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# INSTALLATION INSTRUCTIONS

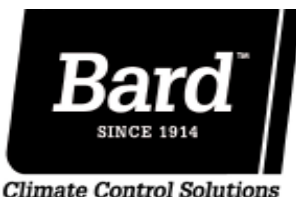
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## Electric Heat Packages

### Models:

|              |              |              |
|--------------|--------------|--------------|
| EHCH024A-A04 | EHCH030ADB05 | EHWH030B-A10 |
| EHCH024A-A08 | EHCH030ADC09 | EHWH030A-B05 |
| EHCH024A-B05 | EHWH018A-A04 | EHWH030A-B09 |
| EHCH024A-B09 | EHWH018A-A08 | EHWH030A-C05 |
| EHCH030A-A04 | EHWH024A-A04 | EHWH030A-C09 |
| EHCH030A-A08 | EHWH024A-A08 | EHWH036A-A05 |
| EHCH030A-B05 | EHWH024A-B05 | EHWH036A-A10 |
| EHCH030A-B09 | EHWH024A-C05 | EHWH036A-A15 |
| EHCH030A-C09 | EHWH030A-A05 | EHWH036A-B05 |
| EHCH030ADA04 | EHWH030A-A10 | EHWH036A-B09 |

For Use with  
Wall-Mounted Heat Pumps



Bard Manufacturing Company, Inc.  
Bryan, Ohio 43506  
[www.bardhvac.com](http://www.bardhvac.com)

Manual: 2100-784B  
Supersedes: 2100-784A  
Date: 5-6-25

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# GENERAL INFORMATION

## Description

The EHCH and EHWH series electric heater packages are field-installable 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 Tables 1A or 1B 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 12).

## 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.

**TABLE 1A**  
**Electrical Data and BTU Output – EHCH Heater Package Models**

| Heater Package Model | Volts   | Phase | Nominal kW | Nominal BTU   |
|----------------------|---------|-------|------------|---------------|
| EHCH024A-A04         | 230/208 | 1     | 3.7/3.0    | 12,600/10,200 |
| EHCH024A-A08         | 230/208 | 1     | 7.4/6.0    | 24,100/20,500 |
| EHCH024A-B05         | 230/208 | 3     | 4.6/3.8    | 15,700/12,800 |
| EHCH024A-B09         | 230/208 | 3     | 8.3/6.8    | 28,300/23,000 |
| EHCH030A-A04         | 230/208 | 1     | 3.7/3.0    | 12,600/10,200 |
| EHCH030A-A08         | 230/208 | 1     | 7.4/6.0    | 24,100/20,500 |
| EHCH030A-B05         | 230/208 | 3     | 4.6/3.8    | 15,700/12,800 |
| EHCH030A-B09         | 230/208 | 3     | 8.3/6.8    | 28,300/23,000 |
| EHCH030A-C09         | 460     | 3     | 8.3        | 28,300        |
| EHCH030ADA04         | 230/208 | 1     | 3.7/3.0    | 12,600/10,200 |
| EHCH030ADB05         | 230/208 | 3     | 4.6/3.8    | 15,700/12,800 |
| EHCH030ADC09         | 460     | 3     | 8.3        | 28,300        |

**TABLE 2**  
**Electrical Data and BTU Output – EHWH Heater Package Models**

| 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 |

## 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.

# WARNING

***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.***

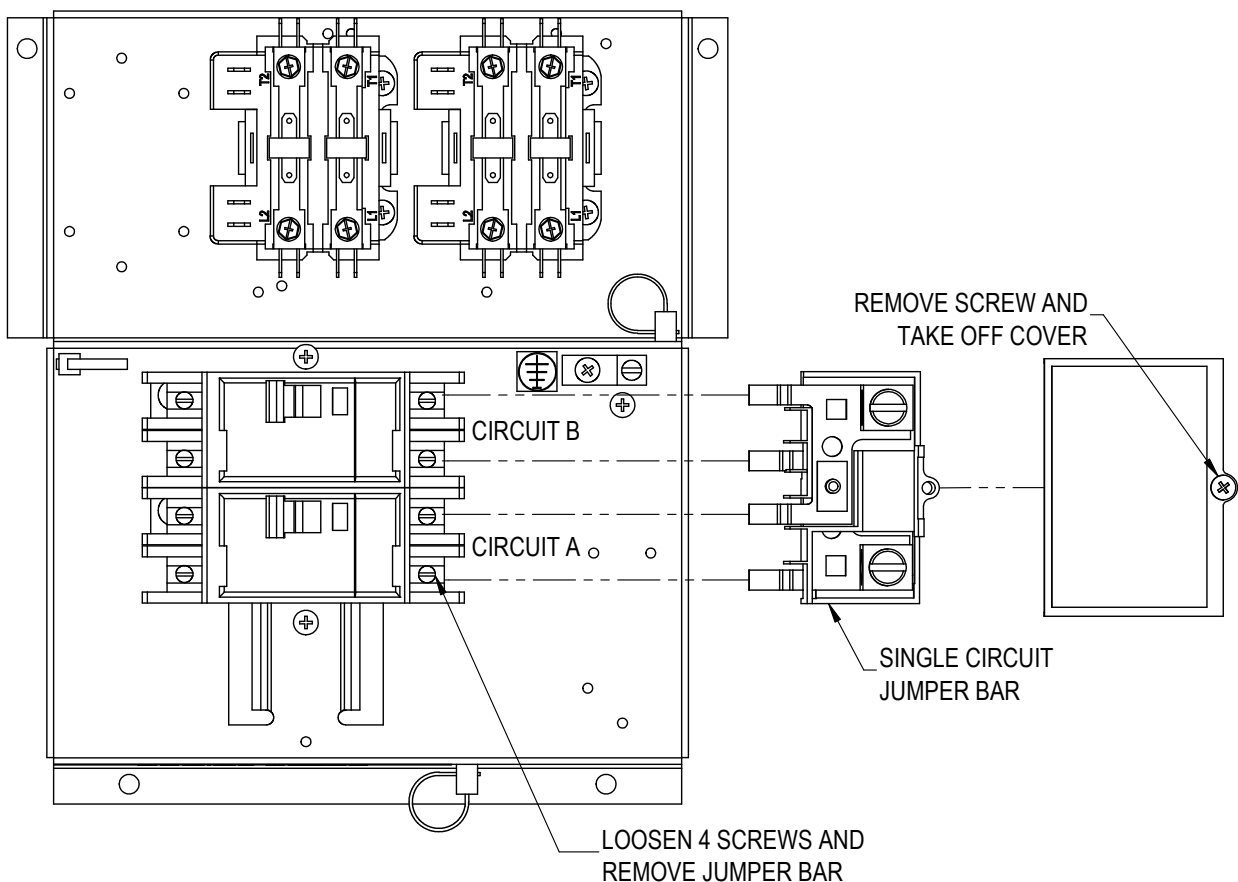
2. All heater packages covered by this manual are factory wired for single supply circuit. The following heater packages are field convertible to a dual supply circuit if required or desired:

|              |              |
|--------------|--------------|
| EHCH024A-A08 | EHWH024A-A08 |
| EHCH030A-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.

**FIGURE 1**  
Wiring – Main Power



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# INSTALLATION

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## Installation of Heater Package

1. Disconnect all power to unit before installation.

### **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.

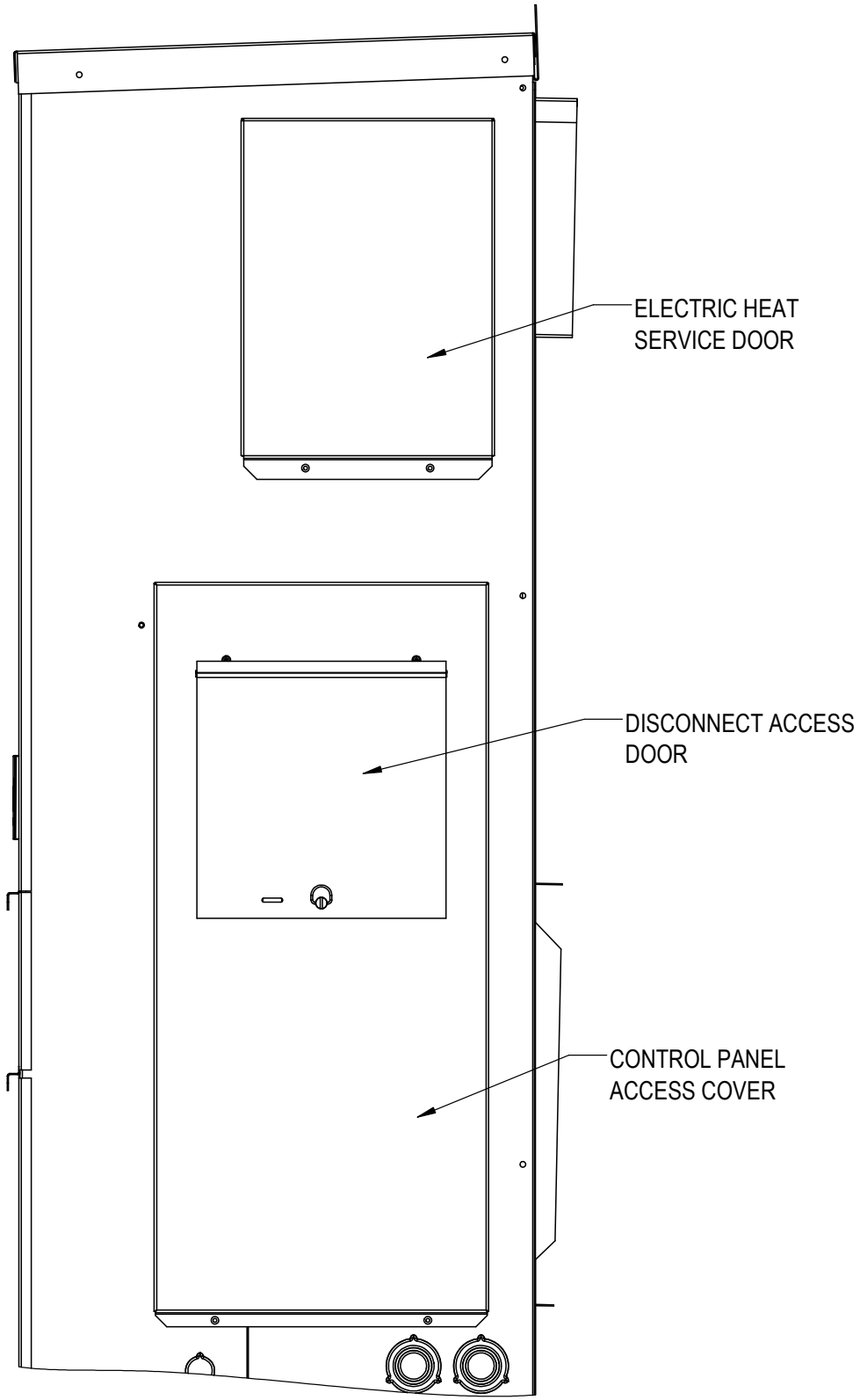
### **WARNING**

***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 8 and Figure 3 on page 9.  
  
On heater packages with two heat strips, install 9 kW or 10 kW heater first in position closest to the outlet air frame (see Figure 4D on page 10).
5. Install heater control base into top of control panel as shown in Figure 5 on page 11. Secure with four (4) sheet metal screws provided.
6. Plug male 3-pin connector into mating connector mounted in control panel (see Figure 5).

7. 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 12).

**FIGURE 2**  
**Electric Heater Access Panel and Control Panel Cover Locations**



MIS-4117

**TABLE 2**  
**References to Figures 3 and 4 for Model Number**

| Heater Package<br>Model Number | Figure 3<br>Rod Support and Screw<br>Mounting Position | Figure 4<br>Heater Terminal<br>Identification Drawing |
|--------------------------------|--|---|
| EHCH024A-A04                   | 1  | 4A  |
| EHCH024A-A08                   | 1  | 4C  |
| EHCH024A-B05                   | 1  | 4B  |
| EHCH024A-B09                   | 1  | 4B  |
| EHCH030A-A04                   | 1  | 4A  |
| EHCH030A-A08                   | 1  | 4C  |
| EHCH030A-B05                   | 1  | 4B  |
| EHCH030A-B09                   | 1  | 4B  |
| EHCH030A-C09                   | 1  | 4B  |
| EHCH030ADA04                   | 1  | 4A  |
| EHCH030ADB05                   | 1  | 4B  |
| EHCH030ADC09                   | 1  | 4B  |
| EHWH018A-A04                   | 1  | 4A  |
| EHWH018A-A08                   | 1  | 4C  |
| EHWH024A-A04                   | 1  | 4A  |
| EHWH024A-A08                   | 1  | 4C  |
| EHWH024A-B05                   | 1  | 4B  |
| EHWH024A-C05                   | 1  | 4B  |
| EHWH030A-A05                   | 1  | 4A  |
| EHWH030A-A10                   | 1  | 4C  |
| EHWH030B-A10                   | 1  | 4C  |
| EHWH030A-B05                   | 1  | 4B  |
| EHWH030A-B09                   | 1  | 4B  |
| EHWH030A-C05                   | 1  | 4B  |
| EHWH030A-C09                   | 1  | 4B  |
| EHWH036A-A05                   | 1  | 4A  |
| EHWH036A-A10                   | 1  | 4C  |
| EHWH036A-A15                   | 1 + 3  | 4D  |
| EHWH036A-B05                   | 1  | 4B  |
| EHWH036A-B09                   | 1  | 4B  |

**FIGURE 3**  
**Screw Mounting Holes**

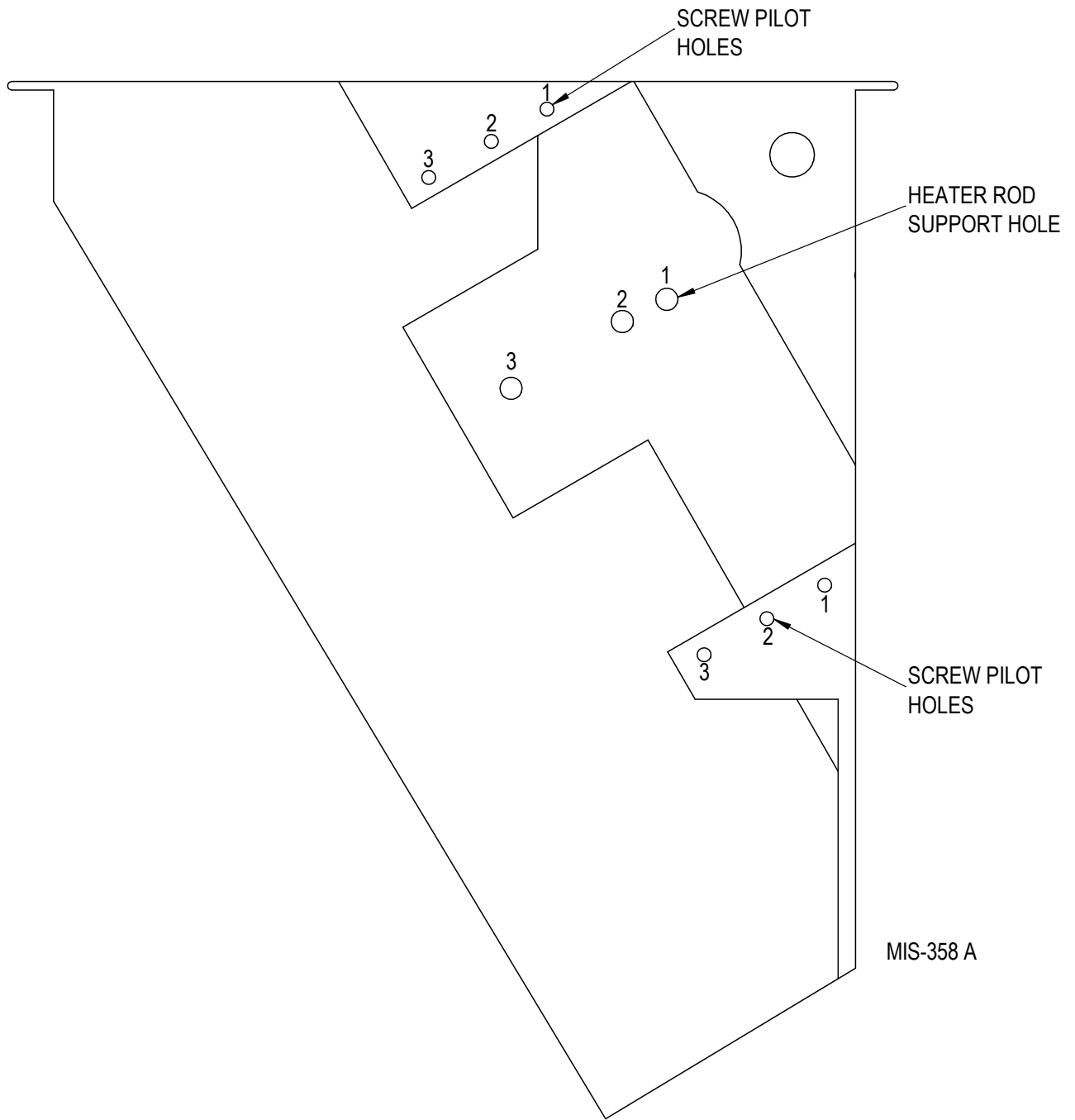


FIGURE 4A-D

FIGURE 4A

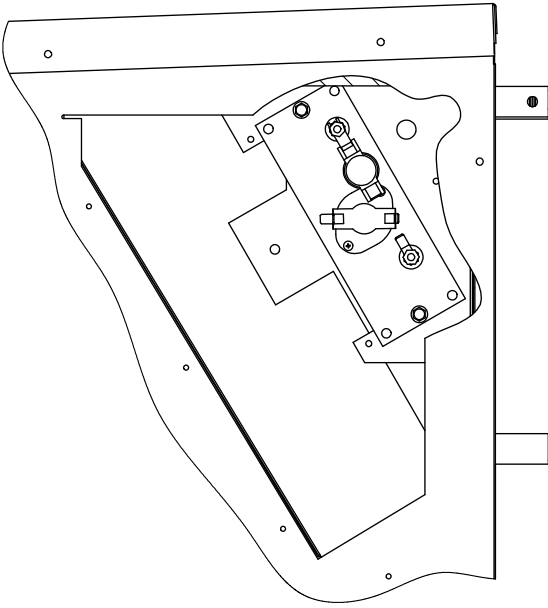


FIGURE 4B

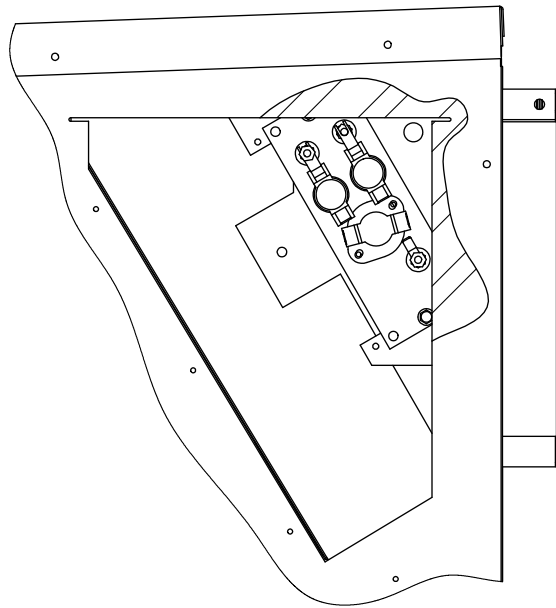


FIGURE 4C

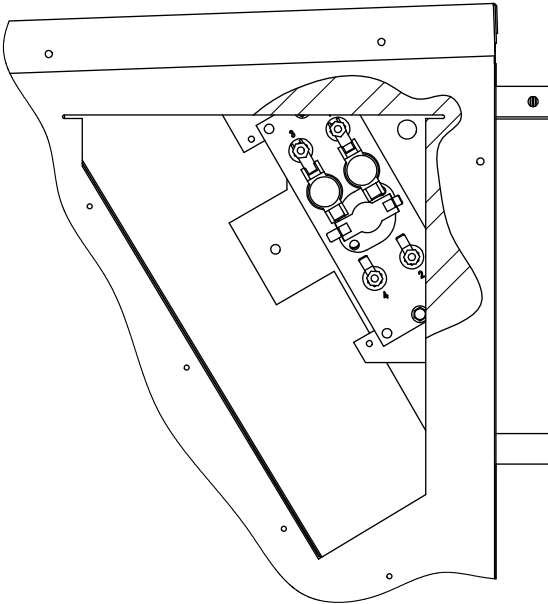
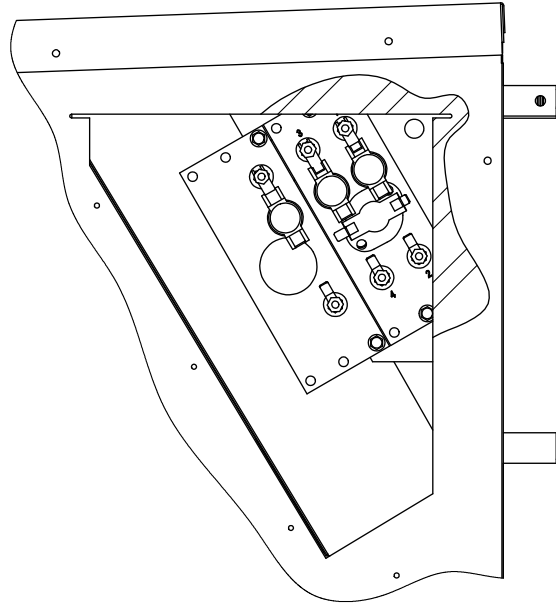
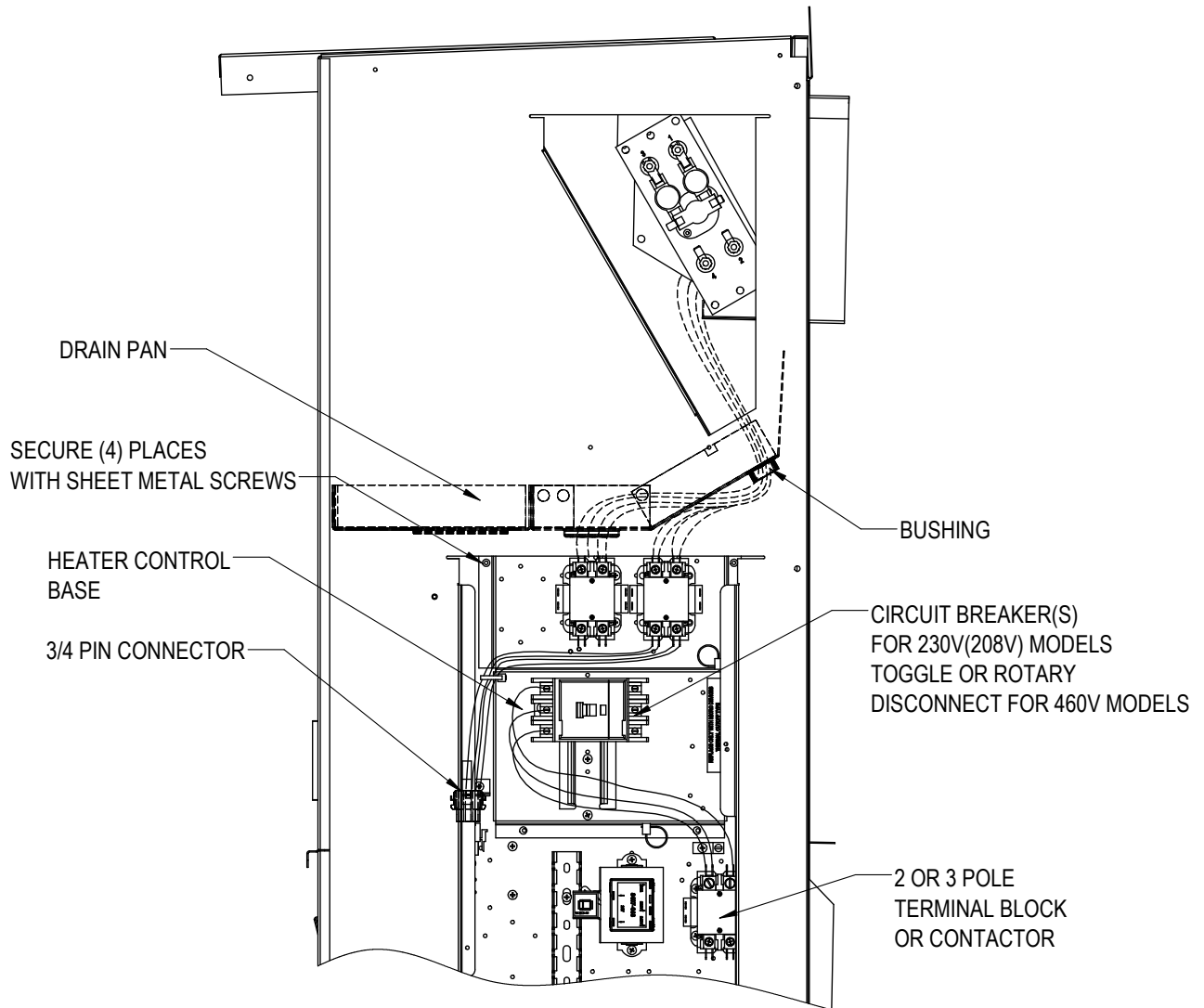


FIGURE 4D



MIS-4422 A

**FIGURE 5**  
**Installing Heater Base**  
**and Connecting Wiring**



MIS-4436

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

INSTALL ONLY HEATER PACKAGES LISTED HERE

BARD MANUFACTURING CO. INC., 1914 RANDOLPH DRIVE

(1)  
 APPROVED  
 HEATER

| MODEL         | PACKAGE      | VAC~    | HZ | PH |
|---------------|--------------|---------|----|----|
| ( ) C36HY-A00 | NONE         | 230/208 | 60 | 1  |
| ( ) C36HY-A0Z | WMCBC-04A    | 230/208 | 60 | 1  |
| (X) C36HY-A05 | EHCH036A-A05 | 230/208 | 60 | 1  |
| ( ) C36HY-A10 | EHCH036A-A10 | 230/208 | 60 | 1  |
| ( ) C36HY-A15 | EHCH036A-A15 | 230/208 | 60 | 1  |

SHORT-CIRCUIT CUR  
 BRANCH CIRCUIT SELECT CURRENT 14.1A OPER

SERIAL NUMBER XXXXXXXXXXXXXXXX-XX

SUITABLE FOR PARTIAL OUTDOOR EXPOSURE IN THROUGH THE WALL  
 ALL MOTORS ARE THERMALLY PROTECTED

|                | VAC     | HZ | PH | HP        | FL      |
|----------------|---------|----|----|-----------|---------|
| COMPRESSOR     | 230/208 | 60 | 1  |           |         |
| OUTDOOR MOTOR  | 230/208 | 60 | 1  | 1/3       | 1.9     |
| INDOOR MOTOR   | 230/208 | 60 | 1  | 1/2       | 1.4     |
| ERV            | 230/208 | 60 | 1  |           | 2.2 (C  |
| HEATER PACKAGE |         |    |    | KW        | FLA     |
| EHCH036A-A05   | 230/208 | 60 | 1  | 4.6/3.8   | 20.0/18 |
| EHCH036A-A10   | 230/208 | 60 | 1  | 9.2/7.5   | 40.0/3  |
| EHCH036A-A15   | 230/208 | 60 | 1  | 13.8/11.3 | 60.0/5  |

ASSURE THAT SERIAL PLATE IS CLEAN AND DRY, REMOVE APPROPRIATE LABEL STRIP FOR KW REQUIRED AND REMARK SERIAL PLATE AS SHOWN FOR THE HEATER PACKAGE THAT IS INSTALLED

MIS-384 A