

Installation Instructions

PAW-T10 PCB

Optional PCB for ECOi, ECO G and PACi indoor units

Model No.

PCB type
PAW-T10

For installation in the following indoor units

System	Indoor unit type	Description
ECOi / ECO G	K1 / K2	Wall-mounted
	F1 / F2	Low silhouette ducted
	P1	Floor-standing
	R1	Concealed floor-standing
	E1 / E2	High static pressure ducted
	U1	4-way cassette (90x90)
	Y1 / Y2	4-way cassette (60x60)
	L1	2-way cassette
	D1	1-way cassette
	T1 / T2	Ceiling
	M1	Slim low static ducted
	WX	Water heat exchanger
PACi	K1	Wall-mounted
	F1	High static pressure ducted
	E1 / E2	High static pressure ducted (20 – 25 kW)
	U1	4-way cassette (90x90)
	Y1 / Y2	4-way cassette (60x60)
	T1 / T2	Ceiling
	N1	Low static pressure ducted

Main features of PAW-T10 PCB

- Easy to connect to the indoor units by a simple electrical connector without special tools and fits mechanically to most units in predrilled holes.
- Provides easily accessible screw terminals for all inputs and outputs.
- Allows to start/stop the indoor unit by external signals. Alternative functions* such as energy saving function are available through settings on the indoor units.
- Allows to permit/prohibit remote controller on/off.
- Operation and alarm signals are available for switching external devices.

* For more details see section “Alternative functions” in “Chapter 3: Functionality”.

Instructions for the electrical installer



PAW-T10

PCB for ECOi, ECO G and PACi indoor units


For your safety


Read the following instructions carefully, and carry out secure installation and electrical work.

The precautions given in this manual consist of specific “Warnings” and “Cautions”. They provide important safety-related information. Be sure to strictly observe all safety procedures. The labels and their meanings are as described below.

	Warning	This symbol refers to a hazard or unsafe procedure or practice that can result in severe personal injury or death.
	Caution	This symbol refers to a hazard or unsafe procedure or practice that can result in personal injury or product or property damage.

After installation is completed, perform a test run to check for operating trouble. Explain operating procedures to the customer following the CONNECTION SCHEME and the OPERATION LOGIC.

	Warning
<ul style="list-style-type: none">• Be sure to arrange installation by the dealer where the system was purchased or by a professional installer. Electric shock or fire may result if an inexperienced person performs any installation or wiring procedures incorrectly.• Be sure that this unit is securely installed in accordance with these “Instructions for the Electrical Installer”. Electric shock or fire may result if any installation or wiring procedures are incorrectly performed.• Only a qualified electrician should attempt to connect this system, in accordance with the instructions in this manual. Insufficient electrical circuit capacity or incorrect installation may cause electric shock and fire.• Use the specified cables for the electrical connections, and connect the cables securely. Run and fasten the cables securely so that external forces or pressure placed on the cables will not be transmitted to the connection terminals. Overheating or fire may result if connections or attachments are not secure.• Depending on the installation conditions and location, an earth leakage breaker may be required. If an earth leakage breaker is not installed, there is a danger of electric shock or fire.• The installation location requires the use of a circuit breaker. Failure to use a circuit breaker may result in electric shock or fire.• Circuit breaker must be incorporated in the fixed wiring in accordance with the wiring regulations. The circuit breaker must be an approved 10-16 A, having a contact separation in all poles.	

	Caution
<ul style="list-style-type: none">• Ground yourself to discharge static electricity before performing any wiring.	

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Parts supplied

PAW-T10 kit including:

- 1) PAW-T10 PCB with snap locks for installation in indoor units
- 2) connection cable (complete with connectors) for connecting the PAW-T10 PCB to the T10 socket on indoor unit PCBs

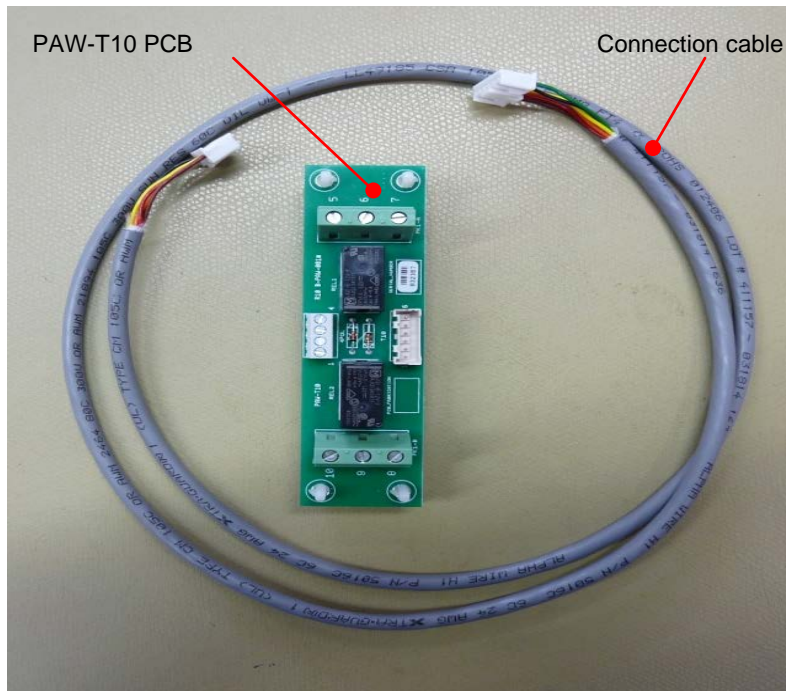


Fig. 1-1

2

Installation

Installation precautions

To avoid malfunction:

- Do not run the indoor/outdoor communication lines, input/output lines and power cables through the same conduit, or twist those cables together, or place the cables near one another.
- Install the main unit away from any sources of electrical noise.
- Avoid installing in any locations where the unit may come into contact with water, or in any extremely humid locations.
- Avoid installing in any location that is subject to excessive vibration or physical impacts.

Installation procedure

1. Install the PAW-T10 PCB (see Fig. 1-1) to each individual controlled indoor unit or to one single unit of each group (master or slave) by inserting the PCB holder into the appropriate holes.
2. Plug the supplied connection cable (see Fig. 1-1) into the T10 socket on the indoor unit main PCB (CN061, yellow) and into the T10 socket on the PAW-T10 PCB (T10, white).

Figures of installation position on each indoor unit type

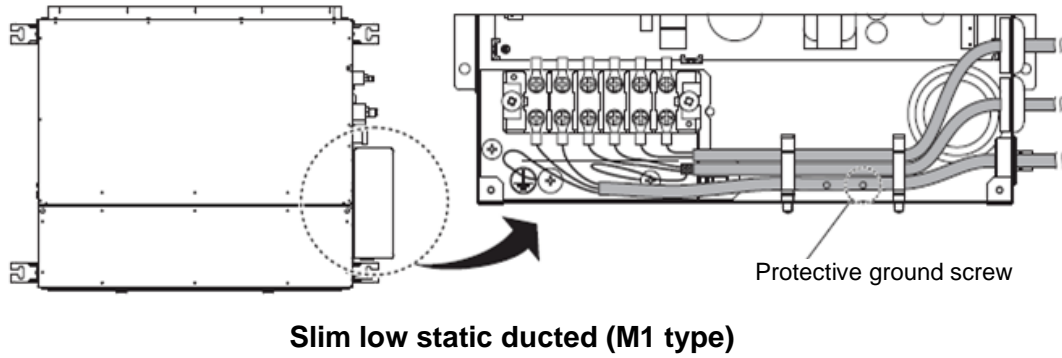


Fig. 2-1

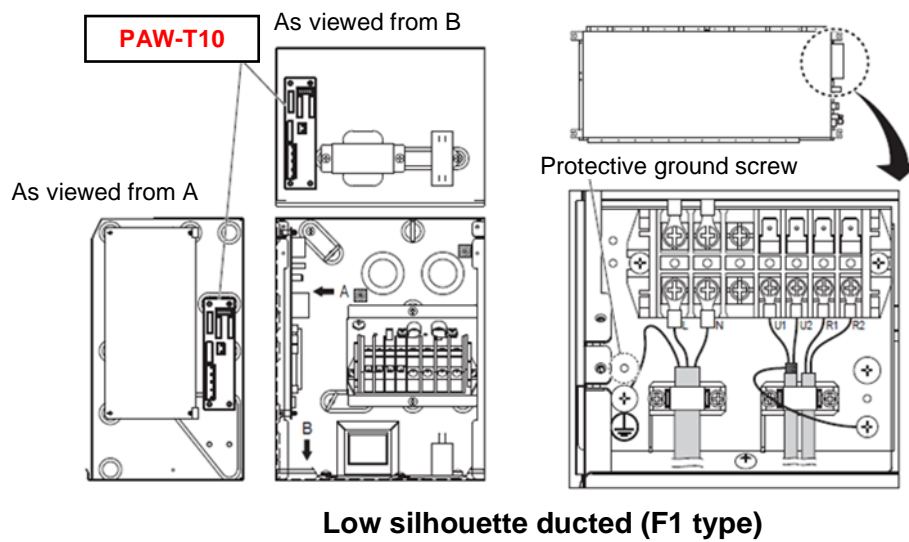


Fig. 2-2

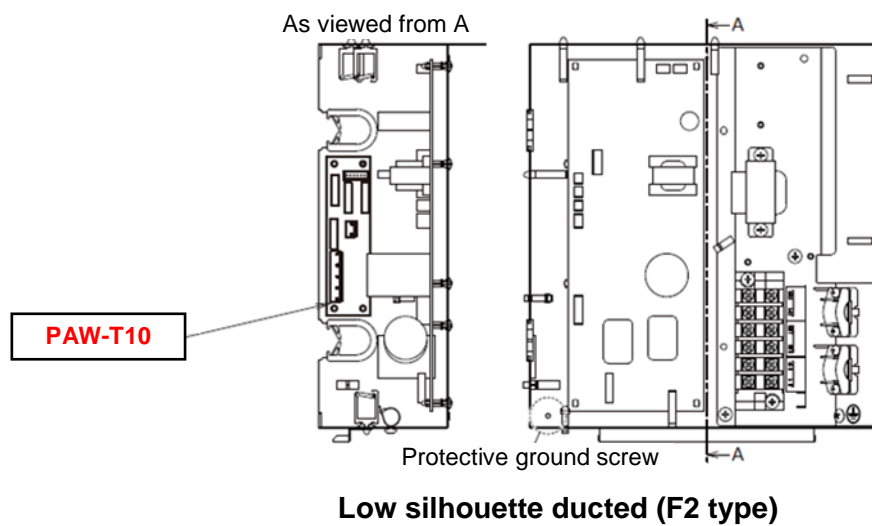
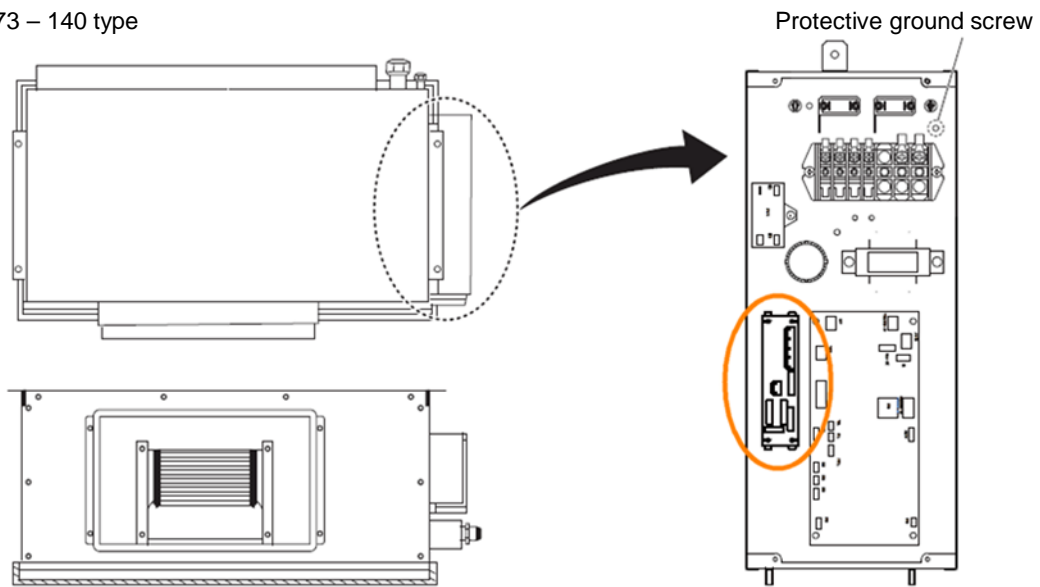


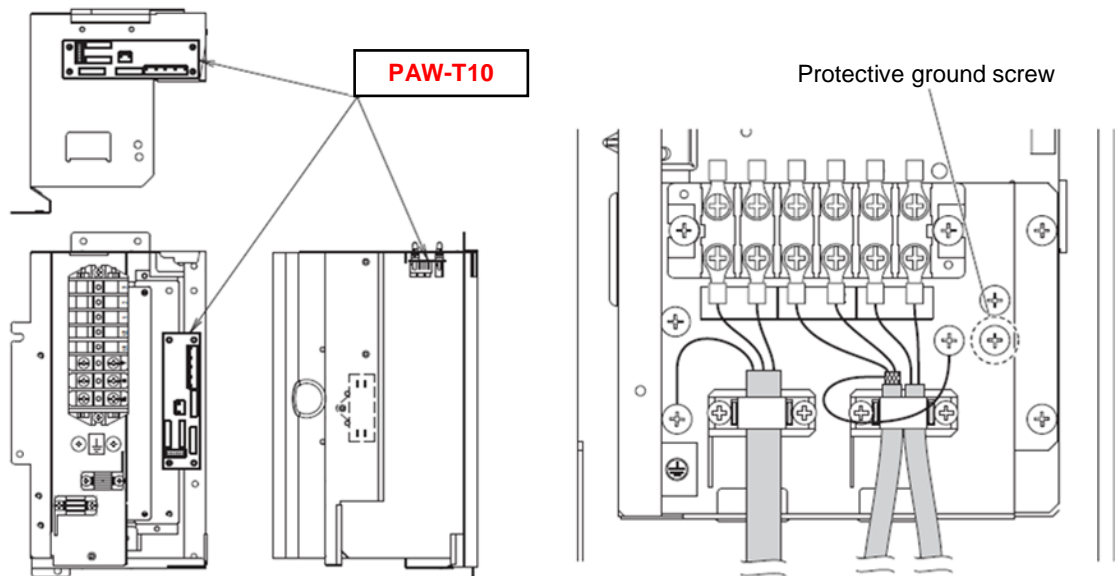
Fig.-2-3

73 – 140 type



High static pressure ducted (E1 type)

Fig. 2-4



**Floor-standing (P1 type) and
Concealed floor-standing (R1 type)**

Fig. 2-5

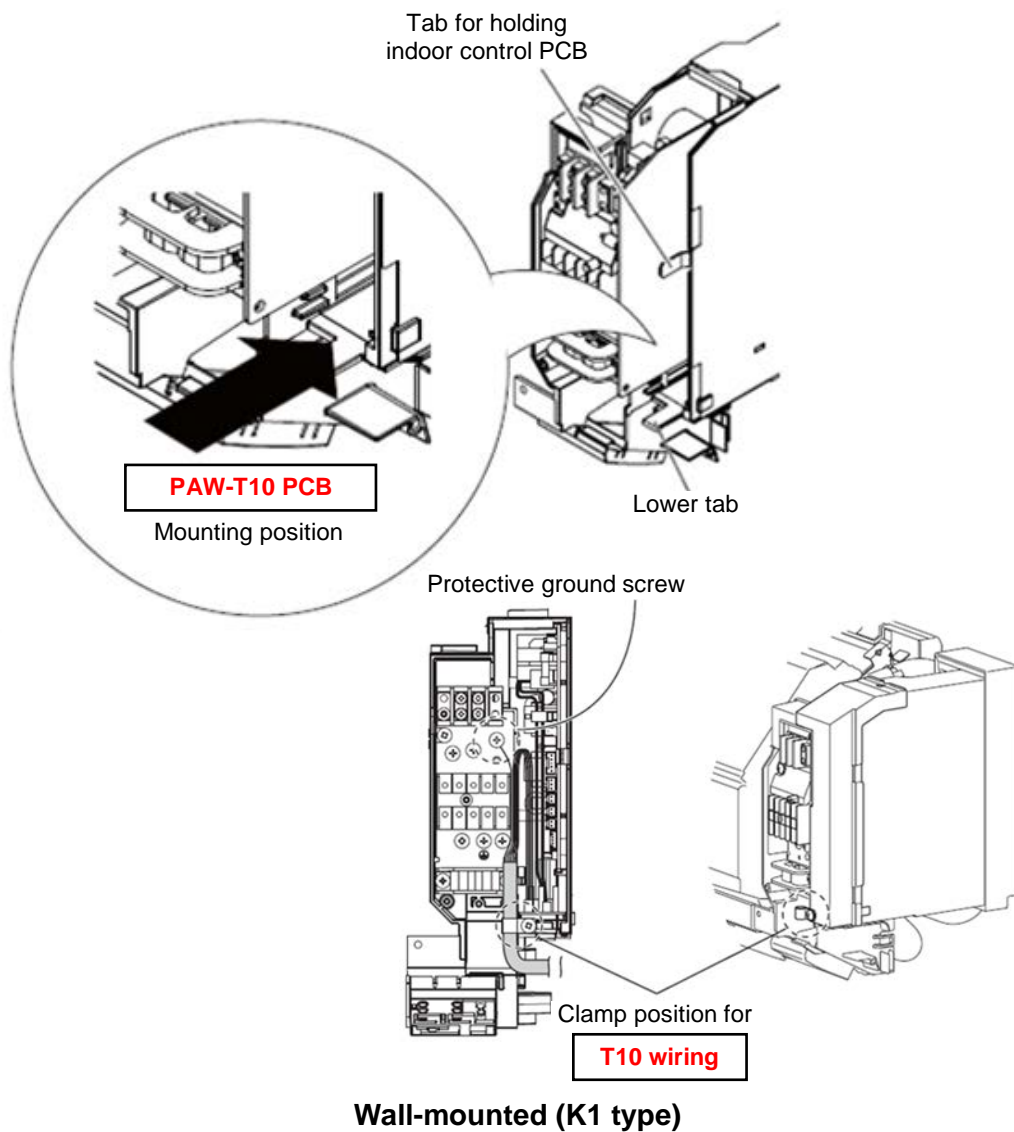


Fig. 2-6

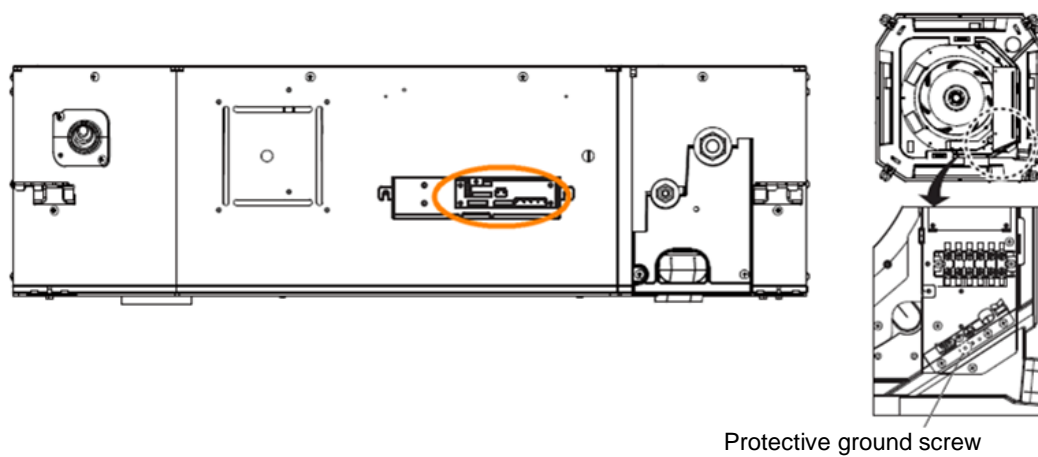
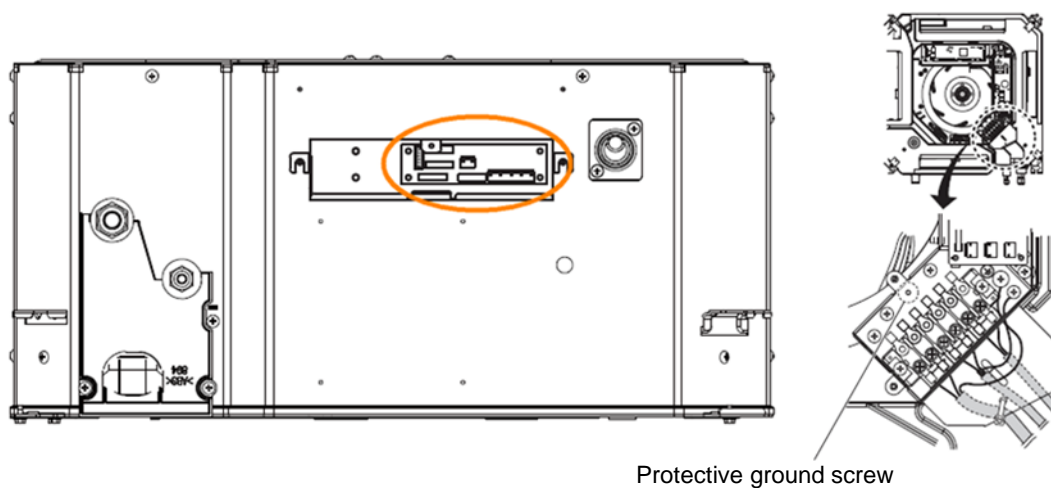
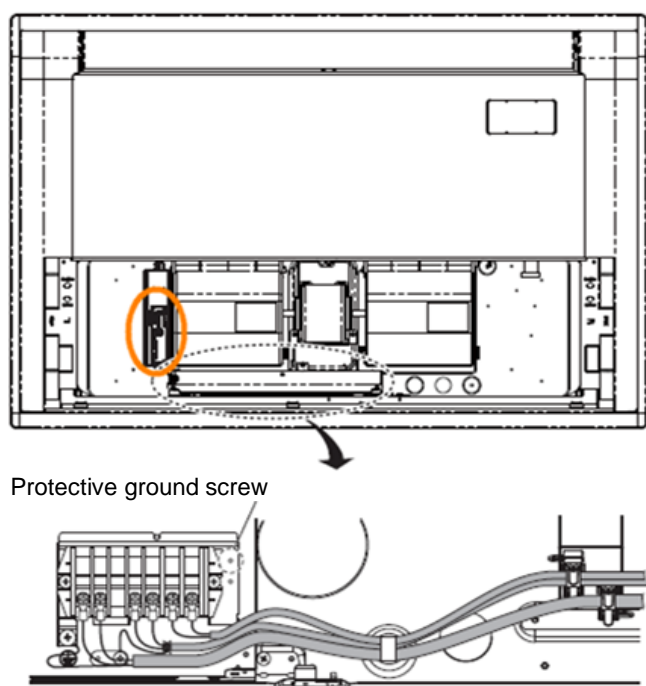


Fig. 2-7



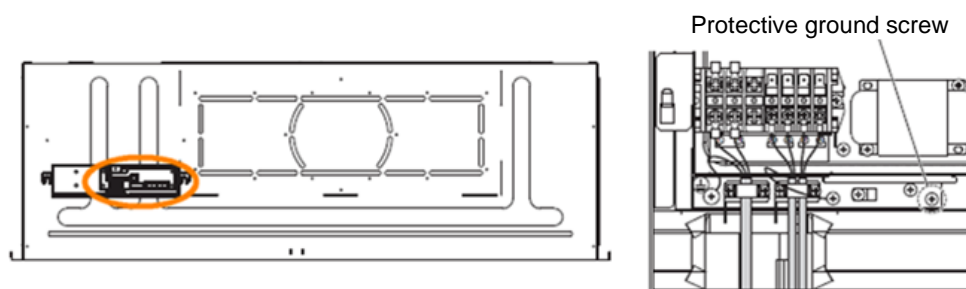
4-way cassette 60x60 (Y1 type)

Fig. 2-8



1-way cassette (D1 type)

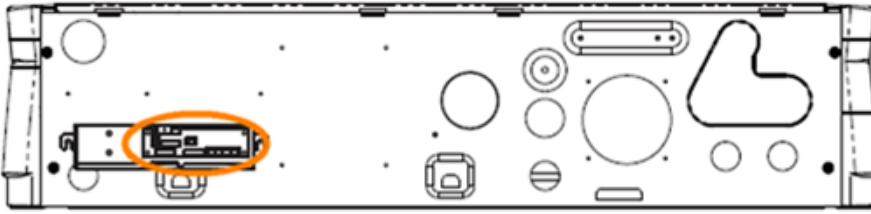
Fig. 2-9



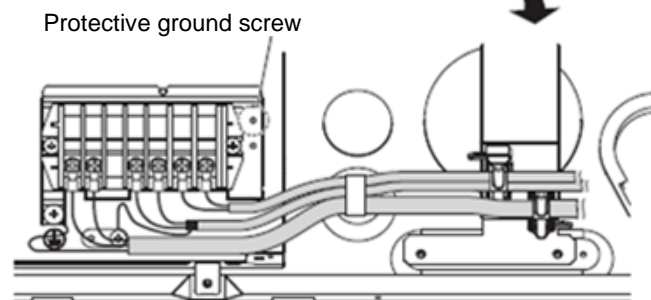
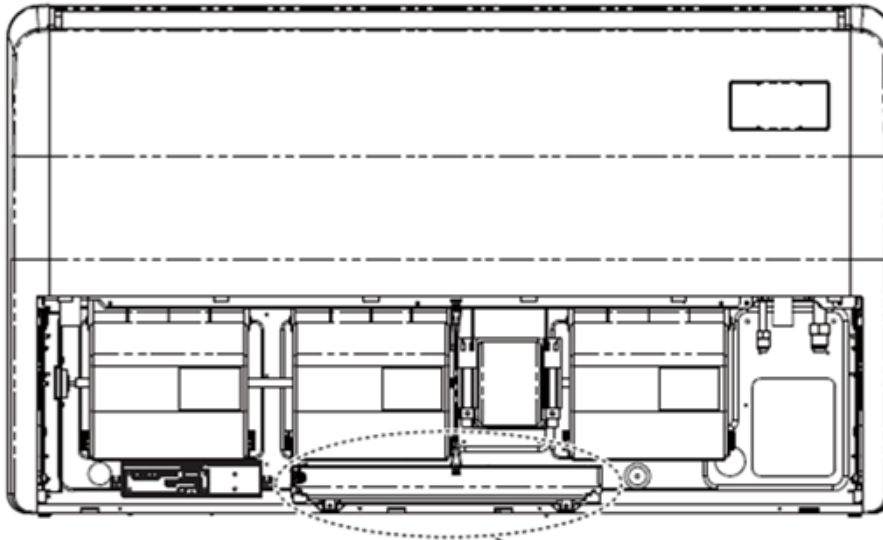
2-way cassette (L1 type)

Fig. 2-10

36 – 56 type

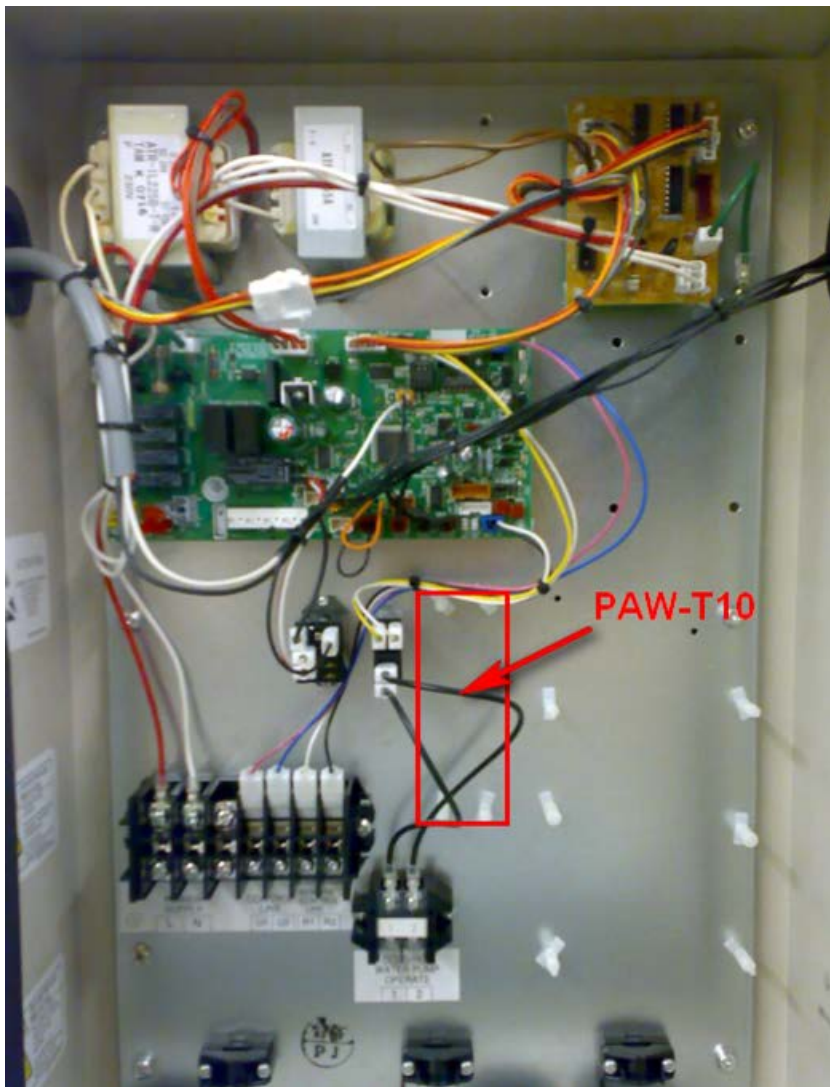


73 – 140 type



Ceiling (T1 type)

Fig. 2-11



Water heat exchanger (WX type)

Fig. 2-12

3

Functionality

The optional PAW-T10 PCB, complete with relays, T10 connector and connection cable, is ready to be fit into any indoor unit. It can be directly connected to the T10 terminal connector to provide combined extended functions. This spares the installer the need to install extra field-supplied relays and devices.

Standard functions

- On/OFF
- RC Prohibit/Permit
- Operation Status
- Alarm Status

All input signals must be transmitted via potential free dry contacts. All output signals are transmitted via NO/NC contacts with max. 5 A / 250 V AC.

PAW-T10 terminal layout

- | | |
|---|--|
| 1 Operating signal digital input (potential free dry contact) | 6 NO contact for operating signal output (max. 5 A / 250 V AC) |
| 2 COM used as 2nd contact for operating signal input | 7 COM contact for operating signal output |
| 3 COM used as 2nd contact for prohibit signal input | 8 NC contact for alarm signal output (max. 5 A / 250 V AC) |
| 4 RC prohibit / permit digital input (potential free dry contact) | 9 NO contact for alarm signal output (max. 5 A / 250 V AC) |
| 5 NC contact for operating signal output (max. 5 A / 250 V AC) | 10 COM contact for alarm signal output |

PAW-T10 PCB

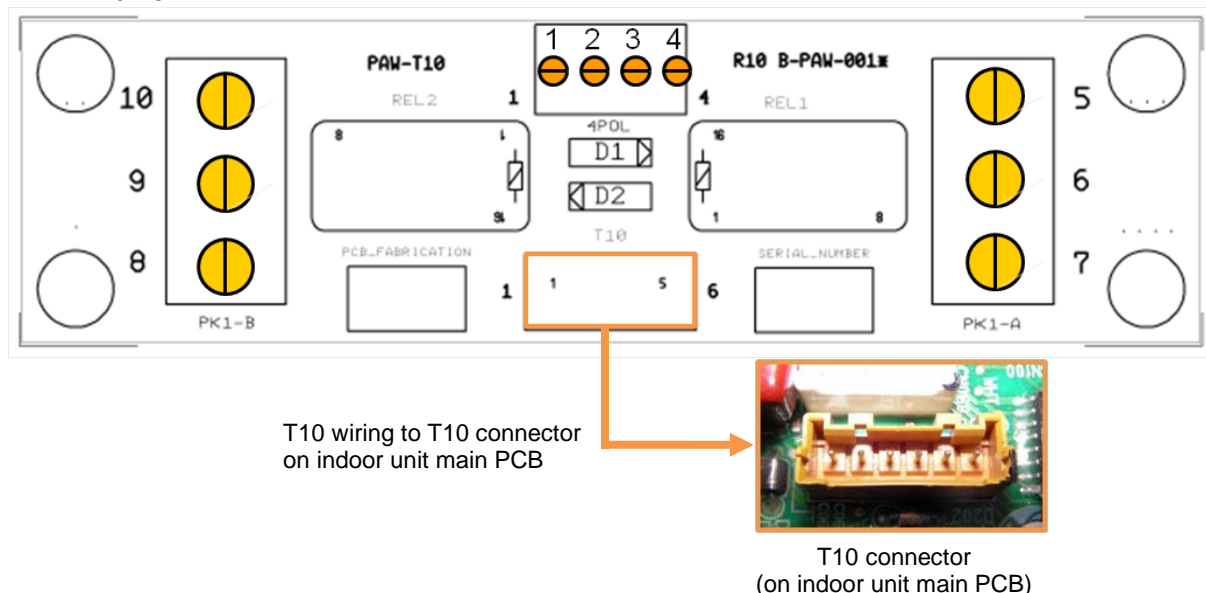


Fig. 3-1

Alternative functions

Apart from the standard functions described above, alternative or special functions are available by changing the setting of code No. "2E" on the local wired remote control (RC) of the indoor units (for detailed instructions on how to set these functions, please refer to the service or test run manuals of the corresponding indoor unit).

Note: To use a static input signal instead of a pulse signal (which is the factory setting), jumper JP001 (located on the indoor unit PCB) needs to be cut.

- Default setting "Home appliance setting" (Parameter 2E = 0000 and JP001 closed)
 - Contacts 1 + 2: Pulse signal (min. 300 ms) reverts operation status from on to off and from off to on.
 - Contacts 3 + 4: Static signal.
If contacts are closed, start/stop from RC is prohibited. If contacts are open, start/stop from RC is possible.
- "Window contact setting" (JP001 on indoor PCB is cut and parameter 2E = 0000)
 - Contacts 1 + 2: Static signal.
If contacts are closed, unit starts. If contacts are open, unit stops.
 - Contacts 3 + 4: Static signal.
If contacts are closed, start/stop from RC is prohibited. If contacts are open, start/stop from RC is possible.

- Special setting “Hotel card application” (Parameter 2E = 0001 and JP001 closed)
 - Contacts 1 + 2: Static signal.
If contacts are closed, unit is permitted to be started by RC. If contacts are open, unit is stopped and prohibited to be started by RC.
 - Contacts 3 + 4 are not used.
- Special setting “Leave home/energy saving setting” (Parameter 2E = 0001 and JP001 open)
 - Contacts 1 + 2: Static signal.
If contacts are closed, normal operation possible. If contacts are open, unit is set to upper temperature limit in cooling mode (Parameter 1F) or to lower temperature limit in heating mode (Parameter 22).
 - Contacts 3 + 4: Static signal.
If contacts are closed, start/stop from RC is prohibited. If contacts are open, start/stop from RC is possible.
- Special setting “Fire prevention setting” (Parameter 2E = 0002, JP001 has no function in this case)
 - Contacts 1 + 2: Static signal.
If contacts are open, normal operation possible. If contacts are closed, unit is stopped and prohibited to start, and even operation by central controller is prohibited.
 - Contacts 3 + 4 are not used.

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Dimensions

Dimensions of PCB (H x W x D):	17 x 110 x 30 mm
Length of connection cable:	1.00 m (overall)
Weight of kit (PCB + cable):	0.075 kg

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Accessories

If the PAW-T10 connection PCB is to be installed outside of the indoor unit, use the optional CZ-CAPE2 PCB casing, which consists of the following parts:

CV6233169552	Terminal box
CV923168334	Cover for terminal box

Due to the ongoing innovation of our products, the specifications of this catalogue are valid barring typographic errors, and may be subject to minor modifications by the manufacturer without prior warning in order to improve the product.

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