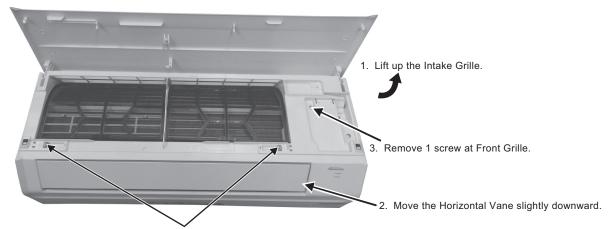
CAUTION

To maintain the indoor unit's appearance, some precaution needs to be taken during installation or servicing activities.

- 1) Avoid direct contact between the indoor unit with rough or sharp surfaces that could cause scratches on the matte surface. (e.g. floor, installation tools, fingernails)
- 2) When placing the unit on the ground, ensure there is lining such as soft cloth between the unit and the ground surface / floor to prevent any scratching.
- 3) When handling the unit, it is encourage to wear gloves to avoid scratches by sharp or rough items (e.g. fingernails, screwdriver/powertool, rings, etc)
- 4) When cleaning the unit, use soft damp cloth. For tougher stains, you can use a bleach-free wet wipe. Test on a small area first. Do not use harsh chemicals such as thinner to clean the grilles which could corrode or leave marks on the paint coating.
- 5) When servicing the unit, gloves should be worn to prevent injuries from sharp edges on certain components.

6.2 Indoor Electronic Controllers, Cross Flow Fan and Indoor Fan Motor Removal Procedures (S-25PK4R S-50PK4R)

6.2.1 To Remove Front Grille



4. Slide the 2 locks knobs on the front of the Front Grille to unlock position.

Figure 1

5. Slide the 2 locks knobs on the top of the Front Grille to unlock position.

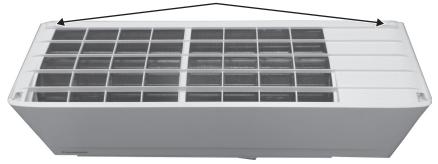


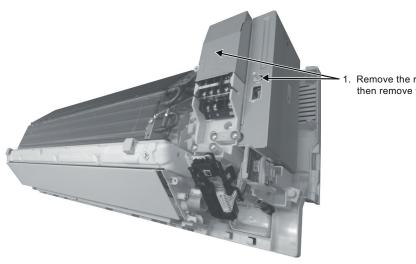
Figure 2



6. Remove the Front Grille. Pull out to front side.

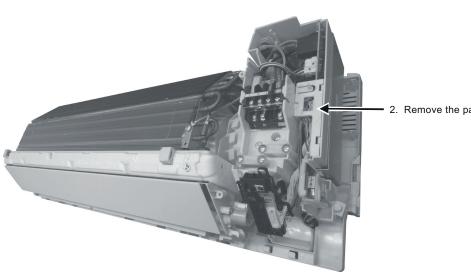
Figure 3

To Remove Electronic Controller 6.2.2



Remove the right side front cover first, then remove the second front cover.

Figure 4



2. Remove the particular piece.

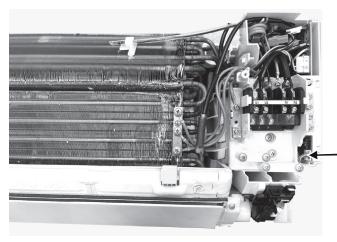
Figure 5

- Pull out the Main Electronic Controller halfway.
 Then disconnect all connectors and lead wire AC2 (Blue) from the controller.
 Remove the Electronic controller.
- 5. Disconnect the lead wires AC1 (Brown), AC3 (Black), and FG1 (Green) from the terminal board.
- Remove air temperature sensor from behind indicator complete.
- Disconnect the CN-DISP connector from indicator complete.

 Then remove the indicator complete.

Figure 6

6.2.3 To Remove Discharge Grille



1. Disconnect CN-STM1 from electronic controller.

Figure 7



2. Pull out the 2 locks knobs on the bottom of the Discharge Grille to unlock position.

Figure 8

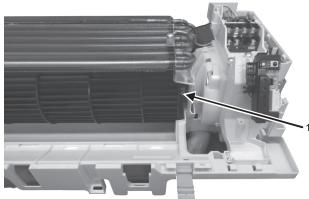


3. Pull out the discharge grille to remove.

Caution: To prevent cuts or injury, service personnel are strongly advised to wear protective gloves when handling or servicing the discharge grille. For cleaning, use a soft brush to avoid direct contact with any sharp surfaces.

Figure 9

6.2.4 To Remove Cross Flow Fan



1. Loosen the cross-flow fan screw.

Figure 10

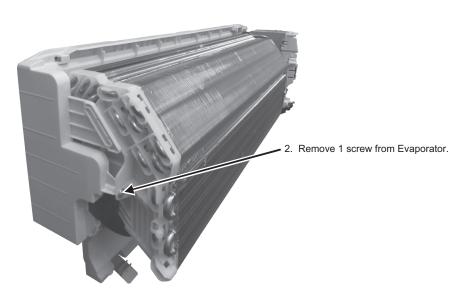
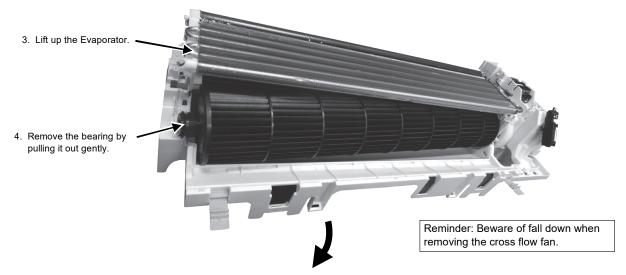


Figure 11



5. Remove the cross flow fan from the unit by pulling it to the left and downward.

Figure 12

6.2.5 To Remove Fan Motor

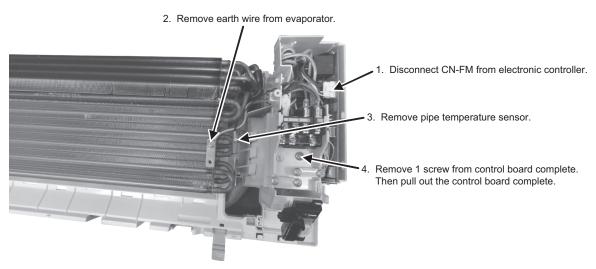


Figure 13

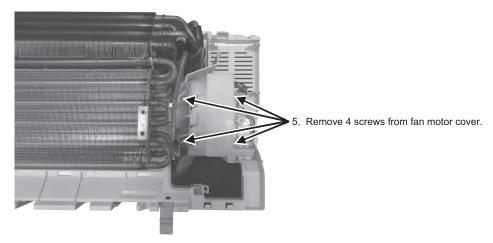
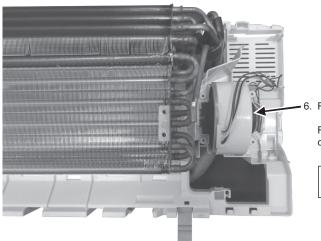


Figure 14



6. Remove Fan Motor.

Reminder: To reinstall the fan motor, adjust the fan motor connector to 60° towards you before fixing control board.

Reminder: Beware of fall down when removing the cross flow fan.

Figure 15

________ "Precaution of Maintenance" Removed all electrical parts before doing wet servicing

⚠ WARNING

High Voltage is generated in the electrical parts area by the capacitor. Ensure that the capacitor has discharged sufficiently before proceeding with repair work. Failure to heed this caution may result in electric shocks.

Working at a height involves risk of a person falling. Practice safety standards according to each country requirement.

⚠ CAUTION

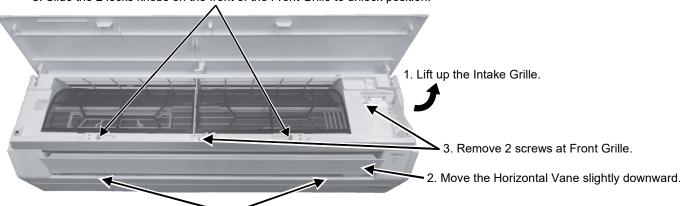
To maintain the indoor unit's appearance, some precaution needs to be taken during installation or servicing activities.

- 1) Avoid direct contact between the indoor unit with rough or sharp surfaces that could cause scratches on the matte surface. (e.g. floor, installation tools, fingernails)
- 2) When placing the unit on the ground, ensure there is lining such as soft cloth between the unit and the ground surface / floor to prevent any scratching.
- 3) When handling the unit, it is encourage to wear gloves to avoid scratches by sharp or rough items (e.g. fingernails, screwdriver/powertool, rings, etc)
- 4) When cleaning the unit, use soft damp cloth. For tougher stains, you can use a bleach-free wet wipe. Test on a small area first. Do not use harsh chemicals such as thinner to clean the grilles which could corrode or leave marks on the paint coating.
- 5) When servicing the unit, gloves should be worn to prevent injuries from sharp edges on certain components.

6.3 Indoor Electronic Controllers, Cross Flow Fan and Indoor Fan Motor Removal Procedures (S-71PK4R S-100PK4R)

6.3.1 To Remove Front Grille

5. Slide the 2 locks knobs on the front of the Front Grille to unlock position.



4. Remove 2 caps and screws from bottom of Front Grille.

Figure 1

6. Slide the 4 locks knobs on the top of the Front Grille to unlock position.

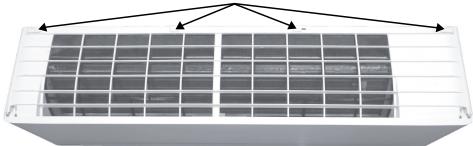


Figure 2



7. Remove the Front Grille. Pull out to front side.

Figure 3

6.3.2 To Remove Electronic Controller

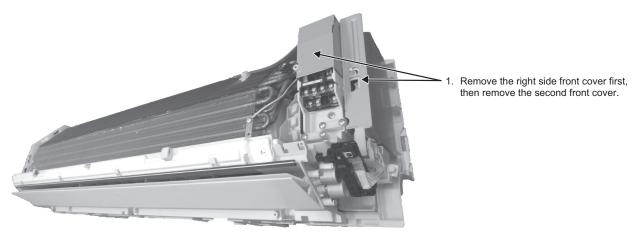


Figure 4

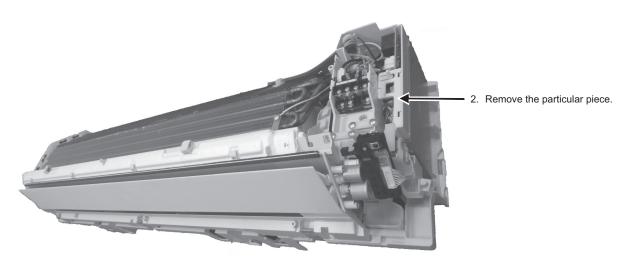
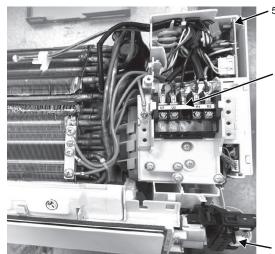


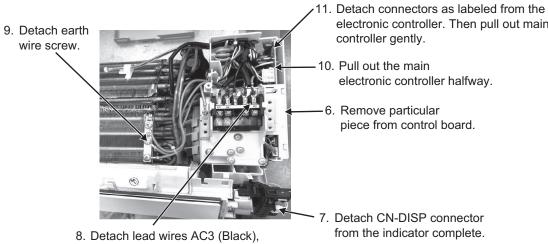
Figure 5



- 5. Pull out the Main Electronic Controller halfway. Then disconnect all connectors and lead wire AC2 (Blue) from the controller. Remove the Electronic controller.
- Disconnect the lead wires AC1 (Brown), AC3 (Black), and FG1 (Green) from the terminal board.

Disconnect the CN-DISP connector from indicator complete. Then remove the indicator complete.

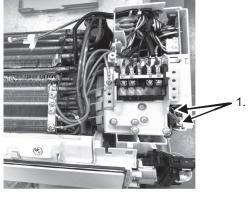
Figure 6



- electronic controller. Then pull out main controller gently.
- 10. Pull out the main electronic controller halfway.
- 6. Remove particular piece from control board.
- 7. Detach CN-DISP connector from the indicator complete.

Figure 7

To Remove Discharge Grille 6.3.3

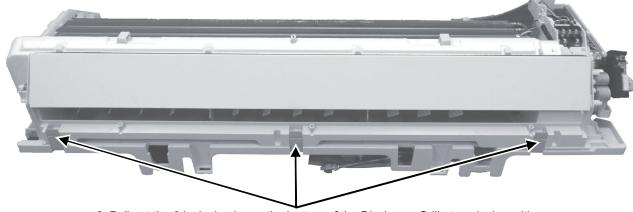


AC1 (Brown) and FG1 (Green)

from terminal board.

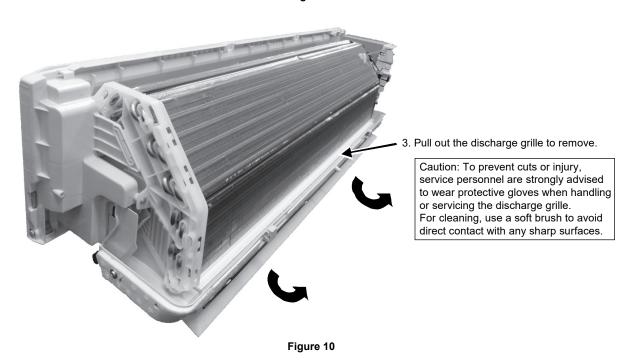
1. Disconnect CN-STM1 and CN-STM3 from electronic controller.

Figure 8



2. Pull out the 3 locks knobs on the bottom of the Discharge Grille to unlock position.

Figure 9



6.3.4 To Remove Cross Flow Fan

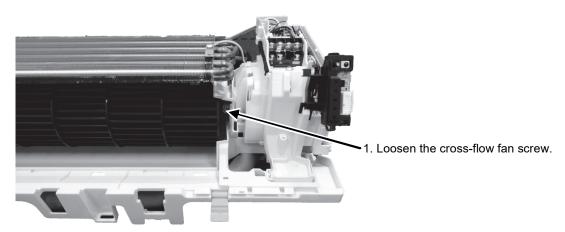


Figure 11

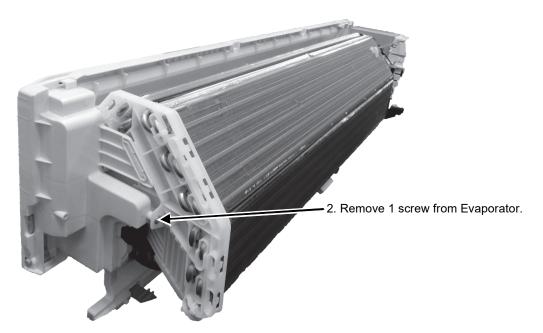


Figure 12



5. Remove the cross flow fan from the unit by pulling it to the left and downward.

Figure 13

6.3.5 To Remove Fan Motor

3. Remove air temperature sensor and pipe temperature sensor.

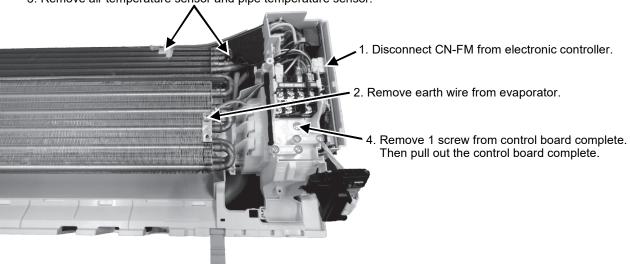


Figure 14

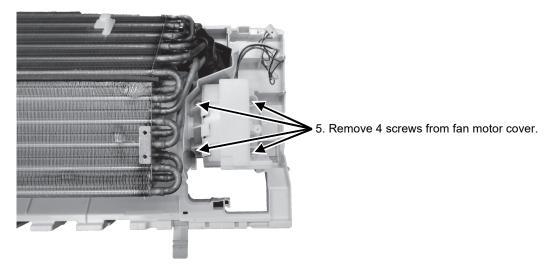
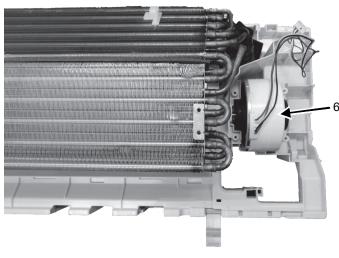


Figure 15



6. Remove Fan Motor.

Reminder: To reinstall the fan motor, adjust the fan motor connector to 60° towards you before fixing control board.

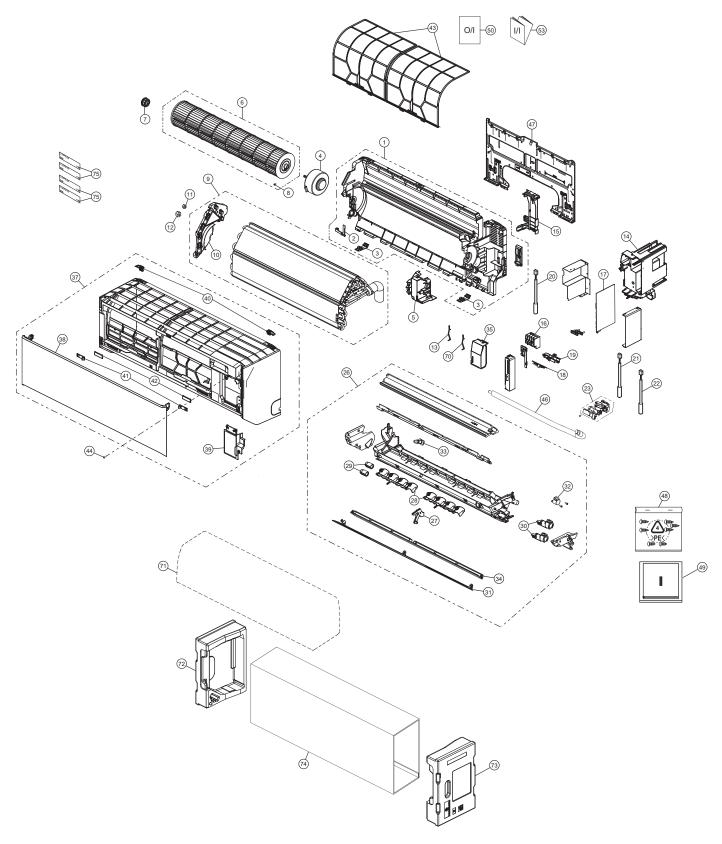
Reminder: Beware of fall down when removing the cross flow fan.

Figure 16

 $\underline{\bigwedge}$ "Precaution of Maintenance" Removed all electrical parts before doing wet servicing

7. Exploded View and Replacement Parts List

7.1 S-25PK4R S-50PK4R



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.

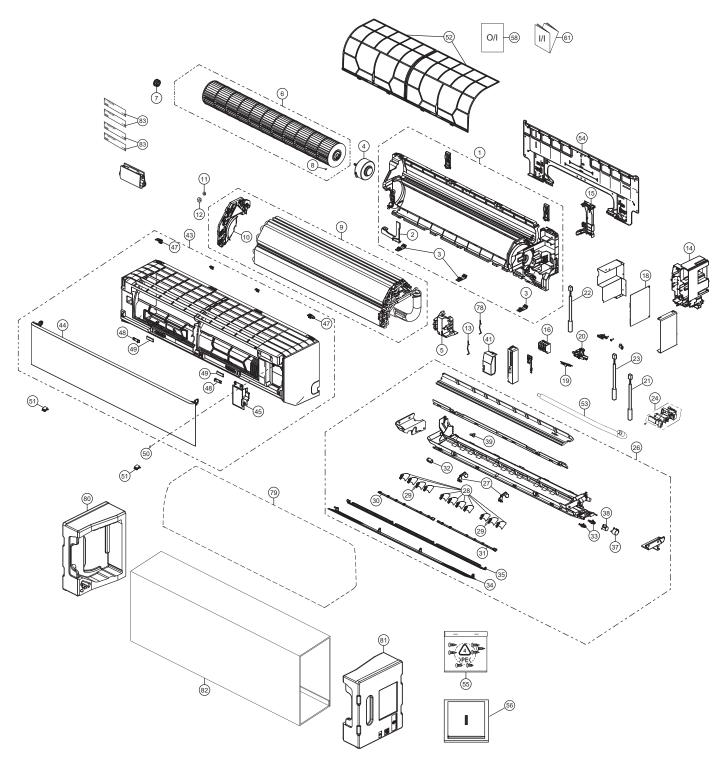
| SAFETY | REF. NO. | PART NAME & DESCRIPTION | QTY. | S-25PK4R | S-50PK4R | REMARK |
|-------------------------|----------|--|------|--------------|--------------|--------|
| | 1 | CHASSIS COMPLETE | 1 | ACXD50C05550 | ← | |
| | 2 | PARTICULAR PIECE | 1 | ACXD93-25540 | ← | |
| | 3 | PARTICULAR PIECE - LOCK | 2 | ACXD93-25560 | ← | |
| À | 4 | FAN MOTOR | 1 | L6CBYYYL0454 | ← | 0 |
| | 5 | FAN MOTOR BRACKET | 1 | ACXD54-05600 | ← | |
| | 6 | CROSS-FLOW FAN ASSY | 1 | ACXH02K01360 | ← | |
| | 7 | BEARING ASSY | 1 | CWH64K1006 | ← | |
| | 8 | SCREW - CROSS-FLOW FAN | 1 | CWH551146 | ← | |
| | 9 | EVAPORATOR | 1 | ACXB30C44670 | ACXB30C44690 | 0 |
| | 10 | BOX SHAPED PLATE | 1 | ACXD66-04080 | ← | |
| | 11 | FLARE NUT (LIQUID) | 1 | CWT251063 | ← | |
| | 12 | FLARE NUT (GAS) | 1 | CWT251061 | CWT251032 | |
| | 13 | CLIP FOR SENSOR | 1 | CWH711019 | ← | |
| | 14 | CONTROL BOARD CASING | 1 | ACXH10-11070 | ← | |
| | 15 | BACK COVER CHASSIS | 1 | ACXD93-25650 | ← | |
| \triangle | 16 | TERMINAL BOARD COMPLETE | 1 | ACXA28C06890 | ← | 0 |
| $\overline{\mathbb{A}}$ | 17 | ELECTRONIC CONTROLLER - MAIN | 1 | ACXA74C14550 | ACXA74C14560 | 0 |
| $\overline{\mathbb{A}}$ | 18 | ELECTRONIC CONTROLLER - INDICATOR | 1 | ACXA73-49200 | ← | 0 |
| | 19 | INDICATOR HOLDER | 1 | ACXD93-25570 | ← | |
| \triangle | 20 | SENSOR COMPLETE [AIR TEMP. SENSOR] TA | 1 | ACXA50C21590 | ← | 0 |
| | 21 | SENSOR COMPLETE [HEAT EXCHANGER TEMP SENSOR E1] | 1 | ACXA50C22540 | ← | |
| | 22 | SENSOR COMPLETE [HEAT EXCHANGER TEMP. SENSOR E2] | 1 | ACXA50C21610 | ← | |
| \triangle | 23 | GENERATOR COMPLETE | 1 | ACXH94C02040 | ← | 0 |
| | 26 | DISCHARGE GRILLE COMPLETE | 1 | ACXE20C09580 | ← | |
| | 27 | FULCRUM | 1 | ACXH62-00900 | ← | |
| | 28 | VERTICAL VANE | 2 | ACXE24-04540 | ← | |
| | 29 | SHAFT [HORIZONTAL VANE] | 2 | ACXH63-01930 | ← | |
| | 30 | SHAFT [AIR SWING MOTOR] | 2 | ACXH63-01570 | ← | |
| | 31 | HORIZONTAL VANE [OUTER VANE] | 1 | ACXE24-04560 | ← | |
| | 32 | AIR SWING MOTOR ASSY | 1 | ACXA98K00250 | ← | |
| | 33 | CAP - DRAIN TRAY | 1 | CWH521259 | ← | |
| | 34 | HORIZONTAL VANE [INNER VANE] | 1 | ACXE24-04550 | ← | |
| | 35 | CONTROL BOARD TOP COVER | 1 | ACXH13-10000 | ← | |
| | 37 | FRONT GRILLE COMPLETE | 1 | ACXE10C21100 | ← | 0 |
| | 38 | INTAKE GRILLE COMPLETE | 1 | ACXE22C05970 | ← | |
| | 39 | GRILLE DOOR COMPLETE | 1 | ACXE14C01980 | ← | |
| | 40 | PARTICULAR PIECE - LOCK | 2 | ACXD93-25610 | ← | |
| | 41 | PARTICULAR PIECE - LOCK | 2 | ACXD93-25620 | ← | |
| | 42 | PARTICULAR PIECE - LOCK | 2 | ACXD93-25630 | ← | |
| | 43 | AIR FILTER | 2 | ACXD00-03390 | ← | 0 |
| | 44 | SCREW - FRONT GRILLE | 1 | XTT4+16CFJ | ← | |

| SAFETY | REF. NO. | PART NAME & DESCRIPTION | QTY. | S-25PK4R | S-50PK4R | REMARK |
|--------|----------|-------------------------------|------|--------------|--------------|--------|
| | 46 | DRAIN HOSE | 1 | ACXH85-03521 | ← | |
| | 47 | INSTALLATION PLATE | 1 | ACXH36-00970 | ← | |
| | 48 | ACCESSORY - COMPLETE [SCREWS] | 1 | ACXH82C24291 | ← | |
| | 49 | ACCESSORY - COMPLETE | 1 | ACXH82C03062 | ← | |
| | 50 | OPERATING INSTRUCTION | 1 | ACXF55-42130 | ← | |
| | 53 | INSTALLATION INSTRUCTION | 1 | ACXF60-60980 | ← | |
| | 70 | SPRING FOR SENSOR | 1 | CWH711010 | ← | |
| | 71 | BAG | 1 | ACXG86-00191 | ← | |
| | 72 | SHOCK ABSORBER [L] | 1 | ACXG70-15491 | ← | |
| | 73 | SHOCK ABSORBER [R] | 1 | ACXG70-15501 | ← | |
| | 74 | C.C. CASE | 1 | ACXG50-66900 | ← | |
| | 75 | MODEL LABEL | 2 | ACXF87-54260 | ACXF87-54270 | |

(NOTE)

- All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488). "O" marked parts are recommended to be kept in stock.

S-71PK4R S-100PK4R 7.2



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-71PK4R | S-100PK4R | REMARK |
|-------------------------|----------|-----------------------------------|------|--------------|--------------|--------|
| | 1 | CHASSIS COMPLETE | 1 | ACXD50C05560 | ← | |
| | 2 | PARTICULAR PIECE | 1 | ACXD93-25540 | ← | |
| | 3 | PARTICULAR PIECE | 3 | ACXD93-25560 | ← | |
| \triangle | 4 | FAN MOTOR | 1 | L6CBYYYL0465 | ← | 0 |
| | 5 | FAN MOTOR BRACKET | 1 | ACXD54-05600 | ← | |
| | 6 | CROSS-FLOW FAN ASSY | 1 | ACXH02K01370 | ← | |
| | 7 | BEARING ASSY | 1 | CWH64K1006 | ← | |
| | 8 | SCREW - CROSS-FLOW FAN | 1 | CWH551146 | ← | |
| | 9 | EVAPORATOR | 1 | ACXB30C44700 | ← | 0 |
| | 10 | BOX SHAPED PLATE | 1 | ACXD66-04090 | ← | |
| | 11 | FLARE NUT (LIQUID) | 1 | CWT251063 | ← | |
| | 12 | FLARE NUT (GAS) | 1 | CWT251033 | ← | |
| | 13 | CLIP FOR SENSOR | 1 | CWH711019 | ← | |
| | 14 | CONTROL BOARD CASING | 1 | ACXH10-11070 | ← | |
| | 15 | BACK COVER CHASSIS | 1 | ACXD93-25650 | ← | |
| \triangle | 16 | TERMINAL BOARD COMPLETE | 1 | ACXA28C06890 | ← | 0 |
| \triangle | 18 | ELECTRONIC CONTROLLER - MAIN | 1 | ACXA74C14570 | ACXA74C14580 | 0 |
| \triangle | 19 | ELECTRONIC CONTROLLER - INDICATOR | 1 | ACXA73-49200 | ← | 0 |
| | 20 | INDICATOR HOLDER | 1 | ACXD93-25710 | ← | |
| \triangle | 21 | SENSOR COMPLETE (TA) | 1 | ACXA50C21590 | ← | 0 |
| | 22 | SENSOR COMPLETE (E1) | 1 | ACXA50C21600 | ← | |
| | 23 | SENSOR COMPLETE (E2) | 1 | ACXA50C21610 | ← | |
| \triangle | 24 | GENERATOR COMPLETE | 1 | ACXH94C02040 | ← | 0 |
| | 26 | DISCHARGE GRILLE COMPLETE | 1 | ACXE20C09020 | ← | |
| | 27 | FULCRUM | 2 | ACXH62-00920 | ← | |
| | 28 | VERTICAL VANE | 9 | ACXE24-04600 | ← | |
| | 29 | VERTICAL VANE | 2 | ACXE24-04670 | ← | |
| | 30 | CONNECTING BAR | 1 | ACXE26-02920 | ← | |
| | 31 | CONNECTING BAR | 1 | ACXE26-03060 | ← | |
| | 32 | SHAFT [HORIZONTAL VANE] | 1 | ACXH63-01930 | ← | |
| | 33 | SHAFT [AIR SWING MOTOR] | 2 | ACXH63-01570 | ← | |
| | 34 | HORIZONTAL VANE [OUTER VANE] | 1 | ACXE24-04580 | ← | |
| | 35 | HORIZONTAL VANE [INNER VANE] | 1 | ACXE24-04590 | ← | |
| \triangle | 37 | AIR SWING MOTOR [OUTER VANE] | 1 | ACXA98-03560 | ← | 0 |
| $\overline{\mathbb{A}}$ | 38 | AIR SWING MOTOR [INNER VANE] | 1 | ACXA98-02950 | ← | 0 |
| | 39 | CAP - DRAIN TRAY | 1 | CWH521259 | ← | |
| | 41 | CONTROL BOARD TOP COVER | 1 | ACXH13-10000 | ← | |
| | 43 | FRONT GRILLE COMPLETE | 1 | ACXE10C20441 | ← | 0 |
| | 44 | INTAKE GRILLE COMPLETE | 1 | ACXE22C05980 | ← | |
| | 45 | GRILLE DOOR COMPLETE | 1 | ACXE14C01980 | ← | |
| | 47 | PARTICULAR PIECE - LOCK | 2 | ACXD93-25610 | ← | |

| SAFETY | REF. NO. | PART NAME & DESCRIPTION | QTY. | S-71PK4R | S-100PK4R | REMARK |
|--------|----------|--------------------------|------|--------------|--------------|--------|
| | 48 | PARTICULAR PIECE - LOCK | 2 | ACXD93-25620 | ← | |
| | 49 | PARTICULAR PIECE - LOCK | 2 | ACXD93-25630 | ← | |
| | 50 | SCREW - FRONT GRILLE | 1 | XTT4+16CFJ | ← | |
| | 51 | CAP - FRONT GRILLE | 2 | ACXH52-04240 | ← | |
| | 52 | AIR FILTER | 2 | ACXD00-03400 | ← | 0 |
| | 53 | DRAIN HOSE | 1 | ACXH85-03521 | ← | |
| | 54 | INSTALLATION PLATE | 1 | ACXH36-00880 | ← | |
| | 55 | ACCESSORY - COMPLETE | 1 | ACXH82C24291 | ← | |
| | 56 | ACCESSORY - COMPLETE | 1 | ACXH82C03062 | ← | |
| | 58 | OPERATING INSTRUCTION | 1 | ACXF55-42130 | ← | |
| | 61 | INSTALLATION INSTRUCTION | 1 | ACXF60-60980 | ← | |
| | 78 | SPRING FOR SENSOR | 1 | CWH711010 | ← | |
| | 79 | BAG | 1 | ACXG86-00131 | ← | |
| | 80 | SHOCK ABSORBER [L] | 1 | ACXG70-15541 | ← | |
| | 81 | SHOCK ABSORBER [R] | 1 | ACXG70-15551 | ← | |
| | 82 | C.C. CASE | 1 | ACXG50-66910 | ← | |
| | 83 | MODEL LABEL | 2 | ACXF87-54280 | ACXF87-54290 | |

- (NOTE)
 All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488).
 "O" marked parts are recommended to be kept in stock.