

50PG03-28

Ultra High Efficiency Single Package Electric Cooling with Optional
Electric Heat Commercial Rooftop Units with PURON® (R-410A)
Refrigerant, Optional EnergyX™ (Energy Recovery Ventilator)



Turn to the Experts.™

Product Data



EnergyX model shown



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Carrier's CENTURION 50PG Series commercial packaged rooftops offer:

- Puron® environmentally sound refrigerant (R-410A)
- Ultra-high efficiencies up to 15.0 SEER and 12.7 EER
- Industry leading sound ratings as low as 72 dB
- TXV refrigerant metering with cooling operation up to 125°F
- Factory-installed Humidi-MiZer™ adaptive dehumidification system
- Hinged access doors with double wall construction
- Factory-installed EnergyX, Energy Recovery Ventilator System
- Convertible duct airflow configuration from vertical to horizontal
- Models with internally sloped, slide-out condensate pan
- Slide-out filter rack with up to 4-in. capabilities
- Slide-out blower motor assembly

FEATURES/BENEFITS

The Centurion 50PG commercial packaged rooftop unit is Carrier's most efficient, easiest to service, and most reliable rooftop unit utilizing Puron refrigerant.

Premium Performance

The Centurion 50PG Series provides ARI (Air Conditioning and Refrigeration Institute) certified cooling SEERs (Seasonal Energy Efficiency Ratios) up to 15.0, EERs (Energy Efficiency Ratio) up to 12.7, and IPLVs (Integrated Part Load Values) up to 13.3. The 50PG unit well exceeds ASHRAE 90.1 and Energy Star® levels. These efficiency ratings ensure low operating costs, qualify for attractive utility rebates in many areas and earn credits for Leadership In Energy and Environmental Design (LEED™) issued by Green Building Council.

These units offer ultra-high energy efficiency and environmental benefits by utilizing Carrier's Puron® (R-410A) refrigerant that eliminates all concerns of mandated refrigerant phase out of R-22 (HCFC) in 2010. Each unit has been specifically designed for Puron refrigerant to provide years of optimum efficiencies with long life.

Easy Installation

The 50PG rooftop units accommodate easy installation.

Field convertible units easily switch from vertical to horizontal configuration. Units come factory standard with vertical discharge and return duct configuration, but can be easily converted in the field for horizontal airflow. If needed, a factory option can be ordered on larger sizes to specifically meet your exact configuration, further saving installation costs.

The entire 50PG Centurion series from 2 to 25 ton only uses 5 roof curb sizes. The contractor can order and install the roof curb early in the construction stage, before decisions on size requirements are made.

Unit controls provide optimum flexibility to meet any application or customer requests. A choice of either base electro-mechanical controls or the popular integrated intelligent *ComfortLink™* controls can be ordered from the factory.

Large component areas facilitate easy installation for electrical, or any other field accessory that may be required.

All units feature rigid base rails with rigging holes for easier maneuvering, rigging, and lifting to and on the job site. Durable packaging protects all units during shipment and storage.

A full range of time-saving factory installed options are available that range from power exhaust, hail guards, breakers, to smoke detectors, air management devices and electric heat. All factory options are pre-engineered and certified.

Large and accessible wiring terminal boards located in the base unit control box, facilitate connections to room thermostat or sensor, outdoor thermostat(s), and economizer. Hinged service panels are provided, permitting easy access.

Thru-the-curb power and control wiring connections route through both the curb and unit, minimizing roof penetrations. Connections are located in an enclosed area away from harsh ambient conditions eliminating water entry. Both power and control connections are made on the same side of the unit to simplify installation. In addition, color-coded and labeled wires permit easy tracing and diagnostics.

The Carrier Centurion units with *ComfortLink* controls will operate in the cooling mode down to 0°F ambient temperature, eliminating the need for expensive aftermarket low ambient controllers while providing comfort in the harshest environments.

Easy Maintenance and Service

Maintaining and servicing a rooftop unit has never been easier thanks to the new Centurion design. Integrated hinged access panels for the filter, indoor-fan motor/blower assembly, compressors, control box, and electric heat areas provide quick access to major components.

Each hinged panel has multiple heavy-duty quarter turn latches and is permanently mounted to the unit, thereby eliminating the concern of a dropped or wind-blown panel puncturing delicate roof materials. Door tiedowns are also provided to ensure panels remain stationary, eliminating any panel blowback conditions.

The indoor fan system slides out for easy access. Blower wheels, motors, belts, and bearings can be easily serviced and maintained.

Evaporator and condenser coils are of a single slab/single pass design that facilitates optimum cleaning without unit disassembly or coils separation as with hybrid type coil designs. Each coil has dedicated access door to ensure ease of cleaning.

Optional ComfortLink™ Controls

These controls provide temperature, pressure readings and all diagnostics electronically on the unit by utilizing a large visual display on the Scrolling Marquee. All messages are displayed in full text so no decoding is required. All sensor information can be read at the Scrolling Marquee so no gauges are required. If remote capabilities are necessary, *ComfortLink* controls provide network capabilities as well.

Humidi-MiZer™ Adaptive Dehumidification System

Carrier's Humidi-MiZer adaptive dehumidification system is an all-inclusive factory-installed option that can be ordered with any Centurion 50PG03-28 rooftop unit.

This system expands the envelope of operation of Carrier's Centurion rooftop products to provide unprecedented flexibility to meet year-round comfort conditions.

The Humidi-MiZer adaptive dehumidification system has the industry's only dual dehumidification mode setting. The Humidi-MiZer system includes two new modes of operation. The Centurion 50PG03-28 rooftop coupled with the Humidi-MiZer system is capable of operating in normal design cooling mode, subcooling mode, and hot gas reheat mode. Normal design cooling mode is when the unit will operate under its normal sequence of operation by cycling compressors to maintain comfort conditions.

Subcooling mode will operate to satisfy part load type conditions when the space requires combined sensible and a higher proportion of latent load control. Hot Gas Reheat mode will operate when outdoor temperatures diminish and the need for latent capacity is required for sole humidity control. Hot Gas Reheat mode will provide neutral air for maximum dehumidification operation.

Optional fan and filter indicator switches will alert necessary personnel when filters require changing or the system fan is not operating properly.

Dedicated hinged filter door and Easy Glide™ slide-out filter tracks make air filter replacement easy. This eliminates the need to reach within the unit. All filters are a standard off the shelf size, allowing easy availability and lower replacement costs.

Compressors are located in a dedicated insulated compartment that allows troubleshooting and diagnostics without creating air bypass that causes misreadings.

Optional EnergyX™ System

EnergyX is a factory integrated, single piece, fully tested and certified energy recovery system specifically designed for the PG series rooftop product family (vertical return duct only).

The EnergyX system recycles exhausted air and provides latent and sensible energy exchange to intake air prior to entering either the unit DX coil or heating section. This preconditioning of air allows even higher operating efficiencies and increased comfort control. Operating cost savings of up to 4 tons per 1,000 cfm in cooling and 80,000 Btu/hour per 1,000 cfm in heating can be achieved by the EnergyX system. This also would allow for the base unit capacity requirements reduction and installation cost savings, while providing lower life-cycle energy consumption during operation.

The Combined Efficiency (CEF) by ARI Guideline V can be higher than 19.0. EnergyX Energy Recovery Wheel also is rated in accordance with ARI 1060 and has UL/CUL certification.

EnergyX system comes with the following standard features:

- Double wall fully gasketed hinged access panels with quarter-turn handles.
- Direct or belt drive exhaust and intake blower motors with centrifugal fans.
- Exhaust and Intake 2-in filters (exhaust filters are optional).
- Single point electrical connection.
- Rotary heat exchanger wheel with desiccant silica gel coating.
- "Stop Jog" logic that prevents dirt and contaminants from building on the wheel by rotating the wheel while the pressure differential is sensed (provided with Economizer bypass models only).
- Air flow test ports to properly balance the exhaust and intake air.
- Pre-assembled exhaust and intake hoods.
- Five year wheel warranty.

The following optional features are available with the EnergyX system:

Frost protection

In extremely cold climates, this option monitors wheel pressure drop and outside temperature. When outside air temperature is 20°F or lower and the pressure drop measurement confirms frost build-up, the wheel activates and exhaust fan energizes to remove accumulated frost.

Motor status switch

This factory option monitors the system pressure drop of all EnergyX motors, which includes the intake, exhaust and rotating energy wheel motors. If lack of pressure amperage is detected, a signal is sent to a field supplied 24 volt indicator light advising that maintenance is required.

Filter Maintenance Switch

This factory-installed option monitors pressure drop through both outside air and exhaust air filters. If excess pressure drop is detected, a signal is sent to a field-supplied 24 volt indicator light advising that maintenance is required (not available on 03-07 units). Exhaust filters are included.

Indoor Air Quality Begins With Carrier Rooftops

Two-inch disposable filters are factory furnished as standard in every unit with the capability of accommodating 4-in. filters as well as factory-installed MERV-8 pleated filters. The same track is used and no special field kits are required on 50PG03-16 units. A factory-installed option is available on 50PG20-28 units.

Condensate pans are internally sloped self-draining to ensure minimizing biological growth in rooftop units in accordance with ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) Standard 62. The 50PG03-16 units use a high impact polycarbonate slide-out condensate pan while the 50PG20-28 units use an epoxy powder coated steel condensate pan.

Unit uses foil-faced cleanable insulation that is securely fastened. Selected panels are mechanically fastened for added support. All edges are either sealed or encapsulated so no fibers enter the airstream.

Optional tilt-out economizers (sizes 03-16) with enthalpy controls maximize building humidity control.

Built in capability for DCV (demand control ventilation) is standard and integrates with CO₂ sensors, both as a factory-installed option or a field-installed accessory.

Belt-driven evaporator fans provide quiet and efficient operation. The belt-driven evaporator fan with variable-pitch pulleys allows adjustment to available static pressure to meet the job requirements of even the most demanding applications. Multiple motor and drive options are available to match system airflow and static pressure requirements.

Durable, Dependable Construction

Weather-resistant cabinets are constructed of galvanized steel and all exterior panels are coated with a prepainted baked enamel finish. The paint finish is a non-chalking type that provides years of maximum aesthetic protection.

Fully insulated cabinets include non-fibrous, foil-faced cleanable insulation that is mechanically secured and encapsulated in unit design. Totally enclosed condenser-fan motors and evaporator-fan motors use permanently lubricated bearings to provide additional unit dependability. The shaft-down design of the condenser fan also ensures protection from the continued harsh environments.

Quality and Reliability

To assure optimum life expectancy and performance, every rooftop unit is factory run tested prior to shipping to the job site. Individual components are also tested at many levels to ensure that only the best parts make it into the Carrier rooftop units. All units are manufactured in a facility registered to ISO 9001:2000.

Reliable fully hermetic scroll compressors with crankcase heater(s) are mounted on a dedicated formed pad and are isolated and secured for quiet operation.

A **TXV (thermostatic expansion valve)** for refrigerant metering on each circuit allows efficient operation up to 125°F ambient cooling temperatures with removable power head.

Each circuit contains a solid core liquid line filter drier specifically designed for Puron® refrigerant systems.

Units contain provisions to eliminate internal damage if a blower motor belt breaks or comes off during operation. Specially located stop bars or strategically located belt drive location eliminates damages to sensitive areas such as coils, piping and metering devices.

Standard warranty coverage provides one-year parts warranty and 5-year compressor and electric heat warranty.

Integrated Economizers and Outdoor Air Management

During a call for cooling, if the outdoor-air temperature is below the control changeover set point, unit control modulates the economizer outdoor-air damper open to achieve the set point. If economizer cooling is not sufficient, additional compressor stages are energized in addition to the economizer. If the outdoor-air temperature is above the changeover set point, the first stage of compression is activated and the economizer stays at minimum position. Economizer operation is controlled by a thermistor that senses outdoor-air temperature.

Gear driven, spring return, close on power loss economizers with dry bulb or single enthalpy are available as a factory-installed option as well as two-position motorized dampers, manual dampers, and power exhaust. All provide the flexibility to meet any application needs or codes.

Ultra Low Sound

Outdoor sound levels of 72 dB are the lowest in the industry for this type of equipment. Low sound levels allow for maximum installation flexibility, greater indoor environmental comfort and reduce or eliminate the need for expensive sound barriers required by many codes.

Field-Installed or Factory-Installed Electric Heaters

Electric heaters are designed with heavy-duty nickel chromium elements and contain automatic high temperature limit controls and safeties.

Multiple kW heater sizes are available ranging from 3 kW to 75 kW.

ComfortLink™ Control Option

The *ComfortLink* control is your link to a world of simple and easy to use rooftop units that offer outstanding performance and value. When used with a space temperature sensor, the *ComfortLink* control's intelligence maintains control over the economizer and condenser fans and optimizes the performance of the refrigeration circuits as conditions change resulting in the following features:

- Better control of temperature and humidity
- Superior reliability
- Automatic redundancy
- Low ambient cooling operation to 0°F
- More accurate diagnostics, at unit or remote

The *ComfortLink* Scrolling Marquee is very easy to use. The messages are displayed in easy to understand English, no decoding is required. A scrolling readout provides detailed explanations of control information. Only four, large, easy-to-use buttons are required to maneuver through the entire menu. The readout is designed to be visible even in the brightest sunlight. A hand-held Navigator™ accessory or wall-mounted System Pilot™ accessory can be used for added service flexibility.

The *ComfortLink* control provides unparalleled service diagnostic information. Temperature and pressure can be read directly from the display with no need for separate gauges. Other data, such as compressor cycles, unit run time hours, current alarms, can also be accessed. A history of alarms is also available for viewing.

The service run test can be very helpful when troubleshooting. The user can run test major components to determine the root cause of a problem. The unit can be run-tested before an installation is complete to ensure satisfactory start-up.

To ensure reliability, the *ComfortLink* control prevents reverse compressor rotation.

No laptop computers are required for start-up. Time schedules are built in and the Scrolling Marquee display provides easy access to set points.

The *ComfortLink* control accepts input from a CO₂ sensor and a smoke detector. Both are available as factory installed options or as field-installed accessories.

ComfortLink controls are fully communicating and are cable-ready for connection to the Carrier Comfort Network® (CCN). The control communicates at 38.4 kilobaud. This provides high-speed communications for remote monitoring via the Internet. Multiple Centurion rooftop units can be daisy chained together using a 3-wire communication bus at the rooftop level. The *ComfortLink*/CCN system is a peer-to-peer system, rather than a polling system. This results in lower cost installations.

The Centurion rooftop units have a terminal strip on board, therefore, the Centurion units can operate with a standard thermostat. Expensive interface devices are not required.

3V™ Control System

The Centurion rooftop unit is linkage compatible for use with the 3V zoning system. Carrier's 3V control system provides optimized equipment control through airside linkage. Linkage allows the Centurion rooftop unit to adjust its supply air temperature set points and occupancy schedules to run in the most efficient manner. The 3V zoning system maintains precise temperature control in the space by regulating the flow of conditioned air into the space using Carrier's VVT® Zone and Bypass Controllers.

MODEL NUMBER NOMENCLATURE

50PG	A	C	06	A	A	A	6	-	-	BB														
50PG – Single Packaged Rooftop Unit with PURON® Refrigerant Electric Cooling, with Optional Electric Heat Constant Volume																								
Electric Heat Options - - No Factory–Installed Electric Heat A – Low kW Factory–Installed Electric Heat B – Medium kW Factory–Installed Electric Heat C – High kW Factory–Installed Electric Heat				Factory–Installed Options Refer to Price Pages for Option Codes																				
Base Unit Control Type C – Integrated ComfortLink™ Controls with Visual Display M – Electro–Mechanical Controls*				EnergyX™ Options - - Standard, No EnergyX E – Low CFM EnergyX F – Med CFM EnergyX G – High CFM EnergyX H – Low CFM EnergyX with Motor Status Switch K – High CFM EnergyX with Motor Status Switch L – Low CFM ERV with Frost Protection M – Med CFM EnergyX with Frost Protection N – High CFM EnergyX with Frost Protection P – Low CFM EnergyX with Frost Protection and Motor Status Switch R – High CFM EnergyX with Frost Protection and Motor Status Switch																				
Unit Size – Nominal Tons <table><tr><td>03 – 2</td><td>12 – 10</td></tr><tr><td>04 – 3</td><td>14 – 12–1/2</td></tr><tr><td>05 – 4</td><td>16 – 15</td></tr><tr><td>06 – 5</td><td>20 – 18</td></tr><tr><td>07 – 6</td><td>24 – 20</td></tr><tr><td>08 – 7–1/2</td><td>28 – 25</td></tr><tr><td>09 – 8–1/2</td><td></td></tr></table>				03 – 2	12 – 10	04 – 3	14 – 12–1/2	05 – 4	16 – 15	06 – 5	20 – 18	07 – 6	24 – 20	08 – 7–1/2	28 – 25	09 – 8–1/2		Design Change						
03 – 2	12 – 10																							
04 – 3	14 – 12–1/2																							
05 – 4	16 – 15																							
06 – 5	20 – 18																							
07 – 6	24 – 20																							
08 – 7–1/2	28 – 25																							
09 – 8–1/2																								
Control Options - - None A – CO ₂ Sensor B – Return Air Smoke Detector C – CO ₂ Sensor, Return Air Smoke Detector D – Fan and Filter Switches E – CO ₂ Sensor, Fan and Filter Switches F – CO ₂ Sensor, Return Air Smoke Detector, Fan and Filter Switches G – Return Air Smoke Detector, Fan and Filter Switches H – Return and Supply Air Smoke Detectors J – CO ₂ Sensor, Return and Supply Air Smoke Detectors K – CO ₂ Sensor, Fan and Filter Switches, Return and Supply Air Smoke Detectors L – Fan and Filter Switches, Return and Supply Air Smoke Detectors				Voltage 1 – 575–3–60 3 – 208/230–1–60 5 – 208/230–3–60 6 – 460–3–60																				
				Coil Protection Options - - Al/Cu Condenser Coil, Al/Cu Evaporator Coil A – Pre–Coated Al/Cu Condenser Coil, Al/Cu Evaporator Coil B – E–Coated Al/Cu Condenser Coil, Al/Cu Evaporator Coil C – E–Coated Al/Cu Condenser Coil, E–Coated Al/Cu Evaporator Coil D – Cu/Cu Condenser Coil, Al/Cu Evaporator Coil E – Cu/Cu Condenser Coil, Cu/Cu Evaporator Coil F – E–Coated Cu/Cu Condenser Coil, Al/Cu Evaporator Coil G – E–Coated Cu/Cu Condenser Coil, Cu/Cu Evaporator Coil H – E–Coated Cu/Cu Condenser Coil, E–Coated Cu/Cu Evaporator Coil J – Humidi–MiZer™ Adaptive Dehumidification System																				
				Indoor Fan Motor Options A – Low Range Vertical B – Mid–Low Range Vertical C – Mid–High Range Vertical D – High Range Vertical E – Low Range Horizontal F – Mid–Low Range Horizontal G – Mid–High Range Horizontal H – High Range Horizontal J – Low Range Vertical with Phase Loss K – Mid–Low Range Vertical with Phase Loss L – Mid–High Range Vertical with Phase Loss M – High Range Vertical with Phase Loss N – Low Range Horizontal with Phase Loss P – Mid–Low Range Horizontal with Phase Loss Q – Mid–High Range Horizontal with Phase Loss R – High Range Horizontal with Phase Loss																				

Quality Assurance

Certified to ISO 9001:2000

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* Humidi–MiZer system not available with Electro–Mechanical controls

Quality Assurance

Certified to ISO 9001:2000



Well exceeds
ASHRAE 90.1 and
Energy Star Standards



This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturer's refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

ARI* CAPACITY RATINGS

50PG03-28

UNIT 50PG	NOMINAL CAPACITY (Tons)	NET COOLING CAPACITY (Btuh)	TOTAL POWER (kW)	SEER	EER†	SOUND RATING (dB)	IPLV**
03	2.0	24,000	2.1	14.1	11.5	75	—
04	3.0	35,800	3.1	14.1	11.7	73	—
05	4.0	47,500	4.0	15.0	12.2	72	—
06	5.0	58,500	4.9	14.8	12.2	78	—
07	6.0	69,000	5.8	—	12.2	78	—
08	7.5	88,000	7.0	—	12.7	80	13.3
09	8.5	102,000	8.4	—	12.4	80	13.3
12	10.0	119,000	9.9	—	12.2	80	13.1
14	12.5	150,000	13.2	—	11.5	83	12.1
16	15.0	182,000	15.9	—	11.6	84	12.7
20	18.0	202,000	17.2	—	11.8	81.7	12.4
24	20.0	238,000	20.2	—	11.6	84.6	12.0
28††	25.0	300,000	27.2	—	11.0	84.6	12.0

LEGEND

db — Dry Bulb
EER — Energy Efficiency Ratio
IPLV — Integrated Part-Load Values
SEER — Seasonal Energy Efficiency Ratio
wb — Wet Bulb

*Air Conditioning and Refrigeration Institute.

† ARI does not require EER ratings for units with capacity below 65,000 Btuh.

**IPLV values are calculated based on control configuration T.CTL = 2 (2 Stage Y1).

†† Size 28 unit is not listed with ARI, but is tested to ARI standards.

NOTES:

1. Tested in accordance with ARI Standards 210–94 (sizes 03–12), 360–93 (sizes 14 and 16) and 360–93 and 370–95 (sizes 20–28).
2. Ratings are net values, reflecting the effects of circulating fan heat.
3. Ratings are based on:
Cooling Standard: 80°F db, 67°F wb indoor entering–air temperature and 95°F db air entering outdoor unit.
IPLV Standard: 80°F db, 67°F wb indoor entering–air temperature and 80°F db outdoor entering–air temperature.
4. All 50PG units are in compliance with Energy Star® and ASHRAE 90.1 2001 Energy Standard for minimum SEER and EER requirements.
5. Units are rated in accordance with ARI sound standards 270 or 370.



50PG Electric Resistance Heater Data

UNIT 50PG	HEATER KW							HEATER STAGES	% HEAT PER STAGE	HEATER AMPS						
	Unit Voltages									Unit Voltages						
	208	230	240	460	480	575	600			208	230	240	460	480	575	600
03 - 07 (Single Phase)	2.3	2.8	3.0	—	—	—	—	1	100	10.8	12.0	12.5	—	—	—	—
	3.8	4.6	5.0	—	—	—	—	1	100	17.3	19.2	20.0	—	—	—	—
	5.6	6.9	7.5	—	—	—	—	1	100	26.0	28.8	30.0	—	—	—	—
	7.5	9.2	10.0	—	—	—	—	1	100	34.7	38.3	40.0	—	—	—	—
	11.3	13.8	15.0	—	—	—	—	2	67/33	52.0	57.5	60.0	—	—	—	—
	15.0	18.4	20.0	—	—	—	—	2	50/50	69.3	76.7	80.0	—	—	—	—
	18.8	23.0	25.0	—	—	—	—	2	60/40	86.7	95.8	100.0	—	—	—	—
03 - 07 (3 Phase)	2.3	2.8	3.0	2.8	3.0	—	—	1	100	6.3	37.7	7.2	3.3	3.5	—	—
	3.8	4.6	5.0	4.6	5.0	—	—	1	100	10.0	11.1	11.5	5.5	5.8	—	—
	5.6	6.9	7.5	6.9	7.5	—	—	1	100	15.0	16.6	17.3	8.3	8.7	—	—
	7.5	9.2	10.0	9.2	10.0	9.2	10.0	1	100	20.0	22.1	23.1	11.1	11.5	8.9	9.2
	11.3	13.8	15.0	13.8	15.0	13.8	15.0	2	50/50	30.0	33.2	34.6	16.6	17.3	13.3	13.9
	15.0	18.4	20.0	18.4	20.0	18.4	20.0	2	50/50	40.0	44.3	46.2	22.1	23.1	17.7	18.5
	18.8	23.0	25.0	23.0	25.0	23.0	25.0	2	50/50	50.0	55.3	57.7	27.7	28.9	22.1	23.1
08 - 14 (3 Phase)	—	—	—	—	—	27.6	30.0	2	50/50	—	—	—	—	—	26.6	27.7
	7.5	9.2	10.0	9.2	10.0	—	—	1	100	20.0	22.1	23.1	11.1	11.5	—	—
	11.3	13.8	15.0	13.8	15.0	13.8	15.0	2	50/50	30.0	33.2	34.6	16.6	17.3	13.3	13.9
	18.8	23.0	25.0	23.0	25.0	23.0	25.0	2	50/50	50.0	55.3	57.7	27.7	28.9	22.1	23.1
	26.3	32.1	35.0	32.1	35.0	32.1	35.0	2	67/33	70.1	77.5	80.8	38.7	40.4	31.0	32.3
	30.0	36.7	40.0	36.7	40.0	36.7	40.0	2	67/33	80.1	88.5	92.4	44.3	46.2	35.4	37.0
	37.6	45.9	50.0	45.9	50.0	45.9	50.0	2	67/33	100.1	110.7	115.5	55.3	57.7	44.3	46.2
16 (3 Phase)	45.1	55.1	60.0	55.1	60.0	55.1	60.0	2	50/50	120.1	132.8	138.6	66.4	69.3	53.1	55.4
	18.8	23.0	25.0	23.0	25.0	23.0	25.0	2	50/50	52.1	57.6	60.1	28.4	30.1	23.1	24.1
	37.6	45.9	50.0	45.9	50.0	45.9	48.0	2	50/50	104.2	115.3	120.3	57.6	60.1	44.3	46.2
20, 24, 28 (3 Phase)	56.3	68.9	75.0	68.9	75.0	68.9	75.0	2	50/50	156.3	172.9	180.4	86.5	90.2	69.2	72.2
	19.0	23.0	25.0	23.0	25.0	23.0	25.0	2	50/50	52.0	58.0	60.0	29.0	30.0	23.0	24.0
	38.0	46.0	50.0	46.0	50.0	44.0	48.0	2	50/50	104.0	115.0	120.0	58.0	60.0	44.0	46.0
	56.0	69.0	75.0	69.0	76.0	72.0	78.0	2	50/50	156.0	173.0	180.0	86.0	90.0	72.0	75.0

NOTES:

1. See Electrical Data for valid heater sizes for each model size. Maximum 5 kW per nominal cooling ton.
2. Heaters are rated at 208, 240, 480, and 600 v.

Factory-Installed Electric Heater Usage — 50PG03-16

50PG HEAT	03	04	05	06	07	08	09	12	14	16
	Heater Nominal kW									
Low*	None	5	5	5	5	10	10	10	10	25
Medium	5	10	10	15	15	25	25	25	25	50
High	10	15	15	25	25	40	40	50	50	75

*Factory—installed low heat is not available on 575—v 50PG03—14 units. Electric heat must be field—installed.

50PG

Operation Air Quantity Limits

50PG03-16 Units

UNIT 50PG	COOLING (cfm)		HEATING (cfm) ELECTRIC HEAT	
	Min	Max	Min	Max
03	600	1000	600	1000
04	900	1500	900	1500
05	1200	2000	1200	2000
06	1500	2500	1500	2500
07	1800	3000	1800	3000
08	2250	3750	2250	3750
09	2550	4250	2550	4250
12	3000	5000	3000	5000
14	3750	6250	3750	6250
16	4500	7500	4500	7500

50PG20-28 Units

50PG	COOLING		ELECTRIC HEAT	ELECTRIC HEAT (Vertical)	ELECTRIC HEAT (Horizontal)
	Minimum Cfm	Maximum Cfm		Minimum Cfm	Minimum Cfm
20	5000	9,000	High Heat (75 kW)	4,500	5,400
			Medium Heat (50 kW)	3,750	4,800
			Low Heat (25 kW)	3,750	3,750
24	5500	10,000	High Heat (75 kW)	4,500	5,400
			Medium Heat (50 kW)	3,750	4,800
			Low Heat (25 kW)	3,750	3,750
28	6500	12,000	High Heat (75 kW)	4,500	5,400
			Medium Heat (50 kW)	3,750	4,800
			Low Heat (25 kW)	3,750	3,750

Outdoor Sound Power (Total Unit)

UNIT 50PG	A-WEIGHTED* (dB)	OCTAVE BAND LEVELS dB							
		63	125	250	500	1000	2000	4000	8000
03	75.0	82.6	79.9	75.7	73.3	70.0	64.3	58.4	50.5
04	73.2	79.8	77.2	74.1	70.1	68.0	63.6	58.4	51.9
05	71.9	79.7	79.6	72.6	69.6	66.0	61.4	56.4	48.5
06	78.5	82.2	82.6	79.5	75.7	73.9	68.6	64.0	56.3
07	78.5	87.5	83.0	78.5	76.3	73.8	68.4	63.8	56.5
08	80.0	91.7	83.6	81.0	77.9	75.0	69.9	66.0	59.3
09	79.9	89.1	82.7	80.0	77.7	75.0	70.2	66.3	57.8
12	80.0	90.4	83.1	80.9	77.8	75.2	70.0	66.1	57.6
14	83.3	86.4	85.9	85.3	81.8	78.2	72.2	67.9	59.9
16	84.0	90.3	85.2	83.5	81.1	79.0	73.7	70.5	65.4
20	81.7	90.2	84.8	80.7	79.0	77.6	71.4	66.7	60.7
24	84.9	90.0	86.3	83.6	82.9	80.3	74.9	71.4	66.5
28	84.9	90.0	86.3	83.6	82.9	80.3	74.9	71.4	66.5

LEGEND

db – Decibel

*Sound Rating ARI or Tone Adjusted, A-Weighted Sound Power Level in dB. For sizes 03–12, the sound rating is in accordance with ARI Standard 270–1995. For sizes 14–28, the sound rating is in accordance with ARI 370–2001.

**Outdoor Sound Power (Total Unit)
with High CFM EnergyX**

UNIT 50PG w/ERV	A-WEIGHTED* (dB)	OCTAVE BAND LEVELS dB							
		63	125	250	500	1000	2000	4000	8000
03	83.0	82.8	81.4	79.7	78.1	77.9	76.5	72.5	70.1
04	82.7	80.2	79.6	79.1	77.3	77.6	76.5	72.5	70.1
05	82.6	80.1	81.1	78.8	77.2	77.4	76.4	72.4	70.0
06	83.8	82.4	83.4	81.6	79.1	78.8	76.9	72.9	70.2
07	83.8	87.6	83.8	81.1	79.3	78.8	76.9	72.9	70.2
08	87.3	92.0	86.8	84.5	82.4	81.8	80.5	78.0	74.2
09	87.2	89.6	86.4	84.1	82.4	81.8	80.5	78.1	74.2
12	87.3	90.8	86.5	84.5	82.4	81.8	80.5	78.0	74.2
14	88.2	87.2	88.0	87.0	84.2	82.7	80.8	78.2	74.3
16	91.4	93.2	92.8	88.2	86.3	85.5	84.4	83.4	78.4
20	91.2	93.1	92.7	87.4	85.8	85.2	84.2	83.3	78.3
24	91.7	93.0	93.0	88.2	86.9	85.8	84.5	83.5	78.5
28	91.7	93.0	93.0	88.2	86.9	85.8	84.5	83.5	78.5

LEGEND

dB – Decibel

* Sound Rating ARI or tone Adjusted, A-Weighted Sound Power Level in dB. For sizes 03–12, the sound rating is in accordance with ARI Standard 270–1995. For sizes 14–28, the sound rating is in accordance with ARI 370–2001.

PHYSICAL DATA

50PG03-07

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			Enhanced Copper Tubes, Aluminum Lanced Fins		
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
EVAPORATOR FAN			Centrifugal Type, Belt Drive		
Quantity...Size (in.)	Low 1...12 x 9	Low 1...12 x 9	Low 1...12 x 9	Low 1...12 x 9	Low 1...12 x 9
High 1...12 x 9	High 1...12 x 9	High 1...12 x 9	High 1...12 x 9	High 1...12 x 9	High 1...12 x 9
Type Drive	Low Belt	Low Belt	Low Belt	Low Belt	Low Belt
High Belt	High Belt	High Belt	High Belt	High Belt	High Belt
Nominal Cfm	800	1200	1600	2000	2400
Maximum Continuous Bhp	Low 0.85	Low 0.85	Low 0.85	Low 0.85/2.40†	Low 2.40
High 0.85	High 0.85	High 0.85	High 1.60/2.40†	High 1.60/2.40†	High 3.10
Motor Nominal Rpm	1620	1620	1620	1725	1725
Motor Frame Size	Low 48Y	Low 48Y	Low 48Y	Low 56Y	Low 56Y
High 48Y	High 48Y	High 48Y	High 56Y	High 56Y	High 56Y
Fan Rpm Range	Low 482-736	Low 482-736	Low 596-910	Low 690-978	Low 796-1128
High 656-1001	High 796-1128	High 828-1173	High 929-1261	High 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	Low 1.9-2.9	Low 1.9-2.9	Low 2.4-3.4	Low 2.4-3.4
High 1.9-2.9	High 2.4-3.4	High 2.4-3.4	High 2.4-3.4	High 2.8-3.8	High 4.0-5.0
Fan Pulley Pitch Diameter (in.)	Low 6.8	Low 6.8	Low 5.5	Low 6.0	Low 5.2
High 5.0	High 5.2	High 5.0	High 5.2	High 6.0	High 6.0
Nominal Motor Shaft Diameter (in.)	Low 1/2	Low 1/2	Low 1/2	Low 5/8	Low 5/8
High 1/2	High 1/2	High 5/8	High 5/8	High 5/8	High 7/8
Belt...Pitch Length (in.)	Low 49.3	Low 49.3	Low 49.3	Low 49.3	Low 49.3
High 49.3	High 49.3	High 49.3	High 49.3	High 49.3	High 52.3
Belt...Type	Low AX	Low AX	Low AX	Low AX	Low AX
High AX	High AX	High AX	High AX	High AX	High AX
Pulley Center Line Distance Min. (in.)	Low 16.2	Low 16.2	Low 16.2	Low 16.2	Low 16.2
High 16.2	High 16.2	High 16.2	High 16.2	High 16.2	High 16.2
Pulley Center Line Distance Max. (in.)	Low 20.2	Low 20.2	Low 20.2	Low 20.2	Low 20.2
High 20.2	High 20.2	High 20.2	High 20.2	High 20.2	High 20.2
Speed Change per Full Turn of Movable Pulley Flange (rpm)	Low 48	Low 48	Low 59	Low 58	Low 66
High 65	High 62	High 69	High 66	High 58	High 58
Movable Pulley Maximum Full Turns from Closed Position	Low 5	Low 5	Low 5	Low 5	Low 5
High 5	High 5	High 5	High 5	High 5	High 5
Factory Pulley Setting (rpm)	Low 482	Low 482	Low 596	Low 690	Low 796
High 656	High 796	High 828	High 929	High 1150	High 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

BASE UNIT 50PG		08	09	12	14
NOMINAL CAPACITY (Tons)		7.5	8.5	10	12.5
OPERATING WEIGHT (lb)					
Unit* (High Heat)		1098	1105	1199	1310
Economizer					
Vertical		57	57	57	57
Horizontal		59	59	59	59
Humidi-MiZer™ Adaptive Dehumidification System		45	45	44	45
Roof Curb					
14-in.		180	180	180	180
24-in.		268	268	268	268
COMPRESSOR		Fully Hermetic Scroll			
Quantity		2	2	2	2
Oil Type Sys A		Copeland 3MA	Copeland 3MA	Copeland 3MA	Copeland 3MA
Sys B		Copeland 3MA	Copeland 3MA	Copeland 3MA	Copeland 3MA
Number of Refrigerant Circuits		2	2	2	2
Oil (oz) Sys A		42	42	66	56
Sys B		42	42	66	56
REFRIGERANT TYPE		R-410A (Puron® Refrigerant)			
Expansion Device		TXV	TXV	TXV	TXV
Operating Charge (lb) Sys A		11.8	11.3	13.7	17.2
Sys B		11.8	11.3	13.7	17.2
Operating Charge Total All Systems (lb)		23.6	22.6	27.4	34.4
Unit with Humidi-MiZer Adaptive Dehumidification System					
Operating Charge (lb)					
Sys A		16.5	16.5	17.7	22.5
Sys B		16.7	16.7	18.2	21.8
Total All Systems (lb)		33.2	33.6	35.9	44.3
CONDENSER COIL		Enhanced Copper Tubes, Aluminum Lanced Fins, Face Split			
Condenser A (Outer)					
Rows...Fins/in.		2...17	2...17	2...17	3...17
Face Area (sq ft)		17.4	17.4	17.4	17.4
Condenser B (Inner)					
Rows...Fins/in.		2...17	2...17	2...17	3...17
Face Area (sq ft)		17.4	17.4	17.4	17.4
HUMIDI-MIZER COIL		Enhanced Copper Tubes, Aluminum Lanced Fins			
Rows...Fins/in.		1...17	1...17	1...17	1...17
Face Area (sq ft)		14.9	14.9	14.9	14.9
CONDENSER FAN		Propeller			
Quantity...Diameter (in.)		2...24	2...24	2...24	2...24
Nominal Cfm (Total, all fans)		7204	7204	8341	7300
Motor Hp		1/4	1/4	1/3	1/3
Nominal Rpm — High Speed		1100	1100	1100	1100
Nominal Rpm — Low Speed		900	900	900	900
EVAPORATOR COIL		Enhanced Copper Tubes, Aluminum Double-Wavy Fins, Face Split			
Rows...Fins/in.		3...15	3...15	4...15	4...15
Face Area (sq ft)		14.9	14.9	14.9	14.9
EVAPORATOR FAN		Centrifugal Type, Belt Drive			
Quantity...Size (in.)	Low	1...15 x 15	1...15 x 15	1...15 x 15	1...15 x 15
	High	1...15 x 15	1...15 x 15	1...15 x 15	1...15 x 15
Type Drive	Low	Belt	Belt	Belt	Belt
	High	Belt	Belt	Belt	Belt
Nominal Cfm		3000	3400	4000	5000
Maximum Continuous Bhp	Low	2.40	2.40	3.10	3.70
	High	3.10	3.70	3.70	5.25
Motor Nominal Rpm		1725	1725	1725	1725
Motor Frame Size	Low	56Y	56Y	56Y	56Y
	High	56Y	56Y	56Y	56Y
Fan Rpm Range	Low	568-771	568-771	690-893	690-893
	High	812-1015	812-1015	852-1055	852-1055
Motor Bearing Type		Ball	Ball	Ball	Ball
Maximum Fan Rpm		1600	1600	1600	1600
Motor Pulley Pitch Diameter Range (in.)	Low	2.8-3.8	2.8-3.8	3.4-4.4	3.4-4.4
	High	4.0-5.0	4.0-5.0	4.6-5.6	4.6-5.6
Fan Pulley Pitch Diameter	Low	8.5	8.5	8.5	8.5
	High	8.5	8.5	8.5	8.5
Nominal Motor Shaft Diameter (in.)	Low	5/8	5/8	7/8	7/8
	High	7/8	7/8	7/8	7/8
Belt...Pitch Length (in.)	Low	63.3	63.3	63.3	63.3
	High	65.3	65.3	65.3	65.3
Belt...Type	Low	AX	AX	AX	AX
	High	AX	AX	AX	AX
Pulley Center Line Distance Min. (in.)	Low	21.0	21.0	21.0	21.0
	High	21.0	21.0	21.0	21.0
Pulley Center Line Distance Max. (in.)	Low	23.4	23.4	23.4	23.4
	High	23.4	23.4	23.4	23.4
Speed Change per Full Turn of Movable Pulley Flange (rpm)	Low	41	41	41	41
	High	41	41	41	41
Movable Pulley Maximum Full Turns from Closed Position	Low	5	5	5	5
	High	5	5	5	5
Factory Pulley Setting (rpm)	Low	568	568	690	690
	High	812	812	852	852
Fan Shaft Diameter at Pulley (in.)		1	1	1	1
HIGH-PRESSURE SWITCH (psig)					
Cutout		660 ± 10	660 ± 10	660 ± 10	660 ± 10
Reset (Auto.)		505 ± 20	505 ± 20	505 ± 20	505 ± 20
RETURN-AIR FILTERS		Throwaway Type			
Quantity...Size (in.)		4...20 x 25 x 2	4...20 x 25 x 2	4...20 x 25 x 2	4...20 x 25 x 2

*See Legend page 13.

BASE UNIT 50PG		16
NOMINAL CAPACITY (Tons)		15.0
OPERATING WEIGHT (lb)		
Unit* (High Heat)		1771
Economizer		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.)		1...15 x 15, 1...12 x 12
Low		1...15 x 15, 1...12 x 12
Mid-Low		1...15 x 15, 1...12 x 12
High		1...15 x 15, 1...12 x 12
Type Drive		Belt
Low		Belt
Mid-Low		Belt
High		Belt
Nominal Cfm		6000
Maximum Continuous Bhp		3.7
Low		5.25
Mid-Low		7.5
High		56
Motor Frame Size		56
Low		56
Mid-Low		56
High		S213T
Fan Rpm Range		710-879
Low		872-1066
Mid-Low		1066-1260
High		1066-1260

50PG16 (cont)

EVAPORATOR FAN (cont)		Centrifugal Type, Belt Drive
Motor Bearing Type	Low	Ball
Motor Pulley Pitch Diameter Min. (in.)	Mid-Low	4.2
	High	4.2
	Low	5.2
Motor Pulley Pitch Diameter Max. (in.)	Mid-Low	5.2
	High	6.2
	Low	10.2
Fan Pulley Pitch Diameter	Mid-Low	8.5
	High	8.5
	Low	$\frac{7}{8}$
Nominal Motor Shaft Diameter (in.)	Mid-Low	$\frac{7}{8}$
	High	$1\frac{3}{8}$
	Low	49.3
Belt...Pitch Length (in.)	Mid-Low	47.8
	High	43.8
	Low	AX
Belt...Type	Mid-Low	BX
	High	BX
	Low	14.2
Pulley Center Line Distance Min. (in.)	Mid-Low	10.8
	High	8.6
	Low	10.8
Pulley Center Line Distance Max. (in.)	Mid-Low	14.2
	High	12
	Low	34
Speed Change (rpm)	Mid-Low	41
	High	41
	Low	5
Movable Turns	Mid-Low	5
	High	5
	Low	812
Factory Pulley Setting (rpm)	Mid-Low	983
	High	1191
		$1\frac{3}{16}$
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 coil/aluminum condenser coil.

50PG

50PG20-28

UNIT 50PG	20		24		28	
VOLTAGE	208/230 and 460	575	208/230 and 460	575	208/230 and 460	575
NOMINAL CAPACITY (Tons)	18		20		25	
OPERATING WEIGHT (lb)						
50 Series (Low Heat) Al/Al	2367	2367	2483	2483	2668	2668
COMPRESSOR	Scroll					
Quantity	2	2	2	2	3	3
Number of Refrigerant Circuits	2	2	2	2	2	2
Oil (ounces) Comp A1, A2, B1	85, NA, 85	85, NA, 85	85, NA, 85	85, NA, 85	85, 85, 85	85, 85, 85
REFRIGERANT TYPE	Puron® (R-410A)					
Expansion Device	TXV	TXV	TXV	TXV	TXV	TXV
Operating Charge (lb) — Standard Unit						
Circuit A	25.3	25.3	35.7	35.7	49.3	49.3
Circuit B	25.3	25.3	33.5	33.5	24.3	24.3
Total Charge	50.6	50.6	69.2	69.2	73.6	73.6
OPERATING CHARGE (lb) — Unit with Humidi-MiZer™ System						
Circuit A	42.9	42.9	46.5	46.5	66.1	66.1
Circuit B	39.8	39.8	44.5	44.5	35.7	35.7
Total Charge	82.7	82.7	91.0	91.0	101.8	101.8
CONDENSER COIL	Face Split					
Rows...Fins/inch	2...17	2...17	3...17	3...17	3...17	3...17
Width (in.)	60	60	60	60	60	60
Total Face area (sq ft)	33.46	33.46	33.46	33.46	33.46	33.46
CONDENSER FAN						
Nominal Cfm (Total, all fans)	14,000	14,000	21,000	21,000	21,000	21,000
Quantity...Diameter (in.)	4...22	4...22	6...22	6...22	6...22	6...22
Motor Hp...Rpm	1/4...1100	1/4...1100	1/4...1100	1/4...1100	1/4...1100	1/4...1100
Watts input (Total)	1400	1400	2100	2100	2100	2100
HUMIDI-MIZER COIL						
Weight (lb)	80	80	80	80	100	100
Rows...Fins/Inch	2...15	2...15	2...15	2...15	2...15	2...15
Length of Tube Sheets (in.)	56	56	56	56	56	56
Width (in.)	32	32	32	32	44	44
Total Face Area (sq ft)	12.4	12.4	12.4	12.4	17.1	17.1
EVAPORATOR COIL	Face Split					
Rows...Fins/inch	4...15	4...15	4...15	4...15	4...15	4...15
Width (in.)	48	48	48	48	60	60
Total Face area (sq ft)	23.13	23.13	23.13	23.13	28.92	28.92
EVAPORATOR FAN						
Quantity...Size (in.)	2...15 x 11	2...15 x 11	2...15 x 11	2...15 x 11	2...15 x 11	2...15 x 11
Type Drive	Belt	Belt	Belt	Belt	Belt	Belt
Nominal Cfm	7000	7000	8000	8000	10,000	10,000
Motor Bearing Type	Ball	Ball	Ball	Ball	Ball	Ball
Maximum Allowable Fan Rpm	1400	1400	1400	1400	1400	1400
HIGH PRESSURE SWITCHES (psig)						
Cutout	630 ± 10	630 ± 10	630 ± 10	630 ± 10	630 ± 10	630 ± 10
Reset (Auto)	505 ± 20	505 ± 20	505 ± 20	505 ± 20	505 ± 20	505 ± 20
OUTDOOR AIR INLET SCREENS						
Quantity...Size (in.)	3...20 x 25	3...20 x 25	3...20 x 25	3...20 x 25	3...20 x 25	3...20 x 25
RETURN AIR FILTERS						
Quantity...Size (in.)	9...16 x 25 x 2	9...16 x 25 x 2	9...16 x 25 x 2	9...16 x 25 x 2	9...20 x 25 x 2	9...20 x 25 x 2

LEGEND
TXV — Thermostatic Expansion Valve

PHYSICAL DATA

50PG03-07 EnergyX for Use With Vertical Return Air Only

BASE UNIT 50PG EnergyX	Low CFM	Low CFM with Bypass**	High CFM	High CFM with Bypass**
NOMINAL CAPACITY (CFM)	350		1,000	
OUTSIDE AIR CAPACITY (CFM)	100–500		500–1,400	
EXHAUST AIR CAPACITY RANGE (CFM)	100–500	100–1,500	500–1,400	500–1,890
MAXIMUM SHIPPING WEIGHT (lb)	190	202	530	550
MAXIMUM OPERATING WEIGHT (lb)	190	202	530	550
ERV DIMENSIONS (including hoods)				
Width (in.)	44.0	44.0	46.08	46.08
Depth (in.)	33.7	33.7	66.39	66.39
Height (in.)	28.18	28.18	39.09	39.09
ROTARY ENERGY EXCHANGER	Enthalpy Lightweight Polymer with Silica Gel Desiccant Coating			
Type				
Size (Dia. x Depth) (in.)	22.5 x 2	22.5 x 2	29.0 x 3	29.0 x 3
Nominal Drive Motor (hp)	1/10			
SUPPLY AIR FAN				
Qty...Type	1	1	1	1
Drive Type	Direct		Adjustable Belt Drive	
Fan Isolation	Neoprene Rubber Pads			
Wheel Dimensions (Dia. x Depth)	5.5 x 5.5	5.5 x 5.5	9 x 7	9 x 7
Nominal Motor (hp)	0.54	0.54	1	1
ERV EXHAUST AIR FAN				
Qty...Type	1	1	1	1
Drive Type	Direct		Adjustable Belt Drive	
Fan Isolation	Neoprene Rubber Pads			
Wheel Dimensions (Dia. x Depth)	5.5 x 5.5	5.5 x 5.5	9 x 7	9 x 7
Nominal Motor (hp)	0.54	0.54	1	1
ECONOMIZER EXHAUST AIR FAN (Used only with ERVs with bypass)				
Qty...Type	NA	2	NA	1
Drive Type	Direct		Adjustable Belt Drive	
Fan Isolation	Neoprene Rubber Pads			
Wheel Dimensions (Dia. x Depth)	NA	5.5 x 5.5	NA	9 x 7
Nominal Motor (hp)	NA	0.54	NA	2
FILTERS	2–in. Pleated – 30% Efficiency			
Type				
Exhaust air (optional)*...Qty...Size (in.)	(2) 10 x 20 x 2	(2) 10 x 20 x 2	(2) 14 x 20 x 2	(2) 14 x 20 x 2
Outside air.Size...Qty...Size (in.)	(1) 10 x 20 x 2	(1) 10 x 30 x 2	(1) 14 x 25 x 2	(1) 14 x 25 x 2

50PG

50PG08-14 EnergyX for Use With Vertical Return Air Only

BASE UNIT 50PG EnergyX	Low CFM	Low CFM with Bypass**	High CFM	High CFM with Bypass**
NOMINAL CAPACITY (CFM)	1,000		2,800	
OUTSIDE AIR CAPACITY (CFM)	500–1,400		1,400–3,900	
EXHAUST AIR CAPACITY RANGE (CFM)	500–1,400	500–3,900	1,400–3,900	1,400–4,900
MAXIMUM SHIPPING WEIGHT (lb)	755	775	865	885
MAXIMUM OPERATING WEIGHT (lb)	755	775	865	885
ERV DIMENSIONS (including hoods)				
Width (in.)	64.24	64.24	64.24	64.24
Depth (in.)	74.06	74.06	74.06	74.06
Height (in.)	50.65	50.65	50.65	50.65
ROTARY ENERGY EXCHANGER	Enthalpy Lightweight Polymer with Silica Gel Desiccant Coating			
Type				
Size (Dia. x Depth) (in.)	29.0 x 3	29.0 x 3	39.8 x 3	39.8 x 3
Nominal Drive Motor (hp)	1/10			
SUPPLY AIR FAN				
Qty...Type	1	1	1	1
Drive Type		Adjustable Belt Drive		
Fan Isolation	Neoprene Rubber Pads			
Wheel Dimensions (Dia. x Depth)	10 x 10	10 x 10	12 x 12	12 x 12
Nominal Motor (hp)	1	1	1	1
ERV EXHAUST AIR FAN				
Qty...Type	1	1	1	1
Drive Type		Adjustable Belt Drive		
Fan Isolation	Neoprene Rubber Pads			
Wheel Dimensions (Dia. x Depth)	10 x 10	10 x 10	10 x 10	10 x 10
Nominal Motor (hp)	1	1	3	3
ECONOMIZER EXHAUST AIR FAN (Used only with ERVs with bypass)				
Qty...Type	NA	1	NA	1
Drive Type		Adjustable Belt Drive		
Fan Isolation	Neoprene Rubber Pads			
Wheel Dimensions (Dia. x Depth)	NA	10 x 10	NA	12 x 12
Nominal Motor (hp)	NA	3	NA	2
FILTERS	2–in. Pleated – 30% Efficiency			
Type				
Exhaust air (optional)*...Qty...Size (in.)	(2) 18 x 25 x 2	(2) 18 x 25 x 2	(2) 18 x 25 x 2	(2) 18 x 25 x 2
Outside air.Size...Qty...Size (in.)	(1) 18 x 25 x 2	(1) 18 x 25 x 2	(2) 16 x 20 x 2	(2) 16 x 20 x 2

* Exhaust air filter comes with the optional filter maintenance switch.

** Bypass models include modulating economizer, 100% bypass damper, and additional exhaust blower.

50PG16 EnergyX for Use With Vertical Return Air Only

BASE UNIT 50PG EnergyX	Low CFM		Low CFM with Bypass**	High CFM	High CFM with Bypass**
NOMINAL CAPACITY (CFM)	1,500			2,800	
OUTSIDE AIR CAPACITY (CFM)	900–2,000			1,400–3,900	
EXHAUST AIR CAPACITY RANGE (CFM)	900–2,000		900–4,700	1,400–3,900	1,400–4,700
MAXIMUM SHIPPING WEIGHT (lb)	914		934	1046	1066
MAXIMUM OPERATING WEIGHT (lb)	914		934	1046	1066
ERV DIMENSIONS (added to hvac) (in.)					
Width (in.)	94.39		94.39	94.39	94.39
Depth (in.)	73.89		73.89	73.89	73.89
Height (in.)	50.62		50.62	50.62	50.62
ROTARY ENERGY EXCHANGER	Enthalpy Lightweight Polymer with Silica Gel Desiccant Coating				
Type					
Size (Dia. x Depth) (in.)	34.0 x 3		34.0 x 3	39.8 x 3	39.8 x 3
Nominal Drive Motor (hp)	1/10		1/10	1/6	1/6
SUPPLY AIR FAN					
Qty...Type	1		1	1	1
Drive Type	Adjustable Belt Drive				
Fan Isolation	Neoprene Rubber Pads				
Specify for use in Vertical Applications Only					
Nominal Motor (hp)	12 x 12		12 x 12	12 x 12	12 x 12
	2		2	3	3
ERV EXHAUST AIR FAN					
Qty...Type	1		1	1	1
Drive Type	Adjustable Belt Drive				
Fan Isolation	Neoprene Rubber Pads				
Wheel Dimensions (Dia. x Depth)	12 x 12		12 x 12	12 x 12	12 x 12
Nominal Motor (hp)	2		2	3	3
ECONOMIZER EXHAUST AIR FAN (Used only with ERVs with bypass)					
Qty...Type	NA		1	NA	2
Drive Type	Adjustable Belt Drive				
Fan Isolation	Neoprene Rubber Pads				
Wheel Dimensions (Dia. x Depth)	NA		12 x 12	NA	12 x 12
Nominal Motor (hp)	NA		3	NA	2
FILTERS					
Type	2-in. Pleated – 30% Efficiency				
Exhaust air (optional)*...Qty...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
Outside air.Size...Qty...Size (in.)	(2) 16 x 20 x 2		(2) 16 x 20 x 2	(2) 16 x 20 x 2	(2) 16 x 20 x 2

50PG20–28 EnergyX for Use With Vertical Return Air Only

BASE UNIT 50PG EnergyX	50PG20–24		50PG28	
	Low CFM	Low CFM with Bypass**	Low CFM	Low CFM with Bypass**
NOMINAL CAPACITY (CFM)	2,600		3,000	
OUTSIDE AIR CAPACITY (CFM)	2,000–3,500		2,000–3,500	
EXHAUST AIR CAPACITY RANGE (CFM)	2,000–3,500		2,000–3,500	2,000–6,800
MAXIMUM SHIPPING WEIGHT (lb)	1033		1053	1068
MAXIMUM OPERATING WEIGHT (lb)	1033		1053	1068
ERV DIMENSIONS (added to hvac) (in.)				
Width (in.)	86.7		86.7	86.7
Depth (in.)	56.8		56.8	56.8
Height (in.)	56.3		56.3	56.3
ROTARY ENERGY EXCHANGER	Enthalpy Lightweight Polymer with Silica Gel Desiccant Coating			
Type				
Size (Dia. x Depth) (in.)	39.8 x 3		39.8 x 3	39.8 x 3
Nominal Drive Motor (hp)	1/6		1/6	1/6
SUPPLY AIR FAN				
Qty...Type	1		1	1
Drive Type	Adjustable Belt Drive			
Fan Isolation	Neoprene Rubber Pads			
Specify for use in Vertical Applications Only				
Nominal Motor (hp)	12 x 12		12 x 12	12 x 12
	2		2	2
ERV EXHAUST AIR FAN				
Qty...Type	1		1	1
Drive Type	Adjustable Belt Drive			
Fan Isolation	Neoprene Rubber Pads			
Wheel Dimensions (Dia. x Depth)	10 x 10		10 x 10	10 x 10
Nominal Motor (hp)	3		3	3
ECONOMIZER EXHAUST AIR FAN (Used only with ERVs with bypass)				
Qty...Type	1		1	1
Drive Type	Adjustable Belt Drive			
Fan Isolation	Neoprene Rubber Pads			
Wheel Dimensions (Dia. x Depth)	NA		10 x 10	10 x 10
Nominal Motor (hp)	NA		3	3
FILTERS				
Type	2-in. Pleated – 30% Efficiency			
Exhaust air (optional)*...Qty...Size (in.)	(2) 20 x 25 x 2		(2) 20 x 25 x 2	(2) 20 x 25 x 2
Outside air.Size...Qty...Size (in.)	(2) 20 x 25 x 2		(2) 20 x 25 x 2	(2) 20 x 25 x 2

* Exhaust air filter comes with the optional filter maintenance switch.

** Bypass models include modulating economizer, 100% bypass damper, and additional exhaust blower.

Effectiveness — 50PG03-28 with EnergyX

Size	CFM range	CFM(O/A)	EFFECTIVENESS (%)			
			Sensible	Latent	T Clg	T Htg
03–07	Low CFM	100	83.3	77.7	80.3	81.3
		350	76.4	67.2	71.2	73.2
		500	69.7	56.8	62.3	65.2
	High CFM	500	77.7	74.4	76.1	76.5
		1000	69.4	62.8	65.8	67.0
		1400	62.7	53.3	57.5	59.3
08–14	Low CFM	500	77.7	74.4	76.1	76.5
		1000	69.4	62.8	65.8	67.0
		1400	62.7	53.3	57.5	59.3
	High CFM	1400	78.5	73.5	75.5	76.7
		2800	65.8	57.4	60.7	62.8
		3900	59.4	49.2	53.3	55.8
16	Low CFM	900	75.8	71.7	73.7	74.3
		1500	68.9	62.1	65.3	66.5
		2000	63.1	54	58.1	59.9
	High CFM	1400	78.5	73.5	75.5	76.7
		2800	65.8	57.4	60.7	62.8
		3900	59.4	49.2	53.3	55.8
20–24	Low CFM	2000	74.9	68.9	71.3	72.7
		2600	67.6	59.7	62.9	64.8
		3500	59.4	49.2	53.3	55.8
28	Low CFM	2000	68.6	60.9	63.9	65.8
		3000	64	55.1	58.6	60.8
		3500	59.4	49.2	53.3	55.8

LEGEND

O/A – Outside Air
T Clg – Total Cooling Capacity
T Htg – Total Heating Capacity

50PG

Fan and Motor Drive Data — Vertical Supply/Return — 50PG20-28

50PG	20		24		28	
	208/230, 460 v	575 v	208/230, 460 v	575 v	208/230, 460 v	575 v
LOW RANGE						
Motor Hp	3.7	5	3.7	5	5	5
Motor Nominal Rpm	1750	1750	1750	1750	1750	1750
Maximum Continuous Bhp	4.26/4.26,4.26	5.75	4.26/4.26,4.26	5.75	5.37/5.75,5.75	5.75
Maximum Continuous Watts	3700	5015	3700	5015	4578/5115	5015
Motor Frame Size	56HZ	S184T	56HZ	S184T	S184T	S184T
Motor Shaft Diameter (in.)	7/8	1 1/8	7/8	1 1/8	1 1/8	1 1/8
Fan Rpm Range	685-939	751-954	685-939	751-954	687-873	687-873
Motor Pulley Min. Pitch Diameter (in.)	2.7	3.7	2.7	3.7	3.7	3.7
Motor Pulley Max. Pitch Diameter (in.)	3.7	4.7	3.7	4.7	4.7	4.7
Blower Pulley Pitch Diameter (in.)	6.8	8.6	6.8	8.6	9.4	9.4
Blower Pulley Shaft Diameter (in.)	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16
Blower Pulley Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pulley Center Line Distance (in.)	11.293-13.544	9.81-13.055	11.293-13.544	9.81-13.055	9.81-13.055	9.81-13.055
Belt, Quantity...Type...Length (in.)	1...BX38...39.8	1...BX40...41.8	1...BX38...39.8	1...BX40...41.8	1...BX41...42.8	1...BX41...42.8
Speed Change Per Turn — Moveable Pulley (Rpm)	42	34	42	34	31	31
Moveable Pulley Maximum Full Turns	6	6	6	6	6	6
Factory Speed Setting (Rpm)	812	853	812	853	780	780
MID-LOW RANGE						
Motor Hp	5	5	5	5	5	5
Motor Nominal Rpm	1750	1750	1750	1750	1750	1750
Maximum Continuous Bhp	5.37/5.75,5.75	5.75	5.37/5.75,5.75	5.75	5.37/5.75,5.75	5.75
Maximum Continuous Watts	4578/5115	5015	4578/5115	5015	4578/5115	5015
Motor Frame Size	S184T	S184T	S184T	S184T	S184T	S184T
Motor Shaft Diameter (in.)	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
Fan Rpm Range	949-1206	949-1206	949-1206	949-1206	805-1007	805-1007
Motor Pulley Min. Pitch Diameter (in.)	3.7	3.7	3.7	3.7	4.8	4.8
Motor Pulley Max. Pitch Diameter (in.)	4.7	4.7	4.7	4.7	6.0	6.0
Blower Pulley Pitch Diameter (in.)	6.8	6.8	6.8	6.8	10.4	10.4
Blower Pulley Shaft Diameter (in.)	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16
Blower Pulley Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pulley Center Line Distance (in.)	9.81-13.055	9.81-13.055	9.81-13.055	9.81-13.055	9.81-13.055	9.81-13.055
Belt, Quantity...Type...Length (in.)	1...BX38...39.8	1...BX38...39.8	1...BX38...39.8	1...BX38...39.8	1...BX45...46.8	1...BX45...46.8
Speed Change Per Turn — Moveable Pulley (Rpm)	43	43	43	43	34	34
Moveable Pulley Maximum Full Turns	6	6	6	6	6	6
Factory Speed Setting (Rpm)	1078	1078	1078	1078	906	906
MID-HIGH RANGE						
Motor Hp	7.5	7.5	7.5	7.5	7.5	7.5
Motor Nominal Rpm	1750	1750	1750	1750	1750	1750
Maximum Continuous Bhp	7.66/8.51,8.63	8.63	7.66/8.51,8.63	8.63	7.66/8.51,8.63	8.63
Maximum Continuous Watts	6458/7586	7586	6458/7586	7586	6458/7586	7586
Motor Frame Size	S213T	S213T	S213T	S213T	S213T	S213T
Motor Shaft Diameter (in.)	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8
Fan Rpm Range	941-1176	941-1176	941-1176	941-1176	941-1176	941-1176
Motor Pulley Min. Pitch Diameter (in.)	4.8	4.8	4.8	4.8	4.8	4.8
Motor Pulley Max. Pitch Diameter (in.)	6.0	6.0	6.0	6.0	6.0	6.0
Blower Pulley Pitch Diameter (in.)	8.9	8.9	8.9	8.9	8.9	8.9
Blower Pulley Shaft Diameter (in.)	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16
Blower Pulley Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pulley Center Line Distance (in.)	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179
Belt, Quantity...Type...Length (in.)	1...BX42...43.8	1...BX42...43.8	1...BX42...43.8	1...BX42...43.8	1...BX42...43.8	1...BX42...43.8
Speed Change Per Turn — Moveable Pulley (Rpm)	39	39	39	39	39	39
Moveable Pulley Maximum Full Turns	6	6	6	6	6	6
Factory Speed Setting (Rpm)	1059	1059	1059	1059	1059	1059
HIGH RANGE						
Motor Hp	10	10	10	10	10	10
Motor Nominal Rpm	1750	1750	1750	1750	1750	1750
Maximum Continuous Bhp	9.94/10.45,11.19	11.50	9.94/10.45,11.19	11.50	9.94/10.45,11.19	11.50
Maximum Continuous Watts	8284/9330	9711	8284/9330	9711	8284/9330	9711
Motor Frame Size	S215T	S215T	S215T	S215T	S215T	S215T
Motor Shaft Diameter (in.)	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8
Fan Rpm Range	1014-1297	1014-1297	1014-1297	1014-1297	1014-1297	1014-1297
Motor Pulley Min. Pitch Diameter (in.)	4.3	4.3	4.3	4.3	4.3	4.3
Motor Pulley Max. Pitch Diameter (in.)	5.5	5.5	5.5	5.5	5.5	5.5
Blower Pulley Pitch Diameter (in.)	7.4	7.4	7.4	7.4	7.4	7.4
Blower Pulley Shaft Diameter (in.)	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16	1 3/16
Blower Pulley Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pulley Center Line Distance (in.)	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179
Belt, Quantity...Type...Length (in.)	2...BX38...39.8	2...BX38...39.8	2...BX38...39.8	2...BX38...39.8	2...BX38...39.8	2...BX38...39.8
Speed Change Per Turn — Moveable Pulley (Rpm)	47	47	47	47	47	47
Moveable Pulley Maximum Full Turns	6	6	6	6	6	6
Factory Speed Setting (Rpm)	1156	1156	1156	1156	1156	1156

NOTE: See evaporator fan motor specifications.

Fan and Motor Drive Data — Horizontal Supply/Return — 50PG20-28

50PG	20		24		28	
	208/230, 460 v	575 v	208/230, 460 v	575 v	208/230, 460 v	575 v
LOW RANGE						
Motor Hp	3.7	5	3.7	5	5	5
Motor Nominal Rpm	1750	1750	1750	1750	1750	1750
Maximum Continuous Bhp	4.26/4.26,4.26	5.75	4.26/4.26,4.26	5.75	5.37/5.75,5.75	5.75
Maximum Continuous Watts	3700	5015	3700	5015	4578/5115	5015
Motor Frame Size	56HZ	S184T	56HZ	S184T	S184T	S184T
Motor Shaft Diameter (in.)	7/8	1 1/8	7/8	1 1/8	1 1/8	1 1/8
Fan Rpm Range	685-939	751-954	685-939	751-954	687-873	687-873
Motor Pulley Min. Pitch Diameter (in.)	2.7	3.7	2.7	3.7	3.7	3.7
Motor Pulley Max. Pitch Diameter (in.)	3.7	4.7	3.7	4.7	4.7	4.7
Blower Pulley Pitch Diameter (in.)	6.8	8.6	6.8	8.6	9.4	9.4
Blower Pulley Shaft Diameter (in.)	1.1875	1.1875	1.1875	1.1875	1 3/16	1 3/16
Blower Pulley Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pulley Center Line Distance (in.)	11.293-13.544	9.81-13.055	11.293-13.544	9.81-13.055	9.81-13.055	9.81-13.055
Belt, Quantity...Type...Length (in.)	1...BX38...39.8	1...BX40...41.8	1...BX38...39.8	1...BX40...41.8	1...BX41...42.8	1...BX41...42.8
Speed Change Per Turn — Moveable Pulley (Rpm)	42	34	42	34	31	31
Moveable Pulley Maximum Full Turns	6	6	6	6	6	6
Factory Speed Setting (Rpm)	812	853	812	853	780	780
MID-LOW RANGE						
Motor Hp	5	5	5	5	5	5
Motor Nominal Rpm	1750	1750	1750	1750	1750	1750
Maximum Continuous Bhp	5.37/5.75,5.75	5.75	5.37/5.75	5.75	5.37/5.75,5.75	5.75
Maximum Continuous Watts	4578/5115	5015	4578/5115	5015	4578/5115	5015
Motor Frame Size	S184T	S184T	S184T	S184T	S184T	S184T
Motor Shaft Diameter (in.)	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8
Fan Rpm Range	949-1206	949-1206	949-1206	949-1206	805-1007	805-1007
Motor Pulley Min. Pitch Diameter (in.)	3.7	3.7	3.7	3.7	4.8	4.8
Motor Pulley Max. Pitch Diameter (in.)	4.7	4.7	4.7	4.7	6.0	6.0
Blower Pulley Pitch Diameter (in.)	6.8	6.8	6.8	6.8	10.4	10.4
Blower Pulley Shaft Diameter (in.)	1.1875	1.1875	1.1875	1.1875	1 3/16	1 3/16
Blower Pulley Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pulley Center Line Distance (in.)	9.81-13.055	9.81-13.055	9.81-13.055	9.81-13.055	9.81-13.055	9.81-13.055
Belt, Quantity...Type...Length (in.)	1...BX38...39.8	1...BX38...39.8	1...BX38...39.8	1...BX38...39.8	1...BX45...46.8	1...BX45...46.8
Speed Change Per Turn — Moveable Pulley (Rpm)	43	43	43	43	34	34
Moveable Pulley Maximum Full Turns	6	6	6	6	6	6
Factory Speed Setting (Rpm)	1078	1078	1078	1078	906	906
MID-HIGH RANGE						
Motor Hp	7.5	7.5	7.5	7.5	7.5	7.5
Motor Nominal Rpm	1750	1750	1750	1750	1750	1750
Maximum Continuous Bhp	7.66/8.51,8.63	8.63	7.66/8.51,8.63	8.63	7.66/8.51,8.63	8.63
Maximum Continuous Watts	6458/7586	7586	6458/7586	7586	6458/7586	7586
Motor Frame Size	S213T	S213T	S213T	S213T	S213T	S213T
Motor Shaft Diameter (in.)	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8
Fan Rpm Range	941-1176	941-1176	941-1176	941-1176	941-1176	941-1176
Motor Pulley Min. Pitch Diameter (in.)	4.8	4.8	4.8	4.8	4.8	4.8
Motor Pulley Max. Pitch Diameter (in.)	6.0	6.0	6.0	6.0	6.0	6.0
Blower Pulley Pitch Diameter (in.)	8.9	8.9	8.9	8.9	8.9	8.9
Blower Pulley Shaft Diameter (in.)	1.1875	1.1875	1.1875	1.1875	1 3/16	1 3/16
Blower Pulley Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pulley Center Line Distance (in.)	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179
Belt, Quantity...Type...Length (in.)	1...BX42...43.8	1...BX42...43.8	1...BX42...43.8	1...BX42...43.8	1...BX42...43.8	1...BX42...43.8
Speed Change Per Turn — Moveable Pulley (Rpm)	39	39	39	39	39	39
Moveable Pulley Maximum Full Turns	6	6	6	6	6	6
Factory Speed Setting (Rpm)	1059	1059	1059	1059	1059	1059
HIGH RANGE						
Motor Hp	10	10	10	10	10	10
Motor Nominal Rpm	1750	1750	1750	1750	1750	1750
Maximum Continuous Bhp	9.94/10.45,11.19	11.50	9.94/10.45,11.19	11.50	9.94/10.45,11.19	11.50
Maximum Continuous Watts	8284/9330	9711	8284/9330	9711	8284/9330	9711
Motor Frame Size	S215T	S215T	S215T	S215T	S215T	S215T
Motor Shaft Diameter (in.)	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8
Fan Rpm Range	1014-1297	1014-1297	1014-1297	1014-1297	1014-1297	1014-1297
Motor Pulley Min. Pitch Diameter (in.)	4.3	4.3	4.3	4.3	4.3	4.3
Motor Pulley Max. Pitch Diameter (in.)	5.5	5.5	5.5	5.5	5.5	5.5
Blower Pulley Pitch Diameter (in.)	7.4	7.4	7.4	7.4	7.4	7.4
Blower Pulley Shaft Diameter (in.)	1.1875	1.1875	1.1875	1.1875	1 3/16	1 3/16
Blower Pulley Type	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Pulley Center Line Distance (in.)	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179	9.025-12.179
Belt, Quantity...Type...Length (in.)	2...BX38...39.8	2...BX38...39.8	2...BX38...39.8	2...BX38...39.8	1...BX38...39.8	1...BX38...39.8
Speed Change Per Turn — Moveable Pulley (Rpm)	47	47	47	47	47	47
Moveable Pulley Maximum Full Turns	6	6	6	6	6	6
Factory Speed Setting (Rpm)	1156	1156	1156	1156	1156	1156

NOTE: See evaporator fan motor specifications.

50PG

OPTIONS AND ACCESSORIES

ITEM	FACTORY-INSTALLED OPTIONS	FIELD-INSTALLED ACCESSORIES
Intelligent <i>ComfortLink</i> ™ Controls	X	
Electro-Mechanical Controls	X	
Humidi-MiZer™ Adaptive Dehumidification System	X	
Economizer With Single Enthalpy Sensor (1)	X	
Differential Enthalpy Sensor		X
Economizer with Single Dry Bulb Sensor	X	X
Single Enthalpy Sensor		X
Differential Dry Bulb Sensor		X
EnergyX™ Energy Recovery Ventilator	X	
Powered 115-volt GFI Convenience Outlet	X	
Non-Powered 115-volt GFI Convenience Outlet	X	
HACR Breaker*	X	
Non-Fused Disconnect Switch†	X	
Manual Outdoor Air Damper (2)	X	X
Two-Position Motorized Outdoor Air Damper (2)	X	X
Barometric Relief Damper (20-28)	X	X
Power Exhaust (2)	X	X
Condenser Coil Hail Guard Grille	X	X
MERV-8 Pleated Return Air Filters	X	
4-in. Filter Capabilities	X	
CO ₂ Sensor	X	X
Return Air Smoke Detector	X	X
Return and Supply Air Smoke Detectors	X	X
Fan and Plugged Filter Switches	X	X
Horizontal Duct Configuration (2)	X (Only 16–28 models)	X
Low Range Fan Performance Motor/Drive	X	
Mid-Low Fan Performance Motor/Drive	X	
Mid-High Fan Performance Motor/Drive	X	
High Fan Performance Motor/Drive	X	
Phase Loss Protection	X	X
Pre-Coated Aluminum Fin/Copper Tube Coil	X	
Copper Fin/Copper Tube Coil	X	
E-Coated Aluminum Fin/Copper Tube Coil	X	
E-Coated Copper Fin/Copper Tube Coil	X	
Electric Heaters	X	X
14-in. Full Perimeter Roof Curb		X
24-in. Full Perimeter Roof Curb		X
Roof Curb Burglar Bars		X
Adapter Curbs (03-16 Only) (2)		X
Thermostats and Subbases		X
Electronic Programmable Thermostats		X
Frost Protection (EnergyX)	X	
Outside and Exhaust Air Blower Maintenance Indicator Switch (EnergyX)	X	
Wheel Maintenance Switch (EnergyX)	X	
Support Rail (EnergyX)	X	
Extension Roof Curb (EnergyX)	X	
14-in. Full Perimeter Roof Curb (EnergyX)	X	
24-in. Full Perimeter Roof Curb (EnergyX)	X	

LEGEND

GFI – Ground Fault Interrupt
HACR – Heating, Air Conditioning and Refrigeration
MERV – Minimum Efficiency Reporting Value

* Available on all units except “c” electric heat 50PG20–28 with 208/230–3–60 voltage.

† Only available on units without electric heat (factory or field–installed).

(1) Economizer with enthalpy is included with EnergyX units with bypass

(2) Can not be used on units with EnergyX

Weight Adders

OPTION/ACCESSORY	OPTION/ACCESSORY WEIGHTS													
	50PG03		50PG04		50PG05		50PG06		50PG07		50PG08		50PG09	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
Humidi-MiZer™ Adaptive Dehumidification System	22	10	22	10	31	14	27	12	26	12	45	20	45	20
Barometric Relief Damper	NO ADDITIONAL WEIGHT													
Power Exhaust	30	14	30	14	30	14	30	14	30	14	40	18	40	18
Electric Heater	30	14	30	14	30	14	30	14	30	14	40	18	40	18
Economizer	55	25	55	25	55	25	55	25	65	29	65	29	65	29
Cu Condenser Coils	100	45	100	45	100	45	100	45	100	45	162	73	162	73
Cu Condenser and Evaporator Coils	175	79	175	79	175	79	175	79	175	79	250	113	250	113
Roof Curb (14 in.)	145	66	145	66	145	66	145	66	145	66	175	79	175	79
Roof Curb (24 in.)	155	70	155	70	155	70	155	70	155	70	190	86	190	86
Optional Indoor Motor/Drive	10	5	10	5	10	5	10	5	10	5	15	7	15	7
Hail Guard	50	23	50	23	50	23	50	23	50	23	65	29	65	29
CO ₂ Sensor	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Return Smoke Detector	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Supply Smoke Detector	5	2	5	2	5	2	5	2	5	2	5	2	5	2
Plugged Filter Indicator	2	1	2	1	2	1	2	1	2	1	2	1	2	1
Fan Status	2	1	2	1	2	1	2	1	2	1	2	1	2	1
Non-Fused Disconnect	15	7	15	7	15	7	15	7	15	7	15	7	15	7
HACR Breaker	20	9	20	9	20	9	20	9	20	9	20	9	20	9
Line-Side Powered Convenience Outlet	35	16	35	16	35	16	35	16	35	16	35	16	35	16
Non-Powered Convenience Outlet	20	9	20	9	20	9	20	9	20	9	20	9	20	9
Enthalpy Sensor	2	1	2	1	2	1	2	1	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1	3	1	3	1	3	1	3	1
4-in. Filter Capability	NO ADDITIONAL WEIGHT													
Two Position Motorized Damper	30	14	30	14	30	14	30	14	30	14	35	16	35	16
Manual Damper	30	14	30	14	30	14	30	14	30	14	35	16	35	16

NOTE: All weights do not include packaging.

50PG

Weight Adders (cont)

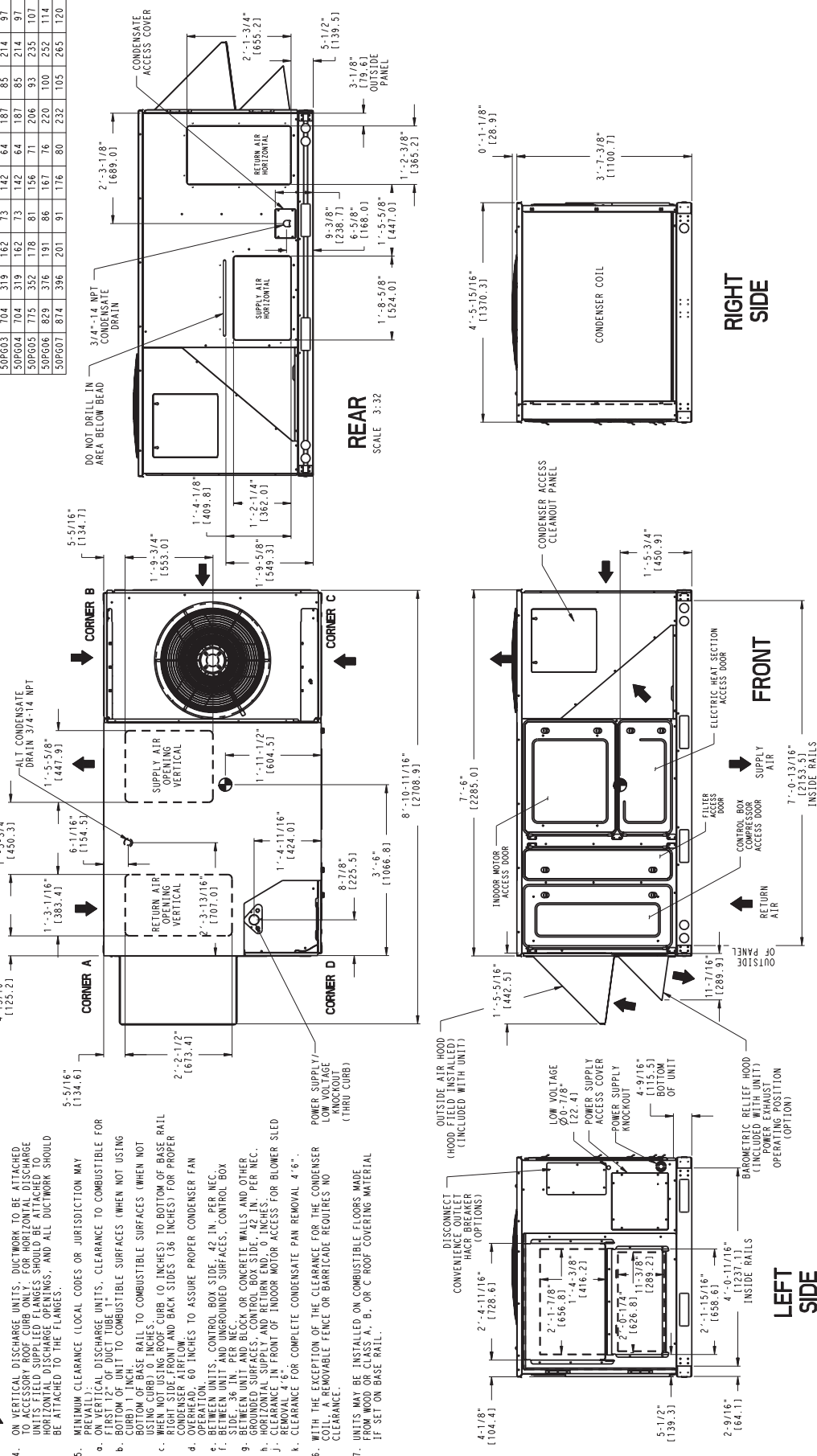
OPTION/ACCESSORY	OPTION/ACCESSORY WEIGHTS (cont)											
	50PG12		50PG14		50PG16		50PG20		50PG24		50PG28	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
Humidi-MiZer Adaptive Dehumidification System	44	20	45	20	64	29	80	36	80	36	100	45
Barometric Relief Damper	NO ADDITIONAL WEIGHT						50	23	50	23	50	23
Power Exhaust	40	18	40	18	44	20	125	57	125	57	125	57
Electric Heater	40	18	40	18	59	27	85	39	85	39	85	39
Economizer	65	29	65	29	149	68	170	77	170	77	195	88
Cu Condenser Coils	162	73	162	73	240	109	202	92	290	132	290	132
Cu Condenser and Evaporator Coils	250	113	250	113	375	170	330	150	418	190	453	205
Roof Curb (14-in.)	175	79	175	79	240	109	305	138	305	138	270	122
Roof Curb (24-in.)	190	86	190	86	360	163	385	175	385	175	345	156
Optional Indoor Motor/Drive	15	7	15	7	330	150	73	33	73	33	40	18
Hail Guard	65	29	65	29	97	44	100	45	100	45	100	45
CO ₂ Sensor	5	2	5	2	5	2	5	2	5	2	5	2
Return Smoke Detector	5	2	5	2	5	2	5	2	5	2	5	2
Supply Smoke Detector	5	2	5	2	5	2	5	2	5	2	5	2
Plugged Filter Indicator	2	1	2	1	2	1	2	1	2	1	2	1
Fan Status	2	1	2	1	2	1	2	1	2	1	2	1
Non-Fused Disconnect	15	7	15	7	15	7	15	7	15	7	15	7
HACR Breaker	20	9	20	9	20	9	20	9	20	9	20	9
Line-Side Powered Convenience Outlet	35	16	35	16	35	16	35	16	35	16	35	16
Non-Powered Convenience Outlet	20	9	20	9	9	4	20	9	20	9	20	9
Enthalpy Sensor	2	1	2	1	2	1	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1	3	1	3	1	3	1
4-in. Filter Capability	NO ADDITIONAL WEIGHT				4	2	10	5	10	5	15	7
Two Position Motorized Damper	35	16	35	16	35	16	40	18	40	18	40	18
Manual Damper	35	16	35	16	35	16	25	11	25	11	25	11

NOTE: All weights do not include packaging.

50PG

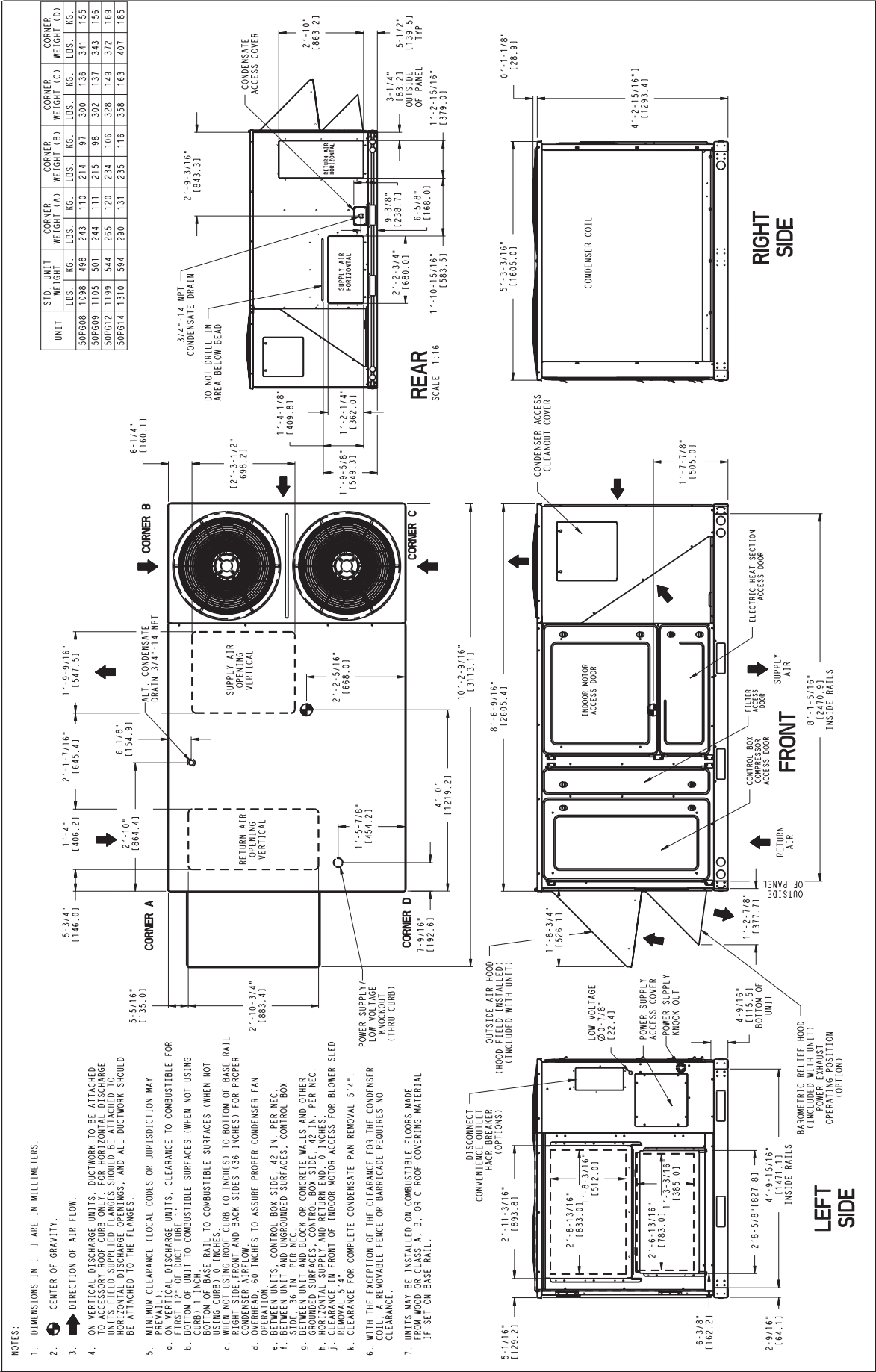
NOTES:

1. DIMENSIONS IN () ARE IN MILLIMETERS.
2.  CENTER OF GRAVITY.
3.  DIRECTION OF AIR FLOW.
4. ON VERTICAL DISCHARGE UNITS, DUCTWORK IS TO ACCESSORY ROOM OR UNIT, OR HORIZONTAL DISCHARGE UNITS, DISCHARGE SHOULD BE HORIZONTAL. DISCHARGE OPENINGS, AND ALL, BE ATTACHED TO THE FLANGES.
5. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY VARY)
 - a. ON VERTICAL DISCHARGE UNITS, CLEARANCE 1' 2" OF DUCT TYPE 1.
 - b. CURB 1' INCH.
 - c. BOTTOM OF BASE RAIL TO COMBUSTIBLE SURFACES 36 INCH.
 - d. BOTTOM OF BASE RAIL TO COMBUSTIBLE SURFACES 36 INCH.
 - e. WHEN OBTAINING ROOF CURB (0 TO 10 INCHES) TO RIGHT SIDE FRONT AND BACK SIDES (36 INCHES) CLEARANCE AFTLOW.
 - f. OVERHEAD, 60 INCHES TO ASSURE PROPER COIL OPERATION.
 - g. BETWEEN UNITS, CONTROL BOX SIDE, 42 INCHES; UNITS, UNINSULATED SURFACES, CONTROL BOX SIDE 36 INCH PER INCH.
 - h. BETWEEN UNIT AND BLOCK OR CONCRETE WALLS, UNINSULATED SURFACES, CONTROL BOX SIDE, 42 INCHES.
 - i. HORIZONTAL SUPPLY AND RETURN DUCT, 0 INCHES.
 - j. HORIZONTAL IN FRONT OF INDOOR MOTOR ACCESS, 0 INCHES.
 - k. CLEARANCE FOR COMPLETE CONDENSATE PAN RAIL, 0 INCHES.
 - l. WITH THE EXCEPTION OF THE CLEARANCE FOR COIL, A REMOVABLE FENCE OR BARRICADE REQUIRED.
6. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOOR, FROM WOOD OR CLASS A, B, OR C ROOF COVERING IF SET ON BASE RAIL.



BASE UNIT DIMENSIONS — 50PG08-14

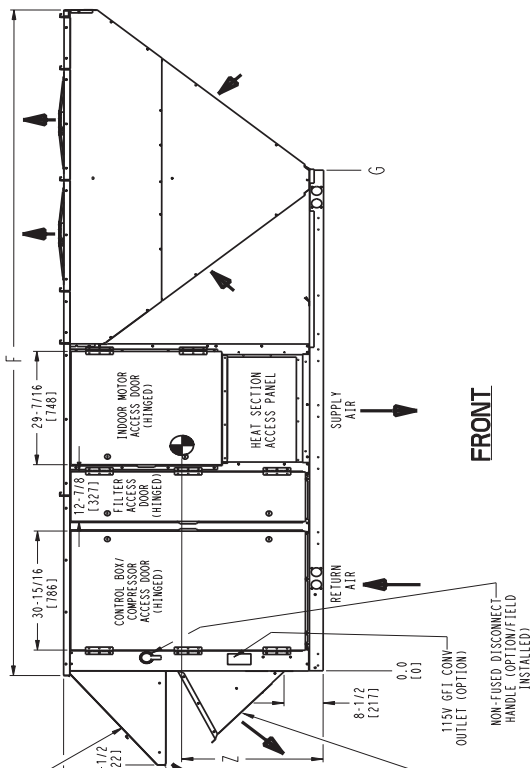
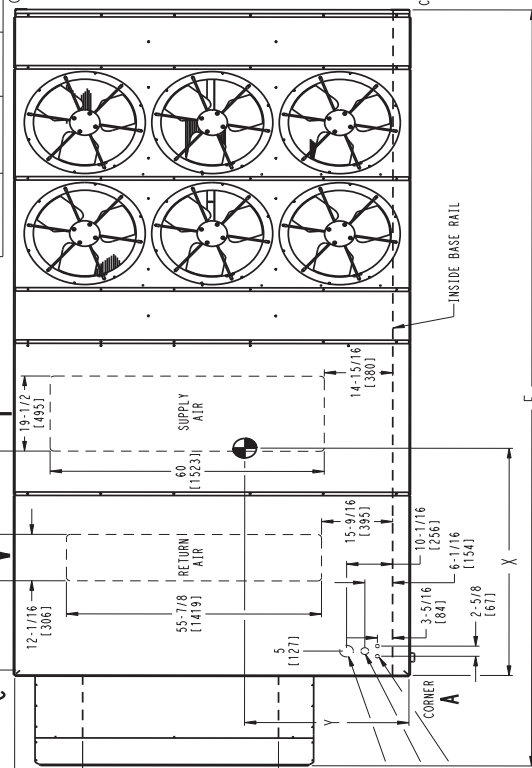
50PG



50PG



50PG

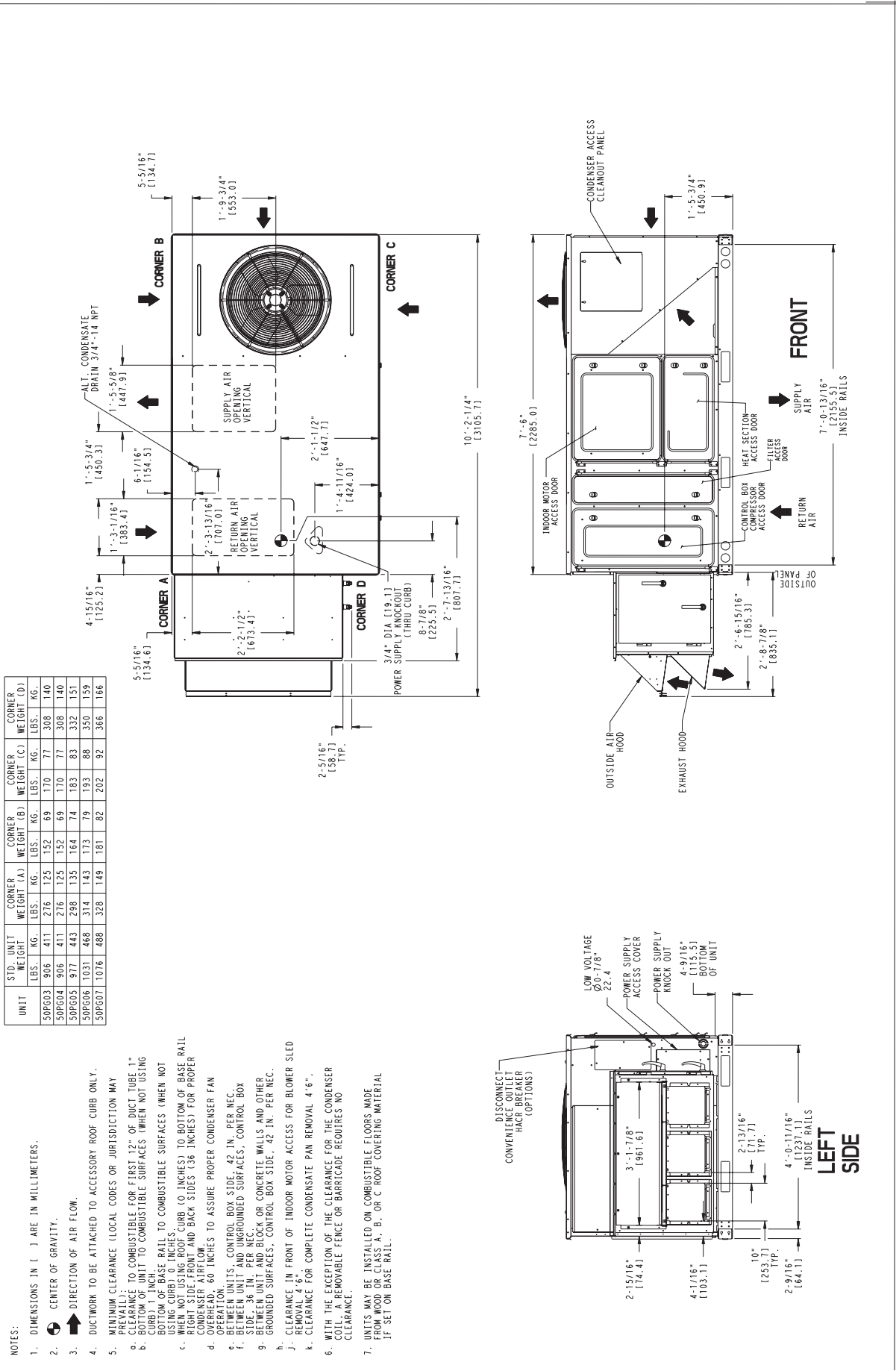
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FRONT

LEFT
SIDE

-

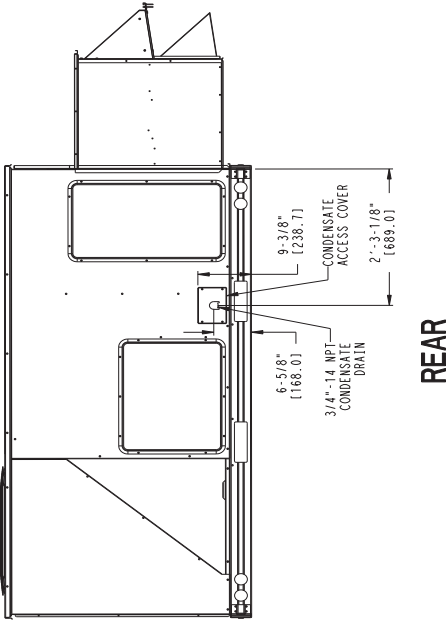
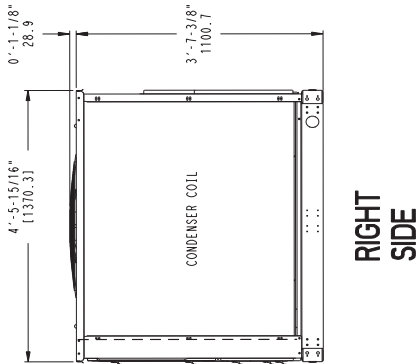
BASE UNIT DIMENSIONS — 50PG03-07 WITH LOW CFM EnergyX



50PG

**BASE UNIT DIMENSIONS — 50PG03-07 WITH LOW CFM EnergyX
(CONT)**

50PG



50PG

NOTES:

1. DIMENSIONS IN [] ARE IN MILLIMETERS.

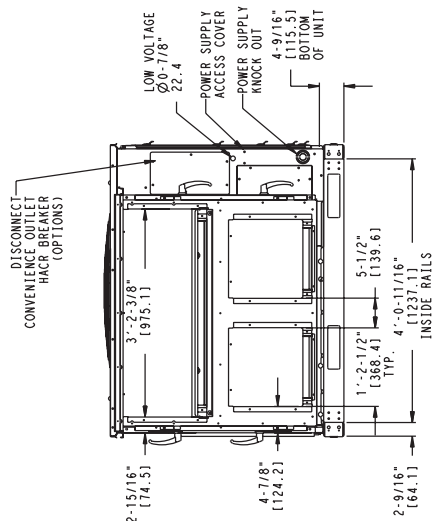
2.  CENTER OF GRAVITY.

3. DIRECTION OF AIR FLOW.

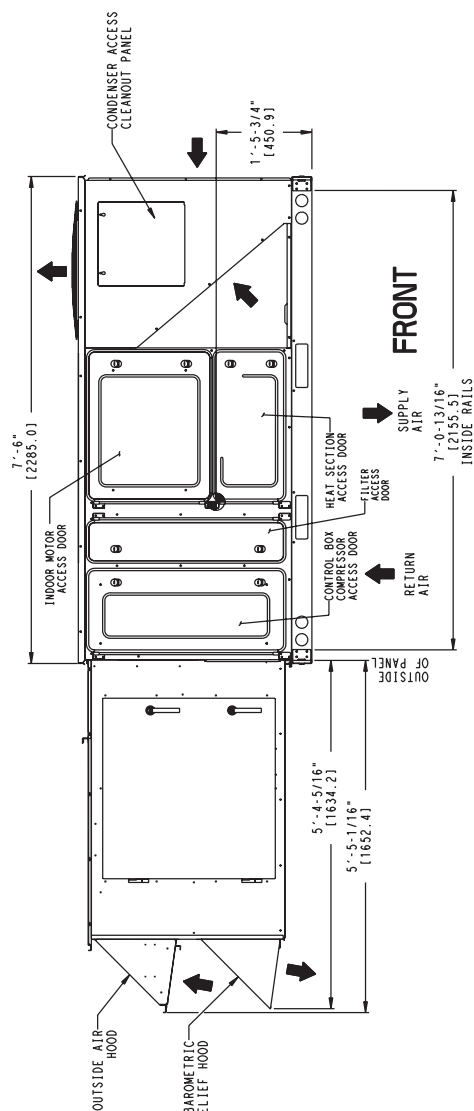
4. ON VERTICAL DISCHARGE UNITS, DUCTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. FOR HORIZONTAL DISCHARGE UNITS, FIELD SUPPLIED FLANGES SHOULD BE ATTACHED TO HORIZONTAL DISCHARGE OPENINGS, AND ALL DUCTWORK SHOULD BE ATTACHED TO THE FLANGES.

5. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY

- a. PREVENT DISCHARGE UNITS, CLEARANCE TO COMBUSTIBLE FOR FIRST 15' OF DUCT TUBE 1"
- b. BOTTOM OF UNIT TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB) 1" INCH.
- c. BOTTOM OF BASE RAIL TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB) 0 INCHES (CURB 10 INCHES) TO BOTTOM OF BASE RAIL.
- d. RIGHT SIDE FRONT AND BACK SIDES (36 INCHES) FOR PROPER CONDENSER AIRFLOW.
- e. OVERHEAD, 60 INCHES TO ASSURE PROPER CONDENSER PAN OPERATION.
- f. BETWEEN UNITS, CONTROL BOX SIDE, 42 IN. PER NEC.
- g. SIDE OF UNIT, PER UNGROUND SURFACES, CONTROL BOX SIDE, 36 IN.
- h. BETWEEN UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, CONTROL BOX SIDE, 42 IN. PER NEC.
- i. HORIZONTAL SUPPLY AND RETURN END, 0 INCHES.
- j. CLEARANCE IN FRONT OF INDOOR MOTOR ACCESS FOR BLOWER SLED REMOVAL, 4' 6" MIN.
- k. CLEARANCE FOR COMPLETE CONDENSATE PAN REMOVAL, 4' 6" MIN.
- l. WITH THE EXCEPTION OF THE CLEARANCE FOR THE CONDENSER COIL, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
7. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS "A", "B", OR "C" ROOF COVERING MATERIAL IF SET ON BASE RAIL.

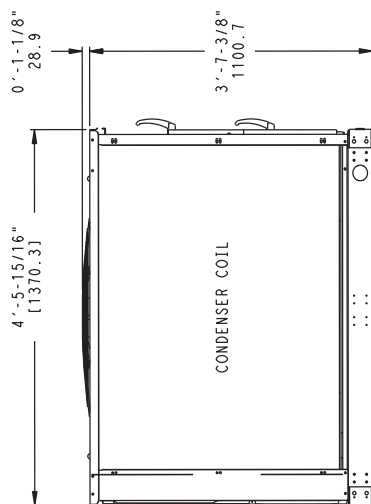


**LEFT
SIDE**

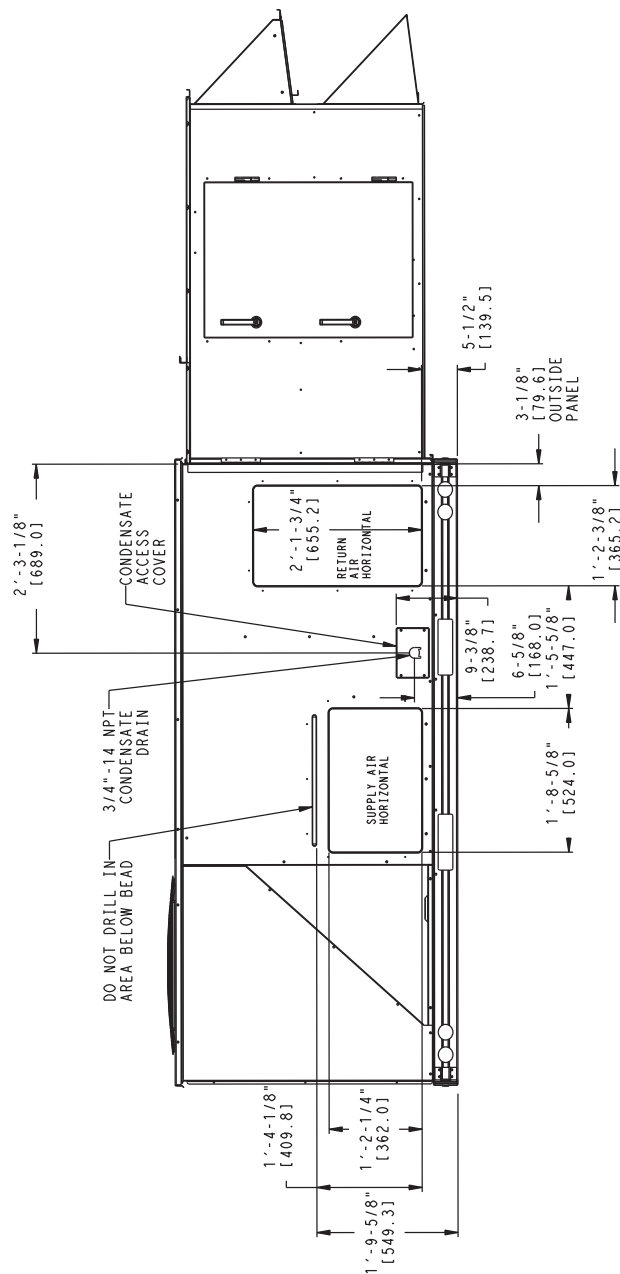


**BASE UNIT DIMENSIONS — 50PG03-07 WITH HIGH CFM EnergyX
(CONT)**

50PG



**RIGHT
SIDE**

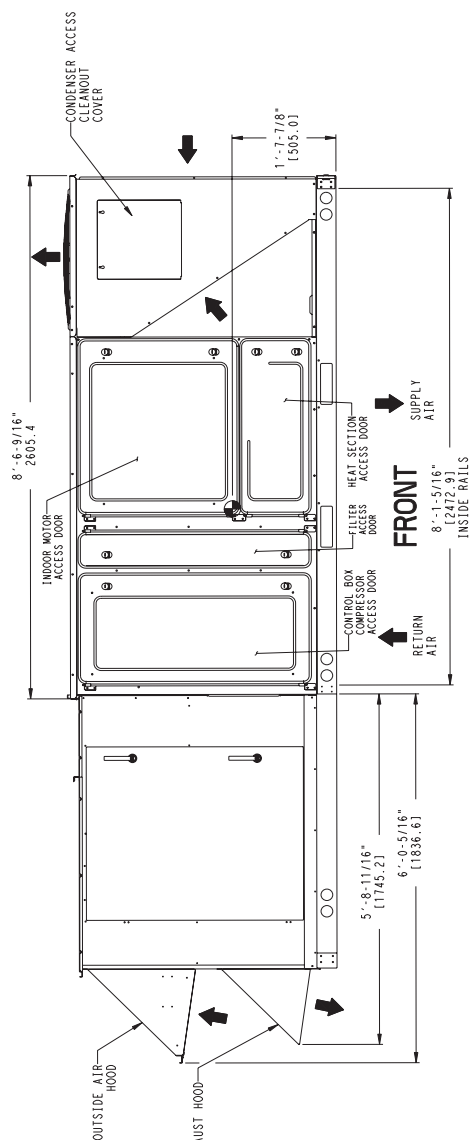
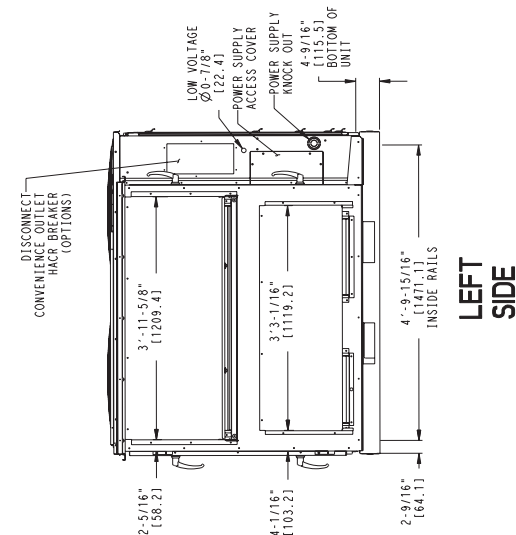


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50PG

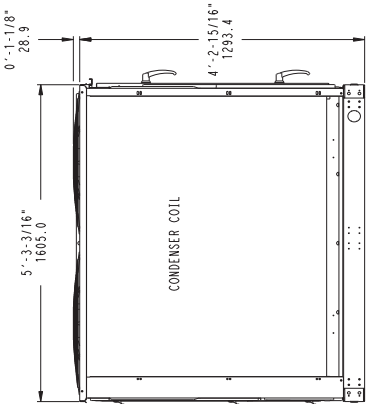
UNIT	STD. UNIT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)	
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.
50PC08	1930	859	414	188	433	197	581	263	555	252
50PC09	1930	859	415	188	435	197	583	264	557	253
50PC12	2084	945	435	197	455	207	610	277	583	264
50PC14	2195	996	458	208	480	218	643	292	614	279

- NOTES:
1. DIMENSIONS IN [] ARE IN MILLIMETERS.
 2. CENTER OF GRAVITY.
 3.  DIRECTION OF AIR FLOW.
 4. DUCTWORK TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY.
 5. MINIMUM CLEARANCE (LOCAL CODES OR JURISDICTION MAY PREVAIL):
 - a. TO COMBUSTIBLE FOR FIRST 12" OF DUCT TUBE 1" ELECTRONIC UNIT TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB) 1 INCH
 - b. FROM BOTTOM OF BASE RAIL TO COMBUSTIBLE SURFACES (WHEN NOT USING CURB) 30 INCHES.
 - c. WHEN NOT USING ROOF CURB (10 INCHES) TO BOTTOM OF BASE RAIL RIGHT SIDE, FRONT AND BACK SIDES (36 INCHES) FOR PROPER CONDENSER AIRFLOW.
 - d. OPERATION 60 INCHES TO ASSURE PROPER CONDENSER PAN OPERATION
 - e. BETWEEN UNITS, CONTROL BOX SIDE, 42 IN. PER NEC.
 - f. BETWEEN UNIT AND UNGROUNDED SURFACES, CONTROL BOX SIDE, 36 IN. PER NEC.
 - g. BETWEEN UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUNDED SURFACES, CONTROL BOX SIDE, 42 IN. PER NEC.
 - h. CLEARANCE IN FRONT OF INDOOR MOTOR ACCESS FOR BLOWER SLED REMOVAL 5'4".
 - i. CLEARANCE FOR COMPLETE CONDENSATE PAN REMOVAL 5'4".
 6. WITH THE EXCEPTION OF THE CLEARANCE FOR THE CONDENSER COIL, A REMOVABLE FENCE OR BARRICADE REQUIRES NO CLEARANCE.
 7. UNITS MAY BE INSTALLED ON COMBUSTIBLE FLOORS MADE FROM WOOD OR CLASS A, B, OR C ROOF COVERING MATERIAL IF SET ON BASE RAIL.

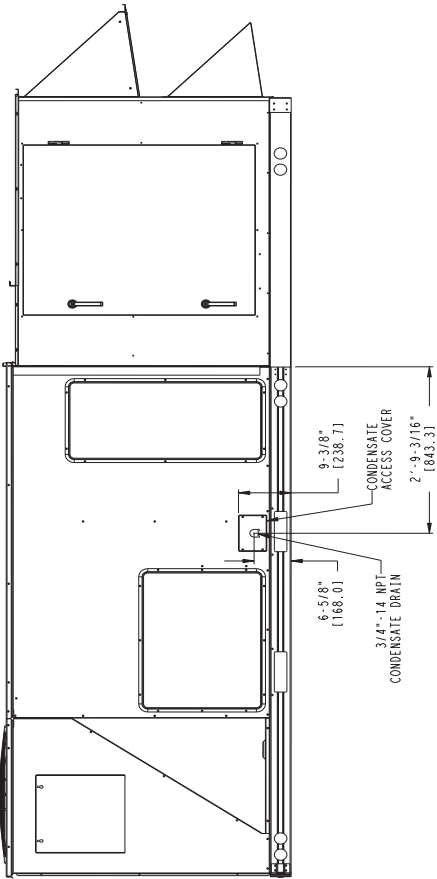


**BASE UNIT DIMENSIONS — 50PG08-14 WITH HIGH OR LOW CFM EnergyX
(CONT)**

50PG

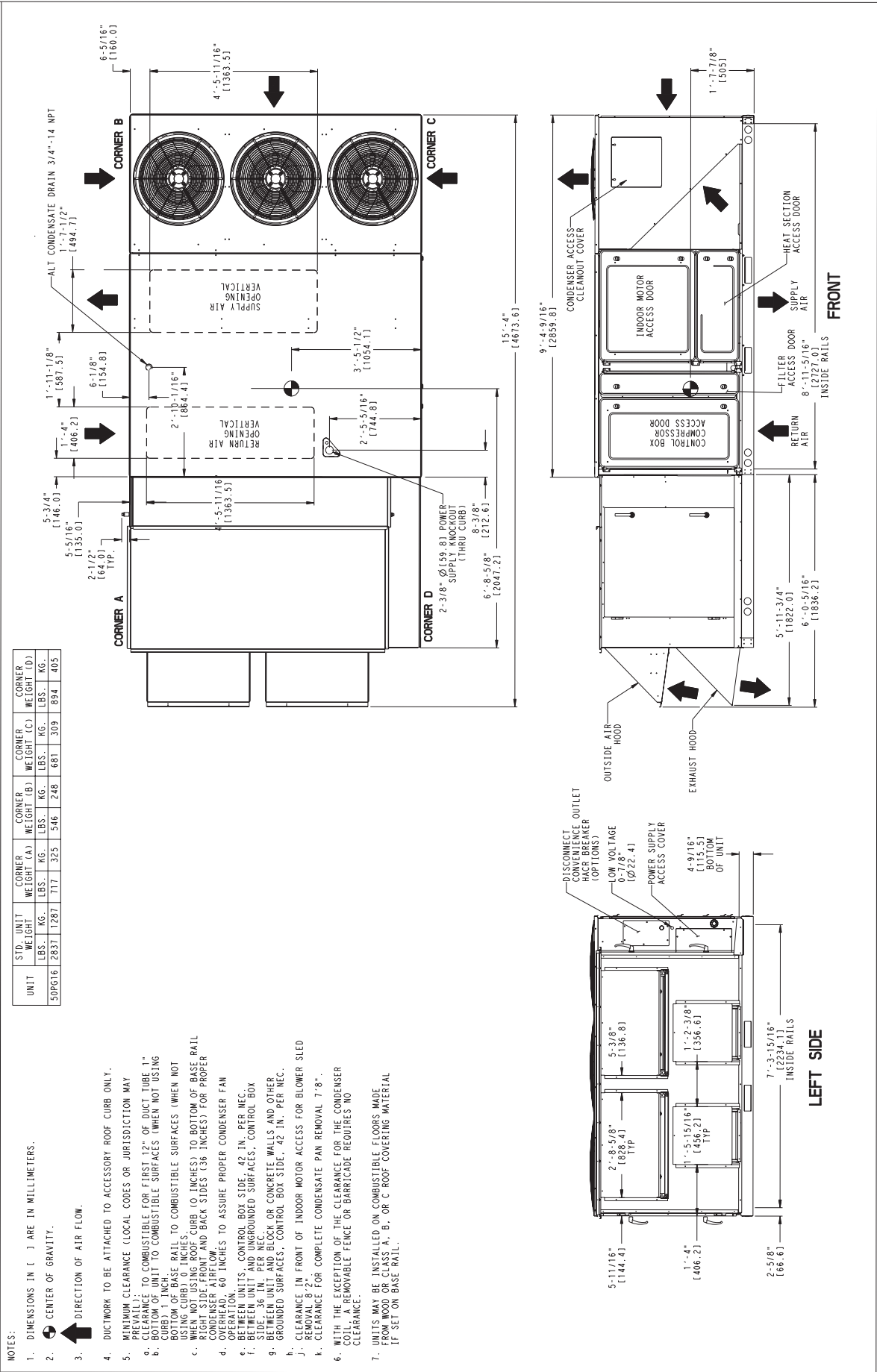


**RIGHT
SIDE**



REAR

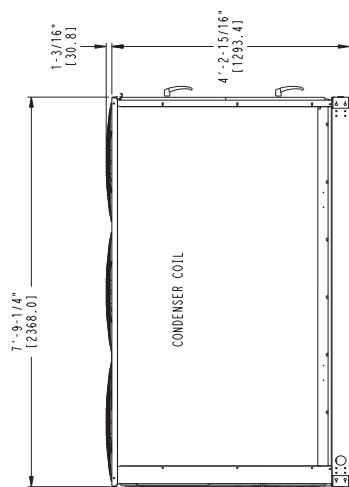
BASE UNIT DIMENSIONS — 50PG16 WITH HIGH OR LOW CFM EnergyX



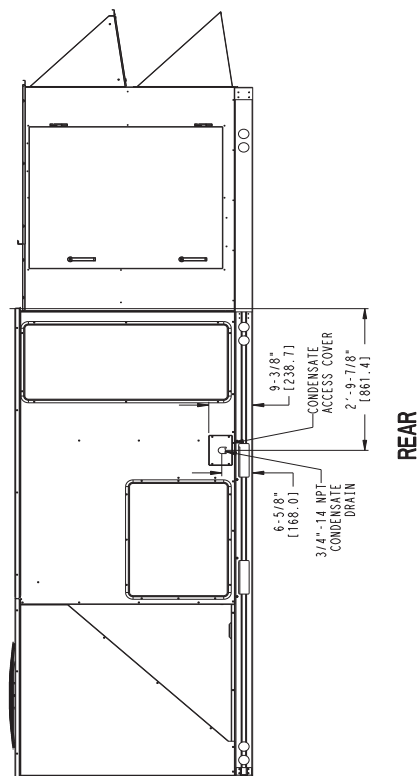
50PG

**BASE UNIT DIMENSIONS — 50PG16 WITH HIGH OR LOW CFM EnergyX
(CONT)**

50PG



RIGHT SIDE



REAR

50PG

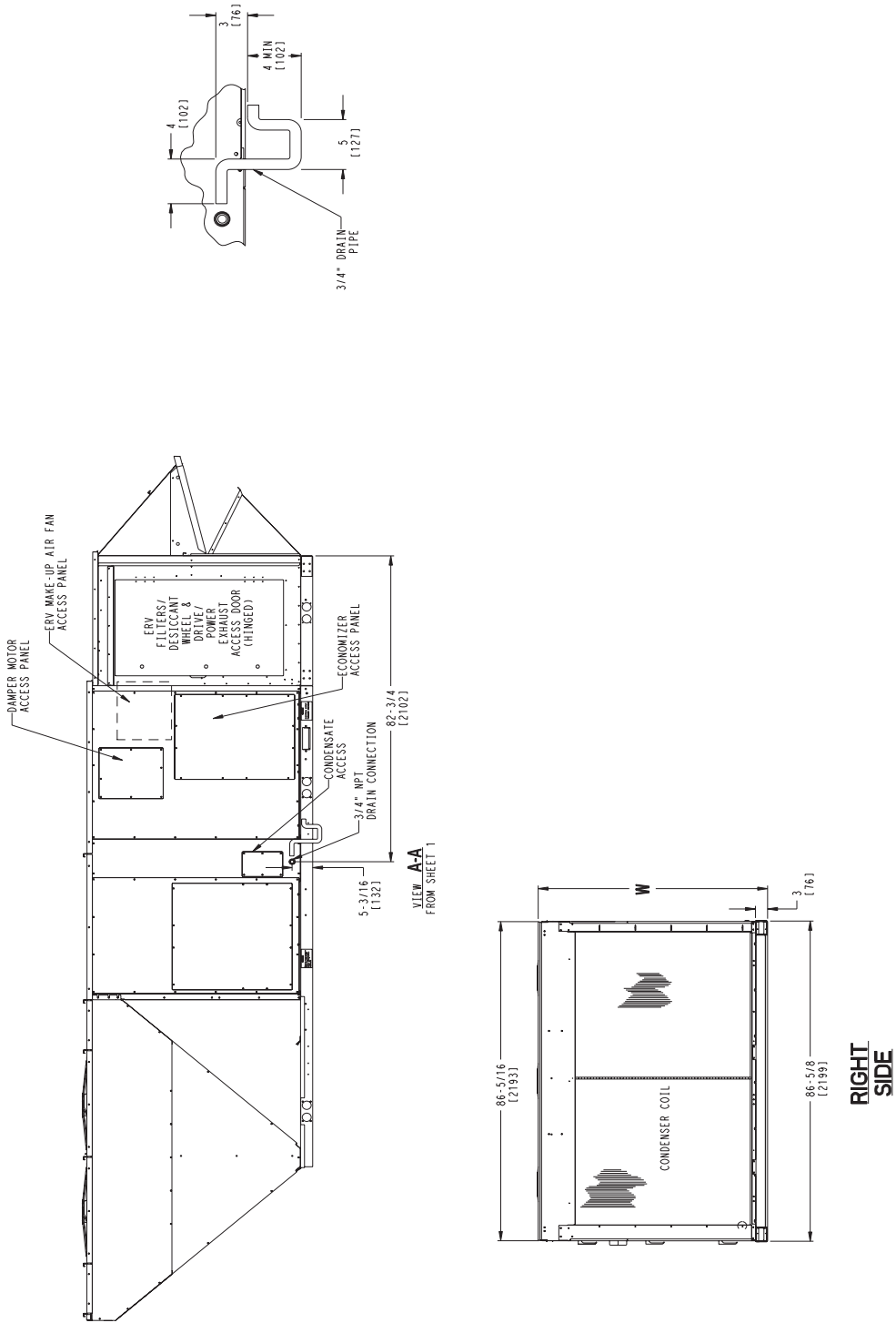
- NOTES: FOR OUTDOOR USE ONLY.
- WEIGHTS SHOWN ARE FOR 50PS COOLING UNIT ONLY
- WITH ERV MODEL OPTION, ALUMINUM COILS.
- WITH ERV MODEL OPTION, ALUMINUM COILS.
- EQUIPMENT CONSULT PRODUCT DATA BOOK.
- MIN. CLEARANCES TO BE:

REAR SIDE	16'-0" (1829)	CONDENSER AIR
RIGHT SIDE	16'-0" (1829)	CONDENSER AIR
FRONT SIDE	3'-0" (915)	SERVICE AIR
	6'-0" (1829)	CONDENSER AIR
	6'-0" (1829)	CONDENSER AIR
	6'-0" (1829)	CONDENSER AIR
	6'-6" (1981)	ECONOMIZER REMOVAL
	6'-6" (1981)	COMBUSTIBLE FABRIC
	6'-2" (1880)	CONDENSER REMOVAL
- FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES.
- CONTACT CARRIER APPLICATION ENGINEERING DEPARTMENT.
- FOR ALL CLEARANCES, THE UNIT MUST BE SUPPORTED BY A ROOF CURB ONLY. THE UNIT IS MOUNTED SIDE, SUPPLY SIDE.
- IS RECOMMENDED. THE DUCTS MUST BE SUPPORTED BY A ROOF CURB ONLY. THE UNIT IS MOUNTED SIDE, SUPPLY SIDE.
- WITH THE EXCEPTION OF CLEARANCES FOR THE CONDENSERS AND DRAIN/PAN/POWER EXHAUST AS STATED IN NOTE 8, ALL DIMENSIONS ARE FROM OUTSIDE OF BASE WALL.
- DIMENSIONS ARE IN INCHES. MILLIMETERS OR KILOGRAMS.
- ALLOW 4" (516.16) ON EACH SIDE OF TOP COVER DECK.
- ALLOW 4" (516.16) ON EACH SIDE OF TOP COVER DECK.
- SUPPLY AIR DUCTS BELOW THE UNIT DISCHARGE CONNECT TO THE UNIT DISCHARGE CONNECT.



BASE UNIT DIMENSIONS — 50PG20-28 WITH EnergyX
(CONT)

50PG

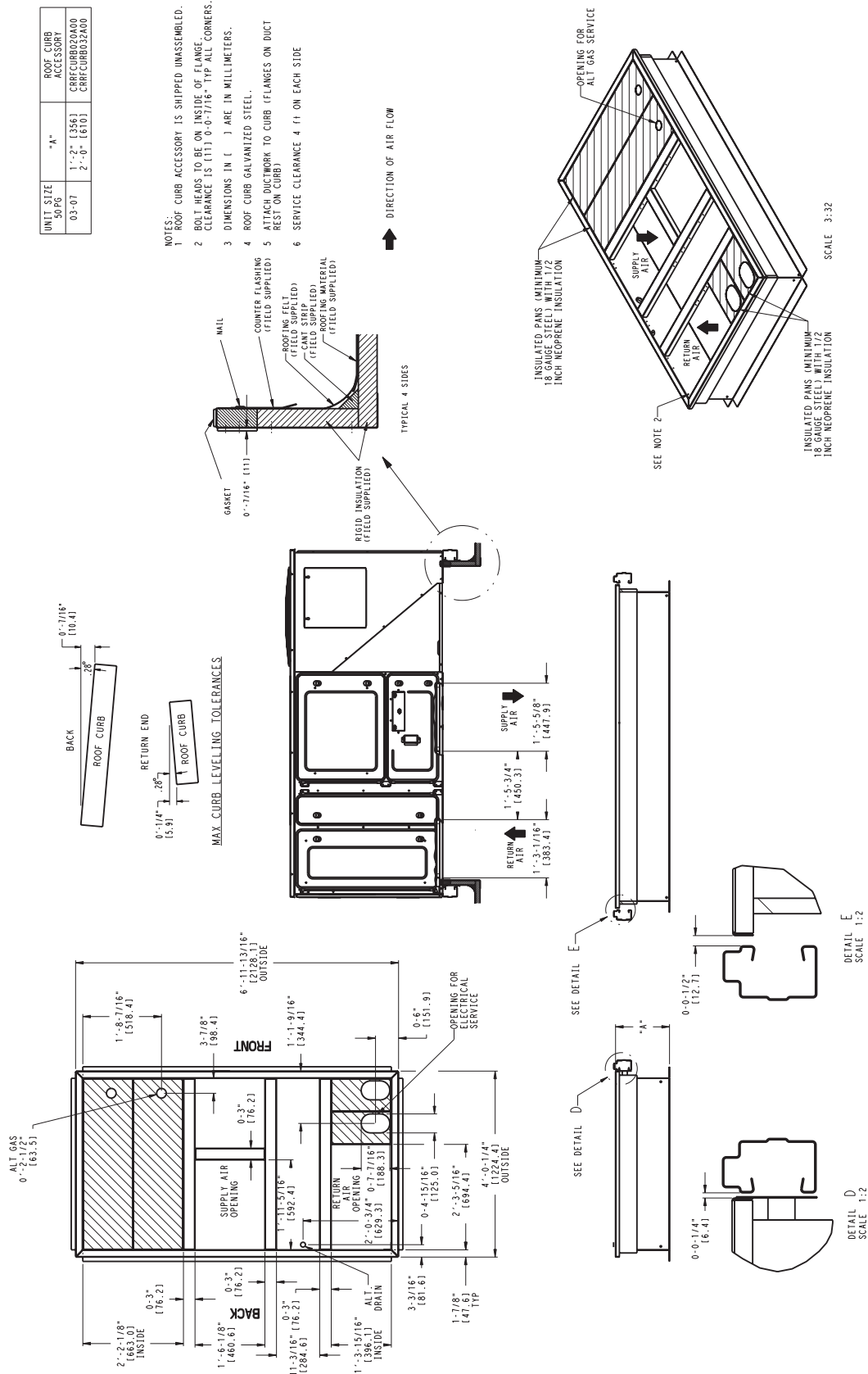


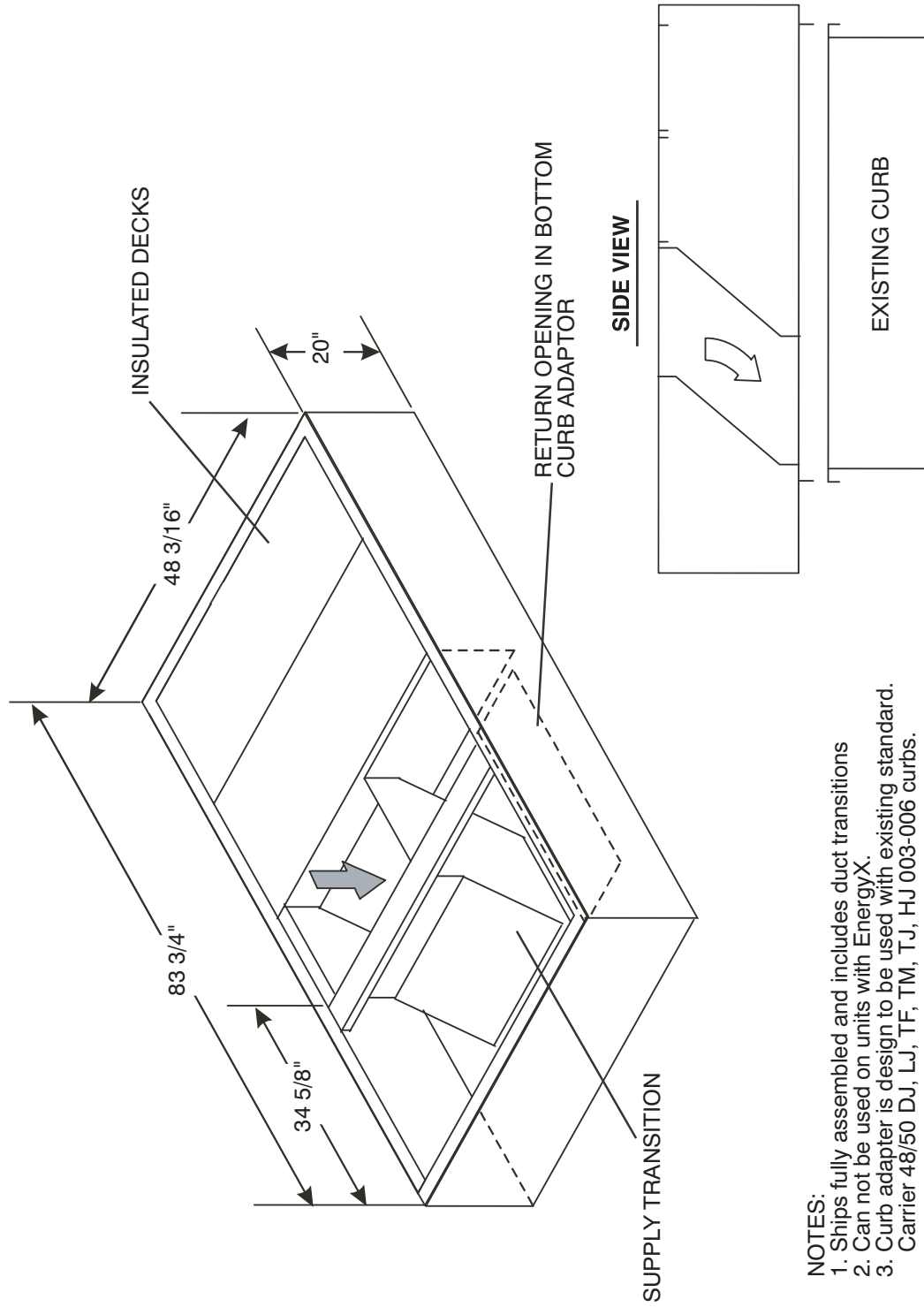
ACCESSORY DIMENSIONS — 50PG03-07

ROOF CURB

UNIT SIZE 50 PG	"A"	ROOF CURB ACCESSORY
03-07	1'-2" [356] 2'-0" [610]	CRRCURB020A00 CRRCURB032A00

- NOTES:
1. ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
 2. BOLT HEADS TO BE ON INSIDE OF FLANGE. CLEARANCE IS (11) 0-8/16" TYP ALL CORNERS.
 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

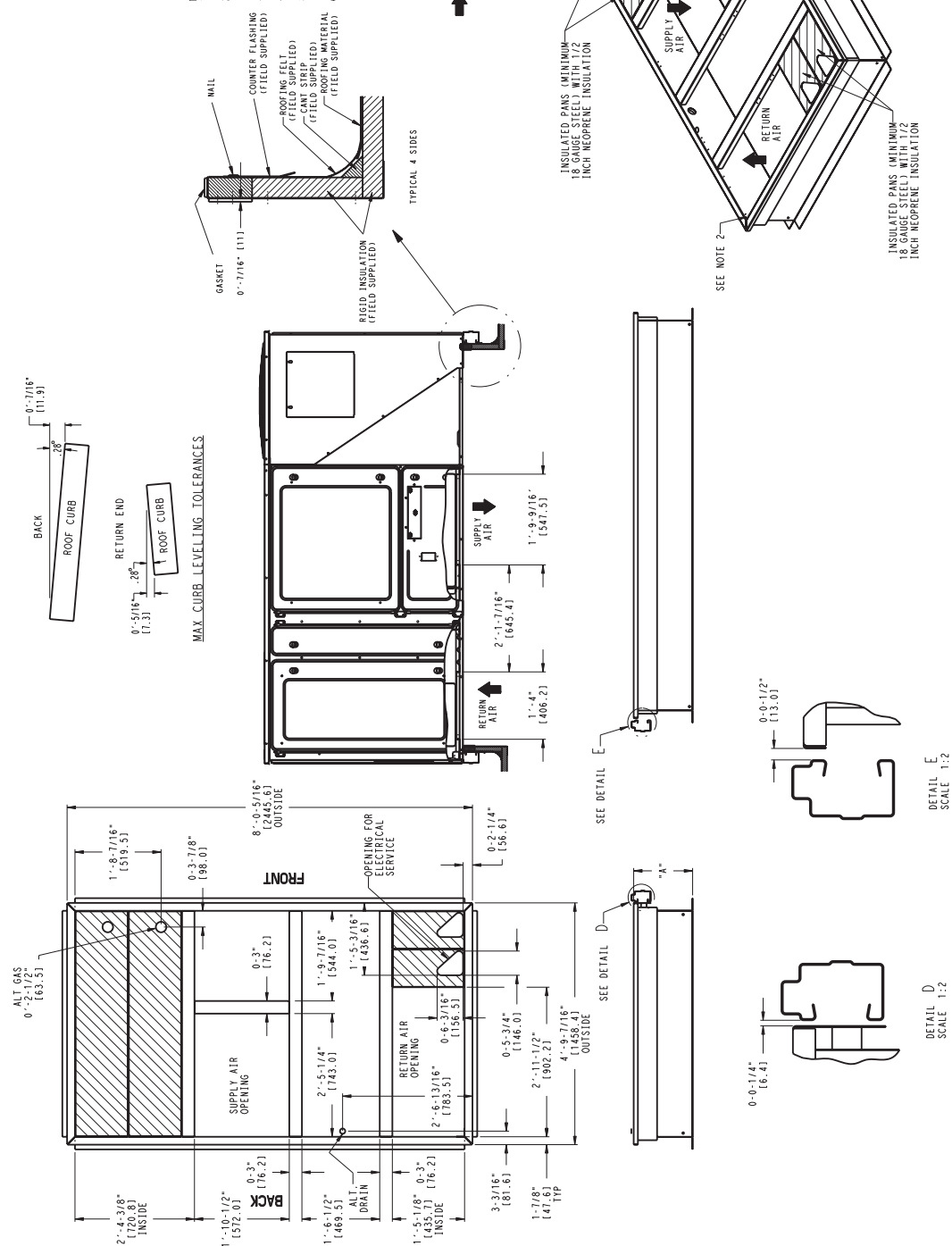




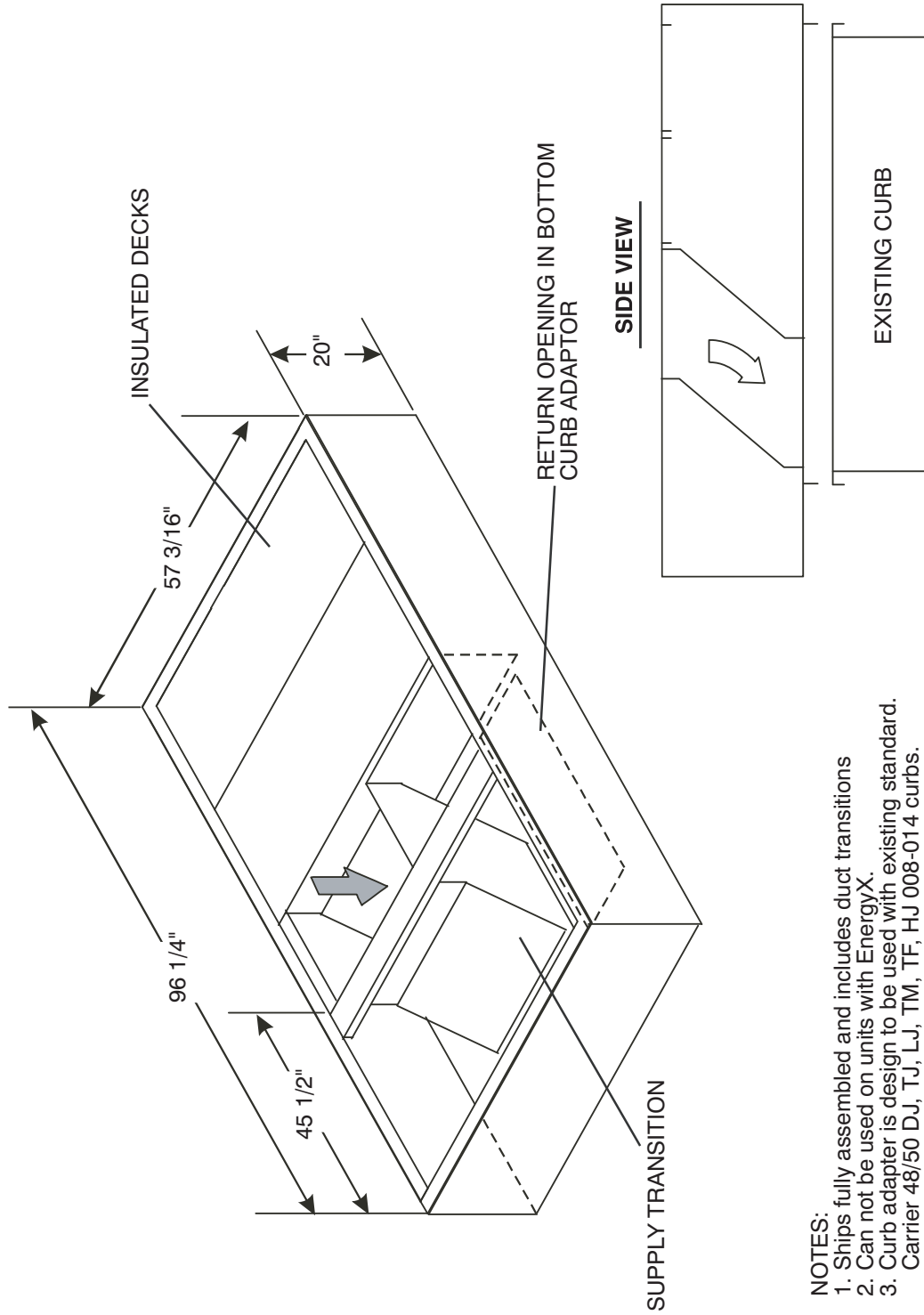
- NOTES:
1. Ships fully assembled and includes duct transitions
 2. Can not be used on units with EnergyX.
 3. Curb adaptor is design to be used with existing standard. Carrier 48/50 DJ, LJ, TF, TM, TJ, HJ 003-006 curbs.

UNIT SIZE	"A"	ROOF CURB ACCESSORY
50PG		
08-14	1'-2" [356] 2'-0" [610]	CRFRCURB031A00 CRFRCURB033A00

1. ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
2. BOLT HEADS TO BE ON INSIDE OF FLANGE. CLEARANCE IS (11) 0-7/16" TIP ALL CORNERS.
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



50PG



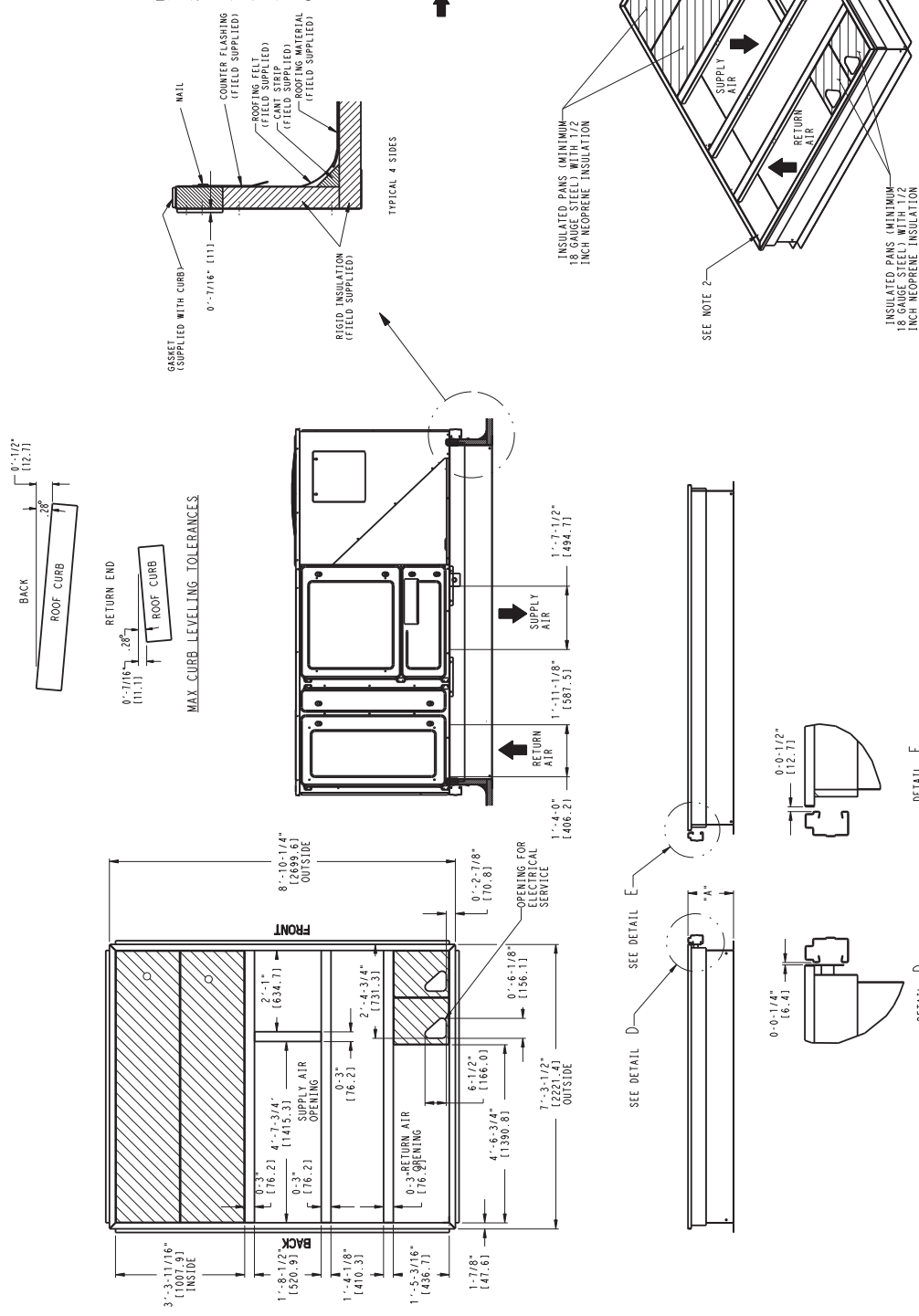
- NOTES:
1. Ships fully assembled and includes duct transitions
 2. Can not be used on units with EnergyX.
 3. Curb adaptor is design to be used with existing standard. Carrier 48/50 DJ, TJ, LJ, TM, TF, HJ 008-014 curbs.

Roof Curb

UNIT SIZE 50PG	"A"	ROOF CURB ACCESSORY
16	1'-2" [356] 2'-0" [610]	CRRFCURB034A00 CRRFCURB035A00

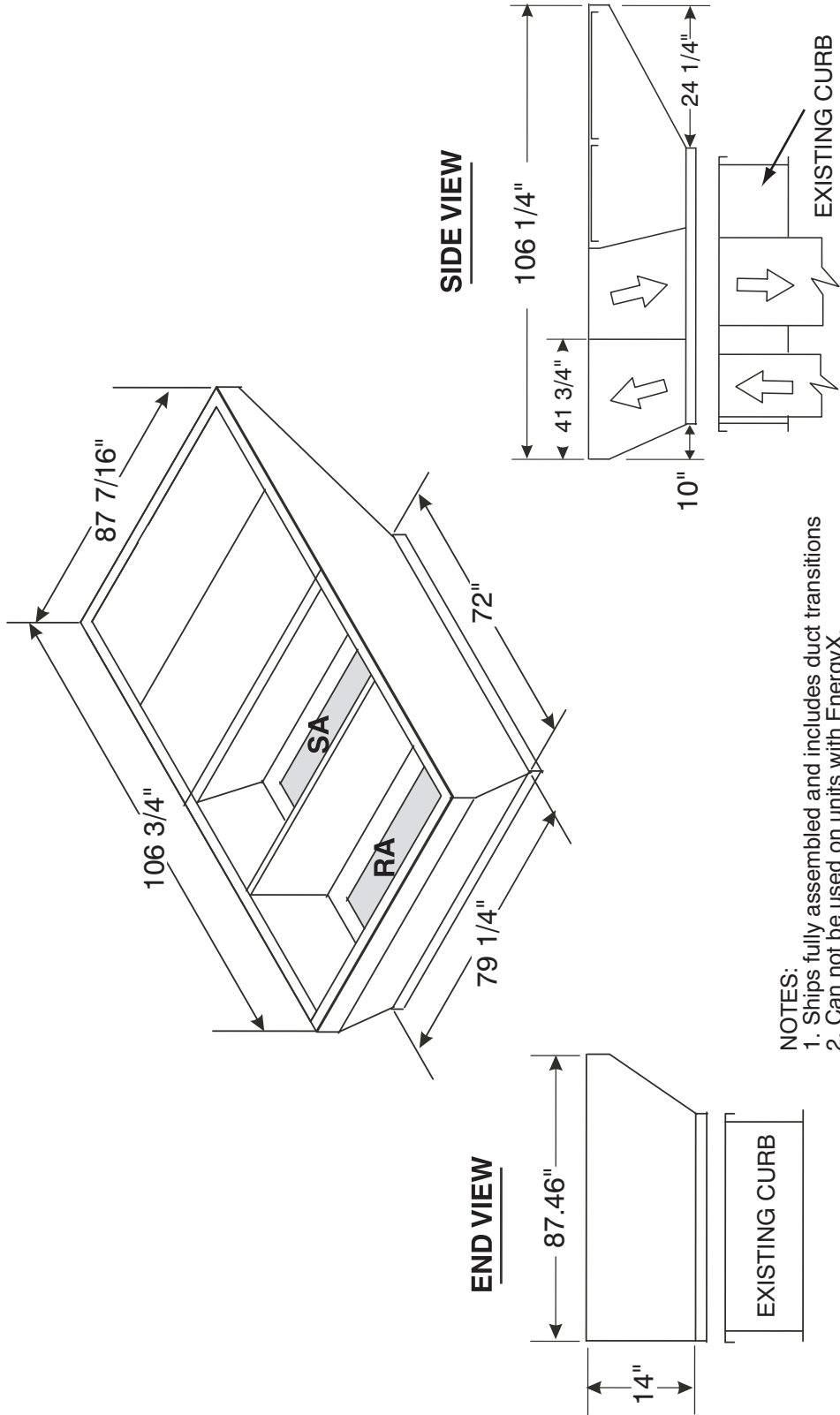
NOTES:

1. ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
2. BOLT HEADS TO BE ON INSIDE OF FLANGE. CLEARANCE IS (11) 0-0-7/16" TIP 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



Accessory Dimension Curb Adaptor - 50PG16 (CRADCURB003A00)

50PG



- NOTES:**
1. Ships fully assembled and includes duct transitions
 2. Can not be used on units with EnergyX.
 3. Curb adaptor is design to be used with existing standard Carrier 48/50 DP, DR, TJ, HJ, TM 016-024 curbs.

ROOFCURB	A		B	
	DEG.	IN.	DEG.	IN.
CRRFCURB018C00	.28	.57	.28	.42
CRRFCURB019C00				
CRRFCURB036A00				
CRRFCURB037A00	.28	.63	.28	.42

MAX CURB LEVELING TOLERANCES:

DO NOT EXCEED CURB ELEVATION TOLERANCES.
CLEARANCE BETWEEN UNIT BASE RAIL AND CURB FLANGE IS 1/4-IN. (6 MM)
ON EACH SIDE.

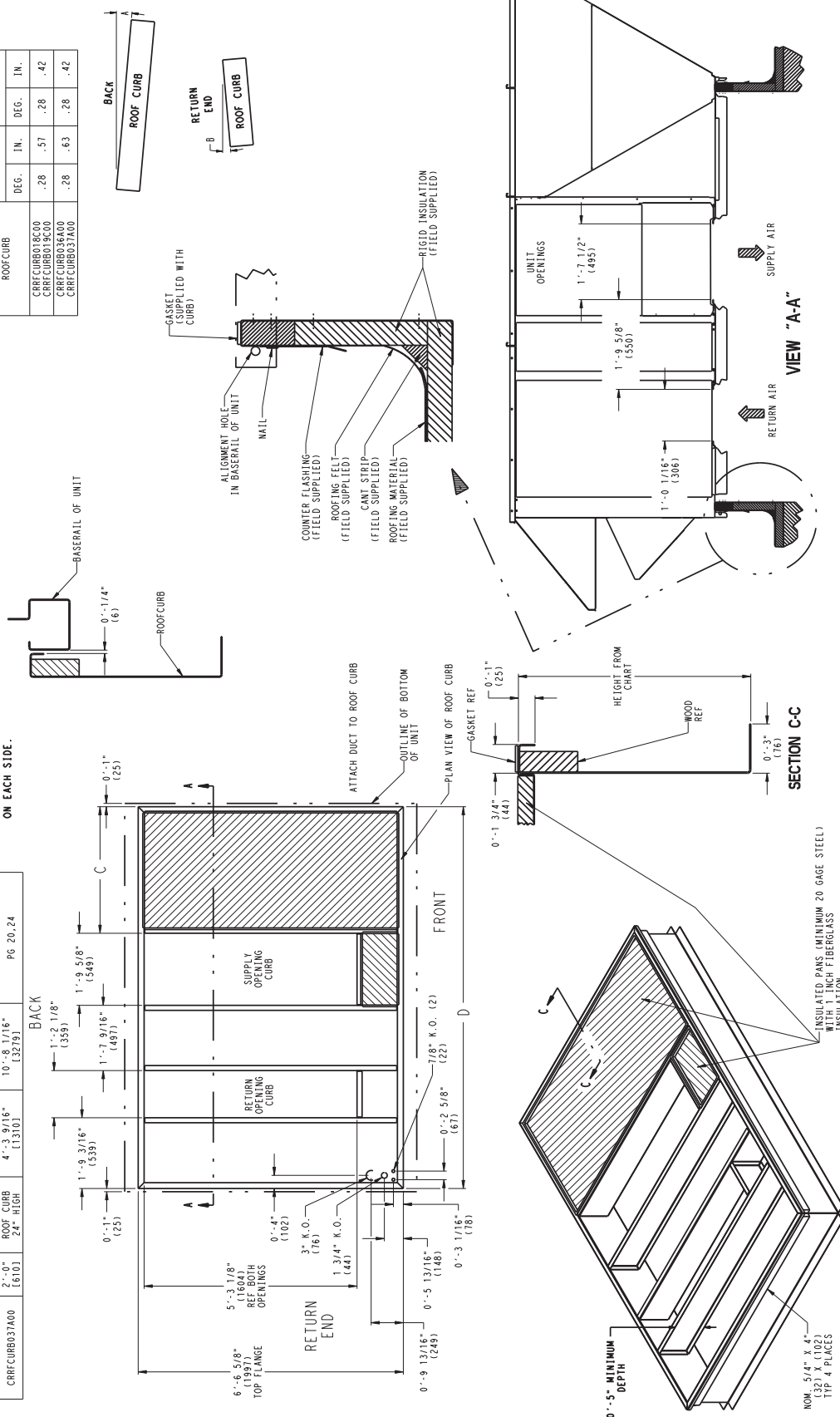
NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.

2. DIMENSIONS IN () ARE IN MILLIMETERS.
3. DIRECTION OF AIRFLOW.

4. ROOF CURB: 16 GA. (VA03-56) STEEL.

5. TO PREVENT THE HAZARD OF STAGNANT WATER BUILD-UP IN THE UNIT DO NOT EXCEED CURB LEVELING TOLERANCES.

6. CLEARANCE BETWEEN UNIT BASE RAIL AND CURB FLANGE IS 1/4-IN. (6 MM) ON EACH SIDE.

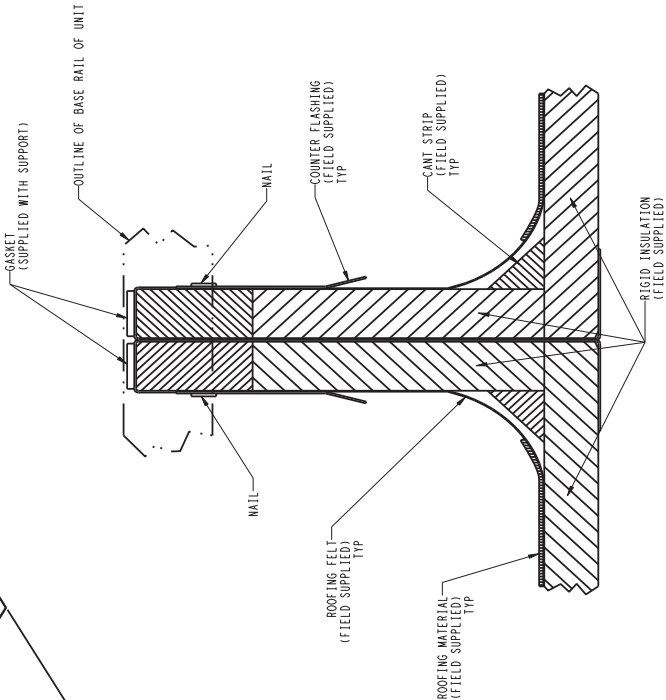
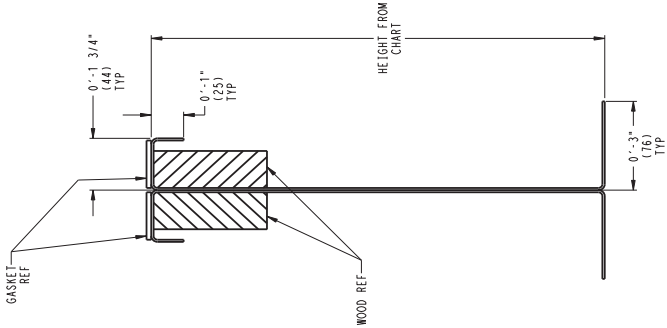
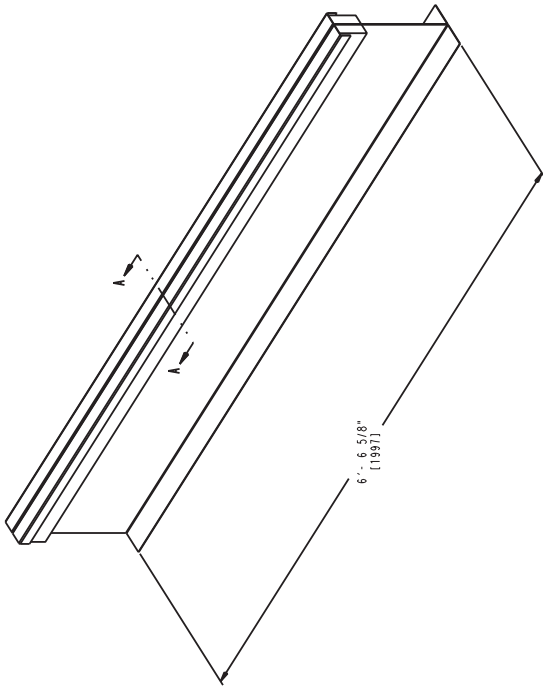


Roof Curb Support

ROOFCURB ACCESSORY	CURB HEIGHT	DESCRIPTION
CRTSUCT001A00	1'-2" [356]	ROOF CURB SUPPORT 14" HIGH
CRTSUCT002A00	2'-0" [610]	ROOF CURB SUPPORT 24" HIGH

- NOTES:
- 1. ROOFCURB SUPPORT ACCESSORY IS SHIPPED DISASSEMBLED.
 - 2. DIMENSIONS IN () ARE IN MILLIMETERS.
 - 3. ROOFCURB SUPPORT: 16 GAGE (VA03-56) STEEL.

Equipment Support Rail provides required base unit support when placing unit on past installed roofcurb DP, DR, TJ, HJ units sized 20-28.



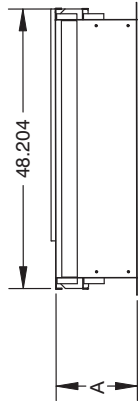
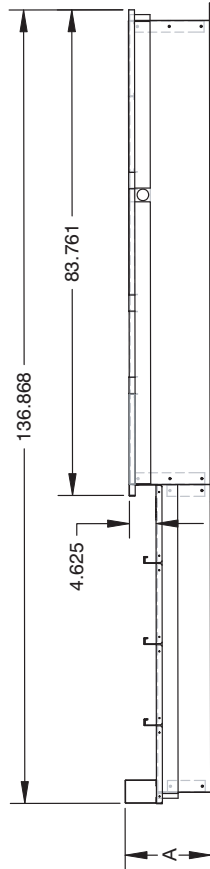
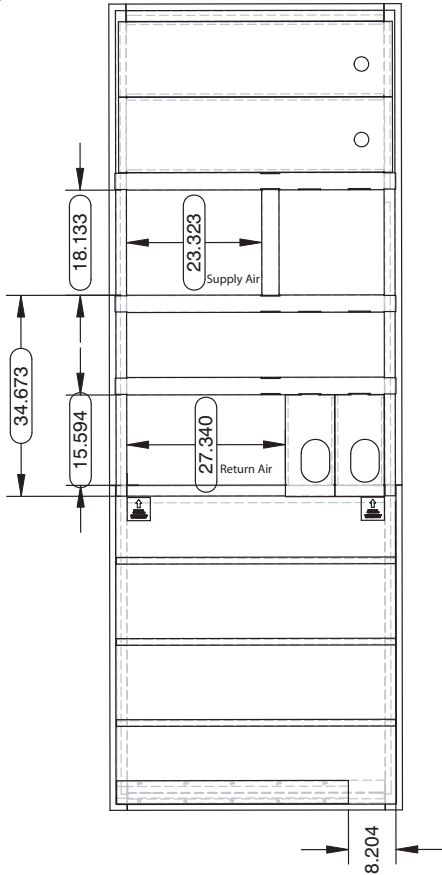
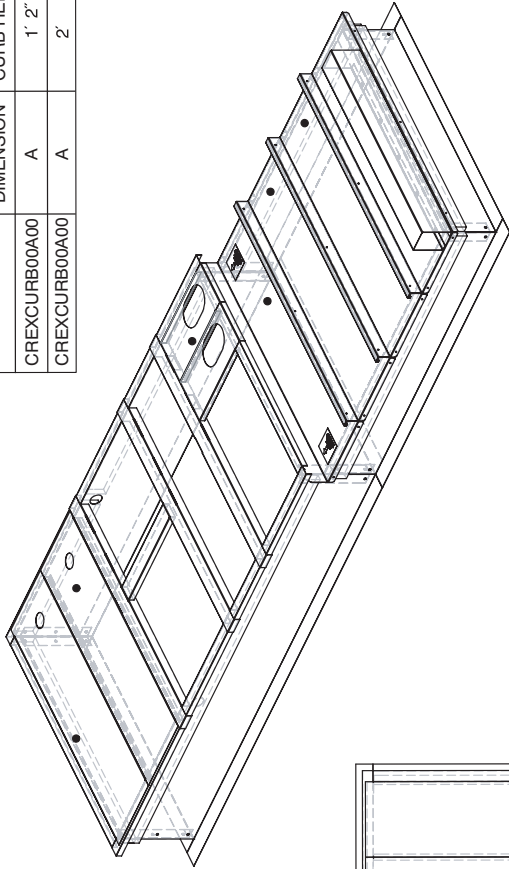
SECTION A-A

ACCESSORY DIMENSIONS - FULL PERIMETER ROOF CURB FOR 50PG03-07 WITH HIGH CFM EnergyX UNIT

Roof Curb - CREXCURB005A00 and CREXCURB006A00

NOTE:
 1. Roofcurbs ship knockdown.
 2. Install ductwork into roofcurb before placing the rooftop unit.

	DIMENSION	CURB HEIGHT
CREXCURB005A00	A	1' 2"
CREXCURB006A00	A	2'



50PG

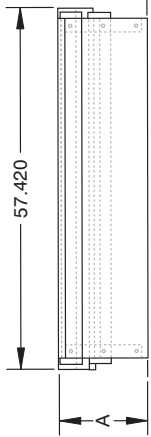
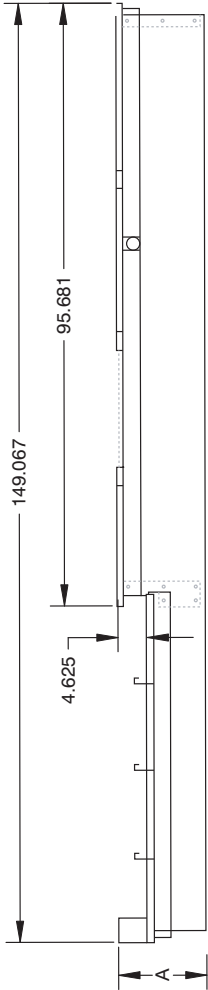
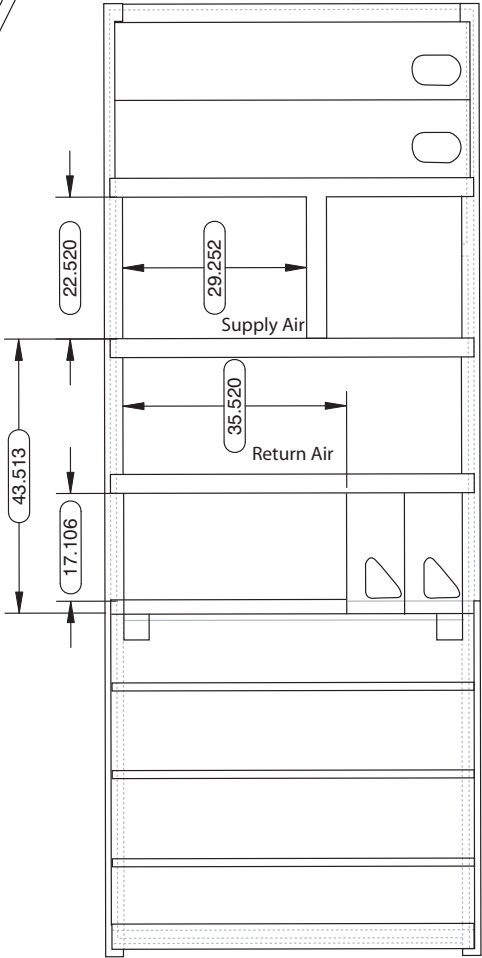
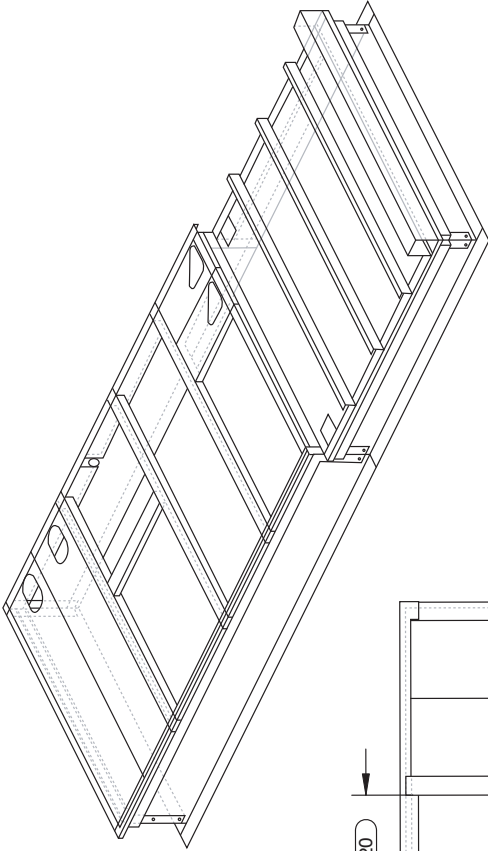
PERIMETER ROOF CURB FOR 50PG08-14 WITH LOW OR HIGH CFM EnergyX UNITS

Roof Curb - CREXCURB007A00 and CREXCURB008A00

50PG

	DIMENSION	CURB HEIGHT
CREXCURB007A00	A	1' 2"
CREXCURB008A00	A	2' 0"

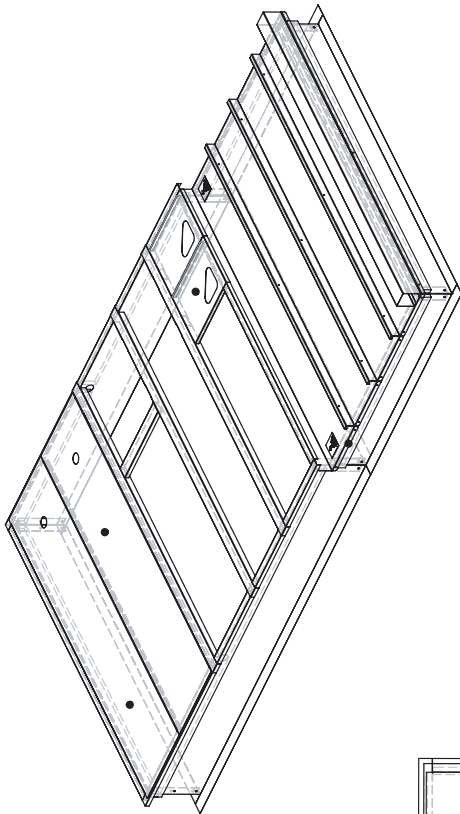
- NOTE:
- 1. Roofcurbs ship knockdown.
 - 2. Install ductwork into roofcurb before placing the rooftop unit.



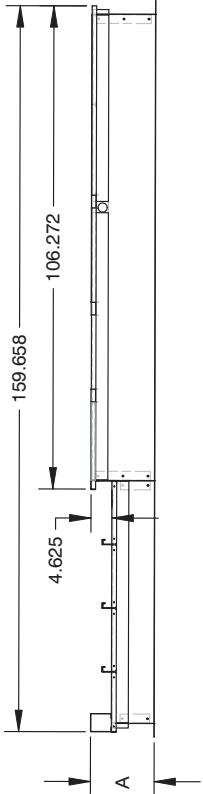
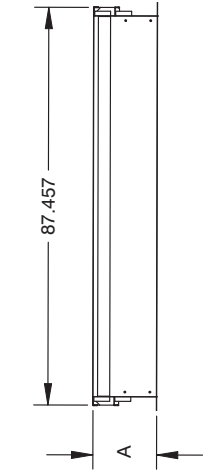
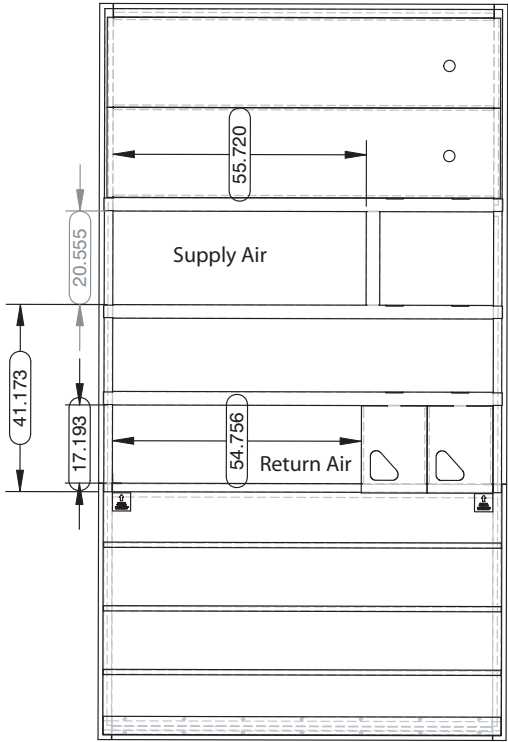
ACCESSORY DIMENSIONS - FULL PERIMETER ROOF CURB FOR 50PG16 WITH EnergyX

Roof Curb - CREXCURB011A00 and CREXCURB012A00

	DIMENSION	CURB HEIGHT
CREXCURB011A00	A	1' 2"
CREXCURB012A00	A	2' 0"



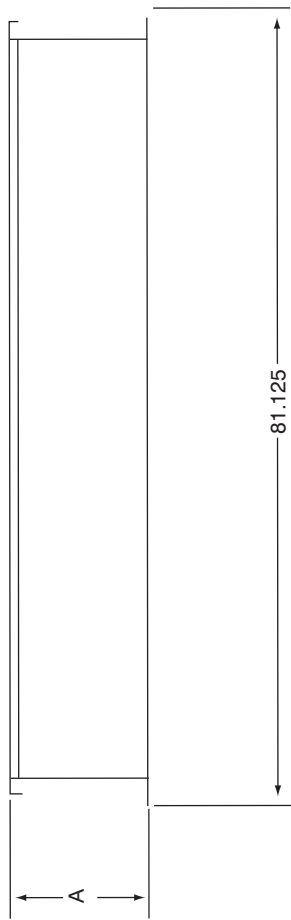
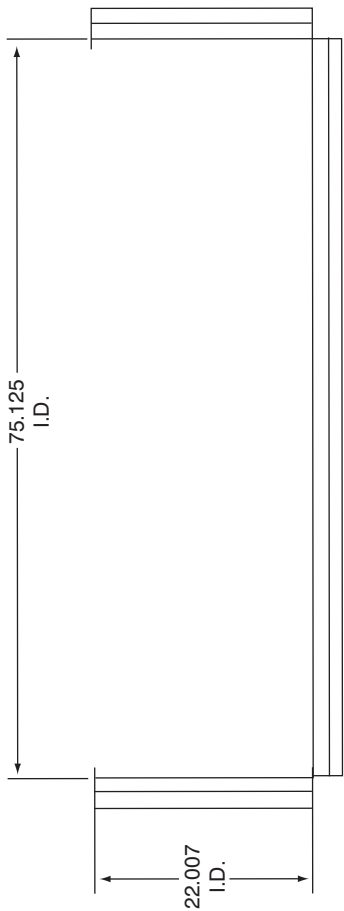
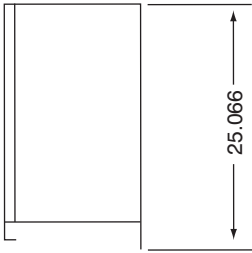
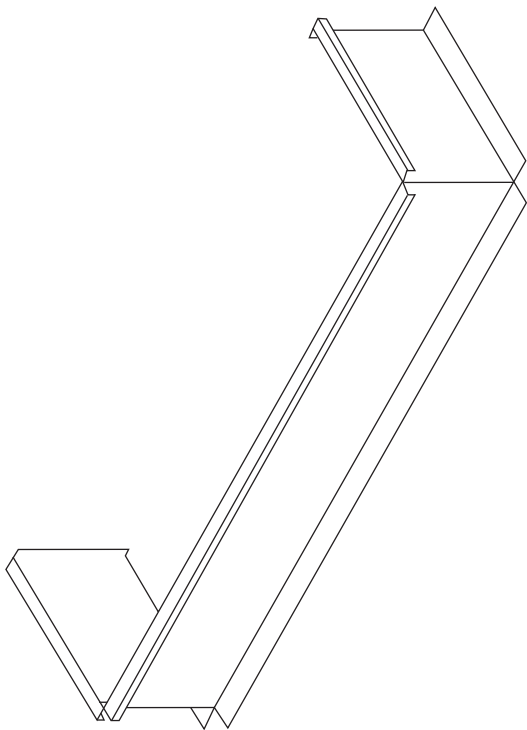
NOTE:
1. Roofcurbs ship knockdown.
2. Install ductwork into roofcurb before placing the rooftop unit.



50PG

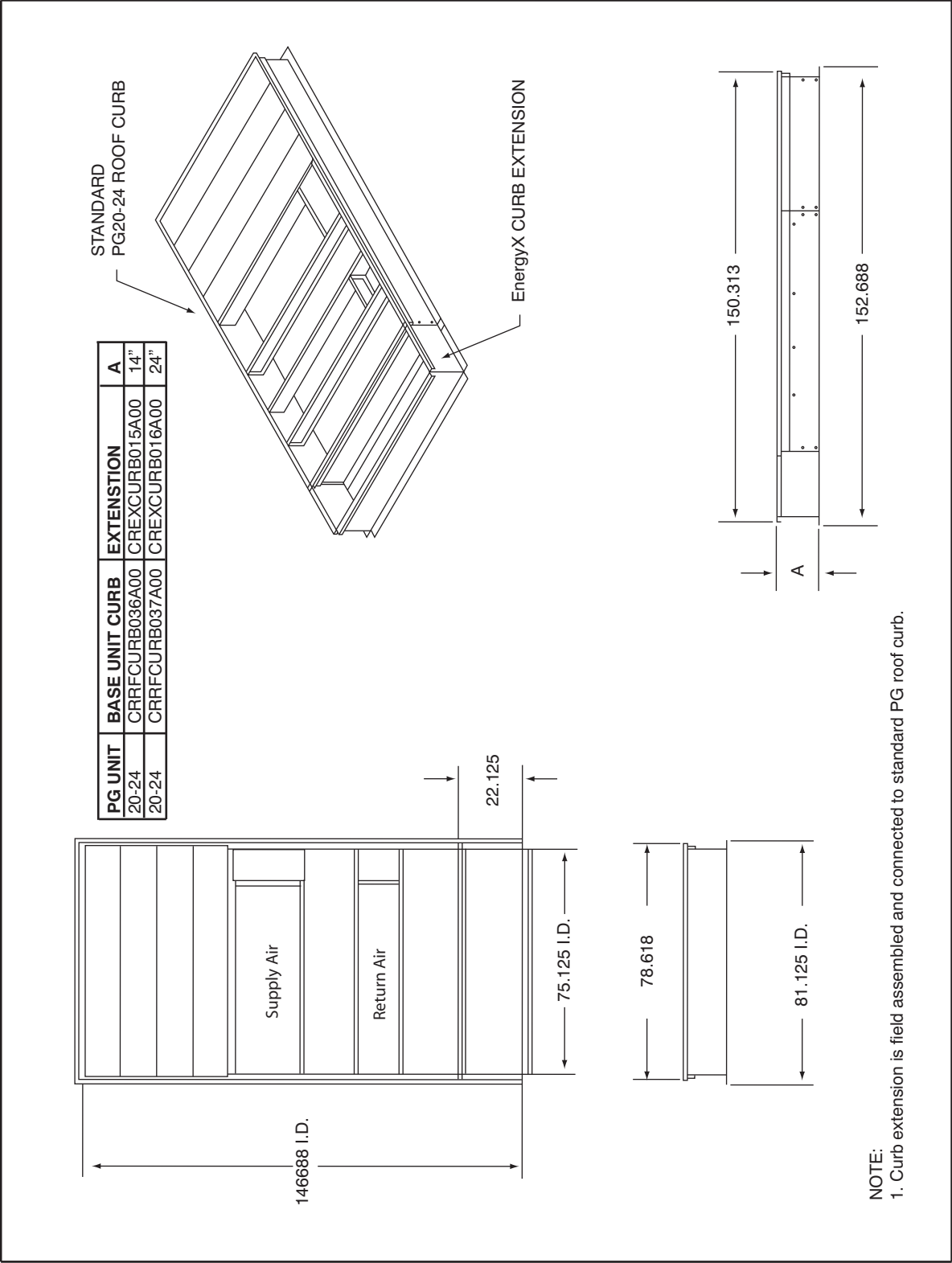
**Roof Curb - 14 and 24 Inch Curb Extension To Use With Standard Unit Roof Curb for
Units 50PG20-28 With EnergyX**

50PG



ACCESSORY DIMENSIONS - EnergyX

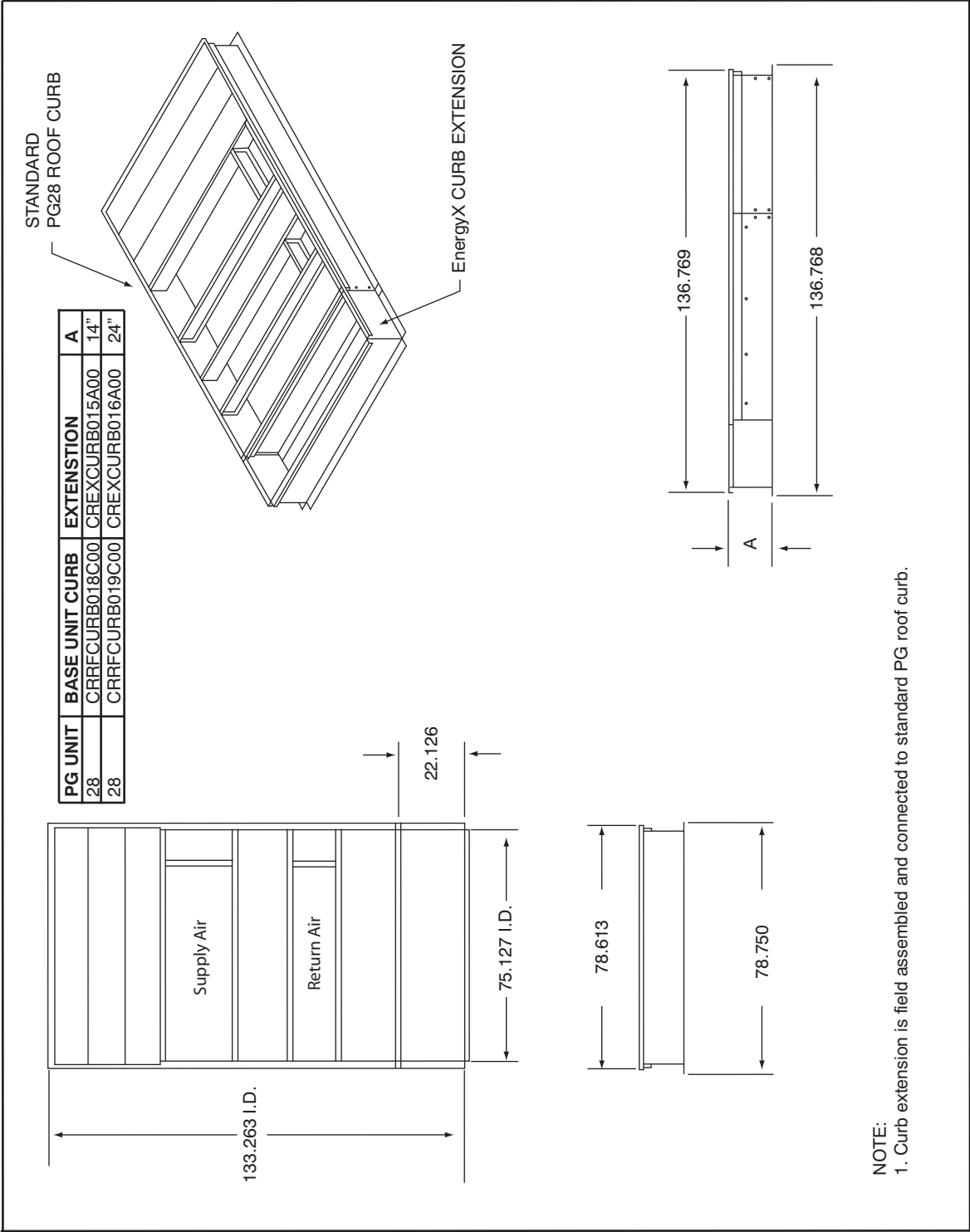
Curb Extension Assembly Drawing to Use With 50PG20-24 Standard Roof Curb



50PG

Curb Extension Assembly Drawing To Use With 50PG28 Standard Roof Curb

50PG



C08035

SELECTION PROCEDURE (WITH 50PG06 EXAMPLE)

I. Determine cooling and heating requirements at design conditions.

Given:

- Required Gross Cooling Capacity (TC) 57,000 Btuh
- Gross Sensible Heat Capacity (SHC) 37,000 Btuh
- Required Heating Capacity 50,000 Btuh
- Condenser Entering Air Temperature 95°F Summer
- Indoor Air Temperature 80°F edb, 67°F ewb
- Evaporator Air Quantity. 1,700 cfm
- External Static Pressure 0.60 in. wg
- Electrical Characteristics (V-Ph-Hz) 230-3-60 Vertical supply required.

II. Select unit based on required cooling capacity.

- Enter Cooling Capacities table for 50PG06 at condenser entering temperature of 95°F, evaporator air quantity of 1,700 cfm, and indoor air temperature of 80/67°F. The 50PG06 unit will provide a total cooling capacity of 60,300 Btuh and a SHC of 41,800 Btuh. For evaporator air temperatures other than 80°F, calculate SHC correction using formula in notes under cooling capacity tables.
- Unit meets design conditions for TC and SHC
- **NOTE:** Unit ratings are gross capacities and do not include the effect of indoor fan motor heat. To calculate net capacities, see Step V.

III. Select electric heat.

- The required heating capacity is 50,000 Btuh; therefore, 50,000 Btuh of electric heat is necessary. Determine the electric heat capacity in kW.

$$\frac{50,000 \text{ Btuh}}{3412 \text{ Btuh/kW}} = 14.7 \text{ kW}$$

- Enter the Electric Resistance Heater Data table at 230-3-60 for 50PG06 units. The 20-kW heater satisfies the electric heater requirement.

IV. Determine fan speed and power requirements at design conditions.

- Before entering the Fan Performance tables, calculate the total static pressure required based on unit components. Tabulated fan performance includes unit casing, filters, and wet evaporator coil.
- Calculate pressure drop:

Design External Static Pressure	0.60
Electric Heat Static Pressure	+ 0.04
	0.64 in.wg (ESP)

- Enter Fan Performance tables for 50PG06 (vertical supply) at 1,700 cfm and 0.64 in. wg. The rpm is 804 and the Bhp is 0.56. The factory-installed low range motor and drive are sufficient for this operation.

V. Determine net cooling capacities.

- Cooling capacities are gross capacities and do not include indoor (evaporator) fan motor (IFM) heat.
- Determine Input Watts
 $\text{Input Watts} = (746 \times \text{Bhp}) / (\text{motor eff})$
 $\text{Input Watts} = (746 \times 0.56) / (0.73)$
 $\text{Input Watts} = 572$
- Determine net cooling capacity and net sensible cooling capacity using the following formulas:
 $\text{IFM Heat} = \text{Input Watts} \times 3.412 \text{ Btuh/Watt}$
 $= 572 \times 3.412$
 $= 1952 \text{ Btuh}$
 $\text{Net Capacity} = \text{Gross Capacity} - \text{IFM Heat}$
 $= 60,300 - 1952$
 $= 58,348 \text{ Btuh}$
 $\text{Net Sensible Cap.} = \text{Gross Sensible Cap.} - \text{IFM Heat}$
 $= 41,800 - 1952$
 $= 39,848 \text{ Btuh}$
 The calculations show that a 50PGE06 unit with 20 kW heater is the correct selection for the given conditions.

VI. Select the unit that corresponds to power source available.

The electrical data table shows that the 230-3-60 unit is available.

PERFORMANCE DATA

Cooling Capacities

50PG03 (2 Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE																						
Temp (F)		Air Entering Evaporator — Cfm																				
Air Ent		600						800						1000								
Condenser		Air Entering Evaporator — Ewb (F)																				
(Edb)		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54
60	TC	33.7	31.7	29.8	27.4	25.2	23.5	23.0	35.6	33.6	31.6	29.2	26.9	25.4	25.4	36.9	34.9	32.9	30.4	28.0	27.3	27.3
	SHC	9.1	11.7	14.2	17.1	20.0	22.2	22.6	9.3	12.5	15.7	19.5	23.2	25.0	25.0	9.4	13.3	17.0	21.6	26.0	26.8	26.8
	kW	0.92	0.91	0.91	0.90	0.90	0.90	0.90	0.93	0.92	0.91	0.91	0.90	0.90	0.90	0.93	0.93	0.92	0.91	0.91	0.90	0.90
	BF	0.00	0.00	0.21	0.18	0.17	0.17	0.33	0.00	0.00	0.20	0.19	0.18	0.25	0.44	0.00	0.25	0.20	0.20	0.20	0.36	0.52
70	TC	32.7	30.8	28.9	26.6	24.5	22.8	22.5	34.6	32.6	30.6	28.3	26.0	24.8	24.8	35.8	33.7	31.8	29.4	27.1	26.5	26.5
	SHC	8.8	11.4	13.9	16.9	19.7	21.8	22.1	8.9	12.2	15.4	19.2	22.9	24.4	24.4	9.1	12.9	16.7	21.4	25.6	26.1	26.1
	kW	1.10	1.10	1.09	1.09	1.09	1.08	1.08	1.11	1.11	1.10	1.09	1.09	1.09	1.09	1.12	1.11	1.11	1.10	1.09	1.09	1.09
	BF	0.00	0.00	0.19	0.16	0.16	0.17	0.35	0.00	0.00	0.18	0.17	0.17	0.27	0.46	0.00	0.24	0.19	0.18	0.20	0.37	0.53
75	TC	32.2	30.3	28.4	26.2	24.0	22.4	22.2	34.0	32.0	30.1	27.8	25.6	24.4	24.4	35.1	33.1	31.2	28.8	26.6	26.1	26.1
	SHC	8.7	11.2	13.7	16.7	19.6	21.5	21.8	8.8	12.0	15.2	19.0	22.8	24.0	24.0	8.9	12.7	16.5	21.2	25.3	25.7	25.7
	kW	1.20	1.20	1.19	1.19	1.19	1.18	1.18	1.21	1.21	1.20	1.20	1.19	1.19	1.19	1.22	1.21	1.21	1.20	1.19	1.19	1.19
	BF	0.00	0.00	0.18	0.15	0.15	0.17	0.36	0.00	0.00	0.18	0.17	0.17	0.28	0.46	0.00	0.23	0.19	0.18	0.20	0.38	0.54
85	TC	31.1	29.3	27.4	25.2	23.1	21.7	21.5	32.6	30.7	28.9	26.7	24.5	23.7	23.7	33.8	31.8	29.9	27.6	25.5	25.3	25.3
	SHC	8.3	10.7	13.3	16.3	19.2	20.8	21.2	8.4	11.6	14.8	18.6	22.4	23.3	23.3	8.6	12.3	16.1	20.8	24.6	24.9	24.9
	kW	1.42	1.42	1.41	1.41	1.40	1.40	1.39	1.43	1.42	1.42	1.41	1.40	1.40	1.40	1.43	1.43	1.42	1.41	1.41	1.41	1.41
	BF	0.00	0.00	0.17	0.15	0.14	0.20	0.37	0.00	0.28	0.17	0.16	0.16	0.30	0.48	0.00	0.21	0.18	0.17	0.22	0.40	0.55
95	TC	30.0	28.1	26.2	24.1	22.1	20.8	20.8	31.3	29.4	27.6	24.9	23.4	22.8	22.8	32.3	30.4	28.6	26.4	24.5	24.3	24.3
	SHC	8.1	10.3	12.9	15.9	18.9	20.5	20.4	8.0	11.2	14.3	17.9	21.8	22.4	22.4	8.1	11.9	15.7	20.3	23.5	23.9	23.9
	kW	1.65	1.66	1.65	1.64	1.64	1.63	1.63	1.67	1.67	1.66	1.65	1.64	1.64	1.64	1.68	1.67	1.66	1.65	1.64	1.64	1.64
	BF	0.00	0.00	0.16	0.14	0.13	0.19	0.39	0.00	0.23	0.16	0.15	0.16	0.33	0.50	0.00	0.20	0.18	0.17	0.25	0.42	0.57
105	TC	28.5	26.8	25.0	23.0	21.1	20.0	20.0	29.8	28.0	26.3	24.2	22.2	21.9	21.9	30.7	28.9	27.2	25.0	23.3	23.3	23.3
	SHC	7.5	9.9	12.4	15.4	18.4	19.7	19.7	7.6	10.7	13.9	17.7	21.2	21.5	21.5	7.6	11.4	15.2	19.8	22.9	22.9	22.9
	kW	1.93	1.92	1.92	1.91	1.90	1.89	1.89	1.93	1.93	1.93	1.91	1.90	1.90	1.90	1.95	1.94	1.93	1.92	1.91	1.91	1.91
	BF	0.00	0.00	0.15	0.13	0.12	0.22	0.42	0.00	0.21	0.16	0.15	0.17	0.35	0.52	0.00	0.19	0.17	0.17	0.26	0.44	0.58
115	TC	27.0	25.3	23.7	21.8	19.9	19.1	19.1	28.2	26.5	24.8	22.9	21.0	20.9	20.9	29.0	27.2	25.6	23.6	22.2	22.2	22.2
	SHC	7.1	9.5	12.0	14.9	17.9	18.8	18.8	7.1	10.3	13.4	17.2	20.3	20.6	20.6	7.2	10.9	14.7	19.3	21.9	21.9	21.9
	kW	2.21	2.21	2.20	2.19	2.18	2.17	2.17	2.23	2.22	2.21	2.20	2.18	2.18	2.18	2.24	2.23	2.22	2.21	2.19	2.19	2.19
	BF	0.00	0.00	0.14	0.13	0.12	0.25	0.44	0.00	0.18	0.16	0.15	0.19	0.38	0.54	0.00	0.18	0.17	0.16	0.29	0.47	0.60
125	TC	25.3	23.7	22.2	20.5	18.7	18.2	18.2	26.3	24.7	23.2	21.4	19.8	19.8	19.8	27.1	25.4	23.9	22.0	21.0	21.0	21.0
	SHC	6.6	9.0	11.4	14.4	17.3	17.9	17.9	6.6	9.7	12.8	16.6	19.5	19.5	19.5	6.7	10.4	14.1	18.7	20.6	20.6	20.6
	kW	2.53	2.52	2.51	2.53	2.50	2.50	2.50	2.54	2.54	2.52	2.51	2.52	2.52	2.52	2.56	2.54	2.53	2.51	2.50	2.50	2.50
	BF	0.00	0.21	0.13	0.12	0.12	0.29	0.47	0.00	0.17	0.15	0.14	0.21	0.41	0.56	0.00	0.18	0.17	0.16	0.33	0.50	0.62

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80 °F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - BF) \times (edb - 80)$.

- Cooling capacities for 50PG03–16 units with Humidi–MiZer system in Cooling mode are the same as standard units.

Cooling Capacities

50PG03 (2 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE

Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		600							800						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	33.7	31.4	29.2	26.4	23.7	20.9	19.2	35.4	33.1	30.8	27.9	25.0	22.1	20.4
	SHC	8.6	10.8	12.9	15.6	18.4	20.9	19.2	10.2	12.3	14.4	17.0	19.6	22.1	20.4
	kW	1.19	1.19	1.21	1.22	1.23	1.24	1.25	1.19	1.19	1.21	1.22	1.23	1.24	1.3
85	TC	30.5	28.4	26.3	23.6	20.9	18.3	16.7	32.4	30.2	28.0	25.2	22.4	19.6	17.9
	SHC	4.5	7.2	9.9	13.3	16.7	20.1	22.1	6.3	8.9	11.6	14.8	18.1	21.4	23.4
	kW	1.41	1.41	1.42	1.43	1.44	1.45	1.45	1.41	1.41	1.42	1.43	1.44	1.45	1.5
95	TC	27.4	25.4	23.3	20.8	18.2	15.6	14.1	29.5	27.3	25.1	22.4	19.7	17.0	15.4
	SHC	0.3	3.6	6.9	11.0	15.0	15.6	14.1	2.4	5.5	8.7	12.7	16.6	17.0	15.4
	kW	1.62	1.62	1.63	1.64	1.64	1.65	1.65	1.62	1.62	1.63	1.64	1.64	1.65	1.7
105	TC	24.3	22.4	20.4	17.9	15.5	13.0	11.5	26.5	24.4	22.3	19.7	17.1	14.4	12.9
	SHC	-3.8	0.0	3.8	8.6	13.4	13.0	11.5	-1.6	2.2	5.9	10.5	15.1	14.4	12.9
	kW	1.84	1.84	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.85	1.85	1.85	1.85	1.9
115	TC	21.2	19.3	17.4	15.1	12.7	10.4	8.9	23.5	21.4	19.4	16.9	14.4	11.9	10.4
	SHC	-7.9	-3.6	0.8	6.3	11.7	10.4	8.9	-5.5	-1.2	3.0	8.3	13.6	11.9	10.4
	kW	2.06	2.06	2.06	2.06	2.06	2.06	2.05	2.06	2.06	2.06	2.06	2.06	2.06	2.1
125	TC	18.1	16.3	14.5	12.2	10.0	7.7	6.4	20.5	18.5	16.6	14.2	11.7	9.3	7.9
	SHC	-12.1	-7.2	-2.2	3.9	10.0	7.7	6.4	-9.4	-4.6	0.2	6.2	11.7	9.3	7.9
	kW	2.28	2.28	2.27	2.27	2.26	2.26	2.26	2.28	2.28	2.27	2.27	2.26	2.26	2.3

50PG03 (2 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)

Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM						
		1000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
75	TC	36.9	34.5	32.1	29.1	26.1	23.1	21.3
	SHC	11.5	13.5	15.5	18.1	20.6	23.1	21.3
	kW	1.19	1.19	1.21	1.22	1.23	1.24	1.25
85	TC	33.9	31.6	29.3	26.4	23.5	20.6	18.8
	SHC	7.7	10.3	12.8	16.0	19.2	22.4	24.3
	kW	1.41	1.41	1.42	1.43	1.44	1.45	1.45
95	TC	31.0	28.8	26.5	23.7	20.9	18.1	16.4
	SHC	4.0	7.0	10.1	14.0	17.9	18.1	16.4
	kW	1.62	1.62	1.63	1.64	1.64	1.65	1.65
105	TC	28.1	26.0	23.8	21.0	18.3	15.6	13.9
	SHC	0.2	3.8	7.4	12.0	16.5	15.6	13.9
	kW	1.84	1.84	1.85	1.85	1.85	1.85	1.85
115	TC	25.2	23.1	21.0	18.4	15.7	13.1	11.5
	SHC	-3.6	0.6	4.7	9.9	15.1	13.1	11.5
	kW	2.06	2.06	2.06	2.06	2.06	2.06	2.05
125	TC	22.3	20.3	18.2	15.7	13.1	10.6	9.1
	SHC	-7.3	-2.7	2.0	7.9	13.1	10.6	9.1
	kW	2.28	2.28	2.27	2.27	2.26	2.26	2.26

LEGEND

Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50PG

Cooling Capacities (cont)

50PG03 (2 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		700	800	900	700	800	900	700	800	900
80	TC	9.9	10.4	10.9	10.6	11.2	11.7	11.2	11.8	12.3
	SHC	2.0	2.6	3.1	0.8	1.3	1.8	-0.3	0.2	0.7
	kW	1.28	1.28	1.28	1.29	1.29	1.29	1.29	1.29	1.29
75	TC	10.6	11.2	11.6	11.3	11.9	12.4	12.0	12.5	13.0
	SHC	2.6	3.1	3.6	1.4	1.9	2.4	0.4	0.9	1.4
	kW	1.26	1.26	1.26	1.27	1.27	1.27	1.27	1.27	1.27
70	TC	11.4	11.9	12.3	12.1	12.6	13.1	12.7	13.2	13.7
	SHC	3.1	3.6	4.0	2.0	2.5	3.0	1.1	1.6	2.0
	kW	1.24	1.24	1.24	1.25	1.25	1.25	1.25	1.25	1.25
60	TC	12.9	13.4	13.7	13.6	14.0	14.4	14.2	14.6	15.0
	SHC	4.2	4.6	5.0	3.3	3.7	4.1	2.5	2.9	3.3
	kW	1.20	1.20	1.20	1.21	1.21	1.21	1.22	1.22	1.22
50	TC	14.5	14.8	15.1	15.1	15.5	15.8	15.7	16.1	16.4
	SHC	5.2	5.6	5.9	4.5	4.9	5.2	3.9	4.3	4.6
	kW	1.17	1.17	1.17	1.17	1.17	1.17	1.18	1.18	1.18
40	TC	16.0	16.3	16.5	16.6	16.9	17.2	17.2	17.5	17.7
	SHC	6.3	6.6	6.9	5.8	6.1	6.4	5.4	5.7	6.0
	kW	1.13	1.13	1.13	1.14	1.14	1.14	1.15	1.15	1.15

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG04 (3 Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE																						
Temp (F)	Air Ent	Air Entering Evaporator — Cfm																				
		900							1200							1500						
		Air Entering Evaporator — Ewb (F)																				
		Condenser (Edb)																				
		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54
60	TC	49.5	46.3	43.4	39.9	36.7	34.3	33.1	52.8	49.6	46.4	42.7	39.2	37.0	36.7	54.6	51.3	48.2	44.4	40.9	39.4	39.4
	SHC	13.7	17.4	20.7	25.2	29.4	32.5	33.1	14.1	18.3	23.2	28.8	34.1	35.0	36.7	14.2	19.6	25.3	32.0	38.2	39.4	39.4
	kW	1.66	1.64	1.62	1.60	1.59	1.57	1.57	1.67	1.66	1.64	1.62	1.60	1.59	1.58	1.69	1.67	1.65	1.63	1.61	1.60	1.60
	BF	0.00	0.17	0.21	0.18	0.18	0.19	0.36	0.00	0.33	0.20	0.19	0.20	0.32	0.47	0.00	0.25	0.20	0.20	0.22	0.38	0.54
70	TC	48.1	45.1	42.3	38.8	35.6	33.1	32.3	51.0	47.9	44.8	41.2	37.9	35.8	35.8	52.6	49.5	46.5	42.8	39.3	38.4	38.4
	SHC	13.2	17.0	20.4	24.8	29.0	31.8	32.3	13.5	17.8	22.7	28.3	33.7	35.8	35.8	13.6	19.1	24.7	31.4	37.4	38.4	38.4
	kW	1.88	1.87	1.86	1.84	1.83	1.81	1.81	1.90	1.88	1.87	1.85	1.83	1.83	1.83	1.91	1.90	1.88	1.86	1.84	1.84	1.84
	BF	0.00	0.18	0.19	0.17	0.17	0.20	0.38	0.00	0.29	0.19	0.18	0.19	0.29	0.48	0.00	0.24	0.20	0.20	0.23	0.39	0.55
75	TC	47.4	44.4	41.6	38.1	35.0	32.5	31.9	50.0	46.9	43.9	40.5	37.2	35.3	35.3	51.6	48.5	45.5	42.0	38.6	37.8	37.8
	SHC	13.0	16.7	20.1	24.5	28.8	31.3	31.9	13.2	17.6	22.4	28.0	32.1	35.3	35.3	13.3	18.8	24.4	31.2	36.9	37.8	37.8
	kW	2.01	2.00	1.99	1.97	1.95	1.94	1.94	2.03	2.01	2.00	1.98	1.97	1.95	1.95	2.04	2.02	2.01	1.99	1.98	1.97	1.97
	BF	0.00	0.18	0.18	0.17	0.17	0.20	0.39	0.00	0.27	0.19	0.18	0.19	0.31	0.49	0.00	0.24	0.20	0.20	0.23	0.40	0.56
85	TC	45.7	42.8	40.0	36.8	33.7	31.3	31.0	47.9	45.0	42.2	38.8	35.6	34.1	34.1	49.4	46.4	43.6	40.1	37.0	36.5	36.5
	SHC	12.5	16.1	19.6	24.0	28.2	30.4	31.0	12.6	17.1	21.8	27.4	32.9	34.1	34.1	12.7	18.2	23.7	30.5	35.9	36.5	36.5
	kW	2.30	2.28	2.27	2.25	2.23	2.22	2.21	2.31	2.30	2.28	2.26	2.24	2.23	2.23	2.32	2.31	2.29	2.27	2.25	2.24	2.24
	BF	0.00	0.19	0.17	0.16	0.16	0.21	0.41	0.00	0.24	0.18	0.18	0.18	0.33	0.51	0.00	0.23	0.20	0.20	0.24	0.42	0.58
95	TC	43.7	41.0	38.3	35.2	32.2	29.9	29.9	45.7	42.9	40.2	36.0	34.0	32.9	32.9	47.0	44.1	41.5	38.3	35.3	35.1	35.1
	SHC	11.8	15.2	19.0	23.4	27.5	29.9	29.9	11.9	16.5	21.1	26.1	32.1	32.9	32.9	12.0	17.5	23.0	29.7	34.9	35.1	35.1
	kW	2.60	2.58	2.57	2.54	2.53	2.51	2.51	2.61	2.60	2.58	2.53	2.54	2.53	2.53	2.63	2.61	2.59	2.57	2.54	2.54	2.54
	BF	0.00	0.29	0.16	0.15	0.16	0.22	0.43	0.00	0.22	0.18	0.18	0.18	0.35	0.52	0.00	0.22	0.20	0.20	0.26	0.45	0.59
105	TC	41.5	39.0	36.4	33.5	30.7	28.9	28.8	43.2	40.6	38.1	35.2	32.3	31.6	31.6	44.4	41.7	39.2	36.2	33.6	33.6	33.6
	SHC	11.1	14.5	18.3	22.7	26.9	28.9	28.8	11.2	15.8	20.4	26.0	30.9	31.6	31.6	11.3	16.8	22.3	28.9	33.6	33.6	33.6
	kW	2.92	2.91	2.89	2.87	2.85	2.85	2.85	2.94	2.93	2.91	2.89	2.87	2.86	2.86	2.95	2.94	2.91	2.89	2.87	2.87	2.87
	BF	0.00	0.29	0.15	0.15	0.16	0.25	0.45	0.00	0.21	0.18	0.17	0.20	0.38	0.55	0.00	0.22	0.20	0.20	0.28	0.47	0.61
115	TC	39.0	36.6	34.3	31.6	29.1	27.5	27.5	40.6	38.1	35.8	33.1	30.5	30.1	30.1	41.6	39.1	36.8	34.0	32.0	32.0	32.0
	SHC	10.4	13.9	17.6	22.0	26.1	27.5	27.5	10.5	15.0	19.6	25.2	29.7	30.1	30.1	10.5	16.0	21.5	28.1	32.0	32.0	32.0
	kW	3.29	3.27	3.26	3.24	3.22	3.20	3.20	3.30	3.29	3.27	3.25	3.23	3.22	3.22	3.31	3.30	3.28	3.25	3.24	3.24	3.24
	BF	0.00	0.22	0.15	0.15	0.15	0.28	0.47	0.00	0.20	0.17	0.17	0.22	0.41	0.57	0.00	0.21	0.20	0.20	0.32	0.50	0.63
125	TC	36.3	34.1	32.0	29.5	27.1	26.1	26.1	37.6	35.3	33.3	30.7	28.5	28.4	28.4	38.4	36.2	34.1	31.6	30.0	30.0	30.0
	SHC	9.5	13.1	16.8	21.1	25.3	26.1	26.1	9.6	14.2	18.7	24.2	28.1	28.4	28.4	9.6	15.1	20.5	27.2	30.0	30.0	30.0
	kW	3.67	3.66	3.64	3.62	3.60	3.59	3.59	3.68	3.67	3.65	3.63	3.61	3.61	3.61	3.69	3.68	3.66	3.64	3.62	3.62	3.62
	BF	0.00	0.19	0.15	0.15	0.15	0.32	0.50	0.00	0.19	0.17	0.17	0.25	0.45	0.59	0.00	0.21	0.20	0.20	0.36	0.53	0.65

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - BF) \times (edb - 80)$.

- Cooling capacities for 50PG03–16 units with Humidi–MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG04 (3 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		900							1200						
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	49.2	46.2	43.1	39.3	35.6	31.8	29.5	52.1	48.9	45.7	41.7	37.8	33.8	31.4
	SHC	15.4	18.6	21.8	25.8	29.8	31.8	29.5	17.9	21.0	24.1	27.9	31.7	33.8	31.4
	kW	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.97	1.97	1.97	1.97	1.97	1.98	1.98
85	TC	45.1	42.2	39.3	35.7	32.0	28.4	26.2	48.1	45.0	41.9	38.1	34.3	30.4	28.1
	SHC	9.9	13.9	17.9	22.8	27.8	32.8	35.8	12.7	16.6	20.4	25.3	30.1	34.9	37.8
	kW	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.27
95	TC	41.0	38.2	35.4	32.0	28.5	25.0	22.9	44.1	41.1	38.2	34.5	30.8	27.1	24.9
	SHC	4.3	9.1	13.9	19.9	25.9	25.0	22.9	7.5	12.2	16.8	22.6	28.4	27.1	24.9
	kW	2.58	2.58	2.57	2.57	2.56	2.56	2.56	2.58	2.58	2.57	2.57	2.56	2.56	2.56
105	TC	36.9	34.2	31.6	28.3	25.0	21.7	19.7	40.0	37.2	34.4	30.8	27.3	23.8	21.6
	SHC	-1.2	4.4	10.0	17.0	24.0	21.7	19.7	2.3	7.7	13.2	20.0	26.7	23.8	21.6
	kW	2.89	2.89	2.88	2.87	2.86	2.85	2.85	2.89	2.89	2.88	2.87	2.86	2.85	2.85
115	TC	32.8	30.3	27.7	24.6	21.4	18.3	16.4	36.0	33.3	30.6	27.2	23.8	20.4	18.4
	SHC	-6.7	-0.3	6.1	14.1	21.4	18.3	16.4	-2.9	3.3	9.5	17.3	23.8	20.4	18.4
	kW	3.20	3.20	3.18	3.17	3.15	3.14	3.13	3.20	3.20	3.18	3.17	3.15	3.14	3.13
125	TC	28.7	26.3	23.9	20.9	17.9	14.9	13.1	31.9	29.4	26.8	23.5	20.3	17.1	15.1
	SHC	-12.3	-5.1	2.1	11.1	17.9	14.9	13.1	-8.1	-1.1	5.9	14.7	20.3	17.1	15.1
	kW	3.51	3.51	3.48	3.47	3.45	3.43	3.42	3.51	3.51	3.48	3.47	3.45	3.43	3.42

50PG04 (3 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)								
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM						
		1500						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
75	TC	54.5	51.2	47.8	43.7	39.5	35.4	32.9
	SHC	19.9	22.9	25.8	29.6	33.3	35.4	32.9
	kW	1.97	1.97	1.97	1.97	1.97	1.98	1.98
85	TC	50.5	47.3	44.1	40.1	36.1	32.0	29.6
	SHC	15.0	18.7	22.4	27.1	31.8	36.5	39.3
	kW	2.27	2.27	2.27	2.27	2.27	2.27	2.27
95	TC	46.5	43.4	40.3	36.5	32.6	28.7	26.4
	SHC	10.0	14.5	19.0	24.7	30.4	28.7	26.4
	kW	2.58	2.58	2.57	2.57	2.56	2.56	2.56
105	TC	42.5	39.5	36.6	32.9	29.1	25.4	23.2
	SHC	5.1	10.4	15.6	22.3	28.9	25.4	23.2
	kW	2.89	2.89	2.88	2.87	2.86	2.85	2.85
115	TC	38.5	35.7	32.8	29.3	25.7	22.1	20.0
	SHC	0.1	6.2	12.2	19.8	25.7	22.1	20.0
	kW	3.20	3.20	3.18	3.17	3.15	3.14	3.13
125	TC	34.5	31.8	29.1	25.6	22.2	18.8	16.7
	SHC	-4.8	2.0	8.9	17.4	22.2	18.8	16.7
	kW	3.51	3.51	3.48	3.47	3.45	3.43	3.42

LEGEND

Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG04 (3 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		1050	1200	1350	1050	1200	1350	1050	1200	1350
80	TC	15.6	16.4	17.1	16.8	17.6	18.3	17.8	18.6	19.4
	SHC	5.9	6.8	7.5	4.3	5.1	5.9	2.9	3.7	4.5
	kW	0.11	0.11	0.11	1.40	1.40	1.40	2.52	2.52	2.52
75	TC	16.0	16.7	17.4	17.1	17.9	18.6	18.1	18.9	19.6
	SHC	6.7	7.5	8.2	5.2	6.0	6.7	3.9	4.7	5.4
	kW	0.25	0.25	0.25	1.46	1.46	1.46	2.51	2.51	2.51
70	TC	16.4	17.1	17.7	17.5	18.2	18.8	18.4	19.2	19.8
	SHC	7.5	8.2	8.9	6.1	6.9	7.5	4.9	5.7	6.3
	kW	0.39	0.39	0.39	1.52	1.52	1.52	2.51	2.51	2.51
60	TC	17.1	17.7	18.3	18.2	18.8	19.3	19.1	19.7	20.3
	SHC	9.1	9.7	10.3	7.9	8.6	9.2	7.0	7.6	8.2
	kW	0.67	0.67	0.67	1.65	1.65	1.65	2.50	2.50	2.50
50	TC	17.9	18.4	18.9	18.9	19.4	19.9	19.7	20.2	20.7
	SHC	10.6	11.2	11.7	9.7	10.3	10.8	9.0	9.6	10.1
	kW	0.95	0.95	0.95	1.78	1.78	1.78	2.50	2.50	2.50
40	TC	18.7	19.1	19.5	19.6	20.0	20.4	20.3	20.7	21.1
	SHC	12.2	12.7	13.1	11.6	12.1	12.5	11.0	11.5	12.0
	kW	1.24	1.24	1.24	1.91	1.91	1.91	2.49	2.49	2.49

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG05 (4 Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE

Temp (F)		Air Entering Evaporator — Cfm																				
		1200								1600								2000				
Air Ent		Air Entering Evaporator — Ewb (F)																				
		Condenser																				
(Edb)		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54
60	TC	66.6	62.4	58.4	53.6	49.1	45.7	44.5	70.5	66.2	61.9	57.0	52.3	49.2	49.2	72.9	68.3	64.1	59.1	54.3	52.7	52.7
	SHC	18.3	23.4	27.8	33.8	39.6	43.4	44.5	18.6	24.3	31.0	38.6	45.8	49.2	49.2	18.7	26.1	33.7	42.7	51.0	52.7	52.7
	kW	2.22	2.18	2.14	2.10	2.06	2.03	2.02	2.26	2.22	2.17	2.13	2.09	2.06	2.06	2.28	2.24	2.20	2.15	2.11	2.09	2.09
	BF	0.00	0.00	0.00	0.24	0.22	0.23	0.37	0.00	0.00	0.27	0.23	0.23	0.30	0.47	0.00	0.00	0.26	0.24	0.25	0.39	0.55
70	TC	64.4	60.3	56.4	51.8	47.5	44.1	43.3	67.9	63.6	59.5	54.8	50.4	47.8	47.8	70.0	65.6	61.6	56.8	52.1	51.1	51.1
	SHC	17.6	22.6	27.2	33.2	38.9	42.3	43.3	17.8	23.7	30.2	37.8	45.1	47.8	47.8	17.9	25.3	32.8	41.9	49.7	51.1	51.1
	kW	2.53	2.49	2.45	2.41	2.37	2.33	2.33	2.57	2.52	2.48	2.43	2.39	2.37	2.37	2.59	2.55	2.50	2.46	2.41	2.40	2.40
	BF	0.00	0.00	0.36	0.22	0.20	0.24	0.39	0.00	0.00	0.25	0.22	0.22	0.31	0.49	0.00	0.36	0.25	0.24	0.26	0.41	0.56
75	TC	63.2	59.1	55.4	50.8	46.6	43.4	42.7	66.4	62.3	58.3	53.7	49.4	47.0	47.0	68.4	64.1	60.2	55.6	51.1	50.3	50.3
	SHC	17.2	22.2	26.9	32.8	38.6	41.8	42.7	17.4	23.4	29.8	37.3	44.7	47.0	47.0	17.5	24.9	32.4	41.4	49.1	50.3	50.3
	kW	2.70	2.66	2.62	2.57	2.53	2.50	2.50	2.74	2.69	2.65	2.60	2.56	2.54	2.54	2.76	2.71	2.67	2.62	2.57	2.57	2.57
	BF	0.00	0.00	0.29	0.22	0.20	0.24	0.40	0.00	0.00	0.24	0.22	0.22	0.33	0.50	0.00	0.33	0.25	0.24	0.27	0.42	0.57
85	TC	60.6	56.7	53.1	48.8	44.7	41.7	41.3	63.5	59.5	55.7	51.4	47.2	45.4	45.4	65.3	61.2	57.5	53.1	49.0	48.5	48.5
	SHC	16.3	21.3	26.1	32.0	37.7	40.3	41.3	16.5	22.6	28.9	36.5	43.6	45.4	45.4	16.6	24.0	31.4	40.5	47.6	48.5	48.5
	kW	3.06	3.02	2.98	2.93	2.89	2.86	2.86	3.10	3.05	3.01	2.96	2.92	2.90	2.90	3.12	3.07	3.03	2.98	2.94	2.93	2.93
	BF	0.00	0.00	0.26	0.20	0.19	0.27	0.41	0.00	0.00	0.23	0.21	0.22	0.35	0.51	0.00	0.30	0.24	0.23	0.28	0.44	0.58
95	TC	57.9	54.2	50.7	46.6	42.7	39.9	39.9	60.4	56.5	53.1	48.9	44.9	43.7	43.7	62.0	58.1	54.6	50.5	46.6	46.5	46.6
	SHC	15.5	20.1	25.2	31.2	36.8	39.9	39.9	15.6	21.7	28.0	35.5	42.4	43.7	43.7	15.7	23.1	30.5	39.5	46.6	46.5	46.6
	kW	3.46	3.42	3.38	3.33	3.29	3.26	3.26	3.49	3.45	3.41	3.36	3.32	3.30	3.30	3.51	3.47	3.43	3.38	3.33	3.33	3.33
	BF	0.00	0.00	0.23	0.19	0.19	0.24	0.43	0.00	0.36	0.22	0.21	0.22	0.37	0.53	0.00	0.27	0.23	0.23	0.28	0.46	0.60
105	TC	54.8	51.4	48.0	44.2	41.9	38.3	38.3	57.0	53.4	50.2	46.3	42.6	41.9	41.9	58.3	54.8	51.6	47.7	44.5	44.5	44.5
	SHC	14.5	19.1	24.3	30.2	31.0	38.3	38.3	14.6	20.8	27.0	34.5	41.0	41.9	41.9	14.7	22.1	29.5	38.4	44.2	44.5	44.5
	kW	3.90	3.86	3.81	3.77	3.70	3.70	3.70	3.93	3.88	3.84	3.79	3.75	3.74	3.74	3.95	3.90	3.86	3.81	3.77	3.77	3.77
	BF	0.00	0.00	0.21	0.18	0.18	0.27	0.45	0.00	0.28	0.21	0.21	0.23	0.40	0.55	0.00	0.26	0.23	0.23	0.32	0.48	0.61
115	TC	51.3	48.2	45.2	41.6	38.3	36.6	36.6	53.2	50.0	47.1	43.5	40.2	39.9	39.9	54.3	51.2	48.3	44.7	42.2	42.2	42.2
	SHC	13.5	18.3	23.2	29.2	34.9	36.6	36.6	13.5	19.7	25.9	33.4	39.3	39.9	39.9	13.6	21.0	28.3	37.3	42.2	42.2	42.2
	kW	4.36	4.32	4.29	4.24	4.20	4.18	4.18	4.39	4.35	4.31	4.27	4.22	4.22	4.22	4.41	4.36	4.33	4.28	4.25	4.25	4.25
	BF	0.00	0.00	0.19	0.18	0.18	0.30	0.48	0.00	0.24	0.21	0.20	0.26	0.42	0.57	0.00	0.24	0.23	0.23	0.34	0.51	0.63
125	TC	47.4	44.5	41.9	38.7	35.7	34.6	34.6	48.9	46.0	43.4	40.3	37.5	37.5	37.5	49.9	47.0	44.5	41.3	39.5	39.5	39.5
	SHC	12.3	17.2	22.1	28.0	33.5	34.6	34.6	12.3	18.6	24.7	32.2	37.5	37.5	37.5	12.4	19.8	27.1	35.9	39.5	39.5	39.5
	kW	4.86	4.82	4.79	4.75	4.71	4.70	4.70	4.88	4.84	4.81	4.77	4.73	4.73	4.73	4.90	4.86	4.82	4.78	4.76	4.76	4.76
	BF	0.00	0.26	0.18	0.17	0.18	0.34	0.50	0.00	0.22	0.20	0.20	0.27	0.46	0.59	0.01	0.23	0.22	0.23	0.38	0.54	0.66

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - BF) \times (edb - 80)$.

- Cooling capacities for 50PG03–16 units with Humidi–MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG05 (4 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		1200							1600						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	64.0	59.5	55.0	49.3	43.7	38.1	34.7	68.0	63.3	58.5	52.6	46.7	40.7	37.2
	SHC	17.3	21.4	25.4	30.5	35.7	38.1	34.7	21.0	24.9	28.8	33.7	38.5	40.7	37.2
	kW	2.51	2.51	2.49	2.48	2.46	2.45	2.45	2.51	2.51	2.49	2.48	2.46	2.45	2.45
85	TC	60.0	55.5	51.0	45.4	39.8	34.2	30.9	64.1	59.4	54.6	48.7	42.8	36.9	33.3
	SHC	10.1	15.2	20.3	26.6	33.0	39.4	43.2	14.2	19.1	24.0	30.2	36.3	42.4	46.1
	kW	2.94	2.94	2.91	2.89	2.87	2.85	2.84	2.94	2.94	2.91	2.89	2.87	2.85	2.84
95	TC	56.0	51.5	47.1	41.5	35.9	30.4	27.0	60.2	55.4	50.7	44.8	38.9	33.0	29.5
	SHC	2.8	9.0	15.1	22.7	30.4	30.4	27.0	7.5	13.4	19.3	26.7	34.0	33.0	29.5
	kW	3.37	3.37	3.33	3.30	3.27	3.24	3.22	3.37	3.37	3.33	3.30	3.27	3.24	3.22
105	TC	52.0	47.5	43.1	37.6	32.1	26.5	23.2	56.2	51.5	46.8	40.9	35.0	29.2	25.6
	SHC	-4.4	2.8	9.9	18.8	27.8	26.5	23.2	0.8	7.7	14.6	23.2	31.8	29.2	25.6
	kW	3.81	3.81	3.75	3.71	3.67	3.63	3.61	3.81	3.81	3.75	3.71	3.67	3.63	3.61
115	TC	48.0	43.6	39.2	33.7	28.2	22.7	19.4	52.3	47.6	42.9	37.0	31.2	25.3	21.8
	SHC	-11.6	-3.4	4.7	14.9	25.1	22.7	19.4	-6.0	1.9	9.8	19.7	29.6	25.3	21.8
	kW	4.24	4.24	4.17	4.12	4.07	4.03	4.00	4.24	4.24	4.17	4.12	4.07	4.03	4.00
125	TC	44.0	39.6	35.2	29.7	24.3	18.8	15.5	48.3	43.7	39.0	33.1	27.3	21.5	18.0
	SHC	-18.8	-9.6	-0.4	11.0	22.5	18.8	15.5	-12.7	-3.8	5.1	16.2	27.3	21.5	18.0
	kW	4.68	4.68	4.59	4.53	4.48	4.42	4.39	4.68	4.68	4.59	4.53	4.48	4.42	4.39

50PG05 (4 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)														
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM												
		2000												
		Air Entering Evaporator — Ewb (F)												
		80	76	72	67	62	57	54						
75	TC	71.3	66.4	61.4	55.2	49.0	42.8	39.1						
	SHC	23.8	27.6	31.4	36.1	40.8	42.8	39.1						
	kW	2.51	2.51	2.49	2.48	2.46	2.45	2.45						
85	TC	67.4	62.5	57.6	51.4	45.2	39.0	35.3						
	SHC	17.5	22.2	27.0	32.9	38.8	44.8	48.3						
	kW	2.94	2.94	2.91	2.89	2.87	2.85	2.84						
95	TC	63.6	58.6	53.7	47.5	41.3	35.1	31.4						
	SHC	11.1	16.8	22.6	29.7	36.9	35.1	31.4						
	kW	3.37	3.37	3.33	3.30	3.27	3.24	3.22						
105	TC	59.7	54.7	49.8	43.6	37.5	31.3	27.6						
	SHC	4.8	11.5	18.2	26.5	34.9	31.3	27.6						
	kW	3.81	3.81	3.75	3.71	3.67	3.63	3.61						
115	TC	55.8	50.8	45.9	39.8	33.6	27.5	23.8						
	SHC	-1.6	6.1	13.8	23.4	33.0	27.5	23.8						
	kW	4.24	4.24	4.17	4.12	4.07	4.03	4.00						
125	TC	51.9	47.0	42.0	35.9	29.7	23.6	19.9						
	SHC	-8.0	0.7	9.4	20.2	29.7	23.6	19.9						
	kW	4.68	4.68	4.59	4.53	4.48	4.42	4.39						

LEGEND

Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG05 (4 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		1200	1600	2000	1200	1600	2000	1200	1600	2000
80	TC	16.7	19.1	21.0	18.7	21.2	23.1	20.5	23.0	25.0
	SHC	2.4	4.5	6.2	0.8	3.0	4.6	-0.5	1.6	3.3
	kW	2.47	2.47	2.47	2.46	2.46	2.46	2.45	2.45	2.45
75	TC	17.3	19.5	21.3	19.2	21.5	23.3	20.9	23.3	25.1
	SHC	2.6	4.5	6.1	1.1	3.1	4.7	-0.2	1.8	3.4
	kW	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48	2.48
70	TC	17.8	19.9	21.6	19.7	21.9	23.5	21.3	23.5	25.2
	SHC	2.7	4.6	6.0	1.3	3.2	4.7	0.1	2.0	3.5
	kW	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
60	TC	19.0	20.8	22.2	20.6	22.5	24.0	22.1	24.0	25.5
	SHC	3.0	4.6	5.9	1.8	3.4	4.7	0.8	2.4	3.7
	kW	2.54	2.54	2.54	2.55	2.55	2.55	2.56	2.56	2.56
50	TC	20.1	21.6	22.8	21.6	23.2	24.4	22.9	24.5	25.8
	SHC	3.3	4.6	5.7	2.3	3.7	4.8	1.5	2.9	4.0
	kW	2.58	2.58	2.58	2.60	2.60	2.60	2.61	2.61	2.61
40	TC	21.2	22.5	23.4	22.6	23.8	24.8	23.7	25.0	26.0
	SHC	3.6	4.6	5.5	2.8	3.9	4.8	2.2	3.3	4.2
	kW	2.62	2.62	2.62	2.65	2.65	2.65	2.67	2.67	2.67

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG06 (5 Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE

Temp (F)		Air Entering Evaporator — Cfm																													
		1500								1700								2000								2500					
Air Ent		Air Entering Evaporator — Ewb (F)																													
Condenser																															
(Edb)		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54		
60	TC	83.9	78.6	73.6	67.9	62.6	58.8	57.3	86.2	80.8	75.9	69.9	64.5	60.5	59.8	88.6	83.2	78.1	72.0	66.7	63.2	63.2	91.2	85.8	80.8	74.9	69.4	67.6	67.6		
	SHC	23.0	29.6	35.7	43.4	51.1	55.7	57.2	23.3	30.3	37.6	45.9	54.5	58.2	59.8	23.4	31.6	39.9	49.6	59.3	63.1	63.1	23.5	33.4	43.2	55.3	65.6	67.5	67.5		
	kW	2.54	2.52	2.50	2.49	2.46	2.45	2.45	2.54	2.52	2.50	2.49	2.47	2.46	2.46	2.55	2.53	2.51	2.47	2.47	2.47	2.47	2.56	2.54	2.52	2.50	2.48	2.47	2.48		
	BF	0.00	0.17	0.17	0.16	0.16	0.20	0.37	0.00	0.24	0.17	0.17	0.17	0.24	0.41	0.00	0.22	0.17	0.17	0.18	0.29	0.47	0.00	0.22	0.20	0.19	0.22	0.39	0.55		
70	TC	81.1	76.2	71.3	65.8	60.6	56.7	55.7	83.2	78.2	73.3	67.6	62.3	58.2	58.2	85.4	80.2	75.4	69.4	64.4	61.4	61.5	87.8	82.6	78.0	72.2	67.0	65.8	65.7		
	SHC	22.1	28.8	34.9	42.6	50.1	54.2	55.6	22.3	29.2	36.6	45.1	53.5	58.1	58.1	22.5	30.6	38.8	48.6	58.1	61.4	61.4	22.6	32.5	42.2	54.2	64.1	65.7	65.7		
	kW	2.93	2.91	2.90	2.88	2.86	2.84	2.84	2.94	2.93	2.90	2.88	2.86	2.85	2.85	2.96	2.93	2.91	2.86	2.87	2.86	2.86	2.97	2.95	2.92	2.90	2.88	2.87	2.87		
	BF	0.00	0.17	0.16	0.16	0.16	0.21	0.39	0.00	0.28	0.16	0.16	0.17	0.24	0.44	0.00	0.22	0.17	0.17	0.18	0.31	0.49	0.00	0.22	0.20	0.19	0.23	0.41	0.56		
75	TC	79.9	74.9	70.1	64.7	59.5	55.6	54.8	81.7	76.7	71.9	66.3	61.0	57.5	57.4	83.8	78.6	73.9	68.1	63.2	60.6	60.6	85.9	81.0	76.4	70.8	65.7	64.8	64.8		
	SHC	21.7	28.3	34.4	42.1	49.4	53.6	54.8	21.9	28.8	36.1	44.6	52.5	57.4	57.4	22.0	30.1	38.3	48.1	57.5	60.5	60.5	22.0	31.9	41.7	53.6	63.3	64.7	64.7		
	kW	3.15	3.13	3.11	3.09	3.06	3.05	3.04	3.16	3.14	3.11	3.09	3.07	3.05	3.05	3.17	3.15	3.12	3.07	3.07	3.06	3.06	3.19	3.16	3.14	3.11	3.08	3.08	3.08		
	BF	0.00	0.18	0.16	0.16	0.16	0.21	0.40	0.00	0.26	0.16	0.16	0.18	0.24	0.44	0.00	0.22	0.17	0.17	0.18	0.32	0.50	0.00	0.22	0.20	0.19	0.24	0.42	0.57		
85	TC	76.9	72.1	67.5	62.2	57.2	53.7	53.3	78.5	73.6	68.9	63.7	58.8	55.7	55.7	80.3	75.3	70.9	65.4	60.6	58.6	58.6	82.0	77.5	73.2	67.8	63.0	62.5	62.5		
	SHC	20.8	27.1	33.5	41.1	48.7	52.0	53.2	20.9	27.9	34.9	43.6	51.7	55.6	55.6	21.0	29.1	37.2	46.8	56.0	58.5	58.6	20.9	30.9	40.6	52.3	61.4	62.5	62.5		
	kW	3.60	3.58	3.56	3.53	3.50	3.47	3.48	3.62	3.59	3.56	3.53	3.50	3.49	3.49	3.63	3.60	3.57	3.53	3.51	3.50	3.50	3.64	3.61	3.59	3.55	3.52	3.52	3.52		
	BF	0.00	0.23	0.15	0.15	0.15	0.23	0.42	0.00	0.22	0.17	0.16	0.17	0.27	0.46	0.00	0.21	0.17	0.18	0.19	0.34	0.52	0.00	0.22	0.20	0.20	0.25	0.44	0.58		
95	TC	73.6	68.8	64.5	59.5	54.8	51.5	51.5	74.9	70.2	66.0	60.3	56.2	53.6	53.6	76.4	71.8	67.7	62.4	57.9	56.5	56.5	77.9	73.7	69.7	64.6	60.1	60.1	60.1		
	SHC	19.7	25.8	32.4	40.1	47.4	51.4	51.4	19.8	26.9	33.9	41.8	50.7	53.6	53.6	19.8	28.0	36.1	45.9	54.6	56.4	56.4	19.8	29.7	39.4	51.2	60.0	60.0	60.1		
	kW	4.10	4.06	4.03	4.00	3.97	3.96	3.96	4.11	4.07	4.04	4.02	3.99	3.97	3.97	4.12	4.09	4.06	3.98	4.00	3.99	3.98	4.13	4.10	4.07	4.03	4.00	4.00	4.00		
	BF	0.00	0.27	0.15	0.15	0.16	0.23	0.44	0.00	0.21	0.16	0.16	0.17	0.29	0.48	0.00	0.20	0.17	0.17	0.20	0.37	0.53	0.00	0.22	0.20	0.19	0.26	0.46	0.60		
105	TC	69.8	65.3	61.3	56.6	52.1	49.4	49.3	71.0	66.5	62.6	57.9	53.4	51.4	51.5	72.1	68.0	64.2	59.2	55.0	54.1	54.1	73.3	69.8	66.0	61.2	57.7	57.4	57.5		
	SHC	18.6	24.9	31.2	38.9	46.2	49.3	49.3	18.6	25.7	32.7	41.3	49.2	51.4	51.4	18.6	26.8	34.8	44.6	52.8	54.1	54.1	18.5	28.5	38.1	49.9	56.2	57.4	57.4		
	kW	4.64	4.61	4.58	4.54	4.50	4.48	4.48	4.65	4.62	4.59	4.55	4.51	4.50	4.50	4.66	4.63	4.60	4.52	4.52	4.51	4.52	4.68	4.65	4.62	4.57	4.55	4.54	4.54		
	BF	0.00	0.20	0.15	0.15	0.15	0.26	0.46	0.00	0.19	0.16	0.15	0.17	0.32	0.50	0.00	0.20	0.17	0.17	0.21	0.39	0.55	0.00	0.22	0.20	0.20	0.31	0.48	0.62		
115	TC	65.6	61.5	57.8	53.4	49.0	47.0	47.1	66.5	62.6	59.0	54.5	50.4	49.0	49.0	67.4	63.8	60.3	55.8	51.8	51.5	51.4	68.3	65.3	61.9	57.5	54.5	54.6	54.6		
	SHC	17.3	23.7	30.0	37.7	44.8	47.0	47.0	17.3	24.5	31.4	39.9	47.7	49.0	49.0	17.3	25.5	33.5	43.2	50.5	51.4	51.4	17.2	27.1	36.7	48.4	54.5	54.5	54.5		
	kW	5.21	5.17	5.14	5.10	5.06	5.03	5.03	5.22	5.18	5.15	5.11	5.07	5.06	5.06	5.23	5.20	5.16	5.07	5.08	5.08	5.08	5.24	5.22	5.18	5.13	5.11	5.11	5.11		
	BF	0.00	0.18	0.15	0.14	0.15	0.30	0.49	0.00	0.18	0.16	0.16	0.18	0.36	0.52	0.00	0.20	0.17	0.17	0.23	0.42	0.57	0.00	0.22	0.20	0.20	0.33	0.51	0.64		
125	TC	60.8	57.2	53.8	49.7	45.7	44.5	44.5	61.4	58.1	54.7	50.7	46.7	46.2	46.2	62.0	59.1	56.0	51.7	48.4	48.4	48.4	62.6	60.3	57.4	53.3	51.0	51.1	51.1		
	SHC	15.9	22.3	28.5	36.1	42.9	44.4	44.5	15.8	23.1	29.9	38.4	45.2	46.2	46.2	15.8	24.0	32.0	41.6	47.8	48.3	48.3	15.6	25.5	35.0	46.7	51.0	51.0	51.0		
	kW	5.81	5.77	5.74	5.70	5.65	5.63	5.63	5.82	5.79	5.75	5.71	5.67	5.66	5.65	5.83	5.80	5.76	5.66	5.68	5.68	5.68	5.84	5.81	5.78	5.73	5.71	5.71	5.71		
	BF	0.00	0.17	0.15	0.14	0.17	0.34	0.51	0.00	0.18	0.16	0.16	0.20	0.40	0.55	0.00	0.20	0.18	0.17	0.27	0.46	0.60	0.00	0.23	0.21	0.20	0.38	0.54	0.66		

50PG

LEGEND

BF — Bypass Factor
Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - BF) \times (edb - 80)$.

- Cooling capacities for 50PG03–16 units with Humidi-MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG06 (5 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		1500							2000						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	81.2	74.8	68.5	60.5	52.5	44.6	39.8	97.6	88.4	79.3	67.8	56.4	45.0	38.1
	SHC	21.4	26.7	32.0	38.5	45.1	44.6	39.8	25.7	30.8	35.9	42.2	48.5	45.0	38.1
	kW	3.14	3.14	3.11	3.09	3.07	3.05	3.04	3.14	3.14	3.11	3.09	3.07	3.05	3.04
85	TC	76.0	70.5	65.0	58.1	51.2	44.3	40.1	87.9	79.9	72.0	62.1	52.1	42.2	36.3
	SHC	11.4	18.0	24.6	32.9	41.1	49.4	54.3	16.2	22.6	29.0	37.0	45.0	52.9	57.7
	kW	3.63	3.63	3.58	3.55	3.52	3.50	3.48	3.63	3.63	3.58	3.55	3.52	3.50	3.48
95	TC	70.9	66.2	61.5	55.7	49.8	44.0	40.4	78.2	71.5	64.7	56.3	47.9	39.4	34.4
	SHC	1.3	9.3	17.2	27.2	37.1	44.0	40.4	6.7	14.4	22.1	31.7	41.4	39.4	34.4
	kW	4.11	4.11	4.05	4.01	3.98	3.94	3.92	4.11	4.11	4.05	4.01	3.98	3.94	3.92
105	TC	65.7	61.9	58.0	53.2	48.4	43.6	40.8	68.5	63.0	57.5	50.5	43.6	36.7	32.5
	SHC	-8.8	0.5	9.8	21.5	33.1	43.6	40.8	-2.9	6.2	15.2	26.5	37.8	36.7	32.5
	kW	4.59	4.59	4.52	4.48	4.43	4.39	4.36	4.59	4.59	4.52	4.48	4.43	4.39	4.36
115	TC	60.6	57.6	54.6	50.8	47.1	43.3	41.1	58.8	54.5	50.2	44.8	39.3	33.9	30.7
	SHC	-18.9	-8.2	2.4	15.8	29.1	42.4	41.1	-12.4	-2.1	8.3	21.3	34.2	33.9	30.7
	kW	5.07	5.07	4.99	4.94	4.89	4.84	4.80	5.07	5.07	4.99	4.94	4.89	4.84	4.80
125	TC	55.4	53.3	51.1	48.4	45.7	43.0	41.4	49.2	46.0	42.9	39.0	35.1	31.2	28.8
	SHC	-28.9	-16.9	-4.9	10.1	25.1	40.1	41.4	-21.9	-10.3	1.4	16.0	30.6	31.2	28.8
	kW	5.55	5.55	5.46	5.40	5.34	5.28	5.25	5.55	5.55	5.46	5.40	5.34	5.28	5.25

50PG06 (5 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)														
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM												
		2500												
		Air Entering Evaporator — Ewb (F)												
		80	76	72	67	62	57	54						
75	TC	115.1	103.0	90.9	75.7	60.6	45.4	36.3						
	SHC	29.1	34.0	38.9	45.0	51.2	45.4	36.3						
	kW	3.14	3.14	3.11	3.09	3.07	3.05	3.04						
85	TC	100.6	90.1	79.5	66.4	53.2	40.0	32.1						
	SHC	20.0	26.2	32.4	40.2	47.9	55.7	60.4						
	kW	3.63	3.63	3.58	3.55	3.52	3.50	3.48						
95	TC	86.1	77.1	68.2	57.0	45.8	34.6	27.9						
	SHC	10.8	18.4	25.9	35.3	44.7	34.6	27.9						
	kW	4.11	4.11	4.05	4.01	3.98	3.94	3.92						
105	TC	71.5	64.2	56.8	47.6	38.4	29.2	23.7						
	SHC	1.7	10.5	19.4	30.4	38.4	29.2	23.7						
	kW	4.59	4.59	4.52	4.48	4.43	4.39	4.36						
115	TC	57.0	51.2	45.5	38.3	31.1	23.8	19.5						
	SHC	-7.4	2.7	12.9	25.5	31.1	23.8	19.5						
	kW	5.07	5.07	4.99	4.94	4.89	4.84	4.80						
125	TC	42.5	38.3	34.1	28.9	23.7	18.5	15.3						
	SHC	-16.5	-5.1	6.4	20.7	23.7	18.5	15.3						
	kW	5.55	5.55	5.46	5.40	5.34	5.28	5.25						

LEGEND

Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG06 (5 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		1750	2000	2250	1750	2000	2250	1750	2000	2250
80	TC	24.2	25.7	27.0	26.0	27.5	28.8	27.6	29.1	30.5
	SHC	5.6	6.4	7.2	3.4	4.2	5.0	1.5	2.3	3.1
	kW	3.08	3.08	3.08	3.07	3.07	3.07	3.07	3.07	3.07
75	TC	24.5	25.9	27.1	26.3	27.7	28.9	27.8	29.2	30.5
	SHC	5.3	6.1	6.8	3.3	4.1	4.8	1.5	2.3	3.0
	kW	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10
70	TC	24.8	26.1	27.2	26.5	27.8	29.0	28.0	29.3	30.5
	SHC	5.1	5.8	6.5	3.2	3.9	4.6	1.5	2.2	2.9
	kW	3.13	3.13	3.13	3.13	3.13	3.13	3.14	3.14	3.14
60	TC	25.4	26.5	27.5	27.0	28.1	29.1	28.3	29.5	30.5
	SHC	4.5	5.2	5.8	2.9	3.6	4.1	1.5	2.2	2.7
	kW	3.18	3.18	3.18	3.19	3.19	3.19	3.21	3.21	3.21
50	TC	26.0	27.0	27.8	27.4	28.4	29.3	28.6	29.6	30.5
	SHC	4.0	4.6	5.1	2.7	3.2	3.7	1.5	2.1	2.6
	kW	3.23	3.23	3.23	3.26	3.26	3.26	3.28	3.28	3.28
40	TC	26.6	27.4	28.1	27.9	28.7	29.4	29.0	29.8	30.5
	SHC	3.5	4.0	4.4	2.4	2.9	3.3	1.5	2.0	2.4
	kW	3.28	3.28	3.28	3.32	3.32	3.32	3.35	3.35	3.35

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50PG

Cooling Capacities (cont)

50PG07 (6 Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE

Temp (F)		Air Entering Evaporator — Cfm																				
		1800								2400								3000				
Air Ent		Air Entering Evaporator — Ewb (F)																				
		Condenser																				
(Edb)		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54
60	TC	96.6	90.8	85.2	78.6	72.3	67.8	67.1	101.4	95.7	90.2	83.4	77.1	74.1	74.1	104.6	98.7	93.1	86.3	80.1	79.2	79.2
	SHC	26.2	33.5	41.8	51.4	60.7	65.7	66.6	26.4	36.3	46.8	59.5	71.9	73.5	73.4	26.6	38.8	51.3	66.8	77.8	78.6	78.6
	kW	2.95	2.90	2.86	2.82	2.79	2.76	2.76	2.98	2.94	2.90	2.85	2.81	2.80	2.80	3.01	2.97	2.92	2.87	2.83	2.82	2.82
	BF	0.00	0.00	0.15	0.13	0.12	0.18	0.36	0.00	0.29	0.13	0.11	0.11	0.29	0.47	0.00	0.18	0.13	0.12	0.20	0.39	0.54
70	TC	93.4	88.3	82.7	76.1	70.0	65.5	65.5	97.8	92.3	86.9	80.5	74.4	72.0	72.0	100.9	95.1	89.7	83.2	77.3	77.3	77.3
	SHC	25.1	32.3	40.9	50.5	60.0	65.0	65.0	25.3	35.3	45.7	58.6	70.6	71.4	71.4	25.5	37.7	50.1	65.8	76.7	76.7	76.6
	kW	3.36	3.33	3.28	3.23	3.19	3.17	3.17	3.40	3.35	3.31	3.27	3.22	3.21	3.21	3.42	3.38	3.33	3.28	3.24	3.24	3.24
	BF	0.00	0.00	0.14	0.11	0.10	0.17	0.38	0.00	0.22	0.13	0.10	0.11	0.31	0.48	0.00	0.17	0.13	0.11	0.20	0.40	0.55
75	TC	91.6	86.6	81.1	75.0	68.8	65.4	64.6	95.8	90.5	85.2	79.0	73.0	70.9	70.9	98.7	93.2	87.9	81.5	76.0	76.1	76.1
	SHC	24.6	31.7	40.3	50.4	59.6	64.9	64.1	24.7	34.8	45.2	58.0	69.9	70.3	70.3	24.9	37.2	49.6	65.2	75.4	75.4	75.4
	kW	3.59	3.55	3.51	3.46	3.42	3.38	3.39	3.62	3.58	3.54	3.49	3.44	3.43	3.43	3.65	3.60	3.56	3.51	3.47	3.47	3.47
	BF	0.00	0.00	0.13	0.09	0.10	0.17	0.38	0.00	0.20	0.12	0.10	0.12	0.32	0.49	0.00	0.16	0.12	0.11	0.21	0.41	0.56
85	TC	87.9	82.9	78.0	71.9	66.4	62.7	62.7	91.8	86.7	81.7	75.7	70.0	68.8	68.8	94.5	89.1	84.0	77.9	73.4	73.4	73.4
	SHC	23.4	31.0	39.3	49.0	58.8	62.2	62.1	23.6	33.6	44.0	56.8	68.0	68.2	68.2	23.7	35.9	48.4	63.9	72.8	72.8	72.8
	kW	4.07	4.03	3.99	3.93	3.89	3.87	3.87	4.11	4.06	4.02	3.97	3.92	3.91	3.91	4.14	4.08	4.04	3.98	3.95	3.95	3.95
	BF	0.00	0.00	0.12	0.10	0.08	0.20	0.40	0.00	0.17	0.11	0.10	0.13	0.34	0.50	0.00	0.15	0.12	0.11	0.23	0.43	0.57
95	TC	83.9	79.2	74.6	68.8	63.4	60.6	60.6	87.4	82.5	77.8	72.1	66.7	66.3	66.3	89.8	84.7	79.9	74.1	70.5	70.5	70.5
	SHC	22.2	29.8	38.1	47.9	57.4	60.1	60.1	22.3	32.4	42.7	55.5	65.2	65.7	65.7	22.5	34.7	47.2	62.4	69.9	69.9	69.9
	kW	4.61	4.56	4.52	4.46	4.41	4.39	4.39	4.64	4.59	4.54	4.49	4.44	4.44	4.44	4.67	4.61	4.56	4.51	4.48	4.48	4.48
	BF	0.00	0.00	0.11	0.09	0.09	0.23	0.42	0.00	0.15	0.10	0.09	0.16	0.36	0.52	0.00	0.14	0.11	0.11	0.26	0.45	0.59
105	TC	79.5	75.1	70.7	65.4	60.1	58.2	58.2	82.7	78.0	73.6	68.2	63.6	63.4	63.4	84.8	80.0	75.4	69.9	67.3	67.3	67.3
	SHC	20.8	28.6	36.7	46.5	55.9	57.7	57.7	21.0	31.1	41.3	54.0	62.1	62.9	62.9	21.1	33.3	45.7	60.9	66.7	66.7	66.7
	kW	5.18	5.13	5.09	5.03	4.98	4.96	4.96	5.22	5.16	5.12	5.06	5.01	5.01	5.01	5.24	5.18	5.13	5.08	5.05	5.05	5.05
	BF	0.00	0.23	0.10	0.08	0.08	0.25	0.44	0.00	0.13	0.10	0.09	0.20	0.38	0.54	0.00	0.12	0.10	0.11	0.30	0.47	0.61
115	TC	74.6	70.5	66.4	61.4	56.5	55.3	55.3	77.4	73.0	68.9	63.9	60.2	60.2	60.2	79.2	74.7	70.4	65.4	63.6	63.6	63.6
	SHC	19.4	27.1	35.2	44.9	54.0	54.9	54.8	19.5	29.6	39.8	52.3	59.7	59.7	59.7	19.6	31.8	44.2	59.0	63.1	63.1	63.1
	kW	5.79	5.74	5.70	5.64	5.58	5.57	5.57	5.82	5.77	5.73	5.67	5.62	5.62	5.62	5.84	5.79	5.74	5.69	5.66	5.66	5.66
	BF	0.00	0.16	0.09	0.08	0.09	0.29	0.47	0.00	0.11	0.09	0.09	0.21	0.41	0.56	0.00	0.11	0.10	0.11	0.33	0.50	0.63
125	TC	69.0	65.2	61.4	56.9	52.4	52.3	52.3	71.2	67.3	63.4	58.9	56.4	56.4	56.4	72.7	68.7	64.8	60.2	59.3	59.3	59.3
	SHC	17.7	25.5	33.4	43.1	51.6	51.8	51.8	17.8	27.9	38.0	50.4	56.0	55.9	55.9	17.8	30.1	42.4	56.9	58.8	58.8	58.8
	kW	6.43	6.38	6.34	6.28	6.22	6.22	6.22	6.45	6.41	6.36	6.31	6.27	6.27	6.27	6.46	6.42	6.38	6.32	6.31	6.31	6.31
	BF	0.00	0.12	0.08	0.08	0.11	0.33	0.50	0.00	0.10	0.09	0.09	0.26	0.45	0.59	0.00	0.11	0.10	0.12	0.38	0.53	0.65

LEGEND

BF — Bypass Factor
Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btu/h) Gross
TC — Total Capacity (1000 Btu/h) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btu/h)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btu/h)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - \text{BF}) \times (\text{edb} - 80)$.

- Cooling capacities for 50PG03–16 units with Humidi-MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG07 (6 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		1800							2400						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	94.5	88.8	83.2	76.0	68.9	61.8	57.6	102.2	96.0	89.9	82.3	74.6	67.0	62.4
	SHC	26.2	32.7	39.3	47.5	55.7	61.8	57.6	32.2	38.5	44.8	52.7	60.6	67.0	62.4
	kW	3.69	3.69	3.63	3.59	3.55	3.51	3.49	3.69	3.69	3.63	3.59	3.55	3.51	3.49
85	TC	87.0	81.5	76.1	69.3	62.5	55.7	51.6	94.4	88.5	82.6	75.3	68.0	60.6	56.2
	SHC	14.0	22.2	30.4	40.7	51.0	61.2	67.4	20.8	28.7	36.6	46.5	56.5	66.4	72.3
	kW	4.26	4.26	4.18	4.13	4.08	4.03	4.00	4.26	4.26	4.18	4.13	4.08	4.03	4.00
95	TC	79.4	74.2	69.0	62.5	56.1	49.6	45.7	86.6	81.0	75.3	68.3	61.3	54.3	50.1
	SHC	1.9	11.8	21.6	34.0	46.3	49.6	45.7	9.4	18.9	28.5	40.4	52.4	54.3	50.1
	kW	4.82	4.82	4.73	4.67	4.60	4.54	4.51	4.82	4.82	4.73	4.67	4.60	4.54	4.51
105	TC	71.8	66.9	62.0	55.8	49.6	43.4	39.7	78.8	73.4	68.1	61.4	54.7	48.0	43.9
	SHC	-10.2	1.3	12.8	27.2	41.6	43.4	39.7	-2.0	9.1	20.3	34.3	48.3	48.0	43.9
	kW	5.39	5.39	5.27	5.20	5.13	5.06	5.02	5.39	5.39	5.27	5.20	5.13	5.06	5.02
115	TC	64.3	59.6	54.9	49.0	43.2	37.3	33.8	71.0	65.9	60.8	54.4	48.0	41.6	37.8
	SHC	-22.4	-9.2	4.0	20.4	36.9	37.3	33.8	-13.5	-0.7	12.1	28.2	44.2	41.6	37.8
	kW	5.95	5.95	5.82	5.74	5.66	5.57	5.53	5.95	5.95	5.82	5.74	5.66	5.57	5.53
125	TC	56.7	52.3	47.8	42.3	36.7	31.2	27.8	63.2	58.3	53.5	47.4	41.4	35.3	31.7
	SHC	-34.5	-19.7	-4.9	13.7	32.2	31.2	27.8	-24.9	-10.4	4.0	22.0	40.1	35.3	31.7
	kW	6.52	6.52	6.37	6.28	6.18	6.09	6.03	6.52	6.52	6.37	6.28	6.18	6.09	6.03

50PG07 (6 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		3000													
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54							
75	TC	108.4	102.0	95.5	87.4	79.3	71.2	66.3							
	SHC	36.9	43.0	49.1	56.7	64.4	71.2	66.3							
	kW	3.69	3.69	3.63	3.59	3.55	3.51	3.49							
85	TC	100.5	94.2	88.0	80.2	72.5	64.7	60.0							
	SHC	26.1	33.8	41.5	51.1	60.7	70.4	76.2							
	kW	4.26	4.26	4.18	4.13	4.08	4.03	4.00							
95	TC	92.5	86.5	80.5	73.1	65.6	58.2	53.7							
	SHC	15.2	24.5	33.8	45.5	57.1	58.2	53.7							
	kW	4.82	4.82	4.73	4.67	4.60	4.54	4.51							
105	TC	84.5	78.8	73.1	65.9	58.8	51.7	47.4							
	SHC	4.4	15.3	26.2	39.8	53.5	51.7	47.4							
	kW	5.39	5.39	5.27	5.20	5.13	5.06	5.02							
115	TC	76.5	71.1	65.6	58.8	52.0	45.2	41.1							
	SHC	-6.5	6.0	18.5	34.2	49.8	45.2	41.1							
	kW	5.95	5.95	5.82	5.74	5.66	5.57	5.53							
125	TC	68.5	63.4	58.2	51.7	45.2	38.7	34.8							
	SHC	-17.3	-3.2	10.9	28.5	45.2	38.7	34.8							
	kW	6.52	6.52	6.37	6.28	6.18	6.09	6.03							

LEGEND

Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG07 (6 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		2100	2400	2700	2100	2400	2700	1750	2000	2700
80	TC	30.0	32.4	34.6	32.1	34.6	36.8	30.6	33.1	38.8
	SHC	11.4	11.4	11.4	8.5	8.5	8.5	6.0	6.0	6.0
	kW	3.34	3.34	3.34	3.35	3.35	3.35	3.35	3.35	3.35
75	TC	30.3	32.6	34.6	32.4	34.7	36.8	30.9	33.3	38.7
	SHC	11.0	11.0	11.0	8.3	8.3	8.3	5.9	5.9	5.9
	kW	3.35	3.35	3.35	3.36	3.36	3.36	3.37	3.37	3.37
70	TC	30.6	32.8	34.7	32.6	34.8	36.8	31.2	33.5	38.5
	SHC	10.6	10.6	10.6	8.0	8.0	8.0	5.8	5.8	5.8
	kW	3.37	3.37	3.37	3.38	3.38	3.38	3.39	3.39	3.39
60	TC	31.2	33.1	34.8	33.0	35.0	36.7	31.9	33.9	38.3
	SHC	9.7	9.7	9.7	7.5	7.5	7.5	5.7	5.7	5.7
	kW	3.39	3.39	3.39	3.41	3.41	3.41	3.43	3.43	3.43
50	TC	31.9	33.5	34.9	33.5	35.1	36.6	32.6	34.3	38.1
	SHC	8.8	8.8	8.8	7.0	7.0	7.0	5.5	5.5	5.5
	kW	3.41	3.41	3.41	3.44	3.44	3.44	3.47	3.47	3.47
40	TC	32.5	33.8	35.0	33.9	35.3	36.5	33.3	34.7	37.9
	SHC	8.0	8.0	8.0	6.5	6.5	6.5	5.3	5.3	5.3
	kW	3.43	3.43	3.43	3.47	3.47	3.47	3.51	3.51	3.51

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG08 (7¹/₂ Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE

Temp (F)		Air Entering Evaporator — Cfm																				
		2250								3000								3750				
Air Ent		Air Entering Evaporator — Ewb (F)																				
		Condenser																				
(Edb)		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54
60	TC	125.6	116.3	106.2	97.2	89.2	81.7	78.5	132.0	122.8	113.8	103.9	94.9	88.7	88.4	137.0	128.0	118.7	108.2	98.9	97.2	95.7
	SHC	38.0	46.5	53.9	64.8	76.9	80.1	78.5	97.6	49.8	60.6	74.3	88.4	88.7	88.4	39.4	53.7	66.9	83.3	96.6	97.2	95.7
	kW	3.35	3.45	3.51	3.49	3.44	3.48	3.50	3.43	3.49	3.50	3.49	3.47	3.49	3.49	3.43	3.43	3.50	3.49	3.48	3.43	3.46
	BF	0.00	0.00	0.14	0.22	0.15	0.25	0.38	0.00	0.00	0.25	0.21	0.19	0.35	0.48	0.01	0.24	0.22	0.21	0.25	0.39	0.55
70	TC	120.8	112.1	103.6	94.2	86.6	79.1	77.5	127.6	119.6	110.4	100.8	91.4	87.2	86.6	131.9	123.2	114.6	105.1	96.0	93.5	93.4
	SHC	36.4	44.5	53.3	63.7	76.3	77.9	77.5	37.4	49.1	59.7	74.4	86.3	87.2	86.6	37.9	51.8	65.8	84.9	96.0	93.5	93.4
	kW	4.01	4.05	4.05	4.04	4.01	4.03	4.03	4.06	4.00	4.05	4.03	4.04	4.03	4.04	4.04	4.05	4.03	4.00	4.01	4.05	4.05
	BF	0.00	0.00	0.10	0.21	0.13	0.27	0.39	0.00	0.16	0.23	0.17	0.20	0.31	0.49	0.01	0.27	0.20	0.15	0.21	0.41	0.56
75	TC	119.1	110.4	101.9	92.7	84.5	78.8	77.3	125.4	117.5	109.2	99.4	89.7	85.0	86.2	129.6	120.9	112.7	102.7	93.9	92.0	92.2
	SHC	35.9	44.0	52.7	63.2	74.5	78.8	77.3	36.7	48.5	60.5	75.0	85.7	85.0	86.2	37.2	51.1	65.3	82.6	92.2	92.0	92.2
	kW	4.31	4.35	4.35	4.34	4.33	4.32	4.33	4.36	4.31	4.31	4.31	4.34	4.34	4.34	4.36	4.35	4.35	4.34	4.34	4.30	4.35
	BF	0.00	0.00	0.09	0.20	0.16	0.18	0.39	0.00	0.28	0.15	0.14	0.20	0.38	0.49	0.01	0.26	0.20	0.18	0.29	0.42	0.56
85	TC	114.3	106.7	98.4	89.3	81.1	75.7	74.7	120.7	112.5	104.8	95.4	86.1	83.9	83.1	124.1	115.8	108.0	98.4	91.3	89.5	90.5
	SHC	34.3	42.8	51.5	62.1	72.5	75.7	74.7	35.2	47.0	59.1	73.7	83.6	83.9	83.1	35.6	49.6	63.8	81.1	90.0	89.5	90.5
	kW	5.01	5.01	5.00	4.99	4.98	4.97	4.97	4.96	4.97	4.98	4.97	4.99	4.98	4.98	5.01	5.00	5.01	4.99	4.99	4.99	4.97
	BF	0.00	0.00	0.24	0.18	0.17	0.24	0.41	0.00	0.22	0.14	0.13	0.20	0.34	0.51	0.01	0.23	0.19	0.18	0.30	0.44	0.57
95	TC	109.5	102.5	94.7	85.6	77.7	72.6	73.1	114.9	106.8	99.8	90.7	82.5	81.7	80.1	118.4	110.5	103.0	93.8	86.5	86.3	87.3
	SHC	32.8	41.8	50.6	60.8	71.7	72.6	73.1	33.5	44.8	57.2	70.8	82.2	81.7	80.1	33.9	48.5	63.1	81.0	86.5	86.3	87.3
	kW	5.72	5.71	5.71	5.71	5.70	5.69	5.68	5.71	5.72	5.71	5.71	5.70	5.69	5.70	5.70	5.70	5.71	5.70	5.71	5.71	5.70
	BF	0.00	0.00	0.18	0.16	0.14	0.26	0.42	0.01	0.26	0.15	0.16	0.20	0.35	0.53	0.01	0.18	0.15	0.14	0.32	0.46	0.59
105	TC	104.4	97.5	90.3	82.0	74.1	70.7	71.1	108.9	101.8	94.5	86.1	79.0	77.9	77.6	112.2	104.5	96.9	88.5	83.5	83.1	83.0
	SHC	31.2	40.3	49.5	60.7	70.3	70.7	71.1	31.7	43.6	55.6	70.3	79.0	77.9	77.6	32.1	46.2	60.2	77.9	83.5	83.1	83.0
	kW	6.49	6.51	6.50	6.49	6.47	6.46	6.47	6.49	6.50	6.49	6.50	6.48	6.48	6.49	6.51	6.52	6.51	6.51	6.50	6.49	6.49
	BF	0.00	0.00	0.12	0.11	0.14	0.25	0.44	0.01	0.17	0.13	0.12	0.18	0.38	0.54	0.01	0.20	0.18	0.16	0.34	0.47	0.61
115	TC	98.4	91.8	84.7	77.1	69.8	67.6	67.9	102.5	95.5	88.8	80.8	74.9	74.6	73.6	105.2	98.1	91.0	83.0	78.9	79.3	78.4
	SHC	29.3	38.2	46.9	58.2	68.4	67.6	67.9	29.8	42.0	53.6	68.2	74.9	74.6	73.6	30.1	44.5	58.4	75.5	78.9	79.3	78.4
	kW	7.35	7.38	7.38	7.36	7.34	7.33	7.34	7.35	7.38	7.36	7.36	7.34	7.35	7.35	7.38	7.38	7.38	7.37	7.37	7.36	7.37
	BF	0.00	0.10	0.16	0.13	0.13	0.28	0.46	0.01	0.12	0.13	0.12	0.25	0.41	0.56	0.01	0.17	0.16	0.17	0.33	0.50	0.63
125	TC	91.6	85.4	79.1	71.9	65.1	63.9	64.0	95.6	88.9	82.5	75.0	69.6	69.5	69.2	97.8	91.1	84.5	76.8	74.4	74.5	73.7
	SHC	27.2	36.2	45.1	55.9	65.8	63.9	64.0	27.7	39.5	50.8	65.2	69.6	69.5	69.2	28.0	42.2	56.3	73.2	74.4	74.5	73.7
	kW	8.30	8.32	8.31	8.30	8.28	8.27	8.26	8.32	8.32	8.32	8.30	8.29	8.28	8.29	8.32	8.32	8.31	8.31	8.30	8.29	8.29
	BF	0.00	0.19	0.14	0.13	0.14	0.32	0.49	0.01	0.16	0.15	0.14	0.26	0.45	0.59	0.02	0.18	0.16	0.16	0.37	0.53	0.65

50PG

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = 1.09 x (1 – BF) x (edb – 80).

- Cooling capacities for 50PG03–16 units with Humidi–MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG08 (7 ¹ / ₂ Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		2250							3000						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	112.2	104.6	97.1	87.7	78.3	68.9	63.3	132.0	121.9	111.7	99.1	86.5	73.8	66.3
	SHC	32.3	40.8	49.2	59.8	70.3	68.9	63.3	38.3	46.6	54.9	65.2	75.6	73.8	66.3
	kW	4.15	4.15	4.15	4.15	4.15	4.15	4.16	4.15	4.15	4.15	4.15	4.15	4.15	4.16
85	TC	104.9	98.2	91.6	83.3	74.9	66.6	61.6	118.8	110.0	101.1	90.0	79.0	67.9	61.3
	SHC	18.2	28.7	39.1	52.3	65.4	78.5	86.4	24.6	35.0	45.3	58.2	71.2	84.1	91.9
	kW	4.81	4.81	4.80	4.80	4.79	4.78	4.78	4.81	4.81	4.80	4.80	4.79	4.78	4.78
95	TC	97.6	91.8	86.0	78.8	71.6	64.4	60.0	105.7	98.1	90.5	81.0	71.5	62.0	56.3
	SHC	4.0	16.5	29.1	44.8	60.4	64.4	60.0	11.0	23.4	35.8	51.3	66.7	62.0	56.3
	kW	5.48	5.48	5.46	5.44	5.43	5.42	5.41	5.48	5.48	5.46	5.44	5.43	5.42	5.41
105	TC	90.3	85.4	80.5	74.3	68.2	62.1	58.4	92.5	86.2	79.8	71.9	64.0	56.0	51.3
	SHC	-10.2	4.4	19.0	37.2	55.5	62.1	58.4	-2.6	11.8	26.2	44.3	62.3	56.0	51.3
	kW	6.15	6.15	6.11	6.09	6.07	6.05	6.03	6.15	6.15	6.11	6.09	6.07	6.05	6.03
115	TC	83.0	79.0	74.9	69.9	64.8	59.8	56.8	79.4	74.3	69.2	62.8	56.5	50.1	46.3
	SHC	-24.4	-7.7	8.9	29.7	50.5	59.8	56.8	-16.3	0.2	16.7	37.3	56.5	50.1	46.3
	kW	6.82	6.82	6.77	6.74	6.71	6.68	6.66	6.82	6.82	6.77	6.74	6.71	6.68	6.66
125	TC	75.7	72.5	69.4	65.4	61.5	57.5	55.1	66.3	62.4	58.6	53.8	49.0	44.2	41.3
	SHC	-38.6	-19.9	-1.2	22.2	45.6	57.5	55.1	-29.9	-11.4	7.1	30.3	49.0	44.2	41.3
	kW	7.48	7.48	7.42	7.38	7.35	7.31	7.28	7.48	7.48	7.42	7.38	7.35	7.31	7.28

50PG08 (7 ¹ / ₂ Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		3750													
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54							
75	TC	152.6	139.8	127.0	111.0	95.0	79.0	69.4							
	SHC	42.9	51.1	59.3	69.5	79.8	79.0	69.4							
	kW	4.15	4.15	4.15	4.15	4.15	4.15	4.16							
85	TC	133.4	122.2	111.0	97.1	83.2	69.2	60.9							
	SHC	29.7	40.0	50.2	63.0	75.8	88.5	96.2							
	kW	4.81	4.81	4.80	4.80	4.79	4.78	4.78							
95	TC	114.1	104.6	95.1	83.2	71.4	59.5	52.4							
	SHC	16.5	28.8	41.1	56.4	71.4	88.5	96.2							
	kW	5.48	5.48	5.46	5.44	5.43	5.42	5.41							
105	TC	94.9	87.0	79.2	69.4	59.6	49.7	43.9							
	SHC	3.3	17.6	31.9	49.8	59.6	79.8	96.2							
	kW	6.15	6.15	6.11	6.09	6.07	6.05	6.03							
115	TC	75.7	69.5	63.3	55.5	47.8	40.0	35.4							
	SHC	-9.9	6.5	22.8	43.2	47.8	66.8	84.1							
	kW	6.82	6.82	6.77	6.74	6.71	6.68	6.66							
125	TC	56.4	51.9	47.3	41.6	35.9	30.3	26.9							
	SHC	-23.0	-4.7	13.7	36.7	35.9	53.8	69.4							
	kW	7.48	7.48	7.42	7.38	7.35	7.31	7.28							

LEGEND

Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG08 (7 ¹ / ₂ Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE (CIRCUIT A ONLY)										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		2625	3000	3375	2625	3000	3375	2625	3000	3375
50	TC	8.2	9.1	9.8	17.0	17.8	18.6	24.5	25.4	26.1
	SHC	−0.9	−0.9	−0.9	−0.1	−0.1	−0.1	0.6	0.6	0.6
	kW	2.16	2.16	2.16	2.11	2.11	2.11	2.06	2.06	2.06
40	TC	5.8	6.4	7.0	12.8	13.4	14.0	18.8	19.5	20.0
	SHC	−0.6	−0.6	−0.6	0.1	0.1	0.1	0.6	0.6	0.6
	kW	2.17	2.17	2.17	2.14	2.14	2.14	2.10	2.10	2.10
30	TC	3.3	3.8	4.2	8.5	9.0	9.4	13.0	13.5	13.9
	SHC	−0.3	−0.3	−0.3	0.2	0.2	0.2	0.6	0.6	0.6
	kW	2.18	2.18	2.18	2.16	2.16	2.16	2.15	2.15	2.15

50PG08 (7 ¹ / ₂ Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN HOT GAS REHEAT MODE (ALL CIRCUITS)										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		2625	3000	3375	2625	3000	3375	2625	3000	3375
80	TC	28.9	30.6	32.0	30.9	32.6	34.1	32.6	34.3	35.8
	SHC	7.6	9.7	11.6	3.0	5.1	6.9	−0.9	1.1	2.8
	kW	4.20	4.20	4.20	4.20	4.20	4.20	4.21	4.21	4.21
75	TC	30.3	31.8	33.2	32.2	33.8	35.2	33.8	35.5	36.9
	SHC	8.8	10.8	12.6	4.5	6.5	8.3	0.9	2.8	4.5
	kW	4.13	4.13	4.13	4.14	4.14	4.14	4.14	4.14	4.14
70	TC	31.6	33.1	34.4	33.5	35.0	36.4	35.1	36.7	38.0
	SHC	9.9	11.9	13.7	6.0	7.9	9.6	2.7	4.5	6.1
	kW	4.06	4.06	4.06	4.07	4.07	4.07	4.08	4.08	4.08
60	TC	34.4	35.7	36.8	36.1	37.5	38.7	37.7	39.0	40.3
	SHC	12.3	14.1	15.7	9.1	10.8	12.4	6.2	7.9	9.5
	kW	3.92	3.92	3.92	3.94	3.94	3.94	3.96	3.96	3.96
50	TC	37.1	38.2	39.2	38.7	39.9	41.0	40.2	41.4	42.5
	SHC	14.7	16.3	17.8	12.1	13.7	15.1	9.8	11.4	12.8
	kW	3.78	3.78	3.78	3.81	3.81	3.81	3.83	3.83	3.83

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG09 (8¹/₂ Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE

Temp (F)		Air Entering Evaporator — Cfm																											
Air Ent		2550								3000								3400								4250			
		Air Entering Evaporator — Ewb (F)																											
Condenser																													
(Edb)		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54
60	TC	146.3	136.3	126.9	115.0	104.6	96.8	94.1	151.8	141.9	131.8	119.7	108.9	101.2	100.3	155.8	145.6	135.4	123.6	112.1	105.2	105.1	161.5	151.0	140.6	128.6	116.9	113.4	113.3
	SHC	41.4	51.4	60.9	72.2	83.6	91.3	94.1	42.2	53.0	64.9	78.2	91.3	98.3	100.3	42.8	55.0	68.3	83.8	97.9	103.0	105.1	43.5	58.9	74.6	93.5	109.5	113.4	113.3
	kW	4.36	4.36	4.37	4.37	4.37	4.37	4.38	4.35	4.36	4.37	4.37	4.37	4.37	4.38	4.35	4.36	4.38	4.38	4.39	4.39	4.39	4.34	4.35	4.36	4.37	4.37	4.39	4.39
	BF	0.00	0.00	0.15	0.24	0.21	0.22	0.34	0.00	0.00	0.28	0.23	0.21	0.26	0.41	0.00	0.00	0.25	0.21	0.21	0.31	0.45	0.00	0.15	0.24	0.22	0.24	0.37	0.53
70	TC	142.0	132.3	123.1	111.5	101.8	93.7	92.0	146.9	137.5	127.7	116.3	105.4	98.6	97.9	150.7	140.8	130.9	119.3	108.2	102.6	102.5	156.2	145.7	135.7	123.9	112.9	109.9	110.0
	SHC	39.9	49.9	59.6	70.9	83.0	90.3	92.0	40.6	51.1	63.5	77.3	90.0	96.3	97.9	41.2	53.6	66.7	82.3	96.3	100.3	102.5	41.9	57.3	72.9	91.8	108.2	109.9	110.0
	kW	5.03	5.03	5.04	5.03	5.03	5.02	5.02	5.03	5.04	5.03	5.03	5.03	5.02	5.03	5.03	5.03	5.04	5.04	5.04	5.03	5.04	5.02	5.03	5.04	5.04	5.04	5.04	5.04
	BF	0.00	0.00	0.13	0.22	0.19	0.21	0.36	0.00	0.00	0.25	0.20	0.20	0.27	0.42	0.00	0.00	0.23	0.20	0.21	0.33	0.47	0.00	0.14	0.23	0.21	0.23	0.39	0.54
75	TC	139.5	130.2	121.0	110.0	99.7	92.2	90.8	144.3	134.9	125.4	114.1	103.4	96.9	96.7	147.9	138.2	128.4	117.1	106.5	101.0	100.6	153.4	142.8	132.9	121.2	110.8	108.7	107.7
	SHC	39.1	49.1	58.8	70.7	81.7	89.1	90.8	39.8	50.6	62.7	76.5	89.2	95.0	96.7	40.3	52.8	65.9	81.4	96.1	99.0	100.6	41.0	56.4	72.0	90.6	106.6	108.7	107.7
	kW	5.39	5.39	5.39	5.38	5.37	5.36	5.38	5.39	5.39	5.39	5.38	5.37	5.38	5.40	5.40	5.40	5.39	5.38	5.38	5.34	5.40	5.40	5.40	5.40	5.40	5.39	5.39	5.38
	BF	0.00	0.00	0.12	0.20	0.19	0.22	0.37	0.00	0.00	0.24	0.20	0.20	0.28	0.43	0.00	0.00	0.22	0.20	0.20	0.33	0.47	0.00	0.33	0.22	0.22	0.24	0.40	0.55
85	TC	134.3	125.6	116.5	105.9	96.3	89.3	88.3	139.4	129.5	120.3	109.4	99.5	93.8	93.8	142.5	132.5	123.2	112.1	102.2	98.1	98.0	146.6	136.8	127.3	116.3	106.6	105.2	105.1
	SHC	37.4	46.8	57.2	69.2	80.8	87.0	88.3	38.2	49.1	60.9	74.5	87.7	92.1	93.8	38.6	51.1	64.1	79.3	94.1	98.1	98.0	39.1	54.5	70.1	89.1	103.4	105.2	105.1
	kW	6.15	6.15	6.14	6.13	6.11	6.09	6.09	6.15	6.15	6.14	6.14	6.12	6.11	6.10	6.12	6.16	6.16	6.15	6.13	6.12	6.12	6.17	6.17	6.16	6.16	6.14	6.13	6.13
	BF	0.00	0.00	0.25	0.19	0.17	0.23	0.38	0.00	0.00	0.22	0.19	0.19	0.30	0.44	0.00	0.16	0.21	0.20	0.20	0.32	0.49	0.00	0.29	0.22	0.20	0.26	0.42	0.56
95	TC	129.6	120.2	111.6	101.4	92.2	86.0	85.6	133.2	123.7	114.9	104.8	95.2	90.7	90.7	135.8	126.5	117.6	107.3	97.7	94.7	94.6	139.8	130.2	121.3	110.8	102.1	101.3	101.2
	SHC	35.9	44.9	55.5	67.4	79.0	84.4	85.6	36.3	47.4	59.0	73.0	86.2	88.9	90.7	36.6	49.2	62.1	77.7	91.8	95.1	94.6	37.1	52.5	68.1	87.0	99.6	101.3	101.2
	kW	6.96	6.97	6.96	6.93	6.90	6.88	6.87	6.98	6.97	6.96	6.94	6.91	6.90	6.89	6.99	6.99	6.98	6.96	6.93	6.92	6.92	7.00	7.00	6.98	6.97	6.94	6.94	6.94
	BF	0.00	0.00	0.22	0.18	0.17	0.24	0.40	0.00	0.00	0.20	0.18	0.18	0.32	0.46	0.00	0.13	0.20	0.19	0.20	0.34	0.51	0.00	0.26	0.21	0.20	0.28	0.44	0.58
105	TC	123.1	114.3	106.2	96.6	87.7	83.1	82.4	126.5	118.0	109.4	99.6	90.5	87.2	87.2	128.8	120.2	111.6	101.8	92.7	90.9	90.8	132.5	123.6	114.6	105.0	97.7	97.0	96.9
	SHC	33.7	43.3	53.5	65.5	77.1	81.4	82.4	34.2	45.7	57.1	71.0	84.0	87.2	87.2	34.4	47.7	60.1	75.7	89.3	90.9	90.8	35.0	50.6	66.4	84.9	95.1	97.0	96.9
	kW	7.86	7.84	7.83	7.79	7.75	7.72	7.72	7.86	7.85	7.84	7.80	7.77	7.75	7.74	7.88	7.85	7.82	7.78	7.77	7.77	7.88	7.87	7.88	7.84	7.81	7.80	7.80	7.80
	BF	0.00	0.00	0.20	0.17	0.16	0.27	0.42	0.00	0.14	0.19	0.17	0.18	0.31	0.48	0.00	0.22	0.20	0.18	0.20	0.37	0.52	0.00	0.23	0.19	0.20	0.31	0.46	0.59
115	TC	116.1	108.2	100.4	91.2	82.8	78.9	78.8	118.9	111.0	103.2	94.0	85.5	83.4	83.3	120.9	112.9	105.1	95.8	87.7	86.7	86.7	123.9	115.8	107.8	98.3	92.8	92.3	92.3
	SHC	31.6	41.6	51.4	63.4	74.9	78.9	78.8	31.9	43.4	55.1	68.9	81.3	83.4	83.3	32.1	45.0	58.1	73.4	85.5	86.7	86.7	32.5	48.7	64.8	84.4	90.5	92.3	92.3
	kW	8.79	8.77	8.75	8.70	8.65	8.62	8.62	8.79	8.79	8.76	8.73	8.68	8.66	8.66	8.80	8.79	8.77	8.74	8.70	8.68	8.68	8.82	8.81	8.78	8.75	8.73	8.72	8.72
	BF	0.00	0.00	0.18	0.16	0.16	0.26	0.45	0.00	0.25	0.17	0.17	0.19	0.34	0.50	0.00	0.23	0.18	0.18	0.23	0.40	0.55	0.00	0.18	0.16	0.16	0.35	0.48	0.61
125	TC	107.3	100.4	93.7	85.4	77.6	75.6	74.8	110.4	103.0	96.0	87.5	80.2	79.3	77.6	112.1	104.8	97.4	89.0	82.4	82.5	82.2	114.7	107.4	99.7	91.2	87.4	87.3	87.3
	SHC	28.9	39.1	49.2	62.3	73.9	75.9	74.8	29.3	41.2	52.6	67.7	78.3	79.3	77.6	29.5	42.6	55.4	72.4	80.7	82.8	82.2	29.8	45.9	62.1	81.5	87.8	87.3	87.3
	kW	9.74	9.74	9.71	9.69	9.63	9.62	9.65	9.79	9.77	9.73	9.70	9.64	9.62	9.59	9.79	9.79	9.76	9.71	9.66	9.67	9.65	9.80	9.80	9.76	9.72	9.70	9.70	9.70
	BF	0.00	0.24	0.16	0.11	0.12	0.30	0.48	0.00	0.17	0.17	0.13	0.20	0.38	0.54	0.00	0.20	0.17	0.14	0.27	0.43	0.57	0.00	0.19	0.16	0.16	0.35	0.51	0.63

LEGEND

- BF** — Bypass Factor
Edb — Entering Dry–Bulb
Ewb — Entering Wet–Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry–Bulb
lwb — Leaving Wet–Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80 °F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

$$\text{Correlation Factor} = 1.09 \times (1 - \text{BF}) \times (\text{edb} - 80).$$

- Cooling capacities for 50PG03–16 units with Humidi–MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG09 (8 ¹ / ₂ Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		2550							3400						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	127.2	119.0	110.8	100.5	90.3	80.1	73.9	148.1	137.4	126.7	113.4	100.1	86.7	78.7
	SHC	36.6	45.8	54.9	66.4	77.9	80.1	73.9	46.4	55.2	64.1	75.3	86.4	86.7	78.7
	kW	5.23	5.23	5.19	5.17	5.14	5.12	5.10	5.23	5.23	5.19	5.17	5.14	5.12	5.10
85	TC	121.4	113.7	106.0	96.4	86.8	77.2	71.5	137.1	127.2	117.3	104.9	92.5	80.1	72.7
	SHC	21.7	33.1	44.5	58.7	72.9	87.2	95.7	32.4	43.5	54.6	68.5	82.3	96.2	104.5
	kW	6.04	6.04	5.99	5.95	5.92	5.88	5.86	6.04	6.04	5.99	5.95	5.92	5.88	5.86
95	TC	115.6	108.4	101.2	92.3	83.3	74.4	69.0	126.1	117.0	107.8	96.3	84.9	73.4	66.6
	SHC	6.8	20.4	34.0	51.0	68.0	74.4	69.0	18.5	31.8	45.1	61.7	78.2	73.4	66.6
	kW	6.86	6.86	6.78	6.74	6.69	6.64	6.61	6.86	6.86	6.78	6.74	6.69	6.64	6.61
105	TC	109.8	103.1	96.5	88.2	79.8	71.5	66.5	115.2	106.8	98.3	87.8	77.3	66.8	60.5
	SHC	-8.1	7.7	23.5	43.3	63.0	71.5	66.5	4.6	20.1	35.5	54.9	74.2	66.8	60.5
	kW	7.68	7.68	7.58	7.52	7.46	7.40	7.37	7.68	7.68	7.58	7.52	7.46	7.40	7.37
115	TC	104.0	97.8	91.7	84.0	76.4	68.7	64.1	104.2	96.5	88.9	79.3	69.7	60.1	54.4
	SHC	-23.0	-5.0	13.0	35.5	58.1	68.7	64.1	-9.3	8.4	26.0	48.1	69.7	60.1	54.4
	kW	8.49	8.49	8.38	8.31	8.24	8.16	8.12	8.49	8.49	8.38	8.31	8.24	8.16	8.12
125	TC	98.2	92.6	86.9	79.9	72.9	65.8	61.6	93.3	86.3	79.4	70.8	62.1	53.5	48.3
	SHC	-37.9	-17.7	2.5	27.8	53.1	65.8	61.6	-23.2	-3.4	16.5	41.3	62.1	53.5	48.3
	kW	9.31	9.31	9.18	9.09	9.01	8.93	8.88	9.31	9.31	9.18	9.09	9.01	8.93	8.88

50PG09 (8 ¹ / ₂ Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		4250													
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54							
75	TC	169.4	156.2	143.0	126.5	110.0	93.5	83.6							
	SHC	54.1	62.8	71.4	82.3	93.1	93.5	83.6							
	kW	5.23	5.23	5.19	5.17	5.14	5.12	5.10							
85	TC	153.1	140.9	128.7	113.5	98.2	83.0	73.8							
	SHC	41.0	51.8	62.6	76.2	89.7	103.3	111.4							
	kW	6.04	6.04	5.99	5.95	5.92	5.88	5.86							
95	TC	136.9	125.7	114.5	100.5	86.5	72.5	64.1							
	SHC	27.8	40.8	53.9	70.1	86.4	72.5	64.1							
	kW	6.86	6.86	6.78	6.74	6.69	6.64	6.61							
105	TC	120.7	110.5	100.3	87.5	74.7	61.9	54.3							
	SHC	14.7	29.9	45.1	64.0	74.7	61.9	54.3							
	kW	7.68	7.68	7.58	7.52	7.46	7.40	7.37							
115	TC	104.5	95.2	86.0	74.5	62.9	51.4	44.5							
	SHC	1.6	18.9	36.3	58.0	62.9	51.4	44.5							
	kW	8.49	8.49	8.38	8.31	8.24	8.16	8.12							
125	TC	88.2	80.0	71.8	61.5	51.2	40.9	34.7							
	SHC	-11.6	8.0	27.5	51.9	51.2	40.9	34.7							
	kW	9.31	9.31	9.18	9.09	9.01	8.93	8.88							

LEGEND

Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50PG

Cooling Capacities (cont)

50PG09 (8 1/2 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE (CIRCUIT A ONLY)										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		2975	3400	3825	2975	3400	3825	2975	3400	3825
50	TC	21.8	21.8	21.8	24.5	24.5	24.5	26.8	26.8	26.8
	SHC	8.3	8.3	8.3	5.3	5.3	5.3	2.6	2.6	2.6
	kW	2.64	2.64	2.64	2.63	2.63	2.63	2.62	2.62	2.62
40	TC	20.9	20.9	20.9	23.1	23.1	23.1	25.0	25.0	25.0
	SHC	6.6	6.6	6.6	4.1	4.1	4.1	2.0	2.0	2.0
	kW	2.70	2.70	2.70	2.70	2.70	2.70	2.71	2.71	2.71
30	TC	20.1	20.1	20.1	21.8	21.8	21.8	23.3	23.3	23.3
	SHC	4.8	4.8	4.8	3.0	3.0	3.0	1.4	1.4	1.4
	kW	2.75	2.75	2.75	2.77	2.77	2.77	2.79	2.79	2.79

50PG09 (8 ¹ / ₂ Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN HOT GAS REHEAT MODE (ALL CIRCUITS)										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		2975	3400	3825	2975	3400	3825	2975	3400	3825
80	TC	35.9	37.9	39.7	37.5	39.6	41.5	39.0	41.1	43.0
	SHC	9.6	12.7	15.5	4.8	7.8	10.6	0.6	3.6	6.4
	kW	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16
75	TC	37.7	39.6	41.4	39.3	41.3	43.1	40.7	42.8	44.6
	SHC	10.7	13.7	16.4	6.2	9.2	11.8	2.4	5.3	7.9
	kW	5.10	5.10	5.10	5.10	5.10	5.10	5.11	5.11	5.11
70	TC	39.5	41.3	43.0	41.1	43.0	44.7	42.5	44.5	46.2
	SHC	11.8	14.7	17.3	7.7	10.5	13.1	4.2	6.9	9.4
	kW	5.03	5.03	5.03	5.04	5.04	5.04	5.05	5.05	5.05
60	TC	43.0	44.7	46.2	44.7	46.4	47.9	46.1	47.8	49.3
	SHC	14.1	16.7	19.0	10.7	13.2	15.5	7.7	10.2	12.5
	kW	4.90	4.90	4.90	4.93	4.93	4.93	4.95	4.95	4.95
50	TC	46.6	48.1	49.4	48.2	49.7	51.1	49.6	51.2	52.5
	SHC	16.4	18.7	20.8	13.6	15.9	18.0	11.3	13.5	15.6
	kW	4.77	4.77	4.77	4.81	4.81	4.81	4.84	4.84	4.84

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG12 (10 Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE

Temp (F)		Air Entering Evaporator — Cfm																													
		3000								3500								4000								5000					
Air Ent		Air Entering Evaporator — Ewb (F)																													
		Condenser																													
(Edb)		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54		
60	TC	172.0	160.6	149.2	135.7	123.6	114.8	112.9	177.7	165.6	154.8	140.4	128.4	121.0	120.2	182.3	170.7	158.7	144.9	132.4	125.3	126.7	189.2	176.6	164.7	150.6	138.5	136.2	136.1		
	SHC	47.1	59.8	72.7	87.2	102.3	110.9	112.9	47.9	62.2	77.0	94.0	112.4	118.6	120.2	48.5	65.2	81.6	101.5	120.4	125.3	126.7	49.5	69.9	90.3	115.5	134.3	136.2	136.1		
	kW	5.28	5.21	5.14	5.09	5.00	4.95	4.93	5.37	5.28	5.22	5.12	5.03	4.99	5.37	5.29	5.23	5.15	5.07	5.04	5.01	5.43	5.35	5.27	5.18	5.11	5.09	5.09	5.09		
	BF	0.00	0.00	0.12	0.12	0.10	0.15	0.32	0.00	0.00	0.14	0.12	0.10	0.21	0.39	0.00	0.20	0.12	0.11	0.12	0.25	0.43	0.00	0.15	0.11	0.10	0.17	0.35	0.51		
70	TC	166.1	155.5	144.2	131.6	119.9	111.5	110.0	171.9	160.8	149.4	136.3	124.2	117.4	116.3	176.5	164.7	153.4	140.2	127.8	122.9	122.9	182.2	170.4	158.8	145.2	133.9	132.4	132.0		
	SHC	45.2	57.6	70.1	85.7	100.6	108.4	110.0	46.0	60.6	75.2	93.0	109.9	115.6	116.3	46.7	63.3	80.0	100.0	118.3	122.9	122.9	47.4	68.1	88.8	113.9	128.7	132.4	132.0		
	kW	6.10	6.02	5.95	5.86	5.78	5.72	5.71	6.11	6.06	5.97	5.89	5.82	5.76	5.76	6.15	6.08	6.00	5.92	5.84	5.80	5.80	6.20	6.11	6.03	5.94	5.88	5.87	5.87		
	BF	0.00	0.00	0.15	0.11	0.10	0.16	0.34	0.00	0.00	0.12	0.10	0.10	0.22	0.40	0.00	0.17	0.11	0.10	0.12	0.27	0.45	0.00	0.12	0.09	0.09	0.21	0.37	0.53		
75	TC	163.7	152.7	142.0	129.4	117.7	109.7	108.2	169.0	157.7	146.8	134.0	122.1	115.5	115.2	173.1	161.6	150.5	137.4	125.2	121.1	120.6	178.6	166.9	155.6	142.3	131.6	130.4	130.2		
	SHC	44.4	56.7	69.6	84.8	99.4	107.0	108.2	45.1	59.6	74.4	92.4	109.4	113.6	115.2	45.7	62.2	79.0	99.3	117.0	121.1	120.6	46.3	67.0	87.9	113.1	128.9	130.4	130.2		
	kW	6.51	6.43	6.35	6.27	6.20	6.14	6.14	6.54	6.47	6.39	6.29	6.22	6.19	6.18	6.56	6.49	6.41	6.32	6.24	6.22	6.22	6.60	6.52	6.44	6.35	6.28	6.28	6.28		
	BF	0.00	0.00	0.12	0.11	0.10	0.17	0.35	0.00	0.12	0.11	0.09	0.10	0.24	0.41	0.00	0.16	0.10	0.09	0.12	0.28	0.46	0.00	0.12	0.09	0.09	0.19	0.38	0.53		
85	TC	157.6	147.0	136.5	124.3	113.2	106.4	105.2	162.2	151.4	141.0	128.5	117.2	111.5	111.2	165.8	154.8	144.2	131.8	120.5	117.5	117.6	170.7	159.5	148.7	136.1	126.5	126.0	125.8		
	SHC	42.4	55.0	68.1	82.9	97.8	104.6	105.2	43.0	57.7	72.4	90.3	107.1	111.5	111.2	43.4	60.2	77.1	97.5	114.5	117.5	117.6	43.9	64.8	85.6	111.0	125.1	126.0	125.8		
	kW	7.38	7.31	7.23	7.16	7.08	7.03	7.02	7.43	7.34	7.27	7.18	7.10	7.08	7.08	7.44	7.36	7.28	7.20	7.14	7.11	7.12	7.48	7.39	7.31	7.23	7.17	7.17	7.17		
	BF	0.00	0.00	0.09	0.10	0.09	0.18	0.37	0.00	0.17	0.10	0.09	0.10	0.24	0.43	0.00	0.13	0.09	0.08	0.12	0.30	0.47	0.00	0.11	0.08	0.08	0.21	0.40	0.55		
95	TC	150.6	140.4	130.5	119.0	108.2	102.2	101.2	154.8	144.4	134.5	122.8	112.1	107.7	107.7	157.9	147.4	137.3	125.6	114.7	113.0	112.9	161.7	151.3	141.2	129.3	121.2	121.1	121.0		
	SHC	40.1	52.8	65.6	81.1	95.9	100.8	101.2	40.6	55.4	70.3	88.3	104.9	107.7	107.7	41.0	57.9	74.8	95.3	111.2	113.0	112.9	41.3	62.2	83.2	108.7	120.0	121.1	121.0		
	kW	8.36	8.28	8.21	8.12	8.04	8.01	8.01	8.38	8.30	8.23	8.14	8.08	8.06	8.05	8.40	8.32	8.24	8.16	8.09	8.09	8.09	8.42	8.35	8.27	8.19	8.17	8.14	8.14		
	BF	0.00	0.10	0.09	0.08	0.08	0.21	0.39	0.00	0.13	0.08	0.08	0.09	0.26	0.45	0.00	0.11	0.08	0.08	0.13	0.32	0.49	0.00	0.10	0.08	0.08	0.25	0.42	0.57		
105	TC	142.8	133.3	124.0	113.1	103.2	97.9	98.0	146.5	136.8	127.4	116.4	106.0	103.6	103.5	149.0	139.3	129.8	118.7	109.3	108.3	108.2	153.5	142.4	133.1	121.9	115.9	115.8	115.7		
	SHC	37.6	50.4	63.3	78.9	93.8	97.9	98.0	38.0	53.0	67.9	86.1	101.4	103.6	103.5	38.3	55.2	72.2	93.0	107.3	108.3	108.2	38.9	59.4	80.5	105.8	115.9	115.8	115.7		
	kW	9.39	9.31	9.24	9.16	9.09	9.06	9.06	9.41	9.34	9.27	9.18	9.10	9.10	9.10	9.43	9.35	9.28	9.20	9.13	9.14	9.14	9.48	9.38	9.31	9.23	9.19	9.20	9.20		
	BF	0.00	0.15	0.08	0.07	0.07	0.08	0.21	0.41	0.00	0.11	0.07	0.11	0.29	0.47	0.00	0.10	0.07	0.07	0.15	0.35	0.51	0.00	0.09	0.07	0.08	0.26	0.45	0.58		
115	TC	133.9	125.2	116.5	106.4	96.8	93.9	93.7	136.6	128.0	119.3	109.0	100.0	98.9	98.8	137.7	129.6	121.4	111.0	103.6	103.1	103.0	141.0	131.5	123.6	113.7	109.9	109.8	109.7		
	SHC	34.8	47.8	60.7	76.4	91.1	93.9	93.7	35.0	50.1	65.1	83.4	97.7	98.9	98.8	34.9	52.2	69.3	90.1	102.5	103.1	103.0	35.3	56.1	77.5	102.6	109.9	109.8	109.7		
	kW	10.49	10.43	10.36	10.28	10.19	10.17	10.17	10.51	10.45	10.38	10.30	10.22	10.23	10.22	10.50	10.45	10.40	10.32	10.26	10.26	10.26	10.54	10.46	10.41	10.34	10.32	10.32	10.32		
	BF	0.00	0.11	0.07	0.06	0.07	0.25	0.44	0.00	0.09	0.07	0.06	0.12	0.32	0.49	0.00	0.09	0.07	0.07	0.19	0.38	0.54	0.00	0.08	0.07	0.08	0.30	0.47	0.61		
125	TC	122.3	115.4	107.7	98.3	89.9	88.7	88.6	124.7	117.7	110.0	100.6	93.5	93.2	93.1	126.6	118.3	110.3	102.2	97.0	96.9	96.8	128.8	120.9	112.5	104.4	102.6	102.5	102.5		
	SHC	31.2	44.6	57.6	73.4	87.1	88.7	88.6	31.4	46.8	61.8	80.2	92.6	93.2	93.1	31.6	48.6	65.6	86.9	97.0	96.9	96.8	31.8	52.9	73.8	98.6	102.6	102.5	102.5		
	kW	11.63	11.59	11.54	11.45	11.37	11.37	11.37	11.65	11.62	11.56	11.48	11.41	11.41	11.41	11.66	11.61	11.55	11.50	11.45	11.45	11.45	11.69	11.63	11.57	11.52	11.50	11.51	11.51		
	BF	0.00	0.09	0.06	0.05	0.09	0.29	0.47	0.00	0.08	0.06	0.06	0.16	0.36	0.52	0.00	0.08	0.06	0.06	0.22	0.42	0.56	0.00	0.08	0.07	0.08	0.34	0.51	0.63		

LEGEND

- BF — Bypass Factor
- Edb — Entering Dry—Bulb
- Ewb — Entering Wet—Bulb
- kW — Compressor Motor Power Input
- ldb — Leaving Dry—Bulb
- lwb — Leaving Wet—Bulb
- SHC — Sensible Heat Capacity (1000 Btu/h) Gross
- TC — Total Capacity (1000 Btu/h) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btu/h)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet—bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btu/h)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - \text{BF}) \times (\text{edb} - 80)$.

- Cooling capacities for 50PG03—16 units with Humidi—MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG12 (10 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		3000							4000						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	149.0	139.0	128.9	116.3	103.7	91.1	83.5	176.9	163.6	150.3	133.7	117.0	100.4	90.4
	SHC	36.7	49.2	61.6	77.2	92.7	91.1	83.5	47.4	59.7	72.0	87.4	102.9	100.4	90.4
	kW	6.34	6.34	6.26	6.22	6.17	6.12	6.09	6.34	6.34	6.26	6.22	6.17	6.12	6.09
85	TC	140.1	131.0	121.9	110.6	99.2	87.8	81.0	160.8	149.0	137.1	122.3	107.5	92.7	83.8
	SHC	17.0	32.3	47.7	66.8	86.0	105.2	116.7	28.4	43.6	58.9	77.9	97.0	116.0	127.5
	kW	7.33	7.33	7.23	7.16	7.10	7.04	7.00	7.33	7.33	7.23	7.16	7.10	7.04	7.00
95	TC	131.1	123.0	114.9	104.8	94.7	84.6	78.6	144.7	134.3	123.9	110.9	97.9	85.0	77.2
	SHC	-2.7	15.5	33.7	56.5	79.3	84.6	78.6	9.4	27.6	45.7	68.4	91.1	85.0	77.2
	kW	8.32	8.32	8.19	8.11	8.03	7.95	7.90	8.32	8.32	8.19	8.11	8.03	7.95	7.90
105	TC	122.1	115.1	108.0	99.1	90.3	81.4	76.1	128.6	119.7	110.7	99.6	88.4	77.2	70.5
	SHC	-22.5	-1.4	19.8	46.1	72.5	81.4	76.1	-9.5	11.5	32.6	58.9	85.2	77.2	70.5
	kW	9.31	9.31	9.16	9.06	8.96	8.87	8.81	9.31	9.31	9.16	9.06	8.96	8.87	8.81
115	TC	113.2	107.1	101.0	93.4	85.8	78.2	73.6	112.5	105.0	97.6	88.2	78.9	69.5	63.9
	SHC	-42.2	-18.2	5.8	35.8	65.8	78.2	73.6	-28.5	-4.5	19.5	49.4	78.9	69.5	63.9
	kW	10.30	10.30	10.12	10.01	9.90	9.78	9.71	10.30	10.30	10.12	10.01	9.90	9.78	9.71
125	TC	104.2	99.1	94.0	87.7	81.3	75.0	71.2	96.4	90.4	84.4	76.9	69.4	61.8	57.3
	SHC	-62.0	-35.1	-8.2	25.5	59.1	75.0	71.2	-47.4	-20.6	6.3	39.9	69.4	61.8	57.3
	kW	11.29	11.29	11.09	10.96	10.83	10.70	10.62	11.29	11.29	11.09	10.96	10.83	10.70	10.62

50PG12 (10 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)								
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM						
		5000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
75	TC	205.8	189.1	172.5	151.6	130.8	110.0	97.5
	SHC	55.9	68.1	80.3	95.6	110.9	110.0	97.5
	kW	6.34	6.34	6.26	6.22	6.17	6.12	6.09
85	TC	182.3	167.6	152.9	134.5	116.0	97.6	86.6
	SHC	37.5	52.7	67.9	86.8	105.8	124.7	136.1
	kW	7.33	7.33	7.23	7.16	7.10	7.04	7.00
95	TC	158.8	146.0	133.2	117.3	101.3	85.3	75.7
	SHC	19.2	37.3	55.4	78.0	100.6	85.3	75.7
	kW	8.32	8.32	8.19	8.11	8.03	7.95	7.90
105	TC	135.3	124.5	113.6	100.1	86.5	72.9	64.8
	SHC	0.9	21.9	42.9	69.1	86.5	72.9	64.8
	kW	9.31	9.31	9.16	9.06	8.96	8.87	8.81
115	TC	111.8	102.9	94.0	82.9	71.7	60.6	53.9
	SHC	-17.5	6.5	30.4	60.3	71.7	60.6	53.9
	kW	10.30	10.30	10.12	10.01	9.90	9.78	9.71
125	TC	88.3	81.4	74.4	65.7	57.0	48.2	43.0
	SHC	-35.8	-8.9	17.9	51.4	57.0	48.2	43.0
	kW	11.29	11.29	11.09	10.96	10.83	10.70	10.62

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG12 (10 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE (CIRCUIT A ONLY)										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		3500	4000	4500	3500	4000	4500	3500	4000	4500
50	TC	27.7	30.4	32.8	29.7	32.5	34.9	31.4	34.3	36.8
	SHC	12.1	12.1	12.1	8.6	8.6	8.6	5.5	5.5	5.5
	kW	3.11	3.11	3.11	3.10	3.10	3.10	3.08	3.08	3.08
40	TC	27.6	29.8	31.7	29.3	31.6	33.5	30.8	33.1	35.1
	SHC	9.8	9.8	9.8	7.0	7.0	7.0	4.5	4.5	4.5
	kW	3.16	3.16	3.16	3.17	3.17	3.17	3.17	3.17	3.17
30	TC	27.5	29.1	30.6	28.9	30.6	32.1	30.2	31.9	33.4
	SHC	7.5	7.5	7.5	5.4	5.4	5.4	3.5	3.5	3.5
	kW	3.21	3.21	3.21	3.23	3.23	3.23	3.25	3.25	3.25

50PG12 (10 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN HOT GAS REHEAT MODE (ALL CIRCUITS)										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		3500	4000	4500	3500	4000	4500	3500	4000	4500
80	TC	49.3	50.8	52.1	52.0	53.6	55.0	54.5	56.0	57.5
	SHC	13.4	17.1	20.4	6.9	10.4	13.6	1.2	4.7	7.8
	kW	6.10	6.10	6.10	6.12	6.12	6.12	6.14	6.14	6.14
75	TC	51.2	52.6	54.0	53.9	55.4	56.8	56.3	57.8	59.2
	SHC	14.7	18.2	21.4	8.7	12.1	15.2	3.4	6.7	9.7
	kW	6.02	6.02	6.02	6.04	6.04	6.04	6.06	6.06	6.06
70	TC	53.1	54.5	55.8	55.7	57.2	58.6	58.1	59.6	61.0
	SHC	16.0	19.4	22.5	10.4	13.7	16.7	5.6	8.8	11.7
	kW	5.94	5.94	5.94	5.97	5.97	5.97	5.99	5.99	5.99
60	TC	56.9	58.3	59.5	59.4	60.9	62.2	61.7	63.1	64.5
	SHC	18.7	21.8	24.6	14.0	17.0	19.7	10.0	12.9	15.5
	kW	5.77	5.77	5.77	5.81	5.81	5.81	5.85	5.85	5.85
50	TC	60.7	62.0	63.3	63.1	64.5	65.8	65.3	66.7	68.0
	SHC	21.3	24.1	26.6	17.6	20.3	22.7	14.3	17.0	19.4
	kW	5.61	5.61	5.61	5.66	5.66	5.66	5.70	5.70	5.70

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG14 (12 ¹ / ₂ Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE																						
Temp (F)		Air Entering Evaporator — Cfm																				
Air Ent		3750							4375							5000						
Condenser		Air Entering Evaporator — Ewb (F)																				
(Edb)		80	76	72	67	62	58	54	80	76	72	67	62	58	54	80	76	72	67	62	58	54
60	TC	215.9	202.7	187.9	171.5	156.2	145.7	141.5	224.4	210.3	195.7	178.2	162.7	153.2	151.1	229.5	215.9	201.0	183.7	167.7	158.4	157.1
	SHC	58.5	74.4	88.7	106.6	124.1	136.3	140.3	60.0	76.8	95.3	115.4	135.8	146.7	149.9	60.5	80.8	100.6	124.1	146.6	152.9	155.9
	kW	7.52	7.35	7.14	6.93	6.69	6.55	6.50	7.66	7.46	7.25	7.02	6.80	6.67	6.63	7.77	7.54	7.34	7.10	6.87	6.74	6.74
	BF	0.00	0.00	0.09	0.19	0.17	0.19	0.33	0.00	0.00	0.20	0.18	0.17	0.23	0.39	0.00	0.00	0.18	0.17	0.17	0.30	0.44
70	TC	205.9	196.4	182.8	166.6	152.1	142.0	137.6	214.9	203.1	189.2	172.9	157.5	148.1	146.1	219.9	208.0	194.0	177.5	161.8	154.3	152.9
	SHC	55.3	71.9	87.2	105.1	122.8	135.1	136.4	57.0	74.9	92.6	113.8	133.9	142.4	144.9	57.6	78.1	98.1	122.3	143.9	148.5	151.7
	kW	8.69	8.32	8.12	7.88	7.67	7.51	7.45	8.79	8.43	8.22	7.98	7.75	7.60	7.58	8.90	8.50	8.29	8.04	7.81	7.71	7.68
	BF	0.00	0.00	0.22	0.17	0.16	0.18	0.35	0.00	0.00	0.19	0.16	0.16	0.25	0.41	0.00	0.13	0.17	0.15	0.17	0.32	0.46
75	TC	200.9	193.4	179.8	163.4	149.3	138.5	136.8	210.2	199.3	185.9	169.9	154.9	144.8	145.1	215.1	204.2	190.8	174.6	159.4	152.4	151.0
	SHC	53.7	70.9	86.2	103.3	121.3	129.4	135.6	55.5	73.8	91.8	112.9	133.2	139.1	143.9	56.1	77.0	97.1	121.3	143.3	146.5	149.8
	kW	9.27	8.83	8.63	8.39	8.17	8.01	7.97	9.36	8.93	8.73	8.49	8.26	8.11	8.10	9.47	9.01	8.81	8.56	8.33	8.23	8.21
	BF	0.00	0.00	0.20	0.18	0.16	0.23	0.35	0.00	0.00	0.17	0.15	0.15	0.27	0.41	0.00	0.11	0.16	0.15	0.16	0.33	0.46
85	TC	190.9	186.3	173.0	158.0	144.0	134.5	132.3	200.6	191.5	178.9	163.4	149.1	140.7	141.0	205.4	195.7	182.8	167.3	153.2	147.3	146.8
	SHC	50.5	67.9	83.6	101.9	119.5	126.6	131.1	52.5	71.3	89.4	110.5	130.9	135.9	139.8	53.2	74.3	94.5	118.8	140.8	146.1	145.6
	kW	10.43	9.94	9.72	9.48	9.25	9.09	9.15	10.49	10.02	9.82	9.57	9.34	9.20	9.20	10.60	10.09	9.88	9.63	9.41	9.32	9.31
	BF	0.00	0.00	0.18	0.15	0.14	0.24	0.37	0.00	0.00	0.15	0.14	0.14	0.28	0.43	0.00	0.24	0.15	0.14	0.16	0.30	0.48
95	TC	180.9	177.7	165.9	151.5	138.1	128.8	127.7	191.1	182.8	170.5	156.0	142.7	135.8	135.4	195.8	184.8	174.2	159.9	146.2	142.2	141.8
	SHC	47.4	65.3	81.0	99.5	117.3	124.2	126.5	49.5	68.5	86.4	107.9	128.0	134.6	134.2	50.2	70.9	91.5	116.1	137.2	141.0	140.6
	kW	11.59	11.10	10.90	10.65	10.42	10.26	10.33	11.63	11.19	10.98	10.73	10.51	10.39	10.38	11.73	11.35	11.05	10.81	10.57	10.50	10.50
	BF	0.00	0.00	0.16	0.14	0.13	0.23	0.39	0.00	0.10	0.15	0.13	0.14	0.26	0.45	0.00	0.21	0.14	0.13	0.16	0.32	0.49
105	TC	170.9	162.4	157.2	143.8	131.3	124.3	123.2	181.6	171.8	161.6	148.3	135.5	130.5	130.4	186.2	174.0	163.4	151.1	138.3	136.3	136.0
	SHC	44.2	72.4	77.9	96.6	114.5	119.7	122.0	46.5	65.1	83.3	105.0	124.7	129.3	129.2	47.3	67.6	88.4	112.9	132.1	135.1	134.8
	kW	12.75	12.24	12.14	11.90	11.66	11.54	11.51	12.76	12.49	12.22	11.99	11.75	11.66	11.65	12.86	12.62	12.35	12.04	11.81	11.77	11.76
	BF	0.00	0.14	0.14	0.13	0.13	0.26	0.41	0.00	0.11	0.13	0.12	0.14	0.29	0.47	0.00	0.18	0.12	0.13	0.18	0.35	0.51
115	TC	160.9	147.8	139.9	135.3	123.8	117.8	118.0	172.1	160.7	150.6	138.2	127.0	124.6	124.4	176.6	163.1	152.6	131.6	130.9	129.8	129.7
	SHC	41.0	77.8	88.3	93.4	111.1	116.6	116.8	43.6	61.7	79.8	101.4	120.9	123.4	123.2	44.3	64.2	85.3	123.4	124.9	128.6	128.5
	kW	13.91	13.48	13.32	13.22	13.00	12.86	12.87	13.90	13.80	13.57	13.33	13.06	13.01	13.01	14.00	13.89	13.65	13.16	13.14	13.12	13.11
	BF	0.00	0.10	0.10	0.11	0.12	0.25	0.44	0.00	0.11	0.11	0.12	0.14	0.32	0.49	0.00	0.15	0.10	0.11	0.22	0.38	0.54
125	TC	150.9	144.5	135.2	141.7	114.1	108.5	108.2	159.6	149.6	139.6	128.1	118.7	116.7	116.5	158.6	152.2	141.8	121.3	121.1	120.7	120.6
	SHC	37.8	53.0	64.8	58.4	104.2	107.3	107.0	39.8	58.3	76.4	97.7	113.4	115.5	115.3	39.1	60.9	82.2	117.4	118.0	119.5	119.4
	kW	15.07	15.00	14.83	15.01	14.33	14.32	14.20	15.27	15.10	14.91	14.68	14.46	14.44	14.42	15.23	15.15	14.95	14.51	14.52	14.50	14.53
	BF	0.00	0.10	0.13	0.14	0.06	0.24	0.43	0.00	0.11	0.09	0.11	0.19	0.36	0.52	0.00	0.11	0.07	0.09	0.25	0.42	0.57

50PG14 (12 ¹ / ₂ Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE (cont)									
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm							
		6250							
		Air Entering Evaporator — Ewb (F)							
		80	76	72	67	62	58	54	
60	TC	238.1	223.0	208.4	191.0	175.0	169.4	169.6	
	SHC	61.7	86.2	110.7	140.2	163.5	168.2	168.4	
	kW	7.88	7.66	7.45	7.20	6.98	6.93	6.91	
	BF	0.00	0.23	0.17	0.16	0.21	0.36	0.52	
70	TC	228.4	215.2	201.0	184.3	169.0	165.5	165.6	
	SHC	58.8	83.7	108.3	138.2	159.4	164.3	164.4	
	kW	8.97	8.61	8.40	8.15	7.93	7.89	7.88	
	BF	0.00	0.21	0.16	0.15	0.22	0.37	0.53	
75	TC	223.5	211.1	197.1	181.0	165.8	163.1	162.7	
	SHC	57.4	82.5	107.1	137.0	158.2	161.9	161.5	
	kW	9.52	9.12	8.91	8.67	8.43	8.40	8.40	
	BF	0.00	0.20	0.16	0.15	0.22	0.38	0.54	
85	TC	213.8	200.7	188.7	173.3	159.7	157.9	157.5	
	SHC	54.5	79.5	104.3	134.3	151.8	156.7	156.3	
	kW	10.61	10.31	9.98	9.74	9.52	9.50	9.49	
	BF	0.00	0.18	0.15	0.15	0.25	0.40	0.55	
95	TC	204.1	190.2	179.6	164.5	153.3	151.9	151.8	
	SHC	51.7	76.6	101.2	131.2	146.1	150.7	150.6	
	kW	11.71	11.50	11.15	10.89	10.70	10.68	10.67	
	BF	0.00	0.15	0.15	0.14	0.28	0.42	0.57	
105	TC	194.4	179.8	168.2	154.1	146.1	145.4	145.2	
	SHC	48.8	73.6	97.8	127.5	141.0	144.2	144.0	
	kW	12.80	12.69	12.44	12.20	11.96	11.94	11.94	
	BF	0.00	0.13	0.14	0.14	0.30	0.45	0.59	
115	TC	181.4	169.4	156.7	143.7	138.0	137.8	137.7	
	SHC	45.0	70.7	94.3	123.7	136.8	136.6	136.5	
	kW	14.10	13.88	13.74	13.50	13.30	13.29	13.28	
	BF	0.00	0.10	0.12	0.13	0.30	0.48	0.61	
125	TC	161.8	158.6	145.3	133.3	128.5	128.3	125.3	
	SHC	39.4	66.8	90.8	120.0	127.3	127.1	131.6	
	kW	15.30	15.27	15.03	14.80	14.70	14.71	14.64	
	BF	0.00	0.12	0.11	0.13	0.35	0.51	0.09	

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

3. The SHC is based on 80°F edb temperature of air entering evaporator coil
 Below 80°F edb, subtract (corr factor x cfm) from SHC.
 Above 80 °F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - \text{BF}) \times (\text{edb} - 80)$.

4. Cooling capacities for 50PG03–16 units with Humidi–MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG14 (12½ Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		3750							5000						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	191.8	179.8	167.9	152.9	138.0	123.0	114.0	223.0	207.7	192.4	173.2	154.1	134.9	123.4
	SHC	46.4	61.5	76.6	95.4	114.3	123.0	114.0	61.8	76.8	91.8	110.5	129.2	134.9	123.4
	kW	9.28	9.28	8.97	8.77	8.58	8.38	8.27	9.28	9.28	8.97	8.77	8.58	8.38	8.27
85	TC	179.9	169.7	159.5	146.7	134.0	121.3	113.6	200.5	187.9	175.2	159.4	143.6	127.7	118.2
	SHC	23.2	41.7	60.3	83.5	106.8	130.0	143.9	39.7	58.2	76.6	99.7	122.8	145.9	159.8
	kW	10.40	10.40	10.05	9.84	9.63	9.41	9.28	10.40	10.40	10.05	9.84	9.63	9.41	9.28
95	TC	167.9	159.5	151.1	140.6	130.1	119.6	113.3	178.1	168.1	158.1	145.6	133.1	120.6	113.1
	SHC	−0.1	22.0	44.1	71.6	99.2	119.6	113.3	17.6	39.5	61.5	89.0	116.5	120.6	113.1
	kW	11.51	11.51	11.14	10.91	10.67	10.44	10.30	11.51	11.51	11.14	10.91	10.67	10.44	10.30
105	TC	156.0	149.3	142.7	134.4	126.1	117.9	112.9	155.6	148.2	140.9	131.7	122.6	113.4	107.9
	SHC	−23.3	2.3	27.8	59.7	91.7	117.9	112.9	−4.6	20.9	46.4	78.3	110.2	113.4	107.9
	kW	12.63	12.63	12.22	11.97	11.72	11.46	11.31	12.63	12.63	12.22	11.97	11.72	11.46	11.31
115	TC	144.0	139.2	134.3	128.3	122.2	116.1	112.5	133.1	128.4	123.7	117.9	112.1	106.3	102.8
	SHC	−46.5	−17.5	11.6	47.8	84.1	116.1	112.5	−26.7	2.3	31.3	67.6	103.9	106.3	102.8
	kW	13.75	13.75	13.31	13.04	12.76	12.49	12.33	13.75	13.75	13.31	13.04	12.76	12.49	12.33
125	TC	132.1	129.0	125.9	122.1	118.3	114.4	112.1	110.6	108.6	106.6	104.1	101.6	99.1	97.6
	SHC	−69.7	−37.2	−4.7	35.9	76.6	114.4	112.1	−48.8	−16.3	16.2	56.9	97.5	99.1	97.6
	kW	14.86	14.86	14.39	14.10	13.81	13.52	13.34	14.86	14.86	14.39	14.10	13.81	13.52	13.34

50PG14 (12 ¹ / ₂ Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)														
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM												
		6250												
		Air Entering Evaporator — Ewb (F)												
		80	76	72	67	62	57	54						
75	TC	255.7	236.8	218.0	194.4	170.9	147.3	133.2						
	SHC	74.3	89.1	104.0	122.6	141.1	147.3	133.2						
	kW	9.28	9.28	8.97	8.77	8.58	8.38	8.27						
85	TC	222.2	206.9	191.7	172.6	153.5	134.5	123.0						
	SHC	53.0	71.4	89.8	112.8	135.8	158.8	172.6						
	kW	10.40	10.40	10.05	9.84	9.63	9.41	9.28						
95	TC	188.6	177.0	165.3	150.8	136.2	121.6	112.9						
	SHC	31.7	53.7	75.6	103.0	130.4	121.6	112.9						
	kW	11.51	11.51	11.14	10.91	10.67	10.44	10.30						
105	TC	155.1	147.1	139.0	128.9	118.9	108.8	102.7						
	SHC	10.5	35.9	61.4	93.3	118.9	108.8	102.7						
	kW	12.63	12.63	12.22	11.97	11.72	11.46	11.31						
115	TC	121.6	117.2	112.7	107.1	101.5	96.0	92.6						
	SHC	-10.8	18.2	47.2	83.5	101.5	96.0	92.6						
	kW	13.75	13.75	13.31	13.04	12.76	12.49	12.33						
125	TC	88.1	87.2	86.4	85.3	84.2	83.1	82.5						
	SHC	-32.1	0.5	33.0	73.7	84.2	83.1	82.5						
	kW	14.86	14.86	14.39	14.10	13.81	13.52	13.34						

LEGEND

Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG14 (12½ Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE (CIRCUIT A ONLY)										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		4375	5000	5625	4375	5000	5625	4375	5000	5625
50	TC	33.8	36.6	39.1	34.0	36.8	39.4	34.1	37.0	39.6
	SHC	14.8	14.8	14.8	9.0	9.0	9.0	3.9	3.9	3.9
	kW	4.57	4.57	4.57	4.59	4.59	4.59	4.61	4.61	4.61
40	TC	35.4	37.7	39.8	35.7	38.1	40.2	36.0	38.4	40.5
	SHC	14.2	14.2	14.2	9.6	9.6	9.6	5.6	5.6	5.6
	kW	4.61	4.61	4.61	4.65	4.65	4.65	4.68	4.68	4.68
30	TC	37.0	38.8	40.4	37.5	39.4	41.0	38.0	39.8	41.4
	SHC	13.5	13.5	13.5	10.1	10.1	10.1	7.2	7.2	7.2
	kW	4.65	4.65	4.65	4.70	4.70	4.70	4.75	4.75	4.75

50PG14 (12½ Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN HOT GAS REHEAT MODE (ALL CIRCUITS)										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		4375	5000	5625	4375	5000	5625	4375	5000	5625
80	TC	65.0	67.5	69.7	67.2	69.7	72.0	69.1	71.7	74.0
	SHC	20.6	26.5	31.9	10.7	16.4	21.5	2.1	7.6	12.6
	kW	8.61	8.61	8.61	8.67	8.67	8.67	8.72	8.72	8.72
75	TC	66.8	69.2	71.4	69.0	71.5	73.7	70.9	73.4	75.7
	SHC	22.0	27.6	32.8	12.8	18.2	23.2	4.8	10.0	14.8
	kW	8.55	8.55	8.55	8.62	8.62	8.62	8.68	8.68	8.68
70	TC	68.6	71.0	73.1	70.8	73.3	75.4	72.7	75.2	77.4
	SHC	23.4	28.8	33.8	14.9	20.1	24.8	7.5	12.5	17.1
	kW	8.49	8.49	8.49	8.57	8.57	8.57	8.64	8.64	8.64
60	TC	72.3	74.5	76.5	74.5	76.8	78.9	76.4	78.7	80.9
	SHC	26.2	31.1	35.6	19.1	23.8	28.1	12.9	17.4	21.6
	kW	8.38	8.38	8.38	8.47	8.47	8.47	8.55	8.55	8.55
50	TC	75.9	78.1	80.0	78.1	80.3	82.3	80.1	82.3	84.3
	SHC	29.0	33.4	37.5	23.2	27.5	31.4	18.2	22.4	26.2
	kW	8.26	8.26	8.26	8.37	8.37	8.37	8.46	8.46	8.46

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50PG

Cooling Capacities (cont)

50PG16 (15 Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER™ SYSTEM IN COOLING MODE															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm													
		4500							5250						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	58	54	80	76	72	67	62	58	54
60	TC	265.1	247.6	230.2	210.2	192.2	178.3	175.3	276.7	257.1	239.0	218.7	199.1	186.1	185.0
	SHC	73.4	91.5	109.5	132.7	156.9	172.5	175.3	74.1	93.8	116.9	144.4	170.6	184.9	185.0
	kW	8.72	8.60	8.47	8.35	8.19	8.10	8.07	8.80	8.68	8.55	8.39	8.25	8.15	8.16
	BF	0.00	0.00	0.24	0.14	0.10	0.12	0.30	0.00	0.00	0.18	0.12	0.11	0.17	0.37
70	TC	257.4	240.4	223.6	204.0	185.5	172.1	170.9	266.7	248.8	231.7	211.0	192.5	180.9	180.2
	SHC	62.0	88.6	107.4	131.3	153.8	167.6	170.9	71.8	91.1	115.2	141.6	168.5	178.4	180.2
	kW	9.92	9.78	9.65	9.48	9.35	9.25	9.23	9.98	9.86	9.70	9.55	9.40	9.31	9.30
	BF	0.00	0.00	0.19	0.11	0.10	0.14	0.32	0.00	0.00	0.14	0.11	0.10	0.20	0.39
75	TC	252.7	236.3	219.4	200.1	182.4	169.1	167.6	266.6	244.3	227.1	207.1	188.8	178.1	177.2
	SHC	68.7	87.1	106.0	129.5	153.0	166.8	167.6	71.8	90.6	113.6	140.4	167.0	176.0	177.2
	kW	10.55	10.41	10.27	10.12	9.96	9.86	9.85	10.66	10.48	10.33	10.17	10.01	9.94	9.93
	BF	0.00	0.00	0.17	0.11	0.09	0.13	0.33	0.00	0.00	0.13	0.11	0.09	0.21	0.40
85	TC	243.4	227.3	211.1	192.2	175.1	163.5	162.8	256.3	234.0	217.4	198.6	180.8	172.5	172.3
	SHC	65.6	83.6	103.3	126.8	150.0	163.4	162.8	68.4	87.8	110.2	137.4	163.5	172.5	172.3
	kW	11.89	11.76	11.61	11.45	11.30	11.19	11.19	12.01	11.81	11.67	11.51	11.35	11.28	11.28
	BF	0.00	0.00	0.13	0.09	0.08	0.13	0.35	0.00	0.07	0.12	0.10	0.09	0.22	0.41
95	TC	232.1	216.8	201.5	183.6	166.9	157.6	157.5	238.2	222.4	207.0	188.8	171.9	166.3	166.1
	SHC	61.9	79.7	99.9	123.4	146.2	157.6	157.5	62.7	84.2	106.6	133.5	159.4	166.3	166.1
	kW	13.36	13.22	13.09	12.92	12.76	12.67	12.67	13.42	13.28	13.14	12.97	12.81	12.76	12.75
	BF	0.00	0.00	0.11	0.09	0.08	0.16	0.37	0.00	0.23	0.11	0.09	0.09	0.24	0.43
105	TC	219.4	205.0	190.5	173.7	158.0	151.1	150.9	224.6	209.8	195.5	178.5	162.6	159.2	159.0
	SHC	57.8	76.4	95.9	119.4	142.1	151.1	150.9	58.5	80.2	102.4	129.4	154.8	159.2	159.0
	kW	14.94	14.82	14.68	14.52	14.36	14.28	14.28	15.01	14.87	14.73	14.57	14.41	14.37	14.37
	BF	0.00	0.06	0.10	0.08	0.08	0.19	0.40	0.00	0.16	0.10	0.09	0.09	0.27	0.45
115	TC	205.1	191.6	178.4	162.9	148.2	143.7	143.5	209.5	196.1	182.7	167.0	152.6	151.0	150.9
	SHC	53.3	72.2	91.5	114.9	137.5	143.7	143.5	53.8	75.8	97.9	124.9	149.2	151.0	150.9
	kW	16.64	16.52	16.39	16.23	16.08	16.02	16.02	16.70	16.58	16.44	16.28	16.12	16.11	16.11
	BF	0.00	0.18	0.09	0.08	0.08	0.23	0.42	0.00	0.13	0.09	0.08	0.11	0.31	0.48
125	TC	188.7	177.1	164.9	150.5	137.3	135.0	134.9	192.3	180.1	168.5	154.0	141.8	141.6	141.4
	SHC	48.2	67.5	86.6	110.0	132.0	135.0	134.9	48.6	70.7	92.9	119.8	141.8	141.6	141.4
	kW	18.41	18.33	18.21	18.05	17.89	17.87	17.86	18.46	18.36	18.25	18.09	17.95	17.95	17.95
	BF	0.00	0.13	0.08	0.07	0.08	0.28	0.46	0.00	0.11	0.09	0.08	0.13	0.35	0.51

50PG16 (15 Tons) — STANDARD UNIT AND UNIT WITH HUMIDI-MIZER SYSTEM IN COOLING MODE (cont)															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm													
		6000							7500						
		Air Entering Evaporator — Ewb (F)													
	80	76	72	67	62	58	54	80	76	72	67	62	58	54	
60	TC	288.3	267.2	246.2	224.4	205.0	194.8	194.1	295.2	276.6	255.2	233.5	213.5	209.3	208.7
	SHC	74.8	99.6	124.5	154.2	184.2	192.1	194.1	77.9	107.4	137.0	174.3	206.6	209.3	208.7
	kW	8.89	8.74	8.59	8.44	8.29	8.23	8.22	8.96	8.81	8.66	8.50	8.35	8.32	8.32
	BF	0.00	0.00	0.15	0.13	0.11	0.25	0.42	0.00	0.23	0.14	0.13	0.15	0.34	0.50
70	TC	276.9	254.9	237.3	216.8	197.7	189.8	188.9	282.1	263.2	245.5	224.6	205.4	203.1	203.1
	SHC	73.9	96.4	121.6	152.2	181.6	189.8	188.9	73.9	103.5	134.0	171.3	202.2	203.1	203.1
	kW	10.06	9.90	9.75	9.59	9.44	9.37	9.38	10.11	9.96	9.82	9.65	9.51	9.49	9.49
	BF	0.00	0.08	0.13	0.11	0.11	0.25	0.44	0.00	0.19	0.13	0.12	0.16	0.36	0.52
75	TC	273.1	249.9	232.7	212.4	193.8	186.6	186.4	276.0	257.7	240.2	219.7	201.8	200.2	199.9
	SHC	72.7	95.0	120.1	150.7	180.0	186.6	186.4	72.1	101.9	132.3	169.6	198.5	200.2	199.9
	kW	10.70	10.52	10.38	10.21	10.06	10.00	10.00	10.74	10.59	10.44	10.27	10.13	10.12	10.12
	BF	0.00	0.17	0.13	0.11	0.11	0.26	0.44	0.00	0.17	0.13	0.12	0.17	0.37	0.52
85	TC	265.7	238.7	222.4	203.0	185.1	180.5	180.2	263.0	245.7	229.2	209.5	193.9	193.4	193.1
	SHC	70.4	91.5	116.7	147.2	175.8	180.5	180.2	68.2	98.2	128.6	165.7	193.0	193.4	193.1
	kW	12.08	11.86	11.72	11.55	11.39	11.35	11.35	12.08	11.93	11.79	11.61	11.47	11.47	11.47
	BF	0.00	0.20	0.11	0.10	0.11	0.28	0.46	0.00	0.16	0.12	0.12	0.19	0.39	0.54
95	TC	242.8	226.7	211.3	193.1	176.3	173.8	173.6	249.1	232.9	217.3	198.6	186.3	185.5	185.3
	SHC	63.3	87.8	112.8	143.3	171.0	173.8	173.6	64.1	94.2	124.5	161.5	183.3	185.5	185.3
	kW	13.47	13.33	13.18	13.02	12.85	12.83	12.83	13.55	13.40	13.25	13.07	12.95	12.95	12.95
	BF	0.00	0.16	0.11	0.10	0.11	0.31	0.48	0.00	0.15	0.12	0.11	0.23	0.41	0.56
105	TC	228.5	213.8	199.2	182.1	167.0	166.0	165.8	234.1	219.1	204.5	187.1	176.9	176.7	176.6
	SHC	58.9	83.7	108.6	139.0	165.0	166.0	165.8	59.7	89.8	120.1	157.1	176.9	176.7	176.6
	kW	15.05	14.92	14.78	14.61	14.45	14.44	14.44	15.13	14.99	14.84	14.67	14.56	14.56	14.56
	BF	0.00	0.14	0.10	0.10	0.13	0.34	0.50	0.00	0.14	0.12	0.11	0.25	0.44	0.58
115	TC	212.8	199.2	186.0	170.1	157.8	157.2	157.0	217.4	204.0	190.4	174.4	167.0	166.8	166.7
	SHC	54.2	79.0	103.9	134.3	156.3	157.2	157.0	54.8	85.2	115.4	152.1	167.0	166.8	166.7
	kW	16.74	16.62	16.48	16.32	16.18	16.18	16.18	16.81	16.68	16.54	16.38	16.29	16.29	16.29
	BF	0.00	0.13	0.10	0.09	0.17	0.37	0.53	0.00	0.13	0.11	0.11	0.29	0.47	0.60
125	TC	195.0	183.5	171.2	156.5	147.2	147.0	146.9	198.5	186.7	174.9	160.1	155.6	155.5	155.4
	SHC	48.9	74.1	98.9	129.1	147.2	147.0	146.9	49.4	79.8	110.0	146.2	155.6	155.5	155.4
	kW	18.51	18.41	18.28	18.13	18.02	18.02	18.01	18.57	18.44	18.33	18.17	18.12	18.12	18.11
	BF	0.00	0.11	0.09	0.09	0.21	0.41	0.56	0.00	0.12	0.11	0.12	0.34	0.50	0.63

* See next page for Legend and Notes

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

3. The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80 °F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - \text{BF}) \times (\text{edb} - 80)$.

4. Cooling capacities for 50PG03–16 units with Humidi–MiZer system in Cooling mode are the same as standard units.

Cooling Capacities (cont)

50PG16 (15 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN SUBCOOLING MODE

Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM													
		4500							6000						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
75	TC	235.9	218.6	201.4	179.8	158.2	136.6	123.6	267.2	246.0	224.8	198.3	171.7	145.2	129.3
	SHC	56.0	72.0	88.1	108.1	128.1	136.6	123.6	65.6	84.3	103.0	126.3	149.7	145.2	129.3
	kW	10.07	10.07	9.81	9.64	9.48	9.32	9.22	9.89	9.89	9.85	9.82	9.79	9.77	9.75
85	TC	222.6	207.0	191.3	171.7	152.1	132.5	120.8	244.4	225.5	206.5	182.9	159.2	135.6	121.4
	SHC	32.5	52.2	71.9	96.5	121.2	145.8	160.6	38.3	61.2	84.2	112.9	141.6	170.3	187.6
	kW	11.62	11.62	11.30	11.10	10.90	10.70	10.58	11.41	11.41	11.34	11.30	11.25	11.21	11.19
95	TC	209.4	195.3	181.2	163.7	146.1	128.5	118.0	221.5	204.9	188.3	167.5	146.7	125.9	113.5
	SHC	8.9	32.3	55.7	85.0	114.2	128.5	118.0	10.9	38.1	65.4	99.5	133.6	125.9	113.5
	kW	13.16	13.16	12.79	12.55	12.32	12.09	11.95	12.93	12.93	12.84	12.78	12.72	12.66	12.62
105	TC	196.1	183.6	171.2	155.6	140.1	124.5	115.2	198.7	184.4	170.0	152.1	134.2	116.3	105.6
	SHC	-14.6	12.5	39.6	73.4	107.3	124.5	115.2	-16.5	15.0	46.6	86.0	125.5	116.3	105.6
	kW	14.71	14.71	14.28	14.01	13.74	13.47	13.31	14.45	14.45	14.33	14.25	14.18	14.10	14.06
115	TC	182.8	171.9	161.1	147.6	134.0	120.5	112.4	175.9	163.8	151.8	136.8	121.7	106.7	97.7
	SHC	-38.2	-7.4	23.4	61.8	100.3	120.5	112.4	-43.9	-8.1	27.8	72.6	117.4	106.7	97.7
	kW	16.25	16.25	15.77	15.46	15.16	14.86	14.68	15.97	15.97	15.82	15.73	15.64	15.55	15.49
125	TC	169.5	160.3	151.1	139.5	128.0	116.5	109.6	153.0	143.3	133.5	121.4	109.2	97.1	89.8
	SHC	-61.7	-27.3	7.2	50.3	93.4	116.5	109.6	-71.3	-31.2	9.0	59.2	109.2	97.1	89.8
	kW	17.80	17.80	17.26	16.92	16.58	16.24	16.04	17.49	17.49	17.32	17.21	17.10	16.99	16.93

50PG16 (15 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM IN SUBCOOLING MODE (cont)

Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — CFM						
		7500						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
75	TC	298.1	273.0	247.9	216.5	185.1	153.7	134.9
	SHC	74.2	95.2	116.3	142.6	168.8	153.7	134.9
	kW	9.75	9.75	9.88	9.96	10.04	10.12	10.17
85	TC	265.9	243.7	221.6	193.9	166.2	138.6	122.0
	SHC	43.4	69.3	95.1	127.5	159.8	192.1	211.5
	kW	11.25	11.25	11.38	11.45	11.53	11.61	11.66
95	TC	233.6	214.4	195.3	171.3	147.4	123.4	109.0
	SHC	12.6	43.3	74.0	112.4	147.4	123.4	109.0
	kW	12.75	12.75	12.87	12.95	13.03	13.11	13.15
105	TC	201.3	185.1	168.9	148.7	128.5	108.2	96.1
	SHC	−18.3	17.3	52.8	97.3	128.5	108.2	96.1
	kW	14.25	14.25	14.37	14.45	14.52	14.60	14.64
115	TC	169.0	155.8	142.6	126.1	109.6	93.1	83.2
	SHC	−49.1	−8.7	31.7	82.2	109.6	93.1	83.2
	kW	15.75	15.75	15.87	15.94	16.02	16.09	16.13
125	TC	136.7	126.5	116.3	103.5	90.7	77.9	70.2
	SHC	−79.9	−34.7	10.5	67.1	90.7	77.9	70.2
	kW	17.25	17.25	17.37	17.44	17.51	17.58	17.63

LEGEND

BF — Bypass Factor
Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG16 (15 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM IN HOT GAS REHEAT MODE										
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)								
		75 Dry Bulb 62.5 Wet Bulb (50% RH)			75 Dry Bulb 64 Wet Bulb (55% RH)			75 Dry Bulb 65.3 Wet Bulb (60% RH)		
		Air Entering Evaporator — Cfm								
		5250	6000	6750	5250	6000	6750	5250	6000	6750
80	TC	49.5	51.9	54.0	52.6	55.0	57.2	55.2	57.7	60.0
	SHC	1.8	3.6	5.1	-14.3	-11.8	-9.6	-28.3	-25.1	-22.3
	kW	12.33	12.39	12.45	12.47	12.46	12.52	12.46	12.52	12.58
75	TC	52.9	55.2	57.3	55.9	58.3	60.5	58.5	61.0	63.2
	SHC	3.6	5.2	6.6	-11.5	-9.2	-7.2	-24.6	-21.6	-19.0
	kW	11.98	12.03	12.08	12.11	12.11	12.16	12.11	12.17	12.22
70	TC	56.3	58.6	60.6	59.2	61.6	63.7	61.8	64.3	66.5
	SHC	5.4	6.8	8.0	-8.7	-6.6	-4.8	-20.8	-18.2	-15.8
	kW	11.62	11.67	11.72	11.75	11.75	11.80	11.76	11.82	11.87
60	TC	63.0	65.2	67.2	65.9	68.2	70.3	68.4	70.8	72.9
	SHC	8.9	10.0	10.9	-3.0	-1.4	0.0	-13.3	-11.2	-9.3
	kW	10.90	10.94	10.98	11.04	11.04	11.08	11.07	11.11	11.16
50	TC	69.7	71.9	73.8	72.5	74.8	76.8	75.0	77.3	79.4
	SHC	12.5	13.2	13.7	2.7	3.8	4.8	-5.8	-4.2	-2.9
	kW	10.18	10.22	10.25	10.33	10.32	10.36	10.37	10.41	10.45
40	TC	76.4	78.5	80.4	79.2	81.4	83.3	81.6	83.8	85.8
	SHC	16.1	16.4	16.6	8.4	9.0	9.6	1.7	2.7	3.6
	kW	9.47	9.50	9.52	9.61	9.61	9.64	9.68	9.71	9.73

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG20 (18 Tons) — STANDARD UNIT															
Temp (F)		Air Entering Evaporator — Cfm													
		5400							6300						
Air Ent		Air Entering Evaporator — Ewb (F)													
		Condenser													
(Edb)		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	306	290	274	254	234	214	203	307	291	276	256	236	216	204
	SHC	131	142	152	166	179	193	201	138	148	159	172	185	198	204
	kW	7.9	7.9	7.9	7.8	7.8	7.8	7.8	8.1	8.0	8.0	8.0	7.9	7.9	7.9
	BF	0.00	0.23	0.11	0.04	0.08	0.21	0.42	0.00	0.25	0.13	0.05	0.09	0.23	0.44
70	TC	290	275	260	241	222	203	191	292	277	261	242	223	204	193
	SHC	110	125	140	158	177	195	191	119	133	147	165	183	201	193
	kW	9.9	9.8	9.8	9.7	9.7	9.6	9.6	10.1	10.0	9.9	9.9	9.8	9.7	9.7
	BF	0.00	0.24	0.13	0.06	0.10	0.22	0.43	0.00	0.26	0.15	0.07	0.12	0.24	0.45
75	TC	282	267	252	234	215	197	186	284	269	254	236	217	198	187
	SHC	100	117	134	154	175	196	186	109	125	142	162	182	198	187
	kW	10.9	10.8	10.7	10.7	10.6	10.5	10.5	11.0	11.0	10.9	10.8	10.7	10.7	10.6
	BF	0.00	0.25	0.14	0.08	0.11	0.23	0.44	0.00	0.27	0.16	0.08	0.13	0.25	0.46
85	TC	266	252	238	220	203	185	174	269	254	240	222	204	187	176
	SHC	80	101	121	147	173	185	174	90	110	130	155	180	187	176
	kW	12.8	12.7	12.6	12.5	12.4	12.3	12.3	13.0	12.9	12.8	12.7	12.6	12.5	12.4
	BF	0.00	0.27	0.16	0.10	0.13	0.25	0.46	0.00	0.29	0.18	0.11	0.15	0.27	0.48
95	TC	251	237	224	207	190	173	163	253	240	226	209	192	175	165
	SHC	60	84	109	139	170	173	163	71	95	119	149	179	175	165
	kW	14.8	14.7	14.6	14.4	14.3	14.2	14.1	15.0	14.9	14.8	14.6	14.5	14.3	14.2
	BF	0.00	0.28	0.18	0.12	0.15	0.26	0.47	0.00	0.31	0.21	0.13	0.18	0.29	0.50
105	TC	235	222	209	193	177	161	152	238	225	212	196	180	163	154
	SHC	40	68	96	132	167	161	152	52	80	108	142	177	163	154
	kW	16.7	16.6	16.5	16.3	16.1	16.0	15.9	17.0	16.9	16.7	16.5	16.3	16.2	16.1
	BF	0.00	0.31	0.20	0.14	0.17	0.29	0.50	0.00	0.33	0.23	0.15	0.20	0.31	0.52
115	TC	219	207	195	180	165	149	140	222	210	198	182	167	152	143
	SHC	20	52	84	124	165	149	140	33	65	96	136	167	152	143
	kW	18.7	18.5	18.4	18.2	18.0	17.8	17.7	19.0	18.8	18.6	18.4	18.2	18.0	17.9
	BF	0.00	0.33	0.22	0.16	0.19	0.31	0.52	0.00	0.35	0.25	0.17	0.23	0.33	0.54
125	TC	203	192	180	166	152	138	129	207	195	184	169	155	140	132
	SHC	10	35	72	117	152	138	129	14	49	85	129	155	140	132
	kW	20.6	20.5	20.3	20.1	19.8	19.6	19.5	21.0	20.8	20.6	20.3	20.1	19.8	19.7
	BF	0.00	0.35	0.24	0.18	0.21	0.33	0.54	0.00	0.37	0.27	0.19	0.25	0.35	0.56

50PG20 (18 Tons) — STANDARD UNIT (cont)															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm													
		7200							8100						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	309	293	277	257	237	217	205	310	294	278	258	238	217	205
	SHC	143	154	164	177	189	202	205	148	158	168	181	193	205	205
	kW	8.2	8.2	8.1	8.1	8.0	8.0	8.0	8.3	8.2	8.2	8.2	8.1	8.1	8.0
	BF	0.00	0.26	0.15	0.05	0.11	0.24	0.45	0.00	0.28	0.17	0.05	0.12	0.26	0.47
70	TC	294	278	263	244	224	205	194	295	279	264	245	225	206	195
	SHC	125	139	153	171	188	205	194	131	145	159	176	193	206	195
	kW	10.2	10.1	10.1	10.0	9.9	9.8	9.8	10.3	10.2	10.2	10.1	10.0	9.9	9.9
	BF	0.00	0.28	0.17	0.07	0.14	0.26	0.47	0.00	0.30	0.19	0.07	0.16	0.28	0.49
75	TC	286	271	256	237	218	199	188	287	272	257	238	219	200	189
	SHC	116	132	148	168	188	199	188	123	138	154	173	193	200	189
	kW	11.2	11.1	11.0	11.0	10.9	10.8	10.7	11.3	11.2	11.2	11.1	11.0	10.9	10.8
	BF	0.00	0.29	0.18	0.08	0.15	0.27	0.48	0.00	0.31	0.20	0.09	0.17	0.29	0.50
85	TC	271	256	242	224	206	188	177	272	258	243	225	207	189	178
	SHC	98	118	138	162	187	188	177	105	125	144	168	192	189	178
	kW	13.2	13.1	13.0	12.9	12.7	12.6	12.5	13.3	13.2	13.1	13.0	12.9	12.7	12.6
	BF	0.00	0.31	0.21	0.11	0.18	0.29	0.50	0.00	0.33	0.23	0.11	0.20	0.31	0.52
95	TC	256	242	228	211	194	177	166	257	244	230	212	195	178	168
	SHC	80	104	127	157	186	177	166	88	111	134	163	192	178	168
	kW	15.2	15.1	15.0	14.8	14.6	14.5	14.4	15.4	15.2	15.1	14.9	14.7	14.6	14.5
	BF	0.00	0.33	0.23	0.13	0.20	0.31	0.52	0.00	0.35	0.25	0.14	0.22	0.33	0.54
105	TC	240	227	214	198	182	165	155	242	229	216	200	183	167	157
	SHC	62	90	117	151	182	165	155	71	98	125	158	183	167	157
	kW	17.2	17.1	16.9	16.7	16.5	16.3	16.2	17.4	17.2	17.1	16.9	16.6	16.4	16.3
	BF	0.00	0.35	0.25	0.15	0.23	0.33	0.54	0.00	0.37	0.27	0.16	0.25	0.35	0.56
115	TC	225	213	200	185	169	154	144	227	215	202	187	171	155	146
	SHC	44	75	106	145	169	154	144	54	84	115	153	171	155	146
	kW	19.2	19.0	18.9	18.6	18.4	18.2	18.0	19.4	19.2	19.0	18.8	18.5	18.3	18.2
	BF	0.00	0.37	0.28	0.17	0.26	0.35	0.56	0.00	0.39	0.30	0.19	0.28	0.37	0.58
125	TC	210	198	186	172	157	142	134	212	200	189	174	159	144	135
	SHC	26	61	96	139	157	142	134	37	71	105	148	159	144	135
	kW	21.2	21.0	20.8	20.5	20.3	20.0	19.9	21.4	21.2	21.0	20.7	20.4	20.2	20.0
	BF	0.00	0.39	0.30	0.20	0.28	0.37	0.58	0.00	0.41	0.32	0.21	0.30	0.39	0.60

Cooling Capacities (cont)

50PG20 (18 Tons) — STANDARD UNIT (cont)								
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm						
		9000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	311	295	279	258	238	218	206
	SHC	153	162	172	184	196	209	206
	kW	8.4	8.3	8.3	8.2	8.2	8.1	8.1
	BF	0.00	0.29	0.18	0.05	0.13	0.27	0.48
70	TC	296	281	265	246	226	207	195
	SHC	136	150	163	180	197	207	195
	kW	10.4	10.3	10.3	10.2	10.1	10.0	9.9
	BF	0.00	0.31	0.20	0.07	0.17	0.29	0.50
75	TC	289	273	258	239	220	201	190
	SHC	128	143	158	178	197	201	190
	kW	11.4	11.3	11.2	11.1	11.0	10.9	10.9
	BF	0.00	0.32	0.21	0.09	0.18	0.30	0.51
85	TC	274	259	245	227	208	190	179
	SHC	111	130	149	173	197	190	179
	kW	13.5	13.3	13.2	13.1	12.9	12.8	12.7
	BF	0.00	0.34	0.24	0.11	0.21	0.32	0.53
95	TC	259	245	231	214	196	179	169
	SHC	95	118	140	169	196	179	169
	kW	15.5	15.3	15.2	15.0	14.8	14.7	14.6
	BF	0.00	0.36	0.26	0.14	0.23	0.34	0.55
105	TC	244	231	218	201	184	168	158
	SHC	78	105	131	164	184	168	158
	kW	17.5	17.4	17.2	17.0	16.8	16.5	16.4
	BF	0.00	0.38	0.28	0.17	0.25	0.36	0.57
115	TC	229	217	204	188	172	157	147
	SHC	62	92	122	160	172	157	147
	kW	19.6	19.4	19.2	18.9	18.7	18.4	18.3
	BF	0.00	0.40	0.30	0.20	0.29	0.38	0.59
125	TC	214	202	190	175	160	146	137
	SHC	46	79	113	156	160	146	137
	kW	21.6	21.4	21.1	20.9	20.6	20.3	20.1
	BF	0.00	0.42	0.32	0.22	0.31	0.40	0.61

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

$$\text{Correlation Factor} = 1.09 \times (1 - \text{BF}) \times (\text{edb} - 80).$$

Cooling Capacities (cont)

50PG20 (18 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — COOLING MODE															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF													
		5400							6300						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	308	290	273	252	231	209	196	312	295	277	256	234	212	199
	SHC	122	133	144	159	173	187	195	130	141	152	166	179	193	199
	kW	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1
	BF	0.00	0.23	0.11	0.04	0.08	0.21	0.42	0.00	0.25	0.13	0.05	0.09	0.23	0.44
70	TC	294	277	260	240	219	198	185	299	282	265	244	223	201	189
	SHC	104	119	134	153	172	191	185	113	128	143	161	179	198	189
	kW	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.3	10.3	10.3	10.3	10.3	10.3	10.3
	BF	0.00	0.24	0.13	0.06	0.10	0.22	0.43	0.00	0.26	0.15	0.07	0.12	0.24	0.45
75	TC	287	271	254	233	213	192	180	293	276	259	238	217	196	183
	SHC	95	112	129	150	171	192	180	105	122	138	159	179	196	183
	kW	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.3	11.3	11.3	11.3	11.3	11.3	11.3
	BF	0.00	0.25	0.14	0.08	0.11	0.23	0.44	0.00	0.27	0.16	0.08	0.13	0.25	0.46
85	TC	273	257	241	221	201	181	168	280	263	247	226	206	185	173
	SHC	76	97	118	144	170	181	168	88	109	129	154	179	185	173
	kW	13.3	13.3	13.3	13.2	13.2	13.2	13.1	13.6	13.5	13.5	13.4	13.4	13.3	13.3
	BF	0.00	0.27	0.16	0.10	0.13	0.25	0.46	0.00	0.29	0.18	0.11	0.15	0.27	0.48
95	TC	260	244	228	208	189	169	157	267	251	235	215	194	174	162
	SHC	58	83	108	138	169	169	157	72	96	120	150	180	174	162
	kW	15.5	15.5	15.4	15.3	15.2	15.2	15.1	15.8	15.7	15.7	15.6	15.5	15.4	15.3
	BF	0.00	0.28	0.18	0.12	0.15	0.26	0.47	0.00	0.31	0.21	0.13	0.18	0.29	0.50
105	TC	246	231	215	196	177	158	146	254	238	222	203	183	163	152
	SHC	40	69	97	133	168	158	146	55	83	110	145	180	163	152
	kW	17.7	17.6	17.5	17.4	17.3	17.2	17.1	18.1	17.9	17.8	17.7	17.5	17.4	17.3
	BF	0.00	0.31	0.20	0.14	0.17	0.29	0.50	0.00	0.33	0.23	0.15	0.20	0.31	0.52
115	TC	232	217	202	184	165	146	135	241	226	210	191	172	153	141
	SHC	22	54	86	127	165	146	135	38	70	101	140	172	153	141
	kW	19.9	19.8	19.7	19.5	19.3	19.2	19.1	20.3	20.1	20.0	19.8	19.6	19.4	19.3
	BF	0.00	0.33	0.22	0.16	0.19	0.31	0.52	0.00	0.35	0.25	0.17	0.23	0.33	0.54
125	TC	219	204	189	171	153	135	124	228	213	198	179	160	142	130
	SHC	4	40	76	121	153	135	124	22	57	92	136	160	142	130
	kW	22.2	22.0	21.8	21.6	21.4	21.2	21.0	22.5	22.4	22.2	21.9	21.7	21.4	21.3
	BF	0.00	0.35	0.24	0.18	0.21	0.33	0.54	0.00	0.37	0.27	0.19	0.25	0.35	0.56

50PG20 (18 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — COOLING MODE (cont)															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF													
		7200							8100						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	316	298	281	259	237	215	202	319	301	283	261	239	217	204
	SHC	137	148	158	171	185	198	202	143	153	163	176	189	202	204
	kW	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.3	8.3
	BF	0.00	0.26	0.15	0.05	0.11	0.24	0.45	0.00	0.28	0.17	0.05	0.12	0.26	0.47
70	TC	303	286	269	248	226	205	192	307	290	272	251	229	207	194
	SHC	122	136	150	168	186	203	192	128	142	156	174	191	207	194
	kW	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.5	10.5	10.5	10.5
	BF	0.00	0.28	0.17	0.07	0.14	0.26	0.47	0.00	0.30	0.19	0.07	0.16	0.28	0.49
75	TC	297	280	263	242	221	199	187	301	284	267	245	224	202	189
	SHC	114	130	146	166	186	199	187	121	137	153	172	192	202	189
	kW	11.5	11.5	11.5	11.5	11.5	11.4	11.4	11.6	11.6	11.6	11.6	11.6	11.5	11.5
	BF	0.00	0.29	0.18	0.08	0.15	0.27	0.48	0.00	0.31	0.20	0.09	0.17	0.29	0.50
85	TC	285	268	252	231	210	189	176	290	273	256	234	213	192	179
	SHC	98	118	138	163	187	189	176	107	126	145	170	194	192	179
	kW	13.8	13.7	13.7	13.6	13.5	13.5	13.4	13.9	13.9	13.8	13.7	13.7	13.6	13.6
	BF	0.00	0.31	0.21	0.11	0.18	0.29	0.50	0.00	0.33	0.23	0.11	0.20	0.31	0.52
95	TC	273	256	240	220	199	179	166	278	261	245	224	203	182	170
	SHC	83	106	130	159	188	179	166	92	115	138	167	196	182	170
	kW	16.0	15.9	15.9	15.7	15.6	15.5	15.5	16.2	16.1	16.0	15.9	15.8	15.7	15.6
	BF	0.00	0.33	0.23	0.13	0.20	0.31	0.52	0.00	0.35	0.25	0.14	0.22	0.33	0.54
105	TC	261	245	228	208	188	168	156	266	250	233	213	193	172	160
	SHC	67	94	122	155	188	168	156	78	104	131	164	193	172	160
	kW	18.3	18.2	18.1	17.9	17.7	17.6	17.5	18.5	18.4	18.2	18.1	17.9	17.7	17.6
	BF	0.00	0.35	0.25	0.15	0.23	0.33	0.54	0.00	0.37	0.27	0.16	0.25	0.35	0.56
115	TC	248	233	217	197	177	158	146	254	238	222	202	182	162	150
	SHC	52	83	113	152	177	158	146	63	94	124	161	182	162	150
	kW	20.6	20.4	20.2	20.0	19.8	19.6	19.5	20.8	20.6	20.4	20.2	20.0	19.8	19.6
	BF	0.00	0.37	0.28	0.17	0.26	0.35	0.56	0.00	0.39	0.30	0.19	0.28	0.37	0.58
125	TC	236	221	205	186	167	147	136	243	227	211	192	172	152	140
	SHC	36	71	105	148	167	147	136	49	83	117	159	172	152	140
	kW	22.8	22.6	22.4	22.2	21.9	21.7	21.5	23.1	22.9	22.6	22.4	22.1	21.8	21.7
	BF	0.00	0.39	0.30	0.20	0.28	0.37	0.58	0.00	0.41	0.32	0.21	0.30	0.39	0.60

Cooling Capacities (cont)

50PG20 (18 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — COOLING MODE (cont)								
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF						
		9000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	321	304	286	264	241	219	206
	SHC	148	158	168	181	193	206	206
	kW	8.4	8.4	8.4	8.4	8.4	8.4	8.4
	BF	0.00	0.29	0.18	0.05	0.13	0.27	0.48
70	TC	310	293	275	253	231	209	196
	SHC	134	148	162	179	196	209	196
	kW	10.6	10.6	10.6	10.6	10.6	10.6	10.6
	BF	0.00	0.31	0.20	0.07	0.17	0.29	0.50
75	TC	305	287	270	248	226	205	192
	SHC	128	143	158	178	197	205	192
	kW	11.8	11.7	11.7	11.7	11.7	11.6	11.6
	BF	0.00	0.32	0.21	0.09	0.18	0.30	0.51
85	TC	293	276	259	238	216	195	182
	SHC	114	133	152	176	199	195	182
	kW	14.1	14.0	13.9	13.9	13.8	13.7	13.6
	BF	0.00	0.34	0.24	0.11	0.21	0.32	0.53
95	TC	282	265	248	227	206	185	173
	SHC	100	123	146	174	202	185	173
	kW	16.4	16.3	16.2	16.0	15.9	15.8	15.7
	BF	0.00	0.36	0.26	0.14	0.23	0.34	0.55
105	TC	271	254	238	217	196	176	163
	SHC	87	113	139	172	196	176	163
	kW	18.7	18.5	18.4	18.2	18.0	17.8	17.7
	BF	0.00	0.38	0.28	0.17	0.25	0.36	0.57
115	TC	260	243	227	207	186	166	154
	SHC	73	103	133	170	186	166	154
	kW	21.0	20.8	20.6	20.4	20.1	19.9	19.8
	BF	0.00	0.40	0.30	0.20	0.29	0.38	0.59
125	TC	249	233	216	196	176	156	144
	SHC	60	93	126	168	176	156	144
	kW	23.3	23.1	22.8	22.5	22.3	22.0	21.8
	BF	0.00	0.42	0.32	0.22	0.31	0.40	0.61

LEGEND

BF — Bypass Factor
Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

3. The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

$$\text{Correlation Factor} = 1.09 \times (1 - \text{BF}) \times (\text{edb} - 80).$$

Cooling Capacities (cont)

50PG20 (18 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — SUBCOOLING MODE															
Temp (F) Air Entering Condenser (Edb)		Air Entering Evaporator — CFM													
		5400							6300						
		Air Entering Evaporator — Ewb (F)													
80	76	72	67	62	57	54	80	76	72	67	62	57	54		
60	TC	316	297	279	256	233	211	197	320	301	283	260	237	214	200
	SHC	128	139	149	163	176	190	197	135	146	156	169	182	195	200
	kW	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.4	8.4	8.4	8.4	8.4	8.4	8.4
70	TC	299	281	263	241	219	196	183	304	286	268	245	223	200	186
	SHC	102	117	132	151	169	188	183	111	126	140	158	176	194	186
	kW	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.4	10.4	10.4	10.4	10.4	10.4	10.4
75	TC	291	273	255	233	211	189	176	296	278	260	238	216	193	180
	SHC	90	107	124	145	166	187	176	99	116	132	153	173	193	180
	kW	11.3	11.3	11.2	11.2	11.1	11.1	11.1	11.6	11.5	11.5	11.4	11.3	11.3	11.2
85	TC	274	257	240	218	197	175	162	280	263	245	223	202	180	166
	SHC	64	85	106	133	159	175	162	75	95	116	142	167	180	166
	kW	13.4	13.4	13.3	13.2	13.1	13.0	13.0	13.7	13.6	13.5	13.4	13.3	13.2	13.1
95	TC	258	241	224	203	182	161	148	265	247	230	209	187	166	153
	SHC	39	64	89	120	152	161	148	51	75	100	130	161	166	153
	kW	15.6	15.4	15.3	15.2	15.1	14.9	14.8	15.9	15.7	15.6	15.5	15.3	15.1	15.0
105	TC	241	225	208	188	167	147	135	249	232	215	194	173	152	140
	SHC	13	42	72	108	145	147	135	26	55	84	119	155	152	140
	kW	17.7	17.5	17.4	17.2	17.0	16.8	16.7	18.0	17.9	17.7	17.5	17.3	17.1	17.0
115	TC	225	209	193	173	153	133	121	233	217	200	180	159	139	127
	SHC	-12	21	54	96	138	133	121	2	35	68	108	149	139	127
	kW	19.8	19.6	19.4	19.2	19.0	18.7	18.6	20.2	20.0	19.8	19.5	19.3	19.0	18.9
125	TC	208	192	177	157	138	119	107	217	201	185	165	145	125	113
	SHC	-38	0	37	84	131	119	107	-22	15	51	97	143	125	113
	kW	21.9	21.7	21.5	21.2	20.9	20.7	20.5	22.3	22.1	21.9	21.6	21.2	20.9	20.8

50PG20 (18 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — SUBCOOLING MODE (cont)															
Temp (F) Air Entering Condenser (Edb)		Air Entering Evaporator — CFM													
		7200							8100						
		Air Entering Evaporator — Ewb (F)													
80	76	72	67	62	57	54	80	76	72	67	62	57	54		
60	TC	323	305	286	263	239	216	202	326	307	289	265	242	218	204
	SHC	142	152	162	174	187	199	202	147	157	166	179	191	203	204
	kW	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6
70	TC	308	290	272	249	226	203	189	312	293	275	252	229	206	192
	SHC	118	132	147	164	182	199	189	125	138	152	169	187	204	192
	kW	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.7	10.7	10.7	10.7	10.7	10.7	10.7
75	TC	301	282	264	242	219	196	183	304	286	268	245	222	199	185
	SHC	107	123	139	159	179	196	183	113	129	145	165	184	199	185
	kW	11.8	11.7	11.6	11.6	11.5	11.4	11.4	11.9	11.8	11.8	11.7	11.6	11.5	11.5
85	TC	285	268	250	228	206	183	170	290	272	254	231	209	186	173
	SHC	84	104	124	149	174	183	170	91	111	131	155	180	186	173
	kW	13.9	13.8	13.7	13.6	13.5	13.4	13.3	14.1	14.0	13.9	13.8	13.6	13.5	13.4
95	TC	270	253	236	214	192	170	157	275	258	240	218	196	174	160
	SHC	60	85	109	139	169	170	157	69	93	116	146	175	174	160
	kW	16.1	16.0	15.8	15.7	15.5	15.3	15.2	16.3	16.2	16.0	15.8	15.6	15.5	15.3
105	TC	255	238	221	200	178	157	144	261	243	226	204	183	161	148
	SHC	37	65	94	129	164	157	144	47	74	102	136	171	161	148
	kW	18.3	18.1	17.9	17.7	17.5	17.3	17.1	18.5	18.3	18.1	17.9	17.7	17.4	17.3
115	TC	240	223	207	186	165	144	131	246	229	212	191	170	148	136
	SHC	14	46	78	119	159	144	131	24	56	88	127	167	148	136
	kW	20.5	20.3	20.0	19.8	19.5	19.2	19.1	20.7	20.5	20.3	20.0	19.7	19.4	19.2
125	TC	225	209	192	172	151	131	119	232	215	198	177	156	136	123
	SHC	-9	27	63	108	151	131	119	2	38	73	118	156	136	123
	kW	22.7	22.4	22.1	21.8	21.5	21.2	21.0	22.9	22.7	22.4	22.0	21.7	21.4	21.2

Cooling Capacities (cont)

50PG20 (18 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — SUBCOOLING MODE (cont)								
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF						
		9000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	329	310	291	267	244	220	206
	SHC	151	161	171	183	195	207	206
	kW	8.7	8.7	8.7	8.7	8.7	8.7	8.7
70	TC	315	296	278	254	231	208	194
	SHC	130	143	157	174	191	208	194
	kW	10.8	10.8	10.8	10.8	10.8	10.8	10.8
75	TC	308	289	271	248	225	202	188
	SHC	119	135	150	169	189	202	188
	kW	12.0	12.0	11.9	11.8	11.7	11.6	11.6
85	TC	294	276	257	235	212	189	176
	SHC	98	117	136	161	185	189	176
	kW	14.3	14.1	14.0	13.9	13.7	13.6	13.5
95	TC	280	262	244	222	199	177	163
	SHC	76	99	123	152	181	177	163
	kW	16.5	16.3	16.2	16.0	15.8	15.6	15.5
105	TC	266	248	230	208	186	164	151
	SHC	55	82	109	143	177	164	151
	kW	18.7	18.5	18.3	18.0	17.8	17.6	17.4
115	TC	252	234	217	195	174	152	139
	SHC	33	64	96	135	174	152	139
	kW	20.9	20.7	20.4	20.1	19.8	19.5	19.4
125	TC	238	221	203	182	161	140	127
	SHC	12	47	82	126	161	140	127
	kW	23.1	22.9	22.6	22.2	21.9	21.5	21.3

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
Idb – Leaving Dry–Bulb
Iwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG20 (18 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — HOT GAS REHEAT MODE — ALL CIRCUITS																
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)														
		75 Dry Bulb 62.5 Wet Bulb (50% RH)					75 Dry Bulb 64 Wet Bulb (55% RH)					75 Dry Bulb 65.3 Wet Bulb (60% RH)				
		Air Entering Evaporator — Cfm														
		5400	6300	7200	8100	9000	5400	6300	7200	8100	9000	5400	6300	7200	8100	9000
80	TC	79	82	85	87	88	85	88	91	93	95	90	94	96	98	100
	SHC	17	23	28	32	35	8	14	19	23	26	0	6	11	15	19
	kW	12.1	12.2	12.2	12.2	12.3	12.2	12.2	12.3	12.3	12.4	12.2	12.3	12.3	12.4	12.4
75	TC	82	85	87	89	91	88	91	93	96	97	93	96	99	101	103
	SHC	21	26	31	35	38	13	18	23	27	30	5	11	16	20	23
	kW	11.8	11.9	11.9	11.9	12.0	11.9	11.9	12.0	12.0	12.1	11.9	12.0	12.1	12.1	12.1
70	TC	85	88	90	92	94	91	94	96	98	100	96	99	101	103	105
	SHC	25	30	34	38	41	17	22	27	30	33	11	16	20	24	27
	kW	11.5	11.6	11.6	11.6	11.7	11.6	11.6	11.7	11.7	11.8	11.7	11.7	11.8	11.8	11.8
60	TC	92	94	96	98	99	97	99	101	103	104	102	104	106	108	109
	SHC	33	37	41	44	46	27	31	35	38	40	21	26	29	32	35
	kW	10.9	11.0	11.0	11.0	11.1	11.0	11.1	11.1	11.1	11.2	11.1	11.1	11.2	11.2	11.2
50	TC	98	100	102	103	104	103	105	107	108	109	107	110	111	113	114
	SHC	41	44	47	50	52	36	40	43	45	47	32	35	38	41	43
	kW	10.3	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.6	10.5	10.6	10.6	10.6	10.7

50PG20 (18 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — HOT GAS REHEAT MODE — CIRCUIT A ONLY																
Temp (F) Air Entering Condenser (Edb)		Air Entering Evaporator — Ewb (F)														
		75 Dry Bulb 62.5 Wet Bulb (50% RH)					75 Dry Bulb 64 Wet Bulb (55% RH)					75 Dry Bulb 65.3 Wet Bulb (60% RH)				
		Air Entering Evaporator — Cfm														
		5400	6300	7200	8100	9000	5400	6300	7200	8100	9000	5400	6300	7200	8100	9000
50	TC	48	51	54	56	59	49	53	56	58	60	51	54	57	60	62
	SHC	21	24	27	29	31	15	19	21	24	26	10	14	17	19	21
	kW	5.4	5.4	5.5	5.5	5.5	5.4	5.5	5.5	5.5	5.5	5.4	5.5	5.5	5.5	5.5
40	TC	51	54	56	58	59	53	55	58	60	61	54	57	59	61	63
	SHC	23	25	28	30	31	18	21	23	25	27	14	17	20	22	23
	kW	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.3	5.4	5.4	5.4

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG24 (20 Tons) — STANDARD UNIT															
Temp (F)		Air Entering Evaporator — Cfm													
		6,000							7,000						
Air Ent		Air Entering Evaporator — Ewb (F)													
		Condenser													
(Edb)		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	372	350	328	300	272	244	228	375	352	330	302	274	246	230
	SHC	162	172	181	193	205	217	224	170	179	188	200	211	222	229
	kW	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.8	8.7	8.7	8.7	8.7	8.7	8.7
	BF	0.00	0.14	0.08	0.03	0.04	0.12	0.33	0.00	0.15	0.09	0.04	0.05	0.13	0.34
70	TC	356	334	312	284	257	229	213	359	337	315	287	259	232	215
	SHC	140	153	167	184	201	217	228	149	162	175	191	208	224	215
	kW	10.8	10.8	10.8	10.7	10.7	10.7	10.7	11.0	11.0	11.0	10.9	10.9	10.8	10.8
	BF	0.00	0.17	0.11	0.04	0.06	0.16	0.36	0.00	0.19	0.12	0.05	0.06	0.17	0.39
75	TC	348	326	304	276	249	222	205	351	329	307	279	252	224	208
	SHC	128	144	159	179	198	218	229	138	153	168	187	206	224	208
	kW	12.0	11.9	11.9	11.8	11.8	11.7	11.7	12.2	12.1	12.1	12.0	12.0	11.9	11.9
	BF	0.00	0.19	0.13	0.05	0.07	0.18	0.38	0.00	0.20	0.14	0.06	0.08	0.19	0.41
85	TC	331	310	288	261	234	207	190	335	313	292	264	237	210	193
	SHC	106	125	145	169	194	219	233	117	136	155	179	203	210	193
	kW	14.2	14.1	14.1	14.0	13.9	13.8	13.8	14.5	14.4	14.3	14.2	14.1	14.0	14.0
	BF	0.00	0.22	0.16	0.08	0.11	0.21	0.41	0.00	0.24	0.17	0.10	0.12	0.23	0.44
95	TC	315	293	272	245	218	192	175	319	298	276	249	222	195	179
	SHC	83	107	130	160	190	219	237	96	119	142	171	199	195	179
	kW	16.5	16.4	16.3	16.2	16.1	16.0	15.9	16.8	16.7	16.6	16.4	16.3	16.2	16.1
	BF	0.00	0.26	0.20	0.13	0.14	0.25	0.45	0.00	0.28	0.22	0.16	0.15	0.27	0.48
105	TC	299	277	256	230	203	176	161	304	282	261	234	207	180	164
	SHC	60	88	116	151	185	220	241	74	101	128	162	196	180	164
	kW	18.7	18.6	18.5	18.4	18.2	18.1	18.0	19.1	18.9	18.8	18.6	18.5	18.3	18.2
	BF	0.00	0.29	0.23	0.16	0.18	0.28	0.48	0.00	0.31	0.25	0.19	0.19	0.30	0.51
115	TC	282	261	240	214	188	161	146	288	266	245	219	192	165	149
	SHC	38	70	101	141	181	221	244	53	84	115	154	193	165	149
	kW	21.0	20.8	20.7	20.5	20.4	20.2	20.1	21.4	21.2	21.0	20.8	20.7	20.5	20.3
	BF	0.00	0.33	0.27	0.19	0.21	0.31	0.52	0.00	0.35	0.29	0.23	0.23	0.33	0.55
125	TC	266	245	224	198	172	146	131	272	251	230	203	177	151	135
	SHC	15	51	87	132	176	221	248	32	67	102	146	189	151	135
	kW	23.2	23.1	22.9	22.7	22.5	22.3	22.2	23.7	23.5	23.3	23.1	22.8	22.6	22.5
	BF	0.00	0.36	0.30	0.23	0.25	0.35	0.55	0.00	0.39	0.32	0.28	0.27	0.38	0.58

50PG

50PG24 (20 Tons) — STANDARD UNIT (cont)															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm													
		8,000							9,000						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	377	355	332	304	276	248	231	379	356	334	306	278	249	232
	SHC	177	185	194	205	216	227	231	182	191	199	210	221	231	232
	kW	8.9	8.9	8.9	8.8	8.8	8.8	8.8	9.0	9.0	9.0	8.9	8.9	8.9	8.9
	BF	0.00	0.15	0.09	0.04	0.05	0.13	0.34	0.00	0.16	0.10	0.05	0.06	0.14	0.35
70	TC	362	339	317	289	261	234	217	364	342	319	291	263	235	218
	SHC	157	169	182	198	214	230	217	163	176	188	204	219	234	218
	kW	11.2	11.2	11.1	11.1	11.0	11.0	10.9	11.4	11.3	11.3	11.2	11.1	11.1	11.0
	BF	0.00	0.20	0.13	0.06	0.07	0.18	0.41	0.00	0.22	0.13	0.06	0.07	0.20	0.44
75	TC	354	332	310	282	254	226	210	356	334	312	284	256	228	211
	SHC	146	161	176	194	213	226	210	154	168	182	200	218	228	211
	kW	12.4	12.3	12.3	12.2	12.1	12.0	12.0	12.5	12.5	12.4	12.3	12.2	12.1	12.1
	BF	0.00	0.22	0.15	0.08	0.08	0.21	0.44	0.00	0.23	0.16	0.09	0.09	0.22	0.47
85	TC	339	317	295	267	239	212	195	341	319	297	269	242	214	197
	SHC	126	145	164	187	210	212	195	135	153	171	194	217	214	197
	kW	14.7	14.6	14.5	14.4	14.3	14.2	14.1	14.9	14.8	14.7	14.6	14.4	14.3	14.2
	BF	0.00	0.25	0.18	0.13	0.13	0.24	0.47	0.00	0.27	0.20	0.15	0.13	0.26	0.50
95	TC	323	301	279	252	225	198	181	326	304	282	255	227	200	183
	SHC	106	129	151	180	208	198	181	115	137	160	187	215	200	183
	kW	17.0	16.9	16.8	16.6	16.5	16.3	16.3	17.2	17.1	17.0	16.8	16.6	16.5	16.4
	BF	0.00	0.30	0.23	0.18	0.16	0.29	0.52	0.00	0.32	0.25	0.21	0.17	0.31	0.55
105	TC	308	286	264	237	210	183	167	311	289	268	240	213	186	169
	SHC	86	113	139	172	205	183	167	96	122	148	181	213	186	169
	kW	19.3	19.2	19.0	18.9	18.7	18.5	18.4	19.6	19.4	19.2	19.0	18.9	18.7	18.5
	BF	0.00	0.33	0.26	0.23	0.21	0.32	0.55	0.00	0.36	0.28	0.26	0.22	0.34	0.58
115	TC	292	271	249	222	196	169	153	296	275	253	226	199	171	155
	SHC	66	96	127	165	196	169	153	77	107	137	174	199	171	155
	kW	21.7	21.5	21.3	21.1	20.9	20.7	20.5	21.9	21.7	21.5	21.3	21.1	20.8	20.7
	BF	0.00	0.38	0.31	0.27	0.24	0.36	0.58	0.00	0.40	0.33	0.31	0.26	0.38	0.60
125	TC	277	256	234	208	181	154	138	281	260	238	211	184	157	141
	SHC	46	80	115	157	181	154	138	58	92	126	168	184	157	141
	kW	24.0	23.8	23.6	23.3	23.1	22.8	22.7	24.2	24.0	23.8	23.5	23.3	23.0	22.8
	BF	0.00	0.41	0.35	0.32	0.29	0.40	0.60	0.00	0.44	0.37	0.37	0.31	0.43	0.63

Cooling Capacities (cont)

50PG24 (20 Tons) — STANDARD UNIT (cont)

Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm						
		10,000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	381	358	335	307	279	251	234
	SHC	187	196	204	214	225	235	234
	kW	9.1	9.1	9.1	9.0	9.0	9.0	8.9
	BF	0.00	0.16	0.10	0.05	0.06	0.14	0.35
70	TC	366	343	321	293	265	237	220
	SHC	169	181	193	208	224	237	220
	kW	11.5	11.4	11.4	11.3	11.2	11.1	11.1
	BF	0.00	0.23	0.14	0.07	0.08	0.21	0.47
75	TC	359	336	314	286	258	230	213
	SHC	160	174	188	206	223	230	213
	kW	12.7	12.6	12.5	12.4	12.3	12.2	12.2
	BF	0.00	0.25	0.17	0.10	0.09	0.23	0.49
85	TC	344	322	299	271	244	216	199
	SHC	142	160	177	200	222	216	199
	kW	15.0	14.9	14.8	14.7	14.5	14.4	14.3
	BF	0.00	0.29	0.21	0.17	0.14	0.27	0.53
95	TC	329	307	285	257	229	202	185
	SHC	123	145	167	194	221	202	185
	kW	17.4	17.2	17.1	16.9	16.8	16.6	16.5
	BF	0.00	0.34	0.26	0.23	0.18	0.33	0.59
105	TC	314	292	270	243	215	188	171
	SHC	105	131	156	188	215	188	171
	kW	19.7	19.6	19.4	19.2	19.0	18.8	18.7
	BF	0.00	0.38	0.30	0.29	0.23	0.36	0.61
115	TC	300	278	256	229	201	174	157
	SHC	87	116	146	183	201	174	157
	kW	22.1	21.9	21.7	21.4	21.2	21.0	20.8
	BF	0.00	0.43	0.35	0.35	0.27	0.40	0.63
125	TC	285	263	241	214	187	160	144
	SHC	69	102	135	177	187	160	144
	kW	24.4	24.2	24.0	23.7	23.4	23.1	23.0
	BF	0.00	0.47	0.39	0.41	0.33	0.46	0.65

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
 Below 80°F edb, subtract (corr factor x cfm) from SHC.
 Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

$$\text{Correlation Factor} = 1.09 \times (1 - \text{BF}) \times (\text{edb} - 80).$$

Cooling Capacities (cont)

50PG24 (20 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — COOLING MODE															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM													
		6000							7000						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	351	330	309	284	258	232	217	354	334	313	287	261	235	220
	SHC	145	158	172	189	205	222	217	155	168	181	197	213	229	220
	kW	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.1	9.1	9.1	9.1	9.1	9.1	9.1
	BF	0.00	0.14	0.08	0.03	0.04	0.12	0.33	0.00	0.15	0.09	0.04	0.05	0.13	0.34
70	TC	336	316	295	270	244	219	204	340	320	299	274	248	222	207
	SHC	121	140	158	180	203	219	204	133	151	168	190	212	222	207
	kW	11.2	11.2	11.2	11.1	11.1	11.0	11.0	11.4	11.4	11.3	11.3	11.2	11.1	11.1
	BF	0.00	0.17	0.11	0.04	0.06	0.16	0.36	0.00	0.19	0.12	0.05	0.06	0.17	0.39
75	TC	329	308	288	263	238	212	197	333	313	292	267	241	216	200
	SHC	110	130	151	176	201	212	197	123	142	162	187	211	216	200
	kW	12.4	12.3	12.3	12.2	12.1	12.0	12.0	12.6	12.5	12.4	12.3	12.3	12.2	12.1
	BF	0.00	0.19	0.13	0.05	0.07	0.18	0.38	0.00	0.20	0.14	0.06	0.08	0.19	0.41
85	TC	314	294	274	249	224	199	184	319	299	279	254	228	203	188
	SHC	86	111	136	168	199	199	184	101	125	149	180	210	203	188
	kW	14.7	14.6	14.5	14.3	14.2	14.1	14.0	14.9	14.8	14.7	14.5	14.4	14.2	14.2
	BF	0.00	0.22	0.16	0.08	0.11	0.21	0.41	0.00	0.24	0.17	0.10	0.12	0.23	0.44
95	TC	299	280	260	235	210	186	171	305	285	265	240	215	190	175
	SHC	63	93	122	159	196	186	171	79	108	137	173	209	190	175
	kW	16.9	16.8	16.7	16.5	16.3	16.1	16.0	17.2	17.0	16.9	16.7	16.5	16.3	16.2
	BF	0.00	0.26	0.20	0.13	0.14	0.25	0.45	0.00	0.28	0.22	0.16	0.15	0.27	0.48
105	TC	285	265	246	221	197	172	158	291	272	252	227	202	177	162
	SHC	40	74	108	151	194	172	158	58	91	124	166	202	177	162
	kW	19.2	19.0	18.9	18.6	18.4	18.2	18.0	19.5	19.3	19.1	18.9	18.6	18.4	18.2
	BF	0.00	0.29	0.23	0.16	0.18	0.28	0.48	0.00	0.31	0.25	0.19	0.19	0.30	0.51
115	TC	270	251	231	207	183	159	144	277	258	238	214	189	164	150
	SHC	16	55	94	143	191	159	144	36	74	112	159	189	164	150
	kW	21.5	21.3	21.1	20.8	20.5	20.2	20.1	21.8	21.6	21.3	21.0	20.7	20.4	20.3
	BF	0.00	0.33	0.27	0.19	0.21	0.31	0.52	0.00	0.35	0.29	0.23	0.23	0.33	0.55
125	TC	255	236	217	193	169	146	131	263	244	225	200	176	151	137
	SHC	10	37	80	134	189	146	131	15	57	99	152	176	151	137
	kW	23.8	23.5	23.3	22.9	22.6	22.3	22.1	24.1	23.9	23.6	23.2	22.9	22.5	22.3
	BF	0.00	0.36	0.30	0.23	0.25	0.35	0.55	0.00	0.39	0.32	0.28	0.27	0.38	0.58

50PG24 (20 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — COOLING MODE (cont)															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM													
		8000							9000						
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	357	337	316	290	263	237	222	360	339	318	292	265	239	223
	SHC	163	176	188	204	220	236	222	171	183	195	210	225	239	223
	kW	9.2	9.2	9.2	9.2	9.2	9.2	9.1	9.3	9.3	9.3	9.3	9.2	9.2	9.2
	BF	0.00	0.15	0.09	0.04	0.05	0.13	0.34	0.00	0.16	0.10	0.05	0.06	0.14	0.35
70	TC	344	323	303	277	251	225	209	347	326	305	279	253	227	211
	SHC	143	160	177	198	220	225	209	152	168	185	206	226	227	211
	kW	11.6	11.5	11.5	11.4	11.3	11.2	11.2	11.7	11.6	11.6	11.5	11.4	11.3	11.3
	BF	0.00	0.20	0.13	0.06	0.07	0.18	0.41	0.00	0.22	0.13	0.06	0.07	0.20	0.44
75	TC	337	317	296	270	244	219	203	341	320	299	273	247	221	205
	SHC	133	152	172	196	220	219	203	142	161	180	203	227	221	205
	kW	12.7	12.7	12.6	12.5	12.4	12.3	12.2	12.9	12.8	12.7	12.6	12.5	12.4	12.3
	BF	0.00	0.22	0.15	0.08	0.08	0.21	0.44	0.00	0.23	0.16	0.09	0.09	0.22	0.47
85	TC	324	303	283	257	232	206	191	328	307	286	260	235	209	193
	SHC	113	137	160	190	220	206	191	123	147	170	199	228	209	193
	kW	15.1	14.9	14.8	14.7	14.5	14.4	14.3	15.2	15.1	15.0	14.8	14.6	14.5	14.4
	BF	0.00	0.25	0.18	0.13	0.13	0.24	0.47	0.00	0.27	0.20	0.15	0.13	0.26	0.50
95	TC	310	290	270	244	219	194	178	315	294	274	248	222	197	181
	SHC	93	121	149	184	219	194	178	104	132	160	194	222	197	181
	kW	17.4	17.2	17.1	16.9	16.7	16.4	16.3	17.6	17.4	17.2	17.0	16.8	16.6	16.4
	BF	0.00	0.30	0.23	0.18	0.16	0.29	0.52	0.00	0.32	0.25	0.21	0.17	0.31	0.55
105	TC	297	277	257	232	206	181	166	302	281	261	235	210	184	169
	SHC	73	105	138	179	206	181	166	86	118	150	189	210	184	169
	kW	19.7	19.5	19.3	19.1	18.8	18.5	18.4	19.9	19.7	19.5	19.2	18.9	18.7	18.5
	BF	0.00	0.33	0.26	0.23	0.21	0.32	0.55	0.00	0.36	0.28	0.26	0.22	0.34	0.58
115	TC	284	264	244	219	194	169	154	289	268	248	223	198	172	157
	SHC	53	90	127	173	194	169	154	67	103	139	185	198	172	157
	kW	22.1	21.8	21.6	21.3	20.9	20.6	20.4	22.3	22.0	21.7	21.4	21.1	20.8	20.6
	BF	0.00	0.38	0.31	0.27	0.24	0.36	0.58	0.00	0.40	0.33	0.31	0.26	0.38	0.60
125	TC	270	250	231	206	181	156	141	276	256	236	210	185	160	145
	SHC	32	74	115	167	181	156	141	48	89	129	180	185	160	145
	kW	24.4	24.1	23.8	23.4	23.1	22.7	22.5	24.6	24.3	24.0	23.6	23.2	22.9	22.6
	BF	0.00	0.41	0.35	0.32	0.29	0.40	0.60	0.00	0.44	0.37	0.37	0.31	0.43	0.63

50PG

Cooling Capacities (cont)

50PG24 (20 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — COOLING MODE (cont)								
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM						
		10,000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	362	341	320	294	267	241	225
	SHC	177	189	201	216	230	241	225
	kW	9.4	9.4	9.4	9.3	9.3	9.3	9.3
	BF	0.00	0.16	0.10	0.05	0.06	0.14	0.35
70	TC	350	329	308	281	255	229	213
	SHC	159	175	192	212	232	229	213
	kW	11.8	11.7	11.6	11.6	11.5	11.4	11.3
	BF	0.00	0.23	0.14	0.07	0.08	0.21	0.47
75	TC	343	322	301	275	249	223	207
	SHC	150	169	187	210	233	223	207
	kW	13.0	12.9	12.8	12.7	12.6	12.4	12.4
	BF	0.00	0.25	0.17	0.10	0.09	0.23	0.49
85	TC	331	310	289	263	237	211	195
	SHC	132	155	178	206	235	211	195
	kW	15.3	15.2	15.1	14.9	14.7	14.5	14.4
	BF	0.00	0.29	0.21	0.17	0.14	0.27	0.53
95	TC	318	298	277	251	225	199	184
	SHC	115	142	169	203	225	199	184
	kW	17.7	17.5	17.3	17.1	16.9	16.7	16.5
	BF	0.00	0.34	0.26	0.23	0.18	0.33	0.59
105	TC	306	285	265	239	213	187	172
	SHC	97	128	160	199	213	187	172
	kW	20.1	19.8	19.6	19.3	19.0	18.8	18.6
	BF	0.00	0.38	0.30	0.29	0.23	0.36	0.61
115	TC	293	273	252	227	201	175	160
	SHC	79	115	150	195	201	175	160
	kW	22.4	22.2	21.9	21.5	21.2	20.9	20.7
	BF	0.00	0.43	0.35	0.35	0.27	0.40	0.63
125	TC	281	260	240	214	189	164	148
	SHC	61	101	141	191	189	164	148
	kW	24.8	24.5	24.2	23.8	23.4	23.0	22.7
	BF	0.00	0.47	0.39	0.41	0.33	0.46	0.65

LEGEND

BF — Bypass Factor
Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
 Below 80°F edb, subtract (corr factor x cfm) from SHC.
 Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

$$\text{Correlation Factor} = 1.09 \times (1 - \text{BF}) \times (\text{edb} - 80).$$

Cooling Capacities (cont)

50PG24 (20 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — SUBCOOLING MODE															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF													
		6000							7000						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	352	330	309	283	257	230	214	357	336	314	288	261	234	218
	SHC	149	159	169	181	194	206	214	158	168	177	189	201	213	218
	kW	9.1	9.1	9.0	9.0	9.0	9.0	9.0	9.2	9.2	9.2	9.1	9.1	9.1	9.1
70	TC	335	314	293	267	241	215	199	342	320	299	273	246	220	204
	SHC	122	136	150	168	186	204	199	133	147	161	178	195	212	204
	kW	11.3	11.3	11.2	11.2	11.1	11.0	11.0	11.5	11.4	11.4	11.3	11.2	11.1	11.1
75	TC	327	306	285	259	233	207	192	334	313	292	265	239	213	197
	SHC	108	125	141	162	182	203	192	121	137	152	172	192	212	197
	kW	12.5	12.4	12.3	12.2	12.1	12.0	12.0	12.6	12.5	12.5	12.4	12.2	12.1	12.1
85	TC	310	290	269	243	218	192	177	318	297	276	250	224	198	182
	SHC	82	102	123	149	175	192	177	96	116	136	161	186	198	182
	kW	14.8	14.6	14.5	14.4	14.2	14.1	14.0	14.9	14.8	14.7	14.5	14.3	14.2	14.1
95	TC	293	273	253	228	202	177	162	303	282	261	235	209	184	168
	SHC	55	80	105	136	167	177	162	71	95	119	149	179	184	168
	kW	17.0	16.9	16.7	16.5	16.3	16.1	16.0	17.2	17.0	16.9	16.7	16.4	16.2	16.1
105	TC	277	257	237	212	187	162	147	287	266	246	220	195	169	154
	SHC	28	57	86	123	159	162	147	46	74	102	137	173	169	154
	kW	19.3	19.1	18.9	18.6	18.4	18.1	18.0	19.5	19.3	19.1	18.8	18.5	18.3	18.1
115	TC	260	240	221	196	171	147	132	271	251	231	205	180	155	139
	SHC	1	35	68	110	152	147	132	20	53	85	126	166	155	139
	kW	21.6	21.3	21.1	20.8	20.5	20.1	20.0	21.8	21.5	21.3	21.0	20.6	20.3	20.1
125	TC	244	224	205	180	156	131	117	256	236	215	190	165	140	125
	SHC	-25	12	50	97	144	131	117	-5	32	69	114	160	140	125
	kW	23.8	23.5	23.3	22.9	22.5	22.2	22.0	24.1	23.8	23.5	23.1	22.7	22.4	22.1

50PG

50PG24 (20 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — SUBCOOLING MODE (cont)															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF													
		8000							9000						
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	362	340	319	292	265	238	221	366	344	322	295	268	240	224
	SHC	167	176	185	196	208	219	221	174	183	192	203	214	225	224
	kW	9.3	9.3	9.2	9.2	9.2	9.1	9.1	9.4	9.3	9.3	9.3	9.2	9.2	9.2
70	TC	347	326	304	277	251	224	208	352	330	308	281	254	227	211
	SHC	143	156	170	186	203	219	208	152	164	177	193	209	225	211
	kW	11.6	11.5	11.5	11.4	11.3	11.2	11.1	11.7	11.6	11.5	11.4	11.3	11.3	11.2
75	TC	340	318	297	270	244	217	201	345	323	301	274	247	220	204
	SHC	131	147	162	181	200	217	201	140	155	170	189	207	220	204
	kW	12.8	12.7	12.6	12.5	12.3	12.2	12.1	12.8	12.7	12.6	12.5	12.4	12.3	12.2
85	TC	325	304	282	256	229	203	187	331	309	288	261	234	207	191
	SHC	108	127	146	171	195	203	187	118	137	156	179	203	207	191
	kW	15.1	14.9	14.8	14.6	14.4	14.3	14.2	15.2	15.0	14.9	14.7	14.5	14.3	14.2
95	TC	310	289	268	242	215	189	173	316	295	274	247	220	194	178
	SHC	84	107	131	160	190	189	173	96	119	141	170	199	194	178
	kW	17.4	17.2	17.0	16.8	16.6	16.3	16.2	17.5	17.3	17.1	16.9	16.6	16.4	16.3
105	TC	295	274	253	227	201	175	159	302	281	260	233	207	180	164
	SHC	60	88	115	150	184	175	159	73	100	127	161	194	180	164
	kW	19.7	19.4	19.2	18.9	18.7	18.4	18.2	19.8	19.6	19.3	19.1	18.8	18.5	18.3
115	TC	280	260	239	213	187	161	146	288	267	246	220	193	167	151
	SHC	37	68	100	140	179	161	146	51	82	113	152	190	167	151
	kW	22.0	21.7	21.4	21.1	20.8	20.4	20.2	22.1	21.8	21.6	21.2	20.9	20.5	20.3
125	TC	266	245	225	199	173	147	132	274	253	232	206	180	153	138
	SHC	13	49	85	129	173	147	132	28	63	98	142	180	153	138
	kW	24.3	24.0	23.7	23.3	22.9	22.5	22.3	24.4	24.1	23.8	23.4	23.0	22.6	22.4

Cooling Capacities (cont)

50PG24 (20 Tons) — UNIT WITH HUMIDIFIER™ SYSTEM — SUBCOOLING MODE (cont)

Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF						
		10,000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	369	347	325	298	270	243	226
	SHC	180	189	197	208	218	229	226
	kW	9.4	9.4	9.4	9.3	9.3	9.2	9.2
70	TC	356	334	312	285	257	230	214
	SHC	159	171	184	200	215	230	214
	kW	11.8	11.7	11.6	11.5	11.4	11.3	11.2
75	TC	349	327	305	278	251	223	207
	SHC	148	163	177	195	213	223	207
	kW	12.9	12.8	12.7	12.6	12.5	12.3	12.3
85	TC	335	314	292	265	238	210	194
	SHC	127	146	164	187	210	210	194
	kW	15.2	15.1	15.0	14.8	14.6	14.4	14.3
95	TC	322	300	279	252	225	198	181
	SHC	106	128	151	179	207	198	181
	kW	17.6	17.4	17.2	17.0	16.7	16.5	16.3
105	TC	309	287	265	238	211	185	168
	SHC	85	111	137	170	203	185	168
	kW	19.9	19.7	19.4	19.1	18.8	18.6	18.4
115	TC	295	274	252	225	198	172	155
	SHC	63	94	124	162	198	172	155
	kW	22.2	22.0	21.7	21.3	21.0	20.6	20.4
125	TC	282	260	239	212	185	159	143
	SHC	42	76	111	154	185	159	143
	kW	24.6	24.2	23.9	23.5	23.1	22.7	22.5

LEGEND

Edb — Entering Dry–Bulb

Ewb — Entering Wet–Bulb

kW — Compressor Motor Power Input

ldb — Leaving Dry–Bulb

lwb — Leaving Wet–Bulb

SHC — Sensible Heat Capacity (1000 Btuh) Gross

TC — Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG24 (20 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — HOT GAS REHEAT MODE — ALL CIRCUITS																
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)														
		75 Dry Bulb 62.5 Wet Bulb (50% RH)					75 Dry Bulb 64 Wet Bulb (55% RH)					75 Dry Bulb 65.3 Wet Bulb (60% RH)				
		Air Entering Evaporator — Cfm														
		6000	7000	8000	9000	10,000	6000	7000	8000	9000	10,000	6000	7000	8000	9000	10,000
80	TC	98	104	108	112	115	101	107	112	116	119	104	110	115	119	122
	SHC	22	30	38	44	51	11	19	26	33	39	2	10	17	23	29
	kW	15.2	15.2	15.3	15.3	15.3	15.3	15.3	15.3	15.4	15.4	15.4	15.4	15.4	15.4	15.4
75	TC	103	108	112	116	119	106	112	116	120	123	109	115	119	123	126
	SHC	27	35	42	49	55	17	25	32	38	44	9	16	23	29	35
	kW	14.7	14.7	14.7	14.8	14.8	14.8	14.8	14.8	14.9	14.9	14.9	14.9	14.9	14.9	14.9
70	TC	108	113	117	120	123	111	116	120	123	126	114	119	123	127	130
	SHC	32	39	47	53	59	23	30	37	43	49	15	22	29	35	41
	kW	14.2	14.2	14.2	14.3	14.3	14.3	14.3	14.3	14.4	14.4	14.4	14.4	14.4	14.4	14.4
60	TC	117	121	125	127	130	120	125	128	131	134	123	128	131	134	137
	SHC	41	49	56	62	67	34	41	48	54	59	28	35	41	47	52
	kW	13.2	13.2	13.2	13.2	13.3	13.3	13.3	13.3	13.4	13.4	13.4	13.4	13.4	13.4	13.5
50	TC	126	130	133	135	137	130	133	136	139	141	133	137	140	142	144
	SHC	51	58	65	70	76	46	52	59	64	69	41	47	53	59	64
	kW	12.2	12.2	12.2	12.2	12.2	12.3	12.3	12.3	12.3	12.4	12.4	12.4	12.4	12.4	12.5

50PG

50PG24 (20 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — HOT GAS REHEAT MODE — CIRCUIT A ONLY																
Temp (F) Air Entering Condenser (Edb)		Air Entering Evaporator — Cfm														
		75 Dry Bulb 62.5 Wet Bulb (50% RH)					75 Dry Bulb 64 Wet Bulb (55% RH)					75 Dry Bulb 65.3 Wet Bulb (60% RH)				
		Air Entering Evaporator — Cfm														
		6000	7000	8000	9000	10,000	6000	7000	8000	9000	10,000	6000	7000	8000	9000	10,000
50	TC	68	75	82	87	92	69	77	84	89	94	71	79	86	91	96
	SHC	28	35	41	46	50	22	29	35	40	44	16	24	30	35	39
	kW	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
40	TC	72	78	83	87	91	74	80	85	89	93	75	82	87	91	95
	SHC	30	36	40	44	48	25	31	36	40	43	21	27	32	36	39
	kW	6.5	6.5	6.5	6.6	6.6	6.5	6.5	6.6	6.6	6.6	6.5	6.6	6.6	6.6	6.6

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG28 (25 Tons) — STANDARD UNIT															
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm													
		7,500							8,250						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	457	432	407	375	343	312	293	460	434	409	377	345	313	294
	SHC	184	199	214	233	251	270	281	193	209	224	243	262	281	293
	kW	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.5	12.4	12.4	12.4	12.4	12.4	12.4
	BF	0.00	0.21	0.10	0.04	0.06	0.16	0.26	0.00	0.23	0.11	0.05	0.06	0.17	0.28
70	TC	436	411	387	356	325	294	275	439	414	389	358	327	296	277
	SHC	158	178	199	224	250	275	275	168	188	209	235	261	287	277
	kW	15.2	15.2	15.1	15.1	15.1	15.0	15.0	15.4	15.3	15.3	15.2	15.2	15.2	15.1
	BF	0.00	0.21	0.10	0.04	0.06	0.16	0.26	0.00	0.23	0.11	0.05	0.06	0.17	0.28
75	TC	425	401	377	346	316	285	267	428	404	379	349	318	287	269
	SHC	145	168	191	220	249	277	267	155	178	202	231	260	287	269
	kW	16.6	16.6	16.6	16.5	16.5	16.4	16.4	16.8	16.8	16.7	16.7	16.6	16.5	16.5
	BF	0.00	0.22	0.11	0.05	0.07	0.17	0.27	0.00	0.24	0.12	0.06	0.08	0.18	0.29
85	TC	404	380	356	327	297	267	250	408	384	360	330	300	270	252
	SHC	119	147	176	211	247	267	250	129	158	187	223	259	270	252
	kW	19.5	19.5	19.4	19.3	19.2	19.2	19.1	19.7	19.7	19.6	19.5	19.4	19.3	19.2
	BF	0.00	0.23	0.13	0.06	0.09	0.19	0.29	0.00	0.25	0.14	0.07	0.10	0.20	0.31
95	TC	383	360	336	308	279	250	233	387	363	340	311	282	253	235
	SHC	93	127	161	203	245	250	233	103	138	172	215	258	253	235
	kW	22.1	22.0	21.9	21.8	21.8	21.7	21.6	22.7	22.6	22.5	22.3	22.2	22.1	22.0
	BF	0.00	0.23	0.13	0.06	0.09	0.19	0.29	0.00	0.25	0.14	0.07	0.10	0.20	0.31
105	TC	361	339	316	288	260	232	215	366	343	320	292	264	235	218
	SHC	67	106	145	194	243	232	215	77	117	157	207	256	235	218
	kW	25.3	25.2	25.1	24.9	24.8	24.6	24.5	25.6	25.4	25.3	25.2	25.0	24.8	24.7
	BF	0.00	0.24	0.13	0.07	0.09	0.19	0.29	0.00	0.26	0.14	0.08	0.10	0.20	0.31
115	TC	340	318	296	269	242	215	198	345	323	301	273	246	218	202
	SHC	41	86	130	186	241	215	198	52	97	142	198	246	218	202
	kW	28.2	28.1	27.9	27.7	27.6	27.4	27.3	28.5	28.3	28.2	28.0	27.8	27.6	27.5
	BF	0.00	0.25	0.14	0.08	0.10	0.20	0.30	0.00	0.27	0.15	0.09	0.11	0.22	0.32
125	TC	319	297	276	250	223	197	181	324	302	281	254	228	201	185
	SHC	16	65	115	177	223	197	181	26	77	127	190	228	201	185
	kW	31.1	30.9	30.8	30.5	30.3	30.1	30.0	31.4	31.2	31.0	30.8	30.6	30.3	30.2
	BF	0.00	0.25	0.15	0.09	0.11	0.21	0.31	0.00	0.27	0.16	0.10	0.12	0.23	0.33

50PG28 (25 Tons) — STANDARD UNIT (cont)															
Temp (F)		Air Entering Evaporator — Cfm													
		9,500							10,750						
Air Ent		Air Entering Evaporator — Ewb (F)													
		Condenser													
(Edb)		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	463	437	412	380	348	315	296	465	440	414	382	350	317	298
	SHC	207	222	238	257	277	296	296	219	235	250	270	290	309	298
	kW	12.6	12.6	12.6	12.6	12.5	12.5	12.5	12.8	12.7	12.7	12.7	12.6	12.6	12.6
	BF	0.00	0.24	0.12	0.05	0.07	0.18	0.30	0.00	0.26	0.12	0.06	0.07	0.20	0.32
70	TC	442	417	392	361	330	299	280	445	420	395	364	332	301	282
	SHC	181	202	223	250	276	299	280	193	215	236	263	290	301	282
	kW	15.6	15.5	15.5	15.4	15.4	15.3	15.3	15.7	15.7	15.6	15.6	15.5	15.4	15.4
	BF	0.00	0.24	0.12	0.05	0.07	0.18	0.30	0.00	0.26	0.12	0.06	0.07	0.20	0.32
75	TC	432	408	383	352	321	290	272	436	411	386	355	324	292	274
	SHC	168	192	216	246	276	290	272	180	205	229	259	290	292	274
	kW	17.0	17.0	16.9	16.8	16.8	16.7	16.6	17.2	17.2	17.1	17.0	16.9	16.8	16.8
	BF	0.00	0.25	0.13	0.06	0.08	0.20	0.31	0.00	0.27	0.13	0.07	0.09	0.21	0.33
85	TC	412	388	364	334	303	273	255	416	391	367	337	306	276	258
	SHC	143	172	201	238	275	273	255	155	185	215	252	290	276	258
	kW	20.0	19.9	19.8	19.7	19.6	19.5	19.4	20.2	20.1	20.0	19.9	19.7	19.6	19.5
	BF	0.00	0.26	0.15	0.07	0.10	0.22	0.33	0.00	0.28	0.16	0.08	0.11	0.23	0.36
95	TC	392	368	345	315	286	256	239	396	372	348	319	289	259	241
	SHC	117	152	187	231	275	256	239	129	165	201	245	289	259	241
	kW	22.9	22.8	22.7	22.6	22.4	22.3	22.2	23.2	23.0	22.9	22.7	22.6	22.4	22.3
	BF	0.00	0.26	0.15	0.07	0.10	0.22	0.33	0.00	0.28	0.16	0.08	0.11	0.23	0.36
105	TC	371	348	325	297	268	239	222	376	353	329	301	272	243	225
	SHC	91	132	172	223	268	239	222	104	145	186	238	272	243	225
	kW	25.9	25.7	25.6	25.4	25.2	25.0	24.9	26.1	26.0	25.8	25.6	25.4	25.2	25.1
	BF	0.00	0.28	0.15	0.08	0.10	0.22	0.33	0.00	0.29	0.16	0.09	0.11	0.23	0.36
115	TC	351	329	306	278	250	222	206	356	333	311	283	254	226	209
	SHC	65	112	158	216	250	222	206	78	125	172	231	254	226	209
	kW	28.8	28.7	28.5	28.3	28.0	27.8	27.7	29.1	28.9	28.7	28.5	28.3	28.0	27.9
	BF	0.00	0.29	0.16	0.09	0.12	0.23	0.35	0.00	0.31	0.17	0.10	0.12	0.25	0.37
125	TC	330	309	287	260	233	206	189	336	314	292	264	237	209	193
	SHC	40	92	143	208	233	206	189	52	105	158	224	237	209	193
	kW	31.8	31.6	31.4	31.1	30.9	30.6	30.4	32.1	31.9	31.6	31.4	31.1	30.8	30.6
	BF	0.00	0.29	0.17	0.10	0.13	0.24	0.36	0.00	0.31	0.18	0.11	0.13	0.26	0.38

Cooling Capacities (cont)

50PG28 (25 Tons) — STANDARD UNIT (cont)								
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Cfm						
		12,000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	468	442	416	384	351	319	299
	SHC	230	246	262	282	302	319	299
	kW	12.9	12.8	12.8	12.8	12.7	12.7	12.7
	BF	0.00	0.27	0.13	0.06	0.08	0.21	0.34
70	TC	448	423	397	366	334	303	284
	SHC	204	226	248	275	302	303	284
	kW	15.9	15.8	15.7	15.7	15.6	15.5	15.5
	BF	0.00	0.27	0.13	0.06	0.08	0.21	0.34
75	TC	438	413	388	357	326	294	276
	SHC	192	216	241	272	303	294	276
	kW	17.4	17.3	17.2	17.1	17.0	16.9	16.9
	BF	0.00	0.29	0.14	0.07	0.09	0.22	0.35
85	TC	419	394	370	339	309	278	260
	SHC	166	197	227	265	303	278	260
	kW	20.4	20.2	20.1	20.0	19.9	19.7	19.6
	BF	0.00	0.30	0.17	0.08	0.12	0.25	0.38
95	TC	399	375	351	322	292	262	244
	SHC	140	177	213	259	292	262	244
	kW	23.4	23.2	23.1	22.9	22.7	22.5	22.4
	BF	0.00	0.30	0.17	0.08	0.12	0.25	0.38
105	TC	380	356	333	304	275	245	228
	SHC	115	157	199	252	275	245	228
	kW	26.3	26.2	26.0	25.8	25.6	25.4	25.2
	BF	0.00	0.31	0.17	0.09	0.12	0.25	0.38
115	TC	360	337	315	286	258	229	212
	SHC	89	137	185	245	258	229	212
	kW	29.3	29.1	28.9	28.7	28.4	28.2	28.0
	BF	0.00	0.33	0.18	0.10	0.13	0.26	0.39
125	TC	341	318	296	268	241	213	196
	SHC	64	118	171	239	241	213	196
	kW	32.3	32.1	31.9	31.6	31.3	31.0	30.8
	BF	0.00	0.33	0.20	0.11	0.14	0.27	0.40

LEGEND

BF – Bypass Factor
Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80°F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
	Correction Factor					
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

$$\text{Correlation Factor} = 1.09 \times (1 - \text{BF}) \times (\text{edb} - 80).$$

Cooling Capacities (cont)

50PG28 (25 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — COOLING MODE															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM													
		7500							8250						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	447	423	398	367	337	306	288	449	425	400	369	339	308	289
	SHC	182	198	213	233	253	273	284	190	206	222	242	262	282	289
	kW	11.9	11.9	11.8	11.8	11.8	11.7	11.7	12.0	12.0	11.9	11.9	11.8	11.8	11.8
	BF	0.00	0.21	0.10	0.04	0.06	0.16	0.26	0.00	0.23	0.11	0.05	0.06	0.17	0.28
70	TC	426	402	379	349	319	289	271	429	405	381	351	321	291	273
	SHC	155	176	197	224	251	277	271	163	184	206	233	260	287	273
	kW	15.1	15.0	14.9	14.8	14.7	14.6	14.5	15.2	15.1	15.0	14.9	14.7	14.6	14.5
	BF	0.00	0.21	0.10	0.04	0.06	0.16	0.26	0.00	0.23	0.11	0.05	0.06	0.17	0.28
75	TC	416	392	369	339	310	281	263	419	395	371	342	312	283	265
	SHC	141	165	189	219	249	279	263	149	173	198	229	259	283	265
	kW	16.7	16.6	16.4	16.3	16.1	16.0	15.9	16.8	16.7	16.5	16.4	16.2	16.0	15.9
	BF	0.00	0.22	0.11	0.05	0.07	0.17	0.27	0.00	0.24	0.12	0.06	0.08	0.18	0.29
85	TC	395	372	349	321	292	264	247	398	375	352	323	295	266	249
	SHC	114	144	173	210	247	264	247	122	152	182	220	257	266	249
	kW	19.9	19.7	19.5	19.2	19.0	18.8	18.6	20.0	19.8	19.6	19.4	19.1	18.8	18.7
	BF	0.00	0.23	0.13	0.06	0.09	0.19	0.29	0.00	0.25	0.14	0.07	0.10	0.20	0.31
95	TC	374	352	330	302	274	247	230	378	355	333	305	277	249	232
	SHC	87	122	157	201	245	247	230	94	130	166	211	255	249	232
	kW	23.0	22.8	22.5	22.2	21.9	21.6	21.4	23.2	23.0	22.7	22.4	22.0	21.7	21.5
	BF	0.00	0.23	0.13	0.06	0.09	0.19	0.29	0.00	0.25	0.14	0.07	0.10	0.20	0.31
105	TC	353	332	310	283	257	230	214	357	335	314	287	260	233	216
	SHC	60	101	141	192	243	230	214	67	108	150	202	253	233	216
	kW	26.2	25.9	25.6	25.2	24.8	24.4	24.1	26.5	26.1	25.8	25.3	24.9	24.5	24.2
	BF	0.00	0.24	0.13	0.07	0.09	0.19	0.29	0.00	0.26	0.14	0.08	0.10	0.20	0.31
115	TC	332	311	291	265	239	213	197	337	316	295	268	242	216	200
	SHC	33	79	125	183	239	213	197	40	87	134	193	242	216	200
	kW	29.4	29.0	28.6	28.1	27.7	27.2	26.9	29.7	29.3	28.9	28.3	27.8	27.3	27.0
	BF	0.00	0.25	0.14	0.08	0.10	0.20	0.30	0.00	0.27	0.15	0.09	0.11	0.22	0.32
125	TC	311	291	271	246	221	196	181	316	296	275	250	225	199	184
	SHC	6	58	109	174	221	196	181	13	65	118	184	225	199	184
	kW	32.6	32.1	31.7	31.1	30.6	30.0	29.6	32.9	32.4	31.9	31.3	30.7	30.1	29.8
	BF	0.00	0.25	0.15	0.09	0.11	0.21	0.31	0.00	0.27	0.16	0.10	0.12	0.23	0.33

50PG28 (25 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — COOLING MODE (cont)															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM													
		9500							10,750						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	452	427	403	372	341	310	291	454	429	405	373	342	311	293
	SHC	201	217	234	254	275	295	291	211	227	244	265	286	307	293
	kW	12.1	12.1	12.0	12.0	11.9	11.8	11.8	12.2	12.2	12.1	12.0	12.0	11.9	11.8
	BF	0.00	0.24	0.12	0.05	0.07	0.18	0.30	0.00	0.26	0.12	0.06	0.07	0.20	0.32
70	TC	432	408	384	354	323	293	275	435	410	386	356	326	295	277
	SHC	173	195	218	245	273	293	275	183	205	228	257	285	295	277
	kW	15.4	15.3	15.1	15.0	14.8	14.7	14.6	15.5	15.4	15.3	15.1	14.9	14.7	14.6
	BF	0.00	0.24	0.12	0.05	0.07	0.18	0.30	0.00	0.26	0.12	0.06	0.07	0.20	0.32
75	TC	422	398	374	345	315	285	267	425	401	377	347	317	287	269
	SHC	159	184	210	241	272	285	267	168	194	220	252	284	287	269
	kW	17.0	16.8	16.7	16.5	16.3	16.1	16.0	17.2	17.0	16.8	16.6	16.4	16.2	16.0
	BF	0.00	0.25	0.13	0.06	0.08	0.20	0.31	0.00	0.27	0.13	0.07	0.09	0.21	0.33
85	TC	402	379	356	327	298	269	251	405	382	359	329	300	271	254
	SHC	131	162	193	232	271	269	251	140	172	204	243	283	271	254
	kW	20.3	20.0	19.8	19.5	19.2	18.9	18.8	20.4	20.2	20.0	19.6	19.3	19.0	18.8
	BF	0.00	0.26	0.15	0.07	0.10	0.22	0.33	0.00	0.28	0.16	0.08	0.11	0.23	0.36
95	TC	382	359	337	309	281	252	235	386	363	340	312	283	255	238
	SHC	104	141	177	223	269	252	235	112	150	188	235	282	255	238
	kW	23.5	23.2	22.9	22.5	22.2	21.8	21.6	23.7	23.4	23.1	22.7	22.3	21.9	21.7
	BF	0.00	0.26	0.15	0.07	0.10	0.22	0.33	0.00	0.28	0.16	0.08	0.11	0.23	0.36
105	TC	362	340	318	291	263	236	220	366	344	322	294	267	239	222
	SHC	76	119	161	214	263	236	220	84	128	171	226	267	239	222
	kW	26.8	26.4	26.0	25.6	25.1	24.6	24.4	27.0	26.6	26.2	25.7	25.2	24.8	24.5
	BF	0.00	0.28	0.15	0.08	0.10	0.22	0.33	0.00	0.29	0.16	0.09	0.11	0.23	0.36
115	TC	342	321	299	273	246	220	204	346	325	303	277	250	223	207
	SHC	48	97	145	206	246	220	204	56	106	155	217	250	223	207
	kW	30.0	29.6	29.1	28.6	28.0	27.5	27.1	30.3	29.8	29.4	28.8	28.2	27.6	27.3
	BF	0.00	0.29	0.16	0.09	0.12	0.23	0.35	0.00	0.31	0.17	0.10	0.12	0.25	0.37
125	TC	322	301	281	255	229	203	188	327	306	285	259	233	207	191
	SHC	21	75	129	197	229	203	188	28	84	139	209	233	207	191
	kW	33.3	32.7	32.2	31.6	31.0	30.3	29.9	33.6	33.0	32.5	31.8	31.1	30.5	30.1
	BF	0.00	0.29	0.17	0.10	0.13	0.24	0.36	0.00	0.31	0.18	0.11	0.13	0.26	0.38

Cooling Capacities (cont)

50PG28 (25 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — COOLING MODE (cont)								
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM						
		12,000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	456	431	406	375	344	313	294
	SHC	220	237	254	275	297	313	294
	kW	12.3	12.3	12.2	12.1	12.0	11.9	11.9
	BF	0.00	0.27	0.13	0.06	0.08	0.21	0.34
70	TC	437	413	388	358	327	297	279
	SHC	191	214	238	267	296	297	279
	kW	15.6	15.5	15.3	15.2	15.0	14.8	14.7
	BF	0.00	0.27	0.13	0.06	0.08	0.21	0.34
75	TC	427	403	379	349	319	289	271
	SHC	177	203	230	262	295	289	271
	kW	17.3	17.1	16.9	16.7	16.5	16.2	16.1
	BF	0.00	0.29	0.14	0.07	0.09	0.22	0.35
85	TC	408	385	361	332	302	273	255
	SHC	149	181	213	254	294	273	255
	kW	20.6	20.3	20.1	19.8	19.4	19.1	18.9
	BF	0.00	0.30	0.17	0.08	0.12	0.25	0.38
95	TC	389	366	343	314	286	257	240
	SHC	120	159	197	245	286	257	240
	kW	23.9	23.6	23.2	22.8	22.4	22.0	21.7
	BF	0.00	0.30	0.17	0.08	0.12	0.25	0.38
105	TC	369	347	325	297	269	241	225
	SHC	92	136	181	237	269	241	225
	kW	27.2	26.8	26.4	25.9	25.4	24.9	24.5
	BF	0.00	0.31	0.17	0.09	0.12	0.25	0.38
115	TC	350	328	307	280	253	226	209
	SHC	63	114	165	228	253	226	209
	kW	30.5	30.0	29.6	29.0	28.3	27.7	27.4
	BF	0.00	0.33	0.18	0.10	0.13	0.26	0.39
125	TC	331	310	289	262	236	210	194
	SHC	35	92	149	220	236	210	194
	kW	33.8	33.3	32.7	32.0	31.3	30.6	30.2
	BF	0.00	0.33	0.20	0.11	0.14	0.27	0.40

LEGEND

BF — Bypass Factor
Edb — Entering Dry-Bulb
Ewb — Entering Wet-Bulb
kW — Compressor Motor Power Input
ldb — Leaving Dry-Bulb
lwb — Leaving Wet-Bulb
SHC — Sensible Heat Capacity (1000 Btuh) Gross
TC — Total Capacity (1000 Btuh) Gross

NOTES:

- Direct interpolation is permissible. Do not extrapolate.
- The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet-bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

- The SHC is based on 80°F edb temperature of air entering evaporator coil
Below 80°F edb, subtract (corr factor x cfm) from SHC.
Above 80 °F edb, add (corr factor x cfm) to SHC.

BYPASS FACTOR (BF)	ENTERING AIR DRY-BULB TEMP (F)					
	79	78	77	76	75	under 75
	81	82	83	84	85	over 85
.05	1.04	2.07	3.11	4.14	5.18	Use formula shown below.
.10	.98	1.96	2.94	3.92	4.90	
.20	.87	1.74	2.62	3.49	4.36	
.30	.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correlation Factor = $1.09 \times (1 - \text{BF}) \times (\text{edb} - 80)$.

Cooling Capacities (cont)

50PG28 (25 Tons) — UNIT WITH HUMIDI-MIZER™ SYSTEM — SUBCOOLING MODE															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF													
		7500							8250						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	448	423	397	366	334	303	284	451	426	400	368	337	305	286
	SHC	183	198	213	231	250	268	279	191	206	221	240	259	278	286
	kW	13.1	13.0	12.9	12.8	12.7	12.6	12.5	13.1	13.0	12.9	12.8	12.7	12.6	12.6
70	TC	425	400	376	345	314	284	265	429	404	379	348	317	286	268
	SHC	147	167	188	214	240	265	265	155	176	197	223	249	275	268
	kW	16.0	15.9	15.8	15.6	15.4	15.2	15.1	16.1	15.9	15.8	15.6	15.4	15.3	15.2
75	TC	413	389	365	334	304	274	256	417	393	368	338	307	277	258
	SHC	129	152	176	205	234	264	256	136	160	184	214	244	274	258
	kW	17.5	17.3	17.2	17.0	16.8	16.6	16.4	17.5	17.4	17.2	17.0	16.8	16.6	16.5
85	TC	390	367	343	314	284	255	237	395	371	347	317	288	258	240
	SHC	93	122	151	188	224	255	237	100	130	159	197	234	258	240
	kW	20.5	20.2	20.0	19.8	19.5	19.2	19.1	20.5	20.3	20.1	19.8	19.5	19.2	19.1
95	TC	367	344	321	293	264	236	218	372	349	326	297	268	239	222
	SHC	56	92	127	170	214	236	218	63	99	135	179	224	239	222
	kW	23.4	23.1	22.9	22.5	22.2	21.9	21.7	23.5	23.2	22.9	22.6	22.2	21.9	21.7
105	TC	344	322	300	272	244	216	200	350	327	305	277	249	220	204
	SHC	20	61	102	153	204	216	200	26	68	110	162	214	220	204
	kW	26.4	26.0	25.7	25.3	24.9	24.5	24.3	26.4	26.1	25.8	25.4	24.9	24.5	24.3
115	TC	321	299	278	251	224	197	181	327	305	284	256	229	202	185
	SHC	-16	31	78	136	194	197	181	-10	37	85	145	204	202	185
	kW	29.3	28.9	28.6	28.1	27.6	27.1	26.9	29.4	29.0	28.6	28.1	27.7	27.2	26.9
125	TC	298	277	256	230	204	178	162	305	284	262	236	209	183	167
	SHC	-52	0	53	119	184	178	162	-47	7	60	127	194	183	167
	kW	32.3	31.8	31.4	30.9	30.3	29.8	29.5	32.3	31.9	31.5	30.9	30.4	29.8	29.5

50PG28 (25 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — SUBCOOLING MODE (cont)															
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF													
		9500							10,750						
		Air Entering Evaporator — Ewb (F)													
		80	76	72	67	62	57	54	80	76	72	67	62	57	54
60	TC	455	429	404	372	340	308	289	458	433	407	375	342	310	291
	SHC	203	218	233	253	272	291	289	213	229	244	264	284	303	291
	kW	13.1	13.1	13.0	12.9	12.8	12.7	12.6	13.2	13.1	13.0	12.9	12.8	12.7	12.6
70	TC	433	408	383	352	321	290	271	437	412	387	355	324	292	273
	SHC	165	187	208	235	262	289	271	175	197	219	246	274	292	273
	kW	16.1	16.0	15.8	15.7	15.5	15.3	15.2	16.1	16.0	15.9	15.7	15.5	15.3	15.2
75	TC	422	398	373	342	311	280	262	426	402	377	346	314	283	265
	SHC	147	171	196	226	257	280	262	156	181	206	238	269	283	265
	kW	17.6	17.4	17.3	17.0	16.8	16.6	16.5	17.6	17.5	17.3	17.1	16.9	16.7	16.5
85	TC	400	376	352	322	292	262	244	405	381	357	326	296	266	247
	SHC	109	140	171	209	247	262	244	118	149	181	220	259	266	247
	kW	20.6	20.3	20.1	19.8	19.6	19.3	19.1	20.6	20.4	20.1	19.9	19.6	19.3	19.1
95	TC	379	355	332	302	273	244	226	384	360	337	307	277	248	230
	SHC	72	109	145	191	237	244	226	80	117	155	202	249	248	230
	kW	23.5	23.2	23.0	22.6	22.3	21.9	21.7	23.6	23.3	23.0	22.7	22.3	22.0	21.8
105	TC	357	334	311	283	254	226	208	363	340	317	288	259	230	212
	SHC	34	77	120	174	228	226	208	42	86	130	185	240	230	212
	kW	26.5	26.1	25.8	25.4	25.0	24.6	24.3	26.5	26.2	25.9	25.4	25.0	24.6	24.4
115	TC	335	313	291	263	235	207	191	342	319	296	268	240	212	195
	SHC	-3	46	95	156	218	207	191	4	54	104	167	230	212	195
	kW	29.4	29.1	28.7	28.2	27.7	27.2	27.0	29.5	29.1	28.7	28.2	27.8	27.3	27.0
125	TC	313	292	270	243	216	189	173	320	298	276	249	222	194	178
	SHC	-40	15	70	139	208	189	173	-34	22	79	150	220	194	178
	kW	32.4	32.0	31.5	31.0	30.4	29.9	29.6	32.5	32.0	31.6	31.0	30.5	29.9	29.6

Cooling Capacities (cont)

50PG28 (25 Tons) — UNIT WITH HUMIDIFIER™ SYSTEM — SUBCOOLING MODE (cont)								
Temp (F) Air Entering Condenser (Edb)		Evaporator Air Quantity — CFM/BF						
		12,000						
		Air Entering Evaporator — Ewb (F)						
		80	76	72	67	62	57	54
60	TC	461	435	409	377	345	312	293
	SHC	222	238	254	274	294	312	293
	kW	13.2	13.1	13.0	12.9	12.8	12.7	12.6
70	TC	440	415	390	358	326	295	276
	SHC	184	206	228	257	285	295	276
	kW	16.2	16.0	15.9	15.7	15.5	15.3	15.2
75	TC	430	405	380	349	317	286	267
	SHC	164	190	216	248	280	286	267
	kW	17.7	17.5	17.3	17.1	16.9	16.7	16.5
85	TC	409	385	360	330	299	268	250
	SHC	126	158	190	230	270	268	250
	kW	20.6	20.4	20.2	19.9	19.6	19.3	19.2
95	TC	389	365	341	311	281	251	233
	SHC	87	126	164	212	260	251	233
	kW	23.6	23.3	23.0	22.7	22.3	22.0	21.8
105	TC	368	344	321	292	263	233	216
	SHC	48	93	138	195	251	233	216
	kW	26.6	26.2	25.9	25.5	25.1	24.6	24.4
115	TC	347	324	302	273	244	216	199
	SHC	10	61	113	177	241	216	199
	kW	29.5	29.1	28.8	28.3	27.8	27.3	27.0
125	TC	326	304	282	254	226	198	182
	SHC	-29	29	87	159	226	198	182
	kW	32.5	32.1	31.6	31.1	30.5	30.0	29.6

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

Cooling Capacities (cont)

50PG28 (25 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — HOT GAS REHEAT MODE — ALL CIRCUITS																
Temp (F) Air Ent Condenser (Edb)		Air Entering Evaporator — Ewb (F)														
		75 Dry Bulb 62.5 Wet Bulb (50% RH)					75 Dry Bulb 64 Wet Bulb (55% RH)					75 Dry Bulb 65.3 Wet Bulb (60% RH)				
		Air Entering Evaporator — Cfm														
		7400	8250	9500	10,750	12,000	7400	8250	9500	10,750	12,000	7400	8250	9500	10,750	12,000
80	TC	107	111	116	121	124	112	116	122	126	130	116	121	126	131	135
	SHC	19	24	31	37	42	12	17	24	30	35	6	11	18	24	29
	kW	19.9	20.0	20.0	20.1	20.1	20.0	20.1	20.1	20.2	20.2	20.1	20.1	20.2	20.3	20.3
75	TC	113	117	122	127	130	119	123	128	132	135	123	127	132	137	140
	SHC	22	27	33	39	45	16	21	27	33	38	10	15	21	27	32
	kW	19.3	19.3	19.4	19.4	19.5	19.3	19.4	19.5	19.5	19.6	19.4	19.5	19.6	19.6	19.7
70	TC	120	124	129	132	136	125	129	134	138	141	130	134	139	143	146
	SHC	25	30	36	42	47	19	24	30	36	41	14	19	25	31	35
	kW	18.6	18.7	18.7	18.8	18.8	18.7	18.8	18.8	18.9	18.9	18.8	18.8	18.9	19.0	19.0
60	TC	134	137	141	144	147	139	142	146	150	153	144	147	151	154	157
	SHC	32	36	41	46	51	27	31	36	41	46	23	27	32	37	42
	kW	17.3	17.3	17.4	17.4	17.5	17.4	17.4	17.5	17.5	17.6	17.5	17.6	17.6	17.6	17.7
50	TC	148	150	154	156	159	153	156	159	162	164	157	160	163	166	169
	SHC	38	42	47	51	55	34	38	43	47	51	31	35	40	44	48
	kW	16.0	16.0	16.1	16.1	16.1	16.1	16.1	16.2	16.2	16.3	16.2	16.3	16.3	16.3	16.3

50PG28 (25 Tons) — UNIT WITH HUMIDI-MIZER SYSTEM — HOT GAS REHEAT MODE — CIRCUIT A ONLY																
Temp (F) Air Entering Condenser (Edb)		Air Entering Evaporator — Ewb (F)														
		75 Dry Bulb 62.5 Wet Bulb (50% RH)					75 Dry Bulb 64 Wet Bulb (55% RH)					75 Dry Bulb 65.3 Wet Bulb (60% RH)				
		Air Entering Evaporator — Cfm														
		7400	8250	9500	10,750	12,000	7400	8250	9500	10,750	12,000	7400	8250	9500	10,750	12,000
50	TC	104	106	109	111	113	107	109	112	114	116	109	111	114	117	119
	SHC	44	49	55	60	64	32	37	43	48	52	21	26	32	38	42
	kW	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
40	TC	110	112	114	116	117	113	114	117	119	120	115	117	119	121	123
	SHC	50	54	59	63	66	40	44	49	53	57	32	36	41	45	49
	kW	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.5	10.5	10.5	10.5

LEGEND

Edb – Entering Dry–Bulb
Ewb – Entering Wet–Bulb
kW – Compressor Motor Power Input
ldb – Leaving Dry–Bulb
lwb – Leaving Wet–Bulb
RH – Relative Humidity
SHC – Sensible Heat Capacity (1000 Btuh) Gross
TC – Total Capacity (1000 Btuh) Gross

NOTES:

1. Direct interpolation is permissible. Do not extrapolate.
2. The following formulas may be used:

$$t_{ldb} = t_{edb} - \frac{\text{sensible capacity (Btuh)}}{1.10 \times \text{cfm}}$$

t_{lwb} = Wet–bulb temperature corresponding to enthalpy of air leaving evaporator coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{cfm}}$$

Where: h_{ewb} = Enthalpy of air entering evaporator coil

50PG Effectiveness

Size	CFM range	ERV WHEEL	CFM(O/A)	EFFECTIVENESS (%)			
				Sensible	Latent	T Clg	T Htg
03–07	Low CFM	ERC–1904	200	83.3	77.7	80.3	81.3
			350	76.4	67.2	71.2	73.2
			500	69.7	56.8	62.3	65.2
	Med CFM	ERC–1904	200	83.3	77.7	80.3	81.3
			350	76.4	67.2	71.2	73.2
			500	69.7	56.8	62.3	65.2
	High CFM	ERC–2513	500	77.7	74.4	76.1	76.5
			1000	69.4	62.8	65.8	67.0
			1400	62.7	53.3	57.5	59.3
08–14	Low CFM	ERC–2513	500	77.7	74.4	76.1	76.5
			1000	69.4	62.8	65.8	67.0
			1400	62.7	53.3	57.5	59.3
	High CFM	ERC–3628	1400	78.5	73.5	75.5	76.7
			2800	65.8	57.4	60.7	62.8
			3500	59.4	49.2	53.3	55.8
16	Low CFM	3020	900	75.8	71.7	73.7	74.3
			1500	68.9	62.1	65.3	66.5
			2000	63.1	54	58.1	59.9
	High CFM	3628	1400	78.5	73.5	75.5	76.7
			2800	65.8	57.4	60.7	62.8
			3500	59.4	49.2	53.3	55.8
20–24	Low CFM	ERC–3628	1800	74.9	68.9	71.3	72.7
			2600	67.6	59.7	62.9	64.8
			3500	59.4	49.2	53.3	55.8
28	Low CFM	ERC–3628	2500	68.6	60.9	63.9	65.8
			3000	64	55.1	58.6	60.8
			3500	59.4	49.2	53.3	55.8

50PG

Fan Performance — Vertical Supply/Return Units

50PG03 (2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
600	402	0.05	549	0.10	664	0.15	761	0.21	847	0.27
650	407	0.06	553	0.11	667	0.17	764	0.23	850	0.29
700	413	0.06	556	0.12	670	0.18	767	0.24	853	0.31
750	418	0.07	560	0.13	673	0.19	770	0.25	856	0.32
800	425	0.07	565	0.13	677	0.20	773	0.27	859	0.34
850	431	0.08	569	0.14	681	0.21	776	0.28	862	0.36
900	438	0.09	574	0.15	685	0.23	780	0.30	865	0.38
950	446	0.10	579	0.17	689	0.24	784	0.32	868	0.40
1000	454	0.11	585	0.18	693	0.25	787	0.33	872	0.42

50PG03 (2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
600	925	0.34	997	0.41	1064	0.48	1126	0.55	1186	0.63
650	928	0.36	999	0.43	1066	0.50	1129	0.58	1188	0.66
700	930	0.38	1002	0.45	1069	0.53	1131	0.61	1191	0.69
750	933	0.40	1005	0.47	1071	0.55	1134	0.63	1193	0.72
800	936	0.42	1007	0.49	1074	0.58	1136	0.66	1196	0.75
850	939	0.44	1010	0.52	1077	0.60	1139	0.69	1198	0.78
900	942	0.46	1013	0.54	1079	0.63	1142	0.72	1201	0.81
950	945	0.48	1016	0.57	1082	0.66	1145	0.75	1204	0.84
1000	948	0.50	1019	0.59	1085	0.68	1147	0.78	—	—

LEGEND

Bhp — Brake Horsepower

NOTES:

1. Motor drive range is 482 to 736 rpm for low range motor/drive and 656 to 1001 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 0.85 for low range motor/drive and 0.85 for high range motor/drive.
3. See General Fan Performance Notes.

50PG04 (3 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
900	438	0.09	574	0.15	685	0.23	780	0.30	865	0.38
950	446	0.10	579	0.17	689	0.24	784	0.32	868	0.40
1000	454	0.11	585	0.18	693	0.25	787	0.33	872	0.42
1050	462	0.12	590	0.19	698	0.27	791	0.35	875	0.44
1100	471	0.13	596	0.20	703	0.28	796	0.37	879	0.46
1150	480	0.14	603	0.21	708	0.30	800	0.39	883	0.48
1200	489	0.15	610	0.23	713	0.32	805	0.41	887	0.50
1250	499	0.16	617	0.24	719	0.33	809	0.43	891	0.53
1300	509	0.18	624	0.26	725	0.35	814	0.45	896	0.55
1350	519	0.19	632	0.28	731	0.37	820	0.47	900	0.57
1400	529	0.21	639	0.29	737	0.39	825	0.49	905	0.60
1450	540	0.22	648	0.31	744	0.41	831	0.52	910	0.63
1500	551	0.24	656	0.33	751	0.43	837	0.54	915	0.65

50PG04 (3 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
900	942	0.46	1013	0.54	1079	0.63	1142	0.72	1201	0.81
950	945	0.48	1016	0.57	1082	0.66	1145	0.75	1204	0.84
1000	948	0.50	1019	0.59	1085	0.68	1147	0.78	—	—
1050	952	0.53	1022	0.62	1088	0.71	1150	0.81	—	—
1100	955	0.55	1026	0.65	1091	0.74	1153	0.84	—	—
1150	959	0.57	1029	0.67	1095	0.77	—	—	—	—
1200	962	0.60	1032	0.70	1098	0.80	—	—	—	—
1250	966	0.63	1036	0.73	1101	0.83	—	—	—	—
1300	970	0.65	1040	0.76	—	—	—	—	—	—
1350	975	0.68	1044	0.79	—	—	—	—	—	—
1400	979	0.71	1048	0.82	—	—	—	—	—	—
1450	984	0.74	1052	0.85	—	—	—	—	—	—
1500	988	0.77	—	—	—	—	—	—	—	—

LEGEND

Bhp — Brake Horsepower

NOTES:

1. Motor drive range is 482 to 736 rpm for low range motor/drive and 796 to 1128 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 0.85 for low range motor/drive and 0.85 for high range motor/drive.
3. See General Fan Performance Notes.

Fan Performance — Vertical Supply/Return Units (cont)

50PG05 (4 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1200	492	0.15	604	0.22	701	0.31	790	0.39	873	0.49
1300	513	0.18	620	0.26	714	0.34	800	0.43	880	0.53
1400	534	0.21	638	0.29	729	0.38	812	0.48	889	0.58
1500	557	0.24	657	0.33	745	0.43	825	0.53	900	0.63
1600	580	0.28	677	0.38	762	0.48	839	0.58	912	0.69
1700	603	0.33	697	0.43	779	0.53	855	0.64	926	0.75
1800	627	0.38	718	0.48	798	0.59	871	0.70	940	0.82
1900	651	0.43	739	0.54	817	0.65	889	0.77	956	0.89
2000	675	0.49	761	0.61	837	0.72	907	0.85	972	0.97

50PG05 (4 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1200	950	0.58	1023	0.69	1092	0.79	1157	0.90	1219	1.02
1300	955	0.63	1027	0.74	1094	0.85	1158	0.96	1220	1.08
1400	962	0.68	1032	0.79	1098	0.91	1161	1.03	1222	1.15
1500	971	0.74	1039	0.85	1103	0.97	1165	1.09	1225	1.22
1600	981	0.80	1047	0.92	1110	1.04	1171	1.17	1229	1.30
1700	993	0.87	1057	0.99	1118	1.11	1178	1.24	1235	1.38
1800	1005	0.94	1068	1.06	1128	1.19	1186	1.33	1242	1.46
1900	1019	1.02	1080	1.14	1139	1.28	1196	1.41	1251	1.56
2000	1034	1.10	1094	1.23	1151	1.37	1206	1.51	1260	1.65

LEGEND

Bhp – Brake Horsepower
 High Range Motor/Drive Required

NOTES:

1. Motor drive range is 596 to 910 rpm for low range motor/drive and 828 to 1173 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 0.85 for low range motor/drive and 1.60 (single phase) and 2.40 (3 phase) for high range motor/drive.
3. See General Fan Performance Notes.

50PG06 (5 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1500	568	0.25	667	0.34	753	0.44	833	0.54	908	0.64
1600	592	0.29	687	0.39	771	0.49	848	0.59	920	0.70
1700	616	0.34	708	0.44	789	0.54	864	0.65	934	0.76
1800	641	0.39	730	0.50	809	0.61	881	0.72	950	0.83
1900	665	0.45	752	0.56	829	0.67	900	0.79	966	0.91
2000	690	0.51	775	0.63	850	0.75	918	0.87	983	0.99
2100	716	0.57	798	0.70	871	0.82	938	0.95	1001	1.08
2200	742	0.65	821	0.78	892	0.91	958	1.04	1020	1.18
2300	768	0.73	845	0.86	915	1.00	979	1.14	1039	1.28
2400	794	0.81	869	0.96	937	1.10	1000	1.24	1059	1.38
2500	820	0.91	894	1.05	960	1.20	1021	1.35	1079	1.50

50PG06 (5 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1500	978	0.75	1046	0.87	1110	0.98	1172	1.11	1231	1.23
1600	989	0.81	1055	0.93	1117	1.05	1178	1.18	1236	1.31
1700	1001	0.88	1065	1.00	1126	1.13	1185	1.26	1242	1.39
1800	1015	0.96	1077	1.08	1136	1.21	1194	1.35	1250	1.48
1900	1029	1.04	1090	1.16	1148	1.30	1204	1.44	1259	1.58
2000	1045	1.12	1104	1.26	1161	1.39	1216	1.53	1269	1.68
2100	1061	1.21	1119	1.35	1174	1.49	1228	1.64	1280	1.79
2200	1078	1.31	1135	1.45	1189	1.60	1241	1.75	1293	1.90
2300	1096	1.42	1151	1.57	1204	1.71	1256	1.87	1306	2.02
2400	1115	1.53	1169	1.68	1221	1.84	1271	1.99	1320	2.15
2500	1134	1.65	1187	1.81	1238	1.97	1287	2.13	1335	2.29

LEGEND

Bhp – Brake Horsepower

NOTES:

1. Motor drive range is 690 to 978 rpm for low range motor/drive and 929 to 1261 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 0.85 (single phase) and 2.40 (3 phase) for low range motor/drive and 1.60 (single phase) and 2.40 (3 phase) for high range motor/drive.
3. See General Fan Performance Notes.

50PG

Fan Performance — Vertical Supply/Return Units (cont)

50PG07 (6 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1800	654	0.41	742	0.51	819	0.62	891	0.73	959	0.85
1900	680	0.46	765	0.58	840	0.69	910	0.81	976	0.93
2000	706	0.53	788	0.65	862	0.77	930	0.89	994	1.01
2100	732	0.60	812	0.72	883	0.85	950	0.97	1012	1.10
2200	758	0.67	836	0.80	906	0.93	970	1.07	1031	1.20
2300	785	0.76	860	0.89	929	1.03	992	1.17	1051	1.31
2400	812	0.85	885	0.99	952	1.13	1014	1.27	1072	1.42
2500	839	0.94	910	1.09	975	1.24	1036	1.39	1093	1.54
2600	866	1.05	936	1.20	999	1.36	1058	1.51	1114	1.66
2700	894	1.16	961	1.32	1023	1.48	1081	1.64	1136	1.80
2800	921	1.28	987	1.45	1048	1.61	1105	1.78	1158	1.94
2900	949	1.41	1013	1.58	1073	1.75	1128	1.92	1181	2.10
3000	977	1.54	1039	1.72	1098	1.90	1152	2.08	1204	2.26

50PG07 (6 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1800	1023	0.97	1085	1.10	1145	1.23	1202	1.36	1258	1.50
1900	1039	1.06	1099	1.19	1157	1.32	1213	1.46	1267	1.60
2000	1055	1.14	1113	1.28	1170	1.42	1225	1.56	1278	1.70
2100	1072	1.24	1129	1.38	1184	1.52	1238	1.67	1290	1.81
2200	1090	1.34	1145	1.48	1199	1.63	1252	1.78	1303	1.93
2300	1108	1.45	1163	1.60	1215	1.75	1267	1.90	1316	2.06
2400	1127	1.57	1181	1.72	1232	1.87	1282	2.03	1331	2.19
2500	1147	1.69	1199	1.85	1250	2.01	1299	2.17	1347	2.33
2600	1168	1.82	1219	1.98	1268	2.15	1316	2.31	—	—
2700	1188	1.96	1239	2.13	1287	2.30	—	—	—	—
2800	1210	2.11	1259	2.28	—	—	—	—	—	—
2900	1231	2.27	—	—	—	—	—	—	—	—
3000	—	—	—	—	—	—	—	—	—	—

LEGEND

Bhp — Brake Horsepower

NOTES:

- Motor drive range is 796 to 1128 rpm for low range motor/drive and 1150 to 1438 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 2.40 for low range motor/drive and 3.10 for high range motor/drive.
- See General Fan Performance Notes.

50PG08 (7 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
2250	439	0.32	519	0.43	592	0.54	659	0.66	721	0.79
2400	455	0.37	532	0.48	602	0.60	667	0.73	728	0.86
2550	471	0.43	546	0.55	613	0.67	676	0.80	735	0.94
2700	488	0.49	560	0.61	625	0.74	686	0.88	743	1.02
2850	505	0.56	574	0.69	638	0.82	697	0.96	753	1.11
3000	522	0.63	589	0.77	651	0.91	708	1.05	763	1.21
3150	539	0.71	605	0.86	664	1.00	720	1.15	773	1.31
3300	557	0.80	620	0.95	679	1.10	733	1.26	785	1.42
3450	575	0.90	636	1.06	693	1.21	746	1.37	797	1.54
3600	593	1.00	653	1.17	708	1.33	760	1.50	809	1.67
3750	611	1.12	669	1.29	723	1.46	774	1.63	822	1.81

50PG08 (7 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
2250	780	0.92	836	1.06	889	1.21	940	1.35	989	1.51
2400	785	1.00	840	1.14	892	1.29	942	1.44	990	1.60
2550	791	1.08	845	1.23	896	1.38	945	1.54	993	1.70
2700	798	1.17	851	1.32	901	1.48	949	1.64	996	1.81
2850	806	1.26	857	1.42	906	1.58	954	1.75	999	1.92
3000	815	1.36	865	1.52	913	1.69	959	1.86	1004	2.04
3150	824	1.47	873	1.64	920	1.81	965	1.99	1009	2.17
3300	834	1.59	882	1.76	928	1.94	972	2.12	1015	2.30
3450	845	1.71	891	1.89	936	2.07	980	2.26	1022	2.45
3600	856	1.85	902	2.03	946	2.21	988	2.40	1030	2.60
3750	868	1.99	912	2.17	955	2.36	997	2.56	1038	2.76

LEGEND

Bhp — Brake Horsepower
 High Range Motor/Drive Required

NOTES:

- Motor drive range is 568 to 771 rpm for low range motor/drive and 812 to 1015 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 2.40 for low range motor/drive and 3.10 for high range motor/drive.
- See General Fan Performance Notes.

Fan Performance — Vertical Supply/Return Units (cont)

50PG09 (8 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
2550	471	0.43	546	0.55	613	0.67	676	0.80	735	0.94
2700	488	0.49	560	0.61	625	0.74	686	0.88	743	1.02
2850	505	0.56	574	0.69	638	0.82	697	0.96	753	1.11
3000	522	0.63	589	0.77	651	0.91	708	1.05	763	1.21
3150	539	0.71	605	0.86	664	1.00	720	1.15	773	1.31
3300	557	0.80	620	0.95	679	1.10	733	1.26	785	1.42
3450	575	0.90	636	1.06	693	1.21	746	1.37	797	1.54
3600	593	1.00	653	1.17	708	1.33	760	1.50	809	1.67
3750	611	1.12	669	1.29	723	1.46	774	1.63	822	1.81
3900	630	1.24	686	1.41	739	1.59	788	1.77	835	1.95
4050	648	1.37	703	1.55	754	1.73	803	1.92	849	2.11
4200	667	1.51	721	1.70	771	1.89	818	2.08	863	2.27

50PG09 (8 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
2550	791	1.08	845	1.23	896	1.38	945	1.54	993	1.70
2700	798	1.17	851	1.32	901	1.48	949	1.64	996	1.81
2850	806	1.26	857	1.42	906	1.58	954	1.75	999	1.92
3000	815	1.36	865	1.52	913	1.69	959	1.86	1004	2.04
3150	824	1.47	873	1.64	920	1.81	965	1.99	1009	2.17
3300	834	1.59	882	1.76	928	1.94	972	2.12	1015	2.30
3450	845	1.71	891	1.89	936	2.07	980	2.26	1022	2.45
3600	856	1.85	902	2.03	946	2.21	988	2.40	1030	2.60
3750	868	1.99	912	2.17	955	2.36	997	2.56	1038	2.76
3900	880	2.14	924	2.33	966	2.52	1007	2.72	1047	2.93
4050	893	2.30	936	2.49	977	2.70	1017	2.90	1056	3.11
4200	906	2.47	948	2.67	988	2.88	1028	3.09	1066	3.30

LEGEND

Bhp — Brake Horsepower
 High Range Motor/Drive Required

NOTES:

- Motor drive range is 568 to 771 rpm for low range motor/drive and 812 to 1015 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 2.40 for low range motor/drive and 3.70 for high range motor/drive.
- See General Fan Performance Notes.

50PG012 (10 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
3000	533	0.65	599	0.79	660	0.93	717	1.08	771	1.23
3200	557	0.77	620	0.91	679	1.06	734	1.21	786	1.37
3400	581	0.90	642	1.05	699	1.21	751	1.37	802	1.53
3600	606	1.04	665	1.20	719	1.36	770	1.53	819	1.71
3800	631	1.20	687	1.37	740	1.54	789	1.71	837	1.89
4000	656	1.37	711	1.55	761	1.73	809	1.91	855	2.10
4200	682	1.56	734	1.75	783	1.94	830	2.13	874	2.32
4400	707	1.77	758	1.96	806	2.16	851	2.36	894	2.57
4600	733	1.99	782	2.20	828	2.41	872	2.62	914	2.83
4800	759	2.24	806	2.45	851	2.67	894	2.89	935	3.11
5000	785	2.50	831	2.73	875	2.95	916	3.18	956	3.41

50PG012 (10 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
3000	822	1.39	872	1.55	920	1.72	966	1.89	1011	2.07
3200	836	1.54	884	1.71	930	1.88	975	2.06	1019	2.24
3400	850	1.70	897	1.88	942	2.06	985	2.24	1028	2.43
3600	866	1.88	911	2.06	955	2.25	997	2.44	1038	2.64
3800	882	2.08	926	2.27	968	2.46	1010	2.66	1050	2.86
4000	899	2.29	942	2.49	983	2.69	1023	2.89	1063	3.10
4200	917	2.52	959	2.72	999	2.93	1038	3.14	1076	3.36
4400	936	2.77	976	2.98	1015	3.19	1054	3.41	1091	3.63
4600	955	3.04	994	3.26	1033	3.48	1070	3.70	—	—
4800	975	3.33	1013	3.55	—	—	—	—	—	—
5000	995	3.63	—	—	—	—	—	—	—	—

LEGEND

Bhp — Brake Horsepower
 High Range Motor/Drive Required

NOTES:

- Motor drive range is 690 to 893 for low range motor/drive and 852 to 1055 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 3.10 for low range motor/drive and 3.70 for high range motor/drive.
- See General Fan Performance Notes.

50PG

Fan Performance — Vertical Supply/Return Units (cont)

50PG014 (12 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
3750	625	1.15	682	1.32	735	1.49	785	1.67	832	1.85
3950	650	1.32	705	1.50	756	1.68	804	1.86	851	2.05
4150	675	1.51	728	1.70	778	1.88	825	2.07	870	2.27
4350	701	1.71	752	1.91	800	2.11	846	2.30	889	2.50
4550	727	1.93	776	2.14	823	2.34	867	2.55	909	2.76
4750	753	2.17	800	2.39	846	2.60	889	2.82	930	3.03
4950	779	2.43	825	2.66	869	2.88	911	3.10	951	3.33
5150	805	2.71	850	2.95	892	3.18	933	3.41	972	3.64
5350	831	3.01	875	3.26	916	3.50	956	3.74	994	3.98
5550	858	3.34	900	3.59	940	3.84	979	4.09	1016	4.34
5750	884	3.68	925	3.95	965	4.21	1002	4.47	1039	4.73
5950	911	4.05	951	4.33	989	4.60	1026	4.86	1062	5.13
6150	938	4.45	976	4.73	1014	5.01	—	—	—	—
6250	951	4.66	989	4.94	1026	5.23	—	—	—	—

50PG014 (12 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
3750	878	2.03	922	2.22	965	2.41	1006	2.60	1047	2.80
3950	895	2.24	938	2.43	979	2.63	1020	2.83	1059	3.04
4150	913	2.46	954	2.66	995	2.87	1034	3.08	1073	3.29
4350	931	2.71	972	2.91	1011	3.13	1050	3.34	1087	3.56
4550	950	2.97	990	3.18	1028	3.40	1066	3.63	1102	3.85
4750	970	3.25	1008	3.47	1046	3.70	1082	3.93	1118	4.16
4950	990	3.56	1028	3.79	1064	4.02	1100	4.25	1135	4.49
5150	1010	3.88	1047	4.12	1083	4.36	1118	4.60	1152	4.85
5350	1031	4.23	1067	4.47	1102	4.72	1136	4.97	1170	5.22
5550	1053	4.59	1088	4.85	1122	5.10	—	—	—	—
5750	1074	4.99	1109	5.25	—	—	—	—	—	—
5950	—	—	—	—	—	—	—	—	—	—
6150	—	—	—	—	—	—	—	—	—	—
6250	—	—	—	—	—	—	—	—	—	—

LEGEND

Bhp — Brake Horsepower
 High Range Motor/Drive Required

NOTES:

- Motor drive range is 690 to 893 for low range motor/drive and 852 to 1055 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 3.70 for low range motor/drive and 5.25 for high range motor/drive.
- See General Fan Performance Notes.

GENERAL NOTES FOR FAN PERFORMANCE DATA TABLES

- Static pressure losses from accessories and options (Humidi-MiZer™ system, economizer, etc.) must be added to external static pressure before entering Fan Performance table.
- Interpolation is permissible. Do not extrapolate.
- Fan performance is based on wet coils, clean filters, and casing losses. See Accessory/FIOP Static Pressure information.
- Extensive motor and drive testing on these units ensures that the full horsepower range of the motor can be utilized with confidence. Using your fan motors up to the bhp rating shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected.
- Use of a field-supplied motor may affect wire size. Recalculate the unit power supply MCA and MOCPS if required. Contact your Carrier representative for details.
- Use the following formula to calculate input watts:
 Input Watts = Bhp x (746/Motor Eff)

Fan Performance — Vertical Supply/Return Units (cont)

50PG16 (15 Tons)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
4500	540	0.71	640	1.03	718	1.36	784	1.68	844	2.00
4800	560	0.82	660	1.15	737	1.50	803	1.85	862	2.19
5100	581	0.94	680	1.29	757	1.66	823	2.03	881	2.40
5400	602	1.08	699	1.43	776	1.83	842	2.22	900	2.61
5700	623	1.24	719	1.59	796	2.01	862	2.42	919	2.84
6000	645	1.42	739	1.77	816	2.20	881	2.64	939	3.08
6300	667	1.62	760	1.96	836	2.40	901	2.86	958	3.33
6600	689	1.84	780	2.17	856	2.63	921	3.10	978	3.59
6900	712	2.09	800	2.40	876	2.86	940	3.36	998	3.87
7200	735	2.36	821	2.65	896	3.12	960	3.63	1017	4.16
7500	758	2.66	842	2.93	916	3.39	980	3.92	1037	4.47

50PG16 (15 Tons)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
4500	898	2.32	949	2.63	998	2.95	1043	3.27	1087	3.59
4800	916	2.53	967	2.87	1014	3.21	1060	3.55	1103	3.89
5100	935	2.76	985	3.12	1032	3.48	1076	3.84	1119	4.20
5400	953	3.00	1003	3.38	1050	3.76	1094	4.14	1136	4.52
5700	972	3.25	1022	3.65	1068	4.05	1112	4.46	1153	4.86
6000	992	3.51	1040	3.94	1086	4.36	1130	4.79	1171	5.21
6300	1011	3.78	1059	4.23	1105	4.68	1148	5.13	1189	5.58
6600	1030	4.07	1079	4.55	1124	5.02	1167	5.49	1208	5.96
6900	1050	4.37	1098	4.87	1143	5.37	1186	5.86	1226	6.35
7200	1069	4.68	1117	5.21	1162	5.73	1205	6.25	1245	6.76
7500	1089	5.02	1137	5.56	1182	6.11	1224	6.65	1264	7.19

LEGEND

Bhp – Brake Horsepower

Mid–Low Range Motor/Drive Required
High Range Motor/Drive Required

NOTES:

1. Motor drive range is 710 to 879 for low range motor/drive, 872 to 1066 rpm for mid–low range motor/drive, and 1066 to 1260 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 3.70 for low range motor/drive, 5.25 for mid–low range motor/drive, and 7.50 for high range motor/drive.
3. See General Fan Performance Notes.

50PG

Fan Performance — Vertical Supply/Return Units (cont)

50PG20 (18 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
5000	533	1.27	611	1.54	682	1.82	748	2.10	808	2.37
5500	571	1.57	643	1.86	711	2.15	773	2.44	832	2.73
6000	610	1.92	676	2.21	740	2.52	A 800	2.82	A 857	3.13
6500	650	2.31	712	2.61	A 772	2.93	829	3.25	883	3.58
7000	691	2.75	A 748	3.06	805	3.39	859	3.73	911	4.07
7500	A 732	3.24	786	3.57	839	3.91	891	4.25	941	4.61
8000	775	3.79	824	4.12	874	4.47	924	4.83	B 972	5.19
8500	817	4.40	863	4.74	911	5.09	B 958	5.46	C 1003	5.84
9000	860	5.06	904	5.41	C 948	5.77	C 993	6.15	1036	6.54

50PG20 (18 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
5000	865	2.64	A 918	2.91	969	3.17	1018	3.44	1065	3.70
5500	A 886	3.02	938	3.31	988	3.59	1035	3.87	1081	4.16
6000	910	3.44	B 960	3.74	B 1008	4.05	B 1054	4.35	B 1099	4.65
6500	935	3.90	984	4.22	1030	4.54	1075	4.86	1118	5.18
7000	961	4.40	1008	4.74	1054	5.08	1098	5.41	1140	5.75
7500	B 989	4.96	1035	5.31	1079	5.66	1122	6.01	C 1163	6.36
8000	1018	5.56	1062	5.93	1105	6.29	C 1147	6.66	1187	7.02
8500	C 1048	6.22	C 1091	6.60	C 1133	6.98	1173	7.36	D 1212	7.73
9000	1079	6.93	1121	7.32	1161	7.71	D 1201	8.11	1239	8.50

LEGEND

Bhp – Brake Horsepower Input to Fan

Boldface indicates field–supplied drive required.

NOTES:

1. Motor drive ranges:

(A) Low Range: 685 to 939 rpm, 4.26 Bhp (208/230 and 460-v), 751 to 954 rpm, 5.75 Bhp 4 (575-v)

(B) Mid-Low Range: 949 to 1206 rpm, 5.37 Bhp (208-v), 5.75 Bhp (230 and 460-v), 5.75 Bhp (575-v)

(C) Mid-High Range: 941 to 1176 rpm, 7.66 Bhp (208-v), 8.51 Bhp (230-v), 8.63 Bhp (460 and 575-v)

(D) High Range: 1014 to 1297 rpm, 9.94 Bhp (208-v), 10.45 Bhp (230-v), 11.19 Bhp (460-v), 11.50 Bhp (575-v) All other rpms require field-supplied drive.

All other rpms require field–supplied drive.

2. See General Fan Performance Notes.

50PG

Fan Performance — Vertical Supply/Return Units (cont)

50PG24 (20 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
5,500	571	1.57	643	1.86	711	2.15	773	2.44	832	2.73
6,000	610	1.92	676	2.21	740	2.52	800	2.82	A 857	3.13
6,500	650	2.31	712	2.61	A 772	2.93	A 829	3.25	883	3.58
7,000	691	2.75	A 748	3.06	805	3.39	859	3.73	911	4.07
7,500	A 732	3.24	786	3.57	839	3.91	891	4.25	941	4.61
8,000	775	3.79	824	4.12	874	4.47	924	4.83	B 972	5.19
8,500	817	4.40	863	4.74	911	5.09	B 958	5.46	1003	5.84
9,000	860	5.06	904	5.41	948	5.77	993	6.15	C 1036	6.54
9,500	903	5.79	C 944	6.14	C 986	6.51	C 1028	6.90	1070	7.29
10,000	C 947	6.57	985	6.93	1025	7.32	1065	7.71	1105	8.11

50PG24 (20 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
5,500	886	3.02	A 938	3.31	988	3.59	1035	3.87	1081	4.16
6,000	A 910	3.44	960	3.74	B 1008	4.05	B 1054	4.35	B 1099	4.65
6,500	935	3.90	B 984	4.22	1030	4.54	1075	4.86	1118	5.18
7,000	961	4.40	1008	4.74	1054	5.08	1098	5.41	1140	5.75
7,500	B 989	4.96	1035	5.31	1079	5.66	1122	6.01	C 1163	6.36
8,000	1018	5.56	1062	5.93	C 1105	6.29	C 1147	6.66	1187	7.02
8,500	1048	6.22	C 1091	6.60	1133	6.98	1173	7.36	1212	7.73
9,000	C 1079	6.93	1121	7.32	1161	7.71	1201	8.11	D 1239	8.50
9,500	1112	7.70	1152	8.10	D 1191	8.51	D 1229	8.91	1266	9.32
10,000	1145	8.52	D 1184	8.94	1222	9.36	1259	9.78	1295	10.20

LEGEND

Bhp – Brake Horsepower Input to Fan

Boldface indicates field-supplied drive required.

NOTES:

1. Motor drive ranges:

(A) Low Range: 685 to 939 rpm, 4.26 Bhp (208/230 and 460-v), 751 to 954 rpm, 5.75 Bhp 4 (575-v)

(B) Mid-Low Range: 949 to 1206 rpm, 5.37 Bhp (208-v), 5.75 Bhp (230 and 460-v), 5.75 Bhp (575-v)

(C) Mid-High Range: 941 to 1176 rpm, 7.66 Bhp (208-v), 8.51 Bhp (230-v), 8.63 Bhp (460 and 575-v)

(D) High Range: 1014 to 1297 rpm, 9.94 Bhp (208-v), 10.45 Bhp (230-v), 11.19 Bhp (460-v), 11.50 Bhp (575-v) All other rpms require field-supplied drive.

All other rpms require field-supplied drive.

2. See General Fan Performance Notes.

50PG

Fan Performance — Vertical Supply/Return Units (cont)

50PG28 (25 TONS)														
Airflow (Cfm)	Available External Static Pressure (in. wg)													
	0.2		0.4		0.6		0.8		1.0					
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp				
6,500	674	1.83	A	752	2.30	A	803	2.61	A	848	2.89	B	891	3.19
7,000	709	2.15		792	2.74		844	3.10		887	3.42		928	3.73
7,500	746	2.53		831	3.23	884	3.66	B	927	4.01	966	4.34		
8,000	786	2.96		869	3.76	925	4.27		968	4.66	1006	5.02		
8,500	827	3.45		905	4.33	B	964	4.94	1008	5.38	1046	5.78		
9,000	870	4.02	B	940	4.92		1003	5.66	C	1049	6.17	1086	6.61	
9,500	913	4.65		975	5.55	1042	6.43	C		1089	7.03	C	1127	7.52
10,000	957	5.35	C	1010	6.23	C	1079		7.25	1128	7.95		1167	8.50
10,500	1002	6.13		C	1047		6.98	1115	8.11	D	1167	8.93	D	1207
11,000	1047	6.98	1086		7.80	1150	9.01	1205	9.97		1247	10.68		
11,500	1092	7.91	D	1126	8.72	D	1185	9.94	D	1242	11.06			
12,000	1137	8.93		D	1168		9.72	1220		10.93				
12,500	1182	10.04				1210	10.82							

50PG28 (25 TONS)														
Airflow (Cfm)	Available External Static Pressure (in. wg)													
	1.2		1.4		1.6		1.8		2.0					
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp				
6,500	B	934	3.51	B	978	3.88	C	1071	4.75	C	1119	5.28		
7,000		967	4.05		1007	4.40		1048	4.79		1090	5.23	1134	5.71
7,500		1003	4.67		1040	5.02		1078	5.40		1116	5.81	1155	6.27
8,000	C	1041	5.37	C	1076	5.73	D	1146	6.51	D	1181	6.95		
8,500		1081	6.15		1114	6.53		1147	6.92		1179	7.32	1212	7.74
9,000		1121	7.02		1153	7.41		1184	7.81		1215	8.22	1246	8.65
9,500		1161	7.96		1193	8.38		1223	8.80		1253	9.23	1282	9.66
10,000		1202	8.99		1233	9.44		1263	9.89		1291	10.33	1319	10.77
10,500	D	1242	10.10		1273	10.59		1303	11.06		—	—		
11,000		1282	11.28		—	—		—	—		—	—	—	
11,500		—	—		—	—		—	—		—	—		
12,000		—	—		—	—		—	—		—	—		
12,500		—	—		—	—		—	—		—	—		

LEGEND

Bhp — Brake Horsepower Input to Fan

Boldface indicates field-supplied motor and drive required.

NOTES:

1. Motor drive ranges:

(A) Low Range: 687 to 873 rpm, 5.37 Bhp (208-v), 5.75 bhp (230 and 460-v), 5.75 bhp (575-v)

(B) Mid-Low Range: 805 to 1007 rpm, 5.37 Bhp (208-v), 5.75 Bhp (230 and 460-v), 5.75 Bhp (575-v)

(C) Mid-High Range: 941 to 1176 rpm, 7.66 Bhp (208-v), 8.51 Bhp (230-v), 8.63 Bhp (460 and 575-v)

(D) High Range: 1014 to 1297 rpm, 9.94 Bhp (208-v), 10.45 Bhp (230-v), 11.19 Bhp (460-v), 11.50 Bhp (575-v)

All other rpms require field-supplied drive.

2. See General Fan Performance Notes.

Fan Performance — Horizontal Supply/Return Units (cont)

50PG03 (2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
600	382	0.05	527	0.09	641	0.14	738	0.20	824	0.26
650	386	0.05	529	0.10	643	0.15	739	0.21	825	0.27
700	390	0.06	532	0.11	644	0.16	741	0.22	826	0.28
750	395	0.06	534	0.11	646	0.17	742	0.23	827	0.30
800	401	0.07	537	0.12	648	0.18	744	0.25	828	0.31
850	407	0.07	541	0.13	651	0.19	746	0.26	830	0.33
900	413	0.08	544	0.14	653	0.20	748	0.27	832	0.35
950	420	0.09	549	0.15	656	0.22	750	0.29	833	0.36
1000	427	0.09	553	0.16	659	0.23	752	0.30	835	0.38

50PG03 (2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
600	902	0.32	973	0.38	1040	0.45	1102	0.52	1162	0.60
650	902	0.33	974	0.40	1040	0.47	1103	0.55	1162	0.62
700	903	0.35	975	0.42	1041	0.49	1104	0.57	1163	0.65
750	904	0.37	976	0.44	1042	0.52	1104	0.59	1164	0.67
800	906	0.39	977	0.46	1043	0.54	1105	0.62	1164	0.70
850	907	0.40	978	0.48	1044	0.56	1106	0.64	1165	0.73
900	908	0.42	979	0.50	1045	0.58	1107	0.67	1166	0.75
950	910	0.44	980	0.52	1046	0.61	1108	0.69	1167	0.78
1000	912	0.46	982	0.54	1048	0.63	1110	0.72	1168	0.81

LEGEND

Bhp — Brake Horsepower

NOTES:

- Motor drive range is 482 to 736 rpm for low range motor/drive and 658 to 1001 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 0.85 for low range motor/drive and 0.85 for high range motor/drive.
- See General Fan Performance Notes.

50PG04 (3 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
900	413	0.08	544	0.14	653	0.20	748	0.27	832	0.35
950	420	0.09	549	0.15	656	0.22	750	0.29	833	0.36
1000	427	0.09	553	0.16	659	0.23	752	0.30	835	0.38
1050	435	0.10	558	0.17	663	0.24	755	0.32	838	0.40
1100	443	0.11	563	0.18	667	0.25	758	0.33	840	0.42
1150	451	0.12	569	0.19	671	0.27	761	0.35	843	0.43
1200	460	0.13	575	0.20	675	0.28	764	0.37	846	0.45
1250	469	0.14	581	0.22	680	0.30	768	0.38	849	0.47
1300	478	0.16	587	0.23	685	0.31	772	0.40	852	0.49
1350	488	0.17	594	0.25	690	0.33	776	0.42	855	0.51
1400	498	0.18	602	0.26	695	0.35	781	0.44	859	0.54
1450	508	0.20	609	0.28	701	0.37	785	0.46	863	0.56
1500	518	0.21	617	0.30	707	0.39	790	0.48	867	0.58

50PG04 (3 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
900	908	0.42	979	0.50	1045	0.58	1107	0.67	1166	0.75
950	910	0.44	980	0.52	1046	0.61	1108	0.69	1167	0.78
1000	912	0.46	982	0.54	1048	0.63	1110	0.72	1168	0.81
1050	913	0.48	983	0.57	1049	0.66	1111	0.75	1169	0.84
1100	915	0.50	985	0.59	1051	0.68	1112	0.77	—	—
1150	918	0.52	987	0.61	1052	0.71	1114	0.80	—	—
1200	920	0.54	989	0.64	1054	0.73	1115	0.83	—	—
1250	923	0.57	992	0.66	1056	0.76	—	—	—	—
1300	925	0.59	994	0.69	1058	0.79	—	—	—	—
1350	928	0.61	997	0.71	1061	0.82	—	—	—	—
1400	932	0.64	999	0.74	1063	0.85	—	—	—	—
1450	935	0.66	1002	0.77	—	—	—	—	—	—
1500	938	0.69	1005	0.80	—	—	—	—	—	—

LEGEND

Bhp — Brake Horsepower

NOTES:

- Motor drive range is 482 to 736 rpm for low range motor/drive and 796 to 1128 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 0.85 for low range motor/drive and 0.85 for high range motor/drive.
- See General Fan Performance Notes.

50PG

Fan Performance — Horizontal Supply/Return Units (cont)

50PG05 (4 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1200	422	0.11	548	0.19	652	0.26	745	0.35	831	0.44
1300	439	0.13	561	0.21	662	0.29	752	0.38	835	0.47
1400	457	0.16	577	0.24	674	0.33	761	0.42	842	0.51
1500	477	0.19	593	0.27	688	0.37	773	0.46	851	0.56
1600	498	0.22	611	0.31	704	0.41	786	0.51	862	0.61
1700	521	0.25	630	0.35	720	0.46	801	0.56	875	0.67
1800	545	0.29	650	0.40	738	0.51	817	0.62	889	0.73
1900	569	0.34	672	0.45	757	0.57	834	0.68	904	0.80
2000	595	0.39	694	0.51	777	0.63	852	0.75	921	0.87

50PG05 (4 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1200	911	0.53	986	0.63	1056	0.74	1123	0.85	1187	0.96
1300	913	0.57	986	0.68	1056	0.78	1122	0.90	1185	1.01
1400	918	0.62	989	0.72	1058	0.84	1123	0.95	1185	1.07
1500	925	0.67	995	0.78	1061	0.89	1125	1.01	1186	1.14
1600	934	0.72	1002	0.84	1067	0.95	1129	1.08	1189	1.21
1700	944	0.78	1010	0.90	1074	1.02	1135	1.15	1194	1.28
1800	956	0.85	1021	0.97	1083	1.09	1143	1.23	1200	1.36
1900	970	0.92	1033	1.04	1094	1.17	1152	1.31	1208	1.45
2000	985	1.00	1047	1.13	1106	1.26	1162	1.40	1217	1.54

LEGEND

Bhp — Brake Horsepower
50PG High Range Motor/Drive Required

NOTES:

1. Motor drive range is 596 to 910 rpm for low range motor/drive and 828 to 1173 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 0.85 for low range motor/drive and 1.60 (single phase) and 2.40 (3 phase) for high range motor/drive.
3. See General Fan Performance Notes.

50PG06 (5 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1500	491	0.19	604	0.28	697	0.37	781	0.47	859	0.57
1600	513	0.23	623	0.32	714	0.42	795	0.52	871	0.62
1700	537	0.27	643	0.37	731	0.47	810	0.57	884	0.68
1800	561	0.31	664	0.42	750	0.52	827	0.63	899	0.75
1900	586	0.36	686	0.47	770	0.58	845	0.70	915	0.82
2000	613	0.41	709	0.53	790	0.65	864	0.77	932	0.89
2100	640	0.47	732	0.60	812	0.72	884	0.85	950	0.97
2200	667	0.54	757	0.67	834	0.80	904	0.93	969	1.06
2300	695	0.61	782	0.75	857	0.89	926	1.02	989	1.16
2400	724	0.69	807	0.84	881	0.98	948	1.12	1010	1.26
2500	753	0.78	833	0.93	905	1.08	971	1.23	1032	1.38

50PG06 (5 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1500	932	0.68	1002	0.79	1068	0.91	1132	1.03	1192	1.15
1600	942	0.73	1009	0.85	1074	0.97	1136	1.09	1196	1.22
1700	953	0.80	1019	0.91	1082	1.04	1143	1.17	1201	1.30
1800	966	0.86	1030	0.99	1092	1.11	1151	1.24	1208	1.38
1900	980	0.94	1043	1.06	1103	1.19	1161	1.33	1217	1.47
2000	996	1.02	1057	1.15	1115	1.28	1172	1.42	1227	1.56
2100	1012	1.11	1072	1.24	1129	1.38	1184	1.52	1238	1.67
2200	1030	1.20	1088	1.34	1144	1.48	1198	1.63	1251	1.78
2300	1049	1.30	1106	1.44	1160	1.59	1213	1.74	1265	1.89
2400	1068	1.41	1124	1.56	1178	1.71	1229	1.86	1279	2.02
2500	1089	1.53	1143	1.68	1196	1.84	1246	1.99	1295	2.16

LEGEND

Bhp — Brake Horsepower
50PG Low Range Motor/Drive Required

NOTES:

1. Motor drive range is 690 to 978 for low range motor/drive and 929 to 1261 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 0.85 (single phase) and 2.40 (3 phase) for low range motor/drive and 1.60 (single phase) and 2.40 (3 phase) for high range motor/drive.
3. See General Fan Performance Notes.

Fan Performance — Horizontal Supply/Return Units (cont)

50PG07 (6 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1800	577	0.32	677	0.43	761	0.54	838	0.65	908	0.76
1900	603	0.38	700	0.49	782	0.60	856	0.72	925	0.83
2000	630	0.43	723	0.55	803	0.67	876	0.79	943	0.91
2100	658	0.49	748	0.62	826	0.74	896	0.87	962	1.00
2200	686	0.56	773	0.70	849	0.83	918	0.96	981	1.09
2300	715	0.64	798	0.78	872	0.92	940	1.05	1002	1.19
2400	744	0.72	825	0.87	897	1.01	963	1.15	1024	1.30
2500	773	0.82	852	0.97	922	1.12	986	1.26	1046	1.41
2600	803	0.92	879	1.07	947	1.23	1010	1.38	1069	1.54
2700	834	1.03	907	1.19	974	1.35	1035	1.51	1092	1.67
2800	864	1.14	935	1.31	1000	1.48	1060	1.65	1116	1.81
2900	895	1.27	964	1.45	1027	1.62	1086	1.79	1141	1.96
3000	927	1.41	993	1.59	1055	1.77	1112	1.95	1165	2.12

50PG07 (6 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
1800	975	0.88	1039	1.00	1100	1.13	1159	1.26	1216	1.40
1900	990	0.96	1052	1.08	1112	1.21	1169	1.35	1225	1.49
2000	1006	1.04	1067	1.17	1125	1.31	1181	1.44	1236	1.59
2100	1024	1.13	1083	1.26	1139	1.40	1194	1.55	1248	1.69
2200	1042	1.23	1100	1.37	1155	1.51	1209	1.66	1261	1.81
2300	1061	1.33	1118	1.47	1172	1.62	1224	1.77	1275	1.93
2400	1081	1.44	1137	1.59	1190	1.74	1241	1.90	1291	2.06
2500	1102	1.56	1156	1.72	1208	1.87	1258	2.03	1307	2.20
2600	1124	1.69	1177	1.85	1228	2.01	1277	2.18	1325	2.34
2700	1146	1.83	1198	1.99	1248	2.16	1296	2.33	—	—
2800	1169	1.98	1220	2.15	1269	2.32	—	—	—	—
2900	1193	2.14	1242	2.31	—	—	—	—	—	—
3000	1217	2.30	—	—	—	—	—	—	—	—

LEGEND

Bhp — Brake Horsepower

NOTES:

- Motor drive range is 796 to 1128 rpm for low range motor/drive and 1150 to 1438 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 2.40 for low range motor/drive and 3.10 for high range motor/drive.
- See General Fan Performance Notes.

50PG08 (7 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
2250	381	0.26	469	0.36	546	0.47	616	0.58	682	0.71
2400	395	0.30	480	0.41	555	0.52	623	0.64	686	0.77
2550	408	0.34	491	0.46	564	0.58	630	0.70	691	0.83
2700	422	0.39	503	0.51	573	0.64	638	0.77	698	0.91
2850	437	0.45	515	0.58	583	0.71	646	0.84	705	0.98
3000	451	0.51	527	0.64	594	0.78	655	0.92	712	1.07
3150	466	0.57	540	0.72	605	0.86	665	1.00	721	1.15
3300	481	0.64	553	0.79	617	0.94	675	1.09	730	1.25
3450	496	0.72	566	0.88	628	1.03	686	1.19	739	1.35
3600	512	0.80	579	0.97	640	1.13	696	1.29	749	1.46
3750	527	0.89	593	1.07	653	1.24	708	1.41	759	1.58

50PG08 (7 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
2250	743	0.84	801	0.97	856	1.11	908	1.26	958	1.41
2400	746	0.90	803	1.04	857	1.19	908	1.34	957	1.49
2550	750	0.97	805	1.12	858	1.27	909	1.42	958	1.58
2700	755	1.05	809	1.20	861	1.35	911	1.51	958	1.67
2850	760	1.13	813	1.28	864	1.44	913	1.60	960	1.77
3000	767	1.22	818	1.37	868	1.54	916	1.70	962	1.88
3150	774	1.31	824	1.47	873	1.64	920	1.81	966	1.99
3300	781	1.41	831	1.58	879	1.75	925	1.92	969	2.11
3450	790	1.52	838	1.69	885	1.86	930	2.04	974	2.23
3600	799	1.63	846	1.81	892	1.99	936	2.17	979	2.36
3750	808	1.75	854	1.93	899	2.12	943	2.31	985	2.50

LEGEND

Bhp — Brake Horsepower
 High Range Motor/Drive Required

NOTES:

- Motor drive range is 568 to 771 rpm for low range motor/drive and 812 to 1015 rpm for high range motor/drive. All other rpms require a field-supplied drive.
- Maximum continuous bhp is 2.40 for low range motor/drive and 3.10 for high range motor/drive.
- See General Fan Performance Notes.

50PG

Fan Performance — Horizontal Supply/Return Units (cont)

50PG09 (8 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
2550	408	0.34	491	0.46	564	0.58	630	0.70	691	0.83
2700	422	0.39	503	0.51	573	0.64	638	0.77	698	0.91
2850	437	0.45	515	0.58	583	0.71	646	0.84	705	0.98
3000	451	0.51	527	0.64	594	0.78	655	0.92	712	1.07
3150	466	0.57	540	0.72	605	0.86	665	1.00	721	1.15
3300	481	0.64	553	0.79	617	0.94	675	1.09	730	1.25
3450	496	0.72	566	0.88	628	1.03	686	1.19	739	1.35
3600	512	0.80	579	0.97	640	1.13	696	1.29	749	1.46
3750	527	0.89	593	1.07	653	1.24	708	1.41	759	1.58
3900	543	0.99	607	1.17	665	1.35	719	1.52	770	1.70
4050	559	1.09	621	1.28	678	1.47	731	1.65	780	1.83
4200	575	1.20	635	1.40	691	1.59	743	1.78	792	1.97

50PG08 (8 – 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
2550	750	0.97	805	1.12	858	1.27	909	1.42	958	1.58
2700	755	1.05	809	1.20	861	1.35	911	1.51	958	1.67
2850	760	1.13	813	1.28	864	1.44	913	1.60	960	1.77
3000	767	1.22	818	1.37	868	1.54	916	1.70	962	1.88
3150	774	1.31	824	1.47	873	1.64	920	1.81	966	1.99
3300	781	1.41	831	1.58	879	1.75	925	1.92	969	2.11
3450	790	1.52	838	1.69	885	1.86	930	2.04	974	2.23
3600	799	1.63	846	1.81	892	1.99	936	2.17	979	2.36
3750	808	1.75	854	1.93	899	2.12	943	2.31	985	2.50
3900	817	1.88	863	2.07	907	2.26	950	2.45	991	2.65
4050	827	2.02	872	2.21	916	2.40	958	2.60	998	2.80
4200	838	2.16	882	2.36	925	2.56	966	2.76	1006	2.97

LEGEND

Bhp – Brake Horsepower
 High Range Motor/Drive Required

NOTES:

1. Motor drive range is 568 to 771 rpm for low range motor/drive and 812 to 1015 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 2.40 for low range motor/drive and 3.70 for high range motor/drive.
3. See General Fan Performance Notes.

50PG12 (10 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
3000	464	0.53	538	0.66	604	0.80	664	0.94	721	1.09
3200	484	0.62	556	0.77	619	0.91	678	1.06	733	1.21
3400	505	0.72	574	0.88	636	1.03	692	1.19	746	1.35
3600	526	0.84	593	1.00	652	1.17	708	1.33	759	1.50
3800	548	0.96	611	1.14	670	1.31	723	1.48	774	1.66
4000	569	1.10	631	1.29	687	1.47	739	1.65	789	1.83
4200	591	1.25	650	1.45	705	1.64	756	1.83	804	2.02
4400	613	1.42	670	1.63	723	1.83	773	2.03	820	2.23
4600	635	1.60	690	1.82	742	2.03	790	2.24	836	2.44
4800	657	1.80	710	2.02	761	2.24	808	2.46	853	2.68
5000	680	2.01	731	2.24	780	2.48	826	2.70	870	2.93

50PG12 (10 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
3000	775	1.24	826	1.40	876	1.56	923	1.73	969	1.90
3200	785	1.37	835	1.53	883	1.70	929	1.88	974	2.06
3400	796	1.51	845	1.68	892	1.86	937	2.04	981	2.22
3600	809	1.67	856	1.84	901	2.03	945	2.21	988	2.40
3800	822	1.84	868	2.02	912	2.21	955	2.40	996	2.59
4000	835	2.02	880	2.21	923	2.40	965	2.60	1006	2.80
4200	850	2.21	893	2.41	936	2.61	976	2.81	1016	3.02
4400	865	2.43	907	2.63	949	2.84	988	3.05	1027	3.26
4600	880	2.65	922	2.86	962	3.08	1001	3.29	1039	3.51
4800	896	2.89	937	3.11	976	3.33	1014	3.56	—	—
5000	912	3.15	952	3.38	991	3.61	—	—	—	—

LEGEND

Bhp – Brake Horsepower
 High Range Motor/Drive Required

NOTES:

1. Motor drive range is 690 to 893 for low range motor/drive and 852 to 1055 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 3.10 for low range motor/drive and 3.70 for high range motor/drive.
3. See General Fan Performance Notes.

Fan Performance — Horizontal Supply/Return Units (cont)

50PG14 (12– 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
3750	542	0.93	607	1.10	665	1.27	719	1.44	770	1.62
3950	564	1.07	626	1.25	683	1.43	735	1.61	785	1.79
4150	586	1.22	645	1.41	701	1.60	752	1.78	800	1.97
4350	608	1.38	665	1.58	719	1.78	769	1.98	816	2.17
4550	630	1.55	685	1.77	737	1.98	786	2.18	832	2.39
4750	652	1.75	705	1.97	756	2.19	804	2.40	849	2.62
4950	674	1.95	726	2.19	775	2.42	822	2.64	866	2.86
5150	697	2.18	747	2.42	794	2.66	840	2.89	883	3.13
5350	719	2.42	767	2.67	814	2.92	858	3.16	901	3.41
5550	742	2.67	789	2.94	834	3.20	877	3.45	918	3.70
5750	765	2.95	810	3.22	854	3.49	896	3.76	936	4.02
5950	788	3.24	831	3.53	874	3.81	915	4.08	955	4.36
6150	811	3.56	853	3.85	894	4.14	935	4.43	973	4.71
6250	822	3.72	864	4.02	905	4.32	944	4.61	983	4.89

50PG14 (12– 1/2 Tons)										
AIRFLOW (Cfm)	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
3750	818	1.79	865	1.97	909	2.16	952	2.35	994	2.54
3950	832	1.97	877	2.16	920	2.35	963	2.55	1003	2.75
4150	846	2.16	890	2.36	932	2.56	974	2.76	1014	2.97
4350	861	2.37	904	2.57	945	2.78	985	2.99	1024	3.20
4550	876	2.59	918	2.80	959	3.02	998	3.23	1036	3.45
4750	892	2.83	933	3.05	973	3.27	1011	3.49	1049	3.72
4950	908	3.09	948	3.31	987	3.54	1025	3.77	1061	4.00
5150	924	3.36	964	3.59	1002	3.83	1039	4.06	1075	4.30
5350	941	3.65	980	3.89	1017	4.13	1054	4.38	1089	4.62
5550	958	3.96	996	4.21	1033	4.46	1069	4.71	1103	4.96
5750	975	4.28	1013	4.54	1049	4.80	1084	5.06	—	—
5950	993	4.63	1030	4.89	1065	5.16	—	—	—	—
6150	1011	4.99	—	—	—	—	—	—	—	—
6250	1020	5.18	—	—	—	—	—	—	—	—

LEGEND

Bhp — Brake Horsepower
 High Range Motor/Drive Required

NOTES:

1. Motor drive range is 690 to 893 for low range motor/drive and 852 to 1055 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 3.70 for low range motor/drive and 5.25 for high range motor/drive.
3. See General Fan Performance Notes.

50PG

Fan Performance — Horizontal Supply/Return Units (cont)

50PG16 (15 Tons)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
4500	592	0.87	670	1.16	732	1.43	787	1.70	837	1.97
4800	619	1.01	696	1.32	758	1.62	812	1.91	861	2.20
5100	647	1.17	723	1.50	784	1.82	838	2.13	886	2.44
5400	675	1.34	750	1.70	810	2.04	863	2.37	911	2.70
5700	704	1.54	776	1.91	837	2.27	889	2.63	936	2.97
6000	733	1.75	804	2.14	863	2.53	915	2.91	962	3.27
6300	762	1.99	831	2.40	890	2.80	941	3.20	988	3.59
6600	792	2.25	858	2.67	917	3.10	968	3.52	1014	3.93
6900	822	2.53	886	2.97	944	3.42	994	3.86	1040	4.29
7200	852	2.84	914	3.29	971	3.76	1021	4.22	1066	4.68
7500	882	3.17	942	3.63	998	4.12	1048	4.61	1093	5.09

50PG16 (15 Tons)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
4500	884	2.25	929	2.52	972	2.80	1014	3.09	1054	3.38
4800	907	2.49	951	2.78	992	3.07	1033	3.37	1072	3.68
5100	931	2.74	973	3.05	1014	3.36	1053	3.68	1091	3.99
5400	955	3.02	997	3.35	1036	3.67	1075	4.00	1112	4.33
5700	980	3.32	1021	3.66	1060	4.00	1097	4.35	1133	4.70
6000	1005	3.64	1045	4.00	1084	4.36	1120	4.72	1156	5.08
6300	1030	3.98	1070	4.35	1108	4.73	1144	5.11	1179	5.49
6600	1056	4.34	1095	4.74	1133	5.13	1168	5.53	1203	5.93
6900	1082	4.72	1121	5.14	1158	5.56	1193	5.97	1227	6.39
7200	1108	5.13	1147	5.57	1183	6.00	1218	6.44	1252	6.87
7500	1134	5.56	1173	6.02	1209	6.48	1244	6.93	1277	7.38

LEGEND

Bhp — Brake Horsepower

Mid–Low Range Motor/Drive Required

High Range Motor/Drive Required

NOTES:

1. Motor drive range is 710 to 879 for low range motor/drive, 872 to 1066 rpm for mid–low range motor/drive, and 1066 to 1260 rpm for high range motor/drive. All other rpms require a field-supplied drive.
2. Maximum continuous bhp is 3.70 for low range motor/drive, 5.25 for mid–low range motor/drive, and 7.50 for high range motor/drive.
3. See General Fan Performance Notes.

50PG

Fan Performance — Horizontal Supply/Return Units (cont)

50PG20 (18 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
5000	575	1.37	642	1.61	700	1.84	754	2.08	808	2.33
5500	619	1.71	682	1.96	737	2.21	788	2.45	837	2.71
6000	663	2.09	723	2.35	E 776	2.62	E 825	2.88	E 871	3.14
6500	708	2.53	E 765	2.80	816	3.08	863	3.35	906	3.63
7000	E 753	3.02	E 807	3.30	857	3.59	902	3.88	944	4.17
7500	800	3.58	850	3.86	898	4.16	942	4.47	982	4.77
8000	847	4.20	894	4.48	940	4.80	F 982	5.11	F 1022	5.43
8500	894	4.88	939	5.17	F 982	5.49	1024	5.82	1062	6.14
9000	G 941	5.63	G 983	5.92	G 1025	6.24	G 1065	6.58	G 1103	6.92

50PG20 (18 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
5000	862	2.60	917	2.89	972	3.20	1028	3.53	1084	3.89
5500	E 886	2.97	E 935	3.25	985	3.55	1035	3.87	1086	4.21
6000	916	3.41	960	3.69	F 1005	3.98	F 1050	4.29	F 1096	4.61
6500	949	3.90	990	4.19	1032	4.48	1073	4.78	1114	5.10
7000	F 984	4.46	F 1023	4.75	1062	5.04	1100	5.34	1139	5.66
7500	1021	5.07	1059	5.37	1095	5.67	G 1131	5.98	G 1167	6.29
8000	1059	5.74	1095	6.05	G 1130	6.36	1165	6.67	1199	6.99
8500	1099	6.47	G 1133	6.79	1167	7.11	1200	7.43	H 1232	7.76
9000	G 1138	7.26	1172	7.59	H 1205	7.93	H 1237	8.26	1268	8.59

LEGEND

Bhp – Brake Horsepower Input to Fan

Boldface indicates field-supplied drive required.

NOTES:

1. Motor drive ranges:

(E) Low Range: 685 to 939 rpm, 4.26 Bhp (208/230 and 460-v), 751 to 954 rpm, 5.75 Bhp 4 (575-v)

(F) Mid-Low Range: 949 to 1206 rpm, 5.37 Bhp (208-v), 5.75 Bhp (230 and 460-v), 5.75 Bhp (575-v)

(G) Mid-High Range: 941 to 1176 rpm, 7.66 Bhp (208-v), 8.51 Bhp (230-v), 8.63 Bhp (460 and 575-v)

(H) High Range: 1014 to 1297 rpm, 9.94 Bhp (208-v), 10.45 Bhp (230-v), 11.19 Bhp (460-v), 11.50 Bhp (575-v)

All other rpms require field-supplied drive.

2. See General Fan Performance Notes.

50PG

Fan Performance — Horizontal Supply/Return Units (cont)

50PG24 (20 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
5,500	619	1.71	682	1.96	737	2.21	788	2.45	837	2.71
6,000	663	2.09	723	2.35	776	2.62	825	2.88	E 871	3.14
6,500	708	2.53	E 765	2.80	E 816	3.08	E 863	3.35	906	3.63
7,000	E 753	3.02	807	3.30	857	3.59	902	3.88	944	4.17
7,500	800	3.58	850	3.86	898	4.16	942	4.47	982	4.77
8,000	847	4.20	894	4.48	940	4.80	F 982	5.11	F 1022	5.43
8,500	894	4.88	939	5.17	F 982	5.49	1024	5.82	1062	6.14
9,000	941	5.63	983	5.92	1025	6.24	1065	6.58	G 1103	6.92
9,500	G 989	6.45	G 1029	6.74	G 1069	7.07	G 1108	7.41	1144	7.77
10,000	1037	7.34	1075	7.63	1113	7.96	1150	8.32	H 1186	8.68

50PG24 (20 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
5,500	886	2.97	E 935	3.25	985	3.55	1035	3.87	1086	4.21
6,000	E 916	3.41	960	3.69	1005	3.98	1050	4.29	1096	4.61
6,500	949	3.90	990	4.19	F 1032	4.48	F 1073	4.78	F 1114	5.10
7,000	984	4.46	F 1023	4.75	1062	5.04	1100	5.34	1139	5.66
7,500	F 1021	5.07	1059	5.37	1095	5.67	1131	5.98	G 1167	6.29
8,000	1059	5.74	1095	6.05	1130	6.36	G 1165	6.67	1199	6.99
8,500	1099	6.47	G 1133	6.79	G 1167	7.11	1200	7.43	H 1232	7.76
9,000	G 1138	7.26	1172	7.59	1205	7.93	H 1237	8.26	1268	8.59
9,500	1179	8.12	1212	8.46	H 1244	8.81	1275	9.15	1305	9.50
10,000	H 1220	9.04	H 1252	9.40	1283	9.76	1313	10.11	1342	10.47

LEGEND

Bhp – Brake Horsepower Input to Fan

Boldface indicates field-supplied drive required.

NOTES:

1. Motor drive ranges:

(E) Low Range: 685 to 939 rpm, 4.26 Bhp (208/230 and 460-v), 751 to 954 rpm, 5.75 Bhp (575-v)

(F) Mid-Low Range: 949 to 1206 rpm, 5.37 Bhp (208-v), 5.75 Bhp (230 and 460-v), 5.75 Bhp (575-v)

(G) Mid-High Range: 941 to 1176 rpm, 7.66 Bhp (208-v), 8.51 Bhp (230-v), 8.63 Bhp (460 and 575-v)

(H) High Range: 1014 to 1297 rpm, 9.94 Bhp (208-v), 10.45 Bhp (230-v), 11.19 Bhp (460-v), 11.50 Bhp (575-v)

All other rpms require field-supplied drive.

2. See General Fan Performance Notes.

50PG

Fan Performance — Horizontal Supply/Return Units (cont)

50PG28 (25 TONS)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
6,500	759	2.34	804	2.61	E 844	2.87	F 883	3.13	F 922	3.42
7,000	E 810	2.87	E 853	3.17	891	3.45	928	3.73	F 964	4.02
7,500	862	3.48	903	3.80	F 939	4.11	974	4.40	1008	4.71
8,000	F 913	4.17	F 953	4.52	988	4.85	1021	5.17	1053	5.49
8,500	965	4.94	1003	5.33	1037	5.69	G 1069	6.03	G 1100	6.36
9,000	1017	5.81	1054	6.23	G 1087	6.62	1118	6.98	1147	7.34
9,500	G 1069	6.78	G 1105	7.24	1137	7.65	1167	8.03	1195	8.41
10,000	1121	7.85	1156	8.34	1187	8.78	1216	9.20	H 1243	9.60
10,500	1173	9.03	H 1207	9.56	H 1238	10.03	H 1266	10.47	1292	10.90
11,000	H 1226	10.32	1259	10.89	1288	11.39	—	—	—	—
11,500	—	—	—	—	—	—	—	—	—	—
12,000	—	—	—	—	—	—	—	—	—	—
12,500	—	—	—	—	—	—	—	—	—	—

50PG28 (25 TONS) (cont)										
Airflow (Cfm)	Available External Static Pressure (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp	Rpm	Bhp
6,500	962	3.74	F 1003	4.10	1045	4.50	G 1090	4.95	G 1135	5.45
7,000	F 1000	4.34	1037	4.69	G 1075	5.07	1115	5.49	G 1155	5.96
7,500	1041	5.03	G 1075	5.38	1110	5.75	1145	6.16	1182	6.60
8,000	G 1085	5.82	1116	6.17	1148	6.54	H 1180	6.94	1214	7.37
8,500	1129	6.71	1159	7.06	1189	7.44	1219	7.83	H 1249	8.25
9,000	1175	7.70	1204	8.07	H 1232	8.45	1260	8.84	1288	9.26
9,500	1222	8.79	H 1249	9.17	1276	9.56	1302	9.97	1329	10.39
10,000	H 1270	10.00	1296	10.39	1321	10.80	1346	11.21	—	—
10,500	1318	11.31	1343	11.37	—	—	—	—	—	—
11,000	—	—	—	—	—	—	—	—	—	—
11,500	—	—	—	—	—	—	—	—	—	—
12,000	—	—	—	—	—	—	—	—	—	—
12,500	—	—	—	—	—	—	—	—	—	—

LEGEND

Bhp – Brake Horsepower Input to Fan

Boldface indicates field-supplied drive required.

NOTES:

1. Motor drive ranges:

(E) Low Range: 687 to 873 rpm, 5.37 Bhp (208-v), 5.75 Bhp (230 and 4560-v), 5.75 Bhp (575-v)

(F) Mid-Low Range: 805 to 1007 rpm, 5.37 Bhp (208-v), 5.75 Bhp (230 and 460-v), 5.75 Bhp (575-v)

(G) Mid-High Range: 941 to 1176 rpm, 7.66 Bhp (208-v), 8.51 Bhp (230-v), 8.63 Bhp (460 and 575-v)

(H) High Range: 1014 to 1297 rpm, 9.94 Bhp (208-v), 10.45 Bhp (230-v), 11.19 Bhp (460-v), 11.50 Bhp (575-v)

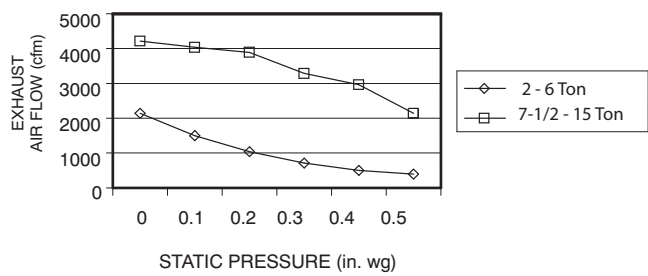
All other rpms require field-supplied drive.

2. See General Fan Performance Notes.

50PG

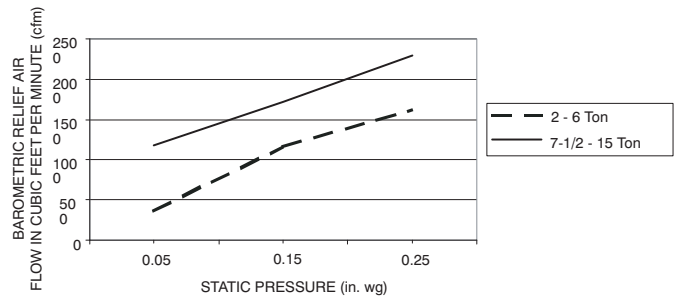
PERFORMANCE DATA (CONT)

Power Exhaust Performance — 50PG03-16



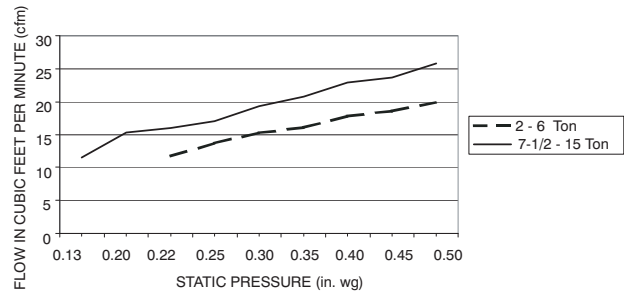
C07115

Barometric Relief Flow Capacity — 50PG03-16



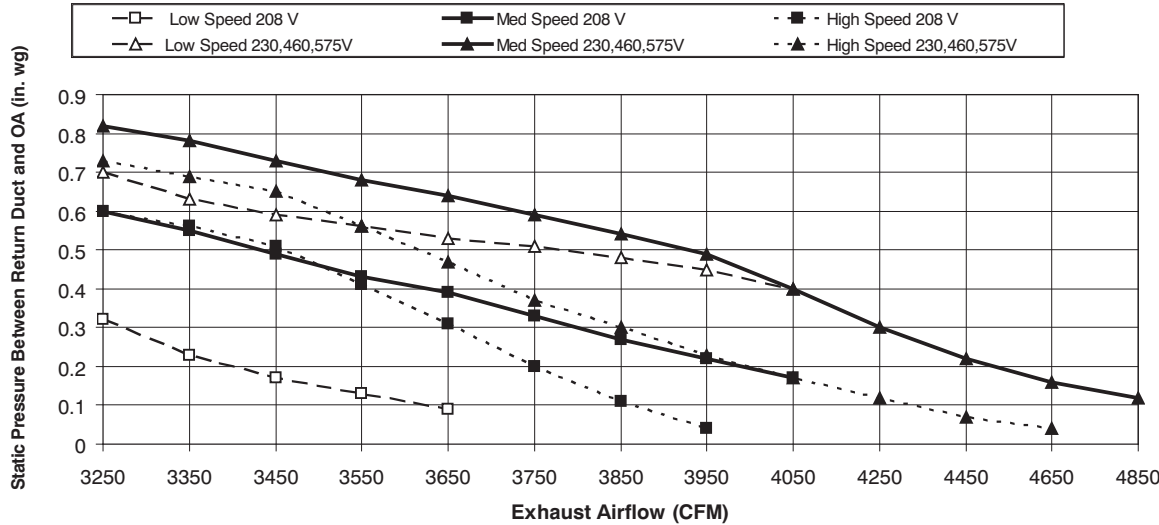
C07116

Outdoor Air Damper Leakage — 50PG03-16



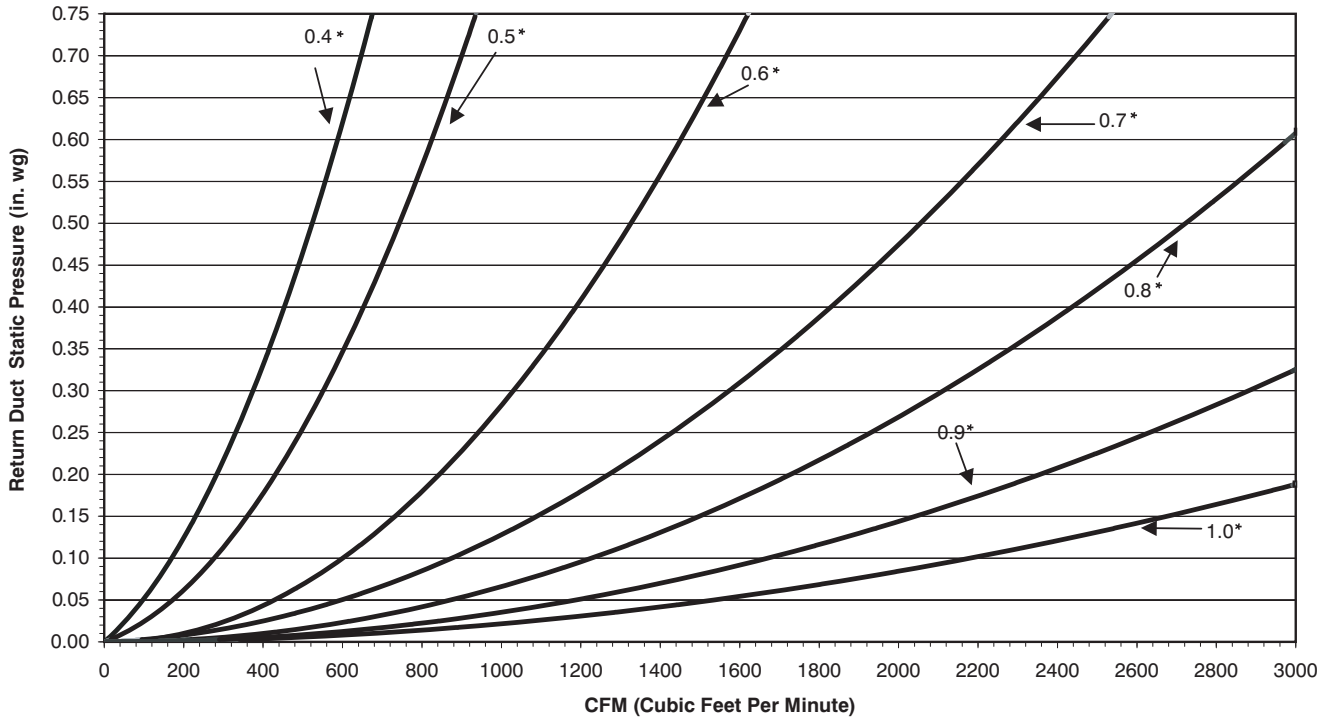
C07117

Power Exhaust Fan Performance — 50PG20-28



C07118

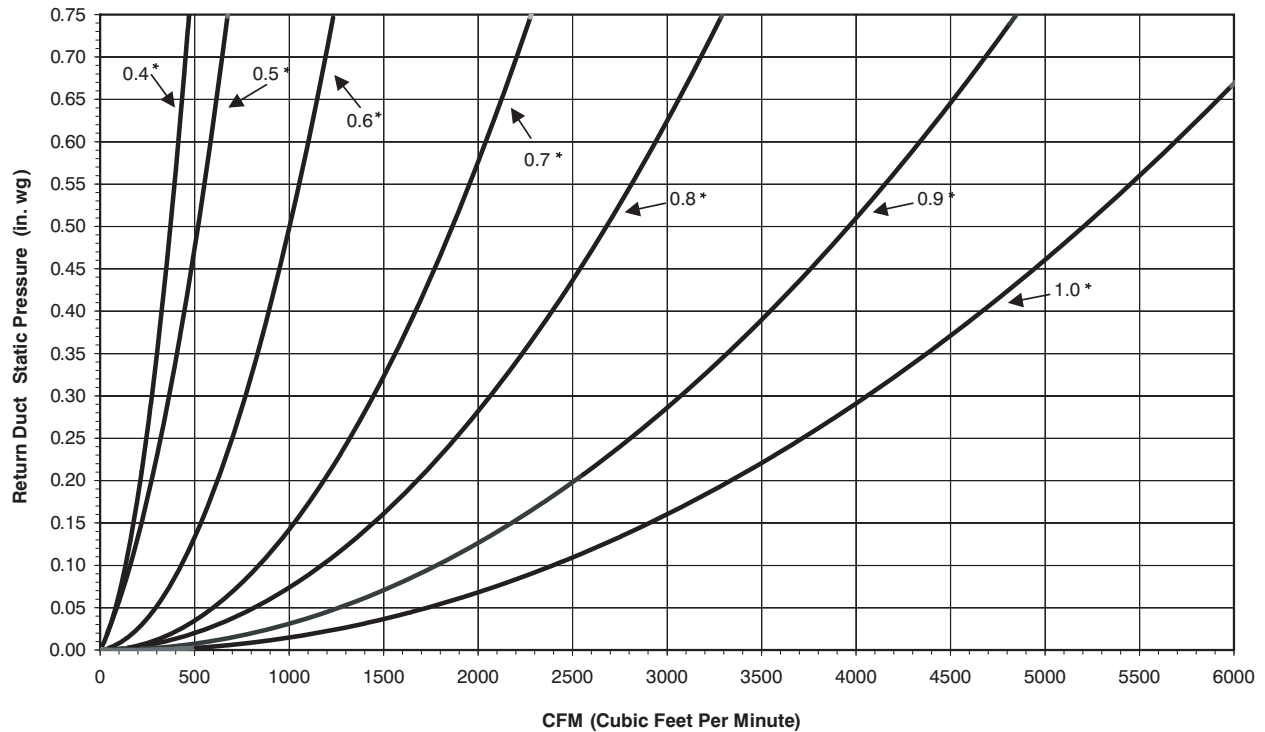
50PG03-07 Two-Position Damper Performance



* Two-position damper position (outdoor air marking on actuator).

C07282

50PG08-16 Two-Position Damper Performance



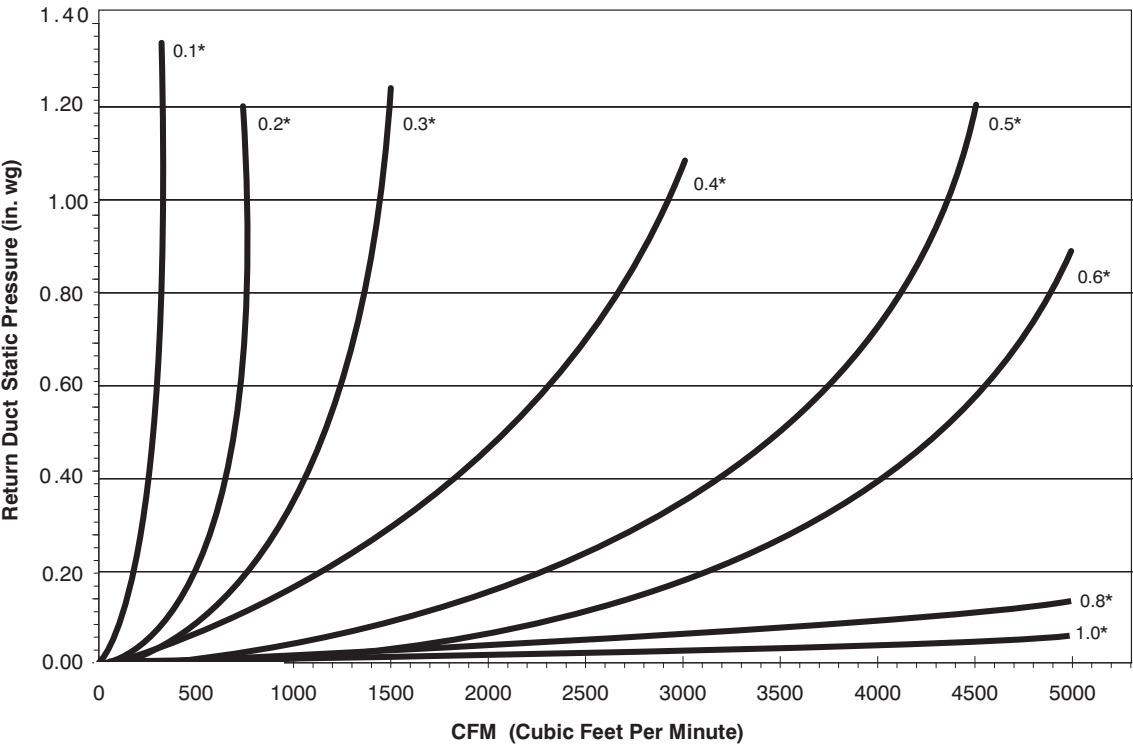
* Two-position damper position (outdoor air marking on actuator).

C07283

50PG

PERFORMANCE DATA (CONT)

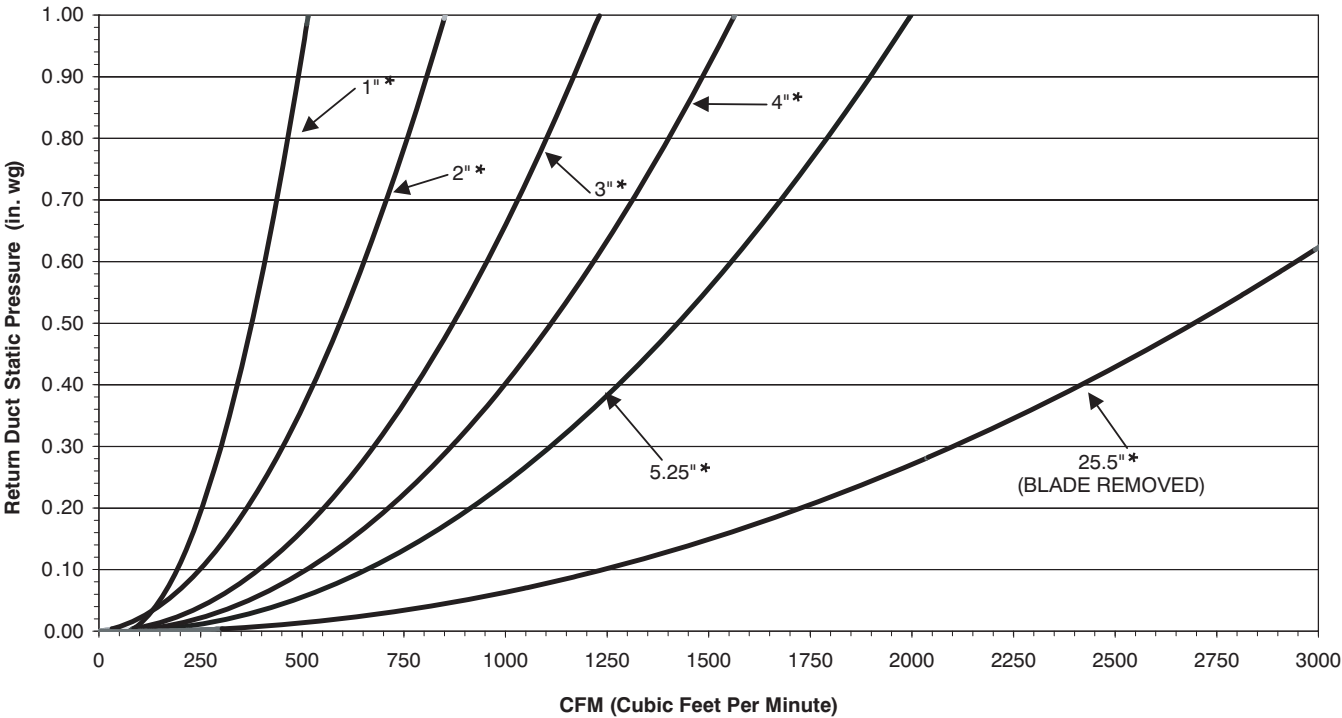
50PG16 Two-Position Damper Performance



* Two-position damper position (outdoor air marking on actuator)

C07151

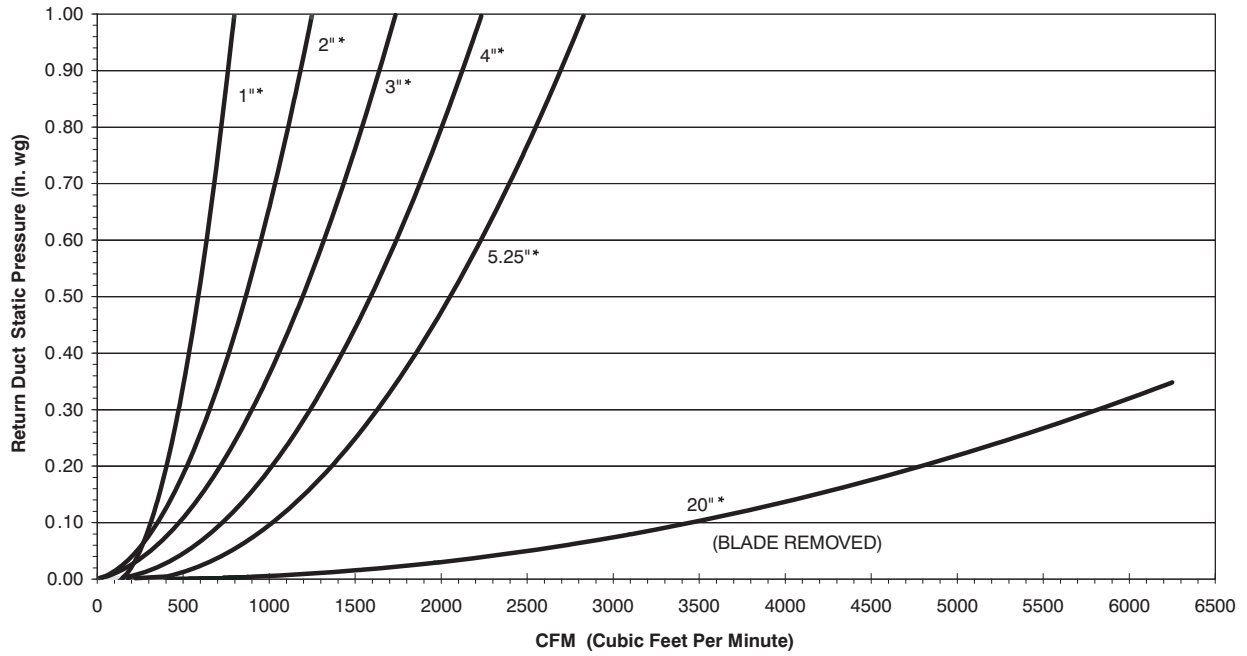
50PG03-07 Manual Air Damper Performance



* Manual air damper opening setting (outdoor air marking on damper).

C07285

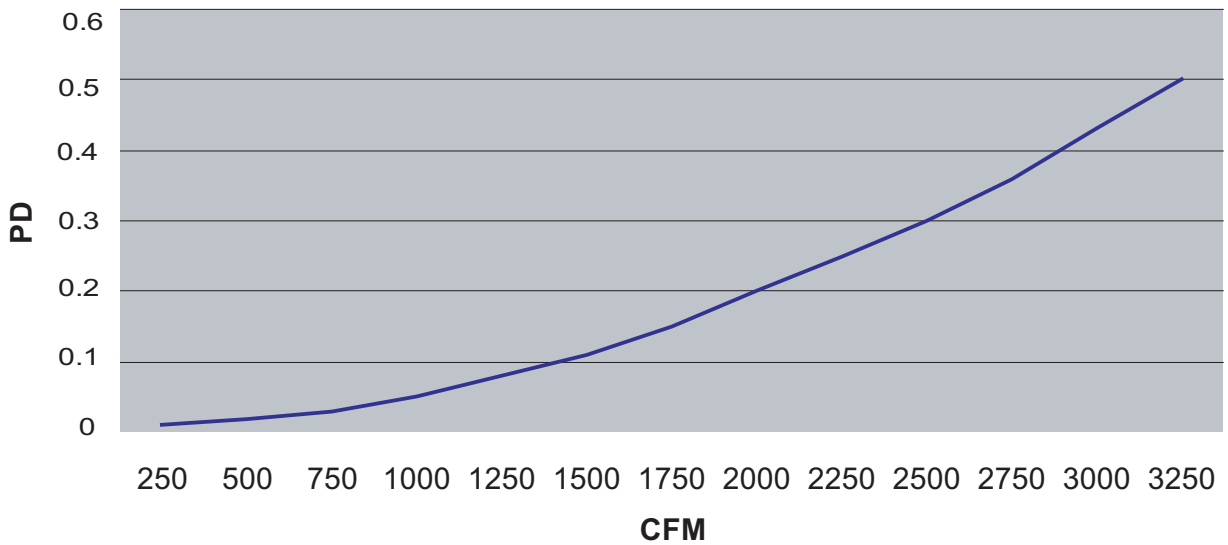
50PG08-16 Manual Air Damper Performance



* Manual air damper opening setting (outdoor air marking on damper).

C07286

50PG20-28 Barometric Relief Flow Capacity



C08198

50PG

Accessory/Fiop Pressure Drop (in.wg)* — 50PG03-07

AIRFLOW (CFM)	ECONOMIZER (Vertical) (Sizes 03-07)	ECONOMIZER (Horizontal) (Sizes 03-07)	HUMIDI-MIZER™ SYSTEM (Sizes 03-04)	HUMIDI-MIZER SYSTEM (Sizes 05-07)
600	0.01	0.03	0.01	—
800	0.01	0.05	0.02	—
1000	0.02	0.07	0.03	—
1200	0.03	0.10	0.04	0.02
1400	0.04	0.14	0.04	0.03
1600	0.06	0.17	0.05	0.03
1800	0.07	0.22	—	0.04
2000	0.09	0.26	—	0.04
2200	0.11	0.31	—	0.05
2400	0.13	0.37	—	0.06
2600	0.15	0.43	—	0.06
2800	0.18	0.49	—	0.07
3000	0.21	0.56	—	0.08

LEGEND

FIOP — Factory–Installed Option

*The static pressure must be added to the external static pressure. The sum and the evaporator entering–air cfm should then be used in conjunction with the Fan Performance tables to determine blower rpm and watts.

Accessory/Fiop Pressure Drop (in.wg)* — 50PG08-14

AIRFLOW (CFM)	ECONOMIZER Vertical	ECONOMIZER Horizontal	HUMIDI-MIZER SYSTEM
2250	0.05	0.10	0.03
2650	0.06	0.13	0.03
3050	0.08	0.17	0.04
3450	0.09	0.21	0.05
3850	0.10	0.26	0.06
4250	0.12	0.31	0.07
4650	0.13	0.37	0.08
5050	0.15	0.44	0.09
5450	0.17	0.50	0.10
5850	0.18	0.58	0.11
6250	0.20	0.66	0.12

LEGEND

FIOP — Factory–Installed Option

*The static pressure must be added to the external static pressure. The sum and the evaporator entering–air cfm should then be used in conjunction with the Fan Performance tables to determine blower rpm and watts.

Accessory/Fiop Pressure Drop (in.wg)* — 50PG16

AIRFLOW (CFM)	ECONOMIZER		HUMIDI-MIZER SYSTEM
	Vertical	Horizontal	
4500	0.03	0.31	0.02
4800	0.04	0.35	0.02
5100	0.04	0.38	0.03
5400	0.05	0.41	0.03
5700	0.05	0.45	0.04
6000	0.06	0.49	0.04
6300	0.06	0.52	0.05
6600	0.07	0.56	0.05
6900	0.08	0.61	0.06
7200	0.08	0.65	0.07
7500	0.09	0.69	0.07

LEGEND

FIOP — Factory–Installed Option

*The static pressure must be added to the external static pressure. The sum and the evaporator entering–air cfm should then be used in conjunction with the Fan Performance tables to determine blower rpm and watts.

PERFORMANCE DATA (CONT)

Accessory/Fiop Pressure Drop (in.wg)* — 50PG20-28

COMPONENT	CFM																
	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500	10,000	10,500	11,000	11,500	12,000
Economizer	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.19	0.20
Humidi-MiZer™ (20,24)	—	—	—	0.24	0.27	0.31	0.35	0.39	0.43	0.48	0.52	0.57	0.62	—	—	—	—
Humidi-MiZer (28)	—	—	—	—	—	0.19	0.21	0.23	0.26	0.29	0.31	0.34	0.37	0.40	0.43	0.46	0.50

LEGEND

FIOP — Factory–Installed Option

*The static pressure must be added to the external static pressure. The sum and the evaporator entering–air cfm should then be used in conjunction with the Fan Performance tables to determine blower rpm and watts.

Accessory/Fiop Electric Heat Static Pressure (in.wg) — 50PG03-16

50PG03–07			50PG08–14			50PG16		
AIRFLOW (Cfm)	PRESSURE DROP (in. wg)		AIRFLOW (Cfm)	PRESSURE DROP (in. wg)		AIRFLOW (Cfm)	PRESSURE DROP (in. wg)	
							Vertical	Horizontal
600	0.01		2250	0.03		4500	0.02	0.29
800	0.01		2650	0.05		4800	0.02	0.30
1000	0.02		3050	0.06		5100	0.03	0.32
1200	0.02		3450	0.08		5400	0.03	0.34
1400	0.03		3850	0.10		5700	0.04	0.35
1600	0.04		4250	0.12		6000	0.04	0.37
1800	0.05		4650	0.14		6300	0.05	0.39
2000	0.07		5050	0.17		6600	0.06	0.40
2200	0.08		5450	0.20		6900	0.07	0.42
2400	0.10		5850	0.23		7200	0.07	0.43
2600	0.11		6250	0.26		7500	0.08	0.45
2800	0.13							
3000	0.15							

50PG

Accessory/Fiop Electric Heat Static Pressure (in.wg) — 50PG20-28

UNIT 50PG	ELECTRIC HEATERS							
	Unit Voltages	Cfm	Nominal Heater Size (kW)	Pressure Drop (in. wg)	Nominal Heater Size (kW)	Pressure Drop (in. wg)	Nominal Heater Size (kW)	Pressure Drop (in. wg)
	208/240							
20, 24, 28	208/240-3-60	4,800	25	0.01	50	0.02	75	0.03
		5,000		0.01		0.02		0.04
		6,000		0.02		0.04		0.06
		7,000		0.03		0.06		0.08
		8,000		0.04		0.08		0.12
		9,000		0.05		0.10		0.15
		10,000		0.06		0.13		0.20
		11,500		0.09		0.18		0.27
	480-3-60	4,800		0.01		0.02		0.03
		5,000		0.01		0.02		0.04
		6,000		0.02		0.04		0.06
		7,000		0.03		0.06		0.08
		8,000		0.04		0.08		0.12
		9,000		0.05		0.10		0.15
		10,000		0.06		0.13		0.20
		11,500		0.09		0.18		0.27
	575-3-60	4,800		0.01		0.02		0.03
		5,000		0.01		0.02		0.04
		6,000		0.02		0.04		0.06
		7,000		0.03		0.06		0.08
		8,000		0.04		0.08		0.12
		9,000		0.05		0.10		0.15
		10,000		0.06		0.13		0.20
		11,500		0.09		0.18		0.27

LEGEND

FIOP — Factory–Installed Option

NOTES:

1. Heaters are rated at 240 v, 480 v, and 600 v.
2. The static pressure must be added to external static pressure. The sum and the evaporator entering–air cfm should then be used in conjunction with the Fan Performance table to determine blower rpm, bhp, and watts.

Evaporator Fan Motor Specifications — 50PG03-16

50PG	DRIVE	VOLTAGE/PHASE	EFFICIENCY	MAX BHP	MAX AMPS
03	Low	208/1ph	0.73	0.85	4.0
		230/1ph	0.73	0.85	4.0
	High	208/1ph	0.73	0.85	4.0
		230/1ph	0.73	0.85	4.0
04	Low	208/1ph	0.73	0.85	4.0
		230/1ph	0.73	0.85	4.0
		208/3ph	0.73	0.85	4.0
		230/3ph	0.73	0.85	4.0
		460/3ph	0.73	0.85	2.0
		575/3ph	0.73	0.85	1.6
	High	208/1ph	0.73	0.85	4.0
		230/1ph	0.73	0.85	4.0
		208/3ph	0.73	0.85	4.0
		230/3ph	0.73	0.85	4.0
		460/3ph	0.73	0.85	2.0
		575/3ph	0.73	0.85	1.6
05	Low	208/1ph	0.73	0.85	4.0
		230/1ph	0.73	0.85	4.0
		208/3ph	0.73	0.85	4.0
		230/3ph	0.73	0.85	4.0
		460/3ph	0.73	0.85	2.0
		575/3ph	0.73	0.85	1.6
	High	208/1ph	0.78	1.6	8.3
		230/1ph	0.78	1.6	8.3
		208/3ph	0.80	2.4	6.4
		230/3ph	0.80	2.4	6.4
		460/3ph	0.80	2.4	3.2
		575/3ph	0.80	2.4	2.4
06	Low	208/1ph	0.73	0.85	4.0
		230/1ph	0.73	0.85	4.0
		208/3ph	0.80	2.4	6.4
		230/3ph	0.80	2.4	6.4
		460/3ph	0.80	2.4	3.2
		575/3ph	0.80	2.4	2.4
	High	208/1ph	0.78	1.6	8.3
		230/1ph	0.78	1.6	8.3
		208/3ph	0.80	2.4	6.4
		230/3ph	0.80	2.4	6.4
		460/3ph	0.80	2.4	3.2
		575/3ph	0.80	2.4	2.4
07	Low	208/3ph	0.80	2.4	6.4
		230/3ph	0.80	2.4	6.4
		460/3ph	0.80	2.4	3.2
		575/3ph	0.80	2.4	2.4
	High	208/3ph	0.84	3.1	8.8
		230/3ph	0.84	3.1	8.8
		460/3ph	0.84	3.1	4.4
		575/3ph	0.84	3.1	3.9
08	Low	208/3ph	0.80	2.4	6.4
		230/3ph	0.80	2.4	6.4
		460/3ph	0.80	2.4	3.2
		575/3ph	0.80	2.4	2.4
	High	208/3ph	0.84	3.1	8.8
		230/3ph	0.84	3.1	8.8
		460/3ph	0.84	3.1	4.4
		575/3ph	0.84	3.1	3.9

NOTES:

- Extensive motor and electrical testing ensures that the motors can be utilized with confidence up to the maximum applied bhp, watts, and amps. Using the fan motor up to the maximum ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected.
- Convert bhp to watts using the following formula:

$$\text{watts} = \frac{\text{bhp (746)}}{\text{motor efficiency}}$$

- The EPACT (Energy Policy Act of 1992) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (three-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 Hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT-compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements. Therefore, the indoor fan motors for Carrier 50PG03-14 units are exempt from these requirements.

PERFORMANCE DATA (CONT)

Evaporator Fan Motor Specifications — 50PG03-16 (cont)

50PG	DRIVE	VOLTAGE/PHASE	EFFICIENCY	MAX BHP	MAX AMPS
09	Low	208/3ph	0.80	2.4	6.4
		230/3ph	0.80	2.4	6.4
		460/3ph	0.80	2.4	3.2
		575/3ph	0.80	2.4	2.4
	High	208/3ph	0.83	3.7	11.0
		230/3ph	0.83	3.7	11.0
		460/3ph	0.83	3.7	5.5
		575/3ph	0.83	3.7	4.2
12	Low	208/3ph	0.84	3.1	8.8
		230/3ph	0.84	3.1	8.8
		460/3ph	0.84	3.1	4.4
		575/3ph	0.84	3.1	3.9
	High	208/3ph	0.83	3.7	11.0
		230/3ph	0.83	3.7	11.0
		460/3ph	0.83	3.7	5.5
		575/3ph	0.83	3.7	4.2
14	Low	208/3ph	0.83	3.7	11.0
		230/3ph	0.83	3.7	11.0
		460/3ph	0.83	3.7	5.5
		575/3ph	0.83	3.7	4.2
	High	208/3ph	0.81	5.25	14.8
		230/3ph	0.81	5.25	14.8
		460/3ph	0.81	5.25	7.4
		575/3ph	0.81	5.25	5.9
16	Low	208/3ph	0.83	3.7	10.3
		230/3ph	0.83	3.7	10.3
		460/3ph	0.83	3.7	5.2
		575/3ph	0.83	3.7	4.2
	Mid-Low	208/3ph	0.81	5.25	12.7
		230/3ph	0.81	5.25	12.7
		460/3ph	0.81	5.25	6.4
		575/3ph	0.81	5.25	5.9
	High	208/3ph	0.89	7.5	19.4
		230/3ph	0.89	7.5	19.4
		460/3ph	0.89	7.5	9.7
		575/3ph	0.81	7.5	7.8

NOTES:

- Extensive motor and electrical testing ensures that the motors can be utilized with confidence up to the maximum applied bhp, watts, and amps. Using the fan motor up to the maximum ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected.
- Convert bhp to watts using the following formula:

$$\text{watts} = \frac{\text{bhp (746)}}{\text{motor efficiency}}$$

- The EPACT (Energy Policy Act of 1992) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (three-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 Hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT-compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements. Therefore, the indoor fan motors for Carrier 50PG03-14 units are exempt from these requirements.

50PG

Evaporator Fan Motor Specifications — 50PG20-28

UNIT 50PG	DRIVE	ORIENTATION	VOLTAGE	EFFICIENCY (%)	MAX BHP	MAX AMPS
20	Low	Vertical	208	85.8	4.26	10.6
			230	85.8	4.26	9.6
			460	85.8	4.26	4.8
			575	87.5	5.75	6.0
	Mid-Low	Vertical	208	87.5	5.37	15.8
			230	87.5	5.75	15.4
			460	87.5	5.75	7.7
			575	87.5	5.75	6.0
	Mid-High	Vertical	208	88.5	7.66	22.0
			230	88.5	8.51	22.0
			460	88.5	8.63	11.6
			575	88.5	8.63	9.4
	High	Vertical	208	89.5	9.94	28.0
			230	89.5	10.45	28.0
			460	89.5	11.19	15.0
			575	89.5	11.50	12.0
	Low	Horizontal	208	85.8	4.26	10.6
			230	85.8	4.26	9.6
			460	85.8	4.26	4.8
			575	87.5	5.75	6.0
	Mid-Low	Horizontal	208	87.5	5.37	15.8
			230	87.5	5.75	15.4
			460	87.5	5.75	7.7
			575	87.5	5.75	6.0
	Mid-High	Horizontal	208	88.5	7.66	22.0
			230	88.5	8.51	22.0
			460	88.5	8.63	11.6
			575	88.5	8.63	9.4
	High	Horizontal	208	89.5	9.94	28.0
			230	89.5	10.45	28.0
			460	89.5	11.19	15.0
			575	89.5	11.50	12.0
24	Low	Vertical	208	85.8	4.26	10.6
			230	85.8	4.26	9.6
			460	85.8	4.26	4.8
			575	87.5	5.75	6.0
	Mid-Low	Vertical	208	87.5	5.37	15.8
			230	87.5	5.75	15.4
			460	87.5	5.75	7.7
			575	87.5	5.75	6.0
	Mid-High	Vertical	208	88.5	7.66	22.0
			230	88.5	8.51	22.0
			460	88.5	8.63	11.6
			575	88.5	8.63	9.4
	High	Vertical	208	89.5	9.94	28.0
			230	89.5	10.45	28.0
			460	89.5	11.19	15.0
			575	89.5	11.50	12.0
	Low	Horizontal	208	85.8	4.26	10.6
			230	85.8	4.26	9.6
			460	85.8	4.26	4.8
			575	87.5	5.75	6.0
	Mid-Low	Horizontal	208	87.5	5.37	15.8
			230	87.5	5.75	15.4
			460	87.5	5.75	7.7
			575	87.5	5.75	6.0
	Mid-High	Horizontal	208	88.5	7.66	22.0
			230	88.5	8.51	22.0
			460	88.5	8.63	11.6
			575	88.5	8.63	9.4
	High	Horizontal	208	89.5	9.94	28.0
			230	89.5	10.45	28.0
			460	89.5	11.19	15.0
			575	89.5	11.50	12.0

NOTES:

- Extensive motor and electrical testing ensures that the motors can be utilized with confidence up to the maximum applied bhp, watts, and amps. Using the fan motor up to the maximum ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected.
- Convert bhp to watts using the following formula:

$$\text{watts} = \frac{\text{bhp (746)}}{\text{motor efficiency}}$$

PERFORMANCE DATA (CONT)

Evaporator Fan Motor Specifications — 50PG20-28 (cont)

UNIT 50PG	DRIVE	ORIENTATION	VOLTAGE	EFFICIENCY (%)	MAX BHP	MAX AMPS
28	Low	Vertical	208	87.5	5.37	15.8
			230	87.5	5.75	15.4
			460	87.5	5.75	7.7
			575	87.5	5.75	6.0
	Mid-Low	Vertical	208	87.5	5.37	15.8
			230	87.5	5.75	15.4
			460	87.5	5.75	7.7
			575	87.5	5.75	6.0
	Mid-High	Vertical	208	88.5	7.66	22.0
			230	88.5	8.51	22.0
			460	88.5	8.63	11.6
			575	88.5	8.63	9.4
	High	Vertical	208	89.5	9.94	28.0
			230	89.5	10.45	28.0
			460	89.5	11.19	15.0
			575	89.5	11.50	12.0
	Low	Horizontal	208	87.5	5.37	15.8
			230	87.5	5.75	15.4
			460	87.5	5.75	7.7
			575	87.5	5.75	6.0
	Mid-Low	Horizontal	208	87.5	5.37	15.8
			230	87.5	5.75	15.4
			460	87.5	5.75	7.7
			575	87.5	5.75	6.0
	Mid-High	Horizontal	208	88.5	7.66	22.0
			230	88.5	8.51	22.0
			460	88.5	8.63	11.6
			575	88.5	8.63	9.4
	High	Horizontal	208	89.5	9.94	28.0
			230	89.5	10.45	28.0
			460	89.5	11.19	15.0
			575	89.5	11.50	12.0

NOTES:

1. Extensive motor and electrical testing ensures that the motors can be utilized with confidence up to the maximum applied bhp, watts, and amps. Using the fan motor up to the maximum ratings shown will not result in nuisance tripping or premature motor failure. Unit warranty will not be affected.
2. Convert bhp to watts using the following formula:

$$\text{watts} = \frac{\text{bhp (746)}}{\text{motor efficiency}}$$

50PG

Fan Rpm at Motor Pulley Settings* — 50PG03-16

UNIT 50PG	DRIVE	MOTOR PULLEY TURNS OPEN										
		0	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5
03	Low	736	710	685	660	634	609	583	558	533	507	482
	High	1001	966	932	897	863	828	794	759	725	690	656
04	Low	736	710	685	660	634	609	583	558	533	507	482
	High	1128	1095	1062	1028	995	962	929	896	863	829	796
05	Low	910	878	847	815	784	753	721	690	659	627	596
	High	1173	1139	1104	1070	1035	1001	966	932	897	863	828
06	Low	978	949	920	891	863	834	805	776	748	719	690
	High	1261	1227	1194	1161	1128	1095	1062	1028	995	962	929
07	Low	1128	1095	1062	1028	995	962	929	896	863	829	796
	High	1438	1409	1380	1351	1323	1294	1265	1236	1208	1179	1150
08	Low	771	751	731	710	690	670	649	629	609	589	568
	High	1015	994	974	954	934	913	893	873	852	832	812
09	Low	771	751	731	710	690	670	649	629	609	589	568
	High	1015	994	974	954	934	913	893	873	852	832	812
12	Low	893	873	852	832	812	791	771	751	731	710	690
	High	1055	1035	1015	994	974	954	934	913	893	873	852
14	Low	893	873	852	832	812	791	771	751	731	710	690
	High	1055	1035	1015	994	974	954	934	913	893	873	852
16	Low	879	863	846	829	812	795	778	761	744	727	710
	Mid-Low	1066	1047	1027	1008	988	969	950	930	911	892	872
	High	1260	1240	1221	1202	1182	1163	1144	1124	1105	1085	1066

* Approximate fan rpm shown, based on 1725 rpm motor.

NOTE: Factory pulley speed setting is at 5 turns open.

Fan Rpm at Motor Pulley Settings* — 50PG20-28

50PG	DRIVE	MOTOR PULLEY TURNS OPEN												
		0	1/2	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6
20 and 24 (230 and 460 volt)	Low Range Vertical	685	706	727	749	770	791	812	833	854	876	897	918	939
	Mid-Low Range Vertical	949	970	992	1013	1035	1056	1078	1099	1120	1142	1163	1185	1206
	Mid-High Range Vertical	941	961	980	1000	1019	1039	1059	1078	1098	1117	1137	1156	1176
	High Range Vertical	1014	1038	1061	1085	1108	1132	1156	1179	1203	1226	1250	1273	1297
	Low Range Horizontal	685	706	727	749	770	791	812	833	854	876	897	918	939
	Mid-Low Range Horizontal	949	970	992	1013	1035	1056	1078	1099	1120	1142	1163	1185	1206
	Mid-High Range Horizontal	941	961	980	1000	1019	1039	1059	1078	1098	1117	1137	1156	1176
	High Range Horizontal	1014	1038	1061	1085	1108	1132	1156	1179	1203	1226	1250	1273	1297
20 and 24 (575 Volt)	Low Range Vertical	751	768	785	802	819	836	853	869	886	903	920	937	954
	Mid-Low Range Vertical	949	970	992	1013	1035	1056	1078	1099	1120	1142	1163	1185	1206
	Mid-High Range Vertical	941	961	980	1000	1019	1039	1059	1078	1098	1117	1137	1156	1176
	High Range Vertical	1014	1038	1061	1085	1108	1132	1156	1179	1203	1226	1250	1273	1297
	Low Range Horizontal	751	768	785	802	819	836	853	869	886	903	920	937	954
	Mid-Low Range Horizontal	949	970	992	1013	1035	1056	1078	1099	1120	1142	1163	1185	1206
	Mid-High Range Horizontal	941	961	980	1000	1019	1039	1059	1078	1098	1117	1137	1156	1176
	High Range Horizontal	1014	1038	1061	1085	1108	1132	1156	1179	1203	1226	1250	1273	1297
28 (all voltages)	Low Range Vertical	687	703	718	734	749	765	780	796	811	827	842	858	873
	Mid-Low Range Vertical	805	822	839	856	872	889	906	923	940	957	973	990	1007
	Mid-High Range Vertical	941	961	980	1000	1019	1039	1059	1078	1098	1117	1137	1156	1176
	High Range Vertical	1014	1038	1061	1085	1108	1132	1156	1179	1203	1226	1250	1273	1297
	Low Range Horizontal	687	703	718	734	749	765	780	796	811	827	842	858	873
	Mid-Low Range Horizontal	805	822	839	856	872	889	906	923	940	957	973	990	1007
	Mid-High Range Horizontal	941	961	980	1000	1019	1039	1059	1078	1098	1117	1137	1156	1176
	High Range Horizontal	1014	1038	1061	1085	1108	1132	1156	1179	1203	1226	1250	1273	1297

* Approximate fan rpm shown, based on 1725 rpm motor.

NOTE: Factory pulley speed setting is at 3 turns open.

ELECTRICAL DATA

Units Without Optional Convenience Outlet — 50PG03-07

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	—	Low	4.9	—	—	21.9/21.9	30/30	22/22	74/74	
										10.8/12.5	2.3/ 3.0	21.9/21.9	30/30	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	30/30	22/22	74/74		
								10.8/12.5		2.3/ 3.0	21.9/21.9	30/30	22/22	74/74		
								17.3/20.0		3.8/ 5.0	27.8/31.1	30/35	26/29	74/74		
							High	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	30/30	23/23	76/76		
								10.8/12.5		2.3/ 3.0	23.3/23.5	30/30	23/23	76/76		
								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	30/30	23/23	76/76		
1.4	Low	10.8/12.5	2.3/ 3.0	23.3/23.5	30/30	23/23	76/76									
		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									
	High	—	—	23.3/23.3	30/30	23/23	76/76									
		10.8/12.5	2.3/ 3.0	23.3/23.5	30/30	23/23	76/76									
		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											
04	208/230-1-60	187	253	15.4	83	1.0	—	Low	4.9	—	—	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	30/40	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	30/40	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	
							1.4			Low	—	—	26.6/26.6	40/40	26/26	99/99
											10.8/12.5	2.3/ 3.0	26.6/26.6	40/40	26/26	99/99
											17.3/20.0	3.8/ 5.0	29.5/32.9	40/40	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	40/40	26/26	99/99	
										10.8/12.5	2.3/ 3.0	26.6/26.6	40/40	26/26	99/99	
										17.3/20.0	3.8/ 5.0	29.5/32.9	40/40	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	
	208/230-3-60	187	253	11.5	77	1.0	—	Low	4.9	—	—	20.3/20.3	30/30	20/20	91/91	
										6.3/ 7.2	2.3/ 3.0	20.3/20.3	30/30	20/20	91/91	
										10.0/11.5	3.8/ 5.0	20.3/20.5	30/30	20/20	91/91	
										15.0/17.3	5.6/ 7.5	24.9/27.8	30/30	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	30/30	20/20	91/91	
										6.3/ 7.2	2.3/ 3.0	20.3/20.3	30/30	20/20	91/91	
										10.0/11.5	3.8/ 5.0	20.3/20.5	30/30	20/20	91/91	
										15.0/17.3	5.6/ 7.5	24.9/27.8	30/30	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	

50PG

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



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

† Fuse or HACR circuit breaker.

NOTES:

- 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.
- 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 230-3-60



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

Determine maximum deviation from average voltage.

$$\begin{aligned} (AB) \quad 227 - 224 &= 3 \text{ v} \\ (BC) \quad 231 - 227 &= 4 \text{ v} \\ (AC) \quad 227 - 226 &= 1 \text{ v} \\ \text{Maximum deviation is } &4 \text{ v.} \end{aligned}$$

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.

Units Without Optional Convenience Outlet — 50PG03-07 (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 (cont)	187	253	11.5	77	1.0	1.4	Low	4.9	—	—	21.7/21.7	30/30	22/22	93/93			
										6.3/ 7.2	2.3/ 3.0	21.7/21.7	30/30	22/22	93/93			
										10.0/11.5	3.8/ 5.0	21.7/22.3	30/30	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	30/30	22/22	93/93			
										6.3/ 7.2	2.3/ 3.0	21.7/21.7	30/30	22/22	93/93			
										10.0/11.5	3.8/ 5.0	21.7/22.3	30/30	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			
	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		—	—	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	
	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			
								High		9.2	10.0	14.1	15	13	37			
										13.9	15.0	20.0	25	18	37			
										—	—	9.4	15	10	39			
										9.2	10.0	15.9	20	15	39			
							1.4			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			
										Low		—	—	8.0	15	8	37	
												9.2	10.0	14.1	15	13	37	
												13.9	15.0	20.0	25	18	37	
	208/230-1-60	187	253	20.5	109	1.0	—	Low	4.9	—	—	31.5/ 31.5	50/ 50	30/30	123/123			
										17.3/20.0	3.8/ 5.0	31.5/ 31.5	50/ 50	30/30	123/123			
										26.0/30.0	5.6/ 7.5	38.6/ 43.6	50/ 50	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	50/ 50	33/ 33	148/148			
										17.3/20.0	3.8/ 5.0	33.6/ 33.6	50/ 50	33/ 33	148/148			
										26.0/30.0	5.6/ 7.5	41.3/ 46.3	50/ 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			
							1.4	Low		69.3/80.0	15.0/20.0	95.4/108.8	100/110	88/100	148/148			
										—	—	32.9/ 32.9	50/ 50	32/32	125/125			
										17.3/20.0	3.8/ 5.0	32.9/ 32.9	50/ 50	32/32	125/125			
										26.0/30.0	5.6/ 7.5	40.4/ 45.4	50/ 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			
								High		69.3/80.0	15.0/20.0	94.5/107.9	100/110	87/99	125/125			
										—	—	35.0/ 35.5	50/ 50	34/ 34	150/150			
										17.3/20.0	3.8/ 5.0	35.0/ 35.5	50/ 50	34/ 34	150/150			
										26.0/30.0	5.6/ 7.5	43.0/ 48.0	50/ 50	40/ 44	150/150			
										34.7/40.0	7.5/10.0	53.9/ 60.5	60/ 70	50/ 56	150/150			
	208/230-3-60	187	253	14.6	91	1.0	—	Low	4.9	—	—	24.2/24.2	30/30	24/24	105/105			
										10.0/11.5	3.8/ 5.0	24.2/24.2	30/30	24/24	105/105			
										15.0/17.3	5.6/ 7.5	24.9/27.8	30/30	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	30/30	24/24	123/123			
										10.0/11.5	3.8/ 5.0	24.5/24.5	30/30	24/24	123/123			
										15.0/17.3	5.6/ 7.5	25.3/28.1	30/30	24/26	123/123			
208/230-3-60	187	253	14.6	91	1.0	—	Low	4.9	—	—	24.5/24.5	30/30	24/24	123/123				
									10.0/11.5	3.8/ 5.0	24.5/24.5	30/30	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				
							High		—	—	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				
						1.4	Low		4.9	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	40/40	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			
										—	—	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			
							High			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	40/40	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													

ELECTRICAL DATA

Units Without Optional Convenience Outlet — 50PG03-07 (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
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
								High	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
	575-3-60	518	633	5.1	34	0.5	—	Low	2.1	—	—	12.1	15	12	54
										5.8	5.0	12.1	15	12	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
								High	2.6	—	—	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
06	208/230-1-60	187	253	26.9	145	1.5	—	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
								High	2.0	—	—	8.9	15	9	46
										9.2	10.0	14.0	15	13	46
										13.9	15.0	19.9	20	18	46
										18.5	20.0	25.6	30	24	46
								Low	2.1	—	—	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
								High	2.0	—	—	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
								Low	4.9	—	—	40.0/ 40.0	60/ 60	38/ 38	160/160
										17.3/ 20.0	3.8/ 5.0	40.0/ 40.0	60/ 60	38/ 38	160/160
										26.0/ 30.0	5.6/ 7.5	40.0/ 43.6	60/ 60	38/ 40	160/160
										34.7/ 40.0	7.5/10.0	49.5/ 56.1	60/ 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
								High	7.0	—	—	114.5/131.1	125/150	105/121	160/160
										42.1/ 42.1	60/ 60	60/ 60	41/ 41	185/185	185/185
										17.3/ 20.0	3.8/ 5.0	42.1/ 42.1	60/ 60	41/ 41	185/185
										26.0/ 30.0	5.6/ 7.5	42.1/ 46.3	60/ 60	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
								Low	4.9	—	—	95.4/108.8	100/110	88/100	185/185
										69.3/ 80.0	15.0/20.0	94.5/107.9	100/110	87/ 99	162/162
										86.7/100.0	18.8/25.0	116.3/132.9	125/150	107/122	162/162
								High	7.0	—	—	43.5/ 43.5	60/ 60	42/ 42	187/187
										17.3/ 20.0	3.8/ 5.0	43.5/ 43.5	60/ 60	42/ 42	187/187
										26.0/ 30.0	5.6/ 7.5	43.5/ 48.0	60/ 60	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
										86.7/100.0	18.8/25.0	118.9/135.5	125/150	109/125	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
OFM — Outdoor (Condenser) Fan Motor
RLA — Rated Load Amps



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

NOTES:

- 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.
- 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 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.

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

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.

50PG

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	—	—	28.7/28.7	45/45	28/28	156/156	
										10.0/11.5	3.8/ 5.0	28.7/28.7	45/45	28/28	156/156	
										15.0/17.3	5.6/ 7.5	28.7/28.7	45/45	28/28	156/156	
										20.0/23.1	7.5/10.0	31.5/35.4	45/45	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	45/45	28/28	156/156		
								10.0/11.5		3.8/ 5.0	28.7/28.7	45/45	28/28	156/156		
								15.0/17.3		5.6/ 7.5	28.7/28.7	45/45	28/28	156/156		
								20.0/23.1		7.5/10.0	31.5/35.4	45/45	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	45/45	30/30	158/158			
							10.0/11.5	3.8/ 5.0		30.1/30.1	45/45	30/30	158/158			
							15.0/17.3	5.6/ 7.5		30.1/30.1	45/45	30/30	158/158			
							20.0/23.1	7.5/10.0		33.3/37.1	45/45	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	45/45	30/30	158/158			
							10.0/11.5	3.8/ 5.0		30.1/30.1	45/45	30/30	158/158			
							15.0/17.3	5.6/ 7.5		30.1/30.1	45/45	30/30	158/158			
	20.0/23.1	7.5/10.0	33.3/37.1	45/45	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										
	—	—	15.4	25	15	79										
	5.8	5.0	15.4	25	15	79										
	8.7	7.5	15.4	25	15	79										
	11.5	10.0	17.6	25	16	79										
	17.3	15.0	24.9	25	23	79										
	23.1	20.0	32.1	35	30	79										
	28.9	25.0	39.4	40	36	79										
	—	—	15.4	25	15	79										
	5.8	5.0	15.4	25	15	79										
	8.7	7.5	15.4	25	15	79										
	11.5	10.0	17.6	25	16	79										
	17.3	15.0	24.9	25	23	79										
	23.1	20.0	32.1	35	30	79										
	28.9	25.0	39.4	40	36	79										
	—	—	16.0	25	16	80										
	5.8	5.0	16.0	25	16	80										
	8.7	7.5	16.0	25	16	80										
	11.5	10.0	18.4	25	17	80										
	17.3	15.0	25.6	30	24	80										
	23.1	20.0	32.9	35	30	80										
	28.9	25.0	40.1	45	37	80										
	—	—	16.0	25	16	80										
	5.8	5.0	16.0	25	16	80										
	8.7	7.5	16.0	25	16	80										
	11.5	10.0	18.4	25	17	80										
	17.3	15.0	25.6	30	24	80										
	23.1	20.0	32.9	35	30	80										
	28.9	25.0	40.1	45	37	80										
	—	—	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	30	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	30	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	30	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	30	30	55										
	—	—	32.3/32.3	50/50	31/31	182/182										
	10.0/11.5	3.8/ 5.0	32.3/32.3	50/50	31/31	182/182										
	15.0/17.3	5.6/ 7.5	32.3/32.3	50/50	31/31	182/182										
	20.0/23.1	7.5/10.0	32.3/35.4	50/50	31/33	182/182										
	30.0/34.6	11.3/15.0	44.0/49.8	50/50	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	50/50	34/34	208/208										
	10.0/11.5	3.8/ 5.0	34.6/34.6	50/50	34/34	208/208										
	15.0/17.3	5.6/ 7.5	34.6/34.6	50/50	34/34	208/208										
	20.0/23.1	7.5/10.0	34.6/38.3	50/50	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										
	07	208/230-3-60	187	253	20.5	149	1.5	—	Low	5.2	—	—	32.3/32.3	50/50	31/31	182/182
											10.0/11.5	3.8/ 5.0	32.3/32.3	50/50	31/31	182/182
											15.0/17.3	5.6/ 7.5	32.3/32.3	50/50	31/31	182/182
											20.0/23.1	7.5/10.0	32.3/35.4	50/50	31/33	182/182
											30.0/34.6	11.3/15.0	44.0/49.8	50/50	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	50/50	34/34	208/208		
								10.0/11.5	3.8/ 5.0		34.6/34.6	50/50	34/34	208/208		
								15.0/17.3	5.6/ 7.5		34.6/34.6	50/50	34/34	208/208		
20.0/23.1								7.5/10.0	34.6/38.3		50/50	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 and Notes on next page.

ELECTRICAL DATA

Units Without Optional Convenience Outlet — 50PG03-07 (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR		OFM	POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	RLA	LRA	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA	
07 (cont)	208/230-3-60 (cont)	187	253	20.5	149	1.5	1.4	Low	5.2	—	—	33.7/33.7	50/50	33/33	184/184	
										10.0/11.5	3.8/ 5.0	33.7/33.7	50/50	33/33	184/184	
										15.0/17.3	5.6/ 7.5	33.7/33.7	50/50	33/33	184/184	
										20.0/23.1	7.5/10.0	33.7/37.1	50/50	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	
								High	7.5	—	—	36.0/36.0	50/50	36/36	210/210	
										10.0/11.5	3.8/ 5.0	36.0/36.0	50/50	36/36	210/210	
										15.0/17.3	5.6/ 7.5	36.0/36.0	50/50	36/36	210/210	
										20.0/23.1	7.5/10.0	36.1/40.0	50/50	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	
	460-3-60	414	506	9.6	75	0.8	—	Low	2.6	—	—	15.4	25	15	92	
										5.8	5.0	15.4	25	15	92	
										8.7	7.5	15.4	25	15	92	
										11.5	10.0	17.6	25	16	92	
										17.3	15.0	24.9	25	23	92	
										23.1	20.0	32.1	35	30	92	
								High	3.4	—	—	16.2	25	16	105	
										5.8	5.0	16.2	25	16	105	
										8.7	7.5	16.2	25	16	105	
										11.5	10.0	18.6	25	17	105	
										17.3	15.0	25.9	30	24	105	
										23.1	20.0	33.1	35	30	105	
								0.6	Low	2.6	—	—	16.0	25	16	93
											5.8	5.0	16.0	25	16	93
											8.7	7.5	16.0	25	16	93
											11.5	10.0	18.4	25	17	93
											17.3	15.0	25.6	30	24	93
											23.1	20.0	32.9	35	30	93
									High	3.4	—	—	16.8	25	17	106
											5.8	5.0	16.8	25	17	106
											8.7	7.5	16.8	25	17	106
											11.5	10.0	19.4	25	18	106
											17.3	15.0	26.6	30	24	106
											23.1	20.0	33.9	35	31	106
	575-3-60	518	633	7.6	54	0.8	—	Low	2.0	—	—	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	30	29	67	
										27.7	30.0	37.1	40	34	67	
								High	2.8	—	—	13.1	20	13	78	
										9.2	10.0	15.0	20	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	30	30	78	
										27.7	30.0	38.1	40	35	78	
								1.4	Low	2.0	—	—	13.7	20	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	30	30	69
											27.7	30.0	38.9	40	36	69
	High	2.8	—	—	14.5	20	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	30	31		80							
			27.7	30.0	39.9	40	37		80							

LEGEND

- FLA** — Full Load Amps
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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



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

† Fuse or HACR circuit breaker.

NOTES:

- 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.
- 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 230-3-60



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

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.

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

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.

Units Without Optional Powered Convenience Outlet — 50PG08-14

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
08	208/230-3-60	187	253	13.5	88	2	1.5	—	Low	5.2	—	—	38.6/ 38.6	50/ 50	40/ 40	212/212
											20.0/23.1	7.5/10.0	38.6/ 38.6	50/ 50	40/ 40	212/212
											30.0/34.6	11.3/15.0	44.0/ 49.8	50/ 50	40/ 46	212/212
											50.0/57.7	18.8/25.0	69.0/ 78.6	70/ 80	63/ 72	212/212
											70.0/80.8	26.3/35.0	94.0/107.5	100/110	86/ 99	212/212
											80.0/92.4	30.0/40.0	106.5/122.0	110/125	98/112	212/212
											—	—	40.9/ 40.9	50/ 50	43/ 43	238/238
									High	7.5	20.0/23.1	7.5/10.0	40.9/ 40.9	50/ 50	43/ 43	238/238
											30.0/34.6	11.3/15.0	46.9/ 52.6	50/ 60	43/ 48	238/238
											50.0/57.7	18.8/25.0	71.9/ 81.5	80/ 90	66/ 75	238/238
											70.0/80.8	26.3/35.0	96.9/110.4	100/125	89/102	238/238
											80.0/92.4	30.0/40.0	109.4/124.9	110/125	101/115	238/238
											—	—	41.6/ 41.6	50/ 50	44/ 44	216/216
								3.0	Low	5.2	20.0/23.1	7.5/10.0	41.6/ 41.6	50/ 50	44/ 44	216/216
											30.0/34.6	11.3/15.0	47.8/ 53.5	50/ 60	44/ 49	216/216
											50.0/57.7	18.8/25.0	72.8/ 82.4	80/ 90	67/ 76	216/216
											70.0/80.8	26.3/35.0	97.8/111.3	100/125	90/102	216/216
											80.0/92.4	30.0/40.0	110.3/125.8	125/150	101/116	216/216
											—	—	43.9/ 43.9	50/ 50	47/ 47	242/242
									High	7.5	20.0/23.1	7.5/10.0	43.9/ 43.9	50/ 50	47/ 47	242/242
											30.0/34.6	11.3/15.0	50.6/ 56.4	60/ 60	47/ 52	242/242
											50.0/57.7	18.8/25.0	75.6/ 85.3	80/ 90	70/ 78	242/242
											70.0/80.8	26.3/35.0	100.6/114.1	110/125	93/105	242/242
											80.0/92.4	30.0/40.0	113.1/128.6	125/150	104/118	242/242
											—	—	18.6	25	20	97
	460-3-60	414	506	6.4	39	2	0.8	—	Low	2.6	11.5	10.0	18.6	25	20	97
											17.3	15.0	24.9	25	23	97
											28.9	25.0	39.4	40	36	97
											40.4	35.0	53.8	60	49	97
											46.2	40.0	61.0	70	56	97
											—	—	19.4	25	20	110
											High	3.4	11.5	10.0	19.4	25
									17.3	15.0			25.9	30	24	110
									28.9	25.0			40.4	45	37	110
									40.4	35.0			54.8	60	50	110
									46.2	40.0			62.0	70	57	110
									—	—			19.8	25	21	100
									1.2	Low	2.6	11.5	10.0	19.8	25	21
								17.3				15.0	26.4	30	24	100
								28.9				25.0	40.9	45	38	100
								40.4				35.0	55.3	60	51	100
								46.2				40.0	62.5	70	58	100
								—				—	20.6	25	22	113
								High		3.4	11.5	10.0	20.6	25	22	113
											17.3	15.0	27.4	30	25	113
											28.9	25.0	41.9	45	39	113
											40.4	35.0	56.3	60	52	113
											46.2	40.0	63.5	70	58	113
—											—	20.6	25	22	113	

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

† Fuse or HACR circuit breaker.

NOTES:

- 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.
- 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 230-3-60



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 – 224 = 3 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.

ELECTRICAL DATA

Units Without Optional Powered Convenience Outlet — 50PG08-14

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
08	208/230-3-60	187	253	13.5	88	2	1.5	—	Low	5.2	—	—	38.6/ 38.6	50/ 50	40/ 40	212/212
											20.0/23.1	7.5/10.0	38.6/ 38.6	50/ 50	40/ 40	212/212
											30.0/34.6	11.3/15.0	44.0/ 49.8	50/ 50	40/ 46	212/212
											50.0/57.7	18.8/25.0	69.0/ 78.6	70/ 80	63/ 72	212/212
											70.0/80.8	26.3/35.0	94.0/107.5	100/110	86/ 99	212/212
											80.0/92.4	30.0/40.0	106.5/122.0	110/125	98/112	212/212
									High	7.5	—	—	40.9/ 40.9	50/ 50	43/ 43	238/238
											20.0/23.1	7.5/10.0	40.9/ 40.9	50/ 50	43/ 43	238/238
											30.0/34.6	11.3/15.0	46.9/ 52.6	50/ 60	43/ 48	238/238
											50.0/57.7	18.8/25.0	71.9/ 81.5	80/ 90	66/ 75	238/238
											70.0/80.8	26.3/35.0	96.9/110.4	100/125	89/102	238/238
											80.0/92.4	30.0/40.0	109.4/124.9	110/125	101/115	238/238
								3.0	Low	5.2	—	—	41.6/ 41.6	50/ 50	44/ 44	216/216
											20.0/23.1	7.5/10.0	41.6/ 41.6	50/ 50	44/ 44	216/216
											30.0/34.6	11.3/15.0	47.8/ 53.5	50/ 60	44/ 49	216/216
											50.0/57.7	18.8/25.0	72.8/ 82.4	80/ 90	67/ 76	216/216
											70.0/80.8	26.3/35.0	97.8/111.3	100/125	90/102	216/216
											80.0/92.4	30.0/40.0	110.3/125.8	125/150	101/116	216/216
									High	7.5	—	—	43.9/ 43.9	50/ 50	47/ 47	242/242
											20.0/23.1	7.5/10.0	43.9/ 43.9	50/ 50	47/ 47	242/242
											30.0/34.6	11.3/15.0	50.6/ 56.4	60/ 60	47/ 52	242/242
											50.0/57.7	18.8/25.0	75.6/ 85.3	80/ 90	70/ 78	242/242
											70.0/80.8	26.3/35.0	100.6/114.1	110/125	93/105	242/242
											80.0/92.4	30.0/40.0	113.1/128.6	125/150	104/118	242/242
	460-3-60	414	506	6.4	39	2	0.8	—	Low	2.6	—	—	18.6	25	20	97
											11.5	10.0	18.6	25	20	97
											17.3	15.0	24.9	25	23	97
											28.9	25.0	39.4	40	36	97
											40.4	35.0	53.8	60	49	97
											46.2	40.0	61.0	70	56	97
									High	3.4	—	—	19.4	25	20	110
											11.5	10.0	19.4	25	20	110
											17.3	15.0	25.9	30	24	110
											28.9	25.0	40.4	45	37	110
											40.4	35.0	54.8	60	50	110
											46.2	40.0	62.0	70	57	110
								1.2	Low	2.6	—	—	19.8	25	21	100
											11.5	10.0	19.8	25	21	100
											17.3	15.0	26.4	30	24	100
											28.9	25.0	40.9	45	38	100
											40.4	35.0	55.3	60	51	100
											46.2	40.0	62.5	70	58	100
									High	3.4	—	—	20.6	25	22	113
											11.5	10.0	20.6	25	22	113
											17.3	15.0	27.4	30	25	113
											28.9	25.0	41.9	45	39	113
											40.4	35.0	56.3	60	52	113
											46.2	40.0	63.5	70	58	113

LEGEND

- FLA** — Full Load Amps
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- RLA** — Rated Load Amps



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

† Fuse or HACR circuit breaker.

NOTES:

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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 230-3-60



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

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.

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

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.

- Single point kits CRSINGLE028A00 and CRSINGLE031A00 are not required if field-supplied pressure connectors are used. Factory-installed heaters contain terminal blocks when combined MOCP is greater than 60 amps.

Units Without Optional Powered Convenience Outlet — 50PG08-14 (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE												
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCPT†	FLA	LRA											
08 (cont)	575-3-60	518	633	5.1	34	2	0.8	—	Low	2.0	—	—	15.1	20	16	83											
											13.9	15.0	19.9	20	18	83											
											23.1	25.0	31.4	35	29	83											
											32.3	35.0	42.9	45	39	83											
											37.0	40.0	48.8	50	45	83											
											—	—	15.9	20	17	94											
									High	2.8	13.9	15.0	20.9	25	19	94											
											23.1	25.0	32.4	35	30	94											
											32.3	35.0	43.9	45	40	94											
											37.0	40.0	49.8	50	46	94											
											—	—	18.1	20	19	87											
											13.9	15.0	23.6	25	22	87											
								3.0	Low	2.0	23.1	25.0	35.1	40	32	87											
											32.3	35.0	46.6	50	43	87											
											37.0	40.0	52.5	60	48	87											
											—	—	18.9	25	20	98											
											13.9	15.0	24.6	25	23	98											
											23.1	25.0	36.1	40	33	98											
									High	2.8	32.3	35.0	47.6	50	44	98											
											37.0	40.0	53.5	60	49	98											
											09	208/230-3-60	187	253	16.0	91	2	1.5	—	Low	5.2	—	—	44.2/ 44.2	60/ 60	46/ 46	218/218
																						20.0/23.1	7.5/10.0	44.2/ 44.2	60/ 60	46/ 46	218/218
																						30.0/34.6	11.3/15.0	44.2/ 49.8	60/ 60	46/ 46	218/218
																						50.0/57.7	18.8/25.0	69.0/ 78.6	70/ 80	63/ 72	218/218
70.0/80.8	26.3/35.0	94.0/107.5	100/110	86/ 99	218/218																						
80.0/92.4	30.0/40.0	106.5/122.0	110/125	98/112	218/218																						
High	10.2	—	—	49.2/ 49.2	60/ 60	52/ 52	261/261																				
		20.0/23.1	7.5/10.0	49.2/ 49.2	60/ 60	52/ 52	261/261																				
		30.0/34.6	11.3/15.0	50.3/ 56.0	60/ 60	52/ 52	261/261																				
		50.0/57.7	18.8/25.0	75.3/ 84.9	80/ 90	69/ 78	261/261																				
		70.0/80.8	26.3/35.0	100.3/113.8	110/125	92/105	261/261																				
		80.0/92.4	30.0/40.0	112.8/128.3	125/150	104/118	261/261																				
3.0	Low	5.2	20.0/23.1	7.5/10.0	47.2/ 47.2	60/ 60	50/ 50	222/222																			
			30.0/34.6	11.3/15.0	47.8/ 53.5	60/ 60	50/ 50	222/222																			
			50.0/57.7	18.8/25.0	72.8/ 82.4	80/ 90	67/ 76	222/222																			
			70.0/80.8	26.3/35.0	97.8/111.3	100/125	90/102	222/222																			
			80.0/92.4	30.0/40.0	110.3/125.8	125/150	101/116	222/222																			
			—	—	52.2/ 52.2	60/ 60	55/ 55	265/265																			
	High	10.2	20.0/23.1	7.5/10.0	52.2/ 52.2	60/ 60	55/ 55	265/265																			
			30.0/34.6	11.3/15.0	54.0/ 59.8	60/ 60	55/ 55	265/265																			
			50.0/57.7	18.8/25.0	79.0/ 88.6	80/ 90	73/ 82	265/265																			
			70.0/80.8	26.3/35.0	104.0/117.5	110/125	96/108	265/265																			
			80.0/92.4	30.0/40.0	116.5/132.0	125/150	107/121	265/265																			
			—	—	20.2	25	21	111																			
—	Low	2.6	11.5	10.0	20.2	25	21	111																			
			17.3	15.0	24.9	25	23	111																			
			28.9	25.0	39.4	40	36	111																			
			40.4	35.0	53.8	60	49	111																			
			46.2	40.0	61.0	70	56	111																			
			—	—	22.4	25	24	133																			
	High	4.8	11.5	10.0	22.4	25	24	133																			
			17.3	15.0	27.6	30	25	133																			
			28.9	25.0	42.1	45	39	133																			
			40.4	35.0	56.5	60	52	133																			
			46.2	40.0	63.8	70	59	133																			
			—	—	21.4	25	23	114																			
1.2	Low	2.6	11.5	10.0	21.4	25	23	114																			
			17.3	15.0	26.4	30	24	114																			
			28.9	25.0	40.9	45	38	114																			
			40.4	35.0	55.3	60	51	114																			
			46.2	40.0	62.5	70	58	114																			
			—	—	23.6	30	25	136																			
	High	4.8	11.5	10.0	23.6	30	25	136																			
			17.3	15.0	29.1	30	27	136																			
			28.9	25.0	43.6	45	40	136																			
			40.4	35.0	58.0	60	53	136																			
			46.2	40.0	65.3	70	60	136																			
			—	—	16.2	20	17	89																			
—	Low	2.0	13.9	15.0	19.9	20	18	89																			
			23.1	25.0	31.4	35	29	89																			
			32.3	35.0	42.9	45	39	89																			
			37.0	40.0	48.8	50	45	89																			
			—	—	17.0	20	18	100																			
			13.9	15.0	20.9	25	19	100																			
	3.0	High	2.8	23.1	25.0	32.4	35	30	100																		
				32.3	35.0	43.9	45	40	100																		
				37.0	40.0	49.8	50	46	100																		
				—	—	19.2	25	20	93																		
				13.9	15.0	23.6	25	22	93																		
				23.1	25.0	35.1	40	32	93																		
Low		2.0	32.3	35.0	46.6	50	43	93																			
			37.0	40.0	52.5	60	48	93																			
			—	—	20.0	25	21	104																			
			13.9	15.0	24.6	25	23	104																			
			23.1	25.0	36.1	40	33	104																			
			32.3	35.0	47.6	50	44	104																			
High	2.8	37.0	40.0	53.5	60	49	104																				

ELECTRICAL DATA

Units Without Optional Powered Convenience Outlet — 50PG08-14 (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA	
12	208/230-3-60	187	253	17.6	123	2	1.9	—	Low	7.5	—	—	50.9/ 50.9	60/ 60	53/ 53	310/310	
											20.0/ 23.1	7.5/10.0	50.9/ 50.9	60/ 60	53/ 53	310/310	
											30.0/ 34.6	11.3/15.0	50.9/ 52.6	60/ 60	53/ 53	310/310	
											50.0/ 57.7	18.8/25.0	71.9/ 81.5	80/ 90	66/ 75	310/310	
											70.0/ 80.8	26.3/35.0	96.9/110.4	100/125	89/102	310/310	
											80.0/ 92.4	30.0/40.0	109.4/124.9	110/125	101/115	310/310	
											100.1/115.5	37.6/50.0	134.5/124.9	150/150	124/141	310/310	
											—	—	53.6/ 53.6	60/ 60	57/ 57	327/327	
											20.0/ 23.1	7.5/10.0	53.6/ 53.6	60/ 60	57/ 57	327/327	
											30.0/ 34.6	11.3/15.0	53.6/ 56.0	60/ 60	57/ 57	327/327	
											50.0/ 57.7	18.8/25.0	75.3/ 84.9	80/ 90	69/ 78	327/327	
											70.0/ 80.8	26.3/35.0	100.3/113.8	110/125	92/105	327/327	
											80.0/ 92.4	30.0/40.0	112.8/128.3	125/150	104/118	327/327	
											100.1/115.5	37.6/50.0	137.9/128.3	150/150	127/145	327/327	
								3.0		7.5	—	—	53.9/ 53.9	60/ 60	57/ 57	314/314	
											20.0/ 23.1	7.5/10.0	53.9/ 53.9	60/ 60	57/ 57	314/314	
											30.0/ 34.6	11.3/15.0	53.9/ 56.4	60/ 60	57/ 57	314/314	
											50.0/ 57.7	18.8/25.0	75.6/ 85.3	80/ 90	70/ 78	314/314	
											70.0/ 80.8	26.3/35.0	100.6/114.1	110/125	93/105	314/314	
											80.0/ 92.4	30.0/40.0	113.1/128.6	125/150	104/118	314/314	
											100.1/115.5	37.6/50.0	138.3/128.6	150/150	127/145	314/314	
										10.2	—	—	56.6/ 56.6	70/ 70	60/ 60	331/331	
											20.0/ 23.1	7.5/10.0	56.6/ 56.6	70/ 70	60/ 60	331/331	
											30.0/ 34.6	11.3/15.0	56.6/ 59.8	70/ 70	60/ 60	331/331	
											50.0/ 57.7	18.8/25.0	79.0/ 88.6	80/ 90	73/ 82	331/331	
											70.0/ 80.8	26.3/35.0	104.0/117.5	110/125	96/108	331/331	
											80.0/ 92.4	30.0/40.0	116.5/132.0	125/150	107/121	331/331	
											100.1/115.5	37.6/50.0	141.6/132.0	150/150	130/148	331/331	
	460-3-60	414	506	9.6	62	2	1.0	—	Low	3.4	—	—	22.7	30	24	132	
											11.5	10.0	22.7	30	24	132	
											17.3	15.0	25.9	30	24	132	
											28.9	25.0	40.4	45	37	132	
											40.4	35.0	54.8	60	50	132	
											46.2	40.0	62.0	70	57	132	
											57.7	50.0	62.0	70	70	132	
											4.8	—	—	24.1	30	26	141
												11.5	10.0	24.1	30	26	141
												17.3	15.0	27.6	30	26	141
												28.9	25.0	42.1	45	39	141
												40.4	35.0	56.5	60	52	141
												46.2	40.0	63.8	70	59	141
												57.7	50.0	63.7	70	72	141
								1.2		3.4	—	—	23.9	30	25	135	
											11.5	10.0	23.9	30	25	135	
											17.3	15.0	27.4	30	25	135	
											28.9	25.0	41.9	45	39	135	
											40.4	35.0	56.3	60	52	135	
											46.2	40.0	63.5	70	58	135	
											57.7	50.0	63.5	70	72	135	
										4.8	—	—	25.3	30	27	144	
											11.5	10.0	25.3	30	27	144	
											17.3	15.0	29.1	30	27	144	
											28.9	25.0	43.6	45	40	144	
											40.4	35.0	58.0	60	53	144	
											46.2	40.0	65.3	70	60	144	
											57.7	50.0	65.2	70	73	144	
	575-3-60	518	633	6.1	40	2	0.8	—	Low	2.8	—	—	18.1	20	19	106	
											13.9	15.0	20.9	25	19	106	
											23.1	25.0	32.4	35	30	106	
											32.3	35.0	43.9	45	40	106	
											37.0	40.0	49.8	50	46	106	
											46.2	50.0	49.7	60	56	106	
								High			—	—	18.1	20	19	106	
											13.9	15.0	20.9	25	19	106	
											23.1	25.0	32.4	35	30	106	
											32.3	35.0	43.9	45	40	106	
											37.0	40.0	49.8	50	46	106	
											46.2	50.0	49.7	60	56	106	

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



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

† Fuse or HACR circuit breaker.

NOTES:

- 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.
- 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 230-3-60



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

50PG

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA	
12 (cont)	575-3-60 (cont)	518	633	6.1	40	2	0.8	3.0	Low	2.8	—	—	21.1	25	23	110	
											13.9	15.0	24.6	25	23	110	
											23.1	25.0	36.1	40	33	110	
											32.3	35.0	47.6	50	44	110	
											37.0	40.0	53.5	60	49	110	
											46.2	50.0	53.5	60	60	110	
									High		—	—	21.1	25	23	110	
											13.9	15.0	24.6	25	23	110	
											23.1	25.0	36.1	40	33	110	
											32.3	35.0	47.6	50	44	110	
											37.0	40.0	53.5	60	49	110	
											46.2	50.0	53.5	60	60	110	
14	208/230-3-60	187	253	22.4	149	2	1.9	—	Low	10.2	—	—	64.4/ 64.4	80/ 80	68/ 68	379/379	
											20.0/ 23.1	7.5/10.0	64.4/ 64.4	80/ 80	68/ 68	379/379	
											30.0/ 34.6	11.3/15.0	64.4/ 64.4	80/ 80	68/ 68	379/379	
											50.0/ 57.7	18.8/25.0	75.3/ 84.9	80/ 90	69/ 78	379/379	
											70.0/ 80.8	26.3/35.0	100.3/113.8	110/125	92/105	379/379	
											100.1/115.5	37.6/50.0	137.9/128.3	150/150	127/145	379/379	
									120.1/138.6		45.1/60.0	162.9/151.4	175/175	150/171	379/379		
									High		15.0	—	—	69.2/ 69.2	90/ 90	73/ 73	388/388
												20.0/ 23.1	7.5/10.0	69.2/ 69.2	90/ 90	73/ 73	388/388
												30.0/ 34.6	11.3/15.0	69.2/ 69.2	90/ 90	73/ 73	388/388
												50.0/ 57.7	18.8/25.0	81.3/ 90.9	90/100	75/ 84	388/388
												70.0/ 80.8	26.3/35.0	106.3/119.8	110/125	98/110	388/388
								100.1/115.5		37.6/50.0		143.9/134.3	150/150	132/150	388/388		
								120.1/138.6	45.1/60.0	168.9/157.4		175/175	155/177	388/388			
								3.0	Low	10.2		—	—	67.4/ 67.4	80/ 80	71/ 71	383/383
												20.0/ 23.1	7.5/10.0	67.4/ 67.4	80/ 80	71/ 71	383/383
												30.0/ 34.6	11.3/15.0	67.4/ 67.4	80/ 80	71/ 71	383/383
												50.0/ 57.7	18.8/25.0	79.0/ 88.6	80/ 90	73/ 82	383/383
												70.0/ 80.8	26.3/35.0	104.0/117.5	110/125	96/108	383/383
											100.1/115.5	37.6/50.0	141.6/132.0	150/150	130/148	383/383	
									120.1/138.6		45.1/60.0	166.6/155.1	175/175	153/175	383/383		
									High		15.0	72.2/ 72.2	90/ 90	77/ 77	392/392		
												20.0/ 23.1	7.5/10.0	72.2/ 72.2	90/ 90	77/ 77	392/392
												30.0/ 34.6	11.3/15.0	72.2/ 72.2	90/ 90	77/ 77	392/392
												50.0/ 57.7	18.8/25.0	85.0/ 94.6	90/100	78/ 87	392/392
												70.0/ 80.8	26.3/35.0	110.0/123.5	125/125	101/114	392/392
								100.1/115.5		37.6/50.0		147.6/138.0	150/150	136/154	392/392		
								120.1/138.6	45.1/60.0	172.6/161.1		175/175	159/180	392/392			
								—	Low	4.8		—	—	30.7	40	32	191
												11.5	10.0	30.7	40	32	191
												17.3	15.0	30.7	40	32	191
												28.9	25.0	42.1	45	39	191
												40.4	35.0	56.5	60	52	191
											57.7	50.0	63.7	70	72	191	
											69.3	60.0	75.3	90	85	191	
											High	7.4	—	—	33.3	40	35
11.5	10.0	33.3	40	35	195												
17.3	15.0	33.3	40	35	195												
28.9	25.0	45.4	50	42	195												
40.4	35.0	59.8	60	55	195												
57.7	50.0	67.0	80	75	195												
69.3	60.0	78.6	90	88	195												
1.2	Low	4.8	—	—	31.9	40	34		194								
			11.5	10.0	31.9	40	34		194								
			17.3	15.0	31.9	40	34		194								
			28.9	25.0	43.6	45	40		194								
			40.4	35.0	58.0	60	53		194								
			57.7	50.0	65.2	70	73		194								
	High		7.4	69.3	60.0	78.6	90		87	194							
				—	—	34.5	45		37	198							
				11.5	10.0	34.5	45		37	198							
				17.3	15.0	34.5	45		37	198							
				28.9	25.0	46.9	50	43	198								
				40.4	35.0	61.3	70	56	198								
575-3-60	518	633		7.7	54	2	0.8	—	Low	2.8	—	—	21.7	25	23	134	
											13.9	15.0	21.7	25	23	134	
											23.1	25.0	32.4	35	30	134	
											32.3	35.0	43.9	45	40	134	
											37.0	40.0	49.8	50	46	134	
											46.2	50.0	49.7	60	56	134	
			55.4						60.0		58.9	60	67	134			
			High						5.6		—	—	24.5	30	26	148	
											13.9	15.0	24.5	30	26	148	
											23.1	25.0	35.9	40	33	148	
											32.3	35.0	47.4	50	44	148	
											37.0	40.0	53.3	60	49	148	
								46.2		50.0	53.2	60	60	148			
			55.4					60.0		62.4	70	70	148				
			3.0					Low		2.8	—	—	24.7	30	26	138	
											13.9	15.0	24.7	30	26	138	
											23.1	25.0	36.1	40	33	138	
											32.3	35.0	47.6	50	44	138	
											37.0	40.0	53.5	60	49	138	
									46.2		50.0	53.5	60	60	138		
								55.4	60.0		62.7	70	70	138			
								High	5.6		—	—	27.5	30	29	152	
											13.9	15.0	28.1	30	29	152	
											23.1	25.0	39.6	40	36	152	
											32.3	35.0	51.1	60	47	152	
											37.0	40.0	57.0	60	52	152	
			46.2							50.0	57.0	60	63	152			
			55.4					60.0		66.2	70	74	152				

See Legend and Notes on previous page.

ELECTRICAL DATA

Units Without Optional Powered Convenience Outlet — 50PG16

50PG

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


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

Determine maximum deviation from average voltage.

(AB) $227 - 224 = 3 \text{ v}$

(BC) $231 - 227 = 4 \text{ v}$

(AC) $227 - 226 = 1 \text{ v}$
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.

*Heater capacity (kW) is based on heater voltage of 208 v, 240 v, 480 v or 600 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. 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.

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

Units Without Optional Powered Convenience Outlet — 50PG20-28

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE													
				No. 1		No. 2		No. 3																													
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCPS*	MCA	MOCPS	FLA													
20	208/230	187	253	28.2	208	28.2	208	—	—	4	0.25	1.5	—	—	3.7	10.6/9.6	—	—	—	80/79	100/100	80/80	100/100	84/83													
																	2	1	5.9	92/91	100/100	92/92	100/100	98/96													
																	—	—	—	86/85	100/100	86/86	100/100	91/89													
																	5	16.7/15.2	2	1	5.9	98/96	100/100	98/98		100/100	105/103										
																	—	—	—	94/91	100/100	94/94	100/100	100/97													
																	7.5	24.2/22	2	1	5.9	105/103	125/125	105/105		125/125	113/111										
																	10	30.8/28	—	—	—	101/ 97	125/100	101/101		125/125	107/104										
																	2	1	5.9	113/109	125/125	113/113	125/125	121/118													
													19/25	52/60	3.7	10.6/ 9.6	—	—	—	80/ 87	100/100	87/ 87	100/100	84/ 83													
																	2	1	5.9	93/102	100/110	102/102	125/125	98/ 96													
																	5	16.7/15.2	2	1	5.9	101/109	125/110	109/109		125/125	105/103										
																	7.5	24.2/22	2	1	5.9	110/117	125/125	117/117		125/125	113/111										
																	10	30.8/28	—	—	—	104/110	125/125	110/110		125/125	107/104										
																	2	1	5.9	118/125	125/125	125/125	125/125	121/118													
																	—	—	—	143/132	150/150	143/143	150/150	132/149													
																	3.7	10.6/9.6	2	1	5.9	158/147	175/150	158/158		175/175	145/163										
																	5	16.7/15.2	2	1	5.9	166/154	175/175	166/166		175/175	152/169										
													38/50	104/120	7.5	24.2/22	—	—	—	160/148	175/150	160/160	175/175	147/163													
																	2	1	5.9	175/162	200/175	175/175	200/200	161/177													
																	—	—	—	169/155	175/175	169/169	175/175	155/170													
																	10	30.8/28	2	1	5.9	183/170	200/175	183/183		200/200	169/184										
													56/75†	156/180	3.7	10.6/ 9.6	—	—	—	80/ 79	100/100	80/ 80	100/100	84/ 83													
																	2	1	5.9	92/ 91	100/100	92/ 92	100/100	98/ 96													
																	5	16.7/15.2	2	1	5.9	86/ 85	100/100	86/ 86		100/100	91/ 89										
																	7.5	24.2/22	2	1	5.9	98/ 96	100/100	98/ 98		100/100	105/103										
																	10	30.8/28	—	—	—	94/ 91	100/100	94/ 94		100/100	100/ 97										
																	2	1	5.9	105/103	125/125	105/105	125/125	113/111													
																	—	—	—	101/ 97	125/100	101/101	125/125	107/104													
																	2	1	5.9	113/109	125/125	113/113	125/125	121/118													
													460	414	506	15.4	104	15.4	104	—	—	4	0.25	0.7		—	—	3.7	4.8	—	—	—	42	50	42	50	44
																														2	1	3.1	48	60	48	60	51
	5	7.6	—	—	—	45	60	45	60	47																											
	7.5	11	—	—	—	48	60	48	60	51																											
	10	14	—	—	—	51	60	51	60	55																											
	2	1	3.1	58	60	58	60	62																													
	3.7	4.8	—	—	—	44	50	44	50	44																											
	5	7.6	—	—	—	47	60	47	60	47																											
	25	30	7.5	11	—	—	—	51	60	51	60	51																									
					2	1	3.1	55	60	55	60	55																									
					—	—	—	51	60	51	60	51																									
					2	1	3.1	59	60	59	60	58																									
					10	14	—	—	—	55	60	55													60	55											
					2	1	3.1	63	70	63	70	62																									
					3.7	4.8	—	—	—	66	80	66													80	75											
					5	7.6	—	—	—	70	80	70													80	78											
	50	60	7.5	11	—	—	—	74	80	74	80	82																									
					2	1	3.1	77	80	77	80	85																									
					—	—	—	74	80	74	80	82																									
					2	1	3.1	82	90	82	90	89																									
10					14	—	—	—	78	90	78	90													85												
2					1	3.1	85	90	85	90	92																										
3.7					4.8	—	—	—	96	100	96	100													109												
5					7.6	—	—	—	100	110	100	125													112												
75	90	7.5	11	—	—	—	104	125	104	125	116																										
				2	1	3.1	107	125	107	125	119																										
				—	—	—	104	125	104	125	113																										
				2	1	3.1	112	125	112	125	126																										
				10	14	—	—	—	108	125	108	125	120																								
				2	1	3.1	115	125	115	125	127																										
				3.7	4.8	—	—	—	96	100	96	100	109																								
				5	7.6	—	—	—	100	110	100	125	112																								

ELECTRICAL DATA

Units Without Optional Powered Convenience Outlet — 50PG20-28 (cont)

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
20	575	518	633	12.8	83	12.8	83	—	—	4	0.25	0.7	—	—	5	6.1	—	—	—	38	50	38	50	40
															2	1	2.4	43	50	43	50	45		
															7.5	9	—	—	—	41	50	41	50	43
															2	1	2.4	45	50	45	50	49		
															10	11	—	—	—	43	50	43	50	45
															2	1	2.4	47	60	47	60	51		
													24.8	24	5	6.1	—	—	—	38	50	38	50	40
															2	1	2.4	44	50	44	50	45		
															7.5	9	—	—	—	41	50	41	50	43
															2	1	2.4	47	50	47	50	49		
															10	11	—	—	—	44	50	44	50	45
															2	1	2.4	50	60	50	60	51		
													48.3	46	5	6.1	—	—	—	65	70	65	70	60
															2	1	2.4	71	80	71	80	65		
															7.5	9	—	—	—	69	70	69	70	63
															2	1	2.4	75	80	75	80	69		
															10	11	—	—	—	71	80	71	80	66
															2	1	2.4	77	80	77	80	71		
													78	75	5	6.1	—	—	—	83	90	83	90	93
															2	1	2.4	89	100	89	100	99		
															7.5	9	—	—	—	86	100	86	100	97
															2	1	2.4	92	100	92	100	102		
															10	11	—	—	—	89	100	89	100	99
															2	1	2.4	95	100	95	100	104		

50PG

Electric Heat Branch Circuit For 208/240-V 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
20	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	156/180	175/200	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
20	208/240	187	253	28.2	208	28.2	208	—	—	4	0.25	1.5	56/75	156/180	3.7	10.6/9.6	—	—	—	169/192	200/225	192/192	200/225	192/218
																	2	1	5.9	184/207	200/225	207/207	225/225	205/232
																	—	—	—	177/199	200/225	199/199	200/225	199/224
																	2	1	5.9	192/214	200/225	214/214	225/225	212/238
																	—	—	—	186/208	200/225	208/208	225/225	207/232
																	2	1	5.9	201/222	225/225	222/222	225/225	221/246
															7.5	24.2/22	—	—	—	186/208	200/225	208/208	225/225	207/232
																	2	1	5.9	201/222	225/225	222/222	225/225	221/246
																	—	—	—	195/215	225/225	215/215	225/225	215/239
																	2	1	5.9	209/230	225/250	230/230	250/250	228/253
																	—	—	—	195/215	225/225	215/215	225/225	215/239
																	2	1	5.9	209/230	225/250	230/230	250/250	228/253

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 460-3-60



$$\begin{aligned}
 AB &= 452 \text{ v} \\
 BC &= 464 \text{ v} \\
 AC &= 455 \text{ v} \\
 \text{Average Voltage} &= \frac{452 + 464 + 455}{3} \\
 &= \frac{1371}{3} \\
 &= 457
 \end{aligned}$$

Determine maximum deviation from average voltage.

- (AB) 457 — 452 = 5 v
- (BC) 464 — 457 = 7 v
- (AC) 457 — 455 = 2 v

Maximum deviation is 7 v.
Determine percent of voltage imbalance.

$$\begin{aligned}
 \% \text{ Voltage Imbalance} &= 100 \times \frac{7}{457} \\
 &= 1.53\%
 \end{aligned}$$

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.

- The 75-kW 208/240-v electric heat can be factory installed but it must be wired separately in the field.
- The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 6

50PG

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE		
				No. 1		No. 2		No. 3																		
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA		
24	208/230	187	253	32.1	240	32.1	240	—	—	6	0.25	1.5	19/25	52/ 60	3.7	10.6/9.6	—	—	—	92/ 91	100/100	92/ 92	100/100	96/95		
															2	1	5.9	104/103	125/125	104/104	125/125	110/109				
															—	—	—	98/ 96	100/100	98/ 98	100/100	103/102				
															2	1	5.9	110/108	125/125	110/110	125/125	117/115				
															—	—	—	105/103	125/125	105/105	125/125	112/109				
															2	1	5.9	117/115	125/125	117/117	125/125	126/123				
															10	30.8/28	—	—	—	112/109	125/125	112/112	125/125	120/116		
															2	1	5.9	124/121	150/150	124/124	150/150	133/130				
															—	—	—	92/ 91	100/100	92/ 92	100/100	96/ 95				
															2	1	5.9	104/103	125/125	104/104	125/125	110/109				
															—	—	—	98/ 96	100/100	98/ 98	100/100	103/102				
															2	1	5.9	110/109	125/125	110/110	125/125	117/115				
													—	—	—	105/103	125/125	105/105	125/125	112/109						
													2	1	5.9	117/117	125/125	117/117	125/125	126/123						
													—	—	—	112/110	125/125	112/112	125/125	120/116						
													2	1	5.9	124/125	150/150	125/125	150/150	133/130						
													38/50	104/120	3.7	10.6/9.6	—	—	—	143/132	150/150	143/143	150/150	132/149		
															2	1	5.9	158/147	175/150	158/158	175/175	145/163				
															—	—	—	151/139	175/150	151/151	175/175	139/155				
															2	1	5.9	166/154	175/175	166/166	175/175	152/169				
															—	—	—	160/148	175/150	160/160	175/175	147/163				
															2	1	5.9	175/162	200/175	175/175	200/200	161/177				
															—	—	—	169/155	175/175	169/169	175/175	155/170				
															2	1	5.9	183/170	200/175	183/183	200/200	169/184				
	56/75†	156/180	3.7	10.6/ 9.6	—	—	—	92/ 91	100/100	92/ 92	100/100	96/ 95														
			—	—	—	98/ 96	100/100	98/ 98	100/100	103/102																
			2	1	5.9	110/108	125/125	110/110	125/125	117/115																
			—	—	—	105/103	125/125	105/105	125/125	112/109																
			2	1	5.9	117/115	125/125	117/117	125/125	126/123																
			10	30.8/28	—	—	—	112/109	125/125	112/112	125/125	120/116														
	460	414	506	15.4	110	15.4	110	—	—	6	0.25	0.7	—	—	3.7	4.8	—	—	—	44	50	44	50	46		
															2	1	3.1	50	60	50	60	53				
															—	—	—	46	60	46	60	49				
															5	7.6	2	1	3.1	53	60	53	60	56		
															—	—	—	50	60	50	60	53				
															2	1	3.1	56	60	56	60	60				
															—	—	—	53	60	53	60	56				
															2	1	3.1	59	60	59	60	63				
															25	30	3.7	4.8	—	—	—	44	50	44	50	46
																	2	1	3.1	51	60	51	60	53		
																	—	—	—	47	60	47	60	49		
																	2	1	3.1	55	60	55	60	56		
													—	—			—	51	60	51	60	53				
													2	1			3.1	59	60	59	60	60				
													10	14	—	—	—	55	60	55	60	56				
													50	60	2	1	3.1	63	70	63	70	63				
															—	—	—	66	80	66	80	75				
															2	1	3.1	74	80	74	80	82				
—															—	—	70	80	70	80	78					
2															1	3.1	77	80	77	80	85					
—															—	—	74	80	74	80	82					
2															1	3.1	82	90	82	90	89					
—															—	—	78	90	78	90	85					
10															14	2	1	3.1	85	90	85	90	92			
—	—	—	96	100	96	100	109																			
75	90	3.7	4.8	—	—	—	96	100	96	100	109															
		2	1	3.1	104	110	104	125	116																	
		—	—	—	100	110	100	125	112																	
		2	1	3.1	107	125	107	125	119																	
		—	—	—	104	125	104	125	116																	
		2	1	3.1	112	125	112	125	123																	
		—	—	—	108	125	108	125	120																	
		10	14	2	1	3.1	115	125	115	125	127															

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ELECTRICAL DATA

Units Without Optional Powered Convenience Outlet — 50PG20-28 (cont)

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
24	575	518	633	12.8	88	12.8	88	—	—	6	0.25	0.7	—	—	5	6.1	—	—	—	39	50	39	50	41
																	2	1	2.4	44	50	44	50	47
																	—	—	—	42	50	42	50	45
															7.5	9	2	1	2.4	47	50	47	50	50
																	—	—	—	44	50	44	50	47
																	2	1	2.4	49	60	49	60	52
													24.8	24	5	6.1	—	—	—	39	50	39	50	41
																	2	1	2.4	44	50	44	50	47
																	—	—	—	42	50	42	50	45
															7.5	9	2	1	2.4	47	50	47	50	50
																	—	—	—	44	50	44	50	47
																	2	1	2.4	50	60	50	60	52
													48.3	46	5	6.1	—	—	—	65	70	65	70	60
																	2	1	2.4	71	80	71	80	65
																	—	—	—	69	70	69	70	63
															7.5	9	2	1	2.4	75	80	75	80	69
																	—	—	—	71	80	71	80	66
																	2	1	2.4	77	80	77	80	71
													78	75	5	6.1	—	—	—	83	90	83	90	93
																	2	1	2.4	89	100	89	100	99
																	—	—	—	86	100	86	100	97
															7.5	9	2	1	2.4	92	100	92	100	102
																	—	—	—	89	100	89	100	99
																	2	1	2.4	95	100	95	100	104

50PG

Electric Heat Branch Circuit For 208/240-V 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
24	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	156/180	175/200	180/180	200/200	179/207	

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE													
				No. 1		No. 2		No. 3																													
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA													
24	208/240	187	253	32.1	240	32.1	240	—	—	6	0.25	1.5	56/75	156/180	3.7	10.6/9.6	—	—	—	169/192	200/225	192/192	200/225	192/218													
																	2	1	5.9	184/207	200/225	207/207	225/225	205/232													
															5	16.7/15.2	—	—	—	177/199	200/225	199/199	200/225	199/224													
																	2	1	5.9	192/214	200/225	214/214	225/225	212/238													
															7.5	24.2/22	—	—	—	186/208	200/225	208/208	225/225	207/232													
																	2	1	5.9	201/222	225/225	222/222	225/225	221/246													
															10	30.8/28	—	—	—	195/215	225/225	215/215	225/225	215/239													
																	2	1	5.9	209/230	225/250	230/230	250/250	228/253													
																	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
																	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Units Without Optional Powered Convenience Outlet — 50PG20-28 (cont)

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
28	208/230	187	253	28.2	208	28.2	208	28.2	208	6	0.25	1.5	—	—	5	16.7/15.2	—	—	—	117/116	125/125	117/117	125/125	127/125
															2	1	5.9	129/128	150/150	129/129	150/150	140/139		
															—	—	—	125/123	150/150	125/125	150/150	135/133		
															2	1	5.9	137/134	150/150	137/137	150/150	149/147		
															—	—	—	132/129	150/150	132/132	150/150	143/140		
															2	1	5.9	144/140	150/150	144/144	150/150	157/153		
													19/25	52/ 60	5	16.7/15.2	—	—	—	117/116	125/125	117/117	125/125	127/125
															2	1	5.9	129/128	150/150	129/129	150/150	140/139		
															—	—	—	125/123	150/150	125/125	150/150	135/133		
															2	1	5.9	137/134	150/150	137/137	150/150	149/147		
															—	—	—	132/129	150/150	132/132	150/150	143/140		
															2	1	5.9	144/140	150/150	144/144	150/150	157/153		
													38/50	104/120	10	30.8/28	—	—	—	132/129	150/150	132/132	150/150	143/140
															2	1	5.9	144/140	150/150	144/144	150/150	157/153		
															—	—	—	151/139	175/150	151/151	175/175	139/155		
															2	1	5.9	166/154	175/175	166/166	175/175	152/169		
															—	—	—	160/148	175/150	160/160	175/175	147/163		
															2	1	5.9	175/162	200/175	175/175	200/200	161/177		
													56/75†	156/180	10	30.8/28	—	—	—	169/155	175/175	169/169	175/175	155/170
															2	1	5.9	183/170	200/175	183/183	200/200	169/184		
															5	16.7/15.2	—	—	—	117/116	125/125	117/117	125/125	127/125
															2	1	5.9	129/128	150/150	129/129	150/150	140/139		
															—	—	—	125/123	150/150	125/125	150/150	135/133		
															2	1	5.9	137/134	150/150	137/137	150/150	149/147		
	460	414	506	15.4	104	15.4	104	15.4	104	6	0.25	0.7	—	—	10	30.8/28	2	1	5.9	144/140	150/150	144/144	150/150	157/153
															—	—	—	62	70	62	70	67		
															5	7.6	2	1	3.1	68	80	68	80	74
															—	—	—	65	80	65	80	71		
															7.5	11	2	1	3.1	71	80	71	80	78
															—	—	—	68	80	68	80	74		
													25	30	10	14	2	1	3.1	74	80	74	80	81
															—	—	—	68	80	68	80	74		
															5	7.6	2	1	3.1	62	70	62	70	67
															—	—	—	62	70	62	70	67		
															7.5	11	2	1	3.1	68	80	68	80	74
															—	—	—	65	80	65	80	71		
													50	60	10	14	2	1	3.1	71	80	71	80	78
															—	—	—	68	80	68	80	74		
															—	—	—	74	80	74	80	81		
															2	1	3.1	74	80	74	80	81		
															5	7.6	2	1	3.1	77	80	77	80	85
															—	—	—	74	80	74	80	82		
													75	90	7.5	11	2	1	3.1	82	90	82	90	89
															—	—	—	78	90	78	90	85		
															10	14	2	1	3.1	85	90	85	90	92
															—	—	—	100	110	100	125	112		
															5	7.6	2	1	3.1	107	125	107	125	119
															—	—	—	104	125	104	125	116		

See Legend and Notes on next page.

ELECTRICAL DATA

Units Without Optional Powered Convenience Outlet — 50PG20-28 (cont)

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST		POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE	
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA		MOCP
28	575	518	633	12.8	83	12.8	83	12.8	83	6	0.25	0.7	—	—	5	6.1	—	—	—	52	60	52	60	56
																	2	1	2.4	57	60	57	60	62
																	—	—	—	55	60	55	60	59
															7.5	9	2	1	2.4	60	60	60	60	65
																	—	—	—	57	60	57	60	62
																	2	1	2.4	62	70	62	70	67
															10	11	—	—	—	52	60	52	60	56
													2	1			2.4	57	60	57	60	62		
													—	—			—	55	60	55	60	59		
													24.8	24	7.5	9	2	1	2.4	60	60	60	60	65
																	—	—	—	57	60	57	60	62
																	2	1	2.4	62	70	62	70	67
													48.3	46	5	6.1	—	—	—	65	70	65	70	60
																	2	1	2.4	71	80	71	80	65
																	—	—	—	69	70	69	70	63
													78	75	7.5	9	2	1	2.4	75	80	75	80	69
																	—	—	—	71	80	71	80	66
																	2	1	2.4	77	80	77	80	71
													10	11	—	—	—	83	90	83	90	93		
															2	1	2.4	89	100	89	100	99		
															—	—	—	86	100	86	100	97		
													78	75	7.5	9	2	1	2.4	92	100	92	100	102
																	—	—	—	89	100	89	100	99
																	2	1	2.4	95	100	95	100	104

50PG

Electric Heat Branch Circuit For 208/240-V 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
28	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	156/180	175/200	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
28	208/240	187	253	28.2	208	28.2	208	28.2	208	6	0.25	1.5	56/75	156/180	5	16.7/15.2	—	—	—	177/199	200/225	199/199	200/225	199/224
																	2	1	5.9	192/214	200/225	214/214	225/225	212/238
																	—	—	—	186/208	200/225	208/208	225/225	207/232
																	2	1	5.9	201/222	225/225	222/222	225/225	221/246
																	—	—	—	195/215	225/225	215/215	225/225	215/239
																	2	1	5.9	209/230	225/250	230/230	250/250	228/253

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



* Fuse or HACR circuit breaker.

† 208/230 v 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

NOTES:

- 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.
- 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



$$\begin{aligned}
 &AB = 452 \text{ v} \\
 &BC = 464 \text{ v} \\
 &AC = 455 \text{ v} \\
 &\text{Average Voltage} = \frac{452 + 464 + 455}{3} \\
 &= \frac{1371}{3} \\
 &= 457
 \end{aligned}$$

Determine maximum deviation from average voltage.

$$(AB) 457 - 452 = 5 \text{ v}$$

$$(BC) 464 - 457 = 7 \text{ v}$$

$$(AC) 457 - 455 = 2 \text{ v}$$

Maximum deviation is 7 v.

Determine percent of voltage imbalance.

$$\begin{aligned}
 \% \text{ Voltage Imbalance} &= 100 \times \frac{7}{457} \\
 &= 1.53\%
 \end{aligned}$$

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.

- The 75-kW 208/240-v electric heat can be factory installed but it must be wired separately in the field.
- The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 600 v.
- MCA calculation for 50PG units with electric heaters over 50 kW is $1.25 \times (\text{IFM} + \text{Power Exhaust} + \text{Convenience Outlet FLA amps}) + 1.00 \times (\text{Electric Heater FLA})$.

Units With Optional Powered Convenience Outlet — 50PG03-07

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	—	Low	4.9	—	—	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
								High		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
										—	—	28.1/28.1	40/40	29/29	81/81
										10.8/12.5	2.3/ 3.0	28.1/29.5	40/40	29/29	81/81
								Low		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	40/40	29/29	81/81
										10.8/12.5	2.3/ 3.0	28.1/29.5	40/40	29/29	81/81
										17.3/20.0	3.8/ 5.0	35.5/38.9	40/40	33/36	81/81
High	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									
	—	—	30.0/30.0	45/45	30/30	102/102									
	10.8/12.5	2.3/ 3.0	30.0/30.0	45/45	30/30	102/102									
	17.3/20.0	3.8/ 5.0	33.8/37.1	45/45	31/34	102/102									
	26.0/30.0	5.6/ 7.5	44.6/49.6	45/50	41/46	102/102									
04	208/230-1-60	187	253	15.4	83	1.0	—	Low	4.9	10.8/12.5	2.3/ 3.0	30.0/30.0	45/45	30/30	102/102
										17.3/20.0	3.8/ 5.0	33.8/37.1	45/45	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	45/45	30/30	102/102
								High		10.8/12.5	2.3/ 3.0	30.0/30.0	45/45	30/30	102/102
										17.3/20.0	3.8/ 5.0	33.8/37.1	45/45	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	45/45	32/32	104/104
								Low		10.8/12.5	2.3/ 3.0	31.4/31.4	45/45	32/32	104/104
										17.3/20.0	3.8/ 5.0	35.5/38.9	45/45	33/36	104/104
										26.0/30.0	5.6/ 7.5	46.4/51.4	50/60	43/47	104/104
										34.7/40.0	7.5/10.0	57.3/63.9	60/70	53/59	104/104
										52.0/60.0	11.3/15.0	78.9/88.9	80/90	73/82	104/104
								High		—	—	31.4/31.4	45/45	32/32	104/104
										10.8/12.5	2.3/ 3.0	31.4/31.4	45/45	32/32	104/104
										17.3/20.0	3.8/ 5.0	35.5/38.9	45/45	33/36	104/104
										26.0/30.0	5.6/ 7.5	46.4/51.4	50/60	43/47	104/104
										34.7/40.0	7.5/10.0	57.3/63.9	60/70	53/59	104/104
										52.0/60.0	11.3/15.0	78.9/88.9	80/90	73/82	104/104
	208/230-3-60	187	253	11.5	77	1.0	—	Low	4.9	—	—	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
								High		—	—	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

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



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

† Fuse or HACR circuit breaker.

NOTES:

- 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.
- 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 230-3-60



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

Determine maximum deviation from average voltage.

$$(\text{AB}) 227 - 224 = 3 \text{ v}$$

$$(\text{BC}) 231 - 227 = 4 \text{ v}$$

$$(\text{AC}) 227 - 226 = 1 \text{ v}$$

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.

ELECTRICAL DATA

Units With Optional Powered Convenience Outlet — 50PG03-07 (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	
04 (cont)	208/230-3-60 (cont)	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		—	—	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		—	—	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	Low		—	—	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		—	—	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	
								High		—	—	9.7	15	10	39	
										9.2	10.0	16.3	20	15	39	
										13.9	15.0	22.1	25	20	39	
							1.4	Low		—	—	11.1	15	12	41	
										9.2	10.0	18.0	20	17	41	
										13.9	15.0	23.9	25	22	41	
								High		—	—	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	50/ 50	36/ 36	128/128	
										17.3/20.0	3.8/ 5.0	36.3/ 37.1	50/ 50	36/ 36	128/128	
										26.0/30.0	5.6/ 7.5	44.6/ 49.6	50/ 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		—	—	38.4/ 38.4	50/ 50	38/ 38	153/153	
										17.3/20.0	3.8/ 5.0	38.4/ 39.8	50/ 50	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	Low		—	—	37.7/ 37.7	50/ 50	37/ 37	130/130	
										17.3/20.0	3.8/ 5.0	37.7/ 38.9	50/ 50	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		—	—	39.8/ 39.8	60/ 60	40/ 40	155/155	
										17.3/20.0	3.8/ 5.0	39.8/ 41.5	60/ 60	40/ 40	155/155	
										26.0/30.0	5.6/ 7.5	49.0/ 54.0	60/ 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	40/40	29/29	110/110	
										10.0/11.5	3.8/ 5.0	30.9/33.8	40/40	29/29	110/110	
										15.0/17.3	5.6/ 7.5	30.9/33.8	40/40	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			—	—	29.3/29.3	40/40	29/29	128/128	
										10.0/11.5	3.8/ 5.0	29.3/29.3	40/40	29/29	128/128	
										15.0/17.3	5.6/ 7.5	31.3/34.1	40/40	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	
—	Low	4.9	—	—	30.4/30.4	40/40	31/31	112/112								
			10.0/11.5	3.8/ 5.0	30.4/30.4	40/40	31/31	112/112								
			15.0/17.3	5.6/ 7.5	32.6/35.5	40/40	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		—	—	30.7/30.7	45/45	31/31	130/130								
			10.0/11.5	3.8/ 5.0	30.7/30.7	45/45	31/31	130/130								
			15.0/17.3	5.6/ 7.5	33.0/35.9	45/45	31/33	130/130								
			20.0/23.1	7.5/10.0	39.3/43.1	45/45	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								

Units With Optional Powered Convenience Outlet — 50PG03-07 (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
05 (cont)	460-3-60	414	506	7.1	46	0.5	—	Low	2.1	—	—	13.7	20	14	55
										5.8	5.0	13.7	20	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	20	14	64	
									5.8	5.0	14.2	20	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	
						0.6		Low	2.1	—	—	14.3	20	14	56
										5.8	5.0	14.3	20	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	20	15	65
										5.8	5.0	14.8	20	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
	575-3-60	518	633	5.1	34	0.5	—	Low	2.1	—	—	10.7	15	11	42
										9.2	10.0	16.3	20	15	42
										13.9	15.0	22.1	25	20	42
										18.5	20.0	27.9	30	26	42
								High	2.0	—	—	10.6	15	11	48
										9.2	10.0	16.1	20	15	48
							13.9			15.0	22.0	25	20	48	
							18.5			20.0	27.8	30	26	48	
						1.4		Low	2.1	—	—	12.1	15	12	44
										9.2	10.0	18.0	20	17	44
										13.9	15.0	23.9	25	22	44
										18.5	20.0	29.6	30	27	44
								High	2.0	—	—	12.0	15	12	50
										9.2	10.0	17.9	20	16	50
										13.9	15.0	23.8	25	22	50
										18.5	20.0	29.5	30	27	50
06	208/230-1-60	187	253	26.9	145	1.5	—	Low	4.9	—	—	44.8/ 44.8	60/ 60	44/ 44	165/165
										17.3/ 20.0	3.8/ 5.0	44.8/ 44.8	60/ 60	44/ 44	165/165
										26.0/ 30.0	5.6/ 7.5	44.8/ 49.6	60/ 60	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
										86.7/100.0	18.8/25.0	120.5/137.1	125/150	111/126	165/165
								High	7.0	—	—	46.9/ 46.9	60/ 60	46/ 46	190/190
										17.3/ 20.0	3.8/ 5.0	46.9/ 46.9	60/ 60	46/ 46	190/190
										26.0/ 30.0	5.6/ 7.5	47.3/ 52.3	60/ 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
										86.7/100.0	18.8/25.0	123.1/139.8	125/150	113/129	190/190
						1.4		Low	4.9	—	—	46.2/ 46.2	60/ 60	45/ 45	167/167
										17.3/ 20.0	3.8/ 5.0	46.2/ 46.2	60/ 60	45/ 45	167/167
										26.0/ 30.0	5.6/ 7.5	46.4/ 51.4	60/ 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
										86.7/100.0	18.8/25.0	122.3/138.9	125/150	112/128	167/167
								High	7.0	—	—	48.3/ 48.3	60/ 60	48/ 48	192/192
										17.3/ 20.0	3.8/ 5.0	48.3/ 48.3	60/ 60	48/ 48	192/192
										26.0/ 30.0	5.6/ 7.5	49.0/ 54.0	60/ 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
										86.7/100.0	18.8/25.0	124.9/141.5	125/150	115/130	192/192

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



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

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.

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

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.

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

† Fuse or HACR circuit breaker.

NOTES:

- 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.
- 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.

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

ELECTRICAL DATA

Units With Optional Powered Convenience Outlet — 50PG03-07 (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	50/50	33/33	161/161	
										10.0/11.5	3.8/ 5.0	33.5/33.5	50/50	33/33	161/161	
										15.0/17.3	5.6/ 7.5	33.5/34.1	50/50	33/33	161/161	
										20.0/23.1	7.5/10.0	37.5/41.4	50/50	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	50/50	33/33	161/161	
							High	10.0/11.5		3.8/ 5.0	33.5/33.5	50/50	33/33	161/161		
								15.0/17.3		5.6/ 7.5	33.5/34.1	50/50	33/33	161/161		
								20.0/23.1		7.5/10.0	37.5/41.4	50/50	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	50/50	35/35	163/163		
								10.0/11.5		3.8/ 5.0	34.9/34.9	50/50	35/35	163/163		
							Low	15.0/17.3		5.6/ 7.5	34.9/35.9	50/50	35/35	163/163		
								20.0/23.1		7.5/10.0	39.3/43.1	50/50	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	50/50	35/35	163/163		
								10.0/11.5		3.8/ 5.0	34.9/34.9	50/50	35/35	163/163		
								15.0/17.3		5.6/ 7.5	34.9/35.9	50/50	35/35	163/163		
							High	20.0/23.1		7.5/10.0	39.3/43.1	50/50	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		
	—	—	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										
	Low	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									
	High	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									
	Low	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									
	460-3-60	414	506	9.6	62	0.8	—	Low	2.6	—	—	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	30	31	55	
								High		—	—	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	30	31	55	
							0.6	Low		—	—	13.5	20	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	30	32	57	
								High		—	—	13.5	20	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	30	32	57	
	575-3-60	518	633	6.1	40	0.8	—	Low	2.0	—	—	37.1/37.1	50/50	37/37	187/187	
										10.0/11.5	3.8/ 5.0	37.1/37.1	50/50	37/37	187/187	
										15.0/17.3	5.6/ 7.5	37.1/37.1	50/50	37/37	187/187	
										20.0/23.1	7.5/10.0	37.5/41.4	50/50	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		—	—	39.4/39.4	50/50	39/39	213/213	
										10.0/11.5	3.8/ 5.0	39.4/39.4	50/50	39/39	213/213	
										15.0/17.3	5.6/ 7.5	39.4/39.4	50/50	39/39	213/213	
							20.0/23.1			7.5/10.0	40.4/44.3	50/50	39/41	213/213		
							30.0/34.6			11.3/15.0	52.9/58.6	60/60	49/54	213/213		
							1.4	Low		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	
										—	—	39.4/39.4	50/50	39/39	213/213	
										10.0/11.5	3.8/ 5.0	39.4/39.4	50/50	39/39	213/213	
										15.0/17.3	5.6/ 7.5	39.4/39.4	50/50	39/39	213/213	
								High		20.0/23.1	7.5/10.0	40.4/44.3	50/50	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										
	—	—	39.4/39.4	50/50	39/39	213/213										
	07	208/230-3-60	187	253	20.5	149	1.5	—	Low	5.2	—	—	37.1/37.1	50/50	37/37	187/187
											10.0/11.5	3.8/ 5.0	37.1/37.1	50/50	37/37	187/187
15.0/17.3											5.6/ 7.5	37.1/37.1	50/50	37/37	187/187	
20.0/23.1											7.5/10.0	37.5/41.4	50/50	37/38	187/187	
30.0/34.6											11.3/15.0	50.0/55.8	60/60	46/51	187/187	
High	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										
	—	—	39.4/39.4	50/50	39/39	213/213										
	10.0/11.5	3.8/ 5.0	39.4/39.4	50/50	39/39	213/213										
	15.0/17.3	5.6/ 7.5	39.4/39.4	50/50	39/39	213/213										

50PG

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

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.

Example: Supply voltage is 230-3-60



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

Determine maximum deviation from average voltage.

(AB) $227 - 224 = 3 \text{ v}$

(BC) $231 - 227 = 4 \text{ v}$

(AC) $227 - 226 = 1 \text{ v}$

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.

ELECTRICAL DATA

Units With Optional Powered Convenience Outlet — 50PG08-14

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
08	208/230-3-60	187	253	13.5	88	2	1.5	—	Low	5.2	—	—	43.4/ 43.4	50/ 50	46/ 46	217/217
											20.0/23.1	7.5/10.0	43.4/ 43.4	50/ 50	46/ 46	217/217
											30.0/34.6	11.3/15.0	50.0/ 55.8	60/ 60	46/ 51	217/217
											50.0/57.7	18.8/25.0	75.0/ 84.6	80/ 90	69/ 78	217/217
											70.0/80.8	26.3/35.0	100.0/113.5	110/125	92/104	217/217
											80.0/92.4	30.0/40.0	112.5/128.0	125/150	104/118	217/217
											—	—	45.7/ 45.7	50/ 50	49/ 49	243/243
											20.0/23.1	7.5/10.0	45.7/ 45.7	50/ 50	49/ 49	243/243
											30.0/34.6	11.3/15.0	52.9/ 58.6	60/ 60	49/ 54	243/243
											50.0/57.7	18.8/25.0	77.9/ 87.5	80/ 90	72/ 81	243/243
											70.0/80.8	26.3/35.0	102.9/116.4	110/125	95/107	243/243
											80.0/92.4	30.0/40.0	115.4/130.9	125/150	106/120	243/243
									High	7.5	—	—	46.4/ 46.4	50/ 50	49/ 49	221/221
											20.0/23.1	7.5/10.0	46.4/ 46.4	50/ 50	49/ 49	221/221
											30.0/34.6	11.3/15.0	53.8/ 59.5	60/ 60	49/ 55	221/221
											50.0/57.7	18.8/25.0	78.8/ 88.4	80/ 90	72/ 81	221/221
											70.0/80.8	26.3/35.0	103.8/117.3	110/125	95/108	221/221
											80.0/92.4	30.0/40.0	116.3/131.8	125/150	107/121	221/221
								3.0	Low	5.2	—	—	48.7/ 48.7	60/ 60	52/ 52	247/247
											20.0/23.1	7.5/10.0	48.7/ 48.7	60/ 60	52/ 52	247/247
											30.0/34.6	11.3/15.0	56.6/ 62.4	60/ 70	52/ 57	247/247
											50.0/57.7	18.8/25.0	81.6/ 91.3	90/100	75/ 84	247/247
											70.0/80.8	26.3/35.0	106.6/120.1	110/125	98/111	247/247
											80.0/92.4	30.0/40.0	119.1/134.6	125/150	110/124	247/247
	460-3-60	414	506	6.4	39	2	0.8	—	Low	2.6	—	—	20.8	25	22	99
											11.5	10.0	20.8	25	22	99
											17.3	15.0	27.6	30	25	99
											28.9	25.0	42.1	45	39	99
											40.4	35.0	56.5	60	52	99
											46.2	40.0	63.8	70	59	99
									High	3.4	—	—	21.6	25	23	112
											11.5	10.0	21.6	25	23	112
											17.3	15.0	28.6	30	26	112
											28.9	25.0	43.1	45	40	112
											40.4	35.0	57.5	60	53	112
											46.2	40.0	64.8	70	60	112
								1.2	Low	2.6	—	—	22.0	25	23	102
											11.5	10.0	22.0	25	23	102
											17.3	15.0	29.1	30	27	102
											28.9	25.0	43.6	45	40	102
											40.4	35.0	58.0	60	53	102
											46.2	40.0	65.3	70	60	102
									High	3.4	—	—	22.8	25	24	115
											11.5	10.0	22.9	25	24	115
											17.3	15.0	30.1	35	28	115
											28.9	25.0	44.6	45	41	115
											40.4	35.0	59.0	60	54	115
											46.2	40.0	66.3	70	61	115

50PG

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



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

NOTES:

- 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.
- 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 230-3-60



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

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.

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

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.

- Single point kits CRSINGLE028A00 and CRSINGLE031A00 are not required if field-supplied pressure connectors are used. Factory-installed heaters contain terminal blocks when combined MOCP is greater than 60 amps.

50PG

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
08 (cont)	575-3-60	518	633	5.1	34	2	0.8	—	Low	2.0	—	—	16.8	20	18	85
											13.9	15.0	22.0	25	20	85
											23.1	25.0	33.5	35	31	85
											32.3	35.0	45.0	50	41	85
									37.0	40.0	50.9	60	47	85		
									High	2.8	—	—	17.6	20	19	96
											13.9	15.0	23.0	25	21	96
											23.1	25.0	34.5	35	32	96
								32.3			35.0	46.0	50	42	96	
								3.0	Low	2.0	37.0	40.0	51.9	60	48	96
											—	—	19.8	25	21	89
											13.9	15.0	25.8	30	24	89
											23.1	25.0	37.3	40	34	89
									High	2.8	32.3	35.0	48.8	50	45	89
											37.0	40.0	54.6	60	50	89
											—	—	20.6	25	22	100
13.9	15.0	26.8	30	25	100											
3.0	High	2.8	23.1	25.0	38.3	40	35	100								
			32.3	35.0	49.8	50	46	100								
			37.0	40.0	55.6	60	51	100								
			—	—	55.6	60	51	100								

09	208/230-3-60	187	253	16.0	91	2	1.5	—	Low	5.2	—	—	49.0/ 49.0	60/ 60	52/ 52	223/223
											20.0/23.1	7.5/10.0	49.0/ 49.0	60/ 60	52/ 52	223/223
											30.0/34.6	11.3/15.0	50.0/ 55.8	60/ 60	52/ 52	223/223
											50.0/57.7	18.8/25.0	75.0/ 84.6	80/ 90	69/ 78	223/223
											70.0/80.8	26.3/35.0	100.0/113.5	110/125	92/104	223/223
											80.0/92.4	30.0/40.0	112.5/128.0	125/150	104/118	223/223
									High	10.2	—	—	54.0/ 54.0	60/ 60	58/ 58	266/266
											20.0/23.1	7.5/10.0	54.0/ 54.0	60/ 60	58/ 58	266/266
											30.0/34.6	11.3/15.0	56.3/ 62.0	60/ 70	58/ 58	266/266
											50.0/57.7	18.8/25.0	81.3/ 90.9	90/100	75/ 84	266/266
											70.0/80.8	26.3/35.0	106.3/119.8	110/125	98/110	266/266
											80.0/92.4	30.0/40.0	118.8/134.3	125/150	109/124	266/266
								3.0	Low	5.2	—	—	52.0/ 52.0	60/ 60	55/ 55	227/227
											20.0/23.1	7.5/10.0	52.0/ 52.0	60/ 60	55/ 55	227/227
											30.0/34.6	11.3/15.0	53.8/ 59.5	60/ 60	55/ 55	227/227
											50.0/57.7	18.8/25.0	78.8/ 88.4	80/ 90	72/ 81	227/227
											70.0/80.8	26.3/35.0	103.8/117.3	110/125	95/108	227/227
											80.0/92.4	30.0/40.0	116.3/131.8	125/150	107/121	227/227
									High	10.2	—	—	57.0/ 57.0	70/ 70	61/ 61	270/270
											20.0/23.1	7.5/10.0	57.0/ 57.0	70/ 70	61/ 61	270/270
											30.0/34.6	11.3/15.0	60.0/ 65.8	70/ 70	61/ 61	270/270
											50.0/57.7	18.8/25.0	85.0/ 94.6	90/100	78/ 87	270/270
											70.0/80.8	26.3/35.0	110.0/123.5	125/125	101/114	270/270
											80.0/92.4	30.0/40.0	122.5/138.0	125/150	113/127	270/270
	460-3-60	414	506	7.1	46	2	0.8	—	Low	2.6	—	—	22.4	25	24	113
											11.5	10.0	22.4	25	24	113
											17.3	15.0	27.6	30	25	113
											28.9	25.0	42.1	45	39	113
											40.4	35.0	56.5	60	52	113
											46.2	40.0	63.8	70	59	113
								High	4.8	—	—	24.6	30	26	135	
										11.5	10.0	24.6	30	26	135	
										17.3	15.0	30.4	35	28	135	
										28.9	25.0	44.9	45	41	135	
										40.4	35.0	59.3	60	55	135	
										46.2	40.0	66.5	70	61	135	
	575-3-60	518	633	5.6	37	2	0.8	—	Low	2.0	—	—	17.9	20	19	91
											13.9	15.0	22.0	25	20	91
											23.1	25.0	33.5	35	31	91
											32.3	35.0	45.0	50	41	91
											37.0	40.0	50.9	60	47	91
											—	—	18.7	25	20	102
								High	2.8	13.9	15.0	23.0	25	21	102	
										23.1	25.0	34.5	35	32	102	
										32.3	35.0	46.0	50	42	102	
										37.0	40.0	51.9	60	48	102	
										—	—	20.9	25	22	95	
										13.9	15.0	25.8	30	24	95	
3.0	Low	2.0	23.1	25.0	37.3	40	34	95								
			32.3	35.0	48.8	50	45	95								
			37.0	40.0	54.6	60	50	95								
			—	—	54.6	60	50	95								
			—	—	21.7	25	23	106								
			13.9	15.0	26.8	30	25	106								
	High	2.8	23.1	25.0	38.3	40	35	106								
			32.3	35.0	49.8	50	46	106								
			37.0	40.0	55.6	60	51	106								
			—	—	55.6	60	51	106								
			—	—	55.6	60	51	106								
			—	—	55.6	60	51	106								

See Legend and Notes on next page.

ELECTRICAL DATA

Units With Optional Powered Convenience Outlet — 50PG08-14 (cont)

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
12	208/230-3-60	187	253	17.6	123	2	1.9	—	Low	7.5	—	—	55.7/ 55.7	70/ 70	59/ 59	315/315
											20.0/ 23.1	7.5/10.0	55.7/ 55.7	70/ 70	59/ 59	315/315
											30.0/ 34.6	11.3/15.0	55.7/ 58.6	70/ 70	59/ 59	315/315
											50.0/ 57.7	18.8/25.0	77.9/ 87.5	80/ 90	72/ 81	315/315
											70.0/ 80.8	26.3/35.0	102.9/116.4	110/125	95/107	315/315
											80.0/ 92.4	30.0/40.0	115.4/130.9	125/150	106/120	315/315
											100.1/115.5	37.6/50.0	140.5/130.9	150/150	129/147	315/315
											—	—	58.4/ 58.4	70/ 70	62/ 62	332/332
									High	10.2	20.0/ 23.1	7.5/10.0	58.4/ 58.4	70/ 70	62/ 62	332/332
											30.0/ 34.6	11.3/15.0	58.4/ 62.0	70/ 70	62/ 62	332/332
											50.0/ 57.7	18.8/25.0	81.3/ 90.9	90/100	75/ 84	332/332
											70.0/ 80.8	26.3/35.0	106.3/119.8	110/125	98/110	332/332
											80.0/ 92.4	30.0/40.0	118.8/134.3	125/150	109/124	332/332
											100.1/115.5	37.6/50.0	143.9/134.3	150/150	132/150	332/332
								3.0	Low	7.5	—	—	58.7/ 58.7	70/ 70	62/ 62	319/319
											20.0/ 23.1	7.5/10.0	58.7/ 58.7	70/ 70	62/ 62	319/319
											30.0/ 34.6	11.3/15.0	58.7/ 62.4	70/ 70	62/ 62	319/319
											50.0/ 57.7	18.8/25.0	81.6/ 91.3	90/100	75/ 84	319/319
											70.0/ 80.8	26.3/35.0	106.6/120.1	110/125	98/111	319/319
											80.0/ 92.4	30.0/40.0	119.1/134.6	125/150	110/124	319/319
											100.1/115.5	37.6/50.0	144.3/134.6	150/150	133/150	319/319
									High	10.2	—	—	61.4/ 61.4	70/ 70	66/ 66	336/336
											20.0/ 23.1	7.5/10.0	61.4/ 61.4	70/ 70	66/ 66	336/336
											30.0/ 34.6	11.3/15.0	61.4/ 65.8	70/ 70	66/ 66	336/336
											50.0/ 57.7	18.8/25.0	85.0/ 94.6	90/100	78/ 87	336/336
											70.0/ 80.8	26.3/35.0	110.0/123.5	125/125	101/114	336/336
											80.0/ 92.4	30.0/40.0	122.5/138.0	125/150	113/127	336/336
											100.1/115.5	37.6/50.0	147.6/138.0	150/150	136/154	336/336
	460-3-60	414	506	9.6	62	2	1.0	—	Low	3.4	—	—	24.9	30	26	134
											11.5	10.0	24.9	30	26	134
											17.3	15.0	28.6	30	26	134
											28.9	25.0	43.1	45	40	134
											40.4	35.0	57.5	60	53	134
											46.2	40.0	64.8	70	60	134
											57.7	50.0	64.7	70	73	134
									High	4.8	—	—	26.3	30	28	143
											11.5	10.0	26.3	30	28	143
											17.3	15.0	30.4	35	28	143
											28.9	25.0	44.9	45	41	143
											40.4	35.0	59.3	60	55	143
											46.2	40.0	66.5	70	61	143
											57.7	50.0	66.5	80	74	143
								1.2	Low	3.4	—	—	26.1	30	28	137
											11.5	10.0	26.1	30	28	137
											17.3	15.0	30.1	35	28	137
											28.9	25.0	44.6	45	41	137
											40.4	35.0	59.0	60	54	137
											46.2	40.0	66.3	70	61	137
											57.7	50.0	66.2	70	74	137
									High	4.8	—	—	27.5	30	29	146
											11.5	10.0	27.5	30	29	146
											17.3	15.0	31.9	35	29	146
											28.9	25.0	46.4	50	43	146
											40.4	35.0	60.8	70	56	146
											46.2	40.0	68.0	70	63	146
											57.7	50.0	68.0	80	76	146
	575-3-60	518	633	6.1	40	2	0.8	—	Low	2.8	—	—	19.8	25	21	108
											13.9	15.0	23.0	25	21	108
											23.1	25.0	34.5	35	32	108
											32.3	35.0	46.0	50	42	108
											37.0	40.0	51.9	60	48	108
											46.2	50.0	51.8	60	58	108
									High	2.8	—	—	19.8	25	21	108
											13.9	15.0	23.0	25	21	108
											23.1	25.0	34.5	35	32	108
											32.3	35.0	46.0	50	42	108
											37.0	40.0	51.9	60	48	108
											46.2	50.0	51.8	60	58	108

50PG

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



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

NOTES:

- 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.
- 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 230-3-60



$$\begin{aligned} AB &= 224 \text{ v} \\ BC &= 231 \text{ v} \\ AC &= 226 \text{ v} \\ \text{$$

50PG

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR (Each)		OFM		POWER EXHAUST FLA	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE			
		Min	Max	RLA	LRA	Qty	FLA				FLA	Nominal kW*	MCA	MOCP†	FLA	LRA		
12 (cont)	575-3-60 (cont)	518	633	6.1	40	2	0.8	3.0	Low	2.8	—	—	22.8	25	24	112		
											13.9	15.0	26.8	30	25	112		
											23.1	25.0	38.3	40	35	112		
											32.3	35.0	49.8	50	46	112		
											37.0	40.0	55.6	60	51	112		
									46.2		50.0	55.6	60	62	112			
									High		—	—	22.8	25	24	112		
											13.9	15.0	26.8	30	25	112		
											23.1	25.0	38.3	40	35	112		
											32.3	35.0	49.8	50	46	112		
37.0	40.0	55.6	60	51	112													
46.2	50.0	55.6	60	62	112													
14	208/230-3-60	187	253	22.4	149	2	1.9	—	Low	10.2	—	—	69.2/ 69.2	90/ 90	73/ 73	384/384		
											20.0/ 23.1	7.5/10.0	69.2/ 69.2	90/ 90	73/ 73	384/384		
											30.0/ 34.6	11.3/15.0	69.2/ 69.2	90/ 90	73/ 73	384/384		
											50.0/ 57.7	18.8/25.0	81.3/ 90.9	90/100	75/ 84	384/384		
											70.0/ 80.8	26.3/35.0	106.3/119.8	110/125	98/110	384/384		
											100.1/115.5	37.6/50.0	143.9/134.3	150/150	132/150	384/384		
									120.1/138.6		45.1/60.0	168.9/157.4	175/175	155/177	384/384			
									High		—	—	74.0/ 74.0	90/ 90	79/ 79	393/393		
											20.0/ 23.1	7.5/10.0	74.0/ 74.0	90/ 90	79/ 79	393/393		
											30.0/ 34.6	11.3/15.0	74.0/ 74.0	90/ 90	79/ 79	393/393		
											50.0/ 57.7	18.8/25.0	87.3/ 96.9	90/100	80/ 89	393/393		
											70.0/ 80.8	26.3/35.0	112.3/125.8	125/150	103/116	393/393		
								100.1/115.5			37.6/50.0	149.9/140.3	150/150	138/156	393/393			
								120.1/138.6	45.1/60.0		174.9/163.4	175/175	161/182	393/393				
								3.0	Low		10.2	—	—	72.2/ 72.2	90/ 90	77/ 77	388/388	
												20.0/ 23.1	7.5/10.0	72.2/ 72.2	90/ 90	77/ 77	388/388	
												30.0/ 34.6	11.3/15.0	72.2/ 72.2	90/ 90	77/ 77	388/388	
												50.0/ 57.7	18.8/25.0	85.0/ 94.6	90/100	78/ 87	388/388	
												70.0/ 80.8	26.3/35.0	110.0/123.5	125/125	101/114	388/388	
												100.1/115.5	37.6/50.0	147.6/138.0	150/150	136/154	388/388	
									120.1/138.6			45.1/60.0	172.6/161.1	175/175	159/180	388/388		
									High			15.0	—	—	77.0/ 77.0	90/ 90	82/ 82	397/397
													20.0/ 23.1	7.5/10.0	77.0/ 77.0	90/ 90	82/ 82	397/397
													30.0/ 34.6	11.3/15.0	77.0/ 77.0	90/ 90	82/ 82	397/397
	50.0/ 57.7	18.8/25.0	91.0/100.6	100/110	84/ 93	397/397												
	70.0/ 80.8	26.3/35.0	116.0/129.5	125/150	107/119	397/397												
	100.1/115.5	37.6/50.0	153.6/144.0	175/150	141/159	397/397												
	120.1/138.6	45.1/60.0	178.6/167.1	200/175	164/186	397/397												
	—	Low	4.8	—	—	32.9	40	35	193									
				11.5	10.0	32.9	40	35	193									
				17.3	15.0	32.9	40	35	193									
				28.9	25.0	44.9	45	41	193									
				40.4	35.0	59.3	60	55	193									
				57.7	50.0	66.5	80	74	193									
		69.3		60.0	78.1	90	88	193										
		High		7.4	—	—	35.5	45	38	197								
					11.5	10.0	35.5	45	38	197								
					17.3	15.0	35.5	45	38	197								
					28.9	25.0	48.1	50	44	197								
					40.4	35.0	62.5	70	58	197								
	57.7		50.0		69.7	80	77	197										
	69.3	60.0	81.3		90	91	197											
	1.2	Low	4.8		—	—	34.1	40	36	196								
					11.5	10.0	34.1	40	36	196								
					17.3	15.0	34.1	40	36	196								
					28.9	25.0	46.4	50	43	196								
					40.4	35.0	60.8	70	56	196								
				57.7	50.0	68.0	80	76	196									
69.3		60.0		79.6	90	89	196											
High		7.4		—	—	36.7	45	39	200									
				11.5	10.0	36.7	45	39	200									
				17.3	15.0	36.7	45	39	200									
				28.9	25.0	49.6	50	46	200									
				40.4	35.0	64.0	70	59	200									
	57.7		50.0	71.2	80	79	200											
69.3	60.0		82.8	90	92	200												
575-3-60	518		633	7.7	54	2	0.8	—	Low	2.8	—	—	23.4	30	25	136		
											13.9	15.0	23.4	30	25	136		
											23.1	25.0	34.5	35	32	136		
											32.3	35.0	46.0	50	42	136		
											37.0	40.0	51.9	60	48	136		
		46.2									50.0	51.8	60	58	136			
		55.4							60.0		61.0	70	69	136				
		High							5.6		—	—	26.2	30	28	150		
											13.9	15.0	26.5	30	28	150		
											23.1	25.0	38.0	40	35	150		
											32.3	35.0	49.5	50	46	150		
											37.0	40.0	55.4	60	51	150		
	46.2		50.0	55.3	60	62	150											
	55.4	60.0	64.5	70	72	150												
	3.0	Low	2.8	—	—	26.4	30	28			140							
				13.9	15.0	26.8	30	28			140							
				23.1	25.0	38.3	40	35			140							
				32.3	35.0	49.8	50	46			140							
				37.0	40.0	55.6	60	51			140							
				46.2	50.0	55.6	60	62	140									
		55.4		60.0	64.8	70	72	140										
		High		5.6	—	—	29.2	35	31		154							
					13.9	15.0	30.3	35	31		154							
					23.1	25.0	41.8	45	38		154							
32.3					35.0	53.3	60	49	154									
37.0					40.0	59.1	60	54	154									
46.2	50.0		59.1		60	65	154											
55.4	60.0	68.3	70		76	154												

See Legend and Notes on next page.

ELECTRICAL DATA

Units With Optional Powered Convenience Outlet — 50PG16

UNIT 50PG	NOMINAL POWER SUPPLY Volts-Ph-Hz	VOLTAGE RANGE		COMPRESSOR						OFM		POWER EXHAUST FLA (ea)	IFM TYPE	IFM FLA	ELECTRIC HEAT		POWER SUPPLY		DISCONNECT SIZE	
				No. 1		No. 2		No. 3							FLA	Nominal kW*	MCA	MOCP†	FLA	LRA
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	FLA (ea)									
16	208/230-3-60	187	253	18.1	137	18.1	137	17.6	123	3	1.9	—	Low	10.2	—	—	79.0/ 79.0	90/ 90	86/ 86	487/487
															52.1/ 60.1	18.8/25.0	83.9/ 93.9	90/100	86/ 86	487/487
															104.2/120.3	37.6/50.0	149.0/139.1	150/150	137/156	487/487
															156.3/180.4	56.3/75.0	175.1/199.2	200/225	197/225	487/487
															—	—	83.8/ 83.8	100/100	91/ 91	496/496
															52.1/ 60.1	18.8/25.0	89.9/ 99.9	100/100	91/ 92	496/496
		Mid-Low	15.0	104.2/120.3	37.6/50.0	155.0/145.1	175/175	143/161	496/496											
				156.3/180.4	56.3/75.0	181.1/205.2	200/225	203/230	496/496											
				—	—	88.6/ 88.6	100/100	96/ 96	534/534											
				52.1/ 60.1	18.8/25.0	95.4/105.4	100/110	96/ 97	534/534											
				104.2/120.3	37.6/50.0	160.5/150.6	175/175	148/166	534/534											
				156.3/180.4	56.3/75.0	186.6/210.7	200/250	208/235	534/534											
	3.0	Low	10.2	—	—	82.0/ 82.0	100/100	89/ 89	491/491											
				52.1/ 60.1	18.8/25.0	87.6/ 97.6	100/100	89/ 90	491/491											
				104.2/120.3	37.6/50.0	152.8/142.8	175/175	141/159	491/491											
				156.3/180.4	56.3/75.0	178.8/202.9	200/225	200/228	491/491											
				—	—	86.8/ 86.8	100/100	95/ 95	500/500											
				52.1/ 60.1	18.8/25.0	93.6/103.6	100/110	95/ 95	500/500											
		Mid-Low	15.0	104.2/120.3	37.6/50.0	158.8/148.8	175/175	146/165	500/500											
				156.3/180.4	56.3/75.0	184.8/208.9	200/225	206/234	500/500											
				—	—	91.6/ 91.6	100/100	100/100	538/538											
				52.1/ 60.1	18.8/25.0	99.1/109.1	100/110	100/100	538/538											
				104.2/120.3	37.6/50.0	164.3/154.3	175/175	151/170	538/538											
				156.3/180.4	56.3/75.0	190.3/214.4	200/250	211/239	538/538											
	—	Low	4.8	—	—	38.0	45	41	219											
				30.1	25.0	46.4	50	43	219											
				60.1	50.0	68.9	80	77	219											
				90.2	75.0	99.0	100	112	219											
				—	—	40.6	45	44	223											
				30.1	25.0	49.6	50	46	223											
		Mid-Low	7.4	60.1	50.0	72.1	80	80	223											
				90.2	75.0	102.2	110	115	223											
				—	—	43.0	50	47	242											
				30.1	25.0	52.5	60	48	242											
				60.1	50.0	75.0	80	83	242											
				90.2	75.0	105.1	125	117	242											
	1.2	Low	4.8	—	—	39.2	45	42	222											
				30.1	25.0	47.9	50	44	222											
				60.1	50.0	70.4	80	79	222											
				90.2	75.0	100.5	110	113	222											
				—	—	41.8	50	45	226											
				30.1	25.0	51.1	60	47	226											
		Mid-Low	7.4	60.1	50.0	73.6	80	82	226											
				90.2	75.0	103.7	125	116	226											
				—	—	44.2	50	48	245											
				30.1	25.0	54.0	60	50	245											
				60.1	50.0	76.5	80	84	245											
				90.2	75.0	106.6	125	119	245											
575-3-60	—	Low	2.8	—	—	28.3	35	31	170											
				24.1	25.0	35.8	40	33	170											
				46.2	50.0	51.8	60	58	170											
				72.2	75.0	77.8	90	88	170											
				—	—	31.1	35	34	184											
				24.1	25.0	39.3	40	36	184											
		Mid-Low	5.6	46.2	50.0	55.3	60	62	184											
				72.2	75.0	81.3	90	91	184											
				—	—	33.6	40	36	199											
				24.1	25.0	42.0	45	39	199											
				46.2	50.0	58.1	60	64	199											
				72.2	75.0	84.1	100	94	199											
	High	7.8	—	—	31.3	35	34	174												
			24.1	25.0	39.5	40	36	174												
			46.2	50.0	55.6	60	62	174												
			72.2	75.0	81.6	90	92	174												
			—	—	34.1	40	37	188												
			24.1	25.0	43.0	45	40	188												
	3.0	Mid-Low	5.6	46.2	50.0	59.1	60	65	188											
				72.2	75.0	85.1	90	95	188											
				—	—	36.6	40	40	203											
				24.1	25.0	45.8	50	42	203											
				46.2	50.0	61.8	70	68	203											
				72.2	75.0	87.8	100	97	203											
High		7.8	—	—	36.6	40	40	203												
			24.1	25.0	45.8	50	42	203												
			46.2	50.0	61.8	70	68	203												
			72.2	75.0	87.8	100	97	203												
			—	—	36.6	40	40	203												
			24.1	25.0	45.8	50	42	203												

50PG

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



*Heater capacity (kW) is based on heater voltage of 208 v, 240 v, 480 v or 600 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. 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.

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

Example: Supply voltage is 230-3-60


$$\begin{aligned} AB &= 224 \text{ v} \\ BC &= 231 \text{ v} \\ AC &= 226 \text{ v} \end{aligned}$$

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

Determine maximum deviation from average voltage.

(AB) $227 - 224 = 3 \text{ v}$

(BC) $231 - 227 = 4 \text{ V}$

(AC) $227 - 226 = 1 \text{ V}$

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.

Units With Optional Powered Convenience Outlet — 50PG20-28

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCPS*	MCA	MOCPS	FLA
20	208/230	187	253	28.2	208	28.2	208	—	—	4	0.25	1.5	—	—	3.7	10.6/9.6	—	—	—	85/ 84	100/100	85/ 85	100/100	90/ 89
																	2	1	5.9	97/ 96	100/100	97/ 97	100/100	103/102
																	—	—	—	91/ 90	100/100	91/ 91	100/100	97/ 95
																	2	1	5.9	103/101	125/125	103/103	125/125	110/109
															7.5	24.2/22	—	—	—	99/ 96	100/100	99/ 99	100/100	105/103
																	2	1	5.9	110/108	125/125	110/110	125/125	119/116
																	—	—	—	106/102	125/125	106/106	125/125	113/110
															10	30.8/28	—	—	—	118/114	125/125	118/118	125/125	127/123
																	2	1	5.9	118/114	125/125	118/118	125/125	127/123
													19/25	52/ 60	3.7	10.6/9.6	—	—	—	85/ 93	100/100	93/ 93	100/100	90/ 89
																	2	1	5.9	99/108	100/110	108/108	125/125	103/102
																	—	—	—	92/100	100/110	100/100	125/125	97/ 95
																	2	1	5.9	107/115	125/125	115/115	125/125	110/109
																	—	—	—	102/109	125/110	109/109	125/125	105/103
																	2	1	5.9	116/124	125/125	124/124	125/125	119/116
																	—	—	—	110/116	125/125	116/116	125/125	113/110
															10	30.8/28	2	1	5.9	125/131	125/150	131/131	150/150	127/123
																	—	—	—	150/138	150/150	150/150	150/150	138/155
													38/50	104/120	3.7	10.6/ 9.6	—	—	—	164/153	175/175	164/164	175/175	151/168
																	2	1	5.9	157/145	175/150	157/157	175/175	145/161
																	—	—	—	172/160	175/175	172/172	175/175	158/175
																	2	1	5.9	167/154	175/175	167/167	175/175	153/169
																	—	—	—	181/169	200/175	181/181	200/200	167/183
																	2	1	5.9	175/161	175/175	175/175	175/175	161/176
															10	30.8/28	2	1	5.9	190/176	200/200	190/190	200/200	174/190
																	—	—	—	85/ 84	100/100	85/ 85	100/100	90/ 89
	56/75	156/180	3.7	10.6/9.6	—	—	—	97/ 96	100/100	97/ 97	100/100	103/102												
					2	1	5.9	91/ 90	100/100	91/ 91	100/100	97/ 95												
					—	—	—	103/101	125/125	103/103	125/125	110/109												
					2	1	5.9	99/ 96	100/100	99/ 99	100/100	105/103												
			7.5	24.2/22	2	1	5.9	110/108	125/125	110/110	125/125	119/116												
					—	—	—	106/102	125/125	106/106	125/125	113/110												
					2	1	5.9	118/114	125/125	118/118	125/125	127/123												
					—	—	—	45	60	45	60	48												
			5	7.6	2	1	3.1	51	60	51	60	55												
					—	—	—	48	60	48	60	51												
					2	1	3.1	54	60	54	60	58												
					—	—	—	51	60	51	60	55												
	7.5	11	2	1	3.1	58	60	58	60	62														
			—	—	—	54	60	54	60	58														
			2	1	3.1	61	70	61	70	65														
			—	—	—	47	60	47	60	48														
	25	30	3.7	4.8	—	—	—	55	60	55	60	55												
					2	1	3.1	51	60	51	60	51												
					—	—	—	59	60	59	60	58												
					2	1	3.1	55	60	55	60	55												
			7.5	7.6	2	1	3.1	63	70	63	70	62												
					—	—	—	59	60	59	60	58												
					2	1	3.1	67	70	67	70	65												
—					—	—	70	80	70	80	78													
50	60	3.7	4.8	—	—	—	78	80	78	80	85													
				2	1	3.1	73	80	73	80	81													
				—	—	—	81	90	81	90	88													
				2	1	3.1	85	90	85	90	92													
		7.5	11	2	1	3.1	89	100	89	100	96													
				—	—	—	81	90	81	90	89													
				2	1	3.1	89	100	89	100	96													
				—	—	—	100	110	100	125	112													
		10	14	2	1	3.1	108	125	108	125	120													
				—	—	—	103	125	103	125	116													
				2	1	3.1	111	125	111	125	123													
				—	—	—	108	125	108	125	120													
75	90	3.7	4.8	—	—	—	111	125	111	125	123													
				2	1	3.1	115	125	115	125	127													
				—	—	—	111	125	111	125	123													
				2	1	3.1	119	125	119	125	130													

ELECTRICAL DATA

Units With Optional Powered Convenience Outlet — 50PG20-28 (cont)

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP		FLA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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50PG

Electric Heat Branch Circuit For 208/240-V 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST		POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3															
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP
20	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	156/180	175/200	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE	
				No. 1		No. 2		No. 3																	
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA	
20	208/240	187	253	28.2	208	28.2	208	—	—	4	0.25	1.5	56/75	156/180	3.7	10.6/ 9.6	—	—	—	176/198	200/225	198/198	200/225	197/224	
																	2	1	5.9	190/213	200/225	213/213	225/225	211/237	
																5	16.7/15.2	—	—	—	183/205	200/225	205/205	225/225	204/230
																		2	1	5.9	198/220	200/225	220/220	225/225	218/244
															7.5	24.2/22	—	—	—	193/214	200/225	214/214	225/225	213/238	
																	2	1	5.9	207/229	225/250	229/229	250/250	227/252	
																10	30.8/28	—	—	—	201/221	225/225	221/221	225/225	221/245
																		2	1	5.9	216/236	225/250	236/236	250/250	234/259

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 460-3-60



$$\begin{aligned}
 AB &= 452 \text{ v} \\
 BC &= 464 \text{ v} \\
 AC &= 455 \text{ v} \\
 \text{Average Voltage} &= \frac{452 + 464 + 455}{3} \\
 &= \frac{1371}{3} \\
 &= 457
 \end{aligned}$$

Determine maximum deviation from average voltage.

- (AB) 457 – 452 = 5 v
- (BC) 464 – 457 = 7 v
- (AC) 457 – 455 = 2 v

Maximum deviation is 7 v.

Determine percent of voltage imbalance.

$$\begin{aligned}
 \% \text{ Voltage Imbalance} &= 100 \times \frac{7}{457} \\
 &= 1.53\%
 \end{aligned}$$

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.

- The 75-kW 208/240-v electric heat can be factory installed but it must be wired separately in the field.
- The convenience outlet full load amps (FLA) are 5, 3 and 3 for 208/230, 460, 575–v units, respectively.
- The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 600 v.
- MCA calculation for 50PG units with electric heaters over 50 kW is = 1.25 x (IFM + Power Exhaust + Convenience Outlet FLA amps) + 1.00 x (Electric Heater FLA).

* Fuse or HACR circuit breaker.

† 208/230 v 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

NOTES:

- 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.
- 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.

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

50PG

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
24	208/230	187	253	32.1	240	32.1	240	—	—	6	0.25	1.5	—	—	3.7	10.6/ 9.6	—	—	—	97/ 96	100/100	97/ 97	100/100	102/101
															2	1	5.9	109/108	125/125	109/109	125/125	116/115		
															—	—	—	103/101	125/125	103/103	125/125	109/107		
															5	16.7/15.2	2	1	5.9	115/113	125/125	115/115	125/125	123/121
															—	—	—	110/108	125/125	110/110	125/125	118/115		
															7.5	24.2/22	2	1	5.9	122/120	150/150	122/122	150/150	131/129
															—	—	—	117/114	125/125	117/117	125/125	125/122		
															10	30.8/28	2	1	5.9	129/126	150/150	129/129	150/150	139/136
															—	—	—	97/ 96	100/100	97/ 97	100/100	102/101		
															3.7	10.6/ 9.6	2	1	5.9	109/108	125/125	109/109	125/125	116/115
															—	—	—	103/101	125/125	103/103	125/125	109/107		
															5	16.7/15.2	2	1	5.9	115/115	125/125	115/115	125/125	123/121
													—	—	—	110/109	125/125	110/110	125/125	118/115				
													7.5	24.2/22	2	1	5.9	122/124	150/150	124/124	150/150	131/129		
													—	—	—	117/116	125/125	117/117	125/125	125/122				
													10	30.8/28	2	1	5.9	129/131	150/150	131/131	150/150	139/136		
													—	—	—	150/138	150/150	150/150	150/150	138/155				
													38/50	104/120	3.7	10.6/ 9.6	2	1	5.9	164/153	175/175	164/164	175/175	151/168
															—	—	—	157/145	175/150	157/157	175/175	145/161		
															5	16.7/15.2	2	1	5.9	172/160	175/175	172/172	175/175	158/175
															—	—	—	167/154	175/175	167/167	175/175	153/169		
															7.5	24.2/22	2	1	5.9	181/169	200/175	181/181	200/200	167/183
															—	—	—	175/161	175/175	175/175	175/175	161/176		
															10	30.8/28	2	1	5.9	190/176	200/200	190/190	200/200	174/190
	—	—	—	97/ 96	100/100	97/ 97	100/100	102/101																
	3.7	10.6/ 9.6	2	1	5.9	109/108	125/125	109/109	125/125	116/115														
	—	—	—	103/101	125/125	103/103	125/125	109/107																
	5	16.7/15.2	2	1	5.9	115/113	125/125	115/115	125/125	123/121														
	—	—	—	110/108	125/125	110/110	125/125	118/115																
	56/75†	156/180	7.5	24.2/22	2	1	5.9	122/120	150/150	122/122	150/150	131/129												
			—	—	—	117/114	125/125	117/117	125/125	125/122														
			10	30.8/28	2	1	5.9	129/126	150/150	129/129	150/150	139/136												
			—	—	—	47	60	47	60	49														
			3.7	4.8	2	1	3.1	53	60	53	60	56												
			—	—	—	49	60	49	60	52														
			5	7.6	2	1	3.1	56	60	56	60	60												
			—	—	—	53	60	53	60	56														
			7.5	11	2	1	3.1	59	60	59	60	63												
			—	—	—	56	60	56	60	60														
			10	14	2	1	3.1	62	70	62	70	67												
			25	30	3.7	4.8	2	1	3.1	55	60	55	60	56										
	—	—			—	51	60	51	60	52														
	5	7.6			2	1	3.1	59	60	59	60	60												
	—	—			—	55	60	55	60	56														
	7.5	11			2	1	3.1	63	70	63	70	63												
	—	—			—	59	60	59	60	60														
	10	14			2	1	3.1	67	70	67	70	67												
	—	—			—	70	80	70	80	78														
3.7	4.8	2			1	3.1	78	80	78	80	85													
—	—	—			73	80	73	80	81															
5	7.6	2			1	3.1	81	90	81	90	88													
—	—	—			78	80	78	80	85															
50	60	7.5	11	2	1	3.1	85	90	85	90	92													
		—	—	—	81	90	81	90	89															
		10	14	2	1	3.1	89	100	89	100	96													
		—	—	—	100	110	100	125	112															
		3.7	4.8	2	1	3.1	108	125	108	125	120													
		—	—	—	103	125	103	125	116															
		5	7.6	2	1	3.1	111	125	111	125	123													
		—	—	—	108	125	108	125	120															
		7.5	11	2	1	3.1	115	125	115	125	127													
		—	—	—	111	125	111	125	123															
		10	14	2	1	3.1	119	125	119	125	130													

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ELECTRICAL DATA

Units With Optional Powered Convenience Outlet — 50PG20-28 (cont)

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE	
				No. 1		No. 2		No. 3																	
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA	
24	575	518	633	12.8	88	12.8	88	—	—	6	0.25	0.7	—	—	5	6.1	—	—	—	—	42	50	42	50	45
															47	50	47	50	50						
															7.5	9	—	—	—	—	45	50	45	50	48
															2	1	2.4	50	60	50	60	54			
															10	11	—	—	—	—	47	50	47	50	50
															2	1	2.4	52	60	52	60	56			
													24.8	24	5	6.1	—	—	—	—	42	50	42	50	45
															2	1	2.4	47	50	47	50	50			
															7.5	9	—	—	—	—	45	50	45	50	48
															2	1	2.4	51	60	51	60	54			
															10	11	—	—	—	—	48	50	48	50	50
															2	1	2.4	54	60	54	60	56			
													48.3	46	5	6.1	—	—	—	—	69	70	69	70	63
															2	1	2.4	75	80	75	80	69			
															7.5	9	—	—	—	—	73	80	73	80	67
															2	1	2.4	79	80	79	80	72			
															10	11	—	—	—	—	75	80	75	80	69
															2	1	2.4	81	90	81	90	75			
													78	75	5	6.1	—	—	—	—	86	100	86	100	97
															2	1	2.4	92	100	92	100	100			
															7.5	9	—	—	—	—	90	100	90	100	100
															2	1	2.4	96	100	96	100	106			
															10	11	—	—	—	—	93	100	93	100	102
															2	1	2.4	99	100	99	100	108			

Units With Optional Powered Convenience Outlet — 50PG20-28 (cont)

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
28	208/230	187	253	28.2	208	28.2	208	28.2	208	6	0.25	1.5	—	—	5	16.7/15.2	—	—	—	122/121	150/125	122/122	150/150	133/131
															2	1	5.9	134/133	150/150	134/134	150/150	146/144		
															—	—	—	130/128	150/150	130/130	150/150	141/139		
															2	1	5.9	142/139	150/150	142/142	150/150	155/152		
															—	—	—	137/134	150/150	137/137	150/150	149/146		
															2	1	5.9	149/145	175/150	149/149	175/175	162/159		
													19/25	52/ 60	5	16.7/15.2	—	—	—	122/121	150/125	122/122	150/150	133/131
															2	1	5.9	134/133	150/150	134/134	150/150	146/144		
															—	—	—	130/128	150/150	130/130	150/150	141/139		
															2	1	5.9	142/139	150/150	142/142	150/150	155/152		
															—	—	—	137/134	150/150	137/137	150/150	149/146		
															2	1	5.9	149/145	175/150	149/149	175/175	162/159		
													38/50	104/120	5	16.7/15.2	—	—	—	157/145	175/150	157/157	175/175	145/161
															2	1	5.9	172/160	175/175	172/172	175/175	158/175		
															—	—	—	167/154	175/175	167/167	175/175	153/169		
															2	1	5.9	181/169	200/175	181/181	200/200	167/183		
															—	—	—	175/161	175/175	175/175	175/175	161/176		
															2	1	5.9	190/176	200/200	190/190	200/200	174/190		
													56/75†	156/180	5	16.7/15.2	—	—	—	122/121	150/125	122/122	150/150	133/131
															2	1	5.9	134/133	150/150	134/134	150/150	146/144		
															—	—	—	130/128	150/150	130/130	150/150	141/139		
															2	1	5.9	142/139	150/150	142/142	150/150	155/152		
															—	—	—	137/134	150/150	137/137	150/150	149/146		
															2	1	5.9	149/145	175/150	149/149	175/175	162/159		
	460	414	506	15.4	104	15.4	104	15.4	104	6	0.25	0.7	—	—	5	7.6	—	—	—	65	80	65	80	70
															2	1	3.1	71	80	71	80	77		
															—	—	—	68	80	68	80	74		
															2	1	3.1	74	80	74	80	81		
															—	—	—	71	80	71	80	78		
															2	1	3.1	77	90	77	90	85		
													25	30	5	7.6	—	—	—	65	80	65	80	70
															2	1	3.1	71	80	71	80	77		
															—	—	—	68	80	68	80	74		
															2	1	3.1	74	80	74	80	81		
															—	—	—	71	80	71	80	78		
															2	1	3.1	77	90	77	90	85		
													50	60	5	7.6	—	—	—	73	80	73	80	81
															2	1	3.1	81	90	81	90	88		
															—	—	—	78	80	78	80	85		
															2	1	3.1	85	90	85	90	92		
															—	—	—	81	90	81	90	89		
															2	1	3.1	89	100	89	100	96		
													75	90	5	7.6	—	—	—	103	125	103	125	116
															2	1	3.1	111	125	111	125	123		
															—	—	—	108	125	108	125	120		
															2	1	3.1	115	125	115	125	127		
															—	—	—	111	125	111	125	123		
															2	1	3.1	119	125	119	125	130		

See Legend and Notes on next page.

ELECTRICAL DATA

Units With Optional Powered Convenience Outlet — 50PG20-28 (cont)

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
28	575	518	633	12.8	83	12.8	83	12.8	83	6	0.25	0.7	—	—	5	6.1	—	—	—	55	60	55	60	59
																	2	1	2.4	60	60	60	60	65
																	—	—	—	58	60	58	60	63
															7.5	9	2	1	2.4	63	70	63	70	68
																	—	—	—	60	60	60	60	65
																	2	1	2.4	65	70	65	70	71
															5	6.1	—	—	—	55	60	55	60	59
																	2	1	2.4	60	60	60	60	65
																	—	—	—	58	60	58	60	63
															7.5	9	2	1	2.4	63	70	63	70	68
																	—	—	—	60	60	60	60	65
																	2	1	2.4	65	70	65	70	71
													10	11	2	1	2.4	69	70	69	70	63		
															—	—	—	75	80	75	80	69		
															2	1	2.4	73	80	73	80	67		
													48.3	46	7.5	9	2	1	2.4	79	80	79	80	72
																	—	—	—	75	80	75	80	69
																	2	1	2.4	81	90	81	90	75
													78	75	5	6.1	—	—	—	86	100	86	100	97
																	2	1	2.4	92	100	92	100	102
																	—	—	—	90	100	90	100	100
															7.5	9	2	1	2.4	96	100	96	100	106
																	—	—	—	93	100	93	100	102
																	2	1	2.4	99	100	99	100	108

50PG

Electric Heat Branch Circuit For 208/240-V 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST		POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE	
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
28	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	156/180	175/200	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat†

UNIT SIZE 50PG	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		POWER EXHAUST			POWER SUPPLY		POWER SUPPLY WITH OPTIONAL HACR BREAKER		DISCONNECT SIZE
				No. 1		No. 2		No. 3																
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Qty	Hp	FLA (ea)	MCA	MOCP*	MCA	MOCP	FLA
28	208/240	187	253	28.2	208	28.2	208	28.2	208	6	0.25	1.5	56/75	156/180	5	16.7/15.2	—	—	—	183/205	200/225	205/205	225/225	204/230
																	2	1	5.9	198/220	200/225	220/220	225/225	218/244
															7.5	24.2/22	—	—	—	193/214	200/225	214/214	225/225	213/238
																	2	1	5.9	207/229	225/250	229/229	250/250	227/252
															10	30.8/28	—	—	—	201/221	225/225	221/221	225/225	221/245
																	2	1	5.9	216/236	225/250	236/236	250/250	234/259

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 460-3-60



$$\begin{aligned}
 AB &= 452 \text{ v} \\
 BC &= 464 \text{ v} \\
 AC &= 455 \text{ v} \\
 \text{Average Voltage} &= \frac{452 + 464 + 455}{3} \\
 &= \frac{1371}{3} \\
 &= 457
 \end{aligned}$$

Determine maximum deviation from average voltage.

- (AB) 457 – 452 = 5 v
- (BC) 464 – 457 = 7 v
- (AC) 457 – 455 = 2 v

Maximum deviation is 7 v.

Determine percent of voltage imbalance.

$$\begin{aligned}
 \% \text{ Voltage Imbalance} &= 100 \times \frac{7}{457} \\
 &= 1.53\%
 \end{aligned}$$

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.

- The 75-kW 208/240-v electric heat can be factory installed but it must be wired separately in the field.
- The convenience outlet full load amps (FLA) are 5, 3 and 3 for 208/230, 460, 575–v units, respectively.
- The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 600 v.
- MCA calculation for 50PG units with electric heaters over 50 kW is = 1.25 x (IFM + Power Exhaust + Convenience Outlet FLA amps) + 1.00 x (Electric Heater FLA).

NOTES:

- 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.
- 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.

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

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM	IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE							
		Min	Max	No. 1		No. 2		No. 3						Qty	FLA (ea)				FLA	FLA (ea)	Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR BKR	MOCF	FLA	LRA				
03	208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	3	1.92/1.74	LOW	none	LOW	LOW	-	2.3/3.0	29.9/29.2	40/40	-	31/30	83								
																											CRHEATER20A00	10.8/12.5	2.3/3.0	29.9/30.8	40/40	-/-	31/30	83/83
																											CRHEATER20T1A00	17.3/20.0	3.8/5.0	37.8/40.2	40/45	-/-	35/37	83/83
																											CRHEATER20A00	26.0/30.0	5.6/7.5	48.6/52.7	50/60	-/-	45/48	83/83
																											CRHEATER20S3A00	34.7/40.0	7.5/10.0	59.5/65.2	-/-	60/70	55/60	83/83
																											CRHEATER20A00	61.2/67.5	-	61.2/67.5	-/-	70/70	67/62	3/6
	208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	8.02/7.25	0.33/0.3	2	11.47/10.375	HIGH	none	HIGH	HIGH	-	2.3/3.0	68.8/66.2	70/70	67/62	336/336									
																										CRHEATER20A00	10.8/12.5	2.3/3.0	29.9/30.8	40/40	-/-	31/30	83/83	
																										CRHEATER20T1A00	17.3/20.0	3.8/5.0	37.8/40.2	40/45	-/-	35/37	83/83	
																										CRHEATER20A00	26.0/30.0	5.6/7.5	48.6/52.7	50/60	-/-	45/48	83/83	
																										CRHEATER20S3A00	34.7/40.0	7.5/10.0	59.5/65.2	-/-	60/70	55/60	83/83	
																										CRHEATER20A00	61.2/67.5	-	61.2/67.5	-/-	70/70	67/62	3/6	
04	208/230-1-60	187	253	15.4	83	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	3	1.92/1.74	LOW	none	LOW	LOW	-	2.3/3.0	33.2/32.4	45/45	-	34/33	106								
																											CRHEATER20A00	10.8/12.5	2.3/3.0	29.9/30.8	40/40	-/-	31/30	83/83
																											CRHEATER20T1A00	17.3/20.0	3.8/5.0	37.8/40.2	45/45	-/-	35/37	106/106
																											CRHEATER20A00	26.0/30.0	5.6/7.5	48.6/52.7	50/60	-/-	45/48	106/106
																											CRHEATER20S3A00	34.7/40.0	7.5/10.0	59.5/65.2	-/-	60/70	55/60	106/106
																											CRHEATER20A00	61.2/67.5	-	61.2/67.5	-/-	70/70	67/62	3/6
	208/230-1-60	187	253	15.4	83	-	-	-	1	1.0	4.9	8.02/7.25	0.33/0.3	2	11.47/10.375	HIGH	none	HIGH	HIGH	-	2.3/3.0	68.8/66.2	70/70	67/62	336/336									
																										CRHEATER20A00	10.8/12.5	2.3/3.0	29.9/30.8	40/40	-/-	31/30	83/83	
																										CRHEATER20T1A00	17.3/20.0	3.8/5.0	37.8/40.2	45/45	-/-	35/37	106/106	
																										CRHEATER20A00	26.0/30.0	5.6/7.5	48.6/52.7	50/60	-/-	45/48	106/106	
																										CRHEATER20S3A00	34.7/40.0	7.5/10.0	59.5/65.2	-/-	60/70	55/60	106/106	
																										CRHEATER20A00	61.2/67.5	-	61.2/67.5	-/-	70/70	67/62	3/6	

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE			COMPRESSOR						OFM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY			DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		Min	Max		No. 1	No. 2			No. 3		Qty	FLA (ea)	FLA	FLA (ea)	FLA (ea)	Qty	FLA (ea)	TYPE				Part Number	FLA	Nom. kW	MCA	Fuse or HACR Brkr	MOC	FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
						RLA	RLA	RLA	RLA	RLA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
04 (cont)	208/230-3-60												1.92/1.74		0.33/0.3	3	1.92/1.74	LOW		HIGH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						O/FM		I/FM	ERV Supply	ERV Wheel	ERV Exhaust		I/FM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
				No. 1			No. 2								No. 3					Qty	FLA (ea)	FLA (ea)	FLA	Nom. kW	MCA	Fuse HACR Bkr	MOCp			FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	FLA (ea)	FLA	Part Number	FLA	FLA	FLA	FLA	FLA	FLA	FLA									FLA	FLA			FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA	FLA

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						IFM	IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE				
				No. 1			No. 2							No. 3					Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Brkr	IMCOP			FLA	LRA	
				RLA	LRA	RLA	RLA	LRA	RLA					LRA																	
05 (cont)	208/230-3-60	Min	Max								4.9	1.92/1.74			3	1.92/1.74			LOW		CRHEATER208A00	-	-	32.2/31.4	45/45	-/-	33/32	114			
																					CRHEATER209A00	10.0/11.5	3.8/5.0	32.2/31.4	45/45	-/-	33/32	114/114			
																					CRHEATER210A00	20.0/23.1	7.5/10.0	41.1/44.1	45/45	-/-	38/41	114/114			
																					CRHEATER211A00	30.0/34.6	11.3/15.0	53.6/58.5	60/60	-/-	49/54	114/114			
																					CRHEATER212A00	40.0/46.2	15.0/20.0	66.1/73.0	-/-	70/80	61/67	114/114			
																					CRHEATER208A00	-	-	45.3/43.3	50/50	-/-	48/46	233			
																					CRHEATER209A00	10.0/11.5	3.8/5.0	45.3/44.4	50/50	-/-	48/46	233/233			
																					CRHEATER210A00	15.0/17.3	5.8/7.5	51.3/51.6	60/60	-/-	48/47	233/233			
																					CRHEATER211A00	20.0/23.1	7.5/10.0	57.5/58.9	60/60	-/-	53/54	233/233			
																					CRHEATER212A00	30.0/34.6	11.3/15.0	70.0/73.3	-/-	80/80	64/67	233/233			
																					CRHEATER212A00	40.0/46.2	15.0/20.0	82.5/87.8	-/-	90/90	76/81	233/233			
																					CRHEATER208A00	-	-	32.5/31.7	45/45	-/-	33/32	132			
460-3-60	414	506	7.1	46	-	-	1	0.5	2.1	0.87	1.5	0.15	3	0.87	2	3.2	HIGH	none	HIGH	CRHEATER208A00	10.0/11.5	3.8/5.0	32.5/31.7	45/45	-/-	33/32	132/132				
																				CRHEATER209A00	15.0/17.3	5.8/7.5	35.3/37.2	45/45	-/-	33/34	132/132				
																				CRHEATER210A00	20.0/23.1	7.5/10.0	41.5/44.5	45/45	-/-	38/41	132/132				
																				CRHEATER211A00	30.0/34.6	11.3/15.0	54.0/58.8	60/60	-/-	50/54	132/132				
																				CRHEATER212A00	40.0/46.2	15.0/20.0	66.5/73.3	-/-	70/80	61/67	132/132				
																				CRHEATER208A00	-	-	45.6/43.6	60/50	-/-	48/46	251				
																				CRHEATER209A00	15.0/17.3	5.8/7.5	45.6/44.8	60/50	-/-	48/46	251/251				
																				CRHEATER210A00	20.0/23.1	7.5/10.0	57.9/59.3	60/60	-/-	53/55	251/251				
																				CRHEATER211A00	30.0/34.6	11.3/15.0	70.4/73.6	-/-	80/80	65/68	251/251				
																				CRHEATER212A00	40.0/46.2	15.0/20.0	82.9/88.1	-/-	90/90	76/81	251/251				
																				CRHEATER215A00	5.8	5.0	15.1	20	-	15	57				
																				CRHEATER216A00	8.7	7.5	18.0	20	-	17	57				
CRHEATER217A00	11.5	10.0	21.5	25	-	20	57																								
CRHEATER218A00	17.3	15.0	28.8	30	-	26	57																								
CRHEATER219A00	23.1	20.0	36.0	40	-	33	57																								
CRHEATER215A00	5.8	5.0	15.1	25	-	22	111																								
CRHEATER216A00	8.7	7.5	21.8	25	-	22	111																								
CRHEATER217A00	11.5	10.0	25.4	30	-	23	111																								
CRHEATER218A00	17.3	15.0	28.9	30	-	27	111																								
CRHEATER219A00	23.1	20.0	36.2	40	-	33	111																								
CRHEATER215A00	5.8	5.0	43.4	45	-	40	111																								
CRHEATER216A00	8.7	7.5	45.6	20	-	16	66																								
CRHEATER217A00	11.5	10.0	15.6	20	-	16	66																								
CRHEATER218A00	17.3	15.0	18.7	20	-	17	66																								
CRHEATER219A00	23.1	20.0	22.2	25	-	20	66																								
CRHEATER215A00	5.8	5.0	29.4	30	-	27	66																								
CRHEATER216A00	8.7	7.5	36.7	40	-	34	66																								
CRHEATER217A00	11.5	10.0	21.5	25	-	23	120																								
CRHEATER218A00	17.3	15.0	22.4	25	-	23	120																								
CRHEATER219A00	23.1	20.0	26.1	30	-	24	120																								
CRHEATER215A00	5.8	5.0	28.1	30	-	27	120																								
CRHEATER216A00	8.7	7.5	36.8	40	-	34	120																								
CRHEATER217A00	11.5	10.0	44.1	45	-	41	120																								
CRHEATER218A00	17.3	15.0	44.1	45	-	41	120																								

50PG

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																							
		Min	Max	No. 1		No. 2		No. 3					Qty	FLA (ea)				FLA (ea)	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Breaker	MOCP	FLA	LRA																																																																																						
				RLA	LRA	RLA	LRA	RLA	LRA																																																																																																								
05 (cont)	575-3-60	518	633	5.1	34	-	-	-	1	0.5	2.1	0.695	1.1	0.12	2	2.4	LOW	none	HIGH	LOW	CRHEATER221A00	9.2	10.0	11.9	15	-	21	90	90	27	90	12	43																																																																																
																																		CRHEATER222A00	13.9	15.0	23.6	25	-	22	43																																																																								
																																										CRHEATER223A00	18.5	20.0	29.4	30	-	27	43																																																																
																																																		CRHEATER221A00	9.2	10.0	16.1	20	-	17	90																																																								
																																																										CRHEATER222A00	13.9	15.0	23.0	25	-	21	90																																																
																																																																		CRHEATER223A00	18.5	20.0	34.7	35	-	32	90																																								
																																																																										CRHEATER221A00	9.2	10.0	11.8	15	-	12	49																																
																																																																																		CRHEATER222A00	13.9	15.0	23.5	25	-	16	49																								
																																																																																										CRHEATER223A00	18.5	20.0	29.3	30	-	27	49																
																																																																																																		CRHEATER221A00	9.2	10.0	16	20	-	17	96								
																																																																																																										CRHEATER222A00	13.9	15.0	22.9	25	-	21	96
CRHEATER221A00	17.320.0	3.8/5.0	48.0/47.3	60/60	-	32	96																																																																																																										
								CRHEATER222A00	26.030.0	5.6/7.5	48.0/47.3	60/60	-	32	96																																																																																																		
																CRHEATER223A00	34.740.0	7.5/10.0	59.5/65.2	70/70	-	48/48	169/169																																																																																										
																								CRHEATER201A00	52.060.0	11.3/15.0	81.1/90.2	90/100	-	56/70	169/169																																																																																		
																																CRHEATER202A00	69.380.0	15.0/20.0	102.8/115.2	110/125	-	95/106	169/169																																																																										
																																								CRHEATER203A00	86.7/100.0	18.8/25.0	124.5/140.2	125/150	-	151/129	169/169																																																																		
																																																CRHEATER204A00	17.320.0	3.8/5.0	79.3/75.6	100/100	-	94/79	422																																																										
																																																								CRHEATER205A00	26.030.0	5.6/7.5	87.8/88.1	100/100	-	94/79	422/422																																																		
																																																																CRHEATER206A00	34.740.0	7.5/10.0	98.6/100.6	100/100	-	94/79	422/422																																										
																																																																								CRHEATER201A00	52.060.0	11.3/15.0	120.3/125.6	110/110	-	91/93	422/422																																		
																																																																																CRHEATER202A00	69.380.0	15.0/20.0	141.9/150.6	125/150	-	111/116	422/422																										
																																																																																								CRHEATER203A00	86.7/100.0	18.8/25.0	163.6/175.6	150/175	-	131/139	422/422																		
CRHEATER204A00	17.320.0	3.8/5.0	50.1/49.4	175/200	-	151/162	422/422																																																																																																										
								CRHEATER205A00	26.030.0	5.6/7.5	50.1/49.4	100/100	-	50/49	194																																																																																																		
																CRHEATER206A00	34.740.0	7.5/10.0	62.1/67.8	100/100	-	50/49	194/194																																																																																										
																								CRHEATER201A00	52.060.0	11.3/15.0	83.8/92.8	90/100	-	50/51	194/194																																																																																		
																																CRHEATER202A00	69.380.0	15.0/20.0	105.4/117.8	90/100	-	50/51	194/194																																																																										
																																								CRHEATER203A00	86.7/100.0	18.8/25.0	127.1/142.8	150/150	-	117/131	194/194																																																																		
																																																CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																										
																																																								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																		
																																																																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																										
																																																																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																		
																																																																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																										
																																																																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																		
CRHEATER204A00	17.320.0	3.8/5.0	166.3/178.2	175/200	-	153/164	447/447																																																																																																										
								CRHEATER205A00	26.030.0	5.6/7.5	90.4/90.7	100/100	-	86/83	447/447																																																																																																		
																CRHEATER206A00	34.740.0	7.5/10.0	101.3/103.2	110/110	-	80/85	447/447																																																																																										
																								CRHEATER201A00	52.060.0	11.3/15.0	122.9/128.2	125/150	-	113/118	447/447																																																																																		
																																CRHEATER202A00	69.380.0	15.0/20.0	144.5/153.2	150/175	-	133/141	447/447																																																																										
																																								CRHEATER203A00	86.7/100.0	18.8/25.0	166.3/178.2	175/200	-	153/164	447/447																																																																		
																																																CRHEATER204A00	17.320.0	3.8/5.0	81.4/78.2	100/100	-	86/82	447																																																										
																																																								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																		
																																																																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																										
																																																																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																		
																																																																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																										
																																																																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																		
CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																																																																										
								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																																																																		
																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																																																																										
																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																																																																		
																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																																																																										
																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																																																																		
																																																CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																										
																																																								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																		
																																																																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																										
																																																																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																		
																																																																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																										
																																																																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																		
CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																																																																										
								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																																																																		
																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																																																																										
																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																																																																		
																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																																																																										
																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																																																																		
																																																CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																										
																																																								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																		
																																																																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																										
																																																																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																		
																																																																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																										
																																																																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																		
CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																																																																										
								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																																																																		
																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																																																																										
																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																																																																		
																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																																																																										
																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																																																																		
																																																CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																										
																																																								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																		
																																																																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																										
																																																																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																		
																																																																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																										
																																																																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																		
CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																																																																										
								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																																																																		
																CRHEATER206A00	34.740.0	7.5/10.0	90.4/90.7	100/100	-	86/83	447/447																																																																																										
																								CRHEATER201A00	52.060.0	11.3/15.0	101.3/103.2	110/110	-	80/85	447/447																																																																																		
																																CRHEATER202A00	69.380.0	15.0/20.0	122.9/128.2	125/150	-	113/118	447/447																																																																										
																																								CRHEATER203A00	86.7/100.0	18.8/25.0	144.5/153.2	150/175	-	133/141	447/447																																																																		
																																																CRHEATER204A00	17.320.0	3.8/5.0	81.4/77.7	100/100	-	86/82	447																																																										
																																																								CRHEATER205A00	26.030.0	5.6/7.5	81.4/78.2	100/100	-	86/82	447/447																																																		

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM	IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																					
		Min	Max	No. 1		No. 2		No. 3						FLA	FLA (ea)				Qty	FLA (ea)	FLA (ea)	MCA	Fuse or HACR Bkr	MOCP	FLA	LRA																																						
				RLA	LRA	RLA	LRA	RLA	LRA																																																							
06 (cont)	208/230-3-60	187	253	17.6	123	-	-	1.5	5.2	1.92/1.74	0.33/0.3	3	1.92/1.74	LOW	none	HIGH	LOW	LOW	CRHEATER208A00	10.0/11.5	3.8/5.0	49.8/47.8	60/60	-/-	52/50	284/284	37/96	165																																				
																													3.32/3.0	2	7.08/6.4	CRHEATER209A00	15.0/17.3	5.6/7.5	51.7/52.0	60/60	-/-	53/55	284/284																									
																																								CRHEATER210A00	20.0/23.1	7.5/10.0	57.9/59.3	60/60	-/-	60/60	65/68	284/284																
																																																	CRHEATER211A00	30.0/34.6	11.3/15.0	70.4/73.0	-/-	90/90	76/81	284/284								
																																																									CRHEATER212A00	40.0/46.2	15.0/20.0	82.9/88.1	-/-	100/110	88/94	284/284
		CRHEATER208A00	10.0/11.5	3.8/5.0	49.8/47.8	60/60	-/-	52/50	284	37/96	165																																																					
												CRHEATER209A00	15.0/17.3	5.6/7.5	51.7/52.0	60/60	-/-	53/55	284/284																																													
																				CRHEATER210A00	20.0/23.1	7.5/10.0	57.9/59.3	60/60	-/-	60/60	65/68	284/284																																				
																													CRHEATER211A00	30.0/34.6	11.3/15.0	70.4/73.0	-/-	90/90	76/81	284/284																												
																																					CRHEATER212A00	40.0/46.2	15.0/20.0	82.9/88.1	-/-	100/110	88/94	284/284																				
																																													CRHEATER213A00	50.0/57.7	18.8/25.0	95.4/102.5	-/-	100/110	88/94	284/284												
	CRHEATER208A00	10.0/11.5	3.8/5.0	49.8/47.8	60/60	-/-	52/50	284	37/96	165																																																						
											CRHEATER209A00	15.0/17.3	5.6/7.5	51.7/52.0	60/60	-/-	53/55	284/284																																														
																			CRHEATER210A00	20.0/23.1	7.5/10.0	57.9/59.3	60/60	-/-	60/60	65/68	284/284																																					
																												CRHEATER211A00	30.0/34.6	11.3/15.0	70.4/73.0	-/-	90/90	76/81	284/284																													
																																				CRHEATER212A00	40.0/46.2	15.0/20.0	82.9/88.1	-/-	100/110	88/94	284/284																					
																																												CRHEATER213A00	50.0/57.7	18.8/25.0	95.4/102.5	-/-	100/110	88/94	284/284													
	460-3-60	414	506	9.6	62	-	-	0.8	2.6	1.5	0.87	0.15	2	3.2	LOW	none	HIGH	LOW	HIGH	CRHEATER215A00	5.8	5.0	19.0	25	-	19	83																																					
																												CRHEATER216A00	8.7	7.5	26.1	30	-	26	137																													
																																				CRHEATER217A00	11.5	10.0	29.6	30	-	27	137																					
																																												CRHEATER218A00	17.3	15.0	36.8	40	-	34	137													
																																																				CRHEATER219A00	23.1	20.0	44.1	45	-	41	137					
																																																												CRHEATER220A00	28.9	25.0	51.3	60
CRHEATER215A00		5.8	5.0	19.0	25	-	19	83																																																								
									CRHEATER216A00	8.7	7.5	26.1	30	-	26	137																																																
																	CRHEATER217A00	11.5	10.0	29.6	30	-	27	137																																								
																									CRHEATER218A00	17.3	15.0	36.8	40	-	34	137																																
																																	CRHEATER219A00	23.1	20.0	44.1	45	-	41	137																								
																																									CRHEATER220A00	28.9	25.0	51.3	60	-	47	137																
CRHEATER215A00	5.8	5.0	19.0	25	-	19	83																																																									
								CRHEATER216A00	8.7	7.5	26.1	30	-	26	137																																																	
																CRHEATER217A00	11.5	10.0	29.6	30	-	27	137																																									
																								CRHEATER218A00	17.3	15.0	36.8	40	-	34	137																																	
																																CRHEATER219A00	23.1	20.0	44.1	45	-	41	137																									
																																								CRHEATER220A00	28.9	25.0	51.3	60	-	47	137																	

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OFM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM	Conv	ERV	ELECTRIC HEAT				POWER SUPPLY			DISCONNECT SIZE																																																																		
		Min	Max	No. 1			No. 2			No. 3		Qty	FLA (ea)	FLA	FLA (ea)	FLA (ea)	Qty	FLA (ea)	TYPE	Outlet	ERV	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Brk	MOCP	FLA	LRA																																																																
				RLA	LRA	RLA	LRA	RLA	LRA																																																																																				
06 (cont)																																																																																													
	575-3-60	518	633	6.1	40	-	-	-	-	1	0.8	2.0	0.695	0.12	3	0.695	2	2.4	none	HIGH	LOW	LOW	CRHEATER221A00	-	10.0	13.3	15	-	14	56																																																															
																															CRHEATER222A00	9.2	10.0	17.6	20	-	16	56																																																							
																																							CRHEATER223A00	13.9	15.0	23.5	25	-	22	56																																															
																																															CRHEATER224A00	18.5	20.0	29.3	30	-	27	56																																							
																																																							CRHEATER254A00	23.1	25.0	35.0	40	-	32	56																															
	575-3-60	518	633	6.1	40	-	-	-	-	-	1	0.8	2.0	0.695	0.12	3	0.695	2	2.4	none	HIGH	LOW	LOW	CRHEATER221A00	9.2	10.0	17.5	20	-	18	103																																																														
																																CRHEATER222A00	13.9	15.0	22.9	25	-	21	103																																																						
																																								CRHEATER223A00	18.5	20.0	34.5	35	-	32	103																																														
																																																CRHEATER254A00	23.1	25.0	40.3	45	-	37	103																																						
CRHEATER221A00																																																								9.2	10.0	13.3	15	-	14	56																															
07	208/230-3-60	187	253	20.5	149	-	-	-	1	1.5	7.5	1.92/1.74	3.32/3.0	0.33/0.3	2	7.08/6.4	3	1.92/1.74	LOW	LOW	LOW	CRHEATER208A00	10.0/11.5	3.8/5.0	53.5/51.4	60/60	-	56/53	310/310																																																																
																														CRHEATER209A00	15.0/17.3	5.6/7.5	40.3/39.6	60/60	-	40/40	191/191																																																								
																																						CRHEATER210A00	20.0/23.1	7.5/10.0	41.5/44.5	60/60	-	40/41	191/191																																																
																																														CRHEATER211A00	30.0/34.6	11.3/15.0	54.0/58.8	60/60	-	50/54	191/191																																								
																																																						CRHEATER212A00	40.0/46.2	15.0/20.0	66.5/73.3	-	70/80	61/67	191/191																																
																																																														CRHEATER213A00	50.0/57.7	18.8/25.0	79.0/87.7	-	80/90	73/81	191/191																								
																																																																						CRHEATER208A00	10.0/11.5	3.8/5.0	53.5/51.4	60/60	-	56/53	310/310																
																																																																														CRHEATER209A00	15.0/17.3	5.6/7.5	40.3/39.6	60/60	-	40/40	191/191								
																																																																																						CRHEATER210A00	20.0/23.1	7.5/10.0	57.9/59.3	60/60	-	56/55	310/310
208/230-3-60	187	253	20.5	149	-	-	-	1	1.5	7.5	1.92/1.74	3.32/3.0	0.33/0.3	2	7.08/6.4	3	1.92/1.74	LOW	LOW	LOW	CRHEATER212A00	40.0/46.2	15.0/20.0	82.9/88.1	-	90/90	76/81	310/310																																																																	
																													CRHEATER213A00	50.0/57.7	18.8/25.0	95.4/102.5	-	100/110	88/94	310/310																																																									
																																					CRHEATER208A00	10.0/11.5	3.8/5.0	42.8/41.9	60/60	-	43/42	217																																																	
																																													CRHEATER209A00	15.0/17.3	5.6/7.5	42.8/41.9	60/60	-	43/42	217/217																																									
																																																					CRHEATER210A00	20.0/23.1	7.5/10.0	44.4/47.3	60/60	-	43/44	217/217																																	
																																																													CRHEATER211A00	30.0/34.6	11.3/15.0	56.9/61.7	-	60/70	52/57	217/217																									
																																																																					CRHEATER212A00	40.0/46.2	15.0/20.0	69.4/76.2	-	70/80	64/70	217/217																	
																																																																													CRHEATER213A00	50.0/57.7	18.8/25.0	81.9/89.6	-	90/100	75/83	217/217									
																																																																																					CRHEATER208A00	10.0/11.5	3.8/5.0	55.8/53.7	70/60	-	58/56	336	
																																																																																													CRHEATER209A00
208/230-3-60	187	253	20.5	149	-	-	-	1	1.5	7.5	1.92/1.74	3.32/3.0	0.33/0.3	2	7.08/6.4	3	1.92/1.74	HIGH	HIGH	HIGH	CRHEATER210A00	30.0/34.6	11.3/15.0	73.3/76.5	-	80/80	67/70	336/336																																																																	
																													CRHEATER211A00	40.0/46.2	15.0/20.0	85.8/91.0	-	90/100	79/84	336/336																																																									
																																					CRHEATER212A00	50.0/57.7	18.8/25.0	98.3/105.4	-	100/110	90/97	336/336																																																	
																																													CRHEATER213A00	50.0/57.7	18.8/25.0	98.3/105.4	-	100/110	90/97	336/336																																									
																																																					CRHEATER208A00	10.0/11.5	3.8/5.0	55.8/53.7	70/60	-	58/56	336/336																																	
																																																													CRHEATER209A00	15.0/17.3	5.6/7.5	55.8/54.9	70/60	-	58/56	336/336																									
																																																																					CRHEATER210A00	20.0/23.1	7.5/10.0	60.8/62.1	-	70/70	58/57	336/336																	
																																																																													CRHEATER211A00	30.0/34.6	11.3/15.0	73.3/76.5	-	80/80	67/70	336/336									
																																																																																					CRHEATER212A00	40.0/46.2	15.0/20.0	85.8/91.0	-	90/100	79/84	336/336	
																																																																																													CRHEATER213A00

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	COMPRESSOR						VOLTAGE RANGE		ERV				ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																		
		No. 1			No. 2			No. 3			IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	Part Number	FLA	Nom. kW	MCA	Fuse HACR Bktr	MOC	FLA	LRA																																														
		RLA	LRA	No. 1	RLA	LRA	No. 2	RLA	LRA	No. 3				Qty	FLA (ea)												FLA (ea)	Qty	FLA (ea)																																											
07 (cont)	460-3-60									2.6	0.87	0.15	3	0.87	LOW	none	HIGH	CRHEATER15A00	-	-	19	25	-	19	96																																															
																										414	506	9.6	75	-	-	-	1	0.8	2	3.2	HIGH	CRHEATER16A00	5.8	5.0	19.0	25	-	19	96																											
																																														CRHEATER17A00	11.5	10.0	22.2	25	-	20	96																			
																																																						CRHEATER18A00	17.3	15.0	29.4	30	-	27	96											
																																																														CRHEATER19A00	23.1	20.0	44.1	45	-	41	150			
																																																																						CRHEATER20A00	28.9	25.0
		460-3-60										3.4	0.87	2	3.2	HIGH	none	LOW	CRHEATER21A00	5.8	5.0	19.8	25	-	20	109																																														
																											CRHEATER22A00	8.7	7.5	19.8	25	-	20	109																																						
																																			CRHEATER23A00	11.5	10.0	23.2	25	-	21	109																														
																																											CRHEATER24A00	17.3	15.0	30.4	35	-	28	109																						
																																																			CRHEATER25A00	23.1	20.0	37.7	40	-	35	109														
																																																											CRHEATER26A00	28.9	25.0	44.9	45	-	41	109						
	575-3-60										2.0	0.695	0.12	3	0.695	LOW	none	HIGH	CRHEATER27A00	9.2	10.0	17.6	20	-	16	70																																														
																											518	633	7.6	54	-	-	-	1	0.8	2	2.4	HIGH	CRHEATER28A00	13.9	15.0	23.5	25	-	22	70																										
																																															CRHEATER29A00	18.5	20.0	29.3	30	-	27	70																		
																																																							CRHEATER30A00	23.1	25.0	35.0	40	-	32	70										
																																																															CRHEATER31A00	27.7	30.0	46.0	50	-	42	117		
																																																																							CRHEATER32A00	27.7
			575-3-60										2.8	0.695	0.12	3	0.695	LOW	none	HIGH	CRHEATER33A00	-	-	16	20	-	16	81																																												
																													518	633	7.6	54	-	-	-	1	0.8	2	2.4	HIGH	CRHEATER34A00	9.2	10.0	18.6	20	-	17	81																								
																																																	CRHEATER35A00	13.9	15.0	24.5	25	-	23	81																
																																																									CRHEATER36A00	18.5	20.0	30.3	35	-	28	81								
																																																																	CRHEATER37A00	23.1	25.0	36.0	40	-	33	81
		575-3-60												2.8	0.695	0.12	2	2.4	HIGH	none	HIGH	CRHEATER39A00	-	-	20.2	25	-	21	128																																											
																														518	633	7.6	54	-	-	-	1	0.8	2	2.4	HIGH	CRHEATER40A00	9.2	10.0	23.9	25	-	22	128																							
																																																		CRHEATER41A00	13.9	15.0	29.8	30	-	27	128															
																																																										CRHEATER42A00	18.5	20.0	35.5	40	-	33	128							
						575-3-60										2.8	0.695	0.12	2	2.4	HIGH	none	HIGH	CRHEATER43A00	23.1	25.0	41.3	45	-	38	128																																									
																																CRHEATER44A00	27.7	30.0	47.0	50	-	43	128																																	

50PG

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						O/FM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY			DISCONNECT SIZE								
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)	FLA	FLA (ea)	FLA (ea)	Qty	FLA (ea)	TYPE			Part Number	FLA	Nom. kW	MCA	Fuse or HACR BKR	MOC	FLA	LRA								
				RLA	LRA	RLA	LRA	RLA	LRA																										
08	208/230-3-60	187	253	13.5	88	13.5	88	-	-	2	1.5	FLA	FLA (ea)	3.32/3.0	FLA (ea)	0.33/0.3	8.85/8.0	LOW	none	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	CRHEATER225A00	-	-	63.2/60.9	-/-	70/70	69/66	318
																												CRHEATER226A00	20.0/23.1	7.5/10.0	63.2/63.3	-/-	70/70	69/66	318/318
																												CRHEATER227A00	30.0/34.6	11.3/15.0	74.8/77.6	-/-	80/80	69/71	318/318
																												CRHEATER228A00	50.0/57.7	18.8/25.0	99.8/106.5	-/-	100/110	92/98	318/318
																												CRHEATER229A00	70.0/80.8	26.3/35.0	124.8/135.4	-/-	125/150	115/125	318/318
																												CRHEATER225A00	80.0/92.4	30.0/40.0	137.3/149.9	-/-	150/150	126/138	318/318
																												CRHEATER225A00	20.0/23.1	7.5/10.0	71.1/68.0	-/-	80/80	70/74	370
																												CRHEATER226A00	30.0/34.6	11.3/15.0	84.7/86.5	-/-	90/90	70/80	370/370
																												CRHEATER227A00	50.0/57.7	18.8/25.0	109.7/115.4	-/-	110/125	101/106	370/370
																												CRHEATER228A00	70.0/80.8	26.3/35.0	134.7/144.3	-/-	150/150	124/133	370/370
																												CRHEATER229A00	80.0/92.4	30.0/40.0	147.2/158.8	-/-	150/175	135/146	370/370
																												CRHEATER225A00	20.0/23.1	7.5/10.0	65.5/63.2	-/-	70/70	71/69	344
	HIGH	CRHEATER225A00	30.0/34.6	11.3/15.0	77.7/80.5	-/-	80/90	71/74	344/344																										
		CRHEATER227A00	50.0/57.7	18.8/25.0	102.7/109.4	-/-	110/110	94/101	344/344																										
		CRHEATER228A00	70.0/80.8	26.3/35.0	127.7/138.3	-/-	150/150	117/127	344/344																										
		CRHEATER229A00	80.0/92.4	30.0/40.0	140.2/152.8	-/-	150/175	129/141	344/344																										
HIGH	CRHEATER225A00	20.0/23.1	7.5/10.0	73.4/70.3	-/-	80/80	81/77	396																											
	CRHEATER226A00	30.0/34.6	11.3/15.0	75.0/75.0	-/-	80/80	81/77	396/396																											
	CRHEATER227A00	50.0/57.7	18.8/25.0	87.5/89.4	-/-	90/90	81/82	396/396																											
	CRHEATER228A00	70.0/80.8	26.3/35.0	112.5/118.3	-/-	125/125	104/109	396/396																											
LOW	CRHEATER228A00	70.0/80.8	26.3/35.0	137.5/147.1	-/-	150/150	127/135	396/396																											
	CRHEATER229A00	80.0/92.4	30.0/40.0	150.0/161.6	-/-	175/175	138/149	396/396																											
	CRHEATER223A00	-	-	29.8	35	-	32	145																											
	CRHEATER233A00	11.5	10.0	31.6	35	-	32	145																											
LOW	CRHEATER233A00	17.3	15.0	38.8	40	-	36	145																											
	CRHEATER234A00	28.9	25.0	53.3	60	-	49	145																											
	CRHEATER235A00	40.4	35.0	67.7	-	70	62	145																											
	CRHEATER236A00	46.2	40.0	74.9	-	80	69	145																											
HIGH	CRHEATER232A00	-	-	33.4	35	-	37	169																											
	CRHEATER233A00	11.5	10.0	36.1	40	-	37	169																											
	CRHEATER234A00	17.3	15.0	43.3	45	-	40	169																											
	CRHEATER234A00	28.9	25.0	57.8	60	-	53	169																											
LOW	CRHEATER235A00	40.4	35.0	72.2	-	80	66	169																											
	CRHEATER236A00	46.2	40.0	79.4	-	80	73	169																											
	CRHEATER232A00	-	-	30.6	35	-	33	158																											
	CRHEATER232A00	11.5	10.0	32.6	35	-	33	158																											
HIGH	CRHEATER233A00	17.3	15.0	39.8	40	-	37	158																											
	CRHEATER234A00	28.9	25.0	54.3	60	-	50	158																											
	CRHEATER235A00	40.4	35.0	68.7	-	70	63	158																											
	CRHEATER236A00	46.2	40.0	75.9	-	80	70	158																											
HIGH	CRHEATER232A00	-	-	34.2	40	-	37	182																											
	CRHEATER232A00	11.5	10.0	37.1	40	-	37	182																											
	CRHEATER233A00	17.3	15.0	44.3	45	-	41	182																											
	CRHEATER234A00	28.9	25.0	58.8	60	-	54	182																											
LOW	CRHEATER235A00	40.4	35.0	73.2	-	80	67	182																											
	CRHEATER236A00	46.2	40.0	80.4	-	90	74	182																											

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OFM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY			DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)				FLA	FLA (ea)				Qty	FLA (ea)	Part Number	FLA	Non. kW	MCA	Fuse or HACR Bktr	MOCP	FLA
08 (cont)	575-3-60	518	633	5.1	34	5.1	34	-	-	2	0.8	2.0	1.1	0.12	2	3.3	LOW	none	HIGH	CRHEATER239A00	-	-	24	30	-	26	137	
													CRHEATER240A00							13.9	15.0	31.0	35	-	29	137		
													CRHEATER241A00							23.1	25.0	42.5	45	-	39	137		
													CRHEATER242A00							32.3	35.0	54.0	60	-	50	137		
													CRHEATER243A00							37.0	40.0	59.9	60	-	55	137		
													CRHEATER244A00							-	-	26.8	30	-	29	160		
		575-3-60	518	633	5.1	34	5.1	34	-	-	2	0.8	2.8	1.1	0.12	2	3.3		HIGH	CRHEATER239A00	13.9	15.0	34.5	35	-	32	160	
														CRHEATER240A00						23.1	25.0	46.0	50	-	42	160		
														CRHEATER241A00						32.3	35.0	57.5	60	-	53	160		
														CRHEATER242A00						37.0	40.0	63.4	-	70	58	160		
														CRHEATER243A00						-	-	24.8	30	-	27	148		
														CRHEATER244A00						13.9	15.0	32.0	35	-	29	148		
09	208/230-3-60	187	253	16.0	91	16.0	91	-	-	2	1.5	5.2	3.3	0.3	2	2.4	HIGH	CRHEATER239A00	13.9	15.0	35.5	40	-	33	171			
																		CRHEATER240A00	23.1	25.0	47.0	50	-	43	171			
																		CRHEATER241A00	32.3	35.0	58.5	60	-	54	171			
																		CRHEATER242A00	37.0	40.0	64.4	-	70	59	171			
																		CRHEATER243A00	-	-	68.9/66.5	-/-	80/80	75/72	324			
																		CRHEATER244A00	20.023.1	7.5/10.0	68.9/66.5	-/-	80/80	73/72	324/324			
		208/230-3-60	187	253	16.0	91	16.0	91	-	-	2	1.5	5.2	3.32/3.0	0.33/0.3	2	8.85/8.0	LOW	CRHEATER245A00	20.034.6	11.3/15.0	74.8/77.6	-/-	80/80	73/72	324/324		
																			CRHEATER246A00	50.057.7	18.8/25.0	99.8/106.5	-/-	100/110	92/98	324/324		
																			CRHEATER247A00	70.080.8	26.3/35.0	124.8/135.4	-/-	125/125	115/125	324/324		
																			CRHEATER248A00	80.092.4	30.0/40.0	137.3/149.9	-/-	150/150	126/138	324/324		
																			CRHEATER249A00	-	-	76.7/73.6	-/-	90/80	84/80	376		
																			CRHEATER250A00	20.023.1	7.5/10.0	76.7/73.6	-/-	90/80	84/80	376/376		
09	208/230-3-60	187	253	16.0	91	16.0	91	-	-	2	1.5	5.2	8.85/8.0	0.66/0.6	2	7.08/6.4	HIGH	CRHEATER251A00	20.034.6	11.3/15.0	84.7/86.5	-/-	90/80	84/80	376/376			
																		CRHEATER252A00	50.057.7	18.8/25.0	109.7/115.4	-/-	110/125	101/106	376/376			
																		CRHEATER253A00	70.080.8	26.3/35.0	134.7/144.3	-/-	150/150	124/133	376/376			
																		CRHEATER254A00	80.092.4	30.0/40.0	147.2/158.8	-/-	150/175	135/146	376/376			
																		CRHEATER255A00	-	-	73.9/71.5	-/-	80/80	80/78	367			
																		CRHEATER256A00	20.023.1	7.5/10.0	73.9/71.5	-/-	80/80	80/78	367/367			
		208/230-3-60	187	253	16.0	91	16.0	91	-	-	2	1.5	5.2	3.32/3.0	0.33/0.3	2	8.85/8.0	LOW	CRHEATER257A00	30.034.6	11.3/15.0	81.1/83.9	-/-	90/90	80/78	367/367		
																			CRHEATER258A00	50.057.7	18.8/25.0	106.1/112.8	-/-	110/125	98/104	367/367		
																			CRHEATER259A00	70.080.8	26.3/35.0	131.1/141.6	-/-	150/150	121/130	367/367		
																			CRHEATER260A00	80.092.4	30.0/40.0	143.6/156.1	-/-	150/175	132/144	367/367		
																			CRHEATER261A00	-	-	81.7/78.6	-/-	90/90	89/86	419		
																			CRHEATER262A00	20.023.1	7.5/10.0	81.7/78.6	-/-	90/90	89/86	419/419		
208/230-3-60	187	253	16.0	91	16.0	91	-	-	2	1.5	5.2	8.85/8.0	0.66/0.6	2	7.08/6.4	HIGH	CRHEATER263A00	30.034.6	11.3/15.0	90.9/92.8	-/-	100/100	89/86	419/419				
																	CRHEATER264A00	50.057.7	18.8/25.0	115.9/121.6	-/-	125/125	107/112	419/419				
																	CRHEATER265A00	70.080.8	26.3/35.0	140.9/150.5	-/-	150/175	130/138	419/419				
																	CRHEATER266A00	80.092.4	30.0/40.0	163.2/166.0	-/-	150/175	130/138	419/419				
																	CRHEATER267A00	-	-	153.2/166.0	-/-	150/175	130/138	419/419				
																	CRHEATER268A00	20.023.1	7.5/10.0	153.2/166.0	-/-	150/175	130/138	419/419				

50PG

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM	IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY			DISCONNECT SIZE	
				No. 1		No. 2		No. 3						FLA (ea)	Qty				FLA (ea)	Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA		
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	FLA	MCA	Fuse or HACR BkHr	MOCP			FLA	LRA										
09 (cont)	460-3-60									2.6	1.5	0.15	4	4	LOW	none	HIGH	CRHEATER232A00	-	-	31.3	35	-	34	159		
																		CRHEATER233A00	11.5	10.0	31.6	35	-	34	159		
																		CRHEATER234A00	17.3	15.0	38.8	40	-	36	159		
																		CRHEATER235A00	28.9	25.0	53.3	60	-	49	159		
																		CRHEATER236A00	40.4	35.0	67.7	-	70	62	159		
																		CRHEATER238A00	46.2	40.0	74.9	-	80	69	159		
	480-3-60	414	506	7.1	46	7.1	46	-	-	2	4.8	1.5	0.15	4	HIGH		LOW	CRHEATER232A00	11.5	10.0	34.3	40	-	37	181		
																		CRHEATER233A00	17.3	15.0	41.6	45	-	38	181		
																		CRHEATER234A00	28.9	25.0	56.1	60	-	52	181		
																		CRHEATER235A00	40.4	35.0	70.4	-	80	65	181		
																		CRHEATER236A00	46.2	40.0	77.7	-	80	71	181		
																		CRHEATER238A00	-	-	37.1	40	-	41	205		
										4	0.35	3.2	4	HIGH		HIGH	CRHEATER232A00	11.5	10.0	38.8	40	-	41	205			
																	CRHEATER233A00	17.3	15.0	46.1	50	-	42	205			
																	CRHEATER234A00	28.9	25.0	60.6	-	70	56	205			
																	CRHEATER235A00	40.4	35.0	74.9	-	80	69	205			
																	CRHEATER236A00	46.2	40.0	82.2	-	90	76	205			
																	CRHEATER238A00	-	-	25.1	30	-	27	143			
										1.1	0.12	3.3	3.3	LOW		LOW	CRHEATER239A00	13.9	15.0	31.0	35	-	29	143			
																	CRHEATER240A00	23.1	25.0	42.5	45	-	39	143			
																	CRHEATER241A00	32.3	35.0	54.0	60	-	50	143			
																	CRHEATER242A00	37.0	40.0	59.9	60	-	55	143			
																	CRHEATER244A00	-	-	27.9	30	-	30	166			
																	CRHEATER239A00	13.9	15.0	34.5	35	-	32	166			
575-3-60	518	633	5.6	37	5.6	37	-	-	2	2.0	3.3	0.3	2	2.4	HIGH	none	HIGH	CRHEATER240A00	23.1	25.0	46.0	50	-	42	166		
																		CRHEATER241A00	32.3	35.0	57.5	60	-	53	166		
																		CRHEATER242A00	37.0	40.0	63.4	-	70	58	166		
																		CRHEATER244A00	-	-	25.9	30	-	28	154		
																		CRHEATER239A00	13.9	15.0	32.0	35	-	29	154		
																		CRHEATER240A00	23.1	25.0	43.5	45	-	40	154		
											1.1	0.12	3.3	HIGH		HIGH	CRHEATER241A00	32.3	35.0	55.0	60	-	51	154			
																	CRHEATER242A00	37.0	40.0	60.9	-	70	56	154			
																	CRHEATER244A00	-	-	28.7	35	-	31	177			
																	CRHEATER239A00	13.9	15.0	35.5	40	-	33	177			
																	CRHEATER240A00	23.1	25.0	47.0	50	-	33	177			
																	CRHEATER241A00	32.3	35.0	58.5	60	-	54	177			
																										CRHEATER242A00	37.0

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY			DISCONNECT SIZE									
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)	FLA	FLA (ea)	FLA (ea)	Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA												
				RLA	LRA	RLA	LRA	RLA	LRA																											
12	208/230-3-60	187	253	17.6	123	123	17.6	123	1.9	10.2	3.32/3.0	0.33/0.3	2	7.08/6.4	8.85/8.0	7.5	LOW	none	HIGH	LOW	-	7.51/10.0	756/73.2	91/87	468/468	90/90	82/79	416								
																													CRHEATER225A00	20.0/23.1	-	-	90/90	82/79	416/416	
																													CRHEATER226A00	30.0/34.6	11.3/15.0	77.7/80.5	-	90/90	82/79	416/416
																													CRHEATER227A00	50.0/57.7	18.8/25.0	102.7/109.4	-	101/10	94/101	416/416
																													CRHEATER228A00	70.0/80.8	26.3/35.0	127.7/138.3	-	150/150	117/127	416/416
																													CRHEATER229A00	80.0/92.4	30.0/40.0	140.2/152.8	-	150/175	129/141	416/416
	460-3-60	414	506	9.6	62	62	9.6	62	1.0	3.4	8.85/8.0	0.35	2	3.2	1.5	HIGH	none	HIGH	HIGH	-	7.51/10.0	83.4/80.3	91/87	468/468	100/90	91/87	468									
																												CRHEATER225A00	20.0/23.1	-	-	90/90	91/87	468		
																												CRHEATER226A00	30.0/34.6	11.3/15.0	87.5/89.4	-	100/90	91/87	468/468	
																												CRHEATER227A00	50.0/57.7	18.8/25.0	112.5/118.3	-	129/125	104/109	468/468	
																												CRHEATER228A00	70.0/80.8	26.3/35.0	137.5/147.1	-	150/150	127/135	468/468	
																												CRHEATER229A00	80.0/92.4	30.0/40.0	150.0/161.6	-	175/175	138/149	468/468	
12	208/230-3-60	187	253	17.6	123	123	17.6	123	1.9	10.2	3.32/3.0	0.33/0.3	2	7.08/6.4	8.85/8.0	LOW	none	HIGH	LOW	-	7.51/10.0	78.3/75.9	90/90	85/82	433											
																										CRHEATER225A00	20.0/23.1	7.51/10.0	78.3/75.9	-	90/90	85/82	433/433			
																										CRHEATER226A00	30.0/34.6	11.3/15.0	81.1/83.9	-	90/90	85/82	433/433			
																										CRHEATER227A00	50.0/57.7	18.8/25.0	106.1/112.8	-	110/125	98/104	433/433			
																										CRHEATER228A00	70.0/80.8	26.3/35.0	131.1/141.6	-	150/175	121/130	433/433			
																										CRHEATER229A00	80.0/92.4	30.0/40.0	143.6/156.1	-	150/175	132/144	433/433			
	460-3-60	414	506	9.6	62	62	9.6	62	1.0	3.4	8.85/8.0	0.35	2	7.08/6.4	8.85/8.0	HIGH	none	HIGH	HIGH	-	7.51/10.0	168.7/156.1	175/175	155/170	433/433	94/90	485									
																												CRHEATER225A00	20.0/23.1	7.51/10.0	86.1/83.0	-	100/100	94/90	485/485	
																												CRHEATER226A00	30.0/34.6	11.3/15.0	90.9/92.8	-	100/100	94/90	485/485	
																												CRHEATER227A00	50.0/57.7	18.8/25.0	115.9/121.6	-	123/125	107/112	485/485	
																												CRHEATER228A00	70.0/80.8	26.3/35.0	140.9/150.5	-	150/175	130/138	485/485	
																												CRHEATER229A00	80.0/92.4	30.0/40.0	153.4/165.0	-	175/175	141/152	485/485	
12	208/230-3-60	187	253	17.6	123	123	17.6	123	1.9	10.2	3.32/3.0	0.33/0.3	2	7.08/6.4	8.85/8.0	HIGH	none	HIGH	LOW	-	7.51/10.0	168.7/156.1	175/175	155/170	433/433	94/90	485									
																												CRHEATER225A00	20.0/23.1	7.51/10.0	86.1/83.0	-	100/100	94/90	485/485	
																												CRHEATER226A00	30.0/34.6	11.3/15.0	90.9/92.8	-	100/100	94/90	485/485	
																												CRHEATER227A00	50.0/57.7	18.8/25.0	115.9/121.6	-	123/125	107/112	485/485	
																												CRHEATER228A00	70.0/80.8	26.3/35.0	140.9/150.5	-	150/175	130/138	485/485	
																												CRHEATER229A00	80.0/92.4	30.0/40.0	153.4/165.0	-	175/175	141/152	485/485	
	460-3-60	414	506	9.6	62	62	9.6	62	1.0	3.4	8.85/8.0	0.35	2	7.08/6.4	8.85/8.0	HIGH	none	HIGH	HIGH	-	7.51/10.0	168.7/156.1	175/175	155/170	433/433	94/90	485									
																												CRHEATER225A00	20.0/23.1	7.51/10.0	86.1/83.0	-	100/100	94/90	485/485	
																												CRHEATER226A00	30.0/34.6	11.3/15.0	90.9/92.8	-	100/100	94/90	485/485	
																												CRHEATER227A00	50.0/57.7	18.8/25.0	115.9/121.6	-	123/125	107/112	485/485	
																												CRHEATER228A00	70.0/80.8	26.3/35.0	140.9/150.5	-	150/175	130/138	485/485	
																												CRHEATER229A00	80.0/92.4	30.0/40.0	153.4/165.0	-	175/175	141/152	485/485	

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																								
		Min	Max	No. 1		No. 2		No. 3					Qty	FLA (ea)				FLA	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR BkR	MOCSP	FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																							
				RLA	LRA	RLA	LRA	RLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																									
12 (cont)	575-3-60	518	633	40	6.1	40	6.1	40	-	2	0.8	2.8	0.3	3.3	2	3.3	none	HIGH	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW	LOW

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OFM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY			DISCONNECT SIZE		
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)	FLA	FLA (ea)	FLA (ea)	Qty	FLA (ea)	none	none	none	none	none	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCPS	FLA	LRA
				RLA	LRA	RLA	LRA	RLA	LRA																				
14 (cont)	460-3-60									2	1.0	4.8	1.5	0.15	4	3.2	LOW	none	HIGH	LOW	CRHEATER232A00	-	-	41.8	50	-	-	45	239
																					CRHEATER233A00	11.5	10.0	41.8	50	-	-	45	239
																					CRHEATER234A00	17.3	15.0	41.8	50	-	-	45	239
																					CRHEATER235A00	28.9	25.0	56.1	60	-	-	52	239
																					CRHEATER236A00	40.4	35.0	70.4	-	-	-	65	239
																					CRHEATER237A00	57.7	50.0	77.6	-	-	-	80	239
		414	506	10.6	75	10.6	75	7.4	4	0.35	2	3.2	HIGH	none	HIGH	CRHEATER238A00	69.3	60.0	89.2	-	-	-	90	98	239				
																CRHEATER239A00	-	-	45.4	50	-	-	49	263					
																CRHEATER240A00	11.5	10.0	45.4	50	-	-	49	263					
																CRHEATER241A00	17.3	15.0	46.1	50	-	-	49	263					
																CRHEATER242A00	28.9	25.0	60.6	-	-	-	56	263					
																CRHEATER243A00	40.4	35.0	74.9	-	-	-	69	263					
	480-3-60	414	506	10.6	75	10.6	75	7.4	4	0.35	2	3.2	HIGH	none	HIGH	CRHEATER244A00	57.7	50.0	82.1	-	-	-	80	89	263				
																CRHEATER245A00	69.3	60.0	93.7	-	-	-	100	102	263				
																CRHEATER246A00	-	-	44.4	50	-	-	48	243					
																CRHEATER247A00	11.5	10.0	44.4	50	-	-	48	243					
																CRHEATER248A00	17.3	15.0	44.8	50	-	-	48	243					
																CRHEATER249A00	28.9	25.0	59.3	60	-	-	55	243					
		518	506	10.6	75	10.6	75	7.4	4	0.35	2	3.2	HIGH	none	HIGH	CRHEATER250A00	40.4	35.0	73.7	-	-	-	80	68	243				
																CRHEATER251A00	57.7	50.0	80.9	-	-	-	90	88	243				
																CRHEATER252A00	69.3	60.0	92.5	-	-	-	100	101	243				
																CRHEATER253A00	-	-	48	60	-	-	52	267					
																CRHEATER254A00	11.5	10.0	48.0	60	-	-	52	267					
																CRHEATER255A00	17.3	15.0	49.3	60	-	-	52	267					
	575-3-60	518	633	7.7	54	7.7	54	2.8	1.1	0.12	2	3.3	LOW	none	HIGH	CRHEATER256A00	28.9	25.0	63.8	-	-	-	70	59	267				
																CRHEATER257A00	40.4	35.0	78.2	-	-	-	80	72	267				
																CRHEATER258A00	57.7	50.0	85.4	-	-	-	90	92	267				
																CRHEATER259A00	69.3	60.0	97.0	-	-	-	100	105	267				
																CRHEATER260A00	-	-	30.6	35	-	-	33	188					
																CRHEATER261A00	13.9	15.0	32.0	35	-	-	33	188					
		518	633	7.7	54	7.7	54	2.8	1.1	0.12	2	3.3	LOW	none	HIGH	CRHEATER262A00	23.1	25.0	43.5	45	-	-	40	188					
																CRHEATER263A00	32.3	35.0	55.0	60	-	-	51	188					
																CRHEATER264A00	37.0	40.0	60.9	-	-	-	70	56	188				
																CRHEATER265A00	46.2	50.0	60.9	-	-	-	70	67	188				
																CRHEATER266A00	55.4	60.0	70.1	-	-	-	80	77	188				
																CRHEATER267A00	-	-	33.4	40	-	-	36	211					
	575-3-60	518	633	7.7	54	7.7	54	2.8	3.3	0.3	2	2.4	HIGH	none	HIGH	CRHEATER268A00	13.9	15.0	35.5	40	-	-	36	211					
																CRHEATER269A00	23.1	25.0	47.0	50	-	-	43	202					
																CRHEATER270A00	32.3	35.0	58.5	60	-	-	54	202					
																CRHEATER271A00	37.0	40.0	64.4	-	-	-	70	59	202				
																CRHEATER272A00	46.2	50.0	64.4	-	-	-	70	70	202				
																CRHEATER273A00	55.4	60.0	73.6	-	-	-	80	80	202				
		518	633	7.7	54	7.7	54	2.8	3.3	0.3	2	2.4	HIGH	none	HIGH	CRHEATER274A00	-	-	36.2	40	-	-	39	225					
																CRHEATER275A00	13.9	15.0	39.0	40	-	-	39	225					
																CRHEATER276A00	23.1	25.0	50.5	60	-	-	46	225					
																CRHEATER277A00	32.3	35.0	62.0	-	-	-	70	57	225				
																CRHEATER278A00	37.0	40.0	67.9	-	-	-	70	62	225				
																CRHEATER279A00	46.2	50.0	67.8	-	-	-	70	73	225				
	518	633	7.7	54	7.7	54	2.8	3.3	0.3	2	2.4	LOW	none	HIGH	CRHEATER280A00	55.4	60.0	77.0	-	-	-	80	84	225					

50PG

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM	IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE						
		Min	Max	No. 1		No. 2		No. 3						Qty	FLA (ea)				FLA (ea)	FLA (ea)	Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA			
				RLA	LRA	RLA	LRA	RLA	LRA																								
16	208/230-3-60	187	253	18.1	137	18.1	137	17.6	123	3	1.9	15.0	2	0.66/0.6	none	none	HIGH	LOW	-	-	106.7/103.6	-	125/110	118/114	640								
																										CRHEATER255A00	52.1/60.1	18.8/25.0	118.5/124.6	-	200/75	169/184	640/640
																										CRHEATER256A00	104.2/120.3	37.6/50.0	183.7/169.8	-	225/250	229/253	640/640
																										CRHEATER257A00	156.3/180.4	56.3/75.0	209.7/229.9	-	225/250	229/253	640/640
																										CRHEATER255A00	52.1/60.1	18.8/25.0	118.5/124.6	-	200/75	169/184	640/640
																										CRHEATER256A00	104.2/120.3	37.6/50.0	183.7/169.8	-	225/250	229/253	640/640
																										CRHEATER257A00	156.3/180.4	56.3/75.0	209.7/229.9	-	225/250	229/253	640/640
																										CRHEATER255A00	52.1/60.1	18.8/25.0	118.5/124.6	-	200/75	169/184	640/640
																										CRHEATER256A00	104.2/120.3	37.6/50.0	183.7/169.8	-	225/250	229/253	640/640
																										CRHEATER257A00	156.3/180.4	56.3/75.0	209.7/229.9	-	225/250	229/253	640/640
																										CRHEATER255A00	52.1/60.1	18.8/25.0	118.5/124.6	-	200/75	169/184	640/640
																										CRHEATER256A00	104.2/120.3	37.6/50.0	183.7/169.8	-	225/250	229/253	640/640
	CRHEATER257A00	156.3/180.4	56.3/75.0	209.7/229.9	-	225/250	229/253	640/640																									
	460-3-60	414	506	9.0	62	9.0	62	9.6	62	3	1.0	7.4	2	0.35	none	none	HIGH	LOW	-	-	52.6	60	225/250	239/264	687/687								
																										CRHEATER258A00	30.1	25.0	62.1	-	70	58	301
																										CRHEATER259A00	60.1	50.0	84.5	-	90	92	301
CRHEATER260A00																										90.2	75.0	114.6	-	125	126	301	

Units Without Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFLM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)	FLA	FLA (ea)	FLA (ea)	Qty	FLA (ea)	TYPE			Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
16 (cont)	575-3-40									2.8	2.4		3.3		3.3	LOW		LOW		LOW																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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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 = $100 \times \frac{4}{227}$

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.

3. Single point kits CRSINGLE028A00 and CRSINGLE031A00 are not required if field-supplied pressure connectors are used. Factory-installed heaters contain terminal blocks when combined MOCP is greater than 60 amps.

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

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

50PG

50PG

UNIT SIZE	NOMINAL VOLTAGE (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY				ERV EXHAUST				ERV WHEEL			POWER SUPPLY		DISCONNECT SIZE																																																																																																					
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	FLA (ea)	Hp	FLA	MCA	MOCP																																																																																																													
				RLA	LRA	RLA	LRA	RLA	LRA																																																																																																																												
208/230-3-60	208/230-3-60	187	253	28.2	208	28.2	208	15.4	104	15.4	104	83	12.8	83	-	4	0.25	0.7	1.5	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	105/102	125/125	113/109																																																																																																						
																																5	16.7/15.2	2	8.85/8.0	0.167	0.66/0.6	112/108	125/125	120/116																																																																																													
																																									7.5	24.2/22	2	8.85/8.0	0.167	0.66/0.6	119/114	125/125	129/124																																																																																				
																																																		10	30.8/28	2	8.85/8.0	0.167	0.66/0.6	126/120	150/125	136/130																																																																											
																																																											3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	110/116	125/125	113/109																																																															
																																																																							5	16.7/15.2	2	8.85/8.0	0.167	0.66/0.6	118/123	125/125	120/116																																																						
																																																																																10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	135/139	150/150	136/130																																										
																																																																																												3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	173/161	200/175	161/175																														
																																																																																																								5	16.7/15.2	2	8.85/8.0	0.167	0.66/0.6	183/168	200/175	168/182																					
																																																																																																																	7.5	24.2/22	2	8.85/8.0	0.167	0.66/0.6	192/176	200/200	171/190												
																																																																																																																										10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	200/184	225/200	184/197
5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	112/108*	125/125*	120/116*																																																																																																																										
												7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	119/114*	125/125*	129/124*																																																																																																														
																								10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	126/120*	150/125*	136/130*																																																																																																		
																																				3.7	4.8	2	3.2	2	3	4	0.167	0.35	54	60	57																																																																																						
																																																5	7.6	2	3.2	2	3	4	0.167	0.35	57	60	61																																																																										
																																																												7.5	11	2	3.2	2	3	4	0.167	0.35	60	60	65																																																														
																																																																								10	14	2	3.2	2	3	4	0.167	0.35	63	70	68																																																		
																																																																																				3.7	4.8	2	3.2	2	3	4	0.167	0.35	58	60	57																																						
																																																																																																5	7.6	2	3.2	2	3	4	0.167	0.35	61	70	61																										
																																																																																																												7.5	11	2	3.2	2	3	4	0.167	0.35	66	70	65														
																																																																																																																								10	14	2	3.2	2	3	4	0.167	0.35	69	70	68		
																																																																																																																																				3.7	4.8
5	7.6	2	3.2	2	3	4	0.167	0.35	84	90	91																																																																																																																										
												7.5	11	2	3.2	2	3	4	0.167	0.35	88	90	95																																																																																																														
																								10	14	2	3.2	2	3	4	0.167	0.35	92	100	98																																																																																																		
																																				3.7	4.8	2	3.2	2	3	4	0.167	0.35	110	125	122																																																																																						
																																																5	7.6	2	3.2	2	3	4	0.167	0.35	114	125	126																																																																										
																																																												7.5	11	2	3.2	2	3	4	0.167	0.35	118	125	129																																																														
																																																																								10	14	2	3.2	2	3	4	0.167	0.35	122	125	133																																																		
																																																																																				5	6.1	2	2.4	2	3	3.3	0.167	0.3	47	50	50																																						
																																																																																																7.5	9	2	2.4	2	3	3.3	0.167	0.3	50	60	54																										
																																																																																																												10	11	2	2.4	2	3	3.3	0.167	0.3	52	60	56														
																																																																																																																								5	6.1	2	2.4	2	3	3.3	0.167	0.3	49	50	50		
																																																																																																																																				7.5	9
10	11	2	2.4	2	3	3.3	0.167	0.3	55	60	56																																																																																																																										
												5	6.1	2	2.4	2	3	3.3	0.167	0.3	77	80	71																																																																																																														
																								7.5	9	2	2.4	2	3	3.3	0.167	0.3	80	90	74																																																																																																		
																																				10	11	2	2.4	2	3	3.3	0.167	0.3	83	90	76																																																																																						
																																																5	6.1	2	2.4	2	3	3.3	0.167	0.3	94	100	104																																																																										
																																																												7.5	9	2	2.4	2	3	3.3	0.167	0.3	98	100	107																																																														
																																																																								10	11	2	2.4	2	3	3.3	0.167	0.3	100	110	110																																																		

* 208/230 v 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	Hp	FLA	FLA (ea)	Qty	Hp	FLA (ea)	MCA	MOC	FLA							
20	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	156/180	175/200	179/207						

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR								OFIM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	FLA (ea)	Hp	FLA	MCA	MOC				
				RLA	LRA	RLA	LRA	RLA	LRA																						
20	208/230	187	253	28.2	208	28.2	208	-	-	4	0.25	1.5	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	2	3	8.85/8.0	0.167	0.66/0.6	201/221	225/225	221/244		
															5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	209/228	225/250	228/251					
															7.5	24.2/22.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	218/236	225/250	236/259					
															10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	226/244	250/250	244/266					

LEGEND

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



Example: Supply voltage is 460-3-60

AB = 452 v
BC = 464 v
AC = 455 v

Average Voltage = $\frac{452 + 464 + 455}{3}$

= $\frac{1371}{3}$

= 457

Determine maximum deviation from average voltage.

(AB) 457 – 452 = 5 v

(BC) 464 – 457 = 7 v

(AC) 457 – 455 = 2 v

Maximum deviation is 7 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{7}{457}$

= 1.53%

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.
- The 75-kW 208/240-v electric heat can be factory installed but it must be wired separately in the field.
 - The convenience outlet full load amps (FLA) are 5, 3 and 3 for 208/230, 460, 575–v units, respectively.
 - The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 600 v.
 - MCA calculation for 50PG units with electric heaters over 50 kW is = 1.25 x (IFM + Power Exhaust + Convenience Outlet FLA amps) + 1.00 x (Electric Heater FLA).

NOTES:

- 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.
- 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 = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet and with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY				ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	FLA (ea)	Hp	FLA	MCA	MOCp						
				RLA	LRA	RLA	LRA	RLA	LRA																					
208/230-3-60		187	253	32.1	240	32.1	240	-	-	6	0.25	1.5			19/25	52/60	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	117/114	125/125	126/122		
																	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	123/119	150/150	133/128		
																	7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	131/126	150/150	141/136		
																	10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	137/132	150/150	149/143		
																	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	117/116	125/125	126/122		
																	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	123/123	150/150	133/128		
																	7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	131/131	150/150	141/136		
																	10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	137/139	150/150	149/143		
																	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	175/161	200/175	161/175		
																	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	183/168	200/175	168/182		
460-3-60		414	506	15.4	110	15.4	110	-	-	6	0.25	0.7		56/75	136/180	7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	131/126*	150/150*	133/128*			
																10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	137/132*	150/150*	149/143*			
																3.7	4.8	2	3.2	2	3	4	0.167	0.35	55	60	59			
																5	7.6	2	3.2	2	3	4	0.167	0.35	58	60	62			
																7.5	11	2	3.2	2	3	4	0.167	0.35	61	70	62			
																10	14	2	3.2	2	3	4	0.167	0.35	66	70	66			
																3.7	4.8	2	3.2	2	3	4	0.167	0.35	69	70	70			
																5	7.6	2	3.2	2	3	4	0.167	0.35	80	90	88			
																7.5	11	2	3.2	2	3	4	0.167	0.35	84	90	91			
																10	14	2	3.2	2	3	4	0.167	0.35	88	90	95			
575-3-60		518	633	88	12.8	88	12.8	-	-	6	0.25	0.7		78	75	3.7	4.8	2	3.2	2	3	4	0.167	0.35	110	125	122			
																5	7.6	2	3.2	2	3	4	0.167	0.35	114	125	126			
																7.5	11	2	3.2	2	3	4	0.167	0.35	118	125	129			
																10	14	2	3.2	2	3	4	0.167	0.35	122	125	133			
																5	6.1	2	2.4	2	3	3.3	0.167	0.3	48	60	52			
																7.5	9	2	2.4	2	3	3.3	0.167	0.3	51	60	55			
																10	11	2	2.4	2	3	3.3	0.167	0.3	53	60	58			
																5	6.1	2	2.4	2	3	3.3	0.167	0.3	49	60	52			
																7.5	9	2	2.4	2	3	3.3	0.167	0.3	53	60	55			
																10	11	2	2.4	2	3	3.3	0.167	0.3	55	60	58			
		518	633	88	12.8	88	12.8	-	-	6	0.25	0.7		48.3	46	5	6.1	2	2.4	2	3	3.3	0.167	0.3	77	80	71			
																7.5	9	2	2.4	2	3	3.3	0.167	0.3	80	90	74			
																10	11	2	2.4	2	3	3.3	0.167	0.3	83	90	76			
																5	6.1	2	2.4	2	3	3.3	0.167	0.3	84	100	104			
																7.5	9	2	2.4	2	3	3.3	0.167	0.3	98	100	107			
																10	11	2	2.4	2	3	3.3	0.167	0.3	100	110	110			

8. 208/230 v 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE			COMPRESSOR						ELECTRIC HEAT			IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	No. 1	No. 2			No. 3	Qty	Hp	FLA (ea)	KW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	Hp	FLA	MCA		MOC	FLA
					RLA	LRA	RLA																					
24	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	156/180	175/200	179/207	

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFIM			ELECTRIC HEAT			IFIM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	FLA	Hp	FLA (ea)	FLA	FLA	Qty	Hp	FLA (ea)	FLA	FLA	Hp	FLA	MCA	MOCp			
				RLA	LRA	RLA	LRA	RLA	LRA																						
24	208/230	187	253	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	2	7.08/6.4	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	201/221	225/225	221/244	

Example: Supply voltage is 460-3-60

AB = 452 v
BC = 464 v
AC = 455 v
Average Voltage = $\frac{452 + 464 + 455}{3}$
= $\frac{1371}{3}$
= 457



Determine maximum deviation from average voltage.

(AB) 457 - 452 = 5 v
(BC) 464 - 457 = 7 v
(AC) 457 - 455 = 2 v

Maximum deviation is 7 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{7}{457}$
= 1.53%

- 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.
3. The 75-kw 208/240-v electric heat can be factory installed but it must be wired separately in the field.
 4. The convenience outlet full load amps (FLA) are 5, 3 and 3 for 208/230, 460, 575-v units, respectively.
 5. The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 600 v.
 6. MCA calculation for 50PG units with electric heaters over 50 kW is = 1.25 x (IFM + Power Exhaust + Convenience Outlet FLA amps) + 1.00 x (Electric Heater FLA).

LEGEND

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

UL

- 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 = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

Units Without Powered Convenience Outlet and with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	KW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP		
				RLA	LRA	RLA	LRA	RLA	LRA																			
28	460-3-60	414	506	15.4	104	15.4	104	104	15.4	6	0.25	0.7	-	5	16.7/15.2	2	7.08/6.4	2	3	8.95/8.0	2	3	8.95/8.0	0.167	0.66/0.6	143/139	150/150	156/152
														7.5	24.2/22	2	7.08/6.4	2	3	8.95/8.0	0.167	0.66/0.6	150/146	175/150	165/159			
														10	30.8/28	2	7.08/6.4	2	3	8.95/8.0	0.167	0.66/0.6	158/152	175/175	172/166			
														5	16.7/15.2	2	7.08/6.4	2	3	8.95/8.0	0.167	0.66/0.6	143/139	150/150	156/152			
														7.5	24.2/22	2	7.08/6.4	2	3	8.95/8.0	0.167	0.66/0.6	150/146*	175/150*	165/159*			
														10	30.8/28	2	7.08/6.4	2	3	8.95/8.0	0.167	0.66/0.6	158/152*	175/175*	172/166*			
														5	7.6	2	3.2	2	3	4	0.167	0.35	73	80	80			
														7.5	11	2	3.2	2	3	4	0.167	0.35	77	90	84			
														10	14	2	3.2	2	3	4	0.167	0.35	80	90	87			
														5	7.6	2	3.2	2	3	4	0.167	0.35	73	80	80			
28	460-3-60	414	506	15.4	104	15.4	104	104	15.4	6	0.25	0.7	25	30	16.7/15.2	2	7.08/6.4	2	3	8.95/8.0	0.167	0.35	77	90	84			
														7.5	24.2/22	2	7.08/6.4	2	3	8.95/8.0	0.167	0.35	80	90	87			
														10	30.8/28	2	7.08/6.4	2	3	8.95/8.0	0.167	0.35	84	90	91			
														5	7.6	2	3.2	2	3	4	0.167	0.35	73	80	80			
														7.5	11	2	3.2	2	3	4	0.167	0.35	77	90	84			
														10	14	2	3.2	2	3	4	0.167	0.35	80	90	87			
														5	7.6	2	3.2	2	3	4	0.167	0.35	73	80	80			
														7.5	11	2	3.2	2	3	4	0.167	0.35	77	90	84			
														10	14	2	3.2	2	3	4	0.167	0.35	80	90	87			
														5	7.6	2	3.2	2	3	4	0.167	0.35	73	80	80			
28	460-3-60	414	506	15.4	104	15.4	104	104	15.4	6	0.25	0.7	75	90	16.7/15.2	2	7.08/6.4	2	3	8.95/8.0	0.167	0.35	114	125	126			
														7.5	24.2/22	2	7.08/6.4	2	3	8.95/8.0	0.167	0.35	118	125	126			
														10	30.8/28	2	7.08/6.4	2	3	8.95/8.0	0.167	0.35	122	133	133			
														5	7.6	2	3.2	2	3	4	0.167	0.35	114	125	126			
														7.5	11	2	3.2	2	3	4	0.167	0.35	118	125	126			
														10	14	2	3.2	2	3	4	0.167	0.35	122	133	133			
														5	6.1	2	2.4	2	3	3.3	0.167	0.3	61	70	67			
														7.5	9	2	2.4	2	3	3.3	0.167	0.3	64	70	70			
														10	11	2	2.4	2	3	3.3	0.167	0.3	66	70	72			
														5	6.1	2	2.4	2	3	3.3	0.167	0.3	61	70	67			
28	575-3-60	518	633	12.8	83	12.8	83	83	12.8	83	12.8	0.7	24.8	24	16.7/15.2	2	7.08/6.4	2	3	8.95/8.0	0.167	0.3	64	70	70			
														7.5	24.2/22	2	7.08/6.4	2	3	8.95/8.0	0.167	0.3	66	70	72			
														10	30.8/28	2	7.08/6.4	2	3	8.95/8.0	0.167	0.3	77	80	71			
														5	6.1	2	2.4	2	3	3.3	0.167	0.3	77	80	71			
														7.5	9	2	2.4	2	3	3.3	0.167	0.3	80	90	74			
														10	11	2	2.4	2	3	3.3	0.167	0.3	83	90	76			
														5	6.1	2	2.4	2	3	3.3	0.167	0.3	84	100	104			
														7.5	9	2	2.4	2	3	3.3	0.167	0.3	98	100	107			
														10	11	2	2.4	2	3	3.3	0.167	0.3	100	110	110			
														5	6.1	2	2.4	2	3	3.3	0.167	0.3	100	110	110			

* 208/230 v 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

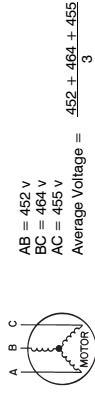
UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY	DISCONNECT SIZE			
				No. 1		No. 2		No. 3																							
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	NA	NA	FLA	Hp	NA	NA	NA	MCA	MOCP
		187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	156/180	175/200
28	208/240																														179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL			POWER SUPPLY		DISCONNECT SIZE		
				No. 1		No. 2		No. 3																							
		Min	Max	RLA	RLA	RLA	RLA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Qty	Hp	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)		FLA (ea)	MCA
28	208/230	187	253	28.2	208	28.2	208	208	6	0.25	1.5	56/75	156/180	7.5	16.7/15.2	2	7.08/6.4	2	7.08/6.4	2	3	8.85/8.0	2	3	8.85/8.0	0.167	0.66/0.6	218/236	225/250	236/259	244/266
				28.2	208	28.2	208	208	6	0.25	1.5	56/75	156/180	7.5	16.7/15.2	2	7.08/6.4	2	7.08/6.4	2	3	8.85/8.0	2	3	8.85/8.0	0.167	0.66/0.6	218/236	225/250	236/259	244/266
				28.2	208	28.2	208	208	6	0.25	1.5	56/75	156/180	7.5	16.7/15.2	2	7.08/6.4	2	7.08/6.4	2	3	8.85/8.0	2	3	8.85/8.0	0.167	0.66/0.6	218/236	225/250	236/259	244/266

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



Determine maximum deviation from average voltage.

- (AB) 457 – 452 = 5 v
- (BC) 464 – 457 = 7 v
- (AC) 457 – 455 = 2 v

Maximum deviation is 7 v.

Determine percent of voltage imbalance.

$$\begin{aligned} \% \text{ Voltage Imbalance} &= 100 \times \frac{7}{457} \\ &= 1.53\% \end{aligned}$$

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

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.

- The 75-kW 208/240-v electric heat can be factory installed but it must be wired separately in the field.
- The convenience outlet full load amps (FLA) are 5, 3 and 3 for 208/230, 460, 575-v units, respectively.
- The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 600 v.
- MCA calculation for 50PG units with electric heaters over 50 kW is = 1.25 x (IFM + Power Exhaust + Convenience Outlet FLA amps) + 1.00 x (Electric Heater FLA).

- NOTES:
- 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.
 - 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.

ELECTRICAL DATA

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16

50PG

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OFIM	IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE	
				No. 1		No. 2		No. 3											Part Number	FLA	Nom. KW	MCA	Fuse or HACR Bktr	MOCp	FLA	LRA		
				RLA	LRA	RLA	LRA	RLA	LRA																			
03	208/230-1-60	Min	Max	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	Qty	FLA (ea)	LOW	none	HIGH	LOW	CRHEATER200A00	-	-	31.8/30.9	40/40	-/-	33/32	85	
																					1.92/1.74	4	1.92/1.74	CRHEATER201A00	10.8/12.5	2.3/3.0	32.0/33.0	40/40
		187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	3	11.47/10.375	HIGH	none	LOW	CRHEATER202A00	17.3/20.0	3.8/5.0	40.2/42.4	45/45	-/-	37/39	85/85		
																				CRHEATER203A00	26.0/30.0	5.6/7.5	51.0/54.9	60/60	-/-	47/50	85/85	
		208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	-	-	72.7/67.8	-/-	80/80	80/74	421	
																					CRHEATER201A00	10.8/12.5	2.3/3.0	83.1/79.2	-/-	90/80	80/74	421/421
		208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	3	11.47/10.375	HIGH	none	LOW	CRHEATER202A00	17.3/20.0	3.8/5.0	91.2/88.5	-/-	100/80	84/81	421/421	
																					CRHEATER203A00	26.0/30.0	5.6/7.5	102.1/101.0	-/-	110/110	94/93	421/421
		208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	-	-	31.8/30.9	40/40	-/-	33/32	85	
																					CRHEATER201A00	10.8/12.5	2.3/3.0	32.0/33.0	40/40	-/-	33/32	85/85
		208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	17.3/20.0	3.8/5.0	40.2/42.4	45/45	-/-	37/39	85/85	
																					CRHEATER203A00	26.0/30.0	5.6/7.5	51.0/54.9	60/60	-/-	47/50	85/85
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	-	-	72.7/67.8	-/-	80/80	80/74	421			
																			CRHEATER201A00	10.8/12.5	2.3/3.0	83.1/79.2	-/-	90/80	80/74	421/421		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	17.3/20.0	3.8/5.0	91.2/88.5	-/-	100/80	84/81	421/421			
																			CRHEATER203A00	26.0/30.0	5.6/7.5	102.1/101.0	-/-	110/110	94/93	421/421		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	-	-	35.1/34.2	50/45	-/-	36/35	108			
																			CRHEATER201A00	10.8/12.5	2.3/3.0	35.1/34.2	50/45	-/-	36/35	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	17.3/20.0	3.8/5.0	40.2/42.4	50/45	-/-	37/39	108/108			
																			CRHEATER203A00	26.0/30.0	5.6/7.5	51.0/54.9	60/60	-/-	47/50	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	-	-	83.5/82.4	-/-	90/100	77/85	108/108			
																			CRHEATER201A00	10.8/12.5	2.3/3.0	75.9/71.1	-/-	90/80	83/77	444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	10.8/12.5	2.3/3.0	90/80	83/77	444/444					
																			CRHEATER203A00	17.3/20.0	3.8/5.0	91.2/88.5	-/-	100/80	84/81	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	26.0/30.0	5.6/7.5	110/110	94/93	444/444					
																			CRHEATER201A00	26.0/30.0	5.6/7.5	110/110	94/93	444/444				
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	34.7/40.0	7.5/10.0	125/125	104/104	444/444					
																			CRHEATER203A00	34.7/40.0	7.5/10.0	125/125	104/104	444/444				
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	52.0/60.0	11.3/15.0	134.6/138.5	-/-	150/150	124/127	444/444			
																			CRHEATER201A00	52.0/60.0	11.3/15.0	134.6/138.5	-/-	150/150	124/127	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	34.7/40.0	7.5/10.0	35.1/34.2	50/45	-/-	36/35	108			
																			CRHEATER203A00	34.7/40.0	7.5/10.0	35.1/34.2	50/45	-/-	36/35	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	10.8/12.5	2.3/3.0	35.1/34.2	50/45	-/-	36/35	108/108			
																			CRHEATER201A00	10.8/12.5	2.3/3.0	35.1/34.2	50/45	-/-	36/35	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	17.3/20.0	3.8/5.0	40.2/42.4	50/45	-/-	37/39	108/108			
																			CRHEATER203A00	26.0/30.0	5.6/7.5	51.0/54.9	60/60	-/-	47/50	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	34.7/40.0	7.5/10.0	83.5/82.4	-/-	90/100	77/85	108/108			
																			CRHEATER201A00	34.7/40.0	7.5/10.0	83.5/82.4	-/-	90/100	77/85	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	52.0/60.0	11.3/15.0	75.9/71.1	-/-	90/80	83/77	444			
																			CRHEATER203A00	52.0/60.0	11.3/15.0	75.9/71.1	-/-	90/80	83/77	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	10.8/12.5	2.3/3.0	91.2/88.5	-/-	100/80	84/81	444/444			
																			CRHEATER201A00	10.8/12.5	2.3/3.0	91.2/88.5	-/-	100/80	84/81	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	26.0/30.0	5.6/7.5	102.1/101.0	-/-	110/110	94/93	444/444			
																			CRHEATER203A00	26.0/30.0	5.6/7.5	102.1/101.0	-/-	110/110	94/93	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	34.7/40.0	7.5/10.0	113.0/113.5	-/-	150/150	124/127	444/444			
																			CRHEATER201A00	34.7/40.0	7.5/10.0	113.0/113.5	-/-	150/150	124/127	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	52.0/60.0	11.3/15.0	134.6/138.5	-/-	150/150	124/127	444/444			
																			CRHEATER203A00	52.0/60.0	11.3/15.0	134.6/138.5	-/-	150/150	124/127	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	10.8/12.5	2.3/3.0	35.1/34.2	50/45	-/-	36/35	108			
																			CRHEATER201A00	10.8/12.5	2.3/3.0	35.1/34.2	50/45	-/-	36/35	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	17.3/20.0	3.8/5.0	40.2/42.4	50/45	-/-	37/39	108/108			
																			CRHEATER203A00	26.0/30.0	5.6/7.5	51.0/54.9	60/60	-/-	47/50	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	34.7/40.0	7.5/10.0	83.5/82.4	-/-	90/100	77/85	108/108			
																			CRHEATER201A00	34.7/40.0	7.5/10.0	83.5/82.4	-/-	90/100	77/85	108/108		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	52.0/60.0	11.3/15.0	75.9/71.1	-/-	90/80	83/77	444			
																			CRHEATER203A00	52.0/60.0	11.3/15.0	75.9/71.1	-/-	90/80	83/77	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER200A00	10.8/12.5	2.3/3.0	91.2/88.5	-/-	100/80	84/81	444/444			
																			CRHEATER201A00	10.8/12.5	2.3/3.0	91.2/88.5	-/-	100/80	84/81	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	HIGH	CRHEATER202A00	26.0/30.0	5.6/7.5	102.1/101.0	-/-	110/110	94/93	444/444			
																			CRHEATER203A00	26.0/30.0	5.6/7.5	102.1/101.0	-/-	110/110	94/93	444/444		
208/230-1-60	187	253	12.8	60	-	-	-	1	1.0	4.9																		

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	COMPRESSOR						VOLTAGE RANGE	ERV				ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE															
		No. 1			No. 2				OFM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv. Outlet	ERV	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Brkr	MOCP	FLA	LRA										
		RLA	LRA	No. 3	Qty	FLA (ea)	Qty		FLA (ea)																											
04 (cont)	208/230-3-60	Min	Max																																	
		187	253	11.5	77	-	-	-	1.0	4.9	1.92/1.74	3.32/3.0	0.33/0.3	4	1.92/1.74	LOW	none	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH									
																												CRHEATER207A00	-	-	30.229.3	40/40	-/-	31/30	102	
																												CRHEATER208A00	6.3/7.2	2.3/3.0	30.229.3	40/40	-/-	31/30	102/102	
																												CRHEATER209A00	10.0/11.5	3.8/5.0	31.031.8	40/40	-/-	31/30	102/102	
																												CRHEATER210A00	15.0/17.3	5.6/7.5	37.339.0	40/40	-/-	34/36	102/102	
																												CRHEATER211A00	20.0/23.1	7.5/10.0	43.546.3	45/50	-/-	40/43	102/102	
		187	253	11.5	77	-	-	-	1.0	4.9	1.92/1.74	3.32/3.0	0.33/0.3	4	1.92/1.74	LOW	none	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH									
																												CRHEATER212A00	30.0/34.6	11.3/15.0	56.060.6	-/-	60/70	52/56	102/102	
																												CRHEATER207A00	6.3/7.2	2.3/3.0	30.229.3	40/40	-/-	31/30	102/102	
	CRHEATER208A00																											10.0/11.5	3.8/5.0	31.031.8	40/40	-/-	31/30	102/102		
	CRHEATER209A00																											15.0/17.3	5.6/7.5	37.339.0	40/40	-/-	34/36	102/102		
	CRHEATER210A00																											20.0/23.1	7.5/10.0	43.546.3	45/50	-/-	40/43	102/102		
	187	253	11.5	77	-	-	-	1.0	4.9	1.92/1.74	3.32/3.0	0.33/0.3	3	7.08/6.4	HIGH	none	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH									
																												CRHEATER211A00	30.0/34.6	11.3/15.0	78.981.3	-/-	80/90	73/75	284/284	
																												CRHEATER207A00	6.3/7.2	2.3/3.0	30.229.3	40/40	-/-	31/30	102/102	
																												CRHEATER208A00	10.0/11.5	3.8/5.0	31.031.8	40/40	-/-	31/30	102/102	
																												CRHEATER209A00	15.0/17.3	5.6/7.5	60.159.6	70/60	-/-	55/55	284/284	
																												CRHEATER210A00	20.0/23.1	7.5/10.0	66.466.9	-/-	70/70	61/62	284/284	
	460-3-60	414	506	5.1	35	-	-	-	0.5	2.1	0.87	1.5	0.15	4	0.87	LOW	none	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH									
																												CRHEATER212A00	3.5	3.0	13.5	15	-	14	47	
																												CRHEATER215A00	5.8	5.0	15.5	20	-	14	47	
																												CRHEATER216A00	8.7	7.5	19.1	20	-	18	47	
																												CRHEATER217A00	11.5	10.0	22.6	25	-	21	47	
																												CRHEATER218A00	17.3	15.0	29.9	30	-	27	47	
		414	506	5.1	35	-	-	-	0.5	2.1	0.87	1.5	0.15	3	3.2	HIGH	none	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH								
																													CRHEATER214A00	3.5	3.0	13.5	15	-	14	47
																													CRHEATER215A00	5.8	5.0	15.5	20	-	14	47
																													CRHEATER216A00	8.7	7.5	19.1	20	-	18	47
																													CRHEATER217A00	11.5	10.0	22.6	25	-	21	47
																													CRHEATER218A00	17.3	15.0	29.9	30	-	27	47

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv. Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																
		Min	Max	No. 1		No. 2		No. 3					FLA (ea)	Qty				FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bk/rr	MOCP	FLA	LRA																
				RLA	LRA	RLA	LRA	RLA	LRA																																	
04 (cont)	575-3-60	518	633	4.3	31	-	-	-	0.5	2.1	0.695	0.12	4	0.695	LOW	none	LOW	CRHEATER221A00	9.2	10.0	11.6	15	-	12	41																	
											CRHEATER222A00		13.9	15.0				18.6	20	-	17	41																				
											1.1		3	2.4				CRHEATER221A00	9.2	10.0	26.0	30	-	19	104																	
																		CRHEATER222A00	13.9	15.0	31.9	35	-	29	104																	
											0.695		4	0.695				CRHEATER221A00	-	-	11.6	15	-	12	41																	
																		CRHEATER222A00	9.2	10.0	18.6	20	-	17	41																	
											1.1		3	2.4				CRHEATER221A00	9.2	10.0	26.0	30	-	19	104																	
																		CRHEATER222A00	13.9	15.0	24.5	25	-	23	41																	
											05		208/230-1-60	187				253	20.5	109	-	-	-	1.0	4.9	8.02/7.25	0.33/0.3	3	11.47/10.375	HIGH	none	HIGH	CRHEATER201A00	17.3/20.0	3.8/5.0	41.5/40.5	60/60	-/-	42/41	134		
																										CRHEATER202A00							26.0/30.0	5.6/7.5	51.0/54.9	60/60	-/-	47/50	134/134			
																										1.92/1.74							4	1.92/1.74	CRHEATER203A00	34.7/40.0	7.5/10.0	61.9/67.4	-/-	70/70	57/62	134/134
																																			CRHEATER204A00	52.0/60.0	11.3/15.0	83.5/92.4	-/-	90/100	77/85	134/134
0.33/0.3	3	11.47/10.375	CRHEATER205A00	69.3/80.0	15.0/20.0	105.2/117.4	-/-	110/125	97/108	134/134																																
			CRHEATER201A00	17.3/20.0	3.8/5.0	82.3/77.5	-/-	100/90	89/83	470																																
8.02/7.25	4	8.02/7.25	CRHEATER202A00	26.0/30.0	5.6/7.5	91.2/88.5	-/-	100/90	89/83	470/470																																
			CRHEATER203A00	34.7/40.0	7.5/10.0	102.1/101.0	-/-	110/110	94/93	470/470																																
7.0	3	11.47/10.375	CRHEATER204A00	52.0/60.0	11.3/15.0	134.6/138.5	-/-	125/125	104/104	470/470																																
			CRHEATER205A00	69.3/80.0	15.0/20.0	156.2/163.5	-/-	150/150	124/127	470/470																																
06	208/230-1-60	187	253	20.5	109	-	-	-	1.0	4.9		8.02/7.25			0.33/0.3	3	11.47/10.375									HIGH							none	HIGH	CRHEATER201A00	17.3/20.0	3.8/5.0	43.6/42.6	60/60	-/-	44/43	159
												CRHEATER202A00																							26.0/30.0	5.6/7.5	43.6/45.0	60/60	-/-	44/43	159/159	
											1.92/1.74	4	1.92/1.74	CRHEATER203A00				34.7/40.0	7.5/10.0	64.5/70.0	-/-	70/80	59/64	159/159																		
														CRHEATER204A00				52.0/60.0	11.3/15.0	86.2/95.0	-/-	90/100	79/87	159/159																		
											7.0	3	11.47/10.375	CRHEATER205A00				69.3/80.0	15.0/20.0	107.9/120.0	-/-	110/125	99/110	159/159																		
														CRHEATER201A00				17.3/20.0	3.8/5.0	84.4/79.6	-/-	100/100	91/86	495																		
											8.02/7.25	4	8.02/7.25	CRHEATER202A00				26.0/30.0	5.6/7.5	93.9/91.2	-/-	100/100	91/86	495/495																		
														CRHEATER203A00				34.7/40.0	7.5/10.0	104.7/103.7	-/-	110/110	96/95	495/495																		
											1.92/1.74	4	1.92/1.74	CRHEATER204A00				52.0/60.0	11.3/15.0	115.6/116.2	-/-	125/125	106/107	495/495																		
														CRHEATER205A00				69.3/80.0	15.0/20.0	137.2/141.2	-/-	150/150	126/130	495/495																		
											0.33/0.3	3	11.47/10.375	CRHEATER201A00				17.3/20.0	3.8/5.0	139.9/140.2	-/-	175/175	146/153	495/495																		
														CRHEATER202A00				26.0/30.0	5.6/7.5	159.9/166.2	-/-	175/175	146/153	495/495																		

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																			
				No. 1			No. 2								No. 3					Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCB			FLA	LRA																																
				RLA	LRA		RLA	LRA							RLA	LRA																																															
05 (cont)	208/230-3-60	Min	Max							4.9	1.92/1.74	0.33/0.3	4	1.92/1.74	LOW	none	LOW	HIGH		LOW	HIGH		-	3.8/5.0	34.1/33.2	45/45	-	35/34	116																																		
																														CRHEATER208A00	10.0/11.5	3.8/5.0	34.1/33.2	45/45	-	35/34	116/116																										
		CRHEATER209A00	15.0/17.3	5.6/7.5	37.3/39.0	45/45	-	35/36	116/116																																																						
		CRHEATER210A00	20.0/23.1	7.5/10.0	43.5/46.3	45/50	-	40/43	116/116																																																						
		CRHEATER211A00	30.0/34.6	11.3/15.0	56.0/60.6	-	60/70	52/56	116/116																																																						
		CRHEATER212A00	40.0/46.2	15.0/20.0	68.5/75.1	-	70/80	63/69	116/116																																																						
		187	253	14.6	91	-	-	-	1.0	1.92/1.74	0.33/0.3	3	7.08/6.4	HIGH	none	HIGH		HIGH		LOW	HIGH		10.0/11.5	3.8/5.0	34.4/33.5	45/45	-	35/34	134																																		
																														CRHEATER208A00	10.0/11.5	3.8/5.0	34.4/33.5	45/45	-	35/34	134/134																										
																														CRHEATER209A00	15.0/17.3	5.6/7.5	37.7/39.4	45/45	-	35/36	134/134																										
																														CRHEATER210A00	20.0/23.1	7.5/10.0	43.9/46.6	45/50	-	40/43	134/134																										
																														CRHEATER211A00	30.0/34.6	11.3/15.0	58.4/61.0	-	60/70	52/56	134/134																										
																														CRHEATER212A00	40.0/46.2	15.0/20.0	68.9/75.5	-	70/80	63/69	134/134																										
	460-3-60								5.2	3.32/3.0		3	7.08/6.4	HIGH		HIGH		HIGH		HIGH		10.0/11.5	3.8/5.0	54.3/52.8	60/60	-	56/53	296/296																																			
																													CRHEATER208A00	15.0/17.3	5.6/7.5	60.5/60.0	70/60	-	56/53	296/296																											
																													CRHEATER209A00	20.0/23.1	7.5/10.0	66.8/67.3	-	70/70	61/62	296/296																											
																													CRHEATER210A00	30.0/34.6	11.3/15.0	79.3/81.6	-	80/90	73/75	296/296																											
																													CRHEATER211A00	40.0/46.2	15.0/20.0	91.8/96.1	-	100/100	84/88	296/296																											
																													CRHEATER212A00	50.0/55.0	18.0/20.0	108.0/115.0	-	120/130	96/104	296/296																											
																													414	506	7.1	46	-	-	-	0.5	0.87	0.15	4	3.2	LOW	none	LOW		LOW		HIGH		5.8	5.0	16.0	20	-	16	58								
																																																								CRHEATER215A00	5.8	5.0	16.0	20	-	16	58
																																																								CRHEATER216A00	8.7	7.5	19.1	20	-	18	58
																																																								CRHEATER217A00	11.5	10.0	22.6	25	-	21	58
																																																								CRHEATER218A00	17.3	15.0	29.9	30	-	27	58
																																																								CRHEATER219A00	23.1	20.0	37.1	40	-	34	58
										2.1	1.5		3	3.2	HIGH		HIGH		HIGH		HIGH		5.8	5.0	25.8	30	-	26	131																																		
																														CRHEATER215A00	5.8	5.0	25.8	30	-	26	131																										
																														CRHEATER216A00	8.7	7.5	29.4	30	-	27	131																										
																														CRHEATER217A00	11.5	10.0	32.9	35	-	30	131																										
																														CRHEATER218A00	17.3	15.0	40.2	45	-	37	131																										
																														CRHEATER219A00	23.1	20.0	47.4	50	-	44	131																										

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OTR		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE							
		Min	Max	No. 1		No. 2				No. 3		Qty	FLA (ea)	FLA (ea)	FLA (ea)	Qty	FLA (ea)	LOW	none	LOW	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA							
				RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA																								
05 (cont)	575-3-60	518	633	5.1	34	-	-	-	1	0.5	2.0	0.695	0.12	4	0.695	HIGH	none	LOW	CRHEAT-ER221A00	-	-	-	12.6	15	-	13	44								
																				2.1	0.695	4	0.695	LOW	CRHEAT-ER222A00	9.2	10.0	18.6	20	-	17	44			
																										CRHEAT-ER223A00	13.9	15.0	24.5	25	-	23	44		
																											CRHEAT-ER224A00	18.5	20.0	30.2	35	-	28	44	
																												CRHEAT-ER221A00	-	-	18.5	20	-	20	107
																													CRHEAT-ER222A00	9.2	10.0	26.0	30	-	24
		575-3-60	518	633	5.1	34	-	-	-	1	0.5	2.0	0.695	0.12	4	0.695	HIGH	none	LOW	CRHEAT-ER223A00	13.9	15.0	31.9	35	-	29	107								
																					2.1	4	0.695	LOW	CRHEAT-ER221A00	18.5	20.0	37.7	40	-	35	107			
																										CRHEAT-ER222A00	-	-	12.5	15	-	13	50		
																											CRHEAT-ER223A00	9.2	10.0	18.5	20	-	17	50	
																												CRHEAT-ER224A00	13.9	15.0	24.4	25	-	22	50
																													CRHEAT-ER223A00	18.5	20.0	30.1	35	-	28
06	208/230-1-6 0	187	253	26.9	145	-	-	-	1	4.9	8.02/7.25	0.33/0.3	3	11.47/10.3 75	LOW	none	HIGH	CRHEAT-ER201A00	17.3/20.0	3.8/5.0	90.886.0	-/-	150/150	117/131	171/171										
																			4.9	8.02/7.25	3	11.47/10.3 75	HIGH	CRHEAT-ER202A00	26.0/30.0	5.6/7.5	102.1/101.0	-/-	100/100	97/91	507/507				
																									CRHEAT-ER203A00	34.7/40.0	7.5/10.0	113.0/113.5	-/-	125/125	104/104	507/507			
																										CRHEAT-ER204A00	52.0/60.0	11.3/15.0	134.6/138.5	-/-	150/150	124/127	507/507		
																											CRHEAT-ER205A00	69.3/80.0	15.0/20.0	156.2/163.5	-/-	175/175	144/150	507/507	
																												CRHEAT-ER206A00	86.7/100.0	18.8/25.0	178.0/188.5	-/-	200/200	164/173	507/507
		187	253	26.9	145	-	-	-	1	1.5	7.0	8.02/7.25	0.33/0.3	3	11.47/10.3 75	HIGH	none	HIGH	CRHEAT-ER207A00	17.3/20.0	3.8/5.0	92.1/91.1	60/60	-/-	52/51	196									
																				4	1.92/1.74	4	1.92/1.74	LOW	CRHEAT-ER208A00	26.0/30.0	5.6/7.5	53.7/57.5	60/60	-/-	52/53	196/196			
																										CRHEAT-ER209A00	34.7/40.0	7.5/10.0	64.5/70.0	-/-	70/80	59/64	196/196		
																											CRHEAT-ER210A00	52.0/60.0	11.3/15.0	86.2/95.0	-/-	90/100	79/87	196/196	
																												CRHEAT-ER205A00	69.3/80.0	15.0/20.0	107.8/120.0	-/-	110/125	99/110	196/196
																													CRHEAT-ER206A00	86.7/100.0	18.8/25.0	129.5/145.0	-/-	150/150	119/133
187	253	26.9	145	-	-	-	1	1.5	7.0	8.02/7.25	0.33/0.3	3	11.47/10.3 75	HIGH	none	HIGH	CRHEAT-ER211A00	17.3/20.0	3.8/5.0	93.9/91.2	-/-	100/100	99/94	532/532											
																		4	1.92/1.74	4	1.92/1.74	LOW	CRHEAT-ER212A00	26.0/30.0	5.6/7.5	104.7/103.7	-/-	110/110	99/95	532/532					
																								CRHEAT-ER213A00	34.7/40.0	7.5/10.0	115.6/116.2	-/-	125/125	106/107	532/532				
																									CRHEAT-ER214A00	52.0/60.0	11.3/15.0	137.2/141.2	-/-	150/150	126/130	532/532			
																										CRHEAT-ER215A00	69.3/80.0	15.0/20.0	159.9/166.2	-/-	175/175	146/153	532/532		
																											CRHEAT-ER216A00	86.7/100.0	18.8/25.0	189.6/191.2	-/-	200/200	166/176	532/532	

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	COMPRESSOR						VOLTAGE RANGE	ERV			IFIM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
		No. 1			No. 2				No. 3						ERV Wheel	ERV Exhaust		IFIM	Part Number	FLA	Nom. kW	MCA			Fuse HACR Bkrs	MOCP	FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		RLA	LRA		RLA	LRA			RLA	LRA						Qty	FLA (ea)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
06 (cont)	208/230-3-60	Min																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

50PG

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OFRM	IFRM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE									
		Min	Max	No. 1		No. 2		No. 3						FLA (ea)	Qty				FLA (ea)	FLA (ea)	Part Number	FLA	Norm. kW	MCA	Fuse or HACR Bktr	MOCSP	FLA	LRA								
06 (cont)	575-3-60	518	633	6.1	40	-	-	1	0.8	2.0	0.695	0.12	4	0.695	LOW	none	LOW	LOW	LOW	-	10.0	18.5	20	-	14	17	57									
																												CRHEATER21A00	9.2	10.0	14	20	-	14	57	
																												CRHEATER22A00	13.9	15.0	24.4	25	-	22	57	
																												CRHEATER23A00	18.5	20.0	30.1	35	-	28	57	
																												CRHEATER24A00	23.1	25.0	35.9	40	-	33	57	
																												CRHEATER25A00	-	-	19.9	25	-	21	120	120
																												CRHEATER26A00	9.2	10.0	25.9	30	-	24	120	120
																												CRHEATER27A00	13.9	15.0	31.8	35	-	29	120	120
																												CRHEATER28A00	18.5	20.0	37.5	40	-	35	120	120
																												CRHEATER29A00	23.1	25.0	43.3	45	-	40	120	120
																												CRHEATER30A00	14	-	14	20	-	14	57	57
																												07	575-3-60	518	633	6.1	40	-	-	1
CRHEATER31A00	9.2	10.0	18.5	20	-	17	57																													
CRHEATER32A00	13.9	15.0	24.4	25	-	22	57																													
CRHEATER33A00	18.5	20.0	30.1	35	-	28	57																													
CRHEATER34A00	23.1	25.0	35.9	40	-	33	57																													
CRHEATER35A00	-	-	19.9	25	-	21	120	120																												
CRHEATER36A00	9.2	10.0	25.9	30	-	24	120	120																												
CRHEATER37A00	13.9	15.0	31.8	35	-	29	120	120																												
CRHEATER38A00	18.5	20.0	37.5	40	-	35	120	120																												
CRHEATER39A00	23.1	25.0	43.3	45	-	40	120	120																												
CRHEATER40A00	14	-	14	20	-	14	57	57																												
07	208/230-3-60	187	253	20.5	149	-	-	1	1.5	5.2	1.92/1.74	0.33/0.3	4	1.92/1.74	HIGH	none	LOW	LOW	-	10.0/11.5	3.8/5.0	60/60	-	70/80	63/69	193/193	193/193									
																												CRHEATER41A00	10.0/11.5	3.8/5.0	42.3/41.3	60/60	-	43/42	193/193	
																												CRHEATER42A00	15.0/17.3	5.6/7.5	42.3/41.3	60/60	-	43/42	193/193	
																												CRHEATER43A00	20.0/23.1	7.5/10.0	43.9/46.6	60/60	-	43/43	193/193	
																												CRHEATER44A00	30.0/34.6	11.3/15.0	56.4/61.0	-	-	60/70	52/56	193/193
																												CRHEATER45A00	40.0/46.2	15.0/20.0	68.9/75.5	-	-	90/90	63/69	193/193
																												CRHEATER46A00	50.0/57.7	18.9/25.0	81.0/89.9	-	-	90/90	75/83	193/193
																												CRHEATER47A00	-	-	60.5/57.8	-	-	80/70	64/61	355/355
																												CRHEATER48A00	15.0/17.3	5.6/7.5	60.5/60.0	-	-	80/70	64/61	355/355
																												CRHEATER49A00	20.0/23.1	7.5/10.0	66.8/67.3	-	-	80/70	64/62	355/355
																												CRHEATER50A00	30.0/34.6	11.3/15.0	79.3/81.6	-	-	80/90	73/75	355/355
																												CRHEATER51A00	40.0/46.2	15.0/20.0	91.8/96.1	-	-	100/100	84/88	355/355
CRHEATER52A00	50.0/57.7	18.9/25.0	104.3/110.5	-	-	110/125	96/102	355/355																												
CRHEATER53A00	-	-	44.6/43.6	60/60	-	-	45/44	219																												
CRHEATER54A00	10.0/11.5	3.8/5.0	44.6/43.6	60/60	-	-	45/44	219/219																												
CRHEATER55A00	15.0/17.3	5.6/7.5	44.6/43.6	60/60	-	-	45/44	219/219																												
CRHEATER56A00	20.0/23.1	7.5/10.0	46.8/49.5	60/60	-	-	45/46	219/219																												
CRHEATER57A00	30.0/34.6	11.3/15.0	59.3/63.9	-	-	60/70	55/59	219/219																												
CRHEATER58A00	40.0/46.2	15.0/20.0	71.8/78.4	-	-	80/80	66/72	219/219																												
CRHEATER59A00	50.0/57.7	18.9/25.0	84.3/92.8	-	-	90/100	78/85	219/219																												
CRHEATER60A00	-	-	62.8/60.1	-	-	80/80	66/63	381																												
CRHEATER61A00	10.0/11.5	3.8/5.0	62.8/60.1	-	-	80/80	66/63	381/381																												
CRHEATER62A00	15.0/17.3	5.6/7.5	63.4/62.9	-	-	80/80	66/63	381/381																												
CRHEATER63A00	20.0/23.1	7.5/10.0	69.6/70.1	-	-	80/80	66/65	381/381																												
CRHEATER64A00	30.0/34.6	11.3/15.0	82.1/84.5	-	-	90/90	76/78	381/381																												
CRHEATER65A00	40.0/46.2	15.0/20.0	94.6/99.0	-	-	100/100	87/91	381/381																												
CRHEATER66A00	50.0/57.7	18.9/25.0	107.1/113.4	-	-	110/125	99/104	381/381																												

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OFM	IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
		Min	Max	No. 1		No. 2		No. 3						Qty	FLA (ea)				FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	Qty	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bkr	MOCP	FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
				RLA	LRA	RLA	LRA	RLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
07 (cont)	460-3-60									2.6		0.87		4	0.87	LOW	none	HIGH																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						O/FM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																	
		Min	Max	No. 1		No. 2				No. 3					Qty	FLA (ea)				FLA	FLA (ea)	Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bkr	MOCP	FLA	LRA																																																																																																																																																														
				RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA																																																																																																																																																																																		
08	208/230-3-60	187	253	13.5	88	13.5	88	-	88	2	1.5	7.5	3.32/3.0	0.33/0.3	none	LOW	8.85/8.0	LOW	HIGH	LOW	LOW	72.1/68.9	80/80	79/75	352																																																																																																																																																																				
																										3.2	8.85/8.0	LOW	CRHEATER225A00	20.0/23.1	7.5/10.0	81.0/80.1	86/82	415/415	90/90	88/82	415/415	100/100	88/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																																														
																																																3	7.08/6.4	HIGH	CRHEATER226A00	30.0/34.6	11.3/15.0	93.5/94.5	86/87	415/415	100/100	88/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																											
																																																																			5.2	8.85/8.0	LOW	CRHEATER227A00	50.0/57.7	18.8/25.0	113.5/123.4	86/87	415/415	100/100	88/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																								
																																																																																						7.5	8.85/8.0	HIGH	CRHEATER228A00	70.0/80.8	26.3/35.0	143.5/152.3	86/87	415/415	100/100	88/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																					
																																																																																																									3.2	8.85/8.0	LOW	CRHEATER229A00	80.0/92.4	30.0/40.0	156.0/166.8	86/82	415/415	100/100	88/82	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																		
																																																																																																																												7.5	8.85/8.0	HIGH	CRHEATER230A00	90.0/92.4	30.0/40.0	156.0/166.8	86/82	415/415	100/100	88/82	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																															
																																																																																																																																															3.2	8.85/8.0	LOW	CRHEATER231A00	100.0/100	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																										
																																																																																																																																																																				7.5	8.85/8.0	HIGH	CRHEATER232A00	110.0/110	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352					
																																																																																																																																																																																									3.2	8.85/8.0	LOW	CRHEATER233A00	120.0/120
	7.5	8.85/8.0	HIGH	CRHEATER234A00	130.0/130	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																																																																								
																						3.2	8.85/8.0	LOW	CRHEATER235A00	140.0/140	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																																																			
																																											7.5	8.85/8.0	HIGH	CRHEATER236A00	150.0/150	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																														
																																																																3.2	8.85/8.0	LOW	CRHEATER237A00	160.0/160	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																									
																																																																																					7.5	8.85/8.0	HIGH	CRHEATER238A00	170.0/170	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107																																																																																					
																																																																																																									3.2	8.85/8.0	LOW	CRHEATER239A00	180.0/180	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125																																																																		
																																																																																																																												7.5	8.85/8.0	HIGH	CRHEATER240A00	190.0/190	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125																																															
																																																																																																																																															3.2	8.85/8.0	LOW	CRHEATER241A00	200.0/200	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																										
																																																																																																																																																																				7.5	8.85/8.0	HIGH	CRHEATER242A00	210.0/210	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352					
																																																																																																																																																																																									3.2	8.85/8.0	LOW	CRHEATER243A00	220.0/220
7.5	8.85/8.0	HIGH	CRHEATER244A00	230.0/230	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																																																																									
																					3.2	8.85/8.0	LOW	CRHEATER245A00	240.0/240	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																																																				
																																										7.5	8.85/8.0	HIGH	CRHEATER246A00	250.0/250	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																															
																																																															3.2	8.85/8.0	LOW	CRHEATER247A00	260.0/260	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																										
																																																																																				7.5	8.85/8.0	HIGH	CRHEATER248A00	270.0/270	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																					
																																																																																																									3.2	8.85/8.0	LOW	CRHEATER249A00	280.0/280	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125																																																																		
																																																																																																																												7.5	8.85/8.0	HIGH	CRHEATER250A00	290.0/290	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125																																															
																																																																																																																																															3.2	8.85/8.0	LOW	CRHEATER251A00	300.0/300	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																										
																																																																																																																																																																				7.5	8.85/8.0	HIGH	CRHEATER252A00	310.0/310	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352					
																																																																																																																																																																																									3.2	8.85/8.0	LOW	CRHEATER253A00	320.0/320
7.5	8.85/8.0	HIGH	CRHEATER254A00	330.0/330	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																																																																									
																					3.2	8.85/8.0	LOW	CRHEATER255A00	340.0/340	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																																																				
																																										7.5	8.85/8.0	HIGH	CRHEATER256A00	350.0/350	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																																															
																																																															3.2	8.85/8.0	LOW	CRHEATER257A00	360.0/360	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																																										
																																																																																				7.5	8.85/8.0	HIGH	CRHEATER258A00	370.0/370	88.8/90.5	113.8/119.4	86/87	415/415	100/100	88.8/90.5	113.8/119.4	86/87	415/415	125/125	109/114	415/415	150/150	125/125	102/107	352/352																																																																																					
																																																																																																									3.2	8.85/8.0	LOW	CRHEATER259A00	380.0/380	88.8/90.5	113.8/119.4																																																																														

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	COMPRESSOR						VOLTAGE RANGE	ERV				ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		No. 1			No. 2				No. 3			IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv. Outlet	ERV	Part Number			FLA	Nom. kW	MCA	Fuse or HACR Bkr	MOCB	FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		RLA	LRA		RLA	LRA			Qty	FLA (ea)	Qty				FLA (ea)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OFM	IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT			POWER SUPPLY			DISCONNECT SIZE				
				No. 1		No. 2		No. 3						Qty	FLA (ea)				FLA (ea)	FLA (ea)	MCA	Fuse or HACR Bkts	MOCp	FLA	LRA				
		RLA	LRA	RLA	LRA	RLA	LRA																						
09 (cont)	460-3-60	Min	Max	7.1	46	7.1	46	7.1	46	0.8	2.6	1.5	0.15	4	3	4	LOW	none	HIGH	HIGH	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bkts	MOCp	FLA	LRA	
																						CRHEATER232A00	-	-	35.3	40	-	39	174
																						CRHEATER233A00	11.5	10.0	36.6	40	-	39	174
																						CRHEATER234A00	17.3	15.0	43.8	45	-	40	174
																						CRHEATER234A00	28.9	25.0	58.3	60	-	54	174
																						CRHEATER235A00	40.4	35.0	72.7	-	80	67	174
																						CRHEATER236A00	46.2	40.0	79.9	-	80	74	174
																						CRHEATER239A00	-	-	38.1	45	-	42	203
																						CRHEATER233A00	11.5	10.0	40.1	45	-	42	203
																						CRHEATER234A00	17.3	15.0	47.3	50	-	44	203
																						CRHEATER234A00	28.9	25.0	61.8	-	70	57	203
																					CRHEATER235A00	40.4	35.0	76.2	-	80	70	203	
																					CRHEATER236A00	46.2	40.0	83.4	-	90	77	203	
																					CRHEATER239A00	-	-	37.5	40	-	41	196	
																					CRHEATER232A00	11.5	10.0	39.3	40	-	41	196	
																					CRHEATER233A00	17.3	15.0	46.6	50	-	43	196	
																					CRHEATER234A00	28.9	25.0	61.1	-	70	56	196	
																					CRHEATER235A00	40.4	35.0	75.4	-	80	69	196	
																					CRHEATER236A00	46.2	40.0	82.7	-	90	76	196	
																					CRHEATER232A00	-	-	40.3	45	-	44	225	
																					CRHEATER232A00	11.5	10.0	42.8	45	-	44	225	
																					CRHEATER233A00	17.3	15.0	50.1	60	-	46	225	
																					CRHEATER234A00	28.9	25.0	64.6	-	70	59	225	
																					CRHEATER235A00	40.4	35.0	78.9	-	80	73	225	
																					CRHEATER236A00	46.2	40.0	86.2	-	90	79	225	
																					CRHEATER239A00	-	-	28.4	30	-	31	163	
																					CRHEATER239A00	13.9	15.0	35.2	40	-	32	163	
																					CRHEATER240A00	23.1	25.0	46.7	50	-	43	163	
																					CRHEATER241A00	32.3	35.0	58.2	60	-	53	163	
																					CRHEATER242A00	37.0	40.0	64.0	-	70	59	163	
																					CRHEATER239A00	-	-	30.3	35	-	33	183	
																					CRHEATER239A00	13.9	15.0	37.5	40	-	35	183	
																					CRHEATER240A00	23.1	25.0	49.0	50	-	45	183	
																					CRHEATER241A00	32.3	35.0	60.5	-	70	56	183	
																					CRHEATER242A00	37.0	40.0	66.4	-	70	61	183	
																					CRHEATER239A00	-	-	29.2	35	-	32	174	
																					CRHEATER239A00	13.9	15.0	36.2	40	-	33	174	
																					CRHEATER240A00	23.1	25.0	47.7	50	-	44	174	
																					CRHEATER241A00	32.3	35.0	59.2	60	-	54	174	

[illegible]

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE	
				No. 1		No. 2		No. 3										Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA		
				RLA	LRA	RLA	LRA	RLA	LRA																		
12 (cont)	575-3-60	Min	Max	6.1	40	6.1	40	-	-	2.8	3.3	0.3	2.4	3.3	LOW	none	HIGH	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA		
																										CRHEATER239A00	-
		CRHEATER240A00	13.9								15.0	-	36.2	40				-	33	180							
		CRHEATER241A00	23.1								25.0	-	47.7	50				-	44	180							
		CRHEATER242A00	32.3								35.0	-	59.2	60				-	54	180							
		CRHEATER243A00	37.0								40.0	-	65.0	-				70	60	180							
		CRHEATER243A00	46.2								50.0	-	70	-				70	70	180							
		CRHEATER239A00	-								-	-	32.2	35				-	35	200							
		CRHEATER240A00	13.9								15.0	-	38.5	40				-	35	200							
		CRHEATER240A00	23.1								25.0	-	50.0	60				-	46	200							
		CRHEATER241A00	32.3								35.0	-	61.5	-				70	57	200							
		CRHEATER242A00	37.0								40.0	-	67.4	-				70	62	200							
CRHEATER243A00	46.2	50.0	-	73	-	70	73	200																			
14	208/230-3-60	Min	Max	6.1	40	6.1	40	-	-	2.8	3.3	0.3	2.4	3.3	LOW	none	HIGH	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA		
																										CRHEATER225A00	20.0/23.1
		CRHEATER225A00	20.0/23.1								7.5/10.0	-	97.994.7	-				110/110	106/102	519/519							
		CRHEATER226A00	30.0/34.6								11.3/15.0	-	97.994.7	-				110/110	106/102	519/519							
		CRHEATER227A00	50.0/57.7								18.8/25.0	-	117.2/122.8	-				125/125	108/113	519/519							
		CRHEATER228A00	70.0/80.8								26.3/35.0	-	142.2/151.6	-				150/175	131/139	519/519							
		CRHEATER229A00	100.1/115.5								37.6/50.0	-	179.8/166.1	-				200/175	165/179	519/519							
		CRHEATER230A00	120.1/138.6								45.1/60.0	-	204.8/189.2	-				225/200	189/206	519/519							
		CRHEATER231A00	120.1/138.6								45.1/60.0	-	204.8/189.2	-				225/200	189/206	519/519							
		CRHEATER225A00	20.0/23.1								7.5/10.0	-	104.0/100.2	-				125/110	113/109	582							
		CRHEATER225A00	20.0/23.1								7.5/10.0	-	104.0/100.2	-				125/110	113/109	582/582							
		CRHEATER226A00	30.0/34.6								11.3/15.0	-	104.0/100.8	-				125/110	113/109	582/582							
CRHEATER227A00	50.0/57.7	18.8/25.0	-	124.8/129.6	-	125/150	115/119	582/582																			
CRHEATER228A00	70.0/80.8	26.3/35.0	-	149.8/158.5	-	150/175	138/146	582/582																			
CRHEATER229A00	100.1/115.5	37.6/50.0	-	187.4/173.0	-	200/175	172/186	582/582																			
CRHEATER230A00	120.1/138.6	45.1/60.0	-	212.4/196.1	-	225/200	195/212	582/582																			
CRHEATER231A00	120.1/138.6	45.1/60.0	-	212.4/196.1	-	225/200	195/212	582/582																			
CRHEATER225A00	20.0/23.1	7.5/10.0	-	102.7/99.5	-	125/110	112/108	538																			
CRHEATER225A00	20.0/23.1	7.5/10.0	-	102.7/99.5	-	125/110	112/108	528/528																			
CRHEATER226A00	30.0/34.6	11.3/15.0	-	102.7/99.9	-	125/110	112/108	528/528																			
CRHEATER227A00	50.0/57.7	18.8/25.0	-	123.2/128.8	-	125/150	113/118	528/528																			
CRHEATER228A00	70.0/80.8	26.3/35.0	-	146.2/157.6	-	150/175	136/143	528/528																			
CRHEATER229A00	100.1/115.5	37.6/50.0	-	185.8/175.1	-	200/175	171/185	528/528																			
CRHEATER230A00	120.1/138.6	45.1/60.0	-	210.8/195.2	-	225/200	194/211	528/528																			
CRHEATER231A00	120.1/138.6	45.1/60.0	-	210.8/195.2	-	225/200	194/211	528/528																			
CRHEATER225A00	20.0/23.1	7.5/10.0	-	108.8/105.0	-	125/125	119/114	591																			
CRHEATER225A00	20.0/23.1	7.5/10.0	-	108.8/105.0	-	125/125	119/114	591/591																			
CRHEATER226A00	30.0/34.6	11.3/15.0	-	108.8/106.8	-	125/125	119/114	591/591																			
CRHEATER227A00	50.0/57.7	18.8/25.0	-	130.8/135.6	-	150/150	120/125	591/591																			
CRHEATER228A00	70.0/80.8	26.3/35.0	-	155.8/164.5	-	175/175	143/151	591/591																			
CRHEATER229A00	100.1/115.5	37.6/50.0	-	187.4/179.0	-	200/200	178/191	591/591																			
CRHEATER230A00	120.1/138.6	45.1/60.0	-	218.4/202.1	-	225/225	201/218	591/591																			
CRHEATER231A00	120.1/138.6	45.1/60.0	-	218.4/202.1	-	225/225	201/218	591/591																			

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OTM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ee)	FLA	FLA (ee)	FLA (ee)	Qty	FLA (ee)	IFM TYPE	none	ERV	Part Number	FLA	Nom. kW	MCA	Fuse or HACR BkHr	MOCP	FLA	LRA		
				RLA	LRA	RLA	LRA	RLA	LRA																				
460-3-60										4.8	1.5	0.15	4	3	3.2	4	none	HIGH	LOW	CRHEATER232A00	-	-	45.8	50	-	50	254		
																					CRHEATER233A00	11.5	10.0	45.8	50	-	50	254	
																					CRHEATER234A00	17.3	15.0	46.6	50	-	50	254	
																					CRHEATER235A00	28.9	25.0	61.1	-	70	56	254	
																					CRHEATER236A00	40.4	35.0	75.4	-	80	69	254	
																					CRHEATER237A00	57.7	50.0	82.6	-	90	89	254	
																					CRHEATER238A00	69.3	60.0	94.2	-	100	103	254	
																					CRHEATER239A00	-	-	48.6	60	-	53	283	
																					CRHEATER240A00	11.5	10.0	48.6	60	-	53	283	
																					CRHEATER241A00	17.3	15.0	50.1	60	-	53	283	
																					CRHEATER242A00	28.9	25.0	64.6	-	70	59	283	
																					CRHEATER243A00	40.4	35.0	78.9	-	80	73	283	
																					CRHEATER244A00	57.7	50.0	86.1	-	90	83	283	
																					CRHEATER245A00	69.3	60.0	97.7	-	100	106	283	
460-3-60		414	506	10.6	75	10.6	75	-	2	1.0	7.4	1.5	0.15	4	3	3.2	4	HIGH	HIGH	CRHEATER232A00	-	-	48.4	60	-	53	258		
																					CRHEATER233A00	11.5	10.0	48.4	60	-	53	258	
																					CRHEATER234A00	17.3	15.0	49.8	60	-	53	258	
																					CRHEATER235A00	28.9	25.0	64.3	-	70	59	258	
																					CRHEATER236A00	40.4	35.0	78.7	-	80	72	258	
																					CRHEATER237A00	57.7	50.0	85.9	-	90	82	258	
																					CRHEATER238A00	69.3	60.0	97.5	-	100	106	258	
																					CRHEATER239A00	-	-	51.2	60	-	56	287	
																					CRHEATER240A00	11.5	10.0	51.2	60	-	56	287	
																					CRHEATER241A00	17.3	15.0	53.3	60	-	56	287	
																					CRHEATER242A00	28.9	25.0	67.8	-	70	62	287	
																					CRHEATER243A00	40.4	35.0	82.2	-	80	76	287	
																					CRHEATER244A00	57.7	50.0	89.4	-	90	86	287	
																					CRHEATER245A00	69.3	60.0	101.0	-	110	109	287	
575-3-60										2.8	1.1	0.12	3.3	3	2.4	3.3	LOW	HIGH	CRHEATER239A00	-	-	33.9	40	-	37	208			
																				CRHEATER240A00	13.9	15.0	36.2	40	-	37	208		
																				CRHEATER241A00	23.1	25.0	47.7	50	-	44	208		
																				CRHEATER242A00	32.3	35.0	59.2	60	-	54	208		
																				CRHEATER243A00	37.0	40.0	65.0	-	70	60	208		
																				CRHEATER244A00	46.2	50.0	65.0	-	70	70	208		
																				CRHEATER245A00	55.4	60.0	74.2	-	80	81	208		
																				CRHEATER246A00	-	-	35.8	40	-	39	228		
																				CRHEATER247A00	13.9	15.0	38.5	40	-	39	228		
																				CRHEATER248A00	23.1	25.0	50.0	60	-	46	228		
																				CRHEATER249A00	32.3	35.0	61.5	-	70	57	228		
																				CRHEATER250A00	37.0	40.0	67.4	-	70	62	228		
																				CRHEATER251A00	46.2	50.0	67.3	-	70	73	228		
																				CRHEATER252A00	55.4	60.0	76.5	-	80	83	228		
575-3-60	518	633	7.7	54	7.7	54	-	2	0.8	5.6	1.1	0.12	3.3	3	2.4	3.3	HIGH	HIGH	CRHEATER239A00	-	-	36.7	40	-	40	222			
																				CRHEATER240A00	13.9	15.0	39.7	40	-	40	222		
																				CRHEATER241A00	23.1	25.0	51.2	60	-	47	222		
																				CRHEATER242A00	32.3	35.0	62.7	-	70	58	222		
																				CRHEATER243A00	37.0	40.0	68.5	-	70	63	222		
																				CRHEATER244A00	46.2	50.0	68.5	-	70	74	222		
																				CRHEATER245A00	55.4	60.0	77.7	-	80	84	222		
																				CRHEATER246A00	-	-	38.6	45	-	42	242		
																				CRHEATER247A00	13.9	15.0	42.0	45	-	42	242		
																				CRHEATER248A00	23.1	25.0	53.5	60	-	49	242		
																				CRHEATER249A00	32.3	35.0	65.0	-	70	60	242		
																				CRHEATER250A00	37.0	40.0	70.9	-	80	65	242		
																				CRHEATER251A00	46.2	50.0	70.8	-	80	76	242		
																				CRHEATER252A00	55.4	60.0	80.0	-	90	86	242		

ELECTRICAL DATA

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Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						OFR		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT			POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
				No. 1	No. 2		No. 3		Qty						FLA (ea)	Qty				FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bkr	MOCP			FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Min	Max	RLA	RLA	RLA	LRA	LRA	LRA	FLA (ea)	FLA (ea)	0.66/0.6	3	8.8/8.0	LOW	8.8/8.0	8.8/8.0	LOW	LOW	LOW	CRHEATER25A00	52.1/60.1	18.8/25.0	-	115.6/111.6	-/-	125/125	128/123	674																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
16	208/230-3-60	187	253	18.1	137	18.1	123	17.6	137	15.0	10.2	7.08/6.4	0.66/0.6	3	8.8/8.0	LOW	none	HIGH	LOW	HIGH	CRHEATER25A00	104.21/20.3	37.6/50.0	198.5/183.8	224.6/243.9	230.1/249.4	250/250	231/127	183/197	200/200	150/150	126/122	150/150	127.4/132.6	18.8/25.0	113.8/110.0	220.6/209.9	194.7/179.8	200/200	150/150	128/124	128/123	674/674																																																																																																																																																																																																																																																																																																																																																																																																																																																																
																																												18.1	137	123	17.6	137	15.0	10.2	7.08/8.4	HIGH	CRHEATER25A00	104.21/20.3	37.6/50.0	198.5/183.8	224.6/243.9	230.1/249.4	250/250	231/127	183/197	200/200	150/150	126/122	150/150	127.4/132.6	18.8/25.0	113.8/110.0	220.6/209.9	194.7/179.8	200/200	150/150	128/124	128/123	674/674																																																																																																																																																																																																																																																																																																																																																																																																																																
																																																																												18.1	137	123	17.6	137	15.0	10.2	7.08/8.4	HIGH	CRHEATER25A00	104.21/20.3	37.6/50.0	198.5/183.8	224.6/243.9	230.1/249.4	250/250	231/127	183/197	200/200	150/150	126/122	150/150	127.4/132.6	18.8/25.0	113.8/110.0	220.6/209.9	194.7/179.8	200/200	150/150	128/124	128/123	674/674																																																																																																																																																																																																																																																																																																																																																																																																
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18.1	137	123	17.6	137	15.0	10.2	7.08/8.4	HIGH	CRHEATER25A00	104.21/20.3	37.6/50.0	198.5/183.8	224.6/243.9	230.1/249.4	250/250	231/127	183/197	200/200	150/150	126/122	150/150	127.4/132.6	18.8/25.0	113.8/110.0	220.6/209.9	194.7/179.8	200/200	150/150	128/124	128/123	674/674																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						IFM	ERV Supply	ERV/ Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT			POWER SUPPLY				DISCONNECT SIZE																																																																						
				No. 1		No. 2		No. 3					Qty	FLA (ea)				Part Number	FLA	Nom. kW	MCA	Fuse or HACR BkR	MOCP	FLA	LRA																																																																						
				RLA	LRA	RLA	LRA	RLA	LRA																																																																																						
16 (cont)	575-3-60	Min	Max						2.8	2.4	0.3	3	3.3	LOW	none	LOW		LOW	24.1	50.0	68.5	-	41.6	45	-	46	265																																																																				
																												2.4	46.2	75.0	-	40.7	45	-	47	262																																																											
																																					3.3	46.2	75.0	-	60	-	70	73	262																																																		
																																														2.4	72.2	98.3	-	100	102	262																																											
																																																					3.3	55.9	60	-	49	279																																					
																																																											2.4	50.0	72.0	-	80	77	279																														
																																																																		3.3	98.0	-	100	107	279																								
																																																																								2.4	43.5	50	-	48	276																		
																																																																														3.3	54.8	60	-	50	276												
																																																																																				2.4	70.8	-	80	76	276						
																																																																																										3.3	96.8	-	100	106	276
3.3	58.6	60	-	54	294																																																																																										
						2.4	50.0	74.7	-	80	79	294																																																																																			
													3.3	75.0	100.7	-	110	109	294																																																																												
																				2.4	72.2	100	-	101	294																																																																						
																										3.3	50	-	51	291																																																																	
																															2.4	46	50	-	53	291																																																											
																																					3.3	57.5	60	-	53	291																																																					
																																											2.4	73.6	-	80	78	291																																															
																																																	3.3	99.6	-	100	108	291																																									

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 = $100 \times \frac{4}{227}$

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

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.

3. Single point kits CRSINGLE028A00 and CRSINGLE031A00 are not required if field-supplied pressure connectors are used. Factory—installed heaters contain terminal blocks when combined MOCP is greater than 60 amps.

Units Without Powered Convenience Outlet with Economizer and Energy X — 50PG20-28

[illegible]

* 208/230 v 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	No. 1			No. 2			No. 3		Qty	Hp	FLA (ea)	KW	FLA	Hp	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	MCA		MOCP
				RLA	LRA	FLA	RLA	LRA	FLA	RLA	LRA															
20	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	156/180	175/200	179/207	NA	156/180	175/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	COMPRESSOR						OFM		ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		No. 1			No. 2					FLA (ea)	kW	FLA	Hp	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Qty	Hp	FLA	MCA	MOCP		
		Min	Max	RLA	LRA	RLA	LRA																			
20	208/230	187	253	28.2	208	28.2	208	-	4	1.5	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	3	3	8.85/8.0	0.167	0.660/6.0	212/231	225/250	231/254		
													5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.660/6.0	220/238	225/250	238/260		
													7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.660/6.0	229/246	250/250	247/268		
													10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.660/6.0	237/254	250/300	254/275		

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 460-3-60

AB = 452 v
BC = 464 v
AC = 455 v
Average Voltage = $\frac{452 + 464 + 455}{3}$
= $\frac{1371}{3}$
= 457



Determine maximum deviation from average voltage.

(AB) 457 – 452 = 5 v
(BC) 464 – 457 = 7 v
(AC) 457 – 455 = 2 v
Maximum deviation is 7 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{7}{457}$
= 1.53%

NOTES:

- 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.
- 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 = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

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.

- The 75-kW 208/240-v electric heat can be factory installed but it must be wired separately in the field.
- The convenience outlet full load amps (FLA) are 5, 3 and 3 for 208/230, 460, 575–v units, respectively.
- The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 600 v.
- MCA calculation for 50PG units with electric heaters over 50 kW is = 1.25 x (IFM + Power Exhaust + Convenience Outlet FLA amps) + 1.00 x (Electric Heater FLA).

50PG

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM		ERV SUPPLY				ERV EXHAUST				ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE		
		Min	Max	No. 1			No. 2			No. 3	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP	FLA							
				RLA	LRA	LRA	RLA	LRA	RLA																	LRA	FLA	FLA	MCA		MOCP	FLA
24	208/230-3-60																															
		187	253	32.1	240	32.1	240	240	-	-	1.5																					
	460-3-60	414	506	110	110	15.4	110	-	-	0.7																						
		518	633	88	88	12.8	88	88	-	-	0.7																					
575-3-60																																
	518	633	88	88	12.8	88	88	-	-	0.7																						

* 208/230 v 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFIM			ELECTRIC HEAT			IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCp	FLA	
24	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	567/5	156/180	NA	NA	NA	NA	NA	NA	NA	156/180	175/200	NA	179/207	156/180	175/200	179/207	

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3		kW	FLA (ea)	Hp	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP		
				RLA	LRA	RLA	LRA	RLA	LRA															
24	208/230	187	253	32.1	240	32.1	240	-	-	0.25	1.5	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	3	8.85/8.0	0.167	0.66/0.6	212/231	225/250	231/254
														5	16.7/15.2	2	7.08/6.4	3	8.85/8.0	0.167	0.66/0.6	220/238	225/250	238/260
														7.5	24.2/22	2	7.08/6.4	3	8.85/8.0	0.167	0.66/0.6	229/246	250/250	247/268
														10	30.8/28	2	7.08/6.4	3	8.85/8.0	0.167	0.66/0.6	237/254	250/300	254/275

Example: Supply voltage is 460-3-60

AB = 452 v
BC = 464 v
AC = 455 v
Average Voltage = $\frac{452 + 464 + 455}{3}$
= $\frac{1371}{3}$
= 457



Determine maximum deviation from average voltage.

(AB) 457 - 452 = 5 v
(BC) 464 - 457 = 7 v
(AC) 457 - 455 = 2 v

Maximum deviation is 7 v.

Determine percent of voltage imbalance.

% Voltage Imbalance = $100 \times \frac{7}{457}$
= 1.53%

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.

3. The 75-kW 208/240-v electric heat can be factory installed but it must be wired separately in the field.
4. The convenience outlet full load amps (FLA) are 5, 3 and 3 for 208/230, 460, 575-v units, respectively.
5. The FLA load amps provided in the table for electric heaters are based on 208/240, 480 and 600 v.
6. MCA calculation for 50PG units with electric heaters over 50 kW is = 1.25 x (IFM + Power Exhaust + Convenience Outlet FLA amps) + 1.00 x (Electric Heater FLA).

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

- 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 = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

ELECTRICAL DATA

50PG

Units Without Powered Convenience Outlet with Economizer and EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM		ERV SUPPLY				ERV EXHAUST				ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		FLA (ea)	Qty	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Qty	Hp	FLA	Hp	MCA	MOCP						
				RLA	LRA	RLA	LRA	RLA	LRA																					
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
	575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																		
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104	15.4	104	104	0.7	0.25	6	0.25																		
575-3-60	518	633	12.8	83	12.8	83	83	0.7	0.25	6	0.25																			
28	208/230-3-60	187	253	28.2	208	28.2	208	208	1.5	0.25	6	0.25																		
	460-3-60	414	506	15.4	104																									

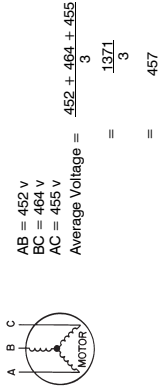
Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE	COMPRESSOR						OFM			ELECTRIC HEAT			IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		VOLTAGE RANGE		No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCp	
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA																	
28	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	156/180	175/200	179/207	NA	156/180	175/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Qty	Hp	FLA (ea)	FLA	MOCp		
				RLA	LRA	RLA	LRA	RLA	LRA																Qty	
28	208/230	187	253	28.2	208	28.2	208	28.2	208	6	0.25	1.5	56/75	156/180	5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.660/6	22/238	225/250	238/260
															7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.660/6	22/246	250/250	247/268
															10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.660/6	237/254	250/300	254/275

Example: Supply voltage is 480-3-60



- NOTES:
- 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.
 - 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 = $100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$

Units With Powered Convenience Outlet and with Energy X — 50PG03-16

[illegible]

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OPM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)				FLA (ea)	FLA (ea)				Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bkrs	MOCP	FLA	LRA		
				RLA	LRA	RLA	LRA	RLA	LRA																				
04 (cont)	208/230-3-60	187	253	11.5	77	-	-	-	1	1.0	4.9	1.92/1.74	0.87	0.33/0.3	4	1.92/1.74	LOW	YES	HIGH	CRHEATER207A00	-	-	35.034.1	45/45	-/-	3736	107		
																					CRHEATER208A00	6.37.2	2.33.0	35.034.1	45/45	-/-	3736	107/107	
																					CRHEATER209A00	10.0/11.5	3.85.0	37.037.8	45/45	-/-	3736	107/107	
																					CRHEATER210A00	15.0/17.3	5.67.5	43.345.0	45/50	-/-	4041	107/107	
																					CRHEATER211A00	20.0/23.1	7.510.0	49.592.3	50/60	-/-	4648	107/107	
																					CRHEATER212A00	30.0/34.6	11.3/15.0	62.086.6	-/-	70/70	5761	107/107	
																					CRHEATER213A00	53.350.6	60/60	-/-	5855	269			
																					CRHEATER214A00	6.37.2	2.33.0	55.353.0	60/60	-/-	5855	269/269	
																					CRHEATER215A00	10.0/11.5	3.85.0	59.958.4	60/60	-/-	5855	269/269	
																					CRHEATER216A00	15.0/17.3	5.67.5	66.165.6	-/-	70/70	6160	269/269	
																					CRHEATER217A00	20.0/23.1	7.510.0	72.472.9	-/-	80/80	6767	269/269	
																					CRHEATER218A00	30.0/34.6	11.3/15.0	84.967.3	-/-	90/90	7860	269/269	
460-3-60	414	506	5.1	35	-	-	-	1	0.5	2.1	1.5	0.87	0.15	3	3.2	HIGH	YES	HIGH	CRHEATER207A00	6.37.2	2.33.0	35.034.1	45/45	-/-	3736	107			
																				CRHEATER208A00	10.0/11.5	3.85.0	37.037.8	45/45	-/-	3736	107/107		
																				CRHEATER209A00	15.0/17.3	5.67.5	43.345.0	45/50	-/-	4041	107/107		
																				CRHEATER210A00	20.0/23.1	7.510.0	49.592.3	50/60	-/-	4648	107/107		
																				CRHEATER211A00	30.0/34.6	11.3/15.0	62.086.6	-/-	70/70	5761	107/107		
																				CRHEATER212A00	53.350.6	60/60	-/-	5855	269				
																				CRHEATER213A00	6.37.2	2.33.0	55.353.0	60/60	-/-	5855	269/269		
																				CRHEATER214A00	10.0/11.5	3.85.0	59.958.4	60/60	-/-	5855	269/269		
																				CRHEATER215A00	15.0/17.3	5.67.5	66.165.6	-/-	70/70	6160	269/269		
																				CRHEATER216A00	20.0/23.1	7.510.0	72.472.9	-/-	80/80	6767	269/269		
																				CRHEATER217A00	30.0/34.6	11.3/15.0	84.967.3	-/-	90/90	7860	269/269		
																				CRHEATER218A00	53.350.6	60/60	-/-	5855	269				

50PG

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						ORF		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE				
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)				FLA (ea)	Qty				FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Break	MOCP	FLA	LRA				
04 (cont)	575-3-60	518	633	4.3	31	0.5	2.1	0.695	1.1	0.12	4	0.695	2.4	3	1.92/1.74	LOW	YES	LOW	HIGH	LOW	HIGH	LOW	HIGH	CRHEATER201A00	-	-	-	13.3	15	-	14	43
																								CRHEATER221A00	9.2	10.0	20.7	25	-	19	43	
																								CRHEATER222A00	13.9	15.0	26.6	30	-	24	43	
																								CRHEATER221A00	-	-	19.2	25	-	21	106	
																								CRHEATER222A00	9.2	10.0	28.2	30	-	26	106	
		518	633	4.3	31	0.5	2.1	0.695	1.1	0.12	4	0.695	2.4	3	1.92/1.74	HIGH	YES	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	CRHEATER201A00	9.2	10.0	20.7	25	-	19	43	
																								CRHEATER221A00	13.9	15.0	26.6	30	-	24	43	
																								CRHEATER222A00	-	-	19.2	25	-	21	106	
																								CRHEATER221A00	9.2	10.0	28.2	30	-	31	106	
																								CRHEATER222A00	13.9	15.0	34.0	35	-	47	146	
208/230-1-60	253	187	253	20.5	109	1.0	4.9	1.92/1.74	8.02/7.25	0.33/0.3	4	1.92/1.74	3	11.47/10.375	HIGH	YES	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	CRHEATER201A00	17.3/20.0	3.85/0	46.3/48.4	60/60	-/-	47/46	139		
																							CRHEATER202A00	26.0/30.0	5.67/5	57.0/60.9	-/-	60/70	52/56	139/139		
																							CRHEATER203A00	34.7/40.0	7.5/10.0	67.9/73.4	-/-	70/80	62/68	139/139		
																							CRHEATER204A00	52.0/60.0	11.3/15.0	89.5/98.4	-/-	90/100	82/91	139/139		
																							CRHEATER205A00	69.3/80.0	15.0/20.0	111.2/123.4	-/-	125/125	102/114	139/139		
																							CRHEATER201A00	17.3/20.0	3.85/0	87.1/92.3	-/-	100/100	94/99	475		
																							CRHEATER202A00	26.0/30.0	5.67/5	108.1/107.0	-/-	100/100	94/99	475/475		
																							CRHEATER203A00	34.7/40.0	7.5/10.0	119.0/119.5	-/-	110/110	99/98	475/475		
																							CRHEATER204A00	52.0/60.0	11.3/15.0	140.6/144.5	-/-	150/150	129/133	475/475		
																							CRHEATER205A00	69.3/80.0	15.0/20.0	162.2/169.5	-/-	175/175	149/156	475/475		
208/230-1-60	187	253	20.5	109	1.0	7.0	8.02/7.25	1.92/1.74	0.33/0.3	4	1.92/1.74	3	11.47/10.375	HIGH	YES	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	CRHEATER201A00	17.3/20.0	3.85/0	48.4/47.4	60/60	-/-	50/49	164		
																							CRHEATER202A00	26.0/30.0	5.67/5	59.7/63.5	-/-	60/70	55/58	164/164		
																							CRHEATER203A00	34.7/40.0	7.5/10.0	70.5/76.0	-/-	80/80	65/70	164/164		
																							CRHEATER204A00	52.0/60.0	11.3/15.0	92.2/101.0	-/-	100/110	85/93	164/164		
																							CRHEATER205A00	69.3/80.0	15.0/20.0	113.8/126.0	-/-	125/150	105/116	164/164		
																							CRHEATER201A00	17.3/20.0	3.85/0	89.2/94.4	-/-	100/100	97/91	500		
																							CRHEATER202A00	26.0/30.0	5.67/5	99.9/97.2	-/-	100/100	97/91	500/500		
																							CRHEATER203A00	34.7/40.0	7.5/10.0	125.1/109.7	-/-	125/110	102/101	500/500		
																							CRHEATER204A00	52.0/60.0	11.3/15.0	143.2/147.2	-/-	150/150	132/135	500/500		
																							CRHEATER205A00	69.3/80.0	15.0/20.0	164.9/172.2	-/-	175/175	152/158	500/500		
208/230-3																																

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT			POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
		Min	Max	No. 1		No. 2		No. 3					Qty	FLA (ea)				FLA (ea)	FLA (ea)	MCA	Fuse or HACR Brkr	MOCP	FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
				RLA	LRA	RLA	LRA	RLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
	(V-Ph-Hz)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														

06

216

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																								
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)	FLA	FLA (ea)	FLA (ea)	Qty	FLA (ea)	IFM TYPE	Conv Outlet	ERV	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA																																									
				RLA	LRA	RLA	LRA	RLA	LRA																																																											
06 (cont)	480-3-60			9.6	62	-	-	-	1	0.8	2.6	0.87	0.15	FLA (ea)	4	0.87	LOW	YES	HIGH	CRHEATER215A00	5.8	5.0	22.1	30.4	35	-	32	159	23	86																																						
																															414	506	CRHEATER216A00	8.7	7.5	22.5	30	-	23	86																												
																																									CRHEATER217A00	11.5	10.0	26.0	30	-	32	159	24	86																		
																																																			CRHEATER218A00	17.3	15.0	33.3	40	-	33	159	31	86								
																																																													CRHEATER219A00	23.1	20.0	40.5	45	-	37	86
		575-3-60	518	633	6.1	40	-	-	-	1	0.8	2.0	0.695	1.1	0.12	2.4	0.695	LOW	YES	HIGH	CRHEATER215A00	5.8	5.0	22.1	30	-	23	86																																								
																													414	506	CRHEATER216A00	8.7	7.5	22.5	30	-	23	86																														
																																							CRHEATER217A00	11.5	10.0	26.0	30	-	32	159	24	86																				
																																																	CRHEATER218A00	17.3	15.0	33.3	40	-	33	159	31	86										
																																																											CRHEATER219A00	23.1	20.0	40.5	45	-	37	86		
																																																																			CRHEATER220A00	28.9
													0.87	1.5	0.15	4	0.87	LOW	YES	HIGH	CRHEATER215A00	5.8	5.0	22.1	30	-	23	86																																								
																													414	506	CRHEATER216A00	8.7	7.5	22.5	30	-	23	86																														
																																							CRHEATER217A00	11.5	10.0	26.0	30	-	32	159	24	86																				
																																																	CRHEATER218A00	17.3	15.0	33.3	40	-	33	159	31	86										
																																																											CRHEATER219A00	23.1	20.0	40.5	45	-	37	86		
																																																																			CRHEATER220A00	28.9
		575-3-60	518	633	6.1	40	-	-	-	1	0.8	2.0	0.695	1.1	0.12	2.4	0.695	LOW	YES	HIGH	CRHEATER215A00	5.8	5.0	22.1	30	-	23	86																																								
																													414	506	CRHEATER216A00	8.7	7.5	22.5	30	-	23	86																														
																																							CRHEATER217A00	11.5	10.0	26.0	30	-	32	159	24	86																				
																																																	CRHEATER218A00	17.3	15.0	33.3	40	-	33	159	31	86										
																																																											CRHEATER219A00	23.1	20.0	40.5	45	-	37	86		
																																																																			CRHEATER220A00	28.9

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

[illegible]

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						IFIM	ERV Supply	ERV Wheel	ERV Exhaust		IFIM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3					FLA	FLA (ea)				Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Brkr	MOC	FLA	LRA
				RLA	LRA	RLA	LRA	RLA	LRA																		
07 (cont)	575-3-60	518	633	7.6	54	-	-	1	0.8	2.0	0.695	4	0.695	LOW	YES	LOW	HIGH	LOW	CRHEATER221A00	-	-	17.6	25	-	18	73	
											CRHEATER222A00		9.2							10.0	20.6	25	-	19	73		
											CRHEATER223A00		13.9							15.0	26.5	30	-	24	73		
											CRHEATER224A00		18.5							20.0	32.2	35	-	30	73		
											CRHEATER225A00		23.1							25.0	38.0	40	-	35	73		
											CRHEATER224A00		27.7							30.0	43.7	45	-	40	73		
		CRHEATER221A00	-	-	23.5	30	-	25	136																		
		CRHEATER222A00	9.2	10.0	28.0	30	-	26	136																		
		CRHEATER223A00	13.9	15.0	33.9	35	-	31	136																		
		CRHEATER224A00	18.5	20.0	39.7	40	-	36	136																		
		CRHEATER225A00	23.1	25.0	45.4	50	-	42	136																		
		CRHEATER224A00	27.7	30.0	51.2	60	-	47	136																		
08	208/230-3-60	187	253	13.5	88	88	-	2	1.5	5.2	8.85/8.0	3	7.08/6.4	LOW	YES	HIGH	HIGH	LOW	CRHEATER225A00	-	-	76.9/73.7	-/-	90/80	85/81	357	
											CRHEATER226A00		20.0/23.1							7.5/10.0	87.0/86.1	-/-	90/80	85/81	357/357		
											CRHEATER227A00		30.0/34.6							11.3/15.0	99.5/100.5	-/-	100/110	92/87	420/420		
											CRHEATER228A00		50.0/57.7							18.8/25.0	124.5/129.4	-/-	125/150	115/119	420/420		
											CRHEATER229A00		70.0/80.8							26.3/35.0	149.5/158.3	-/-	150/175	138/146	420/420		
											CRHEATER229A00		80.0/92.4							30.0/40.0	162.0/172.8	-/-	175/175	149/159	420/420		
		CRHEATER225A00	20.0/23.1	7.5/10.0	83.0/79.2	-/-	90/80	87/83	383																		
		CRHEATER226A00	30.0/34.6	11.3/15.0	82.3/82.1	-/-	90/80	87/83	383/383																		
		CRHEATER227A00	50.0/57.7	18.8/25.0	94.9/96.5	-/-	100/100	87/89	383/383																		
		CRHEATER228A00	70.0/80.8	26.3/35.0	119.8/125.4	-/-	125/150	110/115	383/383																		
		CRHEATER229A00	80.0/92.4	30.0/40.0	144.8/154.3	-/-	150/175	133/142	383/383																		
		CRHEATER229A00	80.0/92.4	30.0/40.0	157.3/168.8	-/-	175/175	145/155	383/383																		
CRHEATER225A00	20.0/23.1	7.5/10.0	85.3/81.5	-/-	90/80	94/90	446																				
CRHEATER226A00	30.0/34.6	11.3/15.0	89.9/89.0	-/-	90/80	94/90	446/446																				
CRHEATER227A00	50.0/57.7	18.8/25.0	102.4/103.4	-/-	110/110	94/95	446/446																				
CRHEATER228A00	70.0/80.8	26.3/35.0	127.4/132.3	-/-	150/150	117/122	446/446																				
CRHEATER229A00	80.0/92.4	30.0/40.0	152.4/161.1	-/-	175/175	140/148	446/446																				
CRHEATER229A00	80.0/92.4	30.0/40.0	164.9/175.6	-/-	175/200	152/162	446/446																				

50PG

ELECTRICAL DATA

50PG

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																
		Min	Max	No. 1		No. 2		No. 3					Qty	FLA (ea)				FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bktr	MOCP	FLA	LRA																
08 (cont)	460-3-60	414	506	6.4	39	2	0.8	3.4	1.5	0.15	4	3	LOW	YES	HIGH	LOW	LOW	HIGH	CRHEATER232A00	-	-	36	40	-	40	162																
																			CRHEATER233A00	11.5	10.0	39.3	40	-	40	162																
																			CRHEATER234A00	17.3	15.0	46.6	50	-	43	162																
																			CRHEATER235A00	28.9	25.0	61.1	-	70	56	162																
																			CRHEATER236A00	40.4	35.0	75.4	-	80	69	162																
																			CRHEATER238A00	46.2	40.0	82.7	-	90	76	162																
																			CRHEATER232A00	-	-	38.8	45	-	43	191																
																			CRHEATER233A00	11.5	10.0	42.8	45	-	43	191																
																			CRHEATER234A00	17.3	15.0	50.1	60	-	46	191																
																			CRHEATER235A00	28.9	25.0	64.6	-	70	59	191																
																			CRHEATER236A00	40.4	35.0	78.9	-	80	73	191																
																			CRHEATER238A00	46.2	40.0	86.2	-	90	79	191																
	575-3-60	518	633	34	5.1	34	2	0.8	2.0	1.1	0.12	3.3	3	HIGH	YES	HIGH	HIGH	CRHEATER232A00	11.5	10.0	40.3	45	-	40	175																	
																		CRHEATER233A00	17.3	15.0	47.6	50	-	44	175																	
																		CRHEATER234A00	28.9	25.0	62.1	-	70	57	175																	
																		CRHEATER235A00	40.4	35.0	76.4	-	80	70	175																	
																		CRHEATER236A00	46.2	40.0	83.7	-	90	77	175																	
																		CRHEATER232A00	-	-	39.6	45	-	44	204																	
																		CRHEATER233A00	11.5	10.0	43.8	45	-	44	204																	
																		CRHEATER234A00	17.3	15.0	51.1	60	-	47	204																	
																		CRHEATER235A00	28.9	25.0	65.6	-	70	60	204																	
																		CRHEATER236A00	40.4	35.0	79.9	-	80	74	204																	
																		CRHEATER238A00	46.2	40.0	87.2	-	90	80	204																	
																		CRHEATER239A00	13.9	15.0	29	35	-	32	159																	
																		CRHEATER240A00	23.1	25.0	37.3	40	-	34	159																	
																		CRHEATER241A00	32.3	35.0	60.3	-	45	159																		
																		CRHEATER242A00	37.0	40.0	66.2	-	70	55	159																	
																		CRHEATER239A00	13.9	15.0	30.9	35	-	34	179																	
																		CRHEATER240A00	23.1	25.0	39.6	40	-	36	179																	
																		CRHEATER241A00	32.3	35.0	51.1	60	-	47	179																	
																		CRHEATER242A00	37.0	40.0	62.6	-	70	58	179																	
																		CRHEATER238A00	-	-	29.8	35	-	33	170																	
																		CRHEATER239A00	13.9	15.0	38.3	40	-	35	170																	
																		CRHEATER240A00	23.1	25.0	49.8	50	-	46	170																	
																		CRHEATER241A00	32.3	35.0	61.3	-	70	56	170																	
																		CRHEATER242A00	37.0	40.0	67.2	-	70	62	170																	
																		HIGH																	CRHEATER238A00	-	-	31.7	35	-	35	190
																																			CRHEATER239A00	13.9	15.0	40.6	45	-	37	190
																																			CRHEATER240A00	23.1	25.0	52.1	60	-	48	190
																																			CRHEATER241A00	32.3	35.0	63.6	-	70	59	190
HIGH																	CRHEATER242A00	37.0	40.0	69	-	70	64	190																		

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	COMPRESSOR						IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv. Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		No. 1			No. 2						No. 3					Qty	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Brkr	MOCP	FLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		RLA	LRA		RLA	LRA					RLA	LRA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
09	208/230-3-60	Min							3.32/3.0		0.33/0.3	8.85/6.0	LOW		LOW	LOW	CRHEATER25A00	-	-	82.5/79.3	-/-	-/-	90/90	90/87	363																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																	CRHEATER26A00	20.0/23.1	7.5/10.0	82.5/79.3	-/-	-/-	90/90	90/87	363/363																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																	CRHEATER27A00	30.0/34.6	11.3/15.0	91.9/93.6	-/-	-/-	100/100	90/87	363/363																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																	CRHEATER28A00	50.0/57.7	18.8/25.0	116.9/122.5	-/-	-/-	125/125	108/113	363/363																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																	CRHEATER29A00	70.0/80.8	26.3/35.0	141.9/151.4	-/-	-/-	150/175	131/139	363/363																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
																	CRHEATER30A00	80.0/92.4	30.0/40.0	154.4/165.9	-/-	-/-	175/175	142/153	363/363																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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50PG

Units With Powered Convenience Outlet and with Energy X — 50PG03-16 (cont)

[illegible]

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY	VOLTAGE RANGE		COMPRESSOR						ORF		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE																																									
				Min	Max	No. 1		No. 2							No. 3					Part Number	FLA	Nom. kW	MCA	Fuse or HACR Brkr	MOCB	FLA	LRA																																										
						RLA	LRA	RLA	LRA						RLA	LRA																																																					
12 (cont)	460-3-60	414	506	9.6	62	9.6	62	-	-	2	1.0	3.4	1.5	0.15	Qty	FLA (ea)	3.2	YES	LOW	HIGH	LOW	CRHEATER23A00	11.5	10.0	44.4	50	-	48	221																																								
																														4	0.35	3	4	CRHEATER23A00	17.3	15.0	47.2	50	-	51	250																												
																																										4	CRHEATER23A00	28.9	25.0	51.1	60	-	51	250																			
																																																			4	CRHEATER23A00	40.4	35.0	63.6	-	70	60	250										
																																																												4	CRHEATER23A00	46.2	40.0	87.2	-	90	80	250	
																																																																					4
												4.8	4	0.35	3	3.2	HIGH	YES	LOW	HIGH	LOW	CRHEATER23A00	11.5	10.0	45.8	50	-	50	230																																								
																														4	CRHEATER23A00	17.3	15.0	49.3	50	-	50	230																															
																																							4	CRHEATER23A00	28.9	25.0	63.8	-	70	59	230																						
																																																4	CRHEATER23A00	40.4	35.0	78.2	-	80	72	230													
																																																									4	CRHEATER23A00	46.2	40.0	85.4	-	90	79	230				
																																																																		4	CRHEATER23A00	57.7	50.0
575-3-60	518	633	6.1	40	6.1	40	-	-	2	0.8	2.8	1.1	0.12	3	3.3	2.4	YES	HIGH	LOW	CRHEATER23A00	13.9	15.0	38.3	40	-	35	182																																										
																												3.3	0.3	3	3.3	2.4	CRHEATER23A00	23.1	25.0	52.1	60	-	48	202																													
																																									3.3	CRHEATER23A00	32.3	35.0	61.3	-	70	56	182																				
																																																		3.3	CRHEATER23A00	37.0	40.0	67.2	-	70	62	182											
																																																											3.3	CRHEATER23A00	46.2	50.0	67.1	-	70	72	182		
																																																																				3.3	CRHEATER23A00
												3.3	0.3	3	3.3	2.4	HIGH	YES	LOW	HIGH	LOW	CRHEATER23A00	13.9	15.0	38.3	40	-	35	182																																								
																														3.3	0.3	3	3.3	2.4	CRHEATER23A00	23.1	25.0	49.8	50	-	46	182																											
																																											3.3	CRHEATER23A00	32.3	35.0	61.3	-	70	56	182																		
																																																				3.3	CRHEATER23A00	37.0	40.0	67.2	-	70	62	182									
																																																													3.3	CRHEATER23A00	46.2	50.0	67.1	-	70	72	182
3.3	0.3	3	3.3	2.4	HIGH	YES	LOW	HIGH	LOW	CRHEATER23A00	13.9	15.0	40.6	45	-	37	202																																																				
																		3.3	0.3	3	3.3	2.4	CRHEATER23A00	23.1	25.0	52.1	60	-	48	202																																							
																															3.3	CRHEATER23A00	32.3	35.0	63.6	-	70	59	202																														
																																								3.3	CRHEATER23A00	37.0	40.0	69.5	-	70	64	202																					
																																																	3.3	CRHEATER23A00	46.2	50.0	69.5	-	70	75	202												
																																																										3.3	CRHEATER23A00	57.7	50.0	69.5	-	70	75	202			

Units With Powered Convenience Outlet and with Energy X — 50PG03-16 (cont)

14

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						ORF		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv. Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE							
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)				FLA	FLA (ea)				Qty	FLA (ea)	IFM TYPE	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Brkr	MOCP	FLA	LRA					
				RLA	LRA	RLA	LRA	RLA	LRA																										
14 (cont)	575-3-60	518	633	7.7	54	7.7	54	-	-	2	0.8	5.6	1.1	0.12			3	2.4	3.3												LOW	YES	LOW	-	-
															CRHEATER239A00	13.9				15.0	38.3	40	-	39	210										
															CRHEATER240A00	23.1				25.0	49.8	50	-	46	210										
															CRHEATER241A00	32.3				35.0	61.3	-	70	56	210										
															CRHEATER242A00	37.0				40.0	67.2	-	70	62	210										
															CRHEATER243A00	46.2				50.0	67.1	-	70	72	210										
															CRHEATER244A00	55.4				60.0	76.3	-	80	83	210										
															CRHEATER239A00	13.9				15.0	37.5	45	-	41	230										
															CRHEATER240A00	23.1				25.0	52.1	60	-	48	230										
															CRHEATER241A00	32.3				35.0	63.0	-	70	59	230										
															CRHEATER242A00	37.0				40.0	69.5	-	70	64	230										
															CRHEATER243A00	46.2				50.0	69.5	-	70	75	230										
															CRHEATER244A00	55.4				60.0	78.7	-	80	85	230										
															CRHEATER239A00	13.9				15.0	38.4	45	-	42	224										
															CRHEATER240A00	23.1				25.0	53.3	60	-	49	224										
CRHEATER241A00	32.3	35.0	64.8	-	70	60	224																												
CRHEATER242A00	37.0	40.0	70.7	-	80	65	224																												
CRHEATER243A00	46.2	50.0	70.6	-	80	76	224																												
CRHEATER244A00	55.4	60.0	79.8	-	80	86	224																												
CRHEATER239A00	13.9	15.0	40.3	45	-	44	244																												
CRHEATER240A00	23.1	25.0	55.6	60	-	51	244																												
CRHEATER241A00	32.3	35.0	67.1	-	70	62	244																												
CRHEATER242A00	37.0	40.0	73.0	-	80	67	244																												
CRHEATER243A00	46.2	50.0	73.0	-	80	78	244																												
CRHEATER244A00	55.4	60.0	82.2	-	90	88	244																												
16	208/230-3-60	187	253	18.1	137	18.1	137	17.6	123	3	1.9	10.2	7.08/6.4	0.66/0.6	3	8.85/8.0	LOW	YES	LOW	-	-	120.4/116.4	-/	125/125	133/129	679									
																											CRHEATER254A00	52.1/60.1	18.8/25.0	135.6/140.6	-/-	150/150	133/129	679/679	
																											CRHEATER255A00	104.2/120.3	37.6/50.0	200.7/185.8	-/-	225/220	185/199	679/679	
																											CRHEATER257A00	156.3/180.4	56.3/75.0	226.8/245.9	-/-	250/250	245/268	679/679	
																											CRHEATER254A00	52.1/60.1	18.8/25.0	118.6/114.8	-/-	125/125	131/127	690	
																											CRHEATER255A00	104.2/120.3	37.6/50.0	198.5/183.8	-/-	150/150	131/128	690/690	
																											CRHEATER256A00	156.3/180.4	56.3/75.0	224.6/243.9	-/-	250/250	243/266	690/690	
																											CRHEATER257A00	156.3/180.4	56.3/75.0	224.6/243.9	-/-	250/250	243/266	690/690	
																											CRHEATER254A00	52.1/60.1	18.8/25.0	141.6/146.6	-/-	150/150	139/134	688	
																											CRHEATER255A00	104.2/120.3	37.6/50.0	206.7/191.8	-/-	225/220	190/204	688/688	
																											CRHEATER257A00	156.3/180.4	56.3/75.0	232.8/251.9	-/-	250/300	250/273	688/688	
																											CRHEATER254A00	52.1/60.1	18.8/25.0	123.4/119.6	-/-	150/125	137/132	699	
																											CRHEATER255A00	104.2/120.3	37.6/50.0	139.4/144.6	-/-	150/150	137/133	699/699	
																											CRHEATER256A00	156.3/180.4	56.3/75.0	204.5/189.8	-/-	225/200	188/202	699/699	
																											CRHEATER257A00	156.3/180.4	56.3/75.0	230.6/249.9	-/-	250/250	248/271	699/699	
CRHEATER254A00	52.1/60.1	18.8/25.0	129.9/126.0	-/-	150/150	144/139	726																												
CRHEATER255A00	104.2/120.3	37.6/50.0	147.1/152.1	-/-	150/175	144/140	726/726																												
CRHEATER257A00	156.3/180.4	56.3/75.0	212.2/197.3	-/-	225/200	195/209	726/726																												
CRHEATER254A00	52.1/60.1	18.8/25.0	128.2/124.4	-/-	150/150	142/137	737																												
CRHEATER255A00	104.2/120.3	37.6/50.0	144.9/150.1	-/-	150/175	142/138	737/737																												
CRHEATER256A00	156.3/180.4	56.3/75.0	210.0/195.3	-/-	225/200	193/207	737/737																												
CRHEATER257A00	156.3/180.4	56.3/75.0	236.1/255.1	-/-	250/300	253/276	737/737																												

50PG

ELECTRICAL DATA

50PG

Units With Powered Convenience Outlet and with EnergyX — 50PG03-16 (cont)

UNIT SIZE	NOMINAL POWER SUPPLY (V-Ph-Hz)	VOLTAGE RANGE		COMPRESSOR						ORF		IFM	ERV Supply	ERV Wheel	ERV Exhaust		IFM TYPE	Conv. Outlet	ERV	ELECTRIC HEAT				POWER SUPPLY				DISCONNECT SIZE															
		Min	Max	No. 1		No. 2		No. 3		Qty	FLA (ea)	FLA (ea)	FLA (ea)	Qty	FLA (ea)	FLA (ea)	FLA (ea)	Part Number	FLA	Nom. kW	MCA	Fuse or HACR Bkts	MOCP	FLA	LRA																		
				RLA	LRA	RLA	LRA	RLA	LRA																																		
16 (cont)	460-3-60	414	506	9.0	62	9.0	62	9.6	62	3	1.0	4.8	3.2	0.35	3	4	LOW	YES	LOW	LOW	58.8	-	70	65	318																		
													CRHEATER268A00			30.1										25.0	69.8	-	70	65	318												
													CRHEATER269A00			60.1										50.0	92.3	-	100	99	318												
													CRHEATER260A00			90.2										75.0	122.4	-	125	133	318												
													CRHEATER268A00			-										-	58	-	70	64	323												
													CRHEATER269A00			30.1										25.0	68.8	-	70	64	323												
												460-3-60	414		506	9.0	62	9.0	62	9.6	62	3	1.0	7.4	4	0.35	3	3.2	MID-LOW	YES	LOW	LOW	58.8	-	70	68	322						
																									CRHEATER268A00			30.1										25.0	73.1	-	80	68	322
																									CRHEATER269A00			60.1										50.0	95.5	-	100	102	322
																									CRHEATER260A00			90.2										75.0	125.6	-	150	136	322
																									CRHEATER268A00			-										-	60.6	-	70	67	327
																									CRHEATER269A00			30.1										25.0	72.1	-	80	67	327
	460-3-60	414	506	9.0	62	9.0	62	9.6	62	3	1.0	9.7	4	0.35	3	3.2	HIGH	YES	LOW	LOW	124.6	-	150	138	346																		
													CRHEATER268A00			30.1										25.0	75.9	-	80	70	341												
													CRHEATER269A00			60.1										50.0	98.4	-	100	104	341												
													CRHEATER260A00			90.2										75.0	128.5	-	150	139	341												
575-3-60	518	633	633	6.8	50	6.8	50	6.1	40	3	0.8	2.8	2.4	0.3	3	3.3	MID-LOW	YES	LOW	LOW	43.3	50	-	48	267																		
													CRHEATER261A00			24.1										25.0	54.5	60	-	50	267												
													CRHEATER262A00			46.2										50.0	70.6	-	80	76	267												
													CRHEATER263A00			72.2										75.0	96.6	-	100	105	267												
575-3-60	518	633	633	6.8	50	6.8	50	6.1	40	3	0.8	5.6	3.3	0.3	3	2.4	MID-LOW	YES	HIGH	LOW	48.6	60	-	54	296																		
													CRHEATER261A00			24.1										25.0	60.8	-	70	56	296												
													CRHEATER262A00			46.2										50.0	76.8	-	80	81	296												
													CRHEATER263A00			72.2										75.0	102.8	-	110	111	296												
575-3-60	518	633	633	6.8	50	6.8	50	6.1	40	3	0.8	7.8	3.3	0.3	3	2.4	HIGH	YES	HIGH	LOW	47.7	50	-	55	293																		
													CRHEATER261A00			24.1										25.0	59.6	60	-	80	80	293											
													CRHEATER262A00			46.2										50.0	75.7	-	80	80	293												
													CRHEATER263A00			72.2										75.0	101.7	-	110	110	293												

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



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

NOTES:

- 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.
- 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 230-3-60



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

Determine maximum deviation from average voltage.

$$\begin{aligned} (AB) \ 227 - 224 &= 3 \text{ v} \\ (BC) \ 231 - 227 &= 4 \text{ v} \\ (AC) \ 227 - 226 &= 1 \text{ v} \end{aligned}$$

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.
- Single point kits CRSINGLE028A00 and CRSINGLE031A00 are not required if field-supplied pressure connectors are used. Factory—installed heaters contain terminal blocks when combined MOCP is greater than 60 amps.

Units With Powered Convenience Outlet and with EnergyX — 50PG20-28

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		ELECTRIC HEAT		IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL			POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA (ea)	Hp	FLA	MCA	MOCP				
				RLA	LRA	RLA	LRA	RLA	LRA																				
20	208/230	187	253	208	208	208	28.2	208	4	0.25	1.5	-	52/60	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	110/107	125/125	119/115				
																										38/50	104/120	3.7	10.6/9.6
		7.5	24.2/22	2	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	198/183	200/200	182/196														
																10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	217/190				
		56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	110/107*	125/125*	119/115*														
																7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	117/113*	125/125*	126/121*	135/129*	
	10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	131/125*	150/125*	142/136*																	
													3.7	4.8	2	3.2	2	3	4	0.167	0.35	57	60	61					
	5	7.6	2	3.2	2	3	4	0.167	0.35	60	60	64																	
													7.5	11	2	3.2	2	3	4	0.167	0.35	63	70	68					
	10	14	2	3.2	2	3	4	0.167	0.35	66	80	71																	
													3.7	4.8	2	3.2	2	3	4	0.167	0.35	62	70	61					
5	7.6	2	3.2	2	3	4	0.167	0.35	65	70	64																		
												7.5	11	2	3.2	2	3	4	0.167	0.35	69	70	68						
10	14	2	3.2	2	3	4	0.167	0.35	73	80	71																		
												3.7	4.8	2	3.2	2	3	4	0.167	0.35	84	90	91						
5	7.6	2	3.2	2	3	4	0.167	0.35	88	90	94																		
												7.5	11	2	3.2	2	3	4	0.167	0.35	92	100	98						
10	14	2	3.2	2	3	4	0.167	0.35	96	100	102																		
												3.7	4.8	2	3.2	2	3	4	0.167	0.35	114	125	126						
5	7.6	2	3.2	2	3	4	0.167	0.35	118	125	129																		
												7.5	11	2	3.2	2	3	4	0.167	0.35	122	125	133						
10	14	2	3.2	2	3	4	0.167	0.35	126	150	136																		
												5	6.1	2	2.4	2	3	3.3	0.167	0.3	50	60	54						
7.5	9	2	2.4	2	3	3.3	0.167	0.3	53	60	57																		
												10	11	2	2.4	2	3	3.3	0.167	0.3	55	60	59						
5	6.1	2	2.4	2	3	3.3	0.167	0.3	53	60	54																		
												7.5	9	2	2.4	2	3	3.3	0.167	0.3	57	60	57						
10	11	2	2.4	2	3	3.3	0.167	0.3	59	60	59																		
												5	6.1	2	2.4	2	3	3.3	0.167	0.3	81	90	74						
7.5	9	2	2.4	2	3	3.3	0.167	0.3	84	90	77																		
												10	11	2	2.4	2	3	3.3	0.167	0.3	87	90	80						
5	6.1	2	2.4	2	3	3.3	0.167	0.3	98	100	107																		
												7.5	9	2	2.4	2	3	3.3	0.167	0.3	102	110	111						
10	11	2	2.4	2	3	3.3	0.167	0.3	104	110	113																		

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																			
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	FLA	Hp	FLA	MCA	MOCp	FLA		
20	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	156/180	175/200	179/207	

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE					
				No. 1		No. 2		No. 3																							
		Min	Max	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	FLA	Hp	FLA	MCA	MOCp									
20	208/230	187	253	28.2	208	28.2	208	-	-	1.5	0.25	4	-	2	2	2	7.08/6.4	156/180	56/75	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	207/227	225/250	227/250
20	208/230	187	253	28.2	208	28.2	208	-	-	1.5	0.25	4	-	2	2	2	7.08/6.4	156/180	56/75	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	215/234	225/250	234/257
20	208/230	187	253	28.2	208	28.2	208	-	-	1.5	0.25	4	-	2	2	2	7.08/6.4	156/180	56/75	7.5	24.2/222	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	224/243	225/250	242/265
20	208/230	187	253	28.2	208	28.2	208	-	-	1.5	0.25	4	-	2	2	2	7.08/6.4	156/180	56/75	10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	233/250	225/250	250/271

Units With Powered Convenience Outlet and with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL			POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	FLA (ea)	Hp	FLA (ea)	FLA	Hp	MCA	MOCp	FLA			
				RLA	LRA	RLA	LRA	RLA	LRA																					
24																														
	208/230	187	253	32.1	240	32.1	240	-	6	1.5																				
	480	414	506	15.4	110	15.4	110	-	6	0.7																				
	575	518	633	12.8	88	12.8	88	-	6	0.7																				

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST		ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE	
				No. 1			No. 2																No. 3
		Min	Max	RLA	LRA		RLA	LRA		FLA (ea)	Hp	FLA (ea)	Qty	FLA (ea)	Hp	FLA (ea)	Qty	FLA (ea)	Hp	FLA	MCA		MOCp
24	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	156/180	175/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST		ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		Min	Max	RLA	LRA	No. 2		No. 3		FLA (ea)	kW	FLA	Hp	FLA (ea)	Hp	Qty	FLA (ea)	Hp	FLA	MCA	MOCp																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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24	208/230	187	253	32.1	240	240	32.1	240	-	1.5	0.25	6	156/180	56/75	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	207/227	225/250	227/250																																																																																																																																																																																																																																																																																																																																																																																																																																																											
																									5	16.7/15.2	2	3	8.85/8.0	0.167	0.66/0.6	215/234	223/250	234/257																																																																																																																																																																																																																																																																																																																																																																																																																																																	
																																			7.5	24.2/222	2	3	8.85/8.0	0.167	0.66/0.6	224/243	225/250	242/265																																																																																																																																																																																																																																																																																																																																																																																																																																							
																																													10	30.8/228	2	3	8.85/8.0	0.167	0.66/0.6	233/250	250/250	250/271																																																																																																																																																																																																																																																																																																																																																																																																																													

Units With Powered Convenience Outlet and with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL			POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	No. 1			No. 2			No. 3			Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	FLA	MCA	MOCp				
				RLA	LRA	FLA	RLA	LRA	FLA	RLA	LRA	FLA																			
28	208/230	187	253	28.2	208	28.2	208	208	208	6	0.25	1.5																			
	460	414	506	15.4	104	15.4	104	104	104	104	6	0.25	0.7																		
575	518	633	12.8	83	12.8	83	83	83	83	6	0.25	0.7																			

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY	DISCONNECT SIZE	
				No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Qty	Hp	FLA (ea)					
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA														FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)	FLA (ea)
28	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	156/180	175/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR									OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1			No. 2			No. 3																						
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	FLA	Hp	FLA	MCA	MOCp	FLA			
28	208/230	187	253	28.2	208	208	28.2	208	28.2	208	208	6	0.25	1.5	56/75	156/180	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	215/234	225/250	234/257				
				28.2	208	208	28.2	208	28.2	208	28.2	208	7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	224/243	225/250	242/265								
													10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	233/250	250/250	250/271								

Units With Powered Convenience Outlet and HACR with EnergyX — 50PG20-28

[illegible]

* 208/230V/75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFIM			ELECTRIC HEAT		IFIM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																			
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP	FLA			
20	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	567/75	156/180	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207			

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3															
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP
20	208/230	187	253	28.2	208	28.2	208	-	4	0.25	1.5	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	227/227	250/250	227/250
												5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	234/234	250/250	234/257
												7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	243/243	250/250	242/265
												10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	250/250	300/250	250/271

Units With Powered Convenience Outlet and HACR with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR					OFM			ELECTRIC HEAT		IFM		ERV SUPPLY				ERV EXHAUST				ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2			No. 3	Qty	Hp	FLA (ea)	KW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Qty	Hp	FLA	MCA	MOCp				
				RLA	LRA	RLA	LRA	LRA																				
24	208/230																											
		187	253	32.1	240	32.1	240	-	6	0.25	1.5	19/25	52/60	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	122/122	150/150	131/127			
															5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	128/128	138/134			
															7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	136/136	147/142			
															10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	142/142	150/150	155/149		
	38/50	104/120	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	122/122	150/150	131/127														
				5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	129/129	138/134														
				7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	138/138	150/150	147/142													
				10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	145/145	150/150	155/149													
	460	414	506	15.4	110	15.4	-	6	0.25	0.7	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	122/122	150/150	131/127				
														5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	128/128	138/134				
														7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	136/136	147/142				
														10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	142/142	150/150	155/149			
518		633	88	12.8	88	12.8	-	6	0.25	0.7	78	75	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.35	58	60	63				
														5	7.6	2	3.2	2	3	4	0.167	0.35	61	70	66			
														7.5	11	2	3.2	2	3	4	0.167	0.35	64	70	70			
														10	14	2	3.2	2	3	4	0.167	0.35	67	80	73			
24	208/230																											
		187	253	32.1	240	32.1	240	-	6	0.25	0.7	25	30	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.35	62	70	63			
															5	7.6	2	3.2	2	3	4	0.167	0.35	65	70	66		
															7.5	11	2	3.2	2	3	4	0.167	0.35	69	70	70		
															10	14	2	3.2	2	3	4	0.167	0.35	73	80	73		
	414	506	15.4	110	15.4	-	6	0.25	0.7	50	60	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.35	84	90	91					
													5	7.6	2	3.2	2	3	4	0.167	0.35	88	90	94				
													7.5	11	2	3.2	2	3	4	0.167	0.35	92	100	98				
													10	14	2	3.2	2	3	4	0.167	0.35	96	100	102				
	575	518	633	88	12.8	88	12.8	-	6	0.25	0.7	75	90	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.35	114	125	126			
															5	7.6	2	3.2	2	3	4	0.167	0.35	118	125	129		
															7.5	11	2	3.2	2	3	4	0.167	0.35	122	125	133		
															10	14	2	3.2	2	3	4	0.167	0.35	126	150	136		
518		633	88	12.8	88	12.8	-	6	0.25	0.7	-	-	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.3	51	60	55				
														5	6.1	2	2.4	2	3	3.3	0.167	0.3	54	60	59			
														7.5	9	2	2.4	2	3	3.3	0.167	0.3	56	60	61			
														10	11	2	2.4	2	3	3.3	0.167	0.3	56	60	55			
575	518	633	88	12.8	88	12.8	-	6	0.25	0.7	24.8	24	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.3	57	60	59				
														5	11	2	2.4	2	3	3.3	0.167	0.3	59	60	61			
														7.5	6.1	2	2.4	2	3	3.3	0.167	0.3	81	90	74			
														10	11	2	2.4	2	3	3.3	0.167	0.3	84	90	77			
	518	633	88	12.8	88	12.8	-	6	0.25	0.7	48.3	46	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.3	87	90	80				
														5	6.1	2	2.4	2	3	3.3	0.167	0.3	98	100	107			
														7.5	9	2	2.4	2	3	3.3	0.167	0.3	102	125	111			
														10	11	2	2.4	2	3	3.3	0.167	0.3	104	125	113			

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFIM			ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																			
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	MCA	MOCP	
24	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207		

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Qty	Hp	FLA	MCA	MOCP	FLA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
24	208/230	187	253	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	227/227	250/250	227/250																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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															10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	243/243	250/250	242/265																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								

Units With Powered Convenience Outlet and HACR with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY				ERV EXHAUST				ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	FLA	MCA	MOCp					
				RLA	LRA	RLA	LRA	RLA	LRA																				
28	460	414	506	15.4	104	15.4	104	15.4	104	6	0.25	0.7	25	5	16.7/15.2	2	7.08/6.4	2	3	8.85/6.0	0.167	0.66/0.6	148/148	175/175	162/157				
														7.5	24.2/22	2	7.08/6.4	2	3	8.85/6.0	0.167	0.66/0.6	155/155	175/175	170/165				
														10	30.8/28	2	7.08/6.4	2	3	8.85/6.0	0.167	0.66/0.6	163/163	175/175	178/172				
														5	16.7/15.2	2	7.08/6.4	2	3	8.85/6.0	0.167	0.66/0.6	148/148	175/175	162/157				
														7.5	24.2/22	2	7.08/6.4	2	3	8.85/6.0	0.167	0.66/0.6	155/155*	175/175*	170/165*				
														10	30.8/28	2	7.08/6.4	2	3	8.85/6.0	0.167	0.66/0.6	163/163*	175/175*	178/172*				
		518	633	15.4	104	15.4	104	15.4	104	6	0.25	0.7	50	5	7.6	2	3.2	2	3	4	0.167	0.35	76	90	83				
														7.5	11	2	3.2	2	3	4	0.167	0.35	80	90	87				
														10	14	2	3.2	2	3	4	0.167	0.35	83	90	91				
														5	7.6	2	3.2	2	3	4	0.167	0.35	88	90	94				
														7.5	11	2	3.2	2	3	4	0.167	0.35	92	100	98				
														10	14	2	3.2	2	3	4	0.167	0.35	96	100	102				
575											75	5	7.6	2	3.2	2	3	4	0.167	0.35	118	125	129						
												7.5	11	2	3.2	2	3	4	0.167	0.35	122	125	133						
												10	14	2	3.2	2	3	4	0.167	0.35	126	150	136						
												5	6.1	2	2.4	2	3	3.3	0.167	0.3	64	70	70						
												7.5	9	2	2.4	2	3	3.3	0.167	0.3	67	70	73						
												10	11	2	2.4	2	3	3.3	0.167	0.3	69	80	76						
575	518	633	12.8	83	12.8	83	12.8	83	6	0.25	0.7	24.8	5	6.1	2	2.4	2	3	3.3	0.167	0.3	67	70	73					
													7.5	9	2	2.4	2	3	3.3	0.167	0.3	69	80	76					
													10	11	2	2.4	2	3	3.3	0.167	0.3	71	90	74					
													5	6.1	2	2.4	2	3	3.3	0.167	0.3	84	90	77					
													7.5	9	2	2.4	2	3	3.3	0.167	0.3	87	90	80					
													10	11	2	2.4	2	3	3.3	0.167	0.3	98	100	107					
											78	7.5	9	2	2.4	2	3	3.3	0.167	0.3	102	125	111						
												10	11	2	2.4	2	3	3.3	0.167	0.3	104	125	113						

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFIM			ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																			
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	MCA	MOCP	
28	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207		

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																		
		Min	Max	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP	FLA		
28	208/230	187	253	28.2	208	28.2	208	208	6	0.25	1.5	56/75	156/180	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	234/234	250/250	234/257	
														7.5	24.2/22.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	242/243	250/250	242/265	
														10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	250/250	300/250	250/271	

Units With Powered Convenience Outlet and HACR and Economizer with EnergyX — 50PG20-28

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1			No. 2			No. 3			Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCp			
				RLA	LRA	FLA	RLA	LRA	FLA	RLA	LRA	FLA															FLA	FLA	
20	208/230	187	253	208	208	208	-	-	-	4	0.25	1.5		19/25	52/60	3.7	10.69/6	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	119/119	125/125	129/124		
																5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	125/125	150/150	136/131		
																7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	133/133	150/150	145/138		
																10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	140/140	150/150	152/145		
	460	414	506	104	104	104	-	-	-	4	0.25	0.7	56/75	156/180	3.7	10.69/6	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	132/132	150/150	129/124			
															5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	139/139	150/150	136/131			
															7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	148/148	150/150	145/138			
															10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	155/155	175/175	152/145			
	575	518	633	83	83	83	-	-	-	4	0.25	0.7	38/50	104/120	3.7	10.69/6	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	192/192	200/200	177/190			
															5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	200/200	200/200	184/197			
															7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	209/209	225/225	193/205			
															10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	218/218	225/225	200/212			
460	414	506	104	104	104	-	-	-	4	0.25	0.7	25	30	3.7	10.69/6	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	119/119*	125/125*	129/124*				
														5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	125/125*	150/150*	136/131*				
														7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	133/133*	150/150*	145/138*				
														10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	140/140*	150/150*	152/145*				
575	518	633	83	83	83	-	-	-	4	0.25	0.7	-	-	3.7	4.8	2	3.2	3	3	4	0.167	0.35	61	70	65				
														5	7.6	2	3.2	3	3	4	0.167	0.35	64	70	69				
														7.5	11	2	3.2	3	3	4	0.167	0.35	67	80	73				
														10	14	2	3.2	3	3	4	0.167	0.35	70	80	76				
575	518	633	83	83	83	-	-	-	4	0.25	0.7	50	60	3.7	4.8	2	3.2	3	3	4	0.167	0.35	67	70	65				
														5	7.6	2	3.2	3	3	4	0.167	0.35	70	80	69				
														7.5	11	2	3.2	3	3	4	0.167	0.35	74	80	73				
														10	14	2	3.2	3	3	4	0.167	0.35	78	80	76				
575	518	633	83	83	83	-	-	-	4	0.25	0.7	75	90	3.7	4.8	2	3.2	3	3	4	0.167	0.35	89	90	96				
														5	7.6	2	3.2	3	3	4	0.167	0.35	93	100	99				
														7.5	11	2	3.2	3	3	4	0.167	0.35	97	100	103				
														10	14	2	3.2	3	3	4	0.167	0.35	101	125	106				
575	518	633	83	83	83	-	-	-	4	0.25	0.7	-	90	3.7	4.8	2	3.2	3	3	4	0.167	0.35	119	125	130				
														5	7.6	2	3.2	3	3	4	0.167	0.35	123	125	134				
														7.5	11	2	3.2	3	3	4	0.167	0.35	127	150	137				
														10	14	2	3.2	3	3	4	0.167	0.35	131	150	141				
575	518	633	83	83	83	-	-	-	4	0.25	0.7	-	-	5	6.1	2	2.4	3	3	3.3	0.167	0.3	53	60	58				
														7.5	9	2	2.4	3	3	3.3	0.167	0.3	56	60	61				
														10	11	2	2.4	3	3	3.3	0.167	0.3	58	60	63				
														5	6.1	2	2.4	3	3	3.3	0.167	0.3	57	60	58				
575	518	633	83	83	83	-	-	-	4	0.25	0.7	24.8	24	7.5	9	2	2.4	3	3	3.3	0.167	0.3	61	70	61				
														10	11	2	2.4	3	3	3.3	0.167	0.3	63	70	63				
														5	6.1	2	2.4	3	3	3.3	0.167	0.3	85	90	78				
														7.5	9	2	2.4	3	3	3.3	0.167	0.3	88	90	81				
575	518	633	83	83	83	-	-	-	4	0.25	0.7	48.3	46	10	11	2	2.4	3	3	3.3	0.167	0.3	91	100	83				
														5	6.1	2	2.4	3	3	3.3	0.167	0.3	102	125	111				
														7.5	9	2	2.4	3	3	3.3	0.167	0.3	106	125	115				
														10	11	2	2.4	3	3	3.3	0.167	0.3	108	125	117				

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																		
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	NA	MCA	
20	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCp				
				RLA	LRA	RLA	LRA	RLA	LRA																				
20	208/230	187	253	28.2	208	28.2	208	-	-	4	0.25	1.5	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	237/237	250/250	237/259			
															5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	244/244	250/250	244/266			
															7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274			
															10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	260/260	300/300	260/281			

Units With Powered Convenience Outlet and HACR and Economizer with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA	MCA	MOCp		
				RLA	LRA	RLA	LRA	RLA	LRA																			
24	208/230	187	253	32.1	240	32.1	240	-	-	6	0.25	1.5	19/25	52/60	3.7	10.8/6.4	2	7.0/6.4	3	3	8.8/6.0	0.167	0.66/0.6	131/131	150/150	142/137		
															5	16.7/15.2	2	7.0/6.4	3	3	8.8/6.0	0.167	0.66/0.6	137/137	150/150	149/143		
															7.5	24.2/22	2	7.0/6.4	3	3	8.8/6.0	0.167	0.66/0.6	145/145	175/175	157/151		
															10	30.8/28	2	7.0/6.4	3	3	8.8/6.0	0.167	0.66/0.6	151/151	175/175	165/158		
															3.7	10.8/6.4	2	7.0/6.4	3	3	8.8/6.0	0.167	0.66/0.6	132/132	150/150	142/137		
	460	414	506	15.4	110	15.4	110	-	-	6	0.25	0.7	56/75	156/180	5	16.7/15.2	2	7.0/6.4	3	3	8.8/6.0	0.167	0.66/0.6	131/131*	150/150*	142/137*		
															7.5	24.2/22	2	7.0/6.4	3	3	8.8/6.0	0.167	0.66/0.6	137/137*	150/150*	149/143*		
															10	30.8/28	2	7.0/6.4	3	3	8.8/6.0	0.167	0.66/0.6	145/145*	175/175*	157/151*		
															3.7	4.8	2	3.2	3	3	4	0.167	0.35	62	70	67		
															5	7.6	2	3.2	3	3	4	0.167	0.35	65	80	70		
															7.5	11	2	3.2	3	3	4	0.167	0.35	68	80	74		
24	460	414	506	15.4	110	15.4	110	-	-	6	0.25	0.7	25	30	3.7	4.8	2	3.2	3	3	4	0.167	0.35	67	70	67		
															5	7.6	2	3.2	3	3	4	0.167	0.35	70	80	70		
															7.5	11	2	3.2	3	3	4	0.167	0.35	74	80	74		
															10	14	2	3.2	3	3	4	0.167	0.35	78	80	78		
															3.7	4.8	2	3.2	3	3	4	0.167	0.35	89	90	96		
	575	518	633	12.8	88	12.8	88	-	-	6	0.25	0.7	50	60	5	7.6	2	3.2	3	3	4	0.167	0.35	93	100	99		
															7.5	11	2	3.2	3	3	4	0.167	0.35	97	100	103		
															10	14	2	3.2	3	3	4	0.167	0.35	101	125	106		
															3.7	4.8	2	3.2	3	3	4	0.167	0.35	119	125	130		
															5	7.6	2	3.2	3	3	4	0.167	0.35	123	125	134		
575	518	633	12.8	88	12.8	88	-	-	6	0.25	0.7	75	90	7.5	11	2	3.2	3	3	4	0.167	0.35	127	150	137			
														10	14	2	3.2	3	3	4	0.167	0.35	131	150	141			
														5	6.1	2	2.4	3	3	3.3	0.167	0.3	55	60	59			
														7.5	9	2	2.4	3	3	3.3	0.167	0.3	58	60	63			
														10	11	2	2.4	3	3	3.3	0.167	0.3	60	60	65			
575	518	633	12.8	88	12.8	88	-	-	6	0.25	0.7	24.8	24	5	6.1	2	2.4	3	3	3.3	0.167	0.3	57	60	59			
														7.5	9	2	2.4	3	3	3.3	0.167	0.3	61	70	63			
														10	11	2	2.4	3	3	3.3	0.167	0.3	63	70	65			
														5	6.1	2	2.4	3	3	3.3	0.167	0.3	85	90	78			
														7.5	9	2	2.4	3	3	3.3	0.167	0.3	88	90	81			
575	518	633	12.8	88	12.8	88	-	-	6	0.25	0.7	48.3	46	10	11	2	2.4	3	3	3.3	0.167	0.3	91	100	83			
														5	6.1	2	2.4	3	3	3.3	0.167	0.3	102	125	111			
														7.5	9	2	2.4	3	3	3.3	0.167	0.3	106	125	115			
														10	11	2	2.4	3	3	3.3	0.167	0.3	108	125	117			
														78	75	7.5	9	2	2.4	3	3	3.3	0.167	0.3	106	125	117	

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2																					
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP	
24	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207	

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE		
				No. 1		No. 2		No. 3																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP	FLA				
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	3							

Units With Powered Convenience Outlet and HACR and Economizer with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA (ea)	FLA	Hp	MCA	MOCP					
				RLA	LRA	RLA	LRA																		RLA	LRA	FLA	Hp	
28	208/230			28.2	208	208	28.2	208	208	6	0.25	1.5		52/60	5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	157/157	175/175	172/167			
															-	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	164/164	175/175	181/174		
																10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	171/171	200/200	188/181		
		187	253	28.2	208	208	28.2	208	208	6	0.25	1.5		19/25	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	164/164	175/175	181/174			
															10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	171/171	200/200	188/181			
															38/50	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	200/200	200/200	184/197		
	460		414	506	15.4	104	104	15.4	104	6	0.25	0.7		156/180	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	164/164*	175/175*	181/174*			
															10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	171/171*	200/200*	188/181*			
															5	7.6	2	3.2	3	3	4	0.167	0.35	80	90	88			
		414	506	15.4	104	104	15.4	104	15.4	104	6	0.25	0.7		25	7.5	11	2	3.2	3	3	4	0.167	0.35	84	90	92		
																10	14	2	3.2	3	3	4	0.167	0.35	87	100	95		
																5	7.6	2	3.2	3	3	4	0.167	0.35	93	100	99		
28	575		518	633	12.8	83	83	12.8	83	6	0.25	0.7		46	7.5	11	2	3.2	3	3	4	0.167	0.35	97	100	103			
															10	14	2	3.2	3	3	4	0.167	0.35	101	125	106			
															5	7.6	2	3.2	3	3	4	0.167	0.35	123	125	134			
		518	633	12.8	83	83	12.8	83	83	6	0.25	0.7		75	7.5	11	2	3.2	3	3	4	0.167	0.35	127	150	137			
															10	14	2	3.2	3	3	4	0.167	0.35	131	150	141			
															5	6.1	2	2.4	3	3	3.3	0.167	0.3	68	80	74			
	575		518	633	12.8	83	83	12.8	83	6	0.25	0.7		24	7.5	9	2	2.4	3	3	3.3	0.167	0.3	70	80	77			
															10	11	2	2.4	3	3	3.3	0.167	0.3	72	80	80			
															5	6.1	2	2.4	3	3	3.3	0.167	0.3	85	90	78			
		518	633	12.8	83	83	12.8	83	83	6	0.25	0.7		48.3	7.5	9	2	2.4	3	3	3.3	0.167	0.3	88	90	81			
															10	11	2	2.4	3	3	3.3	0.167	0.3	91	100	83			
															5	6.1	2	2.4	3	3	3.3	0.167	0.3	102	125	111			
575		518	633	12.8	83	83	12.8	83	6	0.25	0.7		78	7.5	9	2	2.4	3	3	3.3	0.167	0.3	106	125	115				
														10	11	2	2.4	3	3	3.3	0.167	0.3	108	125	117				
														5	6.1	2	2.4	3	3	3.3	0.167	0.3	125	125	117				

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	
28	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR				OFM		ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2																		
		Min	Max	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCp	FLA		
28	208/230	187	253	28.2	208	28.2	208	28.2	0.25	1.5	56/75	156/180	5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	244/244	250/250	244/266
													7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	253/253	300/300	252/274
													10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	260/260	300/300	260/281

Units With HACR and EnergyX — 50PG20-28

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL			POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	FLA	Hp	FLA (ea)	Qty	H	FLA (ea)	Hp	FLA	MCA	MOCP								
				RLA	LRA	RLA	LRA	RLA	LRA																					
20	208/230	187	253	208	208	28.2	208	-	-	4	0.25	1.5	19/25	52/60	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	105/105	125/125	113/109				
															5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	112/112	125/125	120/116				
															7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	119/119	125/125	129/124				
															10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	126/126	150/150	136/130				
	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	112/112	125/125	113/109																		
	7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	125/123	125/123	120/116																		
	10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	131/131	150/150	129/124																		
	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	139/139	150/150	136/130																		
	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	161/175	200/200	161/175																		
	7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	175/175	200/200	168/182																		
	10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	183/183	200/200	168/182																		
	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	192/192	200/200	177/190																		
460	414	506	104	104	15.4	104	-	-	4	0.25	0.7	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	200/200	225/225	184/197					
														5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	205/105*	125/125*	113/109*					
														7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	112/112*	125/125*	120/116*					
														10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	119/119*	125/125*	129/124*					
	3.7	4.8	2	3.2	2	3	4	0.167	0.35	54	60	57																		
	5	7.6	2	3.2	2	3	4	0.167	0.35	57	60	61																		
	7.5	11	2	3.2	2	3	4	0.167	0.35	60	60	65																		
	10	14	2	3.2	2	3	4	0.167	0.35	63	70	68																		
	3.7	4.8	2	3.2	2	3	4	0.167	0.35	58	60	57																		
	5	7.6	2	3.2	2	3	4	0.167	0.35	61	70	61																		
	7.5	11	2	3.2	2	3	4	0.167	0.35	66	70	65																		
	10	14	2	3.2	2	3	4	0.167	0.35	69	70	68																		
3.7	4.8	2	3.2	2	3	4	0.167	0.35	80	90	88																			
5	7.6	2	3.2	2	3	4	0.167	0.35	84	90	91																			
7.5	11	2	3.2	2	3	4	0.167	0.35	88	90	95																			
10	14	2	3.2	2	3	4	0.167	0.35	92	100	98																			
575	414	506	104	104	15.4	104	-	-	4	0.25	0.7	75	90	3.7	4.8	2	3.2	2	3	4	0.167	0.35	110	125	126					
														5	7.6	2	3.2	2	3	4	0.167	0.35	114	125	126					
														7.5	11	2	3.2	2	3	4	0.167	0.35	118	125	129					
														10	14	2	3.2	2	3	4	0.167	0.35	122	125	133					
	5	6.1	2	2.4	2	3	3.3	0.167	0.3	47	50	50																		
	7.5	9	2	2.4	2	3	3.3	0.167	0.3	50	60	54																		
	10	11	2	2.4	2	3	3.3	0.167	0.3	52	60	56																		
	5	6.1	2	2.4	2	3	3.3	0.167	0.3	49	50	50																		
	7.5	9	2	2.4	2	3	3.3	0.167	0.3	53	60	54																		
	10	11	2	2.4	2	3	3.3	0.167	0.3	55	60	56																		
	5	6.1	2	2.4	2	3	3.3	0.167	0.3	77	80	71																		
	7.5	9	2	2.4	2	3	3.3	0.167	0.3	80	90	74																		
10	11	2	2.4	2	3	3.3	0.167	0.3	83	90	76																			
5	6.1	2	2.4	2	3	3.3	0.167	0.3	94	100	104																			
7.5	9	2	2.4	2	3	3.3	0.167	0.3	98	100	107																			
10	11	2	2.4	2	3	3.3	0.167	0.3	100	125	110																			

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

247

50PG

Units With HACR and EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		ELECTRIC HEAT		IFM		ERV SUPPLY				ERV EXHAUST				ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
		Min	Max	No. 1			No. 2			No. 3	Qty	Hp	FLA (ea)	KW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	Hp	FLA	MCA	MOCp		
				RLA	RLA	RLA	RLA	RLA																				
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	6	0.25	1.5	19/25	52/60	3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	117/117	125/125	126/122	
																5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	123/123	150/150	133/128	
																7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	131/131	150/136	141/136	
																10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	137/137	150/150	149/143	
																3.7	10.6/9.6	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	117/117	125/125	126/122	
																5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	123/123	150/150	133/128	
	460	414	506	15.4	110	15.4	110	-	6	0.25	0.7	56/75	156/180	7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	131/131*	150/150*	133/128*			
														10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	137/137*	150/150*	141/136*			
														3.7	4.8	2	3.2	2	3	4	0.167	0.35	55	60	59			
														5	7.6	2	3.2	2	3	4	0.167	0.35	58	60	62			
														7.5	11	2	3.2	2	3	4	0.167	0.35	61	70	66			
														10	14	2	3.2	2	3	4	0.167	0.35	64	70	70			
24	460	414	506	15.4	110	15.4	110	-	6	0.25	0.7	25	30	3.7	4.8	2	3.2	2	3	4	0.167	0.35	58	60	59			
														5	7.6	2	3.2	2	3	4	0.167	0.35	61	70	62			
														7.5	11	2	3.2	2	3	4	0.167	0.35	66	70	66			
														10	14	2	3.2	2	3	4	0.167	0.35	69	70	70			
														3.7	4.8	2	3.2	2	3	4	0.167	0.35	80	90	88			
														5	7.6	2	3.2	2	3	4	0.167	0.35	84	90	91			
	575	518	633	12.8	88	12.8	88	-	6	0.25	0.7	75	90	7.5	11	2	3.2	2	3	4	0.167	0.35	88	90	95			
														10	14	2	3.2	2	3	4	0.167	0.35	92	100	98			
														3.7	4.8	2	3.2	2	3	4	0.167	0.35	110	125	122			
														5	7.6	2	3.2	2	3	4	0.167	0.35	114	125	126			
														7.5	11	2	3.2	2	3	4	0.167	0.35	118	125	129			
														10	14	2	3.2	2	3	4	0.167	0.35	122	125	133			
575	518	633	12.8	88	12.8	88	-	6	0.25	0.7	-	-	5	6.1	2	2.4	2	3	3.3	0.167	0.3	48	60	52				
													7.5	9	2	2.4	2	3	3.3	0.167	0.3	51	60	55				
													10	11	2	2.4	2	3	3.3	0.167	0.3	53	60	58				
													5	6.1	2	2.4	2	3	3.3	0.167	0.3	49	60	52				
													7.5	9	2	2.4	2	3	3.3	0.167	0.3	53	60	55				
													10	11	2	2.4	2	3	3.3	0.167	0.3	55	60	58				
575	518	633	12.8	88	12.8	88	-	6	0.25	0.7	48.3	46	7.5	9	2	2.4	2	3	3.3	0.167	0.3	80	90	74				
													10	11	2	2.4	2	3	3.3	0.167	0.3	83	90	76				
													5	6.1	2	2.4	2	3	3.3	0.167	0.3	94	100	104				
													7.5	9	2	2.4	2	3	3.3	0.167	0.3	98	100	107				
													10	11	2	2.4	2	3	3.3	0.167	0.3	100	125	110				
													7.5	9	2	2.4	2	3	3.3	0.167	0.3	100	125	110				

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE	
				No. 1		No. 2		No. 3																					
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	NA	NA	NA	NA		MCA
24	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE										
				No. 1		No. 2		No. 3																															
		Min	Max	RLA	RLA	RLA	RLA	RLA	RLA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP	FLA													
24	208/230	187	253	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	7.5	24.2/22	2	7.08/6.4	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	236/236	250/250	236/259											
															10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	244/244	250/250	244/266													

Units With HACR and EnergyX — 50PG20-28 (cont)

[illegible]

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT			IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	NA	NA	NA	NA	
28	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						O/FM		ELECTRIC HEAT		IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3																			
		Min	Max	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCP						
28	208/230	187	253	28.2	208	28.2	208	28.2	208	6	0.25	1.5	56/75	156/180	5	16.7/15.2	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	228/228	250/250	228/251	
															7.5	24.2/22	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	236/236	250/250	236/259	
															10	30.8/28	2	7.08/6.4	2	3	8.85/8.0	0.167	0.66/0.6	244/244	250/250	244/266	

Units With HACR and Economizer with EnergyX — 50PG20-28

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	KW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	Hp	FLA	MCA	MOCp		
				RLA	LRA	RLA	LRA	RLA	LRA																		
20	208/230	187	253	28.2	208	28.2	208	208	4	0.25	1.5																
	460	414	506		15.4	104	104	104	4	0.25	0.7																
	575	518	633		12.8	83	83	12.8	4	0.25	0.7																

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE	
				No. 1		No. 2																					No. 3
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	NA		MCA
20	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT				IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2		No. 3		OFM		FLA		kW		FLA		Hp	FLA (ea)	Qty	Hp	FLA (ea)	Qty	Hp	FLA	MCA	
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)															
20	208/230	187	253	28.2	208	28.2	208	-	-	4	0.25	1.5	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	231/231	250/250	231/254	238/260
															5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	238/238	250/250	238/260	
															7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	246/246	250/250	247/268	
															10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	254/254	300/300	254/275	

Units With HACR and Economizer with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR				OFM		ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		Qty	Hp	FLA (ea)	kWh	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA (ea)	Hp	FLA	MCA	MOCp		
				RLA	LRA	RLA	LRA																		
24	208/230	187	253	32.1	240	32.1	240	-	6	1.5	0.25	6													
	460	414	506	15.4	110	15.4	110	-	6	0.7	0.25	6													
	575	518	633	12.8	88	12.8	88	-	6	0.7	0.25	6													

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	NA	
24	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE		
				No. 1		No. 2		No. 3																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA	MOCp					
24	208/230	187	253	32.1	240	32.1	240	32.1	240	-	-	6	0.25	1.5	56/75	156/180	3.7	10.6/9.6	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	231/231	250/250	231/254
																	5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	238/238	250/250	238/260
																	7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	246/246	250/250	247/268
																	10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	0.167	0.66/0.6	254/254	300/300	254/275

Units With HACR and Economizer with EnergyX — 50PG20-28 (cont)

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM		ELECTRIC HEAT		IFM		ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE	
		Min	Max	No. 1		No. 2		No. 3		Qty	Hp	FLA (ea)	Hp	FLA	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	FLA	MCA	MOCp			
				RLA	LRA	RLA	LRA	RLA	LRA																		
28	208/230	187	253	28.2	208	28.2	208	208	208	6	0.25	1.5															
	460	414	506	15.4	104	15.4	104	104	104	104	6	0.25	0.7														
	575	518	633	12.8	83	12.8	83	12.8	83	83	6	0.25	0.7														

* 208/230V 75-kW Electric Heat units must use dual-point wiring. The main table lists the branch circuit values for the refrigeration part of the system. The following two tables list the branch circuit values for the electric heat and values for a feeder circuit for both branch circuits.

ELECTRICAL DATA

Electric Heat Branch Circuit for 208/240 75-kW Electric Heat

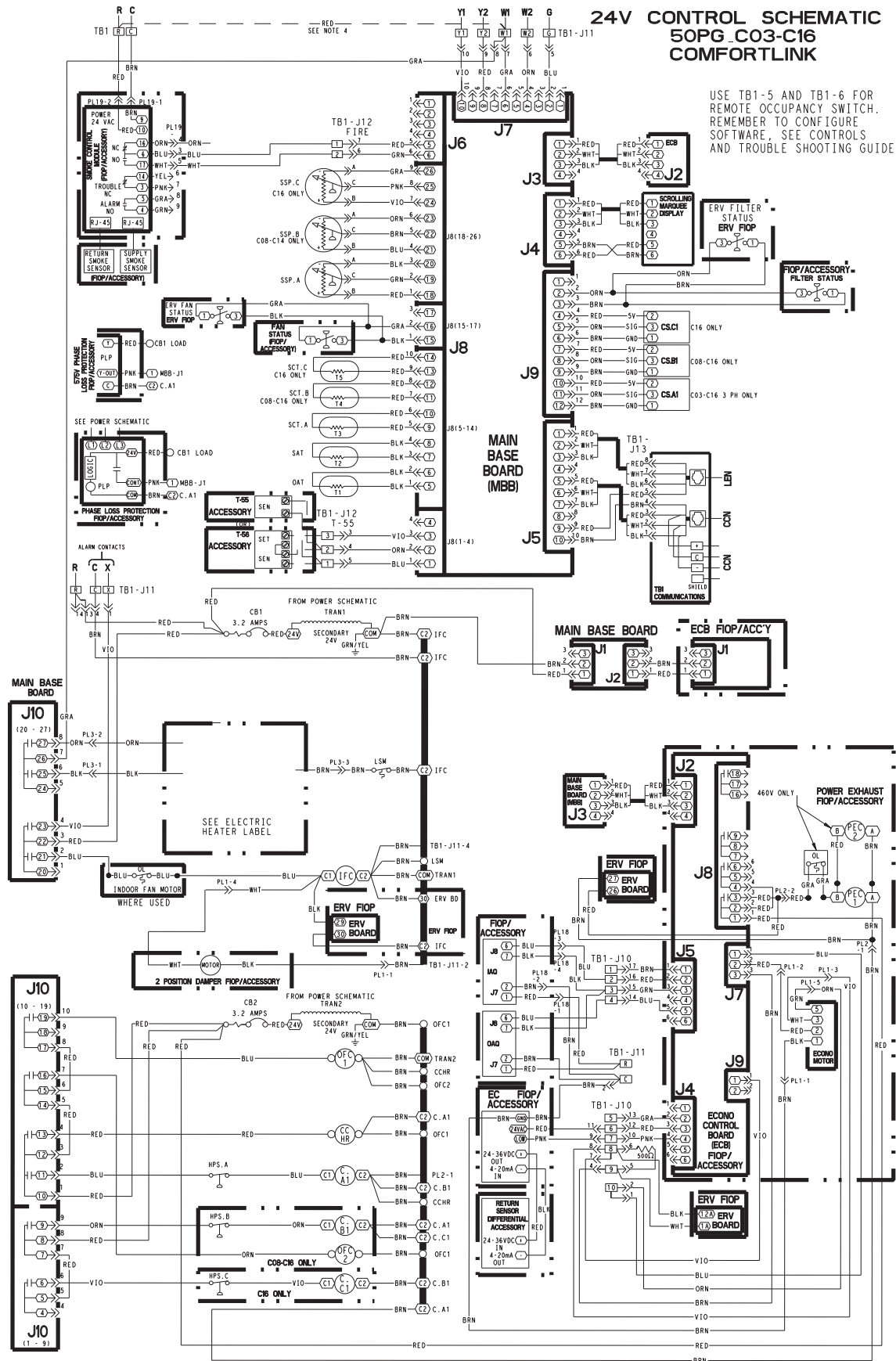
UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						OFM			ELECTRIC HEAT		IFM		ERV SUPPLY		ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE
				No. 1		No. 2																				
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	NA	NA	NA	
28	208/240	187	253	NA	NA	NA	NA	NA	NA	NA	NA	56/75	156/180	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	180/180	200/200	179/207

Feeder Circuit For 208/230-V Unit With 75-kW Electric Heat

UNIT SIZE	NOMINAL VOLTAGE (3 Ph, 60 Hz)	VOLTAGE RANGE		COMPRESSOR						ELECTRIC HEAT			IFM			ERV SUPPLY			ERV EXHAUST			ERV WHEEL		POWER SUPPLY		DISCONNECT SIZE			
				No. 1			No. 2																				No. 3		
		Min	Max	RLA	LRA	RLA	LRA	RLA	LRA	Qty	Hp	FLA (ea)	kW	FLA	Hp	FLA	FLA (ea)	Hp	FLA (ea)	Qty	Hp	FLA (ea)	Hp	FLA	MCA		MOCp		
28	208/230	187	253	28.2	208	28.2	208	28.2	208	6	0.25	1.5	56/75	156/180	5	16.7/15.2	2	7.08/6.4	3	3	8.85/8.0	3	3	8.85/8.0	0.167		0.66/0.6	238/238	250/250
															7.5	24.2/22	2	7.08/6.4	3	3	8.85/8.0	3	3	8.85/8.0	0.167	0.66/0.6	246/246	250/250	247/268
															10	30.8/28	2	7.08/6.4	3	3	8.85/8.0	3	3	8.85/8.0	0.167	0.66/0.6	254/254	300/300	254/275

TYPICAL WIRING SCHEMATICS

Typical Control Wiring Schematic — 50PG03-16 With *ComfortLink™* Controls



50PG



50PG

50PG



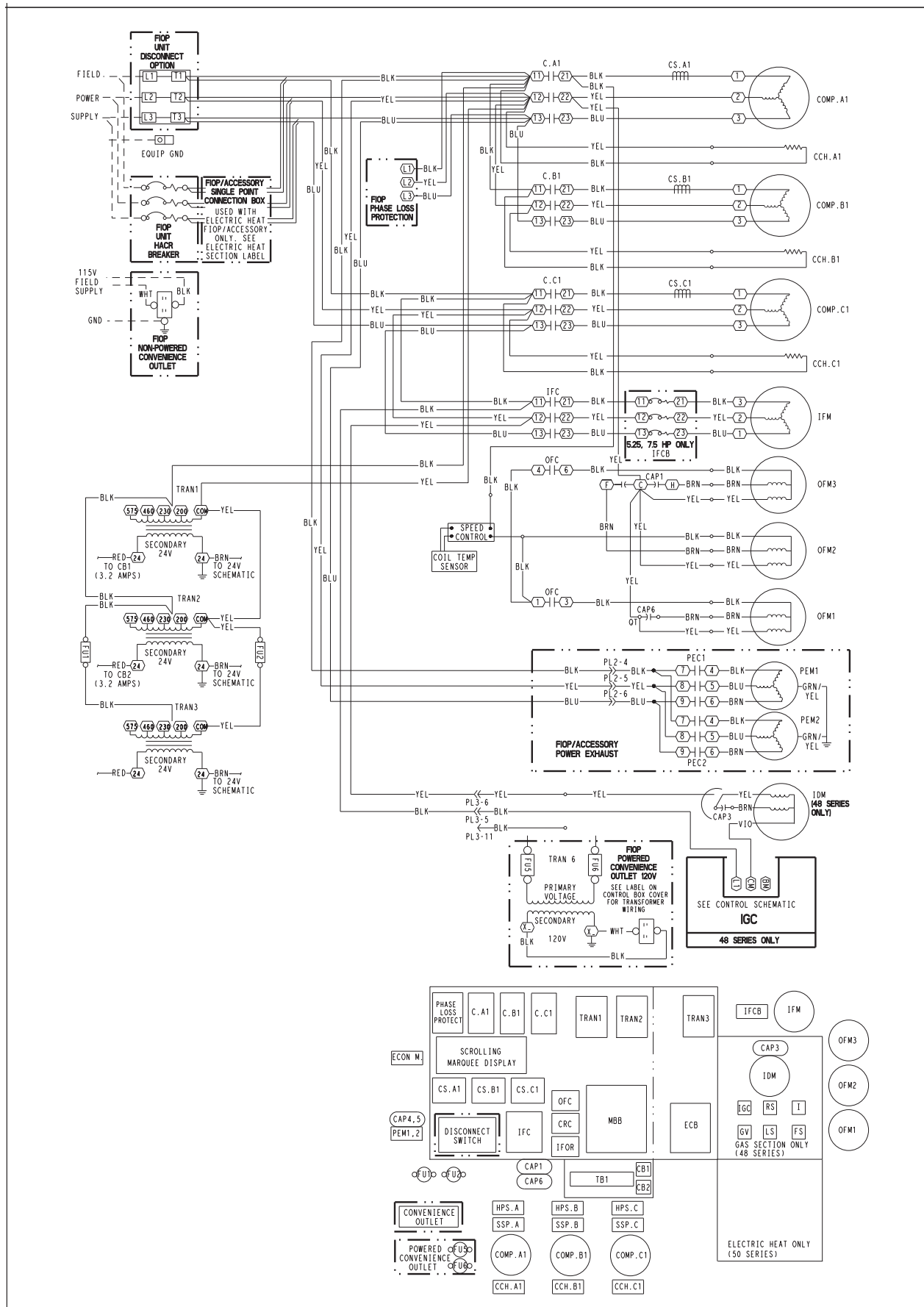
50PG



TYPICAL WIRING SCHEMATICS

Typical Power Schematic — 50PG16 With Humidi-MiZer™ System

50PG



Power Schematic — 50PG20-24

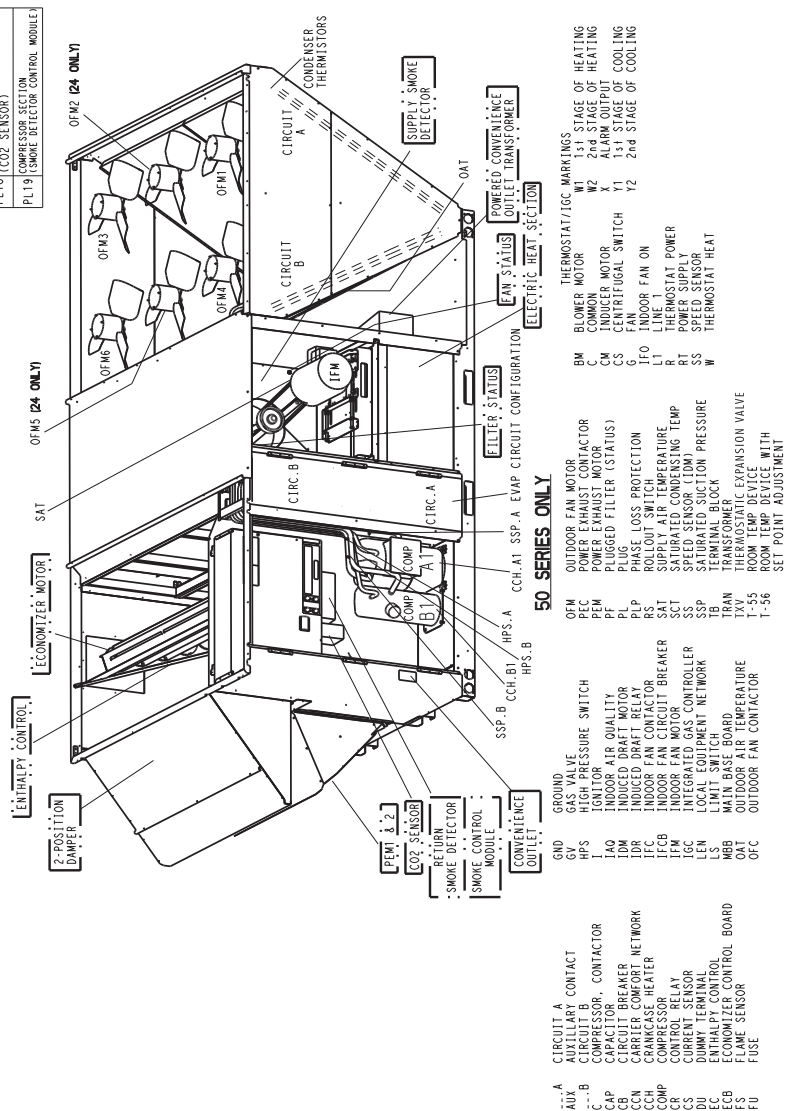
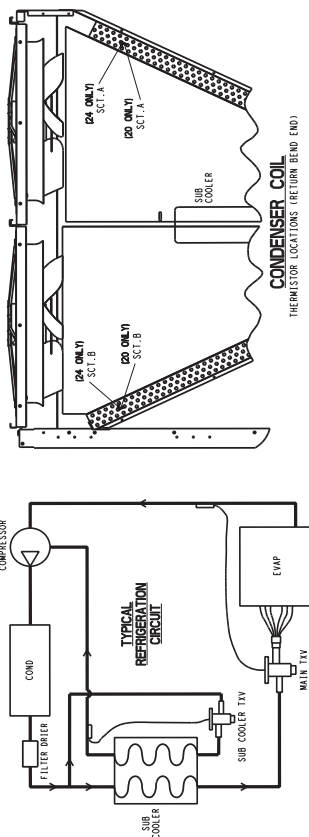




The diagram illustrates the internal layout of a control box. Key components include:

- Capacitors:** CAP1, CAP2, CAP3, CS.B1, C.B1, C.A1, C.B1, C.N1.
- Relays/Switches:** RCT, RCT2, RCT3, PIP, IFC, MCR.
- Transformers:** TRANS1, TRANS2, TRANS3.
- Fuses:** A fuse block labeled "FUSES" with ratings 5, 7.5, 10, 15, 20, 25, 30, 40, 60, 80, 100.
- Wiring Terminals:** Labeled with numbers 1 through 19.
- Grounding:** EQUIP GROUND connection point.
- Labels:** "Control Lock", "MOD", "MOTOR SLIP START", "EQUIP GROUND".
- Notes:**
 - "OPTIONAL LOCATION FOR MACT BREAKER"
 - "OPTIONAL DISCONNECT OR MACT BREAKER"
 - "(575V GAS HEAT ONLY)"

PLUG	LOCATION	REFERENCE
PL3	HEAT SECTION PARTITION (HEAT CONTROLS)	
PL4	FAN SECTION (FAN STATUS MOTOR)	
PL5	COMPRESSOR SECTION (FAN 2-3)	
PL6	CONDENSER SECTION (FAN 4-5)	
PL7	ECONOMIZER SECTION (ECONOMIZER MOTOR)	
PL9	POWER EXHAUST SECTION (POWER EXHAUST MOTORS)	
PL10	CONDENSER SECTION (FAN1)	
PL11	CONDENSER SECTION (FAN2)	
PL12	CONDENSER SECTION (FAN3)	
PL13	CONDENSER SECTION (FAN4)	
PL14	CONDENSER SECTION (FAN5)	
PL15	CONDENSER SECTION (FAN6)	
PL16	CONDENSER SECTION (FAN STATUS ACCESSORY)	
PL17	ECONOMIZER SECTION (2-POSITION DAMPER)	
PL18	COMPRESSOR SECTION (CO2 SENSOR)	
PL19	CONDENSER SECTION (SMOKE DETECTOR CONTROL MODULE)	

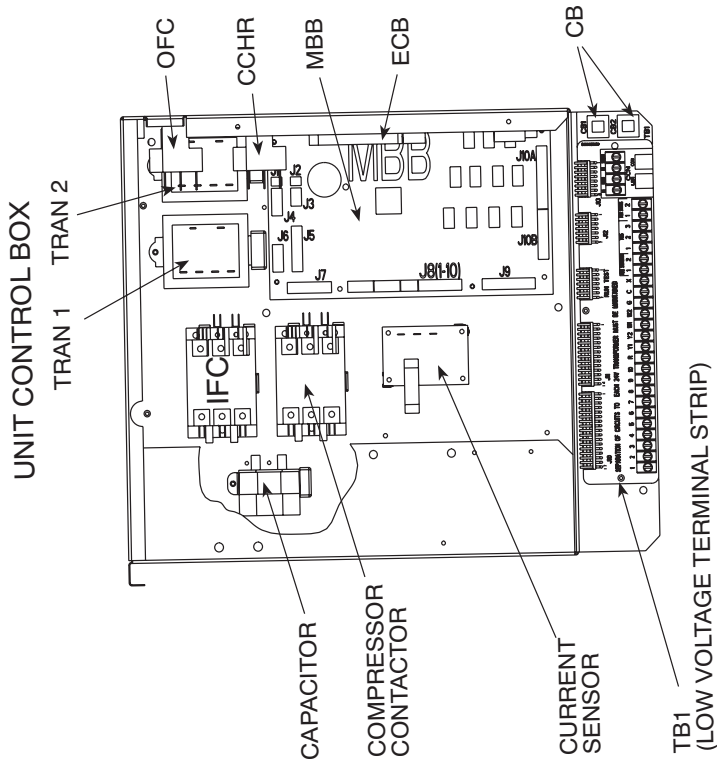
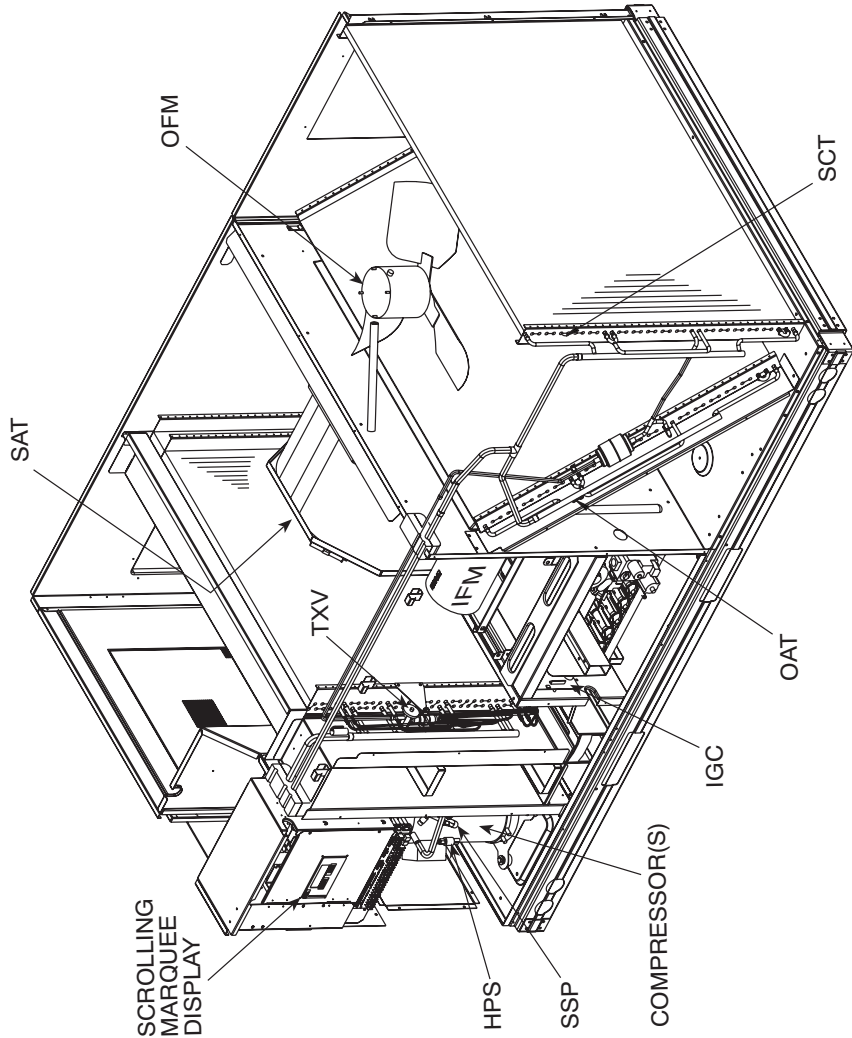


LEGEND

- ☒ TERMINAL BLOCK
- ☐ TERMINAL (UNMARKED)
- ☒ TERMINAL (MARKED)
- ☐ SLICE
- ☒ FACTORY WIRING
- ☐ FIELD WIRING
- ☒ FIELD WIRING - COMMON POTENTIAL ONLY, NOT TO REPRESENT WIRING TO INDICATE FIOP OR ACCESSORY

POWER EXHAUST MOTOR	FN	FLOWER MOTOR	THERMOSTAT/LOG MARKING
PUMP EXHAUST MOTOR	FW	FAN MOTOR	Y1 1st STAGE OF HEATING
PURGED FILTER (STATUS)	CM	COWMAN	Y2 2nd STAGE OF HEATING
PLUS	CS	CENTRIFUGAL SWITCH	X ALARM OUTPUT
PHASE LOSS PROTECTION	G	FAN	Y1 1st STAGE OF COOLING
PHASE LOCK SWITCH	LFO	INDOOR FAN ON	Y2 2nd STAGE OF COOLING
SUPPLY AIR TEMPERATURE	RT	THERMOSTAT POWER	
SPEED-SENSING TEMP	RT	THERMOSTAT SUPPLY	
SPEED SENSING TEMP	RT	SPEED SENSOR	
SATURATED SUCTION PRESSURE	W	THERMOSTAT HEAT	
TERMINAL BLOCK			
TRANSFORMER			
REFRIGERANT EXPANSION VALVE			
ROOM TEMP DEVICE WITH SET POINT ADJUSTMENT			

Typical Unit Component Locations — 50PG03-16 (Sizes 03-07 Shown)



CONTROLS

Operating Sequence, 50PG03-16 Units

Heating

Thermostat Mode

The 50PG (low, medium, and high electric heat) units have either 1 or 2 stages of electric heat. When the thermostat calls for heating, power is applied to the W1 terminal at the unit. The unit control will energize the indoor fan contactor and the first stage of electric heat. On units with two-stage heating, when additional heating is required, the second stage of electric heat will be energized when power is applied at the W2 terminal on the unit.

Space Sensor Mode

The 50PG (low, medium, and high electric heat) units have either 1 or 2 stages of electric heat. When the space sensor senses a temperature that is below the heating set point, the unit control will energize the indoor fan contactor and the first stage of electric heat. On units with two-stage heating, when additional heating is required, the second stage of electric heat will be energized when the space temperature does not reach the desired set point within the appropriate time. See the Controls and Troubleshooting guide for more detail.

Cooling

Economizer Control

If the economizer is available for cooling, the unit will always try to meet demand using the economizer before turning on a compressor. The economizer is available for cooling when:

- The outdoor temperature is below the Economizer High Temperature Lockout (ECL.H) and above the Economizer Low Temperature Lockout (ECL.L)
- The outdoor enthalpy is low.

If the economizer is not available for cooling, the economizer will move to the Economizer Minimum Position (MIN.P).

If the economizer is available for cooling and yet it is unable to meet demand, the unit will continue to modulate the economizer while cycling the compressors to increase total cooling capacity.

If the indoor fan is not operating, the economizer will be closed.

The 50PG units can also be equipped with optional CO₂ sensors for additional indoor air quality control. Consult the Controls and Troubleshooting Guide for more information on IAQ features.

Cooling Using Space Sensor (T55 or T56) Control

To operate the unit in Space Sensor mode, Unit Control Type must be set to Space Sensor (3) and a wire must be added between R and W1 on TB1 (see controls schematic). While in this mode, the unit tries to maintain the Space Temperature (SPT) at one of 4 different set points: the Occupied Cool Set Point (OCSP), the Unoccupied Cool Set Point (UCSP), the Occupied Heat Set Point (OHSP), or the Unoccupied Heat Set Point (UHSP). The building's occupancy is affected by a number of different factors (see Controls and Troubleshooting Guide for details). When the building is occupied, the occupied set points are active. When the building is unoccupied, the unoccupied set points are active. In Space Sensor mode, the control will switch automatically between cooling and heating to maintain temperature. However, to minimize unnecessary cool to heat and heat to cool changes, there is a 10-minute delay after the last stage turns off before the control will switch modes.

To maintain temperature while cooling, the unit will turn on compressors as needed when the economizer is either unavailable or not providing enough cooling. The minimum on-time for each compressor is 3 minutes and the minimum off-time is 5 minutes.

Units with 1 compressor (50PG03-07) have 1 stage of cooling. Units with 2 or 3 compressors (50PG08-16) have 2 stages of cooling. The economizer is not considered a stage of cooling even though it can provide cooling in certain situations. In general, the minimum time between increasing stages (from 1 to 2 and from 2 to 3) is 7.5 minutes, however, the minimum time between stages can be further reduced in certain situations (see Controls and Troubleshooting Guide). The minimum time between decreasing stages (3 to 1 and 2 to 0) is 5 minutes.

Consult the Controls and Troubleshooting Guide for additional information on configuring the controls for space sensor control and adjusting the minimum compressor on-time, minimum compressor off-time, and the minimum time between decreasing stages.

Cooling Using Thermostat Control

Thermostat cooling begins when the Y1 input is energized. If the economizer is available for cooling, the economizer will try to maintain the Supply Air Temperature (SAT) at either the Low Cool Supply Air Set Point (LCS) for a Y1 call or the High Cool Supply Air Set Point (HCS) for a Y2 call. If the economizer operates at 100% for 5 minutes or the economizer cooling is not available, the unit will begin to stage compressors. While the compressors are operating, the economizer will try to maintain its position at 100%. However, if low suction pressures are experienced, the economizer will begin to close in order to protect the compressors from damage.

Three different compressor-staging algorithms are available with *ComfortLink*™ control. They are called Adaptive, 1-stage Y1 and 2-stage Y1. In Adaptive mode, once compressor staging begins (see above), at least one compressor will run as long as there is a Y1 call. On a three-circuit machine with only a Y1 call, the second circuit will cycle depending upon the trend in the supply air temperature (SAT). If there is a Y2 call, compressors will stage up to the maximum number available.

The 1-stage Y1 and 2-stage Y1 modes are identical if there are only two circuits. In both cases, the stages follow the thermostat calls directly. For either mode, all stages will operate immediately if there is a Y2 call.

If fan request G is energized, but Y1 is not energized, the indoor fan will operate and the economizer position will be maintained at MIN.P.

Operating Sequence, 50PG20-28

Heating

Thermostat Mode

The 50PG (low, medium, and high electric heat) units have 2 stages of electric heat. When the thermostat calls for heating, power is applied to the W1 terminal at the unit. The unit control will energize the indoor fan contactor and the first stage of electric heat. On units with two-stage heating, when additional heating is required, the second stage of electric heat will be energized when power is applied at the W2 terminal on the unit.

Space Sensor Mode

The 50PG (low, medium, and high electric heat) units have 2 stages of electric heat. When the space sensor senses a temperature that is below the heating set point, the unit control will energize the indoor fan contactor and the first stage of electric heat. On units with two-stage heating, when additional heating is required, the second stage of electric heat will be energized when the space temperature does not reach the desired set point within the appropriate time. See the Controls and Troubleshooting guide for more detail.

Cooling

Economizer Control

If the economizer is available for cooling, the unit will always try to meet demand using the economizer before turning on a compressor. The economizer is available for cooling when:

- The outdoor temperature is below the Economizer High Temperature Lockout (ECL.H) and above the Economizer Low Temperature Lockout (ECL.L)
- The outdoor enthalpy is low.

If the economizer is not available for cooling, the economizer will move to the Economizer Minimum Position (MIN.P).

If the economizer is available for cooling and yet it is unable to meet demand, the unit will continue to modulate the economizer while cycling the compressors to increase total cooling capacity.

If the indoor fan is not operating, the economizer will be closed.

The 50PG units can also be equipped with optional CO₂ sensors for additional indoor air quality control. Consult the Controls and Troubleshooting Guide for more information on IAQ features.

Cooling Using Space Sensor (T55 or T56) Control

To operate the unit in Space Sensor mode, Unit Control Type must be set to Space Sensor (3) and a wire must be added between R and W1 on TB2 (see controls schematic). While in this mode, the unit tries to maintain the Space Temperature (SPT) at one of 4 different set points: the Occupied Cool Set Point (OCSP), the Unoccupied Cool Set Point (UCSP), the Occupied Heat Set Point (OHSP), or the Unoccupied Heat Set Point (UHSP). The building's occupancy is affected by a number of different factors (see Controls and Troubleshooting Guide for details). When the building is occupied, the occupied set points are active. When the building is unoccupied, the unoccupied set points are active. In Space Sensor mode, the control will switch automatically between cooling and heating to maintain temperature. However, to minimize unnecessary cool to heat and heat to cool changes, there is a 10-minute delay after the last stage turns off before the control will switch modes.

To maintain temperature while cooling, the unit will turn on compressors as needed when the economizer is either unavailable or not providing enough cooling. The minimum on-time for each compressor is 3 minutes and the minimum off-time is 5 minutes.

All units have 2 stages of cooling. The 50PG20 and 24 units have 2 compressors. The 50PG28 units have 3 compressors. The economizer is not considered a stage of cooling even though it can provide cooling in certain situations. In general, the minimum time between increasing stages (from 1 to 2 and from 2 to 3) is 7.5 minutes, however, the minimum time between stages can be further reduced in certain situations (see Controls and Troubleshooting Guide). The minimum time between decreasing stages (3 to 1 and 2 to 0) is 5 minutes.

Consult the Controls and Troubleshooting Guide for additional information on configuring the controls for space sensor control and adjusting the minimum compressor on-time, minimum compressor off-time, and the minimum time between decreasing stages.

Cooling Using Thermostat Control

Thermostat cooling begins when the Y1 input is energized. If the economizer is available for cooling, the economizer will try to maintain the Supply Air Temperature (SAT) at either the Low Cool Supply Air Set Point (LCS) for a Y1 call or the High Cool Supply Air Set Point (HCS) for a Y2 call. If the economizer operates at 100% for 5 minutes or the economizer cooling is not available, the unit will begin to stage compressors. While the compressors are operating, the economizer will try to maintain its position at 100%. However, if low suction pressures are experienced, the economizer will begin to close in order to protect the compressors from damage.

Three different compressor-staging algorithms are available with *ComfortLink*™ control. They are called Adaptive, 1-stage Y1 and 2-stage Y1. In Adaptive mode, once compressor staging begins (see above), at least one compressor will run as long as there is a Y1 call. In addition, internal timers affect the rate at which compressors are turned on and off.

The 1-stage Y1 and 2-stage Y1 modes are identical. In both cases, the stages follow the thermostat calls directly. For either mode, all stages will operate immediately if there is a Y2 call.

If fan request G is energized, but Y1 is not energized, the indoor fan will operate and the economizer position will be maintained at MIN.P.

Optional Humidi-MiZer™ Dehumidification System

Units with the factory-equipped Humidi-MiZer option are capable of providing multiple modes of improved dehumidification as a variation of the normal cooling cycle. The Humidi-MiZer option includes additional valves in the liquid line and discharge line of each refrigerant circuit, a small reheat condenser coil downstream of the evaporator, and Motormaster® variable-speed control of some or all outdoor fans. Operation of the revised refrigerant circuit for each mode is described below.

NOTE: x = refrigerant circuit A, B, or C.

50PG03-16

Normal Cooling

Refrigerant flows from the outdoor condenser through the normally open Cooling Valve (CV.x) to the expansion device. Reheat1 Valve (RH1.x) and Reheat2 Valve (RH2.x) are closed.

Reheat 1 (Subcooling Mode)

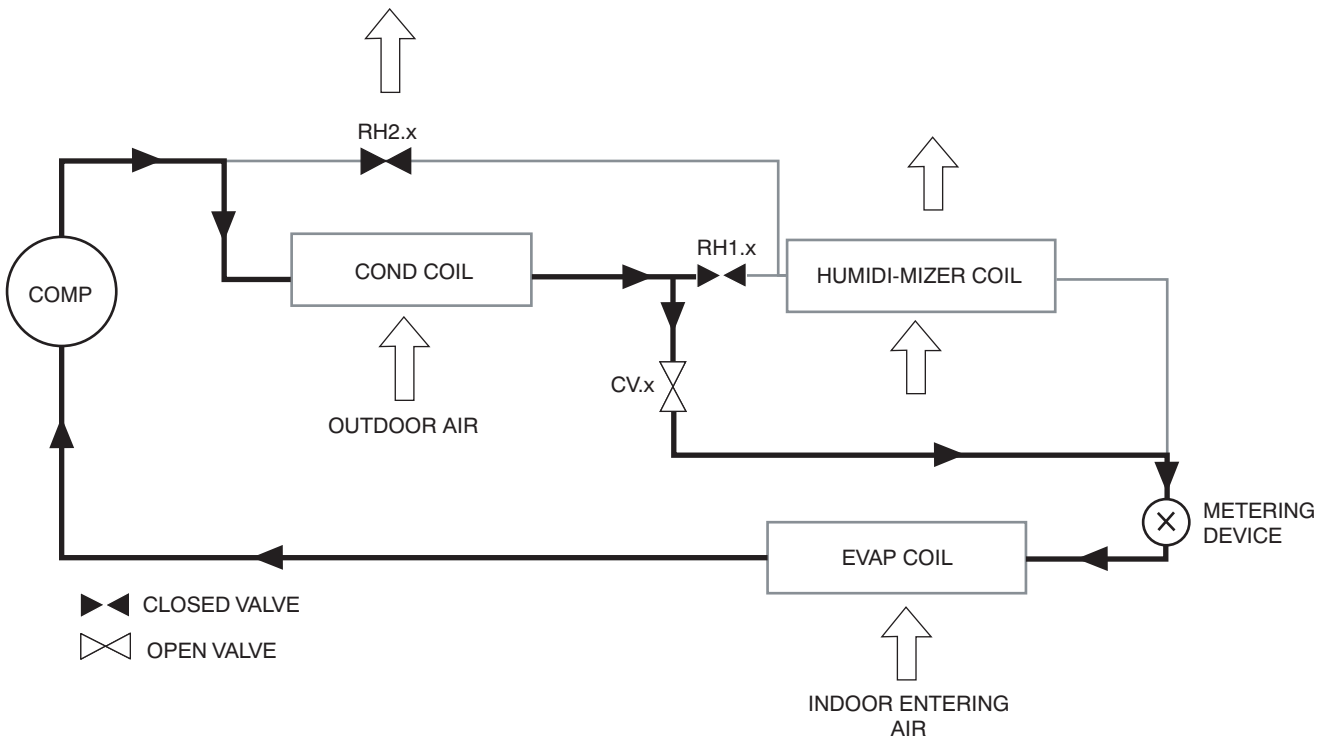
This mode increases latent cooling and decreases sensible cooling compared to normal cooling. Refrigerant flows from the outdoor condenser, through the normally open Reheat1 Valve (RH1.x), and through the reheat condenser coil to the expansion device. Cooling Valve (CV.x) and Reheat2 Valve (RH2.x) are closed.

Reheat 2 (Hot Gas Reheat Mode)

This mode provides maximum latent cooling with little to no sensible capacity. This mode can operate to provide dehumidification when there is no cooling demand. Like Reheat1 mode, refrigerant flows from the outdoor condenser, through the normally open Reheat1 Valve (RH1.x), and through the reheat condenser coil to the expansion device. The Cooling Valve (CV.x) is closed. Reheat2 Valve (RH2.x) is open which provides some compressor discharge gas to the reheat condenser to further increase the reheat of the evaporator airstream.

CONTROLS

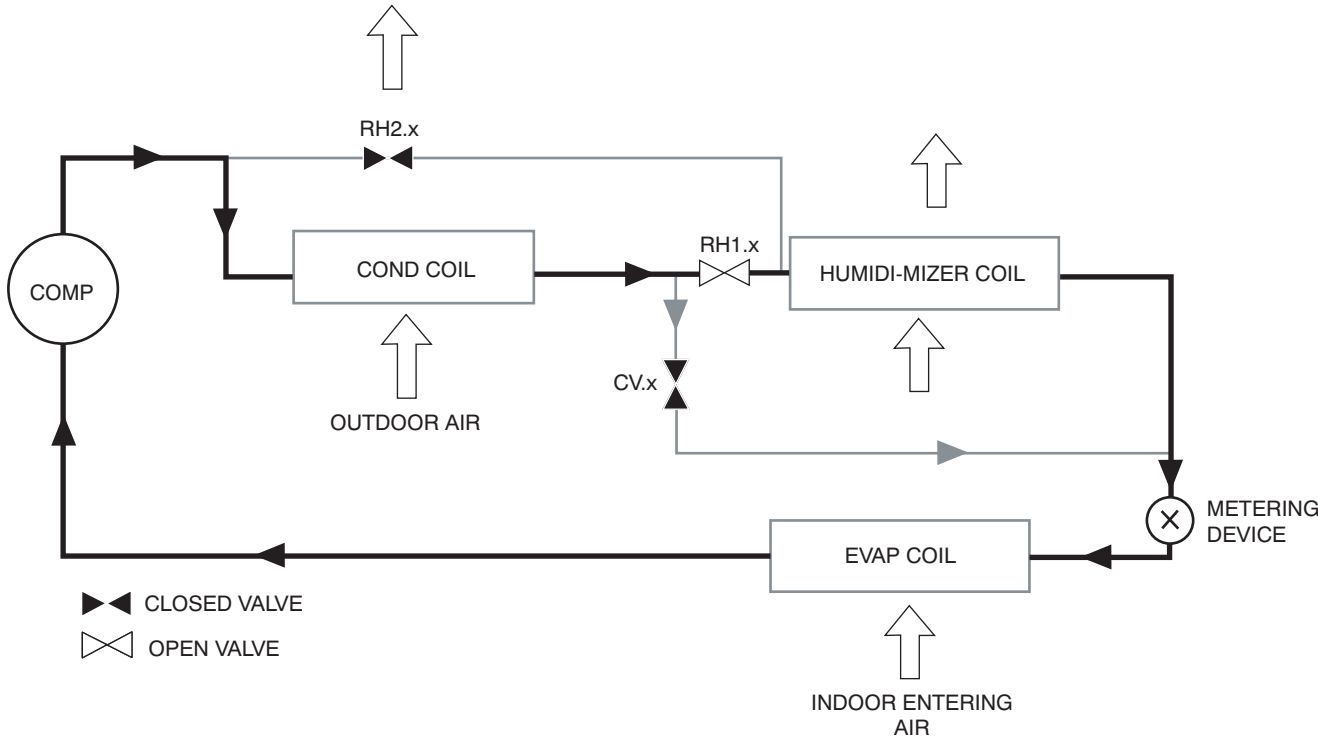
Normal Cooling Mode — Humidi-MiZer™ System (50PG03-16)



50PG

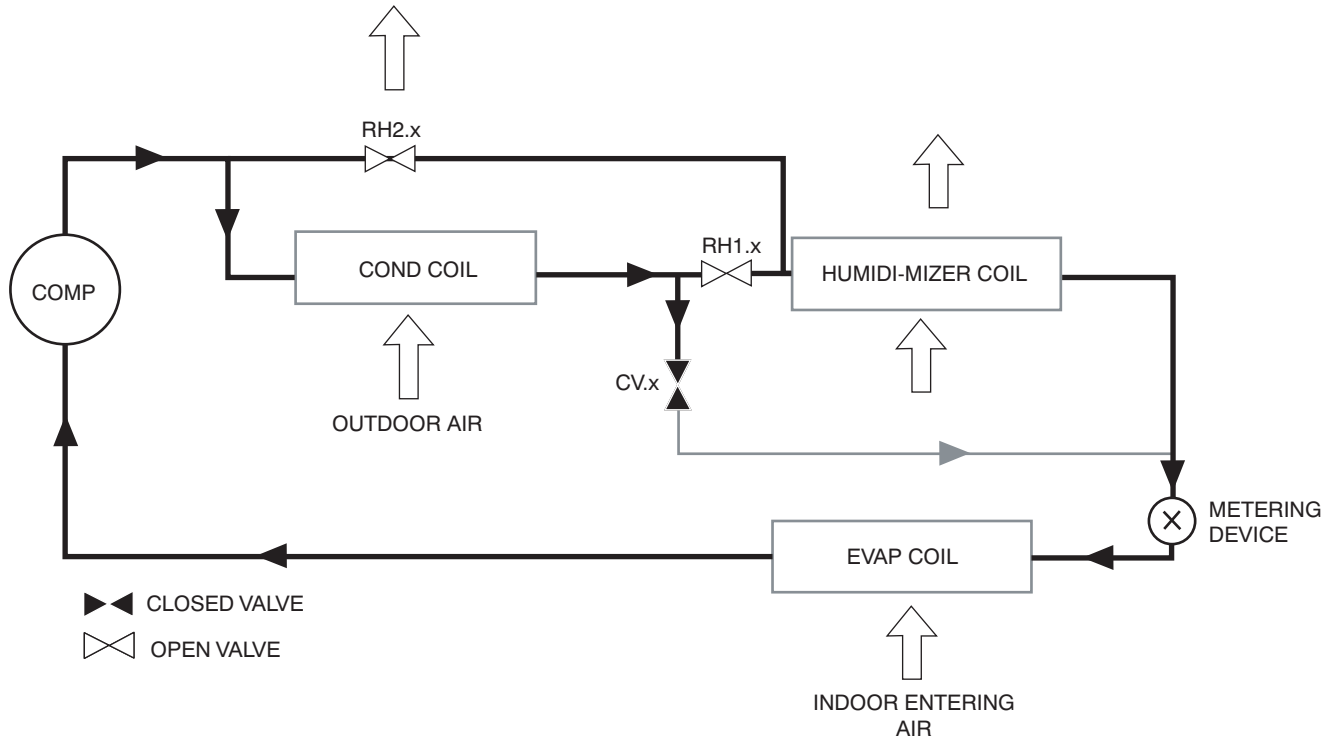
C07119

Subcooling Mode (Reheat 1) — Humidi-MiZer™ System (50PG03-16)



C07120

Hot Gas Reheat Mode (Reheat 2) — Humidi-MiZer™ System (50PG03-16)



C07121

50PG20-28

Normal Cooling

Refrigerant flows from the outdoor condenser through the deenergized 3-way (RH1.x) to the expansion device. Reheat2 Valve (RH2.x) is closed.

Reheat 1 (Subcooling Mode)

This mode increases latent cooling and decreases sensible cooling compared to normal cooling. Refrigerant flows from the outdoor condenser, through the energized 3-way valve (RH1.x), and through the reheat condenser coil to the expansion device. Reheat2 Valve (RH2.x) is closed.

Reheat 2 (Hot Gas Reheat Mode)

This mode provides maximum latent cooling with little to no sensible capacity. This mode can operate to provide dehumidification when there is no cooling demand. Like Reheat1 mode, refrigerant flows from the outdoor condenser, through the energized 3-way valve (RH1.x), and through the reheat condenser coil to the expansion device. Reheat2 Valve (RH2.x) is open which provides some compressor discharge gas to the reheat condenser to further increase the reheat of the evaporator airstream.

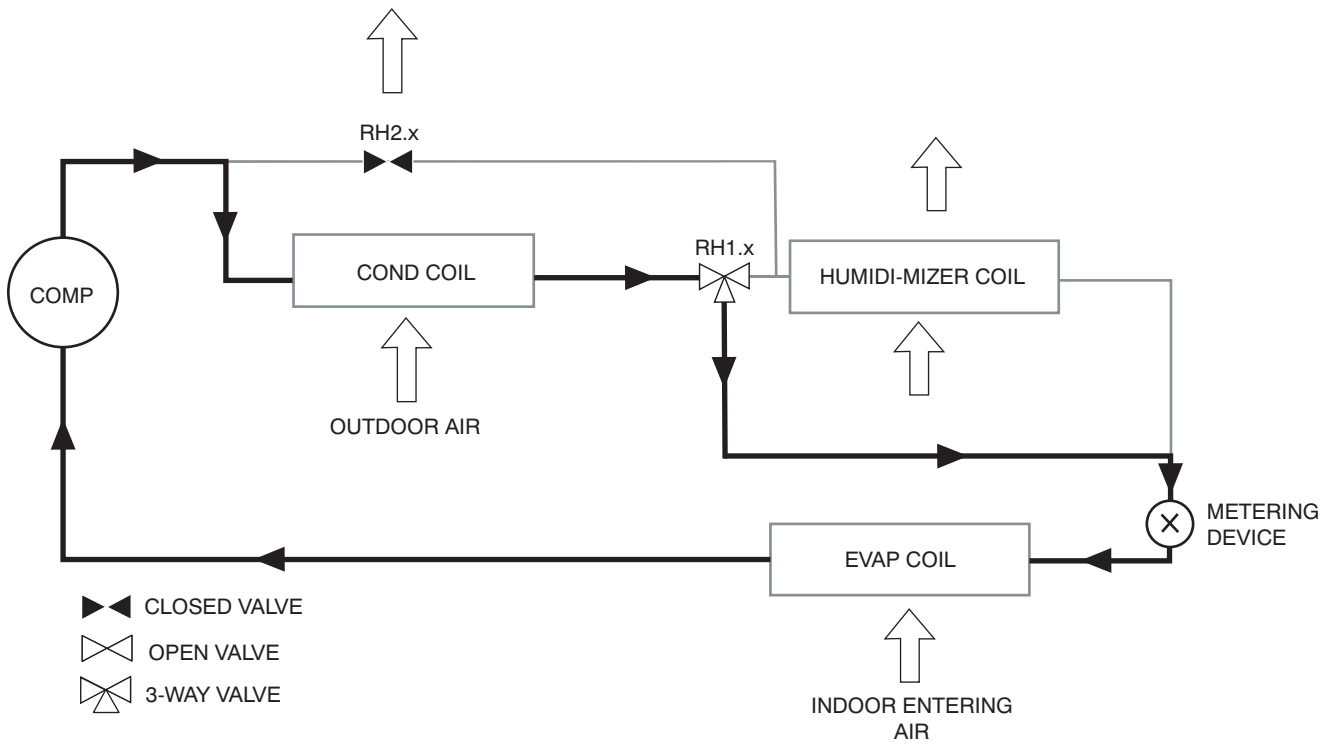
Units with multiple circuits can operate with additional staging of the cooling and dehumidification capacity. When there is only cooling demand, based on a space temperature sensor or thermostat, one or more circuits will operate in normal cooling mode. When there is only dehumidification demand, based on a space humidity sensor or switch, all circuits will operate in Reheat2 mode. When there is both cooling demand and dehumidification demand, all circuits will operate in either Reheat1 or Reheat2 mode, with the portion of Reheat1 circuits determined from the cooling demand.

Outdoor fan control for Humidi-MiZer™ system units includes a Motormaster® variable-speed control of some or all outdoor fans, depending on unit model size. The Motormaster control automatically adjusts the outdoor fan speed to maintain approximately 80 to 100 F condenser temperature for circuit A at all outdoor ambient temperatures. Some model sizes have additional on/off staging of some outdoor fans. This staging is controlled by both outdoor temperature and condenser coil temperature.

Compressor staging control for Humid-MiZer units requires that circuit A always operate when either circuits B or C are on. This applies to normal operation, service test, and for control alarm responses. This operation difference is required due to the fact that the Motormaster outdoor fan control senses circuit A only.

CONTROLS

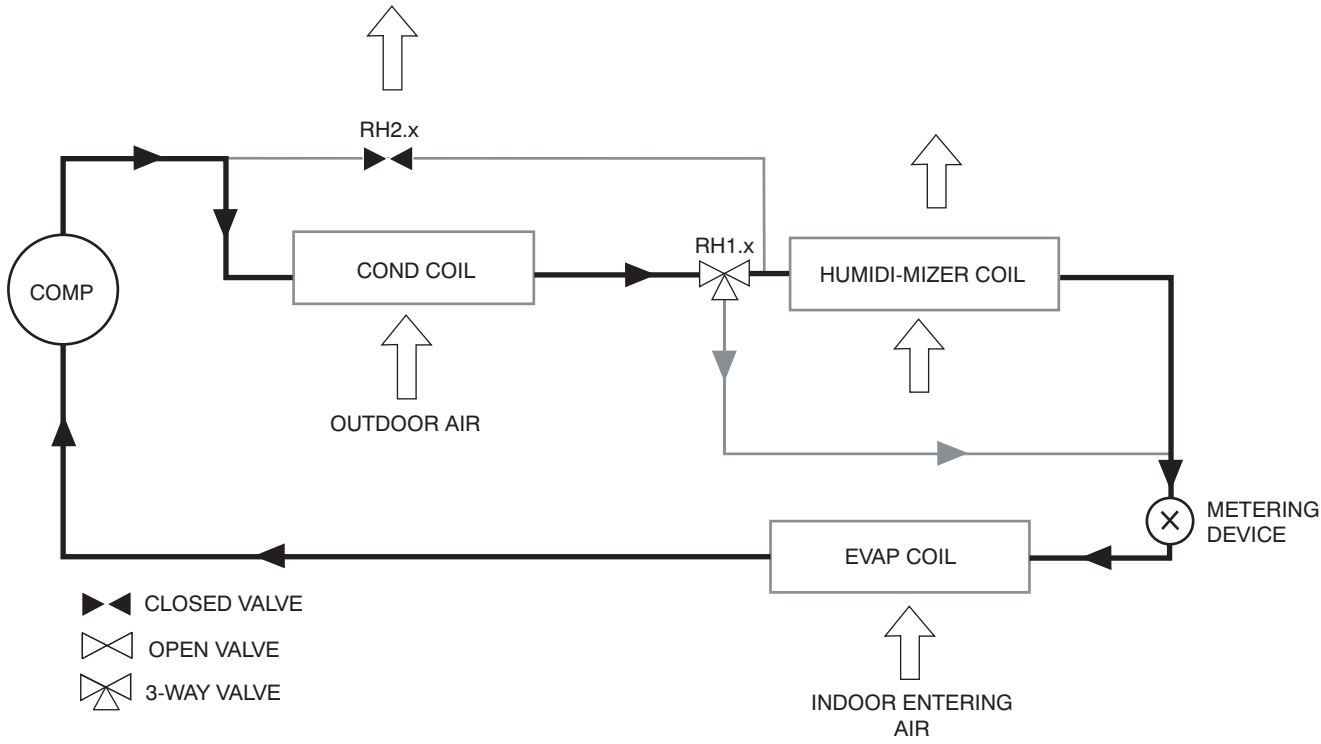
Normal Cooling Mode — Humidi-MiZer™ System (50PG20-28)



50PG

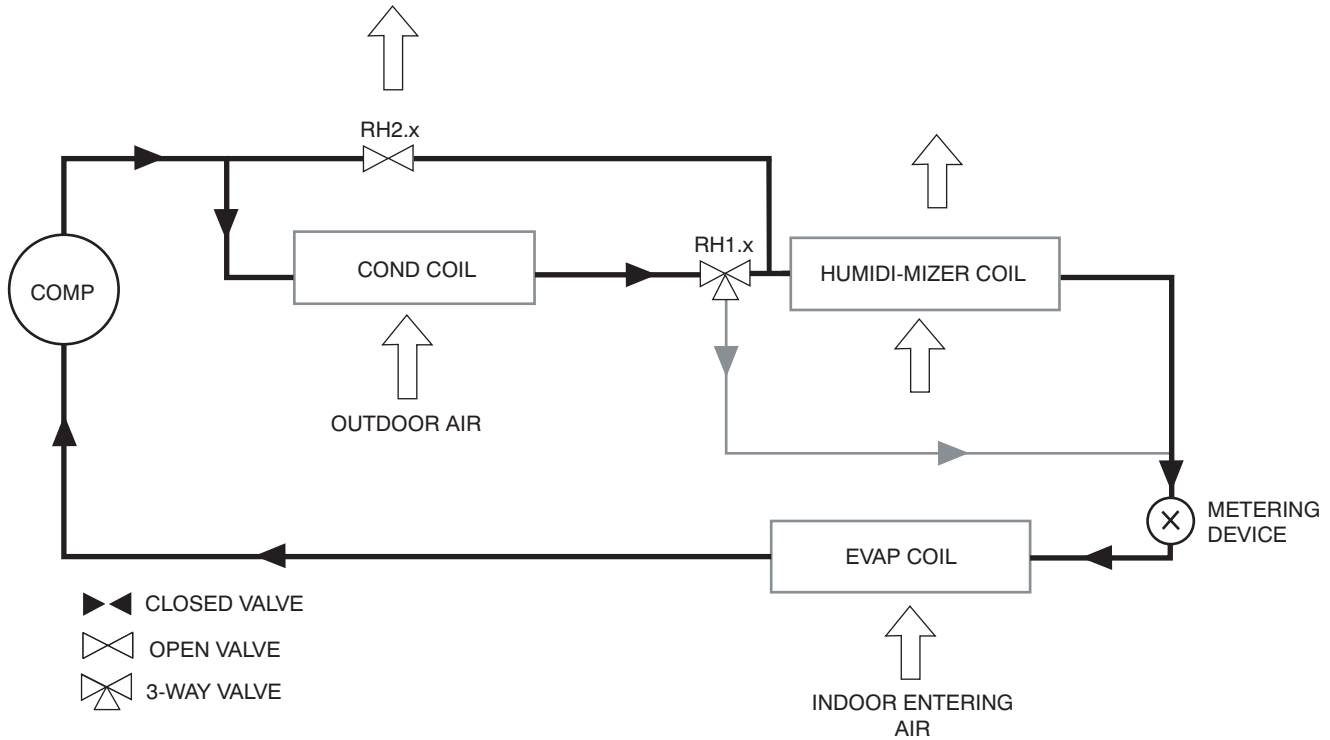
C07122

Subcooling Mode (Reheat 1) — Humidi-MiZer™ System (50PG20-28)



C07123

Hot Gas Reheat Mode (Reheat 2) — Humidi-MiZer™ System (50PG20-28)



C07124

APPLICATION DATA

Ductwork

Ductwork should be attached to the curb on all units. Interior installation may proceed before unit is set in place on roof. If ductwork will be attached to the unit, do not drill in condensate drain pan area--leaks may result.

Electric Heat

On 50PG units with electric heat, a field-supplied 90-degree elbow must be installed on the supply ductwork below the unit discharge connection.

Thru-the-Curb Service Connections

Roof curb connections allow field power wires and control wires to enter through the roof curb opening.

Thermostat/Space Temperature Sensor (T55 or T56)

Either a 2-stage cooling thermostat or a space temperature sensor is required for all units. A field-supplied jumper is required when using a space temperature sensor. The jumper is placed between terminals R and W1 on the unit thermostat terminal block (TB1 or TB2). Refer to wiring diagram for details.

Heating-to-Cooling Changeover

All units are automatic changeover from heating to cooling when automatic changeover thermostat and subbase or space temperature sensors are used.

Airflow

Units are draw-thru on cooling and blow-thru on heating.

Maximum Airflow

To minimize the possibility of condensate blow-off from evaporator, airflow through units should not exceed 500 cfm/nominal ton.

Minimum Airflow

The minimum airflow for cooling is 300 cfm/nominal ton. Refer to Operation Air Quantity Limits table for minimum airflow cfm for heating.

IMPORTANT: The minimum heating cfm must be maintained to ensure proper operation in the Heating mode. The minimum heating cfm value takes precedence over the minimum cooling cfm value.

Condenser Coil Protection (*Enviro-Shield™*)

Pre-coated aluminum-fin coils have a durable epoxyphenolic coating applied to the fin prior to the fin stamping process to provide protection in mildly corrosive coastal environments. Pre-coated coils have an inert barrier between the aluminum fin and copper tube. This barrier electrically disconnects the dissimilar metals to minimize the potential for galvanic corrosion. This economical option provides substantial corrosion protection for mild coastal environments beyond the standard uncoated coil construction.

Copper-fin coils provide increased corrosion resistance in moderate coastal environments where industrial air pollution is not present. All copper coils eliminate bi-metallic construction to eliminate the potential for galvanic corrosion. Use of copper fin coils in industrial environments is not recommended due to potential attack from sulfur, sulfur oxide, nitrogen oxides, carbon and several other industrial air-borne contaminants. In moderate seacoast environments, copper-fin coils have extended life compared to standard or pre-coated aluminum-fin coils.

E-Coated aluminum-fin coils undergo a precisely controlled scientific process that bonds an impermeable epoxy coating to the specially prepared fin coil surface. E-Coating produces a smooth, consistent coating that is less brittle, more resilient and more durable than previous postcoating processes. E-Coated aluminum-fin coils offer economical protection and improved coil life in industrial and combined coastal and industrial environments.

Condenser Coil Protection Applications

Description (Enviro-Shield™ Option)	Environment					
	Standard, Non-Corrosive	Mild Coastal	Moderate Coastal	Severe Coastal	Industrial	Combined Coastal and Industrial
Standard, Al/Cu	X					
Pre-Coated Al/Cu		X				
Cu/Cu			X			
E-Coated Al/Cu					X	X
E-Coated Cu/Cu				X		

Legend

- Al/Cu** – Aluminum Fin with Copper Tube Coil
- Cu/Cu** – Copper Fin with Copper Tube Coil
- Enviro-Shield** – Family of Coil Protection Options
- E-Coated** – Extremely Flexible and Durable Epoxy Coating Uniformly Applied to the Coil Surfaces
- Pre-Coated** – Epoxy Coating Applied to Fin Stock Material

E-Coated copper-fin coils provide maximum protection in virtually all environments, this option combines the continuous, impenetrable barrier of the E-Coating process with the natural resistance of an all-copper construction. E-Coated copper-fin coil assemblies ensure long life in severe coastal conditions.

Minimum Ambient Cooling Operation Temperature

All units with *ComfortLink™* controls are designed to operate at outdoor temperatures down to 0°F. Electromechanical controls operate down to 40°F.

Maximum Operating Outdoor-Air Temperature

For cooling, this temperature is 125°F. Refer to the Cooling Capacity tables for further details.

Motor Data

Due to Carrier's internal unit design (draw-thru over the motor), air path, and specially designed motors, the full horsepower (maximum continuous bhp) listed in the Physical Data table and the notes following each Fan Performance table can be utilized with extreme confidence.

Using Carrier motors with the values listed in the Physical and Fan Performance Data tables will not result in nuisance tripping or premature motor failure. The unit warranty will not be affected.

Indoor Air Quality

An indoor air quality sensor, which senses CO₂, is a factory-installed option. The sensor in conjunction with the economizer is used to maintain indoor air quality. By selecting this option, the minimum economizer position can be reduced because the control will adjust economizer position to maintain indoor air quality to the desired set point. A wall-mounted indoor air quality sensor is a field-installed accessory.

Enthalpy Sensor

Enthalpy switches are available as field-installed accessories. If only one switch is used, it is used to measure return air enthalpy. If two switches are used they should be wired in a differential configuration to measure the difference in the return and outdoor enthalpies. The enthalpy switches signify when the outdoor air is suitable for free cooling.

Plugged Filter Indicator

A plugged filter indicator (filter status switch) is available as a factory-installed option and a field-installed accessory. By measuring the pressure differential across the evaporator section, it signals when the evaporator filters should be cleaned.

Fan Status

A fan status switch is available as a factory-installed option or a field-installed accessory. By sensing the pressure differential generated by the indoor fan, it signals the *ComfortLink™* system when the indoor fan blower is operating and therefore it is very useful for detecting broken belts, etc.

GUIDE SPECIFICATIONS

Packaged Rooftop Electric Cooling Unit with Electric Heat Constant Volume Application with Puron® Refrigerant HVAC Guide Specifications

Size Range: 2 to 25 Tons, Nominal Cooling
3 to 75 kW Nominal (Electric Heating)

Carrier Model Numbers: 50PG



This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturer's refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

50PG

Part 1 — General

1.01 System Description

Unit is an outdoor rooftop mounted, electrically controlled heating and cooling unit utilizing fully hermetic scroll compressors with on demand crankcase heaters for cooling duty and electric heat for heating duty. Supply air shall be discharged downward or horizontally, as shown on contract drawings. Units shall be of ultra-high cooling efficiency and utilize environmentally sound Puron (R-410A) refrigerant.

1.02 Quality Assurance

- A. Unit shall well exceed ASHRAE 90.1-2001 and ENERGY STAR efficiency standards. On 03 to 06 sizes - SEER shall be as high as 15.0. On 06 to 16 sizes - EER shall be as high as 12.7 and on sizes 20 to 28 - EER shall be as high as 11.8.
- B. Unit shall be rated in accordance with ARI Standards 210 (sizes 03-12) and 360 on all other sizes. All units shall be designed in accordance with UL Standard 1995. Units shall be rated in accordance with ARI sound standards, 270 or 370.
- C. Unit shall be designed to conform to ASHRAE 15.
- D. Unit shall be UL and UL, Canada, tested and certified in accordance with ANSI Z21.47 Standards as a total package.
- E. Roof curb shall be designed to conform to NRCA Standards.
- F. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- G. Unit casing shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).
- H. Unit shall be manufactured in a facility registered to ISO 9001:2000.
- I. Each unit shall be subjected to a completely automated run testing on the assembly line.

1.03 Delivery, Storage, and Handling

Unit shall be stored and handled per manufacturer's recommendations.

Part 2 — Products

2.01 Equipment (Standard)

A. General

The 50PG unit shall be a factory assembled, pretested, single-piece heating and cooling unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, Puron refrigerant charge (R-410A), and special features required prior to field start-up. Outdoor sound ratings on sizes 03-06 shall be as low as 72 dB, on sizes 08 to 16 as low as 80 dB and on sizes 20 to 28 as low as 82 dB.

B. Unit Cabinet

1. Constructed of galvanized steel, bonderized and coated with a pre-painted baked enamel finish on all externally exposed surfaces. Internal surfaces shall be of a primer coated finish.
2. All airstream interior surfaces shall be insulated with a minimum 1/2-in. thick, 1 lb density, foil faced, cleanable, insulation. Insulation shall be bonded with a thermosetting resin (8 to 12% by weight nominal, phenol formaldehyde typical), and coated with an acrylic or other material that meets the NFPA 90 flame retardance requirements and has an "R" Value of 3.70. Insulation shall also be encapsulated with panel design or tape edges ensuring secure fit.
3. Cabinet panels shall be hinged with integrated non-corrosive hinges. Large hinged access panels with multiple quarter-turn latches and handles are provided, for the filter, compressors, evaporator fan, control box and heat section areas. Each major external hinged access panel shall be double-wall construction and permanently attached to the rooftop unit. Panels shall also include tiebacks.
4. Return air filters shall be accessible through a dedicated hinged access panel and be on a slide out track using standard size filters. Filter shall be standard off the shelf sizes and be the size per cabinet. Capability for 2 or 4 inch filters shall be on all sizes.
5. Holes shall be provided in the base rails (minimum 16 gage) for rigging shackles and level travel and movement during overhead rigging operations.
6. Fork lift slots shall be available from three sides of the unit (end and 2 sides) for 03-16 and two sides of the unit (end and side) for other sizes.
7. Unit shall have a factory-installed internally sloped condensate drain pan, providing a minimum 3/4-in.-14 NPT connection with horizontal drain, to prevent standing water from accumulating. Pan shall be fabricated of high impact polycarbonate material and shall slide out for cleaning and or maintenance on sizes Guide specifications 156 03-16. An alternate vertical drain (3/4-in. NPT) connection is also available on sizes 03-16. Pan shall be fabricated of epoxy powder coated steel for other sizes. All drain pans conform to ASHRAE 62 self-draining provisions.
8. Unit shall have standard thru-the-bottom power and control wiring connection capability.

C. Fans

1. Indoor blower (evaporator fan)
 - a. Centrifugal supply air blower shall have rubber-isolated, cartridge type, ball bearings (50PG03-16) or pillow-block ball bearings (50PG20-28) and adjustable belt drive.
 - b. Fan wheel shall be made from steel with a corrosion resistant finish. It shall be a dynamically

balanced, double-inlet type with forward-curved blades.

- c. The indoor fan system (blower wheels, motors, belts, and both bearings) shall slide out for easy access.
 - d. Evaporator fan motors shall be continuous operation, open drip-proof. Bearings shall be sealed, permanently lubricated ballbearing type for longer life and lower maintenance.
 - e. On sizes 03 to 16, fan belt shall be located on opposite side of evaporator coil to prevent damage from broken fan belts. On 20 to 28 sizes a fan belt catch system shall be used.
2. Condenser fans shall be of the direct driven propeller type, with corrosion-resistant aluminum blades riveted to corrosion-resistant steel supports. They shall be dynamically balanced and discharge air upwards. Condenser-fan motors shall be totally enclosed thermally plated and be of a shaft down design to protect from direct contact from harsh environments.

D. Compressor(s)

- 1. Fully hermetic, scroll type with on demand crankcase heaters, internal high-pressure and temperature protection.
- 2. Factory mounted on rubber grommets and internally spring mounted for vibration isolation.
- 3. Be mounted on dedicated mounting plate to ensure secure design and reduced sound levels.

E. Coils

- 1. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
- 2. Dual-circuit models (08-28) shall have face-split type evaporator coil (circuit no. 1 on bottom).
- 3. Evaporator and condenser coils shall be single slab, single pass design to facilitate easy coil cleaning. Composite coils or coils that require unit top panels removed shall be unacceptable.
- 4. Coils shall be leak tested at 170 psig and pressure tested at 1875 psig.
- 5. Optional Coils:
 - a. Optional pre-coated aluminum-fin coils shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.
 - b. Optional copper-fin coils shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets. Galvanized steel tube sheets shall not be acceptable. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan. All copper construction shall provide protection in moderate coastal environments.

- c. Optional E-Coated aluminum-fin coils shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation. Color shall be high gloss black with gloss - 60 deg of 65 to 90% per ASTM D523-89. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges. Superior hardness characteristics of 2H per ASTM D3363-92A and crosshatch adhesion of 4B-5B per ASTM D3359-93. Impact resistance shall be up to 160 in./lb (ASTM D2794-93). Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870- 92). Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90. Coil construction shall be aluminum fins mechanically bonded to copper tubes. E-Coated aluminum-fin coils shall provide protection in industrial and industrial and coastal combined environments.

- d. Optional E-Coated copper-fin coils shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation. Color shall be high gloss black with gloss - 60 deg of 65 to 90% per ASTM D523-89. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges. Superior hardness characteristics of 2H per ASTM D3363-92A Guide specifications (cont) 157 and cross-hatch adhesion of 4B-5B per ASTM D3359-93. Impact resistance shall be up to 160 in./lb (ASTM D2794-93). Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870- 92). Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90. Coil construction shall be copper fins mechanically bonded to copper tubes with copper tube sheets. Galvanized steel tube sheets shall not be acceptable. A polymer strip shall prevent coil assembly from contacting sheet metal coil pan to maintain coating integrity and minimize corrosion potential between coil and pan. E-Coated copper-fin coils shall provide protection in severe coastal environments.

F. Heating Section

1. Heater element open coil resistance wire, nickel-chrome alloy, 0.29 inches inside diameter, strung through ceramic insulators mounted on metal frame. Coil ends are staked and welded to terminal screw slots.
2. Heater assemblies are provided with integral fusing for protection of internal heater circuits not exceeding 48 amps each.
3. Auto reset thermo limit controls, magnetic heater contactors (24 v coil) and terminal block all mounted in electric heater control box (minimum 18 ga galvanized steel) attached to end of heater assembly.

G. Refrigerant Components

Each refrigerant shall include:

1. Balanced port thermostatic expansion valve (TXV) with removable power element.
2. Refrigerant filter driers with pressure ports.
3. Refrigerant pressure gage port and connections on suction, discharge, and liquid lines.

H. Filter Section

1. Standard filter section shall consist of factory installed 2-in. thick disposable fiberglass filters and shall be on a dedicated slide-out track to easily facilitate access and replacement.
2. Filter section shall use standard size filters and be a common size within cabinet sizes.
3. Optional MERV-8 pleated filters of commercially available sizes shall be available.
4. Standard 2-in. filter rack shall be field convertible to 4-in. by removing a spacer rack on 03- 16 sizes. A 4-in. filter capability shall be available as factory-installed option on the other sizes.

I. Controls and Safeties

1. Unit *ComfortLink*™ controls
 - a. Scrolling marquee display
 - b. CCN network capable.
 - c. Unit control with standard suction pressure transducers and condensing temperature thermistors.
 - d. Shall provide a 5°F temperature difference between cooling and heating set points to meet ASHRAE 90.1 Energy Standard.
 - e. Shall provide and display a current alarm list and an alarm history list.
 - f. Automatic compressor redundancy.
 - g. Service run test capability.
 - h. Shall accept input from a CO₂ sensor (both indoor and outdoor).
 - i. Configurable alarm light shall be provided which activates when certain types of alarms occur.
 - j. Compressor minimum run time (3 minutes) and minimum off time (5 minutes) are provided.
 - k. Service diagnostic mode.
 - l. Economizer control (optional).
 - m. Multiple capacity stages (on size 08-28 units only).
 - n. Unit shall be complete with self-contained low-voltage control circuit.
 - o. Unit shall have 0°F low ambient cooling operation.

2. Safeties

- a. Unit shall incorporate a solid-state compressor lockout which provides optional reset capability at the space thermostat, should any of the following safety devices trip and shut off compressor:
 - (1.) Compressor lockout protection provided for either internal or external overload.
 - (2.) Low-pressure protection.
 - (3.) Freeze protection (evaporator coil).
 - (4.) High-pressure protection (high pressure switch or internal).
 - (5.) Compressor reverse rotation protection.
 - (6.) Loss of charge protection.
 - (7.) Start assist on single-phase units.
- b. Supply-air sensor shall be located in the unit and detect both heating and cooling operation.

J. Operating Characteristics

1. Unit shall be capable of starting and running at 125°F ambient outdoor temperature per maximum load criteria of ARI Standard 210 (sizes 03-12) and 360 (sizes 16-28).
2. Unit with *ComfortLink* controls will operate in cooling down to an outdoor ambient temperature of 0°F. Electro-mechanical controls shall operate down to 40°F.
3. Unit shall be provided with fan time delay to prevent cold air delivery in heating mode.

K. Electrical Requirements

All unit power wiring shall enter unit cabinet at a single location – side or bottom.

NOTE: On 208/230 v units using 75-kW heaters, separate wiring is required.

L. Motors

1. Compressor motors shall be cooled by refrigerant gas passing through motor windings and shall have line break thermal and current overload protection.
2. Evaporator-fan motor shall have permanently lubricated, sealed bearings and inherent automatic- reset thermal overload protection or manual reset calibrated circuit breakers. Evaporator motors are designed specifically for Carrier and do not have conventional horsepower (hp) ratings listed on the motor nameplate. Motors are designed and qualified in the “air-over” location downstream of the cooling coil and carry a maximum continuous bhp rating that is the maximum application bhp rating for the motor; no “safety factors” above that rating may be applied.
3. All evaporator fan motors 5 hp and larger shall meet the minimum efficiency requirements as established by the Energy Policy Act of 1992 (EPACT), effective October 24, 1997.
4. Totally enclosed condenser-fan motor shall have permanently lubricated, sealed bearings, and inherent automatic-reset thermal overload protection.

M. Special Features

Certain features are not applicable when the features designed * are specified. For assistance in amending the specifications, contact your local Carrier Sales Office.

1. * Full perimeter roof curbs (horizontal and vertical)
 - a. Formed of 14-gauge galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight. Shall be interlocking design.
 - b. Permits installing and securing ductwork to curb prior to mounting unit on the curb. Field assembly required.
 - c. Shall be available in both 14-in. and 24-in. height.
2. * Adapter roof curb
Shall be available for fit up on previously installed Carrier DJ, TJ, LJ, TF, HJ, TM roof curbs (sizes 03-14).
3. * Integrated economizer
 - a. Tilt-out economizer (16-28 slide out) shall be furnished and installed complete with outside-air dampers and controls.
 - b. Low-leakage (less than 2%), opposing, gear-driven dampers with UL approved gears.
 - c. Capable of introducing up to 100% outdoor air for minimum ventilation as well as free cooling.
 - d. Damper actuator shall be electronic 4 to 20 mA or 2 to 10 vdc fully modulating design.
 - e. Economizer outdoor hood shall be prepainted and fully assembled on sizes 03-16. Economizer outdoor hood requires field assembly on other sizes.
 - f. Economizer shall be available for both field or factory installation.
4. * Two-position motorized outdoor air damper
 - a. The damper shall admit up to 50% outdoor air. Spring return damper closes when unit is off.
 - b. The package shall include a multiple-blade damper and motor.
 - c. Shall be available as factory-installed option and field-installed accessory.
5. * Two-position motorized outdoor air damper
 - a. The damper shall admit up to 33% outdoor air.
 - b. Shall include hood, damper plate, and screen (sizes 03-16) or cleanable aluminum filter (sizes 20-28).
 - c. Shall be available as factory-installed option and field-installed accessory.
6. * Barometric relief damper package
 - a. Package shall include damper, seals, hardware, and hoods to relieve excess internal pressure.
 - b. Integrated barometric relief capabilities on economizer shall be available on sizes 03- 16.
 - c. Damper shall close due to gravity upon unit shutdown.
7. * Power exhaust
 - a. For 03-16 sizes, package shall include two (2) propeller exhaust fans, 0.25 Hp (03-07)/ 0.5 Hp (08-16) 208-230 v, 460 v direct drive motor on each, and damper for units with economizer to control overpressurization of building. Single-stage control.
 - b. For 20-28 sizes, package shall include two (2) centrifugal exhaust fans, 1 Hp 208-230, 460 v (factory-wired for 460 v) three-speed direct drive motor on each, and damper for units with economizer to control over-pressurization of building. Two-stage exhaust capability through *ComfortLink™* control shall be available.
 - c. Power exhaust shall fit on both vertical and horizontal configured unit.
 - d. Power exhaust shall be available for both field or factory installation.
8. Single enthalpy sensor
The enthalpy sensor shall provide economizer control based on outdoor air enthalpy. The economizer control shall include logic to calculate the wet bulb and dry bulb temperatures of the outdoor air.
9. Differential enthalpy sensor
 - a. For use with economizer only.
 - b. Capable of comparing heat content (temperature and humidity) of outdoor air and indoor air and controlling economizer cut-in point at the most economical level.
10. Convenience outlet
 - a. Optional factory-installed powered convenience outlet shall be internally mounted with an externally accessible 115-v, 2 plug female receptacle with hinged cover. Shall include 15 amp GFI with independent fuse protection and service receptacle disconnect. The convenience outlet is powered from the unit main power wiring through a factory-installed step down transformer. The power wiring for the transformer needs to be field connected per local codes. This may mean wiring before the disconnect switch or after.
 - b. Optional factory-installed non-powered convenience outlet shall be internally mounted with an externally accessible 115-v, 2 plug female receptacles with hinged cover. There is no step-down transformer installed from the factory.
11. * HACR circuit breaker
Shall be factory-installed, internally mounted, NEC and UL approved. HACR breaker shall provide unit power shutoff. Shall be accessible from outside the unit and shall provide power off lockout capability.
12. CO₂ sensor
The duct-mounted or wall-mounted CO₂ sensor shall have the ability to monitor CO₂ levels and relay information to the controller. The controller will use CO₂ level information to modulate the economizer and provide demand control ventilation. The sensor shall be available as field or factory-installed.
13. Return air/supply air smoke detector
The smoke detector shall send input to the controller to shut down the unit in case smoke is detected. The smoke detector shall be factory installed in the return air section or shall be available as a field-installed accessory.
14. Filter status
The filter status switch shall be a pressure switch and will indicate a dirty filter. The switch shall be available as field or factory-installed.

15. Fan status
The fan status switch shall be a pressure switch and will indicate indoor fan operation. The switch shall be available as field or factory-installed.
16. * MERV-8 pleated return air filters
The filters shall be MERV-8 efficient. The filters shall be 2-in., pleated filters.
17. Four-in. return air filter capability
 - a. The unit shall be capable of accepting field supplied 4-in. filters by removing a spacer rack on 03-16 sizes standard units.
 - b. The unit with factory-installed option of 4-in. filter capability (20-28) shall be capable of accepting field-supplied 4-in. filters by removal of the factory-supplied 2-in. filters and filter retainer.
18. * Low range fan performance motor/drive
This motor/drive option shall provide low range motor and drive capability to enhance evaporator fan performance.
19. * Mid-Low fan performance motor/drive (16-28 sizes)
This motor/drive shall provide low to medium motor and drive capability to enhance evaporator fan performance.
20. * Mid-High fan performance motor/drive (20- 28 sizes)
This motor/drive option shall provide medium to high motor and drive capability to enhance evaporator fan performance.
21. * High fan performance motor/drive
This motor/drive offering shall provide high range motor and drive capability to enhance evaporator fan performance.
22. Hail guard, condenser coil grille: Shall protect the condenser coil from hail, flying debris, and damage by large objects without increasing unit clearances.
23. Horizontal Kit
 - a. Horizontal kit shall contain all the necessary hardware to convert a vertical airflow unit to a horizontal airflow unit (16-28 sizes).
 - b. The unit shall also be available as a horizontal airflow unit directly from the factory.
24. Phase loss protection (3 phase units only)
Shall provide unit shutdown when an electrical phase loss is detected - automatic reset type.
25. Roof curb burglar bar
Shall be 1/2-in. diameter rod with 9-in. on center design grid pattern. Shall mount in roof curb openings.
26. * Electronic programmable thermostat
Capable of using deluxe full-featured electronic thermostat.
27. * Thermostats and subbases
To provide staged heating and cooling in addition to automatic (or manual) changeover and fan control.
28. * Electric Resistance Heater Package
 - a. Fully assembled for installation. The packages are designed in accordance with UL safety standards 1995 and listed by ETL. Heater construction approved by UL 5306.
 - b. Single point kits available for each heater when required (sizes 03-14).
29. Unit-mounted, non-fused disconnect switch
Switch shall be factory-installed, internally mounted. NEC and UL approved non-fused switch shall provide unit power shutoff. Switch shall be accessible from outside the unit and shall provide power off lock-out capability.
30. * Humidi-MiZer™ adaptive dehumidification system
 - a. The Humidi-MiZer dehumidification system shall be factory-installed in the 50PG03-28 rooftop units, and shall provide greater dehumidification of the occupied space by two modes of dehumidification operations beside its normal design cooling mode:
 - (1.) Subcooling mode further subcools the hot liquid refrigerant leaving the condenser coil when both temperature and humidity in the space are not satisfied.
 - (2.) Hot gas reheat mode shall mix a portion of the hot gas from the discharge of the compressor with the hot liquid refrigerant leaving the condenser coil to create a two-phase heat transfer in the system, resulting in a neutral leaving- air temperature when only humidity in the space is not satisfied.
 - b. The system shall consist of a subcooling/ reheat dehumidification coil located downstream of the standard evaporator coil. This dehumidification coil is a single-row coil on 50PG03-16 units. This dehumidification coil is a two-row coil on 50PG20-28 units.
 - c. The system shall include crankcase heater(s) for the scroll compressor(s).
 - d. The system shall include a low outdoor air temperature switch to lock out both subcooling and hot gas reheat mode when the outdoor-air temperature is below 40°F.
 - e. The system shall include a Motormaster® low ambient control to ensure the normal design cooling mode capable of down to 0°F low ambient operation.
 - f. The system shall include a low-pressure switch on the suction line to ensure low pressure start-up of hot gas reheat mode at lower outdoor temperature condition.
 - g. The system operation may be controlled by a field-installed, wall-mounted humidistat. The dehumidification circuit will then operate only when needed. Field connections for the humidistat are made in the low voltage compartment of the unit control box. The sensor can be set for any level between 55% and 80% relative humidity.
 - h. The system shall include a thermostatic expansion valve (TXV) to ensure a positive superheat condition.
 - i. For units with two or three compressors (sizes 08-28), depending on the conditions required to maintain the space set points, one or all the compressors can operate in subcooling mode, one compressor could operate in subcooling mode while the other(s) operate in hot gas reheat mode, or one or all the compressors can operate in hot gas reheat mode.

GUIDE SPECIFICATIONS

EnergyX™ - Packaged Energy Recovery Ventilators

HVAC Guide Specifications

Nominal Capacity Range: 350 cfm to 3,500 cfm

Model Numbers: 50PG03-07 - Low, Med and High EnergyX cfm range

50PG20-28 - Low and High EnergyX cfm range

Part 1 — General

1.01 System Description

One-piece EnergyX (Energy Recovery Ventilation) unit is an electrically controlled ventilation air pre-conditioner utilizing an ARI 1060 Certified Energy Recovery Cassette to reduce the cooling and heating loads placed on the primary HVAC unit by untreated outdoor air. Building exhaust air shall be introduced to the EnergyX unit through ductwork. Unit shall be designed as a factory-installed option to be used with 48PG units for use in Vertical applications only.

1.02 Quality Assurance

- A. Unit shall be designed in accordance with UL Standard 1995 Ver.3.
- B. Unit shall be ETL tested and certified.
- C. Roof curb extension shall be designed to conform to NRCA Standards.
- D. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- E. Unit casing shall be capable of withstanding ASTM No. 141 (Method 6061) 500-hour salt spray test.
- F. Unit shall contain ARI 1060 Certified Energy Recovery Cassette.
- G. Unit shall help meet ASHRAE Standard 62-1989 requirements.

Part 2 — Products

2.01 Equipment (Standard)

A. General

The EnergyX unit shall be a factory assembled, single piece unit. Contained within the unit enclosure shall be all factory wiring with a single, pre-determined point of power input and a single point of 24-volt control wiring.

B. Unit Cabinet

1. Unit cabinet shall be constructed of galvanized steel coated with a prepainted baked enamel finish.
2. All models shall have hoods installed over outside air intake and exhaust openings. Outside air hood shall have aluminum water entrainment filters.
3. All models are double-wall and shall have 1-in., 2 pound density foil-faced insulation contained within a double-walled panel.
4. Hinged access doors shall be provided on all units for access to fans and filters. Hinged doors shall be provided with at least one handle capable of being locked. Access doors shall have gasket.
5. Exhaust and supply airstreams shall have back-draft dampers to prevent air penetration during off cycles.
6. Holes shall be provided in the base rails for rigging shackles to facilitate overhead rigging.

C. Blowers

1. 2-6 Ton PG unit with Low and Medium cfm EnergyX unit:
Blowers shall be direct drive. Single-phase units shall have four-speed motors. Three-phase units shall have four-speed motors.
2. All other sizes:
Blowers shall be belt-driven. Drives shall include an adjustable pulley.
3. Blowers wheel shall be made from steel with a corrosion resistant finish. It shall be a dynamically balanced, double-inlet type with forward-curved blades.
4. Blowers shall be mounted on neoprene vibration isolation pads (except sizes 03-07 Low CFM).
5. Motors shall be high efficiency (80-87%) and have thermal overload protection.

D. Filter Section

Standard filter section shall accept commercially available, 2-in. pleated filter(s), MERV-11 efficiency rating.

E. Controls and Safeties

The rooftop shall operate in conjunction with rooftop unit fan.

F. Electrical Requirements

All unit power wiring shall enter unit cabinet at a single location.

G. Energy Recovery Cassette

1. The energy recovery media shall have a minimum of 60% effectiveness at nominal unit airflow.
2. Energy wheel performance shall be ARI Standard 1060 Certified and bear the ARI Certified Product Seal.
3. The energy recovery cassette shall be an UL Recognized component for electrical and fire safety.
4. The wheel shall be coated with silica gel desiccant, permanently bonded without the use of binders or adhesives.
5. Coated wheels shall be washable with detergent or alkaline coil cleaner and water.
6. The silica gel shall not dissolve or deliquesce in the presence of water or high humidity.
7. The substrate shall be made of a lightweight polymer and shall not degrade or require additional coatings for application in coastal environments.
8. The wheel polymer layers shall be wound continuously with one flat and one structured layer in an ideal parallel plate geometry providing laminar flow and minimum pressure drop.
9. The polymer layers shall be captured in a stainless steel wheel frame or aluminum and stainless steel segment frames that provide a rigid and self-supporting matrix.
10. Energy recovery wheels greater than 19 inches in diameter shall be provided with removable wheel segments.
11. Wheel frame shall be a welded hub, spoke and rim assembly of stainless, plated, and or coated steel and shall be self supporting without the wheel segments in place.
12. Wheel segments shall be removable without the use of tools to facilitate maintenance and cleaning.
13. Wheel rim shall be continuous rolled stainless steel and the wheel shall be connected to the shaft by means of taper locks.

50PG

14. Wheel bearings shall provide an L-10 life of 400,000 hours.
15. Drive belts of stretch urethane shall be provided for wheel rim drive without the need for external tensioners or adjustment.

H. Air Filters

Optional factory-installed exhaust and outdoor air filters shall be 2-in. pleated type with a MERV 8 minimum efficiency rating.

I. Airflow test ports

Optional pressure test ports shall be factory-installed on the outside of unit cabinet. They shall allow measurement of EnergyX™ wheel pressure drop on both the intake and exhaust sections to facilitate blower setup and air balancing.

2.02 Special Features (Options)

1. Access door interlock switches

Optional factory-installed switches shall interrupt power to control circuit when door is opened, deenergizing blower and wheel motors.

2. Fused disconnect switch option

- a. For 575/460 volt power, a 600 volt, 3 pole, NEMA3R fused disconnect switch shall be factory installed. Fuses shall be included.
- b. For 115/208/230 volt power, a 30 amp, 250 volt, 3 pole, NEMA3R fused disconnect switch shall be factory installed. Fuses shall be included.

3. Non-fused disconnect switch option

- a. For 575/460 volt power, a 600 volt, 3 pole, NEMA3R disconnect switch shall be factory installed.
- b. For 115/208/230 volt power, a 250 volt, 3 pole, NEMA3R disconnect switch shall be factory installed.

4. Supply and exhaust air frost control option

- a. Factory-installed frost protection module shall sense pressure differential across the energy recovery cassette.
- b. Supply blower shall be shut-off if the pressure differential across the energy recovery cassette exceeds an adjustable set point. Blower shall remain off for 5 minutes.
- c. Exhaust blower and wheel shall remain in operation in order to remove any frost build-up on the wheel.

5. EnergyX wheel maintenance indicator switch

Pressure switches are used when blowers are not running and alarm is sent.
Proxy sensor is used to monitor the EnergyX wheel and alarm is sent.

6. EnergyX filter maintenance indicator

A factory-installed differential pressure switch shall measure pressure drop across the outside air filter and activate a field-supplied 24-v indicator when airflow is restricted (all sizes except 03-07 Low and Med CFM). It shall not interrupt EnergyX operation. Switch set point shall be adjustable.

7. Low temperature lockout option

A factory-installed lockout thermostat shall de-energize the EnergyX to prevent extremely cold outside air from entering the space. Thermostat shall be field-adjustable from -30°F to 100°F.

8. EnergyX free cooling with enthalpy and stop/jog control

- a. Both enthalpy sensors shall prevent the wheel from rotation, if outside air and exhaust air are at the same enthalpy levels. The blower will remain ON in Non-Economizer unit.
- b. Stop-Jog-Control shall energize the wheel periodically during the free cooling operation of the EnergyX or when Outside Air and Return Air are at the same enthalpy levels to prevent dirt build-up on the wheel.

9. Motorized supply damper option

The supply damper shall be motorized with factory-installed, 2 position, 24-volt motor (Non-Economizer version only).

10. Motorized exhaust damper option

The exhaust damper shall be motorized with factory-installed, 2-position, 24-volt motor (Non-Economizer version only).

11. Variable air volume control

The EnergyX shall work in conjunction with a CO₂ sensor (ordered separately). Each blower motor shall have a motor controller that will modulate the motor speed around a predetermined set point. The set point will correspond to a 0 to 10 vdc signal that is generated by the CO₂ sensor. The EnergyX shall be controlled by the CO₂ sensor (ordered separately).

12. Pre-heater Option:

Electric pre-heater is factory-installed on the outside air hood to the EnergyX. Pre-heater shall be activated by adjustable thermostat.

13. Roof Curb Extension is required in conjunction with standard base unit PG roofcurb (PG20-28 sizes with EnergyX) or Full Perimeter Roof Curb (PG03-16 with EnergyX) Accessory for use with EnergyX units

- a. Curb shall be constructed of heavy gage galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
- b. Curb shall permit installing and securing ductwork to curb prior to mounting unit on the curb.

14. Equipment support

Field-installed equipment supports shall be available to provide additional support units when coupled with PG 03-14 units.

