



Product Data

WeatherMaster® Single Package Heat Pump Rooftop

3-Stage — 15 to 25 Nominal Tons

ecoblue™  technology



Puron
ADVANCE™

50GEQ*17, 24, 28

Single-Packaged Heat Pump with Optional Electric
Heat and Puron Advance™ Refrigerant (R-454B)

Introducing Carrier's WeatherMaster® packaged heat pump rooftop units (RTUs) with Puron Advance™ and EcoBlue™ Fan Technology.

The WeatherMaster line has always stood for cooling solutions that are innovative, high quality, and easy to use. Carrier's new 50GEQ rooftops continue our legacy of progress with Puron Advance™, our low global warming potential refrigerant. With competitive efficiencies, EcoBlue fan technology, locally available stock, and direct fit footprints, new installations and replacements are easier than ever.

New major design features include:

- Puron Advance (R-454B) refrigerant, which delivers a 75% reduction in global warming potential (GWP) compared to the original Puron (R-410A). Puron Advance's GWP of 466 easily exceeds the EPA (Environmental Protection Agency) requirement of <700 GWP.
- A patented, industry-first vane axial indoor fan system with an electronically commutated variable speed motor for simplicity and efficiency. When compared to traditional belt-driven forward curve fans, our reliable system has:
 - 75% fewer moving parts
 - Up to 40% greater efficiency
 - No fan belts, pulleys, shaft, or shaft bearings
 - Better sound and comfort due to slow ramp-up capability

- Internal protection from phase reversal and phase loss situations
- High external static capability
- Slide-out blower assembly design
- Reliable 3 stage cooling with tandem scroll compressors technology, fully active evaporator coil, and mixed air temperature protection on all models.
- Reliable copper tube/aluminum fin condenser coil with 5/16 in. tubing to help reduce refrigerant charge and weight versus prior designs

WeatherMaster® 50GEQ units 15 to 25 tons are specifically designed for dedicated factory-supplied vertical air flow or horizontal air flow. No special field kits are required. Designed to fit on pre-installed curbs by other manufacturer, these units can also fit on some of Carrier's past installed roof curbs.

Three-speed staged air volume (SAV) Vane Axial indoor fan speed control helps deliver IEERs up to 19.0 and COP up to 3.5.

With "no-strip" screw collars, handled access panels, and more, the unit is easy to install, easy to maintain, and easy to use. Your new 15 to 25 ton Carrier WeatherMaster RTU provides optimum comfort and control from a packaged rooftop.

Value-added features include:

- Puron Advance refrigerant (R-454B)
- SystemVu™ intuitive, intelligent controls that provides:
 - Large, full text, multi-line display
 - USB flash port for data transfer

- Built-in i-Vu®, CCN, and BACnet®¹.
- Easy to read refrigerant pressures shown via the display — no checking gauges
- Quick LED Status for Run, Alert, and Fault
- Conventional thermostat or sensor capabilities
- Historical component runtime and starts
- Supply air tempering
- Network Service Tool compatible
- Single point electrical connections
- All 15 to 25 ton models use TXV refrigerant metering devices
- Tandem Scroll compressors with internal line-break overload protection
- Units come with an easy access tool-less filter door. Filter track tilts out for filter removal and replacement. All filters are the same size in each unit

Easy to install

Lighter units make for easy replacement and aid in the structural approval process. All units have SystemVu controls standard for easy, tool free commissioning. Clearly labeled connections points to reduce installation time. Also, a large control box provides room to work and room to mount Carrier accessory controls.

1. Third-party trademarks and logos are the property of their respective owners.

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Easy to maintain

With the EcoBlue vane axial fan system and direct drive ECM motor, belts and pulleys are a thing of the past. This frees up maintenance, installation and commissioning time. Should an adjustment be necessary, it can easily be made via the main base board (MBB) in the control box. For regular service activities, our easy-access handles provide a quick solution to all commonly accessed service panels, and our sloped, corrosion-resistant composite drain pan sheds water and will not rust. Service gauge connections are included on compressor suction/discharge lines and before and after the filter drier to monitor system operation during maintenance.

Easy to use

The SystemVu controller's MBB (main base board) puts all connections and troubleshooting points in one convenient place. Most low voltage connections use the same board and are easy to access. Our rooftops have high switches, a filter drier, and 2 in. filters standard.

Heat pump flexibility

50GEQ Three-Stage models offer onboard electromechanical heating standard. Our robust systems are rigorously tested to ensure reliable reverse cycle heating operation. The result is a clean, environmentally responsible heat

source to keep occupants comfortable year-round. Should an adjustment be necessary, it can easily be made via the SystemVu controller in the control box. Should you need supplemental heat, we offer a full line of single point powered electric heaters that can easily be installed at site.

Puron Advance™ features

In 2018, Carrier announced Puron Advance (R-454B) as our next generation refrigerant for light commercial rooftops. With a GWP of 466 and similar working pressure and performance to R-410A, Puron Advance easily exceeds the EPA's new, stringent <700 GWP refrigerant requirement while minimizing unit redesign. Like other next generation refrigerants (R-32, etc.), R-454B is classified as an "A2L" refrigerant by ASHRAE®¹ (American Society of Heating, Refrigerating, and Air-Conditioning Engineers). This designation means that R-454B is "mildly flammable" under certain conditions. While this is a change from legacy "A1 — No Flame Propagation" refrigerants like Puron (R-410A), A2Ls are still very low on the flammability scale and quite safe for use. A2L refrigerants are difficult to ignite and have an extremely low flame speed — much less so than natural gas, propane, or even rubbing alcohol. At Carrier, we are committed to safety. As such, all of our Puron Advance rooftop units include a factory installed dissipation control board and

leak sensor designed to last the lifetime of the unit. This system is certified to UL 60335-2-40 and designed to work right away, without any field configuration or wiring. In the event of a leak, these systems are designed to automatically identify and resolve the issue by dissipating the refrigerant to minimize risk to equipment, buildings, or occupants.

EcoBlue™ Technology

Our direct drive EcoBlue indoor fan system uses vane axial fan design and electronically commutated motor. The benefit is clear: when compared to legacy belt drive systems, this vane axial design has 75% fewer moving parts, uses up to 40% less energy, and has no belts, blower bearings, or shaft.

Streamlined control and integration

The standard SystemVu™ controls make connecting these units into existing building automation systems easy.

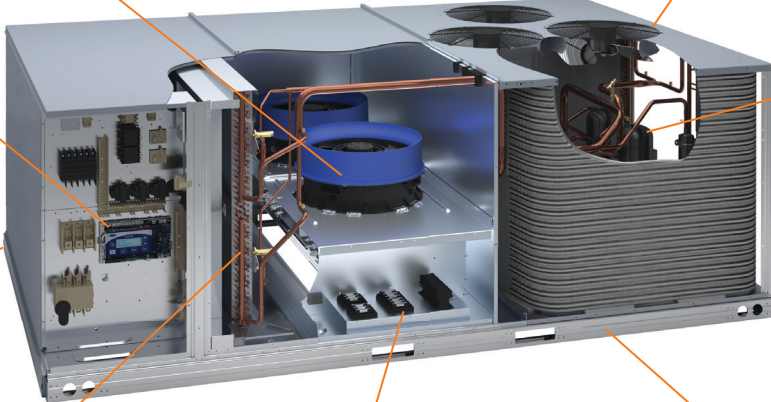
Operating efficiency and flexibility

The 50GEQ Three-Stage Heat Pump exceed ASHRAE 90.1 and IECC®¹ (International Energy Conservation Code) minimum IEER efficiency requirements.

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50GEQ 15 – 25 Ton Models shown



Vane Axial Indoor Fan

- Direct drive ECM
- Slow ramp up
- Phase loss protection
- No belts or pulleys
- Slide out design

High Efficiency Outdoor Fan

- Quiet operation
- Balanced blades
- Efficient airflow collar

Unit Controls

- SystemVu™ control standard

Compression

- Fully hermetic scroll
- Internally protected
- Multi stage design
- Safety switch protected

Air Management

- Factory - Field economizers
- Upgraded MERV-13 filters
- Tool-less Filter Access door

Efficient Coils

- Round tube/plate fin
- Copper/Aluminum
- Special coating available
- New 5/16 in. condenser tube
- TXV metering device
- Humidi-MiZer® system available
- Low Ambient cooling to -10°F standard

Heating

- Electric Heating
- Field installed accessory
- Integral fusing
- Multiple kW sizes available
- Terminal block connections
- Single point power

Cabinet Design

- Heavy gauge base rails
- Large handled access panels
- Embossed strengthened base pan

Model number nomenclature



50GEQ*17-28 Model Number Nomenclature

Position:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Example:	5	0	G	E	Q	R	2	4	A	2	A	6	-	3	A	0	A	0

Unit Heat Type

50 = Cooling Packaged Rooftop

Model Series - WeatherMaster®

GE = Mid Tier Puron Advance™

Heat Type

Q = Heat Pump
(Field-Installed Electric Heat)

Refrigerant Options

R = Three Stage Cooling/Single Circuit with Chicago Code Relief Valve
S = Three Stage Cooling/Single Circuit with Chicago Code Relief Valve and Humidi-MiZer® System
T = Three Stage Cooling/Single Circuit
U = Three Stage Cooling/Single Circuit with Humidi-MiZer System

Cooling Tons

17 = 15.0 tons
24 = 20.0 tons
28 = 25.0 tons

Sensor Options

A = None
B = Return Air Smoke Detector (RA)
C = Supply Air Smoke Detector (SA)
D = RA + SA Smoke Detector
J = Condensate Overflow Switch (COFS)
K = Condensate Overflow Switch + RA Smoke Detector
L = Condensate Overflow Switch + RA and SA Smoke Detectors
M = Condensate Overflow Switch + SA Smoke Detector

Indoor Fan Options - Vane Axial EcoBlue Fan System

2 = Standard/Medium Static Motor
3 = High Static Motor
5 = Standard/Medium Static Motor, Filter Status Switch
6 = High Static Motor - Vertical Supply and Filter Status Switch
J = High Static Motor - Horizontal Supply
L = High Static Motor - Horizontal Supply and Filter Status Switch

Coil Options – RTPF (Outdoor – Indoor – Hail Guard)

A = Al/Cu – Al/Cu
B = Precoat Al/Cu – Al/Cu
C = E-coat Al/Cu – Al/Cu
D = E-coat Al/Cu – E-coat Al/Cu
M = Al/Cu – Al/Cu – Louvered Hail Guard
N = Precoat Al/Cu – Al/Cu – Louvered Hail Guard
P = E-coat Al/Cu – Al/Cu – Louvered Hail Guard
Q = E-coat Al/Cu – E-coat Al/Cu – Louvered Hail Guards
R = Cu/Cu – Al/Cu – Louvered Hail Guard
S = Cu/Cu – Cu/Cu – Louvered Hail Guard

Voltage

1 = 575-3-60
5 = 208/230-3-60
6 = 460-3-60

Design Revision

- = Factory Design Revision

Packaging Compliance

0 = Standard

Electrical Options

A = None
B = HACR Breaker
C = Non-Fused Disconnect (NFDC)
N = Phase Monitor/Protection (PMR)
P = PMR + HACR
Q = PMR + NFDC
1 = HSCCR^a (High Short Circuit Current Rating) Protection

Service Options

0 = None
1 = Unpowered Convenience Outlet (NPCO)
2 = Powered Convenience Outlet (PCO)
3 = Hinged Panels (HP)
4 = Hinged Panels + NPCO
5 = Hinged Access Panels + PCO
6 = MERV-13 Filters (M13)
7 = NPCO + MERV-13 Filters
8 = PCO + MERV-13 Filters
9 = Hinged Panels + MERV-13 Filters
A = HP + NPCO + MERV-13 Filters
B = HP + PCO + MERV-13 Filters
C = Foil Faced Insulation (FF)
D = FF + NPCO
E = FF + PCO
F = FF + HP
G = FF + HP + NPCO
H = FF + HP + PCO
J = FF + MERV-13 Filters
K = FF + NPCO + MERV-13 Filters
L = FF + PCO + MERV-13 Filters
M = FF + HP + MERV-13 Filters
N = FF + HP + NPCO + MERV-13 Filters
P = FF + HP + PCO + MERV-13 Filters

Intake / Exhaust Options

A = None
B = Temperature Economizer with Barometric Relief
F = Enthalpy Economizer with Barometric Relief
L = ULL (Ultra Low Leak) Temperature Economizer with Barometric Relief and CO₂ Sensor
M = ULL Enthalpy Economizer with Barometric Relief and CO₂ Sensor
N = ULL Temperature Economizer with Power Exhaust and CO₂ Sensor, Vertical Only
P = ULL Enthalpy Economizer with Power Exhaust and CO₂ Sensor, Vertical Only
U = ULL Temperature Economizer with Barometric Relief
V = ULL Temperature Economizer with Power Exhaust, Vertical Only
W = ULL Enthalpy Economizer with Barometric Relief
X = ULL Enthalpy Economizer with Power Exhaust, Vertical Only

Base Unit Controls

3 = SystemVu™ Controller

NOTE(S):

^a Not available on the following models/options: 575V, Phase Loss Monitor, Non-Fused Disconnect, HACR Breaker, Powered Convenience Outlet.

50GEQ AHRI Ratings, Cooling Mode^{a,b,c}

UNIT	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (Btuh)	TOTAL POWER (kW)	EER	IEER WITH 3-SPEED INDOOR FAN MOTOR	AHRI RATING CFM	AHRI MEDIUM PART LOAD CFM	AHRI LOW PART LOAD CFM
VERTICAL UNITS									
50GEQT17	3	15	178,000	15.2	11.70	19.0	6,000	3,600	2,400
50GEQT24	3	20	246,000	23.0	10.70	18.5	8,000	4,800	3,200
50GEQT28	3	25	290,000	27.6	10.50	17.5	9,500	5,700	4,750
HORIZONTAL UNITS									
50GEQT17	3	15	176,000	15.3	11.50	18.5	6,000	3,600	2,400
50GEQT24	3	20	242,000	22.8	10.60	18.0	8,000	4,800	3,200
50GEQT28	3	25	284,000	28.1	10.10	16.8	9,500	5,700	4,750

NOTE(S):

- Rated in accordance with AHRI Standards 340/360.
- Rating are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temperature and 95°F (35°C) db outdoor air temperature.
IEER Standard: A measure that expresses cooling part-load EER efficiency for commercial unitary air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities.
- All 50GEQ units comply with ASHRAE 90.1-2019 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) and DOE-2023 (Department of Energy) Energy Standard for minimum IEER requirements.

LEGEND

- AHRI** — Air-Conditioning, Heating and Refrigeration Institute
EER — Energy Efficiency Ratio
IEER — Integrated Energy Efficiency Ratio



50GEQ Vertical and Horizontal Units — AHRI Ratings, Heating Mode^{a,b,c}

UNIT	HEATING, LOW 17°F (−8°C) AMBIENT		HEATING, HIGH 47°F (8°C) AMBIENT		AHRI RATING CFM
	Net Capacity (Btuh)	COP	Net Capacity (Btuh)	COP	
50GEQ*17	96,000	2.30	166,000	3.50	6,000
50GEQ*24	148,000	2.25	244,000	3.40	8,000
50GEQ*28	172,000	2.20	300,000	3.40	9,500

NOTE(S):

- Rated in accordance with AHRI Standards 340/360.
- Rating are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temperature and 95°F (35°C) db outdoor air temperature.
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LEGEND

- AHRI** — Air-Conditioning, Heating and Refrigeration Institute
COP — Coefficient of Performance



Sound Rating Table^a

UNIT	COOLING STAGES	OUTDOOR SOUND (dB) AT 60 Hz ^b									
		A-WEIGHTED ^c	31.5	63	125	250	500	1000	2000	4000	8000
50GEQ*17	3	84	92.6	92.2	83.9	80.4	81.8	78.7	76.5	72.2	65.4
50GEQ*24	3	86	101.3	97.1	88.3	84.4	83.3	80.7	77.4	73.4	67.3
50GEQ*28	3	86	101.3	97.1	88.3	84.4	83.3	80.7	77.4	73.4	67.3

NOTE(S):

- Outdoor sound data is measured in accordance with AHRI.
- Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure depends on specific environmental factors which normally do not match individual applications. Sound power values are independent of the environment and therefore more accurate.
- A-weighted sound ratings filter out very high and very low frequencies, to better approximate the response of "average" human ear. A-weighted measurements for Carrier units are taken in accordance with AHRI.

LEGEND

dB — Decibel

Minimum - Maximum Airflow Ratings (cfm) — Cooling Units and Accessory Electric Heat

UNIT	COOLING				ELECTRIC HEAT ^a	
	MINIMUM 3-SPEED AIRFLOW (LOW SPEED)	MINIMUM 3-SPEED AIRFLOW (MEDIUM SPEED)	MINIMUM 3-SPEED AIRFLOW (HIGH SPEED)	MAXIMUM AIRFLOW CFM	MINIMUM AIRFLOW CFM	MAXIMUM AIRFLOW CFM
50GEQT17	1800	2700	4500	7500	4500	7500
50GEQT24	2400	3600	6000	10000	6000	10000
50GEQT28	3750	4500	7500	12500	7500	12500

NOTE(S):

- Electric heat modules and single point kits are available as field-installed accessories for 50GEQ units.

50GEQ 17 to 28 Physical Data

50GEQ UNIT	50GEQT17	50GEQU17	50GEQT24	50GEQU24	50GEQT28	50GEQU28
NOMINAL TONS	15	15	20	20	25	25
BASE UNIT OPERATING WT (lb) ^a	1627	1627	2057	2057	2125	2125
REFRIGERATION SYSTEM						
No. Circuits/No. Compressors/Type	1/2/Scroll	1/2/Scroll	1/2/Scroll	1/2/Scroll	1/2/Scroll	1/2/Scroll
Puron Advance™ (R-454B) Charge (lb-oz)	32-0	40-2	45-0	56-8	44-10	56-3
Cooling Metering Device	TXV	TXV	TXV	TXV	TXV	TXV
Heating Metering Device	TXV	TXV	TXV	TXV	TXV	TXV
High-Pressure Trip/Reset (psig)	630/505	630/505	630/505	630/505	630/505	630/505
EVAPORATOR COIL						
Material (Tube/Fin)	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu/Al
Coil Type	3/8 in. RTPF	3/8 in. RTPF	3/8 in. RTPF	3/8 in. RTPF	3/8 in. RTPF	3/8 in. RTPF
Rows/FPI	3/17	3/17	4/17	4/17	4/17	4/17
Total Face Area (ft²)	22	22	26	26	26	26
Condensate Drain Connection Size	3/4 in.	3/4 in.	3/4 in.	3/4 in.	3/4 in.	3/4 in.
CONDENSER COIL						
Material (Tube/Fin)	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu/Al	Cu/Al
Coil Type	5/16 in. RTPF	5/16 in. RTPF	5/16 in. RTPF	5/16 in. RTPF	5/16 in. RTPF	5/16 in. RTPF
Rows/FPI	2/18	2/18	2/18	2/18	2/18	2/18
Total Face Area (ft²)	50.1	50.1	70.8	70.8	70.8	70.8
HUMIDIFIER COIL						
Material (Tube/Fin)	—	Cu/Al	—	Cu/Al	—	Cu/Al
Coil Type	—	5/16 in. RTPF	—	5/16 in. RTPF	—	5/16 in. RTPF
Rows / FPI	—	1/18	—	1/18	—	1/18
Total Face Area (ft²)	—	21.4	—	25.3	—	25.3
EVAPORATOR FAN AND MOTOR						
Standard/Medium Static 3 Phase						
Motor Qty / Drive Type	2 / Direct	2 / Direct	2 / Direct	2 / Direct	2 / Direct	2 / Direct
Max Cont bhp	2.4	2.4	2.4	2.4	3.0	3.0
Range (rpm)	250-2000	250-2000	250-2000	250-2000	250-2200	250-2200
Fan Qty / Type	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial
Fan Diameter (in.)	22	22	22	22	22	22
Vertical High Static 3 Phase						
Motor Qty / Drive Type	2 / Direct	2 / Direct	2 / Direct	2 / Direct	2 / Direct	2 / Direct
Max Cont bhp	3	3	5	5	5	5
Range (rpm)	250-2200	250-2200	250-2200	250-2200	250-2200	250-2200
Fan Qty / Type	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial
Fan Diameter (in.)	22	22	22	22	22	22
Horizontal High Static 3 Phase						
Motor Qty / Drive Type	2 / Direct	2 / Direct	2 / Direct	2 / Direct	2 / Direct	2 / Direct
Max Cont bhp	5	5	5	5	5	5
Range (rpm)	250-2200	250-2200	250-2200	250-2200	250-2200	250-2200
Fan Qty / Type	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial	2 / Vane Axial
Fan Diameter (in.)	22	22	22	22	22	22
CONDENSER FAN AND MOTOR						
Qty / Motor Drive Type	4 / Direct	4 / Direct	6 / Direct	6 / Direct	6 / Direct	6 / Direct
Motor hp / rpm	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b
Fan Diameter (in.)	22	22	22	22	22	22
FILTERS						
RA Filter Qty / Size (in.)	6 / 25x25x2	6 / 25x25x2	9 / 20x25x2	9 / 20x25x2	9 / 20x25x2	9 / 20x25x2
OA Inlet Screen Qty / Size (in.)	4 / 16x25x1	4 / 16x25x1	4 / 16x25/1	4 / 16x25/1	4 / 16x25/1	4 / 16x25/1

NOTE(S):

- a. Base unit operating weight does not include weight of options.
b. 1050/770/450/350/265 rpm

LEGEND

bhp — Brake Horsepower
FPI — Fins Per Inch
OA — Outdoor Air
RA — Return Air

Options and accessories



ITEM	FACTORY- INSTALLED OPTION	FIELD- INSTALLED ACCESSORY
ELECTRIC HEAT		
Electric Resistance Heaters	X	X
Single Point Kits		X
CABINET		
Hinged Access Panels	X	
MERV-13, 4 in. Filters	X	
MERV-13, 2 in. Filters		X
MERV-8, 2 in. Filters		X
4 in. Filter Rack (filters not included)		X
COIL OPTIONS		
Cu/Cu Indoor and/or Outdoor Coils ^a	X	
Pre-Coated Outdoor Coils	X	
Premium, E-Coated Outdoor Coils	X	
HUMIDITY CONTROL		
Humidi-MiZer [®] Adaptive Dehumidification System	X	
CONDENSER PROTECTION		
Condenser Coil Hail Guard (louvered design)	X	X
PRESSURE RELIEF		
Pressure Relief Valve ^b	X	
CONTROLS		
Thermostats, Temperature Sensors, and Subbases		X
Smoke Detector (supply and/or return air)	X	X
Horn Strobe Annunciator ^c		X
Phase Monitor	X	X
ECONOMIZERS AND OUTDOOR AIR DAMPERS		
EconoMiZer [®] 2 for DDC Controls (Low and Ultra Low Leak air damper models) ^d	X	X
Motorized Two-Position Outdoor-Air Damper		X
Manual Outdoor-Air Damper (25% and 50%)		X
Barometric Relief ^e	X	X
Power Exhaust — centrifugal design	X	X
Condensate Overflow Switch	X	X
ECONOMIZER SENSORS AND IAQ DEVICES		
Single Dry Bulb Temperature Sensors ^f	X	X
Differential Dry Bulb Temperature Sensors ^f		X
Differential Enthalpy Sensors ^f		X
CO ₂ Sensor (wall, duct, or unit mounted) ^f	X	X
INDOOR MOTOR AND DRIVE		
Multiple Motor and Drive Packages	X	
Fan Filter Status Switch	X	X
POWER OPTIONS		
Convenience Outlet (powered)	X	
Convenience Outlet (unpowered)	X	
Convenience Outlet, 20 amp (unpowered)		X
HACR Circuit Breakers ^g	X	
Non-Fused Disconnect ^h	X	
High SCCR Protection ⁱ	X	
ROOF CURBS		
Roof Curb 14 in. (356 mm)		X
Roof Curb 24 in. (610 mm)		X

NOTE(S):

- Cu/Cu coils are only available with louvered hail guards.
- The Pressure Relief Valve is single use and must be replaced after refrigerant discharge.
- Requires a field-supplied 24V transformer for each application. See price pages for details.
- Models with SystemVu controls comply with California Title 24 Fault Detection and Diagnostic (FDD).
- Included with economizer.
- Sensors used to optimize economizer performance.
- HACR circuit breaker cannot be used when unit MOCB electrical rating exceeds:
 - 17-24 sizes -
 - 208V/230V = 150 amps
 - 460V = 70 amps
 - 575V = 50 amps
 - 28 size -
 - 208V/230V = 200 amps
 - 460V = 90 amps
 - 575V = 70 amps
 HACR circuit breaker on 575 volt can only be used on Wye power supply. Delta power supply is prohibited. Carrier RTUBuilder automatically selects the amps limitations.
- Non-fused disconnect switch cannot be used when unit FLA electrical rating exceeds:
 - 208V/230V = 200 amps
 - 460V/575V = 100 amps
- High SCCR (Short Circuit Current Rating) is not available on the following: Phase loss monitor, Non-fused disconnect, Powered convenience outlet, and 575V models

Factory-installed options

Economizer (dry-bulb or enthalpy)

Economizers save money. They bring in fresh, outside air for ventilation; and provide cool, outside air to cool your building. This is the preferred method of low-ambient cooling. When coupled to CO₂ sensors, economizers can provide even more savings by coupling the ventilation air to only that amount required.

Economizers are available, installed and tested by the factory, with either enthalpy or dry-bulb temperature inputs. Additional sensors are available as accessories to optimize the economizers. Economizers include barometric relief system to help equalize building pressures.

Economizers can be factory-installed or easily field-installed.

Unit mounted CO₂ sensor

The CO₂ sensor works with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO₂ sensor detects their presence through increasing CO₂ levels, and opens the economizer appropriately. When the occupants leave, the CO₂ levels decrease, and the sensor appropriately closes the economizer. This intelligent control of the ventilation air, called demand controlled ventilation (DCV), reduces the overall load on the rooftop, saving money. It is also available as a field-installed accessory.

Smoke detector (supply and/or return air)

Our smoke detectors make your application safer and your job easier. Carrier smoke detectors immediately shut down the rooftop unit when smoke is detected. They are available, installed by the factory, for supply air, return air, or both.

Optional Humidi-MiZer[®] adaptive dehumidification system with patent subcooling technology

Carrier's Humidi-MiZer adaptive dehumidification system is an all-inclusive factory-installed option that can be ordered with any WeatherMaster[®] 50GEQ 17-28 rooftop unit.

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

The Humidi-MiZer adaptive dehumidification system has a unique dual operational mode setting. The Humidi-MiZer system provides greater dehumidification of the occupied space by 2 modes of dehumidification operations in addition to its normal design cooling mode.

The WeatherMaster 50GEQ 17-28 rooftop coupled with the Humidi-MiZer system is capable of operating in normal design cooling mode, sub-cooling 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.

Sub-cooling 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.

Hinged access panels

Allows access to unit's major components with specifically designed hinged access panels. Panels are filter, control box access indoor fan motor access.

Cu/Cu (indoor) coils

Copper fins and copper tubes are mechanically bonded to copper tubes and copper tube sheets. A polymer strip prevents coil assembly from contacting the sheet metal coil pan to minimize the potential for galvanic corrosion between coil and pan. Only available with louvered hail guards.

E-coated (outdoor and indoor) coils

These coils feature a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. The coating process ensures complete coil encapsulation of tubes, fins, and headers.

Pre-coated outdoor coils

These coils feature a durable epoxy-phenolic coating that provides protection in mildly corrosive coastal environments. The coating minimizes galvanic action between dissimilar metals. The coating is applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube.

Condenser coil hail guard

These sleek, louvered panels protect the condenser coil from hail damage, foreign objects, and incidental contact. This can be purchased as a factory-installed option or as a field-installed accessory.

Convenience outlet (powered or unpowered)

Reduce service and/or installation costs by including a convenience outlet in your specification. Carrier will install this service feature at our factory. Provides a convenient, 15 amp, 115v GFCI receptacle with "Wet in Use" cover. The "powered" option allows the installer to power the outlet from the line side of the disconnect or load side as required by code. The "unpowered" option is to be powered from a separate 115/120v power source.

The unpowered convenience outlet is available as a 15 amp factory-installed option or a 20 amp field-installed accessory.

Non-fused disconnect

This OSHA-compliant, factory-installed, safety switch allows a service technician to locally secure power to the rooftop. When selecting a factory-installed non-fused disconnect, note they are sized for the unit as ordered from the factory. The sizing of these do not accommodate field-installed items such as power exhaust devices, etc. If field installing electric heat with factory-installed non-fused disconnect switch, a single point kit may or may not be required.

HACR Breaker

These manual reset devices provide overload and short circuit protection for the unit. Breakers are factory wired and mounted on the units, with an access cover to provide protection from the environment.

Condensate overflow switch

This sensor and related controller monitors the condensate level in the drain pan and shuts down compression operation when overflow conditions occur. It includes:

- Indicator light — solid red (more than 10 seconds on water contact — compressors disabled), blinking red (sensor disconnected)
- 10-second delay to break — eliminates nuisance trips from splashing or waves in pan (sensor needs 10 seconds of constant water contact before tripping)
- Disables the compressors operation when condensate plug is detected, but still allows fans to run for economizer.

Power exhaust with barometric relief

Superior internal building pressure control. This field-installed accessory may eliminate the need for costly, external pressure control fans.

MERV-13 4 in. return air filters

This factory option upgrades the return air filters from standard unit filters to high efficiency MERV-13 filters. Non-woven MERV-13 filter media with high strength, moisture-resistant frame. Filter media is securely fastened inside the filter frame on all 4 sides.

High Short Circuit Current Rating (SCCR) protection

This factory-installed option provides high short circuit current protection to each compressor, plus all indoor and outdoor fan motors of 60 kA (for 208/230-3-60 units) and 65 kA (for 460-3-60 units) against high potential fault current situations.

Standard unit comes with 5 kA rating. This option is not available with factory installed Non-Fused Disconnect, Phase loss monitor/protection, Powered convenience outlet, and 575 Volt models.

Pressure Relief Valve

Units with the factory-installed pressure relief option contain a pressure relief valve in the unit liquid line for compliance with Chicago Municipal Code 18-28-1102.3. The pressure relief valve is set to open above 650 PSI and is intended to vent refrigerant in the event the refrigerant pressure exceeds the equipment design pressure. The pressure relief valve is single use and must be replaced after refrigerant discharge.

Field-installed accessories

Filter maintenance indicator

When the optional factory-installed filter maintenance indicator is used, a factory-installed differential pressure switch measures pressure drop across the outside air filter and activates a field-supplied dry contact indicator when the pressure differential exceeds the adjustable switch setpoint.

Condenser coil hail guard

Sleek, louvered panels protect the condenser coil from hail damage, foreign objects, and incidental contact. This can be purchased as a factory-installed option or as a field-installed accessory.

Differential enthalpy sensor

The differential enthalpy sensor is comprised of an outdoor and return air enthalpy sensors to provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.

Wall or duct mounted CO₂ sensor

The IAQ sensor shall be available in duct or wall mount. The sensor provides demand ventilation indoor air quality (IAQ) control.

4 in. filter rack kit

The 4 in. filter rack accessory kit is designed to hold 4 in. MERV-8 or MERV-13 filters. Filters not included in kit.

MERV-13 2 in. return air filters

This kit includes MERV-13 2 in. filters (qty 4) to accommodate unit filter rack size.

MERV-8 2 in. return air filters

This kit includes MERV-8 2 in. filters (qty 4) to accommodate unit filter rack size.

Phase monitor protection

The Phase Monitor Control will monitor the sequence of 3-phase electrical system to provide a phase reversal protection; and monitor the 3-phase voltage inputs to provide a phase loss protection for the 3-phase device. It will work on either a Delta or Wye power connection.

Roof curb (14 in./356 mm or 24 in./610 mm)

Full perimeter roof curb with exhaust capability provides separate air streams for energy recovery from the exhaust air without supply air contamination.

Filter status indicator accessory

Monitors static pressure across supply and exhaust filters and provides indication when filters become clogged.

Power exhaust

Superior internal building pressure control. This field-installed accessory may eliminate the need for costly, external pressure control fans.

Manual OA damper

Manual outdoor air dampers are an economical way to bring in ventilation air. The dampers are available in 25% and 50% versions.

Motorized Two-Position damper

The Carrier two-position, motorized outdoor air damper admits up to 100% outside air. Using reliable, gear-driven technology, the two-position damper opens to allow ventilation air and closes when the rooftop stops, stopping unwanted infiltration.

Electric heaters

Carrier offers a full-line of field-installed accessory heaters. The heaters are very easy to use, install and are all pre-engineered and certified.

Options and Accessory Weights^a

OPTION / ACCESSORY NAME	50GEQ UNIT WEIGHT					
	17		24		28	
	lb	kg	lb	kg	lb	kg
Humidi-MiZer® System	82	37	90	37	90	41
Power Exhaust	198	90	198	90	198	90
EconoMi\$er® 2	245	111	245	111	245	111
High Electric Heat	85	39	85	39	85	39
Largest Single Point Box	20	9	20	9	20	9
Hail Guard (louvered)	90	41	100	46	100	46
Cu/Cu Condenser Coil	166	76	244	111	278	126
Cu/Cu Evaporator Coil	128	58	163	74	163	74
Roof Curb (14 in. curb)	240	109	255	116	255	116
Roof Curb (24 in. curb)	340	154	355	161	355	161
CO₂ Sensor	5	3	5	3	5	3
Flue Discharge Deflector	7	3	7	3	7	3
Optional Indoor Motor^b	30	14	30	14	0	0
Return Air Smoke Detector	7	3	7	3	7	3
Supply Air Smoke Detector	7	3	7	3	7	3
Fan Filter Switch	2	1	2	1	2	1
Non-Fused Disconnect	15	7	15	7	15	7
Powered Convenience Outlet^c	36	16	36	16	36	16
Unpowered Convenience Outlet	5	2	5	2	5	2
Enthalpy Sensor	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1

NOTE(S):

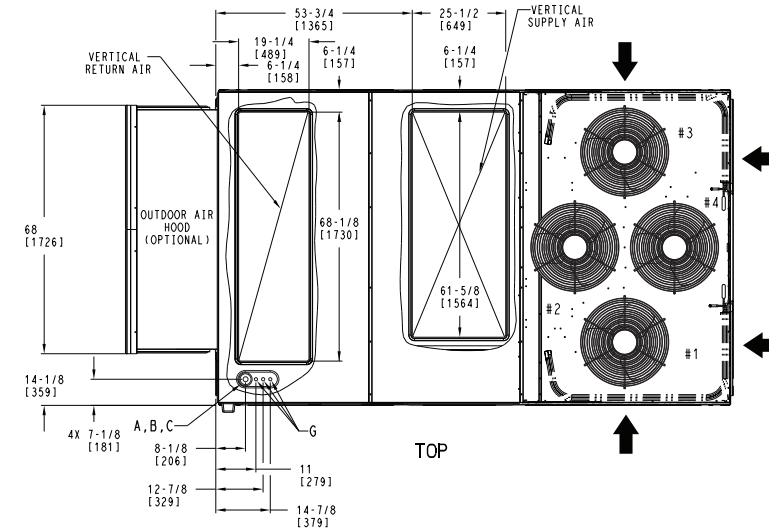
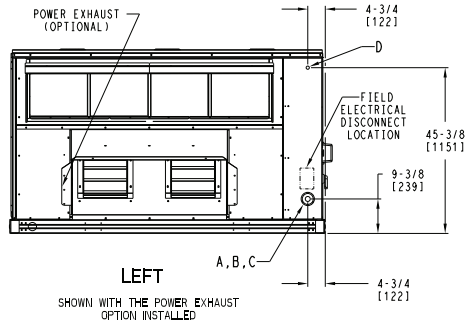
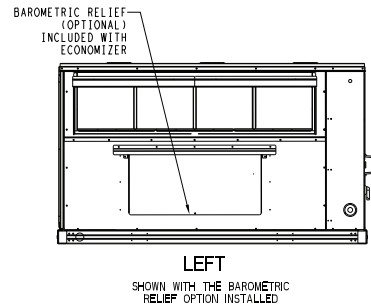
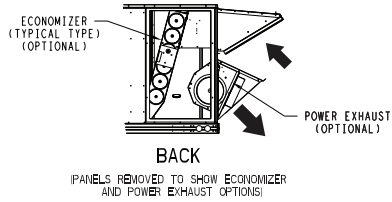
- Where multiple variations are available, the heaviest combination is listed.
- Add the Optional Indoor Motor weight to the weight of the base unit.
- Weight includes convenience outlet and convenience outlet transformer.

50GEQ*17 Base Unit Dimensions

Carrier

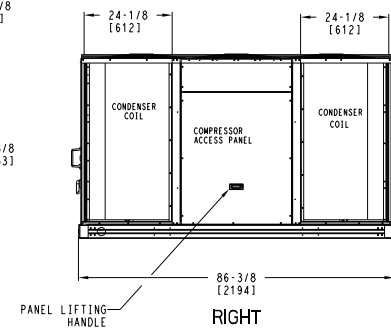
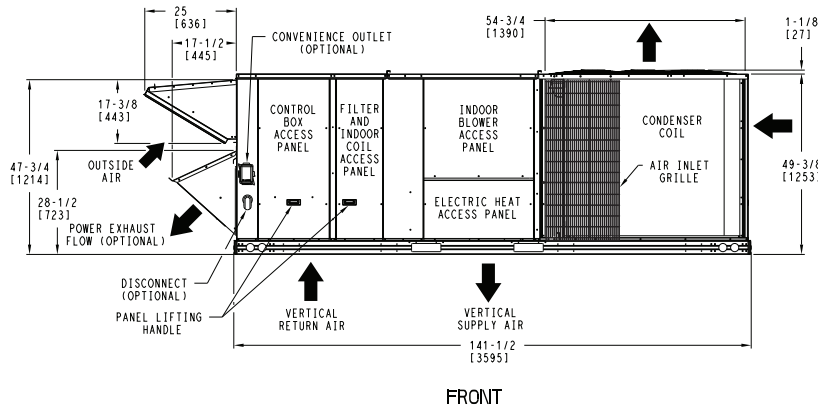
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CONNECTION SIZES	
A	1 3/8" DIA [35] FIELD POWER SUPPLY KNOCKOUT
B	3" DIA [76] FIELD POWER SUPPLY KNOCKOUT
C	3 5/8" DIA [92] FIELD POWER SUPPLY KNOCKOUT
D	7/8" DIA [22] FIELD CONTROL WIRING HOLE
G	7/8" DIA [22] FIELD CONTROL WIRING KNOCKOUT

- NOTES:
1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS.
 2. CENTER OF GRAVITY
 3. DIRECTION OF AIR FLOW
 4. ALL VIEW DRAWN USING 3RD ANGLE



DEDICATED VERTICAL AIRFLOW UNIT
17 SIZE

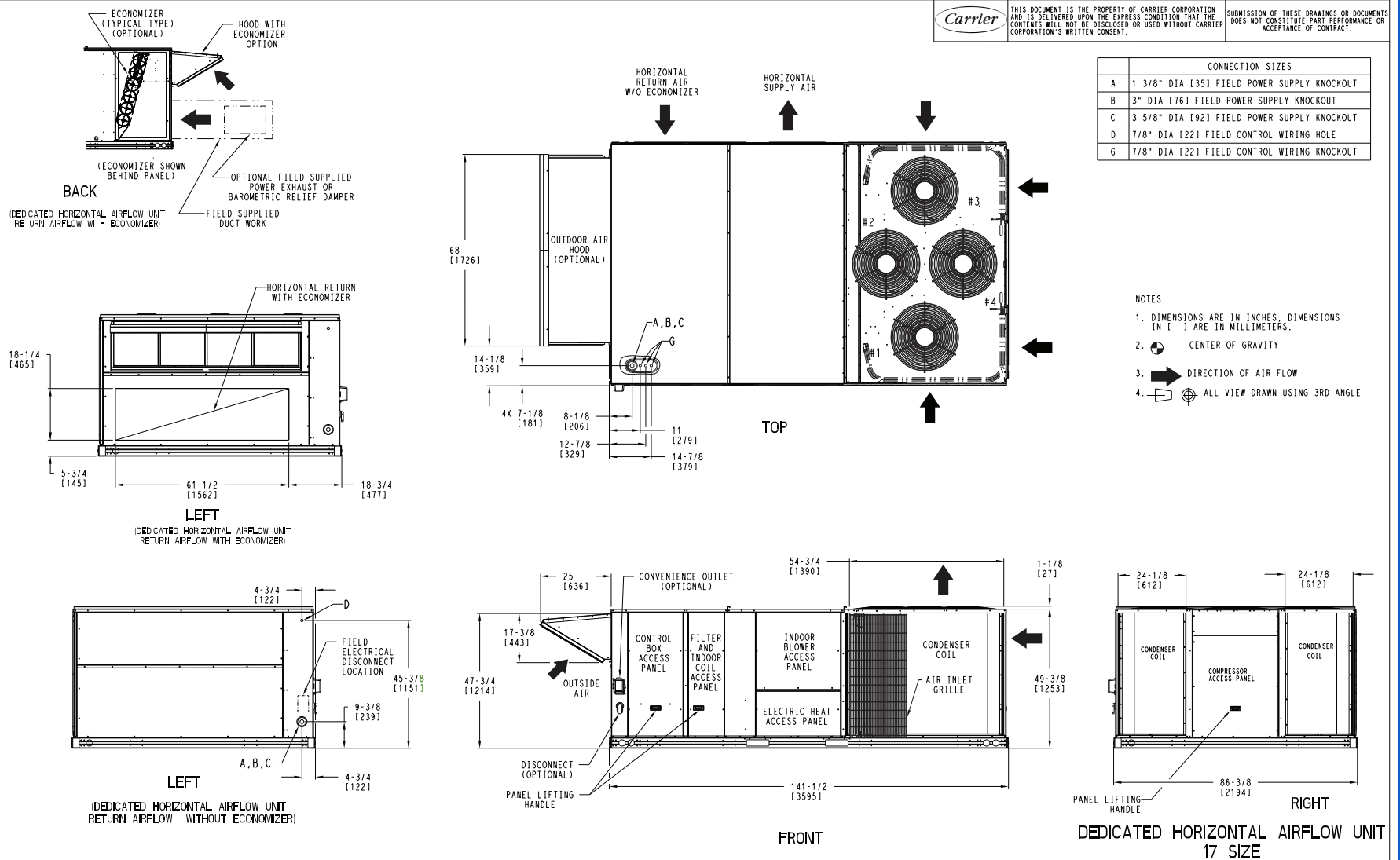
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GEQ 17 SINGLE ZONE ELECTRICAL HEAT PUMP	50HE008125	REV
U.S. ECCN:NSR	1 OF 5	08/19/24	-			-

50GEQ*17 Base Unit Dimensions (cont)

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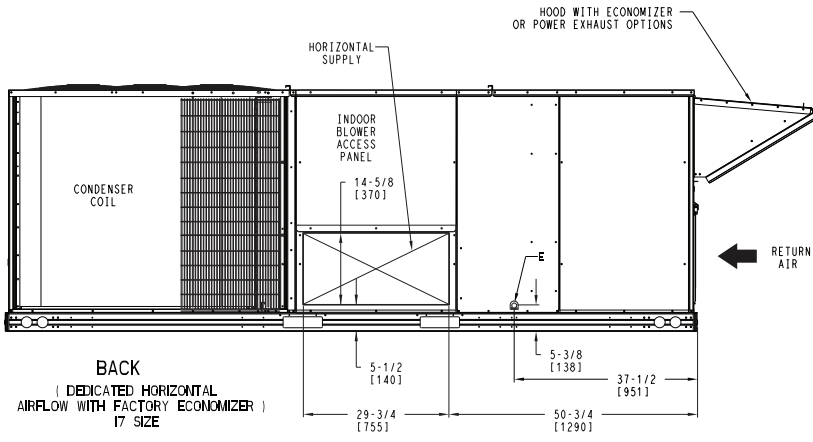
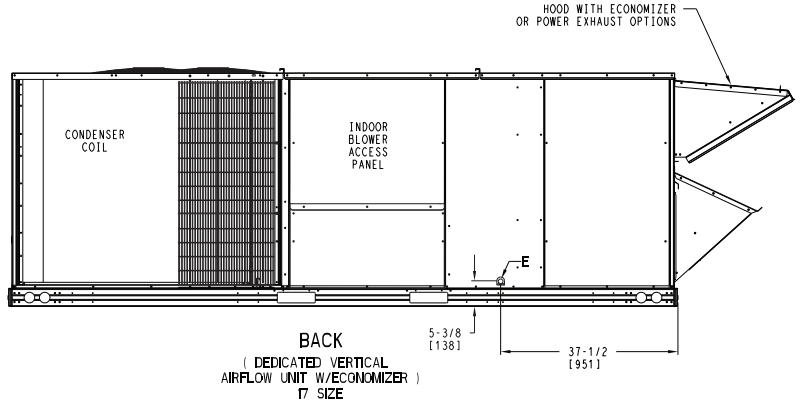
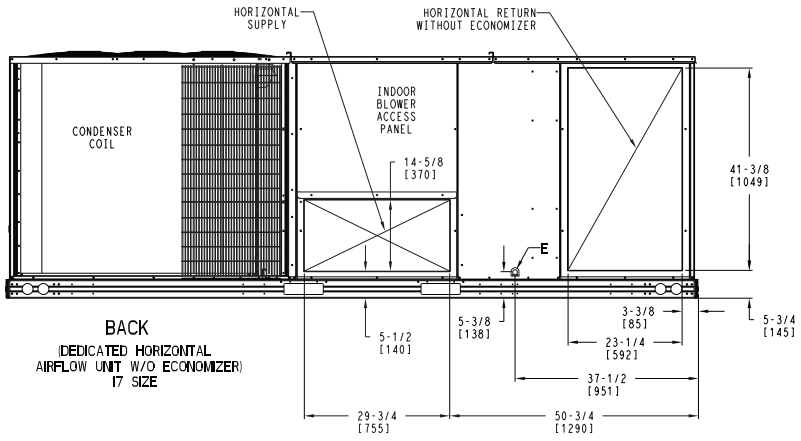


ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GEQ 17 SINGLE ZONE ELECTRICAL HEAT PUMP	50HE008125	REV
U.S. ECCN:NSR	2 OF 5	08/19/24	-			-

50GEQ*17 Base Unit Dimensions (cont)

CONNECTION SIZES	
E	3/4"-14 NPT CONDENSATE DRAIN

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ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GEQ 17 SINGLE ZONE ELECTRICAL HEAT PUMP	50HE008125	REV
U.S. ECCN:NSR	3 OF 5	08/19/24	-			-



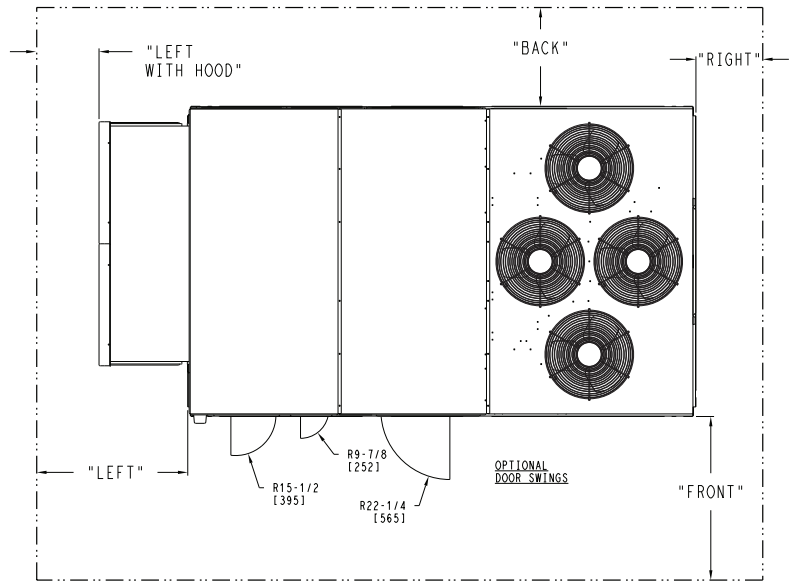
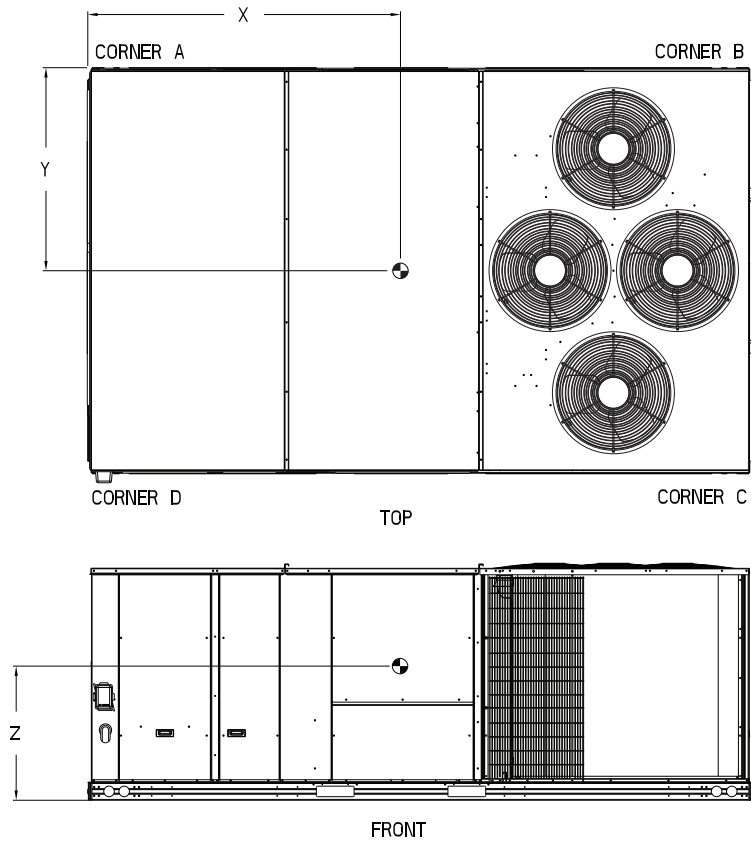
50GEQ*17 Base Unit Dimensions (cont)

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GEQ 17	RTPF	1925	873	430	195	514	233	534	242	447	203	77 [1956]	44 [1118]	16 1/2 [419]

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* STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT AND WITHOUT PACKAGING.
FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.



- NOTES:
- 1. CLEARANCE ABOVE THE UNIT TO BE 72"
 - 2. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

SURFACE	CLEARANCE		OPERATING CLEARANCE
	SERVICE WITH: CONDUCTIVE BARRIER	SERVICE WITH: NONCONDUCTIVE BARRIER	
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK	42 [1067mm]	36 [914mm]	18 [457mm]
LEFT WITH HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION U.S. ECCN:NSR	SHEET 4 OF 5	DATE 08/19/24	SUPERCEDES -	50GEQ 17 SINGLE ZONE ELECTRICAL HEAT PUMP	50HE008125	REV -
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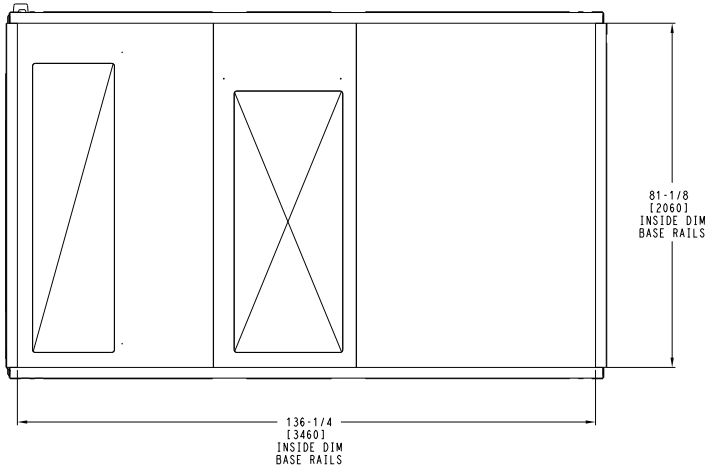
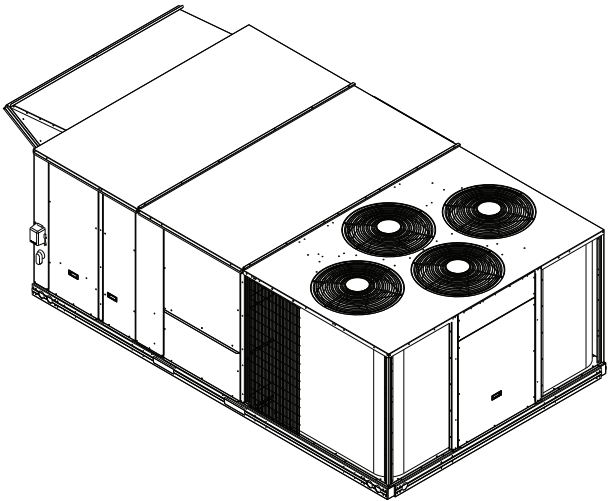
50GEQ*17 Base Unit Dimensions (cont)



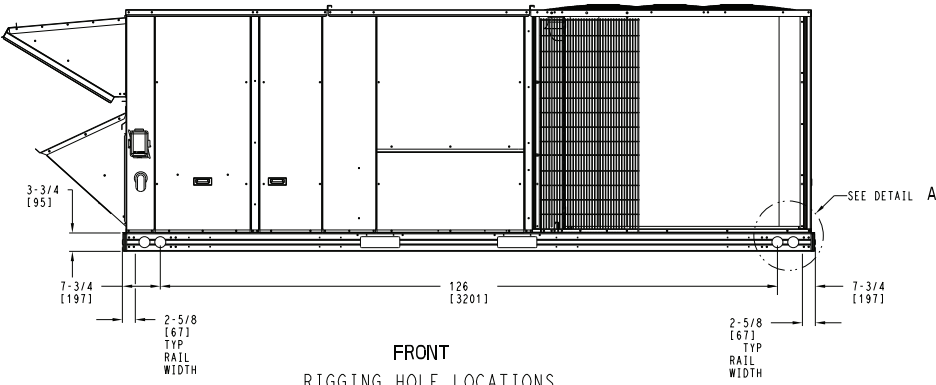
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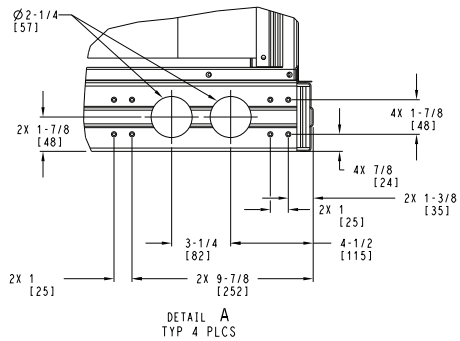
Base unit dimensions (cont)



BOTTOM
INSIDE BASERAIL DIMENSIONS



FRONT
RIGGING HOLE LOCATIONS



DETAIL A
TYP 4 PLCS

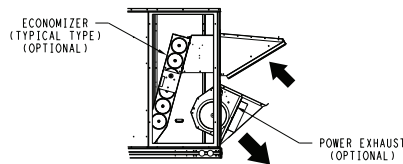
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GEQ 17 SINGLE ZONE ELECTRICAL HEAT PUMP	50HE008125	REV
U.S. ECCN: NSR	5 OF 5	08/19/24	-			-

50GEQ*24-28 Base Unit Dimensions

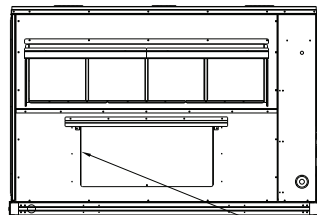
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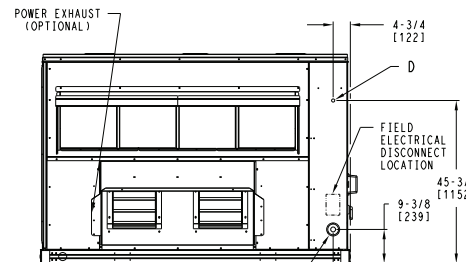
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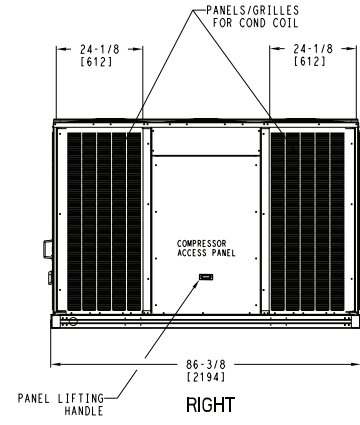
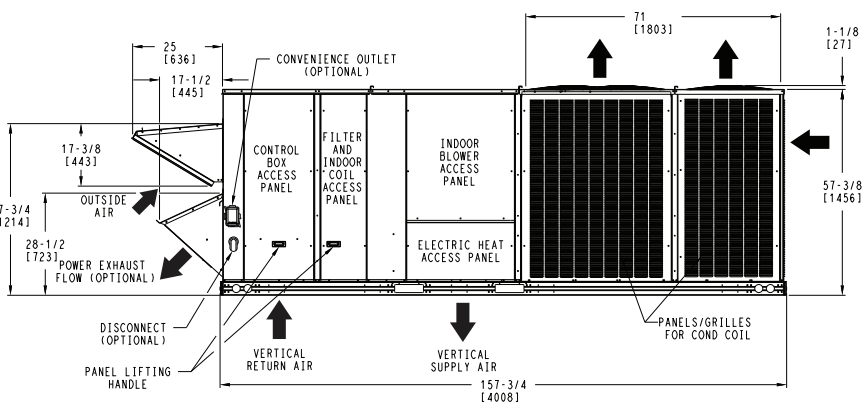
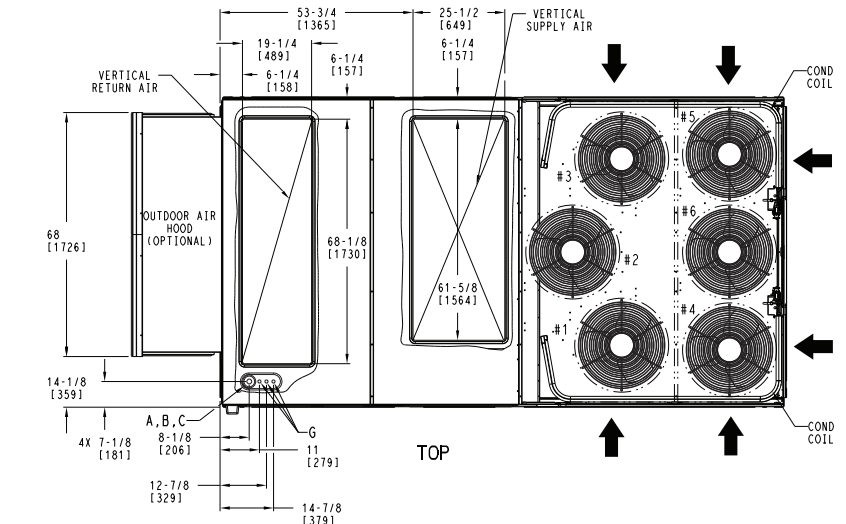
BACK
(PANELS REMOVED TO SHOW ECONOMIZER AND POWER EXHAUST OPTIONS)



LEFT
SHOWN WITH THE BAROMETRIC RELIEF OPTION INSTALLED



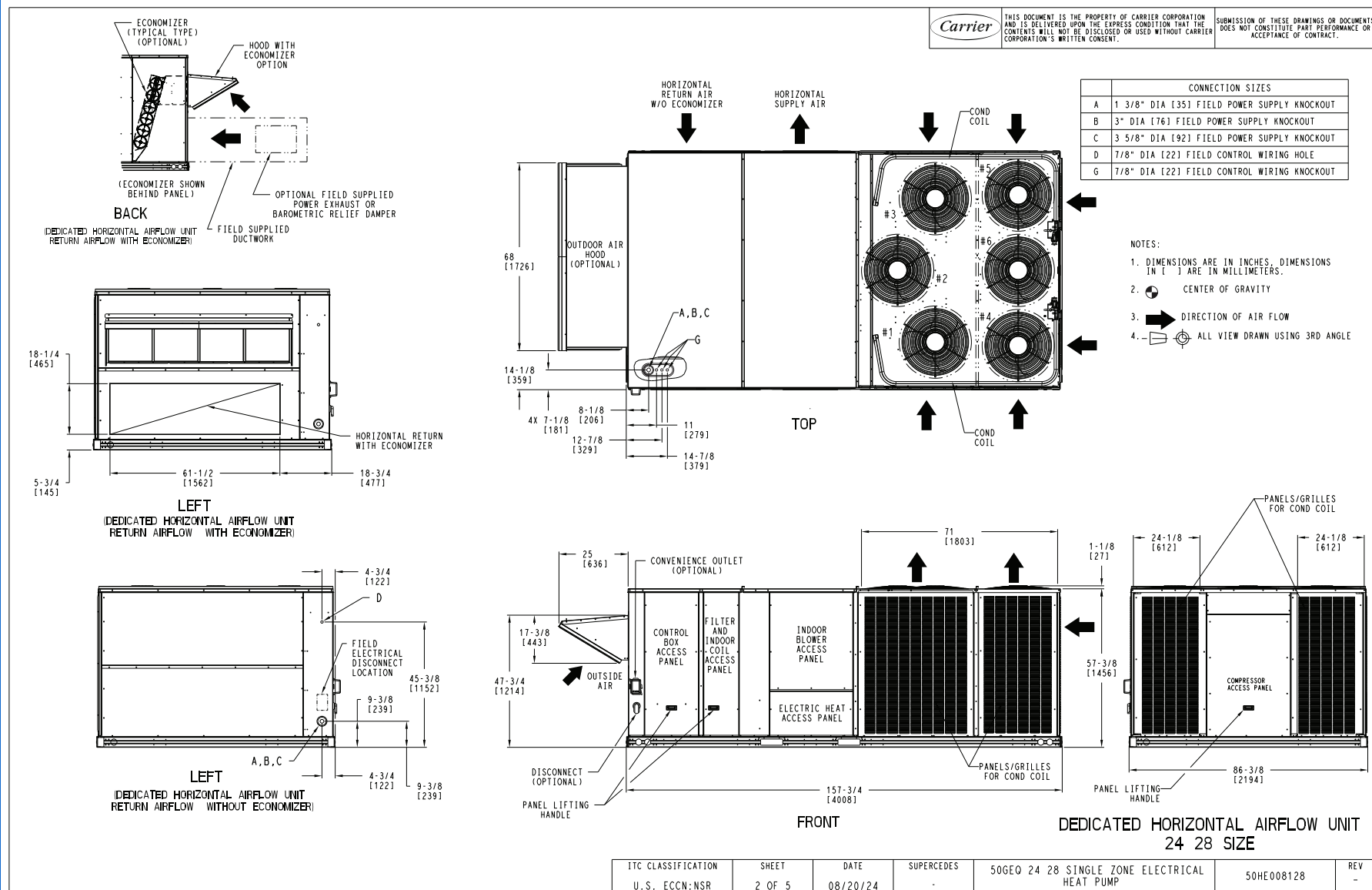
LEFT
SHOWN WITH THE POWER EXHAUST OPTION INSTALLED



DEDICATED VERTICAL AIRFLOW UNIT
24 28 SIZE

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GEQ 24 28 SINGLE ZONE ELECTRICAL HEAT PUMP	50HE008128	REV
U.S. ECCN:NSR	1 OF 5	08/20/24	-			-

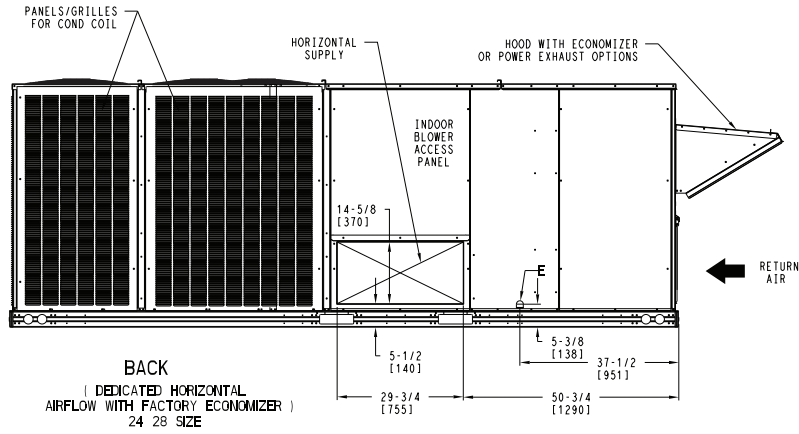
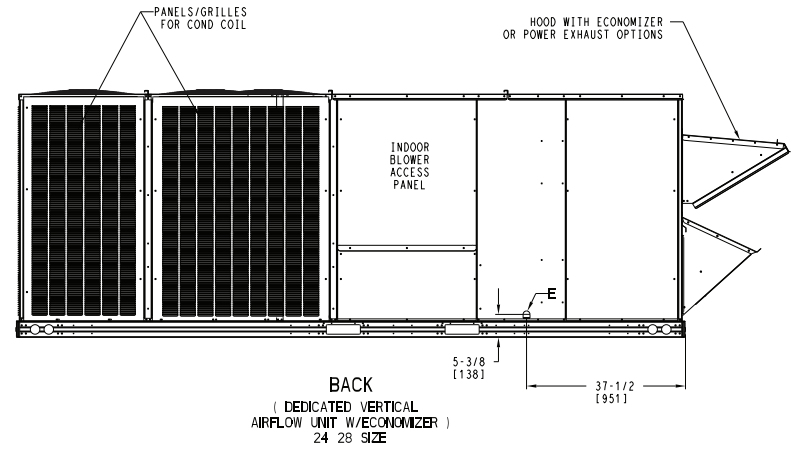
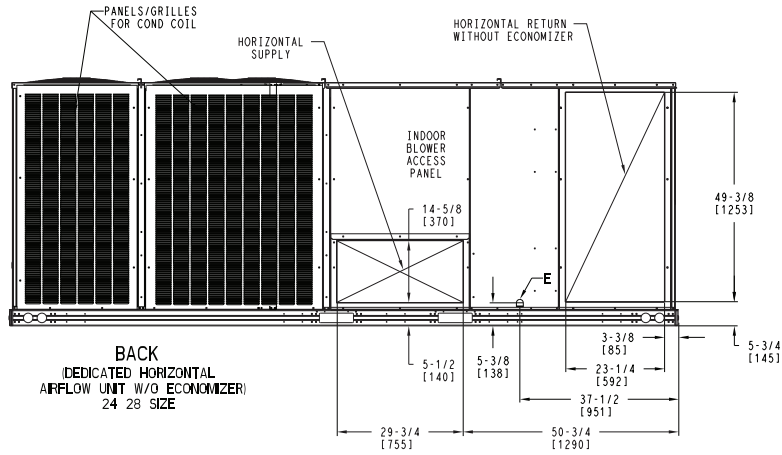




50GEQ*24-28 Base Unit Dimensions (cont)

CONNECTION SIZES	
E	3/4"-14 NPT CONDENSATE DRAIN

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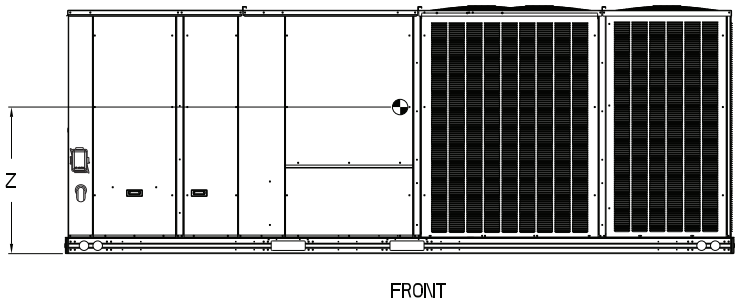
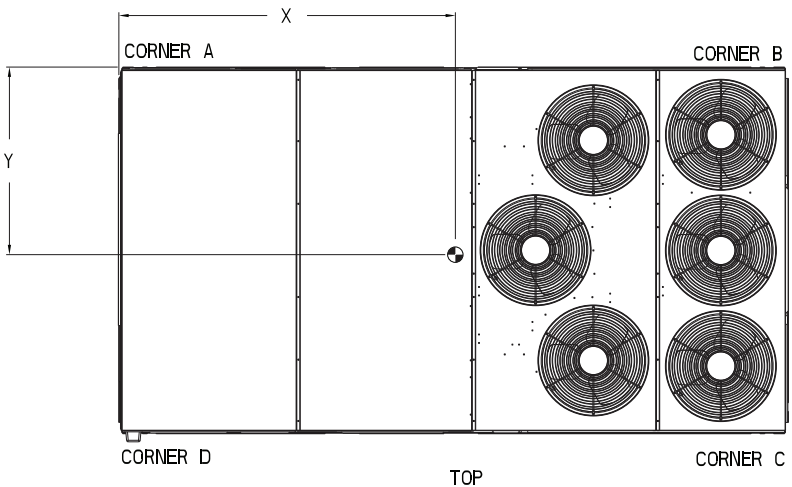
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50 GEO 24 28 SINGLE ZONE ELECTRICAL HEAT PUMP	50HE008128	REV
U.S. ECCN:NSR	3 OF 5	08/20/24	-			-



50GEQ*24-28 Base Unit Dimensions (cont)

UNIT	OUTDOOR COIL TYPE	STD UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GEQ 24	RTPF	2307	1046	479	217	586	266	683	310	559	254	86 3/4 [2203]	46 1/2 [1181]	19 [483]
50GEQ 28	RTPF	2370	1075	487	221	607	275	708	321	568	258	87 1/2 [2223]	46 1/2 [1181]	19 [483]

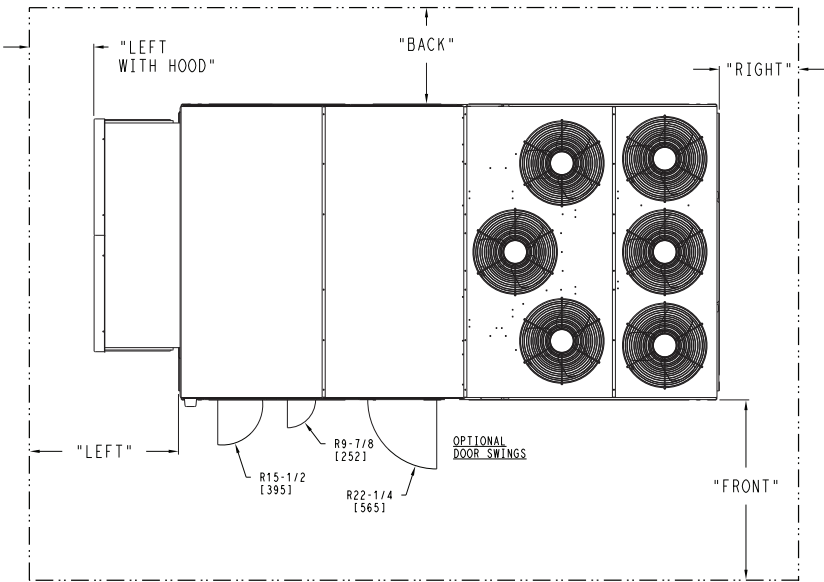
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Carrier

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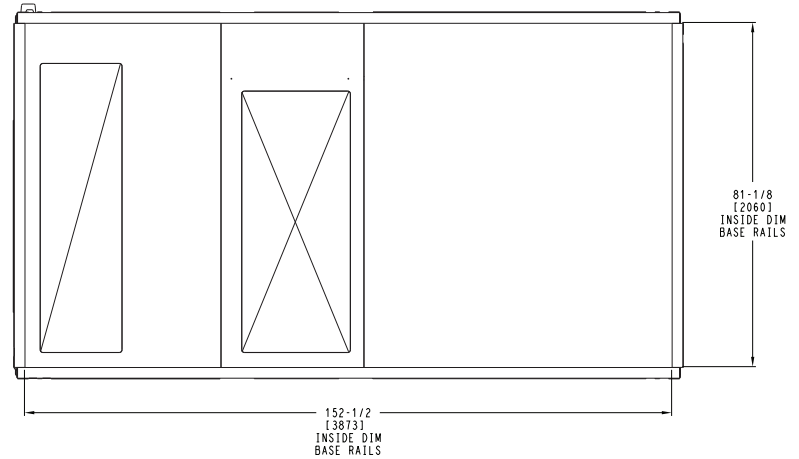
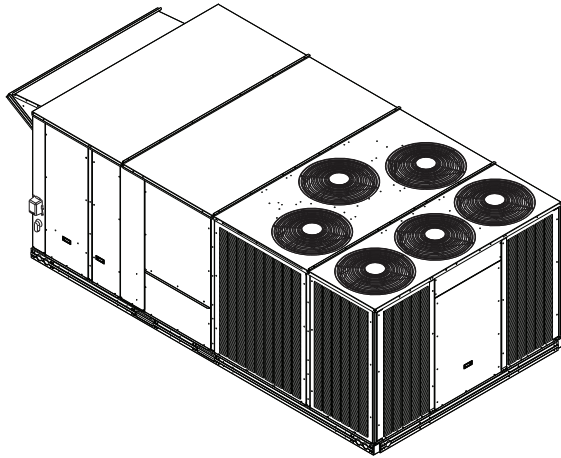
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ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GEQ 24 28 SINGLE ZONE ELECTRICAL HEAT PUMP	50HE008128	REV
U.S. ECCN:NSR	4 OF 5	08/20/24	-			-

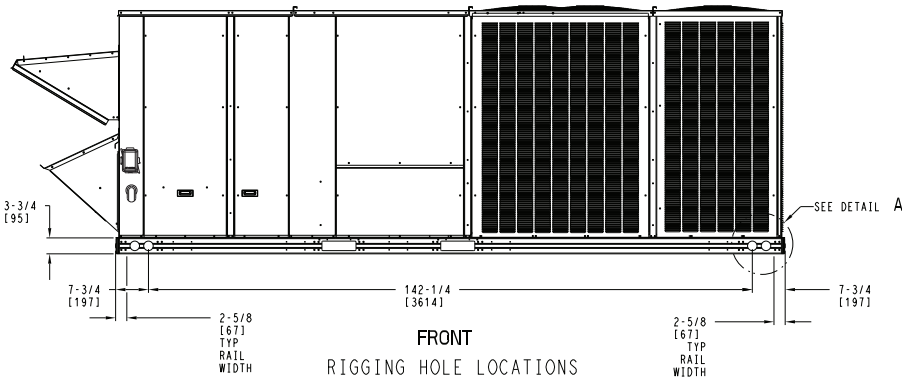


50GEQ*24-28 Base Unit Dimensions (cont)

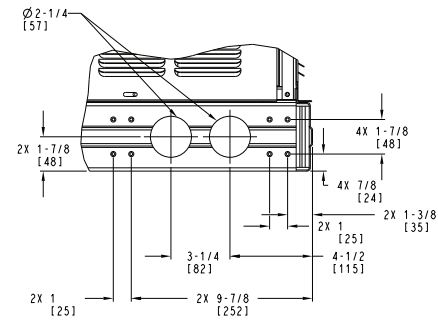
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BOTTOM
INSIDE BASERAIL DIMENSIONS



FRONT
RIGGING HOLE LOCATIONS

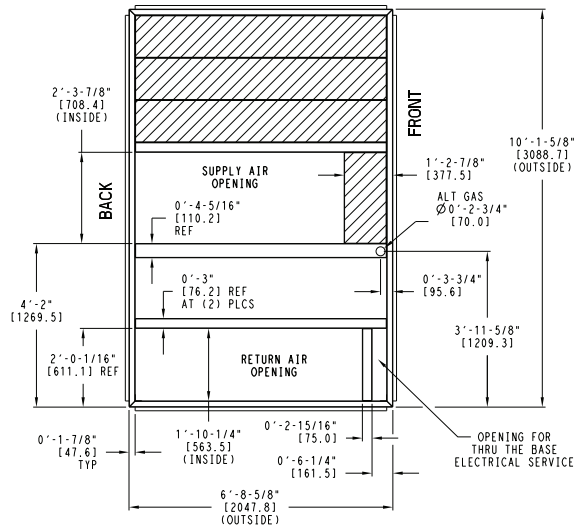


DETAIL A
TYP 4 PLCS

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GEQ 24 28 SINGLE ZONE ELECTRICAL	50HE008128	REV
U.S. ECCN:NSR	5 OF 5	08/20/24	-	HEAT PUMP		-

Roof Curb Dimensions — 50GEQ*17

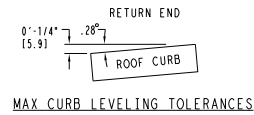
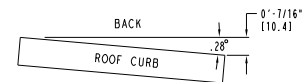
"A"	ROOF CURB ACCESSORY
1'-2" [356.0]	CRRFCURB045A00
2'-0" [610.0]	CRRFCURB046A00



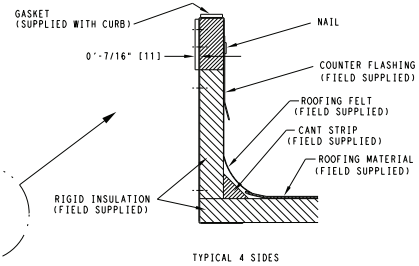
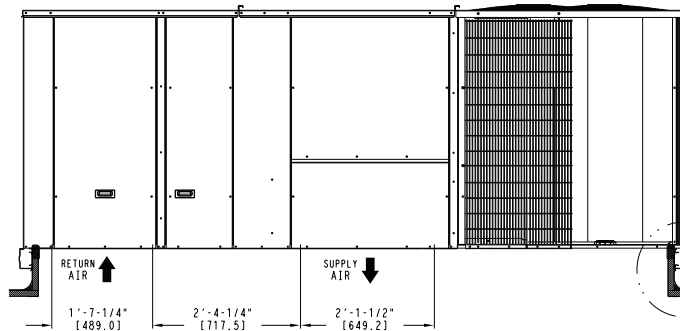
NOTES:

- 1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
- 2 DIMENSIONS IN [] ARE IN MILLIMETERS.
- 3 ROOF CURB GALVANIZED STEEL.
- 4 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)
- 5 SERVICE CLEARANCE 4 ft ON EACH SIDE

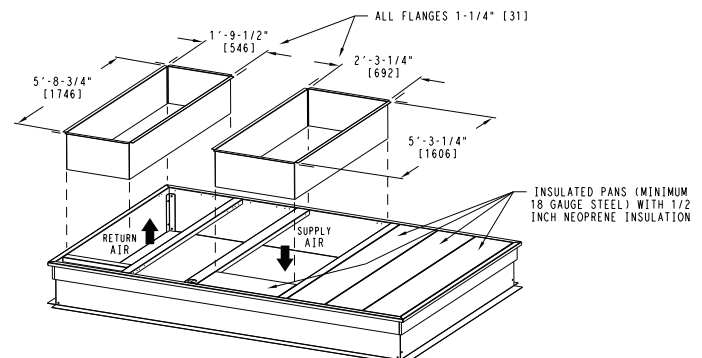
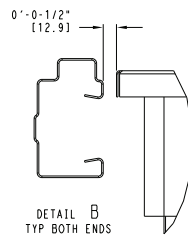
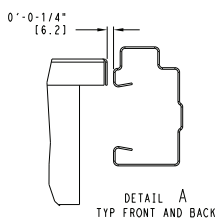
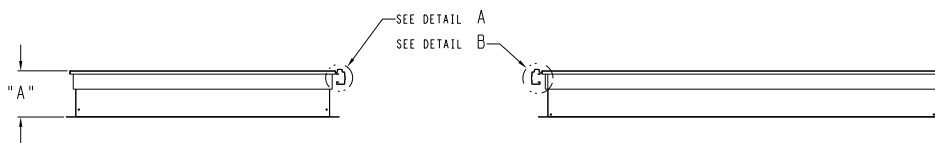
➔ DIRECTION OF AIR FLOW



MAX CURB LEVELING TOLERANCES

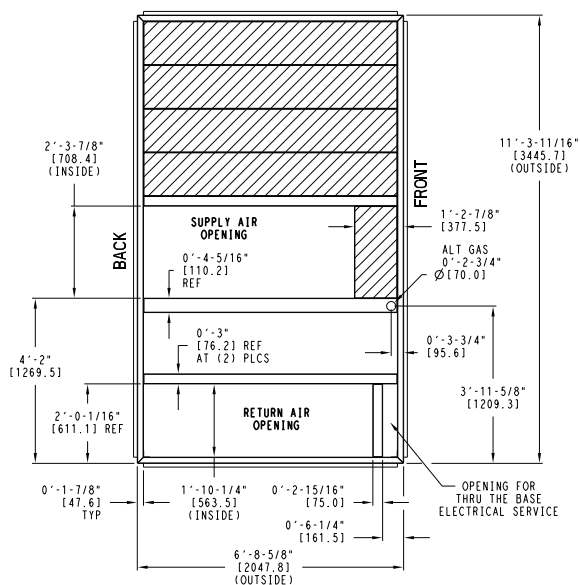


TYPICAL 4 SIDES



Roof Curb Dimensions — 50GEQ*24-28

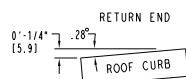
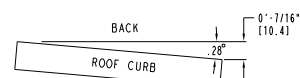
A	ROOF CURB ACCESSORY
1'-2" [356.0]	CRRFCURB047A00
2'-0" [610.0]	CRRFCURB048A00



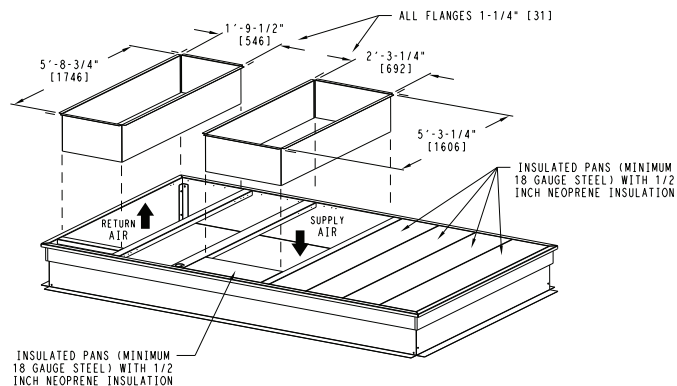
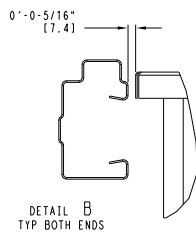
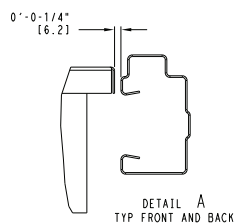
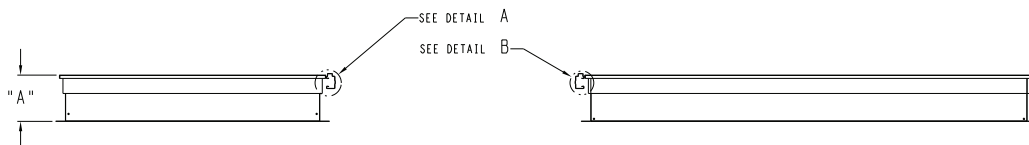
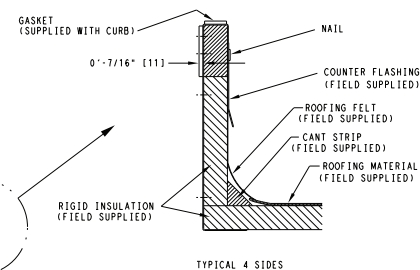
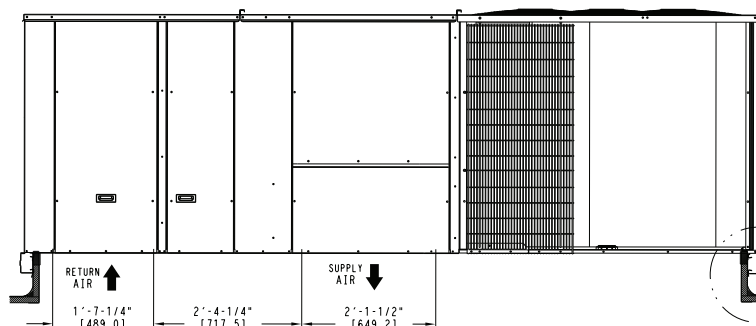
NOTES:

- 1 ROOF CURB ACCESSORY IS SHIPPED UNASSEMBLED.
- 2 DIMENSIONS IN () ARE IN MILLIMETERS.
- 3 ROOF CURB GALVANIZED STEEL.
- 4 ATTACH DUCTWORK TO CURB (FLANGES ON DUCT REST ON CURB)
- 5 SERVICE CLEARANCE 4 FT ON EACH SIDE

➔ DIRECTION OF AIR FLOW



MAX CURB LEVELING TOLERANCES



50GEQ*17 Three Stage Cooling Capacities

50GEQ*17				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
4200 cfm	EA (wb)	58	TC	162.2	162.2	183.9	154.8	154.8	176.0	146.6	146.6	167.1	137.9	137.9	157.5	128.7	128.7	147.4
			SHC	140.5	162.2	183.9	133.6	154.8	176.0	126.2	146.6	167.1	118.3	137.9	157.5	110.0	128.7	147.4
		62	TC	171.1	171.1	174.4	162.8	162.8	168.1	152.7	152.7	162.2	142.1	142.1	156.0	131.0	131.0	149.5
			SHC	126.5	150.5	174.4	120.5	144.3	168.1	114.6	138.4	162.2	108.4	132.2	156.0	102.0	125.8	149.5
		67	TC	188.8	188.8	188.8	180.4	180.4	180.4	169.7	169.7	169.7	158.3	158.3	158.3	146.3	146.3	146.3
			SHC	104.0	128.0	152.1	97.8	121.7	145.6	91.9	115.8	139.7	85.8	109.7	133.6	79.5	103.3	127.2
		72	TC	208.2	208.2	208.2	199.6	199.6	199.6	188.1	188.1	188.1	175.9	175.9	175.9	163.0	163.0	163.0
			SHC	81.0	105.2	129.3	74.6	98.5	122.4	68.7	92.6	116.5	62.7	86.5	110.4	56.4	80.2	104.0
		76	TC	168.1	224.7	224.7	—	216.1	216.1	—	203.9	203.9	—	191.0	191.0	—	177.3	177.3
			SHC	—	86.4	111.1	—	79.5	102.6	—	73.6	96.8	—	67.6	90.8	—	61.3	84.6
5250 cfm	EA (wb)	58	TC	172.2	172.2	195.1	164.5	164.5	186.8	155.8	155.8	177.3	146.5	146.5	167.1	136.7	136.7	156.4
			SHC	149.3	172.2	195.1	142.2	164.5	186.8	134.3	155.8	177.3	125.9	146.5	167.1	117.1	136.7	156.4
		62	TC	177.3	177.3	192.4	168.5	168.5	186.3	158.1	158.1	180.0	147.4	147.4	173.2	138.7	138.7	158.6
			SHC	137.4	164.9	192.4	131.3	158.8	186.3	125.2	152.6	180.0	118.8	146.0	173.2	108.6	133.6	158.6
		67	TC	194.7	194.7	194.7	186.1	186.1	186.1	174.9	174.9	174.9	163.0	163.0	163.0	150.5	150.5	150.5
			SHC	111.2	139.0	166.9	104.8	132.5	160.1	98.8	126.5	154.1	92.6	120.2	147.9	86.2	113.8	141.4
		72	TC	214.4	214.4	214.4	205.3	205.3	205.3	193.3	193.3	193.3	180.6	180.6	180.6	167.3	167.3	167.3
			SHC	84.3	112.3	140.3	77.6	105.3	132.9	71.6	99.3	126.9	65.5	93.1	120.7	59.1	86.7	114.3
		76	TC	—	231.0	231.0	—	222.0	222.0	—	209.3	209.3	—	195.8	195.8	—	181.6	181.6
			SHC	—	90.6	119.1	—	83.0	109.9	—	77.0	103.9	—	70.9	97.8	—	64.5	91.4
6000 cfm	EA (wb)	58	TC	180.4	180.4	204.3	172.6	172.6	195.9	163.4	163.4	185.8	153.7	153.7	175.1	143.3	143.3	163.7
			SHC	156.6	180.4	204.3	149.3	172.6	195.9	141.0	163.4	185.8	132.3	153.7	175.1	122.9	143.3	163.7
		62	TC	182.3	182.3	208.8	175.6	175.6	196.7	166.4	166.4	185.7	156.5	156.5	175.1	143.5	143.5	170.8
			SHC	147.1	177.9	208.8	138.5	167.6	196.7	130.2	158.0	185.7	121.9	148.5	175.1	116.3	143.5	170.8
		67	TC	199.3	199.3	199.3	190.5	190.5	190.5	178.9	178.9	178.9	166.7	166.7	166.7	153.8	153.8	155.0
			SHC	118.0	149.6	181.1	111.4	142.7	174.1	105.3	136.6	167.9	99.1	130.3	161.6	92.6	123.8	155.0
		72	TC	219.2	219.2	219.2	209.9	209.9	209.9	197.5	197.5	197.5	184.3	184.3	184.3	170.5	170.5	170.5
			SHC	87.4	119.1	150.8	80.3	111.6	142.9	74.2	105.5	136.8	68.0	99.2	130.5	61.5	92.8	124.0
		76	TC	—	235.8	235.8	—	226.6	226.6	—	213.4	213.4	—	199.4	199.4	—	184.9	184.9
			SHC	—	94.3	126.5	—	86.1	116.5	—	80.0	110.5	—	73.8	104.3	—	67.3	97.8
6750 cfm	EA (wb)	58	TC	187.3	187.3	212.0	179.5	179.5	203.5	169.9	169.9	193.1	159.7	159.7	181.9	148.9	148.9	169.9
			SHC	162.7	187.3	212.0	155.4	179.5	203.5	146.8	169.9	193.1	137.6	159.7	181.9	127.8	148.9	169.9
		62	TC	187.5	187.5	220.4	182.4	182.4	203.6	170.1	170.1	201.0	159.9	159.9	189.5	149.0	149.0	177.1
			SHC	154.5	187.5	220.4	143.7	173.7	203.6	139.2	170.1	201.0	130.3	159.9	189.5	120.9	149.0	177.1
		67	TC	202.7	202.7	202.7	193.9	193.9	193.9	182.1	182.1	182.1	169.6	169.6	174.8	156.4	156.4	168.2
			SHC	124.4	159.5	194.7	117.7	152.6	187.5	111.6	146.4	181.3	105.3	140.0	174.8	98.7	133.5	168.2
		72	TC	222.5	222.5	222.5	213.4	213.4	213.4	200.6	200.6	200.6	187.2	187.2	187.2	173.1	173.1	173.1
			SHC	90.1	125.4	160.7	82.6	117.5	152.3	76.5	111.4	146.2	70.2	105.0	139.9	63.8	98.5	133.3
		76	TC	—	239.4	239.4	—	230.1	230.1	—	216.5	216.5	—	202.3	202.3	—	187.4	187.4
			SHC	—	97.8	133.4	—	88.7	122.7	—	82.6	116.6	—	76.3	110.3	—	69.8	103.8
7500 cfm	EA (wb)	58	TC	193.3	193.3	218.7	185.4	185.4	210.2	175.4	175.4	199.2	164.8	164.8	187.5	153.6	153.6	175.2
			SHC	168.0	193.3	218.7	160.6	185.4	210.2	151.7	175.4	199.2	142.1	164.8	187.5	132.0	153.6	175.2
		62	TC	193.5	193.5	227.4	185.7	185.7	218.7	175.6	175.6	207.4	165.0	165.0	195.4	153.8	153.8	182.6
			SHC	159.6	193.5	227.4	152.6	185.7	218.7	143.9	175.6	207.4	134.7	165.0	195.4	124.9	153.8	182.6
		67	TC	205.8	205.8	207.9	196.8	196.8	200.5	184.7	184.7	194.2	172.0	172.0	187.7	158.6	158.6	181.0
			SHC	130.6	169.2	207.9	123.7	162.1	200.5	117.6	155.9	194.2	111.3	149.5	187.7	104.7	142.8	181.0
		72	TC	225.6	225.6	225.6	216.2	216.2	216.2	203.2	203.2	203.2	189.5	189.5	189.5	175.1	175.1	175.1
			SHC	92.8	131.7	170.5	84.7	123.1	161.5	78.6	116.9	155.3	72.3	110.6	148.9	65.8	104.0	142.3
		76	TC	—	242.6	242.6	—	232.8	232.8	—	219.0	219.0	—	204.5	204.5	—	189.3	189.3
			SHC	—	101.2	140.3	—	91.1	128.5	—	84.9	122.4	—	78.6	116.0	—	72.1	109.4

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 7.

50GEQ*17 Two Stage Cooling Capacities

50GEQ*17				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
2700 cfm	EA (wb)	58	TC	101.3	101.3	115.4	96.7	96.7	110.5	91.0	91.0	104.2	84.9	84.9	97.7	78.5	78.5	90.7
			SHC	87.2	101.3	115.4	82.9	96.7	110.5	77.7	91.0	104.2	72.1	84.9	97.7	66.3	78.5	90.7
		62	TC	109.8	109.8	109.8	104.0	104.0	104.0	97.3	97.3	98.0	89.6	89.6	93.6	81.6	81.6	89.2
			SHC	77.9	92.5	107.1	73.8	88.3	102.9	69.2	83.6	98.0	64.7	79.1	93.6	60.1	74.6	89.2
		67	TC	122.9	122.9	122.9	116.3	116.3	116.3	108.7	108.7	108.7	101.3	101.3	101.3	92.1	92.1	92.1
			SHC	64.9	79.6	94.2	60.9	75.5	90.2	56.3	71.0	85.7	51.9	66.4	81.0	46.8	61.4	76.0
		72	TC	136.7	136.7	136.7	129.7	129.7	129.7	121.7	121.7	121.7	114.1	114.1	114.1	104.4	104.4	104.4
			SHC	51.5	66.3	81.1	47.5	62.3	77.2	43.0	57.8	72.6	38.7	53.4	68.1	33.7	48.3	63.0
		76	TC	—	148.6	148.6	—	141.5	141.5	—	133.0	133.0	—	123.8	123.8	—	115.0	115.0
			SHC	—	55.2	70.1	—	51.3	66.1	—	46.8	61.7	—	42.2	57.1	—	37.7	52.6
3150 cfm	EA (wb)	58	TC	109.1	109.1	124.1	103.8	103.8	118.4	97.7	97.7	111.7	91.2	91.2	104.7	84.3	84.3	97.2
			SHC	94.1	109.1	124.1	89.2	103.8	118.4	83.6	97.7	111.7	77.7	91.2	104.7	71.5	84.3	97.2
		62	TC	114.8	114.8	119.1	108.3	108.3	114.9	100.8	100.8	110.2	93.1	93.1	105.4	85.1	85.1	100.3
			SHC	85.3	102.2	119.1	81.0	98.0	114.9	76.4	93.3	110.2	71.6	88.5	105.4	66.7	83.5	100.3
		67	TC	127.6	127.6	127.6	120.8	120.8	120.8	112.9	112.9	112.9	104.7	104.7	104.7	96.0	96.0	96.0
			SHC	69.8	86.9	104.0	65.6	82.6	99.6	61.0	78.0	94.9	56.3	73.1	90.0	51.4	68.2	85.0
		72	TC	141.5	141.5	141.5	134.6	134.6	134.6	126.1	126.1	126.1	117.0	117.0	117.0	108.3	108.3	108.3
			SHC	53.9	71.1	88.3	49.9	67.2	84.5	45.4	62.6	79.8	40.6	57.9	75.2	36.1	53.5	70.8
		76	TC	—	153.5	153.5	—	146.0	146.0	—	137.2	137.2	—	127.8	127.8	—	117.5	117.5
			SHC	—	58.1	75.5	—	54.1	71.4	—	49.6	66.9	—	45.0	62.3	—	40.2	57.5
3600 cfm	EA (wb)	58	TC	115.5	115.5	131.2	109.7	109.7	124.9	103.2	103.2	117.9	96.5	96.5	110.5	89.2	89.2	102.7
			SHC	99.8	115.5	131.2	94.4	109.7	124.9	88.5	103.2	117.9	82.4	96.5	110.5	75.8	89.2	102.7
		62	TC	118.5	118.5	130.4	111.8	111.8	126.0	104.4	104.4	120.8	98.5	98.5	110.5	89.4	89.4	107.3
			SHC	92.1	111.2	130.4	87.7	106.9	126.0	82.8	101.8	120.8	75.7	93.1	110.5	71.5	89.4	107.3
		67	TC	131.1	131.1	131.1	124.1	124.1	124.1	116.0	116.0	116.0	107.4	107.4	107.4	98.4	98.4	98.4
			SHC	74.3	93.7	113.1	70.1	89.4	108.7	65.5	84.8	104.1	60.7	80.0	99.3	55.8	75.1	94.4
		72	TC	145.4	145.4	145.4	138.1	138.1	138.1	129.3	129.3	129.3	120.2	120.2	120.2	110.6	110.6	110.6
			SHC	56.1	75.7	95.3	52.1	71.7	91.3	47.5	67.0	86.6	42.7	62.3	81.9	37.9	57.4	77.0
		76	TC	—	157.5	157.5	—	149.4	149.4	—	140.2	140.2	—	130.6	130.6	—	120.3	120.3
			SHC	—	61.0	80.8	—	56.7	76.5	—	52.3	72.1	—	47.4	67.2	—	42.6	62.3
4050 cfm	EA (wb)	58	TC	120.8	120.8	137.1	114.7	114.7	130.5	108.0	108.0	123.2	100.9	100.9	115.4	93.4	93.4	107.2
			SHC	104.5	120.8	137.1	98.9	114.7	130.5	92.7	108.0	123.2	86.3	100.9	115.4	79.5	93.4	107.2
		62	TC	121.7	121.7	140.9	115.5	115.5	134.4	108.1	108.1	128.4	101.0	101.0	120.5	93.5	93.5	112.0
			SHC	98.3	119.6	140.9	93.0	113.7	134.4	87.8	108.1	128.4	81.5	101.0	120.5	74.9	93.5	112.0
		67	TC	134.0	134.0	134.0	126.8	126.8	126.8	118.4	118.4	118.4	109.7	109.7	109.7	100.5	100.5	103.0
			SHC	78.6	100.4	122.1	74.4	96.1	117.8	69.7	91.3	112.9	64.8	86.4	108.0	59.9	81.4	103.0
		72	TC	148.4	148.4	148.4	140.9	140.9	140.9	131.9	131.9	131.9	122.5	122.5	122.5	112.6	112.6	112.6
			SHC	58.1	80.1	102.0	54.0	75.9	97.9	49.3	71.3	93.2	44.6	66.5	88.3	39.7	61.5	83.3
		76	TC	—	160.3	160.3	—	152.0	152.0	—	142.6	142.6	—	132.7	132.7	—	122.7	122.7
			SHC	—	63.3	85.5	—	59.1	81.4	—	54.4	76.6	—	49.6	71.7	—	44.9	66.8
4500 cfm	EA (wb)	58	TC	125.4	125.4	142.2	119.2	119.2	135.5	112.1	112.1	127.8	104.7	104.7	119.7	97.0	97.0	111.2
			SHC	108.5	125.4	142.2	102.8	119.2	135.5	96.4	112.1	127.8	89.7	104.7	119.7	82.7	97.0	111.2
		62	TC	125.5	125.5	147.9	119.3	119.3	141.1	112.3	112.3	133.2	104.9	104.9	124.9	97.1	97.1	116.2
			SHC	103.0	125.5	147.9	97.5	119.3	141.1	91.3	112.3	133.2	84.8	104.9	124.9	78.0	97.1	116.2
		67	TC	136.4	136.4	136.4	129.0	129.0	129.0	120.5	120.5	121.5	111.6	111.6	116.5	102.2	102.2	111.3
			SHC	82.8	106.7	130.7	78.5	102.5	126.4	73.7	97.6	121.5	68.8	92.6	116.5	63.8	87.5	111.3
		72	TC	150.7	150.7	150.7	143.1	143.1	143.1	134.0	134.0	134.0	124.4	124.4	124.4	114.3	114.3	114.3
			SHC	60.0	84.2	108.4	55.8	79.8	103.9	51.1	75.3	99.5	46.3	70.5	94.6	41.4	65.5	89.6
		76	TC	—	162.6	162.6	—	154.8	154.8	—	145.2	145.2	—	135.0	135.0	—	124.2	124.2
			SHC	—	65.5	90.0	—	61.4	85.9	—	56.8	81.1	—	51.9	76.2	—	46.9	70.9

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 7.

50GEQ*17 One Stage Cooling Capacities

50GEQ*17				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1800 cfm	EA (wb)	58	TC	61.3	61.3	70.2	57.1	57.1	65.8	52.7	52.7	61.1	48.0	48.0	56.0	43.3	43.3	50.9
			SHC	52.3	61.3	70.2	48.5	57.1	65.8	44.4	52.7	61.1	40.0	48.0	56.0	35.7	43.3	50.9
		62	TC	65.4	65.4	66.6	60.5	60.5	63.2	55.3	55.3	59.3	50.0	50.0	55.7	45.8	45.8	48.5
			SHC	47.0	56.8	66.6	43.6	53.4	63.2	39.9	49.6	59.3	36.3	46.0	55.7	31.2	39.9	48.5
		67	TC	73.9	73.9	73.9	68.8	68.8	68.8	63.3	63.3	63.3	57.5	57.5	57.5	51.4	51.4	51.4
			SHC	38.6	48.5	58.3	35.2	45.1	54.9	31.7	41.5	51.4	28.1	37.9	47.7	24.3	34.1	43.9
		72	TC	82.3	82.3	82.3	77.8	77.8	77.8	71.8	71.8	71.8	65.9	65.9	65.9	59.3	59.3	59.3
			SHC	30.0	39.9	49.8	26.7	36.6	46.5	23.1	33.0	42.8	19.6	29.5	39.4	15.9	25.7	35.6
		76	TC	—	90.9	90.9	—	85.9	85.9	—	79.6	79.6	—	72.6	72.6	—	65.4	65.4
			SHC	—	32.9	42.8	—	29.7	39.6	—	26.2	36.1	—	22.4	32.3	—	18.6	28.5
2100 cfm	EA (wb)	58	TC	66.1	66.1	75.5	61.7	61.7	70.9	57.1	57.1	65.9	52.2	52.2	60.6	47.1	47.1	55.1
			SHC	56.6	66.1	75.5	52.6	61.7	70.9	48.3	57.1	65.9	43.7	52.2	60.6	39.0	47.1	55.1
		62	TC	65.8	65.8	73.6	63.4	63.4	70.7	59.9	59.9	63.0	52.5	52.5	63.2	47.2	47.2	57.9
			SHC	50.8	62.2	73.6	48.2	59.4	70.7	43.0	53.0	63.0	40.8	52.0	63.2	36.4	47.2	57.9
		67	TC	76.1	76.1	76.1	71.2	71.2	71.2	65.8	65.8	65.8	59.7	59.7	59.7	53.2	53.2	53.2
			SHC	41.7	53.1	64.6	38.4	49.8	61.3	34.9	46.4	57.8	31.2	42.6	54.0	27.3	38.8	50.2
		72	TC	85.5	85.5	85.5	80.4	80.4	80.4	74.7	74.7	74.7	68.2	68.2	68.2	60.6	60.6	60.6
			SHC	31.5	43.0	54.5	28.3	39.8	51.2	24.9	36.5	48.0	21.1	32.7	44.2	17.0	28.5	40.0
		76	TC	—	94.0	94.0	—	87.9	87.9	—	82.1	82.1	—	74.8	74.8	—	68.2	68.2
			SHC	—	34.9	46.5	—	31.4	42.9	—	28.0	39.6	—	24.2	35.8	—	20.5	32.1
2400 cfm	EA (wb)	58	TC	70.1	70.1	80.0	65.6	65.6	75.2	60.7	60.7	69.9	55.5	55.5	64.4	50.2	50.2	58.6
			SHC	60.2	70.1	80.0	56.0	65.6	75.2	51.5	60.7	69.9	46.7	55.5	64.4	41.8	50.2	58.6
		62	TC	70.5	70.5	82.1	65.6	65.6	78.1	60.8	60.8	73.1	55.6	55.6	67.2	50.3	50.3	61.5
			SHC	56.4	69.2	82.1	52.7	65.4	78.1	48.5	60.8	73.1	44.0	55.6	67.2	39.1	50.3	61.5
		67	TC	78.3	78.3	78.3	73.7	73.7	73.7	67.8	67.8	67.8	61.4	61.4	61.4	54.8	54.8	56.2
			SHC	44.8	57.8	70.9	41.7	54.7	67.8	37.9	50.9	63.9	34.1	47.1	60.1	30.2	43.2	56.2
		72	TC	88.6	88.6	88.6	83.1	83.1	83.1	76.7	76.7	76.7	69.9	69.9	69.9	62.9	62.9	62.9
			SHC	33.3	46.4	59.6	29.9	43.0	56.1	26.2	39.4	52.5	22.5	35.6	48.8	18.6	31.7	44.9
		76	TC	—	97.0	97.0	—	91.1	91.1	—	84.2	84.2	—	76.5	76.5	—	69.0	69.0
			SHC	—	36.9	49.8	—	33.5	46.7	—	29.8	42.9	—	25.8	39.0	—	21.9	35.0
2700 cfm	EA (wb)	58	TC	73.5	73.5	83.8	68.9	68.9	78.8	63.7	63.7	73.2	58.4	58.4	67.5	52.8	52.8	61.5
			SHC	63.2	73.5	83.8	59.0	68.9	78.8	54.1	63.7	73.2	49.3	58.4	67.5	44.1	52.8	61.5
		62	TC	73.0	73.0	86.6	69.0	69.0	82.3	63.9	63.9	76.6	58.5	58.5	70.7	52.9	52.9	64.5
			SHC	59.4	73.0	86.6	55.7	69.0	82.3	51.1	63.9	76.6	46.3	58.5	70.7	41.3	52.9	64.5
		67	TC	79.8	79.8	79.8	75.2	75.2	75.2	69.1	69.1	69.9	62.8	62.8	66.1	56.1	56.1	62.1
			SHC	47.6	62.3	76.9	44.4	59.0	73.5	40.7	55.3	69.9	36.9	51.5	66.1	33.0	47.5	62.1
		72	TC	90.8	90.8	90.8	84.7	84.7	84.7	78.2	78.2	78.2	71.3	71.3	71.3	64.1	64.1	64.1
			SHC	34.8	49.5	64.3	31.2	45.8	60.5	27.6	42.3	57.0	23.7	38.4	53.1	19.8	34.5	49.2
		76	TC	—	98.9	98.9	—	92.2	92.2	—	85.1	85.1	—	78.3	78.3	—	69.7	69.7
			SHC	—	38.7	53.5	—	35.0	49.8	—	31.2	45.9	—	27.4	42.0	—	23.1	37.5
3000 cfm	EA (wb)	58	TC	76.6	76.6	87.2	71.7	71.7	82.0	66.5	66.5	76.3	60.9	60.9	70.3	55.1	55.1	64.0
			SHC	66.0	76.6	87.2	61.5	71.7	82.0	56.6	66.5	76.3	51.5	60.9	70.3	46.2	55.1	64.0
		62	TC	76.2	76.2	90.3	71.8	71.8	85.5	66.6	66.6	79.7	61.0	61.0	73.6	55.2	55.2	67.1
			SHC	62.1	76.2	90.3	58.1	71.8	85.5	53.4	66.6	79.7	48.5	61.0	73.6	43.3	55.2	67.1
		67	TC	82.2	82.2	83.2	76.9	76.9	79.6	70.5	70.5	76.1	63.9	63.9	71.9	57.1	57.1	67.8
			SHC	50.8	67.0	83.2	47.4	63.5	79.6	43.6	59.9	76.1	39.7	55.8	71.9	35.6	51.7	67.8
		72	TC	92.4	92.4	92.4	86.1	86.1	86.1	79.1	79.1	79.1	72.3	72.3	72.3	65.0	65.0	65.0
			SHC	36.1	52.4	68.7	32.5	48.8	65.1	28.6	44.9	61.1	24.9	41.1	57.4	20.9	37.1	53.4
		76	TC	—	100.2	100.2	—	94.2	94.2	—	87.1	87.1	—	78.4	78.4	—	70.3	70.3
			SHC	—	40.2	56.5	—	36.6	52.8	—	32.8	49.0	—	28.4	44.2	—	24.2	39.8

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

50GEQU17 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR - (°F)								
		80 Dry Bulb 62 Wet Bulb (36% Relative)			80 Dry Bulb 67 Wet Bulb (51% Relative)			80 Dry Bulb 72 Wet Bulb (68% Relative)		
		AIR ENTERING EVAPORATOR - SCFM / STATIC								
		4500	6000	7500	4500	6000	7500	4500	6000	7500
75	TC	150.5	160.3	167.9	164.2	174.8	183.0	177.9	189.2	198.0
	SHC	126.5	138.5	147.9	106.5	119.5	129.6	86.5	100.5	111.3
	kW	10.1	10.1	10.1	10.2	10.2	10.2	10.4	10.4	10.4
85	TC	143.4	154.3	162.7	156.7	168.4	177.5	170.0	182.6	192.3
	SHC	121.0	134.7	145.3	96.5	111.3	122.8	72.0	87.9	100.3
	kW	11.4	11.4	11.4	11.6	11.6	11.6	11.8	11.8	11.8
95	TC	136.3	148.2	157.4	149.2	162.1	172.0	162.2	176.0	186.6
	SHC	115.5	130.9	142.8	86.5	103.1	116.0	57.5	75.4	89.2
	kW	12.8	12.8	12.8	13.0	13.0	13.0	13.2	13.2	13.2
105	TC	129.2	142.2	152.2	141.7	155.7	166.6	154.3	169.3	180.9
	SHC	110.0	127.0	140.2	76.5	94.9	109.2	43.0	62.8	78.2
	kW	14.1	14.1	14.1	14.4	14.4	14.4	14.6	14.6	14.6
115	TC	122.1	136.1	147.0	134.3	149.4	161.1	146.4	162.7	175.2
	SHC	104.5	123.2	137.7	66.5	86.7	102.4	28.5	50.3	67.1
	kW	15.5	15.5	15.5	15.8	15.8	15.8	16.0	16.0	16.0

50GEQU17 — Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR - (°F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		AIR ENTERING EVAPORATOR - SCFM								
		4500	6000	7500	4500	6000	7500	4500	6000	7500
80	TC	53.5	59.3	63.8	54.2	60.2	64.7	54.9	60.9	65.5
	SHC	-0.5	-0.4	-0.3	-2.0	-1.9	-1.9	-3.3	-3.2	-3.2
	kW	10.5	10.5	10.5	10.3	10.4	10.4	10.3	10.3	10.3
75	TC	55.1	60.7	64.9	56.0	61.6	65.9	56.7	62.4	66.8
	SHC	2.4	2.4	2.5	1.0	1.1	1.1	-0.2	-0.1	-0.0
	kW	10.4	10.4	10.4	10.3	10.4	10.4	10.3	10.3	10.3
70	TC	56.8	62.1	66.1	57.7	63.0	67.1	58.5	63.9	68.0
	SHC	5.2	5.3	5.3	4.0	4.1	4.1	3.0	3.0	3.1
	kW	10.4	10.4	10.4	10.3	10.4	10.4	10.3	10.3	10.3
60	TC	60.1	64.8	68.4	61.2	65.9	69.6	62.1	66.9	70.6
	SHC	10.9	10.9	10.9	10.0	10.0	10.1	9.2	9.3	9.3
	kW	10.3	10.3	10.3	10.2	10.3	10.3	10.3	10.3	10.3
50	TC	63.5	67.6	70.7	64.7	68.8	72.0	65.7	69.9	73.1
	SHC	16.5	16.6	16.6	16.0	16.0	16.0	15.5	15.5	15.6
	kW	10.2	10.2	10.2	10.2	10.2	10.2	10.3	10.3	10.3
40	TC	66.8	70.3	73.0	68.2	71.7	74.4	69.3	72.9	75.7
	SHC	22.2	22.2	22.2	22.0	22.0	22.0	21.8	21.8	21.8
	kW	10.1	10.1	10.1	10.1	10.2	10.2	10.2	10.2	10.2

LEGEND

Edb	—	Entering Dry Bulb
Ewb	—	Entering Wet Bulb
kW	—	Compressor Power Input
SCFM/BF	—	Standard Cubic Feet per Minute/Bypass Factor
SHC	—	Sensible Heat Capacity (1000 Btuh) Gross
TC	—	Total Capacity (1000 Btuh) Gross

50GEQ*24 Three Stage Cooling Capacities

50GEQ*24				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
6000 cfm	EA (wb)	58	TC	210.0	210.0	230.2	203.0	203.0	227.5	193.7	193.7	220.6	184.5	184.5	210.1	—	—	—
			SHC	176.0	203.1	230.2	172.9	200.2	227.5	166.9	193.7	220.6	158.9	184.5	210.1	—	—	—
		62	TC	223.0	223.0	223.0	216.2	216.2	216.2	205.5	205.5	209.7	193.3	193.3	204.3	179.4	179.4	197.9
			SHC	158.4	188.0	217.6	155.2	184.9	214.5	150.3	180.0	209.7	144.8	174.5	204.3	138.5	168.2	197.9
		67	TC	247.1	247.1	247.1	240.4	240.4	240.4	228.8	228.8	228.8	215.7	215.7	215.7	201.1	201.1	201.1
			SHC	130.4	159.6	188.8	127.6	156.9	186.2	122.8	152.3	181.7	117.5	147.1	176.6	111.7	141.4	171.1
		72	TC	273.8	273.8	273.8	267.1	267.1	267.1	254.7	254.7	254.7	240.7	240.7	240.7	225.1	225.1	225.1
			SHC	103.0	130.6	158.3	100.3	128.2	156.2	95.4	123.8	152.2	90.1	118.9	147.7	84.3	113.4	142.5
		76	TC	—	296.6	296.6	—	290.5	290.5	—	277.9	277.9	—	262.5	262.5	—	246.0	246.0
			SHC	—	107.4	140.4	—	103.8	136.8	—	99.1	132.1	—	95.4	128.4	—	90.5	115.1
7000 cfm	EA (wb)	58	TC	220.1	220.1	250.3	214.7	214.7	244.1	206.0	206.0	234.3	196.1	196.1	223.1	185.0	185.0	210.5
			SHC	190.0	220.1	250.3	185.3	214.7	244.1	177.8	206.0	234.3	169.2	196.1	223.1	159.6	185.0	210.5
		62	TC	231.1	231.1	239.9	224.3	224.3	236.9	212.8	212.8	231.5	200.2	200.2	225.6	189.0	189.0	212.2
			SHC	171.8	205.8	239.9	168.7	202.8	236.9	163.4	197.5	231.5	157.6	191.6	225.6	148.4	180.3	212.2
		67	TC	255.6	255.6	255.6	248.4	248.4	248.4	236.3	236.3	236.3	222.6	222.6	222.6	207.4	207.4	207.4
			SHC	139.5	173.3	207.1	136.6	170.5	204.4	131.7	165.7	199.8	126.3	160.4	194.5	120.3	154.6	188.8
		72	TC	282.4	282.4	282.4	275.3	275.3	275.3	262.2	262.2	262.2	247.5	247.5	247.5	231.3	231.3	231.3
			SHC	107.0	139.8	172.5	104.3	137.3	170.2	99.5	132.7	166.0	94.1	127.6	161.2	88.3	122.0	155.8
		76	TC	—	306.2	306.2	—	299.0	299.0	—	284.9	284.9	—	269.2	269.2	—	252.1	252.1
			SHC	—	111.4	149.9	—	109.7	148.2	—	105.5	144.0	—	100.8	130.8	—	95.6	127.1
8000 cfm	EA (wb)	58	TC	231.0	231.0	262.4	225.5	225.5	256.2	216.4	216.4	245.8	205.9	205.9	233.9	194.1	194.1	220.6
			SHC	199.6	231.0	262.4	194.9	225.5	256.2	186.9	216.4	245.8	177.8	205.9	233.9	167.6	194.1	220.6
		62	TC	237.5	237.5	260.5	230.6	230.6	257.2	218.7	218.7	250.3	209.2	209.2	236.9	198.9	198.9	220.0
			SHC	184.0	222.2	260.5	180.9	219.0	257.2	174.7	212.5	250.3	165.8	201.3	236.9	154.9	187.4	220.0
		67	TC	262.0	262.0	262.0	254.7	254.7	254.7	242.1	242.1	242.1	227.9	227.9	227.9	212.2	212.2	212.2
			SHC	147.8	186.0	224.3	144.9	183.2	221.6	139.9	178.4	216.8	134.4	172.9	211.5	128.4	167.0	205.6
		72	TC	289.0	289.0	289.0	281.7	281.7	281.7	268.0	268.0	268.0	252.8	252.8	252.8	236.1	236.1	236.1
			SHC	110.8	148.2	185.6	108.1	145.6	183.2	103.2	141.0	178.8	97.8	135.8	173.8	91.9	130.1	168.2
		76	TC	—	312.5	312.5	—	305.1	305.1	—	290.5	290.5	—	274.4	274.4	—	256.8	256.8
			SHC	—	117.0	147.8	—	114.8	147.4	—	110.4	144.9	—	105.5	141.2	—	100.1	136.7
9000 cfm	EA (wb)	58	TC	240.5	240.5	273.0	234.8	234.8	266.5	225.1	225.1	255.6	214.2	214.2	243.2	201.8	201.8	229.2
			SHC	208.0	240.5	273.0	203.1	234.8	266.5	194.7	225.1	255.6	185.1	214.2	243.2	174.4	201.8	229.2
		62	TC	243.0	243.0	278.8	236.7	236.7	273.3	226.7	226.7	262.3	217.8	217.8	244.8	202.1	202.1	238.7
			SHC	195.0	236.9	278.8	190.8	232.1	273.3	183.0	222.6	262.3	172.0	208.4	244.8	165.5	202.1	238.7
		67	TC	267.2	267.2	267.2	259.7	259.7	259.7	246.7	246.7	246.7	232.1	232.1	232.1	216.0	216.0	221.6
			SHC	155.6	198.2	240.8	152.7	195.4	238.0	147.7	190.4	233.1	142.1	184.9	227.6	136.0	178.8	221.6
		72	TC	294.3	294.3	294.3	286.7	286.7	286.7	272.7	272.7	272.7	257.0	257.0	257.0	239.9	239.9	239.9
			SHC	114.3	156.1	198.0	111.6	153.6	195.5	106.6	148.8	190.9	101.1	143.5	185.8	95.2	137.7	180.1
		76	TC	—	317.7	317.7	—	310.1	310.1	—	295.1	295.1	—	278.6	278.6	—	260.6	260.6
			SHC	—	121.7	159.8	—	119.4	158.2	—	114.8	154.6	—	109.8	150.4	—	104.4	145.6
10000 cfm	EA (wb)	58	TC	248.5	248.5	281.9	242.7	242.7	275.3	232.6	232.6	263.9	221.1	221.1	250.9	208.3	208.3	236.4
			SHC	215.1	248.5	281.9	210.0	242.7	275.3	201.3	232.6	263.9	191.3	221.1	250.9	180.2	208.3	236.4
		62	TC	254.7	254.7	278.4	245.2	245.2	280.2	237.0	237.0	264.3	222.0	222.0	258.8	208.6	208.6	246.2
			SHC	197.6	238.0	278.4	196.5	238.4	280.2	186.5	225.4	264.3	180.4	219.6	258.8	171.0	208.6	246.2
		67	TC	271.4	271.4	271.4	263.8	263.8	263.8	250.5	250.5	250.5	235.6	235.6	243.2	219.3	219.3	236.9
			SHC	163.1	209.9	256.7	160.2	207.1	253.9	155.1	202.0	248.8	149.4	196.3	243.2	143.2	190.1	236.9
		72	TC	298.6	298.6	298.6	290.9	290.9	290.9	276.4	276.4	276.4	260.3	260.3	260.3	243.0	243.0	243.0
			SHC	117.5	163.7	209.8	114.8	161.1	207.3	109.8	156.2	202.6	104.3	150.8	197.4	98.4	145.0	191.6
		76	TC	—	322.0	322.0	—	314.2	314.2	—	299.0	299.0	—	282.1	282.1	—	263.7	263.7
			SHC	—	125.9	169.3	—	123.6	167.4	—	119.0	163.5	—	113.9	159.0	—	108.4	153.9

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 7.

50GEQ*24 Two Stage Cooling Capacities

50GEQ*24				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
3600 cfm	EA (wb)	58	TC	135.0	135.0	153.1	131.0	131.0	148.6	126.1	126.1	143.0	120.2	120.2	136.4	113.4	113.4	128.6
			SHC	116.9	135.0	153.1	113.4	131.0	148.6	109.1	126.1	143.0	104.1	120.2	136.4	98.2	113.4	128.6
		62	TC	145.0	145.0	145.0	139.6	139.6	139.7	133.0	133.0	136.6	125.4	125.4	133.0	116.5	116.5	128.7
			SHC	104.4	123.4	142.3	101.9	120.8	139.7	98.8	117.7	136.6	95.2	114.1	133.0	91.1	109.9	128.7
		67	TC	160.5	160.5	160.5	154.9	154.9	154.9	147.8	147.8	147.8	139.8	139.8	139.8	130.4	130.4	130.4
			SHC	86.8	105.8	124.8	84.4	103.4	122.4	81.4	100.4	119.4	78.1	97.1	116.0	74.3	93.2	112.2
		72	TC	178.2	178.2	178.2	171.8	171.8	171.8	164.1	164.1	164.1	155.5	155.5	155.5	145.7	145.7	145.7
			SHC	69.1	88.2	107.4	66.6	85.8	104.9	63.6	82.8	101.9	60.4	79.5	98.7	56.8	75.9	95.0
		76	TC	—	193.2	193.2	—	186.7	186.7	—	178.3	178.3	—	169.1	169.1	—	158.8	158.8
			SHC	—	73.7	93.5	—	71.4	91.2	—	68.4	88.2	—	65.2	84.7	—	61.7	81.2
4200 cfm	EA (wb)	58	TC	143.7	143.7	162.9	139.4	139.4	158.0	134.0	134.0	151.9	127.8	127.8	144.8	120.5	120.5	136.6
			SHC	124.6	143.7	162.9	120.8	139.4	158.0	116.2	134.0	151.9	110.7	127.8	144.8	104.5	120.5	136.6
		62	TC	150.5	150.5	156.9	145.0	145.0	154.3	137.9	137.9	150.8	129.8	129.8	146.6	121.1	121.1	141.7
			SHC	113.2	135.1	156.9	110.7	132.5	154.3	107.4	129.1	150.8	103.4	125.0	146.6	99.0	120.4	141.7
		67	TC	166.4	166.4	166.4	160.3	160.3	160.3	152.7	152.7	152.7	144.2	144.2	144.2	134.4	134.4	134.4
			SHC	92.8	114.8	136.7	90.3	112.3	134.2	87.2	109.1	131.1	83.8	105.7	127.6	79.9	101.8	123.8
		72	TC	184.2	184.2	184.2	177.7	177.7	177.7	169.4	169.4	169.4	160.3	160.3	160.3	150.0	150.0	150.0
			SHC	72.0	94.1	116.2	69.6	91.6	113.7	66.5	88.5	110.6	63.2	85.2	107.3	59.5	81.5	103.6
		76	TC	—	199.6	199.6	—	192.7	192.7	—	183.8	183.8	—	174.1	174.1	—	163.3	163.3
			SHC	—	77.3	100.1	—	74.9	97.6	—	71.8	94.4	—	68.5	91.0	—	65.0	87.4
4800 cfm	EA (wb)	58	TC	151.1	151.1	171.1	146.5	146.5	165.9	140.7	140.7	159.4	134.1	134.1	151.9	126.5	126.5	143.3
			SHC	131.1	151.1	171.1	127.1	146.5	165.9	122.1	140.7	159.4	116.3	134.1	151.9	109.7	126.5	143.3
		62	TC	154.9	154.9	170.6	149.2	149.2	167.6	142.0	142.0	163.6	134.3	134.3	158.1	126.6	126.6	149.1
			SHC	121.5	146.0	170.6	118.6	143.1	167.6	115.1	139.3	163.6	110.6	134.3	158.1	104.2	126.6	149.1
		67	TC	170.8	170.8	170.8	164.5	164.5	164.5	156.5	156.5	156.5	147.7	147.7	147.7	137.6	137.6	137.6
			SHC	98.4	123.3	148.1	95.8	120.7	145.6	92.6	117.5	142.4	89.1	114.0	138.8	85.1	110.0	134.8
		72	TC	188.9	188.9	188.9	182.1	182.1	182.1	173.4	173.4	173.4	164.0	164.0	164.0	153.3	153.3	153.3
			SHC	74.7	99.7	124.7	72.2	97.2	122.2	69.0	94.0	119.0	65.6	90.6	115.6	61.9	86.8	111.8
		76	TC	—	204.6	204.6	—	197.4	197.4	—	188.0	188.0	—	178.0	178.0	—	166.8	166.8
			SHC	—	80.5	106.2	—	78.1	103.6	—	75.0	100.4	—	71.6	97.0	—	68.0	93.3
5400 cfm	EA (wb)	58	TC	157.4	157.4	178.2	152.5	152.5	172.6	146.4	146.4	165.7	139.5	139.5	157.9	131.6	131.6	148.9
			SHC	136.6	157.4	178.2	132.4	152.5	172.6	127.1	146.4	165.7	121.1	139.5	157.9	114.2	131.6	148.9
		62	TC	158.9	158.9	182.8	152.8	152.8	179.8	146.6	146.6	172.4	139.4	139.4	164.2	131.7	131.7	154.9
			SHC	128.8	155.8	182.8	125.9	152.8	179.8	120.8	146.6	172.4	114.7	139.4	164.2	108.5	131.7	154.9
		67	TC	174.7	174.7	174.7	167.8	167.8	167.8	159.5	159.5	159.5	150.4	150.4	150.4	140.0	140.0	145.3
			SHC	103.7	131.5	159.2	101.0	128.8	156.5	97.8	125.5	153.2	94.2	121.9	149.6	90.1	117.7	145.3
		72	TC	192.7	192.7	192.7	185.7	185.7	185.7	176.7	176.7	176.7	166.8	166.8	166.8	155.9	155.9	155.9
			SHC	77.1	105.0	133.0	74.6	102.5	130.4	71.4	99.2	127.1	67.9	95.7	123.5	64.1	91.9	119.8
		76	TC	—	208.6	208.6	—	201.3	201.3	—	191.5	191.5	—	181.0	181.0	—	169.5	169.5
			SHC	—	83.6	112.0	—	81.1	109.5	—	77.9	106.2	—	74.5	102.8	—	70.8	99.0
6000 cfm	EA (wb)	58	TC	162.8	162.8	184.2	157.7	157.7	178.4	151.4	151.4	171.3	144.1	144.1	163.1	135.9	135.9	153.8
			SHC	141.4	162.8	184.2	137.0	157.7	178.4	131.5	151.4	171.3	125.2	144.1	163.1	118.0	135.9	153.8
		62	TC	163.0	163.0	191.6	157.9	157.9	185.6	151.3	151.3	178.0	144.3	144.3	169.6	136.1	136.1	159.9
			SHC	134.4	163.0	191.6	130.2	157.9	185.6	124.7	151.3	178.0	119.0	144.3	169.6	112.2	136.1	159.9
		67	TC	177.5	177.5	177.5	170.4	170.4	170.4	162.0	162.0	163.7	152.6	152.6	160.0	142.1	142.1	155.6
			SHC	108.8	139.4	169.9	106.0	136.6	167.2	102.7	133.2	163.7	99.0	129.5	160.0	94.9	125.2	155.6
		72	TC	195.8	195.8	195.8	188.6	188.6	188.6	179.3	179.3	179.3	169.2	169.2	169.2	158.0	158.0	158.0
			SHC	79.3	110.1	141.0	76.8	107.6	138.3	73.5	104.2	134.9	70.0	100.7	131.3	66.2	96.8	127.5
		76	TC	—	211.8	211.8	—	204.3	204.3	—	194.3	194.3	—	183.5	183.5	—	171.8	171.8
			SHC	—	86.4	117.6	—	84.0	115.2	—	80.7	111.8	—	77.2	108.3	—	73.5	104.5

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 7.

50GEQ*24 One Stage Cooling Capacities

50GEQ*24				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
2400 cfm	EA (wb)	58	TC	90.7	90.7	100.0	84.3	84.3	94.9	77.3	77.3	89.6	70.7	70.7	82.6	64.0	64.0	75.3
			SHC	75.1	87.6	100.0	70.2	82.5	94.9	65.0	77.3	89.6	58.9	70.7	82.6	52.7	64.0	75.3
		62	TC	99.9	99.9	99.9	93.2	93.2	93.2	85.7	85.7	85.7	77.8	77.8	77.8	69.5	69.5	71.2
			SHC	67.0	79.6	92.1	62.2	74.7	87.2	57.0	69.5	82.0	51.7	64.2	76.7	46.2	58.7	71.2
		67	TC	112.8	112.8	112.8	105.7	105.7	105.7	97.9	97.9	97.9	89.5	89.5	89.5	80.7	80.7	80.7
			SHC	56.6	69.1	81.7	51.7	64.3	76.8	46.6	59.1	71.7	41.2	53.8	66.3	35.8	48.3	60.9
		72	TC	126.6	126.6	126.6	119.4	119.4	119.4	111.0	111.0	111.0	102.2	102.2	102.2	92.9	92.9	92.9
			SHC	45.7	58.4	71.1	40.9	53.6	66.3	35.8	48.5	61.1	30.5	43.2	55.8	25.1	37.7	50.4
		76	TC	—	138.8	138.8	—	131.2	131.2	—	122.5	122.5	—	113.2	113.2	—	103.4	103.4
			SHC	—	49.5	62.7	—	44.8	58.0	—	39.7	52.9	—	34.5	47.7	—	29.1	42.3
2800 cfm	EA (wb)	58	TC	96.4	96.4	110.3	90.4	90.4	103.9	83.9	83.9	96.9	77.0	77.0	89.6	69.9	69.9	81.8
			SHC	82.5	96.4	110.3	76.9	90.4	103.9	70.9	83.9	96.9	64.5	77.0	89.6	57.9	69.9	81.8
		62	TC	104.9	104.9	104.9	97.8	97.8	97.8	90.0	90.0	92.1	81.7	81.7	86.6	73.1	73.1	80.9
			SHC	73.6	88.0	102.5	68.6	83.0	97.5	63.3	77.7	92.1	57.8	72.2	86.6	52.1	66.5	80.9
		67	TC	118.0	118.0	118.0	110.7	110.7	110.7	102.4	102.4	102.4	93.6	93.6	93.6	84.4	84.4	84.4
			SHC	61.1	75.6	90.1	56.2	70.7	85.2	50.9	65.4	79.9	45.4	59.9	74.4	39.8	54.3	68.8
		72	TC	132.3	132.3	132.3	124.6	124.6	124.6	115.9	115.9	115.9	106.6	106.6	106.6	96.8	96.8	96.8
			SHC	48.3	63.0	77.6	43.4	58.1	72.7	38.2	52.8	67.4	32.8	47.4	62.0	27.2	41.8	56.4
		76	TC	—	144.6	144.6	—	136.7	136.7	—	127.5	127.5	—	117.7	117.7	—	107.5	107.5
			SHC	—	52.6	68.0	—	47.8	63.2	—	42.6	57.8	—	37.1	52.2	—	31.6	46.6
3200 cfm	EA (wb)	58	TC	102.7	102.7	117.2	96.4	96.4	110.6	89.6	89.6	103.2	82.4	82.4	95.5	74.8	74.8	87.3
			SHC	88.1	102.7	117.2	82.2	96.4	110.6	75.9	89.6	103.2	69.3	82.4	95.5	62.3	74.8	87.3
		62	TC	108.9	108.9	112.3	101.6	101.6	107.2	93.4	93.4	101.6	85.0	85.0	95.8	76.1	76.1	89.7
			SHC	79.6	95.9	112.3	74.5	90.8	107.2	69.0	85.3	101.6	63.4	79.6	95.8	57.5	73.6	89.7
		67	TC	122.1	122.1	122.1	114.5	114.5	114.5	105.9	105.9	105.9	96.8	96.8	96.8	87.2	87.2	87.2
			SHC	65.2	81.7	98.1	60.3	76.7	93.1	54.9	71.3	87.7	49.3	65.7	82.1	43.6	60.0	76.4
		72	TC	136.7	136.7	136.7	128.8	128.8	128.8	119.7	119.7	119.7	110.0	110.0	110.0	99.9	99.9	99.9
			SHC	50.6	67.1	83.7	45.6	62.2	78.7	40.3	56.8	73.3	34.8	51.3	67.8	29.1	45.6	62.1
		76	TC	—	149.1	149.1	—	141.0	141.0	—	131.4	131.4	—	121.4	121.4	—	110.8	110.8
			SHC	—	55.2	72.4	—	50.4	67.5	—	45.0	62.0	—	39.5	56.4	—	33.9	50.7
3600 cfm	EA (wb)	58	TC	108.1	108.1	123.2	101.6	101.6	116.4	94.5	94.5	108.7	87.0	87.0	100.6	79.1	79.1	92.1
			SHC	92.9	108.1	123.2	86.9	101.6	116.4	80.3	94.5	108.7	73.4	87.0	100.6	66.1	79.1	92.1
		62	TC	112.2	112.2	121.5	104.8	104.8	116.2	96.5	96.5	110.4	87.9	87.9	104.1	79.2	79.2	96.6
			SHC	85.2	103.4	121.5	80.0	98.1	116.2	74.4	92.4	110.4	68.5	86.3	104.1	61.9	79.2	96.6
		67	TC	125.4	125.4	125.4	117.7	117.7	117.7	108.8	108.8	108.8	99.4	99.4	99.4	89.5	89.5	89.5
			SHC	69.1	87.4	105.7	64.1	82.4	100.6	58.6	76.9	95.1	53.0	71.2	89.5	47.2	65.4	83.7
		72	TC	140.2	140.2	140.2	132.1	132.1	132.1	122.7	122.7	122.7	112.8	112.8	112.8	102.3	102.3	102.3
			SHC	52.6	71.0	89.4	47.6	66.0	84.4	42.1	60.5	78.9	36.5	54.9	73.3	30.8	49.2	67.5
		76	TC	—	152.8	152.8	—	144.5	144.5	—	134.7	134.7	—	124.3	124.3	—	113.4	113.4
			SHC	—	57.6	76.5	—	52.7	71.5	—	47.3	66.1	—	41.7	60.4	—	36.0	54.7
4000 cfm	EA (wb)	58	TC	112.8	112.8	128.5	106.2	106.2	121.4	98.7	98.7	113.4	91.0	91.0	105.0	82.8	82.8	96.2
			SHC	97.1	112.8	128.5	91.0	106.2	121.4	84.1	98.7	113.4	76.9	91.0	105.0	69.4	82.8	96.2
		62	TC	115.1	115.1	130.1	107.6	107.6	124.4	99.6	99.6	116.9	91.1	91.1	109.9	82.9	82.9	100.8
			SHC	90.5	110.3	130.1	85.1	104.8	124.4	78.6	97.8	116.9	72.3	91.1	109.9	65.1	82.9	100.8
		67	TC	128.2	128.2	128.2	120.2	120.2	120.2	111.1	111.1	111.1	101.5	101.5	101.5	91.4	91.4	91.4
			SHC	72.8	92.9	113.0	67.7	87.8	107.9	62.1	82.2	102.4	56.4	76.5	96.6	50.5	70.6	90.7
		72	TC	143.0	143.0	143.0	134.8	134.8	134.8	125.1	125.1	125.1	115.0	115.0	115.0	104.4	104.4	104.4
			SHC	54.4	74.6	94.9	49.3	69.6	89.9	43.8	64.1	84.3	38.2	58.4	78.6	32.4	52.6	72.8
		76	TC	—	155.8	155.8	—	147.4	147.4	—	137.3	137.3	—	126.6	126.6	—	115.4	115.4
			SHC	—	59.8	80.5	—	54.8	75.5	—	49.3	70.0	—	43.7	64.2	—	37.9	58.5

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

50GEQU24 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR - (°F)								
		80 Dry Bulb 62 Wet Bulb (36% Relative)			80 Dry Bulb 67 Wet Bulb (51% Relative)			80 Dry Bulb 72 Wet Bulb (68% Relative)		
		AIR ENTERING EVAPORATOR - SCFM / STATIC								
		6000	8000	10000	6000	8000	10000	6000	8000	10000
75	TC	232.2	240.0	246.3	257.1	265.7	272.6	282.0	291.4	298.9
	SHC	176.0	195.0	209.3	150.3	168.7	182.7	124.6	142.5	156.0
	kW	14.4	15.8	16.9	14.8	16.4	17.5	15.2	16.9	18.1
85	TC	215.9	223.5	229.6	240.3	248.7	255.4	264.7	273.9	281.3
	SHC	169.6	186.4	199.1	138.1	153.9	165.8	106.5	121.3	132.5
	kW	16.2	17.9	19.1	16.7	18.5	19.7	17.2	19.0	20.4
95	TC	199.6	207.0	212.9	223.5	231.7	238.3	247.4	256.4	263.6
	SHC	163.2	177.8	188.9	125.8	139.0	149.0	88.5	100.2	109.1
	kW	18.1	19.9	21.2	18.6	20.5	22.0	19.1	21.2	22.7
105	TC	183.2	190.5	196.3	206.7	214.7	221.1	230.1	238.9	246.0
	SHC	156.8	169.3	178.7	113.6	124.1	132.1	70.4	79.0	85.6
	kW	19.9	21.9	23.4	20.5	22.6	24.2	21.0	23.4	25.1
115	TC	166.9	173.9	179.6	189.9	197.7	204.0	212.8	221.4	228.4
	SHC	150.4	160.7	168.5	101.4	109.3	115.3	52.3	57.9	62.1
	kW	21.7	23.9	25.6	22.3	24.7	26.5	23.0	25.5	27.4

50GEQU24 — Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR - (°F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		AIR ENTERING EVAPORATOR - SCFM								
		6000	8000	10000	6000	8000	10000	6000	8000	10000
80	TC	95.7	101.8	106.5	97.8	104.0	108.9	99.6	106.0	110.9
	SHC	5.7	5.7	5.7	2.0	2.0	2.0	-1.2	-1.2	-1.2
	kW	14.6	14.7	14.7	18.7	14.7	14.8	14.7	14.7	14.8
75	TC	99.3	105.1	109.6	101.5	107.4	112.0	103.4	109.5	114.2
	SHC	7.9	7.9	7.9	4.4	4.4	4.4	1.5	1.5	1.5
	kW	14.8	14.9	14.9	18.6	14.9	15.0	14.9	15.0	15.0
70	TC	102.9	108.4	112.7	105.2	110.8	115.2	107.2	112.9	117.4
	SHC	10.0	10.0	10.0	6.9	6.9	6.9	4.2	4.2	4.2
	kW	14.9	15.0	15.1	18.6	15.1	15.2	15.1	15.2	15.3
60	TC	110.1	115.0	118.9	112.6	117.6	121.6	114.7	119.9	123.9
	SHC	14.3	14.3	14.3	11.8	11.8	11.8	9.6	9.6	9.6
	kW	15.3	15.4	15.5	18.4	15.5	15.6	15.6	15.6	15.7
50	TC	117.2	121.6	125.0	119.9	124.4	127.9	122.3	126.9	130.4
	SHC	18.7	18.7	18.7	16.7	16.7	16.7	15.0	15.0	15.0
	kW	15.6	15.7	15.8	18.3	15.9	16.0	16.0	16.1	16.2
40	TC	124.4	128.3	131.2	127.3	131.2	134.3	129.8	133.8	136.9
	SHC	23.0	23.0	23.0	21.6	21.6	21.6	20.4	20.4	20.4
	kW	16.0	16.1	16.2	18.2	16.3	16.4	16.4	16.5	16.6

LEGEND

Edb	—	Entering Dry Bulb
Ewb	—	Entering Wet Bulb
kW	—	Compressor Power Input
SCFM/BF	—	Standard Cubic Feet per Minute/Bypass Factor
SHC	—	Sensible Heat Capacity (1000 Btuh) Gross
TC	—	Total Capacity (1000 Btuh) Gross

50GEQ*28 Three Stage Cooling Capacities

50GEQ*28				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
7500 cfm	EA (wb)	58	TC	255.0	255.0	290.1	243.8	243.8	278.1	227.4	227.4	260.4	209.5	209.5	240.8	190.1	190.1	219.5
			SHC	219.9	255.0	290.1	209.4	243.8	278.1	194.5	227.4	260.4	178.2	209.5	240.8	160.7	190.1	219.5
		62	TC	273.9	273.9	273.9	262.0	262.0	262.0	242.3	242.3	246.8	220.6	220.6	233.5	197.0	197.0	219.3
			SHC	196.4	233.3	270.2	186.0	222.6	259.1	173.8	210.3	246.8	160.8	197.1	233.5	146.9	183.1	219.3
		67	TC	302.5	302.5	302.5	290.9	290.9	290.9	270.3	270.3	270.3	247.6	247.6	247.6	222.9	222.9	222.9
			SHC	162.2	199.2	236.3	151.0	187.8	224.6	139.1	175.8	212.6	126.4	163.1	199.8	113.0	149.7	186.3
		72	TC	333.7	333.7	333.7	322.7	322.7	322.7	301.0	301.0	301.0	277.2	277.2	277.2	251.6	251.6	251.6
			SHC	127.0	163.9	200.7	115.2	151.8	188.4	103.4	140.0	176.6	90.9	127.5	164.1	77.9	114.5	151.1
		76	TC	—	360.1	360.1	—	349.6	349.6	—	327.0	327.0	—	302.3	302.3	—	275.9	275.9
			SHC	—	134.8	168.7	—	122.4	156.1	—	110.7	145.3	—	98.4	133.4	—	85.6	120.9
8750 cfm	EA (wb)	58	TC	270.8	270.8	307.6	259.5	259.5	295.7	242.4	242.4	277.0	223.6	223.6	256.4	203.2	203.2	234.1
			SHC	234.0	270.8	307.6	223.4	259.5	295.7	207.8	242.4	277.0	190.7	223.6	256.4	172.3	203.2	234.1
		62	TC	283.8	283.8	296.7	271.9	271.9	285.6	251.6	251.6	272.8	229.3	229.3	258.6	206.7	206.7	237.3
			SHC	212.6	254.6	296.7	202.1	243.9	285.6	189.7	231.2	272.8	176.2	217.4	258.6	158.9	198.1	237.3
		67	TC	312.2	312.2	312.2	300.7	300.7	300.7	279.3	279.3	279.3	255.7	255.7	255.7	230.3	230.3	230.3
			SHC	173.0	215.4	257.8	161.4	203.5	245.6	149.3	191.4	233.4	136.4	178.4	220.4	123.0	164.8	206.7
		72	TC	343.4	343.4	343.4	332.6	332.6	332.6	310.0	310.0	310.0	285.3	285.3	285.3	259.0	259.0	259.0
			SHC	132.2	174.5	216.7	119.6	161.5	203.4	107.7	149.6	191.5	95.0	136.9	178.8	81.9	123.8	165.7
		76	TC	—	369.9	369.9	—	359.7	359.7	—	336.2	336.2	—	310.5	310.5	—	—	—
			SHC	—	140.9	181.1	—	127.2	167.1	—	115.4	155.6	—	102.9	143.4	—	—	—
10000 cfm	EA (wb)	58	TC	283.8	283.8	322.1	272.5	272.5	310.1	254.7	254.7	290.7	235.1	235.1	269.3	214.0	214.0	246.1
			SHC	245.5	283.8	322.1	234.9	272.5	310.1	218.7	254.7	290.7	201.0	235.1	269.3	181.9	214.0	246.1
		62	TC	291.6	291.6	321.2	279.8	279.8	309.9	258.9	258.9	296.0	239.8	239.8	267.6	219.1	219.1	240.1
			SHC	227.3	274.3	321.2	217.0	263.5	309.9	203.9	249.9	296.0	183.5	225.6	267.6	163.2	201.7	240.1
		67	TC	319.7	319.7	319.7	308.3	308.3	308.3	286.3	286.3	286.3	262.0	262.0	262.0	236.0	236.0	236.0
			SHC	183.0	230.6	278.2	171.0	218.2	265.5	158.8	206.0	253.1	145.8	192.9	240.0	132.3	179.2	226.2
		72	TC	350.9	350.9	350.9	340.2	340.2	340.2	317.0	317.0	317.0	291.5	291.5	291.5	264.7	264.7	264.7
			SHC	136.9	184.4	231.8	123.3	170.4	217.5	111.2	158.3	205.4	98.5	145.6	192.7	85.3	132.3	179.3
		76	TC	—	377.6	377.6	—	367.5	367.5	—	343.3	343.3	—	317.0	317.0	—	—	—
			SHC	—	146.4	192.0	—	131.3	176.6	—	119.4	164.8	—	106.8	152.4	—	—	—
11250 cfm	EA (wb)	58	TC	294.7	294.7	334.2	283.3	283.3	322.1	264.9	264.9	302.0	244.8	244.8	280.0	223.0	223.0	256.1
			SHC	255.2	294.7	334.2	244.5	283.3	322.1	227.8	264.9	302.0	209.5	244.8	280.0	189.9	223.0	256.1
		62	TC	298.1	298.1	342.7	288.1	288.1	323.7	265.6	265.6	315.3	245.0	245.0	292.1	223.1	223.1	267.3
			SHC	240.3	291.5	342.7	226.3	275.0	323.7	215.9	265.6	315.3	197.9	245.0	292.1	178.9	223.1	267.3
		67	TC	325.7	325.7	325.7	314.4	314.4	314.4	291.9	291.9	291.9	267.1	267.1	267.1	240.7	240.7	244.5
			SHC	192.3	245.0	297.6	180.0	232.2	284.3	167.7	219.8	271.9	154.7	206.6	258.6	141.1	192.8	244.5
		72	TC	356.7	356.7	356.7	346.1	346.1	346.1	322.5	322.5	322.5	296.6	296.6	296.6	269.2	269.2	269.2
			SHC	141.2	193.8	246.4	126.5	178.7	231.0	114.4	166.5	218.5	101.6	153.6	205.7	88.3	140.3	192.3
		76	TC	—	383.7	383.7	—	373.7	373.7	—	349.0	349.0	—	322.1	322.1	—	—	—
			SHC	—	151.6	202.4	—	134.9	185.2	—	122.8	173.3	—	110.1	160.7	—	—	—
12500 cfm	EA (wb)	58	TC	304.0	304.0	344.5	292.6	292.6	332.5	273.7	273.7	311.9	253.0	253.0	289.1	230.7	230.7	264.6
			SHC	263.5	304.0	344.5	252.8	292.6	332.5	235.6	273.7	311.9	216.8	253.0	289.1	196.7	230.7	264.6
		62	TC	308.2	308.2	342.2	293.0	293.0	346.3	274.0	274.0	324.9	253.2	253.2	301.5	230.9	230.9	276.2
			SHC	242.6	292.4	342.2	239.8	293.0	346.3	223.1	274.0	324.9	204.9	253.2	301.5	185.5	230.9	276.2
		67	TC	330.6	330.6	330.6	319.4	319.4	319.4	296.4	296.4	296.4	271.3	271.3	276.3	244.6	244.6	262.1
			SHC	201.2	258.7	316.2	188.6	245.5	302.4	176.2	233.0	289.8	163.1	219.7	276.3	149.5	205.8	262.1
		72	TC	361.7	361.7	361.7	351.2	351.2	351.2	327.0	327.0	327.0	300.8	300.8	300.8	273.0	273.0	273.0
			SHC	145.1	202.7	260.2	129.3	186.3	243.3	117.1	174.1	231.0	104.3	161.2	218.1	91.0	147.9	204.7
		76	TC	—	388.6	388.6	—	378.8	378.8	—	353.6	353.6	—	326.3	326.3	—	—	—
			SHC	—	156.4	212.3	—	137.9	193.2	—	125.7	181.2	—	112.9	168.5	—	—	—

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 7.

50GEQ*28 Two Stage Cooling Capacities

50GEQ*28				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
4500 cfm	EA (wb)	58	TC	147.2	147.2	168.5	138.4	138.4	159.4	127.3	127.3	147.6	115.4	115.4	134.7	102.5	102.5	120.8
			SHC	125.6	147.1	168.5	117.4	138.4	159.4	107.1	127.3	147.6	96.1	115.4	134.7	84.2	102.5	120.8
		62	TC	158.2	158.2	158.7	148.4	148.4	151.1	135.3	135.3	142.0	121.1	121.1	132.4	105.8	105.8	122.1
			SHC	112.4	135.5	158.7	104.9	128.0	151.1	95.9	119.0	142.0	86.4	109.4	132.4	76.4	99.3	122.1
		67	TC	177.0	177.0	177.0	167.4	167.4	167.4	153.6	153.6	153.6	138.8	138.8	138.8	122.8	122.8	122.8
			SHC	92.0	115.2	138.4	84.8	108.0	131.2	75.9	99.1	122.2	66.7	89.8	113.0	57.0	80.1	103.2
		72	TC	197.3	197.3	197.3	188.0	188.0	188.0	173.6	173.6	173.6	158.1	158.1	158.1	141.4	141.4	141.4
			SHC	71.3	94.4	117.5	64.3	87.4	110.5	55.5	78.6	101.7	46.4	69.5	92.6	36.8	59.9	83.0
		76	TC	—	214.8	214.8	—	205.7	205.7	—	190.8	190.8	—	174.8	174.8	—	157.4	157.4
			SHC	—	77.1	97.5	—	70.5	92.6	—	61.8	84.0	—	52.7	75.0	—	43.3	65.7
5250 cfm	EA (wb)	58	TC	157.8	157.8	180.4	148.8	148.8	170.9	137.2	137.2	158.4	124.6	124.6	145.0	111.1	111.1	130.4
			SHC	135.2	157.8	180.4	126.7	148.8	170.9	115.9	137.2	158.4	104.3	124.6	145.0	91.9	111.1	130.4
		62	TC	164.6	164.6	176.2	154.7	154.7	168.6	141.2	141.2	159.1	126.7	126.7	148.8	111.4	111.4	137.1
			SHC	123.2	149.7	176.2	115.6	142.1	168.6	106.3	132.7	159.1	96.5	122.7	148.8	85.7	111.4	137.1
		67	TC	183.3	183.3	183.3	173.6	173.6	173.6	159.4	159.4	159.4	144.1	144.1	144.1	127.5	127.5	127.5
			SHC	99.4	126.0	152.7	92.1	118.8	145.4	83.1	109.7	136.3	73.6	100.3	126.9	63.8	90.3	116.9
		72	TC	203.6	203.6	203.6	194.3	194.3	194.3	179.4	179.4	179.4	163.3	163.3	163.3	146.1	146.1	146.1
			SHC	74.9	101.6	128.2	68.0	94.6	121.3	59.1	85.7	112.3	49.7	76.3	102.9	40.1	66.7	93.2
		76	TC	—	221.4	221.4	—	212.4	212.4	—	196.8	196.8	—	180.1	180.1	—	162.2	162.2
			SHC	—	81.6	107.2	—	74.8	100.5	—	65.9	91.6	—	56.7	82.5	—	47.2	73.1
6000 cfm	EA (wb)	58	TC	166.5	166.5	190.0	157.5	157.5	180.5	145.3	145.3	167.5	132.4	132.4	153.5	118.3	118.3	138.3
			SHC	143.0	166.5	190.0	134.4	157.5	180.5	123.2	145.3	167.5	111.2	132.4	153.5	98.3	118.3	138.3
		62	TC	169.8	169.8	192.3	159.9	159.9	184.5	146.6	146.6	173.5	132.5	132.5	160.8	118.5	118.5	145.2
			SHC	133.0	162.7	192.3	125.3	154.9	184.5	115.3	144.4	173.5	104.3	132.5	160.8	91.8	118.5	145.2
		67	TC	188.2	188.2	188.2	178.5	178.5	178.5	163.9	163.9	163.9	148.1	148.1	148.1	131.1	131.1	131.1
			SHC	106.1	136.2	166.3	98.9	129.0	159.0	89.7	119.7	149.8	80.1	110.1	140.1	70.1	100.0	130.0
		72	TC	208.6	208.6	208.6	199.3	199.3	199.3	184.1	184.1	184.1	167.5	167.5	167.5	149.8	149.8	149.8
			SHC	78.2	108.3	138.4	71.3	101.3	131.3	62.3	92.3	122.4	52.8	82.8	112.8	43.1	73.0	103.0
		76	TC	—	226.6	226.6	—	217.4	217.4	—	201.4	201.4	—	184.3	184.3	—	166.0	166.0
			SHC	—	85.5	114.6	—	78.7	107.8	—	69.7	98.8	—	60.4	89.6	—	50.7	80.0
6750 cfm	EA (wb)	58	TC	173.9	173.9	198.2	164.8	164.8	188.7	152.3	152.3	175.2	138.9	138.9	160.7	124.4	124.4	145.0
			SHC	149.6	173.9	198.2	141.0	164.8	188.7	129.4	152.3	175.2	117.0	138.9	160.7	103.7	124.4	145.0
		62	TC	174.4	174.4	206.9	165.2	165.2	197.0	152.5	152.5	183.1	139.1	139.1	168.2	124.5	124.5	152.1
			SHC	141.9	174.4	206.9	133.3	165.2	197.0	121.9	152.5	183.1	109.9	139.1	168.2	97.0	124.5	152.1
		67	TC	192.1	192.1	192.1	182.4	182.4	182.4	167.5	167.5	167.5	151.4	151.4	152.7	134.2	134.2	142.4
			SHC	112.5	145.9	179.3	105.2	138.6	172.0	95.9	129.2	162.6	86.2	119.5	152.7	76.1	109.2	142.4
		72	TC	212.7	212.7	212.7	203.4	203.4	203.4	187.5	187.5	187.5	170.8	170.8	170.8	152.8	152.8	152.8
			SHC	81.3	114.7	148.1	74.3	107.7	141.1	65.1	98.5	131.9	55.6	89.0	122.3	45.8	79.1	112.4
		76	TC	—	230.6	230.6	—	221.5	221.5	—	205.1	205.1	—	187.6	187.6	—	168.9	168.9
			SHC	—	89.1	121.5	—	82.3	114.7	—	73.2	105.7	—	63.8	96.4	—	54.0	86.6
7500 cfm	EA (wb)	58	TC	180.3	180.3	205.3	171.2	171.2	195.7	158.3	158.3	181.8	144.5	144.5	166.9	129.6	129.6	150.7
			SHC	155.3	180.3	205.3	146.7	171.2	195.7	134.7	158.3	181.8	122.0	144.5	166.9	108.4	129.6	150.7
		62	TC	180.5	180.5	213.9	171.4	171.4	204.1	158.5	158.5	189.9	144.6	144.6	174.6	129.7	129.7	158.0
			SHC	147.1	180.5	213.9	138.6	171.4	204.1	127.0	158.5	189.9	114.6	144.6	174.6	101.4	129.7	158.0
		67	TC	195.3	195.3	195.3	185.6	185.6	185.6	170.4	170.4	174.8	154.2	154.2	164.7	136.6	136.6	154.3
			SHC	118.4	155.0	191.6	111.1	147.7	184.3	101.8	138.3	174.8	91.9	128.3	164.7	81.7	118.0	154.3
		72	TC	216.0	216.0	216.0	206.5	206.5	206.5	190.5	190.5	190.5	173.5	173.5	173.5	155.2	155.2	155.2
			SHC	84.0	120.7	157.4	77.2	114.3	151.5	67.8	104.4	141.0	58.2	94.8	131.4	48.3	84.8	121.3
		76	TC	—	233.9	233.9	—	224.8	224.8	—	208.1	208.1	—	190.3	190.3	—	171.3	171.3
			SHC	—	92.4	128.1	—	85.6	121.3	—	76.4	112.2	—	67.0	102.8	—	57.2	93.0

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

NOTE: See minimum-maximum airflow ratings on page 7.

50GEQ*28 One Stage Cooling Capacities

50GEQ*28				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
3750 cfm	EA (wb)	58	TC	131.0	131.0	149.5	123.9	123.9	141.9	115.6	115.6	132.9	106.4	106.4	123.0	96.4	96.4	112.0
			SHC	112.6	131.0	149.5	105.9	123.9	141.9	98.3	115.6	132.9	89.9	106.4	123.0	80.7	96.4	112.0
		62	TC	141.7	141.7	141.7	133.2	133.2	133.2	123.3	123.3	126.1	112.3	112.3	119.0	100.1	100.1	111.3
			SHC	100.2	119.4	138.6	94.3	113.5	132.7	87.8	107.0	126.1	80.8	99.9	119.0	73.3	92.3	111.3
		67	TC	157.8	157.8	157.8	148.9	148.9	148.9	138.4	138.4	138.4	126.9	126.9	126.9	114.3	114.3	114.3
			SHC	82.9	102.2	121.4	77.1	96.3	115.5	70.6	89.8	109.0	63.8	83.0	102.1	56.6	75.7	94.8
		72	TC	175.2	175.2	175.2	165.8	165.8	165.8	154.6	154.6	154.6	142.5	142.5	142.5	129.3	129.3	129.3
			SHC	65.2	84.4	103.6	59.4	78.6	97.7	53.0	72.1	91.2	46.3	65.4	84.5	39.2	58.3	77.4
		76	TC	—	190.1	190.1	—	180.2	180.2	—	168.4	168.4	—	155.7	155.7	—	142.1	142.1
			SHC	—	69.9	88.1	—	64.1	82.4	—	57.6	76.0	—	51.0	69.4	—	44.0	62.5
4375 cfm	EA (wb)	58	TC	140.0	140.0	159.5	132.5	132.5	151.5	123.8	123.8	142.1	114.3	114.3	131.7	103.7	103.7	120.2
			SHC	120.6	140.0	159.5	113.6	132.5	151.5	105.6	123.8	142.1	96.8	114.3	131.7	87.3	103.7	120.2
		62	TC	149.2	149.2	155.1	138.6	138.6	147.2	128.3	128.3	140.3	117.0	117.0	132.8	104.8	104.8	124.4
			SHC	110.9	133.0	155.1	103.2	125.2	147.2	96.5	118.4	140.3	89.2	111.0	132.8	81.3	102.9	124.4
		67	TC	163.6	163.6	163.6	154.3	154.3	154.3	143.3	143.3	143.3	132.4	132.4	132.4	118.3	118.3	118.3
			SHC	89.0	111.1	133.2	83.0	105.1	127.2	76.4	98.5	120.5	70.4	92.4	114.4	62.1	84.1	106.1
		72	TC	181.1	181.1	181.1	171.2	171.2	171.2	159.5	159.5	159.5	147.0	147.0	147.0	133.4	133.4	133.4
			SHC	68.3	90.3	112.4	62.4	84.4	106.4	55.8	77.8	99.8	49.0	71.0	92.9	41.9	63.8	85.7
		76	TC	—	196.1	196.1	—	185.8	185.8	—	173.4	173.4	—	160.2	160.2	—	146.0	146.0
			SHC	—	73.3	94.5	—	67.5	88.7	—	60.9	82.1	—	54.1	75.4	—	47.0	68.3
5000 cfm	EA (wb)	58	TC	147.6	147.6	167.9	139.8	139.8	159.6	130.7	130.7	149.7	120.7	120.7	138.9	112.1	112.1	128.5
			SHC	127.3	147.6	167.9	120.1	139.8	159.6	111.7	130.7	149.7	102.6	120.7	138.9	95.7	112.1	128.5
		62	TC	152.0	152.0	166.9	143.0	143.0	160.5	132.5	132.5	153.2	121.1	121.1	145.3	109.9	109.9	132.8
			SHC	117.4	142.2	166.9	111.3	135.9	160.5	104.3	128.7	153.2	96.8	121.1	145.3	87.0	109.9	132.8
		67	TC	168.0	168.0	168.0	158.4	158.4	158.4	147.1	147.1	147.1	134.8	134.8	134.8	121.4	121.4	121.4
			SHC	94.5	119.5	144.4	88.5	113.4	138.3	81.8	106.7	131.5	74.8	99.6	124.4	67.3	92.0	116.7
		72	TC	185.5	185.5	185.5	175.4	175.4	175.4	163.4	163.4	163.4	150.5	150.5	150.5	138.3	138.3	138.3
			SHC	70.9	95.8	120.7	65.0	89.8	114.7	58.4	83.1	107.9	51.4	76.2	100.9	45.3	70.0	94.6
		76	TC	—	200.6	200.6	—	190.0	190.0	—	177.1	177.1	—	163.6	163.6	—	151.0	151.0
			SHC	—	76.4	100.4	—	70.5	94.5	—	63.8	87.8	—	56.9	81.0	—	50.5	74.6
5625 cfm	EA (wb)	58	TC	154.1	154.1	175.2	146.0	146.0	166.5	136.5	136.5	156.1	126.2	126.2	144.9	114.8	114.8	132.5
			SHC	133.1	154.1	175.2	125.6	146.0	166.5	116.9	136.5	156.1	107.4	126.2	144.9	97.1	114.8	132.5
		62	TC	156.0	156.0	179.2	146.6	146.6	173.5	136.9	136.9	162.8	126.3	126.3	151.3	114.8	114.8	138.4
			SHC	124.9	152.0	179.2	119.0	146.2	173.5	110.4	136.6	162.8	101.3	126.3	151.3	91.2	114.8	138.4
		67	TC	171.6	171.6	171.6	161.8	161.8	161.8	150.1	150.1	150.1	137.6	137.6	137.6	124.0	124.0	126.9
			SHC	99.8	127.4	155.1	93.7	121.3	148.9	86.8	114.4	142.0	79.7	107.2	134.7	72.2	99.5	126.9
		72	TC	189.2	189.2	189.2	178.8	178.8	178.8	166.4	166.4	166.4	153.2	153.2	153.2	139.0	139.0	139.0
			SHC	73.4	101.0	128.6	67.4	95.0	122.5	60.6	88.1	115.6	53.7	81.1	108.5	46.4	73.7	101.1
		76	TC	—	204.2	204.2	—	193.3	193.3	—	180.1	180.1	—	166.3	166.3	—	151.4	151.4
			SHC	—	79.3	106.0	—	73.2	100.0	—	66.5	93.2	—	59.6	86.2	—	52.3	78.9
6250 cfm	EA (wb)	58	TC	159.7	159.7	181.3	151.3	151.3	172.3	141.4	141.4	161.6	130.8	130.8	150.0	119.1	119.1	137.3
			SHC	138.0	159.7	181.3	130.3	151.3	172.3	121.3	141.4	161.6	111.6	130.8	150.0	100.9	119.1	137.3
		62	TC	160.0	160.0	188.9	151.5	151.5	179.5	141.6	141.6	168.5	130.9	130.9	156.6	119.2	119.2	143.5
			SHC	131.0	160.0	188.9	123.4	151.5	179.5	114.6	141.6	168.5	105.2	130.9	156.6	95.0	119.2	143.5
		67	TC	174.5	174.5	174.5	164.6	164.6	164.6	152.7	152.7	152.7	140.0	140.0	144.6	126.1	126.1	136.7
			SHC	104.7	135.0	165.4	98.5	128.8	159.1	91.6	121.8	152.0	84.4	114.5	144.6	76.7	106.7	136.7
		72	TC	192.2	192.2	192.2	181.6	181.6	181.6	168.9	168.9	168.9	155.5	155.5	155.5	141.0	141.0	141.0
			SHC	75.6	105.9	136.2	69.6	99.8	130.0	62.8	92.9	123.1	55.7	85.8	115.9	48.4	78.4	108.4
		76	TC	—	207.1	207.1	—	196.1	196.1	—	182.5	182.5	—	168.4	168.4	—	153.3	153.3
			SHC	—	81.9	111.3	—	75.9	105.2	—	69.0	98.3	—	61.7	90.3	—	54.7	83.9

LEGEND

—	Do Not Operate
cfm	Cubic Feet Per Minute (Supply Air)
EA (db)	Entering Air Temperature (dry bulb)
EA (wb)	Entering Air Temperature (wet bulb)
SHC	Sensible Heat Capacity (1000 Btuh) Gross
TC	Total Capacity (1000 Btuh) Gross

50GEQU28 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR - (°F)								
		80 Dry Bulb 62 Wet Bulb (36% Relative)			80 Dry Bulb 67 Wet Bulb (51% Relative)			80 Dry Bulb 72 Wet Bulb (68% Relative)		
		AIR ENTERING EVAPORATOR - SCFM / STATIC								
		6000	8000	10000	6000	8000	10000	6000	8000	10000
75	TC	283.0	294.3	303.4	313.9	326.3	336.3	344.8	358.3	369.2
	SHC	219.7	239.9	256.5	190.7	208.8	223.7	161.8	177.7	190.8
	kW	18.2	18.4	18.5	18.4	18.6	18.7	18.6	18.8	18.9
85	TC	262.5	273.4	282.1	292.8	304.8	314.4	323.1	336.2	346.7
	SHC	209.2	230.2	247.6	173.2	191.6	206.8	137.2	153.0	166.1
	kW	20.8	21.0	21.1	21.0	21.2	21.4	21.3	21.5	21.6
95	TC	242.0	252.4	260.9	271.7	283.3	292.6	301.5	314.1	324.3
	SHC	198.7	220.6	238.6	155.6	174.4	190.0	112.5	128.3	141.3
	kW	23.4	23.6	23.8	23.7	23.9	24.0	23.9	24.2	24.3
105	TC	221.5	231.5	239.6	250.7	261.8	270.7	279.8	292.0	301.8
	SHC	188.2	211.0	229.7	138.0	157.3	173.1	87.9	103.6	116.6
	kW	26.0	26.2	26.4	26.3	26.6	26.7	26.6	26.9	27.0
115	TC	201.0	210.6	218.4	229.6	240.3	248.9	258.2	269.9	279.4
	SHC	177.8	201.3	220.7	120.5	140.1	156.3	63.2	78.9	91.9
	kW	28.7	28.9	29.0	29.0	29.2	29.4	29.3	29.6	29.7

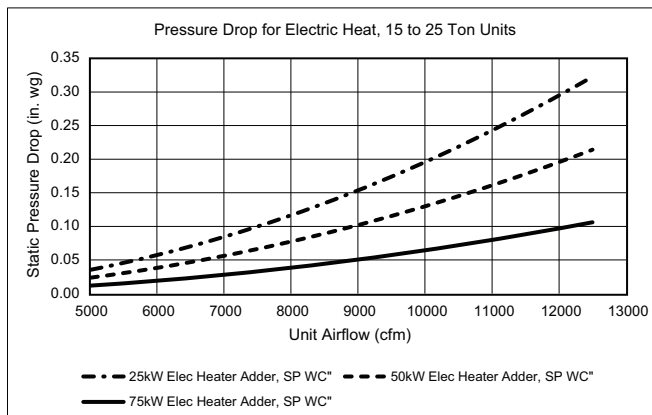
50GEQU28 — Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR - (°F)								
		75 Dry Bulb 62.5 Wet Bulb (50% Relative)			75 Dry Bulb 64 Wet Bulb (56% Relative)			75 Dry Bulb 65.3 Wet Bulb (60% Relative)		
		AIR ENTERING EVAPORATOR - SCFM								
		6000	8000	10000	6000	8000	10000	6000	8000	10000
80	TC	80.2	83.5	86.2	79.2	82.6	85.3	78.4	81.8	84.5
	SHC	14.0	11.2	9.1	7.8	7.9	7.9	2.5	5.0	6.9
	kW	18.3	18.3	18.3	18.3	18.2	18.2	18.0	18.1	18.1
75	TC	83.0	86.4	89.2	82.3	85.7	88.5	81.7	85.1	87.9
	SHC	16.5	13.4	11.1	12.2	11.8	11.4	8.6	10.4	11.7
	kW	18.7	18.7	18.7	18.8	18.6	18.6	18.5	18.5	18.5
70	TC	85.9	89.3	92.1	85.4	88.9	91.7	85.0	88.5	91.3
	SHC	19.0	15.6	13.0	16.7	15.7	14.9	14.6	15.8	16.6
	kW	19.1	19.1	19.1	19.2	19.0	19.0	19.0	19.0	19.0
60	TC	91.6	95.1	98.0	91.7	95.2	98.1	91.7	95.3	98.2
	SHC	24.0	20.0	17.0	25.5	23.5	22.0	26.8	26.5	26.3
	kW	19.9	19.8	19.8	20.0	19.9	19.8	19.9	19.9	19.9
50	TC	97.4	101.0	103.9	97.9	101.5	104.5	98.4	102.0	105.0
	SHC	29.0	24.5	21.0	34.3	31.4	29.1	39.0	37.3	36.1
	kW	20.6	20.6	20.5	20.9	20.7	20.7	20.9	20.8	20.8
40	TC	103.1	106.8	109.8	104.1	107.9	110.9	105.0	108.8	111.9
	SHC	34.0	28.9	24.9	43.2	39.2	36.1	51.1	48.1	45.8
	kW	21.4	21.3	21.3	21.8	21.5	21.5	21.8	21.7	21.7

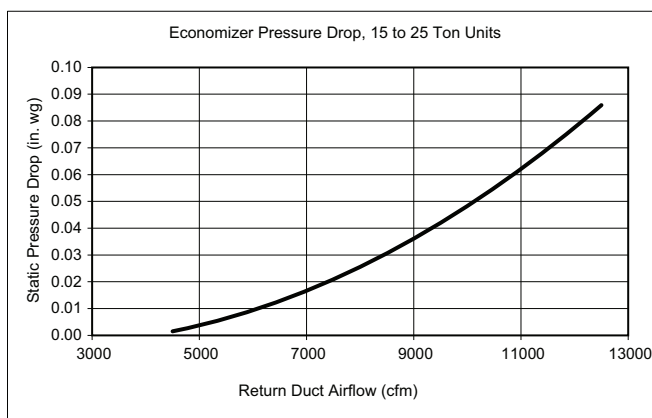
LEGEND

Edb	—	Entering Dry Bulb
Ewb	—	Entering Wet Bulb
kW	—	Compressor Power Input
SCFM/BF	—	Standard Cubic Feet per Minute/Bypass Factor
SHC	—	Sensible Heat Capacity (1000 Btuh) Gross
TC	—	Total Capacity (1000 Btuh) Gross

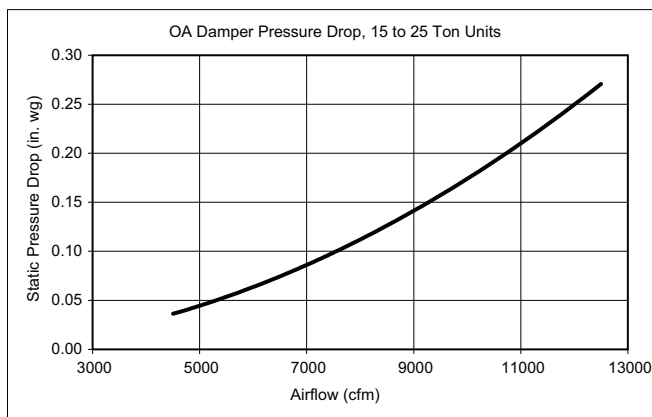
Pressure Drop for Electric Heating Units 15 to 25 Ton Units



Static Pressure Drop — Accessory Economizer 15 to 25 Ton Units



Outside Air Damper Leakage 15 to 25 Ton Units



General Fan Performance Notes

1. Interpolation is permissible. Do not extrapolate.
2. External static pressure is the static pressure difference between the return duct and the supply duct plus the static pressure caused by any FIOPs or accessories.
3. Tabular data accounts for pressure loss due to clean filters, unit casing, and wet coils.
4. Factory options and accessories may effect static pressure losses. Selection software is available, through your salesperson, to help you select the best motor/drive combination for your application.
5. The fan performance tables offer motor recommendations. In cases when 2 motors would work, the lower horsepower option is recommended.
6. For information on the electrical properties of the fan motors, please see the Electrical information section of this book.
7. For more information on the performance limits of the fan motors, see the application data section of this book.
8. 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 (3-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.

50GEQT17 — 15 Ton Vertical Supply (rpm - bhp)

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	936	0.61	1065	0.90	1180	1.23	1285	1.59	1380	1.97
4875	991	0.73	1112	1.03	1224	1.37	1325	1.74	1418	2.14
5250	1048	0.86	1161	1.18	1268	1.53	1366	1.91	1457	2.32
5625	1106	1.02	1211	1.34	1314	1.71	1410	2.11	1498	2.53
6000	1166	1.19	1263	1.52	1362	1.90	1454	2.31	1540	2.75
6375	1226	1.38	1317	1.72	1410	2.11	1499	2.53	1584	2.99
6750	1287	1.59	1371	1.93	1460	2.33	1546	2.76	1628	3.23
7125	1349	1.82	1428	2.16	1511	2.56	1594	3.01	1674	3.48
7500	1412	2.07	1485	2.40	1563	2.80	1643	3.26	1721	3.74

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	1470	2.38	1554	2.81	1634	3.27	1710	3.74	1782	4.24
4875	1505	2.55	1588	3.00	1666	3.46	1741	3.95	1812	4.46
5250	1542	2.75	1623	3.21	1700	3.69	1773	4.18	1844	4.71
5625	1581	2.97	1660	3.44	1735	3.93	1807	4.44	1876	4.97
6000	1622	3.21	1699	3.69	1772	4.19	1843	4.71	1911	5.25
6375	1663	3.46	1739	3.95	1811	4.46	1880	4.99	1946	5.54
6750	1706	3.71	1780	4.22	1850	4.74	1918	5.28	1983	5.83
7125	1750	3.98	1822	4.49	1891	5.02	1958	5.57	2022	6.14
7500	1794	4.24	1866	4.77	1933	5.30	1999	5.86	—	—

Std/Med Static 936-2000 rpm, 4.8 Max bhp (2.4 Max bhp per fan motor)

High Static 936-2200 rpm, 6.0 Max bhp (3.0 Max bhp per fan motor)

50GEQT17 — Standard/Medium Static — 15 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
4500	936	4.5	1065	5.2	1180	5.8	1285	6.3	1380	6.8
4875	991	4.8	1112	5.4	1224	6.0	1325	6.5	1418	7.0
5250	1048	5.1	1161	5.7	1268	6.2	1366	6.7	1457	7.2
5625	1106	5.4	1211	5.9	1314	6.5	1410	7.0	1498	7.4
6000	1166	5.7	1263	6.2	1362	6.7	1454	7.2	1540	7.6
6375	1226	6.0	1317	6.5	1410	7.0	1499	7.4	1584	7.9
6750	1287	6.3	1371	6.8	1460	7.2	1546	7.7	1628	8.1
7125	1349	6.7	1428	7.1	1511	7.5	1594	7.9	1674	8.3
7500	1412	7.0	1485	7.4	1563	7.8	1643	8.2	1721	8.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
4500	1470	7.3	1554	7.7	1634	8.1	1710	8.5	1782	8.9
4875	1505	7.5	1588	7.9	1666	8.3	1741	8.7	1812	9.0
5250	1542	7.6	1623	8.1	1700	8.5	1773	8.8	1844	9.2
5625	1581	7.8	1660	8.3	1735	8.6	1807	9.0	1876	9.4
6000	1622	8.1	1699	8.5	1772	8.8	1843	9.2	—	—
6375	1663	8.3	1739	8.7	1811	9.0	1880	9.4	—	—
6750	1706	8.5	1780	8.9	1850	9.2	—	—	—	—
7125	1750	8.7	1822	9.1	1891	9.4	—	—	—	—
7500	1794	8.9	1866	9.3	—	—	—	—	—	—

Std/Med Static 936-2000 rpm

50GEQT17 — High Static — 15 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
4500	936	4.2	1065	4.8	1180	5.3	1285	5.8	1380	6.2
4875	991	4.4	1112	5.0	1224	5.5	1325	6.0	1418	6.4
5250	1048	4.7	1161	5.2	1268	5.7	1366	6.2	1457	6.6
5625	1106	5.0	1211	5.4	1314	5.9	1410	6.4	1498	6.8
6000	1166	5.2	1263	5.7	1362	6.1	1454	6.6	1540	7.0
6375	1226	5.5	1317	5.9	1410	6.4	1499	6.8	1584	7.2
6750	1287	5.8	1371	6.2	1460	6.6	1546	7.0	1628	7.4
7125	1349	6.1	1428	6.4	1511	6.8	1594	7.2	1674	7.6
7500	1412	6.4	1485	6.7	1563	7.1	1643	7.4	1721	7.8

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
4500	1470	6.6	1554	7.0	1634	7.4	1710	7.7	1782	8.1
4875	1505	6.8	1588	7.2	1666	7.5	1741	7.9	1812	8.2
5250	1542	7.0	1623	7.3	1700	7.7	1773	8.0	1844	8.4
5625	1581	7.1	1660	7.5	1735	7.9	1807	8.2	1876	8.5
6000	1622	7.3	1699	7.7	1772	8.0	1843	8.4	1911	8.7
6375	1663	7.5	1739	7.9	1811	8.2	1880	8.5	1946	8.8
6750	1706	7.7	1780	8.1	1850	8.4	1918	8.7	1983	9.0
7125	1750	7.9	1822	8.3	1891	8.6	1958	8.9	2022	9.2
7500	1794	8.1	1866	8.5	1933	8.8	1999	9.1	—	—

High Static 936-2200 rpm

50GEQT24 — 20 Ton Vertical Supply (rpm - bhp)

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
6,000	1038	0.84	1148	1.14	1251	1.47	1351	1.86	1448	2.28
6,500	1103	1.01	1207	1.32	1304	1.66	1398	2.05	1490	2.48
7,000	1169	1.19	1269	1.52	1360	1.87	1448	2.26	1535	2.69
7,500	1234	1.38	1332	1.74	1418	2.09	1501	2.48	1583	2.91
8,000	1299	1.58	1395	1.95	1478	2.32	1557	2.72	1634	3.14
8,500	1364	1.78	1459	2.18	1540	2.56	1615	2.95	1689	3.37
9,000	1427	1.97	1524	2.40	1602	2.79	1674	3.18	1745	3.60
9,500	1491	2.17	1589	2.62	1665	3.02	1735	3.41	1802	3.83
10,000	1553	2.36	1653	2.84	1729	3.25	1797	3.65	1862	4.06

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
6,000	1539	2.74	1624	3.22	1703	3.72	1777	4.22	1847	4.74
6,500	1578	2.95	1662	3.44	1741	3.96	1816	4.49	1887	5.04
7,000	1619	3.16	1701	3.66	1779	4.19	1854	4.74	1924	5.30
7,500	1663	3.38	1742	3.88	1818	4.41	1892	4.97	1962	5.55
8,000	1711	3.60	1786	4.10	1859	4.62	1931	5.18	2000	5.76
8,500	1761	3.83	1832	4.31	1903	4.83	1972	5.37	2039	5.94
9,000	1813	4.04	1882	4.52	1949	5.02	2015	5.55	2081	6.11
9,500	1868	4.26	1933	4.72	1998	5.21	2061	5.72	2124	6.27
10,000	1925	4.49	1987	4.94	2049	5.41	2110	5.91	2170	6.43

Std/Med Static 1038-2000 rpm, 4.8 Max bhp (2.4 Max bhp per fan motor)

High Static 1038-2200 rpm, 10.0 Max bhp (5.0 Max bhp per fan motor)

50GEQT24 — Standard/Medium Static — 20 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
6,000	1038	5.1	1148	5.6	1251	6.1	1351	6.7	1448	7.2
6,500	1103	5.4	1207	5.9	1304	6.4	1398	6.9	1490	7.4
7,000	1169	5.7	1269	6.2	1360	6.7	1448	7.2	1535	7.6
7,500	1234	6.1	1332	6.6	1418	7.0	1501	7.4	1583	7.9
8,000	1299	6.4	1395	6.9	1478	7.3	1557	7.7	1634	8.1
8,500	1364	6.7	1459	7.2	1540	7.6	1615	8.0	1689	8.4
9,000	1427	7.1	1524	7.6	1602	8.0	1674	8.3	1745	8.7
9,500	1491	7.4	1589	7.9	1665	8.3	1735	8.6	1802	9.0
10,000	1553	7.7	1653	8.2	1729	8.6	1797	9.0	1862	9.3

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
6,000	1539	7.6	1624	8.1	1703	8.5	1777	8.9	1847	9.2
6,500	1578	7.8	1662	8.3	1741	8.7	1816	9.1	1887	9.4
7,000	1619	8.0	1701	8.5	1779	8.9	1854	9.2	—	—
7,500	1663	8.3	1742	8.7	1818	9.1	1892	9.4	—	—
8,000	1711	8.5	1786	8.9	1859	9.3	—	—	—	—
8,500	1761	8.8	1832	9.1	1903	9.5	—	—	—	—
9,000	1813	9.0	1882	9.4	1949	9.7	—	—	—	—
9,500	1868	9.3	1933	9.7	—	—	—	—	—	—
10,000	1925	9.6	1987	9.9	—	—	—	—	—	—

Std/Med Static 1038-2000 rpm

50GEQT24 — High Static — 20 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
6,000	1038	4.6	1148	5.1	1251	5.6	1351	6.1	1448	6.5
6,500	1103	4.9	1207	5.4	1304	5.9	1398	6.3	1490	6.7
7,000	1169	5.2	1269	5.7	1360	6.1	1448	6.5	1535	6.9
7,500	1234	5.5	1332	6.0	1418	6.4	1501	6.8	1583	7.2
8,000	1299	5.8	1395	6.3	1478	6.7	1557	7.0	1634	7.4
8,500	1364	6.1	1459	6.6	1540	7.0	1615	7.3	1689	7.6
9,000	1427	6.4	1524	6.9	1602	7.2	1674	7.6	1745	7.9
9,500	1491	6.7	1589	7.2	1665	7.5	1735	7.9	1802	8.2
10,000	1553	7.0	1653	7.5	1729	7.8	1797	8.1	1862	8.4

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
6,000	1539	6.9	1624	7.3	1703	7.7	1777	8.0	1847	8.4
6,500	1578	7.1	1662	7.5	1741	7.9	1816	8.2	1887	8.6
7,000	1619	7.3	1701	7.7	1779	8.1	1854	8.4	1924	8.7
7,500	1663	7.5	1742	7.9	1818	8.2	1892	8.6	1962	8.9
8,000	1711	7.7	1786	8.1	1859	8.4	1931	8.8	2000	9.1
8,500	1761	8.0	1832	8.3	1903	8.6	1972	8.9	2039	9.3
9,000	1813	8.2	1882	8.5	1949	8.8	2015	9.1	2081	9.5
9,500	1868	8.5	1933	8.8	1998	9.1	2061	9.4	2124	9.6
10,000	1925	8.7	1987	9.0	2049	9.3	2110	9.6	2170	9.9

High Static 1038-2200 rpm

50GEQT28 — 25 Ton Vertical Supply (rpm - bhp)

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
7,500	1099	1.27	1174	1.55	1256	1.90	1343	2.32	1433	2.82
8,125	1177	1.58	1246	1.87	1319	2.22	1397	2.64	1479	3.13
8,750	1256	1.92	1319	2.23	1385	2.58	1456	3.00	1530	3.48
9,375	1337	2.32	1394	2.63	1455	2.99	1519	3.40	1586	3.87
10,000	1417	2.74	1471	3.06	1526	3.42	1585	3.83	1646	4.29
10,625	1498	3.18	1548	3.51	1600	3.88	1654	4.28	1710	4.73
11,250	1579	3.65	1626	3.98	1675	4.36	1725	4.76	1777	5.20
11,875	1661	4.17	1705	4.51	1751	4.88	1798	5.29	1846	5.72
12,500	1743	4.78	1785	5.14	1828	5.52	1872	5.93	1917	6.37

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
7,500	1521	3.38	1604	3.96	1683	4.58	1757	5.21	1828	5.86
8,125	1561	3.68	1642	4.28	1720	4.92	1794	5.58	1864	6.26
8,750	1606	4.02	1683	4.63	1758	5.28	1830	5.95	1900	6.66
9,375	1655	4.40	1727	5.00	1798	5.64	1869	6.33	1937	7.05
10,000	1710	4.81	1776	5.39	1843	6.02	1910	6.70	1976	7.42
10,625	1769	5.24	1829	5.79	1891	6.40	1954	7.06	2018	7.78
11,250	1831	5.69	1887	6.23	1944	6.81	2003	7.45	2063	8.14
11,875	1896	6.20	1948	6.72	2001	7.29	2056	7.90	2111	8.56
12,500	1964	6.85	2012	7.36	2061	7.91	2112	8.51	2164	9.16

Std/Med Static 1099-2200 rpm, 6.0 Max bhp (3.0 Max bhp per fan motor)

High Static 1099-2200 rpm, 10.0 Max bhp (5.0 Max bhp per fan motor)

50GEQT28 — Standard/Medium Static — 25 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
7,500	1099	4.9	1174	5.3	1256	5.6	1343	6.0	1433	6.5
8,125	1177	5.3	1246	5.6	1319	5.9	1397	6.3	1479	6.7
8,750	1256	5.6	1319	5.9	1385	6.2	1456	6.6	1530	6.9
9,375	1337	6.0	1394	6.3	1455	6.6	1519	6.9	1586	7.2
10,000	1417	6.4	1471	6.6	1526	6.9	1585	7.2	1646	7.4
10,625	1498	6.8	1548	7.0	1600	7.2	1654	7.5	1710	7.7
11,250	1579	7.1	1626	7.4	1675	7.6	1725	7.8	1777	8.0
11,875	1661	7.5	1705	7.7	1751	7.9	1798	8.1	1846	8.4
12,500	1743	7.9	1785	8.1	1828	8.3	1872	8.5	1917	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
7,500	1521	6.9	1604	7.2	1683	7.6	1757	8.0	1828	8.3
8,125	1561	7.1	1642	7.4	1720	7.8	1794	8.1	1864	8.4
8,750	1606	7.3	1683	7.6	1758	8.0	1830	8.3	—	—
9,375	1655	7.5	1727	7.8	1798	8.1	1869	8.5	—	—
10,000	1710	7.7	1776	8.0	1843	8.4	—	—	—	—
10,625	1769	8.0	1829	8.3	1891	8.6	—	—	—	—
11,250	1831	8.3	1887	8.6	—	—	—	—	—	—
11,875	1896	8.6	—	—	—	—	—	—	—	—
12,500	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1099-2200 rpm

50GEQT28 — High Static — 25 Ton Vertical Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
7,500	1099	4.9	1174	5.3	1256	5.6	1343	6.0	1433	6.5
8,125	1177	5.3	1246	5.6	1319	5.9	1397	6.3	1479	6.7
8,750	1256	5.6	1319	5.9	1385	6.2	1456	6.6	1530	6.9
9,375	1337	6.0	1394	6.3	1455	6.6	1519	6.9	1586	7.2
10,000	1417	6.4	1471	6.6	1526	6.9	1585	7.2	1646	7.4
10,625	1498	6.8	1548	7.0	1600	7.2	1654	7.5	1710	7.7
11,250	1579	7.1	1626	7.4	1675	7.6	1725	7.8	1777	8.0
11,875	1661	7.5	1705	7.7	1751	7.9	1798	8.1	1846	8.4
12,500	1743	7.9	1785	8.1	1828	8.3	1872	8.5	1917	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
7,500	1521	6.9	1604	7.2	1683	7.6	1757	8.0	1828	8.3
8,125	1561	7.1	1642	7.4	1720	7.8	1794	8.1	1864	8.4
8,750	1606	7.3	1683	7.6	1758	8.0	1830	8.3	1900	8.6
9,375	1655	7.5	1727	7.8	1798	8.1	1869	8.5	1937	8.8
10,000	1710	7.7	1776	8.0	1843	8.4	1910	8.7	1976	9.0
10,625	1769	8.0	1829	8.3	1891	8.6	1954	8.9	2018	9.2
11,250	1831	8.3	1887	8.6	1944	8.8	2003	9.1	2063	9.4
11,875	1896	8.6	1948	8.8	2001	9.1	2056	9.3	2111	9.6
12,500	1964	8.9	2012	9.1	2061	9.4	2112	9.6	2164	9.8

High Static 1099-2200 rpm

50GEQT17 — 15 Ton Horizontal Supply (rpm - bhp)

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	1055	0.71	1171	0.97	1279	1.26	1379	1.58	1472	1.92
4875	1122	0.85	1231	1.12	1334	1.43	1430	1.76	1520	2.11
5250	1190	1.01	1293	1.30	1390	1.61	1482	1.95	1569	2.32
5625	1259	1.19	1356	1.49	1448	1.81	1536	2.16	1621	2.54
6000	1329	1.39	1420	1.69	1508	2.03	1592	2.39	1674	2.78
6375	1399	1.60	1486	1.92	1570	2.26	1650	2.63	1728	3.02
6750	1470	1.83	1553	2.16	1632	2.51	1710	2.89	1785	3.28
7125	1541	2.08	1620	2.42	1696	2.77	1770	3.15	1842	3.56
7500	1612	2.34	1688	2.69	1761	3.06	1832	3.44	1902	3.85

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	1560	2.29	1642	2.67	1721	3.29	1796	3.74	1870	4.22
4875	1605	2.49	1685	2.88	1762	3.29	1835	3.99	1906	4.47
5250	1652	2.70	1730	3.10	1805	3.53	1877	4.27	1946	4.75
5625	1701	2.94	1777	3.35	1850	3.78	1920	4.57	1988	5.07
6000	1751	3.18	1826	3.60	1897	4.04	1966	4.90	2032	5.41
6375	1803	3.43	1876	3.86	1945	4.31	2013	5.26	2078	5.79
6750	1857	3.70	1927	4.13	1995	4.59	2061	5.65	2125	6.19
7125	1913	3.98	1981	4.42	2047	4.88	2111	6.07	2173	6.62
7500	1969	4.27	2035	4.72	2099	5.18	2162	6.52	—	—

High Static 1055-2200 rpm, 10.0 Max bhp (5.0 Max bhp per fan motor)

50GEQT17 — High Static — 15 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
4500	1055	4.7	1171	5.3	1279	5.7	1379	6.2	1472	6.6
4875	1122	5.0	1231	5.5	1334	6.0	1430	6.4	1520	6.9
5250	1190	5.3	1293	5.8	1390	6.3	1482	6.7	1569	7.1
5625	1259	5.7	1356	6.1	1448	6.5	1536	6.9	1621	7.3
6000	1329	6.0	1420	6.4	1508	6.8	1592	7.2	1674	7.6
6375	1399	6.3	1486	6.7	1570	7.1	1650	7.5	1728	7.8
6750	1470	6.6	1553	7.0	1632	7.4	1710	7.7	1785	8.1
7125	1541	7.0	1620	7.3	1696	7.7	1770	8.0	1842	8.3
7500	1612	7.3	1688	7.6	1761	8.0	1832	8.3	1902	8.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
4500	1560	7.0	1642	7.4	1721	7.8	1796	8.1	1870	8.5
4875	1605	7.3	1685	7.6	1762	8.0	1835	8.3	1906	8.6
5250	1652	7.5	1730	7.8	1805	8.2	1877	8.5	1946	8.8
5625	1701	7.7	1777	8.0	1850	8.4	1920	8.7	1988	9.0
6000	1751	7.9	1826	8.3	1897	8.6	1966	8.9	2032	9.2
6375	1803	8.2	1876	8.5	1945	8.8	2013	9.1	2078	9.4
6750	1857	8.4	1927	8.7	1995	9.1	2061	9.4	2125	9.7
7125	1913	8.7	1981	9.0	2047	9.3	2111	9.6	2173	9.9
7500	1969	8.9	2035	9.2	2099	9.5	2162	9.8	—	—

High Static 1055-2200 rpm

50GEQT24 — 20 Ton Horizontal Supply (rpm - bhp)

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
6,000	1267	1.20	1361	1.49	1451	1.81	1538	2.15	1621	2.52
6,500	1356	1.45	1443	1.75	1527	2.07	1609	2.43	1688	2.80
7,000	1446	1.73	1527	2.04	1606	2.37	1683	2.73	1758	3.11
7,500	1537	2.03	1612	2.35	1687	2.69	1760	3.05	1831	3.44
8,000	1628	2.36	1699	2.68	1769	3.03	1838	3.40	1906	3.79
8,500	1719	2.71	1786	3.04	1853	3.40	1918	3.77	1983	4.16
9,000	1811	3.09	1875	3.43	1938	3.79	2000	4.17	2061	4.56
9,500	1904	3.50	1964	3.85	2024	4.21	2083	4.59	2142	4.99
10,000	1997	3.94	2054	4.29	2111	4.66	2167	5.04	—	—

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
6,000	1700	2.90	1777	3.32	1850	3.74	1921	4.19	1989	4.65
6,500	1764	3.20	1838	3.62	1909	4.05	1977	4.50	2043	4.97
7,000	1831	3.51	1901	3.93	1970	4.37	2036	4.83	2100	5.30
7,500	1900	3.84	1968	4.27	2033	4.71	2098	5.17	2160	5.64
8,000	1972	4.20	2037	4.63	2100	5.07	2162	5.53	—	—
8,500	2046	4.57	2108	5.00	2169	5.45	—	—	—	—
9,000	2122	4.97	2181	5.40	—	—	—	—	—	—
9,500	2199	5.40	—	—	—	—	—	—	—	—
10,000	—	—	—	—	—	—	—	—	—	—

High Static 1267-2200 rpm, 10.0 Max bhp (5.0 Max bhp per fan motor)

50GEQT24 — High Static — 20 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
6,000	1267	5.7	1361	6.1	1451	6.5	1538	6.9	1621	7.3
6,500	1356	6.1	1443	6.5	1527	6.9	1609	7.3	1688	7.6
7,000	1446	6.5	1527	6.9	1606	7.3	1683	7.6	1758	8.0
7,500	1537	6.9	1612	7.3	1687	7.6	1760	8.0	1831	8.3
8,000	1628	7.4	1699	7.7	1769	8.0	1838	8.3	1906	8.6
8,500	1719	7.8	1786	8.1	1853	8.4	1918	8.7	1983	9.0
9,000	1811	8.2	1875	8.5	1938	8.8	2000	9.1	2061	9.4
9,500	1904	8.6	1964	8.9	2024	9.2	2083	9.5	2142	9.7
10,000	1997	9.1	2054	9.3	2111	9.6	2167	9.8	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
6,000	1700	7.7	1777	8.0	1850	8.4	1921	8.7	1989	9.0
6,500	1764	8.0	1838	8.3	1909	8.7	1977	9.0	2043	9.3
7,000	1831	8.3	1901	8.6	1970	8.9	2036	9.2	2100	9.5
7,500	1900	8.6	1968	8.9	2033	9.2	2098	9.5	2160	9.8
8,000	1972	8.9	2037	9.2	2100	9.5	2162	9.8	—	—
8,500	2046	9.3	2108	9.6	2169	9.9	—	—	—	—
9,000	2122	9.6	2181	9.9	—	—	—	—	—	—
9,500	2199	10.0	—	—	—	—	—	—	—	—
10,000	—	—	—	—	—	—	—	—	—	—

High Static 1267-2200 rpm

50GEQT28 — 25 Ton Horizontal Supply (rpm - bhp)

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
7,500	1406	2.11	1483	2.47	1559	2.87	1636	3.32	1711	3.80
8,125	1509	2.60	1580	2.98	1651	3.40	1722	3.86	1792	4.35
8,750	1614	3.16	1679	3.56	1744	3.98	1810	4.45	1876	4.96
9,375	1719	3.78	1779	4.19	1840	4.63	1902	5.11	1963	5.62
10,000	1824	4.44	1880	4.87	1938	5.33	1995	5.81	2053	6.34
10,625	1930	5.16	1983	5.60	2036	6.06	2091	6.56	2145	7.09
11,250	2036	5.91	2086	6.35	2137	6.83	2187	7.32	—	—
11,875	2143	6.67	2190	7.12	—	—	—	—	—	—
12,500	—	—	—	—	—	—	—	—	—	—

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
7,500	1783	4.30	1853	4.82	1921	5.37	1986	5.94	2048	6.51
8,125	1861	4.87	1928	5.42	1993	5.98	2055	6.56	2116	7.16
8,750	1941	5.49	2005	6.05	2067	6.63	2128	7.24	2187	7.86
9,375	2024	6.16	2085	6.74	2144	7.33	—	—	—	—
10,000	2111	6.89	2168	7.46	—	—	—	—	—	—
10,625	2199	7.63	—	—	—	—	—	—	—	—
11,250	—	—	—	—	—	—	—	—	—	—
11,875	—	—	—	—	—	—	—	—	—	—
12,500	—	—	—	—	—	—	—	—	—	—

High Static 1406-2200 rpm, 10.0 Max bhp (5.0 Max bhp per fan motor)

50GEQT28 — High Static — 25 Ton Horizontal Supply (rpm - vdc)

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	0.2		0.4		0.6		0.8		1.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
7,500	1406	6.3	1483	6.7	1559	7.0	1636	7.4	1711	7.7
8,125	1509	6.8	1580	7.1	1651	7.5	1722	7.8	1792	8.1
8,750	1614	7.3	1679	7.6	1744	7.9	1810	8.2	1876	8.5
9,375	1719	7.8	1779	8.1	1840	8.3	1902	8.6	1963	8.9
10,000	1824	8.3	1880	8.5	1938	8.8	1995	9.1	2053	9.3
10,625	1930	8.8	1983	9.0	2036	9.2	2091	9.5	2145	9.7
11,250	2036	9.2	2086	9.5	2137	9.7	2187	9.9	—	—
11,875	2143	9.7	2190	10.0	—	—	—	—	—	—
12,500	—	—	—	—	—	—	—	—	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
7,500	1783	8.1	1853	8.4	1921	8.7	1986	9.0	2048	9.3
8,125	1861	8.4	1928	8.7	1993	9.0	2055	9.3	2116	9.6
8,750	1941	8.8	2005	9.1	2067	9.4	2128	9.7	2187	9.9
9,375	2024	9.2	2085	9.5	2144	9.7	—	—	—	—
10,000	2111	9.6	2168	9.9	—	—	—	—	—	—
10,625	2199	10.0	—	—	—	—	—	—	—	—
11,250	—	—	—	—	—	—	—	—	—	—
11,875	—	—	—	—	—	—	—	—	—	—
12,500	—	—	—	—	—	—	—	—	—	—

High Static 1406-2200 rpm

Legend and Notes

Applicable for Electrical Data Tables on pages 49 to 58

LEGEND

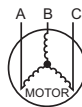
BRKR	— Circuit Breaker
C.O.	— Convenience Outlet
FLA	— Full Load Amps
IFM	— Indoor Fan Motor
LRA	— Locked Rotor Amps
MCA	— Minimum Circuit Amps
P.E.	— Power Exhaust
PWRD C.O.	— Powered Convenience Outlet
RLA	— Rated Load Amps
SCCR	— Short Circuit Current Rating
UNPWR C.O.	— Unpowered Convenience Outlet

NOTES:

1. In compliance with NEC requirements for multi-motor 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. For 208/230 v units, where one value is shown it is the same for either 208 or 230 volts.
3. **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

$$\text{Average Voltage} = \frac{(224 + 231 + 226)}{3} = \frac{681}{3} = 227$$

Determine maximum deviation from average voltage.

(AB) 227-224 = 3-v

(BC) 231-227 = 4-v

(AC) 227-226 = 1-v

Maximum deviation is 4-v.

Determine percent of voltage imbalance.

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

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

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

50GEQ*17-28 Cooling Electrical Data

UNIT SIZE	V-Ph-Hz	UNIT VOLTAGE		STD SCCR kA	HIGH SCCR kA	COMP 1		COMP 2		OFM (ea)		IFM		
		RANGE				RLA	LRA	RLA	LRA	WATTS	FLA	TYPE	EFF at Full Load	FLA
		MIN	MAX											
50GEQT17 Vertical	208-3-60	187	253	5	60	31.8	255	23.6	157	360	2.6	MED	90.0%	6.4
												HIGH	90.0%	7.5
	230-3-60	187	253	5	60	31.8	255	23.6	157	360	2.6	MED	90.0%	6.4
												HIGH	90.0%	7.5
	460-3-60	414	506	5	65	15.0	123	10.1	75	360	1.4	MED	90.0%	3.0
												HIGH	90.0%	3.5
	575-3-60	518	633	5	—	11.9	94	8.6	48	360	2.6	MED	90.0%	2.5
												HIGH	90.0%	3.0
50GEQT24 Vertical	208-3-60	187	253	5	60	45.4	270	31.8	255	360	2.6	MED	90.0%	6.4
												HIGH	90.0%	12.6
	230-3-60	187	253	5	60	45.4	270	31.8	255	360	2.6	MED	90.0%	6.4
												HIGH	90.0%	12.6
	460-3-60	414	506	5	65	21.6	147	15.0	123	360	1.4	MED	90.0%	3.0
												HIGH	90.0%	5.6
	575-3-60	518	633	5	—	15.3	109	11.9	94	360	2.6	MED	90.0%	2.5
												HIGH	90.0%	4.6
50GEQT28 Vertical	208-3-60	187	253	5	60	51.3	300	45.4	270	360	2.6	MED	90.0%	7.5
												HIGH	90.0%	12.6
	230-3-60	187	253	5	60	51.3	300	45.4	270	360	2.6	MED	90.0%	7.5
												HIGH	90.0%	12.6
	460-3-60	414	506	5	65	22.4	150	21.6	147	360	1.4	MED	90.0%	3.5
												HIGH	90.0%	5.6
	575-3-60	518	633	5	—	19.9	109	15.3	109	360	2.6	MED	90.0%	3.0
												HIGH	90.0%	4.6
50GEQT17 Horizontal	208-3-60	187	253	5	60	31.8	255	23.6	157	360	2.6	HIGH	90.0%	12.6
	230-3-60	187	253	5	60	31.8	255	23.6	157	360	2.6	HIGH	90.0%	12.6
	460-3-60	414	506	5	65	15.0	123	10.1	75	360	1.4	HIGH	90.0%	5.6
	575-3-60	518	633	5	—	11.9	94	8.6	48	360	2.6	HIGH	90.0%	4.6
50GEQT24 Horizontal	208-3-60	187	253	5	60	45.4	270	31.8	255	360	2.6	HIGH	90.0%	12.6
	230-3-60	187	253	5	60	45.4	270	31.8	255	360	2.6	HIGH	90.0%	12.6
	460-3-60	414	506	5	65	21.6	147	15.0	123	360	1.4	HIGH	90.0%	5.6
	575-3-60	518	633	5	—	15.3	109	11.9	94	360	2.6	HIGH	90.0%	4.6
50GEQT28 Horizontal	208-3-60	187	253	5	60	51.3	300	45.4	270	360	2.6	HIGH	90.0%	12.6
	230-3-60	187	253	5	60	51.3	300	45.4	270	360	2.6	HIGH	90.0%	12.6
	460-3-60	414	506	5	65	22.4	150	21.6	147	360	1.4	HIGH	90.0%	5.6
	575-3-60	518	633	5	—	19.9	109	15.3	109	360	2.6	HIGH	90.0%	4.6

50GEQ*17 Unit Wire/Fuse Sizing Electrical Data

UNIT SIZE	IFM TYPE	STD SCCR kA	High SCCR kA	STD SCCR CRHEATER ****00	HIGH SCCR CRHEATER ****00	NOM (kW)	FLA	NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
								No Power Exhaust				With Power Exhaust			
								MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
										FLA	LRA			FLA	LRA
50GEQ*17 Vertical	208/230-3-60	MED	5	60	—	—	—	87	100	90	442	98	125	104	462
			5	60	454A	454A	18.8/25.0	52.1/60.1	152/162	175/175	150/160	164/174	175/175	164/173	514/522
			5	60	455A	455A	37.6/50.0	104.2/120.3	217/207	225/225	210/229	229/219	250/250	224/242	566/582
			5	60	456A	456A	56.3/75.0	156.4/180.4	243/267	300/300	270/298	255/279	300/300	284/311	618/642
		HIGH	5	60	—	—	—	89	100	93	446	101	125	106	466
			5	60	454A	454A	18.8/25.0	52.1/60.1	154/164	175/175	153/162	166/176	175/200	166/176	518/526
			5	60	455A	455A	37.6/50.0	104.2/120.3	219/209	225/225	213/231	231/221	250/250	226/245	570/586
			5	60	456A	456A	56.3/75.0	156.4/180.4	245/269	300/300	273/300	257/281	300/300	286/314	622/646
	460-3-60	MED	5	65	—	—	—	40	50	42	210	47	60	49	222
			5	65	457A	457A	25	30.1	78	80	77	84	90	84	252
			5	65	458A	458A	50	60.1	101	110	111	107	125	118	282
			5	65	459A	459A	75	90.2	131	150	146	137	150	153	312
		HIGH	5	65	—	—	—	42	50	43	212	48	60	50	224
			5	65	457A	457A	25	30.1	79	80	78	85	90	85	254
			5	65	458A	458A	50	60.1	102	110	112	108	125	120	284
			5	65	459A	459A	75	90.2	132	150	147	138	150	154	314
	575-3-60	MED	5	—	—	—	—	39	50	41	162	44	50	47	170
			5	—	460A	—	24.8	23.9	69	70	69	74	80	74	194
			5	—	461A	—	49.6	47.7	98	100	96	103	110	102	218
			5	—	462A	—	74.4	71.6	110	125	124	115	125	129	242
		HIGH	5	—	—	—	—	40	50	42	162	45	50	48	170
			5	—	460A	—	24.8	23.9	70	70	70	75	80	75	194
			5	—	461A	—	49.6	47.7	100	100	97	104	110	103	218
			5	—	462A	—	74.4	71.6	112	125	125	116	125	130	242
50GEQ*17 Horizontal	208/230-3-60	HIGH	5	60	—	—	—	99	125	105	460	111	125	118	480
			5	60	463A	463A	18.8/25.0	52.1/60.1	164/174	175/175	165/174	176/186	200/200	178/187	532/540
			5	60	464A	464A	37.6/50.0	104.2/120.3	229/219	250/250	224/243	241/231	250/250	238/257	584/600
			5	60	465A	465A	56.3/75.0	156.4/180.4	255/279	300/300	285/312	267/291	300/300	298/326	636/660
	460-3-60	HIGH	5	65	—	—	—	46	60	48	218	52	60	55	230
			5	65	466A	466A	25	30.1	83	90	83	90	90	90	260
			5	65	467A	467A	50	60.1	106	110	117	112	125	124	290
			5	65	468A	468A	75	90.2	136	150	152	142	150	159	320
	575-3-60	HIGH	5	—	—	—	—	43	50	46	166	48	60	52	174
			5	—	469A	—	24.8	23.9	73	80	74	78	80	79	198
			5	—	470A	—	49.6	47.7	103	110	101	108	110	106	222
			5	—	471A	—	74.4	71.6	115	125	128	120	125	134	246

50GEQ*17 Unit Wire/Fuse Sizing Electrical Data (cont)

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	High SCCR kA	STD SCCR CRHEATER ****00	HIGH SCCR CRHEATER ****00	NOM (kW)	FLA	WITH POWERED CONVENIENCE OUTLET							
									NO P.E.				w/ P.E. (pwrdr fr/unit)			
									MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
											FLA	LRA			FLA	LRA
50GEQ*17 Vertical	208/230-3-60	MED	5	60	—	—	—	—	91	100	96	447	103	125	109	467
			5	60	454A	454A	18.8/25.0	52.1/60.1	156/166	175/175	156/165	499/507	168/178	175/200	169/179	519/527
			5	60	455A	455A	37.6/50.0	104.2/120.3	222/212	225/225	216/234	551/567	233/224	250/250	229/248	571/587
			5	60	456A	456A	56.3/75.0	156.4/180.4	248/272	300/300	276/303	603/627	260/284	300/300	289/317	623/647
		HIGH	5	60	—	—	—	—	94	125	98	451	105	125	112	471
			5	60	454A	454A	18.8/25.0	52.1/60.1	159/169	175/175	158/168	503/511	170/180	175/200	172/181	523/531
			5	60	455A	455A	37.6/50.0	104.2/120.3	224/214	225/225	218/237	555/571	236/226	250/250	232/250	575/591
			5	60	456A	456A	56.3/75.0	156.4/180.4	250/274	300/300	278/306	607/631	262/286	300/300	292/319	627/651
	460-3-60	MED	5	65	—	—	—	—	43	50	45	212	49	60	52	224
			5	65	457A	457A	25	30.1	80	90	79	242	86	90	86	254
			5	65	458A	458A	50	60.1	103	110	114	272	109	125	121	284
			5	65	459A	459A	75	90.2	133	150	148	302	139	150	156	314
		HIGH	5	65	—	—	—	—	44	50	46	214	50	60	53	226
			5	65	457A	457A	25	30.1	81	90	81	244	88	90	88	256
			5	65	458A	458A	50	60.1	104	110	115	274	110	125	122	286
			5	65	459A	459A	75	90.2	134	150	150	304	140	150	157	316
	575-3-60	MED	5	—	—	—	—	—	41	50	43	164	45	50	49	172
			5	—	460A	—	24.8	23.9	70	80	71	188	75	80	76	196
			5	—	461A	—	49.6	47.7	100	110	98	212	105	110	104	220
			5	—	462A	—	74.4	71.6	112	125	126	236	117	125	131	244
		HIGH	5	—	—	—	—	—	42	50	44	164	46	50	50	172
			5	—	460A	—	24.8	23.9	72	80	72	188	76	80	77	196
			5	—	461A	—	49.6	47.7	101	110	99	212	106	110	105	220
			5	—	462A	—	74.4	71.6	113	125	127	236	118	125	132	244
50GEQ*17 Horizontal	208/230-3-60	HIGH	5	60	—	—	—	—	104	125	110	465	116	125	124	485
			5	60	463A	463A	18.8/25.0	52.1/60.1	169/179	175/200	170/179	517/525	181/191	200/200	184/193	537/545
			5	60	464A	464A	37.6/50.0	104.2/120.3	234/224	250/250	230/249	569/585	246/236	250/250	244/262	589/605
			5	60	465A	465A	56.3/75.0	156.4/180.4	260/284	300/300	290/318	621/645	272/296	300/350	304/331	641/665
	460-3-60	HIGH	5	65	—	—	—	—	48	60	51	220	54	60	58	232
			5	65	466A	466A	25	30.1	86	90	85	250	92	100	92	262
			5	65	467A	467A	50	60.1	108	125	120	280	114	125	127	292
			5	65	468A	468A	75	90.2	138	150	154	310	144	150	162	322
	575-3-60	HIGH	5	—	—	—	—	—	45	50	48	168	50	60	54	176
			5	—	469A	—	24.8	23.9	75	80	76	192	80	80	81	200
			5	—	470A	—	49.6	47.7	104	110	103	216	109	110	108	224
			5	—	471A	—	74.4	71.6	116	125	130	240	121	125	136	248

50GEQ*17 Unit HACR Sizing Electrical Data

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELEC. HTR			WITH POWERED CONVENIENCE OUTLET							
				STD SCCR CRHEATER ****00	NOM (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
FLA	LRA	FLA	LRA											
50GEQ*17	208/230-3-60	MED	5	—	—	—	91	100	96	447	103	125	109	467
			5	454A	18.8/25.0	52.1/60.1	166/166	175/175	156/165	507/507	178/178	200/200	169/179	527/527
			5	455A	37.6/50.0	104.2/120.3	222/222	225/225	216/234	567/567	233/233	250/250	229/248	587/587
			5	456A	56.3/75.0	156.4/180.4	272/272	300/300	276/303	627/627	284/284	300/300	289/317	647/647
		HIGH	5	—	—	—	94	125	98	451	105	125	112	471
			5	454A	18.8/25.0	52.1/60.1	169/169	175/175	158/168	511/511	180/180	200/200	172/181	531/531
			5	455A	37.6/50.0	104.2/120.3	224/224	225/225	218/237	571/571	236/236	250/250	232/250	591/591
			5	456A	56.3/75.0	156.4/180.4	274/274	300/300	278/306	631/631	286/286	300/300	292/319	651/651
	460-3-60	MED	5	—	—	—	43	50	45	212	49	60	52	224
			5	457A	25	30.1	80	90	79	242	86	90	86	254
			5	458A	50	60.1	103	110	114	272	109	125	121	284
			5	459A	75	90.2	133	150	148	302	139	150	156	314
		HIGH	5	—	—	—	44	50	46	214	50	60	53	226
			5	457A	25	30.1	81	90	81	244	88	90	88	256
			5	458A	50	60.1	104	110	115	274	110	125	122	286
			5	459A	75	90.2	134	150	150	304	140	150	157	316
	575-3-60	MED	5	—	—	—	41	50	43	164	45	50	49	172
			5	460A	24.8	23.9	70	80	71	188	75	80	76	196
			5	461A	49.6	47.7	100	110	98	212	105	110	104	220
			5	462A	74.4	71.6	112	125	126	236	117	125	131	244
		HIGH	5	—	—	—	42	50	44	164	46	50	50	172
			5	460A	24.8	23.9	72	80	72	188	76	80	77	196
			5	461A	49.6	47.7	101	110	99	212	106	110	105	220
			5	462A	74.4	71.6	113	125	127	236	118	125	132	244
50GEQ*17 Horizontal	208/230-3-60	HIGH	5	—	—	—	104	125	110	465	116	125	124	485
			5	463A	18.8/25.0	52.1/60.1	179/179	200/200	170/179	525/525	191/191	200/200	184/193	545/545
			5	464A	37.6/50.0	104.2/120.3	234/234	250/250	230/249	585/585	246/246	250/250	244/262	605/605
			5	465A	56.3/75.0	156.4/180.4	284/284	300/300	290/318	645/645	296/296	350/350	304/331	665/665
	460-3-60	HIGH	5	—	—	—	48	60	51	220	54	60	58	232
			5	466A	25	30.1	86	90	85	250	92	100	92	262
			5	467A	50	60.1	108	125	120	280	114	125	127	292
			5	468A	75	90.2	138	150	154	310	144	150	162	322
	575-3-60	HIGH	5	—	—	—	45	50	48	168	50	60	54	176
			5	469A	24.8	23.9	75	80	76	192	80	80	81	200
			5	470A	49.6	47.7	104	110	103	216	109	110	108	224
			5	471A	74.4	71.6	116	125	130	240	121	125	136	248

50GEQ*17 Unit HACR Sizing Electrical Data (cont)

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELEC. HTR			NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
				STD SCCR CRHEATER ****00	Nom (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50GEQ*17	208/230-3-60	MED	5	—	—	—	87	100	90	442	98	125	104	462
			5	454A	18.8/25.0	52.1/60.1	162/162	175/175	150/160	502/502	174/174	175/175	164/173	522/522
			5	455A	37.6/50.0	104.2/120.3	217/217	225/225	210/229	562/562	229/229	250/250	224/242	582/582
			5	456A	56.3/75.0	156.4/180.4	267/267	300/300	270/298	622/622	279/279	300/300	284/311	642/642
		HIGH	5	—	—	—	89	100	93	446	101	125	106	466
			5	454A	18.8/25.0	52.1/60.1	164/164	175/175	153/162	506/506	176/176	200/200	166/176	526/526
			5	455A	37.6/50.0	104.2/120.3	219/219	225/225	213/231	566/566	231/231	250/250	226/245	586/586
			5	456A	56.3/75.0	156.4/180.4	269/269	300/300	273/300	626/626	281/281	300/300	286/314	646/646
	460-3-60	MED	5	—	—	—	40	50	42	210	47	60	49	222
			5	457A	25	30.1	78	80	77	240	84	90	84	252
			5	458A	50	60.1	101	110	111	270	107	125	118	282
			5	459A	75	90.2	131	150	146	300	137	150	153	312
		HIGH	5	—	—	—	42	50	43	212	48	60	50	224
			5	457A	25	30.1	79	80	78	242	85	90	85	254
			5	458A	50	60.1	102	110	112	272	108	125	120	284
			5	459A	75	90.2	132	150	147	302	138	150	154	314
	575-3-60	MED	5	—	—	—	39	50	41	162	44	50	47	170
			5	460A	24.8	23.9	69	70	69	186	74	80	74	194
			5	461A	49.6	47.7	98	100	96	210	103	110	102	218
			5	462A	74.4	71.6	110	125	124	234	115	125	129	242
		HIGH	5	—	—	—	40	50	42	162	45	50	48	170
			5	460A	24.8	23.9	70	70	70	186	75	80	75	194
			5	461A	49.6	47.7	100	100	97	210	104	110	103	218
			5	462A	74.4	71.6	112	125	125	234	116	125	130	242
50GEQ*17 Horizontal	208/230-3-60	HIGH	5	—	—	—	99	125	105	460	111	125	118	480
			5	463A	18.8/25.0	52.1/60.1	174/174	175/175	165/174	520/520	186/186	200/200	178/187	540/540
			5	464A	37.6/50.0	104.2/120.3	229/229	250/250	224/243	580/580	241/241	250/250	238/257	600/600
			5	465A	56.3/75.0	156.4/180.4	279/279	300/300	285/312	640/640	291/291	300/300	298/326	660/660
	460-3-60	HIGH	5	—	—	—	46	60	48	218	52	60	55	230
			5	466A	25	30.1	83	90	83	248	90	90	90	260
			5	467A	50	60.1	106	110	117	278	112	125	124	290
			5	468A	75	90.2	136	150	152	308	142	150	159	320
	575-3-60	HIGH	5	—	—	—	43	50	46	166	48	60	52	174
			5	469A	24.8	23.9	73	80	74	190	78	80	79	198
			5	470A	49.6	47.7	103	110	101	214	108	110	106	222
			5	471A	74.4	71.6	115	125	128	238	120	125	134	246

50GEQ*17 Electric Heat Data — Standard SCCR Unit

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	High SCCR kA	STD SCCR CRHEATER ****00	NOMINAL (kW)	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	STD SCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXA			
									NO C.O. OR UNPOWERED C.O.		w/ PWRD C.O.	
									NO P.E.	w/P.E. (pwrdr fr/unit)	NO P.E.	w/P.E. (pwrdr fr/unit)
50GEQ*17 Vertical	208/230-3-60	MED	5	60	454A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	455A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	456A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
		HIGH	5	60	454A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	455A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	456A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
	460-3-60	MED	5	65	457A	25.0	23.0	78.3	57	57	57	57
			5	65	458A	50.0	45.9	156.7	57	57	57	57
			5	65	459A	75.0	68.9	235.0	57	57	57	57
		HIGH	5	65	457A	25.0	23.0	78.3	57	57	57	57
			5	65	458A	50.0	45.9	156.7	57	57	57	57
			5	65	459A	75.0	68.9	235.0	57	57	57	57
	575-3-60	MED	5	—	460A	24.8	22.8	77.7	—	57	57	57
			5	—	461A	49.6	45.6	155.4	57	57	57	57
			5	—	462A	74.4	68.3	233.1	57	57	57	57
		HIGH	5	—	460A	24.8	22.8	77.7	—	57	57	57
			5	—	461A	49.6	45.6	155.4	57	57	57	57
			5	—	462A	74.4	68.3	233.1	57	57	57	57
50GEQ*17 Horizontal	208/230-3-60	HIGH	5	60	463A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	464A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	465A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
	460-3-60	HIGH	5	65	466A	25.0	23.0	78.3	57	57	57	57
			5	65	467A	50.0	45.9	156.7	57	57	57	57
			5	65	468A	75.0	68.9	235.0	57	57	57	57
	575-3-60	HIGH	5	—	469A	24.8	22.8	77.7	57	57	57	57
			5	—	470A	49.6	45.6	155.4	57	57	57	57
			5	—	471A	74.4	68.3	233.1	57	57	57	57

50GEQ*17 Electrical Heat Data — High SCCR Unit

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	High SCCR kA	HIGH SCCR CRHEATER ****00	NOMINAL (kW)	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	HIGH SCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXA	
									NO C.O. OR UNPOWERED C.O.	
									NO P.E.	w/ P.E. (pwrd fr/unit)
50GEQ*17 Vertical	208/230-3-60	MED	5	60	454A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	455A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	456A	75.0	56.3/68.9	192.2/235.0	58	58
		HIGH	5	60	454A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	455A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	456A	75.0	56.3/68.9	192.2/235.0	58	58
	460-3-60	MED	5	65	457A	25.0	23.0	78.3	59	59
			5	65	458A	50.0	45.9	156.7	59	59
			5	65	459A	75.0	68.9	235.0	59	59
		HIGH	5	65	457A	25.0	23.0	78.3	59	59
			5	65	458A	50.0	45.9	156.7	59	59
			5	65	459A	75.0	68.9	235.0	59	59
50GEQ*17 Horizontal	208/230-3-60	HIGH	5	60	463A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	464A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	465A	75.0	56.3/68.9	192.2/235.0	58	58
	460-3-60	HIGH	5	65	466A	25.0	23.0	78.3	59	59
			5	65	467A	50.0	45.9	156.7	59	59
			5	65	468A	75.0	68.9	235.0	59	59

50GEQ*24 Unit Wire/Fuse Sizing Electrical Data

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCC R kA	High SCCR kA	ELECTRIC HEATER				NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
					STD SCCR CRHEATER ****00	HIGH SCCR CRHEATER ****00	NOM (kW)	FLA	NO P.E.				w/ P.E. (pwr fr/unit)			
									MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
											FLA	LRA			FLA	LRA
50GEQ*24 Vertical	208/230-3-60	MED	5	60	—	—	—	—	117	150	121	561	129	150	135	581
			5	60	454A	454A	18.8/25.0	52.1/60.1	182/192	200/200	181/191	613/621	194/204	225/225	195/204	633/641
			5	60	455A	455A	37.6/50.0	104.2/120.3	247/237	250/250	241/260	665/681	259/249	300/300	255/273	685/701
			5	60	456A	456A	56.3/75.0	156.4/180.4	273/297	300/350	301/329	717/741	285/309	300/350	315/342	737/761
		HIGH	5	60	—	—	—	—	129	150	136	579	141	175	149	599
			5	60	454A	454A	18.8/25.0	52.1/60.1	194/204	225/225	196/205	631/639	206/216	225/225	209/218	651/659
			5	60	455A	455A	37.6/50.0	104.2/120.3	260/250	300/300	256/274	683/699	271/262	300/300	269/288	703/719
			5	60	456A	456A	56.3/75.0	156.4/180.4	286/310	300/350	316/343	735/759	298/322	350/350	329/357	755/779
	460-3-60	MED	5	65	—	—	—	—	56	70	59	284	63	80	66	296
			5	65	457A	457A	25	30.1	94	100	93	314	100	110	100	326
			5	65	458A	458A	50	60.1	116	125	128	344	123	150	135	356
			5	65	459A	459A	75	90.2	147	175	162	374	153	175	170	386
		HIGH	5	65	—	—	—	—	62	80	65	292	68	80	72	304
			5	65	457A	457A	25	30.1	99	100	99	322	105	110	106	334
			5	65	458A	458A	50	60.1	122	150	134	352	128	150	141	364
			5	65	459A	459A	75	90.2	152	175	168	382	158	175	175	394
	57.5-3-60	MED	5	—	—	—	—	—	52	60	55	229	56	70	60	237
			5	—	460A	—	24.8	23.9	82	90	82	253	86	90	88	261
			5	—	461A	—	49.6	47.7	111	125	110	277	116	125	115	285
			5	—	462A	—	74.4	71.6	123	150	137	301	128	150	143	309
		HIGH	5	—	—	—	—	—	56	60	60	233	61	70	65	241
			5	—	460A	—	24.8	23.9	86	90	87	257	90	100	93	265
			5	—	461A	—	49.6	47.7	116	125	115	281	120	125	120	289
			5	—	462A	—	74.4	71.6	127	150	142	305	132	150	148	313
50GEQ*24 Horizontal	208/230-3-60	HIGH	5	60	—	—	—	—	129	150	136	579	141	175	149	599
			5	60	463A	463A	18.8/25.0	52.1/60.1	194/204	225/225	196/205	631/639	206/216	225/225	209/218	651/659
			5	60	464A	464A	37.6/50.0	104.2/120.3	260/250	300/300	256/274	683/699	271/262	300/300	269/288	703/719
			5	60	465A	465A	56.3/75.0	156.4/180.4	286/310	300/350	316/343	735/759	298/322	350/350	329/357	755/779
	460-3-60	HIGH	5	65	—	—	—	—	62	80	65	292	68	80	72	304
			5	65	466A	466A	25	30.1	99	100	99	322	105	110	106	334
			5	65	467A	467A	50	60.1	122	150	134	352	128	150	141	364
			5	65	468A	468A	75	90.2	152	175	168	382	158	175	175	394
	57.5-3-60	HIGH	5	—	—	—	—	—	56	60	60	233	61	70	65	241
			5	—	469A	—	24.8	23.9	86	90	87	257	90	100	93	265
			5	—	470A	—	49.6	47.7	116	125	115	281	120	125	120	289
			5	—	471A	—	74.4	71.6	127	150	142	305	132	150	148	313

50GEQ*24 Unit Wire/Fuse Sizing Electrical Data (cont)

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCC R kA	High SCCR kA	ELECTRIC HEATER				WITH POWERED CONVENIENCE OUTLET							
					STD SCCR CRHEATER ****00	HIGH SCCR CRHEATER ****00	NOM (kW)	FLA	NO P.E.				w/ P.E. (pwrd fr/unit)			
									MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
											FLA	LRA			FLA	LRA
50GEQ*24 Vertical	208/230-3-60	MED	5	60	—	—	—	—	122	150	127	566	134	175	141	586
			5	60	454A	454A	18.8/25.0	52.1/60.1	187/197	200/225	187/196	618/626	199/209	225/225	200/210	638/646
			5	60	455A	455A	37.6/50.0	104.2/120.3	252/242	300/300	247/265	670/686	264/254	300/300	260/279	690/706
			5	60	456A	456A	56.3/75.0	156.4/180.4	278/302	300/350	307/334	722/746	290/314	350/350	320/348	742/766
		HIGH	5	60	—	—	—	—	134	175	141	584	146	175	155	604
			5	60	454A	454A	18.8/25.0	52.1/60.1	199/209	225/225	201/210	636/644	211/221	225/250	215/224	656/664
			5	60	455A	455A	37.6/50.0	104.2/120.3	264/254	300/300	261/280	688/704	276/266	300/300	275/293	708/724
			5	60	456A	456A	56.3/75.0	156.4/180.4	291/315	350/350	321/349	740/764	302/326	350/350	335/362	760/784
	460-3-60	MED	5	65	—	—	—	—	59	80	61	286	65	80	68	298
			5	65	457A	457A	25	30.1	96	100	96	316	102	110	103	328
			5	65	458A	458A	50	60.1	119	125	130	346	125	150	137	358
			5	65	459A	459A	75	90.2	149	175	165	376	155	175	172	388
		HIGH	5	65	—	—	—	—	64	80	67	294	70	90	74	306
			5	65	457A	457A	25	30.1	101	110	102	324	108	110	109	336
			5	65	458A	458A	50	60.1	124	150	136	354	130	150	143	366
			5	65	459A	459A	75	90.2	154	175	171	384	160	175	178	396
	575-3-60	MED	5	—	—	—	—	—	53	60	57	231	58	70	62	239
			5	—	460A	—	24.8	23.9	83	90	84	255	88	90	90	263
			5	—	461A	—	49.6	47.7	113	125	112	279	118	125	117	287
			5	—	462A	—	74.4	71.6	125	150	139	303	130	150	145	311
		HIGH	5	—	—	—	—	—	58	70	62	235	62	70	67	243
			5	—	460A	—	24.8	23.9	87	90	89	259	92	100	95	267
			5	—	461A	—	49.6	47.7	117	125	117	283	122	125	122	291
			5	—	462A	—	74.4	71.6	129	150	144	307	134	150	150	315
50GEQ*24 Horizontal	208/230-3-60	HIGH	5	60	—	—	—	—	134	175	141	584	146	175	155	604
			5	60	463A	463A	18.8/25.0	52.1/60.1	199/209	225/225	201/210	636/644	211/221	225/250	215/224	656/664
			5	60	464A	464A	37.6/50.0	104.2/120.3	264/254	300/300	261/280	688/704	276/266	300/300	275/293	708/724
			5	60	465A	465A	56.3/75.0	156.4/180.4	291/315	350/350	321/349	740/764	302/326	350/350	335/362	760/784
	460-3-60	HIGH	5	65	—	—	—	—	64	80	67	294	70	90	74	306
			5	65	466A	466A	25	30.1	101	110	102	324	108	110	109	336
			5	65	467A	467A	50	60.1	124	150	136	354	130	150	143	366
			5	65	468A	468A	75	90.2	154	175	171	384	160	175	178	396
	575-3-60	HIGH	5	—	—	—	—	—	58	70	62	235	62	70	67	243
			5	—	469A	—	24.8	23.9	87	90	89	259	92	100	95	267
			5	—	470A	—	49.6	47.7	117	125	117	283	122	125	122	291
			5	—	471A	—	74.4	71.6	129	150	144	307	134	150	150	315

50GEQ*24 Unit HACR Sizing Electrical Data

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELEC. HTR			WITH POWERED CONVENIENCE OUTLET							
				STD SCCR CRHEATER *****00	NOM (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50GEQ*24	208/230-3-60	MED	5	—	—	—	122	150	127	566	134	175	141	586
			5	454A	18.8/25.0	52.1/60.1	197/197	225/225	187/196	626/626	209/209	225/225	200/210	646/646
			5	455A	37.6/50.0	104.2/120.3	252/252	300/300	247/265	686/686	264/264	300/300	260/279	706/706
			5	456A	56.3/75.0	156.4/180.4	302/302	350/350	307/334	746/746	314/314	350/350	320/348	766/766
		HIGH	5	—	—	—	134	175	141	584	146	175	155	604
			5	454A	18.8/25.0	52.1/60.1	209/209	225/225	201/210	644/644	221/221	250/250	215/224	664/664
			5	455A	37.6/50.0	104.2/120.3	264/264	300/300	261/280	704/704	276/276	300/300	275/293	724/724
			5	456A	56.3/75.0	156.4/180.4	315/315	350/350	321/349	764/764	326/326	350/350	335/362	784/784
	460-3-60	MED	5	—	—	—	59	80	61	286	65	80	68	298
			5	457A	25	30.1	96	100	96	316	102	110	103	328
			5	458A	50	60.1	119	125	130	346	125	150	137	358
			5	459A	75	90.2	149	175	165	376	155	175	172	388
		HIGH	5	—	—	—	64	80	67	294	70	90	74	306
			5	457A	25	30.1	101	110	102	324	108	110	109	336
			5	458A	50	60.1	124	150	136	354	130	150	143	366
			5	459A	75	90.2	154	175	171	384	160	175	178	396
	575-3-60	MED	5	—	—	—	53	60	57	231	58	70	62	239
			5	460A	24.8	23.9	83	90	84	255	88	90	90	263
			5	461A	49.6	47.7	113	125	112	279	118	125	117	287
			5	462A	74.4	71.6	125	150	139	303	130	150	145	311
		HIGH	5	—	—	—	58	70	62	235	62	70	67	243
			5	460A	24.8	23.9	87	90	89	259	92	100	95	267
			5	461A	49.6	47.7	117	125	117	283	122	125	122	291
			5	462A	74.4	71.6	129	150	144	307	134	150	150	315
50GEQ*24 Horizontal	208/230-3-60	HIGH	5	—	—	—	134	175	141	584	146	175	155	604
			5	463A	18.8/25.0	52.1/60.1	209/209	225/225	201/210	644/644	221/221	250/250	215/224	664/664
			5	464A	37.6/50.0	104.2/120.3	264/264	300/300	261/280	704/704	276/276	300/300	275/293	724/724
			5	465A	56.3/75.0	156.4/180.4	315/315	350/350	321/349	764/764	326/326	350/350	335/362	784/784
	460-3-60	HIGH	5	—	—	—	64	80	67	294	70	90	74	306
			5	466A	25	30.1	101	110	102	324	108	110	109	336
			5	467A	50	60.1	124	150	136	354	130	150	143	366
			5	468A	75	90.2	154	175	171	384	160	175	178	396
	575-3-60	HIGH	5	—	—	—	58	70	62	235	62	70	67	243
			5	469A	24.8	23.9	87	90	89	259	92	100	95	267
			5	470A	49.6	47.7	117	125	117	283	122	125	122	291
			5	471A	74.4	71.6	129	150	144	307	134	150	150	315

50GEQ*24 Unit HACR Sizing Electrical Data (cont)

UNIT SIZE	NOM. V.Ph-Hz	IFM TYPE	STD SCCR kA	ELEC. HTR			NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
				STD SCCR CRHEATER ****00	Nom (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50GEQ*24	208/230-3-60	MED	5	—	—	—	117	150	121	561	129	150	135	581
			5	454A	18.8/25.0	52.1/60.1	192/192	200/200	181/191	621/621	204/204	225/225	195/204	641/641
			5	455A	37.6/50.0	104.2/120.3	247/247	250/250	241/260	681/681	259/259	300/300	255/273	701/701
			5	456A	56.3/75.0	156.4/180.4	297/297	350/350	301/329	741/741	309/309	350/350	315/342	761/761
		HIGH	5	—	—	—	129	150	136	579	141	175	149	599
			5	454A	18.8/25.0	52.1/60.1	204/204	225/225	196/205	639/639	216/216	225/225	209/218	659/659
			5	455A	37.6/50.0	104.2/120.3	260/260	300/300	256/274	699/699	271/271	300/300	269/288	719/719
			5	456A	56.3/75.0	156.4/180.4	310/310	350/350	316/343	759/759	322/322	350/350	329/357	779/779
	460-3-60	MED	5	—	—	—	56	70	59	284	63	80	66	296
			5	457A	25	30.1	94	100	93	314	100	110	100	326
			5	458A	50	60.1	116	125	128	344	123	150	135	356
			5	459A	75	90.2	147	175	162	374	153	175	170	386
		HIGH	5	—	—	—	62	80	65	292	68	80	72	304
			5	457A	25	30.1	99	100	99	322	105	110	106	334
			5	458A	50	60.1	122	150	134	352	128	150	141	364
			5	459A	75	90.2	152	175	168	382	158	175	175	394
	575-3-60	MED	5	—	—	—	52	60	55	229	56	70	60	237
			5	460A	24.8	23.9	82	90	82	253	86	90	88	261
			5	461A	49.6	47.7	111	125	110	277	116	125	115	285
			5	462A	74.4	71.6	123	150	137	301	128	150	143	309
		HIGH	5	—	—	—	56	60	60	233	61	70	65	241
			5	460A	24.8	23.9	86	90	87	257	90	100	93	265
			5	461A	49.6	47.7	116	125	115	281	120	125	120	289
			5	462A	74.4	71.6	127	150	142	305	132	150	148	313
50GEQ*24 Horizontal	208/230-3-60	HIGH	5	—	—	—	129	150	136	579	141	175	149	599
			5	463A	18.8/25.0	52.1/60.1	204/204	225/225	196/205	639/639	216/216	225/225	209/218	659/659
			5	464A	37.6/50.0	104.2/120.3	260/260	300/300	256/274	699/699	271/271	300/300	269/288	719/719
			5	465A	56.3/75.0	156.4/180.4	310/310	350/350	316/343	759/759	322/322	350/350	329/357	779/779
	460-3-60	HIGH	5	—	—	—	62	80	65	292	68	80	72	304
			5	466A	25	30.1	99	100	99	322	105	110	106	334
			5	467A	50	60.1	122	150	134	352	128	150	141	364
			5	468A	75	90.2	152	175	168	382	158	175	175	394
	575-3-60	HIGH	5	—	—	—	56	60	60	233	61	70	65	241
			5	469A	24.8	23.9	86	90	87	257	90	100	93	265
			5	470A	49.6	47.7	116	125	115	281	120	125	120	289
			5	471A	74.4	71.6	127	150	142	305	132	150	148	313

50GEQ*24 Electric Heat Data — Standard SCCR Unit

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	High SCCR kA	STD SCCR CRHEATER ****00	NOMINAL (kW)	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	STD SCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXA			
									NO C.O. OR UNPOWERED C.O.		w/ PWRD C.O.	
									NO P.E.	w/P.E. (pwr fr/unit)	NO P.E.	w/P.E. (pwr fr/unit)
50GEQ*24 Vertical	208/230-3-60	MED	5	60	454A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	455A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	456A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
		HIGH	5	60	454A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	455A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	456A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
	460-3-60	MED	5	65	457A	25.0	23.0	78.3	57	57	57	57
			5	65	458A	50.0	45.9	156.7	57	57	57	57
			5	65	459A	75.0	68.9	235.0	57	57	57	57
		HIGH	5	65	457A	25.0	23.0	78.3	57	57	57	57
			5	65	458A	50.0	45.9	156.7	57	57	57	57
			5	65	459A	75.0	68.9	235.0	57	57	57	57
	575-3-60	MED	5	—	460A	24.8	22.8	77.7	57	57	57	57
			5	—	461A	49.6	45.6	155.4	57	57	57	57
			5	—	462A	74.4	68.3	233.1	57	57	57	57
		HIGH	5	—	460A	24.8	22.8	77.7	57	57	57	57
			5	—	461A	49.6	45.6	155.4	57	57	57	57
			5	—	462A	74.4	68.3	233.1	57	57	57	57
50GEQ*24 Horizontal	208/230-3-60	HIGH	5	60	463A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	464A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	465A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
	460-3-60	HIGH	5	65	466A	25.0	23.0	78.3	57	57	57	57
			5	65	467A	50.0	45.9	156.7	57	57	57	57
			5	65	468A	75.0	68.9	235.0	57	57	57	57
	575-3-60	HIGH	5	—	469A	24.8	22.8	77.7	57	57	57	57
			5	—	470A	49.6	45.6	155.4	57	57	57	57
			5	—	471A	74.4	68.3	233.1	57	57	57	57

50GEQ*24 Electrical Heat Data — High SCCR Unit

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	High SCCR kA	HSCCR ELECTRIC HEATER PART NUMBER	Nominal (kW)	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	HIGH SCCR SINGLE POINT OR JUNCTION KIT PART NUMBE CRSINGLEXXA	
									NO C.O. OR UNPOWERED C.O.	
									NO P.E.	w/ P.E. (pwr d fr/unit)
50GEQ*24 Vertical	208/230-3-60	MED	5	60	454A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	455A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	456A	75.0	56.3/68.9	192.2/235.0	58	58
		HIGH	5	60	454A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	455A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	456A	75.0	56.3/68.9	192.2/235.0	58	58
	460-3-60	MED	5	65	457A	25.0	23.0	78.3	59	59
			5	65	458A	50.0	45.9	156.7	59	59
			5	65	459A	75.0	68.9	235.0	59	59
		HIGH	5	65	457A	25.0	23.0	78.3	59	59
			5	65	458A	50.0	45.9	156.7	59	59
			5	65	459A	75.0	68.9	235.0	59	59
50GEQ*24 Horizontal	208/230-3-60	HIGH	5	60	463A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	464A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	465A	75.0	56.3/68.9	192.2/235.0	58	58
	460-3-60	HIGH	5	65	466A	25.0	23.0	78.3	59	59
			5	65	467A	50.0	45.9	156.7	59	59
			5	65	468A	75.0	68.9	235.0	59	59

50GEQ*28 Unit Wire/Fuse Sizing Electrical Data

UNIT SIZE	NOM. V-PH-Hz	IFM TYPE	STD SCCR KA	High SCCR KA	ELECTRIC HEATER				NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
					STD SCCR EH	HIGH SCCR EH	NOM (kW)	FLA	NO P.E.				w/ P.E. (pwrd fr/unit)			
									MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
											FLA	LRA			FLA	LRA
50GEQ*28 Vertical	208/230-3-60	MED	5	60	—	—	—	—	140	175	146	610	152	200	160	630
			5	60	454A	454A	18.8/25.0	52.1/60.1	205/215	225/250	206/216	662/670	217/227	250/250	220/229	682/690
			5	60	455A	455A	37.6/50.0	104.2/120.3	270/260	300/300	266/285	714/730	282/272	300/300	280/298	734/750
			5	60	456A	456A	56.3/75.0	156.4/180.4	296/320	350/350	326/354	766/790	308/332	350/350	340/367	786/810
		HIGH	5	60	—	—	—	—	150	200	158	624	162	200	172	644
			5	60	454A	454A	18.8/25.0	52.1/60.1	216/226	250/250	218/227	676/684	227/237	250/250	232/241	696/704
			5	60	455A	455A	37.6/50.0	104.2/120.3	281/271	300/300	278/296	728/744	292/282	300/300	292/310	748/764
			5	60	456A	456A	56.3/75.0	156.4/180.4	307/331	350/350	338/366	780/804	318/342	350/400	352/379	800/824
	460-3-60	MED	5	65	—	—	—	—	65	80	68	313	71	90	75	325
			5	65	457A	457A	25	30.1	103	110	103	343	109	110	110	355
			5	65	458A	458A	50	60.1	125	150	137	373	131	150	145	385
			5	65	459A	459A	75	90.2	155	175	172	403	161	175	179	415
		HIGH	5	65	—	—	—	—	69	90	73	319	75	90	80	331
			5	65	457A	457A	25	30.1	107	110	108	349	113	125	115	361
			5	65	458A	458A	50	60.1	129	150	142	379	136	150	149	391
			5	65	459A	459A	75	90.2	159	175	177	409	166	175	184	421
	575-3-60	MED	5	—	—	—	—	—	62	80	65	244	67	80	71	252
			5	—	460A	—	24.8	23.9	92	100	93	268	96	100	98	276
			5	—	461A	—	49.6	47.7	121	125	120	292	126	150	126	300
			5	—	462A	—	74.4	71.6	133	150	148	316	138	150	153	324
		HIGH	5	—	—	—	—	—	65	80	69	248	70	80	75	256
			5	—	460A	—	24.8	23.9	95	100	96	272	100	100	102	280
			5	—	461A	—	49.6	47.7	125	125	124	296	129	150	129	304
			5	—	462A	—	74.4	71.6	137	150	151	320	141	150	157	328
50GEQ*28 Horizontal	208/230-3-60	HIGH	5	60	—	—	—	—	150	200	158	624	162	200	172	644
			5	60	463A	463A	18.8/25.0	52.1/60.1	216/226	250/250	218/227	676/684	227/237	250/250	232/241	696/704
			5	60	464A	464A	37.6/50.0	104.2/120.3	281/271	300/300	278/296	728/744	292/282	300/300	292/310	748/764
			5	60	465A	465A	56.3/75.0	156.4/180.4	307/331	350/350	338/366	780/804	318/342	350/400	352/379	800/824
	460-3-60	HIGH	5	65	—	—	—	—	69	90	73	319	75	90	80	331
			5	65	466A	466A	25	30.1	107	110	108	349	113	125	115	361
			5	65	467A	467A	50	60.1	129	150	142	379	136	150	149	391
			5	65	468A	468A	75	90.2	159	175	177	409	166	175	184	421
	575-3-60	HIGH	5	—	—	—	—	—	65	80	69	248	70	80	75	256
			5	—	469A	—	24.8	23.9	95	100	96	272	100	100	102	280
			5	—	470A	—	49.6	47.7	125	125	124	296	129	150	129	304
			5	—	471A	—	74.4	71.6	137	150	151	320	141	150	157	328

50GEQ*28 Unit Wire/Fuse Sizing Electrical Data (cont)

UNIT SIZE	NOM. V-PH-Hz	IFM TYPE	STD SCCR KA	High SCCR KA	ELECTRIC HEATER				WITH POWERED CONVENIENCE OUTLET							
					STD SCCR EH	HIGH SCCR EH	NOM (kW)	FLA	NO P.E.				w/ P.E. (pwrdr fr/unit)			
									MCA	FUSE or HACR BRKR	DISC. SIZE		MCA	FUSE or HACR BRKR	DISC. SIZE	
											FLA	LRA			FLA	LRA
50GEQ*28 Vertical	208/230-3-60	MED	5	60	—	—	—	—	145	175	152	615	157	200	165	635
			5	60	454A	454A	18.8/25.0	52.1/60.1	210/220	225/250	212/221	667/675	222/232	250/250	225/235	687/695
			5	60	455A	455A	37.6/50.0	104.2/120.3	275/265	300/300	272/290	719/735	287/277	300/300	285/304	739/755
			5	60	456A	456A	56.3/75.0	156.4/180.4	301/325	350/350	332/359	771/795	313/337	350/350	345/373	791/815
		HIGH	5	60	—	—	—	—	155	200	164	629	167	200	177	649
			5	60	454A	454A	18.8/25.0	52.1/60.1	220/230	250/250	224/233	681/689	232/242	250/250	237/246	701/709
			5	60	455A	455A	37.6/50.0	104.2/120.3	285/275	300/300	283/302	733/749	297/287	300/350	297/316	753/769
			5	60	456A	456A	56.3/75.0	156.4/180.4	312/336	350/350	344/371	785/809	323/347	350/400	357/385	805/829
	460-3-60	MED	5	65	—	—	—	—	67	80	71	315	73	90	78	327
			5	65	457A	457A	25	30.1	105	110	105	345	111	125	113	357
			5	65	458A	458A	50	60.1	127	150	140	375	134	150	147	387
			5	65	459A	459A	75	90.2	157	175	175	405	164	175	182	417
		HIGH	5	65	—	—	—	—	71	90	76	321	78	100	83	333
			5	65	457A	457A	25	30.1	109	110	110	351	115	125	117	363
			5	65	458A	458A	50	60.1	132	150	145	381	138	150	152	393
			5	65	459A	459A	75	90.2	162	175	179	411	168	175	187	423
	575-3-60	MED	5	—	—	—	—	—	64	80	67	246	68	80	73	254
			5	—	460A	—	24.8	23.9	93	100	95	270	98	100	100	278
			5	—	461A	—	49.6	47.7	123	125	122	294	128	150	128	302
			5	—	462A	—	74.4	71.6	135	150	150	318	140	150	155	326
		HIGH	5	—	—	—	—	—	67	80	71	250	72	90	76	258
			5	—	460A	—	24.8	23.9	97	100	98	274	101	110	104	282
			5	—	461A	—	49.6	47.7	126	150	126	298	131	150	131	306
			5	—	462A	—	74.4	71.6	138	150	153	322	143	150	159	330
50GEQ*28 Horizontal	208/230-3-60	HIGH	5	60	—	—	—	—	155	200	164	629	167	200	177	649
			5	60	463A	463A	18.8/25.0	52.1/60.1	220/230	250/250	224/233	681/689	232/242	250/250	237/246	701/709
			5	60	464A	464A	37.6/50.0	104.2/120.3	285/275	300/300	283/302	733/749	297/287	300/350	297/316	753/769
			5	60	465A	465A	56.3/75.0	156.4/180.4	312/336	350/350	344/371	785/809	323/347	350/400	357/385	805/829
	460-3-60	HIGH	5	65	—	—	—	—	71	90	76	321	78	100	83	333
			5	65	466A	466A	25	30.1	109	110	110	351	115	125	117	363
			5	65	467A	467A	50	60.1	132	150	145	381	138	150	152	393
			5	65	468A	468A	75	90.2	162	175	179	411	168	175	187	423
	575-3-60	HIGH	5	—	—	—	—	—	67	80	71	250	72	90	76	258
			5	—	469A	—	24.8	23.9	97	100	98	274	101	110	104	282
			5	—	470A	—	49.6	47.7	126	150	126	298	131	150	131	306
			5	—	471A	—	74.4	71.6	138	150	153	322	143	150	159	330

50GEQ*28 Unit HACR Sizing Electrical Data

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELEC. HTR			WITH POWERED CONVENIENCE OUTLET							
				STD SCCR CRHEATER *****00	NOM (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50GEQ*28	208/230-3-60	MED	5	—	—	—	145	175	152	615	157	200	165	635
			5	454A	18.8/25.0	52.1/60.1	220/220	250/250	212/221	675/675	232/232	250/250	225/235	695/695
			5	455A	37.6/50.0	104.2/120.3	275/275	300/300	272/290	735/735	287/287	300/300	285/304	755/755
			5	456A	56.3/75.0	156.4/180.4	325/325	350/350	332/359	795/795	337/337	350/350	345/373	815/815
		HIGH	5	—	—	—	155	200	164	629	167	200	177	649
			5	454A	18.8/25.0	52.1/60.1	230/230	250/250	224/233	689/689	242/242	250/250	237/246	709/709
			5	455A	37.6/50.0	104.2/120.3	285/285	300/300	283/302	749/749	297/297	350/350	297/316	769/769
			5	456A	56.3/75.0	156.4/180.4	336/336	350/350	344/371	809/809	347/347	400/400	357/385	829/829
	460-3-60	MED	5	—	—	—	67	80	71	315	73	90	78	327
			5	457A	25	30.1	105	110	105	345	111	125	113	357
			5	458A	50	60.1	127	150	140	375	134	150	147	387
			5	459A	75	90.2	157	175	175	405	164	175	182	417
		HIGH	5	—	—	—	71	90	76	321	78	100	83	333
			5	457A	25	30.1	109	110	110	351	115	125	117	363
			5	458A	50	60.1	132	150	145	381	138	150	152	393
			5	459A	75	90.2	162	175	179	411	168	175	187	423
	575-3-60	MED	5	—	—	—	64	80	67	246	68	80	73	254
			5	460A	24.8	23.9	93	100	95	270	98	100	100	278
			5	461A	49.6	47.7	123	125	122	294	128	150	128	302
			5	462A	74.4	71.6	135	150	150	318	140	150	155	326
		HIGH	5	—	—	—	67	80	71	250	72	90	76	258
			5	460A	24.8	23.9	97	100	98	274	101	110	104	282
			5	461A	49.6	47.7	126	150	126	298	131	150	131	306
			5	462A	74.4	71.6	138	150	153	322	143	150	159	330
50GEQ*28 Horizontal	208/230-3-60	HIGH	5	—	—	—	155	200	164	629	167	200	177	649
			5	463A	18.8/25.0	52.1/60.1	230/230	250/250	224/233	689/689	242/242	250/250	237/246	709/709
			5	464A	37.6/50.0	104.2/120.3	285/285	300/300	283/302	749/749	297/297	350/350	297/316	769/769
			5	465A	56.3/75.0	156.4/180.4	336/336	350/350	344/371	809/809	347/347	400/400	357/385	829/829
	460-3-60	HIGH	5	—	—	—	71	90	76	321	78	100	83	333
			5	466A	25	30.1	109	110	110	351	115	125	117	363
			5	467A	50	60.1	132	150	145	381	138	150	152	393
			5	468A	75	90.2	162	175	179	411	168	175	187	423
	575-3-60	HIGH	5	—	—	—	67	80	71	250	72	90	76	258
			5	469A	24.8	23.9	97	100	98	274	101	110	104	282
			5	470A	49.6	47.7	126	150	126	298	131	150	131	306
			5	471A	74.4	71.6	138	150	153	322	143	150	159	330

50GEQ*28 Unit HACR Sizing Electrical Data (cont)

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELEC. HTR			NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
				STD SCCR CRHEATER ****00	Nom (kW)	FLA	NO POWER EXHAUST				w/ POWER EXHAUST (powered from unit)			
							MCA	HACR BRKR	DISC. SIZE		MCA	HACR BRKR	DISC. SIZE	
									FLA	LRA			FLA	LRA
50GEQ*28	208/230-3-60	MED	5	—	—	—	140	175	146	610	152	200	160	630
			5	454A	18.8/25.0	52.1/60.1	215/215	250/250	206/216	670/670	227/227	250/250	220/229	690/690
			5	455A	37.6/50.0	104.2/120.3	270/270	300/300	266/285	730/730	282/282	300/300	280/298	750/750
			5	456A	56.3/75.0	156.4/180.4	320/320	350/350	326/354	790/790	332/332	350/350	340/367	810/810
		HIGH	5	—	—	—	150	200	158	624	162	200	172	644
			5	454A	18.8/25.0	52.1/60.1	226/226	250/250	218/227	684/684	237/237	250/250	232/241	704/704
			5	455A	37.6/50.0	104.2/120.3	281/281	300/300	278/296	744/744	292/292	300/300	292/310	764/764
			5	456A	56.3/75.0	156.4/180.4	331/331	350/350	338/366	804/804	342/342	400/400	352/379	824/824
	460-3-60	MED	5	—	—	—	65	80	68	313	71	90	75	325
			5	457A	25	30.1	103	110	103	343	109	110	110	355
			5	458A	50	60.1	125	150	137	373	131	150	145	385
			5	459A	75	90.2	155	175	172	403	161	175	179	415
		HIGH	5	—	—	—	69	90	73	319	75	90	80	331
			5	457A	25	30.1	107	110	108	349	113	125	115	361
			5	458A	50	60.1	129	150	142	379	136	150	149	391
			5	459A	75	90.2	159	175	177	409	166	175	184	421
	575-3-60	MED	5	—	—	—	62	80	65	244	67	80	71	252
			5	460A	24.8	23.9	92	100	93	268	96	100	98	276
			5	461A	49.6	47.7	121	125	120	292	126	150	126	300
			5	462A	74.4	71.6	133	150	148	316	138	150	153	324
		HIGH	5	—	—	—	65	80	69	248	70	80	75	256
			5	460A	24.8	23.9	95	100	96	272	100	100	102	280
			5	461A	49.6	47.7	125	125	124	296	129	150	129	304
			5	462A	74.4	71.6	137	150	151	320	141	150	157	328
50GEQ*28 Horizontal	208/230-3-60	HIGH	5	—	—	—	150	200	158	624	162	200	172	644
			5	463A	18.8/25.0	52.1/60.1	226/226	250/250	218/227	684/684	237/237	250/250	232/241	704/704
			5	464A	37.6/50.0	104.2/120.3	281/281	300/300	278/296	744/744	292/292	300/300	292/310	764/764
			5	465A	56.3/75.0	156.4/180.4	331/331	350/350	338/366	804/804	342/342	400/400	352/379	824/824
	460-3-60	HIGH	5	—	—	—	69	90	73	319	75	90	80	331
			5	466A	25	30.1	107	110	108	349	113	125	115	361
			5	467A	50	60.1	129	150	142	379	136	150	149	391
			5	468A	75	90.2	159	175	177	409	166	175	184	421
	575-3-60	HIGH	5	—	—	—	65	80	69	248	70	80	75	256
			5	469A	24.8	23.9	95	100	96	272	100	100	102	280
			5	470A	49.6	47.7	125	125	124	296	129	150	129	304
			5	471A	74.4	71.6	137	150	151	320	141	150	157	328

50GEQ*28 Electric Heat Data — Standard SCCR Unit

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	High SCCR kA	STD SCCR CRHEATER ****00	NOMINAL (kW)	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	STD SCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXA			
									NO C.O. OR UNPOWERED C.O.		w/ PWRD C.O.	
									NO P.E.	w/P.E. (pwrdr fr/unit)	NO P.E.	w/P.E. (pwrdr fr/unit)
50GEQ*28 Vertical	208/230-3-60	MED	5	60	454A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	455A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	456A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
		HIGH	5	60	454A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	455A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	456A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
	460-3-60	MED	5	65	457A	25.0	23.0	78.3	57	57	57	57
			5	65	458A	50.0	45.9	156.7	57	57	57	57
			5	65	459A	75.0	68.9	235.0	57	57	57	57
		HIGH	5	65	457A	25.0	23.0	78.3	57	57	57	57
			5	65	458A	50.0	45.9	156.7	57	57	57	57
			5	65	459A	75.0	68.9	235.0	57	57	57	57
	575-3-60	MED	5	—	460A	24.8	22.8	77.7	57	57	57	57
			5	—	461A	49.6	45.6	155.4	57	57	57	57
			5	—	462A	74.4	68.3	233.1	57	57	57	57
		HIGH	5	—	460A	24.8	22.8	77.7	57	57	57	57
			5	—	461A	49.6	45.6	155.4	57	57	57	57
			5	—	462A	74.4	68.3	233.1	57	57	57	57
50GEQ*28 Horizontal	208/230-3-60	HIGH	5	60	463A	25.0	18.8/23.0	64.1/78.3	56	56	56	56
			5	60	464A	50.0	37.6/45.9	128.1/156.7	56	56	56	56
			5	60	465A	75.0	56.3/68.9	192.2/235.0	56	56	56	56
	460-3-60	HIGH	5	65	466A	25.0	23.0	78.3	57	57	57	57
			5	65	467A	50.0	45.9	156.7	57	57	57	57
			5	65	468A	75.0	68.9	235.0	57	57	57	57
	575-3-60	HIGH	5	—	469A	24.8	22.8	77.7	57	57	57	57
			5	—	470A	49.6	45.6	155.4	57	57	57	57
			5	—	471A	74.4	68.3	233.1	57	57	57	57

50GEQ*28 Electrical Heat Data — High SCCR Unit

UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	High SCCR kA	HSCCR ELECTRIC HEATER PART NUMBER	Nominal (kW)	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	HIGH SCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXA	
									NO C.O. OR UNPOWERED C.O.	
									NO P.E.	w/ P.E. (pwrd fr/ unit)
50GEQ*28 Vertical	208/230-3-60	MED	5	60	454A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	455A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	456A	75.0	56.3/68.9	192.2/235.0	58	58
		HIGH	5	60	454A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	455A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	456A	75.0	56.3/68.9	192.2/235.0	58	58
	460-3-60	MED	5	65	457A	25.0	23.0	78.3	59	59
			5	65	458A	50.0	45.9	156.7	59	59
			5	65	459A	75.0	68.9	235.0	59	59
		HIGH	5	65	457A	25.0	23.0	78.3	59	59
			5	65	458A	50.0	45.9	156.7	59	59
			5	65	459A	75.0	68.9	235.0	59	59
50GEQ*28 Horizontal	208/230-3-60	HIGH	5	60	463A	25.0	18.8/23.0	64.1/78.3	58	58
			5	60	464A	50.0	37.6/45.9	128.1/156.7	58	58
			5	60	465A	75.0	56.3/68.9	192.2/235.0	58	58
	460-3-60	HIGH	5	65	466A	25.0	23.0	78.3	59	59
			5	65	467A	50.0	45.9	156.7	59	59
			5	65	468A	75.0	68.9	235.0	59	59

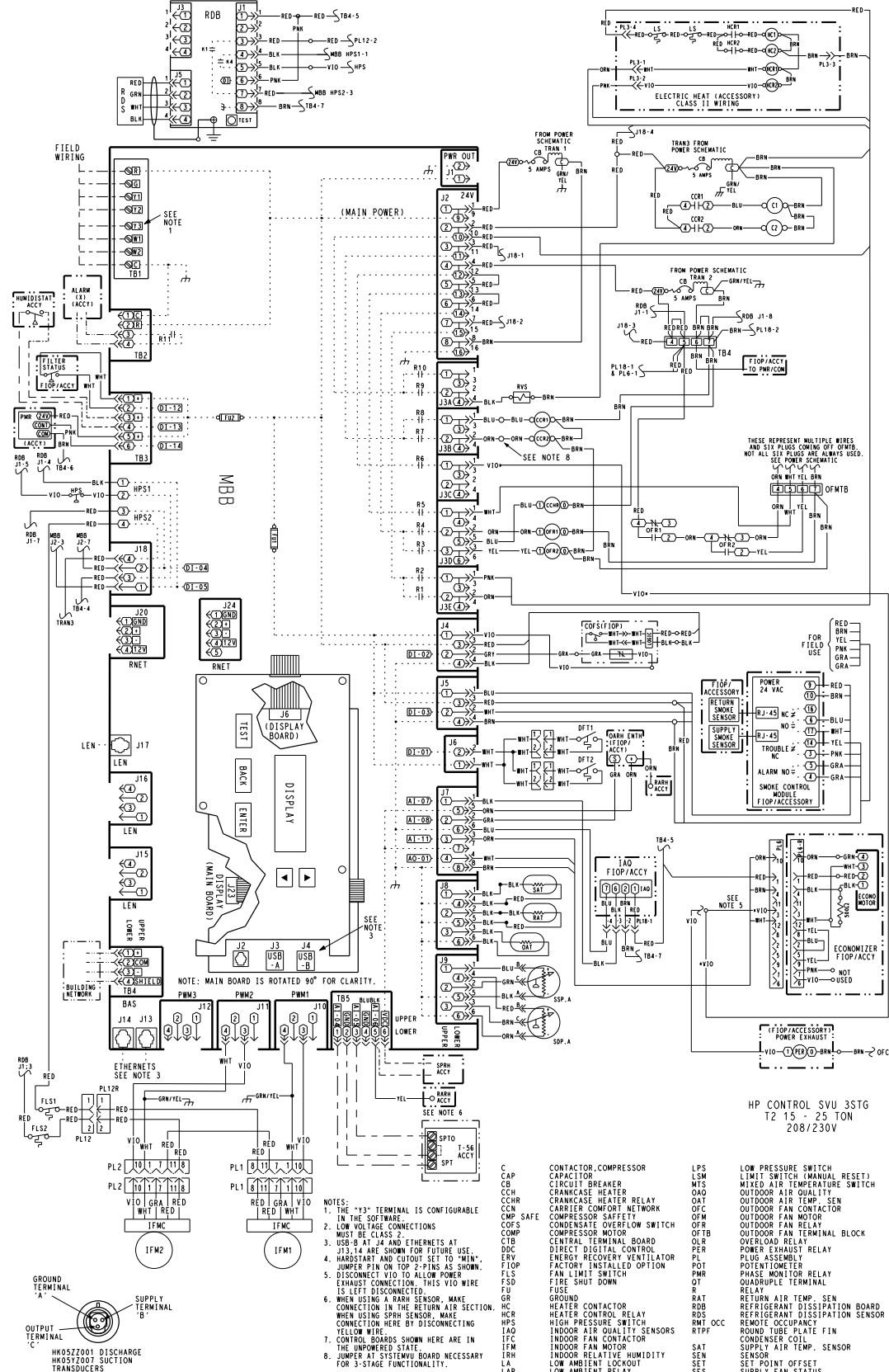
50GEQ*17-28 Wiring Diagrams — Standard SCCR

UNIT	VOLTAGE	CONTROL	PAGE	POWER	PAGE
50GEQ*17 with SystemVu Controller	208/230-3-60	50HE008879	69	50HE009233	77
	460-3-60	50HE008878	70	50HE009234	78
	575-3-60			50HE009235	79
50GEQ*24-28 with SystemVu Controller	208/230-3-60	50HE008879	69	50HE009236	80
	460-3-60	50HE008878	70	50HE009237	81
	575-3-60			50HE009238	82
50GEQ*17 with SystemVu Controller with Humidi-Mizer System	208/230-3-60	50HE009448	71	50HE009233	77
	460-3-60	50HE009449	72	50HE009234	78
	575-3-60			50HE009235	79
50GEQ*24-28 with SystemVu Controller with Humidi-Mizer System	208/230-3-60	50HE009448	71	50HE009236	80
	460-3-60	50HE009449	72	50HE009237	81
	575-3-60			50HE009238	82

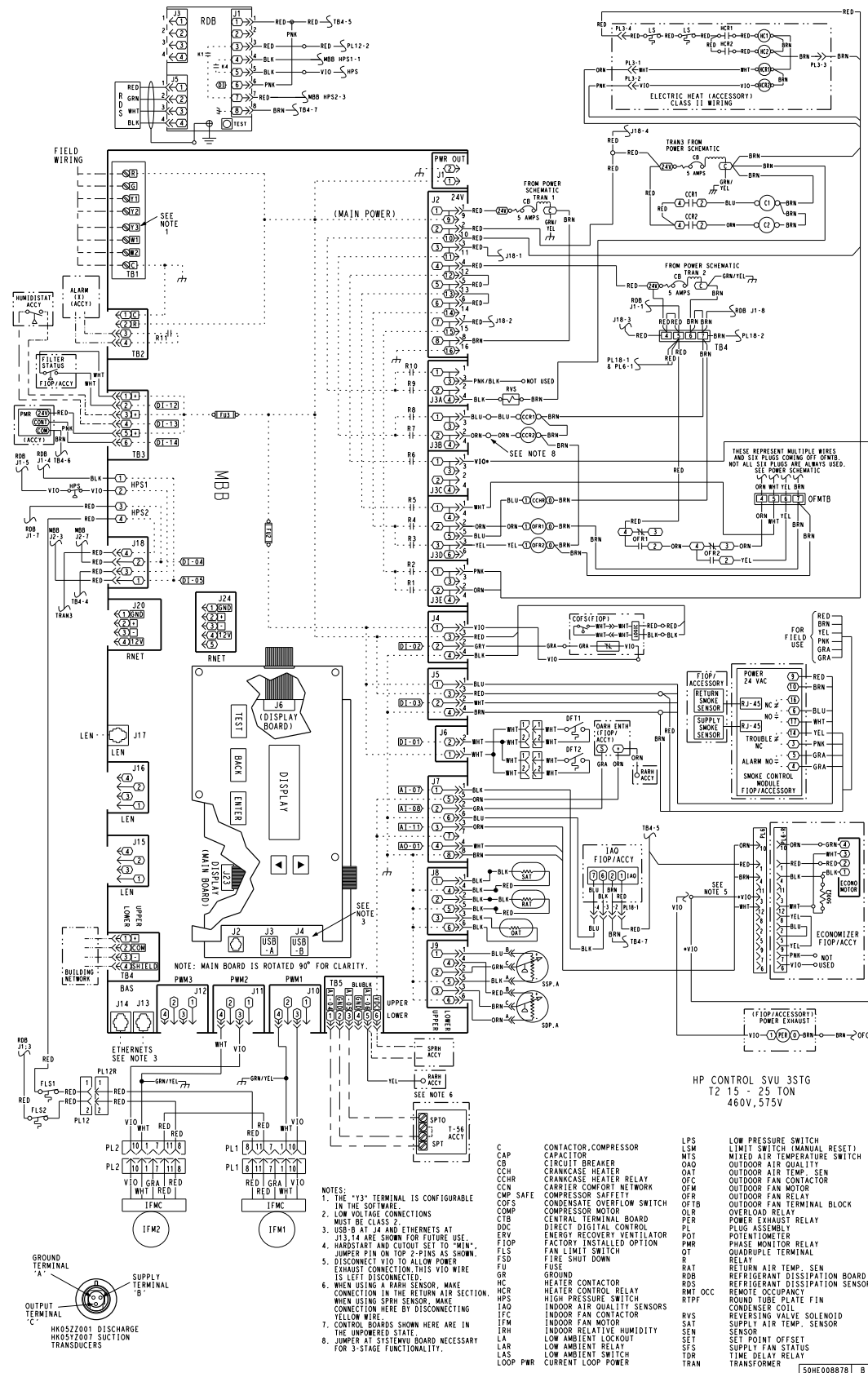
50GEQ*17-28 Wiring Diagrams — High SCCR

UNIT	VOLTAGE	CONTROL	PAGE	POWER	PAGE
50GEQ*17 with SystemVu Controller	208/230-3-60	50HE008880	73	50HE009239	83
	460-3-60	50HE008881	74	50HE009240	84
50GEQ*24-28 with SystemVu Controller	208/230-3-60	50HE008880	73	50HE009241	85
	460-3-60	50HE008881	74	50HE009242	86
50GEQ*17 with SystemVu Controller with Humidi-Mizer System	208/230-3-60	50HE009452	75	50HE009239	83
	460-3-60	50HE009453	76	50HE009240	84
50GEQ*24-28 with SystemVu Controller with Humidi-Mizer System	208/230-3-60	50HE009452	75	50HE009241	85
	460-3-60	50HE009453	76	50HE009242	86

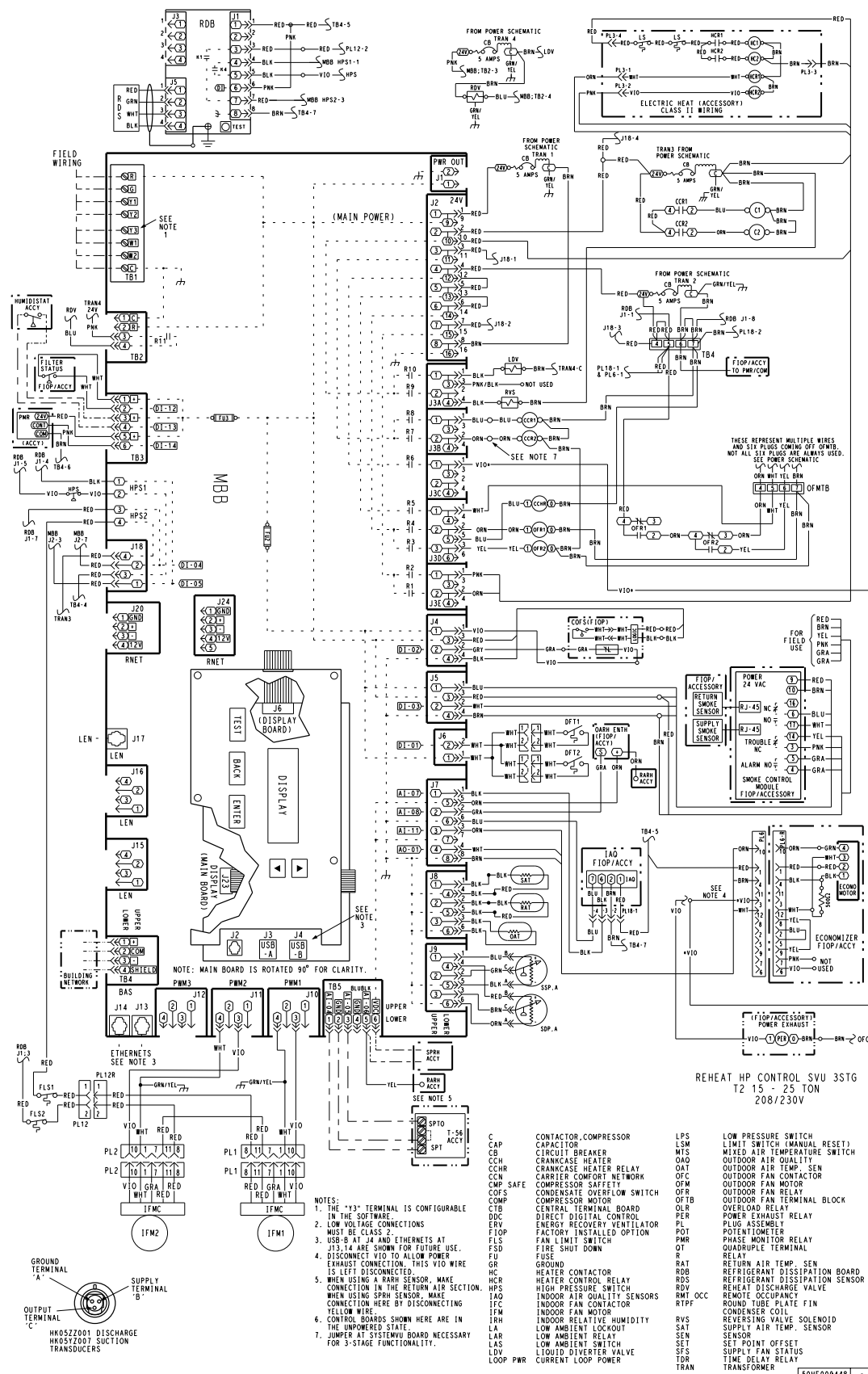
Typical 50GEQ*17-28 Control Wiring Diagram, SystemVu™ Controller, 208/230-3-60 unit shown



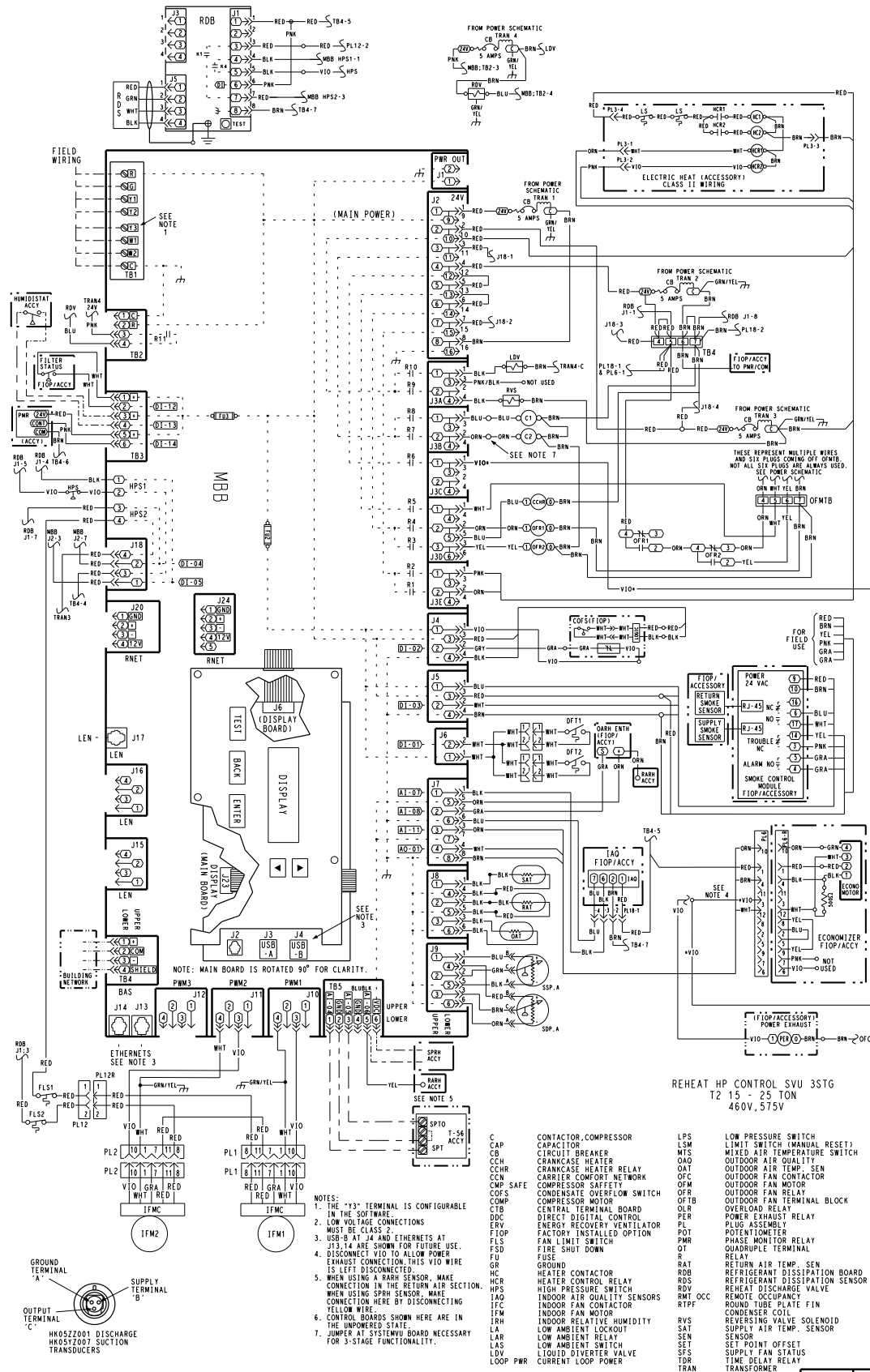
Typical 50GEQ*17-28 Control Wiring Diagram, SystemVu™ Controller, 460, 575-3-60 unit shown



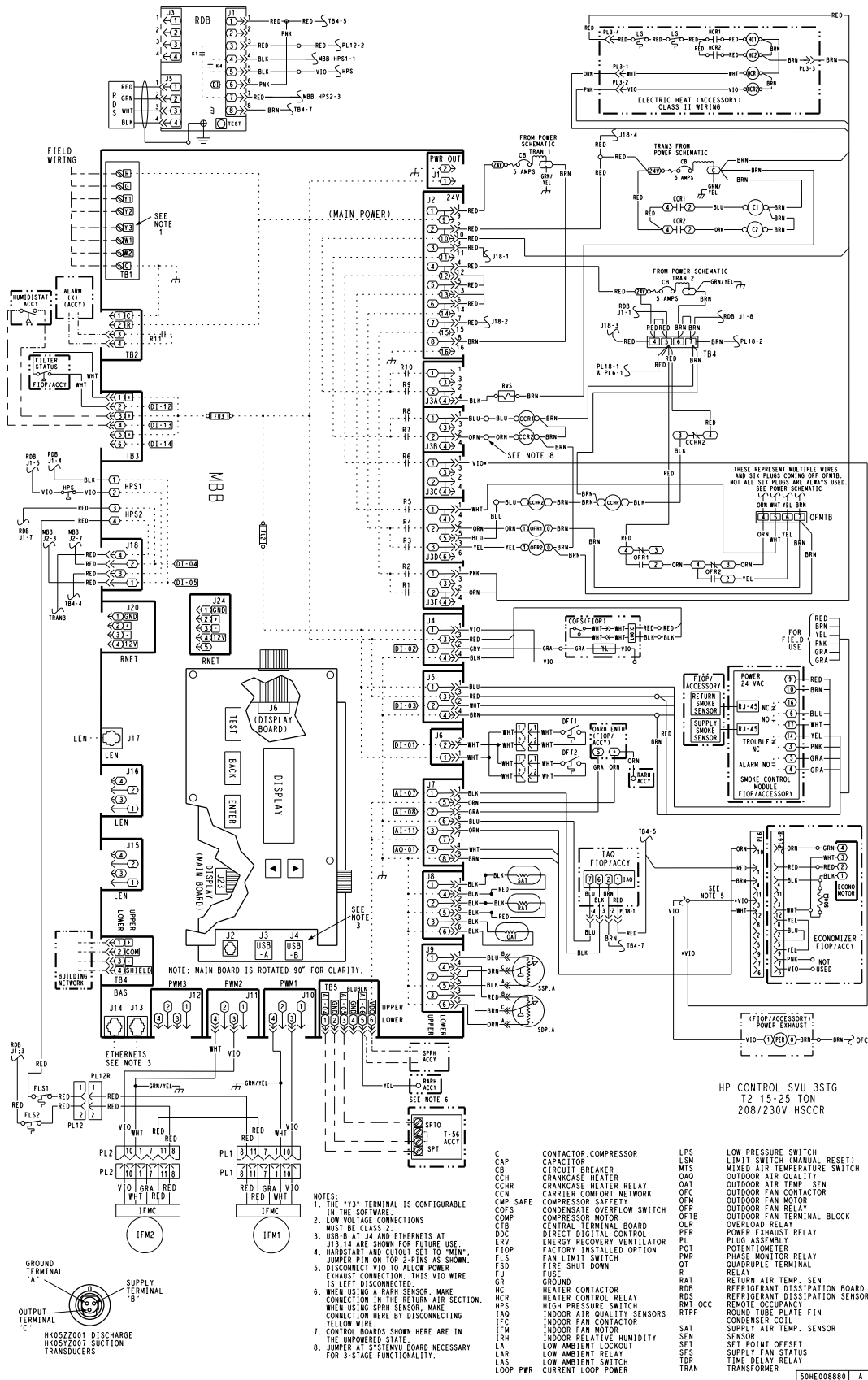
**Typical 50GEQ*17-28 Control Wiring Diagram, SystemVu™ Controller with Humidi-MiZer,
208/230-3-60 unit shown**



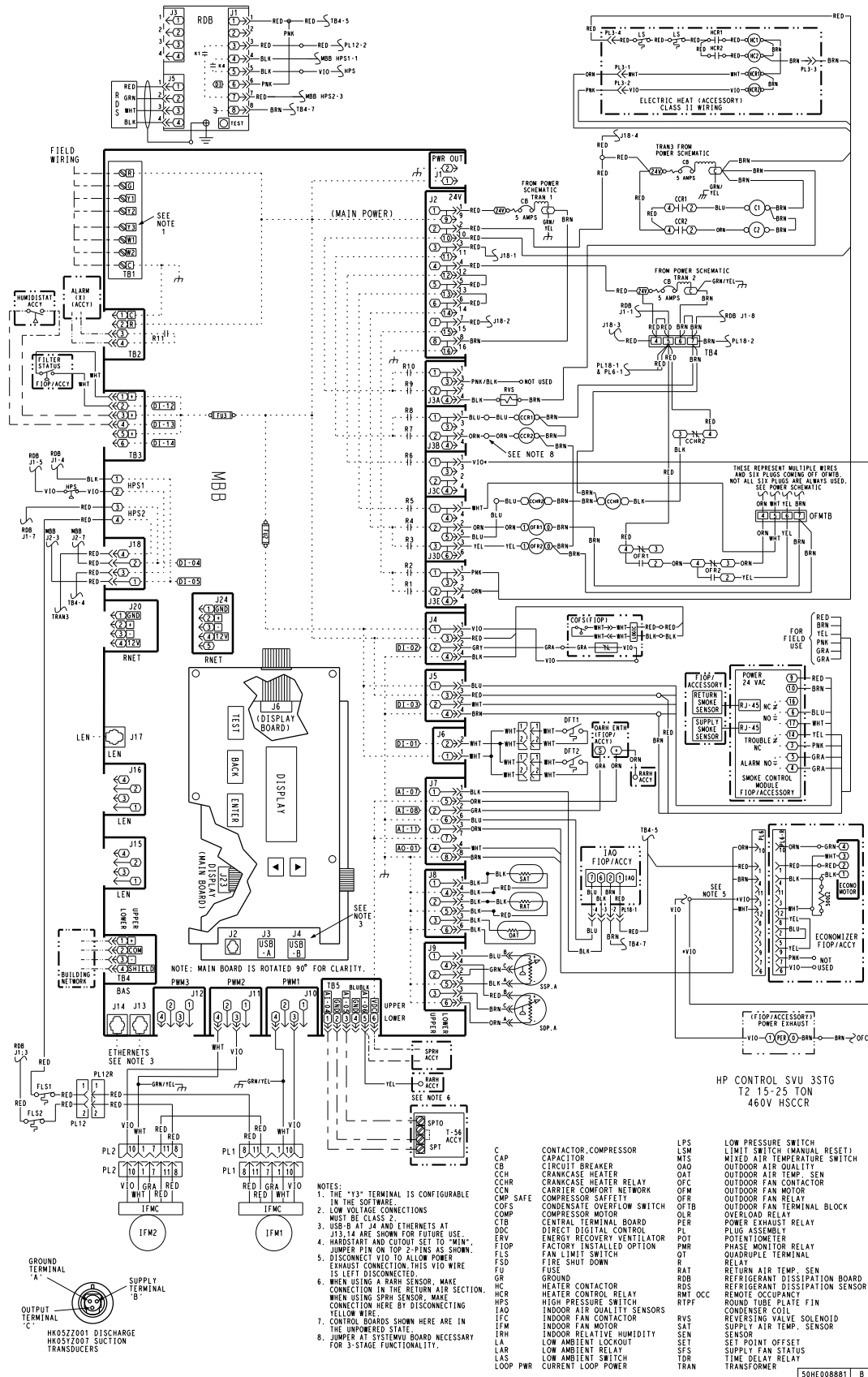
Typical 50GEQ*17-28 Control Wiring Diagram, SystemVu™ Controller with Humidi-MiZer, 460, 575-3-60 unit shown



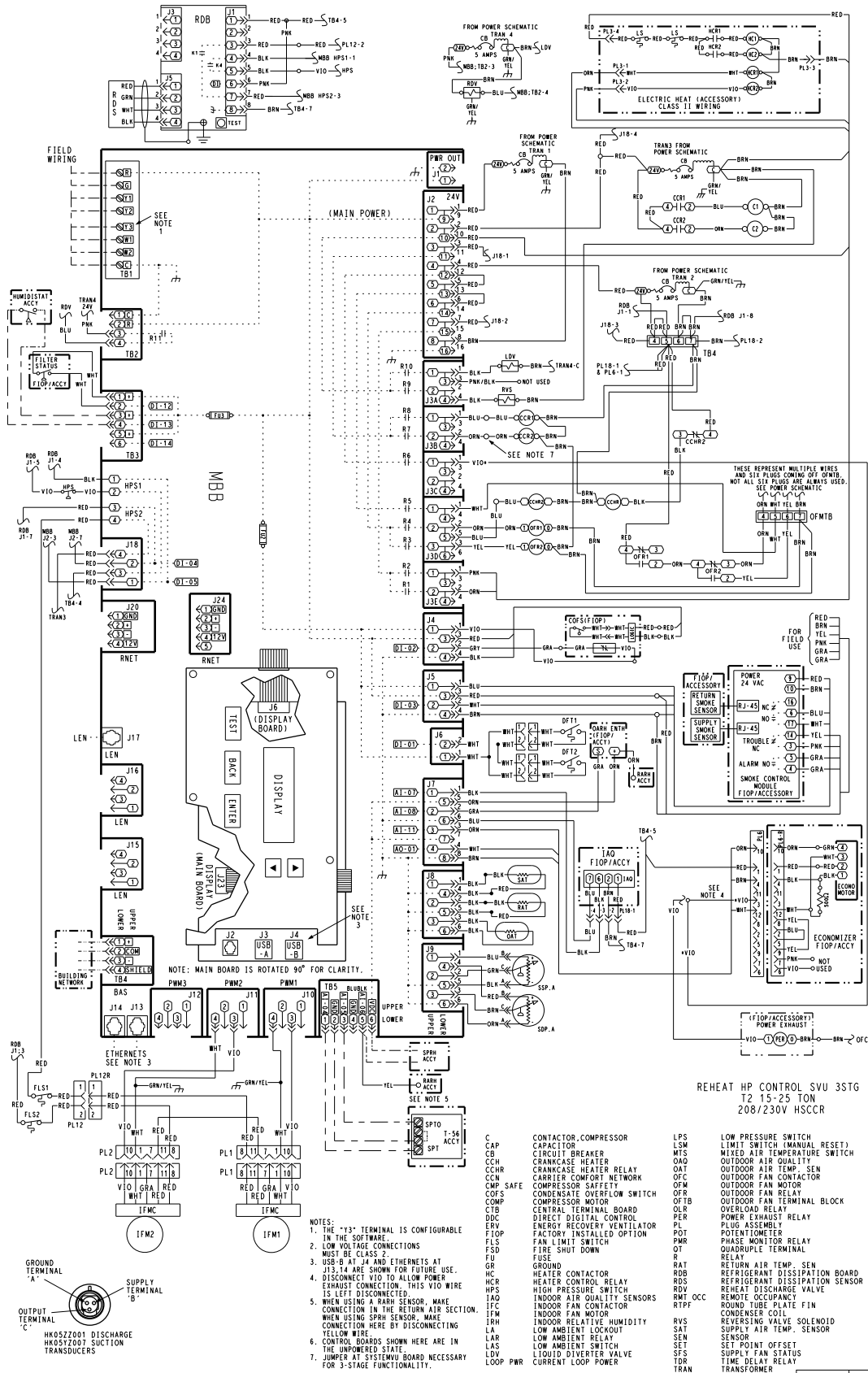
Typical 50GEQ*17-28 Control Wiring Diagram, SystemVu™ Controller, 208/230-3-60 High SCCR unit shown



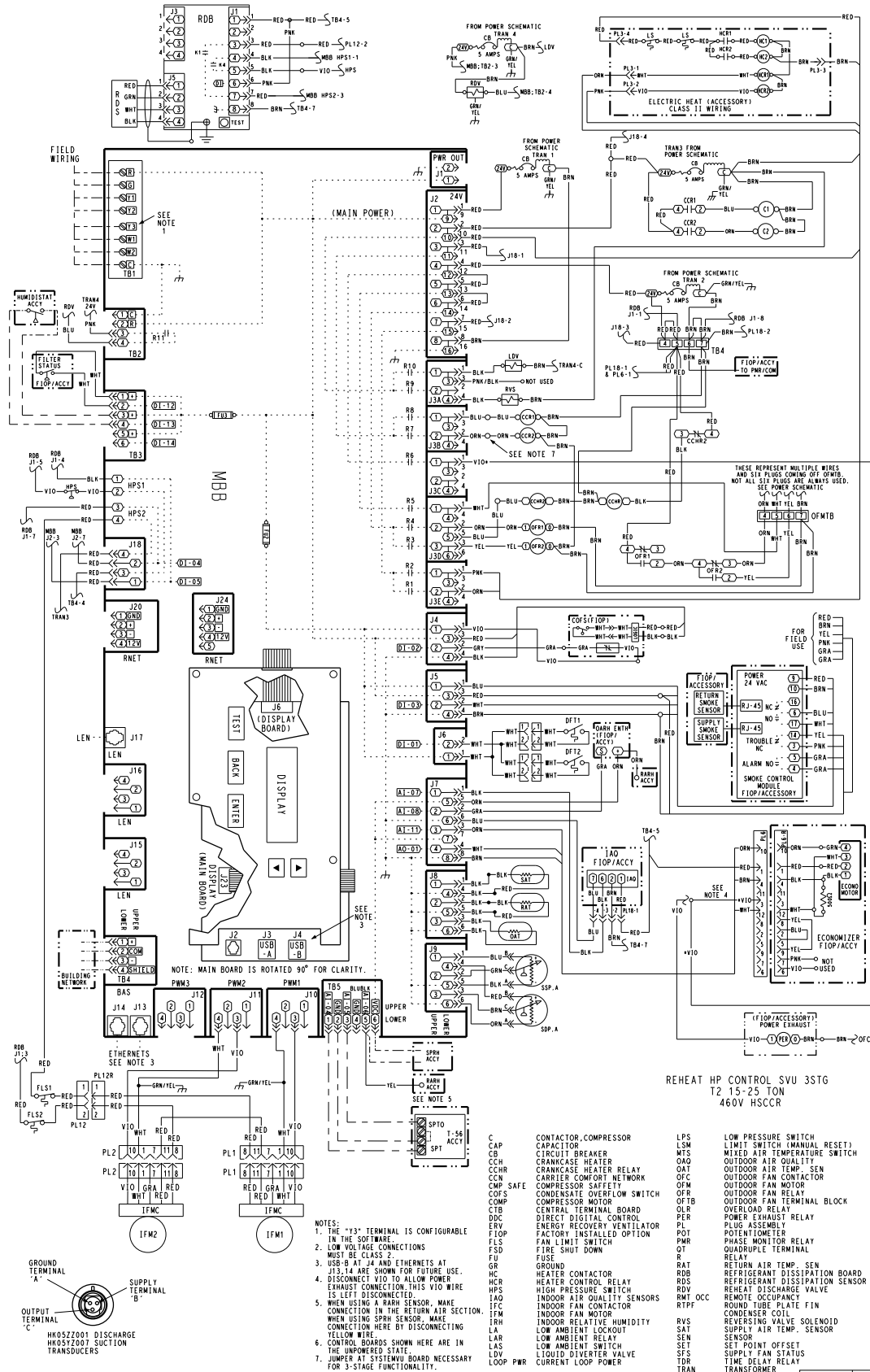
**Typical 50GEQ*17-28 Control Wiring Diagram, SystemVu™ Controller,
460, 575-3-60 High SCCR unit shown**



Typical 50GEQ*17-28 Control Wiring Diagram, SystemVu™ Controller with Humidi-MiZer, 208/230-3-60 High SCCR unit shown



Typical 50GEQ*17-28 Control Wiring Diagram, SystemVu™ Controller with Humidi-MiZer, 460, 575-3-60 High SCCR unit shown



NOTES:

- IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED. IT MUST BE REPLACED WITH TYPE 90 C WIRE OR ITS EQUIVALENT.
- COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
- USE COPPER CONDUCTORS ONLY.
- 208/230V UNIT TRAIL IS WIRED FOR 230V UNIT. IF UNIT IS TO BE RUN WITH 200V POWER SUPPLY DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 200V TAP.

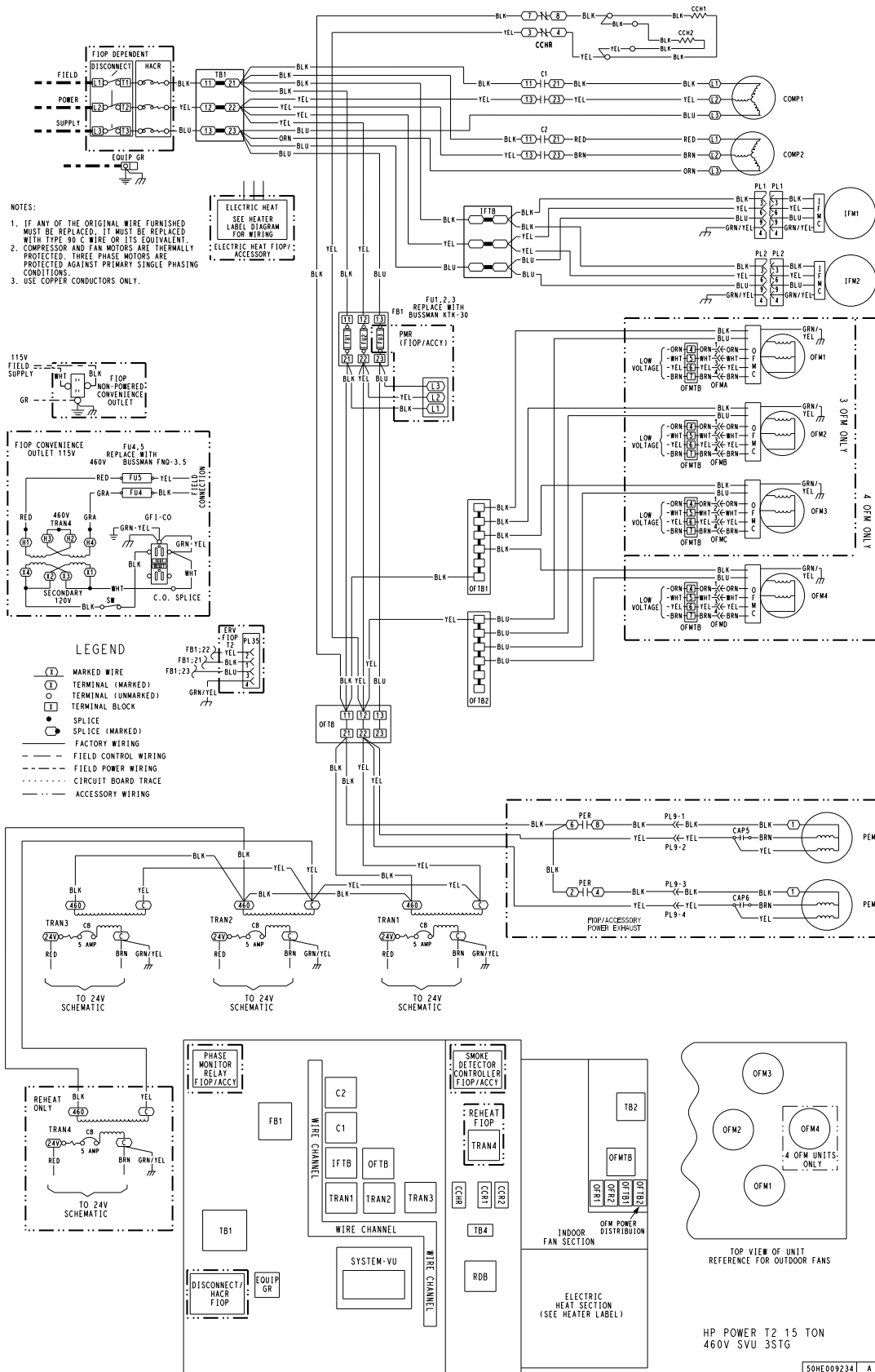
LEGEND

- (T) MARKED WIRE
- (O) TERMINAL (MARKED)
- () TERMINAL (UNMARKED)
- [] TERMINAL BLOCK
- SPICE
- SPICE (MARKED)
- - - FACTORY WIRING
- - - FIELD CONTROL WIRING
- - - FIELD POWER WIRING
- - - CIRCUIT BOARD TRACE
- - - ACCESSORY WIRING

TOP VIEW OF UNIT REFERENCE FOR OUTDOOR FANS

HP POWER T2 15 TON
208/230V SVU 3STG

Typical 50GEQ*17 Power Wiring Diagram, SystemVu™ Controller, 460-3-60 unit shown



NOTES:

1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE SO C WIRE OR ITS EQUIVALENT.
2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
3. USE COPPER CONDUCTORS ONLY.

LEGEND

- (1) MARKED WIRE
- (1) TERMINAL (MARKED)
- (1) TERMINAL (UNMARKED)
- (1) TERMINAL BLOCK
- SPlice
- SPlice (MARKED)
- FIELD CONTROL WIRING
- FIELD POWER WIRING
- CIRCUIT BOARD TRACE
- ACCESSORY WIRING

115V FIELD SUPPLY

GRN/YEL (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33) (34) (35) (36) (37) (38) (39) (40) (41) (42) (43) (44) (45) (46) (47) (48) (49) (50) (51) (52) (53) (54) (55) (56) (57) (58) (59) (60) (61) (62) (63) (64) (65) (66) (67) (68) (69) (70) (71) (72) (73) (74) (75) (76) (77) (78) (79) (80) (81) (82) (83) (84) (85) (86) (87) (88) (89) (90) (91) (92) (93) (94) (95) (96) (97) (98) (99) (100)

F1OP/ACCY

REHEAT F1OP

SMOKE DETECTOR CONTROLLER F1OP/ACCY

PHASE MONITOR RELAY F1OP/ACCY

DISCONNECT/HACR

EQUIP GR

SYSTEM-VU

INDOOR FAN SECTION

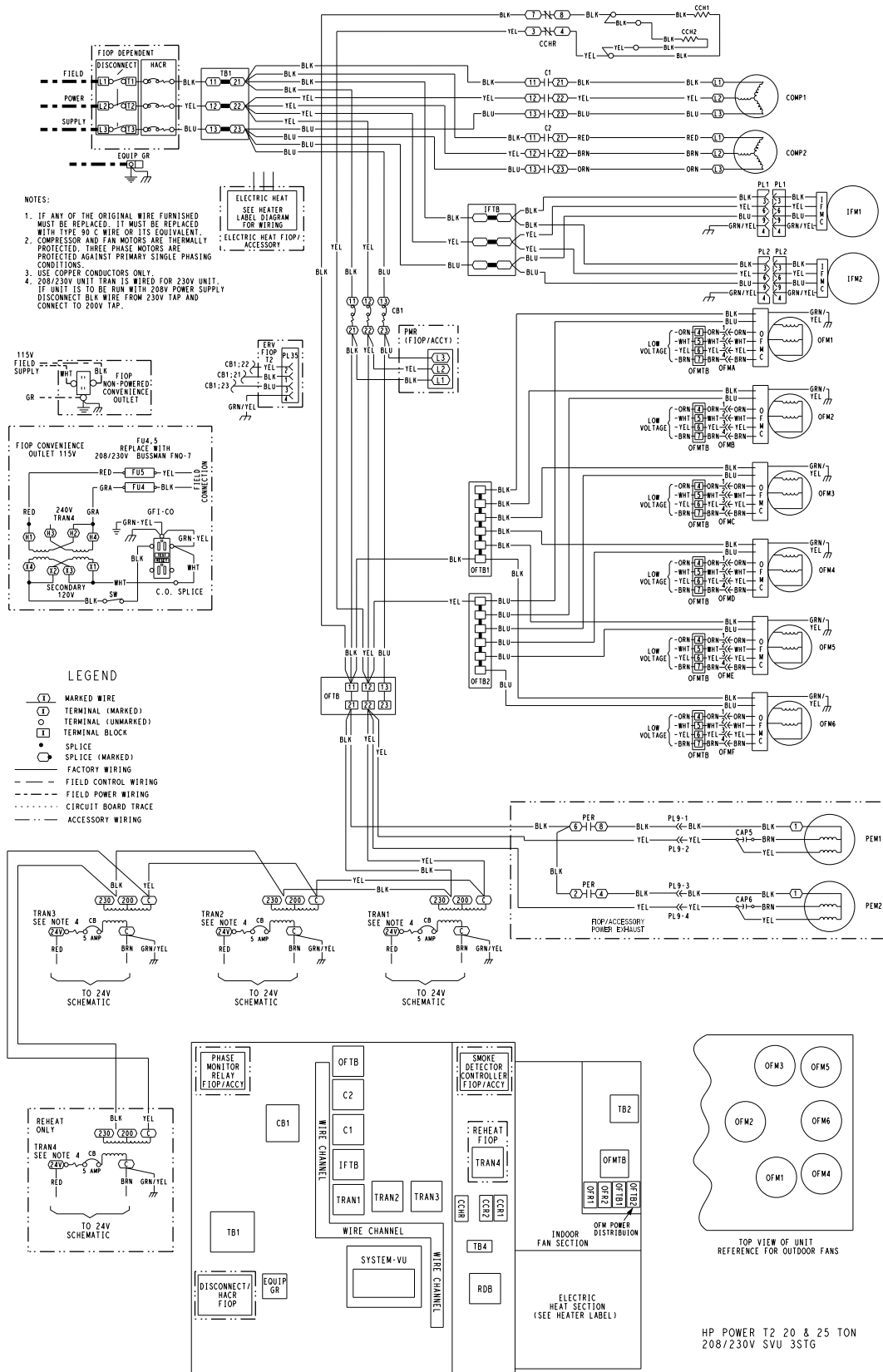
ELECTRIC HEAT SECTION (SEE HEATER LABEL)

TOP VIEW OF UNIT

HP POWER T2 15 TON 575V SVU 3STG

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Typical 50GEQ*24-28 Power Wiring Diagram, SystemVu™ Controller, 208/230-3-60 unit shown



NOTES:

- IF ANY OF THE ORIGINAL WIRE FURNISHED WITH TYPE WD C WIRE OR ITS EQUIVALENT, COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
- USE COPPER CONDUCTORS ONLY.

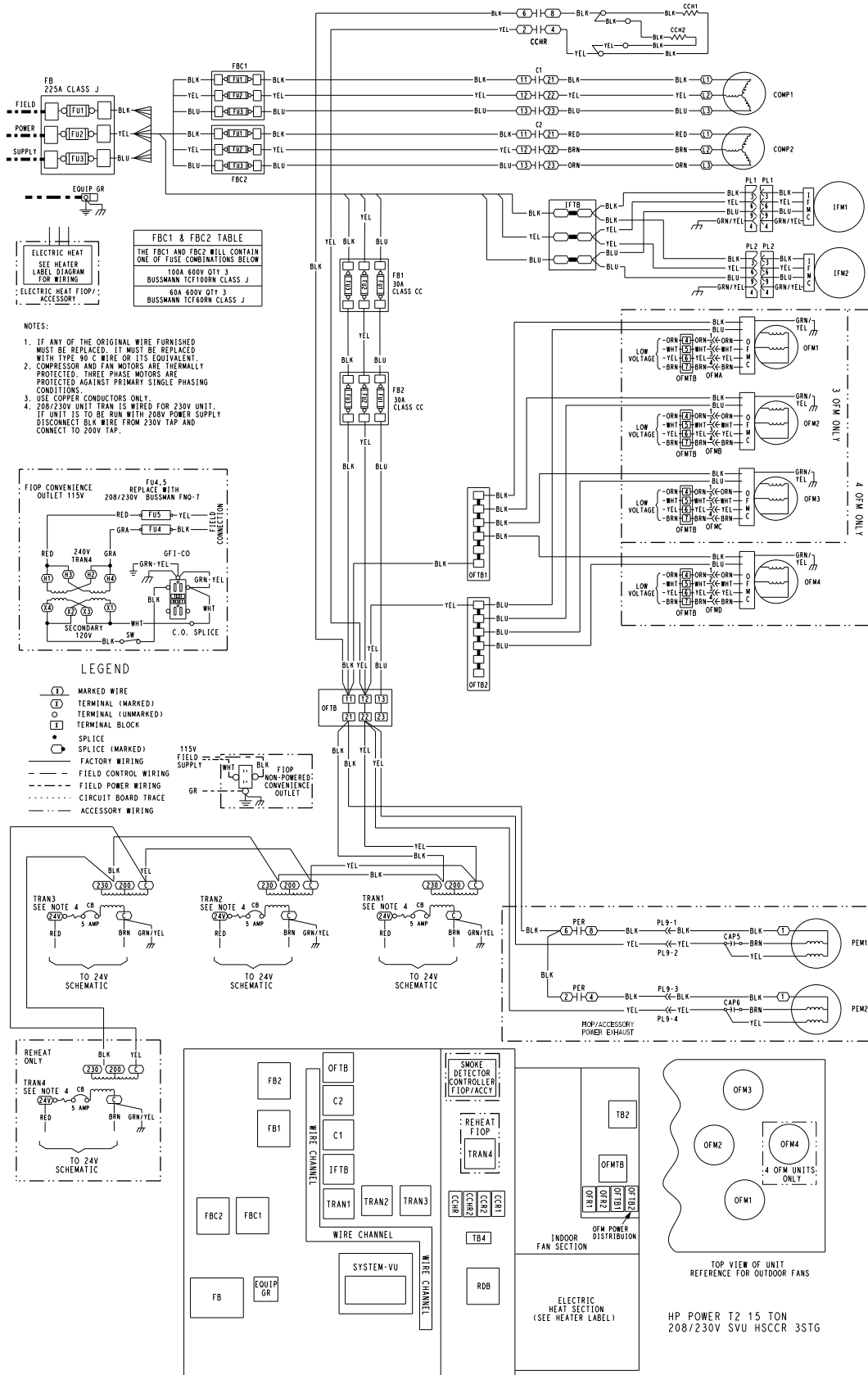
LEGEND

- (7) MARKED WIRE
- (1) TERMINAL (MARKED)
- (1) TERMINAL (UNMARKED)
- (1) TERMINAL BLOCK
- SPLICE
- SPLICE (MARKED)
- FACTORY WIRING
- FIELD CONTROL WIRING
- FIELD POWER WIRING
- CIRCUIT BOARD TRACE
- ACCESSORY WIRING

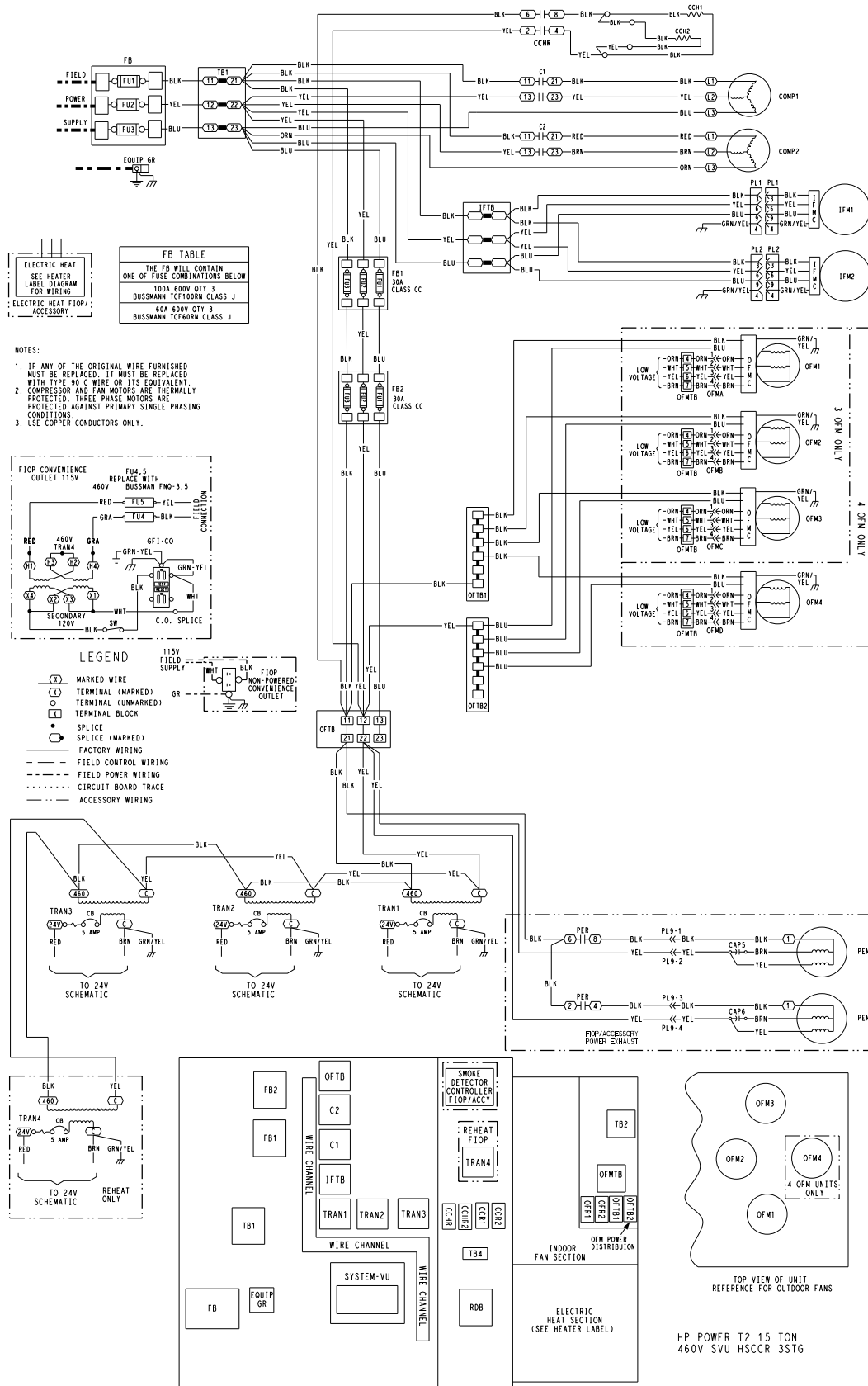
WIRING DETAILS:

- FIELD DEPENDENT DISCONNECT:** Shows connections for Field, Power, and Supply lines through a HACR breaker.
- ELECTRIC HEAT:** Includes a heater label diagram and a FIOF/ACCY terminal block.
- COMPRESSOR (COMP1, COMP2):** Shows three-phase motor connections with terminals 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.
- PL1, PL2:** Phase 1 and Phase 2 terminals for the compressor.
- IFM1, IFM2:** Indoor Fan Motor terminals.
- OFM1, OFM2, OFM3, OFM4, OFM5, OFM6:** Outdoor Fan Motor terminals.
- PER, CAPS, CAP6:** Power Exhaust, Capacitor, and Capacitor terminals.
- TRANS1, TRANS2, TRANS3, TRANS4:** Transformer terminals for 24V schematics.
- PHASE MONITOR RELAY:** A relay for FIOF/ACCY.
- SMOKE DETECTOR:** A detector for FIOF/ACCY.
- REHEAT:** A reheat section for FIOF/ACCY.
- INDOOR FAN SECTION:** Includes a fan section and a power distribution section.
- ELECTRIC HEAT SECTION:** Includes a heater section and a power distribution section.
- TOP VIEW OF UNIT:** A reference diagram for outdoor fans, showing the layout of OFM1 through OFM6.

Typical 50GEQ*17 Power Wiring Diagram, SystemVu™ Controller, 208/230-3-60 High SCCR unit shown



Typical 50GEQ*17 Power Wiring Diagram, SystemVu™ Controller, 460-3-60 High SCCR unit shown



The diagram illustrates the electrical wiring for a Carrier HVAC system. Key components include:

- Field and Power Supply:** Connections for Field (FB), Power (F), and Supply (S) wires.
- Fans and Motors:** Wires for COMP1, COMP2, IFM1, IFM2, OFM1 through OFM6, and PEM1 through PEM2.
- Controls and Safety:** Smoke Detector, Reheat FIP, Tran4, and various limit switches (C1, C2, C3).
- Wiring Channels:** FB1, FB2, FBC1, FBC2, TRAN1, TRAN2, TRAN3, and EQUIP GR.
- Legend:** Defines symbols for marked/unmarked terminals, splices, factory wiring, field control/power wiring, circuit board traces, and accessory wiring.
- Top View Reference:** Shows the layout of outdoor fans (OFM1-OFM6) relative to the indoor fan section.
- Schematic Details:** Includes notes on transformer ratings (e.g., 208/230V, 24V), wire gauges (#14, #16), and specific terminal markings.

FB TABLE

THE FB WILL CONTAIN ONE OF FUSE COMBINATIONS BELOW	
100A 600V QTY 3	BUSSMAN TCF100RN CLASS J
60A 600V QTY 3	BUSSMAN TCF60RN CLASS J

LEGEND

- MARKED WIRE
- TERMINAL (MARKED)
- TERMINAL (UNMARKED)
- TERMINAL BLOCK
- SPLICE
- SPLICE (MARKED)
- FACTORY WIRING
- FIELD CONTROL WIRING
- FIELD POWER WIRING
- CIRCUIT BOARD TRACE
- ACCESSORY WIRING

NOTES:

- IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED, IT MUST BE REPLACED WITH TYPE 90 C WIRE OR ITS EQUIVALENT.
- COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
- USE COPPER CONDUCTORS ONLY.

HP POWER T2 20 & 25 TON 460V SVU HSCCR 35TG

General

The SystemVu controller is standard on all 50GEQ 3-stage units. The sequence below describes the sequence of operation for 50GEQ 3-stage units with and without a factory-installed economizer. For more information regarding the SystemVu controller, see the 50FEQ/50GEQ/48QE Single Package Rooftop Units with SystemVu Controls Start-Up, Operation and Troubleshooting manual.

Units without economizer

Cooling

When the thermostat calls for cooling, terminals G and Y1 are energized. The indoor fan will run at the low fan speed and the C2 compressor contactor (CC) is energized causing small compressor and outdoor fan to run. The low indoor fan speed is 40% (on 50GEQ*17, 24) or 50% (on 50GEQ*28) of the user set fan speed, depending on unit size.

If additional cooling is needed, the thermostat will add the call for Y2. This will increase the indoor fan speed to 60% of the user set fan speed, energize the C1 contactor and the large compressor, and de-energize C2 and the small compressor. The outdoor fan may run at different speeds for Y1 and Y2 depending on unit size and outdoor ambient temperature.

If further cooling is needed, the thermostat will add the call for Y3. This will increase the indoor fan speed to the user set fan speed and re-energize the C2 contactor and small compressor for full compressor capacity. The outdoor fan runs at different speeds for Y1, Y2, and Y3 depending on unit size and outdoor ambient temperature.

When the thermostat removes the call for Y3 but leaves the Y2 and Y3, the indoor fan will slow to the reduced percentage of the user set fan speed, the C2 contactor will de-energize, the second compressor will turn off, and the outdoor fan will remain on. When the thermostat removes the call for Y2 but leaves the Y1, the indoor fan will further slow to the reduced percentage of the user set fan speed, the C1 contactor and large compressor will de-energize, the C2 contactor and small compressor will re-energize, and the outdoor fan will remain on. When the thermostat removes the call for Y1, the C2 contactor and small compressor will de-energize and the outdoor fan will shut down. When the thermostat removes the call for G, the indoor fan will turn off after the specific unit fan off delay.

NOTE: Per ASHRAE 90.1-2019 and IECC-2018 standards, during the first stage cooling operation the SystemVu controller will adjust the fan motor speed to provide 40% (on 50GEQ*17, 24) or 50% (on 50GEQ*28) of the total cfm established for the unit. During the second stage cooling operation the SystemVu controller will adjust the fan motor speed to provide 60% of the total cfm established for the unit.

Defrost

When the temperature of the outdoor coil drops below 28°F (-2°C) as sensed by the defrost thermostat (DFT2) and the defrost timer is at the end of a timed period (adjustable between 30 to 120 minutes), the reversing valve solenoid (RVS) is energized and the OFRs are de-energized. This switches the position of the reversing valve and shuts off the outdoor fan. The electric heaters (if installed) will be energized.

Heating, unit with economizer

Upon a request for heating from the space thermostat terminal, W1 will be energized with 24V. The indoor fan will run at high speed, and outdoor fan C1 and C2 will be energized in heating. The indoor fan, outdoor fans, and compressor are energized.

The reversing valve is de-energized and switch positions. The economizer is set to minimum position (ventilation position).

If the space temperature continues to fall with W1 energized, W2 will bring on gas heat. As the space temperature rises the W2 will de-energize and the compressors will continue to operate, until the thermostat set point is achieved de-energizing W1.

If the thermostat is set to Auto, the indoor fan will de-energize and the economizer will close. If the indoor fan is set to On, the indoor fan will continue to operate and the economizer will remain at minimum position (vent position). On units equipped for 2 stages of heat, when additional heat is needed, second stage of gas heat energized through W2. The economizer damper moves to the minimum position. When the thermostat is satisfied, the damper moves to the fully closed position.

Heating, unit without economizer

Upon a request for heating from the space thermostat, terminal W1 will be energized with 24V. The indoor fan, outdoor fan C1 and C2 will be energized. The indoor fan, outdoor fans, and compressor 1, and compressor 2 are energized and reversing valves are deenergized and switch position.

If the space temperature continues to fall while W1 is energized, W2 will be energized with 24V, and gas heat will be energized.

When the space thermostat is satisfied, W2 will be de-energized first, and gas heating will be de-energized. Upon a further rise in space temperature, W1 will be de-energized.

IMPORTANT: The thermostat must be configured for Electric Heat so it will energize G with the W1 call.

Heating

The sequence of operation for the heating is the same as the unit without economizer. The only difference is how the economizer acts. The economizer will stay at the Economizer Minimum Position while the evaporator fan is operating. The outdoor-air damper is closed when the indoor fan is not operating. Refer to Service and Maintenance manual for further details.

Optional Humidi-MiZer® dehumidification system

Units with the factory-installed Humidi-MiZer system option are capable of providing multiple modes of improved dehumidification as a variation of the normal cooling cycle. The Humidi-MiZer system option includes additional valves in the liquid line and discharge line of each refrigerant circuit, and a small reheat condenser coil downstream of the evaporator on the air side. Select units have a head pressure controller for variable speed operation of the outdoor fan(s). Operation of the revised refrigerant circuit for each mode is described below.

The Humidi-MiZer system provides 3 sub-modes of operation: Cool, Reheat1, and Reheat2.

Cool — provides a normal ratio of sensible and latent cooling effect from the evaporator coil.

Subcooling Mode (Reheat1) — provides increased latent cooling while slightly reducing the sensible cooling effect.

Hot Gas Reheat Mode (Reheat2) — provides normal latent cooling but with null or minimum sensible cooling effect delivered to the space.

The Reheat1 and Reheat2 modes are available when the unit is not in a heating mode and when the system has not locked out reheat in colder ambient conditions.

Minimum operating ambient temperature (cooling)

In mechanical cooling mode, your Carrier rooftop unit can safely operate down to an outdoor ambient temperature of -10°F (-23°C).

Maximum operating ambient temperature (cooling)

The maximum operating ambient temperature for cooling mode is 125°F (52°C). While cooling operation above 125°F (52°C) may be possible, it could cause either a reduction in performance, reliability, or a protective action by the unit's internal safety devices.

Multiple motor and drive packages

Some applications need larger horsepower motors, some need more airflow, and some need both. Regardless of the case, your Carrier expert has a factory installed combination to meet your application. A wide selection of motors are available, factory installed, to handle nearly any application.

Minimum and maximum airflow (heating and cooling)

To maintain safe and reliable operation of your rooftop, operate within the heating airflow limits during heating mode and cooling airflow limits during cooling mode. Operating above the maximum may cause blow-off, undesired airflow noise, or airflow related problems with the rooftop unit. Operating below the minimum may cause problems with coil freeze-up and unsafe heating operation. Heating and cooling limitations differ when evaluating operating CFM, minimum value is the HIGHER of the cooling and heating minimum CFM values published on page 7 and the maximum value is the LOWER of the cooling and heating minimum values published on page 7.

Heating-to-cooling changeover

Your unit will automatically change from heating to cooling mode when using a thermostat with an auto-changeover feature.

Airflow

All units are draw-through in cooling mode and blow-through in heating mode.

Outdoor air application strategies

Economizers reduce operating expenses and compressor run time by providing a free source of cooling and a means of ventilation to match application changing needs. In fact,

they should be considered for most applications. Also, consider the various economizer control methods and their benefits, as well as sensors required to accomplish your application goals. Please contact your local Carrier representative for assistance.

Motor limits, brake horsepower (bhp)

Due to internal design of Carrier units, the air path, and specially designed motors, the full horsepower (maximum continuous bhp) band, as listed in the Fan Performance tables, can be used with the utmost confidence. There is no need for extra safety factors, as Carrier motors are designed and rigorously tested to use the entire, listed bhp range without either nuisance tripping or premature motor failure.

Sizing a rooftop

Bigger is not necessarily better. While an air conditioner needs to have enough capacity to meet the design loads, it does not need excess capacity. In fact, excess capacity typically results in very poor part load performance and humidity control.

Using higher design temperatures than ASHRAE recommends for your location, adding "safety factors" to the calculated load, are all signs of oversizing air conditioners. Oversizing the air conditioner leads to poor humidity control, reduced efficiency, higher utility bills, larger indoor temperature swings, excessive noise, and increased wear and tear on the air conditioner.

Rather than oversizing an air conditioner, engineers should "right-size" or even slightly "under-size" air conditioners. Correctly sizing an air conditioner controls humidity better; promotes efficiency; reduces utility bills; extends equipment life, and maintains even, comfortable temperatures. Please contact your local Carrier representative for assistance.

Low ambient applications

The optional Carrier economizer can adequately cool your space by bringing in fresh, cool outside air. In low ambient conditions, unless the outdoor air is excessively humid or contaminated, economizer-based "free cooling" is the preferred less costly and energy conscious method. In low ambient applications where outside air might not be desired (such as contaminated or excessively humid outdoor environments), your Carrier rooftop can operate to ambient temperatures down to -10°F (-23°C).

Note about this specification:

This specification is in the “Masterformat” as published by the Construction Specification Institute. Please feel free to copy this specification directly into your building spec.



Cooling Only/Electric Heat Packaged Rooftop Heat Pump

HVAC Guide Specifications

Size Range: **15 to 25 Nominal Tons — Three Stage**

Carrier Model Number: **50GEQ*17-28**

Part 1 — (23 06 80) Schedules for Decentralized HVAC Equipment

1.01 (23 06 80.13) Decentralized Unitary HVAC Equipment Schedule:

- A. (23 06 80.13.A.) Rooftop Unit (RTU) Schedule:
Schedule is per the project specification requirements.

Part 2 — (23 07 16) HVAC Equipment Insulation

2.01 (23 07 16.13) Decentralized, Rooftop Units:

- A. (23 07 16.13.A.) Evaporator Fan Compartment:
1. Interior cabinet surfaces shall be insulated with a minimum 1/2 in. thick, minimum 1-1/2 lb density, flexible fiberglass insulation bonded with a phenolic binder, neoprene coated on the air side.
 2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- B. (23 07 16.13.B.) Electric Heat Compartment:
1. Aluminum foil-faced fiberglass insulation shall be used.
 2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.

Part 3 — (23 09 13) Instrumentation and Control Devices for HVAC

3.01 (23 09 13.23) Sensors and Transmitters:

- A. (23 09 13.23.A.) Thermostats:
- Thermostat must:
- a. energize both “W” and “G” when calling for heat.
 - b. have capability to energize 1, 2 or 3 different stages of cooling, and 2 different stages of heating.
 - c. be heat pump design and include capability for occupancy scheduling.

Part 4 — (23 09 23) Direct Digital Control system for HVAC

4.01 (23 09 23.13) Decentralized, Rooftop Units:

A. (23 09 23.13.A.) SystemVu™ intelligent integrated Direct Digital Control (DDC) shall provide:

1. Integrated unit operation for comfort cooling, heating ventilation as well as all monitoring, recording and reporting capabilities. Controller shall also provide diagnostics and alarms of abnormal unit operation through the controller. Controller shall have an intuitive user display and be able to be used in a standalone operation or via building automation system (BAS).
2. Quick Unit Status LEDs of: RUN — meaning all systems are go, ALERT — that indicates there is currently a non-critical issue with the unit, like filters need to be replaced and FAULT — that indicates the unit has a critical issue and will possibly shut down.
3. Six large navigation keys for easy access. Navigation keys shall consist of: TEST, BACK, ENTER, and MENU along with UP and DOWN arrows.
4. Full back lit user display with 4 line by 30 character text capabilities. Display menu shall be designed to provide guided major menus and sub menus main menus provided below:
 - a. Shutdown Unit
 - b. Run Status
 - c. Settings
 - d. Alerts/Faults
 - e. Service
 - f. Inputs
 - g. Outputs
 - h. USB
5. The capability for standalone operation with conventional thermostat/sensor or use with building automation systems (BAS) of Carrier i-Vu®, BACnet®1 MS/TP and Carrier Comfort Network® (CCN) systems. No special modules or boards are required for these capabilities. Has the capability to work with Equipment Touch™ and System Touch™ devices and ZS Sensors.
6. The ability to read refrigerant pressures at display or via BAS network of Discharge Pressure and Suction Pressure. The need for traditional refrigerant gauges is not required.
7. USB Data Port for flash drive interaction. This will allow the transfer of data for uploads, downloads, perform software upgrades, back-up and restore data and file transfer data such as component number of starts and run hours.
8. Reverse Rotation Protection of compressors if field 3-phase wiring is misapplied.

1. Third-party trademarks and logos are the property of their respective owners.

9. Provide Service Capabilities of:
 - a. Auto run test
 - b. Manual run test
 - c. Component run hours and starts
 - d. Commissioning reports
 - e. Data logging
 - f. Alarm history
10. Economizer control and diagnostics. Set up economizer operation, receive feedback from actuator. Also meets the most recent California Title 24, ASHRAE®¹ 90.1 and IECC® Fault Detection and Diagnostic (FDD) requirements.
11. Unit cooling operation down to -10°F (-23°C).
12. Controller shall have easy access connections around the controller perimeter area and consist of Mate-N-Lok®¹, terminal block and RJ style modular jack connections.
13. 365 day real time clock, 20 holiday schedules along with occupied and unoccupied scheduling.
14. Auto-Recognition for easy installation and commissioning of devices like economizers, space sensors, etc.
15. A 5°F temperature difference between cooling and heating set points to meet the latest ASHRAE 90.1 Energy Standard.
16. Contains return air sensor, supply air sensor and outdoor air sensor to help monitor and provide data for the unit comfort operation, diagnostic and alarms.
17. Use of Carrier's field accessory Equipment Touch™ and System Touch™ devices.
18. Supply Air Tempering control operates the electric heat to maintain a minimum supply air temperature during conditions where very cold outdoor air causes the supply air temperature to fall below the configured Supply Air Tempering Setpoint. This occurs during periods where DCV is active and increasing the amount of outdoor air or in cases where the system is operating at very low airflow and the calculated economizer position has increased to maintain a constant ventilation rate.

19. Demand limiting in units with SystemVu™ controller is achieved through set point expansion. The systems heating and cooling set points are expanded in steps or levels. The degree to which the set points may be expanded is defined by the 6 demand level offsets and the 2 commanded demand limit levels.
20. 3-year limited part warranty.

Part 5 — (23 09 33) Electric and Electronic Control System for HVAC

5.01 (23 09 33.13) Decentralized, Rooftop Units:

A. (23 09 33.13.A.) General:

1. Shall be complete with self-contained low-voltage control circuit protected by a resettable circuit breaker on the 24-v transformer side. Transformer shall have 75 VA capability.
2. Shall utilize color-coded wiring.
3. Shall include a SystemVu Controller to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, economizer, thermostat, and high pressure switches.
4. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.
5. Shall include integrated defrost system to prevent excessive frost accumulation during heating duty, and shall be controlled as follows:
 - a. Defrost shall be initiated on the basis of time and coil temperature.
 - b. A 30-120 minute timer shall activate the defrost cycle only if the coil temperature is low enough to indicate a heavy frost condition.
 - c. Defrost cycle shall terminate when defrost thermostat is satisfied and shall have a positive termination time of 10 minutes.

B. (23 09 33.13.B.) Safeties:

1. Compressor over-temperature, over-current. High internal pressure differential.
2. High Pressure Switch.

High pressure switch shall use different color wire than the low pressure switch. The purpose is to assist the installer and service technician to correctly wire and or troubleshoot the rooftop unit.

1. Third-party trademarks and logos are the property of their respective owners.

3. Heating section shall be provided with the following minimum protections:

High temperature limit switches.

- a. Dissipation control board shall be accessible via normal maintenance locations and LED shall be visible.
 - b. Dissipation system shall “Fail Safe” per UL requirements.
 - c. Dissipation shall allow smoke and building fire systems to override in case of event.
4. A2L Refrigerant Leak Dissipation System:
 - a. Leak dissipation system shall consist of control board and A2L sensor certified to UL 60335-2-40, integrated with SystemVu controller.
 - b. System shall be designed for the life of the unit.
 - c. Dissipation system shall be automatic, ship pre-wired, and require no additional field connections to function.
 - d. Refrigerant leak sensor shall be installed in UL certified location and orientation. Sensor shall be self-correcting and resettable. Single use refrigerant leak sensor shall not be permitted.
 - e. Factory installed dissipation system shall use onboard microprocessor and include:
 - 1) Automatic leak detection and dissipation algorithm.
 - 2) Automatic reset after a dissipation event has occurred.
 - 3) Onboard LED with flash code to indicate current unit status and hardware failures.
 - 4) Depressible “Test” button to allow for a system test and recall/reset of leak detection history.
 - 5) 24V dry contact alarm terminal on dissipation control board to allow for external notification of leak detection.
 - 6) Ability to notify BAS system of dissipation event via readable alarm point through SystemVu.
 - 7) Recallable dissipation alarm history on SystemVu controller.
 - f. Dissipation control board shall be accessible via normal maintenance locations and LED shall be visible.
 - g. Dissipation system shall “Fail Safe” per UL requirements.
 - h. Dissipation shall allow smoke and building fire systems to override in case of event.

Part 6 — (23 09 93) Sequence of Operation for HVAC Controls

- 6.01 (23 09 93.13) Decentralized, Rooftop Units:

- A. (23 09 93.13.A.) INSERT SEQUENCE OF OPERATION

Part 7 — (23 40 13) Panel Air Filters

- 7.01 (23 40 13.13) Decentralized, Rooftop Units:

- A. (23 40 13.13.A.) Standard Filter Section:

1. Shall consist of factory installed, low velocity, disposable 2 in. thick fiberglass filters of commercially available sizes.
2. Unit shall use only one filter size, Multiple sizes are not acceptable.
3. Filters shall be accessible through an access panel with “no-tool” removal as described in the unit cabinet section of this specification (23 81 19.13.G).

Part 8 — (23 81 19) Self-Contained Air Conditioners

- 8.01 (23 81 19.13) Small-Capacity Self-Contained Air Conditioners:

- A. (23 81 19.13.A.) General:

1. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing fully hermetic scroll compressors for cooling duty and heat pump heating duty.
2. Factory assembled, single-piece heating and cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
3. Unit shall use Puron Advance™ (R-454) refrigerant.
4. Unit shall be installed in accordance with the manufacturer’s instructions.
5. Unit must be selected and installed in compliance with local, state, and federal codes.

- B. (23 81 19.13.B.) Quality Assurance:

1. Unit meets ASHRAE 90.1 minimum efficiency requirements.
2. Unit shall be rated in accordance with AHRI Standards 340/360.
3. Unit shall be designed to conform to ASHRAE 15.
4. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
5. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
6. Unit casing shall be capable of withstanding 500 hour salt spray exposure per ASTM B117 (scribed specimen).
7. Unit shall be designed in accordance with ISO 9001, and shall be manufactured in a facility registered by ISO 9001:2015.
8. Roof curb shall be designed to conform to NRCA Standards.
9. Unit shall be subjected to a completely automated run test on the assembly line. The data

for each unit will be stored at the factory, and must be available upon request.

10. Unit shall be designed in accordance with UL Standard 60335-1 and 60335-2-40, including testing to withstand rain. Unit shall be IPX4 rated.
11. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.
12. Unit shall be tested to assurance level 1, ASTM D4169 to ensure shipping reliability.
- C. (23 81 19.13.C.) Delivery, Storage, and Handling:
 1. Unit shall be stored and handled per manufacturer's recommendations.
 2. Lifted by crane requires either shipping top panel or spreader bars.
 3. Unit shall only be stored or positioned in the upright position.
- D. (23 81 19.13.D.) Project Conditions:
 1. As specified in the contract.
- E. (23 81 19.13.E.) Operating Characteristics:
 1. Unit shall be capable of starting and running at 125°F (52°C) ambient outdoor temperature meeting maximum load criteria of AHRI Standard 340/360 at ±10% voltage.
 2. Compressor with standard controls shall be capable of operation down to -10°F (-23°C) ambient outdoor temperatures in cooling mode.
 3. Compressor with standard controls shall be capable of operation down to -10°F (-23°C) ambient outdoor temperatures or lower in heat pump heating mode.
 4. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
 5. Unit shall be factory configured for either vertical or horizontal supply and return configurations. Unit shall not require field conversion.
- F. (23 81 19.13.F.) Electrical Requirements:
 1. Main power supply voltage, phase, and frequency must match those required by the manufacturer.
- G. (23 81 19.13.G.) Unit Cabinet:
 1. Unit cabinet shall be constructed of galvanized steel, and shall be bonderized and coated with a prepainted baked enamel finish on all externally exposed surfaces.
 2. Unit cabinet exterior paint shall be: film thickness, (dry) 0.003 in. minimum, gloss (per ASTM D523, 60°F/16°C): 60, Hardness: H-2H Pencil hardness.
 3. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 340/360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2 in. thick, 1 lb density, flexible fiberglass insulation, neoprene coated on the air side. Aluminum foil-faced fiberglass insulation shall be used in the heat compartment.
4. Base of unit shall have a minimum of 4 locations for thru-the-base gas and electrical connections (factory-installed or field-installed), standard.
5. Base Rail:
 - a. Unit shall have base rails on a minimum of 2 sides.
 - b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
 - c. Holes shall be provided in the base rail for moving the rooftop by fork truck.
 - d. Base rail shall be a minimum of 16 gauge thickness.
6. Condensate Pan and Connections:
 - a. Shall be a sloped condensate drain pan made of a corrosion resistant material.
 - b. Shall comply with ASHRAE Standard 62.
 - c. Shall use a 3/4 in. 14 NPT drain connection, through the side of the drain pan. Connection shall be made per manufacturer's recommendations.
7. Top Panel:
 - a. Shall be a multi-top panel with watertight flanges and locking systems.
8. Electrical Connections:
 - a. All unit power wiring shall enter unit cabinet at a single, factory prepared, knockout location.
 - b. Thru-the-Base Capability.
 - 1) Standard unit shall have a thru-the-base electrical location(s) using a raised, embossed portion of the unit basepan.
 - 2) Optional, factory approved, water-tight connection method must be used for thru-the-base electrical connections.
 - 3) No basepan penetration, other than those authorized by the manufacturer, is permitted.
9. Component Access Panels (standard):
 - a. Cabinet panels shall be easily removable for servicing.
 - b. Unit shall have one factory installed, removable, filter access panel.
 - c. Panels covering control box, filters, and compressors shall have molded composite handles.
 - d. Handles shall be UV modified, composite. They shall be permanently attached, and recessed into the panel.
 - e. Screws on the vertical portion of all removable access panel shall engage into heat resistant, molded composite collars.

- f. Collars shall be removable and easily replaceable using manufacturer recommended parts.

H. (23 81 19.13.H.) Coils:

1. Standard Aluminum Fin-Copper Tube Coils:
 - a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
 - b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 60335-2-40 burst test at 1775 psig.
 - c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 60335-2-40 burst test at 1980 psig.
2. Optional Pre-Coated Aluminum-Fin Condenser Coils:
 - a. Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments.
 - b. 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.
 - c. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.
 - d. Corrosion durability of fin stock shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117.
 - e. Corrosion durability of fin stock shall be confirmed through testing to have no visible corrosion after 48 hour immersion in a room temperature solution of 5% salt, 1% acetic acid.
 - f. Fin stock coating shall pass 2000 hours of the following: one week exposure in the prohesion chamber followed by one week of accelerated ultraviolet light testing. Prohesion chamber: the solution shall contain 3.5% sodium chloride and 0.35% ammonium sulfate. The exposure cycle is one hour of salt fog application at ambient followed by one hour drying at 95°F (35°C).
3. Optional Copper-Fin Evaporator and Condenser Coils:
 - a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
 - b. Galvanized steel tube sheets shall not be acceptable.
 - c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.

4. Optional E-Coated Aluminum-Fin Evaporator and Condenser Coils:

- a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
- b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
- c. Color shall be high gloss black with gloss per ASTM D523.
- d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.
- e. Superior hardness characteristics of 2H per ASTM D3363 and cross-hatch adhesion of 4B-5B per ASTM D3359.
- f. Impact resistance shall be up to 160 in.-lb (ASTM D2794).
- g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247 and ASTM D870).
- h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117.

I. (23 81 19.13.I.) Refrigerant Components:

1. Refrigerant circuit shall include the following control, safety, and maintenance features:
 - a. Thermostatic Expansion Valve (TXV) shall help provide optimum performance across the entire operating range. Shall contain removable power element to allow change out of power element and bulb without removing the valve body.
 - b. Refrigerant filter drier — Solid core design with pre and post filter service gauge connections for filter diagnostics and maintenance.
 - c. Service gauge connections on suction, discharge and liquid lines.
2. Compressors:
 - a. Unit shall use tandem scroll compressor assembly on single independent refrigeration circuit with three stages of cooling for efficient comfort cooling operation.
 - b. Evaporator coils shall be a full active design to help better control latent removal and minimize unconditioned bypass air.
 - c. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
 - d. Compressors shall be internally protected from high discharge temperature conditions.
 - e. Compressors shall be protected from an over-temperature and over-ampereage conditions by an internal, motor overload device.
 - f. Compressor shall be factory mounted on rubber grommets.

- g. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
 - h. Crankcase heaters shall be required for reliability.
- J. (23 81 19.13.J.) Filter Section:
- 1. Filters access is specified in the unit cabinet section of this specification.
 - 2. Filters shall be held in place by a reformed slide out filter tray, facilitating easy removal and installation.
 - 3. Shall consist of factory installed, low velocity, throw-away 2 in. thick fiberglass filters.
 - 4. Filters shall be standard, commercially available sizes.
 - 5. Only one size filter per unit is allowed.
- K. (23 81 19.13.K.) Evaporator Fan and Motor with EcoBlue™ Technology:
- 1. Direct Drive Evaporator Fan Motor:
 - a. Shall be a ECM motor design.
 - b. Shall be direct drive design for all static options.
 - c. Shall have permanently lubricated bearings.
 - d. Shall have inherent automatic-reset thermal overload protection.
 - e. Shall have slow ramp up to speed capabilities.
 - f. Shall require no fan/motor belts for operation, adjustments and or initial fan speed set up.
 - g. Fan set up via the SystemVu™ controller shall eliminate the need of removal of blower access door, required on conventional belt drive systems.
 - h. Shall be internally protected from electrical phase reversal and loss.
 - 2. Evaporator Fan:
 - a. Speed shall be easily set through SystemVu™ controller.
 - b. Shall provide 3 stage cooling capacity control, the indoor fan speed is automatically controlled to meet the code-compliant <40% (50GEQ*17, 24) / <50% (50GEQ*28) low fan speed and 100% at full fan speed operation.
 - c. Blower fan shall be a Vane Axial fan design with fan assembly secured directly to ECM motor. Additional shafts, belts, pulleys/sheaves, and bearing blocks to drive fan shall not be permitted or necessary.
 - d. Additional variable frequency drive to control fan motor speed shall not be permitted or necessary. All speed control electronics must be onboard fan motor assembly.
 - e. Shall be constructed of high impact composite material on stator rotor and air inlet casing.
- f. Shall be a patented design with a corrosion resistant material.
 - g. Fan assembly design shall be integrated to fan deck, dynamically balanced, and require no additional vibration isolation for normal operation.
 - h. Shall have slow ramp up to speed capabilities to help reduce sound and comfort issues typically associated with single speed belt drive systems.
 - i. Units shall contain 2 separate vane axial fan assemblies designed to meet factory configured airflow orientation.
 - j. Shall be a slide out design with removal of a few support brackets.
3. Shall include an easily accessible SystemVu MBB (main base board) to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, economizer, thermostat, DDC control options, and low, high and mixed air temperature switches. Controller shall also provide a means to adjust the indoor fan speed using the keypad on the SystemVu interface.
- L. (23 81 19.13.L.) Condenser Fans and Motors:
- 1. Condenser Fan Motors:
 - a. Shall be a totally enclosed motor.
 - b. Shall use permanently lubricated bearings.
 - c. Shall have inherent thermal overload protection with an automatic reset feature.
 - d. Shall use a shaft-down design on all sizes.
 - 2. Condenser Fans:
 - a. Shall be a direct-driven propeller type fan.
 - b. Shall have galvalum blades riveted to steel spider that have corrosion-resistant properties and shall be dynamically balanced.
- M. (23 81 19.13.M.) Special Features Options and Accessories:
- 1. Integrated EconoMi\$er® 2 Low Leak Rate Models.
 - a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
 - b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory installed option.
 - c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
 - d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below set points.

- e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
 - f. Low leak rate shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential.
 - g. Economizer controller on EconoMi\$er 2 models with SystemVu™ controls shall be a 4-20 mA design controlled directly by the controller. SystemVu controllers meet California Title 24, ASHRAE 90.1 and IECC Fault Detection and Diagnostic (FDD) requirements.
 - h. Shall be capable of introducing up to 100% outdoor air.
 - i. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
 - j. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
 - k. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from -10°F to 100°F (-23°C to 38°C). Additional sensor options shall be available as accessories.
 - l. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.
 - m. The economizer shall maintain minimum air-flow into the building during occupied period and provide design ventilation rate for full occupancy.
 - n. Dampers shall be completely closed when the unit is in the unoccupied mode.
 - o. Economizer controller shall accept a 0 to 10 vdc CO₂ sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
 - p. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
 - q. Contains LED indication for free cooling, sensor, and damper operation.
2. Integrated EconoMi\$er® 2 Ultra Low Leak Rate Models.
- a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
 - b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory-installed option.
 - c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
 - d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below set points.
 - e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
 - f. Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements for 4 cfm per sq ft on the outside air dampers and 10 cfm per sq ft on the return dampers.
 - g. Economizer controller on EconoMi\$er 2 models with SystemVu controls shall be a 4 to 20mA design controlled directly by the controller. SystemVu controller meets California Title 24, ASHRAE 90.1 and IECC Fault Detection and Diagnostic (FDD) requirements.
 - h. Shall be capable of introducing up to 100% outdoor air.
 - i. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
 - j. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
 - k. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from -10°F to 100°F (-23°C to 38°C). Additional sensor options shall be available as accessories.
 - l. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.
 - m. The economizer shall maintain minimum air-flow into the building during occupied period and provide design ventilation rate for full occupancy.
 - n. Dampers shall be completely closed when the unit is in the unoccupied mode.
 - o. Economizer controller shall accept a 0 to 10 vdc CO₂ sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
 - p. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
 - q. Shall contain LED indication for free cooling, sensor, and damper operation.

3. Two-Position Damper (field-installed only):

- a. Damper shall be a Two-Position Damper. Damper travel shall be from the full closed position to the field adjustable %-open set point.
- b. Damper shall include adjustable damper travel from 25% to 100% (full open).
- c. Damper shall include single or dual blade, gear driven dampers and actuator motor.
- d. Actuator shall be direct coupled to damper gear. No linkage arms or control rods shall be acceptable.
- e. Damper will admit up to 100% outdoor air for applicable rooftop units.
- f. Damper shall close upon indoor (evaporator) fan shutoff and/or loss of power.
- g. The damper actuator shall plug into the rooftop unit's wiring harness plug. No hard wiring shall be required.
- h. Outside air hood shall include aluminum water entrainment filter.

4. Manual Damper (field-installed only):

Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 25% or 50% outdoor air for year round ventilation.

5. Humidi-MiZer® Adaptive Dehumidification System:

The Humidi-MiZer Adaptive Dehumidification System shall be factory installed and shall provide greater dehumidification of the occupied space by 2 modes of dehumidification operations in addition to its normal design cooling mode:

- a. Subcooling mode further sub cools the hot liquid refrigerant leaving the condenser coil when both temperature and humidity in the space are not satisfied.
- b. 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 2-phase heat transfer in the system, resulting in a neutral leaving air temperature when only humidity in the space is not satisfied.

6. Condenser Coil Hail Guard Assembly (factory or field installed):

- a. Shall protect against damage from hail.
- b. Shall be louvered type.

7. Unit-Mounted, Non-Fused Disconnect Switch:

- a. Available on 15 to 25 ton units with FLA of 100 amps or less (460/575V) or 200 amps or less (208/230V).
- b. Switch shall be factory installed, internally mounted.

- c. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
- d. Shall be accessible from outside the unit.
- e. Shall provide local shutdown and lockout capability.
- f. Sized **only** for the unit as ordered from the factory. Does not accommodate field-installed devices.

8. HACR Breaker:

- a. These manual reset devices provide overload and short circuit protection for the unit. Factory wired and mounted with the units, with access cover to help provide environmental protection. On 575V applications, HACR breaker can only be used with WYE power distribution systems. Use on Delta power distribution systems is prohibited.
- b. Sized **only** for the unit as ordered from the factory. Does not accommodate field-installed devices.

9. Convenience Outlet:

a. Factory Installed Powered Convenience Outlet.

- 1) Outlet shall be powered from main line power to the rooftop unit.
- 2) Outlet shall be powered from line side or load side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be UL certified and rated for additional outlet amperage.
- 3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
- 4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
- 5) Voltage required to operate convenience outlet shall be provided by a factory installed step-down transformer.
- 6) Outlet shall be accessible from outside the unit.
- 7) Outlet shall include a field installed "Wet in Use" cover.

b. Factory-Installed Non-Powered Convenience Outlet.

- 1) Outlet shall be powered from a separate 115/120-v power source.
- 2) A transformer shall not be included.
- 3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
- 4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
- 5) Outlet shall be accessible from outside the unit.

- 6) Outlet shall include a field installed "Wet in Use" cover.
- c. Field-Installed Non-Powered Convenience Outlet.
 - 1) Outlet shall be powered from a separate 115/120-v power source.
 - 2) A transformer shall not be included.
 - 3) Outlet shall be field-installed and internally mounted with easily accessible 115-v female receptacle.
 - 4) Outlet shall include 20 amp GFI receptacles. This kit provides a flexible installation method which allows code compliance for height requirements of the GFCI outlet from the finished roof surface as well as the capability to relocate the outlet to a more convenient location.
 - 5) Outlet shall be accessible from outside the unit.
 - 6) Outlet shall include a field installed "Wet in Use" cover.
10. Thru-the-Base Connectors:
 - a. Shall provide connectors to permit electrical connections to be brought to the unit through the unit basepan.
 - b. Minimum of 4 connections locations per unit.
11. Centrifugal Fan Power Exhaust:
 - a. Power exhaust shall be used in conjunction with an integrated economizer.
 - b. Power exhaust to be of centrifugal fan type.
 - c. Horizontal power exhaust shall be mounted in return ductwork.
 - d. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0 to 100% adjustable setpoint on the economizer control.
12. Roof Curbs (Vertical):
 - a. Full perimeter roof curb with exhaust capability providing separate air streams for energy recovery from the exhaust air without supply air contamination.
 - b. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
 - c. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
13. Outdoor Air Enthalpy Sensor:

The outdoor air enthalpy sensor shall be used to provide single enthalpy control. When used in conjunction with a return air enthalpy sensor, the unit will provide differential enthalpy control. The sensor allows
- the unit to determine if outside air is suitable for free cooling.
14. Return Air Enthalpy Sensor:

The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
15. Indoor Air Quality (CO₂) Sensor:
 - a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
 - b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The setpoint shall have adjustment capability.
16. Smoke Detectors:
 - a. Shall be a 4-wire controller and detector.
 - b. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
 - c. Shall use magnet-activated test/reset sensor switches.
 - d. Shall have tool-less connection terminal access.
 - e. Shall have a recessed momentary switch for testing and resetting the detector.
 - f. Controller shall include:
 - 1) One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel.
 - 2) Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment.
 - 3) One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station.
 - 4) Capable of direct connection to 2 individual detector modules.
 - 5) Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
17. Time Guard:
 - a. SystemVu shall prevent compressor short-cycling by providing a 5 minute delay before restarting a compressor after shutdown and a 3 minute delay before shutting a compressor down after startup. For more information, see the 50FEQ/50GEQ/48QE Single Package Rooftop Units with SystemVu Controls Start-Up, Operation and Troubleshooting manual.
18. Hinged Access Panels:
 - a. Shall provide easy access through integrated quarter turn latches.
 - b. Shall be on major panels of: filter, control box, fan motor, and compressor.

Guide specifications (cont)

19. **Condensate Overflow Switch:**
This sensor and related controller monitors the condensate level in the drain pan and shuts down compression operation when overflow conditions occur. It includes:
- Indicator light — solid red (more than 10 seconds of water contact — compressors disabled), blinking red (sensor disconnected).
 - 10 second delay to break — eliminates nuisance trips from splashing or waves in pan (sensor needs 10 seconds of constant water contact before tripping).
 - Disables the compressor(s) operation when condensate plug is detected, but still allows fans to run for economizer.
20. **Foil Faced Insulation:**
Throughout unit cabinet air stream, non-fibrous and cleanable foil faced insulation is used.
21. **MERV-13 – 4 in. Return Air Filters (factory installed only):**
- Factory option to upgrade standard unit filters to 4 in. MERV-13 filters.
 - Upgraded option shall include factory installed 4 in. filter rack.
22. **4 in. Return Air Filter Rack (field installed only):**
Accessory kit designed to hold 4 in. MERV-8 or MERV-13 filters. Filters not included in kit.
23. **2 in. MERV-13 Return Air Filters:**
- Accessory kit to field upgrade standard unit filters to 2 in. MERV-13 filters.
 - Correct size and quantity of filters shall ship in a single box.
24. **2 in. MERV-8 Return Air Filters:**
- Accessory kit to field upgrade standard unit filters to 2 in. MERV-8 filters.
 - Correct size and quantity of filters shall ship in a single box.
25. **Phase Monitor Control:**
- Shall monitor the sequence of 3-phase electrical system to provide a phase reversal protection.
 - Shall monitor the 3-phase voltage inputs to provide a phase loss protection for the 3-phase device.
 - Will work on either a Delta or Wye power connection.
26. **Horn/Strobe Annunciator:**
- Provides an audible/visual signaling device for use with factory-installed option or field installed accessory smoke detectors.
 - Requires installation of a field-supplied 24-v transformer suitable for 4.2 VA (AC) or 3.0 VA (DC) per horn/strobe accessory.
 - Requires field-supplied electrical box, North American 1-gang box, 2 in. x 4 in. (51 mm x 102 mm).
 - Shall have a clear colored lens.
27. **Electric Heat:**
- Heating Section:**
 - 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.
 - Heater assemblies are provided with integral fusing for protection of internal heater circuits. Auto re-set 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.
28. **High Short Circuit Current Rating (SCCR) Protection:**
- Factory-installed option shall provide high short circuit current protection to compressor and all indoor and outdoor fan motors of 60 kA (208/230V) or 65 kA (460V) against high potential fault current situations. (Standard unit comes with 5 kA rating.)
 - This option is not available with factory installed powered convenience outlet, non-fused disconnect, HACR breaker, phase loss monitor/protection, or 575 Volt models.
29. **Pressure Relief Valve:**
- Units with the pressure relief option contain a pressure relief valve in the unit liquid line for compliance with Chicago Municipal Code 18-28-1102.3.
 - The pressure relief valve is set to open above 650 PSI and is intended to vent refrigerant in the event the refrigerant pressure exceeds the equipment design pressure.
 - The pressure relief valve is single use and must be replaced after refrigerant discharge.