

ACCESSORY KIT INSTALLATION MANUAL

ELECTRIC HEATER ACCESSORY - 6HK SERIES FOR USE WITH THE FOLLOWING AIR HANDLER

MODELS: AHR / AHE

GENERAL INFORMATION

WARNING

ELECTRICAL SHOCK HAZARD

Installation or repairs made by unqualified persons can result in hazards to you and others. Installation must conform with local building codes or, in the absence of local codes, with National Electrical Code ANSI/NFPA 70-1996 or current edition.

The information contained in this manual is intended for use by a qualified service technician familiar with safety procedures and equipped with the proper tools and test instruments.

Shut OFF electric power at unit disconnect and/or service panel before beginning the following procedures.

Failure to carefully read and follow all instructions in this manual can result in malfunction, property damage, personal injury, and/or death.

Verify edges of foil faced insulation are not in contact with any exposed electrical connections.

This instruction covers the physical installation of the following electric heaters with AHR/AHE18-60 single piece air handlers. Refer to unit instructions for electrical specifications.

These electric heat accessories are used for applications of cooling with electric heat and heat pump with electric heat. Each of the air handler unit models are approved for use with specific electric heat accessories. The Air Handler installation instructions, or name plate list the possible combinations and other important electrical data and limitations.

TABLE 1: Models Covered*

6HK06500206	6HK16502506
6HK16500206	6HK06501525
6HK06500506	6HK06501825
6HK16500506	6HK16501825
6HK06500806	6HK16502025
6HK16500806	6HK16502525
6HK06501006	6HK26501306
6HK16501006	6HK26501506
6HK16501306	6HK26501806
6HK16501506	6HK26502006
6HK16501806	6HK26502506
6HK16502006	

* Refer to Page 4 for nomenclature.

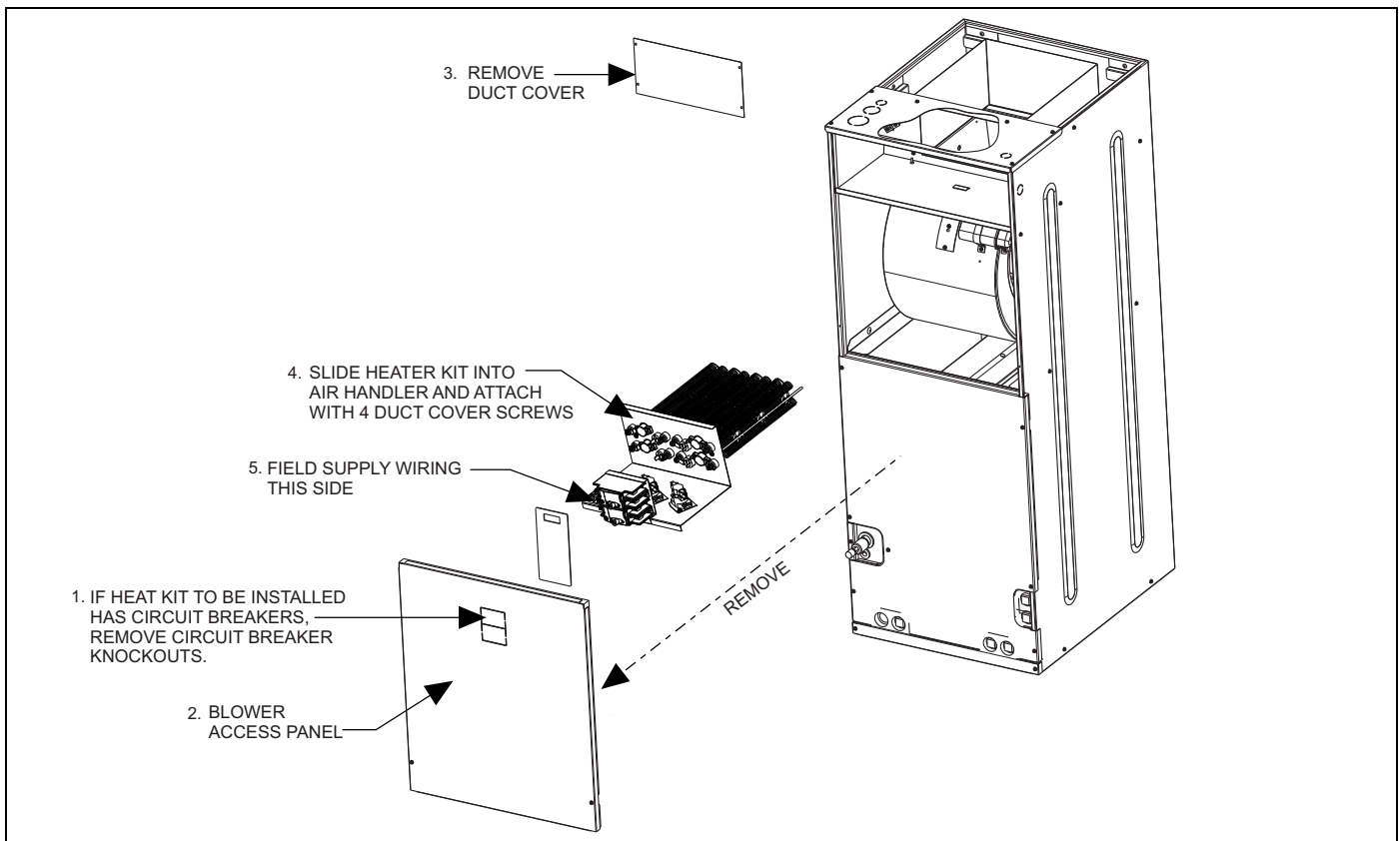


FIGURE 1: Heater Installation

INSTALLATION

Installation is the same for all operating positions: upflow, horizontal right or left (Refer to Figure 1). Installation of the Heater Kit should be done prior to unit installation.

1. If Heat Kit has circuit breakers - remove circuit breaker knockouts from front of air handler unit. For kits with circuit breakers, cut blower access panel insulation along foil perforations behind the circuit breaker plate and remove to open the area for the circuit breakers to protrude through the front access panel and to provide clearance for circuit breakers and single point wiring entry kit. Replacement non-foil faced insulation for the exposed front panel may then need to be added. Add rubber gasket to inside of door.
2. Remove air handler blower access panel.
3. Remove duct cover from back panel of air handler control and wiring compartment.

CAUTION

To prevent damage, carefully pass the accessory heating element through the rectangular opening in the discharge duct. Element mounting plate must be secured with 4 screws.

4. Install electric heat accessory.
 - a. Position and slide heat kit into opening in air handler.
 - b. Align holes and fasten the Heat Kit to the air handler unit with 4 screws.
5. Connect the Heat Kit's 6 pin socket connector to the appropriate 6 pin connector in the air handler. The end terminals are "D" shaped to ensure polarization of the connector.
6. Connect the air handler power supply to either the circuit breaker or terminal block.

WARNING

Verify edges of foil faced insulation are not in contact with any exposed electrical connections.

7. Mark an X in the appropriate box on the indoor unit data plate for the particular heater installed.

NOTICE

All wiring must comply with local and national electrical code requirements. Read and heed all unit caution labels.

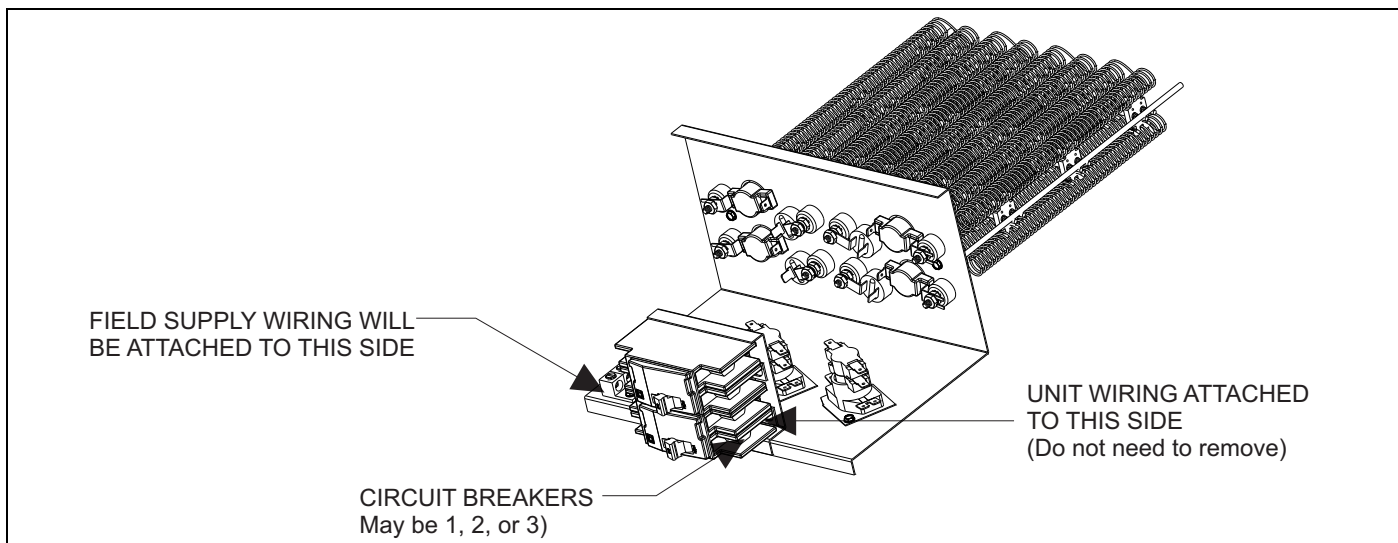


FIGURE 2: Heat Kit Connection

LINE POWER CONNECTIONS

Power may be brought into the unit through the outlet air end of the unit (top left when unit is vertical) or the left side panel. To minimize air leakage, seal the field wiring entry point.

Field wiring connects to heat kits with circuit breaker or terminal block. A ground lug is also provided on the kits.

ELECTRIC HEATERS & OPERATING CONTROLS

The low voltage transformer and the fan control are standard on all models. The air handlers are shipped pre-wired to operate as cooling only applications.

LOW VOLTAGE CONTROL CONNECTIONS

The 24 volt power supply is provided by an internally wired low voltage transformer which is standard on all air handler models. Field supplied low voltage wiring can exit the unit on the top right hand corner or the right hand side panel. Refer to Figure 1. Remove desired knockout and pierce foil faced insulation to allow wiring to pass through. Use as small of a hole as possible to minimize air leakage. Install a 7/8" plastic bushing in the selected hole and keep low voltage wiring as short as possible inside the control box. To further minimize air leakage, seal the wiring entry point at the outside of the unit. The field wiring is to be connected at the screw terminals of the control board.

NOTICE

All wiring must comply with local and national electrical code requirements. Read and heed all unit caution labels.

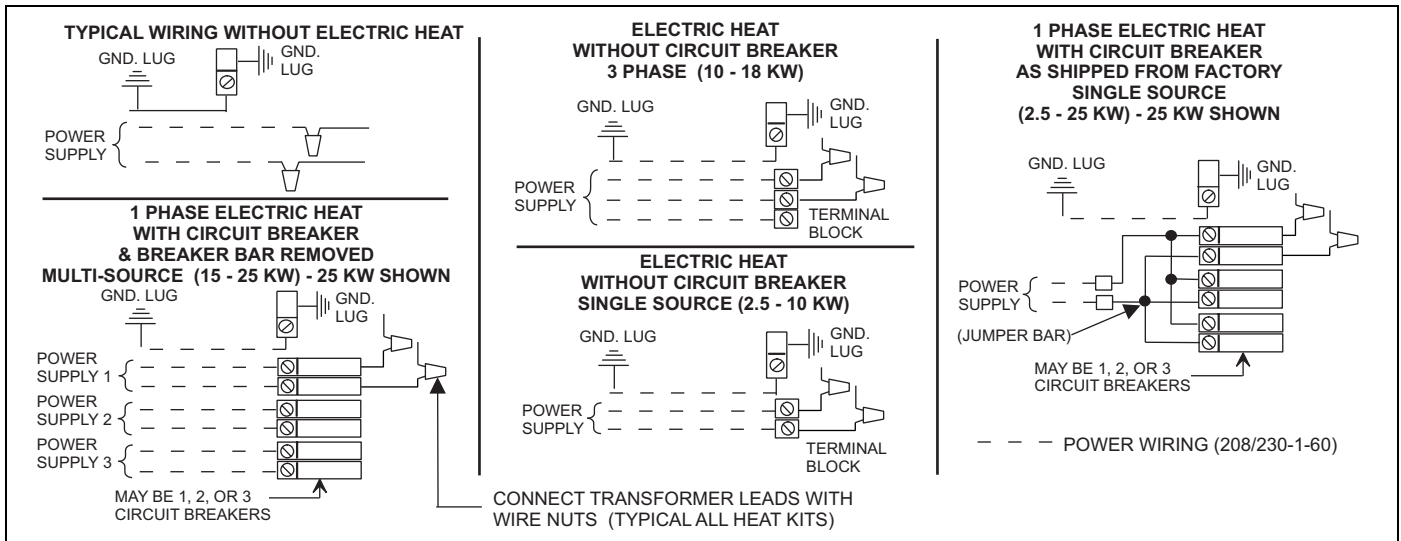


FIGURE 3: Line Power Connections for PSC Motors

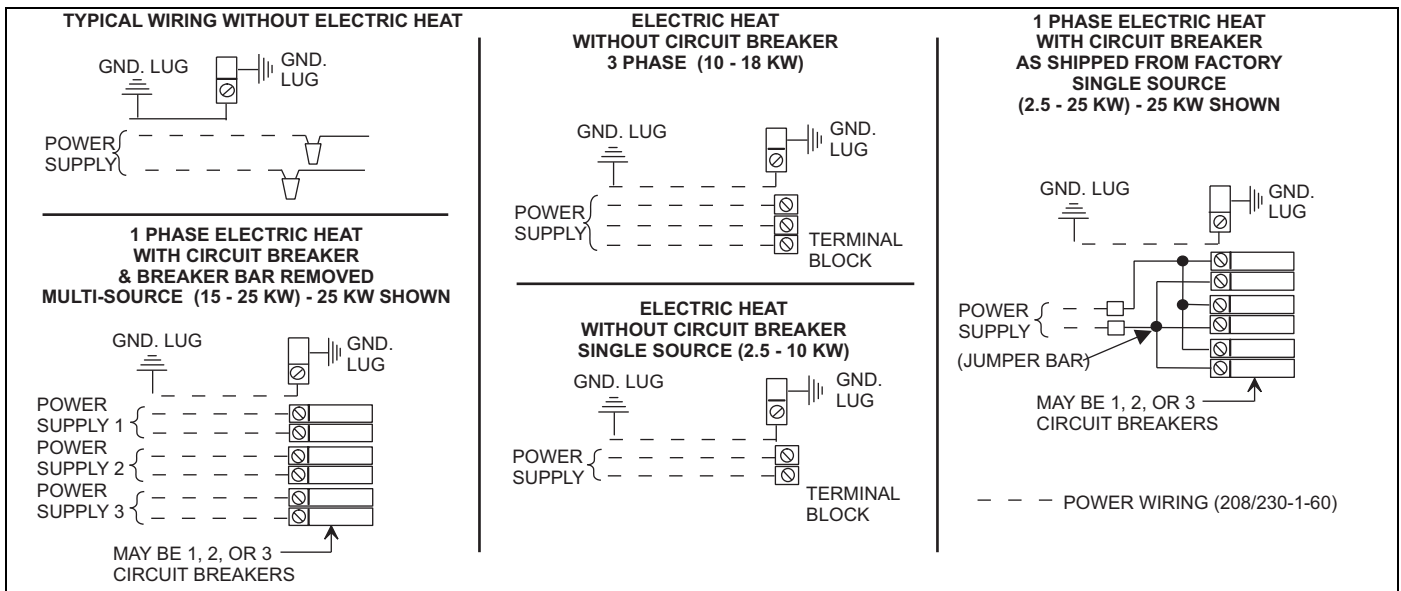


FIGURE 4: Line Power Connections for Standard ECM Motors

NOTICE

For blower speed connections, electrical information and wiring diagrams, see indoor unit installation instructions.

NOTICE

The electric heaters have both auto resettable and one shot thermal limit controls. If failure occurs, this one shot thermal limit control must be replaced with a direct replacement.

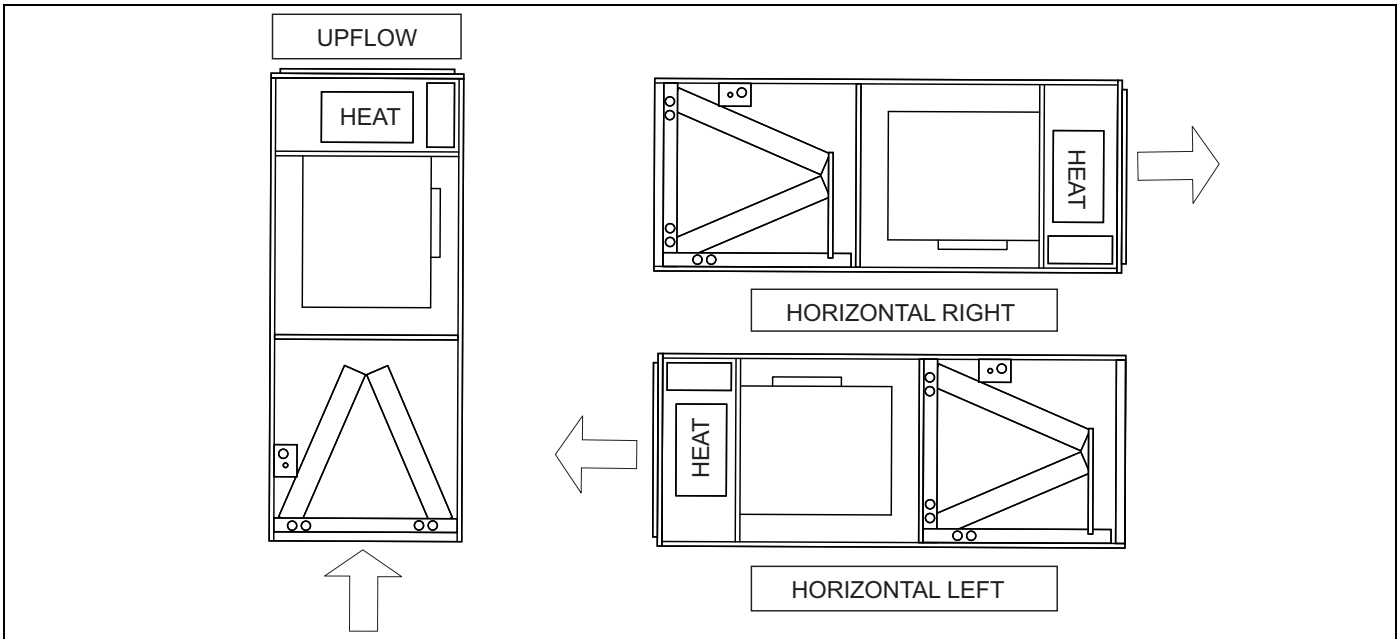


FIGURE 5: Typical Installed Application

NOMENCLATURE - ELECTRICAL

6	Product Category	2 = Electrical Accessory	4 = 2nd Gen Electrical Accessory
		6 = 3rd Gen. Electrical Accessory	
HK	Family Identifier	HK = Heater Kit	
06	Where Used	06 = Residential Air Handlers for Heat Pump & Air Conditioner	
		16 = Electric Heater W / Breaker	
		26 = With Circuit Breaker and breaker jumper	
5	Class Identifier	5 = Electric Heat	7 = General
005	Electric Heat, in KW	005 = 5 KW	008 = 8 KW
		010 = 10 KW	013 = 13 KW
		015 = 15 KW	018 = 18 KW
		020 = 20 KW	025 = 25 KW
		06	Voltage Code
		24 = 240-1-60	46 = 460-3-60
BK	Order Code	BK = Bulk Pack (If Applicable)	