



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. Use quenching cloth for unbrazing operations. Have fire extinguishers available for all brazing operations.

⚠ WARNING

ELECTRICAL SHOCK HAZARD

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

Before performing service or maintenance operations on unit, turn off main power switch to unit. There may be more than one disconnect switch.

⚠ CAUTION

UNIT OPERATION AND SAFETY HAZARD

Failure to follow this caution may result in personal injury 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 HAZARD

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

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.

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.

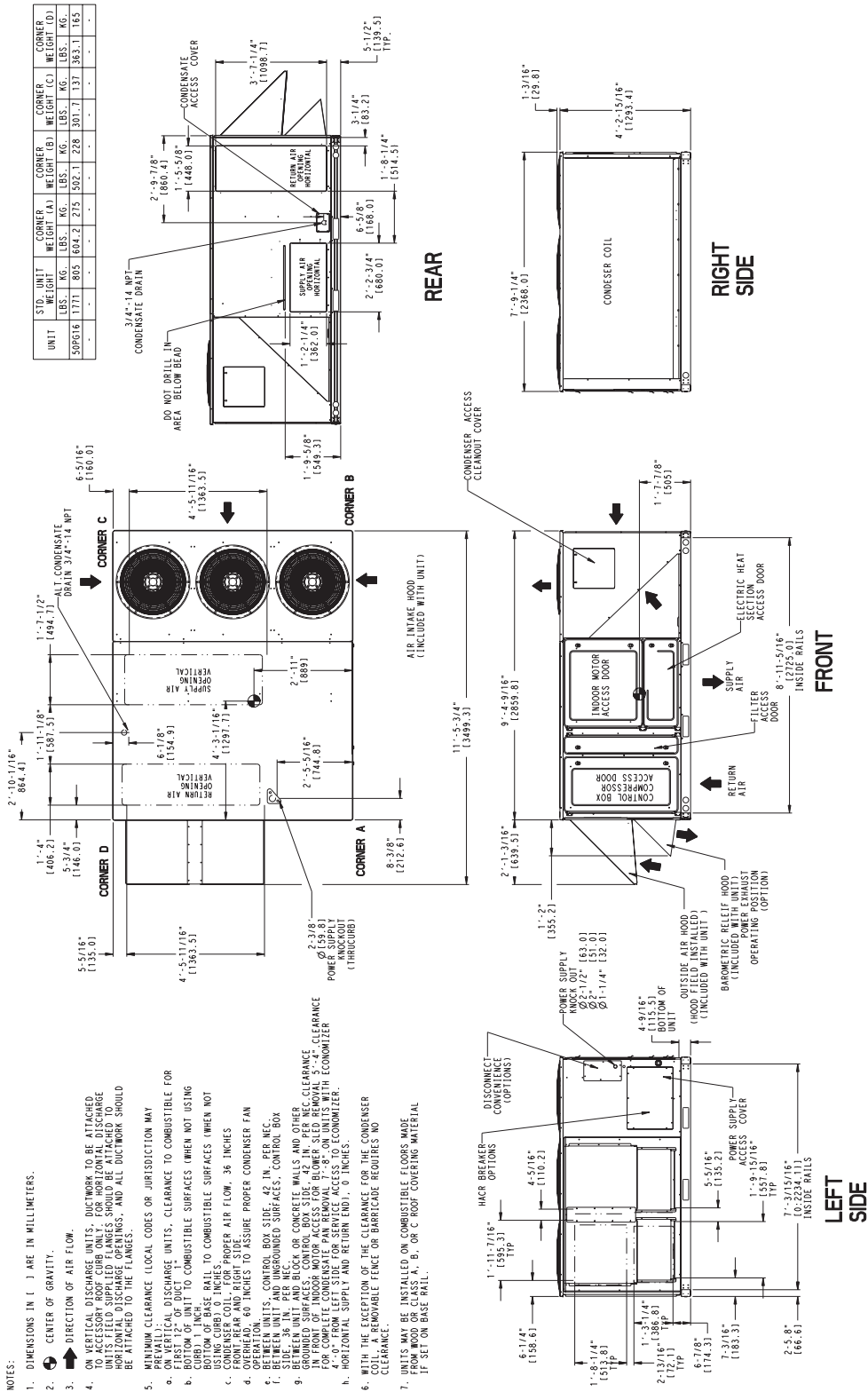


Fig. 1 - Base Unit Dimensions

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

UNIT DAMAGE HAZARD

Failure to follow this caution may result in equipment damage.

All panels must be in place when rigging.

Do not drop unit; keep upright. Use spreader bars or top crating 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. 2 for additional information. Unit rigging weight is shown in Fig. 2.

Rigging holes are provided in the unit base rails as shown in Fig. 2. Refer to rigging instructions on unit.

Positioning

Maintain clearance, per Fig. 3, around and above unit to provide minimum distance from combustible materials, proper airflow, and service access.

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

After unit is in position, remove top 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. 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.

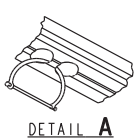
NOTE: Before positioning unit on curb make sure bottom drain connection plug is tight. See Step 6 — Install External Trap for Condensate Drain for details.

50PG16

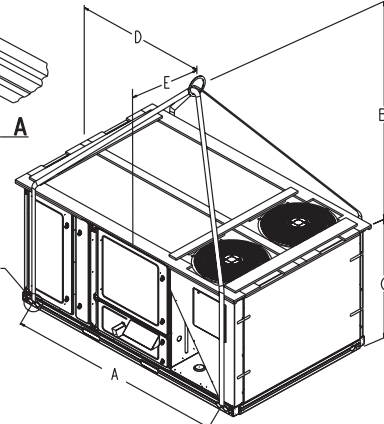
⚠ CAUTION - NOTICE TO RIGGERS:
ACCESS PANEL MUST BE IN PLACE WHEN RIGGING.

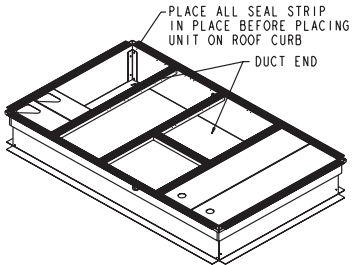
Hook rigging shackles through holes in base rail, as shown in Detail A. Holes in base rails are centered around the unit center of gravity. Use wooden top skid, when rigging, to prevent rigging straps from damaging unit.

| UNIT SIZE | A | | B | | C | | D | | E | | MAX. WEIGHT | |
|-----------|-------|------|-------|----------|------|------|------|------|------|-----|-------------|-----|
| | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | lb | kg |
| 16 | 100.4 | 2550 | 36-54 | 914-1371 | 52.4 | 1331 | 51.0 | 1295 | 35.0 | 889 | 1959 | 890 |



DETAIL A





SEE DETAIL A

Fig. 2 - 50PG Rigging Label

C06253

Table 1 – Physical Data

| | | |
|---|---------|--|
| BASE UNIT 50PG | | 16 |
| NOMINAL CAPACITY (Tons) | | 15.0 |
| OPERATING WEIGHT (lb) | | |
| Unit* | | 1771 |
| Economizer | | |
| Vertical | | 149 |
| Horizontal | | 149 |
| Humidi-MiZer™ System | | 64 |
| Roof Curb | | |
| 14-in. | | 240 |
| 24-in. | | 360 |
| COMPRESSOR | | Fully Hermetic Scroll |
| Quantity | | 3 |
| Oil Type | Sys A | Copeland 3MA |
| | Sys B | Copeland 3MA |
| | Sys C | Copeland 3MA |
| Number of Refrigerant Circuits | | 3 |
| Oil (oz) | Sys A | 66 |
| | Sys B | 66 |
| | Sys C | 66 |
| REFRIGERANT TYPE | | R-410A (Puron® Refrigerant) |
| Expansion Device | | TXV |
| Operating Charge (lb) | Sys A | 13.5 |
| | Sys B | 15.0 |
| | Sys C | 15.0 |
| Operating Charge Total All Systems (lb) | | 43.5 |
| Unit with Humidi-MiZer System | | |
| Operating Charge (lb) | Sys A | 18.8 |
| | Sys B | 16.7 |
| | Sys C | 18.8 |
| Total All Systems (lb) | | 54.3 |
| CONDENSER COIL | | Enhanced Copper Tubes, Aluminum Lanced Fins, Face Split |
| Condenser A (Outer) | | |
| Rows...Fins/in. | | 2...17 |
| Face Area (sq ft) | | 26.6 |
| Condenser B (Inner) | | |
| Rows...Fins/in. | | 2...17 |
| Face Area (sq ft) | | 30.2 |
| Humidi-MiZer Coil | | Enhanced Copper Tubes, Aluminum Lanced Fins |
| Rows...Fins/in. | | 1...17 |
| Face Area (sq ft) | | 22.2 |
| CONDENSER FAN | | Propeller |
| Quantity...Diameter (in.) | | 3...24 |
| Nominal Cfm (Total, all fans) | | 12,500 |
| Motor Hp | | 1/3 |
| Nominal Rpm | | 1100 |
| EVAPORATOR COIL | | Enhanced Copper Tubes, Aluminum Double-Wavy Fins, Face Split |
| Rows...Fins/in. | | 3...15 |
| Face Area (sq ft) | | 22.2 |
| EVAPORATOR FAN | | Centrifugal Type, Belt Drive |
| Quantity...Size (in.) | Low | 1...15x15, 1...12x12 |
| | Mid-Low | 1...15x15, 1...12x12 |
| | High | 1...15x15, 1...12x12 |
| Type Drive | Low | Belt |
| | Mid-Low | Belt |
| | High | Belt |
| Nominal Cfm | | 6000 |
| Maximum Continuous Bhp | Low | 3.7 |
| | Mid-Low | 5.25 |
| | High | 7.5 |
| Motor Frame Size | Low | 56 |
| | Mid-Low | 56 |
| | High | S213T |
| Fan Rpm Range | Low | 710-879 |
| | Mid-Low | 872-1066 |
| | High | 1066-1260 |
| Motor Bearing Type | | Ball |

* See Legend on next page

50PG16

Table 1 — Physical Data (cont)

| BASE UNIT 50PG (cont) | | 16 |
|--|---------|--------------------------------|
| EVAPORATOR FAN (cont) | | Centrifugal Type, Belt Drive |
| Motor Pulley Pitch Diameter Min. (in.) | Low | 4.2 |
| | Mid-Low | 4.2 |
| | High | 5.2 |
| Motor Pulley Pitch Diameter Max. (in.) | Low | 5.2 |
| | Mid-Low | 5.2 |
| | High | 6.2 |
| Fan Pulley Pitch Diameter | Low | 10.2 |
| | Mid-Low | 8.5 |
| | High | 8.5 |
| Nominal Motor Shaft Diameter (in.) | Low | 7/8 |
| | Mid-Low | 7/8 |
| | High | 1 ³ / ₈ |
| Belt...Pitch Length (in.) | Low | 49.3 |
| | Mid-Low | 47.8 |
| | High | 43.8 |
| Belt...Type | Low | AX |
| | Mid-Low | BX |
| | High | BX |
| Pulley Center Line Distance Min. (in.) | Low | 14.2 |
| | Mid-Low | 10.8 |
| | High | 8.6 |
| Pulley Center Line Distance Max. (in.) | Low | 10.8 |
| | Mid-Low | 14.2 |
| | High | 12 |
| Speed Change (rpm) | Low | 34 |
| | Mid-Low | 41 |
| | High | 41 |
| Movable Turns | Low | 5 |
| | Mid-Low | 5 |
| | High | 5 |
| Factory Pulley Setting (rpm) | Low | 812 |
| | Mid-Low | 983 |
| | High | 1191 |
| Fan Shaft Diameter at Pulley (in.) | | 1 ³ / ₁₆ |
| HIGH-PRESSURE SWITCH (psig) | | |
| Cutout | | 660 ± 10 |
| Reset (Auto.) | | 505 ± 20 |
| RETURN-AIR FILTERS | | Throwaway Type |
| Quantity...Size (in.) | | 8...20 x 20 x 2 |

LEGEND

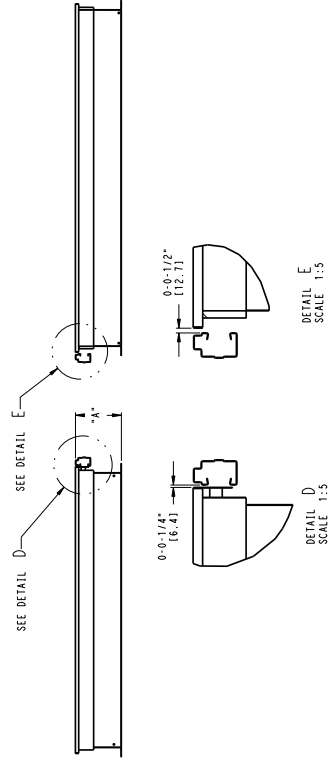
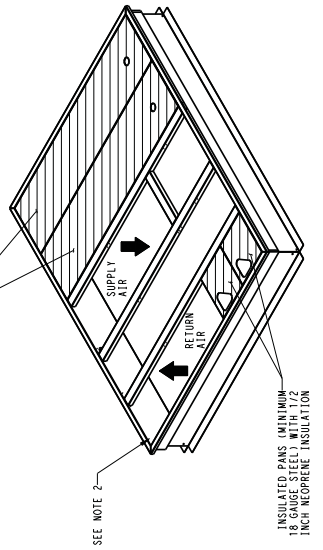
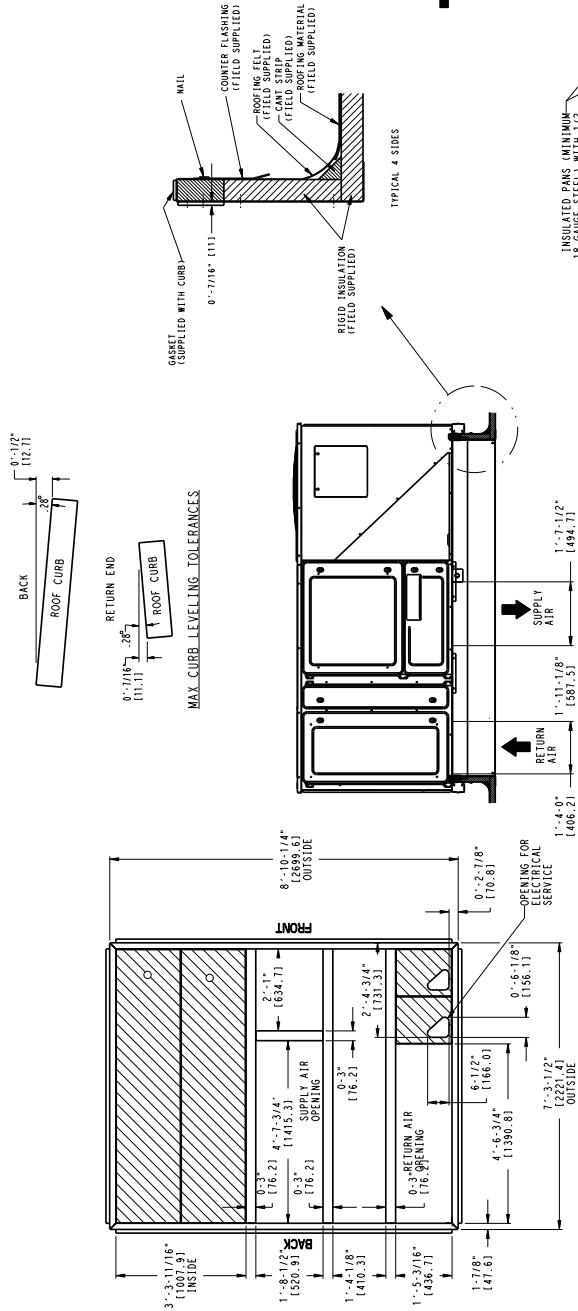
TXV – Thermostatic Expansion Valve

*Aluminum Evaporator/Aluminum Condenser coil fin material.

50PG16

| UNIT SIZE 50PG | *A* | ROOF CURB ACCESSORY |
|-------------------|-------------|------------------------|
| 16 | 1'-2" [356] | CRFCURB034A0 |
| | 2'-0" [610] | CRFCURB035A0 |

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



C06306

Fig. 3 - Roof Curb Details

⚠ 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.

Step 3 — Field Fabricate Ductwork

On vertical units, secure all ducts to roof curb and building structure. *Do not connect ductwork to unit.* 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 if electric heat is not used. 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.

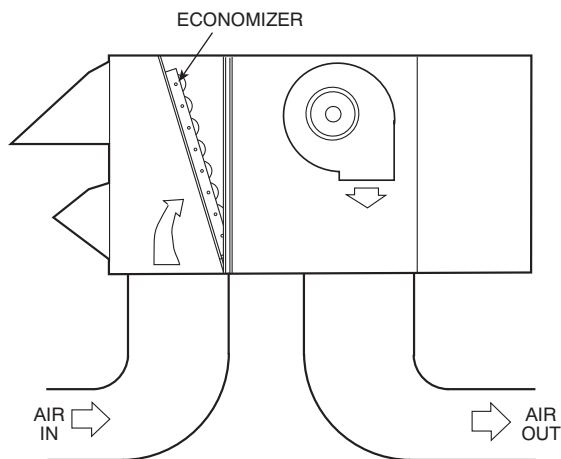
Duct connections are shown in Fig. 4. Field-fabricated concentric ductwork may be connected as shown in Fig. 5.

⚠ CAUTION

PERSONAL INJURY HAZARD

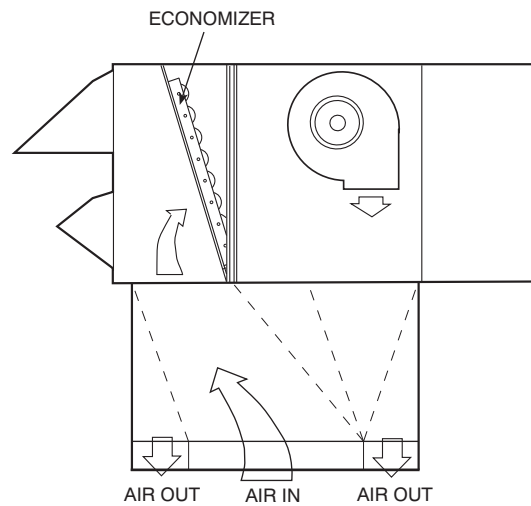
Failure to follow this caution may result in personal injury.

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



C06307

Fig. 4 - Air Distribution - Vertical Supply and Return



C06308

Fig. 5 - Air Distribution - Concentric Duct

Horizontal Applications

Horizontal units are shipped with an outer panel that allows for side by side horizontal duct connections. If specified during ordering, the unit will be shipped with the vertical duct openings blocked off from the factory, ready for side installation. If the horizontal supply/return option was not specified at time of ordering the unit, a field-installed accessory kit is required to convert the vertical unit into a horizontal supply configuration.

Installation of the duct block-off covers should be completed prior to placing the unit unless sufficient side clearance is available. A minimum of 66 in. is required between the unit and any obstruction to install the duct block-off covers. Slide supply duct dimensions and locations are shown on Fig. 3. Install ductwork to horizontal duct flange connections on side of unit.

Units with electric heat require a 1-in. clearance for the first 24 in. of ductwork. Outlet grilles must not lie directly below unit discharge.

NOTE: A 90° elbow must be provided in the supply ductwork to comply with UL (Underwriters Laboratories) codes for use with electric heat.

Step 5 — Install External Trap for Condensate Drain

The unit's $\frac{3}{4}$ -in. condensate drain connections are located on the bottom and side of the unit. Unit discharge connections do not determine the use of drain connections; either drain connection can be used with vertical or horizontal applications. See Fig. 3 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. 7.)

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 $\frac{1}{2}$ -in. socket extension can be used to remove the plug. (See Fig. 7.) The piping for the condensate drain and external trap can be completed after the unit is in place.

50PG16

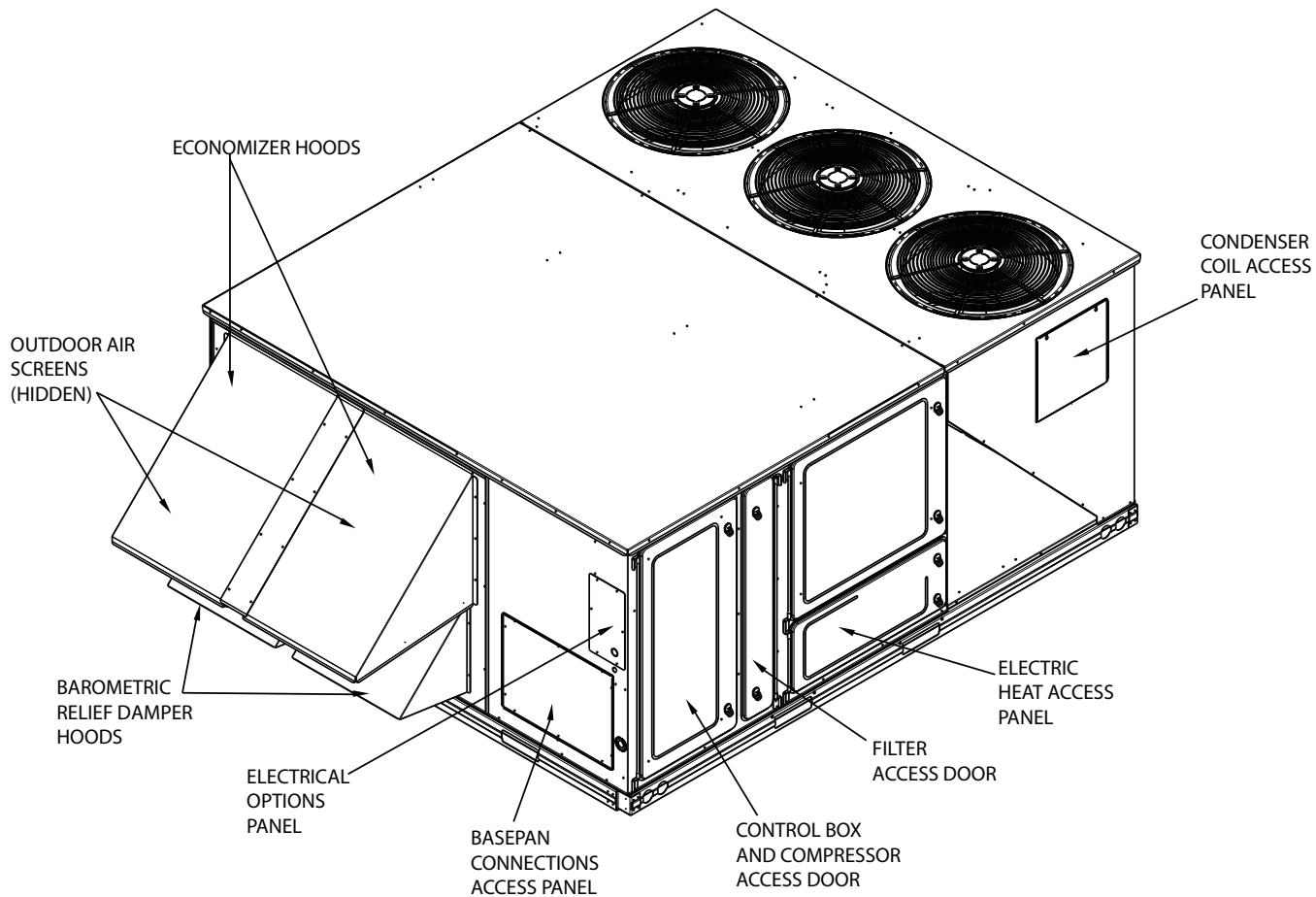


Fig. 6 - Panel and Filter Locations

C06309

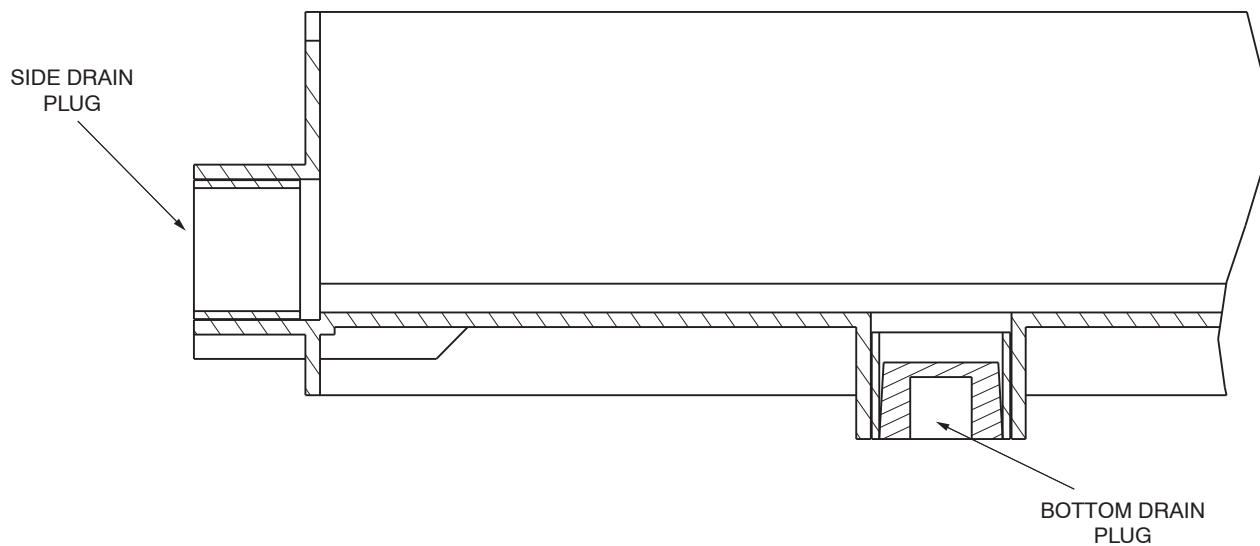


Fig. 7 - Condensate Drain Pan

C06233

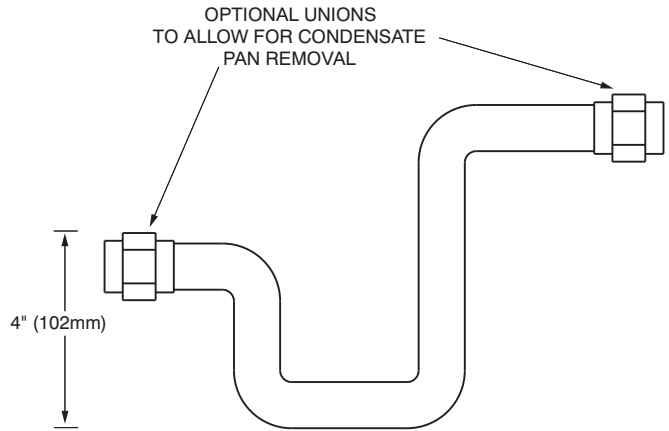
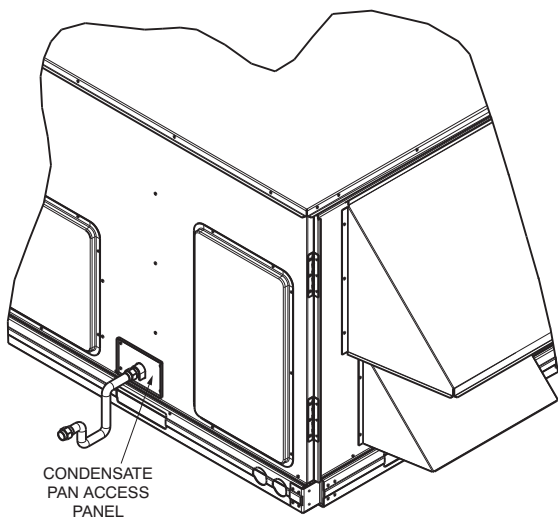
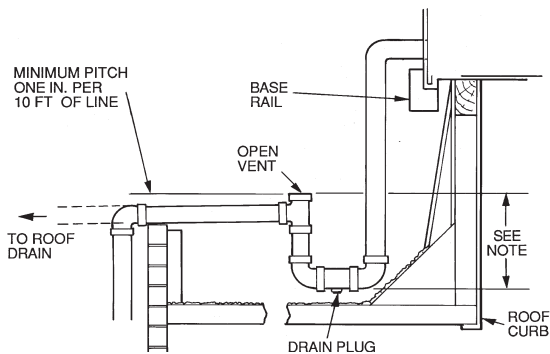


Fig. 8 - External Trap for Condensate Drain

C06311

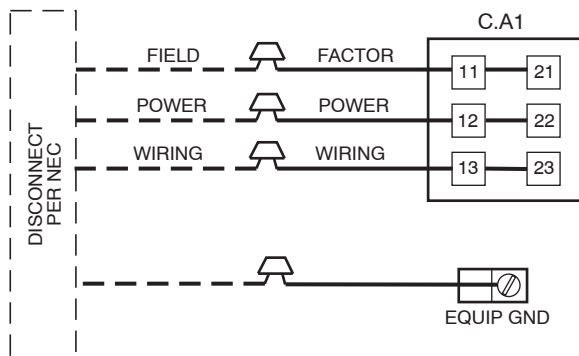
50PG16



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

C06291

Fig. 9 - Condensate Drain Piping Details



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. 10 - Field Power Wiring Connections

All units must have an external trap for condensate drainage. Install a trap at least 4-in. deep and protect against freeze-up. 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. 8 and 9.)

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.

Step 6 — Make Electrical Connections

Field Power Supply

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

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 approved copper/aluminum connector.

When installing 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. 10 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. 3) to connections as shown on unit wiring diagram and Fig. 10. Factory leads may be wired directly to the disconnect.

Table 2 – Electrical Data — Units Without Optional Powered Convenience Outlet

| UNIT 50PG | NOMINAL POWER SUPPLY (V-PH-HZ) | VOLTAGE RANGE | | COMPR NO. 1 | | COMPR NO. 2 | | COMPR NO. 3 | | OFM- FLA | POWER EXHAUST QTY | FLA | IFM TYPE | IFM FLA | ELECTRIC HEAT | | | POWER SUPPLY | | CRSINGLE PART NO. (NOTES) | DISCONNECT SIZE | | WIRING FIG. NO. |
|--------------|---|------------------|-----|----------------|-----|----------------|-----|----------------|-----|-------------|-------------------------|-----|-------------|------------|----------------------|-------------|----------------|--------------|---------|---------------------------------|-----------------|---------|--------------------|
| | | MIN | MAX | RLA | LRA | RLA | LRA | RLA | LRA | | | | | | CRHEATER PART NO. | FLA | NOMINAL KW* | MCA | MOCP | | FLA | LRA | |
| | | | | | | | | | | | | | | | | | FLA | LRA | | | | | |
| 16 | 208/230-3-60 | 187 | 253 | 18.1 | 137 | 18.1 | 137 | 17.6 | 123 | 1.9 | — | — | Low | 10.2 | — | — | —/— | 74.2/ 74.2 | 90/ 90 | — | 80/80 | 482/482 | — |
| | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 77.9/ 87.9 | 90/ 90 | 034 | 80/81 | 482/482 | 20 |
| | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 143.0/133.0 | 150/150 | 034 | 132/150 | 482/482 | 20 |
| | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 169.1/193.2 | 200/225 | 034 | 192/219 | 482/482 | 20 |
| | | | | | | | | | | | | | | 15.0 | — | — | —/— | 79.0/ 79.0 | 90/ 90 | — | 86/ 86 | 491/491 | — |
| | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 83.9/ 93.9 | 90/100 | 034 | 86/ 86 | 491/491 | 20 |
| | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 149.0/139.0 | 150/175 | 034 | 137/156 | 491/491 | 20 |
| | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 175.1/199.2 | 200/225 | 034 | 197/225 | 491/491 | 20 |
| | | | | | | | | | | | | | | 19.4 | — | — | —/— | 83.4/ 83.4 | 100/100 | — | 91/ 91 | 529/529 | — |
| | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 89.4/ 99.4 | 100/100 | 034 | 91/ 91 | 529/529 | 20 |
| | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 154.5/144.5 | 175/175 | 034 | 142/161 | 529/529 | 20 |
| | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 180.6/204.7 | 200/225 | 034 | 202/230 | 529/529 | 20 |
| | 460-3-60 | 414 | 506 | 9.0 | 62 | 9.0 | 62 | 7.7 | 50 | 1.0 | — | — | Low | 10.2 | — | — | —/— | 77.2/ 77.2 | 90/ 90 | — | 84/ 84 | 486/486 | — |
| | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 81.6/ 91.7 | 90/100 | 034 | 84/ 84 | 486/486 | 20 |
| | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 146.8/136.8 | 150/150 | 034 | 135/154 | 486/486 | 20 |
| | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 172.8/196.9 | 200/225 | 034 | 195/223 | 486/486 | 20 |
| | | | | | | | | | | | | | | 15.0 | — | — | —/— | 82.0/ 82.0 | 100/100 | — | 89/ 89 | 495/495 | — |
| | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 87.6/ 97.7 | 100/100 | 034 | 89/ 90 | 495/495 | 20 |
| | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 152.8/142.8 | 175/175 | 034 | 141/159 | 495/495 | 20 |
| | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 178.8/202.9 | 200/225 | 034 | 200/228 | 495/495 | 20 |
| | | | | | | | | | | | | | | 19.4 | — | — | —/— | 86.4/ 86.4 | 100/100 | — | 94/ 94 | 533/533 | — |
| | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 93.1/103.2 | 100/110 | 034 | 94/ 95 | 533/533 | 20 |
| | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 158.3/148.3 | 175/175 | 034 | 146/164 | 533/533 | 20 |
| | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 184.3/208.4 | 200/250 | 034 | 206/233 | 533/533 | 20 |
| 575-3-60 | 518 | 633 | 6.8 | 50 | 6.8 | 50 | 6.1 | 40 | 0.8 | — | — | Low | 4.8 | — | — | —/— | 35.8 | 40 | — | 39 | 215 | — | |
| | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 43.6 | 45 | 035 | 40 | 215 | 21 | |
| | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 66.1 | 80 | 036 | 75 | 215 | 22 | |
| | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 96.2 | 100 | 036 | 109 | 215 | 22 | |
| | | | | | | | | | | | | | 7.4 | — | — | —/— | 38.4 | 45 | — | 42 | 219 | — | |
| | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 46.8 | 50 | 035 | 43 | 219 | 21 | |
| | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 69.4 | 80 | 036 | 78 | 219 | 22 | |
| | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 99.5 | 110 | 036 | 112 | 219 | 22 | |
| | | | | | | | | | | | | | 9.7 | — | — | —/— | 40.7 | 50 | — | 44 | 238 | — | |
| | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 49.7 | 50 | 035 | 46 | 238 | 21 | |
| | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 72.3 | 80 | 036 | 80 | 238 | 22 | |
| | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 102.3 | 125 | 036 | 115 | 238 | 22 | |
| 2.8 | 518 | 633 | 6.8 | 50 | 6.8 | 50 | 6.1 | 40 | 0.8 | — | — | Low | 4.8 | — | — | —/— | 37.0 | 45 | — | 40 | 217 | — | |
| | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 45.1 | 50 | 035 | 41 | 217 | 21 | |
| | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 67.6 | 80 | 036 | 76 | 217 | 22 | |
| | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 97.7 | 100 | 036 | 111 | 217 | 22 | |
| | | | | | | | | | | | | | 7.4 | — | — | —/— | 39.6 | 45 | — | 43 | 222 | — | |
| | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 48.3 | 50 | 035 | 44 | 222 | 21 | |
| | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 70.9 | 80 | 036 | 79 | 222 | 22 | |
| | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 101.0 | 110 | 036 | 114 | 222 | 22 | |
| | | | | | | | | | | | | | 9.7 | — | — | —/— | 41.9 | 50 | — | 46 | 241 | — | |
| | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 51.2 | 60 | 036 | 47 | 241 | 21 | |
| | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 73.8 | 80 | 036 | 82 | 241 | 22 | |
| | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 103.8 | 125 | 036 | 116 | 241 | 22 | |
| 2.8 | 518 | 633 | 6.8 | 50 | 6.8 | 50 | 6.1 | 40 | 0.8 | — | — | Low | 2.8 | — | — | —/— | 26.6 | 30 | — | 29 | 167 | — | |
| | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 33.6 | 35 | 035 | 31 | 167 | 21 | |
| | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 49.7 | 60 | 035 | 56 | 167 | 21 | |
| | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 75.7 | 80 | 036 | 86 | 167 | 22 | |
| | | | | | | | | | | | | | 5.6 | — | — | —/— | 29.4 | 35 | — | 32 | 181 | — | |
| | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 37.1 | 40 | 035 | 34 | 181 | 21 | |
| | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 53.2 | 60 | 035 | 60 | 181 | 21 | |
| | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 79.2 | 90 | 036 | 89 | 181 | 22 | |
| | | | | | | | | | | | | | 7.8 | — | — | —/— | 31.6 | 35 | — | 34 | 196 | — | |
| | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 39.8 | 40 | 035 | 37 | 196 | 21 | |
| | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 55.9 | 60 | 035 | 62 | 196 | 21 | |
| | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 81.9 | 90 | 036 | 92 | 196 | 22 | |
| 2.8 | 518 | 633 | 6.8 | 50 | 6.8 | 50 | 6.1 | 40 | 0.8 | — | — | Low | 2.8 | — | — | —/— | 29.6 | 35 | — | 32 | 171 | — | |
| | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 37.3 | 40 | 035 | 34 | 171 | 21 | |
| | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 53.4 | 60 | 035 | 60 | 171 | 21 | |
| | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 79.4 | 90 | 036 | 90 | 171 | 22 | |
| | | | | | | | | | | | | | 5.6 | — | — | —/— | 32.4 | 35 | — | 35 | 185 | — | |
| | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 40.8 | 45 | 035 | 38 | 185 | 21 | |
| | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 56.9 | 60 | 035 | 63 | 185 | 21 | |
| | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 82.9 | 90 | 036 | 93 | 185 | 22 | |
| | | | | | | | | | | | | | 7.8 | — | — | —/— | 34.6 | 40 | — | 38 | 200 | — | |
| | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 43.6 | 45 | 035 | 40 | 200 | 21 | |
| | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 59.7 | 70 | 035 | 66 | 200 | 21 | |
| | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 85.7 | 100 | 036 | 95 | 200 | 22 | |

50PG16

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

| UNIT 50PG | NOMINAL POWER SUPPLY (V-PH-HZ) | VOLTAGE RANGE | | COMPR NO. 1 | | COMPR NO. 2 | | COMPR NO. 3 | | OFM | POWER EXHAUST | | IFM TYPE | IFM FLA | ELECTRIC HEAT | | | POWER SUPPLY | | CRSINGLE PART NO. (NOTE 3) | DISCONNECT SIZE | | WIRING-FIG. NO. | | | |
|-----------|--------------------------------|---------------|-----|-------------|-----|-------------|-----|-------------|-----|-----|---------------|-----|----------|---------|-------------------|---------|-------------|--------------|-------------|----------------------------|-----------------|---------|-----------------|---------|-----|----|
| | | MIN | MAX | RLA | LRA | RLA | LRA | RLA | LRA | FLA | QTY | FLA | | | CRHEATER PART NO. | FLA | NOMINAL KW* | MCA | MOCPP | | FLA | LRA | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | 208/230-3-60 | 187 | 253 | 18.1 | 137 | 18.1 | 137 | 17.6 | 123 | 1.9 | | | | Low | 10.2 | — | — | —/— | 79.0/ 79.0 | 90/ 90 | — | 86/ 86 | 487/487 | — | | |
| | | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 83.9/ 93.4 | 90/100 | 034 | 86/ 86 | 487/487 | 20 | | |
| | | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 149.1/138.5 | 150/150 | 034 | 137/156 | 487/487 | 20 | | |
| | | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 175.1/198.6 | 200/225 | 034 | 197/225 | 487/487 | 20 | | |
| | | | | | | | | | | | | | | | Mid-Low | 15.0 | — | — | —/— | 83.8/ 83.8 | 100/100 | — | 91/ 91 | 495/495 | — | |
| | | | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 89.9/ 99.4 | 100/100 | 034 | 91/ 92 | 495/495 | 20 | |
| | | | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 155.1/144.5 | 175/175 | 034 | 143/161 | 495/495 | 20 | |
| | | | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 181.1/204.6 | 200/225 | 034 | 203/230 | 495/495 | 20 | |
| | | | | | | | | | | | | | | | High | 19.4 | — | — | —/— | 88.2/ 88.2 | 100/100 | — | 96/ 96 | 534/534 | — | |
| | | | | | | | | | | | | | | | | | 255A00 | 52.1/ 60.1 | 18.8/25.0 | 95.4/104.9 | 100/110 | 034 | 96/ 97 | 534/534 | 20 | |
| | | | | | | | | | | | | | | | | | 256A00 | 104.2/120.3 | 37.6/50.0 | 160.6/150.0 | 175/175 | 034 | 148/166 | 534/534 | 20 | |
| | | | | | | | | | | | | | | | | | 257A00 | 156.3/180.4 | 56.3/75.0 | 186.6/210.1 | 200/250 | 034 | 208/235 | 534/534 | 20 | |
| | 460-3-60 | 414 | 506 | 9.0 | 62 | 9.0 | 62 | 7.7 | 50 | 1.0 | | | | | Low | 4.8 | — | — | —/— | 37.9 | 45 | — | 41 | 217 | — | |
| | | | | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 46.3 | 50 | 035 | 43 | 217 | 21 | |
| | | | | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 68.9 | 80 | 036 | 77 | 217 | 22 | |
| | | | | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 98.9 | 100 | 036 | 112 | 217 | 22 | |
| | | | | | | | | | | | | | | | | Mid-Low | 7.4 | — | — | —/— | 40.5 | 45 | — | 44 | 221 | — |
| | | | | | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 49.6 | 50 | 035 | 46 | 221 | 21 |
| | | | | | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 72.1 | 80 | 036 | 80 | 221 | 22 |
| | | | | | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 102.2 | 110 | 036 | 115 | 221 | 22 |
| | | | | | | | | | | | | | | | | High | 9.7 | — | — | —/— | 42.8 | 50 | — | 47 | 240 | — |
| | | | | | | | | | | | | | | | | | | 258A00 | 30.1 | 25.0 | 52.4 | 60 | 035 | 48 | 240 | 21 |
| | | | | | | | | | | | | | | | | | | 259A00 | 60.1 | 50.0 | 75.0 | 80 | 036 | 83 | 240 | 22 |
| | | | | | | | | | | | | | | | | | | 260A00 | 90.2 | 75.0 | 105.1 | 125 | 036 | 117 | 240 | 22 |
| | 575-3-60 | 518 | 633 | 6.8 | 50 | 6.8 | 50 | 6.1 | 40 | 0.8 | | | | | Low | 2.8 | — | — | —/— | 28.3 | 35 | — | 31 | 169 | — | |
| | | | | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 35.7 | 40 | 035 | 33 | 169 | 21 | |
| | | | | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 51.9 | 60 | 035 | 58 | 169 | 21 | |
| | | | | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 77.8 | 90 | 036 | 88 | 169 | 22 | |
| | | | | | | | | | | | | | | | | Mid-Low | 5.6 | — | — | —/— | 31.1 | 35 | — | 34 | 183 | — |
| | | | | | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 39.2 | 40 | 035 | 36 | 183 | 21 |
| | | | | | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 55.4 | 60 | 035 | 62 | 183 | 21 |
| | | | | | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 81.3 | 90 | 036 | 91 | 183 | 22 |
| | | | | | | | | | | | | | | | | High | 7.8 | — | — | —/— | 33.3 | 40 | — | 36 | 198 | — |
| | | | | | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 42.0 | 45 | 035 | 39 | 198 | 21 |
| | | | | | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 58.1 | 60 | 035 | 64 | 198 | 21 |
| | | | | | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 84.1 | 100 | 036 | 94 | 198 | 22 |
| 2 | 3.0 | | | | | | | | | | | | | Low | 2.8 | — | — | —/— | 31.3 | 35 | — | 34 | 173 | — | | |
| | | | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 39.5 | 40 | 035 | 36 | 173 | 21 | | |
| | | | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 55.6 | 60 | 035 | 62 | 173 | 21 | | |
| | | | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 81.6 | 90 | 036 | 92 | 173 | 22 | | |
| | | | | | | | | | | | | | | | Mid-Low | 5.6 | — | — | —/— | 34.1 | 40 | — | 37 | 187 | — | |
| | | | | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 43.0 | 45 | 035 | 40 | 187 | 21 | |
| | | | | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 59.1 | 60 | 035 | 65 | 187 | 21 | |
| | | | | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 85.1 | 90 | 036 | 95 | 187 | 22 | |
| | | | | | | | | | | | | | | | High | 7.8 | — | — | —/— | 36.3 | 40 | — | 40 | 202 | — | |
| | | | | | | | | | | | | | | | | | 261A00 | 24.1 | 25.0 | 45.7 | 50 | 035 | 42 | 202 | 21 | |
| | | | | | | | | | | | | | | | | | 262A00 | 46.2 | 50.0 | 61.9 | 70 | 035 | 68 | 202 | 21 | |
| | | | | | | | | | | | | | | | | | 263A00 | 72.2 | 75.0 | 87.8 | 100 | 036 | 97 | 202 | 22 | |

*See Legend on next page

50PG16

LEGEND

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



* Heater capacity (kW) is based on heater voltage of 208 v, 240 v, or 480 v. 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.

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.

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

Example: Supply voltage is 460-3-60



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

$$\begin{aligned} \text{Average Voltage} &= \frac{224 + 231 + 226}{3} \\ &= \frac{681}{3} \\ &= 227 \end{aligned}$$

Determine maximum deviation from average voltage.

(AB) 227 – 223 = 4 v

(BC) 231 – 227 = 4 v

(AC) 227 – 226 = 1 v

Maximum deviation is 4 v.

Determine percent of voltage imbalance.

$$\begin{aligned} \% \text{ Voltage Imbalance} &= 100 \times \frac{4}{227} \\ &= 1.76\% \end{aligned}$$

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.

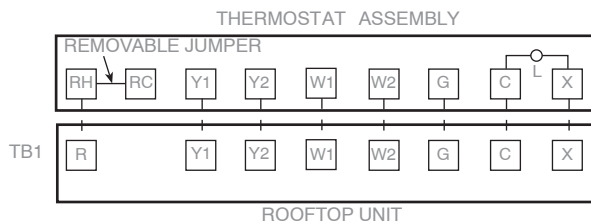
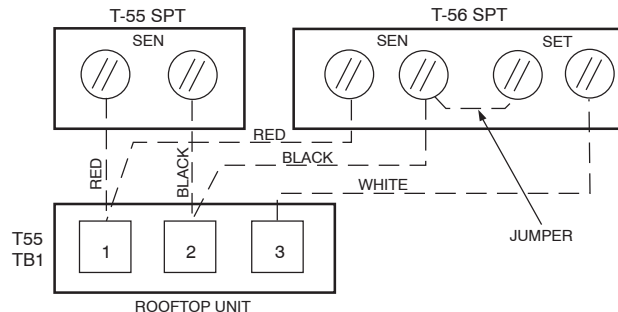


Fig. 11 - Field Control Thermostat Wiring

C06292

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. 11 and 12.



SPT — Space Temperature Sensor

C06239

Fig. 12 - Field Control Temperature Sensor Wiring

⚠ 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.

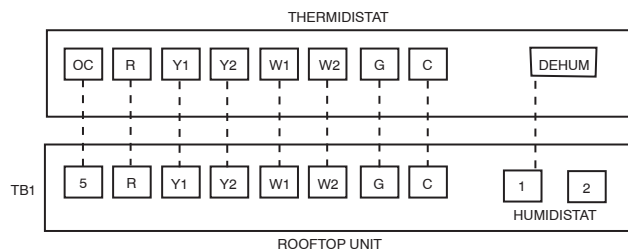


Fig. 13 - Field Thermidistat™ Wiring

C07055

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.

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.

Temperature Control

The unit can be controlled with either a Carrier-approved space temperature sensor, a Carrier accessory Thermidistat 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. 12. General thermostat field control wiring connections are shown in Fig. 11. Carrier Thermidistat device wiring connections are shown in Fig. 13. Configuration of the unit control is required to specify the control input type before unit operation.

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. 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.

50PG16

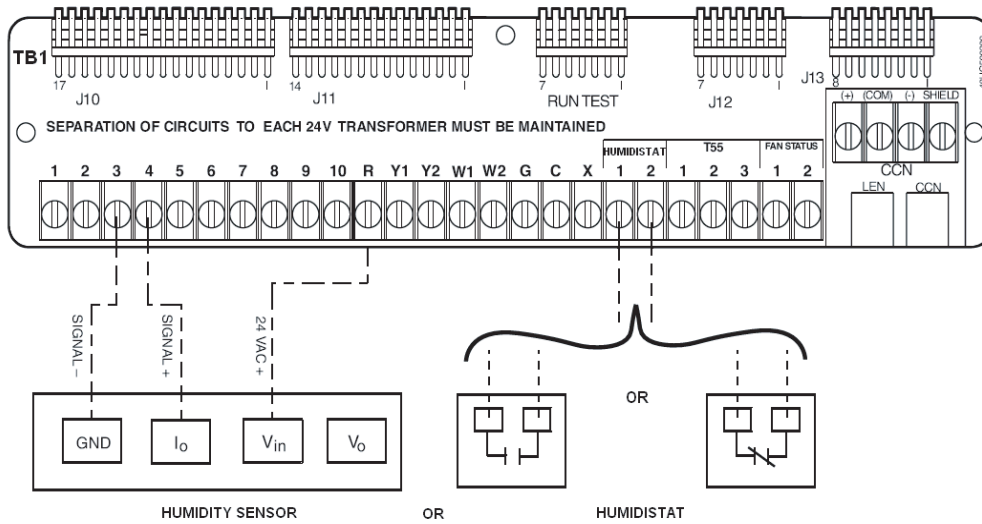


Fig. 14 - Humidi-MiZer™ Low-Voltage Terminal Strip - Humidity Sensor/Humidistat Wiring

C07045

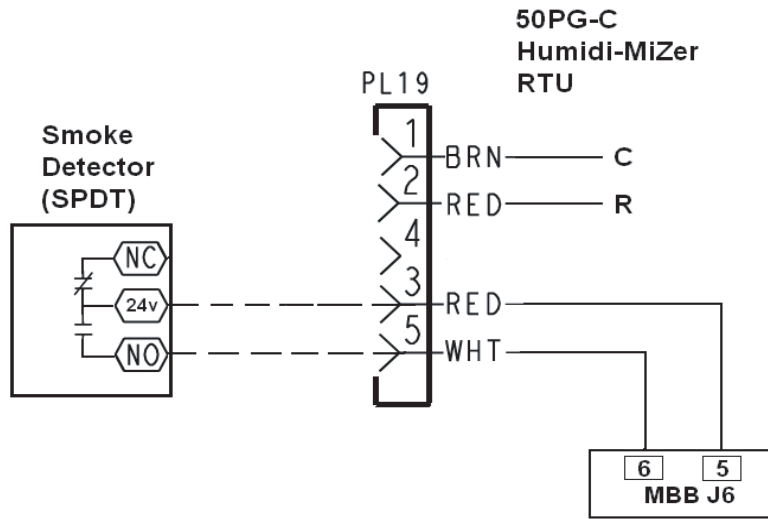


Fig. 15 - Third Party Smoke Detector on Humidi-MiZer

C07191

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. 11-13.

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. 13. General humidistat wiring connections are shown in Fig. 14. 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. 14.)

A space relative humidity sensor input (SPRH) 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. 14.) This input is used instead of the discrete humidistat or thermidstat inputs. The input controls the Humidi-MiZer using the 4-20mA 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-part smoke detector, see Fig. 15.

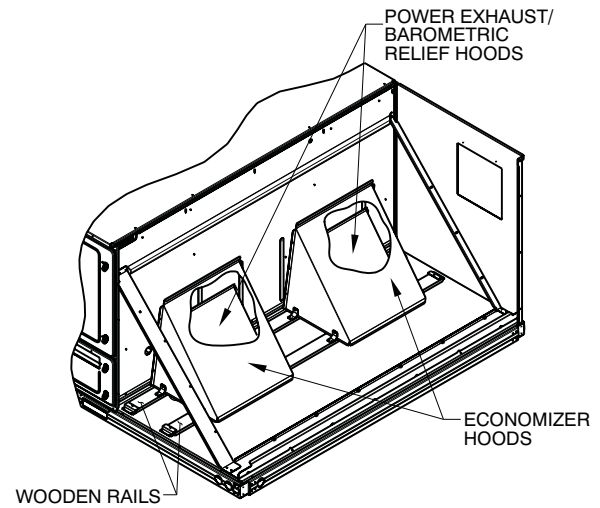
Point 19-3 is the 24 vac power source for the detector and point 19-5 is the 24 vac signal input for fire shutdown.

More information is available in the third party control section of the controls, start-up, operation, and troubleshooting manual.

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

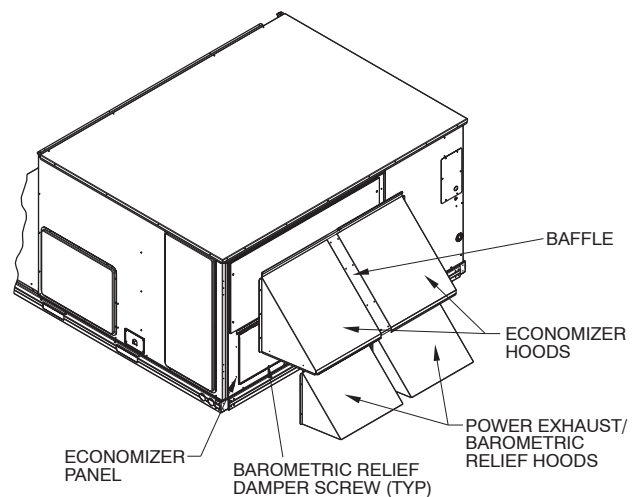
Perform the following procedure to install the outdoor-air hoods:

1. Economizer and barometric relief/power exhaust hoods are located in the condenser section under the slanted coil for shipping. (See Fig. 16.) Barometric relief/power exhaust hoods are shipped inside each economizer hood. Remove screws that secure the wooden rails of the hood assemblies to the unit. Save screws. Slide complete assembly from condenser section.



C06259

Fig. 16 - Economizer and Barometric Relief/Power Exhaust Hoods Shipping Positions



C06261

Fig. 17 - Hood Installation

2. Remove the screws that secure the economizer and barometric relief/power exhaust hoods to the wooden railing. Discard or recycle wooden rails. Save the screws.
3. The barometric relief dampers are factory-installed on to the economizer panel for shipping. Remove the screw holding the barometric relief dampers to the panel. Dampers should be free to swing open during operation. (See Fig. 17.)
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. 17 and 18.) Repeat for second hood.

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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 hood 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. 17 and 19.) Repeat for second hood.

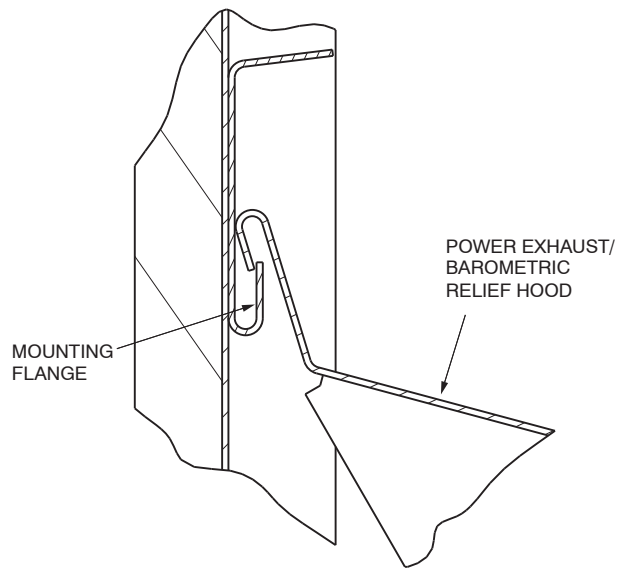
Loosen screws securing the clip on top of the flange of each opening. Rotate clip 180° and tighten screw. Install 1-in. filter provided by inserting under the clip on the flange and letting filter drop behind bracket holding barometric relief hoods. Repeat for second hood. Install baffle between the outdoor air hoods with the screws saved from item 1. (See Fig. 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.

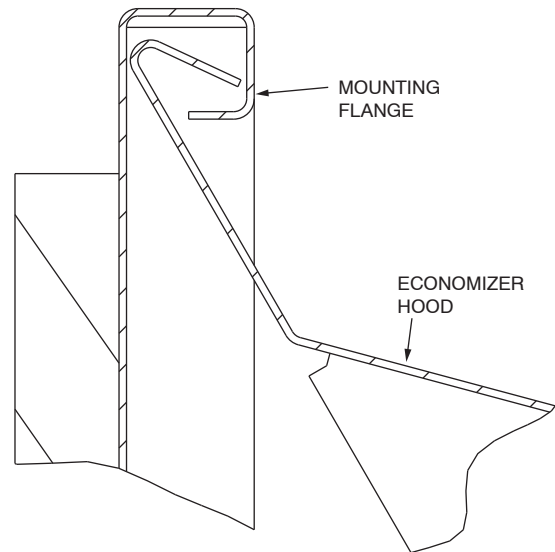
Step 9 — Configure Controls

Refer to unit Controls and Troubleshooting literature for all controls information.



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Fig. 18 - Barometric Relief/Power Exhaust Hood Flange



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Fig. 19 - Economizer Flange