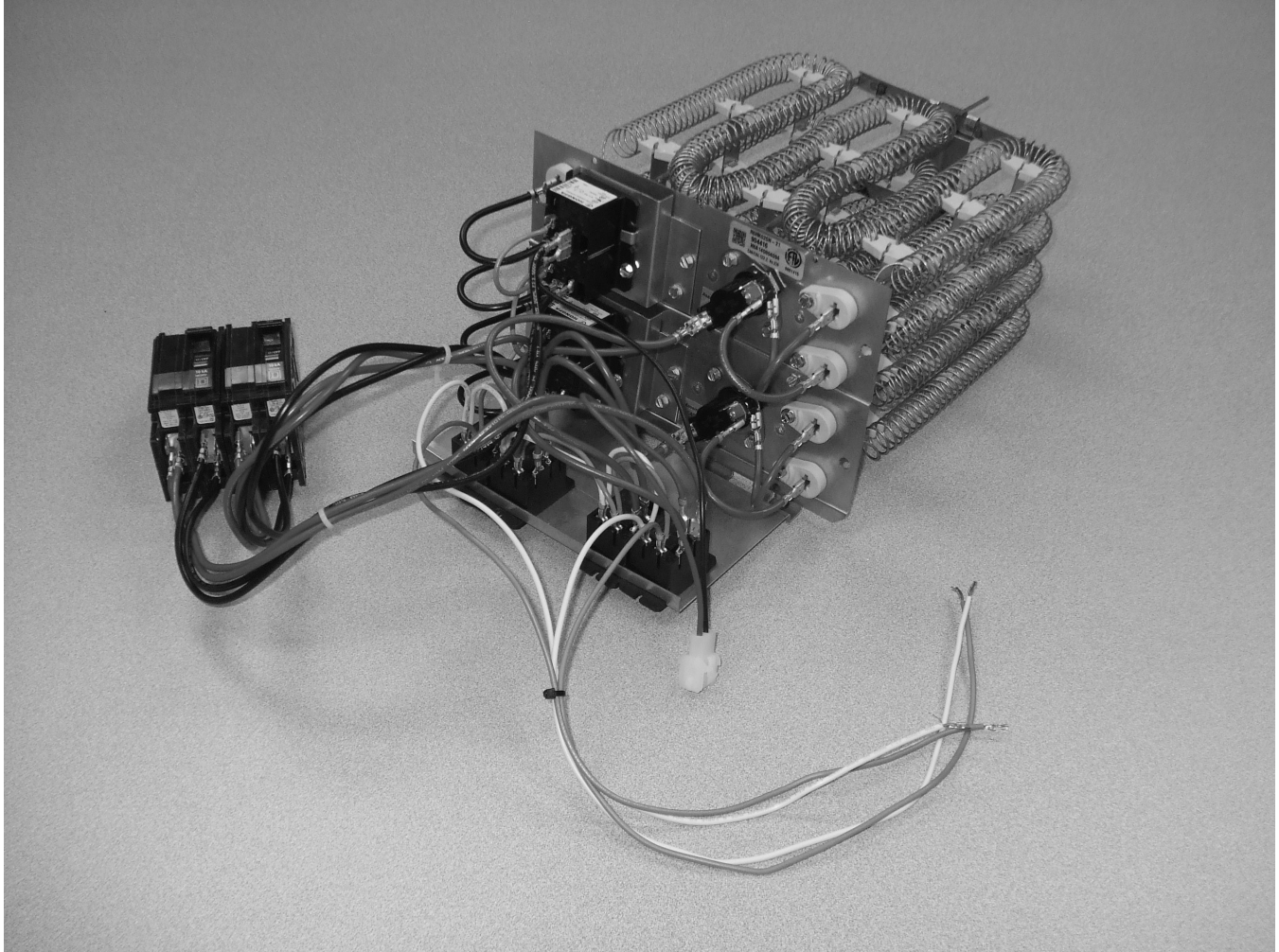


H8HK-A SERIES ELECTRIC HEATER KIT

INSTALLATION INSTRUCTIONS

INSTALLATION IN STANDARD & VARIABLE SPEED INDOOR AIR HANDLERS



IMPORTANT

ATTENTION INSTALLERS:

These instructions are primarily intended to assist qualified individuals experienced in the proper installation of heating and/or air conditioning appliances. Some local codes require licensed installation/service personnel for this type equipment. All installations must be in accordance with these instructions and with all applicable national and local codes and standards.

Read these instructions thoroughly before starting the installation. Follow all precautions and warnings contained within these instructions and on the unit. The instructions included with this heater kit are for installations in air handlers only.

DO NOT DESTROY. PLEASE READ CAREFULLY & KEEP IN A SAFE PLACE FOR FUTURE REFERENCE.

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IMPORTANT SAFETY INFORMATION

INSTALLER: Please read all instructions before servicing this equipment. Pay attention to all safety warnings and any other special notes highlighted in the manual. Safety markings are used frequently throughout this manual to designate a degree or level of seriousness and should not be ignored. **WARNING** indicates a potentially hazardous situation that if not avoided, could result in personal injury or death. **CAUTION** indicates a potentially hazardous situation that if not avoided, may result in minor or moderate injury or property damage.

WARNING:

ELECTRICAL SHOCK, FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury or property damage.

Improper servicing could result in dangerous operation, serious injury, death or property damage.

- **Before servicing, disconnect all electrical power to the unit.**
 - **When servicing controls, label all wires prior to disconnecting. Reconnect wires correctly.**
 - **Verify proper operation after servicing.**
-

GENERAL INFORMATION

About the heater kit

H8HK-A Series electric heater kit is approved for field installation in B6 Air Handlers as replacement parts (only using 190°F Limits), and B64 air handlers. All sizes are available with factory-provided circuit-breakers for short circuit protection and to provide a disconnecting means. Also available are 5, 8, and 10 kW electric heater kits without circuit-breakers. Refer to the National Electric Code (ANSI/NFPA 70) and applicable local codes for over-current protection and disconnect requirements.

NOTES:

- The 15, 20, and 24 kW electric heater kits are NOT approved for installation in A-cabinet B64 air handlers.
- The 20 and 24 kW heater kits are NOT approved for installation in B-cabinet B64 air handlers. For all heater kit applications, use [Table 5 and Table 6 \(page 14\)](#), [Table 7 \(page 15\)](#), [Table 8 \(page 16\)](#), [Table 9 \(page 17\)](#) and [Figure 1 \(page 8\)](#).
- These instructions are written assuming the air handler is in the upflow position (outlet facing up). For horizontal and downflow applications, it is recommended that the electric heater kit be installed prior to installation of the air handler.
- Use caution when handling or installing this component. Personal injury can occur from sharp metal edges present in all sheet metal constructed equipment.

Clearances to Combustibles

Standard Air Handlers

All installations of H8HK-A electric heater kits in standard air handlers are approved for zero-clearance to combustibles when the minimum electric heat airflow is set as directed in these instructions.

Variable Speed Air Handlers

All installations of H8HK-A electric heater kits in variable speed air handlers are approved for zero-clearance to combustibles when the minimum electric heat airflow is set as directed in these instructions.

ELECTRICAL SUPPLY

- All electrical connections must be in compliance with all applicable local codes with the current revision of the National Electric Code (ANSI/NFPA 70). For Canadian installations the electrical connections and grounding shall comply with the current Canadian Electrical Code (CSA C22.1 and/or local codes).
- If the air handler was previously installed without electric heat, the existing supply wiring may not be sufficient to carry the increased load. If installing electric heat in the air handler, the supply wiring can be aluminum or copper. The supplied circuit breakers and terminal blocks are approved for either wire type. Make sure to follow all of the rating information on the circuit breaker or terminal block and that the supply wiring is sized according to the current NEC codes and any other state or local codes. See the rating label or [Table 6 \(page 14\)](#), [Table 7 \(page 15\)](#), [Table 8 \(page 16\)](#), [Table 9 \(page 17\)](#) for minimum circuit ampacities and maximum overcurrent protection.
- All heater kits are supplied from the factory configured for use with one or more supply circuits. 5 & 10 kW heater kits are configured for use with a single supply circuit (Circuit A). 15 & 20 kW heater kits are configured for use with 2 circuits (Circuit A & Circuit B). 24 kW heater kits are configured for use with 3 circuits (Circuit A, Circuit B, & Circuit C). See [Table 3 \(page 12\)](#) & [Table 4 \(page 13\)](#) for additional information.

NOTE: If a single supply is desired, accessory kit #913874 is required to convert to single circuit connection.

Power Wiring

All wiring must comply with the current revision of the National Electric Code and must be sized for the minimum ampacities as listed on the unit data label or in [Table 6 \(page 14\)](#), [Table 7 \(page 15\)](#), [Table 8 \(page 16\)](#), [Table 9 \(page 17\)](#). Refer to [Figures 13 \(page 18\)](#), [14 \(page 19\)](#), [15 \(page 20\)](#), [16 \(page 21\)](#), and [17 \(page 22\)](#) for proper connections.

If a single circuit adaptor kit is used it may need to be re-configured for some applications. Remove the single circuit adaptor kit cover and verify that the lugs are configured correctly for the application. If the lugs are not configured for the application, reference the instructions included with the kit and modify the configuration. Install the single circuit adaptor kit (if used) in the line side ("on" end) of the circuit breakers. Tighten the lugs securely (45 in-lbs recommended).

Connect the supply wiring to the circuit breaker(s), single circuit adaptor kit, or terminal block. Tighten the lugs securely.

When using multiple supply circuits verify that the supply sized for circuit "A" is connected to the circuit breaker that is connected to the top element assembly.

Install metal circuit breaker line cover on the left side of the circuit breaker to cover the supply wires.

INSTRUCTIONS FOR SWAPPING LIMITS

1. Refer to the "Limit Switch Opening Temperatures Required for Each Heater Kit Combination" data in [Table 3 \(page 12\)](#), [Table 4 \(page 13\)](#), and [Table 5 \(page 14\)](#) to identify if a limit needs to be swapped before installing heater kit.
2. Set the thermostat to the lowest temperature setting.
3. Turn off all electrical power to the air handler.
4. Remove upper access door from the air handler.
5. To swap a limit switch, disconnect all wires from the limit (you will connect the wires of the new limit in the exact same way).
6. Remove the two screws that attach the limit to the metal plate and save them to install the new limit.
7. Attach the new limit (as directed by [Table 3](#), [Table 4](#), and [Table 5](#)) with the two screws and tighten until snug.
8. Connect the wires to the spade connectors on the new limit switch in the same exact way that you removed them, or refer to the corresponding heater kit wiring diagram.

NOTE: On [Table 3](#), [Table 4](#), and [Table 5](#), Limit #1 is defined as the limit installed in the closest possible position to the blower, and Limit #2 is 2nd closest to the blower. Also keep in mind, the airflow direction label on the heater kit plate should always point in the direction of the airflow when installed.

ELEMENT INSTALLATION

1. Refer to "Limit Switch Opening Temperature(s) Required for Each Heater Kit Combination", [Table 3](#), [Table 4](#), and [Table 5](#), to identify if a limit needs to be swapped before installing Heater Kit.
2. Set the thermostat to the lowest temperature setting.
3. Turn off all electrical power to the air handler.
4. Remove the upper access door from the air handler.
5. Remove the screws securing the upper element close-off plate from the back of the air handler control box.
6. Remove the element close-off plate and set the screws aside. Do not discard the screws. **NOTE:** For 2-tiered electric heater kits, remove two close-off plates. For 3-tiered electric heater kits remove all 3 close-off plates. The close off plates should be removed from the bottom up in ascending order.
7. Insert the element assembly into the opening in the air handler control box being careful not to damage the element wire or the ceramic element supports. **NOTE:** Heating element alignment rods will slide into alignment holes in the back of the air handler element box. **NOTE:** Install Heater Kit in the orientation where the airflow direction matches the airflow direction label on the Heater Kit plate.

8. If blue blower limit wires are NOT present(This will be the case if you are replacing an old H8HK heater kit with a new H8HK-A heater kit):

Single Stage Board: Connect the **W** wires from the control board (**white**), AC relay (**white**) and the **W** wire from the thermostat with one of the supplied wire nuts. Connect the **C** wires from the board (**gray**), AC relay (**gray**) and **C** wire (if supplied) from the thermostat with one wire nut.

Two Stage Board: Place the **W1** wire from the thermostat and the **white** wire from the AC relay under the **W1** screw terminal on the board. Place the **C** wire from the thermostat (if present) and the **gray** wire from the AC relay underneath the **C** terminal on the control board.

If blue blower limit wires ARE present:

Single Stage Board: Connect **white** wire from the AC relay to one of the **blue** blower limit wires with a supplied wire nut. Then, connect the other **blue** blower limit wire to the **W** wire from the control board (**white**) with a supplied wire nut. Connect the **C** wire from the board (**gray**), AC relay (**gray**) and **C** wire (if supplied) from the thermostat with one wire nut.

Two Stage Board: Locate the supplied loose **white** wire with two stripped ends supplied with the air handler in it's parts package. Place the **W1** wire from the thermostat and one end of the supplied stripped **white** wire under the **W1** screw terminal on the board. Connect the other end of the supplied stripped **white** wire with one of the **blue** blower limit wires using a supplied wire nut. Connect the other **blue** blower limit wire with the **white** wire from the AC relay using a supplied wire nut. Place the **C** wire from the thermostat (if present) and the **gray** wire from the AC relay underneath the **C** terminal on the control board.

9. Single Stage Board: Connect the **W** wires from the control board (**white**), AC relay (**white**) and the **W** wire from the thermostat with one of the supplied wire nuts. Connect the **C** wires from the board (**grey**), AC relay (**grey**) and **C** wire (if supplied) from the thermostat with one wire nut.

Two-Stage Board: Place the **W1** wire from the thermostat and the **white** wire from the AC relay under the **W1** screw terminal on the board. Place the **C** wire from the thermostat (if present) and the **grey** wire from the AC relay underneath the **C** terminal on the control board.

10. Connect the 2-Pin Power plug from the element assembly into the unit's 2-Pin power plug. Connect the 7-Pin Harness from the element assembly to the unit's circuit board.

NOTE: A wiring diagram and a rating label are supplied with the electric heater kit. Affix the wiring diagram to the blower housing.

- When installing the electric heater kit into a standard air handler, affix the supplied rating label over the electrical data section of the air handler unit data label located on the lower access door.

- When installing the electric heater kit into a variable speed air handler, the rating label supplied with the kit will NOT be used. Check the appropriate block on the air handler ratings label located on the lower access door.
12. Install the circuit breaker bracket inside of the air handler. Position the tab on the bottom of the bracket into the slot of the control panel box. See [Figure 2 \(page 8\)](#) for proper location of bracket.
13. Slide the bracket forward and align the screw holes with the holes in the bottom of the control panel box. Secure the bracket to the air handler with the supplied screws.

Electric Heater Kits with Circuit Breakers

NOTE 1: Circuit breakers supplied with the H8HK electric heater kit are for short-circuit protection of the internal wiring and to serve as a unit disconnect. They DO NOT provide over-current protection of the supply wiring. Over-current protection of the supply wiring must be provided at the distribution panel and sized as shown in [Table 6 \(page 14\)](#), [Table 7 \(page 15\)](#), [Table 8 \(page 16\)](#), and [Table 9 \(page 17\)](#) or the unit data label, and in accordance with the NEC and all applicable local codes.

NOTE 2: In some cases, the over-current protection specified in [Table 6](#), [Table 7](#), [Table 8](#), and [Table 9](#) (or the unit data label) is less than the 60 amp rating of the circuit breakers used in the H8HK-A electric heater kit. This difference may occur if the function of the over-current protection required at the distribution panel (field supplied) and the function of the circuit breakers in the H8HK-A electric heater kit are different.

5, 8, & 10 kW Electric Heater Kits

- Snap the circuit breaker onto the circuit breaker bracket. The circuit breaker must be positioned with the 1/4" tab terminals to the right as shown in [Figure 3 \(page 8\)](#).
- Remove the lower circuit breaker knockout from the air handler upper access door.

15, 20 & 24 kW Electric Heater Kits

NOTE 1: The heavy red and black supply leads are bundled by circuit with wire ties at the factory. The bundle coming from the top element tier is circuit "A".

NOTE 2: The element assembly is right-side-up when the limits are on the right side). The bundle coming from the second element tier is circuit "B". The bundle coming from the bottom element tier is circuit "C".

- Snap the circuit breaker onto the circuit breaker bracket. The circuit breaker must be positioned with the 1/4" tab terminals to the right as shown in [Figure 3 \(page 8\)](#).
- Remove all necessary circuit breaker knockouts in the air handler upper access door.

Line Cover

Heater Kits with circuit breakers are supplied with a line cover shown in [Figure 4 \(page 8\)](#). The line cover is required by code in order to protect installers from the line/supply wiring. The line cover should be installed as shown in [Figure 5 \(page 8\)](#).

Electric Heater Kits without Circuit Breakers

1. Attach the supplied power terminal block to the circuit breaker bracket with the supplied screws as shown in [Figure 6 \(page 8\)](#).
2. Using the 1/4" terminals, connect the red supply wire(s) from the element assembly to one pole of the terminal block and connect the black wires to the other pole.

Staged Heat

All Single-phase heater kits are internally staged using B6 and B64 air handler circuit board logic. B6 and B64 single stage air handlers will not stage the heater kit. B6 and B64 two-stage air handlers may stage the heat kW turned on with either a low or high heat call. All 3-phase heater kits are not equipped for internal staging. Refer to the installation instructions supplied with the air handler for additional staging information.

Air Baffle Installation and Usage

1. To identify if a baffle needs to be installed into the blower housing, refer to the "Limit Switch Opening Temperatures Required for Each Heater Kit Combination" [Table 2 \(page 11\)](#). Asterisks in the table show where a baffle is used.
2. To install the baffle properly, find the paper template included in the heater kit packaging. Two copies have been provided in case a mistake occurs.
3. Set the thermostat to the lowest temperature setting.
4. Turn off all electrical power to the air handler.
5. Remove blower access door and coil access door from the air handler.
6. Remove mid-cabinet support bracket to be able to slide blower housing out of cabinet.
7. Be aware of where the **blue** blower limit wires on the blower housing are located and how the ends are located in the blower cabinet of the air handler. (See [Figure 8](#) to see blower limit wires on a blower housing)
8. Remove the blower housing by unscrewing all of the screws holding the blower to the blower deck, and then slide the blower housing out of the cabinet.
9. Pull **blue** blower limit wires out of electrical compartment, and disconnect any blower motor wires to make this process easier.
10. Lay the paper template onto the flat section of the blower housing, shown in the picture below, being sure to match the correct corner of the template to the corresponding corner of the blower housing, shown in [Figure 9](#).
11. Tape to secure, or physically hold the template into the corner of the blower housing without bending it. The locations of the three dots on the template are where you will drill out three clearance holes with a 7/32" drill bit into the blower housing (5mm drill bit also works).

NOTE: Poking holes in the paper template beforehand will make it easy to mark the sheet metal when you overlay the template.

12. Once the clearance holes are drilled, insert the baffle into the outlet of the blower housing, line up the holes,

and screw in the 3 supplied #10 self-drilling screws until snug, being sure not to strip any sheet metal. Reference [Figure 11](#) and [Figure 12](#) to see how this should look when completed.

13. Slide the blower housing back into the cabinet and reconnect any blower limit wires according to the corresponding heater kit wiring diagram, as well as any blower motor wires according to their corresponding air handler wiring diagram.
14. Reattach mid-cabinet support bracket, and then replace the blower access door and coil access door.

MOTOR SPEED SELECTION

Standard Air Handlers

The blower speed is preset at the factory for operation at the same speed for heating and cooling, by using the blower motor jumpering terminal on the blower motor and connecting it to the desired speed with both the red and black wires connected to the jumpering terminal. For optimum system performance and comfort, it may be necessary to change the factory set speed. To change the blower speed:

WARNING:

To avoid the risk of electric shock, personal injury, or death, disconnect all electrical power to the unit before performing any maintenance or service. The unit may have more than one electrical power supply.

1. Disconnect all electrical power to the unit and remove the upper door.
2. Remove the black and red wires from the blower motor jumping terminal.
3. Connect the heating speed wire (red) and the cooling speed wire (black) to the desired blower speed marked on the terminal block of the blower motor. If needed, re-use the motor jumping terminal.

IMPORTANT NOTE

After changing the blower speed setting, make sure to bundle and insulate any unused blower motor leads so that they will not make contact with the air handler cabinet or non-insulated live parts.

Standard 3 Speed Motors

Terminal 4 = Hi speed

Terminal 5 = Med speed

Terminal 6 = Low speed

For a Table of Minimum heating speeds, limit settings, and baffle usage, see [Table 1 \(page 10\)](#). Also see Clearances to Combustibles ([page 4](#)).

4. Replace the upper door and secure it to the unit.
5. Restore power to the unit.

Variable Speed Air Handlers

The minimum electric heat airflow is selected by setting switches on the air handler circuit board. Selecting the minimum electric heat airflow sets the minimum air flow that will be produced whenever electric heater kits are energized. When the electric heater kits are energized along with a heat pump, the airflow may be higher depending on the basic cooling/heat-pump airflow setting. Reference the installation instructions supplied with the air handler for additional airflow information.

FIGURES & TABLES

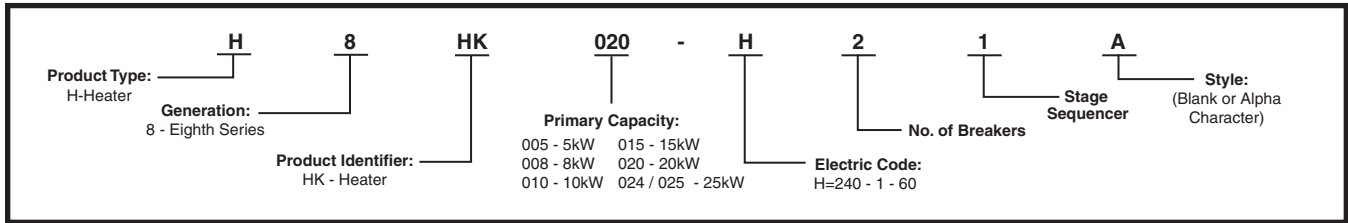


Figure 1. Heater Kit Identification Code

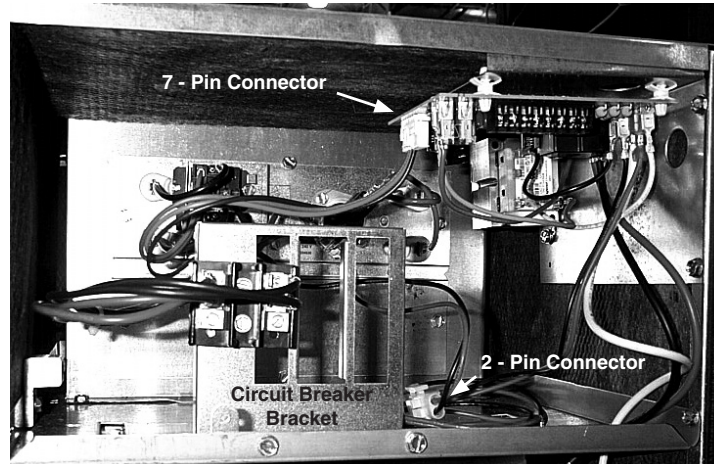


Figure 2. Sample Installation
(shown with access door removed)

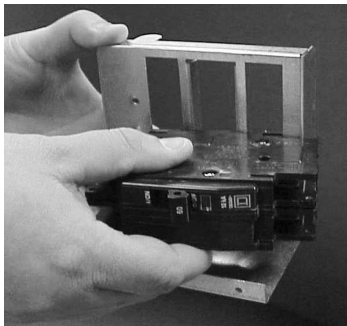


Figure 3. Installation of Circuit Breakers

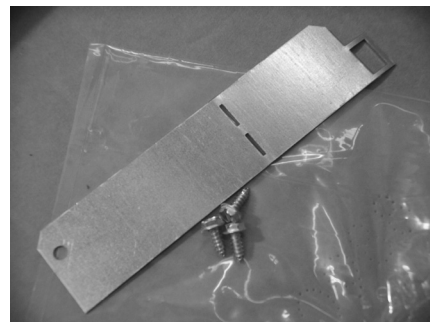


Figure 4. Line Cover

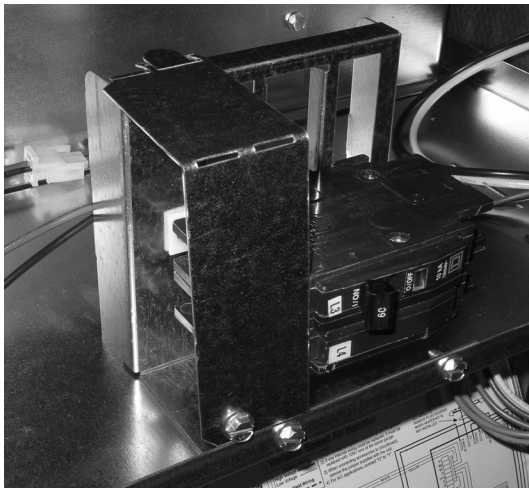


Figure 5. Line Cover Installed

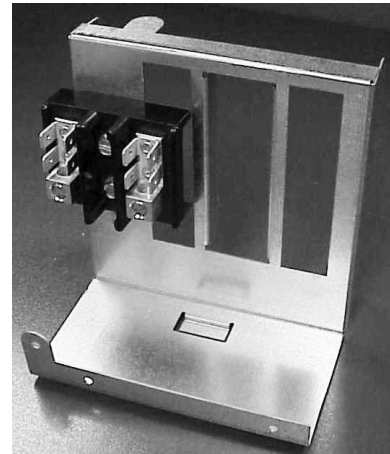


Figure 6. Circuit Breaker Bracket with
Terminal Block Installed

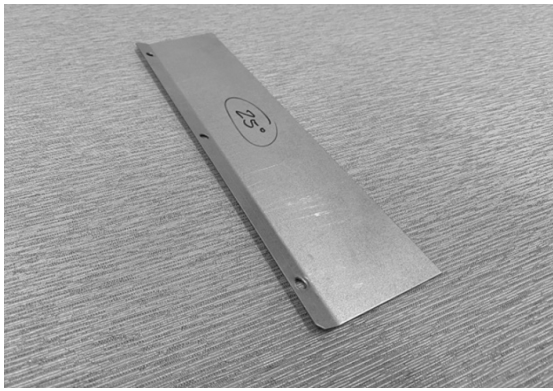


Figure 7. Blower Housing Air Baffle



Figure 8. Blower Limit Switches/Wires

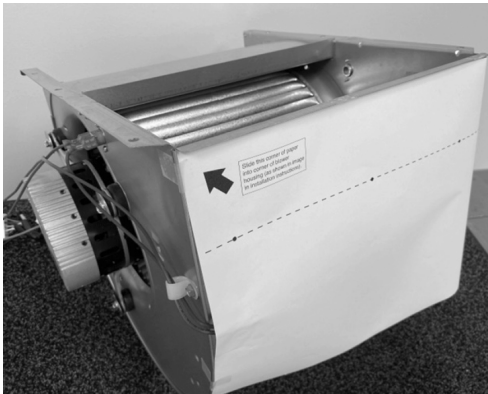


Figure 9. Template for Air Baffle Installation



Figure 10. Installed Air Baffle, View 1



Figure 11. Installed Air Baffle, View 2

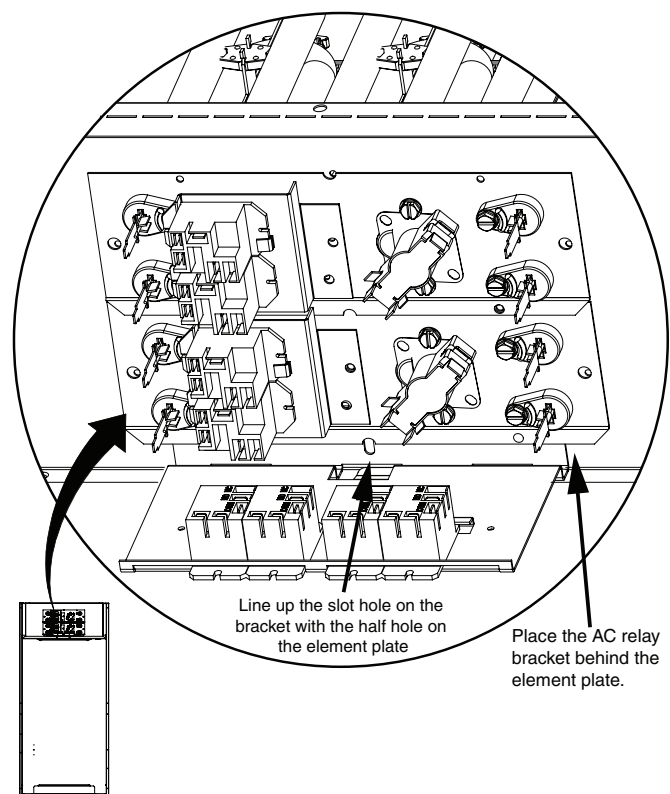


Figure 12. H8HK Heater Kit Installation

		Minimum Recommended Heating Blower Speed (Zero Clearance Install)							
Air Handler Model	Blower Orientation	H8HK005H-01A	H8HK005H-11A	H8HK008H-01A	H8HK008H-11A	H8HK010H-01A	H8HK010H-11A	H8HK015H-21A	H8HK020H-21A
		4.8 kW	4.8 kW	7.5 kW	7.5 kW	9.6 kW	9.6 kW	14.4 kW	19.2 kW
B64BMM(0,X) 18K-A	ALL	LOW	LOW	MED.	MED.	-	-	-	-
B64BMM(0,X) 24K-A	ALL	LOW	LOW	MED.	MED.	-	-	-	-
B64BMM(0,X) 24K-B	Upflow/Downflow	LOW	LOW	MED.	MED.	MED.	MED.	-	-
	Horiz. Right/Left	MED.	MED.	MED.	MED.	HIGH	HIGH	-	-
B64BMM(0,X) 30K-B	Upflow/Downflow	LOW	LOW	MED.	MED.	HIGH	HIGH	-	-
	Horiz. Right/Left	LOW	LOW	MED.	MED.	MED.	MED.	-	-
B64BMM(0,X) 36K-B	ALL	LOW	LOW	LOW	LOW	MED.	MED.	MED.	-
B64BMM(0,X) 42K-C	Upflow/Downflow	LOW	LOW	LOW	LOW	MED.	MED.	HIGH	HIGH
	Horiz. Right/Left	LOW	LOW	LOW	LOW	MED.	MED.	HIGH	HIGH*
B64BMM(0,X) 48K-C	Upflow	LOW	LOW	LOW	LOW	LOW	LOW	MED.	MED.
	Horiz. Right/Left	LOW	LOW	MED.	MED.	HIGH	HIGH	LOW*	-
	Downflow	LOW	LOW	LOW	LOW	MED.	MED.	HIGH	-

*Included 25-Degree Air Baffle shall be installed in blower housing of air handler.

Note: Dashes denote combinations that are not allowed.

Note: All B64 Air Handlers have 2 blower housing limits installed (130F opening temperature), field-wired into the low voltage circuit of the H8HK*A heater kit.

Table 1. Minimum Recommended Heating Blower Speeds for B64BMM(0,X) Air Handlers

		Minimum Heating Airflows for Heater Kit Combination (CFM)								
Air Handler Model	Blower Orientation	H8HK005H-01A	H8HK005H-11A	H8HK008H-01A	H8HK008H-11A	H8HK010H-01A	H8HK010H-11A	H8HK015H-21A	H8HK020H-21A	H8HK024H-31A
		4.8 kW	4.8 kW	7.5 kW	7.5 kW	9.6 kW	9.6 kW	14.4 kW	19.2 kW	24.0 kW
B64EMMX 24K-A	Upflow & Horiz. Right/Left	765	765	1095	1095	1305	1305	-	-	-
	Downflow	765	765	1060	1060	1195	1195	-	-	-
B64EMMX 24K-B	Upflow/Downflow	540	540	835	835	995	995	1465	-	-
	Horiz. Right/Left	540	540	765	765	995	995	1315	-	-
B64EMMX 30K-A	Upflow/Downflow	765	765	1060	1060	1265	1265	-	-	-
	Horiz. Right/Left	650	650	975	975	1095	1095	-	-	-
B64EMMX 30K-B	Upflow/Downflow	695	695	920	920	1060	1060	-	-	-
	Horiz. Right/Left	765	765	1210	1210	1410	1410	-	-	-
B64EMMX 36K-B	ALL	540	540	835	835	1060	1060	1460	-	-
B64EMMX 42K-B	Upflow	695	695	920	920	1060	1060	1410	-	-
	Horiz. Right/Left	540	540	765	765	995	995	1315	-	-
	Downflow	695	695	920	920	1060	1060	-	-	-
B64EMMX 48K-C	ALL	510	510	850	850	975	975	1465	1800	1800

Notes:

Airflow values above are measured at 0.30 in W.C. of static pressure.

Dashes denote combinations that are not allowed.

All B64 Air Handlers have 2 blower housing limits installed (130F opening temperature), field-wired into the low voltage circuit of the H8HK*A heater kit.

Table 2. Minimum Recommended Heating Blower Speeds for B64EMMX Air Handlers

		Limit Switch Combinations for B64BMM(0,X) Air Handlers							
Air Handler Model	Blower Orientation	H8HK005H-01A	H8HK005H-11A	H8HK008H-01A	H8HK008H-11A	H8HK010H-01A	H8HK010H-11A	H8HK015H-21A	H8HK020H-21A
		4.8 kW	4.8 kW	7.5 kW	7.5 kW	9.6 kW	9.6 kW	14.4 kW	19.2 kW
B64BMM(0,X) 18K-A	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-	-	-
B64BMM(0,X) 24K-A	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-	-	-
B64BMM(0,X) 24K-B	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-
B64BMM(0,X) 30K-B	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-
B64BMM(0,X) 36K-B	Upflow/Downflow	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-
	Horizontal Right	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 205F #2: 205F	-
	Horizontal Left	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-
B64BMM(0,X) 42K-C	Upflow/Downflow	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	#1: 190F #2: 190F
	Horiz. Right/Left	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 205F #2: 190F	#1: 205F* #2: 190F
B64BMM(0,X) 48K-C	Upflow	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	#1: 190F #2: 190F
	Horiz. Right/Left	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 215F	#1: 215F	#1: 190F* #2: 190F	-
	Downflow	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 205F #2: 205F	-

*Included 25-Degree Air Baffle shall be installed in blower housing of air handler.

Any limit switch specified other than 190 requires a limit change.

Note: Limit #1 is installed closest to blower. Limit #2 is installed in 2nd closest position to blower.

Note: Dashes denote combinations that are not allowed.

Note: All B64 Air Handlers have 2 blower housing limits installed (130F opening temperature), field-wired into the low voltage circuit of the H8HK*A heater kit.

Table 3. Limit Switch Combinations for B64BMM(0,X) Air Handlers

		Limit Switch Opening Temperature(s) Required for Each Heater Kit Combination								
Air Handler Model	Blower Orientation	H8HK005H-01A	H8HK005H-11A	H8HK008H-01A	H8HK008H-11A	H8HK010H-01A	H8HK010H-11A	H8HK015H-21A	H8HK020H-21A	H8HK024H-31A
		4.8 kW	4.8 kW	7.5 kW	7.5 kW	9.6 kW	9.6 kW	14.4 kW	19.2 kW	24.0 kW
B64EMMX 24K-A	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-	-
B64EMMX 24K-B	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	-	-
B64EMMX 30K-A	Upflow/ Downflow	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-	-
	Horiz. Right/Left	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 215F	#1: 215F	-	-	-
B64EMMX 30K-B	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-	-
B64EMMX 36K-B	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	-	-
B64EMMX 42K-B	Upflow	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	-	-
	Horiz. Right/Left	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	-	-
	Downflow	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-	-
B64EMMX 48K-C	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	#1: 190F #2: 190F	#1: 190F #2: 190F #3: 190F

Notes:

All B64 Air Handlers have 2 blower housing limits installed (130F opening temperature), field wired into the low voltage circuit of the H8HK*A heater kit.

Dashes denote combinations that are not allowed.

Any limit specified other than 190F requires a limit change.

Table 4. Limit Switch Combinations for B64EMMX Air Handlers

		Limit Switch Opening Temperature(s) Required for Each Heater Kit Combination								
Air Handler Model	Blower Orientation	H8HK005H-01A	H8HK005H-11A	H8HK008H-01A	H8HK008H-11A	H8HK010H-01A	H8HK010H-11A	H8HK015H-21A	H8HK020H-21A	H8HK024H-31A
		4.8 kW	4.8 kW	7.5 kW	7.5 kW	9.6 kW	9.6 kW	14.4 kW	19.2 kW	24.0 kW
B64VMMX 24K-A	Upflow/Downflow	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	-	-	-
	Horiz. Left/Right	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 205F	#1: 205F	-	-	-
B64VMMX 24K-B	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	-	-
B64VMMX 36K-B	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	-	-
B64VMMX 48K-C	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	#1: 190F #2: 190F	#1: 190F #2: 190F #3: 190F
B64VMMX 60K-C	ALL	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F	#1: 190F #2: 190F	#1: 190F #2: 190F	-

Notes:

All B64 Air Handlers have 2 blower housing limits installed (130F opening temperature), field wired into the low voltage circuit of the H8HK*A heater kit.

Dashes denote combinations that are not allowed.

Any limit specified other than 190F requires a limit change.

Table 5. Limit Switch Combinations for B64VMMX Air Handlers

Model Number H8HK-	VOLTAGE	HTR AMP-A	HTR AMP-B	HTR AMP-C	HTR AMP
None	240/208V	-	-	-	-
005H-**A	240/208V	20.0/17.3	-	-	20.0/17.3
008H-**A	240/208V	31.7/27.4	-	-	31.7/27.4
010H-**A	240/208V	40.0/34.6	-	-	40.0/34.6
015H-**A	240/208V	40.0/34.6	20.0/17.3	-	60.0/51.9
020H-**A	240/208V	40.0/34.6	40.0/34.6	-	80.0/69.2
024H-**A	240/208V	40.0/34.6	40.0/34.6	20.0/17.3	100.0/86.5

Table 6. Heater Kit Current

ELECTRICAL RATINGS FOR B64BMM(0,X) AIR HANDLERS																		
				VOLTAGE: 240V				VOLTAGE: 208V										
				MINIMUM CIRCUIT AMPACITY (MCA)				MAX OVER-CURRENT PROTECTION (MOP)				MINIMUM CIRCUIT AMPACITY (MCA)					MAX OVER-CURRENT PROTECTION (MOP)	
Cabinet	Capacity (x1000 BTU's)	Model Number H8HK-	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT
A	18	None	1.6	-	-	1.6	15	-	-	15	1.6	-	-	1.6	15	-	-	15
		005H- **A	26.625	-	-	26.6	30	-	-	30	23.260	-	-	23.3	25	-	-	25
		008H- **A	41.208	-	-	41.2	45	-	-	45	35.880	-	-	35.9	40	-	-	40
A	24	None	3.1	-	-	3.1	15	-	-	15	3.1	-	-	3.1	15	-	-	15
		005H- **A	28.125	-	-	28.1	30	-	-	30	24.760	-	-	24.8	25	-	-	25
		008H- **A	42.708	-	-	42.7	45	-	-	45	37.380	-	-	37.4	40	-	-	40
B	24	None	3.1	-	-	3.1	15	-	-	15	3.1	-	-	3.1	15	-	-	15
		005H- **A	28.125	-	-	28.1	30	-	-	30	24.760	-	-	24.8	25	-	-	25
		008H- **A	42.708	-	-	42.7	45	-	-	45	37.380	-	-	37.4	40	-	-	40
		010H- **A	53.125	-	-	53.1	60	-	-	60	46.394	-	-	46.4	50	-	-	50
		None	2.6	-	-	2.6	15	-	-	15	2.6	-	-	2.6	15	-	-	15
		005H- **A	27.625	-	-	27.6	30	-	-	30	24.260	-	-	24.3	25	-	-	25
B	30	008H- **A	42.208	-	-	42.2	45	-	-	45	36.880	-	-	36.9	40	-	-	40
		010H- **A	52.625	-	-	52.6	60	-	-	60	45.894	-	-	45.9	50	-	-	50
		None	3.1	-	-	3.1	15	-	-	15	3.1	-	-	3.1	15	-	-	15
B	36	005H- **A	28.125	-	-	28.1	30	-	-	30	24.760	-	-	24.8	25	-	-	25
		008H- **A	42.708	-	-	42.7	45	-	-	45	37.380	-	-	37.4	40	-	-	40
		010H- **A	53.125	-	-	53.1	60	-	-	60	46.394	-	-	46.4	50	-	-	50
		015H- **A	50	28.125	-	78.1	50	30	-	80	43.269	24.760	-	68	45	25	-	70
		None	5.4	-	-	5.4	15	-	-	15	5.4	-	-	5.4	15	-	-	15
		005H- **A	30.375	-	-	30.4	35	-	-	35	27.010	-	-	27	30	-	-	30
C	42	008H- **A	44.958	-	-	45	45	-	-	45	39.630	-	-	39.6	40	-	-	40
		010H- **A	55.375	-	-	55.4	60	-	-	60	48.644	-	-	48.6	50	-	-	50
		015H- **A	50	30.375	-	80.4	50	35	-	90	43.269	27.010	-	70.3	45	30	-	80
		020H- **A	50	55.375	-	105.4	50	60	-	110	43.269	48.644	-	91.9	45	50	-	100
		None	5.4	-	-	5.4	15	-	-	15	5.4	-	-	5.4	15	-	-	15
		005H- **A	30.375	-	-	30.4	35	-	-	35	27.010	-	-	27	30	-	-	30
C	48	008H- **A	44.958	-	-	45	45	-	-	45	39.630	-	-	39.6	40	-	-	40
		010H- **A	55.375	-	-	55.4	60	-	-	60	48.644	-	-	48.6	50	-	-	50
		015H- **A	50	30.375	-	80.4	50	35	-	90	43.269	27.010	-	70.3	45	30	-	80
		020H- **A	50	55.375	-	105.4	50	60	-	110	43.269	48.644	-	91.9	45	50	-	100
		None	5.4	-	-	5.4	15	-	-	15	5.4	-	-	5.4	15	-	-	15
		005H- **A	30.375	-	-	30.4	35	-	-	35	27.010	-	-	27	30	-	-	30
C	48	008H- **A	44.958	-	-	45	45	-	-	45	39.630	-	-	39.6	40	-	-	40
		010H- **A	55.375	-	-	55.4	60	-	-	60	48.644	-	-	48.6	50	-	-	50
		015H- **A	50	30.375	-	80.4	50	35	-	90	43.269	27.010	-	70.3	45	30	-	80
		020H- **A	50	55.375	-	105.4	50	60	-	110	43.269	48.644	-	91.9	45	50	-	100
		None	5.4	-	-	5.4	15	-	-	15	5.4	-	-	5.4	15	-	-	15
		005H- **A	30.375	-	-	30.4	35	-	-	35	27.010	-	-	27	30	-	-	30
C	48	008H- **A	44.958	-	-	45	45	-	-	45	39.630	-	-	39.6	40	-	-	40
		010H- **A	55.375	-	-	55.4	60	-	-	60	48.644	-	-	48.6	50	-	-	50
		015H- **A	50	30.375	-	80.4	50	35	-	90	43.269	27.010	-	70.3	45	30	-	80
		020H- **A	50	55.375	-	105.4	50	60	-	110	43.269	48.644	-	91.9	45	50	-	100
		None	5.4	-	-	5.4	15	-	-	15	5.4	-	-	5.4	15	-	-	15
		005H- **A	30.375	-	-	30.4	35	-	-	35	27.010	-	-	27	30	-	-	30

ELECTRICAL RATINGS FOR B64EMMX AIR HANDLERS														
VOLTAGE: 240V					VOLTAGE: 208V									
B64EMMX AIR HANDLERS		MINIMUM CIRCUIT AMPACITY (MCA)				MAX OVER-CURRENT PROTECTION (MOP)				MINIMUM CIRCUIT AMPACITY (MCA)				
Cabinet	Capacity (x1000 BTU's)	Model Number H8HK-	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	MAX OVER-CURRENT PROTECTION (MOP)
A	24	None	4.8	-	-	4.8	15	-	-	4.8	-	-	4.8	15
		005H-**A	29.75	-	-	29.8	30	-	-	26.385	-	-	26.4	30
		008H-**A	44.333	-	-	44.3	45	-	-	39.005	-	-	39	40
		010H-**A	54.75	-	-	54.8	60	-	-	48.019	-	-	48	50
		None	4.8	-	-	4.8	15	-	-	4.8	-	-	4.8	15
B	24	005H-**A	29.75	-	-	29.8	30	-	-	26.385	-	-	26.4	30
		008H-**A	44.333	-	-	44.3	45	-	-	39.005	-	-	39	40
		010H-**A	54.75	-	-	54.8	60	-	-	48.019	-	-	48	50
		015H-**A	50	29.75	-	79.8	50	30	-	43.269	26.385	-	69.7	45
		None	4.8	-	-	4.8	15	-	-	4.8	-	-	4.8	15
A	30	005H-**A	29.75	-	-	29.8	30	-	-	26.385	-	-	26.4	30
		008H-**A	44.333	-	-	44.3	45	-	-	39.005	-	-	39	40
		010H-**A	54.75	-	-	54.8	60	-	-	48.019	-	-	48	50
		None	4.8	-	-	4.8	15	-	-	4.8	-	-	4.8	15
		005H-**A	29.75	-	-	29.8	30	-	-	26.385	-	-	26.4	30
B	36	008H-**A	44.333	-	-	44.3	45	-	-	39.005	-	-	39	40
		010H-**A	54.75	-	-	54.8	60	-	-	48.019	-	-	48	50
		None	4.8	-	-	4.8	15	-	-	4.8	-	-	4.8	15
		005H-**A	29.75	-	-	29.8	30	-	-	26.385	-	-	26.4	30
		008H-**A	44.333	-	-	44.3	45	-	-	39.005	-	-	39	40
B	42	010H-**A	54.75	-	-	54.8	60	-	-	48.019	-	-	48	50
		015H-**A	50	29.75	-	79.8	50	30	-	43.269	26.385	-	69.7	45
		None	4.8	-	-	4.8	15	-	-	4.8	-	-	4.8	15
		005H-**A	29.75	-	-	29.8	30	-	-	26.385	-	-	26.4	30
		008H-**A	44.333	-	-	44.3	45	-	-	39.005	-	-	39	40
C	48	010H-**A	54.75	-	-	54.8	60	-	-	48.019	-	-	48	50
		015H-**A	50	29.75	-	79.8	50	30	-	43.269	26.385	-	69.7	45
		None	8.8	-	-	8.8	15	-	-	8.8	-	-	8.8	15
		005H-**A	33.75	-	-	33.8	35	-	-	30.385	-	-	30.4	35
		008H-**A	48.333	-	-	48.3	50	-	-	43.005	-	-	43	45
		010H-**A	58.75	-	-	58.8	60	-	-	52.019	-	-	52	60
		015H-**A	50	33.75	-	83.8	50	35	-	43.269	30.385	-	73.7	45
		020H-**A	50	58.75	-	108.8	50	60	-	43.269	52.019	-	95.3	45
		025H-**A	50	50	33.75	133.8	50	50	35	43.269	43.269	30.385	116.9	45

Note: H8HK0**H-**A heater kits may be used with B64 Air Handlers in accordance to the corresponding "Limit Switch Combinations" and "Minimum Recommended Heating Blower Speeds" tables OR as direct replacements into the B6(B,E,V) air handlers.

Table 8. Electrical Ratings for B64EMMX Air Handlers

ELECTRICAL RATINGS FOR B64VMM AIR HANDLERS														
B64VMMX AIR HANDLER			VOLTAGE: 240V					VOLTAGE: 208V						
			MINIMUM CIRCUIT AMPACITY (MCA)				MAX OVER-CURRENT PROTECTION (MOP)				MINIMUM CIRCUIT AMPACITY (MCA)			
			CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT	CIRCUIT A	CIRCUIT B	CIRCUIT C	SINGLE CIRCUIT
A	24	None	4.8	-	-	4.8	15	-	-	15	4.8	-	-	15
			29.75	-	-	29.8	30	-	-	30	26.385	-	-	30
			44.333	-	-	44.3	45	-	-	45	39.005	-	-	40
			54.75	-	-	54.8	60	-	-	60	48.019	-	-	50
			4.8	-	-	4.8	15	-	-	15	4.8	-	-	15
B	24	None	29.75	-	-	29.8	30	-	-	30	26.385	-	-	30
			44.333	-	-	44.3	45	-	-	45	39.005	-	-	40
			54.75	-	-	54.8	60	-	-	60	48.019	-	-	50
			50	29.75	-	79.8	50	30	-	80	43.269	26.385	-	70
			4.8	-	-	4.8	15	-	-	15	4.8	-	-	15
B	36	None	29.75	-	-	29.8	30	-	-	30	26.385	-	-	30
			44.333	-	-	44.3	45	-	-	45	39.005	-	-	40
			54.75	-	-	54.8	60	-	-	60	48.019	-	-	50
			50	29.75	-	79.8	50	30	-	80	43.269	26.385	-	70
			4.8	-	-	4.8	15	-	-	15	4.8	-	-	15
C	48	None	31.75	-	-	31.8	35	-	-	35	28.385	-	-	30
			46.333	-	-	46.3	50	-	-	50	41.005	-	-	45
			56.75	-	-	56.8	60	-	-	60	50.019	-	-	60
			50	31.75	-	81.8	50	35	-	90	43.269	28.385	-	80
			50	56.75	-	106.8	50	60	-	110	43.269	50.019	-	100
C	60	None	50	50	31.75	131.8	50	50	35	150	43.269	43.269	28.385	125
			8.8	-	-	8.8	15	-	-	15	8.8	-	-	15
			33.75	-	-	33.8	35	-	-	35	30.385	-	-	35
			48.333	-	-	48.3	50	-	-	50	43.005	-	-	45
			58.75	-	-	58.8	60	-	-	60	52.019	-	-	60
C	60	None	50	33.75	-	83.8	50	35	-	90	43.269	30.385	-	80
			50	58.75	-	108.8	50	60	-	110	43.269	52.019	-	100

Note: H8HK0**H-**A heater kits may be used with B64 Air Handlers in accordance to the corresponding "Limit Switch Combinations" and "Minimum Recommended Heating Blower Speeds" tables OR as direct replacements into the B6(B,E,V) air handlers.

Table 9. Electrical Ratings for B64VMM Air Handlers

Wiring Diagrams

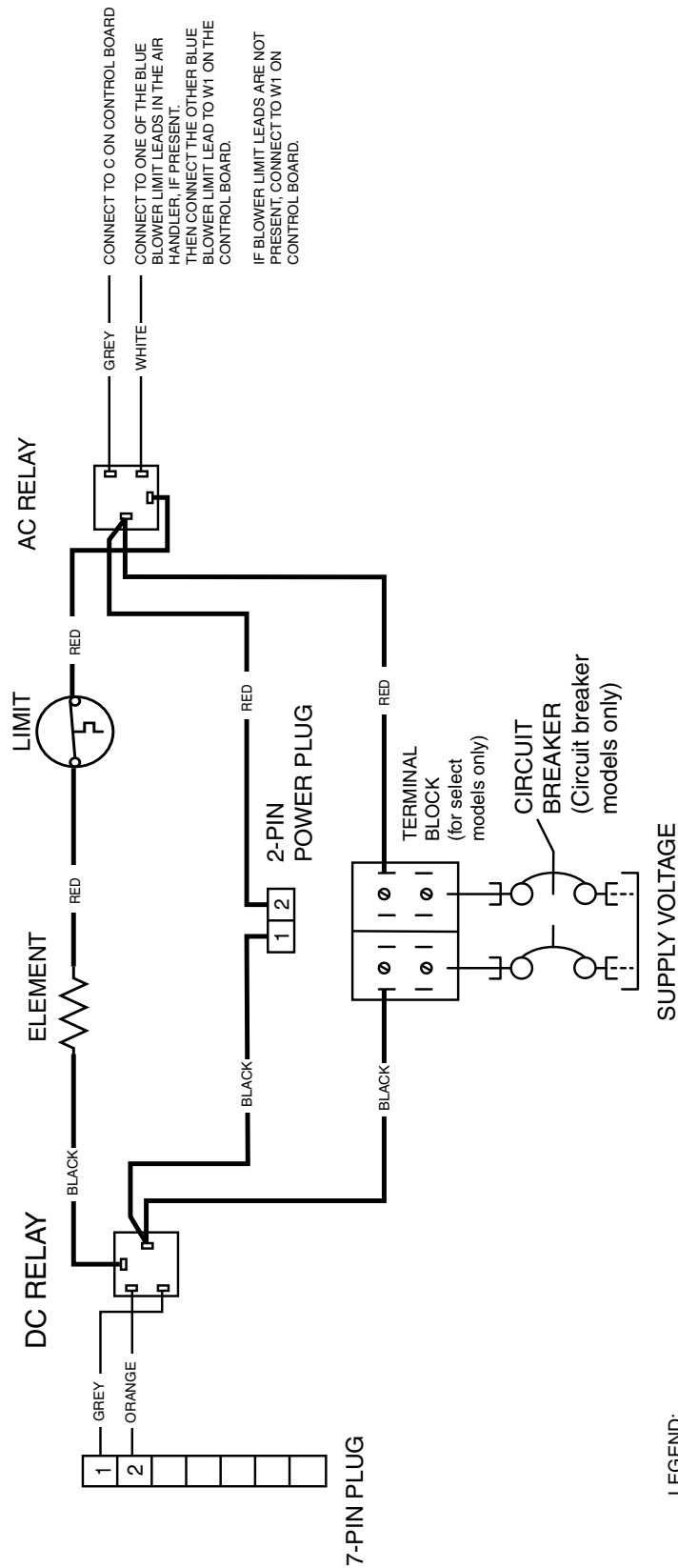
WIRING DIAGRAM

NOTES:

1. If any of the original wire supplied with this unit must be replaced, it must be replaced with wiring material of the same gauge size and temperature rating.
2. The installation of this heater kit may require a change in the blower speed tap connection. See Installation Instructions for details.
3. Use copper conductors with a minimum temperature rating of 60°C for supply connections.

H8HK005H-01A (with circuit breaker)
H8HK005H-11A (without circuit breaker)

5 kW, 1-Phase Electric Heater Kit



10437120
(NEW)
07/22

Figure 13. Single Phase, 5 kW W.D.
(Air Handler with Circuit Breaker(s))

WIRING DIAGRAM

NOTES:

1. If any of the original wire supplied with this unit must be replaced, it must be replaced with wiring material of the same gauge size and temperature rating.
2. The installation of this heater kit may require a change in the blower speed tap connection. See Installation Instructions for details.
3. Use copper conductors with a minimum temperature rating of 60°C for supply connections.

8kW, 10kW, 1-Stage, 240 VAC, 1-Phase Electric Heater Kit

H8HK008H-01A (without circuit breaker)
H8HK008H-11A (with circuit breaker)
H8HK010H-11A (with circuit breaker)
H8HK010H-01A (without circuit breaker)

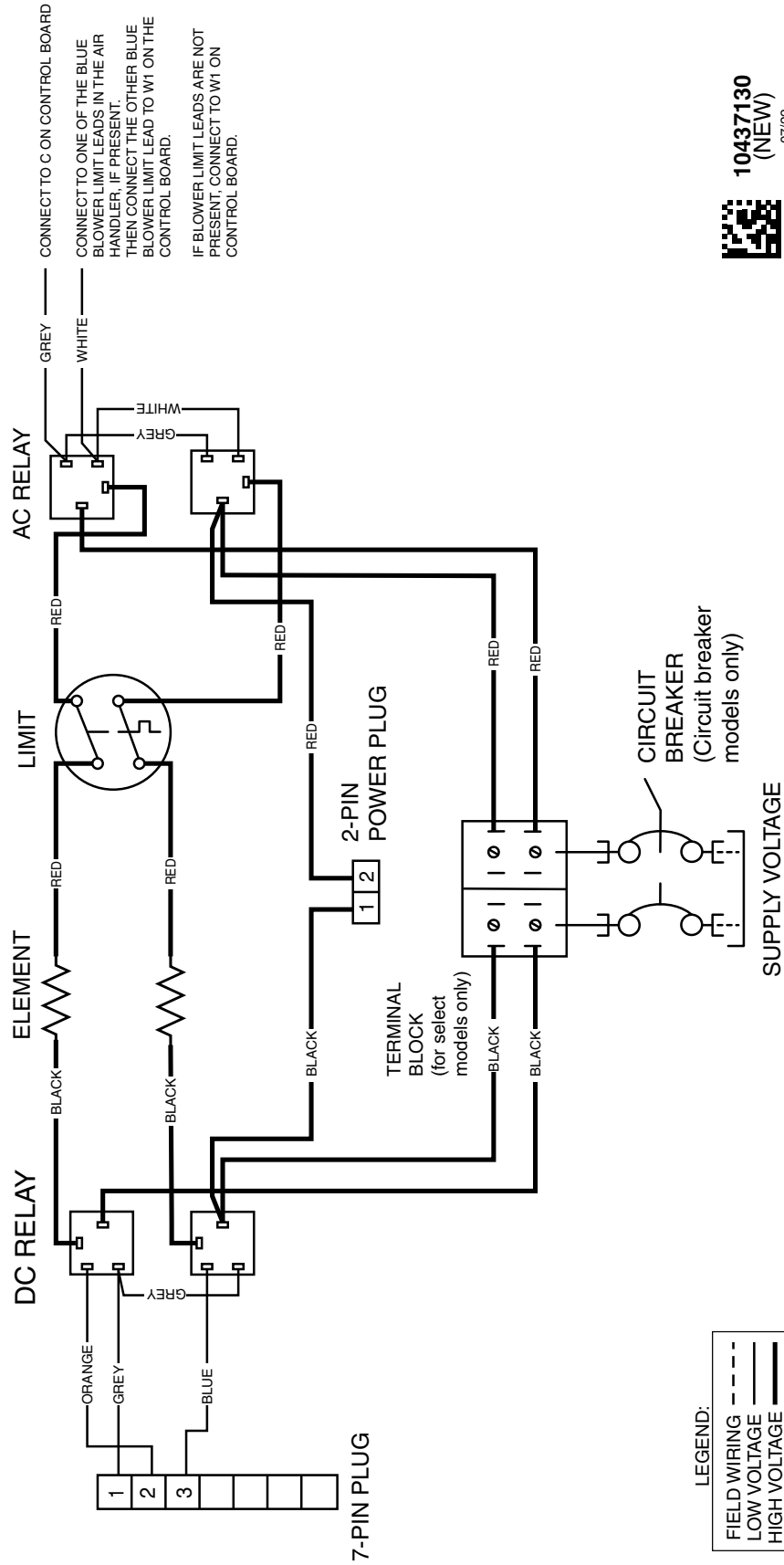
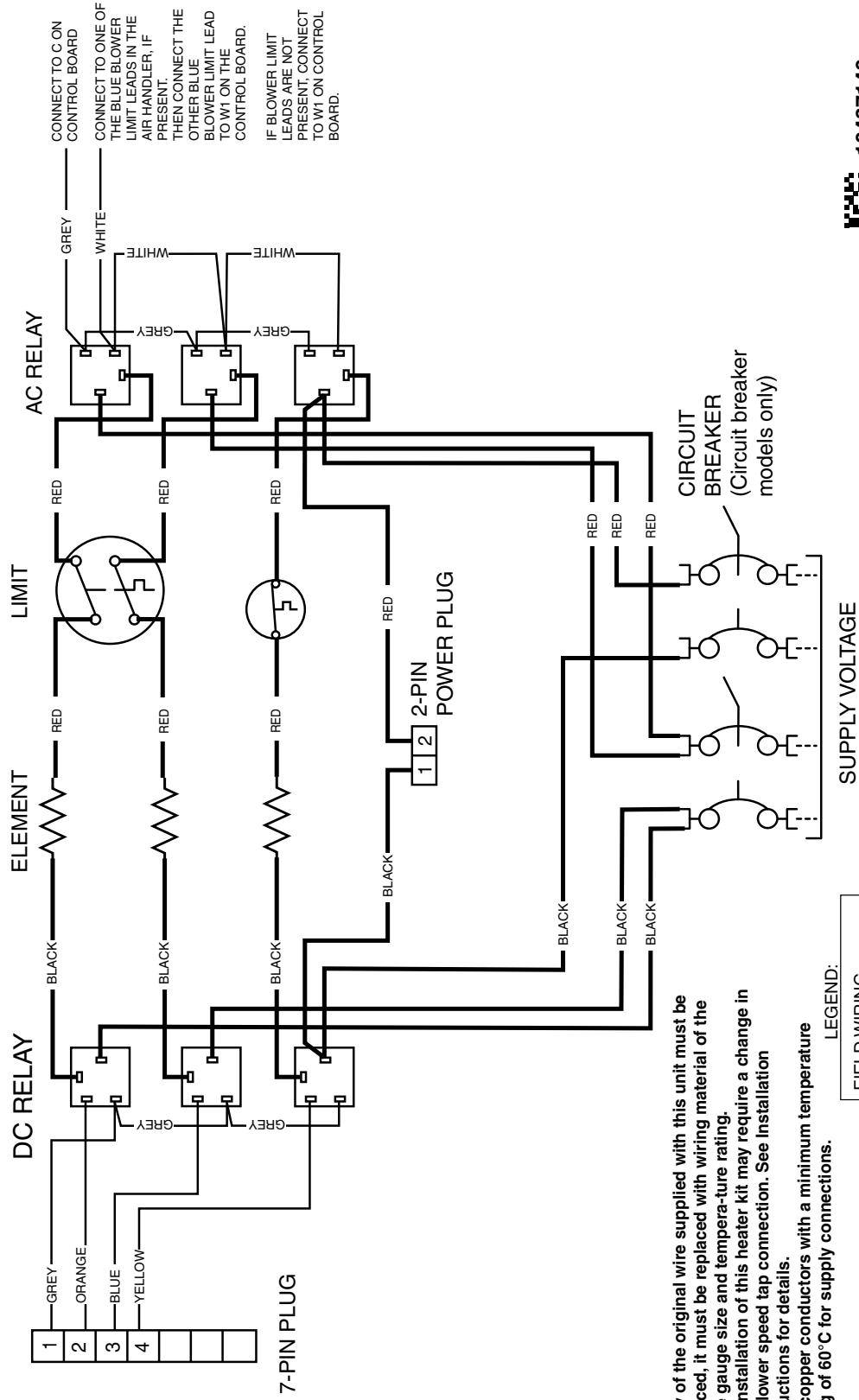


Figure 14. Single Phase, 8kW & 10 kW W.D.
(Air Handler with Circuit Breaker(s))

WIRING DIAGRAM

H8HK015H-21A (with circuit breaker)

15kW, 240 VAC, 1-Phase Electric Heater Kit



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Figure 15. Single Phase, 15 kW W.D.
(Air Handler with Circuit Breaker(s))

25kW , 240 VAC, 1-Phase Electric Heater Kit

H8HK024H-31A (with circuit breaker)

25kW , 240 VAC, 1-Phase Electric Heater Kit



- ## NOTES
1. If any of the original wire supplied with this unit must be replaced, it must be replaced with wiring material of the same gauge size and temperature rating.
 2. The installation of this heater kit may require a change in the blower speed tap connection. See Installation Instructions for details.
 3. Use copper conductors with a minimum temperature rating of 60°C for supply connections.

**Figure 17. Single Phase, 25 kW W.D.
(Air Handler with Circuit Breaker(s))**

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INSTALLER: PLEASE LEAVE THESE INSTALLATION INSTRUCTIONS WITH THE HOMEOWNER



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(Replaces 10437110)