

INSTALLATION MANUAL

Electric heater PCB kit

EKRP1B2A



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Installation manual

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READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION.

KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

IMPROPER INSTALLATION OR ATTACHMENT OF EQUIPMENT OR ACCESSORIES COULD RESULT IN ELECTRIC SHOCK, SHORT-CIRCUIT, LEAKS, FIRE OR OTHER DAMAGE TO THE EQUIPMENT. BE SURE ONLY TO USE ACCESSORIES MADE BY DAIKIN WHICH ARE SPECIFICALLY DESIGNED FOR USE WITH THE EQUIPMENT AND HAVE THEM INSTALLED BY A PROFESSIONAL.

IF UNSURE OF INSTALLATION PROCEDURES OR USE, ALWAYS CONTACT YOUR DAIKIN DEALER FOR ADVICE AND INFORMATION.

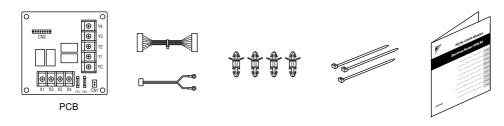


ALL FIELD WIRING AND COMPONENTS MUST BE INSTALLED BY A LICENSED ELECTRICIAN AND MUST COMPLY WITH RELEVANT LOCAL AND NATIONAL REGULATIONS.

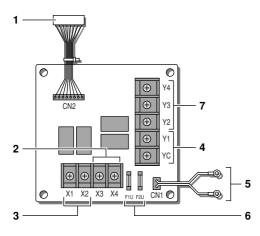
THE FIELD WIRING MUST BE CARRIED OUT IN ACCORDANCE WITH THE WIRING DIAGRAMS AND THE INSTRUCTIONS GIVEN BELOW.

TAKE CARE NOT TO BEND THE PRINTED CIRCUIT BOARD WHEN INSERTING OR REMOVING THE CONNECTORS.

CONTENT OF KIT EKRP1B2A



NAME OF PARTS



- 1 Connector to indoor PCB
- 2 Pilot lamp connection
- 3 Hour meter connection
- 4 Electric heater connection
- 5 Electric heater control relay power supply
- 6 Fuses 5 A 250 V
- 7 Humidifier connection

FUNCTION POSSIBILITIES

- Compressor operation indication
- Indoor fan operation indication
- Electrical heater connection (only for FBQ, FHYBP, FDYP, FDYMP, FXSQ, FXMQ)
- Humidifier connection (only for FBQ, FHYBP, FDYP, FXSQ, FXMQ)

INSTALLATION IN UNIT



Do not drill any holes in the casing of the unit to install the option. Only use the accessories provided by Daikin to install the option.

Refer to the installation manual of the indoor unit or refer to the option handbook if the option can be installed inside the unit.

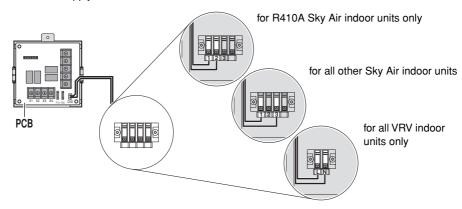
In all other cases use an installation box to mount the EKRP.

ELECTRICAL CONNECTIONS

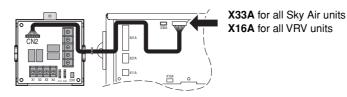


Do not bundle low and high voltage wires together. Bundle all wires with the included clamps in order to avoid contact with indoor PCB's or sharp edges.

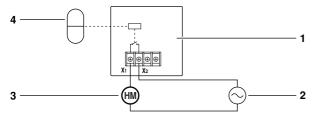
Power supply connection



Communication line

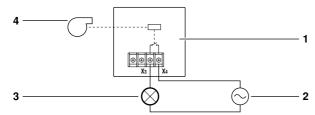


Connection of hour meter



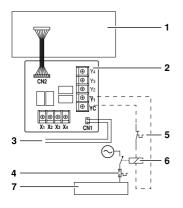
- 1 PCB
- 2 Power supply for hour meter (3 A 250 V AC/0.3 A 110 V DC)
- 3 Hour meter
- 4 Compressor

Connection of operation lamp



- 1 PCB
- 2 Power supply for operation lamp (3 A 250 V AC/0.3 A 110 V DC)
- 3 Operation lamp
- 4 Fan

Electrical connection of electric heater



- 1 Main PCB
- 2 Optional PCB
- **3** Main terminal (1-3) (230 V 50 Hz)

Field supply:



- Thermal fuse (Max. 110°C): to protect the installation from accident (e.g. fire) when a malfunction occurs. (1 fuse in case of single phase power supply and minimum 2 fuses for three phase power supply.)
- Thermal protector: to protect the electric heater for overheating.
- 6 Relay (Max. 550 VA)
- 7 Heater



Important installation caution

The heater should be installed according to local regulations and must comply with EN60335-2-40.

A thermal fuse should be installed on the heater so that there is no danger of damage to the heater and no safety risk when the fan is stopped or when the PCB is malfunctioning.

The electric heater must be installed on a safe location in the discharge duct, so that there is no danger for damage to the unit.

Maximum temperature in the discharge duct may not exceed 90°C. Select the proper safety device or thermal protector accordingly.

Temperature on the unit casing may not exceed 70°C.

Maximum heater capacity to be installed:

20~35 class	2 kW
35~63 class	3 kW

71~90 class	5 kW
100 class	7 kW
125 class	9 kW

200 class	12 kW
250 class	16 kW

- Electrical connection of humidifier (control by 1 humidifier adjustment switch)
 - Main PCB
 - 2 Optional PCB
 - **3** Main terminal (1-3) (230 V 50 Hz)

Field supply:

- 4 Humidifier HU (YC-Y2) min. 20 mA 125 V AC, max. 1 A 250 V AC
- 5 Relay RY (YC-Y4) max. 400 mA 250 V AC (only required in case B)

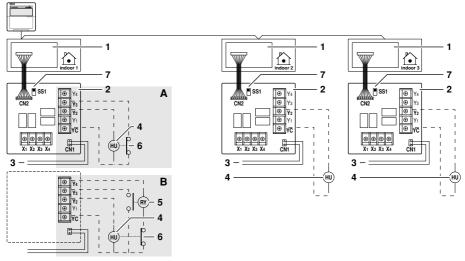


case **A**: (YC-Y3) min. 200 V AC, max. 2 mA

case B: Humidifier adjustment switch current >2 mA

Current of RY must be lower than current of the humidifier adjustment switch.

- 6 Humidifier adjustment switch
- 7 SS1 ON/OFF switch: Set the switch to ON for enabling humidifier control.



Remote control settings

Mode No.	Setting	First code No.	Second code No.
15(25)	Operate the humidifier during heating mode if suction air temperature is more than 20°C (also in thermostat off condition).	1	02
	Operate humidifier and drainpump.	3	01

