

Installation Instructions

Precedent™ Packaged Rooftop

Units

Electric Heaters

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

Introduction

Read this manual thoroughly before operating or servicing this unit.

Warnings, Cautions, and Notices

Safety advisories appear throughout this manual as required. Your personal safety and the proper operation of this machine depend upon the strict observance of these precautions.

The three types of advisories are defined as follows:



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

NOTICE

Indicates a situation that could result in equipment or property-damage only accidents.

Important Environmental Concerns

Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants.

Important Responsible Refrigerant Practices

Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified according to local rules. For the USA, the Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.

⚠ WARNING

Proper Field Wiring and Grounding Required!

Failure to follow code could result in death or serious injury.

All field wiring **MUST** be performed by qualified personnel. Improperly installed and grounded field wiring poses **FIRE** and **ELECTROCUTION** hazards. To avoid these hazards, you **MUST** follow requirements for field wiring installation and grounding as described in NEC and your local/state/national electrical codes.

⚠ WARNING

Personal Protective Equipment (PPE) Required!

Failure to wear proper PPE for the job being undertaken could result in death or serious injury.

Technicians, in order to protect themselves from potential electrical, mechanical, and chemical hazards, **MUST** follow precautions in this manual and on the tags, stickers, and labels, as well as the instructions below:

- Before installing/servicing this unit, technicians **MUST** put on all PPE required for the work being undertaken (Examples; cut resistant gloves/sleeves, butyl gloves, safety glasses, hard hat/bump cap, fall protection, electrical PPE and arc flash clothing). **ALWAYS** refer to appropriate Safety Data Sheets (SDS) and OSHA guidelines for proper PPE.
- When working with or around hazardous chemicals, **ALWAYS** refer to the appropriate SDS and OSHA/GHS (Global Harmonized System of Classification and Labelling of Chemicals) guidelines for information on allowable personal exposure levels, proper respiratory protection and handling instructions.
- If there is a risk of energized electrical contact, arc, or flash, technicians **MUST** put on all PPE in accordance with OSHA, NFPA 70E, or other country-specific requirements for arc flash protection, **PRIOR** to servicing the unit. **NEVER** PERFORM ANY SWITCHING, DISCONNECTING, OR VOLTAGE TESTING WITHOUT PROPER ELECTRICAL PPE AND ARC FLASH CLOTHING. ENSURE ELECTRICAL METERS AND EQUIPMENT ARE PROPERLY RATED FOR INTENDED VOLTAGE.

⚠ WARNING**Follow EHS Policies!**

Failure to follow instructions below could result in death or serious injury.

- All Trane personnel must follow the company's Environmental, Health and Safety (EHS) policies when performing work such as hot work, electrical, fall protection, lockout/tagout, refrigerant handling, etc. Where local regulations are more stringent than these policies, those regulations supersede these policies.
- Non-Trane personnel should always follow local regulations.

⚠ WARNING**Cancer and Reproductive Harm!**

This product can expose you to chemicals including lead and bisphenol A (BPA), which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

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Revision History

Transfer previous production document ACC-SVN59 document to supply PART document.

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Installation

⚠ WARNING

Hazardous Voltage w/Capacitors!

Failure to disconnect power and discharge capacitors before servicing could result in death or serious injury.

Disconnect all electric power, including remote disconnects and discharge all motor start/run capacitors before servicing. Follow proper lockout/tagout procedures to ensure the power cannot be inadvertently energized. Verify with a CAT III or IV voltmeter rated per NFPA 70E that all capacitors have discharged.

1. Remove heater compartment access panel and unit control box access panel. See [Figure 2, p. 6](#).

Note: *On downflow units with or without ductwork installed or horizontal units without ductwork installed, remove horizontal supply cover from the rear of the heater compartment.*

2. Remove insulation to expose perimeter of removable panel in the vestibule panel. See [Figure 2, p. 6](#).
3. Clip or cut the retaining tabs around the perimeter of the removable panel.
4. Remove the panel.
5. Check the opening in the vestibule panel. Remove any metal burrs or slivers that could damage or pinch the heater elements resulting in a short circuit when elements are installed in the opening.
6. The electric heater element assembly has "BOTTOM" stamped in the mounting panel to identify the proper position for mounting.

Note: *The back of the electric heater element assembly is supported by a factory installed electric heat support rod hanger in the unit.*

7. Tilt the back of the electric heater element assembly slightly upward as it is positioned in the opening to engage the support rod with the support rod hanger. Be very careful to avoid dragging the heater element on the edges of the opening in vestibule panel, as this could damage or pinch the heater elements resulting in a short circuit.
8. Secure the electric heater element assembly with six screws.
9. If necessary, fasten door extension onto heater door with sheet metal screws provided with field kit (only install, for units with digit 30 = F or digit 8 = D. Recycle panel for units with both digit 30 = B and digit 7 = E).
10. Slide the electric heater control panel/access door assembly inward until the rear edge engages with retaining clips. Secure the outer edge with two screws.
11. To install the hinged door stops, loosen one existing screw from the upper left side of the electric heater

compartment opening. Position each door stop with outer tab flush against center post and secure each door stop with one screw. See zoom view in [Figure 4, p. 6](#).

12. Remove the wire nuts from W1, W2 (if present) and W3.
13. Route the wires through the wire access opening in the divider panel, then up to the unit control box entering through the bottom wire access opening on the left side. Secure wires to the existing harness.
14. In the unit control box, route the wires along the existing harness to contactor CC1. Secure wires to existing harness. See [Figure 3, p. 6](#).
15. Locate the low voltage wire harness with polarized plug in the electric heater section compartment. Remove the factory installed jumper. Connect the low voltage polarized plug from the unit to the polarized plug on the electric heater assembly.
16. Wire heater element assembly to electric heater control panel according to the wiring diagram attached to the electric heater control panel door.
17. Secure green ground wire from the electric heat control panel to the right hand wall of electric heater compartment with star washer and #10 grounding screw.
18. Wire W1, W2 (if present) and W3 wires to CC1 according to the wiring diagram attached to the unit control panel door.
19. Route single point power entry wires through the front access opening of the support panel adjacent to the electric heater section compartment. Using good installation practices, provide strain relief for high voltage wires where necessary. See [Figure 4, p. 6](#).

Note: *Verify the field wiring complies with all applicable codes.*

NOTICE

Use Copper Conductors Only!

Failure to use copper conductors could result in equipment damage as the equipment was not designed or qualified to accept other types of conductors.

20. Wire according to the wiring diagram attached to the electric heater control panel door. Ground unit at grounding lug provided on electric heater control panel assembly.

NOTICE

Heater Damage!

Failure to follow instructions below could result in heater damage.

After heater is installed and before applying power, verify that heating elements are not damaged or pinched and that heating elements are not short circuited to each other or to the heater frame or equipment cabinet by doing the following:

- Test every heater element with ohmmeter and verify that heater element terminals are electrically isolated from cabinet and ground (infinite resistance).
- On downflow units with or without duct work installed or horizontal units without ductwork installed, remove horizontal supply cover and carefully inspect elements after installation for damage or proximity to supporting structure or cabinet.
- Confirm at least 1/4-inch clearance is present around electric heater coils.

Important: Verify tightness of all terminal connections, clamps, screws, and other hardware, as they may have become loose in shipment. Tighten all electrical connections after equipment has been in operation and components have reached operating temperature.

21. Install magnets into door as shown in Figure 3, p. 6. Magnets should lock into place once installed.
22. Close electric heater control panel access door, replace heat section access panel and unit control box access panel. Replace horizontal supply cover. Be careful when replacing cover and make sure gasketing is not torn or missing. Gasket must make water tight seal.
23. Scratch out the square on unit nameplate showing heater model installed in unit.

Figure 1. Wiring for electromechanical electric/electric

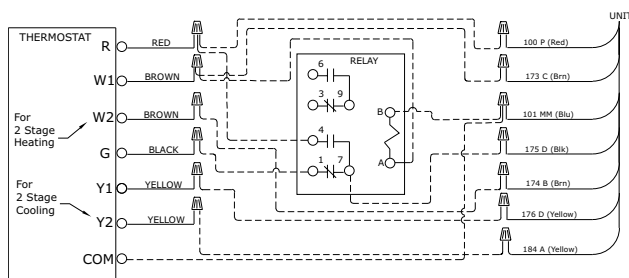


Figure 2. Electric heater panel

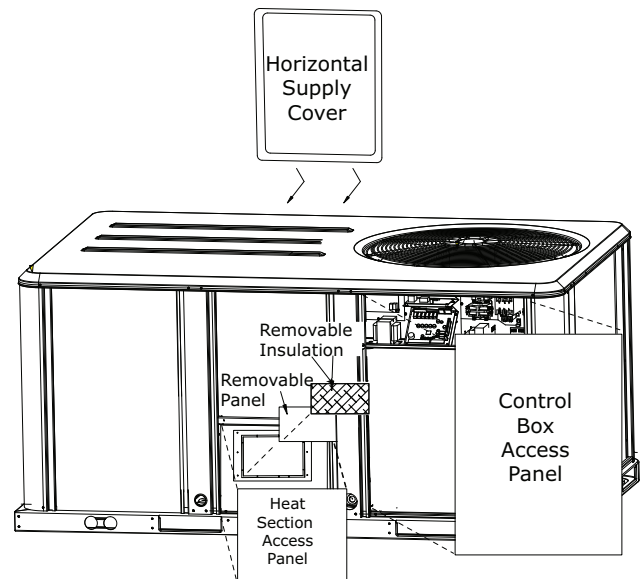


Figure 3. Magnets

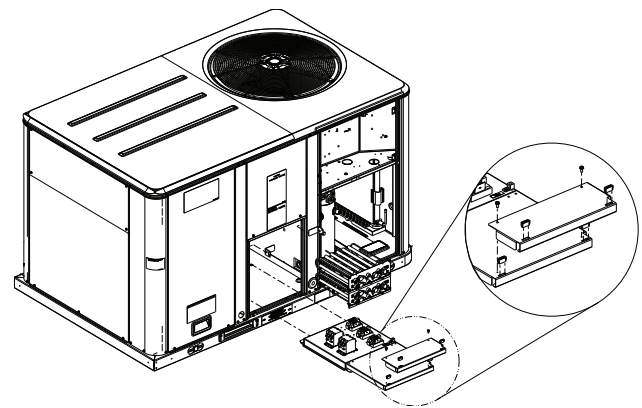
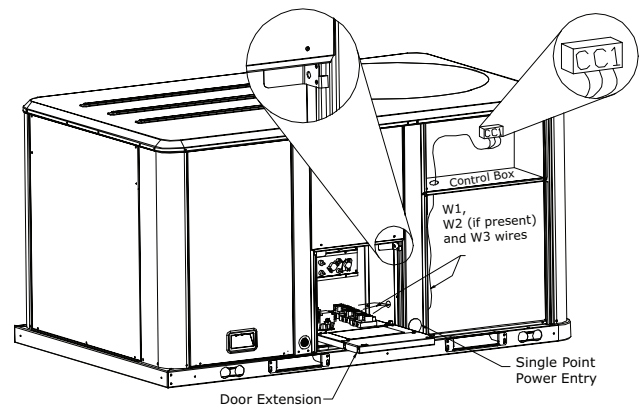


Figure 4. Hinged door stop



General Electric Heat Data

Table 1. Air temperature rise across electric heaters (°F)

kW	Stage	3 Ton 1200 CFM ^(a)		4 Ton 1600 CFM ^(b)		5 Ton 2000 CFM	
		Single Phase THC036E1	Three Phase TSC036G3,4,W, THC036E3,4, THC037E3,4, TZC036E3,4 WSC036H3,4, W WHC036H3,4,W	Single Phase THC048*1	Three Phase TSC048G3,4,W THC047E3,4 THC048*3,*4, TZC048F3,4, WSC048H3,4,W WHC048H3,4,W	Single Phase THC060*1	Three Phase TSC060G3,4,W THC060*3,*4 THC067*3,*4, TZC060E3,4, WSC060H3,4,W WHC060H3,4,W
5.0	1	13.8	—	10.5	—	8.5	—
6.0	1	—	18.5	—	10.5	—	11.4
10.0	2	26.8	—	20.3	—	16.3	—
12.0	2	—	36.2	—	22.3	—	21.5
13.8	2	36.9	—	27.8	—	22.3	—
17.4	2	—	48.2	—	33.0	—	30.0
17.6	2	—	—	35.5	—	28.3	—
23.0	2	—	—	—	—	—	38.8

Notes:

- For minimum design airflow, see airflow performance table for each unit.
- To calculate temp rise at different airflow, use the following formula:
Temp. rise (°C) across Elect Heater = (kW x 2985)/(M3/H)
Temp. rise (°F) across Elect Heater = (kW x 3414)/(1.08 x CFM)

^(a) The minimum allowable airflow for a 5 ton unit with a 23.0 kW heater is 1900 CFM.

^(b) The minimum allowable airflow for a 3 ton with a 17.4 kW heater is 1080 CFM.

Table 2. Air temperature rise across electric heaters (°C and °F)

Celsius			5 Ton 3400 M3/H WSC060ED TSC060ED	Fahrenheit			5 Ton 2000 CFM WSC060ED TSC060AD
kW	Voltage	Stage		kW	Voltage	Stage	
7.5 / 9.0	380-415/50/3	2	6.6 / 7.9	7.5 / 9.0	380-415/50/3	2	11.9 / 14.2
10.9 / 13.0	380-415/50/3	2	9.6 / 11.4	10.9 / 13.0	380-415/50/3	2	17.2 / 20.5
14.4 / 17.2	380-415/50/3	2	12.6 / 15.1	14.4 / 17.2	380-415/50/3	2	22.8 / 27.2

Table 3. Unit wiring with electric heat (single point connection) — standard efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Three Phase								
3	TSC036G3	BAYHTRE306*	4.5/6.0	1	23/26	30/30	—	—
3	TSC036G3	BAYHTRE312*	9.0/12.0	2	39/44	40/45	—	—
3	TSC036G3	BAYHTRE318*	13.1/17.4	2	53/60	60/60	—	—
4	TSC048G3	BAYHTRE306*	4.5/6.0	1	26/27	35/35	—	—
4	TSC048G3	BAYHTRE312*	9.0/12.0	2	40/45	40/45	—	—
4	TSC048G3	BAYHTRE318*	13.1/17.4	2	54/61	60/70	—	—
5	TSC060G3	BAYHTRE306*	4.5/6.0	1	29/29	40/40	—	—

General Electric Heat Data

Table 3. Unit wiring with electric heat (single point connection) — standard efficiency (continued)

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
5	TSC060G3	BAYHTRE312*	9.0/12.0	2	40/45	40/45	—	—
5	TSC060G3	BAYHTRE318*	13.1/17.4	2	54/61	60/70	—	—
5	TSC060G3	BAYHTRE323*	17.3/23.0	2	69/78	80/80	—	—
460 Volts Three Phase								
3	TSC036G4	BAYHTRE406*	6.0	1	12	15	—	—
3	TSC036G4	BAYHTRE412*	12.0	2	21	25	—	—
3	TSC036G4	BAYHTRE418*	17.4	2	29	30	—	—
4	TSC048G4	BAYHTRE406*	6.0	1	13	15	—	—
4	TSC048G4	BAYHTRE412*	12.0	2	22	25	—	—
4	TSC048G4	BAYHTRE418*	17.4	2	30	30	—	—
5	TSC060G4	BAYHTRE406*	6.0	1	13	15	—	—
5	TSC060G4	BAYHTRE412*	12.0	2	22	25	—	—
5	TSC060G4	BAYHTRE418*	17.4	2	30	30	—	—
5	TSC060G4	BAYHTRE423*	23.0	2	38	40	—	—
575 Volts Three Phase								
3	TSC036GW	BAYHTREW06*	6.0	1	11	15	—	—
3	TSC036GW	BAYHTREW12*	12.0	2	18	20	—	—
3	TSC036GW	BAYHTREW18*	17.4	2	24	25	—	—
4	TSC048GW	BAYHTREW06*	6.0	1	11	15	—	—
4	TSC048GW	BAYHTREW12*	12.0	2	19	20	—	—
4	TSC048GW	BAYHTREW18*	17.4	2	25	25	—	—
5	TSC060GW	BAYHTREW06*	6.0	1	11	15	—	—
5	TSC060GW	BAYHTREW12*	12.0	2	19	20	—	—
5	TSC060GW	BAYHTREW18*	17.4	2	25	25	—	—
5	TSC060GW	BAYHTREW23*	23.0	2	32	35	—	—

^(a) No optional motors available for 3 to 5 tons. The standard motor is a multispeed, direct drive motor. The standard motor for the 3-phase (6 to 8.5 ton models) is a belt drive motor.

Table 4. Unit wiring with electric heat (single point connection) — standard efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Three Phase								
3	WSC036H3	BAYHTRE306*	4.5/6.0	1	42/44	50/50	46/48	50/50
3	WSC036H3	BAYHTRE312*	9.0/12.0	2	58/62	60/70	62/66	70/70
3	WSC036H3	BAYHTRY317*	13.1/17.4	2	72/79	80/80	76/83	80/90
4	WSC048H3	BAYHTRE306*	4.5/6.0	1	43/45	50/50	46/48	50/50
4	WSC048H3	BAYHTRE312*	9.0/12.0	2	58/63	60/70	61/66	70/70
4	WSC048H3	BAYHTRY317*	13.1/17.4	2	72/79	80/80	75/82	80/90

Table 4. Unit wiring with electric heat (single point connection) — standard efficiency (continued)

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
5	WSC060H3	BAYHTRX306*	4.5/6.0	1	48/50	60/60	50/52	60/60
5	WSC060H3	BAYHTRX312*	9.0/12.0	2	63/68	70/70	65/70	70/70
5	WSC060H3	BAYHTRY318*	13.1/17.4	2	77/84	80/90	79/86	80/90
5	WSC060H3	BAYHTRY323*	17.3/23.0	2	92/101	100/110	94/103	100/110
460 Volts Three Phase								
3	WSC036H4	BAYHTRE406*	6.0	1	20	20	23	25
3	WSC036H4	BAYHTRE412*	12.0	2	29	30	32	35
3	WSC036H4	BAYHTRY417*	17.4	2	37	40	40	40
4	WSC048H4	BAYHTRE406*	6.0	1	21	25	23	25
4	WSC048H4	BAYHTRE412*	12.0	2	30	30	32	35
4	WSC048H4	BAYHTRY417*	17.4	2	38	40	40	40
5	WSC060H4	BAYHTRX406*	6.0	1	24	30	25	30
5	WSC060H4	BAYHTRX412*	12.0	2	34	35	35	35
5	WSC060H4	BAYHTRY418*	17.4	2	42	45	43	45
5	WSC060H4	BAYHTRY423*	23.0	2	50	50	51	60
575 Volts Three Phase								
3	WSC036HW	BAYHTREW06*	6.0	1	19	20	19	20
3	WSC036HW	BAYHTREW12*	12.0	2	26	30	26	30
3	WSC036HW	BAYHTRYW17*	17.4	2	33	35	33	35
4	WSC048HW	BAYHTREW06*	6.0	1	20	20	20	20
4	WSC048HW	BAYHTREW12*	12.0	2	27	30	27	30
4	WSC048HW	BAYHTRYW17*	17.4	2	34	35	34	35
5	WSC060HW	BAYHTRXW06*	6.0	1	20	20	20	20
5	WSC060HW	BAYHTRXW12*	12.0	2	28	30	28	30
5	WSC060HW	BAYHTRYW18*	17.4	2	34	35	34	35
5	WSC060HW	BAYHTRYW23*	23.0	2	41	45	41	45

^(a) The standard motor for the 1-phase models is a multispeed, direct drive motor. The standard motor for 3-phase models (3 to 5 tons and 10 tons) is a multispeed, direct drive motor. The standard motor for 3-phase (6 to 7.5 tons) is a belt drive motor.

Table 5. Unit wiring with electric heat (single point connection) - standard efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Three Phase								
3	WHC036H3	BAYHTRE306*	4.5/6.0	1	42/44	50/50	46/48	50/50
3	WHC036H3	BAYHTRE312*	9.0/12.0	2	58/62	60/70	62/66	70/70
3	WHC036H3	BAYHTRY317*	13.1/17.4	2	72/79	80/80	76/83	80/90
4	WHC048H3	BAYHTRE306*	4.5/6.0	1	43/45	50/50	46/48	50/50

General Electric Heat Data

Table 5. Unit wiring with electric heat (single point connection) - standard efficiency (continued)

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Oversized Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
4	WHC048H3	BAYHTRE312*	9.0/12.0	2	58/63	60/70	61/66	70/70
4	WHC048H3	BAYHTRY318*	13.1/17.4	2	72/79	80/80	75/82	80/90
5	WHC060H3	BAYHTRX306*	4.5/6.0	1	48/50	60/60	50/52	60/60
5	WHC060H3	BAYHTRX312*	9.0/12.0	2	63/68	70/70	65/70	70/70
5	WHC060H3	BAYHTRY318*	13.1/17.4	2	77/84	80/90	79/86	80/90
5	WHC060H3	BAYHTRY323*	17.3/23.0	2	92/101	100/110	94/103	100/110
460 Volts Three Phase								
3	WHC036H4	BAYHTRE406*	6.0	1	20	20	23	25
3	WHC036H4	BAYHTRE412*	12.0	2	29	30	32	35
3	WHC036H4	BAYHTRY417*	17.4	2	37	40	40	40
4	WHC048H4	BAYHTRE406*	6.0	1	21	25	23	25
4	WHC048H4	BAYHTRE412*	12.0	2	30	30	32	35
4	WHC048H4	BAYHTRY418*	17.4	2	38	40	40	40
5	WHC060H4	BAYHTRX406*	6.0	1	24	30	25	30
5	WHC060H4	BAYHTRX412*	12.0	2	34	35	35	35
5	WHC060H4	BAYHTRY418*	17.4	2	42	45	43	45
5	WHC060H4	BAYHTRY423*	23.0	2	50	50	51	60
575 Volts Three Phase								
3	WHC036HW	BAYHTREW06*	6.0	1	19	20	19	20
3	WHC036HW	BAYHTREW12*	12.0	2	26	30	26	30
3	WSC036HW	BAYHTRYW17*	17.4	2	33	35	33	35
4	WHC048HW	BAYHTREW06*	6.0	1	20	20	20	20
4	WHC048HW	BAYHTREW12*	12.0	2	27	30	27	30
4	WHC048HW	BAYHTRYW18*	17.4	2	34	35	34	35
5	WHC060HW	BAYHTRXW06*	6.0	1	20	20	20	20
5	WHC060HW	BAYHTRXW12*	12.0	2	28	30	28	30
5	WHC060HW	BAYHTRYW18*	17.4	2	34	35	34	35
5	WHC060HW	BAYHTRYW23*	23.0	2	41	45	41	45

^(a) The standard motor for the 1-phase models is a multispeed, direct drive motor. The standard motor for 3-phase models (3 to 5 tons and 10 tons) is a multispeed, direct drive motor. The standard motor for 3-phase (6 to 7.5 tons) is a belt drive motor.

Table 6. Unit wiring with electric heat (single point connection) - high efficiency

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Optional Belt Drive Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Single Phase								
3	THC036E1	BAYHTRE105*	3.8/5.0	1	30.1/33.5	45/45	—	—
3	THC036E1	BAYHTRE110*	7.5/10.0	2	52.6/59.6	60/60	—	—

Table 6. Unit wiring with electric heat (single point connection) - high efficiency (continued)

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Optional Belt Drive Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
3	THC036E1	BAYHTRE114*	10.4/13.8	2	69.8/79.4	70/80	—	—
4	THC048F1	BAYHTRX105*	3.8/5.0	1	37.3/37.3	50/50	—	—
4	THC048F1	BAYHTRX110*	7.5/10.0	2	54.6/61.6	60/70	—	—
4	THC048F1	BAYHTRX114*	10.4/13.8	2	71.8/81.4	80/90	—	—
4	THC048F1	BAYHTRX118*	13.2/17.6	2	89.0/101.1	90/110	—	—
5	THC060F1	BAYHTRX105*	3.8/5.0	1	41.1/41.4	60/60	—	—
5	THC060F1	BAYHTRX110*	7.5/10.0	2	54.6/61.6	60/70	—	—
5	THC060F1	BAYHTRX114*	10.4/13.8	2	71.8/81.4	80/90	—	—
5	THC060F1	BAYHTRX118*	13.2/17.6	2	89.0/101.1	90/110	—	—
208/230 Volts Three Phase								
3	THC036E3	BAYHTRE306*	4.5/6.0	1	23.1/25.5	30/30	21.9/24.3	30/30
3	THC036E3	BAYHTRE312*	9.0/12.0	2	38.8/43.6	40/45	37.5/42.4	40/45
3	THC036E3	BAYHTRE318*	13.1/17.4	2	52.9/59.9	60/60	51.6/58.6	60/60
4	THC048E3	BAYHTRX306*	4.5/6.0	1	28.3/28.3	40/40	25.7/25.7	40/40
4	THC048E3	BAYHTRX312*	9.0/12.0	2	40.8/45.6	45/50	37.5/42.4	40/45
4	THC048E3	BAYHTRX318*	13.1/17.4	2	54.9/61.9	60/70	51.6/58.6	60/60
4	THC048F3	BAYHTRX306*	4.5/6.0	1	27.2/27.5	40/40	24.6/24.6	35/35
4	THC048F3	BAYHTRX312*	9.0/12.0	2	40.8/45.6	45/50	37.5/42.4	40/45
4	THC048F3	BAYHTRX318*	13.1/17.4	2	54.9/61.9	60/70	51.6/58.6	60/60
5	THC060E3	BAYHTRX306*	4.5/6.0	1	30.0/30.0	45/45	27.4/27.4	40/40
5	THC060E3	BAYHTRX312*	9.0/12.0	2	40.8/45.6	45/50	37.5/42.4	40/45
5	THC060E3	BAYHTRX318*	13.1/17.4	2	54.9/61.9	60/70	51.6/58.6	60/60
5	THC060E3	BAYHTRX323*	17.3/23.0	2	69.5/78.6	70/80	66.3/75.4	70/80
5	THC060F3	—	4.5/6.0	1	30.0/30.0	45/45	27.4/27.4	40/40
5	THC060F3	—	9.0/12.0	2	40.8/45.6	45/50	37.5/42.4	40/45
5	THC060F3	—	13.1/17.4	2	54.9/61.9	60/70	51.6/58.6	60/60
5	THC060F3	—	17.3/23.0	2	69.5/78.6	70/80	66.3/75.4	70/80
460 Volts Three Phase								
3	THC036E4	—	6.0	1	13.0	15	12.1	15
3	THC036E4	—	12.0	2	22.0	25	21.1	25
3	THC036E4	—	17.4	2	30.1	35	29.3	30
4	THC048E4	—	6.0	1	14.0	20	12.3	15
4	THC048E4	—	12.0	2	23.0	25	21.1	25
4	THC048E4	—	17.4	2	31.1	35	29.3	30
4	THC048F4	—	6.0	1	14.0	15	12.3	15
4	THC048F4	—	12.0	2	23.0	25	21.1	25
4	THC048F4	—	17.4	2	31.1	35	29.3	30

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Table 6. Unit wiring with electric heat (single point connection) - high efficiency (continued)

Tons	Unit Model Number	Heater Model Number	Heater kW Rating ^(a)	Control Stages	Standard Indoor Motor		Optional Belt Drive Indoor Motor	
					MCA	Max Fuse Size or Max Circuit Breaker	MCA	Max Fuse Size or Max Circuit Breaker
5	THC060E4	—	6.0	1	14.0	20	12.3	15
5	THC060E4	—	12.0	2	23.0	25	21.1	25
5	THC060E4	—	17.4	2	31.1	35	29.3	30
5	THC060E4	—	23.0	2	39.6	40	37.8	40
5	THC060F4	—	6.0	1	14.0	20	12.3	15
5	THC060F4	—	12.0	2	23.0	25	21.1	25
5	THC060F4	—	17.4	2	31.1	35	29.3	30
5	THC060F4	—	23.0	2	39.6	40	37.8	40

^(a) Heater kW ratings are at 208V/240V for 208V/230V units, 480V for 460V units.

Table 7. Unit wiring with electric heat (single point connection) - high and ultra high efficiency - 17 plus and eFlex™

Ton	Unit Model Number	Heater Model Number	Heater kW Rating (a)	Control Stages	Heater Amps	Standard Indoor Motor	
						MCA	Max Fuse Size or Max Circuit Breaker
208/230 Volts Three Phase							
3	THC037E3	BAYHTRE306*	4.5/6.0	1	12.5/14.4	24.8/27.1	30.0/30.0
3	THC037E3	BAYHTRE312*	9.0/12.0	2	25.0/28.9	40.4/45.3	45.0/50.0
3	THC037E3	BAYHTRE318*	13.1/17.4	2	36.3/41.9	54.5/61.5	60.0/70.0
3	TZC036E3	BAYHTRE306*	4.5/6.0	1	12.5/14.4	18.5/20.9	20.0/25.0
3	TZC036E3	BAYHTRE312*	9.0/12.0	2	25.0/28.9	34.1/39.0	35.0/40.0
3	TZC036E3	BAYHTRE318*	13.1/17.4	2	36.3/41.9	48.3/55.3	50.0/60.0
4	THC047E3	BAYHTRX306*	4.5/6.0	1	12.5/14.4	29.4/29.8	40.0/40.0
4	THC047E3	BAYHTRX312*	9.0/12.0	2	25.0/28.9	43.0/47.9	45.0/50.0
4	THC047E3	BAYHTRX318*	13.1/17.4	2	36.3/41.9	57.1/64.1	60.0/70.0
4	TZC048F3	BAYHTRX306*	4.5/6.0	1	12.5/14.4	19.7/22.1	25.0/25.0
4	TZC048F3	BAYHTRX312*	9.0/12.0	2	25.0/28.9	35.3/40.2	40.0/45.0
4	TZC048F3	BAYHTRX318*	13.1/17.4	2	36.3/41.9	49.5/56.5	50.0/60.0
5	THC067E3	BAYHTRX306*	4.5/6.0	1	12.5/14.4	32.2/32.2	45.0/45.0
5	THC067E3	BAYHTRX312*	9.0/12.0	2	25.0/28.9	43.0/47.9	45.0/50.0
5	THC067E3	BAYHTRX318*	13.1/17.4	2	36.3/41.9	57.1/64.1	60.0/70.0
5	THC067E3	BAYHTRX323*	17.3/23.0	2	48.0/55.3	71.8/80.9	80.0/90.0
5	TZC060E3	BAYHTRX306*	4.5/6.0	1	12.5/44.4	27.8/27.8	40.0/40.0
5	TZC060E3	BAYHTRX312*	9.0/12.0	2	25.0/28.9	37.5/42.4	40.0/45.0
5	TZC060E3	BAYHTRX318*	13.1/17.4	2	36.3/41.9	51.6/58.6	60.0/60.0
5	TZC060E3	BAYHTRX323*	17.3/23.0	2	48.0/55.3	66.3/75.4	70.0/80.0
460 Volts Three Phase							
3	THC037E4	BAYHTRE406*	6.0	1	7.2	13.6	15.0

Table 7. Unit wiring with electric heat (single point connection) - high and ultra high efficiency - 17 plus and eFlex™ (continued)

Ton	Unit Model Number	Heater Model Number	Heater kW Rating (a)	Control Stages	Heater Amps	Standard Indoor Motor	
						MCA	Max Fuse Size or Max Circuit Breaker
3	THC037E4	BAYHTRE412*	12.0	2	14.4	22.6	25.0
3	THC037E4	BAYHTRE418*	17.4	2	20.9	30.8	35.0
3	TZC036E4	BAYHTRE406*	6.0	1	7.2	10.2	15.0
3	TZC036E4	BAYHTRE412*	12.0	2	14.4	19.2	20.0
3	TZC036E4	BAYHTRE418*	17.4	2	20.9	27.3	30.0
4	THC047E4	BAYHTRX406*	6.0	1	7.2	14.9	20.0
4	THC047E4	BAYHTRX412*	12.0	2	14.4	23.9	25.0
4	THC047E4	BAYHTRX418*	17.4	2	20.9	32.0	35.0
4	TZC048F4	BAYHTRX406*	6.0	1	7.2	10.8	15.0
4	TZC048F4	BAYHTRX412*	12.0	2	14.4	19.8	20.0
4	TZC048F4	BAYHTRX418*	17.4	2	20.9	27.9	30.0
5	THC067E4	BAYHTRX406*	6.0	1	7.2	15.2	20.0
5	THC067E4	BAYHTRX412*	12.0	2	14.4	23.9	25.0
5	THC067E4	BAYHTRX418*	17.4	2	20.9	32.0	35.0
5	THC067E4	BAYHTRX423*	23.0	2	27.7	40.5	45.0
5	TZC060E4	BAYHTRX406*	6.0	1	7.2	11.3	15.0
5	TZC060E4	BAYHTRX412*	12.0	2	14.4	20.3	25.0
5	TZC060E4	BAYHTRX418*	17.4	2	20.9	28.4	30.0
5	TZC060E4	BAYHTRX423*	23.0	2	27.7	36.9	40.0

(a) Heater kW ratings are at 208V/240V for 208V/230V units, 480V for 460V units.

Table 8. Cooling unit with electric heater - single power source

Unit Model No.	Heater Model No.	Heater ^(a)		Control Stages	Standard Indoor Fan Motor		Oversized Indoor Fan Motor	
		kW Rating	MBH		Minimum Circuit Ampacity	Max Fuse Size or Max Circuit Breaker ^(b)	Minimum Circuit Ampacity	Max Fuse Size or Max Circuit Breaker
TSC060ED	BAYHTRR412	7.5 / 9.0	26 / 31	2	19.8 / 21.0	25 / 25	21.0 / 22.3	25 / 25
	BAYHTRR418	10.9 / 13.0	38 / 45	2	26.1 / 28.0	30 / 30	27.4 / 29.3	30 / 30
	BAYHTRR423	14.4 / 17.2	50 / 59	2	32.8 / 35.3	35 / 40	34.0 / 36.5	35 / 40

(a) kW and MBH shown for 380V/415V.

(b) All units to be installed under local codes.

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Table 9. Heat pump unit with electric heater - single power source

Unit Model No.	Heater Model No.	Heater ^(a)		Control Stages	Standard Indoor Fan Motor		Oversized Indoor Fan Motor	
		kW Rating	MBH		Minimum Circuit Ampacity	Max Fuse Size or Max Circuit Breaker ^(b)	Minimum Circuit Ampacity	Max Fuse Size or Max Circuit Breaker
380-415/50/3								
WSC060ED	BAYHTRR412	7.5/9.0	26 / 31	2	33.3/34.6	40/40	34.3/35.6	40/40
	BAYHTRR418	10.9/13.0	38 / 45	2	39.7/41.6	45/45	40.7/42.6	45/45
	BAYHTRR423	14.4/17.2	50 / 59	2	46.3/48.8	50/50	47.3/49.8	50/50

^(a) kW and MBH shown for 380V/415V.

^(b)

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