

Safety precautions

Please Read Before Starting

- This adaptor must be installed by the sales dealer or installer. These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

WARNING This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.

CAUTION This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

- We assume no responsibility for accidents or damages resulting from methods other than those described in the installation instructions or methods without using specified parts. Malfunctions that occurred due to the unauthorised installation methods are not covered by the product warranty.
- This adaptor shall be installed in accordance with National Wiring Regulations.
- After the installation is complete, perform test operation to confirm that no abnormality is present.
- Read the installation instructions of devices to be connected as well.
- When relocating or repairing this adaptor, provide the Installation Instructions to the servicing personnel.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision. The appliances is intended for household.

WARNING

ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause **accidental injury or death**.
- This adaptor 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. Earth Leakage Circuit Breaker (ELCB) must be

incorporated in the fixed wiring in accordance with the wiring regulations. The Earth Leakage Circuit Breaker (ELCB) must be an approved 10 A, having a contact separation by 3 mm in all poles.

- Provide a power outlet to be used exclusively for this adaptor.
- Turn off the circuit breaker of the adaptors before installation.
- Do not supply power to the adaptor until all wiring is completed or reconnected and checked.
- Fix the power supply wiring securely with the clamper so that the power supply terminal board is free of tension (external force) when pulled. Loose connection of the terminal board may occur fire.
- To prevent possible hazards from insulation failure, the adaptor must be grounded.
- Select an installation location which is rigid and strong enough to support or hold the adaptor, and select a location for easy maintenance.
- This product must not be modified or disassembled under any circumstances. Modified or disassembled adaptor may cause fire, electric shock or injury.
- Do not clean inside the adaptor by users. Engage authorized dealer or specialist for cleaning.
- Do not operate with wet hands.
- Ensure the electricity is off when connecting or performing maintenance on lighting or electrical devices and make sure there are no other people around.
- Take precautions when switching on the electricity again when automatic restoration features are being used.

CAUTION

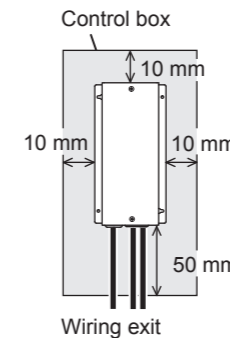
- Ground yourself to discharge static electricity before performing any wiring.
- Do not use the adaptor at the following locations.
 - Areas where leakage of flammable gas may be expected
 - Places where large amounts of oil mist exist
 - Locations where external air may enter the room directly (This may cause "condensation".)
 - Locations where high-frequency emissions are generated
 - Location where voltage fluctuation frequently occurs
- Do not wash with water.

NOTICE

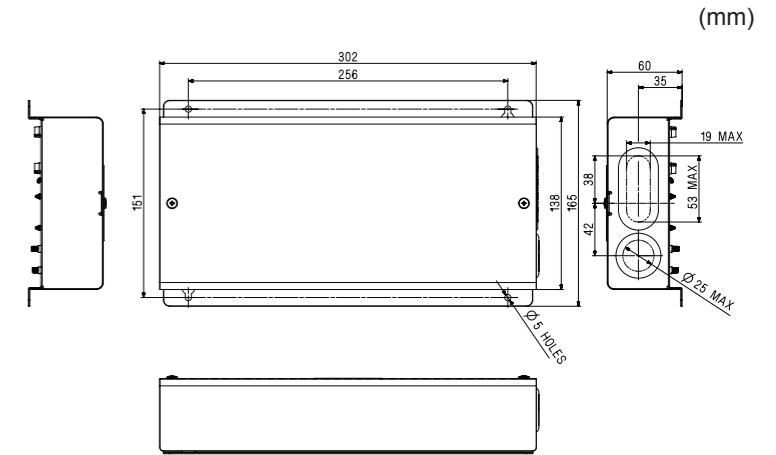
- The English text is the original instructions. Other languages are translation of the original instructions.
- Refer to the PDF data for the Installation Instructions in other languages. Please contact to your local dealer to find PDF file for other languages. (French, Spanish, German, Italian, Dutch, Portuguese, Russian, Ukrainian, Kazakh, Polish, Turkish)

Installation precautions

- Avoid the following locations for installation.
 - Near a window where the unit is exposed to direct sunlight or the open air
 - In unstable locations or locations where the unit is exposed to shocks or vibrations (may cause the unit to fall)
 - Near heat sources
 - Where condensation forms
- Install the unit vertically to the floor.
- Install so that there is at least 50 mm gap from the side where the wirings exit and at least 10 mm in each other direction. (Refer to the diagram at right)
- Install at least 1 m away from TV, radio, PC, etc. (The unit may cause picture distortion or noise)
- Do not modify the unit such as by trying to install the circuit board into another device.
- Use wiring with at least 1 mm in thickness of insulation including the sheath.



Dimensions



Specifications

Model No.	CZ-CAPC4
Dimensions	(H) 165mm × (W) 302 mm × (D) 60 mm
Weight	1250 g
Temperature/ Humidity range	0 °C to 50 °C / 10% to 90% (Indoor use only)
Rated voltage/ Rated frequency	Single phase 100–240 V ~ 50–60 Hz
Power consumption	Max. 4.0 W

Supplied accessories < >: Number of pieces

Screws Tapping screws M4 × 20 <4>	Cable Tie <3>
Installation Instructions <1>	

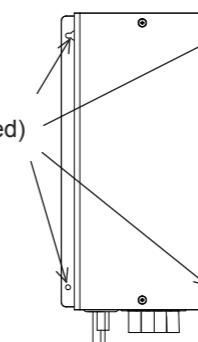
* Wiring are not included (field supplied item).

1. Mounting

- Install near the target device or in a control box.
- When connecting to a relay control device, connect to the device with wiring for input and output of 3 m or less. (Connection wiring should be 0.5 mm² or more, and select connection wiring for the output wiring with sufficient capacity to suit the capacity of the device.)
- Apart from the vertical mounting style, you can also mount the unit horizontally so the wirings exit the left or right sides.

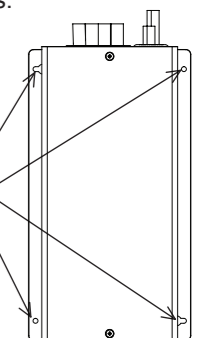
- When mounting so the wirings exit from the bottom

Fix with 4 screws (supplied)



- When mounting so the wirings exit from the top (Allowed only when installing inside a control box)

Fix with 4 screws (supplied)



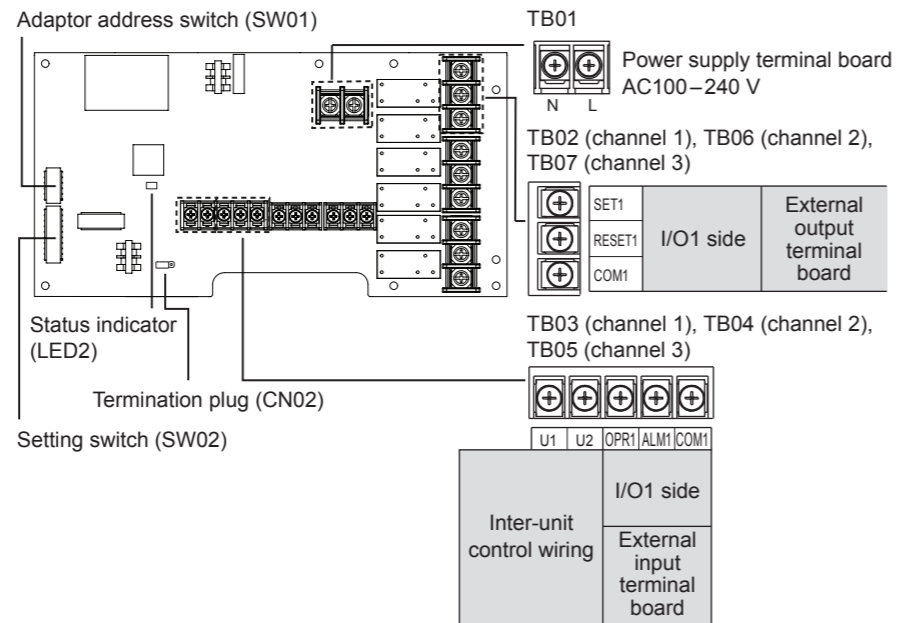
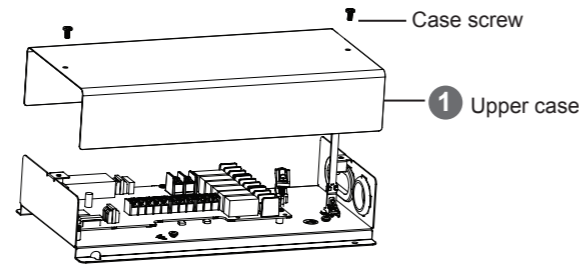
2. Wiring

1 Remove the upper case.

(Case screws: 2)

2 Connect the power supply wiring.

- Type of wiring
 - Usage standard: 600 V vinyl wiring (Field supplied item)
 - Use a flexible wiring of 2 mm² (recommended).
 - Use the standard power supply wiring for Europe (such as H05RN-F or H07RN-F which conform to CENELEC (HAR) rating specifications) or use the wiring based on IEC standard (60245 IEC57, 60245 IEC66).
- Connect the power supply wiring to the power supply terminal board and the earth wiring to the earth terminal.
 - Power supply terminal board screw: M4
 - Tightening torque: 0.5 N·m (recommended)
- Prepare the end of the lead wiring for terminal connection.

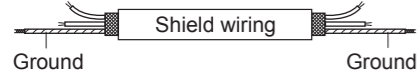


3 Connect the inter-unit control wiring.

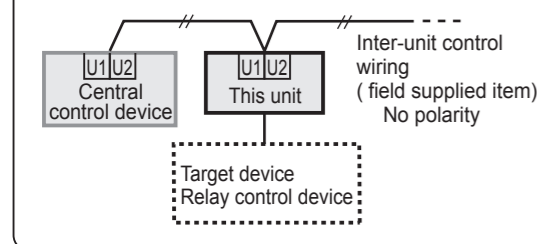
- Type of wiring
 - Use flexible shield wiring of 0.5 to 2 mm².
- Total wire length: 1000 m or less
- Other terminal boards for inter-unit control wiring for indoor or outdoor units can also be connected.
- No polarity

Attention

- Ground the shield on both sides of shield wiring, otherwise an operation error from noise may occur.

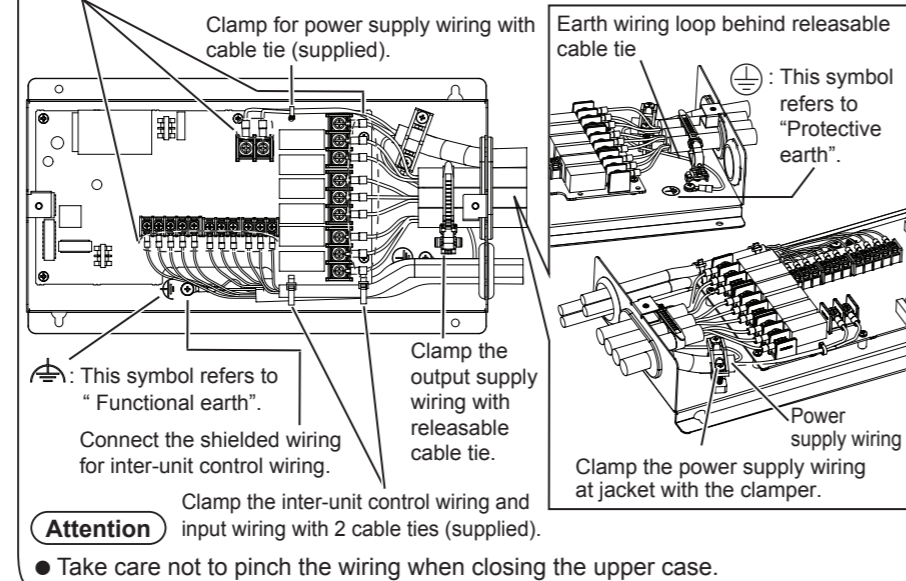


Basic Wiring Diagram



Attention

- Do the wiring work so there is no stress on the lead wiring of the terminal clamber.



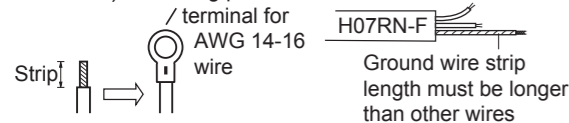
Attention

- Take care not to pinch the wiring when closing the upper case.

How to attach the ring pressure terminal

For power supply wiring

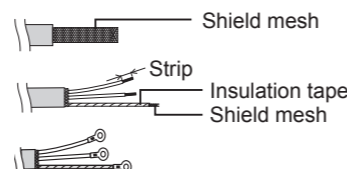
- Process the end of each wiring and attach the ring pressure terminal (Field supplied item).



For shield wiring

- Process the end of each wiring and attach the ring pressure terminal (field supplied item).

- Remove wiring coat.
- Cover with the tape.
- Attach ring pressure terminal.



3. How to connect to a relay control device

These are the specifications for the output terminal boards and input terminal boards.

The output terminal boards

Using the setting switches (SW02), select the output signal that suits the controlled device and whether to have an operation answer back. See "7. Relay circuit examples" below detail.

Note: SW02-1 is for Output 1, change to SW02-9 for Output 2 and SW02-10 for Output 3 accordingly.

Setting switch			Output signals from SET terminal board/RESET terminal board	Operation answer back
SW02-1	SW02-2	SW02-4		
OFF	OFF	OFF	SET1 terminal board: Start signal (pulse, contact "a")*1 RESET1 terminal board: Stop signal (pulse, contact "a")*1	Yes
	ON	OFF	SET1 terminal board: Start/Stop signal (pulse, contact "a")*1 The start and stop signals are output alternately from the SET1 terminal board. RESET1 terminal board: Local prohibition signal*2	No
ON	OFF	ON	SET1 terminal board: Start/Stop signal (static) Stop signal: contact OFF (continuous contact) Start signal: contact ON (continuous contact) RESET1 terminal board: Local prohibition signal*2	Yes
	ON	OFF		(The output of start/stop signals are not linked with operation answer back input.) No
	OFF	ON		Yes (The output of start/stop signals are linked with operation answer back input.)

*1 Pulse width is about 0.5 seconds.

*2 Output as follows according to the signal from the central control device. Use as necessary.

Individual permitted: Contact OFF (continuous contact)

Local prohibited: Contact ON (continuous contact)

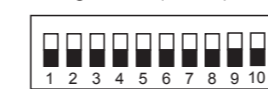
Interface adaptor side		External equipment side		
Condition	Terminal name	Terminal	Circuit example	Condition
Terminal board screw: M4 Tightening torque: 0.5 N·m (recommended)	TB02, TB06, TB07	SET1 RESET1 COM1		Wire length: 3 m or less Wire thickness: 0.5 mm ² or more
<ul style="list-style-type: none"> Contact capacity <ul style="list-style-type: none"> Signal format: Non-voltage contact "a" Contact allowable voltage and current: AC240 V, 10.0 A Minimum connected load: 5 V, 0.1 A 				

The input terminal boards

Interface adaptor side		External equipment side		
Condition	Terminal name	Terminal	Circuit example	Condition
Status monitor signal from the controlled device is received by the relay contact. Terminal board screw: M3 Tightening torque: 0.5 N·m (recommended)	TB03, TB04, TB05	OPR1 ALM1 COM1		Wire length: 3 m or less Wire thickness: 0.5 mm ² or more
<ul style="list-style-type: none"> Contact behaviour specifications <ul style="list-style-type: none"> Signal format: Non-voltage contact "a", static Circuit contact voltage: DC12 V±10% Circuit contact current: Max. 10 mA 				

4. The setting switches (SW02)

Setting switch (SW02)



* The factory defaults are all OFF.

[SW02-1] Relay 1 output format

Switch the signal format of the SET1/RESET1 relay output.

- ON: Static output
- OFF: Pulse output

[SW02-9] Relay 2 output format

Switch the signal format of the SET2/RESET2 relay output.

- ON: Static output
- OFF: Pulse output

[SW02-10] Relay 3 output format

Switch the signal format of the SET3/RESET3 relay output.

- ON: Static output
- OFF: Pulse output

4. The setting switches (SW02) (continued)

[SW02-2] Operation answer back

- ON: Operation answer back input is not used.
 - OFF: Operation answer back input is used.
- ★ When operation answer back is not to be used, such as when controlling a humidifier, for example, set to ON.

[SW02-3] How to configure central addresses

- ON: Set with the adaptor address switch (SW01) on this unit.
 - OFF: Setting from a central control device.
- See "5. Setting the adaptor address" for details.

[SW02-4] Operation answer back link output

- See "3. How to connect to a relay control device" for pulse output.
- For static output
- ON: Static output is linked with operation answer back input.
 - OFF: Static output is not linked with operation answer back input.
- ★ Set to ON when total heat exchange type ventilation with a remote controller is to be controlled.

[SW02-5] Feature for automatically restoring after a power outage

- ON: Use the feature for automatically restoring after a power outage.
 - OFF: Do not use the feature for automatically restoring after a power outage.
- ★ Take proper care when using the feature for automatically restoring after a power outage.

[SW02-6] Alarm signal input when stopped

- ON: Alarm signal input is not accepted when stopped.
- OFF: Alarm signal input is accepted when stopped.

[SW02-7] Use prohibited

[SW02-8] Malfunction diagnosis feature

- ON: Start signal is output.
 - OFF: Stop signal is output.
- ★ The relay output format is switched by combinations of the setting switches (SW02-1, 2, 4).
See "3. How to connect to a relay control device" for details.

5. Setting the adaptor address (SW01)

The adaptor address is equivalent to the unit number of the indoor unit.
Make sure the addresses are not duplicated when more than one of these units are to be used.

■ Setting the central address from a central control device (Set setting switch SW02-3 to OFF.)

This applies when the central address is to be set or changed from a central control device in a state where both indoor units and this unit are connected directly to the inter-unit control wiring.

- Set the adaptor address of this unit starting from number 1.
 - ★ The systems address of this unit will be registered as 31.
- Example: If the adaptor address is number 1, 2, 3, the unit number of this unit will be 31-1, 31-2, 31-3. The central address of this unit can be set freely from the central control device.

■ Setting the central address with the adaptor address switch (Set setting switch SW02-3 to ON.)

- The adaptor address of this unit will be the central address.
The central address cannot be changed from the central control device.
Set the adaptor address according to the requirements of the customer.
 - ★ This unit will be registered as system address 31 and the adaptor address and the central address will be the same.
- Example: If the adaptor address is number 4, 5, 6, the unit number of this unit will be 31-4, 31-5, 31-6 and the central address will be number 4, 5, 6.

Adaptor address switch (SW01)



- Set so that it does not duplicate the central address of the indoor unit.

Adaptor address	Address switch No.	Adaptor address	Address switch No.	Adaptor address	Address switch No.	Adaptor address	Address switch No.
I/O1 side only	1 2 3 4 5 6	I/O1 side only	1 2 3 4 5 6	-I/O1 side only	1 2 3 4 5 6	I/O1 side only	1 2 3 4 5 6
1, 2, 3	- - - - -	25, 26, 27	- - - - ● -	49, 50, 51	- - - - ● -	64, 1, 2	- - - - ● -
4, 5, 6	- ● - - -	28, 29, 30	- ● - - ● -	52, 53, 54	- ● - - ● -		- ● - - ● -
7, 8, 9	- - ● - -	31, 32, 33	- - ● - ● -	55, 56, 57	- - ● - ● -		- - ● - ● -
10, 11, 12	- ● ● - -	34, 35, 36	- ● ● - ● -	58, 59, 60	- ● ● - ● -		- ● ● - ● -
13, 14, 15	- - - ● -	37, 38, 39	- - - ● ● -	61, 62, 63	- - - ● ● -		- - - ● ● -
16, 17, 18	- ● - ● -	40, 41, 42	- ● - ● ● -		- ● - ● ● -		- ● - ● ● -
19, 20, 21	- - ● ● -	43, 44, 45	- - ● ● ● -		- - ● ● ● -	- - ● ● ● -	
22, 23, 24	- ● ● ● -	46, 47, 48	- ● ● ● ● -		- ● ● ● ● -	- ● ● ● ● -	

★ See the terminal board diagram in "2. Wiring" for the location of I/O1. - : Switch OFF ● : Switch ON

6. Termination plug

- When only this unit is in a system or there is only one of these units, set one location to "termination plug". When there are multiple units set two locations to "termination plug". (Three or more locations is not allowed.)
- CN02 is on the "OPEN side": Termination plug is not connected. (Factory default)
CN02 is on the "SHORT side": Termination plug is connected.



7. Relay circuit examples

Examples of connection circuit.

	Pulse contact output(Non-voltage contact "a") (SET output + RESET output)	Special notes
Internal	TB02 (channel 1), TB06 (channel 2), TB07 (channel 3)	
External Equipment Side	TB03 (channel 1), TB04 (channel 2), TB05 (channel 3)	1) X1, X2, X3, X4 are auxiliary relays. 2) Set switch SW02-1 to OFF. 3) SW02-2 ON: When operation answer back is not used. 4) Do not connect OPR1, ALM1 if operation answer back input is not used. (Connect only the inputs to be used.)
Internal	TB02 (channel 1), TB06 (channel 2), TB07 (channel 3)	
External Equipment Side	TB03 (channel 1), TB04 (channel 2), TB05 (channel 3)	1) X1 and X4 are auxiliary relays. 2) Set switch SW02-1 to ON 3) Can be used to switch RESET output centrally or individually. (ON when "Central" is set on the central control device, OFF when "Individual permitted" is set) 4) SW02-2 ON: Operation answer back input is not be used. 5) Do not connect OPR1, ALM1 if operation answer back input is not to be used. (Connect only the inputs to be used.)
Internal	SET output Non-voltage contact "a" TB02 (channel 1), TB06 (channel 2), TB07 (channel 3)	
External Equipment Side	TB03 (channel 1), TB04 (channel 2), TB05 (channel 3)	1) Set switch SW02-1 to OFF Set switch SW02-2 to OFF Set switch SW02-4 to ON 2) The total heat exchange type ventilation; • External start/stop control input is a non-voltage contact "a" pulse. • Operating status output is a non-voltage contact "a" pulse. *If the start and stop operations are sent repeatedly and continuously from the central control device or total heat exchange type ventilation remote controller, the total heat exchange type ventilation may not accept the settings.

8. Operation and alarm indications

- The operating status can be confirmed with the status indicator (LED1) on the top of the circuit board.

Indicator pattern	Description
Lighting (red)	Normal operation
Blinking (red)	Regular blinking*1
	Irregular blinking*2

- *1 Blinking pattern where the indicator lights and goes out every 0.5 seconds
*2 After lighting twice, the indicator goes out for two seconds, and the blinking repeats.

The following alarms are displayed on the central control device when an alarm occurs.

C12: There is an alarm signal input from a device connected to this unit.
Check the alarm status on the device connected to this unit.

C19: Duplication of the adaptor address
Set the address switch not to duplicate the adaptor address.

Disposal of Old Equipment

Only for European Union and countries with recycling systems



This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products must not be mixed with general household waste.
For proper treatment, recovery and recycling of old products, please take them to applicable collection points in accordance with your national legislation.
By disposing of them correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment. For more information about collection and recycling, please contact your local municipality.
Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.