

# INSTALLER'S GUIDE

18-HB13D7-5

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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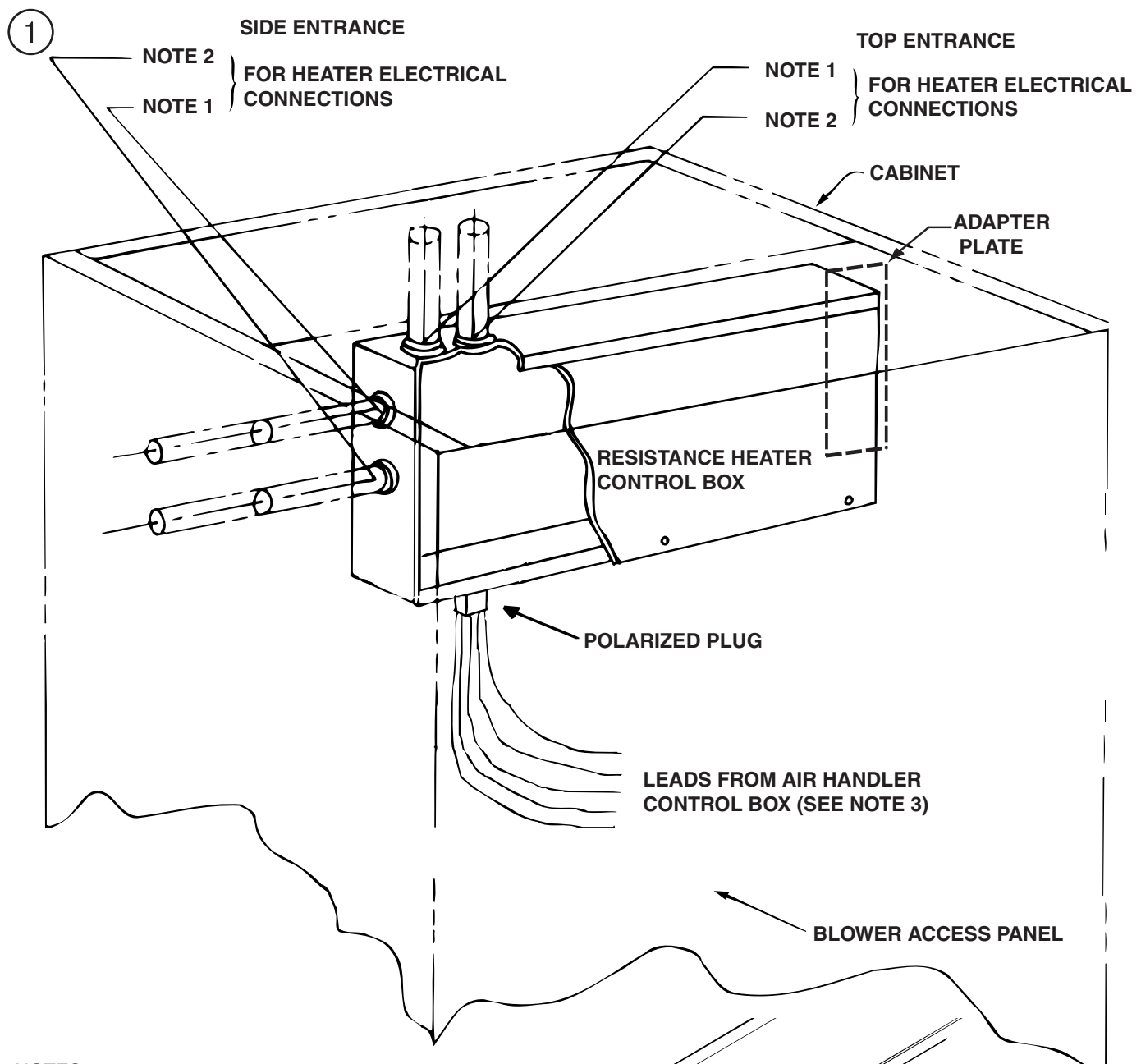
8. Connect the female polarized plug (disconnected in item 2 from the wire bundle next to the knock-outs) to the male polarized plug on the bottom of the heater control box
9. Refer to the heater minimum airflow chart on the air handler rating nameplate for the appropriate minimum blower speed tap to 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. Open

the plastic "AirTite" disconnect cover in the front panel opening by loosening the screw on the cover door. Cut out the fiberglass insulation only in the area where the disconnect will extend through the opening.

11. Replace all panels removed during the heater installation.

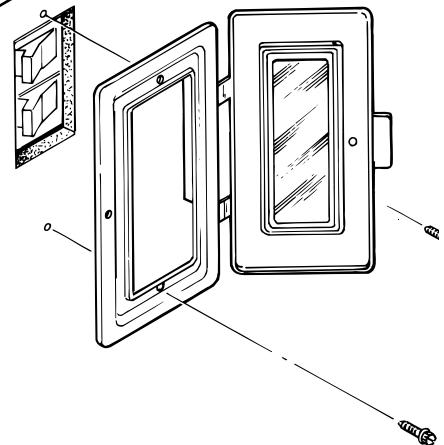
**IMPORTANT: The BAYHTR\*\* electric heat accessory, designed for use with this air handler, may include up to a combination of three 30 and / or 60 amp circuit breakers to provide an electrical disconnect for service personnel that is intended to help protect internal electrical components in the event of a short circuit or ground fault. As designed, the circuit breakers supplied in the BAYHTR\* accessory do not provide over-current protection of the branch circuit. Therefore, the branch circuit(s) shall be sized and protected according to the unit nameplate.**

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 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 BRK PDC 4.80kw	1408 000 BRK PDC 7.68kw	1410 000 BRK PDC 3410 000 9.60kw	1415 BRK 15.36kw	3415 000 15.36kw	1419 BRK 19.20kw	1425 BRK 24.96kw
NUMBER OF HEATER RACKS	1	2	2	3	3	4	5
TWG018A	L / L	L / M	L / H	--	--	--	--
TGB3F18 / TGB3F25 / TWG025A	L / L	L / M	L / M	L / H	L / H	--	--
TGB3F30 / TWG030A	L / L	L / L	L / L	L / M	L / M	--	--
TGB3F36 / TWG036/037A	L / L	L / L	L / L	L / M	L / M	--	--
TGB3F42 / TWG042A	L / L	L / L	L / L	L / H	L / H	--	--
TWG048A	L / L	L / L	L / L	L / H	L / H	L / M	--
TGB3F48 / 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
2TEE3C31	1000/1130	PS/AS	1130/1350	1130/1350	1130/1350	1130/1350	--
2TEE3C37	600/900	900/1100	1100/1450	1100/1450	1100/1450	1100/1450	--
2TEE3C40	PS/AS	600/900	900/1100	1100/1400	1100/1400	1100/1400	1100/1400
2TEE3C49	800/1100	800/1100	800/1400	1100/1700	1100/1700	1400/1700	1400/1700
2TEE3C65	900/1200	900/1200	1200/1500	PS/AS	PS/AS	1200/1500	1500/1800
4TEE3C01/4TEE3D01	1000/1130	PS/AS	1130/1350	1130/1350	1130/1350	1130/1350	--
4TEE3C02/4TEE3D02	600/900	900/1100	1100/1450	1100/1450	1100/1450	1100/1450	--
4TEE3C03/4TEE3D03	PS/AS	PS/AS	900/1100	PS/AS	PS/AS	PS/AS	--
4TEE3C04/4TEE3D04	PS/AS	PS/AS	900/1100	PS/AS	PS/AS	PS/AS	--
4TEE3C05/4TEE3D05	PS/AS	600/900	900/1100	1100/1400	1100/1400	1100/1400	1100/1400
4TEE3C06/4TEE3D06	800/800	PS/AS	PS/AS	PS/AS	PS/AS	PS/AS	PS/AS
4TEE3C07/4TEE3D07	800/1100	800/1100	800/1400	1100/1700	1100/1700	1400/1700	1400/1700
4TEE3C08/4TEE3D08	900/900	PS/AS	PS/AS	PS/AS	PS/AS	PS/AS	PS/AS
4TEE3C09/4TEE3D09	900/1200	900/1200	1200/1500	PS/AS	PS/AS	1200/1500	1500/1800
4TEE3C10/4TEE3D10	900/1200	900/1200	1200/1500	PS/AS	PS/AS	1200/1500	1500/1800

COOLING /  
HEATPUMP  
AIRFLOW

**AS** = Heater application is affected based on whether the outdoor unit is a heat pump or cooling unit.

**PS** = Minimum speed tap varies based on air handler installation position.

SEE AIR HANDLER NAMEPLATE OR PRODUCT DATA FOR AS/PS NOTES

## MODEL NUMBERS

000 = pigtails,  
BRK = contains circuit breakers,  
PDC = contains pull disconnect