

# INSTALLER'S GUIDE

18-HB13D7-2

|                 |                                  |
|-----------------|----------------------------------|
| Library         | Service Literature               |
| Product Section | Unitary                          |
| Product         | Unitary Accessories              |
| Model           | Electric, Steam, Hot Water Coils |
| Literature Type | Installer's Guide                |
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**ALL phases of this installation must comply with  
NATIONAL, STATE AND LOCAL CODES**

## Models:

|                |               |
|----------------|---------------|
| BAYHTR1405+++  | BAYHTR3410000 |
| BAYHTR1405BRK  | BAYHTR1415BRK |
| BAYHTR1408+++  | BAYHTR3415000 |
| BAYHTR1408BRK  | BAYHTR1419BRK |
| BAYHTR1410+++  | BAYHTR1425BRK |
| BAYHTR1410BRK  |               |
| +++ = 000, PDC |               |

## Supplementary Electric Heaters for Air Handler Installations

**IMPORTANT**—This Document is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

**⚠ WARNING: HAZARDOUS VOLTAGE - DISCONNECT POWER BEFORE SERVICING**

### A. GENERAL

This accessory electric heater is designed to provide power directly to the air handler from the accessory heaters power supply eliminating the need for additional circuits. The power and control wiring use a single polarized plug to connect the heater and the air handler. Single source power entry is provided for single phase heaters with two circuits using accessory BAYSPEK140B. See the Heater Data table on page 2 for the number of circuits required.

1. Check the air handler heater label to confirm that the selected Heater is approved for use with this air handler, in the installed configuration.
2. Check the components received for damage. Report any defects or shortages to the transportation company immediately.
3. Be sure the power supply agrees with the listing shown on heater nameplate.

### B. INSTALLATION

1. Remove the blower access panel from the front of the air handler.
2. Disconnect the female polarized plug from the wire bundle at left side of air handler near the knockouts. Discard the male polarized plug and power wire leads.
3. (**TWG & TGB** models only) Remove the cover from the heater compartment of the air handler and discard.

4. Remove the cover from the heater field wiring and control compartment box. ***For heaters up to 15 Kw, an adapter plate is provided which is used with air handlers that are 21.5" wide or wider. When required, attach the adapter plate to the back of the heater on the side opposite the knockouts using 2 screws.***
5. Remove the appropriate knockouts in the heater field wiring compartment. See Figure 1 on page 3. Remove the appropriate knockouts in the air handler for making electrical connections to the heater. The holes in the air handler must align with the holes in the heater field wiring compartment.
6. Insert the heater assembly into the heater cavity of the air handler so that the field wiring holes in the air handler and the heater will align. Secure the heater compartment to the air handler with the four screws removed from the hardware envelope.

**IMPORTANT: Conduit must attach directly to the heater control box.**

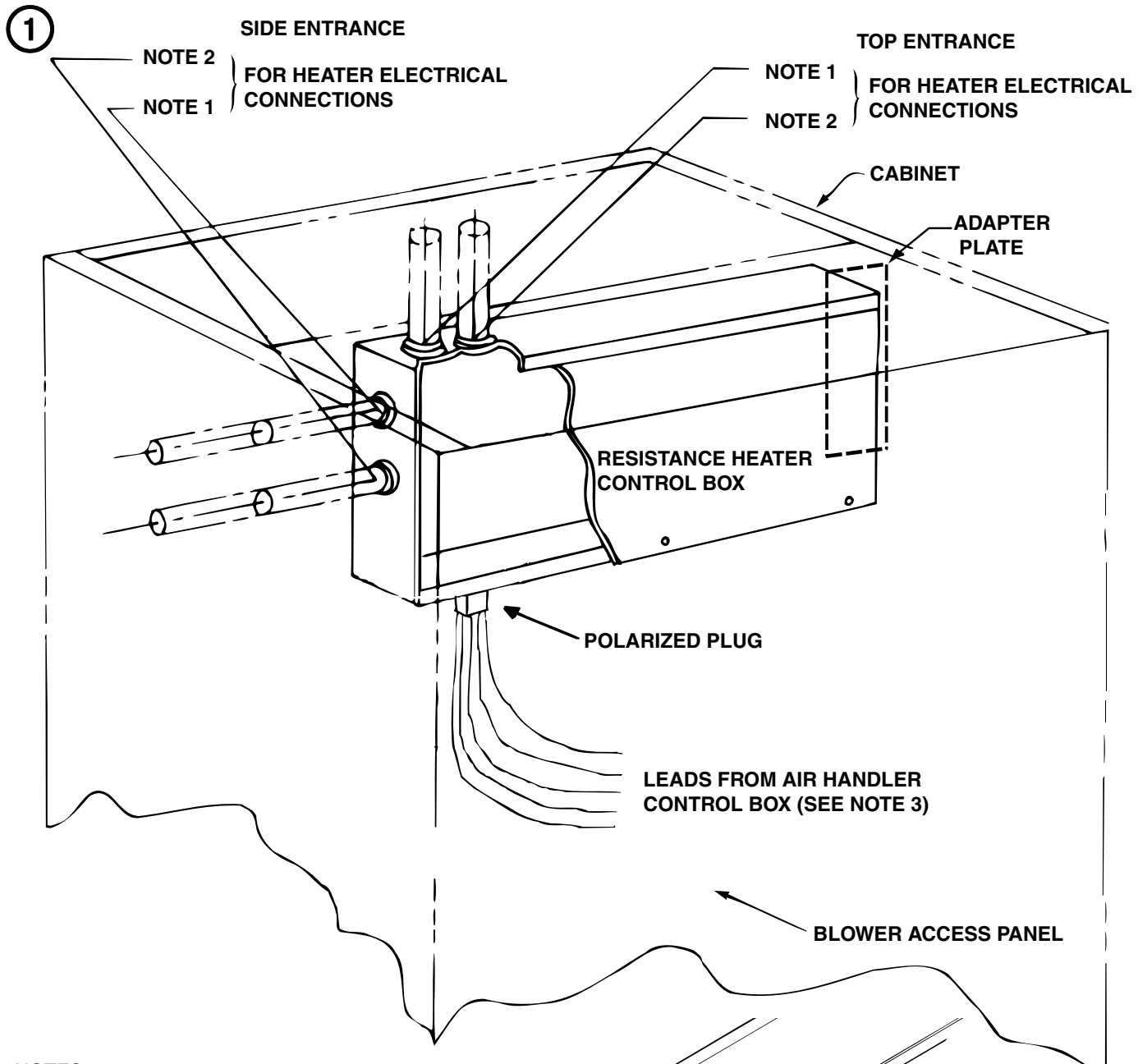
**NOTE:** Air handlers approved to use the 1425 heater have a plate covering either the upper or lower 1.2" of the heater cavity. This plate is removed **ONLY** when the 1425 heater is used. Otherwise it must be left in place for a blower barrier seal.

7. Make all wiring connections per applicable field wiring diagrams in these instructions. All instructions **must** conform to national, state and local electrical codes.

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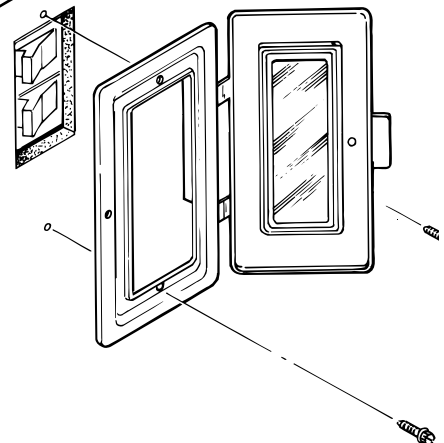
8. Connect the female polarized plug (disconnected in item 2 from the wire bundle next to the knockouts) to the male polarized plug on the bottom of the heater control box
9. Refer to the heater minimum airflow chart on the air handler rating nameplate for the appropriate minimum blower speed tap to be used with the approved heater installed.
10. For heaters with self contained disconnect, an opening in the blower access panel is provided so that the disconnect may be operated without removal of the blower access panel. Remove the metal cover from the circuit breaker opening in the air handler access panel and discard, cut out the fiberglass insulation only in the areas where the disconnect will extend through the opening.
11. Replace all panels removed during the heater installation.

| BAYHTR -- HEATER DATA                                                                                  |                    |       |          |       |                         |          |       |                         |
|--------------------------------------------------------------------------------------------------------|--------------------|-------|----------|-------|-------------------------|----------|-------|-------------------------|
| Heater Model No.                                                                                       | Number of Circuits | Phase | 240 VOLT |       |                         | 208 VOLT |       |                         |
|                                                                                                        |                    |       | Capacity |       | Heater Amps per Circuit | Capacity |       | Heater Amps per Circuit |
|                                                                                                        |                    |       | KW       | BTUH  |                         | KW       | BTUH  |                         |
| BAYHTR1405 +++                                                                                         | 1                  | 1     | 4.80     | 16400 | 20                      | 3.60     | 12300 | 17.3                    |
| BAYHTR1408 +++                                                                                         | 1                  | 1     | 7.68     | 26200 | 32                      | 5.76     | 19700 | 27.7                    |
| BAYHTR1410 +++                                                                                         | 1                  | 1     | 9.60     | 32800 | 40                      | 7.20     | 24600 | 34.6                    |
| BAYHTR3410 000                                                                                         | 1                  | 3     | 9.60     | 32800 | 34.6                    | 7.20     | 24600 | 30                      |
| BAYHTR1415 BRK                                                                                         | 2                  | 1     | 15.36    | 52400 | 40/24                   | 11.53    | 39300 | 34.6/20.8               |
| BAYHTR3415 000                                                                                         | 1                  | 3     | 15.36    | 52400 | 38.2                    | 11.53    | 39300 | 33.1                    |
| BAYHTR1419 BRK                                                                                         | 2                  | 1     | 19.20    | 65500 | 32/48                   | 14.42    | 49200 | 27.7/41.6               |
| BAYHTR1425 BRK                                                                                         | 3                  | 1     | 24.96    | 85200 | 44/40/20                | 18.73    | 63900 | 38.1/34.6/17.3          |
| +++ = 000, BRK, PDC<br>000 = pigtails, BRK = contains Circuit Breakers, PDC = contains Pull Disconnect |                    |       |          |       |                         |          |       |                         |



## NOTES

1. HEATER LINE VOLTAGE KNOCKOUT LOCATIONS FOR 1" OR 1-1/2" CONDUIT. CONDUIT MUST BE ATTACHED DIRECTLY TO THE HEATER CONTROL BOX. WIRE AND CONDUIT SIZE MUST COMPLY WITH N.E.C.
2. HEATER LINE VOLTAGE KNOCKOUT LOCATIONS FOR 3/4" OR 1-1/4" CONDUIT. CONDUIT MUST BE ATTACHED DIRECTLY TO THE HEATER CONTROL BOX. WIRE AND CONDUIT SIZE MUST COMPLY WITH N.E.C.
3. BLOWER CIRCUIT POWER SUPPLY LEADS & LOW VOLTAGE HEATER CONTROL LEADS FROM AIR HANDLER CONTROL BOX ARE CONNECTED TO THE HEATER VIA A POLARIZED PLUG



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| MINIMUM HEATING AIRFLOW CFM - HEATER MATRIX                                                                                                                                                                                                                                                                                                                                                                                         |                                             |                                  |                                              |                     |                     |                     |                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------|----------------------------------------------|---------------------|---------------------|---------------------|---------------------|
| AIR HANDLER                                                                                                                                                                                                                                                                                                                                                                                                                         | MINIMUM HEATING AIRFLOW CFM - HEATER MATRIX |                                  |                                              |                     |                     |                     |                     |
| MODEL NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                        | 1405 000<br>BRK<br>PDC<br>4.80kw            | 1408 000<br>BRK<br>PDC<br>7.68kw | 1410 000<br>BRK<br>PDC<br>3410 000<br>9.60kw | 1415 BRK<br>15.36kw | 3415 000<br>15.36kw | 1419 BRK<br>19.20kw | 1425 BRK<br>24.96kw |
| NUMBER OF HEATER RACKS                                                                                                                                                                                                                                                                                                                                                                                                              | 1                                           | 2                                | 2                                            | 3                   | 3                   | 4                   | 5                   |
| TWG018A                                                                                                                                                                                                                                                                                                                                                                                                                             | L / L                                       | L / M                            | L / H                                        | --                  | --                  | --                  | --                  |
| 2TGB3F18 / 2TGB3F25 / TWG025A                                                                                                                                                                                                                                                                                                                                                                                                       | L / L                                       | L / M                            | L / M                                        | L / H               | L / H               | --                  | --                  |
| 2TGB3F30 / TWG030A                                                                                                                                                                                                                                                                                                                                                                                                                  | L / L                                       | L / L                            | L / L                                        | L / M               | L / M               | --                  | --                  |
| 2TGB3F36 / TWG036/037A                                                                                                                                                                                                                                                                                                                                                                                                              | L / L                                       | L / L                            | L / L                                        | L / M               | L / M               | --                  | --                  |
| 2TGB3F42 / TWG042A                                                                                                                                                                                                                                                                                                                                                                                                                  | L / L                                       | L / L                            | L / L                                        | L / H               | L / H               | --                  | --                  |
| TWG048A                                                                                                                                                                                                                                                                                                                                                                                                                             | L / L                                       | L / L                            | L / L                                        | L / H               | L / H               | L / M               | --                  |
| 2TGB3F48 / TWG060A                                                                                                                                                                                                                                                                                                                                                                                                                  | L / L                                       | L / L                            | L / L                                        | L / L               | L / L               | L / M               | L / H               |
| TEC / TWE018C                                                                                                                                                                                                                                                                                                                                                                                                                       | L / L                                       | L / M                            | L / M                                        | --                  | --                  | --                  | --                  |
| TEC / TWE024C                                                                                                                                                                                                                                                                                                                                                                                                                       | L / L                                       | L / L                            | L / L                                        | L / M               | L / M               | --                  | --                  |
| TEC / TWE030C                                                                                                                                                                                                                                                                                                                                                                                                                       | L / L                                       | L / L                            | L / L                                        | L / M               | L / M               | --                  | --                  |
| TEC / TWE036C                                                                                                                                                                                                                                                                                                                                                                                                                       | L / L                                       | L / L                            | L / L                                        | L / L               | L / L               | PS                  | --                  |
| TEC / TWE042C                                                                                                                                                                                                                                                                                                                                                                                                                       | L / L                                       | L / L                            | L / L                                        | L / H               | L / H               | AS                  | --                  |
| TWE048C                                                                                                                                                                                                                                                                                                                                                                                                                             | L / L                                       | L / L                            | L / L                                        | L / L               | L / L               | L / H               | L / H               |
| TEC3F48                                                                                                                                                                                                                                                                                                                                                                                                                             | L / L                                       | L / L                            | L / L                                        | L / L               | L / L               | L / H               |                     |
| TWE060C/D                                                                                                                                                                                                                                                                                                                                                                                                                           | AS                                          | L / L                            | L / L                                        | L / L               | L / L               | L / H               | L / H               |
| TEC3F60                                                                                                                                                                                                                                                                                                                                                                                                                             |                                             | L / L                            | L / L                                        | L / L               | L / L               | L / H               |                     |
| 4TEP/TWE018P                                                                                                                                                                                                                                                                                                                                                                                                                        | L / L                                       | L / M                            | L / M                                        | --                  | --                  | --                  | --                  |
| 4TEP/TWE024P                                                                                                                                                                                                                                                                                                                                                                                                                        | L / L                                       | L / L                            | L / L                                        | L / M               | L / M               | --                  | --                  |
| 4TEP/TWE030P                                                                                                                                                                                                                                                                                                                                                                                                                        | L / L                                       | L / L                            | L / L                                        | L / M               | L / M               | --                  | --                  |
| 4TEP/TWE036P                                                                                                                                                                                                                                                                                                                                                                                                                        | L / L                                       | L / L                            | L / L                                        | L / H               | L / H               | L / H               | --                  |
| 4TEP/TWE042P                                                                                                                                                                                                                                                                                                                                                                                                                        | L / L                                       | L / L                            | L / L                                        | PS                  | PS                  | L / H               | --                  |
| 4TEP/TWE048P                                                                                                                                                                                                                                                                                                                                                                                                                        | L / L                                       | L / L                            | L / L                                        | PS                  | PS                  | L / H               | L / H               |
| TWE060P                                                                                                                                                                                                                                                                                                                                                                                                                             | L / L                                       | L / L                            | L / L                                        | PS                  | PS                  | L / H               | L / H               |
| 4TEP/TWE063P                                                                                                                                                                                                                                                                                                                                                                                                                        | L / L                                       | L / L                            | L / L                                        | PS                  | PS                  | L / H               | L / H               |
| TEE3D/TEE3F/TWE031E                                                                                                                                                                                                                                                                                                                                                                                                                 | 700/1000                                    | 700/1000                         | 700/1000                                     | 700/1125            | 700/1125            | 1000/1350           | --                  |
| TEE3D/TEE3F/TWE037E                                                                                                                                                                                                                                                                                                                                                                                                                 | 600/700                                     | 600/900                          | 600/900                                      | 1000/1300           | 1000/1300           | 1000/1350           | --                  |
| TEE3D/TEE3F/TWE040E                                                                                                                                                                                                                                                                                                                                                                                                                 | 600/1100                                    | 600/1100                         | 600/1100                                     | 1100/1400           | 1100/1400           | 1100/1400           | 1100/1400           |
| TEE3D/TEE3F/TWE049E                                                                                                                                                                                                                                                                                                                                                                                                                 | 700/1400                                    | 700/1400                         | 700/1400                                     | 1400/1600           | 1400/1600           | 1400/1600           | 1400/1600           |
| TEE3D/TEE3F/TWE065E                                                                                                                                                                                                                                                                                                                                                                                                                 | 900/1500                                    | 900/1500                         | 900/1500                                     | 1200/1800           | 1200/1800           | 1200/1800           | 1200/1800           |
| TWE062E*                                                                                                                                                                                                                                                                                                                                                                                                                            | 900/1500                                    | 900/1500                         | 900/1500                                     | 1200/1800           | 1200/1800           | 1200/1800           | 1200/1800           |
| TEE3C31*                                                                                                                                                                                                                                                                                                                                                                                                                            | 1000/1130                                   | PS/AS                            | 1130/1350                                    | 1130/1350           | 1130/1350           | 1130/1350           | --                  |
| TEE3C37*                                                                                                                                                                                                                                                                                                                                                                                                                            | 600/900                                     | 900/1100                         | 1100/1450                                    | 1100/1450           | 1100/1450           | 1100/1450           | --                  |
| TEE3C40*                                                                                                                                                                                                                                                                                                                                                                                                                            | PS/AS                                       | 600/900                          | 900/1100                                     | 1100/1400           | 1100/1400           | 1100/1400           | 1100/1400           |
| TEE3C49*                                                                                                                                                                                                                                                                                                                                                                                                                            | 800/1100                                    | 800/1100                         | 800/1400                                     | 1100/1700           | 1100/1700           | 1400/1700           | 1400/1700           |
| TEE3C65*                                                                                                                                                                                                                                                                                                                                                                                                                            | 900/1200                                    | 900/1200                         | 1200/1500                                    | PS/AS               | PS/AS               | 1200/1500           | 1500/1800           |
| COOLING / HEATPUMP AIRFLOW<br><b>AS</b> = Heater application is affected based on whether the outdoor unit is a heat pump or cooling unit.<br><b>PS</b> = Minimum speed tap varies based on air handler installation position.<br>SEE AIR HANDLER NAMEPLATE OR PRODUCT DATA FOR AS/PS NOTES<br>000 = pigtails, BRK = contains circuit breakers, PDC = contains pull disconnect<br>* These units require BAYHTR*****C series heaters |                                             |                                  |                                              |                     |                     |                     |                     |

