# **INSTALLATION INSTRUCTIONS**

# **Electric Heat Packages**

Models:

EHWH018A-A04	EHWH030A-B05
EHWH018A-A08	EHWH030A-B09
EHWH024A-A04	EHWH030A-C05
EHWH024A-A08	EHWH030A-C09
EHWH024A-B05	EHWH036A-A05
EHWH024A-C05	EHWH036A-A10
EHWH030A-A05	EHWH036A-A15
EHWH030A-A10	EHWH036A-B05
EHWH030B-A10	EHWH036A-B09

For Use with W\*\*HY Series Wall-Mounted Heat Pumps



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## Description

The EHWH series electric heater packages are fieldinstallable heater packages suitable for use with Bard wall mount heat pumps. The packages consist of the electric heat strip, the heater control base (which includes the heat contactors and circuit breaker or toggle or rotary disconnects), installation instructions and wiring diagrams. See Table 1 for nominal electrical data and BTU output. **Before installation, check unit serial plate to ensure the heater package model to be installed is a listed heater package that is suitable for use with the Bard wall mount unit (see Figure 6 on page 11).** 

### Important

The equipment covered in this manual is to be installed by trained, experienced service and installation technicians.

### **Shipping Damage**

Upon receipt of equipment, the carton should be checked for external signs of shipping damage. If damage is found, the receiving party must contact the last carrier immediately, preferably in writing, requesting inspection by the carrier's agent.

### **Unpacking the Electric Heat Package**

Remove the heat package from the shipping carton. The heat package must consist of the following:

- 1. Basic heater.
- 2. Electric heat control base and wiring.
- 3. Installation instructions.
- 4. Two wiring diagrams, one to be applied to unit.
- 5. Adhesive label to re-mark serial plate to indicate new model number. This is attached to the front of these instructions.

Heater Package Model	Volts	Phase	Nominal KW	Nominal BTU
EHWH018A-A04	230/208	1	3.7/3.0	12,600/10,200
EHWH018A-A08	230/208	1	7.4/6.0	25,100/20,500
EHWH024A-A04	230/208	1	3.7/3.0	12,600/10,200
EHWH024A-A08	230/208	1	7.4/6.0	25,100/20,500
EHWH024A-B05	230/208	3	4.6/3.8	15,700/12,800
EHWH024A-C05	460	3	4.6	15,700
EHWH030A-A05	230/208	1	4.6/3.8	15,700/12,800
EHWH030A-A10	230/208	1	9.2/7.5	31,400/25,600
EHWH030B-A10	230/208	1	9.2/7.5	31,400/25,600
EHWH030A-B05	230/208	3	4.6/3.8	15,700/12,800
EHWH030A-B09	230/208	3	8.3/6.8	28,300/23,000
EHWH030A-C05	460	3	4.6	15,700
EHWH030A-C09	460	3	8.3	28,300
EHWH036A-A05	230/208	1	4.6/3.8	15,700/12,800
EHWH036A-A10	230/208	1	9.2/7.5	31,400/25,600
EHWH036A-A15	230/208	1	13.8/11.3	47,100/38,400
EHWH036A-B05	230/208	3	4.6/3.8	15,700/12,800
EHWH036A-B09	230/205	3	8.3/6.8	28,300/23,000

#### TABLE 1 Electrical Data and BTU Output

### **Wiring Main Power**

1. On all installations, size unit power supply wiring for the minimum circuit ampacity requirement for the unit and heater package combination listed on the unit serial plate.

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Install properly sized power supply leads for the unit/heater combination minimum circuit ampacity as listed on the unit serial plate. Hazard of fire. Failure to install properly sized conductors could result in fire causing damage, bodily injury or death. 2. All heater packages covered by this manual are factory wired for single supply circuit. The following heater packages are field convertible to a dual supply circuit if required or desired:

EHWH024A-A08

EHWH030A-A10

EHWH036A-A10

EHWH036A-A15

To convert the above heater package to dual circuit configuration before installation, loosen four (4) screws holding jumper bar in place and remove jumper bar (see Figure 1). Circuits A + B are now identified on the heater package.

Wire should be sized to the minimum circuit ampacity as specified on the serial plates of units that accept this heater package for circuits A + B.

 $\bigcirc$ Ο 0 o 0 0 REMOVE SCREW AND TAKE OFF COVER (#) П Ð θ  $(\mathbf{F})$ CIRCUIT B θ θ × θ θ  $m H\,CIRCUIT\,A_{o}$ 0 € θ п (-)SINGLE CIRCUIT 0 JUMPER BAR 0 0 Ο Ο LOOSEN 4 SCREWS AND REMOVE JUMPER BAR

FIGURE 1 Wiring – Main Power

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# **Installation of Heater Package**

1. Disconnect all power to unit before installation.

# \land WARNING

Disconnect all power to unit before installing heater package. Hazard of electrical shock. Failure to disconnect power could result in injury or death.

2. Before installation, check unit serial plate to ensure that the heater package model to be installed is listed as a heater package suitable for use with the unit.

Under no circumstance shall a heater package be installed in a unit if the model number of the heater package does not appear on the unit serial plate.

# **A WARNING**

Install only heater packages listed on unit serial plate. Hazard of fire or electrical shock. Failure to install listed heater package could result in fire, injury or death.

- 3. Remove electric heater access panel and control panel cover, both inner and outer (see Figure 2).
- 4. All heaters are installed with the thermal cutoffs positioned to the top of the unit. Install heat strip(s) through heater access opening. Position heat strip support rod in heater support hole 1, 2 or 3 as indicated in Table 2 on page 7 and Figure 3 on page 8.

On heater packages with two heat strips, install 9KW or 10KW heater first in position closest to the outlet air frame (see Figure 4D on page 9).

- Install heater control base into top of control panel as shown in Figure 5 on page 10. Secure with four (4) sheet metal screws provided.
- 6. Plug male 3-pin connector into mating connector mounted in control panel (see Figure 5).

- Connect red compressor supply lead to L1 of terminal block. Connect black compressor supply lead to L2 of terminal block. If three phase, connect yellow supply lead to L3 of terminal block. See Figure 5 and wiring diagram.
- 8. Route wires from heater control base up through raceway in top right corner of control panel to the heaters (see Figure 5).
- 9. Wire heater package per wiring diagram supplied with the heater package. All wires are stamped with wire numbers that correspond with terminal numbers on the wiring diagram and stamped numbers on the heat strip. Limit switch wires are terminated with insulated quick connect terminals. See Figure 5.
- 10. Attach adhesive wiring diagram directly above unit wiring diagram on inner control panel cover.
- 11. Recheck all wiring. Break out appropriate circuit breaker tabs on inner control panel cover to allow trip lever to protrude. Replace control panel and heater access panels.
- 12. Resupply power to the unit and check for proper operation.
- 13. Re-mark serial plate with self-adhesive label attached to the front of this manual (see Figure 6 on page 11).

FIGURE 2 Electric Heater Access Panel and Control Panel Cover Locations

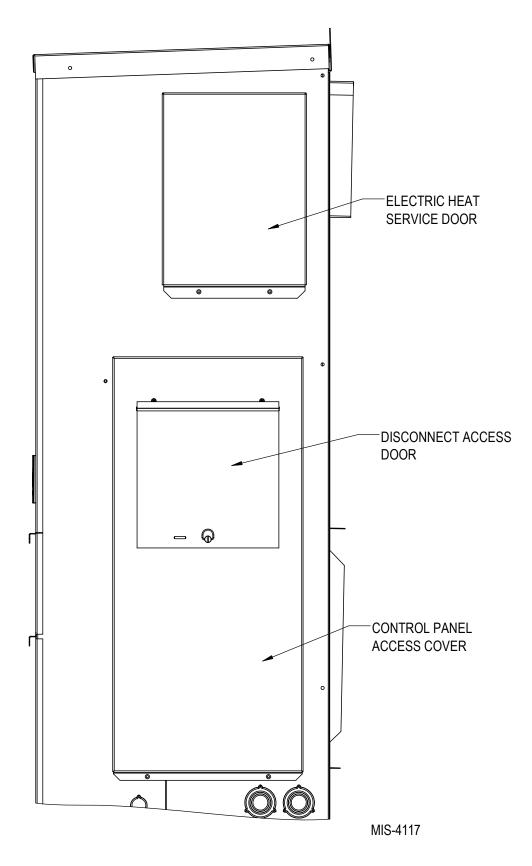
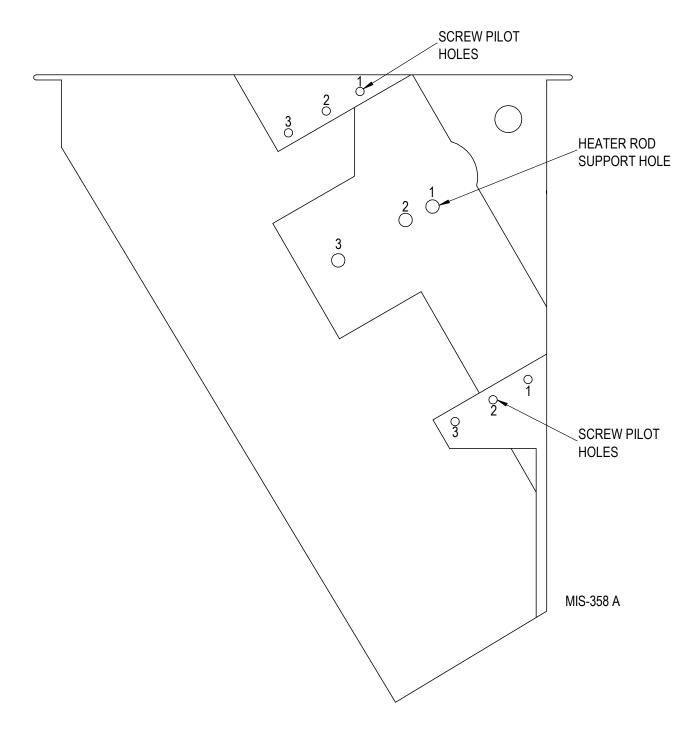
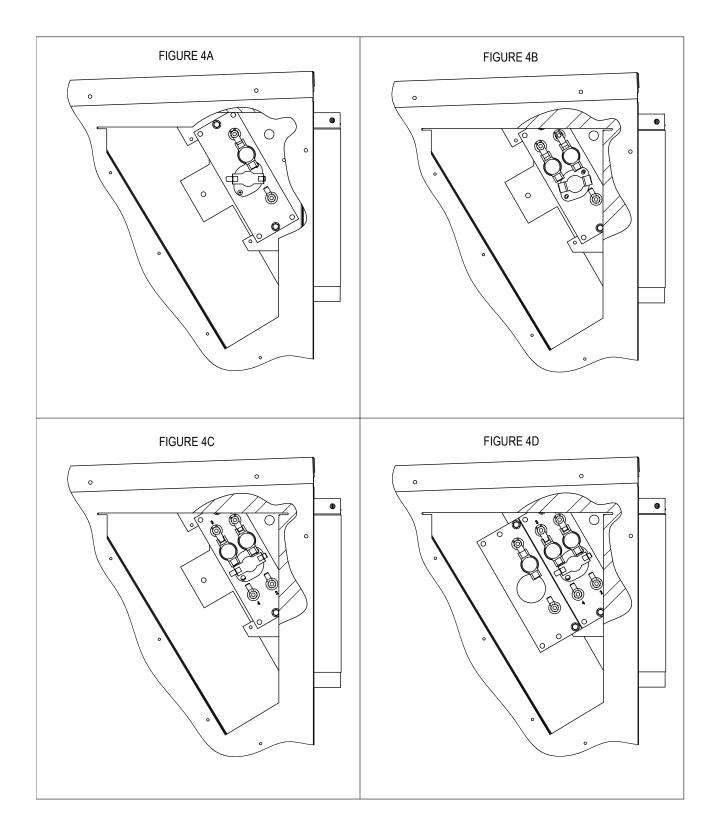


TABLE 2		
References to Figures 3 and 4 for Model Number		

Heater Package Model Number	Figure 3 Rod Support and Screw Mounting Position	Figure 4 Heater Terminal Identification Drawing
EHWH018A-A04	1	4A
EHWH018A-A08	1	4B
EHWH024A-A04	1	4A
EHWH024A-A08	1	4B
EHWH024A-B05	1	4C
EHWH024A-C05	1	4C
EHWH030A-A05	1	4A
EHWH030A-A10	1	4B
EHWH030B-A10	1	4B
EHWH030A-B05	1	4C
EHWH030A-B09	1	4C
EHWH030A-C05	1	4C
EHWH030A-C09	1	4C
EHWH036A-A05	1	4A
EHWH036A-A10	1	4B
EHWH036A-A15	1 + 3	4D
EHWH036A-B05	1	4C
EHWH036A-B09	1	4C

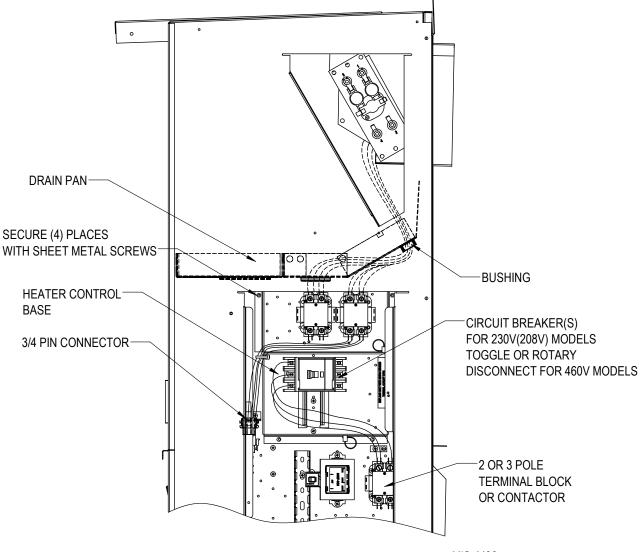
FIGURE 3 Screw Mounting Holes





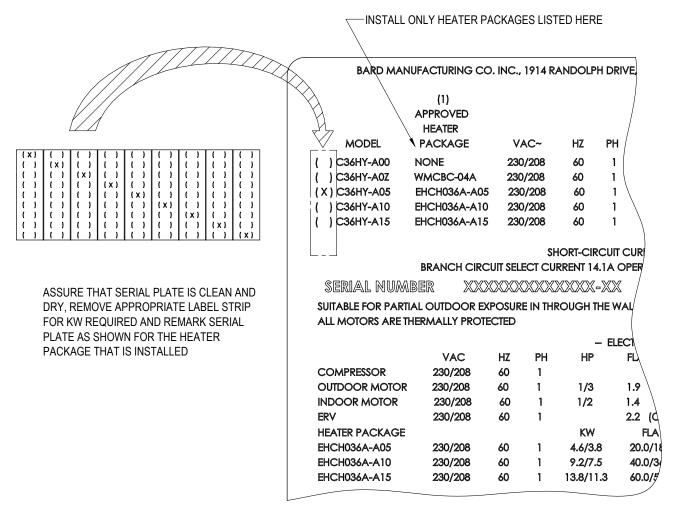
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FIGURE 5 Installing Heater Base and Connecting Wiring



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#### FIGURE 6 Serial Plate Showing Approved Heater Packages



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