

INSTALLATION MANUAL

Electric Heat Accessory

EHK-10-1

EHK-20-1

EHK-15-1

EHK-05-1

- Please read this manual carefully and thoroughly before installing the unit.
- Take care of this manual for future reference.

INSTALLATION INSTRUCTIONS ELECTRIC HEAT ACCESSORY

Safety Precautions

These instructions are intended as a general guide only, for use by qualified personnel and do not supersede any national or local codes in any way. Installation must conform with the local building codes and with the latest editions of the National Electrical Code. Read these instructions thoroughly before starting installation. Only qualified installers or technicians should install the electric heat section and all other equipment used in HVAC systems. Federal, state, and local codes must be followed when installing this or any other HVAC equipment. Incorrect installation or operation by not following these instructions may cause harm or damage to people, properties, etc. The seriousness is classified by the following indications:

WARNING

This symbol indicates the possibility of death or serious injury.

CAUTION

This symbol indicates the possibility of injury or damage to properties.

WARNING

- Improper installation, adjustment, alteration, service, or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified installer or service agency.
- Installation and servicing of air conditioning equipment can be hazardous due to internal refrigerant pressure and live electrical components. Only trained and qualified service personnel should install or service this equipment. Installation and service performed by unqualified persons can result in property damage, personal injury, or death.
- If this unit is to be installed in a mobile or manufactured home application, the ductwork must be sized to achieve static pressures within the manufacturer's guidelines. All other installation guidelines must also be followed. Failure to do so may result in equipment damage, personal injury, and improper performance of the unit.
- Sharp metal edges can cause injury. When installing the unit, use care to avoid sharp edges.
- If these instructions and/or codes are not followed or if the equipment is not properly installed, possible injury or death could occur during installation or operation.
- Be sure to disconnect all power to the unit while installing and servicing this equipment. Turn off accessory heater power switch if applicable. Be mindful that there may be more than one disconnect servicing this equipment. Use proper tools and protective equipment during installation and service. TAG Disconnect switch(es) with a suitable WARNING LABEL.

- The installation of this appliance must conform to the requirements of the National Fire Protection Association; the National Electrical Code, ANSI/NFPA No.70(latest edition)in the United States; the Canadian Electrical Code Part 1,CSA 22.1 (latest edition) in Canada; and any state or provincial laws or local ordinances. Local authorities having jurisdiction should be consulted before installation is made. Such applicable regulations or requirements take precedence over the general instructions in this manual.

Inspection of Shipment

Before proceeding with the heater installation, inspect thoroughly for shipping damage. Notify the shipper immediately if any damage is found. Check all ceramic insulators for breakage and inspect heater element wire to see that none have been deformed. Clean all dirt, dust and moisture from equipment. Check for proper clearances of live parts, between phases, and to ground. Make sure that all required barriers are in place. Check conductors run in multiple to ensure that they are properly wired. Refer to base installation instructions for complete unit installation details.

Attention Installing Personnel

WARNING

- As a professional installer, you have an obligation to know the product better than the customer. This includes all safety precautions and related items.
- Prior to actual installation, thoroughly familiarize yourself with the Instruction Manual. Pay close attention to all safety warnings. Often during installation or repair, it is possible to place yourself in a position which is more hazardous than when the unit is in operation.
- Remember, it is Your responsibility to install the product safely and to know it well enough to be able to instruct a customer on its safe use.
- Safety is a matter of thinking before acting. Most dealers have a list of specific good safety practices follow them.
- The precautions listed in this installation manual are intended as supplemental to existing practices. However, if there is a direct conflict between existing practices and the content of this manual, the precautions listed here are to take precedence.
- Reminder: If these instructions and/or codes are not followed or if the equipment is not properly installed, possible injury or death could occur during installation or operation.

CAUTION

TO AVOID PROPERTY DAMAGE OR PERSONAL INJURY DUE TO FIRE, USE ONLY COPPER CONDUCTORS.

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⚠ WARNING



CARBON MONOXIDE POISONING HAZARD

Special Warning for Installation of Furnace or Air Handling Units in Enclosed Areas such as Garages, Utility Rooms or Parking Areas.

Carbon monoxide producing devices (such as an automobile, space heater, gas water heater, etc.) should not be operated in enclosed areas such as unventilated garages, utility rooms or parking areas because of the danger of carbon monoxide (CO) poisoning resulting from the exhaust emissions. If a furnace or air handler is installed in an enclosed area such as a garage, utility room or parking area and a carbon monoxide producing device is operated therein, there must be adequate, direct outside ventilation. This ventilation is necessary to avoid the danger of CO poisoning which can occur if a carbon monoxide producing device continues to operate in the enclosed area. Carbon monoxide emissions can be (re) circulated throughout the structure if the furnace or air handler is operating in any mode.

CO can cause serious illness including permanent brain damage or death.

- Risk of electrical shock. Before installing or servicing unit, be sure ALL power to the units is OFF. More than one disconnect switch may be present. Failure to disconnect power supplies can result in property damage, personal injury, or death.



⚠ CAUTION

To avoid possible personal injury, use extreme caution if using power tools to remove the small breaker mounting brackets. The brackets may quickly rotate and cause injury.

NOTE:
The power must be in the OFF position. There may also be more than one means of disconnect servicing this product.

Model Size Selection

For installations requiring supplemental heating, the optional Electric Auxiliary Heat Module is available in sizes from 5kW to 20kW to accommodate appropriate sizing given the specific heat load and electrical requirements of each installation. Please refer to the product nameplate for selection of available sizes of each outdoor unit model, being sure to avoid improper matching.

NOTE:
Only use matched modules certified for use with model. Please refer to the air conditioning manual to select the compatible electric heating model.

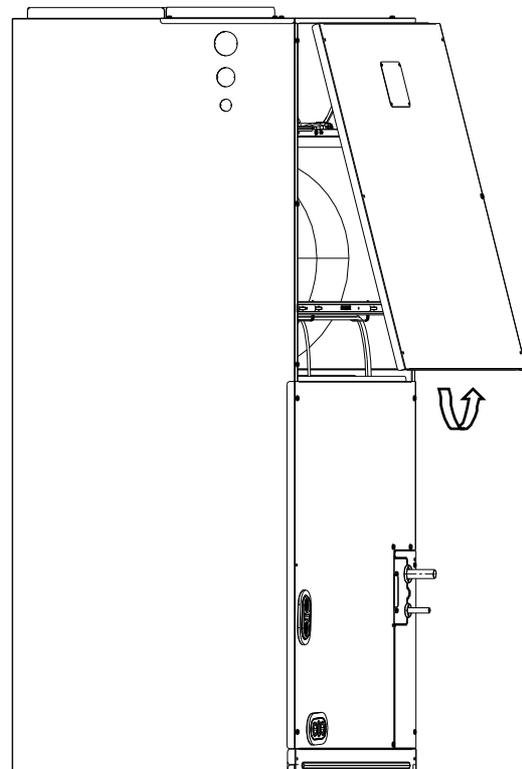
Electric Heat Accessory Installation

(for standard air handler equipment)

NOTE:

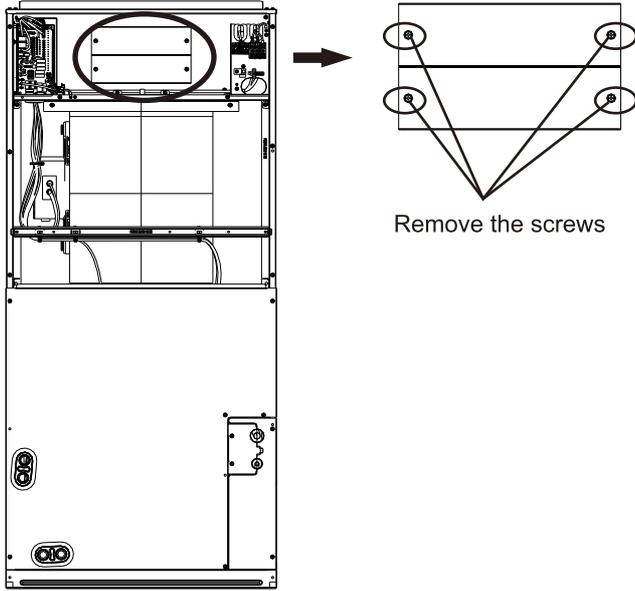
- *The installation must be carried out by a licensed contractor. Take necessary precautions when performing the installation operation.*
- *The pictures in the manual are for reference only. Please refer to the actual product for details.*
- *If physical damage is observed during the inspection DO NOT install this kit.*
- *Before installing the unit, check the information on the unit rating plate to ensure that the unit meets the job specification, proper electrical power is available, and the proper duct clearances are maintained.*

1. Open the upper cover.

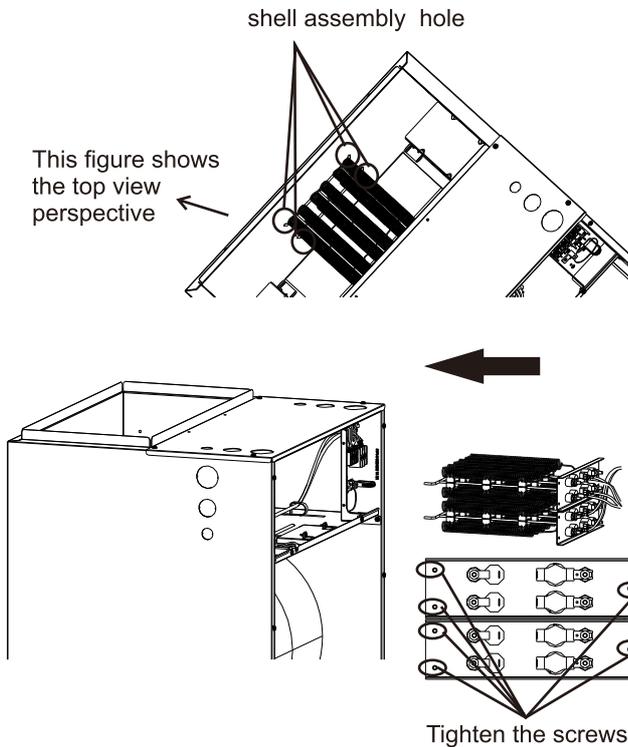


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2. Loosen the screws, remove the electric auxiliary heating cover, and retain screws for mounting heater.

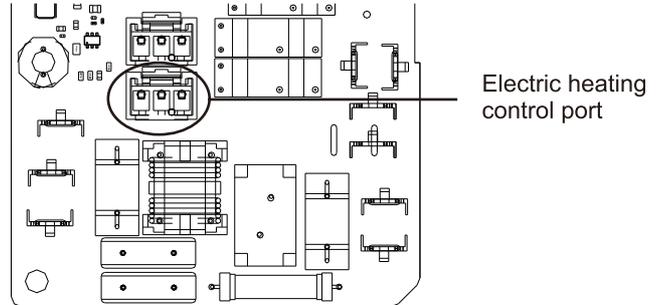
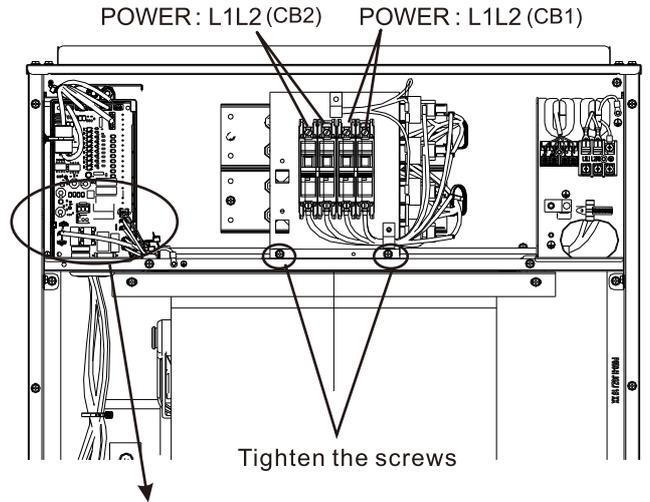


3. Install the electric auxiliary heating assembly to the front, and note that the support assembly must lock into the support holes in the back of the cabinet.



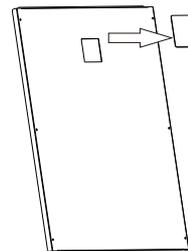
NOTE:
Be careful not to damage the heater elements or any other components when installing the heater through the slot provided.

4. Install circuit breaker bracket: Insert the circuit breaker bracket into the middle part of the electronic control box and fix it with screws.

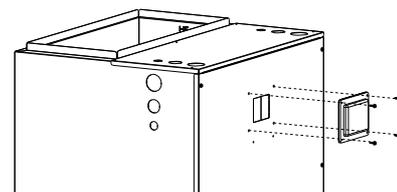


5. Insert the electric heating control line into the corresponding port (DJR-1), and insert the power line into the terminal of the circuit breaker and tighten it.

6. Use tools to remove the knock-out holes of upper cover, Install the upper cover.



7. Some models are equipped with sealing rigs and circuit breaker covers, which should be installed according to the diagram.



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8. After the electric auxiliary heating component is installed, attach the circuit breaker label near the newly installed silicone circuit breaker cover.

NOTE:

Electric auxiliary heating wiring diagram packed with the accessories. If branch circuit wire length exceeds 100 ft, consult NEC 210-19a to determine maximum wire length. Use 2% voltage drop.

Parameter specifications

After the electric heating wiring is connected, please confirm before power on:

- Check all wiring and ensure secure connection of all wiring.
- Ensure that wire size is properly selected per NEC or local codes.

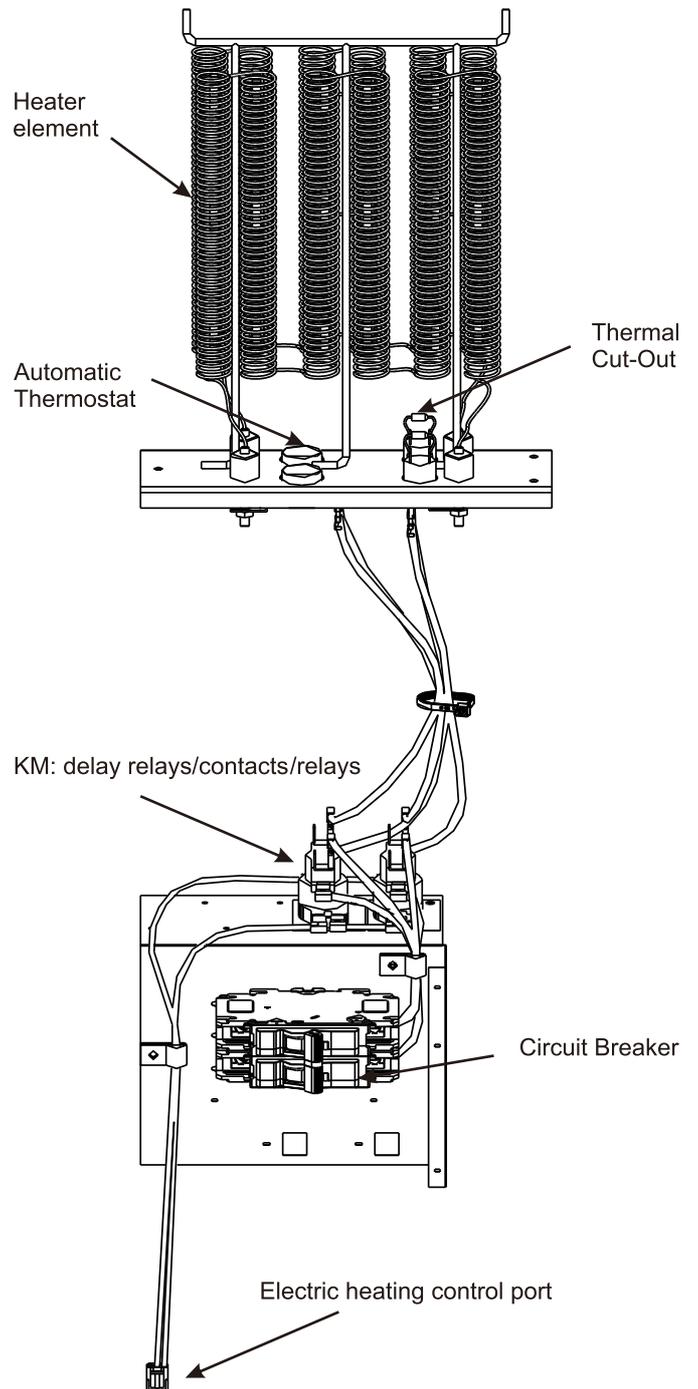
Specifications	Number of circuit breakers	Number of relays	Number of power cord groups
5kW	1	1	1
10kW	1	2	1
15kW	2	3	2
20kW	2	4	2

Use copper wire only to connect unit. If other than uncoated (non-plated) 75°C copper wire (solid wire for 6 AWG and smaller, stranded wire for larger than 6 AWG) is used consult applicable tables of the National Electric Code (ANSI/NFPA 70).

NOTE:

The specification may be different between different models, please refer to indoor unit's nameplate. Choose the cable type according to the local electrical codes and regulations. Please choose the right cable size according to the Minimum Circuit Ampacity indicated on the nameplate of the unit.

Heat Kit Model	Electric heat (kW) 1PH		Min.Circuit Ampacity 1PH				Max.Fuse or breaker Ampacity 1PH			
	240V	208V	240V		208V		240V		208V	
			CB1	CB2	CB1	CB2	CB1	CB2	CB1	CB2
20kW	20	15	59	59	53	53	60	60	60	60
15kW	15	11.3	28	59	24	53	30	60	25	60
10kW	10	7.5	59	-	53	-	60	-	60	-
5kW	5	3.8	28	-	24	-	30	-	25	-



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Electric Auxiliary Heating Wiring Diagram

