# Three Phase Electric Heat Accessory MODELS

## AMMZ09AHB AMMZ15AHB

Used With 400 Volt, 3 Phase, 50 hz., Package AC & HP Model Series PA55 AND PH55

#### **General Information**

### **Adjusting Thermostat Anticipator**

Set the heat anticipator of the thermostat to the proper value. See instructions provided with the thermostat before making this adjustment.

Model Number	Anticipator Setting					
AMMZ09AHB	.36					
AMMZ15AHB	.36					

#### **Limit Controls**

The limit controls are mounted on the face of the heater and are wired into the supply wires to each element. If there is not enough air flow through the heater, the limit will open and break the power circuit. The limit will reset when the electric accessory cools down.

#### Operation

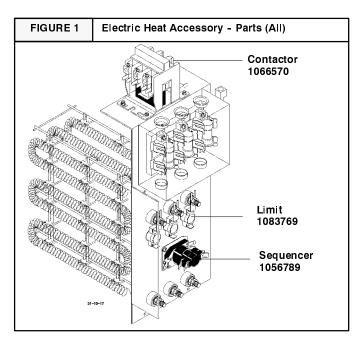
The heater elements are switched **ON** and **OFF** through a contactor which operate through the low voltage thermostat circuit.

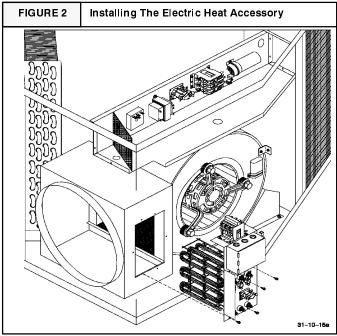
#### **Install Heater**

- Shut OFF electric power at unit disconnect switch or service panel.
- Remove the blower access panel from unit.
   NOTE: Installation of field wiring and conduit for heaters to the unit prior to installing the heater will simplify wiring of heaters.
- From inside the blower compartment, remove the six screws on the heater cover plate and save the screws. Discard the heater cover plate.

The screws will be used later to mount the electric heat accessory and its cover.

- 4. Remove the cardboard wrapper from the heater's elements.
- Insert the heater into the heater/blower box. Exercise caution to prevent damage to heater elements.
- Secure heater to heater/blower box with four of the six screws removed in Step 3.





# **Heater Wiring**

#### Grounding

Permanently ground the electric heat accessory in accordance with local codes and ordinances and in the United States with National Electrical Code ANSI/NFPA70-1990 or current edition. Use a copper conductor of the appropriate size from the electric

heat accessory to the ground lug on the top of the heater as shown in **FIGURE 3**.

#### **Installing Wiring**

When an electric heat accessory is installed, two separate field power supplies **MUST** be provided - **one** for the electric heat accessory and **one** for the unit.

- 1. Shut **OFF** electric power at unit disconnect or service panel.
- 2. Install the appropriate field supplied conduit fitting into the heater knockout located in the rear panel of the unit. The knockout is sized  $1^1/_4$ " in diameter.
- Connect field installed copper ground wire to the ground lug on the heater mounting plate.
- Route the field supplied line voltage wires through the conduit, up the left corner from field supplied disconnect to top of

heater. Leave approximately 8" of excess wire so the wiring harness may be moved to service. Make line connections to L1, L2, L3 on the fuse panel.

- 5. Connect the black wire with terminal from the heater wire harness to the loose black wire at the unit blower or appropriate speed tap if lower speed is desired in electric heat mode. NOTE: Do not exceed 60° F temperature rise on heater.
- 6 Connect the red wire with terminal in the heater wire harness to the loose red wire from the unit sequencer.
- Connect the white wire from the heater wire harness to the white wire from the thermostat at the field supplied low volt wire harness in the control box.
- 8. Connect the grey wire from the heater wire harness to the blue wire from the unit 24V common.

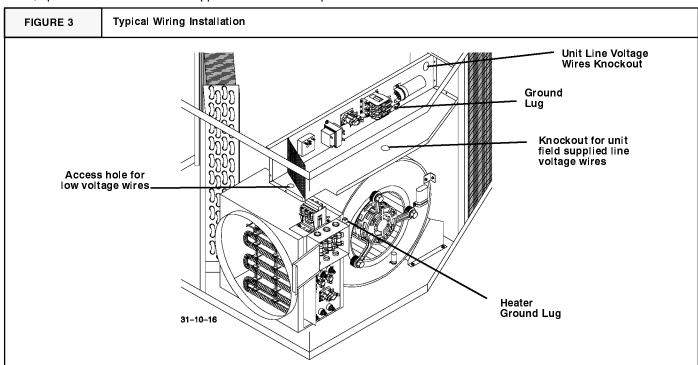


FIGURE 4 Accessory Electric Heater Electrical Data

HEATER MODEL	Used With	Supply Voltage	KW Rating	Nominal Heating BTUH	Supply Circuit No.	Heater Amps	Mininum Circuit Ampacity	Maximum Overcurrent Protective Device (Amps)
AMMZ09AHB with fuses	3, 4, 5 Ton	400-3-50	9.9	33,788	L4 - L5-L6	14.3	17.9	20
AMMZ15AHB with fuses	3 , 4, 5 Ton	400-3-50	14.4	49,147	L4, L5, L6	20.8	26.0	30

FIGURE 5 Accessory Electric Heater Temperature Rise

			*Temperature Rise °F @ CFM								
Heater Model	Use With	Supply Voltage	600	800	1000	1200	1400	1600	1800	2000	2200
AMM Z09AHB with fuses	3, 4, 5 Ton	400-3-50	52.1	39.1	31.3	26.1	22.3	19.6	17.4	15.6	14.2
AMMZ15AHB with fuses	3, 4, 5 Ton	400-3-50	-	59.6	45.5	37.9	32.5	28.4	25.2	22.7	20.7

<sup>\*</sup> Do not exceed 60° F temperature rise on heater.

