

Installation Instructions

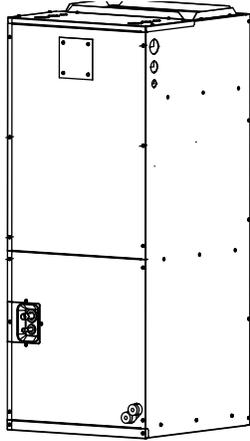


Fig. 1 — Air Handler

NOTE: Refer to the air handler’s installation instructions for installation assistance.

NOTE: Read the entire instruction manual before starting the installation.

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SAFETY CONSIDERATIONS

Improper installation, adjustment, alteration, service, maintenance, or use can cause explosion, fire, electrical shock, or other conditions which may cause death, personal injury or property damage. Consult a qualified installer, service agency, or your distributor or branch for information or assistance. The qualified installer or agency must use factory-authorized kits or accessories when modifying this product. Refer to the individual instructions packaged with kits or accessories when installing.

Follow all safety codes. Wear safety glasses, protective clothing and work gloves. Have a fire extinguisher available. Read these instructions thoroughly and follow all warnings or cautions included in the literature and attached to the unit. Consult local building codes and the current editions of the National Electrical Code (NEC) NFPA 70.

In Canada, refer to the current editions of the Canadian Electrical Code CSA C22.1. Recognize safety information.

This is the safety-alert symbol . When you see this symbol on the unit and in instruction manuals, be alert to the potential for personal injury. Understand the signal words **DANGER**, **WARNING**, and **CAUTION**. These words are used with the safety-alert symbol. **DANGER** identifies the most serious hazards which will result in severe personal injury or death. **WARNING** signifies hazards which could result in personal injury or death. **CAUTION** is used to identify unsafe practices which may result in minor personal injury or product and property damage. **NOTE** is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

WARNING

ELECTRICAL OPERATION HAZARD
Failure to follow this warning could result in personal injury or death.
Before installing or servicing the unit, always turn off all power to the unit. There may be more than one disconnect switch. Turn off accessory heater power if applicable. Lock out and tag switch with a suitable warning label.

CAUTION

CUT HAZARD
Failure to follow this caution may result in personal injury. Sheet metal parts may have sharp edges or burrs. Use care and wear appropriate protective clothing and gloves when handling parts.

MOUNT ELECTRIC HEATER

Table 1 — Accessories

NAME	SHAPE	QUANTITY
Installation Manual		1
Seal		1
Screw		2
Resilient Cap		1
Electric Auxiliary Heating Wiring Diagram		1
Circuit Breaker Label		1

NOTE: Installation must be performed by an authorized dealer or specialist. Use recommended PPE when installing the unit.

Specification of electric auxiliary heat modules: 5kW, 10kW, 15kW, 20kW.



CAUTION

The electric auxiliary heat module is internally mounted in the air handler. **DO NOT MOUNT IN DUCTWORK!**

If the unit needs to be equipped with the electric auxiliary heat module, please check the electric auxiliary heat module specification that is compatible with the unit to avoid unnecessary consequences caused by improper matching.

INSTALLATION REQUIREMENTS

NOTE: Installation of Auxiliary Electric Heat Module should be completed before installing the discharge ductwork to insure proper alignment of the inside support brackets.

Before installation, check the list of electric auxiliary heat modules and physical objects. After transportation, check whether the electric heat module is damaged. If any damage is detected, contact the after-sales personnel immediately.

NOTE: A separate power is required for an Auxiliary Electric Heater.

ELECTRIC AUXILIARY HEAT MODULE INSTALLATION AND WIRING

1. Remove the six screws securing the upper cover plate and the chassis.

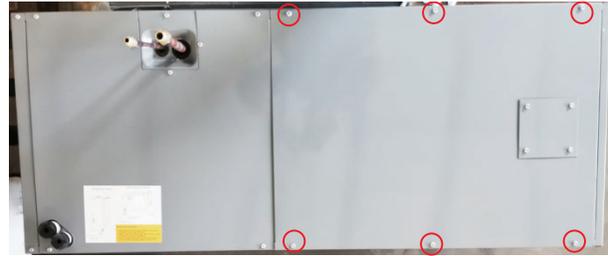


Fig. 2 — Upper Cover Plate

2. Remove the four screws securing the electric auxiliary heat cover plate and the upper cover plate.



Fig. 3 — Electric Auxiliary Heat Module Plate

3. Remove the screws and the sheet-metal cover(s) reserved for the electric heating module.

NOTES:

- For model 5KW, 10KW, remove three screws from the upper sheet metal cover only.
- For model 15KW, 20KW, remove the upper and lower sheet metal covers.

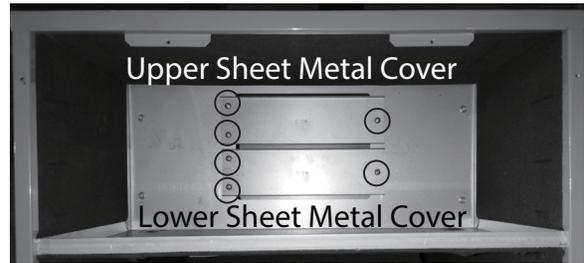


Fig. 4 — Remove Sheet Metal Covers

4. Insert the heating module into the opening made by removal of the sheet metal cover(s). Ensure the two support rod ends are on the opposite bulkhead.

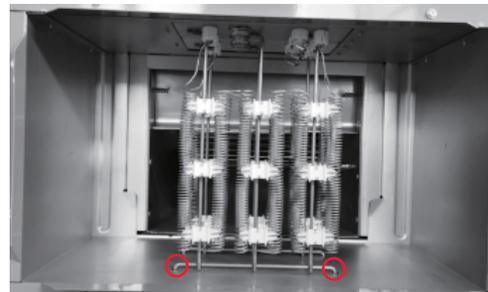


Fig. 5 — Insert Heating Module

- Use the 3 screws (6 screws for 15K or 20K) removed previously and fasten the outer cover of the module into the access hole.

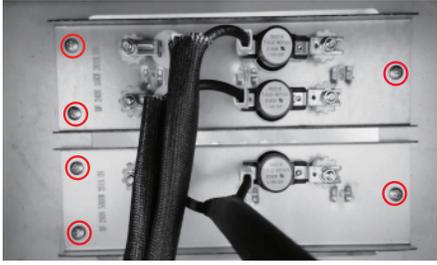


Fig. 6 — Install the Electric Heating Module

- Secure one end of the electric heating terminal board to the sheet metal slot close to the fan, and the other end to the sheet metal on the top cover plate with two screws.
- Secure the 2 tabs on the Power Terminal mounting bracket in the slots provided and fasten the lower tabs with 2 screws.

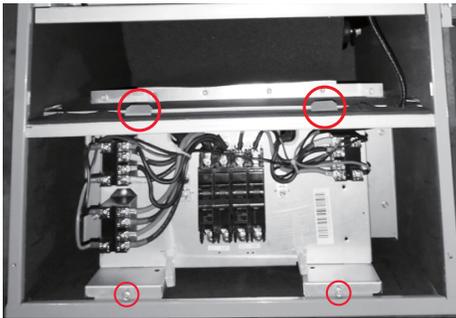


Fig. 7 — Electrical Heating Terminal

- Remove the cover for the electronic controls. After completing the following steps, the cover needs to be re-installed.

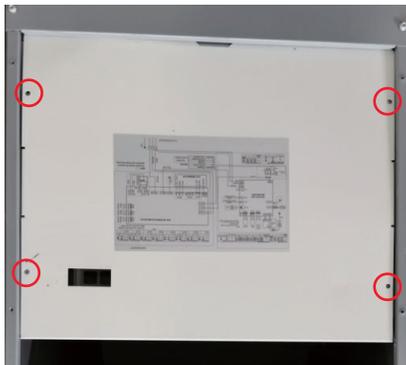


Fig. 8 — Remove the electronic control box

- Insert the white plug of the electric heating control line into the electric control box through the reserved crossing hole and insert into the corresponding white plug in the electronic control box.



Fig. 9 — Insert the white plug

- Connect the low voltage control wires of the electric auxiliary heat module to the AUX terminals of the 24V module board (not polarity sensitive). Figure 10 shows the module board terminal.

NOTE: The control wire may be connected to the AUX terminals in any order.



Fig. 10 — Connect the auxiliary heat wires

- Power Wiring should be sized in accordance with NEC (CEC) requirements and local codes (see Table 2 on page 4). Choose the power cord and the power cord installation location (see Figure 11). Each circuit breaker group needs to connect to the power input line. Where needed, Jumper L1 and L2 to the terminals for the other contactor.



Fig. 11 — Choose the power cord installation location

- See Figure 12 for the securing position of the power supply ground wire. Secure the power input wires for each group, and make sure that the cable is properly grounded.



Fig. 12 — Secure the power input wires of each group

NOTE: After installing the electric auxiliary heat module, place the circuit breaker label near the upper cover circuit breaker.

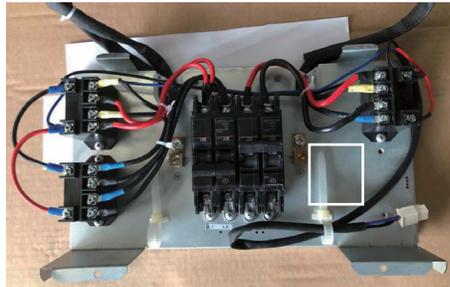


Fig. 13 — Circuit Breaker Label Placement

- Remove the resilient cap and seal from the auxiliary heat module accessory bag, and attach the seal to the resilient cap.

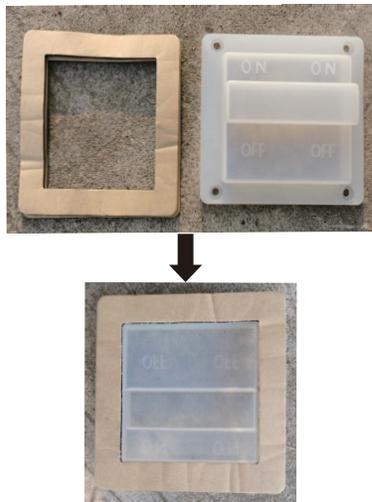


Fig. 14 — Remove the resilient cap

- Fasten the resilient cap and seal on the upper cover plate with 4 screws.

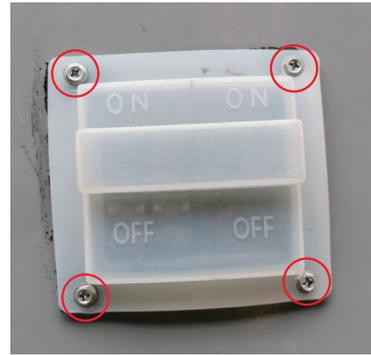


Fig. 15 — Fasten the resilient cap

- Reassemble the electronic control cover and secure it with screws. Reassemble the upper cover plate and secure it with screws. After the electric heating wiring is connected, confirm the plate is secure before powering the unit on. Check all the wiring and ensure a reliable connection with the wire body.

Table 2 — Specifications

Specifications	No. of Circuit Breakers	No. of Relays	No. of Power Cord Groups	No. of Power Cord Grounding Screws
5kW	1	1	1	1
10kW	1	2	1	1
15kW	2	3	2	2
20kW	2	4	2	2

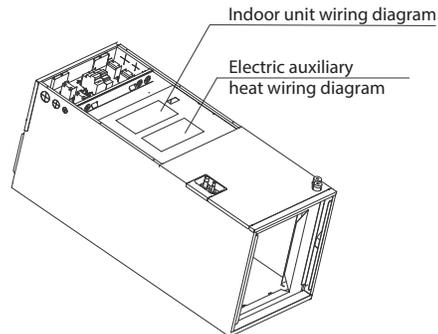


Fig. 16 — Indoor Unit Wiring Diagram

NOTE: The electric auxiliary heat wiring diagram is supplied with the accessories. Please paste the wiring diagram in the designated position after installing the heat modules.