

Installation Instructions

IMPORTANT: This installation instruction contains basic unit installation information including installation of field control devices. For information on unit start-up, service, and operation, refer to the unit Controls, Start- Up, Operation, Service, and Troubleshooting Instructions also enclosed in the unit literature packet.

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SAFETY CONSIDERATIONS


Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air-conditioning equipment.

Untrained personnel can perform the basic maintenance functions of cleaning coils and filters and replacing filters. All other operations should be performed by trained service personnel. When working on air-conditioning equipment, observe precautions in the literature, tags and labels attached to the unit, and other safety precautions that may apply.

Follow all safety codes. Wear safety glasses and work gloves.

Recognize safety information. This is the safety-alert symbol . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.


Understand the signal words DANGER, WARNING, and CAUTION. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies a hazard which **could** result in personal injury or death. CAUTION is used to identify unsafe practices which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

 **WARNING**

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could cause personal injury or death.


Before performing service or maintenance operations on unit, turn off main power switch to unit and install lockout tag.

 **WARNING**

UNIT OPERATION AND SAFETY HAZARD

Failure to follow this warning could cause personal injury, death and/or equipment damage.

Puron (R-410a) refrigerant systems operate at higher pressures than standard R-22 systems. Do not use R-22 service equipment or components on Puron refrigerant equipment.

 **WARNING**

FIRE, EXPLOSION HAZARD

Failure to follow this warning could result in personal injury, death and/or property damage.

1. Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Refer to the User's Information Manual provided with this unit for more details.
2. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

IMPORTANT: Units have high ambient operating limits. If limits are exceeded, the units will automatically lock the compressor out of operation. Manual reset will be required to restart the compressor.

UNIT SIZE 30/6	"A"	ROOF CURB ACCESSORY
03-07	1'-2" [356] 2'-0" [610]	CRRCURB02A00 CRRCURB03A00

- NOTES:
1. ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
 2. INSULATED PANELS.
 3. DIMENSIONS IN () ARE IN MILLIMETERS.
 4. ROOF CURB GALVANIZED STEEL.
 5. ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB).
 6. SERVICE CLEARANCE 4 FT ON EACH SIDE.
 7. BOLT HEADS TO BE ON INSIDE OF FLANGE. CLEARANCE IS (11) 0-0-7/16" TYP ALL CORNERS.

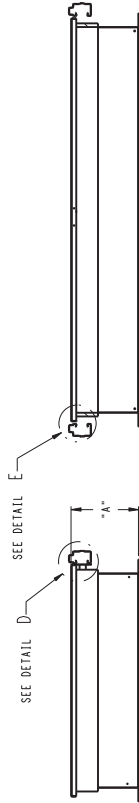
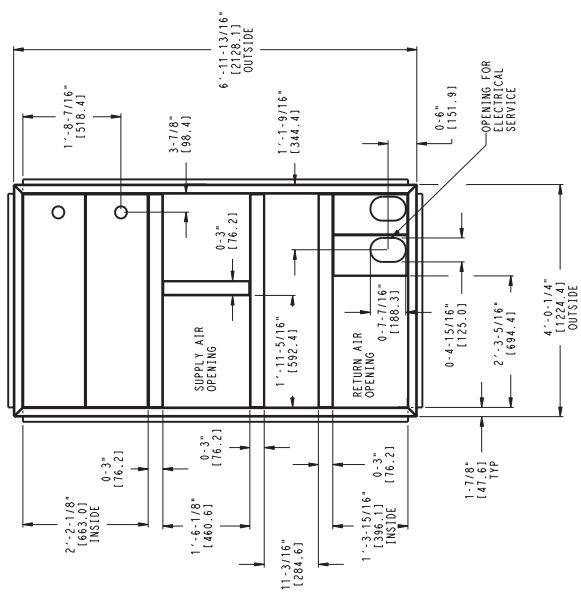
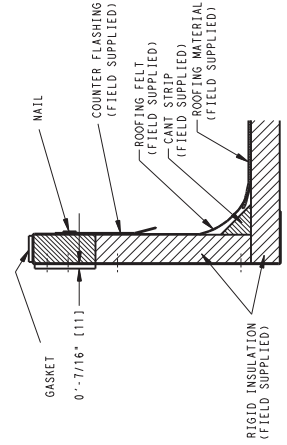
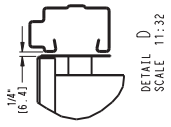
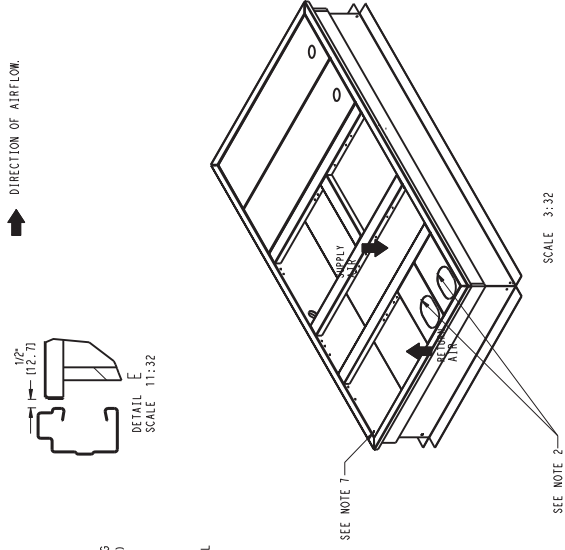
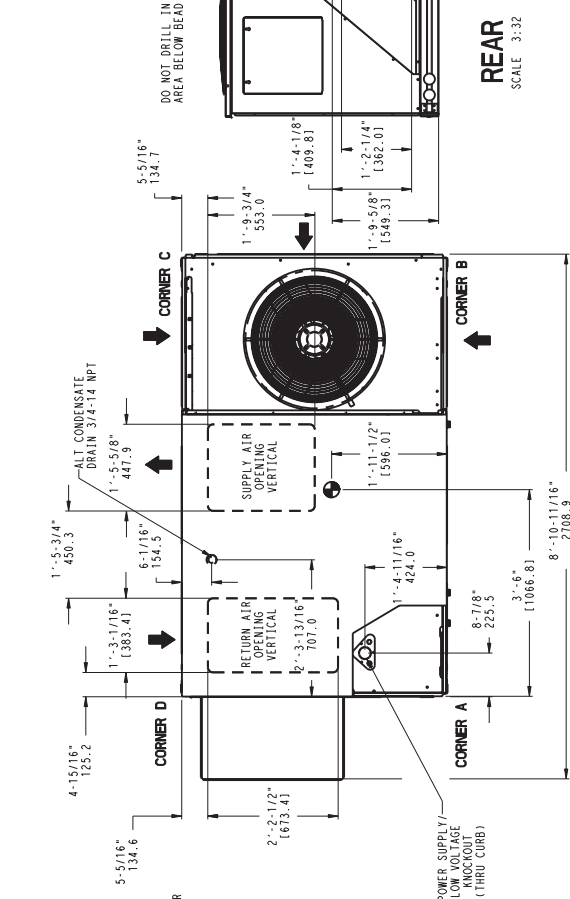


Fig. 1 - Roof Curb Details

UNIT	STD. WEIGHT LB.	UNIT WEIGHT KG.	CORNER (A)		CORNER (B)		CORNER (C)		CORNER (D)	
			LB.	KG.	LB.	KG.	LB.	KG.	LB.	KG.
50P603	704	319	162	73	142	64	187	85	214	97
50P604	704	319	162	73	142	64	187	85	214	97
50P605	715	322	178	81	156	71	206	93	235	107
50P606	829	376	191	86	161	76	220	100	232	114
50P607	874	398	201	91	176	80	232	105	285	120



- NOTES:
- DIMENSIONS IN () ARE IN MILLIMETERS.
 - CENTER OF GRAVITY.
 - DIRECTION OF AIR FLOW.
 - ON VERTICAL DISCHARGE UNITS, DUCTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. FOR HORIZONTAL DISCHARGE UNITS, FIELD SUPPLIED FLANGES SHOULD BE ATTACHED TO HORIZONTAL DISCHARGE OPENINGS, AND ALL DUCTWORK SHOULD BE ATTACHED TO THE FLANGES.
 - MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
 - VERTICAL DISCHARGE UNITS, CLEARANCE TO COMBUSTIBLE FOR FIRST 12" OF DUCT ABOVE UNIT.
 - BOTTOM OF UNIT TO COMBUSTIBLE SURFACES WHEN NOT USING CURB) 1 INCH.
 - BOTTOM OF BASE RAIL TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB) 1 INCH.
 - CONDENSATE COIL FOR PROPER AIR FLOW, 36 INCHES ONE SIDE, 12 INCHES THE OTHER. THE SIDE GETTING THE GREATER CLEARANCE IS OPTIONAL.
 - OVERHEAD, 60 INCHES TO ASSURE PROPER CONDENSER FAN OPERATION.
 - BETWEEN UNITS, CONTROL BOX SIDE, 42 IN. PER NEC.
 - BETWEEN UNITS AND UNGROUNDED SURFACES, CONTROL BOX SIDE, 36 IN. PER NEC.
 - UNGROUNDED SURFACE TO CONTROL BOX SIDE, 42 IN. PER NEC.
 - HORIZONTAL SUPPLY AND RETURN END, 0 INCHES.
 - WITH THE EXCEPTION OF THE CLEARANCE FOR THE CONDENSER COIL, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
 - UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B, OR C ROOF COVERING MATERIAL IF SET ON BASE RAIL.
 - THE VERTICAL CENTER OF GRAVITY IS 1'-6"(457) UP FROM THE BOTTOM OF THE BASE RAIL.

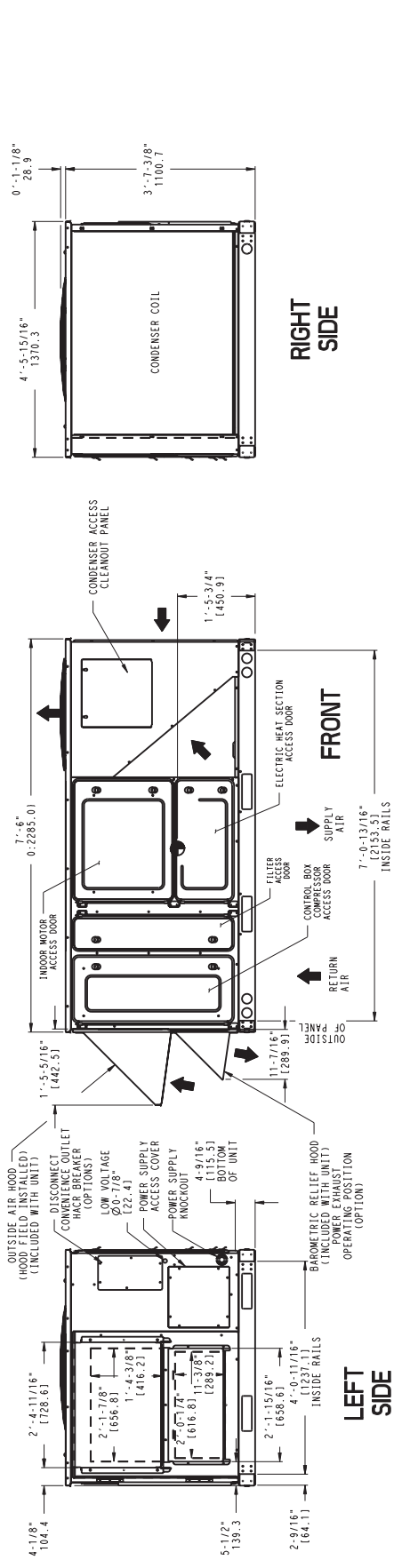


Fig. 2 - Base Unit Dimensions

INSTALLATION

Step 1 — Provide Unit Support

Roof Curb

Assemble or install accessory roof curb in accordance with instructions shipped with this accessory. (See Fig. 1.) Install insulation, cant strips, roofing, and counter flashing as shown. Ductwork can be installed to roof curb before unit is set in place. Ductwork must be attached to curb and not to the unit. Curb must be level. This is necessary to permit unit drain to function properly. Unit leveling tolerance is $\pm 1/16$ -in. per linear ft in any direction. Refer to Accessory Roof Curb Installation Instructions for additional information as required. When accessory roof curb is used, unit may be installed on class A, B, or C roof covering material. Carrier roof curb accessories are for flat roofs or slab mounting.

IMPORTANT: The gasketing of the unit to the roof curb is critical for a watertight seal. Install gasket with the roof curb as shown in Fig. 1. Improperly applied gasket can also result in air leaks and poor unit performance. Do not slide unit to position on roof curb.

Alternate Unit Support

When a curb cannot be used, install unit on a noncombustible surface. Support unit with sleepers, using unit curb support area. If sleepers cannot be used, support long sides of unit with a minimum of 3 equally spaced 4-in. x 4-in. pads on each side.

Step 2 — Rig and Place Unit

Inspect unit for transportation damage. See Table 1 for physical data. File any claim with transportation agency.

⚠ CAUTION

PERSONAL INJURY AND PROPERTY DAMAGE HAZARD

Failure to follow this caution may result in damage to roof. All panels must be in place when rigging. Unit is not designed for handling by fork truck.

Do not drop unit; keep upright. Use spreader bars over unit to prevent sling or cable damage. Rollers may be used to move unit across a roof. Level by using unit rail as a reference; leveling tolerance is $\pm 1/16$ -in. per linear ft in any direction. See Fig. 3 for additional information. Unit rigging weight is shown in Fig. 3.

Rigging holes are provided in the unit base rails as shown in Fig. 3. Refer to rigging instructions on unit.

Positioning

Maintain clearance, per Fig. 2, around and above unit to provide minimum distance from combustible materials, proper airflow, and service access. See Fig. 4 for location of access panels.

Do not install unit in an indoor location. Do not locate air inlets near exhaust vents or other sources of contaminated air.

Although unit is weatherproof, guard against water from higher level runoff and overhangs.

After unit is in position, remove crating and polyethylene sheet.

Roof Mount

Check building codes for weight distribution requirements. Unit operating weight is shown in Table 1.

Installation Onto Curb

The 50PG units are designed to fit on the accessory full perimeter curb. In either case, correct placement of the unit onto the curb is critical to operating performance. To aid in correct positioning, place unit on roof curb to maintain 1/4-in. gap between the inside of rail and roof curb on long sides and a 1/2-in. gap between the inside of rail and roof curb on both duct and condenser ends. Refer to Fig. 1 and 3, to assure proper duct opening alignment.

NOTE: Before positioning unit onto curb, refer to Step 5 - Install External Trap for Condensate Drain section concerning bottom drain connection plug.

⚠ CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage.

Do not slide unit to position when it is sitting on the curb. Curb gasketing material may be damaged and leaks may result.

Slab Mount (Horizontal Units Only)

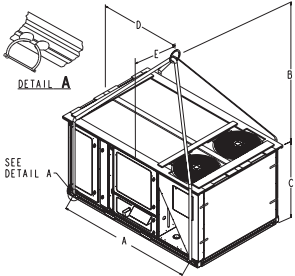
Provide a level concrete slab that extends a minimum of 6-in. beyond unit cabinet. Install a gravel apron in front of condenser-coil air inlet to prevent grass and foliage from obstructing airflow.

NOTE: Horizontal units may be installed on a roof curb if required.

⚠ CAUTION - NOTICE TO RIGGERS:
ACCESS PANEL MUST BE IN PLACE WHEN RIGGING.

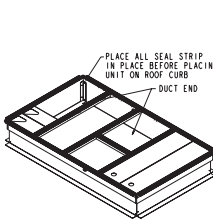
Hook rigging shackles through holes in base rail, as shown in Detail A. Holes in base rails are centered around the unit center of gravity. Use wooden top skid, when rigging, to prevent rigging straps from damaging unit.

UNIT SIZE	A		B		C		D		E		MAX. WEIGHT	
	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg
03-07	77.9	1978	36-54	914-1371	44.8	1139	42.0	1067	23.5	597	1158	525



DETAIL A

SEE DETAIL A



PLACE ALL SEAL STRIP IN PLACE BEFORE PLACING UNIT ON ROOF CURB DUCT END

Fig. 3 - 50PG Rigging Label

Table 1 – Physical Data

BASE UNIT 50PG	03	04	05	06	07
NOMINAL CAPACITY (Tons)	2	3	4	5	6
OPERATING WEIGHT (lb)					
Unit*	704	704	775	829	874
Economizer					
Vertical	40	40	40	40	40
Horizontal	50	50	50	50	50
Humidi-MiZer™ Adaptive Dehumidification System	22	22	31	27	26
Roof Curb					
14-in.	122	122	122	122	122
24-in.	184	184	184	184	184
COMPRESSOR			Fully Hermetic Scroll		
Quantity	1	1	1	1	1
Oil Type			Copeland 3MA		
Number of Refrigerant Circuits	1	1	1	1	1
Oil (oz)	38	42	42	66	56
REFRIGERANT TYPE			R-410A (Puron® Refrigerant)		
Expansion Device	TXV	TXV	TXV	TXV	TXV
Operating Charge (lb) — Standard Unit	7.3	9.0	15.7	16.6	19.0
Operating Charge (lb) — Unit with Humidi-MiZer System	11.75	13.50	25.00	22.00	22.70
CONDENSER COIL			Enhanced Copper Tubes, Aluminum Lanced Fins		
Condenser A (Outer)					
Rows...Fins/in.	1...17	1...17	2...17	2...17	2...17
Face Area (sq ft)	12.6	12.6	12.6	12.6	12.6
Condenser B (Inner)					
Rows...Fins/in.	—	1...17	2...17	2...17	2...17
Face Area (sq ft)	—	12.6	12.6	12.6	12.6
Humidi-MiZer Coil					
Rows...Fins/in.	1...17	1...17	1...17	1...17	1...17
Face Area (sq ft)	6.4	6.4	9.3	9.3	9.3
CONDENSER FAN			Propeller		
Quantity...Diameter (in.)	1...24	1...24	1...24	1...24	1...24
Nominal Cfm (Total, all fans)	3500	3500	3500	4500	4500
Motor Hp	1/8	1/8	1/8	1/4	1/4
Nominal Rpm — High Speed	825	825	825	1100	1100
Nominal Rpm — Low Speed	300	300	300	300	300
EVAPORATOR COIL			Enhanced Copper Tubes, Aluminum Double-Wavy Fins, Face Split		
Rows...Fins/in.	2...15	2...15	2...15	3...15	4...15
Face Area (sq ft)	9.3	9.3	9.3	9.3	9.3

* See Legend on next page.

50PG03--07

Table 1 — Physical Data (cont)

BASE UNIT 50PG (cont)		03	04	05	06	07
EVAPORATOR FAN		Centrifugal Type, Belt Drive				
Quantity...Size (in.)	Low	1...12 x 9	1...12 x 9	1...12 x 9	1...12 x 9	1...12 x 9
	High	1...12 x 9	1...12 x 9	1...12 x 9	1...12 x 9	1...12 x 9
Type Drive	Low	Belt	Belt	Belt	Belt	Belt
	High	Belt	Belt	Belt	Belt	Belt
Nominal Cfm		800	1200	1600	2000	2400
Maximum Continuous Bhp	Low	0.85	0.85	0.85	0.85/2.40†	2.40
	High	0.85	0.85	1.60/2.40†	1.60/2.40†	3.10
Motor Nominal Rpm		1620	1620	1620	1725	1725
Motor Frame Size	Low	48Y	48Y	48Y	56Y	56Y
	High	48Y	48Y	56Y	56Y	56Y
Fan Rpm Range	Low	482-736	482-736	596-910	690-978	796-1128
	High	656-1001	796-1128	828-1173	929-1261	1150-1438
Motor Bearing Type		Ball	Ball	Ball	Ball	Ball
Maximum Fan Rpm		2000	2000	2000	2000	2000
Motor Pulley Pitch Diameter Range (in.)	Low	1.9-2.9	1.9-2.9	1.9-2.9	2.4-3.4	2.4-3.4
	High	1.9-2.9	2.4-3.4	2.4-3.4	2.8-3.8	4.0-5.0
Fan Pulley Pitch Diameter (in.)	Low	6.8	6.8	5.5	6.0	5.2
	High	5.0	5.2	5.0	5.2	6.0
Nominal Motor Shaft Diameter (in.)	Low	1/2	1/2	1/2	5/8	5/8
	High	1/2	1/2	5/8	5/8	7/8
Belt...Pitch Length (in.)	Low	49.3	49.3	49.3	49.3	49.3
	High	49.3	49.3	49.3	49.3	52.3
Belt...Type	Low	AX	AX	AX	AX	AX
	High	AX	AX	AX	AX	AX
Pulley Center Line Distance Min. (in.)	Low	16.2	16.2	16.2	16.2	16.2
	High	16.2	16.2	16.2	16.2	16.2
Pulley Center Line Distance Max. (in.)	Low	20.2	20.2	20.2	20.2	20.2
	High	20.2	20.2	20.2	20.2	20.2
Speed Change per Full Turn of Movable Pulley Flange (rpm)	Low	48	48	59	58	66
	High	65	62	69	66	58
Movable Pulley Maximum Full Turns from Closed Position	Low	5	5	5	5	5
	High	5	5	5	5	5
Factory Pulley Setting (rpm)	Low	482	482	596	690	796
	High	656	796	828	929	1150
Fan Shaft Diameter at Pulley (in.)		3/4	3/4	3/4	3/4	3/4
HIGH-PRESSURE SWITCH (psig)						
Cutout		660 ± 10	660 ± 10	660 ± 10	660 ± 10	660 ± 10
Reset (Auto.)		505 ± 20	505 ± 20	505 ± 20	505 ± 20	505 ± 20
RETURN-AIR FILTERS		Throwaway				
Quantity...Size (in.)		4...16 x 20 x 2	4...16 x 20 x 2	4...16 x 20 x 2	4...16 x 20 x 2	4...16 x 20 x 2

LEGEND

TXV – Thermostatic Expansion Valve

* Aluminum evaporator coil/aluminum condenser coil.

† Single phase/three phase.

50PG03--07

Step 3 — Field Fabricate Ductwork

On vertical units, secure all ducts to roof curb and building structure. *Do not connect ductwork to unit.* For horizontal applications, field-supplied flanges should be attached to horizontal discharge openings and all ductwork secured to the flanges. Insulate and weatherproof all external ductwork, joints, and roof openings with counter flashing and mastic in accordance with applicable codes.

Ducts passing through an unconditioned space must be insulated and covered with a vapor barrier.

If a plenum return is used on a vertical unit, the return should be ducted through the roof deck to comply with applicable fire codes.

A minimum clearance is not required around ductwork. Cabinet return-air static pressure (a negative condition) shall not exceed 0.35-in. wg with economizer or 0.45-in. wg without economizer.

Step 4 — Make Unit Duct Connections

Vertical Supply/Return Configuration

Unit is shipped in vertical supply/return configuration. Ductwork openings are shown in Fig. 1 and 3. Attach the ductwork to the roof curb. Do not attach duct directly to the unit.

⚠ WARNING

PERSONAL INJURY HAZARD

Failure to follow this warning could result in personal injury.

For vertical supply and return units, tools or parts could drop into ductwork and cause an injury. Install a 90-degree turn in the return ductwork between the unit and the conditioned space. If a 90-degree elbow cannot be installed, then a grille of sufficient strength and density should be installed to prevent objects from falling into the conditioned space.

Horizontal Supply/Return Applications

Unit can be field-converted from vertical supply/return to horizontal supply/return. Remove all screws securing horizontal

duct covers to duct panel. Save panels. Install duct covers in the vertical duct openings in the basepan with the insulation side up. Covers will drop into openings and can be secured using field-supplied self-tapping screws. Ductwork can be attached to duct flanges provided on unit. When securing ductwork to unit, do not drill in area below bead or above top edge of duct opening.

Step 5 — Install External Trap for Condensate Drain

The unit's 3/4-in. condensate drain connections are located on the bottom and side of the unit. If the down drain is used, drill a minimum of a 5/8-in. diameter hole but not larger than a 3/4-in. diameter hole through the drain pan. A dimple of 2 mm in diameter and 1.5 mm deep will be provided in the drain pan to help locate the drill bit and to start the hole. Do not cut through the PVC pipe threads. Unit discharge connections do not determine the use of drain connections; either drain connection can be used with vertical or horizontal applications. See Fig. 2 for locations.

When using the standard side drain connection, make sure the plug (red) in the alternate bottom connection is tight before installing the unit. (See Fig. 5.)

To use the bottom drain connection for a roof curb installation, relocate the factory-installed plug (red) from the bottom connection to the side connection. A 1/2-in. socket extension can be used to remove the plug. (See Fig. 5.) The piping for the condensate drain and external trap can be completed after the unit is in place.

All units must have an external trap for condensate drainage. Install a trap at least 4-in. deep and protect against freezeup. If drain line is installed downstream from the external trap, pitch the line away from the unit at 1-in. per 10 ft of run. Do not use a pipe size smaller than the unit connection (3/4-in.). (See Fig. 6 and 7.)

The 50PG units are provided with a removable condensate pan for ease of cleaning. It is recommended that a union be placed between the unit and condensate drainage to ease the removal of the pan during servicing. Adequate clearance should be allowed if removal of condensate pan is required. Allow 54-in. between condensate pan access panel and any obstruction for complete removal.

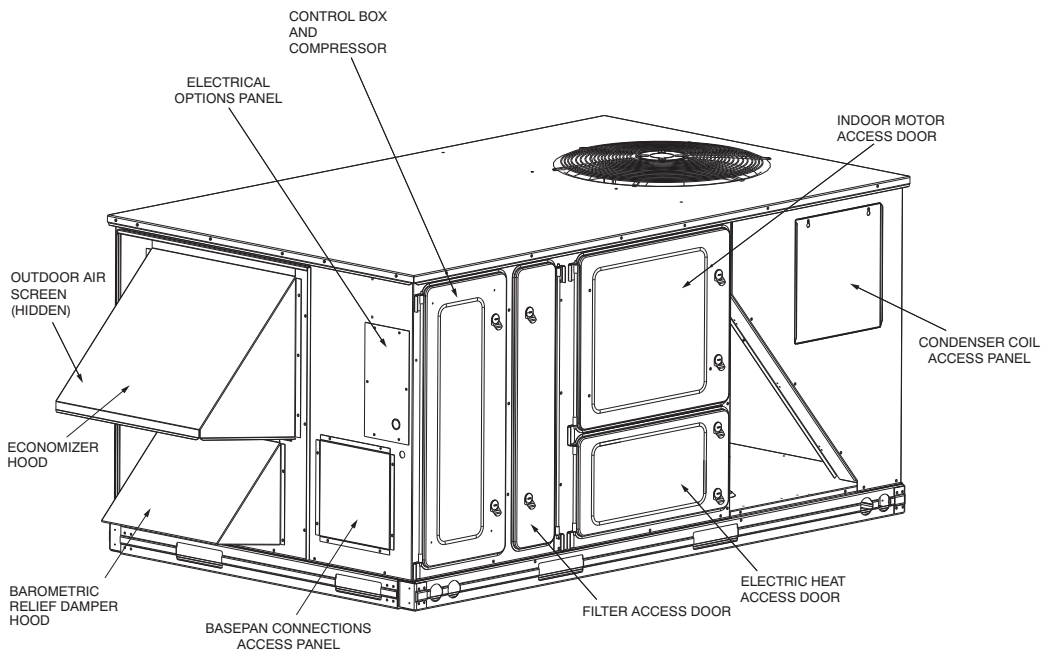


Fig. 4 - Panel and Filter Locations

C07272

INSERT SIDE DRAIN
PLUG FOR DOWN
DRAIN USE.

DRILL 5/8" DIA. (0.625 mm)
HOLE
THRU FOR DOWN DRAIN USE.

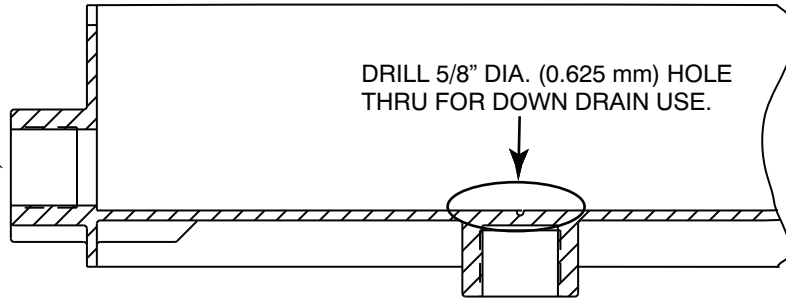


Fig. 5 - Condensate Drain Pan

C10321

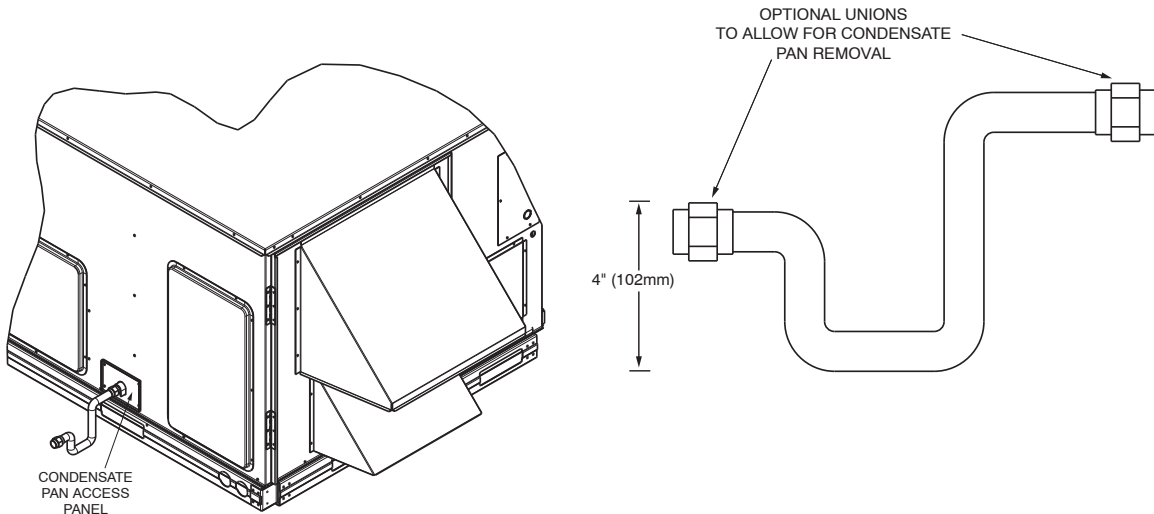
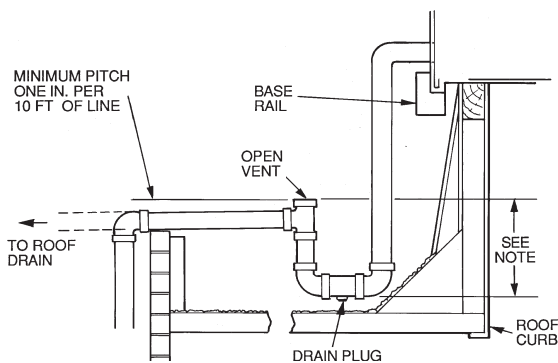


Fig. 6 - External Trap for Condensate Drain

C06234



NOTE: Trap should be deep enough to offset maximum unit static difference. A 4-in. trap is recommended.

Fig. 7 - Condensate Drain Piping Details

C06291

Step 6 — Make Electrical Connections

(For more details, refer to the Controls, Start-up, Operation, and Troubleshooting manual).

Field Power Supply

All 208/230-v units are factory wired for 230-v power supply. If the 208/230-v unit is to be connected to a 208-v power supply, the transformers (TRAN1 and TRAN2) must be rewired by moving the black wire with the 1/4-in. female quick connect from the 230-volt connection and moving to the 200-volt 1/4-in. male terminal on the primary side of the transformer.

Refer to unit label diagram for additional information. Leads are provided for field wire connections. Use UL (Underwriters Laboratories) approved copper/aluminum connector.

When installing rooftop units, provide safety disconnect per NEC (National Electrical Code) Article 440 or local codes. For non-fused disconnects, size the disconnect according to the sizing data provided in the electrical data tables. If a fused disconnect is used, determine the minimum size for the switch based on the disconnect sizing data provided in the electrical data tables and then coordinate the disconnect housing size to accommodate the Maximum Overcurrent Protection (MOCP) device size as marked on the unit informative plate. (See Table 2 and 3.) All field wiring must comply with NEC and local codes. Size wire based on MCA (Minimum Circuit Amps) on the unit informative plate. See Fig. 8 for power wiring connection to the unit leads and equipment ground.

Route power and ground lines through control box end panel or unit basepan (see Fig. 2) to connections as shown on unit wiring diagram and Fig. 8. Factory leads may be wired directly to the disconnect.

⚠ CAUTION

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage.

The correct power phasing is critical to the operation of the scroll compressors. An incorrect phasing will result in an alarm being generated and compressor operation lockout. Should this occur, power phase correction must be made to the incoming power. Damage to compressor could result.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

Failure to follow this warning could result in personal injury or death.

Unit cabinet must have an uninterrupted, unbroken electrical ground to minimize the possibility of personal injury if an electrical fault should occur. This ground may consist of electrical wire connected to unit ground lug in control compartment, or conduit approved for electrical ground when installed in accordance with NEC; ANSI (American National Standards Institute)/NFPA (National Fire Protection Association), latest edition, and local electrical codes.

Field wiring must conform to temperature limitations for type “T” wire. All field wiring must comply with NEC and local requirements.

Operating voltage to compressor must be within voltage range indicated on unit nameplate. On 3-phase units, voltages between phases must be balanced within 2%.

Unit failure as a result of operation on improper line voltage or excessive phase imbalance constitutes abuse and may cause damage to electrical components.

Field Control Wiring (Units Without Optional Humidi-MiZer™ Adaptive Dehumidification System)

Unit can be controlled with either a Carrier-approved accessory thermostat or a Carrier-approved space temperature sensor. Install thermostat according to the installation instructions included with accessory. Locate thermostat assembly or space temperature sensor on a solid interior wall in the conditioned space to sense average temperature.

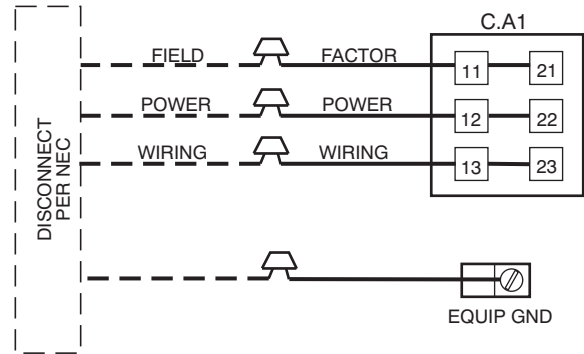
Route thermostat or space temperature sensor cable or equivalent single leads of colored wire from subbase terminals through conduit into unit to low-voltage connections as shown on unit label wiring diagram and in Fig. 9 or 10.

NOTE: For wire runs up to 50 ft, use no. 18 AWG (American Wire Gauge) insulated wire (35°C minimum). For 50 to 75 ft, use no. 16 AWG insulated wire (35°C minimum). For over 75 ft, use no. 14 AWG insulated wire (35°C Minimum). All wire larger than no. 18 AWG cannot be directly connected at the thermostat and will require a junction box and splice at the thermostat.

Set heat anticipator settings as follows:

VOLTAGE	Stage 1 (W1) ON	STAGE 1 AND 2 (W1 AND W2) ON
All	0.2	0.4

Settings may be changed slightly to provide a greater degree of comfort for a particular installation.



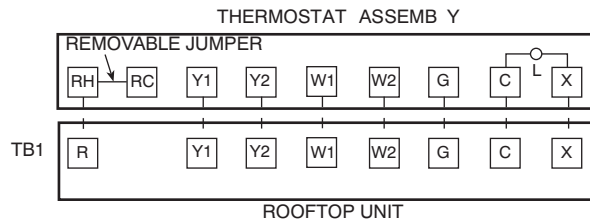
LEGEND

- C.A1** -- Compressor Contactor (A1)
- EQUIP** -- Equipment
- GND** -- Ground
- NEC** -- National Electrical Code

NOTE: The maximum wire size for C.A1 is 2/0.

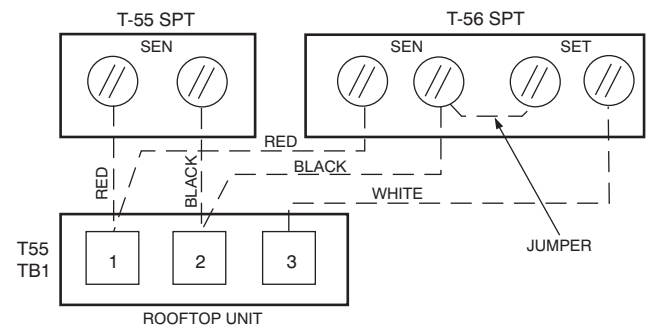
C06237

Fig. 8 - Field Power Wiring Connections



C06292

Fig. 9 - Field Control Thermostat Wiring



C06239

Fig. 10 - Field Control Space Temperature Sensor Wiring

Field Control Wiring (Units With Optional Humidi-MiZer™ Adaptive Dehumidification System)

Units require temperature control inputs for cooling and heating operation and humidity control inputs for Humidi-MiZer operation.

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Temperature Control

The unit can be controlled with either a Carrier-approved space temperature sensor, a Carrier accessory Thermidstat™ device, or a Carrier-approved accessory thermostat. Install the temperature control device according to the installation instructions included with the accessory. Locate the device on a solid interior wall in the conditioned space to sense average temperature. Carrier space temperature sensor wiring connections are shown in Fig. 10. General thermostat field control wiring connections are shown in Fig. 9. Carrier Thermidstat device wiring connections are shown in Fig. 11. Configuration of the unit control is required to specify the control input type before unit operation.

Route thermostat or space temperature sensor cable or equivalent single leads of colored wire from subbase terminals through conduit into unit to low-voltage connections as shown on unit label wiring diagram and in Fig. 9-11.

NOTE: For wire runs up to 50 ft, use no. 18 AWG (American Wire Gauge) insulated wire (35°C minimum). For 50 to 75 ft, use no. 16 AWG insulated wire (35°C minimum). For over 75 ft, use no. 14 AWG insulated wire (35°C Minimum). All wire larger than no. 18 AWG cannot be directly connected at the thermostat and will require a junction box and splice at the thermostat.

Set heat anticipator settings as follows:

VOLTAGE	Stage 1 (W1) ON	STAGE 1 AND 2 (W1 AND W2) ON
All	0.2	0.4

Settings may be changed slightly to provide a greater degree of comfort for a particular installation.

Humidity Control

Unit can be controlled with either a Carrier accessory Thermidstat device or a Carrier-approved accessory humidistat (switch output). The input for an accessory humidity sensor with 4 to 20 mA output is another option available when an economizer board is installed. Install the humidity control device according to the installation instructions included with the accessory. Locate the device on a solid interior wall in the conditioned space to sense average humidity. Carrier Thermidstat device wiring connections are shown in Fig. 11. General humidistat wiring connections are shown in Fig. 12. Configuration of the unit control is required to specify the control input type before unit operation. Refer to the

Controls, Start-up, Operation and Troubleshooting manual for configuration.

Units with the Humidi-MiZer™ option receive a discrete input from a field-installed device (such as from the Carrier humidistat or Thermidstat device). The discrete input is connected to the TB1 terminal strip points labeled Humidistat 1 and 2. As this is a discrete input, one of the connection points is for power to the switch and the other is the return path. (See Fig. 12.)

A space relative humidity sensor input (SP.RH) is only available if an economizer board (ECB) is installed in the unit and then the sensor can be connected to the OAQ point TB1-4. (See Fig. 12.) This input is used instead of the discrete humidistat or thermidstat inputs. The input controls the Humidi-MiZer using the 4 to 20 mA as percent humidity. The relative humidity value (measured by the relative humidity sensor) can be displayed on the Scrolling Marquee, in the space through a System Pilot™ device, or can be read by other CCN devices where it can be used to perform more advanced functions. The humidity sensor must be configured correctly; refer to the Controls, Start-up, Operation, and Troubleshooting manual for details.

If the customer also wishes to install a smoke detector into a Humidi-MiZer equipped 50PG unit, the fire shutdown connection points are on Plug PL-19, located in the economizer section. See the unit wiring schematic for wiring. For third-party smoke detector, see Fig. 13.

Point 19-3 is the 24 vac power source for the detector and point 19-5 is the 24 vac signal input for fire shutdown.

More information is available in the third party control section of the Controls, Start-up, Operation, and Troubleshooting manual.

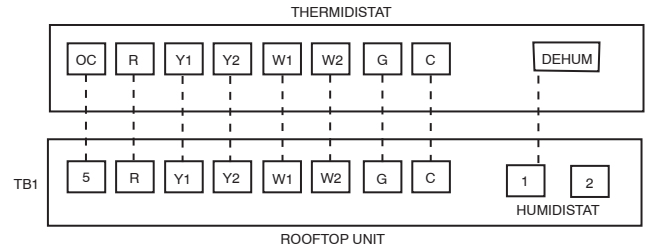


Fig. 11 - Field Control Thermidstat Wiring

C07055

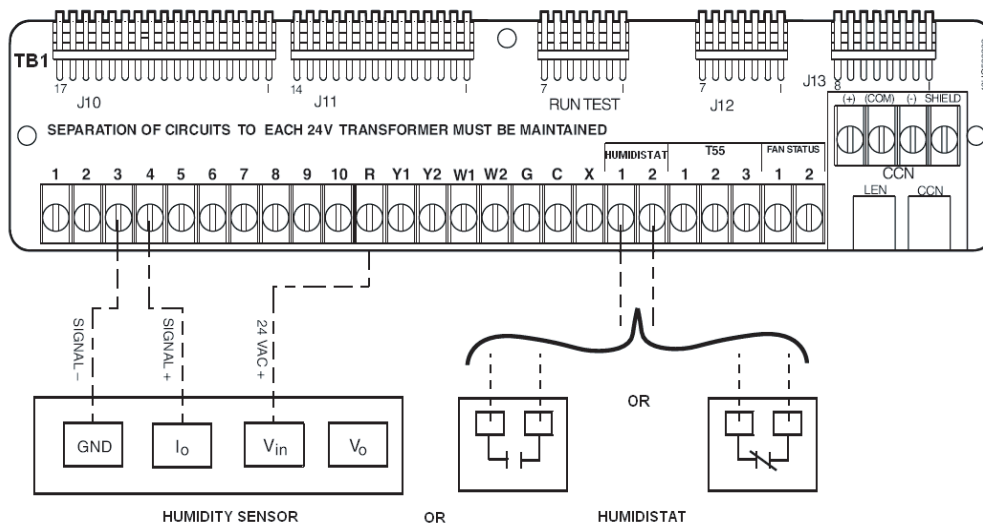


Fig. 12 - Humidi-MiZer Low-Voltage Terminal Strip - Humidity Sensor/Humidity Wiring

C07045

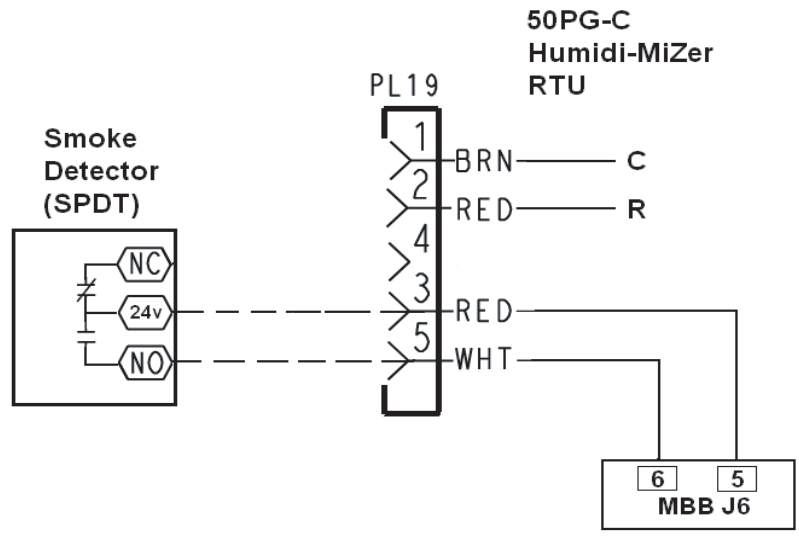


Fig. 13 - Third Party Smoke Detector on Humidi-MiZer™

C07191

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Table 2 – Electrical Data - Units Without Optional Convenience Outlet

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA	
03	208/230-1-60	187	253	12.8	60	1.0	—	—	4.9	Low	—	—	21.9/21.9	25/25	22/22	74/74
											10.8/12.5	2.3/ 3.0	21.9/21.9	25/25	22/22	74/74
											17.3/20.0	3.8/ 5.0	27.8/31.1	30/35	26/29	74/74
											26.0/30.0	5.6/ 7.5	38.6/43.6	40/45	36/40	74/74
											34.7/40.0	7.5/10.0	49.5/56.1	50/60	46/52	74/74
											—	—	21.9/21.9	25/25	22/22	74/74
										High	10.8/12.5	2.3/ 3.0	21.9/21.9	25/25	22/22	74/74
											17.3/20.0	3.8/ 5.0	27.8/31.1	30/35	26/29	74/74
											26.0/30.0	5.6/ 7.5	38.6/43.6	40/45	36/40	74/74
											34.7/40.0	7.5/10.0	49.5/56.1	50/60	46/52	74/74
											—	—	23.3/23.3	25/25	23/23	76/76
											10.8/12.5	2.3/ 3.0	23.3/23.5	25/25	23/23	76/76
										Low	17.3/20.0	3.8/ 5.0	29.5/32.9	30/35	27/30	76/76
											26.0/30.0	5.6/ 7.5	40.4/45.4	45/50	37/42	76/76
											34.7/40.0	7.5/10.0	51.3/57.9	60/60	47/53	76/76
											—	—	23.3/23.3	25/25	23/23	76/76
											10.8/12.5	2.3/ 3.0	23.3/23.5	25/25	23/23	76/76
											17.3/20.0	3.8/ 5.0	29.5/32.9	30/35	27/30	76/76
High	26.0/30.0	5.6/ 7.5	40.4/45.4	45/50	37/42	76/76										
	34.7/40.0	7.5/10.0	51.3/57.9	60/60	47/53	76/76										
	—	—	25.2/25.2	30/30	24/24	97/97										
	10.8/12.5	2.3/ 3.0	25.2/25.2	30/30	24/24	97/97										
	17.3/20.0	3.8/ 5.0	27.8/31.1	30/35	26/29	97/97										
	26.0/30.0	5.6/ 7.5	38.6/43.6	40/45	36/40	97/97										
04	208/230-1-60	187	253	15.4	83	1.0	—	—	4.9	Low	—	—	25.2/25.2	30/30	24/24	97/97
											10.8/12.5	2.3/ 3.0	25.2/25.2	30/30	24/24	97/97
											17.3/20.0	3.8/ 5.0	27.8/31.1	30/35	26/29	97/97
											26.0/30.0	5.6/ 7.5	38.6/43.6	40/45	36/40	97/97
											34.7/40.0	7.5/10.0	49.5/56.1	50/60	46/52	97/97
											52.0/60.0	11.3/15.0	71.1/81.1	80/90	65/75	97/97
										High	—	—	25.2/25.2	30/30	24/24	97/97
											10.8/12.5	2.3/ 3.0	25.2/25.2	30/30	24/24	97/97
											17.3/20.0	3.8/ 5.0	27.8/31.1	30/35	26/29	97/97
											26.0/30.0	5.6/ 7.5	38.6/43.6	40/45	36/40	97/97
											34.7/40.0	7.5/10.0	49.5/56.1	50/60	46/52	97/97
											52.0/60.0	11.3/15.0	71.1/81.1	80/90	65/75	97/97
										Low	—	—	26.6/26.6	30/30	26/26	99/99
											10.8/12.5	2.3/ 3.0	26.6/26.6	30/30	26/26	99/99
											17.3/20.0	3.8/ 5.0	29.5/32.9	30/35	27/30	99/99
											26.0/30.0	5.6/ 7.5	40.4/45.4	45/50	37/42	99/99
											34.7/40.0	7.5/10.0	51.3/57.9	60/60	47/53	99/99
											52.0/60.0	11.3/15.0	72.9/82.9	80/90	67/76	99/99
High	—	—	26.6/26.6	30/30	26/26	99/99										
	10.8/12.5	2.3/ 3.0	26.6/26.6	30/30	26/26	99/99										
	17.3/20.0	3.8/ 5.0	29.5/32.9	30/35	27/30	99/99										
	26.0/30.0	5.6/ 7.5	40.4/45.4	45/50	37/42	99/99										
	34.7/40.0	7.5/10.0	51.3/57.9	60/60	47/53	99/99										
	52.0/60.0	11.3/15.0	72.9/82.9	80/90	67/76	99/99										
04	208/230-3-60	187	253	11.5	77	1.0	—	—	4.9	Low	—	—	20.3/20.3	25/25	20/20	91/91
											6.3/ 7.2	2.3/ 3.0	20.3/20.3	25/25	20/20	91/91
											10.0/11.5	3.8/ 5.0	20.3/20.5	25/25	20/20	91/91
											15.0/17.3	5.6/ 7.5	24.9/27.8	25/30	23/26	91/91
											20.0/23.1	7.5/10.0	31.1/35.0	35/40	29/32	91/91
											30.0/34.6	11.3/15.0	43.6/49.4	45/50	40/45	91/91
										High	—	—	20.3/20.3	25/25	20/20	91/91
											6.3/ 7.2	2.3/ 3.0	20.3/20.3	25/25	20/20	91/91
											10.0/11.5	3.8/ 5.0	20.3/20.5	25/25	20/20	91/91
											15.0/17.3	5.6/ 7.5	24.9/27.8	25/30	23/26	91/91
											20.0/23.1	7.5/10.0	31.1/35.0	35/40	29/32	91/91
											30.0/34.6	11.3/15.0	43.6/49.4	45/50	40/45	91/91

LEGEND

- FLA – Full Load Amps
- HACR – Heating, Air Conditioning and Refrigeration
- IFM – Indoor (Evaporator) Fan Motor
- LRA – Locked Rotor Amps
- MCA – Minimum Circuit Amps
- MOCP – Maximum Overcurrent Protection
- NEC – National Electrical Code
- OFM – Outdoor (Condenser) Fan Motor
- RLA – Rated Load Amps



Example: Supply voltage is 230–3–60



AB = 224 v
 BC = 231 v
 AC = 226 v
 Average Voltage = $\frac{224 + 231 + 226}{3}$
 = $\frac{681}{3}$
 = 227

Determine maximum deviation from average voltage.

- (AB) 227 – 224 = 3 v
 - (BC) 231 – 227 = 4 v
 - (AC) 227 – 226 = 1 v
- Maximum deviation is 4 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{4}{227}$
 = 1.76%

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

*Heater capacity (kW) is based on heater voltage of 208v, 240v, 480v, or 600v. If power distribution voltage to unit varies from rated heater voltage, heater kW will vary accordingly.

† Fuse or HACR circuit breaker.

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. **Unbalanced 3-Phase Supply Voltage**
 Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

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Table 2 - Electrical Data - Units Without Optional Convenience Outlet (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA	
												FLA	LRA			
04 (cont)	208/230-3-60	187	253	11.5	77	1.0	1.4	Low	4.9	—	—	21.7/21.7	25/25	22/22	93/93	
										6.3/ 7.2	2.3/ 3.0	21.7/21.7	25/25	22/22	93/93	
										10.0/11.5	3.8/ 5.0	21.7/22.3	25/25	22/22	93/93	
										15.0/17.3	5.6/ 7.5	26.6/29.5	30/30	24/27	93/93	
										20.0/23.1	7.5/10.0	32.9/36.8	35/40	30/34	93/93	
										30.0/34.6	11.3/15.0	45.4/51.1	50/60	42/47	93/93	
		High	—	—	21.7/21.7	25/25	22/22	93/93								
			6.3/ 7.2	2.3/ 3.0	21.7/21.7	25/25	22/22	93/93								
			10.0/11.5	3.8/ 5.0	21.7/22.3	25/25	22/22	93/93								
			15.0/17.3	5.6/ 7.5	26.6/29.5	30/30	24/27	93/93								
			20.0/23.1	7.5/10.0	32.9/36.8	35/40	30/34	93/93								
			30.0/34.6	11.3/15.0	45.4/51.1	50/60	42/47	93/93								
	460-3-60	414	506	5.1	35	0.5	—	Low	2.1	—	—	9.0	15	9	42	
										3.5	3.0	9.0	15	9	42	
										5.8	5.0	9.9	15	9	42	
										8.7	7.5	13.5	15	12	42	
										11.5	10.0	17.0	20	16	42	
										17.3	15.0	24.3	25	22	42	
										High	—	—	9.0	15	9	42
											3.5	3.0	9.0	15	9	42
											5.8	5.0	9.9	15	9	42
											8.7	7.5	13.5	15	12	42
											11.5	10.0	17.0	20	16	42
											17.3	15.0	24.3	25	22	42
		0.6	Low	—	—	9.6	15	10	43							
				3.5	3.0	9.6	15	10	43							
				5.8	5.0	10.6	15	10	43							
				8.7	7.5	14.3	15	13	43							
				11.5	10.0	17.8	20	16	43							
				17.3	15.0	25.0	30	23	43							
			High	—	—	9.6	15	10	43							
				3.5	3.0	9.6	15	10	43							
				5.8	5.0	10.6	15	10	43							
				8.7	7.5	14.3	15	13	43							
				11.5	10.0	17.8	20	16	43							
				17.3	15.0	25.0	30	23	43							
	575-3-60	518	633	4.3	31	0.5	—	Low	2.1	—	—	8.0	15	8	37	
										9.2	10.0	14.1	15	13	37	
										13.9	15.0	20.0	25	18	37	
										—	—	8.0	15	8	37	
										9.2	10.0	14.1	15	13	37	
										13.9	15.0	20.0	25	18	37	
		1.4	—	—	9.4	15	10	39								
			9.2	10.0	15.9	20	15	39								
			13.9	15.0	21.8	25	20	39								
			—	—	9.4	15	10	39								
			9.2	10.0	15.9	20	15	39								
			13.9	15.0	21.8	25	20	39								
05	208/230-1-60	187	253	20.5	109	1.0	—	Low	4.9	—	—	31.5/ 31.5	35/ 35	30/30	123/123	
										17.3/20.0	3.8/ 5.0	31.5/ 31.5	35/ 35	30/30	123/123	
										26.0/30.0	5.6/ 7.5	38.6/ 43.6	40/ 45	36/40	123/123	
										34.7/40.0	7.5/10.0	49.5/ 56.1	50/ 60	46/52	123/123	
										52.0/60.0	11.3/15.0	71.1/ 81.1	80/ 90	65/75	123/123	
										69.3/80.0	15.0/20.0	92.8/106.1	100/110	85/98	123/123	
										High	—	—	33.6/ 33.6	35/ 35	33/ 33	148/148
											17.3/20.0	3.8/ 5.0	33.6/ 33.6	35/ 35	33/ 33	148/148
											26.0/30.0	5.6/ 7.5	41.3/ 46.3	45/ 50	38/ 43	148/148
											34.7/40.0	7.5/10.0	52.1/ 58.8	60/ 60	48/ 54	148/148
											52.0/60.0	11.3/15.0	73.8/ 83.8	80/ 90	68/ 77	148/148
											69.3/80.0	15.0/20.0	95.4/108.8	100/110	88/100	148/148
		1.4	Low	—	—	32.9/ 32.9	35/ 35	32/32	125/125							
				17.3/20.0	3.8/ 5.0	32.9/ 32.9	35/ 35	32/32	125/125							
				26.0/30.0	5.6/ 7.5	40.4/ 45.4	45/ 50	37/42	125/125							
				34.7/40.0	7.5/10.0	51.3/ 57.9	60/ 60	47/53	125/125							
				52.0/60.0	11.3/15.0	72.9/ 82.9	80/ 90	67/76	125/125							
				69.3/80.0	15.0/20.0	94.5/107.9	100/110	87/99	125/125							
			High	—	—	35.0/ 35.5	40/ 40	34/ 34	150/150							
				17.3/20.0	3.8/ 5.0	35.0/ 35.5	40/ 40	34/ 34	150/150							
				26.0/30.0	5.6/ 7.5	43.0/ 48.0	45/ 50	40/ 44	150/150							
				34.7/40.0	7.5/10.0	53.9/ 60.5	60/ 70	50/ 56	150/150							
				52.0/60.0	11.3/15.0	75.5/ 85.5	80/ 90	69/ 79	150/150							
				69.3/80.0	15.0/20.0	97.1/110.5	100/125	89/102	150/150							
	208/230-3-60	187	253	14.6	91	1.0	—	Low	4.9	—	—	24.2/24.2	25/25	24/24	105/105	
										10.0/11.5	3.8/ 5.0	24.2/24.2	25/25	24/24	105/105	
										15.0/17.3	5.6/ 7.5	24.9/27.8	25/30	24/26	105/105	
										20.0/23.1	7.5/10.0	31.1/35.0	35/40	29/32	105/105	
										30.0/34.6	11.3/15.0	43.6/49.4	45/50	40/45	105/105	
										40.0/46.2	15.0/20.0	56.1/63.9	60/70	52/59	105/105	
										High	—	—	24.5/24.5	25/25	24/24	123/123
											10.0/11.5	3.8/ 5.0	24.5/24.5	25/25	24/24	123/123
											15.0/17.3	5.6/ 7.5	25.3/28.1	30/30	24/26	123/123
											20.0/23.1	7.5/10.0	31.5/35.4	35/40	29/33	123/123
											30.0/34.6	11.3/15.0	44.0/49.8	45/50	40/46	123/123
											40.0/46.2	15.0/20.0	56.5/64.3	60/70	52/59	123/123
		4.9	Low	—	—	25.6/25.6	30/30	25/25	107/107							
				10.0/11.5	3.8/ 5.0	25.6/25.6	30/30	25/25	107/107							
				15.0/17.3	5.6/ 7.5	26.6/29.5	30/30	25/27	107/107							
				20.0/23.1	7.5/10.0	32.9/36.8	35/40	30/34	107/107							
				30.0/34.6	11.3/15.0	45.4/51.1	50/60	42/47	107/107							
				40.0/46.2	15.0/20.0	57.9/65.6	60/70	53/60	107/107							
			High	—	—	25.9/25.9	30/30	26/26	125/125							
				10.0/11.5	3.8/ 5.0	25.9/25.9	30/30	26/26	125/125							
				15.0/17.3	5.6/ 7.5	27.0/29.9	30/30	26/27	125/125							
				20.0/23.1	7.5/10.0	33.3/37.1	35/40	31/34	125/125							
				30.0/34.6	11.3/15.0	45.8/51.5	50/60	42/47	125/125							
				40.0/46.2	15.0/20.0	58.3/66.0	60/70	54/61	125/125							

*See Legend on next page.

50PG03--07

Table 2 - Electrical Data - Units Without Optional Convenience Outlet (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE									
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA								
												FLA	LRA										
05 (cont)	460-3-60	414	506	7.1	46	0.5	—	Low	2.1	—	—	11.5	15	11	53								
										5.8	5.0	11.5	15	11	53								
										8.7	7.5	13.5	15	12	53								
										11.5	10.0	17.0	20	16	53								
										17.3	15.0	24.3	25	22	53								
										23.1	20.0	31.5	35	29	53								
									2.6	—	—	12.0	15	12	62								
										5.8	5.0	12.0	15	12	62								
										8.7	7.5	14.1	15	13	62								
										11.5	10.0	17.6	20	16	62								
										17.3	15.0	24.9	25	23	62								
										23.1	20.0	32.1	35	30	62								
	0.6	2.1	—	12.1	15	12	54	—	Low	—	—	12.1	15	12	54								
										5.8	5.0	12.1	15	13	54								
										8.7	7.5	14.3	15	13	54								
										11.5	10.0	17.8	20	16	54								
										17.3	15.0	25.0	30	23	54								
										23.1	20.0	32.3	35	30	54								
		2.6	—	12.6	15	12	63	—	High	—	—	12.6	15	12	63								
										5.8	5.0	12.6	15	12	63								
										8.7	7.5	14.9	15	14	63								
										11.5	10.0	18.4	20	17	63								
										17.3	15.0	25.6	30	24	63								
										23.1	20.0	32.9	35	30	63								
575-3-60	518	633	5.1	34	0.5	—	Low	2.1	—	—	9.0	15	9	40									
									9.2	10.0	14.1	15	13	40									
									13.9	15.0	20.0	25	18	40									
									18.5	20.0	25.8	30	24	40									
									—	—	8.9	15	9	46									
									9.2	10.0	14.0	15	13	46									
								2.0	—	13.9	15.0	19.9	20	18	High	—	—	13.9	15.0	19.9	20	18	46
																18.5	20.0	25.6	30	24	46		
																—	—	10.4	15	10	42		
																9.2	10.0	15.9	20	15	42		
																13.9	15.0	21.8	25	20	42		
																18.5	20.0	27.5	30	25	42		
1.4	—	10.3	15	10	48	—	Low	—	—	10.3	15	10	48										
								9.2	10.0	15.8	20	14	48										
								13.9	15.0	21.6	25	20	48										
								18.5	20.0	27.4	30	25	48										
								—	—	9.0	15	9	40										
								9.2	10.0	14.1	15	13	40										
06	208/230-1-60	187	253	26.9	145	1.5	—	Low	4.9	—	—	40.0/ 40.0	45/ 45	38/38	160/160								
										17.3/ 20.0	3.8/ 5.0	40.0/ 40.0	45/ 45	38/38	160/160								
										26.0/ 30.0	5.6/ 7.5	40.0/ 43.6	45/ 45	38/40	160/160								
										34.7/ 40.0	7.5/10.0	49.5/ 56.1	50/ 60	46/52	160/160								
										52.0/ 60.0	11.3/15.0	71.1/ 81.1	80/ 90	65/75	160/160								
										69.3/ 80.0	15.0/20.0	92.8/106.1	100/110	85/98	160/160								
									7.0	—	117.1/133.8	125/150	105/121	160/160	—	High	—	—	42.1/ 42.1	45/ 45	41/41	185/185	
																	17.3/ 20.0	3.8/ 5.0	42.1/ 42.1	45/ 45	41/41	185/185	
																	26.0/ 30.0	5.6/ 7.5	42.1/ 46.3	45/ 50	41/43	185/185	
																	34.7/ 40.0	7.5/10.0	52.1/ 58.8	60/ 60	48/54	185/185	
																	52.0/ 60.0	11.3/15.0	73.8/ 83.8	80/ 90	68/77	185/185	
																	69.3/ 80.0	15.0/20.0	95.4/108.8	100/110	88/100	185/185	
								1.4	4.9	—	41.4/ 41.4	45/ 45	40/40	162/162	Low	—	—	41.4/ 41.4	45/ 45	40/40	162/162		
																17.3/ 20.0	3.8/ 5.0	41.4/ 41.4	45/ 45	40/40	162/162		
																26.0/ 30.0	5.6/ 7.5	41.4/ 45.4	45/ 50	40/42	162/162		
																34.7/ 40.0	7.5/10.0	51.3/ 57.9	60/ 60	47/53	162/162		
																52.0/ 60.0	11.3/15.0	72.9/ 82.9	80/ 90	67/76	162/162		
																69.3/ 80.0	15.0/20.0	94.5/107.9	100/110	87/99	162/162		
									7.0	—	116.3/132.9	125/150	107/122	162/162	—	High	—	—	43.5/ 43.5	50/ 50	42/42	187/187	
																	17.3/ 20.0	3.8/ 5.0	43.5/ 43.5	50/ 50	42/42	187/187	
																	26.0/ 30.0	5.6/ 7.5	43.5/ 48.0	50/ 50	42/44	187/187	
																	34.7/ 40.0	7.5/10.0	53.9/ 60.5	60/ 70	50/56	187/187	
																	52.0/ 60.0	11.3/15.0	75.5/ 85.5	80/ 90	69/79	187/187	
																	69.3/ 80.0	15.0/20.0	97.1/110.5	100/125	89/102	187/187	

LEGEND

- FLA - Full Load Amps
- HACR - Heating, Air Conditioning and Refrigeration
- IFM - Indoor (Evaporator) Fan Motor
- LRA - Locked Rotor Amps
- MCA - Minimum Circuit Amps
- MOCP - Maximum Overcurrent Protection
- NEC - National Electrical Code
- NEF - Outdoor (Condenser) Fan Motor
- RLA - Rated Load Amps



Example: Supply voltage is 230-3-60



AB = 224 v
 BC = 231 v
 AC = 226 v
 Average Voltage = $\frac{224 + 231 + 226}{3}$
 = $\frac{681}{3}$
 = 227

Determine maximum deviation from average voltage.

- (AB) 227 - 224 = 3 v
 - (BC) 231 - 227 = 4 v
 - (AC) 227 - 226 = 1 v
- Maximum deviation is 4 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{4}{227}$
 = 1.76%

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

*Heater capacity (kW) is based on heater voltage of 208v, 240v, 480v, or 600v. If power distribution voltage to unit varies from rated heater voltage, heater kW will vary accordingly.

† Fuse or HACR circuit breaker.

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. **Unbalanced 3-Phase Supply Voltage**
 Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

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Table 2 - Electrical Data - Units Without Optional Convenience Outlet (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
06 (cont)	208/230-3-60	187	253	17.6	123	1.5	—	—	5.2	—	—	28.7/28.7	30/30	28/28	156/156
										10.0/11.5	3.8/ 5.0	28.7/28.7	30/30	28/28	156/156
										15.0/17.3	5.6/ 7.5	28.7/28.7	30/30	28/28	156/156
										20.0/23.1	7.5/10.0	31.5/35.4	35/40	29/33	156/156
										30.0/34.6	11.3/15.0	44.0/49.8	45/50	40/46	156/156
										40.0/46.2	15.0/20.0	56.5/64.3	60/70	52/59	156/156
										50.0/57.7	18.8/25.0	69.0/78.6	70/80	63/72	156/156
										—	—	28.7/28.7	30/30	28/28	156/156
										10.0/11.5	3.8/ 5.0	28.7/28.7	30/30	28/28	156/156
										15.0/17.3	5.6/ 7.5	28.7/28.7	30/30	28/28	156/156
										20.0/23.1	7.5/10.0	31.5/35.4	35/40	29/33	156/156
										30.0/34.6	11.3/15.0	44.0/49.8	45/50	40/46	156/156
										40.0/46.2	15.0/20.0	56.5/64.3	60/70	52/59	156/156
										50.0/57.7	18.8/25.0	69.0/78.6	70/80	63/72	156/156
										—	—	30.1/30.1	35/35	30/30	158/158
										10.0/11.5	3.8/ 5.0	30.1/30.1	35/35	30/30	158/158
										15.0/17.3	5.6/ 7.5	30.1/30.1	35/35	30/30	158/158
										20.0/23.1	7.5/10.0	33.3/37.1	35/40	31/34	158/158
										30.0/34.6	11.3/15.0	45.8/51.5	50/60	42/47	158/158
										40.0/46.2	15.0/20.0	58.3/66.0	60/70	54/61	158/158
	50.0/57.7	18.8/25.0	70.8/80.4	80/90	65/74	158/158									
	—	—	30.1/30.1	35/35	30/30	158/158									
	10.0/11.5	3.8/ 5.0	30.1/30.1	35/35	30/30	158/158									
	15.0/17.3	5.6/ 7.5	30.1/30.1	35/35	30/30	158/158									
	20.0/23.1	7.5/10.0	33.3/37.1	35/40	31/34	158/158									
	30.0/34.6	11.3/15.0	45.8/51.5	50/60	42/47	158/158									
	40.0/46.2	15.0/20.0	58.3/66.0	60/70	54/61	158/158									
	50.0/57.7	18.8/25.0	70.8/80.4	80/90	65/74	158/158									
	—	—	13.0	15	13	67									
	5.8	5.0	13.0	15	13	67									
	8.7	7.5	14.1	15	13	67									
	11.5	10.0	17.6	20	16	67									
	17.3	15.0	24.9	25	23	67									
	23.1	20.0	32.1	35	30	67									
	28.9	25.0	39.4	40	36	67									
	—	—	13.0	15	13	67									
	5.8	5.0	13.0	15	13	67									
	8.7	7.5	14.1	15	13	67									
	11.5	10.0	17.6	20	16	67									
	17.3	15.0	24.9	25	23	67									
	23.1	20.0	32.1	35	30	67									
	28.9	25.0	39.4	40	36	67									
	—	—	13.6	15	13	68									
	5.8	5.0	13.6	15	13	68									
	8.7	7.5	14.9	15	14	68									
	11.5	10.0	18.4	20	17	68									
	17.3	15.0	25.6	30	24	68									
	23.1	20.0	32.9	35	30	68									
	28.9	25.0	40.1	45	37	68									
	—	—	13.6	15	13	68									
	5.8	5.0	13.6	15	13	68									
	8.7	7.5	14.9	15	14	68									
	11.5	10.0	18.4	20	17	68									
	17.3	15.0	25.6	30	24	68									
	23.1	20.0	32.9	35	30	68									
	28.9	25.0	40.1	45	37	68									
	—	—	10.4	15	10	53									
	9.2	10.0	14.0	15	13	53									
	13.9	15.0	19.9	20	18	53									
	18.5	20.0	25.6	30	24	53									
	23.1	25.0	31.4	35	29	53									
	—	—	10.4	15	10	53									
	9.2	10.0	14.0	15	13	53									
	13.9	15.0	19.9	20	18	53									
	18.5	20.0	25.6	30	24	53									
	23.1	25.0	31.4	35	29	53									
	—	—	11.8	15	12	55									
	9.2	10.0	15.8	20	14	55									
	13.9	15.0	21.6	25	20	55									
	18.5	20.0	27.4	30	25	55									
	23.1	25.0	33.1	35	30	55									
	—	—	11.8	15	12	55									
	9.2	10.0	15.8	20	14	55									
	13.9	15.0	21.6	25	20	55									
	18.5	20.0	27.4	30	25	55									
	23.1	25.0	33.1	35	30	55									
	—	—	32.3/32.3	35/35	31/31	182/182									
	10.0/11.5	3.8/ 5.0	32.3/32.3	35/35	31/31	182/182									
	15.0/17.3	5.6/ 7.5	32.3/32.3	35/35	31/31	182/182									
	20.0/23.1	7.5/10.0	32.3/35.4	35/40	31/33	182/182									
	30.0/34.6	11.3/15.0	44.0/49.8	45/50	40/46	182/182									
	40.0/46.2	15.0/20.0	56.5/64.3	60/70	52/59	182/182									
	50.0/57.7	18.8/25.0	69.0/78.6	70/80	63/72	182/182									
	—	—	34.6/34.6	35/35	34/34	208/208									
	10.0/11.5	3.8/ 5.0	34.6/34.6	35/35	34/34	208/208									
	15.0/17.3	5.6/ 7.5	34.6/34.6	35/35	34/34	208/208									
	20.0/23.1	7.5/10.0	34.6/38.3	35/40	34/35	208/208									
	30.0/34.6	11.3/15.0	46.9/52.6	50/60	43/48	208/208									
	40.0/46.2	15.0/20.0	59.4/67.1	60/70	55/62	208/208									
	50.0/57.7	18.8/25.0	71.9/81.5	80/90	66/75	208/208									

* See Legend on next page.

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Table 2 - Electrical Data - Units Without Optional Convenience Outlet (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
07 (cont)	208/230-3-60	187	253	20.5	149	1.5	1.4	Low	5.2	—	—	33.7/33.7	35/35	33/33	184/184
										10.0/11.5	3.8/ 5.0	33.7/33.7	35/35	33/33	184/184
										15.0/17.3	5.6/ 7.5	33.7/33.7	35/35	33/33	184/184
										20.0/23.1	7.5/10.0	33.7/37.1	35/40	33/34	184/184
										30.0/34.6	11.3/15.0	45.8/51.5	50/60	42/47	184/184
										40.0/46.2	15.0/20.0	58.3/66.0	60/70	54/61	184/184
										50.0/57.7	18.8/25.0	70.8/80.4	80/90	65/74	184/184
										—	—	36.0/36.0	40/40	36/36	210/210
										10.0/11.5	3.8/ 5.0	36.0/36.0	40/40	36/36	210/210
										15.0/17.3	5.6/ 7.5	36.0/36.0	40/40	36/36	210/210
								20.0/23.1	7.5/10.0	36.1/40.0	40/45	36/37	210/210		
								30.0/34.6	11.3/15.0	48.6/54.4	50/60	45/50	210/210		
								40.0/46.2	15.0/20.0	61.1/68.9	70/70	56/63	210/210		
								50.0/57.7	18.8/25.0	73.6/83.3	80/90	68/77	210/210		
								—	—	15.4	20	15	92		
								5.8	5.0	15.4	20	15	92		
								8.7	7.5	15.4	20	15	92		
								11.5	10.0	17.6	20	16	92		
								17.3	15.0	24.9	25	23	92		
								23.1	20.0	32.1	35	30	92		
	28.9	25.0	39.4	40	36	92									
	—	—	16.2	20	16	105									
	5.8	5.0	16.2	20	16	105									
	8.7	7.5	16.2	20	16	105									
	11.5	10.0	18.6	20	17	105									
	17.3	15.0	25.9	30	24	105									
	23.1	20.0	33.1	35	30	105									
	28.9	25.0	40.4	45	37	105									
	—	—	16.0	20	16	93									
	5.8	5.0	16.0	20	16	93									
	8.7	7.5	16.0	20	16	93									
	11.5	10.0	18.4	20	17	93									
	17.3	15.0	25.6	30	24	93									
	23.1	20.0	32.9	35	30	93									
	28.9	25.0	40.1	45	37	93									
	—	—	16.8	20	17	106									
	5.8	5.0	16.8	20	17	106									
	8.7	7.5	16.8	20	17	106									
	11.5	10.0	19.4	20	18	106									
	17.3	15.0	26.6	30	24	106									
	23.1	20.0	33.9	35	31	106									
	28.9	25.0	41.1	45	38	106									
	—	—	12.3	15	12	67									
	9.2	10.0	14.0	15	13	67									
	13.9	15.0	19.9	20	18	67									
	18.5	20.0	25.6	30	24	67									
	23.1	25.0	31.4	35	29	67									
	27.7	30.0	37.1	40	34	67									
	—	—	13.1	15	13	78									
	9.2	10.0	15.0	15	14	78									
	13.9	15.0	20.9	25	19	78									
	18.5	20.0	26.6	30	24	78									
	23.1	25.0	32.4	35	30	78									
	27.7	30.0	38.1	40	35	78									
	—	—	13.7	15	14	69									
	9.2	10.0	15.8	20	14	69									
	13.9	15.0	21.6	25	20	69									
	18.5	20.0	27.4	30	25	69									
	23.1	25.0	33.1	35	30	69									
	27.7	30.0	38.9	40	36	69									
	—	—	14.5	15	14	80									
	9.2	10.0	16.8	20	15	80									
	13.9	15.0	22.6	25	21	80									
	18.5	20.0	28.4	30	26	80									
	23.1	25.0	34.1	35	31	80									
	27.7	30.0	39.9	40	37	80									

LEGEND

- FLA - Full Load Amps
- HACR - Heating, Air Conditioning and Refrigeration
- IFM - Indoor (Evaporator) Fan Motor
- LRA - Locked Rotor Amps
- MCA - Minimum Circuit Amps
- MOCP - Maximum Overcurrent Protection
- NEC - National Electrical Code
- OFM - Outdoor (Condenser) Fan Motor
- RLA - Rated Load Amps



Example: Supply voltage is 230-3-60



AB = 224 v
 BC = 231 v
 AC = 226 v
 Average Voltage = $\frac{224 + 231 + 226}{3}$
 = $\frac{681}{3}$
 = 227

Determine maximum deviation from average voltage.

- (AB) 227 - 224 = 3 v
- (BC) 231 - 227 = 4 v
- (AC) 227 - 226 = 1 v
- Maximum deviation is 4 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{4}{227}$
 = 1.76%

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

*Heater capacity (kW) is based on heater voltage of 208v, 240v, 480v, or 600v. If power distribution voltage to unit varies from rated heater voltage, heater kW will vary accordingly.

† Fuse or HACR circuit breaker.

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. **Unbalanced 3-Phase Supply Voltage**
 Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

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Table 3 – Electrical Data - Units With Optional Powered Convenience Outlet

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA	
03	208/230-1-60	187	253	12.8	60	1.0	—	—	4.9	Low	—	—	26.7/26.7	30/30	27/27	79/79
											10.8/12.5	2.3/ 3.0	26.7/27.8	30/30	27/27	79/79
											17.3/20.0	3.8/ 5.0	33.8/37.1	35/40	31/34	79/79
											26.0/30.0	5.6/ 7.5	44.6/49.6	45/50	41/46	79/79
											34.7/40.0	7.5/10.0	55.5/62.1	60/70	51/57	79/79
											—	—	26.7/26.7	30/30	27/27	79/79
											10.8/12.5	2.3/ 3.0	26.7/27.8	30/30	27/27	79/79
											17.3/20.0	3.8/ 5.0	33.8/37.1	35/40	31/34	79/79
										High	26.0/30.0	5.6/ 7.5	44.6/49.6	45/50	41/46	79/79
											34.7/40.0	7.5/10.0	55.5/62.1	60/70	51/57	79/79
											—	—	28.1/28.1	30/30	29/29	81/81
											10.8/12.5	2.3/ 3.0	28.1/29.5	30/30	29/29	81/81
											17.3/20.0	3.8/ 5.0	35.5/38.9	40/40	33/36	81/81
											26.0/30.0	5.6/ 7.5	46.4/51.4	50/60	43/47	81/81
											34.7/40.0	7.5/10.0	57.3/63.9	60/70	53/59	81/81
											—	—	28.1/28.1	30/30	29/29	81/81
04	208/230-1-60	187	253	15.4	83	1.0	—	—	4.9	Low	—	—	30.0/30.0	30/30	30/30	102/102
											10.8/12.5	2.3/ 3.0	30.0/30.0	30/30	30/30	102/102
											17.3/20.0	3.8/ 5.0	33.8/37.1	35/40	31/34	102/102
											26.0/30.0	5.6/ 7.5	44.6/49.6	45/50	41/46	102/102
											34.7/40.0	7.5/10.0	55.5/62.1	60/70	51/57	102/102
											52.0/60.0	11.3/15.0	77.1/87.1	80/90	71/80	102/102
											—	—	30.0/30.0	30/30	30/30	102/102
											10.8/12.5	2.3/ 3.0	30.0/30.0	30/30	30/30	102/102
										High	17.3/20.0	3.8/ 5.0	33.8/37.1	35/40	31/34	102/102
											26.0/30.0	5.6/ 7.5	44.6/49.6	45/50	41/46	102/102
											34.7/40.0	7.5/10.0	55.5/62.1	60/70	51/57	102/102
											52.0/60.0	11.3/15.0	77.1/87.1	80/90	71/80	102/102
											—	—	31.4/31.4	35/35	32/32	104/104
											10.8/12.5	2.3/ 3.0	31.4/31.4	35/35	32/32	104/104
											17.3/20.0	3.8/ 5.0	35.5/38.9	40/40	33/36	104/104
											26.0/30.0	5.6/ 7.5	46.4/51.4	50/60	43/47	104/104
04	208/230-3-60	187	253	11.5	77	1.0	—	—	4.9	Low	—	—	25.1/25.1	30/30	26/26	96/96
											6.3/ 7.2	2.3/ 3.0	25.1/25.1	30/30	26/26	96/96
											10.0/11.5	3.8/ 5.0	25.1/26.5	30/30	26/26	96/96
											15.0/17.3	5.6/ 7.5	30.9/33.8	35/35	28/31	96/96
											20.0/23.1	7.5/10.0	37.1/41.0	40/45	34/38	96/96
											30.0/34.6	11.3/15.0	49.6/55.4	50/60	46/51	96/96
											—	—	25.1/25.1	30/30	26/26	96/96
											6.3/ 7.2	2.3/ 3.0	25.1/25.1	30/30	26/26	96/96
										High	10.0/11.5	3.8/ 5.0	25.1/26.5	30/30	26/26	96/96
											15.0/17.3	5.6/ 7.5	30.9/33.8	35/35	28/31	96/96
											20.0/23.1	7.5/10.0	37.1/41.0	40/45	34/38	96/96
											30.0/34.6	11.3/15.0	49.6/55.4	50/60	46/51	96/96

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LEGEND

- FLA - Full Load Amps
- HACR - Heating, Air Conditioning and Refrigeration
- IFM - Indoor (Evaporator) Fan Motor
- LRA - Locked Rotor Amps
- MCA - Minimum Circuit Amps
- MOCP - Maximum Overcurrent Protection
- NEC - National Electrical Code
- OFM - Outdoor (Condenser) Fan Motor
- RLA - Rated Load Amps



Example: Supply voltage is 230-3-60



AB = 224 v
 BC = 231 v
 AC = 226 v
 Average Voltage = $\frac{224 + 231 + 226}{3}$
 = $\frac{681}{3}$
 = 227

Determine maximum deviation from average voltage.

- (AB) 227 - 224 = 3 v
- (BC) 231 - 227 = 4 v
- (AC) 227 - 226 = 1 v

Maximum deviation is 4 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{4}{227}$
 = 1.76%

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

*Heater capacity (kW) is based on heater voltage of 208v, 240v, 480v, or 600v. If power distribution voltage to unit varies from rated heater voltage, heater kW will vary accordingly.

† Fuse or HACR circuit breaker.

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. **Unbalanced 3-Phase Supply Voltage**
 Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

Table 3 - Electrical Data - Units With Optional Powered Convenience Outlet (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE			
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCPT†	FLA	LRA		
04 (cont)	208/230-3-60	187	253	11.5	77	1.0	1.4	Low	4.9	—	—	26.5/26.5	30/30	27/27	98/98		
										6.3/ 7.2	2.3/ 3.0	26.5/26.5	30/30	27/27	98/98		
										10.0/11.5	3.8/ 5.0	26.5/28.3	30/30	27/27	98/98		
										15.0/17.3	5.6/ 7.5	32.6/35.5	35/40	30/33	98/98		
										20.0/23.1	7.5/10.0	38.9/42.8	40/45	36/39	98/98		
										30.0/34.6	11.3/15.0	51.4/57.1	60/60	47/53	98/98		
								High	4.9	—	—	26.5/26.5	30/30	27/27	98/98		
										6.3/ 7.2	2.3/ 3.0	26.5/26.5	30/30	27/27	98/98		
										10.0/11.5	3.8/ 5.0	26.5/28.3	30/30	27/27	98/98		
										15.0/17.3	5.6/ 7.5	32.6/35.5	35/40	30/33	98/98		
										20.0/23.1	7.5/10.0	38.9/42.8	40/45	36/39	98/98		
										30.0/34.6	11.3/15.0	51.4/57.1	60/60	47/53	98/98		
	460-3-60	414	506	5.1	35	0.5	—	Low	2.1	—	—	11.2	15	11	44		
										3.5	3.0	11.2	15	11	44		
										5.8	5.0	12.6	15	12	44		
										8.7	7.5	16.3	20	15	44		
										11.5	10.0	19.8	20	18	44		
										17.3	15.0	27.0	30	25	44		
										High	2.1	—	—	11.2	15	11	44
												3.5	3.0	11.2	15	11	44
												5.8	5.0	12.6	15	12	44
												8.7	7.5	16.3	20	15	44
												11.5	10.0	19.8	20	18	44
												17.3	15.0	27.0	30	25	44
								0.6	2.1	—	—	11.8	15	12	45		
										3.5	3.0	11.8	15	12	45		
										5.8	5.0	13.4	15	12	45		
										8.7	7.5	17.0	20	16	45		
										11.5	10.0	20.5	25	19	45		
										17.3	15.0	27.8	30	26	45		
										High	2.1	—	—	11.8	15	12	45
												3.5	3.0	11.8	15	12	45
												5.8	5.0	13.4	15	12	45
												8.7	7.5	17.0	20	16	45
												11.5	10.0	20.5	25	19	45
												17.3	15.0	27.8	30	26	45
	575-3-60	518	633	4.3	31	0.5	—	Low	2.1	—	—	9.7	15	10	39		
										9.2	10.0	16.3	20	15	39		
										13.9	15.0	22.1	25	20	39		
										—	—	9.7	15	10	39		
										9.2	10.0	16.3	20	15	39		
										13.9	15.0	22.1	25	20	39		
								High	2.1	—	—	11.1	15	12	41		
										9.2	10.0	18.0	20	17	41		
										13.9	15.0	23.9	25	22	41		
										—	—	11.1	15	12	41		
										9.2	10.0	18.0	20	17	41		
										13.9	15.0	23.9	25	22	41		
05	208/230-1-60	187	253	20.5	109	1.0	—	Low	4.9	—	—	36.3/ 36.3	40/ 40	36/ 36	128/128		
										17.3/20.0	3.8/ 5.0	36.3/ 37.1	40/ 40	36/ 36	128/128		
										26.0/30.0	5.6/ 7.5	44.6/ 49.6	45/ 50	41/ 46	128/128		
										34.7/40.0	7.5/10.0	55.5/ 62.1	60/ 70	51/ 57	128/128		
										52.0/60.0	11.3/15.0	77.1/ 87.1	80/ 90	71/ 80	128/128		
										69.3/80.0	15.0/20.0	98.8/112.1	100/125	91/103	128/128		
										High	7.0	—	—	38.4/ 38.4	40/ 40	38/ 38	153/153
												17.3/20.0	3.8/ 5.0	38.4/ 39.8	40/ 40	38/ 38	153/153
												26.0/30.0	5.6/ 7.5	47.3/ 52.3	50/ 60	43/ 48	153/153
												34.7/40.0	7.5/10.0	58.1/ 64.8	60/ 70	53/ 60	153/153
												52.0/60.0	11.3/15.0	79.8/ 89.8	80/ 90	73/ 83	153/153
												69.3/80.0	15.0/20.0	101.4/114.8	110/125	93/106	153/153
								1.4	4.9	—	—	37.7/ 37.7	40/ 40	37/ 37	130/130		
										17.3/20.0	3.8/ 5.0	37.7/ 38.9	40/ 40	37/ 37	130/130		
										26.0/30.0	5.6/ 7.5	46.4/ 51.4	50/ 60	43/ 47	130/130		
										34.7/40.0	7.5/10.0	57.3/ 63.9	60/ 70	53/ 59	130/130		
										52.0/60.0	11.3/15.0	78.9/ 88.9	80/ 90	73/ 82	130/130		
										69.3/80.0	15.0/20.0	100.5/113.9	110/125	92/105	130/130		
										High	7.0	—	—	39.8/ 39.8	40/ 40	40/ 40	155/155
												17.3/20.0	3.8/ 5.0	39.8/ 41.5	40/ 45	40/ 40	155/155
												26.0/30.0	5.6/ 7.5	49.0/ 54.0	50/ 60	45/ 50	155/155
												34.7/40.0	7.5/10.0	59.9/ 66.5	60/ 70	55/ 61	155/155
												52.0/60.0	11.3/15.0	81.5/ 91.5	90/100	75/ 84	155/155
												69.3/80.0	15.0/20.0	103.1/116.5	110/125	95/107	155/155
	208/230-3-60	187	253	14.6	91	1.0	—	Low	4.9	—	—	29.0/29.0	30/30	29/29	110/110		
										10.0/11.5	3.8/ 5.0	29.0/29.0	30/30	29/29	110/110		
										15.0/17.3	5.6/ 7.5	30.9/33.8	35/35	29/31	110/110		
										20.0/23.1	7.5/10.0	37.1/41.0	40/45	34/38	110/110		
										30.0/34.6	11.3/15.0	49.6/55.4	50/60	46/51	110/110		
										40.0/46.2	15.0/20.0	62.1/69.9	70/70	57/64	110/110		
								High	5.2	—	—	29.3/29.3	30/30	29/29	128/128		
										10.0/11.5	3.8/ 5.0	29.3/29.3	30/30	29/29	128/128		
										15.0/17.3	5.6/ 7.5	31.3/34.1	35/35	29/31	128/128		
										20.0/23.1	7.5/10.0	37.5/41.4	40/45	35/38	128/128		
										30.0/34.6	11.3/15.0	50.0/55.8	60/60	46/51	128/128		
										40.0/46.2	15.0/20.0	62.5/70.3	70/80	58/65	128/128		
	1.4	4.9	—	—	30.4/30.4	35/35	31/31	112/112									
			10.0/11.5	3.8/ 5.0	30.4/30.4	35/35	31/31	112/112									
			15.0/17.3	5.6/ 7.5	32.6/35.5	35/40	31/33	112/112									
			20.0/23.1	7.5/10.0	38.9/42.8	40/45	36/39	112/112									
			30.0/34.6	11.3/15.0	51.4/57.1	60/60	47/53	112/112									
			40.0/46.2	15.0/20.0	63.9/71.6	70/80	59/66	112/112									
			High	5.2	—	—	30.7/30.7	35/35	31/31	130/130							
					10.0/11.5	3.8/ 5.0	30.7/30.7	35/35	31/31	130/130							
					15.0/17.3	5.6/ 7.5	33.0/35.9	35/40	31/33	130/130							
					20.0/23.1	7.5/10.0	39.3/43.1	40/45	36/40	130/130							
					30.0/34.6	11.3/15.0	51.8/57.5	60/60	48/53	130/130							
					40.0/46.2	15.0/20.0	64.3/72.0	70/80	59/66	130/130							

* See Legend on next page.

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Table 3 - Electrical Data - Units With Optional Powered Convenience Outlet (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
												FLA	LRA		
05 (cont)	460-3-60	414	506	7.1	46	0.5	—	Low	2.1	—	—	13.7	15	14	55
										5.8	5.0	13.7	15	14	55
										8.7	7.5	16.3	20	15	55
										11.5	10.0	19.8	20	18	55
										17.3	15.0	27.0	30	25	55
										23.1	20.0	34.3	35	32	55
								High	2.6	—	—	14.2	15	14	64
										5.8	5.0	14.2	15	14	64
										8.7	7.5	16.9	20	16	64
										11.5	10.0	20.4	25	19	64
										17.3	15.0	27.6	30	25	64
										23.1	20.0	34.9	35	32	64
	575-3-60	518	633	5.1	34	0.5	—	Low	2.1	—	—	14.3	15	14	56
										5.8	5.0	14.3	15	14	56
										8.7	7.5	17.0	20	16	56
										11.5	10.0	20.5	25	19	56
										17.3	15.0	27.8	30	26	56
										23.1	20.0	35.0	40	32	56
								High	2.6	—	—	14.8	15	15	65
										5.8	5.0	14.8	15	15	65
										8.7	7.5	17.6	20	16	65
										11.5	10.0	21.1	25	19	65
										17.3	15.0	28.4	30	26	65
										23.1	20.0	35.6	40	33	65
06	208/230-1-60	187	253	26.9	145	1.5	Low	4.9	—	—	44.8/ 44.8	50/ 50	44/44	165/165	
									17.3/ 20.0	3.8/ 5.0	44.8/ 44.8	50/ 50	44/44	165/165	
									26.0/ 30.0	5.6/ 7.5	44.8/ 49.6	50/ 50	44/46	165/165	
									34.7/ 40.0	7.5/10.0	55.5/ 62.1	60/ 70	51/57	165/165	
									52.0/ 60.0	11.3/15.0	77.1/ 87.1	80/ 90	71/80	165/165	
									69.3/ 80.0	15.0/20.0	98.8/112.1	100/125	91/103	165/165	
							High	7.0	—	—	46.9/ 46.9	50/ 50	46/ 46	190/190	
									17.3/ 20.0	3.8/ 5.0	46.9/ 46.9	50/ 50	46/ 46	190/190	
									26.0/ 30.0	5.6/ 7.5	47.3/ 52.3	50/ 60	46/ 48	190/190	
									34.7/ 40.0	7.5/10.0	58.1/ 64.8	60/ 70	53/ 60	190/190	
									52.0/ 60.0	11.3/15.0	79.8/ 89.8	80/ 90	73/ 83	190/190	
									69.3/ 80.0	15.0/20.0	101.4/114.8	110/125	93/106	190/190	
1.4	Low	4.9	—	—	46.2/ 46.2	50/ 50	45/ 45	167/167							
			17.3/ 20.0	3.8/ 5.0	46.2/ 46.2	50/ 50	45/ 45	167/167							
			26.0/ 30.0	5.6/ 7.5	46.4/ 51.4	50/ 60	45/ 47	167/167							
			34.7/ 40.0	7.5/10.0	57.3/ 63.9	60/ 70	53/ 59	167/167							
			52.0/ 60.0	11.3/15.0	78.9/ 88.9	80/ 90	73/ 82	167/167							
			69.3/ 80.0	15.0/20.0	100.5/113.9	110/125	92/105	167/167							
	High	7.0	—	—	48.3/ 48.3	50/ 50	48/ 48	192/192							
			17.3/ 20.0	3.8/ 5.0	48.3/ 48.3	50/ 50	48/ 48	192/192							
			26.0/ 30.0	5.6/ 7.5	49.0/ 54.0	50/ 60	48/ 50	192/192							
			34.7/ 40.0	7.5/10.0	59.9/ 66.5	60/ 70	55/ 61	192/192							
			52.0/ 60.0	11.3/15.0	81.5/ 91.5	90/100	75/ 84	192/192							
			69.3/ 80.0	15.0/20.0	103.1/116.5	110/125	95/107	192/192							

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LEGEND

- FLA - Full Load Amps
- HACR - Heating, Air Conditioning and Refrigeration
- IFM - Indoor (Evaporator) Fan Motor
- LRA - Locked Rotor Amps
- MCA - Minimum Circuit Amps
- MOCP - Maximum Overcurrent Protection
- NEC - National Electrical Code
- OFM - Outdoor (Condenser) Fan Motor
- RLA - Rated Load Amps



Example: Supply voltage is 230-3-60



AB = 224 v
 BC = 231 v
 AC = 226 v

$$\text{Average Voltage} = \frac{224 + 231 + 226}{3}$$

$$= \frac{681}{3}$$

$$= 227$$

Determine maximum deviation from average voltage.

- (AB) 227 - 224 = 3 v
- (BC) 231 - 227 = 4 v
- (AC) 227 - 226 = 1 v

Maximum deviation is 4 v.

Determine percent of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{227}$$

$$= 1.76\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

*Heater capacity (kW) is based on heater voltage of 208v, 240v, 480v, or 600v. If power distribution voltage to unit varies from rated heater voltage, heater kW will vary accordingly.

† Fuse or HACR circuit breaker.

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.

2. Unbalanced 3-Phase Supply Voltage

Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Table 3 - Electrical Data - Units With Optional Powered Convenience Outlet (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE									
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA								
06 (cont)	208/230-3-60	187	253	17.6	123	1.5	—	Low	5.2	—	—	33.5/33.5	35/35	33/33	161/161								
										10.0/11.5	3.8/ 5.0	33.5/33.5	35/35	33/33	161/161								
										15.0/17.3	5.6/ 7.5	33.5/34.1	35/35	33/33	161/161								
										20.0/23.1	7.5/10.0	37.5/41.4	40/45	35/38	161/161								
										30.0/34.6	11.3/15.0	50.0/55.8	60/60	46/51	161/161								
										40.0/46.2	15.0/20.0	62.5/70.3	70/80	58/65	161/161								
										50.0/57.7	18.8/25.0	75.0/84.6	80/90	69/78	161/161								
										—	—	33.5/33.5	35/35	33/33	161/161								
										10.0/11.5	3.8/ 5.0	33.5/33.5	35/35	33/33	161/161								
										15.0/17.3	5.6/ 7.5	33.5/34.1	35/35	33/33	161/161								
										20.0/23.1	7.5/10.0	37.5/41.4	40/45	35/38	161/161								
										30.0/34.6	11.3/15.0	50.0/55.8	60/60	46/51	161/161								
								40.0/46.2		15.0/20.0	62.5/70.3	70/80	58/65	161/161									
								50.0/57.7		18.8/25.0	75.0/84.6	80/90	69/78	161/161									
								—		—	34.9/34.9	35/35	35/35	163/163									
								10.0/11.5		3.8/ 5.0	34.9/34.9	35/35	35/35	163/163									
								15.0/17.3		5.6/ 7.5	34.9/35.9	35/40	35/35	163/163									
								20.0/23.1		7.5/10.0	39.3/43.1	40/45	36/40	163/163									
								30.0/34.6		11.3/15.0	51.8/57.5	60/60	48/53	163/163									
								40.0/46.2		15.0/20.0	64.3/72.0	70/80	59/66	163/163									
								50.0/57.7		18.8/25.0	76.8/86.4	80/90	71/79	163/163									
								—		—	34.9/34.9	35/35	35/35	163/163									
								10.0/11.5		3.8/ 5.0	34.9/34.9	35/35	35/35	163/163									
								15.0/17.3		5.6/ 7.5	34.9/35.9	35/40	35/35	163/163									
	20.0/23.1	7.5/10.0	39.3/43.1	40/45	36/40	163/163																	
	30.0/34.6	11.3/15.0	51.8/57.5	60/60	48/53	163/163																	
	40.0/46.2	15.0/20.0	64.3/72.0	70/80	59/66	163/163																	
	50.0/57.7	18.8/25.0	76.8/86.4	80/90	71/79	163/163																	
	460-3-60	414	506	7.7	50	0.8	—	Low	2.6	—	—	15.2	20	15	69								
										5.8	5.0	15.2	20	15	69								
										8.7	7.5	16.9	20	16	69								
										11.5	10.0	20.4	25	19	69								
										17.3	15.0	27.6	30	25	69								
										23.1	20.0	34.9	35	32	69								
										28.9	25.0	42.1	45	39	69								
										—	—	15.2	20	15	69								
										5.8	5.0	15.2	20	15	69								
										8.7	7.5	16.9	20	16	69								
										11.5	10.0	20.4	25	19	69								
										17.3	15.0	27.6	30	25	69								
								23.1		20.0	34.9	35	32	69									
								28.9		25.0	42.1	45	39	69									
								—		—	15.8	20	16	70									
								5.8		5.0	15.8	20	16	70									
								8.7		7.5	17.6	20	16	70									
								11.5		10.0	21.1	25	19	70									
								17.3		15.0	28.4	30	26	70									
								23.1		20.0	35.6	40	33	70									
28.9								25.0		42.9	45	39	70										
—								—		15.8	20	16	70										
5.8								5.0		15.8	20	16	70										
8.7								7.5		17.6	20	16	70										
11.5	10.0	21.1	25	19	70																		
17.3	15.0	28.4	30	26	70																		
23.1	20.0	35.6	40	33	70																		
28.9	25.0	42.9	45	39	70																		
575-3-60	518	633	6.1	40	0.8	—	Low	2.0	—	—	12.1	15	12	55									
									9.2	10.0	16.1	20	15	55									
									13.9	15.0	22.0	25	20	55									
									18.5	20.0	27.8	30	26	55									
									23.1	25.0	33.5	35	31	55									
									—	—	12.1	15	12	55									
									9.2	10.0	16.1	20	15	55									
									13.9	15.0	22.0	25	20	55									
									18.5	20.0	27.8	30	26	55									
									23.1	25.0	33.5	35	31	55									
									—	—	13.5	15	14	57									
									9.2	10.0	17.9	20	16	57									
							13.9		15.0	23.8	25	22	57										
							18.5		20.0	29.5	30	27	57										
							23.1		25.0	35.3	40	32	57										
							—		—	13.5	15	14	57										
							9.2		10.0	17.9	20	16	57										
							13.9		15.0	23.8	25	22	57										
							18.5		20.0	29.5	30	27	57										
							23.1		25.0	35.3	40	32	57										
							07		208/230-3-60	187	253	20.5	149	1.5	—	Low	5.2	—	—	37.1/37.1	40/40	37/37	187/187
																		10.0/11.5	3.8/ 5.0	37.1/37.1	40/40	37/37	187/187
																		15.0/17.3	5.6/ 7.5	37.1/37.1	40/40	37/37	187/187
																		20.0/23.1	7.5/10.0	37.5/41.4	40/45	37/38	187/187
30.0/34.6	11.3/15.0	50.0/55.8	60/60	46/51	187/187																		
40.0/46.2	15.0/20.0	62.5/70.3	70/80	58/65	187/187																		
50.0/57.7	18.8/25.0	75.0/84.6	80/90	69/78	187/187																		
High	7.5	—	—	39.4/39.4	40/40	39/39		213/213															
		10.0/11.5	3.8/ 5.0	39.4/39.4	40/40	39/39		213/213															
		15.0/17.3	5.6/ 7.5	39.4/39.4	40/40	39/39		213/213															
		20.0/23.1	7.5/10.0	40.4/44.3	45/45	39/41		213/213															
		30.0/34.6	11.3/15.0	52.9/58.6	60/60	49/54		213/213															
		40.0/46.2	15.0/20.0	65.4/73.1	70/80	60/67	213/213																
50.0/57.7	18.8/25.0	77.9/87.5	80/90	72/81	213/213																		

* See Legend on next page.

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Table 3 - Electrical Data - Units With Optional Powered Convenience Outlet (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM FLA	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA					FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
07 (cont)	208/230-3-60	187	253	20.5	149	1.5	1.4	Low	5.2	—	—	38.5/38.5	40/40	38/38	189/189
										10.0/11.5	3.8/ 5.0	38.5/38.5	40/40	38/38	189/189
										15.0/17.3	5.6/ 7.5	38.5/38.5	40/40	38/38	189/189
										20.0/23.1	7.5/10.0	39.3/43.1	40/45	38/40	189/189
										30.0/34.6	11.3/15.0	51.8/57.5	60/60	48/53	189/189
										40.0/46.2	15.0/20.0	64.3/72.0	70/80	59/66	189/189
								50.0/57.7	18.8/25.0	76.8/86.4	80/90	71/79	189/189		
								High	7.5	—	—	40.8/40.8	45/45	41/41	215/215
										10.0/11.5	3.8/ 5.0	40.8/40.8	45/45	41/41	215/215
										15.0/17.3	5.6/ 7.5	40.8/40.8	45/45	41/41	215/215
										20.0/23.1	7.5/10.0	42.1/46.0	45/50	41/42	215/215
										30.0/34.6	11.3/15.0	54.6/60.4	60/70	50/56	215/215
	40.0/46.2	15.0/20.0	67.1/74.9	70/80	62/69	215/215									
	460-3-60	414	506	9.6	75	0.8	—	Low	2.6	—	—	17.6	20	17	94
										5.8	5.0	17.6	20	17	94
										8.7	7.5	17.6	20	17	94
										11.5	10.0	20.4	25	19	94
										17.3	15.0	27.6	30	25	94
										23.1	20.0	34.9	35	32	94
								28.9	25.0	42.1	45	39	94		
								High	3.4	—	—	18.4	20	18	107
										5.8	5.0	18.4	20	18	107
										8.7	7.5	18.4	20	18	107
										11.5	10.0	21.4	25	20	107
										17.3	15.0	28.6	30	26	107
	23.1	20.0	35.9	40	33	107									
	575-3-60	518	633	7.6	54	0.8	—	Low	2.0	—	—	18.2	20	18	95
										5.8	5.0	18.2	20	18	95
										8.7	7.5	18.2	20	18	95
										11.5	10.0	21.1	25	19	95
										17.3	15.0	28.4	30	26	95
										23.1	20.0	35.6	40	33	95
								28.9	25.0	42.9	45	39	95		
								High	3.4	—	—	19.0	20	19	108
										5.8	5.0	19.0	20	19	108
										8.7	7.5	19.0	20	19	108
										11.5	10.0	22.1	25	20	108
										17.3	15.0	29.4	30	27	108
	23.1	20.0	36.6	40	34	108									
	575-3-60	518	633	7.6	54	0.8	—	Low	2.0	—	—	14.0	15	14	69
										9.2	10.0	16.1	20	15	69
										13.9	15.0	22.0	25	20	69
										18.5	20.0	27.8	30	26	69
										23.1	25.0	33.5	35	31	69
										27.7	30.0	39.3	40	36	69
								High	2.8	—	—	14.8	15	15	80
										9.2	10.0	17.1	20	16	80
										13.9	15.0	23.0	25	21	80
										18.5	20.0	28.8	30	26	80
										23.1	25.0	34.5	35	32	80
										27.7	30.0	40.3	45	37	80
	575-3-60	518	633	7.6	54	0.8	1.4	Low	2.0	—	—	15.4	20	16	71
										9.2	10.0	17.9	20	16	71
										13.9	15.0	23.8	25	22	71
										18.5	20.0	29.5	30	27	71
										23.1	25.0	35.3	40	32	71
										27.7	30.0	41.0	45	38	71
								High	2.8	—	—	16.2	20	16	82
										9.2	10.0	18.9	20	17	82
										13.9	15.0	24.8	25	23	82
										18.5	20.0	30.5	35	28	82
										23.1	25.0	36.3	40	33	82
										27.7	30.0	42.0	45	39	82

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LEGEND

- FLA - Full Load Amps
- HACR - Heating, Air Conditioning and Refrigeration
- IFM - Indoor (Evaporator) Fan Motor
- LRA - Locked Rotor Amps
- MCA - Minimum Circuit Amps
- MOCP - Maximum Overcurrent Protection
- NEC - National Electrical Code
- OFM - Outdoor (Condenser) Fan Motor
- RLA - Rated Load Amps



Example: Supply voltage is 230-3-60



AB = 224 v
 BC = 231 v
 AC = 226 v
 Average Voltage = $\frac{224 + 231 + 226}{3}$
 = $\frac{681}{3}$
 = 227

Determine maximum deviation from average voltage.

- (AB) 227 - 224 = 3 v
 - (BC) 231 - 227 = 4 v
 - (AC) 227 - 226 = 1 v
- Maximum deviation is 4 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{4}{227}$
 = 1.76%

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

*Heater capacity (kW) is based on heater voltage of 208v, 240v, 480v, or 600v. If power distribution voltage to unit varies from rated heater voltage, heater kW will vary accordingly.

† Fuse or HACR circuit breaker.

NOTES:

1. In compliance with NEC requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.

2. Unbalanced 3-Phase Supply Voltage

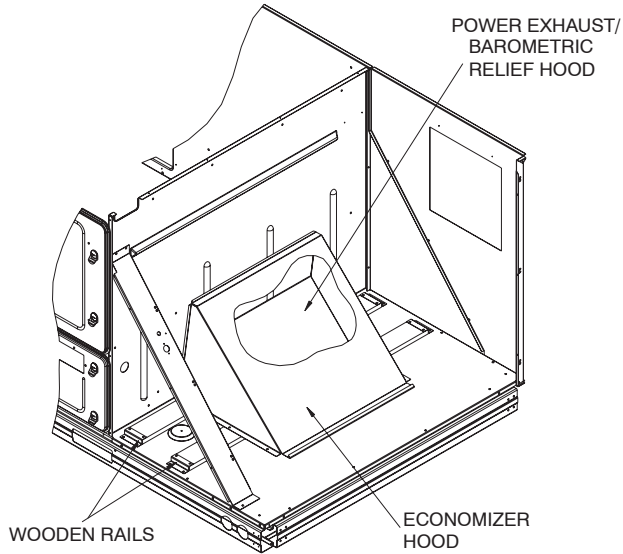
Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

Step 7 — Install Outdoor Air Hoods (Units with Economizer)

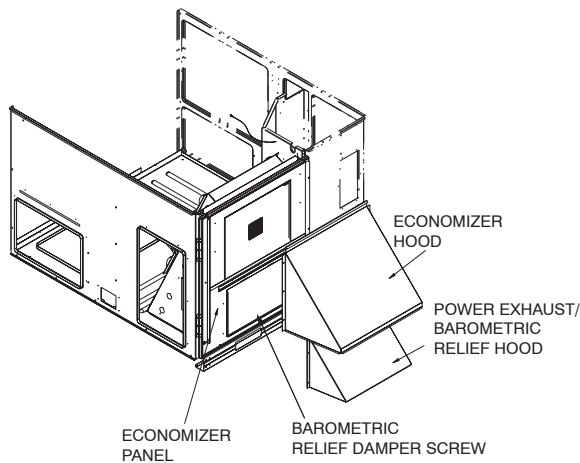
Perform the following procedure to install the outdoor-air hoods:

1. Economizer and barometric relief hoods are located in the condenser section under the slanted coil for shipping. (See Fig. 14.) Barometric relief/power exhaust hood is shipped inside of economizer hood. Remove screws that secure the wooden rails of the hood assemblies to the unit. Save screws. Slide complete assembly from condenser section.
2. Remove the screws that secure the economizer and barometric relief/power exhaust hoods to the wooden railing. Discard or recycle wooden rails. Save screws.
3. The barometric relief damper is factory mounted onto the economizer panel for shipping. Remove the screw holding the barometric relief damper to the panel. Damper should be free to swing open during operation. (See Fig. 15.)



C06290

Fig. 14 - Economizer and Barometric Relief/Power Exhaust Hoods Shipping Positions



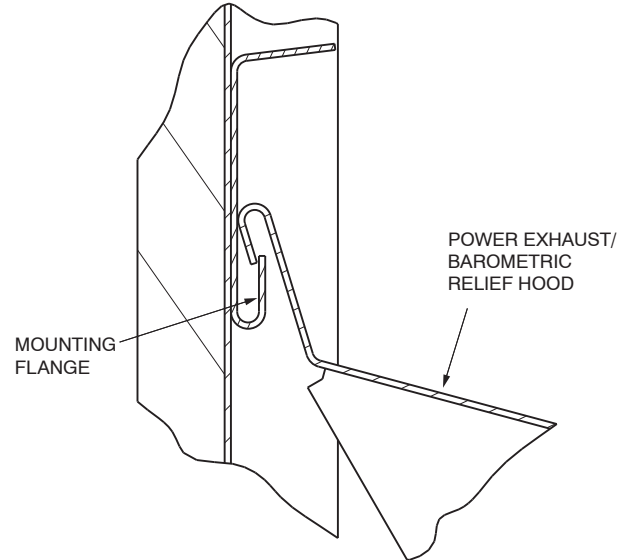
C06260

Fig. 15 - Hood Installation

4. Hang the barometric relief/power exhaust hood on the mounting flange on the economizer panel. Secure hood to panel with screws saved from Step 2. (See Fig. 15 and 16.)
5. Align hole in flange of economizer panel with left edge of hood. Hang economizer hood on the top flange of the economizer panel by rotating hood until top flange of the economizer panel engages the bent flange on the economizer panel. Rotate hood until hood is flush with the economizer panel. Hood will support itself from flange. Align holes in hood with holes in panel and secure hood to panel with screws saved from Step 2. (See Fig. 16 and 17.)

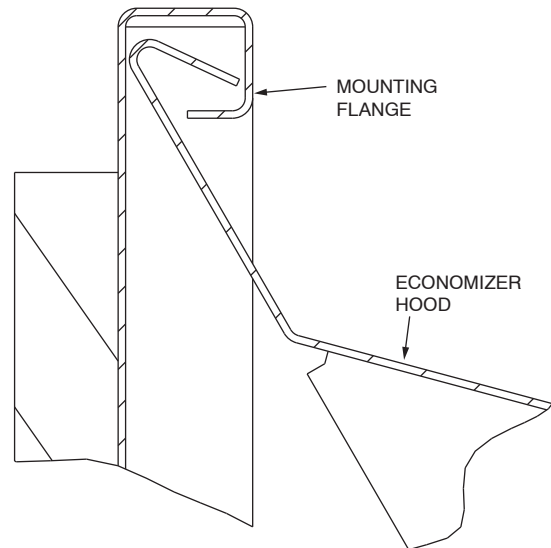
Step 8 — Install All Accessories

After all of the factory-installed options have been adjusted, install all field-installed accessories. Refer to the accessory installation instructions included with each accessory. Consult the Carrier Price Pages for accessory package numbers for particular applications.



C06262

Fig. 16 - Barometric Relief/Power Exhaust Hood Flange



C06263

Fig. 17 - Economizer Flange