Carrier

Product Data

WeatherMaster® Single Package Heat Pump Rooftop

3 to 5 Nominal Tons

ecoblue™ technology

Puron ADVANCE™

50GEQ*04, 05, 06
Single-Packaged Heat Pump with Optional Electric Heat and Puron Advance™ Refrigerant (R-454B)

Features/Benefits

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

The WeatherMaster line have always stood for high efficiency cooling solutions that are innovative, high quality, and easy to use. Carrier's new 50GEQ rooftop heat pumps continue that legacy with Puron Advance, our low global warming potential refrigerant. With high efficiency offerings, additional factory installed options, 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 efficient indoor fan system using vane axial fan with electronically commutated variable speed motor for simplicity and efficiency
- Reliable 2-stage cooling with fully active evaporator coils
- Unit control board (UCB) with intuitive indoor fan adjustment that uses simple dial and switch configuration
- Reliable copper tube/aluminum fin condenser coil with 5/16 in. tubing to help reduce refrigerant charge and weight versus prior designs
- New outdoor fan system with rugged, lightweight, high impact composite fan blade

Designed to fit on existing roof curbs, Carrier 50GEQ 3 to 5 ton models make replacements even easier.

Two-stage cooling capacity control delivers efficiencies of up to 16.0 SEER2 and 7.2 HSPF2. All models are field convertible and capable of either vertical or horizontal air-flow.

With "no-strip" screw collars, handled access panels, and more, the unit is easy to install, easy to maintain, and easy to use. Our precisely sized suction line accumulator helps insure reliable operation at unit operation conditions.

Value-added features include:

- Puron Advance refrigerant (R-454B)
- SystemVu™ intuitive, intelligent controls option
- Optional Humidi-MiZer® adaptive dehumidification system for improved part load humidity performance
- Single point electrical connections
- TXV refrigerant metering system
- Scroll compressors with internal line-break overload protection
- Easy-to-access tool-less filter door, filter tracks that tilt out for filter removal and replacement, and filter size consistency across units

Easy to install

All 3 to 5 ton WeatherMaster units are field-convertible to horizontal airflow, which makes it easy to adjust to unexpected jobsite complications. Our units are light, making them easy to replace, and our standard integrated unit control board (UCB) has simple, fast, clearly labeled plug-in connection points that reduce installation time. Should a job need additional features, our large control box provides room to work and mount Carrier accessories.

Easy to maintain

With the EcoBlue vane axial fan system and direct drive ECM motor, belts or pulleys are a thing of the past. Should an adjustment be necessary, it can easily be made via the UCB 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

Carrier's re-designed unit control board puts all connections and troubleshooting points in one convenient place. Most low voltage connections use the same board and are easy to access. Setting up the fan is simple using an intuitive switch and rotary dial arrangement. Our rooftops have high and low pressure switches, a filter drier, and 2 in. filters standard.

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Features/Benefits (cont)

Heat pump flexibility

50GEQ models offer onboard electro-mechanical 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. All 50GEQ models can be easily controlled with a standard thermostat and remove the need to burn fossil fuels to heat your building. 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 (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 a vane axial fan 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

Carrier controllers make connecting WeatherMaster rooftops into existing building automation systems easy. The units are compatible with conventional thermostat controls, SystemVu controls, and third-party building management systems (BMS).

Operating efficiency and flexibility

The 50GEQ rooftops exceed ASHRAE 90.1 and IECC®[1] (International Energy Conservation Code) minimum efficiency requirements.

Comfort control

Carrier's round tube plate fin coil design helps maximize heat transfer and reliable operation.

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

Model number nomenclature

50GEQ 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	M	0	4	A	2	A	6	-	0	A	0	A	0

Unit Type
50 – Cooling with Electric Heat

Model Series — WeatherMaster®
GE= High Efficiency Puron Advance™

Heat Size
Q = Heat Pump

Refrig. Systems Options
M = Two Stage Cooling, Single Circuit
N = Two Stage Cooling, Single Circuit with Humidi-MiZer® System[a,b]

Cooling Tons
04 = 3 tons
05 = 4 tons
06 = 5 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

Fan Options
2 = Standard/Medium Static – EcoBlue Vane Axial Fan
3 = High Static – EcoBlue™ Vane Axial Fan
5 = Standard/Medium Static – EcoBlue Vane Axial Fan and Filter Status Switch
6 = High Static – EcoBlue Vane Axial Fan and Filter Status Switch

RTPF Coil Options – (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 Guard
R = Cu/Cu - Al/Cu — Louvered Hail Guard
S = Cu/Cu - Cu/Cu — Louvered Hail Guard

Voltage
1 = 575-3-60
3 = 208/230-1-60[c]
5 = 208/230-3-60
6 = 460-3-60

Design Revision
- = Factory Design Revision

Packaging
0 = Standard

Electrical Options
A = None
B = HACR Breaker
C = Non-Fused Disconnect (NFDC)
D = Thru-The-Base Connections (TTB)
E = HACR + TTB
F = NFDC + TTB
N = Phase Monitor Protection (PMR)
P = PMR + HACR
Q = PMR + NFDC
R = PMR + TTB
S = PMR + HACR + TTB
T = PMR + NFDC + TTB
1 = HSCCR[d] (High Short Circuit Current Rating)
2 = HSCCR[d] + TTB

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 = Foil Faced Insulation + NPCO
E = Foil Faced Insulation + PCO
F = Foil Faced Insulation + Hinged Panels
G = FF + HP + NPCO
H = FF + HP + PCO
J = Foil Faced Insulation + 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 = Standard Leak Economizer with Barometric Relief
F = Standard Leak Enthalpy Economizer with Barometric Relief
L = ULL (Ultra Low Leak) Temperature Economizer with Barometric Relief and CO_2 Sensor
M = ULL Enthalpy Economizer with Barometric Relief and CO_2 Sensor
U = ULL Temperature Economizer with Barometric Relief
W = ULL Enthalpy Economizer with Barometric Relief

Base Unit Controls
0 = Standard Electromechanical Controls (can be used with field installed economizers and dampers)
3 = SystemVu™ Controller
8 = Electromechanical Controls with POL224 EconomizerONE (with Fault Detection and Diagnostic)

NOTE(S):
a Units with Humidi-MiZer System include Low Ambient controller.
b Requires SystemVu Controller.
c The following are not available as a factory-installed options for models with this voltage code: Coated Coils or Cu Fin Coils, Louvered Hail Guards, Economizer, Powered Convenience Outlet, Upgraded MERV filters, or Humidi-MiZer System.
d HSCCR is not available on units with: 575V, Low Ambient Controls,Phase Loss Monitor, Non-Fused Disconnect, HACR Breaker, Powered Convenience Outlet, or Humidi-MiZer System.

Capacity ratings

50GEQ AHRI Ratings — Cooling Mode[a,b,c,d]

UNIT	COOLING STAGES	NOM. CAPACITY (tons)	NET COOLING CAPACITY 2 (MBtuh)	NET COOLING CAPACITY (MBtuh)	TOTAL POWER 2 (kW)	TOTAL POWER (kW)	SEER 2	SEER	EER 2	EER	RATED INDOOR AIRFLOW (cfm)
50GEQM04	2	3	35.0	36.0	2.6	2.6	16.0	17.0	12.0	12.2	1200
50GEQM05	2	4	47.0	48.0	3.9	3.9	16.0	17.0	12.0	12.2	1725
50GEQM06	2	5	59.5	60.5	5.0	5.0	16.0	17.0	12.0	12.2	2000

NOTE(S):

a. Rated in accordance with AHRI Standards 210/240.
b. 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.
c. Units comply with ASHRAE 90.1-2016 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) requirements, as well as DOE-2018 (Department of Energy) Energy Standard for minimum SEER and EER and DOE-2023 Energy Standards for minimum SEER2 and EER2 requirements. ASHRAE 90.1 requires M1 ratings on 3-phase models.
d. 50GEQ units comply with US Energy Policy Act (2005). To evaluate code compliance requirements, refer to state and local codes.

LEGEND

AHRI — Air Conditioning, Heating and Refrigeration Institute
EER — Energy Efficiency Ratio
MBtuh — Btuh in Thousands
SEER — Seasonal Energy Efficiency Ratio

Capacity ratings (cont)

50GEQ AHRI Ratings — Heating Mode[a,b,c,d]

UNIT	HSPF 2	HSPF	HIGH HEATING CAPACITY 2 (MBtuh)	HIGH HEATING CAPACITY (MBtuh)	HIGH HEAT COP 2	HIGH HEAT COP	LOW HEATING CAPACITY 2 (MBtuh)	LOW HEATING CAPACITY (MBtuh)	LOW HEAT COP2	LOW HEAT COP	RATED INDOOR AIRFLOW (cfm)
50GEQM04	6.7	8.0	33.0	32.5	3.8	3.9	17.2	16.8	2.3	2.4	1200
50GEQM05	7.2	8.2	45.0	45.0	3.7	3.8	25.5	24.5	2.4	2.5	1725
50GEQM06	7.2	8.2	54.0	54.0	3.7	3.8	30.0	29.0	2.4	2.5	2000

NOTE(S):

a. Rated in accordance with AHRI Standards 210/240.
b. 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.
High Temperature Heating Ratings: 47°F (8°C) db, 43°F (6°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.
Low Temperature Heating Ratings: 17°F (–8°C) db, 15°F (–9°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.
c. Units comply with ASHRAE 90.1-2016 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) requirements, as well as DOE-2018 (Department of Energy) Energy Standard for minimum SEER and EER and DOE-2023 Energy Standards for minimum SEER2 and EER2 requirements. ASHRAE 90.1 requires M1 ratings on 3-phase models.
d. 50GEQ units comply with US Energy Policy Act (2005). To evaluate code compliance requirements, refer to state and local codes.

LEGEND

AHRI — Air Conditioning, Heating and Refrigeration Institute
COP — Coefficient of Performance
HSPF — Heating Seasonal Performance Factor
MBtuh — Btuh in Thousands

Capacity ratings (cont)

Sound Ratings Table[a,b,c]

UNIT	COOLING STAGES	OUTDOOR SOUND (dB) AT 60 Hz								
		A-WEIGHTED	63	125	250	500	1000	2000	4000	8000
50GEQ*04	2	79.0	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3
50GEQ*05	2	79.0	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3
50GEQ*06	2	79.0	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3

NOTE(S):

a. Outdoor sound data is measured in accordance with AHRI.
b. 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.
c. 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 Airflow (cfm)	Minimum 2-Speed Airflow (low speed)	Minimum 2-Speed Airflow (high speed)	Maximum Airflow (cfm)	Minimum Airflow (cfm)	Maximum Airflow (cfm)
50GEQ*04	900	675	900	1275	900	1500
50GEQ*05	1200	900	1200	2000	1200	2000
50GEQ*06	1500	1125	1500	2500	1500	2500

NOTE(S):

a. Electric heat modules are available as field-installed accessories for 50GEQ units.

Physical data

50GEQ UNIT	50GEQM04	50GEQN04	50GEQM05	50GEQN05	50GEQM06	50GEQN06
NOMINAL TONS	3	3	4	4	5	5
BASE UNIT OPERATING WT (lb)[a]	567	567	594	594	596	596
REFRIGERATION SYSTEM						
No. Circuits/No. Compressors/Type	1 / 1 / 2-Stage Scroll	1 / 1 / 2-Stage Scroll	1 / 1 / 2-Stage Scroll	1 / 1 / 2-Stage Scroll	1 / 1 / 2-Stage Scroll	1 / 1 / 2-Stage Scroll
Puron Advance™ (R-454B) Charge (lb-oz)	12-0	—	11-7	—	13-0	—
Humidi-MiZer® Puron Advance (R-454B) Charge (lb-oz)	—	16-0	—	22-11	—	19-8
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
Low-Pressure Trip/Reset (psig)	54/117	54/117	54/117	54/117	54/117	54/117
EVAPORATOR COIL (Indoor)						
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	3/15	3/15	4/15	4/15	4/15	4/15
Total Face Area (ft^2)	7.3	7.3	7.3	7.3	7.3	7.3
Condensate Drain Connection Size	3/4 in.	3/4 in.	3/4 in.	3/4 in.	3/4 in.	3/4 in.
CONDENSER COIL (Outdoor)						
Material	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 (ft^2)	18.8	18.8	20.5	20.5	20.5	20.5
HUMIDI-MIZER COIL (Outdoor)						
Material	—	Cu/Al	—	Cu/Al	—	Cu/Al
Coil Type	—	3/8 in. RTPF	—	3/8 in. RTPF	—	3/8 in. RTPF
Rows/FPI	—	1/17	—	2/17	—	2/17
Total Face Area (ft^2)	—	5.2	—	5.2	—	5.2
EVAPORATOR FAN AND MOTOR (Indoor)						
Medium Static 1 Phase						
Motor Qty/Drive Type	1/Direct	—	1/Direct	—	1/Direct	—
Max Cont Bhp	0.71	—	1.06	—	1.44	—
Rpm Range	219-2190	—	217-2170	—	239-2390	—
Fan Qty/Type	1/Vane Axial	—	1/Vane Axial	—	1/Vane Axial	—
Fan Diameter (in.)	16.6	—	16.6	—	16.6	—
High Static 1 Phase						
Motor Qty/Drive Type	1/Direct	—	1/Direct	—	1/Direct	—
Max Cont Bhp	1.07	—	1.53	—	1.96	—
Rpm Range	249-2490	—	246-2460	—	266-2660	—
Fan Qty/Type	1/Vane Axial	—	1/Vane Axial	—	1/Vane Axial	—
Fan Diameter (in.)	16.6	—	16.6	—	16.6	—
Medium Static 3 Phase						
Motor Qty/Drive Type	1/Direct	1/Direct	1/Direct	1/Direct	1/Direct	1/Direct
Max Cont Bhp	0.71	0.71	1.06	1.06	1.44	1.44
Rpm Range	219-2190	219-2190	217-2170	217-2170	239-2390	239-2390
Fan Qty/Type	1/Vane Axial	1/Vane Axial	1/Vane Axial	1/Vane Axial	1/Vane Axial	1/Vane Axial
Fan Diameter (in.)	16.6	16.6	16.6	16.6	16.6	16.6
High Static 3 Phase						
Motor Qty/Drive Type	1/Direct	1/Direct	1/Direct	1/Direct	1/Direct	1/Direct
Max Cont Bhp	1.07	1.07	1.96	1.96	2.43	2.43
Rpm Range	249-2490	249-2490	266-2660	266-2660	284-2836	284-2836
Fan Qty/Type	1/Vane Axial	1/Vane Axial	1/Vane Axial	1/Vane Axial	1/Vane Axial	1/Vane Axial
Fan Diameter (in.)	16.6	16.6	16.6	16.6	16.6	16.6
CONDENSER FAN AND MOTOR (Outdoor)						
Qty / Motor Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Direct	1 / Direct	1 / Direct
Motor Hp/Rpm	1/3 / 1000	1/3 / 1000	1/4 / 1100	1/4 / 1100	1/4 / 1100	1/4 / 1100
Fan Diameter (in.)	23	23	23	23	23	23
FILTERS						
RA Filter Qty / Size (in.)	4 / 16x16x2	4 / 16x16x2	4 / 16x16x2	4 / 16x16x2	4 / 16x16x2	4 / 16x16x2
OA Inlet Screen Qty / Size (in.)	1 / 20x24x1	1 / 20x24x1	1 / 20x24x1	1 / 20x24x1	1 / 20x24x1	1 / 20x24x1

NOTE(S):

a. Base unit operating weight does not include weight of options.

Options and accessories

ITEM	FACTORY-INSTALLED OPTION	FIELD-INSTALLED ACCESSORY
ELECTRIC HEAT		
Electric Resistance Heaters		X
Single Point Kits		X
CABINET		
Thru-the-Base Electrical Connections	X	X
Hinged Access Panels	X	
4 in. Filter Rack (filters not included)		X
MERV-8 Filters		X
MERV-13 Filters, 2 in.		X
MERV-13 Filters, 4 in.	X	
COIL OPTIONS		
Cu/Cu Indoor and/or Outdoor Coils[a,b]	X	
Pre-Coated Outdoor Coils[a]	X	
Premium, E-Coated Indoor and/or Outdoor Coils[a]	X	
HUMIDITY CONTROL		
Humidi-MiZer® Adaptive Dehumidification System[c]	X	
CONDENSER PROTECTION		
Condenser Coil Hail Guard (louvered design)[a]	X	X
CONTROLS		
Thermostats, Temperature Sensors, and Subbases		X
SystemVu DDC Communicating Controller	X	
Smoke Detector (supply and/or return air)	X	X
Horn Strobe Annunciator[d]		X
Time Guard II Compressor Delay Control Circuit		X
Phase Monitor[a]	X	X
Condensate Overflow Switch	X	X
Fan/Filter Status Switch		X
ECONOMIZERS AND OUTDOOR AIR DAMPERS		
EconomizerONE for Electromechanical Controls, complies with FDD (Standard and Ultra Low Leak damper models)[a, e]	X	X
Wi-Fi Stick for EconomizerONE (optional)		X
EconoMi$er® 2 for DDC Controls (Standard and Ultra Low Leak air damper models)[a, f]	X	X
Motorized Two-Position Outdoor-Air Damper		X
Manual Outdoor-Air Damper (25% and 50%)		X
Barometric Relief[g]	X	X
Power Exhaust - prop design		X

ITEM	FACTORY-INSTALLED OPTION	FIELD-INSTALLED ACCESSORY
ECONOMIZER SENSORS AND IAQ DEVICES		
Single Dry Bulb Temperature Sensors[h]	X	X
Differential Dry Bulb Temperature Sensors[h]		X
Single Enthalpy Sensors[h]	X	X
Differential Enthalpy Sensors[h]		X
CO_2 Sensor (wall, duct, or unit mounted)[h]	X	X
INDOOR FAN MOTOR		
Optional Indoor Fan Motors	X	
Fan Filter Status Switch	X	X
LOW AMBIENT CONTROL		
Winter Start Kit[i,j]		X
Low Ambient Controller to –20°F (–29°C)[i]		X
POWER OPTIONS		
Convenience Outlet (powered)[a]	X	
Convenience Outlet (unpowered)	X	X
HACR Circuit Breaker[k]	X	
Non-Fused Disconnect[l]	X	
High SCCR Protection[m]	X	
ROOF CURBS		
Roof Curb 14 in. (356 mm)		X
Roof Curb 24 in. (610 mm)		X

NOTE(S):

a. Not available on single-phase (-3 voltage code) models. Use field-installed accessory where available.
b. Cu/Cu coils are only available with louvered hail guards.
c. Not available on single-phase (-3 voltage code) models.
d. Requires a field-supplied 24V transformer for each application. See price pages for details.
e. FDD (Fault Detection and Diagnostic) capability per California Title 24 section 120.2.
f. Models with SystemVu controls comply with California Title 24 Fault Detection and Diagnostic (FDD).
g. Included with economizer.
h. Sensors used to optimize economizer performance.
i. See application data for assistance.
j. Not compatible with SystemVu controller.
k. HACR circuit breaker cannot be used on 04-06 sizes when unit MOCP rating exceeds:
   208/230/1/60 = 60 amps
   208/230/3/60 = 45 amps
   460/3/60 = 30 amps
   575/3/60 = 15 amps
   Carrier RTUBuilder automatically selects the amps limitations.
l. Non fused disconnect switch (04-06 sizes) cannot be used when unit FLA electrical rating exceeds 80 amps (all voltages).
   Carrier RTUBuilder automatically selects the amp limitations.
m. High SCCR (Short Circuit Current Rating) is not available on 575 volt units or units with factory-installed non-fused disconnect, HACR circuit breaker, phase loss monitor/protection, powered convenience outlet, or low ambient controls.

Options and accessories (cont)

Factory-installed options

Economizer (dry-bulb or enthalpy)

Economizers save money. They bring in fresh, outside air for ventilation and provide outside air to cool your building. This is the preferred method of low-ambient cooling. When used with CO_2 sensors, economizers can provide even more savings by adjusting the ventilation air intake to just the correct amount.

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 a gravity-controlled barometric relief to help equalize building pressures. This can be a cost effective solution to prevent building pressurization. Economizers are available in ultra low leak and standard low leak versions. They can be factory-installed or easily field installed.

Unit mounted CO_2 sensor

The CO_2 sensor works with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO_2 sensor detects their presence through increasing CO_2 levels and opens the economizer appropriately. When the occupants leave, the CO_2 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

Carrier's Humidi-MiZer adaptive dehumidification system is an all-inclusive factory-installed option that can be ordered with any WeatherMaster® 50GEQ 04-06 heat pump rooftop unit, with the exception of single phase voltage (208/230-1-60) units.

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. It provides greater dehumidification of the occupied space through 2 modes of dehumidification operations, in addition to its normal design cooling mode.

When coupled with the Humidi-MiZer system, the 50GEQ 04-06 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 operates under its normal sequence of operation by cycling compressors to maintain comfort conditions.

Sub-cooling mode operates to satisfy part load type conditions when the space requires combined sensible and a higher proportion of latent load control. Hot gas reheat mode operates when outdoor temperatures fall and latent capacity is required for humidity control. Hot gas reheat mode provides neutral air for maximum dehumidification operation.

NOTE: Humidi-MiZer system includes Low Ambient controller.

Thru-the-base connections

Thru-the-base connections, available as a factory option, are necessary to ensure proper connection and seal when routing wire and piping through the rooftop's basepan and curb. These couplings eliminate roof penetration and should be considered for main power lines and control power.

Hinged access panels

These specially designed hinged access panels allow access to unit's major components. Panels allow access to filters, the control box, and the indoor fan motor.

MERV-13 return air filters

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

Cu/Cu (indoor and outdoor) coils

Copper fins and copper tubes are mechanically bonded to copper tubes and copper tube sheets. A polymer strip prevents the 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 shall ensure 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.

Single enthalpy sensor

This sensor allows the economizer to account for both the humidity and temperature of outside air conditions, providing additional comfort.

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. It provides a convenient, 15 amp, 115-v 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.

Options and accessories (cont)

The "unpowered" option is to be powered from a separate 115/120-v power source. This outlet is available as a 15 amp factory-installed option or a 20 amp field-installed accessory.

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.

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 that they are sized for the unit as ordered from the factory. The sizing does 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.

SystemVu™ controller

Carrier's SystemVu controller is an optional factory-installed and tested controller.

This option provides a whole new approach by using an intuitive, intelligent controller that not only monitors and controls the unit but also provides linkage to multiple building automation systems.

Each SystemVu controller makes it easy to set up, service, troubleshoot, access historical data, generate reports, and provide comfort only Carrier is noted for.

Key features include:

- Easy-to-read backlit 4-line text screen for superior visibility
- Quick operational condition LEDs for Run, Alert, and Fault
- Simple navigation using large keypad buttons for Navigation arrows, Test, Back, Enter, and Menu
- Capable of being controlled with a conventional thermostat, space sensor, or build automation system
- Service capabilities include:
  Auto run test
  Manual run test
  Component run hours and starts
  Commissioning reports
  Data logging
- Full range of diagnosis:
  Read refrigerant pressures without needing gauges
  Sensor faults
  Compressor reverse rotation
  Economizer diagnostics that meet California Title 24 requirements
- Quick data transfer via USB port:
  Unit configuration uploading/downloading
  Data logging
  Software upgrades
- Built in capacity for:
  i-Vu® open systems
  BACnet®[1] systems
  CCN systems
- Configuration and alarm point capability:
  Contain over 100 alarm codes
  Contain over 260 status, troubleshooting, diagnostic and maintenance points
  Contain over 270 control configuration setpoints

Condensate overflow switch

This sensor and related controller monitor the condensate level in the drain pan and shut down compression operation when overflow conditions occur. This option:

- Includes an indicator light showing when the sensor is disconnected (blinking red) and when there has been more than 10 seconds of water contact (solid red — compressors disabled)
- Includes a 10-second delay to break, which eliminates nuisance trips from splashing or waves in the 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 the economizer

High Short Circuit Current Rating (SCCR) protection

This factory-installed option provides high short circuit current protection of 10 kA against high potential fault current situations for the compressor and all indoor and outdoor fan motors. (A standard unit comes with 5 kA rating.)

This option is not available on 575-v units or units with a factory-installed non-fused disconnect, phase loss monitor/protection, powered convenience outlet, or low ambient controls.

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

Options and accessories (cont)

Field-installed accessories

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.

Differential enthalpy sensor

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

Wall or duct-mounted CO_2 sensor

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

Fan filter status switch and 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.

Phase monitor protection

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

Winter start kit

Carrier's winter start kit extends the low ambient limit of your rooftop to 25°F (–4°C). The kit bypasses the low pressure switch, preventing nuisance tripping of the switch. Other low ambient precautions may still be prudent.

Low ambient controller

The low ambient controller is a head pressure controller kit designed to maintain the unit's condenser head pressure during periods of low ambient cooling operation. This device should be used as an alternative to economizer free cooling when economizer usage is either not appropriate or not desired. The low ambient controller will either cycle the outdoor fan motors or operate them at reduced speed to maintain the unit operation, depending on the model. This controller allows cooling operation down to –20°F (–29°C) ambient conditions.

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

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

Power exhaust

This accessory provides superior internal building pressure control and 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 and single point kits

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

Time Guard II control circuit

This accessory protects your compressor by preventing short-cycling in the event of some other failure by preventing the compressor from restarting for 30 seconds after stopping. (Not required with SystemVu controller or authorized commercial thermostats.)

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 to accommodate unit filter rack size.

MERV-8 2 in. return air filters

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

Wi-Fi Stick for EconomizerONE (optional)

The accessory Wi-Fi/WLAN stick can be connected to the EconomizerONE POL224 economizer controller via the USB host interface. The Wi-Fi stick enables a wireless connection to be made between a smartphone and the economizer controller via the Climatix™[1] mobile application for commissioning, troubleshooting, and maintenance operations. The Wi-Fi stick is required to utilize the mobile application but is not needed to configure the controller should a user prefer to use the controller's onboard keypad.

Climatix™ mobile application

The Climatix™ mobile application offers a best-in-class user interface and a simple step-by-step commissioning workflow using a mobile device. The user interface walks users through the setup of the controller and allows users to view the operating mode and parameters. Users can adjust setpoints, initiate damper tests, and save the final configuration as a favorite to expedite setup in the future.

The application is available on Android™[1] and Apple iOS®[1] platforms. The Wi-Fi stick for the EconomizerONE is required to join the Siemens-WiFi-Stick network and setup the controller on a smartphone.

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

Options and accessories (cont)

Options and Accessory Weights[a]

OPTION / ACCESSORY NAME	50GEQ UNIT WEIGHT					
	04		05		06	
	lb	kg	lb	kg	lb	kg
Humidi-MiZer Coil[b]	15	7	24	11	24	11
Power Exhaust — Vertical	51	23	51	23	51	23
Power Exhaust — Horizontal	39	18	39	18	39	18
EconomizerONE or EconoMi$er® 2	51	23	51	23	51	23
Two-Position Damper	39	18	39	18	39	18
Manual Damper	12	5	12	5	12	5
Hail Guard (louvered)	13	6	13	6	13	6
Cu/Cu Condenser Coil	37	17	74	34	74	34
Cu/Cu Condenser and Evaporator Coils	75	34	112	51	112	51
Roof Curb (14 in. curb)	95	43	95	43	95	43
Roof Curb (24 in. curb)	150	68	150	68	150	68
CO_2 Sensor	2	1	2	1	2	1
Optional Indoor Motor/Drive	10	5	10	5	10	5
Low Ambient Controller	9	4	9	4	9	4
Winter Start Kit	5	2	5	2	5	2
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	36	16	36	16	36	16
Unpowered Convenience Outlet	4	2	4	2	4	2
Enthalpy Sensor	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1

NOTE(S):

a. Where multiple variations are available, the heaviest combination is listed.
b. For Humidi-MiZer add Low Ambient controller.

50GEQ*04-06 Base Unit Dimensions

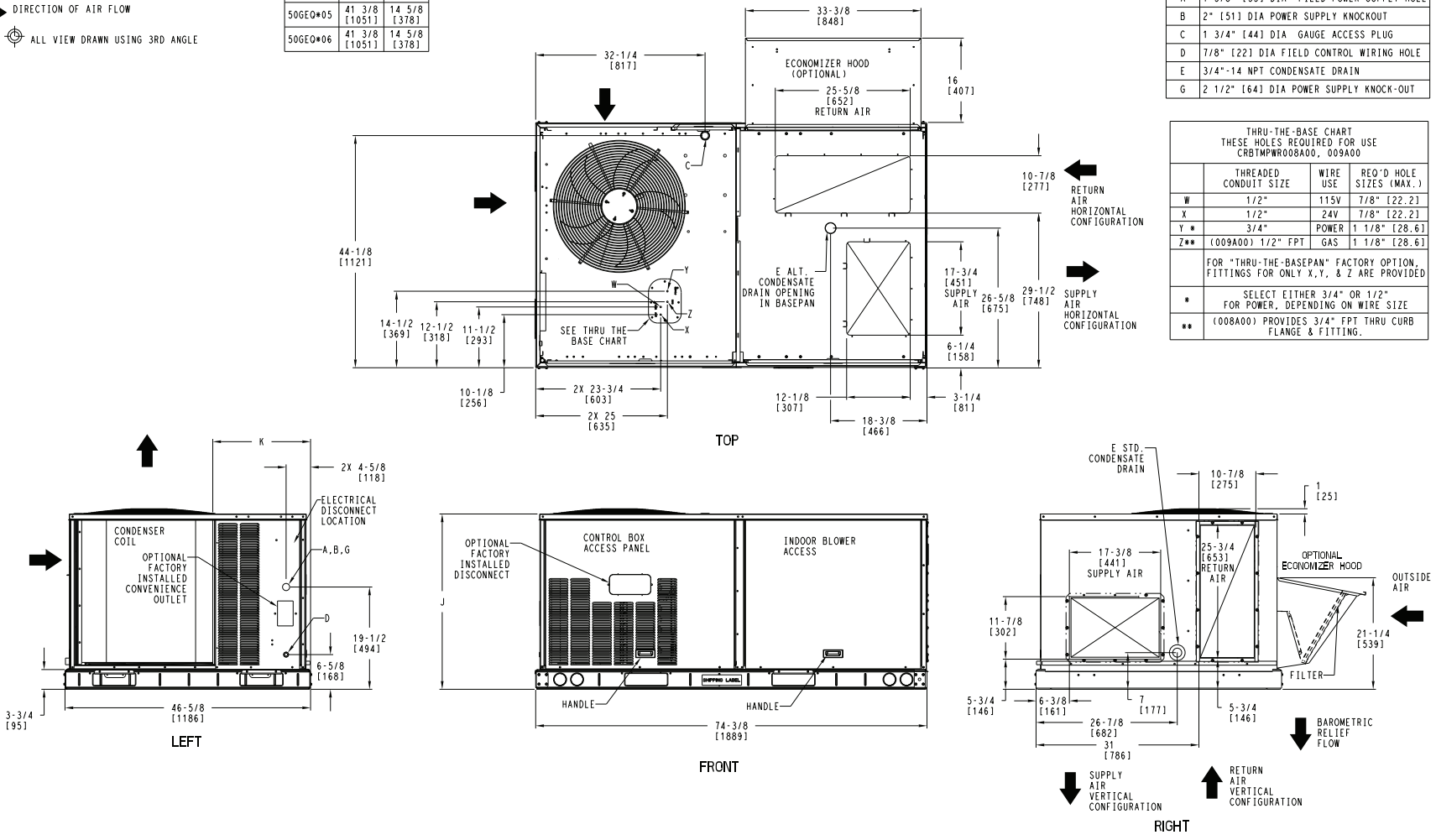
NOTES:

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

UNIT	J	K
50GEQ*04	41 3/8 [1051]	18 5/8 [472]
50GEQ*05	41 3/8 [1051]	14 5/8 [378]
50GEQ*06	41 3/8 [1051]	14 5/8 [378]

	CONNECTION SIZES
A	1 3/8" [35] DIA FIELD POWER SUPPLY HOLE
B	2" [51] DIA POWER SUPPLY KNOCKOUT
C	1 3/4" [44] DIA GAUGE ACCESS PLUG
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
G	2 1/2" [64] DIA POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPWR008A00, 009A00			
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	115V	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y *	3/4"	POWER	1 1/8" [28.6]
Z**	(009A00) 1/2" FPT	GAS	1 1/8" [28.6]
	FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X,Y, & Z ARE PROVIDED		
*	SELECT EITHER 3/4" OR 1/2" FOR POWER, DEPENDING ON WIRE SIZE		
**	(008A00) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.		

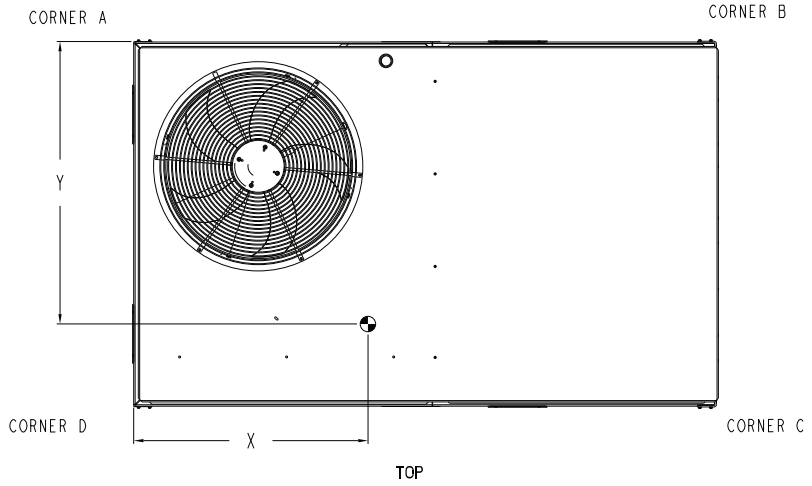


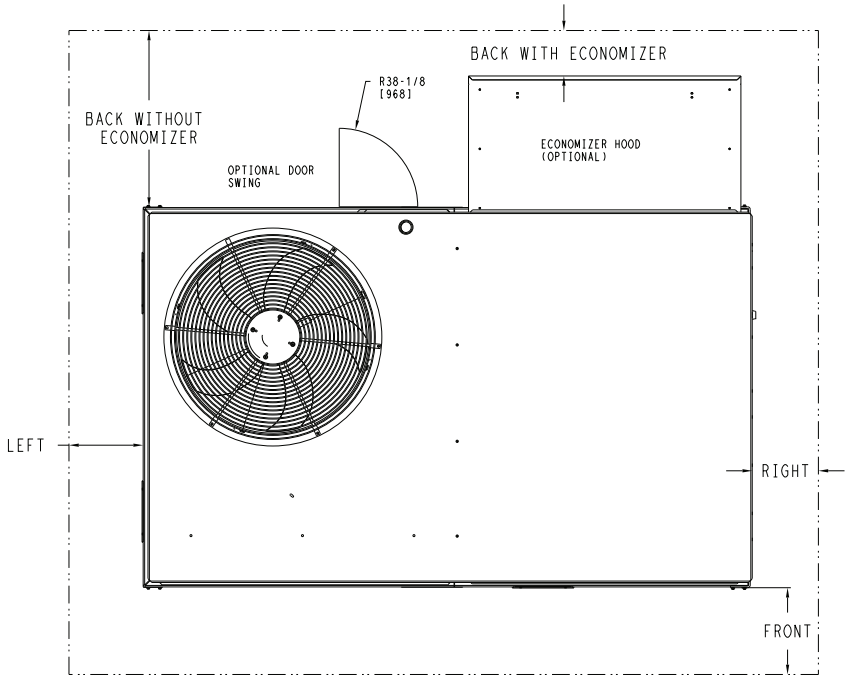
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GEQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC006647	REV
U.S. ECCN:NSR	1 OF 3	11/6/24	9/9/24			B

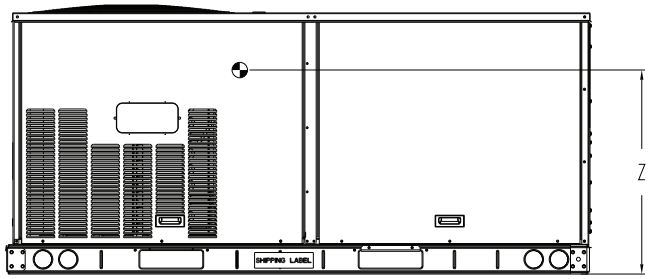
50GEQ*04-06 Base Unit Dimensions (cont)

UNIT	STD. UNIT WEIGHT *		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GEQ*04	567	257	151	68	138	63	132	60	145	66	35 1/2 [902]	22 7/8 [581]	16 1/2 [419]
50GEQ*05	594	269	163	74	148	67	135	61	149	68	35 3/8 [898]	22 5/16 [557]	16 1/2 [419]
50GEQ*06	596	270	163	74	148	67	135	61	149	68	35 3/8 [898]	22 5/16 [557]	16 1/2 [419]

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







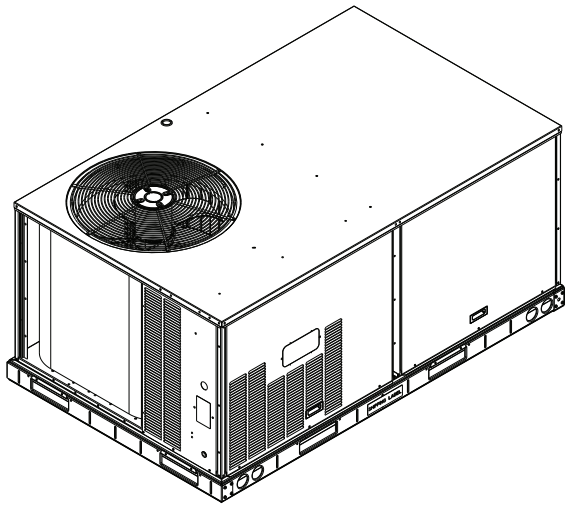
NOTE:

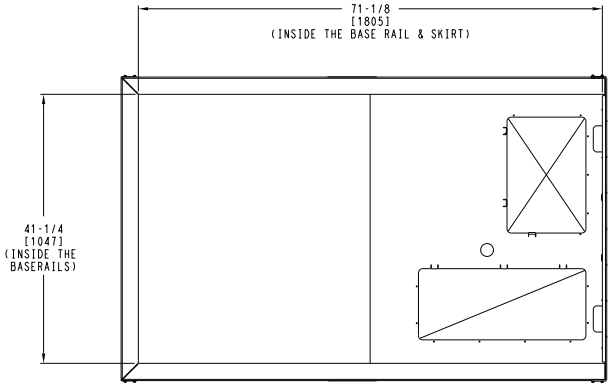
1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

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

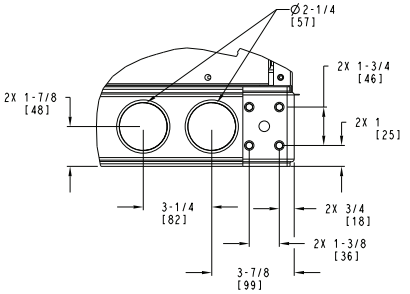
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	2 OF 3	11/6/24	9/9/24	50GEQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC006647	B

50GEQ*04-06 Base Unit Dimensions (cont)

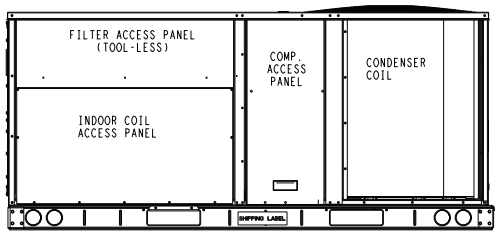




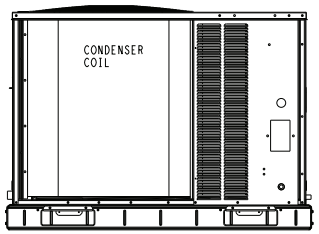
INSIDE BASERAIL DIMENSIONS
BOTTOM



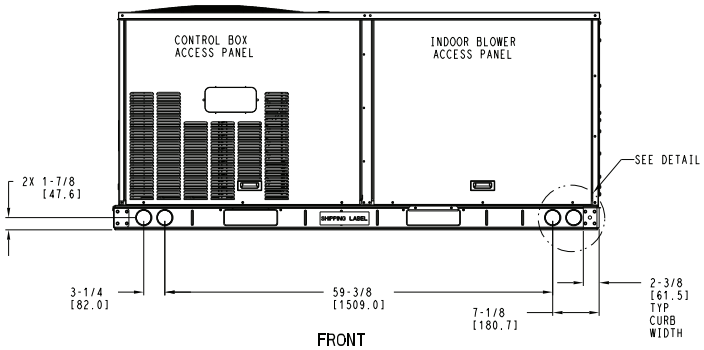
DETAIL C
TYP 4 PLCS



BACK



LEFT



FRONT

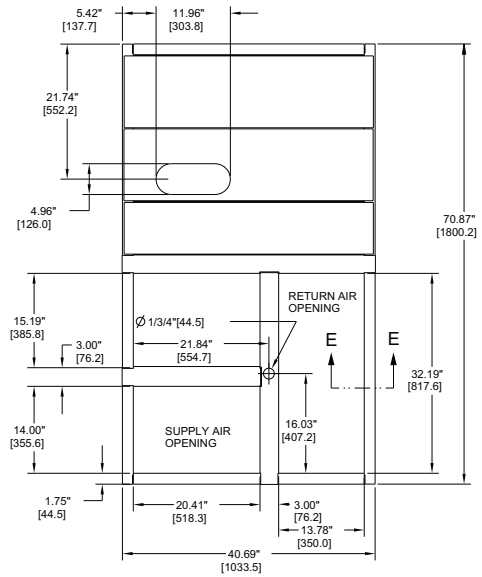
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES			REV
U.S. ECCN:NSR	3 OF 3	11/6/24	9/9/24	50GEQ 04-06 SINGLE PACKAGE HEAT PUMP	48TC006647	B

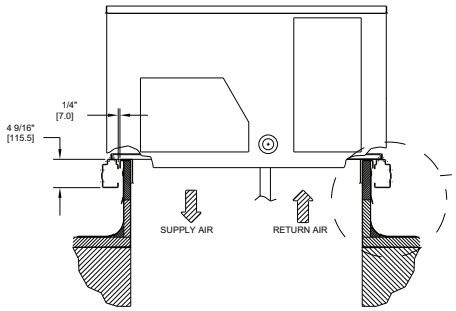
Roof Curb Dimensions — 50GEQ 04-06

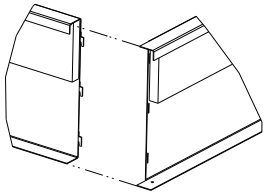
ROOF CURB ACCESSORY #	A
CRRFCURB001A01	14" [356]
CRRFCURB002A01	24" [610]

NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
2. INSULATED PANELS: 25.4 [1"] THK. POLYURETHANE FOAM, 44.5 [1-3/4] # DENSITY.
3. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
4. ROOFCURB: 18 GAGE STEEL.
5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB).
6. SERVICE CLEARANCE 4 FEET ON EACH SIDE.
7. ▨ DIRECTION OF AIR FLOW.
8. CONNECTOR PACKAGE CRBTMPWR001A01 IS FOR THRU-THE-CURB GAS TYPE PACKAGE CRBTMPWR003A01 IS FOR THRU-THE-BOTTOM TYPE GAS CONNECTIONS.

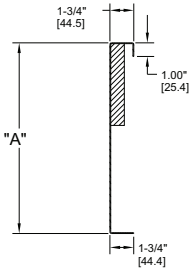
CONNECTOR PKG. ACC.	GAS CONNECTION TYPE	GAS FITTING	POWER WIRING FITTING	CONTROL WIRING FITTING	ACCESSORY CONVENIENCE OUTLET WIRING CONNECTOR
CRBTMPWR001A01	THRU THE CURB	3/4" [19] NPT	3/4" [19] NPT	1/2" [12.7] NPT	1/2" [12.7] NPT
CRBTMPWR003A01	THRU THE BOTTOM	1/2" [12.7] NPT			



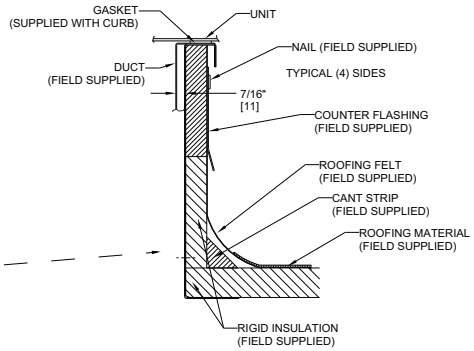


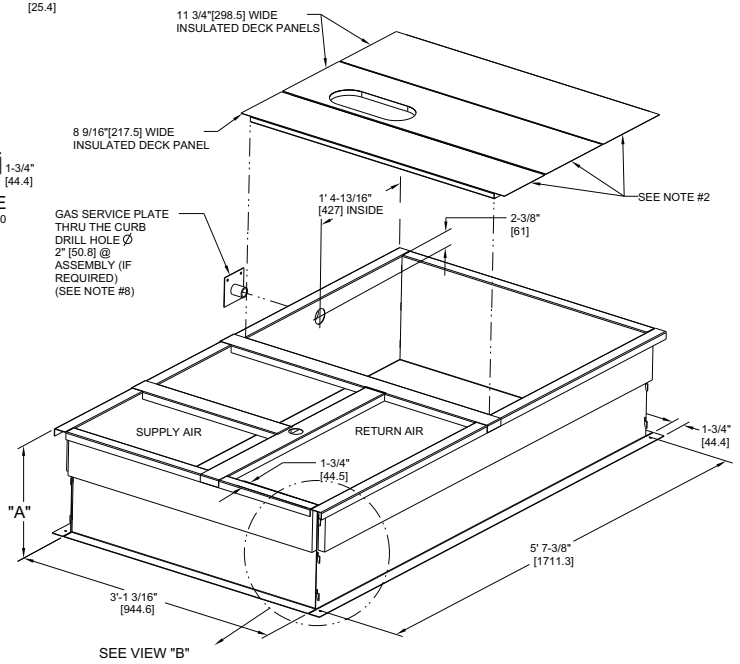


VIEW "B"
CORNER DETAIL



SECTION E-E
SCALE 0.250





CERTIFIED DRAWING

REV	REVISION RECORD	DATE	BY	CHK'D	APP'D	ECN NO.
A	OVERALL DIM. 5'-7 3/8" WAS 5'-7 7/8; 18GA MATERIAL WA 16 GA.; NAIL FIELD SUPPLIED WAS WITH CURB	04/22/13	MMC	-	-	1067898

DRAWING RELEASE LEVEL: PRODUCTION			
THIRD ANGLE PROJECTION	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: 1 DEC ± - 2 DEC ± - 3 DEC ± - ANG ± °		
MATERIAL - - -	AUTHORIZATION NUMBER 1041738	TITLE	CURB ASY, ROOF
ENGINEERING REQUIREMENTS T-005, Y-002	ENGINEERING - MANUFACTURING -	SIZE D	DRAWING NUMBER 48TC400427 SHEET 5 OF 5 REV B
WEIGHT: -	DRAFTER MMC 06/17/11 CHECKER -		
SURFACE FINISH - MFG/PURCH PURCH	MODEL (INTERNAL USE ONLY)	NEXT DRAWING - SCALE N/A	DISTRIBUTION MMC

Performance data

50GEQ*04 High Stage Cooling Capacities[a,b]

50GEQ*04				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
900 cfm	EA (wb)	58	TC	31.6	31.6	36.0	29.6	29.6	33.9	27.5	27.5	31.6	25.3	25.3	29.2	23.0	23.0	26.6
			SHC	27.2	31.6	36.0	25.4	29.6	33.9	23.5	27.5	31.6	21.5	25.3	29.2	19.3	23.0	26.6
		62	TC	33.6	33.6	34.2	31.2	31.2	32.6	28.7	28.7	31.1	26.0	26.0	29.4	23.6	23.6	26.7
			SHC	24.4	29.3	34.2	22.9	27.8	32.6	21.3	26.2	31.1	19.7	24.6	29.4	17.6	22.1	26.7
		67	TC	37.7	37.7	37.7	35.1	35.1	35.1	32.4	32.4	32.4	29.5	29.5	29.5	26.4	26.4	26.4
			SHC	20.0	24.9	29.8	18.5	23.4	28.2	16.9	21.8	26.6	15.3	20.2	25.0	13.6	18.5	23.3
		72	TC	42.1	42.1	42.1	39.4	39.4	39.4	36.5	36.5	36.5	33.3	33.3	33.3	30.0	30.0	30.0
			SHC	15.5	20.4	25.2	14.0	18.8	23.7	12.4	17.3	22.1	10.8	15.6	20.5	9.1	13.9	18.8
		76	TC	—	45.9	45.9	—	43.0	43.0	—	39.9	39.9	—	36.6	36.6	—	33.1	33.1
			SHC	—	16.7	21.4	—	15.1	19.9	—	13.6	18.4	—	11.9	16.7	—	10.2	15.1
1050 cfm	EA (wb)	58	TC	33.9	33.9	38.6	31.8	31.8	36.3	29.6	29.6	33.9	27.2	27.2	31.3	24.7	24.7	28.5
			SHC	29.2	33.9	38.6	27.3	31.8	36.3	25.3	29.6	33.9	23.1	27.2	31.3	20.8	24.7	28.5
		62	TC	35.0	35.0	38.1	32.5	32.5	36.5	30.3	30.3	33.7	27.2	27.2	32.7	24.7	24.7	29.9
			SHC	26.8	32.5	38.1	25.3	30.9	36.5	23.1	28.4	33.7	21.8	27.2	32.7	19.6	24.7	29.9
		67	TC	39.1	39.1	39.1	36.4	36.4	36.4	33.5	33.5	33.5	30.5	30.5	30.5	27.3	27.3	27.3
			SHC	21.6	27.2	32.9	20.0	25.7	31.3	18.4	24.1	29.7	16.8	22.4	28.1	15.1	20.7	26.4
		72	TC	43.5	43.5	43.5	40.7	40.7	40.7	37.6	37.6	37.6	34.4	34.4	34.4	30.9	30.9	30.9
			SHC	16.2	21.9	27.5	14.7	20.3	26.0	13.1	18.7	24.4	11.4	17.1	22.7	9.7	15.4	21.0
		76	TC	—	47.3	47.3	—	44.3	44.3	—	41.0	41.0	—	37.6	37.6	—	33.9	33.9
			SHC	—	17.5	23.1	—	16.0	21.5	—	14.4	19.9	—	12.7	18.3	—	11.0	16.6
1200 cfm	EA (wb)	58	TC	35.8	35.8	40.7	33.6	33.6	38.3	31.2	31.2	35.7	28.7	28.7	33.0	26.1	26.1	30.1
			SHC	30.9	35.8	40.7	28.9	33.6	38.3	26.7	31.2	35.7	24.5	28.7	33.0	22.1	26.1	30.1
		62	TC	36.2	36.2	41.8	34.3	34.3	38.1	31.3	31.3	37.3	28.8	28.8	34.5	26.1	26.1	31.5
			SHC	29.1	35.4	41.8	26.6	32.4	38.1	25.3	31.3	37.3	23.1	28.8	34.5	20.8	26.1	31.5
		67	TC	40.2	40.2	40.2	37.4	37.4	37.4	34.4	34.4	34.4	31.3	31.3	31.3	27.9	27.9	29.3
			SHC	23.1	29.5	35.9	21.5	27.9	34.3	19.9	26.3	32.7	18.2	24.6	31.0	16.5	22.9	29.3
		72	TC	44.6	44.6	44.6	41.6	41.6	41.6	38.5	38.5	38.5	35.1	35.1	35.1	31.5	31.5	31.5
			SHC	16.9	23.3	29.7	15.3	21.7	28.2	13.7	20.1	26.5	12.0	18.4	24.9	10.3	16.7	23.1
		76	TC	—	48.4	48.4	—	45.3	45.3	—	41.9	41.9	—	38.4	38.4	—	34.6	34.6
			SHC	—	18.3	24.6	—	16.7	23.0	—	15.1	21.4	—	13.4	19.8	—	11.6	18.0
1350 cfm	EA (wb)	58	TC	37.5	37.5	42.5	35.1	35.1	40.0	32.7	32.7	37.3	30.0	30.0	34.5	27.3	27.3	31.4
			SHC	32.4	37.5	42.5	30.2	35.1	40.0	28.0	32.7	37.3	25.6	30.0	34.5	23.1	27.3	31.4
		62	TC	37.5	37.5	44.3	35.2	35.2	41.7	32.7	32.7	38.9	30.1	30.1	36.0	27.3	27.3	32.8
			SHC	30.7	37.5	44.3	28.7	35.2	41.7	26.5	32.7	38.9	24.2	30.1	36.0	21.8	27.3	32.8
		67	TC	41.0	41.0	41.0	38.1	38.1	38.1	35.1	35.1	35.6	31.9	31.9	33.9	28.5	28.5	32.1
			SHC	24.5	31.7	38.9	22.9	30.1	37.2	21.2	28.4	35.6	19.5	26.7	33.9	17.8	25.0	32.1
		72	TC	45.4	45.4	45.4	42.4	42.4	42.4	39.1	39.1	39.1	35.7	35.7	35.7	32.0	32.0	32.0
			SHC	17.5	24.7	31.9	15.9	23.1	30.3	14.2	21.4	28.6	12.5	19.7	26.9	10.8	18.0	25.2
		76	TC	—	49.2	49.2	—	46.0	46.0	—	42.6	42.6	—	39.0	39.0	—	35.1	35.1
			SHC	—	18.9	26.0	—	17.4	24.5	—	15.7	22.9	—	14.0	21.2	—	12.3	19.4
1500 cfm	EA (wb)	58	TC	38.9	38.9	44.1	36.4	36.4	41.4	33.9	33.9	38.7	31.2	31.2	35.7	28.3	28.3	32.5
			SHC	33.6	38.9	44.1	31.4	36.4	41.4	29.1	33.9	38.7	26.6	31.2	35.7	24.0	28.3	32.5
		62	TC	38.9	38.9	45.9	36.5	36.5	43.2	33.9	33.9	40.3	31.2	31.2	37.3	28.3	28.3	34.0
			SHC	31.9	38.9	45.9	29.8	36.5	43.2	27.5	33.9	40.3	25.1	31.2	37.3	22.6	28.3	34.0
		67	TC	41.7	41.7	41.7	38.7	38.7	40.1	35.6	35.6	38.4	32.4	32.4	36.7	28.9	28.9	34.9
			SHC	25.8	33.8	41.7	24.2	32.2	40.1	22.6	30.5	38.4	20.9	28.8	36.7	19.1	27.0	34.9
		72	TC	46.1	46.1	46.1	43.0	43.0	43.0	39.7	39.7	39.7	36.2	36.2	36.2	32.4	32.4	32.4
			SHC	18.0	26.0	33.9	16.4	24.4	32.3	14.8	22.7	30.7	13.1	21.0	29.0	11.3	19.2	27.2
		76	TC	—	49.9	49.9	—	46.6	46.6	—	43.1	43.1	—	39.4	39.4	—	35.5	35.5
			SHC	—	19.6	27.4	—	18.0	25.9	—	16.3	24.2	—	14.6	22.5	—	12.9	20.8

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.
b. Published capacity values are based on SEER2 static requirements.

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

Performance data (cont)

50GEQ*04 Low Stage Cooling Capacities[a,b]

50GEQ*04				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
750 cfm	EA (wb)	58	TC	23.4	23.4	26.6	22.0	22.0	25.0	20.5	20.5	23.3	18.9	18.9	21.6	17.1	17.1	19.7
			SHC	20.2	23.4	26.6	18.9	22.0	25.0	17.6	20.5	23.3	16.1	18.9	21.6	14.6	17.1	19.7
		62	TC	24.1	24.1	26.5	22.4	22.4	25.4	21.1	21.1	22.8	18.9	18.9	22.5	17.2	17.2	20.6
			SHC	18.7	22.6	26.5	17.7	21.5	25.4	16.0	19.4	22.8	15.2	18.9	22.5	13.7	17.2	20.6
		67	TC	26.9	26.9	26.9	25.0	25.0	25.0	23.0	23.0	23.0	21.0	21.0	21.0	18.8	18.8	18.8
			SHC	15.1	19.0	22.9	14.1	18.0	21.9	13.1	17.0	20.9	12.0	15.9	19.8	10.9	14.8	18.7
		72	TC	29.9	29.9	29.9	27.9	27.9	27.9	25.8	25.8	25.8	23.6	23.6	23.6	21.3	21.3	21.3
			SHC	11.4	15.3	19.2	10.4	14.3	18.2	9.4	13.3	17.2	8.3	12.2	16.1	7.2	11.1	15.0
		76	TC	—	32.5	32.5	—	30.4	30.4	—	28.2	28.2	—	25.9	25.9	—	23.4	23.4
			SHC	—	12.3	16.1	—	11.3	15.1	—	10.3	14.1	—	9.2	13.0	—	8.1	12.0
900 cfm	EA (wb)	58	TC	25.1	25.1	28.5	23.6	23.6	26.8	22.0	22.0	25.0	20.2	20.2	23.1	18.4	18.4	21.1
			SHC	21.8	25.1	28.5	20.4	23.6	26.8	18.9	22.0	25.0	17.3	20.2	23.1	15.7	18.4	21.1
		62	TC	25.2	25.2	29.7	23.6	23.6	27.9	22.0	22.0	26.1	20.3	20.3	24.1	18.4	18.4	22.0
			SHC	20.7	25.2	29.7	19.3	23.6	27.9	17.9	22.0	26.1	16.4	20.3	24.1	14.8	18.4	22.0
		67	TC	27.8	27.8	27.8	25.9	25.9	25.9	23.8	23.8	23.8	21.6	21.6	22.5	19.4	19.4	21.4
			SHC	16.5	21.1	25.7	15.4	20.1	24.7	14.4	19.0	23.6	13.3	17.9	22.5	12.2	16.8	21.4
		72	TC	30.9	30.9	30.9	28.8	28.8	28.8	26.6	26.6	26.6	24.3	24.3	24.3	21.9	21.9	21.9
			SHC	12.0	16.7	21.3	11.0	15.6	20.3	10.0	14.6	19.2	8.9	13.5	18.1	7.8	12.4	17.0
		76	TC	—	33.5	33.5	—	31.2	31.2	—	28.9	28.9	—	26.5	26.5	—	24.0	24.0
			SHC	—	13.0	17.5	—	12.0	16.5	—	10.9	15.5	—	9.9	14.4	—	8.8	13.3
1050 cfm	EA (wb)	58	TC	26.5	26.5	30.0	24.9	24.9	28.2	23.1	23.1	26.3	21.3	21.3	24.3	19.4	19.4	22.2
			SHC	23.0	26.5	30.0	21.5	24.9	28.2	19.9	23.1	26.3	18.3	21.3	24.3	16.6	19.4	22.2
		62	TC	26.5	26.5	31.2	24.9	24.9	29.4	23.2	23.2	27.4	21.3	21.3	25.4	19.4	19.4	23.2
			SHC	21.8	26.5	31.2	20.4	24.9	29.4	18.9	23.2	27.4	17.3	21.3	25.4	15.6	19.4	23.2
		67	TC	28.5	28.5	28.5	26.5	26.5	27.3	24.4	24.4	26.2	22.2	22.2	25.1	19.8	19.8	23.9
			SHC	17.8	23.1	28.4	16.7	22.0	27.3	15.6	20.9	26.2	14.5	19.8	25.1	13.3	18.6	23.9
		72	TC	31.5	31.5	31.5	29.4	29.4	29.4	27.1	27.1	27.1	24.8	24.8	24.8	22.3	22.3	22.3
			SHC	12.6	17.9	23.2	11.5	16.8	22.2	10.5	15.8	21.1	9.4	14.7	20.0	8.3	13.6	18.9
		76	TC	—	34.1	34.1	—	31.8	31.8	—	29.5	29.5	—	27.0	27.0	—	24.4	24.4
			SHC	—	13.6	18.8	—	12.6	17.8	—	11.5	16.8	—	10.5	15.7	—	9.4	14.6
1200 cfm	EA (wb)	58	TC	27.6	27.6	31.3	25.9	25.9	29.4	24.1	24.1	27.4	22.2	22.2	25.3	20.2	20.2	23.1
			SHC	24.0	27.6	31.3	22.4	25.9	29.4	20.8	24.1	27.4	19.1	22.2	25.3	17.3	20.2	23.1
		62	TC	27.7	27.7	32.5	25.9	25.9	30.6	24.1	24.1	28.6	22.2	22.2	26.4	20.2	20.2	24.1
			SHC	22.8	27.7	32.5	21.3	25.9	30.6	19.7	24.1	28.6	18.1	22.2	26.4	16.3	20.2	24.1
		67	TC	29.0	29.0	30.9	27.0	27.0	29.8	24.8	24.8	28.7	22.6	22.6	27.4	20.8	20.8	23.0
			SHC	18.9	24.9	30.9	17.9	23.9	29.8	16.8	22.7	28.7	15.6	21.5	27.4	13.2	18.1	23.0
		72	TC	32.1	32.1	32.1	29.8	29.8	29.8	27.5	27.5	27.5	25.1	25.1	25.1	22.6	22.6	22.6
			SHC	13.0	19.1	25.1	12.0	18.0	24.0	10.9	16.9	23.0	9.8	15.8	21.8	8.7	14.7	20.7
		76	TC	—	34.6	34.6	—	32.3	32.3	—	29.8	29.8	—	27.3	27.3	—	—	—
			SHC	—	14.2	20.1	—	13.2	19.1	—	12.1	18.0	—	11.0	17.0	—	—	—
1350 cfm	EA (wb)	58	TC	28.6	28.6	32.3	26.8	26.8	30.4	24.9	24.9	28.3	22.9	22.9	26.1	20.8	20.8	23.8
			SHC	24.8	28.6	32.3	23.2	26.8	30.4	21.5	24.9	28.3	19.7	22.9	26.1	17.9	20.8	23.8
		62	TC	28.6	28.6	33.6	26.8	26.8	31.6	24.9	24.9	29.5	23.0	23.0	27.2	20.9	20.9	24.9
			SHC	23.6	28.6	33.6	22.0	26.8	31.6	20.4	24.9	29.5	18.7	23.0	27.2	16.9	20.9	24.9
		67	TC	29.5	29.5	33.3	27.4	27.4	32.2	25.2	25.2	30.9	23.3	23.3	27.7	20.9	20.9	26.9
			SHC	20.1	26.7	33.3	19.0	25.6	32.2	17.8	24.4	30.9	15.9	21.8	27.7	14.9	20.9	26.9
		72	TC	32.5	32.5	32.5	30.2	30.2	30.2	27.8	27.8	27.8	25.4	25.4	25.4	22.8	22.8	22.8
			SHC	13.5	20.2	26.9	12.4	19.1	25.8	11.4	18.0	24.7	10.3	16.9	23.6	9.1	15.8	22.5
		76	TC	—	35.0	35.0	—	32.6	32.6	—	30.1	30.1	—	27.6	27.6	—	—	—
			SHC	—	14.7	21.3	—	13.7	20.3	—	12.6	19.2	—	11.5	18.2	—	—	—

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.
b. Published capacity values are based on SEER2 static requirements.

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

Performance data (cont)

50GEQN04 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF (80°F db)								
		900/0.01			1200 /0.02			1500/0.04		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	44.9	39.7	35.1	48.5	42.1	36.4	49.2	43.6	38.6
	SHC	15.8	21.3	26.8	18.6	26.9	31.6	21.5	29.6	37.0
	kW	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
85	TC	42.4	37.5	33.1	45.7	38.4	34.4	46.4	41.1	36.4
	SHC	14.9	20.1	25.3	17.5	24.0	29.8	20.3	28.0	34.9
	kW	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.2	2.2
95	TC	38.5	34.1	30.1	41.6	37.0	32.4	43.8	38.8	34.3
	SHC	13.6	18.3	23.0	15.9	22.4	28.1	19.1	26.4	32.9
	kW	2.5	2.5	2.4	2.5	2.5	2.5	2.5	2.5	2.5
105	TC	34.9	30.8	27.2	37.6	33.4	29.4	39.6	35.1	31.1
	SHC	12.3	16.5	20.8	14.4	19.8	25.5	17.3	23.9	29.8
	kW	2.7	2.7	2.7	2.8	2.8	2.7	2.8	2.7	2.7
115	TC	31.5	27.9	24.6	34.0	28.8	26.6	35.8	31.7	28.1
	SHC	11.1	15.0	18.8	13.0	17.0	23.0	15.7	21.6	26.9
	kW	3.0	3.0	3.0	3.0	3.1	3.0	3.1	3.0	3.0
125	TC	—	—	—	—	—	—	—	—	—
	SHC	—	—	—	—	—	—	—	—	—
	kW	—	—	—	—	—	—	—	—	—

50GEQN04 — Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — Ewb (°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 — cfm								
		900	1200	1500	900	1200	1500	900	1200	1500
80	TC	10.3	12.0	12.6	10.0	13.2	12.7	9.9	11.3	12.8
	SHC	2.6	5.0	6.6	1.0	2.4	4.0	-0.3	-0.4	-0.4
	kW	1.9	1.9	1.9	1.3	2.0	1.9	1.9	1.9	1.9
75	TC	11.0	12.8	13.3	10.7	12.1	13.5	10.6	12.2	13.8
	SHC	2.7	5.3	7.0	1.2	2.7	5.0	0.2	1.3	2.4
	kW	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
70	TC	11.6	13.5	14.1	11.3	11.1	14.4	11.4	13.0	14.7
	SHC	2.9	5.6	7.4	1.4	3.5	2.4	0.7	0.7	2.6
	kW	1.9	1.9	1.9	2.5	1.8	1.9	2.0	1.9	1.9
60	TC	12.8	14.9	15.6	12.7	14.5	16.1	12.8	14.6	16.6
	SHC	3.2	6.2	8.2	1.9	1.8	3.2	1.8	1.8	2.8
	kW	1.9	1.9	1.9	3.8	2.2	1.9	2.0	2.0	1.9
50	TC	14.1	16.4	17.1	14.0	17.1	17.8	14.3	16.3	18.4
	SHC	3.5	6.8	9.1	2.4	4.4	4.1	2.8	2.9	3.3
	kW	2.0	1.9	1.9	5.0	2.0	1.9	2.0	2.0	2.0
40	TC	15.3	17.8	18.6	15.3	17.3	19.5	15.7	17.9	20.3
	SHC	3.8	7.5	9.9	2.8	6.5	4.9	3.9	3.9	4.0
	kW	2.0	1.9	1.9	6.2	2.1	2.0	2.0	2.0	2.0

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

Performance data (cont)

50GEQ*05 High Stage Cooling Capacities[a,b]

50GEQ*05				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
1200 cfm	EA (wb)	58	TC	41.7	41.7	47.7	39.0	39.0	44.7	36.2	36.2	41.7	33.2	33.2	38.4	30.0	30.0	35.0
			SHC	35.8	41.7	47.7	33.3	39.0	44.7	30.7	36.2	41.7	27.9	33.2	38.4	25.0	30.0	35.0
		62	TC	44.5	44.5	45.5	41.2	41.2	43.3	37.7	37.7	41.1	34.1	34.1	38.8	31.1	31.1	34.6
			SHC	32.3	38.9	45.5	30.1	36.7	43.3	27.9	34.5	41.1	25.6	32.2	38.8	22.5	28.6	34.6
		67	TC	50.3	50.3	50.3	46.8	46.8	46.8	43.1	43.1	43.1	39.2	39.2	39.2	35.1	35.1	35.1
			SHC	26.4	33.0	39.6	24.2	30.8	37.4	22.0	28.6	35.2	19.7	26.3	32.9	17.4	24.0	30.6
		72	TC	56.6	56.6	56.6	52.8	52.8	52.8	48.9	48.9	48.9	44.7	44.7	44.7	40.3	40.3	40.3
			SHC	20.4	27.0	33.6	18.3	24.9	31.5	16.0	22.6	29.2	13.7	20.3	26.9	11.3	17.9	24.5
		76	TC	—	61.9	61.9	—	58.0	58.0	—	53.7	53.7	—	49.3	49.3	—	44.6	44.6
			SHC	—	22.2	28.8	—	20.0	26.6	—	17.7	24.3	—	15.4	22.0	—	13.0	19.6
1400 cfm	EA (wb)	58	TC	45.1	45.1	51.4	42.1	42.1	48.2	39.1	39.1	44.9	35.9	35.9	41.5	32.5	32.5	37.8
			SHC	38.7	45.1	51.4	36.1	42.1	48.2	33.3	39.1	44.9	30.3	35.9	41.5	27.2	32.5	37.8
		62	TC	46.5	46.5	51.1	43.0	43.0	48.9	39.9	39.9	45.3	36.0	36.0	43.4	32.6	32.6	39.6
			SHC	35.7	43.4	51.1	33.5	41.2	48.9	30.7	38.0	45.3	28.5	36.0	43.4	25.5	32.6	39.6
		67	TC	52.4	52.4	52.4	48.7	48.7	48.7	44.8	44.8	44.8	40.7	40.7	40.7	36.4	36.4	36.4
			SHC	28.7	36.4	44.1	26.4	34.1	41.8	24.2	31.9	39.6	21.8	29.5	37.2	19.4	27.1	34.8
		72	TC	58.7	58.7	58.7	54.8	54.8	54.8	50.6	50.6	50.6	46.2	46.2	46.2	41.6	41.6	41.6
			SHC	21.5	29.2	36.9	19.3	27.0	34.7	17.0	24.7	32.4	14.6	22.3	30.0	12.2	19.9	27.6
		76	TC	—	64.1	64.1	—	60.0	60.0	—	55.6	55.6	—	50.9	50.9	—	46.0	46.0
			SHC	—	23.4	31.1	—	21.2	28.9	—	18.9	26.6	—	16.5	24.2	—	14.1	21.8
1600 cfm	EA (wb)	58	TC	47.8	47.8	54.5	44.8	44.8	51.2	41.6	41.6	47.7	38.2	38.2	44.0	34.6	34.6	40.1
			SHC	41.2	47.8	54.5	38.4	44.8	51.2	35.4	41.6	47.7	32.3	38.2	44.0	29.1	34.6	40.1
		62	TC	48.0	48.0	56.5	44.9	44.9	53.4	41.6	41.6	49.8	38.2	38.2	46.0	34.7	34.7	42.0
			SHC	39.0	47.8	56.5	36.3	44.9	53.4	33.5	41.6	49.8	30.5	38.2	46.0	27.3	34.7	42.0
		67	TC	54.0	54.0	54.0	50.1	50.1	50.1	46.0	46.0	46.0	41.8	41.8	41.8	37.3	37.3	39.0
			SHC	30.8	39.6	48.4	28.5	37.3	46.1	26.2	35.0	43.8	23.8	32.6	41.4	21.4	30.2	39.0
		72	TC	60.4	60.4	60.4	56.3	56.3	56.3	52.0	52.0	52.0	47.4	47.4	47.4	42.6	42.6	42.6
			SHC	22.5	31.3	40.1	20.2	29.0	37.8	17.9	26.7	35.5	15.5	24.3	33.1	13.0	21.8	30.6
		76	TC	—	65.8	65.8	—	61.5	61.5	—	56.9	56.9	—	52.1	52.1	—	47.0	47.0
			SHC	—	24.5	33.3	—	22.3	31.1	—	19.9	28.7	—	17.5	26.3	—	15.0	23.8
1800 cfm	EA (wb)	58	TC	50.3	50.3	57.2	47.0	47.0	53.7	43.7	43.7	50.0	40.1	40.1	46.1	36.4	36.4	42.1
			SHC	43.4	50.3	57.2	40.4	47.0	53.7	37.3	43.7	50.0	34.1	40.1	46.1	30.7	36.4	42.1
		62	TC	50.3	50.3	59.6	47.1	47.1	56.0	43.7	43.7	52.2	40.2	40.2	48.2	36.4	36.4	44.0
			SHC	41.1	50.3	59.6	38.3	47.1	56.0	35.3	43.7	52.2	32.1	40.2	48.2	28.8	36.4	44.0
		67	TC	55.2	55.2	55.2	51.3	51.3	51.3	47.0	47.0	48.0	42.7	42.7	45.6	38.1	38.1	43.2
			SHC	32.8	42.7	52.6	30.5	40.4	50.3	28.2	38.1	48.0	25.8	35.7	45.6	23.4	33.3	43.2
		72	TC	61.7	61.7	61.7	57.5	57.5	57.5	53.0	53.0	53.0	48.3	48.3	48.3	43.4	43.4	43.4
			SHC	23.3	33.2	43.1	21.0	30.9	40.8	18.7	28.6	38.5	16.3	26.2	36.1	13.8	23.7	33.6
		76	TC	—	67.1	67.1	—	62.7	62.7	—	58.0	58.0	—	53.0	53.0	—	47.8	47.8
			SHC	—	25.5	35.4	—	23.2	33.1	—	20.9	30.8	—	18.4	28.3	—	15.9	25.8
2000 cfm	EA (wb)	58	TC	52.3	52.3	59.5	49.0	49.0	55.8	45.5	45.5	52.0	41.8	41.8	48.0	37.9	37.9	43.7
			SHC	45.2	52.3	59.5	42.1	49.0	55.8	38.9	45.5	52.0	35.5	41.8	48.0	32.0	37.9	43.7
		62	TC	52.4	52.4	61.9	49.1	49.1	58.2	45.5	45.5	54.3	41.8	41.8	50.1	37.9	37.9	45.8
			SHC	42.9	52.4	61.9	39.9	49.1	58.2	36.8	45.5	54.3	33.5	41.8	50.1	30.1	37.9	45.8
		67	TC	56.2	56.2	56.8	52.2	52.2	54.5	47.9	47.9	52.1	43.4	43.4	49.7	38.7	38.7	47.3
			SHC	34.8	45.8	56.8	32.5	43.5	54.5	30.2	41.2	52.1	27.8	38.7	49.7	25.3	36.3	47.3
		72	TC	62.7	62.7	62.7	58.4	58.4	58.4	53.8	53.8	53.8	49.0	49.0	49.0	44.0	44.0	44.0
			SHC	24.1	35.1	46.1	21.8	32.8	43.8	19.4	30.4	41.4	17.0	28.0	39.0	14.5	25.5	36.5
		76	TC	—	68.2	68.2	—	63.6	63.6	—	58.8	58.8	—	53.8	53.8	—	—	—
			SHC	—	26.5	37.5	—	24.2	35.2	—	21.8	32.8	—	19.3	30.3	—	—	—

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.
b. Published capacity values are based on SEER2 static requirements.

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

Performance data (cont)

50GEQ*05 Low Stage Cooling Capacities[a,b]

50GEQ*05				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		
1000 cfm	EA (wb)	58	TC	31.2	31.2	35.5	29.0	29.0	33.1	26.6	26.6	30.5	24.2	24.2	27.9	21.7	21.7	25.1		
			SHC	26.9	31.2	35.5	24.9	29.0	33.1	22.7	26.6	30.5	20.5	24.2	27.9	18.3	21.7	25.1		
		62	TC	31.8	31.8	36.1	29.2	29.2	34.3	26.7	26.7	31.9	24.2	24.2	29.2	21.7	21.7	26.3		
			SHC	25.1	30.6	36.1	23.4	28.8	34.3	21.5	26.7	31.9	19.3	24.2	29.2	17.1	21.7	26.3		
		67	TC	36.2	36.2	36.2	33.4	33.4	33.4	30.5	30.5	30.5	27.4	27.4	27.4	24.2	24.2	24.8		
			SHC	20.3	25.8	31.3	18.7	24.2	29.7	17.1	22.6	28.1	15.5	21.0	26.5	13.8	19.3	24.8		
		72	TC	41.0	41.0	41.0	38.2	38.2	38.2	35.3	35.3	35.3	32.3	32.3	32.3	29.1	29.1	29.1		
			SHC	15.4	20.9	26.4	13.9	19.4	24.9	12.4	17.9	23.4	10.8	16.3	21.8	9.2	14.7	20.2		
		76	TC	—	45.0	45.0	—	42.2	42.2	—	39.4	39.4	—	36.4	36.4	—	33.3	33.3		
			SHC	—	16.8	22.3	—	15.4	20.9	—	13.9	19.4	—	12.4	17.9	—	10.9	16.4		
1200 cfm	EA (wb)	58	TC	33.9	33.9	38.5	31.6	31.6	36.0	29.1	29.1	33.3	26.6	26.6	30.5	24.0	24.0	27.7		
			SHC	29.3	33.9	38.5	27.2	31.6	36.0	25.0	29.1	33.3	22.6	26.6	30.5	20.3	24.0	27.7		
		62	TC	34.0	34.0	40.2	31.6	31.6	37.6	29.2	29.2	34.8	26.7	26.7	32.0	24.0	24.0	29.0		
			SHC	27.8	34.0	40.2	25.7	31.6	37.6	23.6	29.2	34.8	21.4	26.7	32.0	19.1	24.0	29.0		
		67	TC	37.7	37.7	37.7	34.9	34.9	34.9	31.8	31.8	32.4	28.7	28.7	30.8	25.4	25.4	29.1		
			SHC	22.4	29.0	35.6	20.9	27.4	34.0	19.2	25.8	32.4	17.6	24.2	30.8	15.9	22.5	29.1		
		72	TC	42.6	42.6	42.6	39.7	39.7	39.7	36.7	36.7	36.7	33.6	33.6	33.6	30.4	30.4	30.4		
			SHC	16.3	22.9	29.5	14.8	21.4	28.0	13.3	19.9	26.5	11.7	18.3	24.9	10.1	16.7	23.3		
		76	TC	—	46.6	46.6	—	43.8	43.8	—	40.9	40.9	—	37.9	37.9	—	34.6	34.6		
			SHC	—	18.0	24.6	—	16.5	23.1	—	15.1	21.7	—	13.6	20.2	—	12.0	18.6		
1400 cfm	EA (wb)	58	TC	36.1	36.1	41.0	33.7	33.7	38.4	31.2	31.2	35.6	28.6	28.6	32.8	25.9	25.9	29.8		
			SHC	31.3	36.1	41.0	29.1	33.7	38.4	26.8	31.2	35.6	24.4	28.6	32.8	21.9	25.9	29.8		
		62	TC	36.2	36.2	42.7	33.8	33.8	40.0	31.3	31.3	37.2	28.7	28.7	34.3	25.9	25.9	31.2		
			SHC	29.7	36.2	42.7	27.6	33.8	40.0	25.3	31.3	37.2	23.1	28.7	34.3	20.7	25.9	31.2		
		67	TC	38.8	38.8	39.8	35.9	35.9	38.2	32.8	32.8	36.6	29.6	29.6	34.9	26.3	26.3	33.2		
			SHC	24.4	32.1	39.8	22.9	30.5	38.2	21.2	28.9	36.6	19.6	27.3	34.9	17.9	25.5	33.2		
		72	TC	43.7	43.7	43.7	40.8	40.8	40.8	37.8	37.8	37.8	34.6	34.6	34.6	31.3	31.3	31.3		
			SHC	17.2	24.9	32.6	15.7	23.4	31.0	14.2	21.9	29.6	12.6	20.3	28.0	11.0	18.7	26.4		
		76	TC	—	47.7	47.7	—	44.9	44.9	—	42.0	42.0	—	—	—	—	—	—		
			SHC	—	19.0	26.7	—	17.5	25.2	—	16.1	23.8	—	—	—	—	—	—		
1600 cfm	EA (wb)	58	TC	38.0	38.0	43.1	35.5	35.5	40.4	32.9	32.9	37.6	30.3	30.3	34.7	27.5	27.5	31.6		
			SHC	32.9	38.0	43.1	30.6	35.5	40.4	28.3	32.9	37.6	25.9	30.3	34.7	23.4	27.5	31.6		
		62	TC	38.1	38.1	44.9	35.6	35.6	42.1	33.0	33.0	39.2	30.3	30.3	36.2	27.5	27.5	33.0		
			SHC	31.2	38.1	44.9	29.1	35.6	42.1	26.8	33.0	39.2	24.4	30.3	36.2	22.0	27.5	33.0		
		67	TC	39.7	39.7	43.9	36.7	36.7	42.3	33.6	33.6	40.7	30.5	30.5	38.9	27.6	27.6	35.8		
			SHC	26.4	35.1	43.9	24.8	33.6	42.3	23.2	31.9	40.7	21.5	30.2	38.9	19.3	27.6	35.8		
		72	TC	44.5	44.5	44.5	41.6	41.6	41.6	38.6	38.6	38.6	35.4	35.4	35.4	32.0	32.0	32.0		
			SHC	18.0	26.8	35.6	16.5	25.3	34.1	14.9	23.7	32.5	13.4	22.2	31.0	11.8	20.6	29.4		
		76	TC	—	48.6	48.6	—	—	—	—	—	—	—	—	—	—	—	—		
			SHC	—	19.9	28.7	—	—	—	—	—	—	—	—	—	—	—	—		
1800 cfm	EA (wb)	58	TC	39.6	39.6	44.8	37.0	37.0	42.1	34.4	34.4	39.2	31.7	31.7	36.2	28.8	28.8	33.1		
			SHC	34.3	39.6	44.8	32.0	37.0	42.1	29.6	34.4	39.2	27.1	31.7	36.2	24.6	28.8	33.1		
		62	TC	39.6	39.6	46.7	37.1	37.1	43.8	34.4	34.4	40.9	31.7	31.7	37.8	28.9	28.9	34.6		
			SHC	32.6	39.6	46.7	30.3	37.1	43.8	28.0	34.4	40.9	25.6	31.7	37.8	23.1	28.9	34.6		
		67	TC	40.4	40.4	47.9	37.4	37.4	46.3	34.5	34.5	44.1	31.8	31.8	40.9	28.9	28.9	37.5		
			SHC	28.3	38.1	47.9	26.7	36.5	46.3	24.9	34.5	44.1	22.7	31.8	40.9	20.4	28.9	37.5		
		72	TC	45.2	45.2	45.2	42.2	42.2	42.2	39.2	39.2	39.2	36.0	36.0	36.0	32.5	32.5	32.5		
			SHC	18.7	28.6	38.5	17.2	27.1	37.0	15.7	25.6	35.5	14.1	24.0	33.9	12.5	22.4	32.3		
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.
b. Published capacity values are based on SEER2 static requirements.

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

Performance data (cont)

50GEQN05 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF (80°F db)								
		1200/0.04			1600 /0.07			2000/0.10		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	60.4	53.9	48.1	66.1	56.9	50.8	66.4	60.9	54.7
	SHC	20.9	28.3	35.7	25.5	35.3	43.0	27.9	40.5	51.8
	kW	2.8	2.7	2.7	2.8	2.9	2.7	2.8	2.8	2.7
85	TC	57.0	50.8	45.4	62.4	54.4	47.9	62.7	57.4	51.6
	SHC	19.7	26.7	33.7	24.0	33.3	40.6	26.3	38.2	48.9
	kW	3.1	3.0	3.0	3.1	3.1	3.0	3.1	3.1	3.0
95	TC	51.8	46.2	41.2	56.7	49.5	45.2	59.1	54.2	48.7
	SHC	17.9	24.3	30.6	21.8	29.8	38.3	24.8	36.1	46.1
	kW	3.4	3.4	3.3	3.4	3.4	3.3	3.5	3.4	3.4
105	TC	46.9	41.8	37.3	51.3	46.9	40.9	53.5	49.0	44.1
	SHC	16.2	22.0	27.7	19.8	27.0	34.6	22.5	32.6	41.7
	kW	3.7	3.7	3.7	3.8	3.8	3.6	3.8	3.7	3.7
115	TC	42.5	37.9	33.8	46.4	38.5	37.0	48.4	44.4	39.9
	SHC	14.7	19.9	25.1	17.9	20.4	31.3	20.3	29.5	37.8
	kW	4.1	4.1	4.0	4.1	4.2	4.0	4.2	4.1	4.1
125	TC	—	—	—	—	—	—	—	—	—
	SHC	—	—	—	—	—	—	—	—	—
	kW	—	—	—	—	—	—	—	—	—

50GEQN05 — Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — Ewb (°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 — cfm								
		1200	1600	2000	1200	1600	2000	1200	1600	2000
80	TC	16.4	19.5	21.9	17.6	19.2	20.4	18.6	18.9	19.1
	SHC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	kW	2.7	2.6	2.6	2.4	2.7	2.6	2.8	2.7	2.6
75	TC	16.1	20.1	23.1	17.3	19.8	21.8	18.3	19.6	20.6
	SHC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	kW	2.8	2.7	2.6	2.4	2.7	2.6	2.8	2.7	2.7
70	TC	15.9	20.7	24.3	17.0	20.5	23.1	18.0	20.3	22.1
	SHC	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	kW	2.8	2.7	2.6	2.5	2.7	2.6	2.9	2.8	2.7
60	TC	15.5	21.9	26.7	16.5	21.8	25.8	17.3	21.8	25.1
	SHC	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	kW	2.8	2.7	2.6	2.5	2.8	2.7	2.9	2.8	2.7
50	TC	15.0	23.0	29.1	15.9	23.1	28.6	16.7	23.2	28.1
	SHC	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
	kW	2.8	2.7	2.7	2.6	2.8	2.7	2.9	2.8	2.8
40	TC	14.6	24.2	31.5	15.4	24.4	31.3	16.1	24.6	31.1
	SHC	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	kW	2.8	2.8	2.7	2.7	2.8	2.8	2.9	2.9	2.8

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

Performance data (cont)

50GEQ*06 High Stage Cooling Capacities[a,b]

50GEQ*06				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		
1500 cfm	EA (wb)	58	TC	54.3	54.3	61.4	51.8	51.8	58.7	49.1	49.1	55.6	46.1	46.1	52.3	42.9	42.9	48.7		
			SHC	47.2	54.3	61.4	45.0	51.8	58.7	42.5	49.1	55.6	39.9	46.1	52.3	37.0	42.9	48.7		
		62	TC	56.7	56.7	59.2	53.5	53.5	57.5	50.1	50.1	55.7	46.5	46.5	53.7	42.9	42.9	50.8		
			SHC	42.9	51.1	59.2	41.2	49.4	57.5	39.4	47.6	55.7	37.5	45.6	53.7	35.1	42.9	50.8		
		67	TC	62.7	62.7	62.7	59.3	59.3	59.3	55.5	55.5	55.5	51.5	51.5	51.5	47.2	47.2	47.2		
			SHC	35.0	43.2	51.4	33.3	41.5	49.7	31.5	39.7	47.9	29.6	37.8	45.9	27.6	35.8	44.0		
		72	TC	69.3	69.3	69.3	65.5	65.5	65.5	61.5	61.5	61.5	57.1	57.1	57.1	52.4	52.4	52.4		
			SHC	27.0	35.2	43.4	25.2	33.4	41.7	23.4	31.6	39.8	21.5	29.7	37.9	19.5	27.7	35.9		
		76	TC	—	74.9	74.9	—	70.9	70.9	—	66.5	66.5	—	61.8	61.8	—	56.9	56.9		
			SHC	—	28.6	36.8	—	26.9	35.1	—	25.0	33.3	—	23.1	31.4	—	21.1	29.4		
1750 cfm	EA (wb)	58	TC	57.7	57.7	65.3	55.0	55.0	62.2	52.1	52.1	59.0	48.8	48.8	55.4	45.3	45.3	51.5		
			SHC	50.2	57.7	65.3	47.8	55.0	62.2	45.1	52.1	59.0	42.3	48.8	55.4	39.2	45.3	51.5		
		62	TC	58.8	58.8	65.7	55.5	55.5	63.9	52.1	52.1	61.4	48.9	48.9	57.7	45.4	45.4	53.6		
			SHC	46.8	56.3	65.7	45.0	54.5	63.9	42.9	52.1	61.4	40.1	48.9	57.7	37.2	45.4	53.6		
		67	TC	64.8	64.8	64.8	61.1	61.1	61.1	57.2	57.2	57.2	53.0	53.0	53.0	48.5	48.5	49.0		
			SHC	37.5	47.1	56.6	35.8	45.3	54.8	33.9	43.5	53.0	32.0	41.5	51.0	30.0	39.5	49.0		
		72	TC	71.4	71.4	71.4	67.4	67.4	67.4	63.2	63.2	63.2	58.6	58.6	58.6	53.7	53.7	53.7		
			SHC	28.0	37.6	47.1	26.2	35.8	45.4	24.4	34.0	43.5	22.5	32.0	41.6	20.4	30.0	39.5		
		76	TC	—	77.1	77.1	—	72.8	72.8	—	68.3	68.3	—	63.4	63.4	—	58.2	58.2		
			SHC	—	29.8	39.5	—	28.1	37.7	—	26.2	35.9	—	24.3	33.9	—	22.3	31.9		
2000 cfm	EA (wb)	58	TC	60.6	60.6	68.5	57.7	57.7	65.2	54.5	54.5	61.7	51.1	51.1	57.9	47.4	47.4	53.8		
			SHC	52.8	60.6	68.5	50.2	57.7	65.2	47.4	54.5	61.7	44.3	51.1	57.9	41.0	47.4	53.8		
		62	TC	60.7	60.7	71.2	57.8	57.8	67.9	54.6	54.6	64.2	51.2	51.2	60.3	47.5	47.5	56.0		
			SHC	50.2	60.7	71.2	47.7	57.8	67.9	45.0	54.6	64.2	42.1	51.2	60.3	38.9	47.5	56.0		
		67	TC	66.3	66.3	66.3	62.5	62.5	62.5	58.5	58.5	58.5	54.1	54.1	56.0	49.5	49.5	54.0		
			SHC	39.9	50.8	61.6	38.2	49.0	59.9	36.3	47.2	58.0	34.4	45.2	56.0	32.4	43.2	54.0		
		72	TC	73.1	73.1	73.1	68.9	68.9	68.9	64.5	64.5	64.5	59.7	59.7	59.7	54.7	54.7	54.7		
			SHC	29.0	39.9	50.8	27.2	38.1	49.0	25.3	36.2	47.1	23.4	34.2	45.1	21.3	32.2	43.1		
		76	TC	—	78.8	78.8	—	74.3	74.3	—	69.6	69.6	—	64.5	64.5	—	59.2	59.2		
			SHC	—	31.0	42.0	—	29.2	40.2	—	27.4	38.4	—	25.4	36.4	—	23.3	34.3		
2250 cfm	EA (wb)	58	TC	63.1	63.1	71.3	60.0	60.0	67.8	56.7	56.7	64.1	53.1	53.1	60.1	49.2	49.2	55.8		
			SHC	55.0	63.1	71.3	52.2	60.0	67.8	49.2	56.7	64.1	46.0	53.1	60.1	42.6	49.2	55.8		
		62	TC	63.2	63.2	74.1	60.1	60.1	70.5	56.8	56.8	66.7	53.1	53.1	62.5	49.2	49.2	58.1		
			SHC	52.3	63.2	74.1	49.7	60.1	70.5	46.8	56.8	66.7	43.7	53.1	62.5	40.4	49.2	58.1		
		67	TC	67.6	67.6	67.6	63.7	63.7	64.8	59.5	59.5	62.9	55.0	55.0	60.9	50.3	50.3	58.8		
			SHC	42.3	54.4	66.6	40.5	52.7	64.8	38.7	50.8	62.9	36.7	48.8	60.9	34.7	46.7	58.8		
		72	TC	74.4	74.4	74.4	70.1	70.1	70.1	65.6	65.6	65.6	60.7	60.7	60.7	55.5	55.5	55.5		
			SHC	29.9	42.1	54.3	28.1	40.3	52.5	26.2	38.4	50.6	24.2	36.4	48.6	22.2	34.4	46.6		
		76	TC	—	80.1	80.1	—	75.6	75.6	—	70.7	70.7	—	65.5	65.5	—	60.1	60.1		
			SHC	—	32.0	44.4	—	30.2	42.5	—	28.3	40.6	—	26.3	38.6	—	24.3	36.6		
2500 cfm	EA (wb)	58	TC	65.3	65.3	73.7	62.0	62.0	70.1	58.5	58.5	66.2	54.8	54.8	62.0	50.7	50.7	57.5		
			SHC	56.9	65.3	73.7	54.0	62.0	70.1	50.9	58.5	66.2	47.5	54.8	62.0	44.0	50.7	57.5		
		62	TC	65.3	65.3	76.6	62.1	62.1	72.8	58.6	58.6	68.8	54.8	54.8	64.5	50.8	50.8	59.8		
			SHC	54.1	65.3	76.6	51.4	62.1	72.8	48.4	58.6	68.8	45.2	54.8	64.5	41.7	50.8	59.8		
		67	TC	68.7	68.7	71.5	64.7	64.7	69.7	60.4	60.4	67.7	55.9	55.9	65.6	51.6	51.6	61.1		
			SHC	44.6	58.1	71.5	42.8	56.2	69.7	41.0	54.3	67.7	39.0	52.3	65.6	36.0	48.5	61.1		
		72	TC	75.5	75.5	75.5	71.1	71.1	71.1	66.5	66.5	66.5	61.5	61.5	61.5	56.2	56.2	56.2		
			SHC	30.7	44.2	57.8	28.9	42.4	55.9	27.0	40.5	54.1	25.0	38.6	52.1	23.0	36.5	50.0		
		76	TC	—	81.2	81.2	—	76.6	76.6	—	71.7	71.7	—	66.3	66.3	—	60.8	60.8		
			SHC	—	33.0	46.6	—	31.1	44.8	—	29.2	42.9	—	27.2	40.9	—	25.2	38.8		

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.
b. Published capacity values are based on SEER2 static requirements.

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

Performance data (cont)

50GEQ*06 Low Stage Cooling Capacities[a,b]

50GEQ*06				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
1250 cfm	EA (wb)	58	TC	39.7	39.7	44.8	37.7	37.7	42.6	35.5	35.5	40.2	33.0	33.0	37.4	30.3	30.3	34.3
			SHC	34.5	39.7	44.8	32.8	37.7	42.6	30.8	35.5	40.2	28.6	33.0	37.4	26.2	30.3	34.3
		62	TC	40.0	40.0	46.1	37.8	37.8	44.4	35.6	35.6	41.8	33.1	33.1	39.0	30.3	30.3	35.7
			SHC	32.6	39.4	46.1	31.2	37.8	44.4	29.3	35.6	41.8	27.2	33.1	39.0	24.9	30.3	35.7
		67	TC	44.5	44.5	44.5	41.8	41.8	41.8	38.9	38.9	38.9	35.6	35.6	35.9	32.0	32.0	34.3
			SHC	26.3	33.1	39.9	25.1	31.9	38.7	23.8	30.6	37.3	22.3	29.1	35.9	20.8	27.5	34.3
		72	TC	49.6	49.6	49.6	46.7	46.7	46.7	43.6	43.6	43.6	40.1	40.1	40.1	36.1	36.1	36.1
			SHC	19.8	26.6	33.4	18.6	25.4	32.2	17.3	24.1	30.9	15.8	22.7	29.5	14.3	21.1	27.9
		76	TC	—	53.9	53.9	—	51.0	51.0	—	47.6	47.6	—	43.9	43.9	—	39.8	39.8
			SHC	—	21.3	28.2	—	20.1	27.0	—	18.8	25.7	—	17.4	24.3	—	15.9	22.8
1500 cfm	EA (wb)	58	TC	42.5	42.5	47.9	40.3	40.3	45.6	37.9	37.9	42.9	35.3	35.3	39.9	32.2	32.2	36.6
			SHC	37.0	42.5	47.9	35.1	40.3	45.6	33.0	37.9	42.9	30.6	35.3	39.9	27.9	32.2	36.6
		62	TC	42.5	42.5	49.8	40.4	40.4	47.4	38.0	38.0	44.6	35.3	35.3	41.5	32.3	32.3	38.0
			SHC	35.2	42.5	49.8	33.4	40.4	47.4	31.4	38.0	44.6	29.1	35.3	41.5	26.5	32.3	38.0
		67	TC	46.0	46.0	46.0	43.2	43.2	43.7	40.1	40.1	42.3	36.7	36.7	40.8	33.0	33.0	39.1
			SHC	28.7	36.8	44.9	27.4	35.6	43.7	26.1	34.2	42.3	24.6	32.7	40.8	23.1	31.1	39.1
		72	TC	51.1	51.1	51.1	48.2	48.2	48.2	44.9	44.9	44.9	41.2	41.2	41.2	37.1	37.1	37.1
			SHC	20.8	28.9	37.1	19.6	27.7	35.9	18.2	26.4	34.5	16.8	24.9	33.1	15.2	23.4	31.5
		76	TC	—	55.6	55.6	—	52.5	52.5	—	49.0	49.0	—	45.1	45.1	—	40.8	40.8
			SHC	—	22.5	30.8	—	21.3	29.6	—	20.0	28.2	—	18.6	26.8	—	17.0	25.2
1750 cfm	EA (wb)	58	TC	44.7	44.7	50.5	42.5	42.5	48.0	39.9	39.9	45.1	37.1	37.1	41.9	33.9	33.9	38.4
			SHC	39.0	44.7	50.5	37.0	42.5	48.0	34.7	39.9	45.1	32.2	37.1	41.9	29.4	33.9	38.4
		62	TC	44.8	44.8	52.5	42.5	42.5	49.8	40.0	40.0	46.9	37.1	37.1	43.6	33.9	33.9	39.9
			SHC	37.1	44.8	52.5	35.2	42.5	49.8	33.0	40.0	46.9	30.6	37.1	43.6	27.9	33.9	39.9
		67	TC	47.1	47.1	49.8	44.3	44.3	48.5	41.1	41.1	47.1	37.6	37.6	45.5	34.3	34.3	41.5
			SHC	31.0	40.4	49.8	29.7	39.1	48.5	28.4	37.7	47.1	26.9	36.2	45.5	24.4	32.9	41.5
		72	TC	52.3	52.3	52.3	49.3	49.3	49.3	45.9	45.9	45.9	42.0	42.0	42.0	37.8	37.8	37.8
			SHC	21.7	31.2	40.6	20.5	29.9	39.4	19.1	28.6	38.1	17.7	27.1	36.6	16.1	25.6	35.1
		76	TC	—	56.8	56.8	—	53.6	53.6	—	50.0	50.0	—	46.0	46.0	—	—	—
			SHC	—	23.6	33.2	—	22.4	32.0	—	21.1	30.6	—	19.6	29.2	—	—	—
2000 cfm	EA (wb)	58	TC	46.6	46.6	52.6	44.2	44.2	49.9	41.5	41.5	46.9	38.6	38.6	43.6	35.2	35.2	39.8
			SHC	40.6	46.6	52.6	38.5	44.2	49.9	36.1	41.5	46.9	33.5	38.6	43.6	30.5	35.2	39.8
		62	TC	46.7	46.7	54.7	44.3	44.3	51.9	41.6	41.6	48.8	38.6	38.6	45.3	35.2	35.2	41.4
			SHC	38.7	46.7	54.7	36.7	44.3	51.9	34.4	41.6	48.8	31.9	38.6	45.3	29.0	35.2	41.4
		67	TC	48.1	48.1	54.5	45.1	45.1	53.1	41.9	41.9	51.6	38.9	38.9	47.7	35.3	35.3	44.6
			SHC	33.2	43.9	54.5	31.9	42.5	53.1	30.5	41.0	51.6	28.1	37.9	47.7	26.0	35.3	44.6
		72	TC	53.2	53.2	53.2	50.1	50.1	50.1	46.6	46.6	46.6	42.7	42.7	42.7	38.3	38.3	38.5
			SHC	22.5	33.3	44.1	21.3	32.1	42.9	20.0	30.7	41.5	18.5	29.3	40.1	17.0	27.7	38.5
		76	TC	—	57.8	57.8	—	54.5	54.5	—	50.8	50.8	—	—	—	—	—	—
			SHC	—	24.6	35.5	—	23.4	34.3	—	22.1	32.9	—	—	—	—	—	—
2250 cfm	EA (wb)	58	TC	48.2	48.2	54.4	45.8	45.8	51.6	42.9	42.9	48.5	39.8	39.8	45.0	36.3	36.3	41.1
			SHC	42.1	48.2	54.4	39.9	45.8	51.6	37.4	42.9	48.5	34.6	39.8	45.0	31.6	36.3	41.1
		62	TC	48.3	48.3	56.5	45.8	45.8	53.7	43.0	43.0	50.4	39.9	39.9	46.8	36.4	36.4	42.8
			SHC	40.0	48.3	56.5	37.9	45.8	53.7	35.6	43.0	50.4	32.9	39.9	46.8	30.0	36.4	42.8
		67	TC	48.9	48.9	58.9	46.2	46.2	56.3	43.2	43.2	53.5	39.9	39.9	50.3	36.4	36.4	46.0
			SHC	35.3	47.1	58.9	33.6	44.9	56.3	31.7	42.6	53.5	29.5	39.9	50.3	26.8	36.4	46.0
		72	TC	53.9	53.9	53.9	50.7	50.7	50.7	47.2	47.2	47.2	43.2	43.2	43.4	38.8	38.8	41.8
			SHC	23.3	35.4	47.5	22.1	34.2	46.2	20.8	32.8	44.9	19.4	31.4	43.4	17.8	29.8	41.8
		76	TC	—	58.5	58.5	—	55.2	55.2	—	—	—	—	—	—	—	—	—
			SHC	—	25.6	37.7	—	24.3	36.5	—	—	—	—	—	—	—	—	—

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.
b. Published capacity values are based on SEER2 static requirements.

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

Performance data (cont)

50GEQN06 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF (80°F db)								
		1500/0.04			2000 /0.07			2500/0.10		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	69.3	62.1	56.6	75.8	66.5	59.1	77.6	69.0	61.3
	SHC	22.1	31.7	41.4	26.9	40.2	48.2	29.1	44.7	56.0
	kW	3.4	3.3	3.3	3.4	3.7	3.4	3.4	3.4	3.4
85	TC	65.4	58.6	53.4	71.5	63.4	55.8	73.2	65.1	57.8
	SHC	20.8	29.9	39.1	25.4	37.4	45.4	27.5	42.2	52.9
	kW	3.8	3.7	3.6	3.8	3.8	3.7	3.8	3.8	3.7
95	TC	59.5	53.3	48.6	65.0	58.7	52.6	69.1	61.4	54.6
	SHC	18.9	27.2	35.5	23.1	33.9	42.9	25.9	39.8	49.9
	kW	4.2	4.1	4.0	4.2	4.2	4.1	4.2	4.2	4.1
105	TC	53.8	48.2	43.9	58.8	53.4	47.6	62.5	55.5	49.4
	SHC	17.1	24.6	32.2	20.9	30.5	38.8	23.4	36.0	45.1
	kW	4.7	4.5	4.4	4.6	4.7	4.6	4.7	4.6	4.6
115	TC	48.7	43.6	38.9	53.3	47.8	43.1	56.3	49.6	44.7
	SHC	15.5	22.3	29.1	18.9	26.8	35.1	21.2	32.6	40.8
	kW	5.1	5.0	4.9	5.1	5.3	5.0	5.1	5.1	5.0
125	TC	—	—	—	—	—	—	—	—	—
	SHC	—	—	—	—	—	—	—	—	—
	kW	—	—	—	—	—	—	—	—	—

48QE*N06 — Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — Ewb (°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 — cfm								
		1500	2000	2500	1500	2000	2500	1500	2000	2500
80	TC	17.5	19.9	21.7	18.2	20.6	22.5	18.8	21.2	23.1
	SHC	0.9	0.9	0.9	3.8	3.8	3.8	6.4	6.4	6.4
	kW	3.6	3.5	3.5	3.6	3.5	3.4	3.5	3.4	3.3
75	TC	18.3	20.5	22.3	19.0	21.3	23.0	19.5	21.9	23.7
	SHC	0.8	0.8	0.8	3.5	3.5	3.5	5.8	5.8	5.8
	kW	3.6	3.5	3.5	3.5	3.4	3.4	3.5	3.4	3.3
70	TC	19.0	21.2	22.9	19.7	21.9	23.6	20.3	22.5	24.3
	SHC	0.6	0.6	0.6	3.1	3.1	3.1	5.3	5.3	5.3
	kW	3.6	3.5	3.4	3.5	3.4	3.4	3.5	3.4	3.3
60	TC	20.5	22.5	24.0	21.2	23.2	24.8	21.8	23.8	25.4
	SHC	0.2	0.2	0.2	2.4	2.4	2.4	4.3	4.3	4.3
	kW	3.5	3.4	3.4	3.5	3.4	3.3	3.4	3.4	3.3
50	TC	22.0	23.8	25.2	22.7	24.5	25.9	23.3	25.2	26.6
	SHC	–0.1	–0.1	–0.1	1.7	1.7	1.7	3.3	3.3	3.3
	kW	3.4	3.4	3.3	3.4	3.3	3.3	3.4	3.3	3.3
40	TC	23.5	25.1	26.4	24.2	25.8	27.1	24.8	26.5	27.8
	SHC	–0.5	–0.5	–0.5	1.0	1.0	1.0	2.2	2.2	2.2
	kW	3.4	3.3	3.3	3.4	3.3	3.3	3.4	3.3	3.3

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

Performance data (cont)

50GEQ*04 Heating Capacities

RETURN AIR (°F db)	CFM (Standard Air)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db at 70% rh)								
			–10	0	10	17	30	40	47	50	60
55	900	Capacity	—	12.0	15.6	19.1	24.1	28.0	35.1	36.8	42.8
		Int. Cap.	—	11.1	14.3	17.4	21.1	28.0	35.1	36.8	42.8
	1200	Capacity	—	12.6	15.2	19.4	24.0	27.4	36.4	38.5	43.5
		Int. Cap.	—	11.6	13.9	17.6	21.1	27.4	36.4	38.5	43.5
	1500	Capacity	—	12.9	14.7	19.4	22.2	23.3	37.1	38.8	44.2
		Int. Cap.	—	11.8	13.5	17.7	19.4	23.3	37.1	38.8	44.2
70	900	Capacity	—	9.8	13.9	17.0	22.4	26.2	31.8	33.7	40.0
		Int. Cap.	—	9.0	12.8	15.5	19.6	26.2	31.8	33.7	40.0
	1200	Capacity	—	10.4	14.3	17.8	22.6	26.0	33.8	35.6	41.1
		Int. Cap.	—	9.6	13.1	16.3	19.8	26.0	33.8	35.6	41.1
	1500	Capacity	7.1	11.0	14.4	18.3	22.5	23.6	35.4	36.6	42.0
		Int. Cap.	6.5	10.1	13.2	16.7	19.7	23.6	35.4	36.6	42.0
80	900	Capacity	4.6	8.3	12.4	15.5	21.2	25.0	29.7	31.5	37.7
		Int. Cap.	4.2	7.6	11.4	14.1	18.6	25.0	29.7	31.5	37.7
	1200	Capacity	5.1	9.0	13.1	16.4	21.7	24.9	31.5	33.5	39.7
		Int. Cap.	4.7	8.2	12.0	14.9	19.0	24.9	31.5	33.5	39.7
	1500	Capacity	5.5	9.5	13.5	17.0	21.8	23.9	32.8	34.7	40.2
		Int. Cap.	5.1	8.7	12.4	15.5	19.1	23.9	32.8	34.7	40.2

LEGEND

— Indicates standard rating point

Capacity — Instantaneous Capacity (1000 Btuh) - includes indoor fan motor heat at AHRI static conditions
Int. Cap. — Integrated Capacity = instantaneous capacity minus the effects of frost on the OD coil and the heat required to defrost it
rh — Relative Humidity
db — Dry Bulb

50GEQ*05 Heating Capacities

RETURN AIR (°F db)	CFM (Standard Air)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db at 70% rh)								
			–10	0	10	17	30	40	47	50	60
55	1200	Capacity	—	18.2	23.0	27.1	35.1	40.2	45.6	47.7	55.5
		Int. Cap.	—	16.8	21.1	24.7	30.8	40.2	45.6	47.7	55.5
	1600	Capacity	—	19.1	23.0	27.8	32.3	42.0	47.7	49.6	56.9
		Int. Cap.	—	17.6	21.1	25.4	28.3	42.0	47.7	49.6	56.9
	2000	Capacity	—	19.3	21.2	26.5	29.3	43.3	48.6	50.4	57.1
		Int. Cap.	—	17.7	19.5	24.2	25.7	43.3	48.6	50.4	57.1
70	1200	Capacity	11.1	15.5	20.7	24.7	32.8	37.8	42.8	44.9	52.6
		Int. Cap.	10.2	14.3	19.0	22.5	28.7	37.8	42.8	44.9	52.6
	1600	Capacity	11.9	16.7	21.7	25.8	31.8	39.4	44.8	46.9	54.3
		Int. Cap.	11.0	15.4	19.9	23.5	27.8	39.4	44.8	46.9	54.3
	2000	Capacity	12.5	17.4	21.0	25.8	29.8	40.6	46.1	48.0	55.0
		Int. Cap.	11.6	16.0	19.3	23.5	26.1	40.6	46.1	48.0	55.0
80	1200	Capacity	9.3	13.8	19.3	23.4	31.2	36.1	41.0	43.2	50.7
		Int. Cap.	8.6	12.7	17.7	21.4	27.3	36.1	41.0	43.2	50.7
	1600	Capacity	10.1	14.7	20.2	24.3	31.1	37.7	42.9	45.0	52.5
		Int. Cap.	9.3	13.5	18.6	22.2	27.3	37.7	42.9	45.0	52.5
	2000	Capacity	10.7	15.4	20.8	25.1	29.4	39.0	44.4	46.4	53.4
		Int. Cap.	9.9	14.2	19.1	22.9	25.8	39.0	44.4	46.4	53.4

LEGEND

— Indicates standard rating point

Capacity — Instantaneous Capacity (1000 Btuh) - includes indoor fan motor heat at AHRI static conditions
Int. Cap. — Integrated Capacity = instantaneous capacity minus the effects of frost on the OD coil and the heat required to defrost it
rh — Relative Humidity
db — Dry Bulb

Performance data (cont)

50GEQ*06 Heating Capacities

RETURN AIR (°F db)	CFM (Standard Air)		TEMPERATURE AIR ENTERING OUTDOOR COIL (°F db at 70% rh)								
			–10	0	10	17	30	40	47	50	60
55	1500	Capacity	13.7	20.1	26.4	32.8	41.3	49.1	55.6	57.4	65.1
		Int. Cap.	12.7	18.5	24.2	29.9	36.2	49.1	55.6	57.4	65.1
	2000	Capacity	14.9	21.4	26.5	33.9	42.0	51.5	57.0	58.7	66.5
		Int. Cap.	13.8	19.7	24.3	30.9	36.8	51.5	57.0	58.7	66.5
	2500	Capacity	16.1	22.1	24.9	34.7	42.1	52.8	58.2	59.8	67.5
		Int. Cap.	14.9	20.4	22.9	31.6	36.8	52.8	58.2	59.8	67.5
70	1500	Capacity	10.3	16.6	23.6	29.2	38.6	45.8	51.8	54.1	62.5
		Int. Cap.	9.5	15.2	21.7	26.7	33.8	45.8	51.8	54.1	62.5
	2000	Capacity	11.4	17.9	24.6	31.0	39.6	47.8	54.5	56.5	64.1
		Int. Cap.	10.6	16.5	22.6	28.2	34.7	47.8	54.5	56.5	64.1
	2500	Capacity	12.6	19.2	25.2	32.5	40.1	49.7	56.1	57.8	65.3
		Int. Cap.	11.7	17.7	23.1	29.6	35.2	49.7	56.1	57.8	65.3
80	1500	Capacity	8.0	14.3	21.0	27.0	37.2	43.7	49.3	51.4	60.3
		Int. Cap.	7.4	13.2	19.3	24.6	32.6	43.7	49.3	51.4	60.3
	2000	Capacity	9.1	15.6	22.6	28.6	37.9	45.7	51.7	54.0	62.5
		Int. Cap.	8.4	14.4	20.8	26.1	33.2	45.7	51.7	54.0	62.5
	2500	Capacity	10.3	16.9	24.0	30.2	38.8	47.4	53.9	56.1	63.8
		Int. Cap.	9.5	15.6	22.0	27.5	34.0	47.4	53.9	56.1	63.8

LEGEND

— Indicates standard rating point

Capacity — Instantaneous Capacity (1000 Btuh) - includes indoor fan motor heat at AHRI static conditions

Int. Cap. — Integrated Capacity = instantaneous capacity minus the effects of frost on the OD coil and the heat required to defrost it

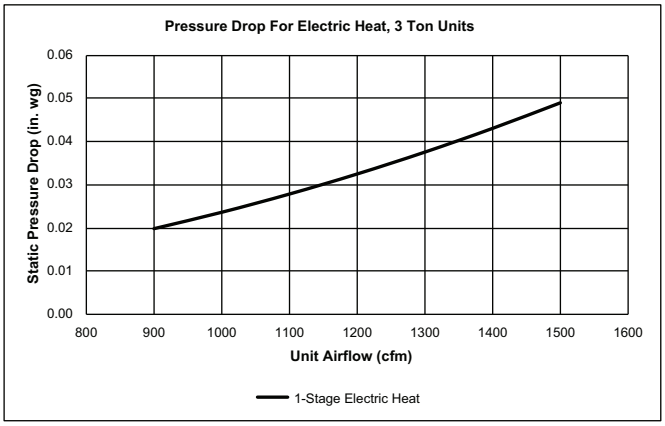
rh — Relative Humidity

db — Dry Bulb

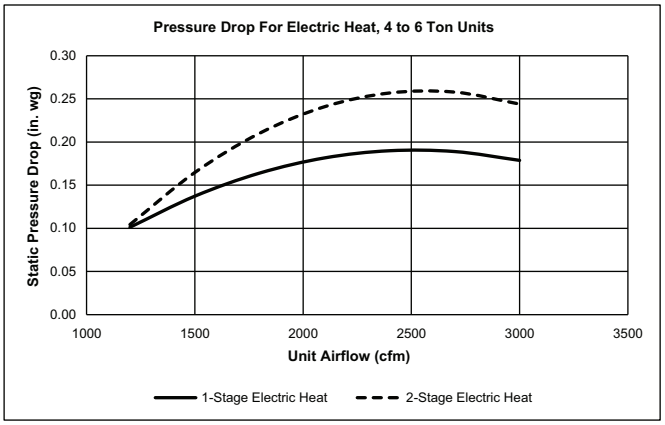
Performance data (cont)

Pressure Drops for Electric Heating Units

Pressure Drop for Electric Heat 3 to 5 Ton Units — 1 Stage Heat



Pressure Drop for Electric Heat 4 to 5 Ton Units — 1 and 2 Stage Heat



Performance data (cont)

Field-Installed Accessory Electric Heater Data

UNIT	V-Ph-Hz	HEATER MODEL NUMBER[a]	NUMBER OF STAGES
50GEQ*04	208/230	CRHEATER323A00	1
		CRHEATER324A00	1
		CRHEATER325A00	1
		CRHEATER326A00	1
		CRHEATER327A00	2
		CRHEATER328A00	1
	460	CRHEATER333A00	1
		CRHEATER334A00	1
		CRHEATER335A00	1
		CRHEATER336A00	1
	575	CRHEATER339A00	1
		CRHEATER340A00	1
50GEQ*05	208/230	CRHEATER323A00	1
		CRHEATER324A00	1
		CRHEATER325A00	1
		CRHEATER327A00	2
		CRHEATER328A00	1
		CRHEATER329A00	2
		CRHEATER330A00[b]	2
		CRHEATER331A00[c]	2
	460	CRHEATER333A00	1
		CRHEATER335A00	1
		CRHEATER336A00	1
		CRHEATER337A00	2
	575	CRHEATER339A00	1
		CRHEATER340A00	1
50GEQ*06	208/230	CRHEATER324A00	1
		CRHEATER325A00	1
		CRHEATER326A00	1
		CRHEATER327A00	2
		CRHEATER328A00	1
		CRHEATER329A00	2
		CRHEATER331A00	2
		CRHEATER332A00	2
	460	CRHEATER333A00	1
		CRHEATER335A00	1
		CRHEATER336A00	1
		CRHEATER337A00	2
		CRHEATER338A00	2
	575	CRHEATER340A00	1
		CRHEATER341A00	2

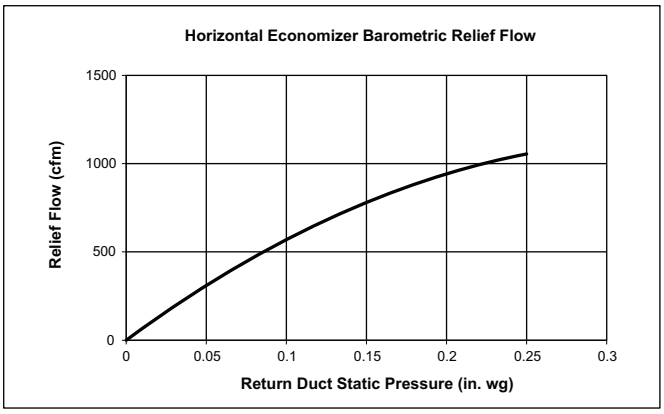
NOTE(S):

a. Check heater nameplate for model number.
b. Do not use with size 05 horizontal supply duct configuration units.
c. Do not use with size 05 vertical supply duct configuration units.

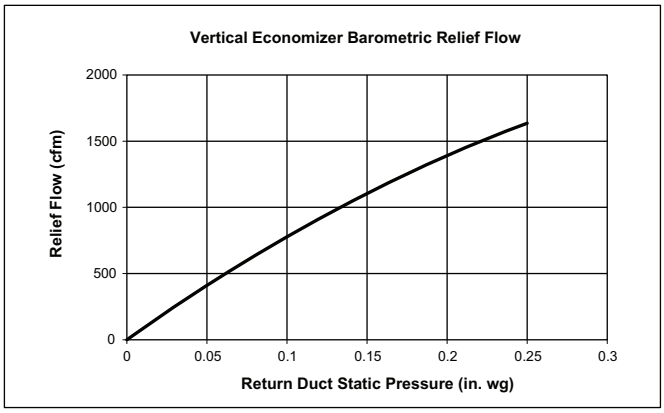
Performance data (cont)

Economizer Barometric Relief and Static Pressure

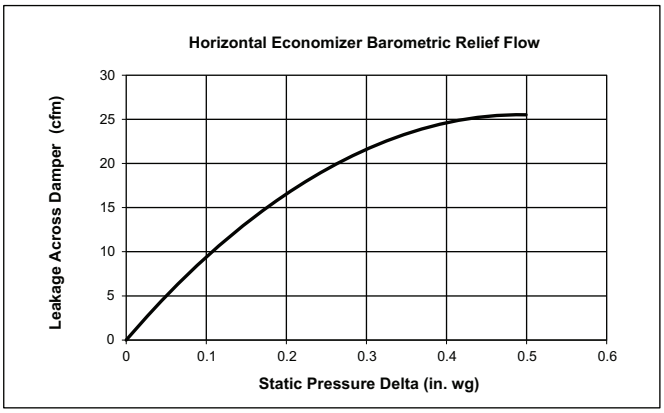
Horizontal Economizer Barometric Relief



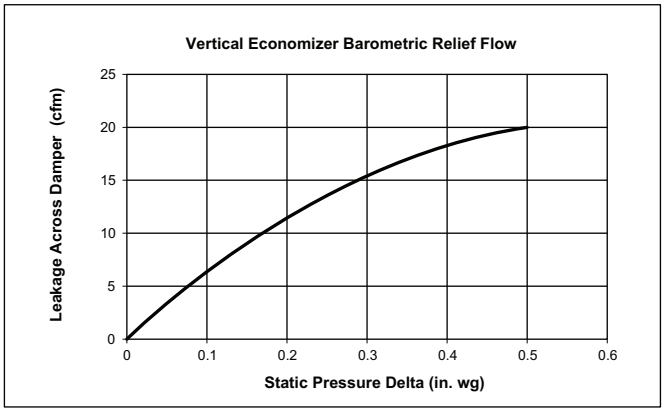
Vertical Economizer Barometric Relief



Horizontal Economizer Damper Leakage



Vertical Economizer Damper Leakage



MERV-13 filters pressure drop

NOTE: For factory-installed MERV-13 filters, no additional pressure drop adjustments are necessary. The standard fan tables accommodate usage.

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 two motors would work, Carrier recommends the lower horsepower option.
6. For information on the electrical properties of Carrier motors, please see the Electrical Data section of this book.
7. For more information on the performance limits of Carrier 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 (three-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements.

Fan data (cont)

50GEQM04 Single Phase — 3 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
900	1059	0.08	1325	0.16	1541	0.25	1718	0.35	1870	0.46
975	1102	0.09	1356	0.17	1572	0.27	1751	0.37	1906	0.48
1050	1149	0.11	1388	0.19	1602	0.29	1783	0.39	1940	0.51
1125	1198	0.12	1422	0.20	1632	0.30	1814	0.42	1973	0.53
1200	1250	0.14	1459	0.22	1662	0.32	1844	0.44	2005	0.56
1275	1303	0.15	1499	0.23	1695	0.34	1874	0.46	2035	0.59
1350	1357	0.17	1542	0.26	1728	0.36	1905	0.48	2065	0.61
1425	1413	0.20	1587	0.28	1764	0.38	1936	0.51	2095	0.64
1500	1469	0.22	1635	0.30	1803	0.41	1969	0.53	2126	0.67

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	2006	0.56	2129	0.67	2244	0.79	2352	0.91	2453	1.03
975	2043	0.59	2168	0.71	2283	0.83	2391	0.95	—	—
1050	2079	0.63	2205	0.75	2322	0.87	2430	1.00	—	—
1125	2114	0.66	2242	0.78	2359	0.91	2468	1.05	—	—
1200	2147	0.69	2277	0.82	2395	0.96	—	—	—	—
1275	2180	0.72	2310	0.86	2430	1.00	—	—	—	—
1350	2211	0.75	2343	0.90	2464	1.04	—	—	—	—
1425	2241	0.78	2374	0.93	—	—	—	—	—	—
1500	2271	0.82	2405	0.97	—	—	—	—	—	—

Standard/Medium Static 1060-2190 rpm, 0.71 max bhp

High Static 1060-2490 rpm, 1.07 max bhp

50GEQM04 Single Phase — Standard/Medium Static — 3 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
900	1060	4.8	1325	6.1	1541	7.0	1718	7.8	1871	8.5
975	1103	5.0	1355	6.2	1572	7.2	1752	8.0	1906	8.7
1050	1150	5.3	1387	6.3	1602	7.3	1784	8.1	1941	8.9
1125	1198	5.5	1422	6.5	1632	7.5	1815	8.3	1974	9.0
1200	1249	5.7	1459	6.7	1662	7.6	1845	8.4	2005	9.2
1275	1303	5.9	1499	6.8	1694	7.7	1874	8.6	2036	9.3
1350	1357	6.2	1542	7.0	1728	7.9	1905	8.7	2066	9.4
1425	1413	6.5	1587	7.2	1765	8.1	1936	8.8	2095	9.6
1500	1469	6.7	1635	7.5	1803	8.2	1969	9.0	2126	9.7

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
900	2006	9.2	2130	9.7	—	—	—	—	—	—
975	2044	9.3	2168	9.9	—	—	—	—	—	—
1050	2080	9.5	—	—	—	—	—	—	—	—
1125	2115	9.7	—	—	—	—	—	—	—	—
1200	2148	9.8	—	—	—	—	—	—	—	—
1275	2180	10.0	—	—	—	—	—	—	—	—
1350	—	—	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Standard/Medium Static 1060-2190 rpm

Fan data (cont)

50GEQM04 Single Phase — High Static — 3 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
900	1060	4.3	1325	5.3	1541	6.2	1718	6.9	1871	7.5
975	1103	4.4	1355	5.4	1572	6.3	1752	7.0	1906	7.7
1050	1150	4.6	1387	5.6	1602	6.4	1784	7.2	1941	7.8
1125	1198	4.8	1422	5.7	1632	6.6	1815	7.3	1974	7.9
1200	1249	5.0	1459	5.9	1662	6.7	1845	7.4	2005	8.1
1275	1303	5.2	1499	6.0	1694	6.8	1874	7.5	2036	8.2
1350	1357	5.4	1542	6.2	1728	6.9	1905	7.7	2066	8.3
1425	1413	5.7	1587	6.4	1765	7.1	1936	7.8	2095	8.4
1500	1469	5.9	1635	6.6	1803	7.2	1969	7.9	2126	8.5

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
900	2006	8.1	2130	8.6	2244	9.0	2352	9.4	2453	9.9
975	2044	8.2	2168	8.7	2283	9.2	2391	9.6	—	—
1050	2080	8.4	2206	8.9	2322	9.3	2430	9.8	—	—
1125	2115	8.5	2242	9.0	2359	9.5	2468	9.9	—	—
1200	2148	8.6	2277	9.1	2396	9.6	—	—	—	—
1275	2180	8.8	2311	9.3	2431	9.8	—	—	—	—
1350	2211	8.9	2343	9.4	2465	9.9	—	—	—	—
1425	2241	9.0	2375	9.5	—	—	—	—	—	—
1500	2271	9.1	2405	9.7	—	—	—	—	—	—

High Static 1060-2490 rpm

Fan data (cont)

50GEQM04 Three Phase — 3 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
900	1058	0.08	1325	0.16	1541	0.25	1718	0.35	1870	0.46
975	1102	0.09	1356	0.17	1572	0.27	1751	0.37	1906	0.48
1050	1149	0.11	1388	0.19	1602	0.29	1783	0.40	1940	0.51
1125	1198	0.12	1422	0.20	1632	0.30	1814	0.42	1973	0.54
1200	1250	0.14	1459	0.22	1662	0.32	1844	0.44	2005	0.56
1275	1303	0.15	1499	0.23	1695	0.34	1874	0.46	2035	0.59
1350	1357	0.17	1542	0.26	1728	0.36	1905	0.48	2065	0.61
1425	1413	0.20	1587	0.28	1764	0.38	1936	0.51	2095	0.64
1500	1469	0.22	1635	0.30	1803	0.41	1969	0.53	2126	0.67

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	2006	0.56	2129	0.67	2244	0.79	2352	0.91	2453	1.03
975	2043	0.59	2168	0.71	2283	0.83	2391	0.95	—	—
1050	2079	0.63	2205	0.75	2322	0.87	2430	1.00	—	—
1125	2114	0.66	2242	0.78	2359	0.92	2468	1.05	—	—
1200	2147	0.69	2277	0.82	2395	0.96	—	—	—	—
1275	2180	0.72	2310	0.86	2430	1.00	—	—	—	—
1350	2211	0.75	2343	0.90	2464	1.04	—	—	—	—
1425	2241	0.78	2374	0.93	—	—	—	—	—	—
1500	2271	0.82	2405	0.97	—	—	—	—	—	—

Standard/Medium Static 1060-2190 rpm, 0.71 max bhp

High Static 1060-2490 rpm, 1.07 max bhp

50GEQM04 Three Phase — Standard/Medium Static — 3 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
900	1060	4.8	1325	6.1	1541	7.0	1718	7.8	1871	8.5
975	1103	5.0	1355	6.2	1572	7.2	1752	8.0	1906	8.7
1050	1150	5.3	1387	6.3	1602	7.3	1784	8.1	1941	8.9
1125	1198	5.5	1422	6.5	1632	7.5	1815	8.3	1974	9.0
1200	1249	5.7	1460	6.7	1662	7.6	1845	8.4	2005	9.2
1275	1303	5.9	1499	6.8	1694	7.7	1874	8.6	2036	9.3
1350	1357	6.2	1542	7.0	1728	7.9	1905	8.7	2066	9.4
1425	1413	6.5	1587	7.2	1765	8.1	1936	8.8	2095	9.6
1500	1469	6.7	1635	7.5	1803	8.2	1969	9.0	2126	9.7

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
900	2006	9.2	2130	9.7	—	—	—	—	—	—
975	2044	9.3	2169	9.9	—	—	—	—	—	—
1050	2080	9.5	—	—	—	—	—	—	—	—
1125	2115	9.7	—	—	—	—	—	—	—	—
1200	2148	9.8	—	—	—	—	—	—	—	—
1275	2180	10.0	—	—	—	—	—	—	—	—
1350	—	—	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Standard/Medium Static 1060-2190 rpm

Fan data (cont)

50GEQM04 Three Phase — High Static — 3 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
900	1060	4.3	1325	5.3	1541	6.2	1718	6.9	1871	7.5
975	1103	4.4	1355	5.4	1572	6.3	1752	7.0	1906	7.7
1050	1150	4.6	1387	5.6	1602	6.4	1784	7.2	1941	7.8
1125	1198	4.8	1422	5.7	1632	6.6	1815	7.3	1974	7.9
1200	1249	5.0	1460	5.9	1662	6.7	1845	7.4	2005	8.1
1275	1303	5.2	1499	6.0	1694	6.8	1874	7.5	2036	8.2
1350	1357	5.4	1542	6.2	1728	6.9	1905	7.7	2066	8.3
1425	1413	5.7	1587	6.4	1765	7.1	1936	7.8	2095	8.4
1500	1469	5.9	1635	6.6	1803	7.2	1969	7.9	2126	8.5

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
900	2006	8.1	2130	8.6	2245	9.0	2352	9.4	2454	9.9
975	2044	8.2	2169	8.7	2284	9.2	2391	9.6	—	—
1050	2080	8.4	2206	8.9	2322	9.3	2430	9.8	—	—
1125	2115	8.5	2242	9.0	2360	9.5	2469	9.9	—	—
1200	2148	8.6	2277	9.1	2396	9.6	—	—	—	—
1275	2180	8.8	2311	9.3	2431	9.8	—	—	—	—
1350	2211	8.9	2343	9.4	2465	9.9	—	—	—	—
1425	2241	9.0	2375	9.5	—	—	—	—	—	—
1500	2271	9.1	2405	9.7	—	—	—	—	—	—

High Static 1060-2490 rpm

Fan data (cont)

50GEQM05 Single Phase — 4 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
1200	1048	0.12	1251	0.21	1431	0.32	1590	0.43	1735	0.56
1300	1102	0.14	1293	0.23	1467	0.34	1622	0.46	1765	0.59
1400	1158	0.17	1337	0.26	1505	0.36	1657	0.49	1796	0.62
1500	1217	0.19	1383	0.28	1545	0.39	1693	0.52	1830	0.65
1600	1277	0.22	1432	0.31	1587	0.42	1731	0.55	1865	0.69
1700	1340	0.25	1483	0.34	1631	0.46	1771	0.59	1902	0.73
1800	1404	0.29	1536	0.38	1677	0.50	1812	0.63	1940	0.77
1900	1469	0.33	1592	0.42	1724	0.54	1855	0.67	1980	0.81
2000	1535	0.38	1649	0.47	1774	0.58	1900	0.72	2021	0.86

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1869	0.70	1994	0.86	2111	1.02	2221	1.18	2324	1.35
1300	1897	0.73	2020	0.89	2136	1.05	2246	1.22	2350	1.39
1400	1926	0.76	2048	0.92	2162	1.08	2271	1.25	2375	1.43
1500	1957	0.80	2077	0.95	2190	1.12	2298	1.29	2400	1.47
1600	1990	0.84	2107	0.99	2219	1.16	2325	1.33	2427	1.52
1700	2024	0.88	2140	1.04	2250	1.20	2354	1.38	2455	1.56
1800	2060	0.92	2174	1.08	2282	1.25	2385	1.43	—	—
1900	2097	0.97	2209	1.13	2315	1.30	2417	1.48	—	—
2000	2136	1.02	2246	1.19	2350	1.36	2451	1.54	—	—

Standard/Medium Static 1095-2170 rpm, 1.06 max bhp

High Static 1095-2460 rpm, 1.53 max bhp

50GEQM05 Single Phase — Standard/Medium Static — 4 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
1200	1047	4.8	1251	5.8	1431	6.6	1590	7.3	1735	8.0
1300	1101	5.1	1293	6.0	1467	6.8	1622	7.5	1765	8.1
1400	1158	5.3	1337	6.2	1505	6.9	1657	7.6	1796	8.3
1500	1217	5.6	1383	6.4	1545	7.1	1693	7.8	1830	8.4
1600	1278	5.9	1432	6.6	1587	7.3	1731	8.0	1865	8.6
1700	1340	6.2	1483	6.8	1631	7.5	1771	8.2	1902	8.8
1800	1404	6.5	1536	7.1	1677	7.7	1812	8.4	1940	8.9
1900	1469	6.8	1592	7.3	1724	7.9	1855	8.5	1980	9.1
2000	1535	7.1	1649	7.6	1774	8.2	1900	8.8	2021	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
1200	1869	8.6	1994	9.2	2111	9.7	—	—	—	—
1300	1897	8.7	2020	9.3	2136	9.8	—	—	—	—
1400	1926	8.9	2047	9.4	2162	10.0	—	—	—	—
1500	1957	9.0	2077	9.6	—	—	—	—	—	—
1600	1990	9.2	2107	9.7	—	—	—	—	—	—
1700	2024	9.3	2140	9.9	—	—	—	—	—	—
1800	2060	9.5	—	—	—	—	—	—	—	—
1900	2097	9.7	—	—	—	—	—	—	—	—
2000	2136	9.8	—	—	—	—	—	—	—	—

Standard/Medium Static 1094-2170 rpm

Fan data (cont)

50GEQM05 Single Phase — High Static — 4 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
1200	1047	4.3	1251	5.1	1431	5.8	1590	6.5	1735	7.1
1300	1101	4.5	1293	5.3	1467	6.0	1622	6.6	1765	7.2
1400	1158	4.7	1337	5.4	1505	6.1	1657	6.7	1796	7.3
1500	1217	4.9	1383	5.6	1545	6.3	1693	6.9	1830	7.4
1600	1278	5.2	1432	5.8	1587	6.5	1731	7.0	1865	7.6
1700	1340	5.4	1483	6.0	1631	6.6	1771	7.2	1902	7.7
1800	1404	5.7	1536	6.2	1677	6.8	1812	7.4	1940	7.9
1900	1469	6.0	1592	6.5	1724	7.0	1855	7.5	1980	8.0
2000	1535	6.2	1649	6.7	1774	7.2	1900	7.7	2021	8.2

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
1200	1869	7.6	1994	8.1	2111	8.6	2221	9.0	2324	9.4
1300	1897	7.7	2020	8.2	2136	8.7	2246	9.1	2350	9.6
1400	1926	7.8	2047	8.3	2162	8.8	2271	9.2	2375	9.7
1500	1957	8.0	2077	8.4	2190	8.9	2297	9.3	2400	9.8
1600	1990	8.1	2107	8.6	2219	9.0	2325	9.5	2427	9.9
1700	2024	8.2	2140	8.7	2249	9.1	2354	9.6	2455	10.0
1800	2060	8.4	2174	8.8	2282	9.3	2385	9.7	—	—
1900	2097	8.5	2209	9.0	2315	9.4	2417	9.8	—	—
2000	2136	8.7	2246	9.1	2350	9.6	2450	10.0	—	—

High Static 1094-2460 rpm

Fan data (cont)

50GEQM05 Three Phase — 4 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
1200	1047	0.12	1252	0.21	1431	0.32	1590	0.43	1735	0.56
1300	1102	0.14	1293	0.23	1467	0.34	1622	0.46	1765	0.59
1400	1158	0.17	1337	0.26	1505	0.36	1657	0.49	1796	0.62
1500	1217	0.19	1383	0.28	1545	0.39	1693	0.52	1830	0.65
1600	1278	0.22	1432	0.31	1587	0.42	1732	0.55	1865	0.69
1700	1341	0.25	1483	0.34	1631	0.46	1771	0.59	1902	0.73
1800	1404	0.29	1536	0.38	1676	0.50	1813	0.63	1940	0.77
1900	1470	0.33	1592	0.42	1724	0.54	1855	0.67	1980	0.81
2000	1536	0.38	1649	0.47	1774	0.58	1900	0.72	2021	0.86

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1869	0.70	1994	0.86	2111	1.02	2221	1.18	2324	1.35
1300	1897	0.73	2020	0.89	2136	1.05	2246	1.22	2350	1.39
1400	1926	0.76	2047	0.92	2162	1.08	2271	1.25	2375	1.43
1500	1957	0.80	2077	0.95	2190	1.12	2297	1.29	2400	1.47
1600	1990	0.84	2107	0.99	2219	1.16	2325	1.33	2427	1.52
1700	2024	0.88	2140	1.04	2250	1.20	2354	1.38	2455	1.56
1800	2060	0.92	2174	1.08	2282	1.25	2385	1.43	2484	1.61
1900	2098	0.97	2209	1.13	2315	1.30	2417	1.48	2515	1.67
2000	2137	1.02	2246	1.19	2351	1.36	2451	1.54	2547	1.73

Standard/Medium Static 1094-2170 rpm, 1.06 max bhp

High Static 1094-2660 rpm, 1.96 max bhp

50GEQM05 Three Phase — Standard/Medium Static — 4 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
1200	1047	4.8	1251	5.8	1431	6.6	1590	7.3	1735	8.0
1300	1101	5.1	1293	6.0	1467	6.8	1622	7.5	1765	8.1
1400	1158	5.3	1337	6.2	1505	6.9	1657	7.6	1796	8.3
1500	1217	5.6	1383	6.4	1545	7.1	1693	7.8	1830	8.4
1600	1277	5.9	1432	6.6	1587	7.3	1731	8.0	1865	8.6
1700	1340	6.2	1483	6.8	1631	7.5	1771	8.2	1902	8.8
1800	1404	6.5	1536	7.1	1677	7.7	1812	8.4	1940	8.9
1900	1469	6.8	1592	7.3	1724	7.9	1855	8.5	1980	9.1
2000	1535	7.1	1649	7.6	1774	8.2	1900	8.8	2021	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
1200	1869	8.6	1994	9.2	2111	9.7	—	—	—	—
1300	1897	8.7	2020	9.3	2136	9.8	—	—	—	—
1400	1926	8.9	2048	9.4	2162	10.0	—	—	—	—
1500	1957	9.0	2077	9.6	—	—	—	—	—	—
1600	1990	9.2	2107	9.7	—	—	—	—	—	—
1700	2024	9.3	2140	9.9	—	—	—	—	—	—
1800	2060	9.5	—	—	—	—	—	—	—	—
1900	2097	9.7	—	—	—	—	—	—	—	—
2000	2136	9.8	—	—	—	—	—	—	—	—

Standard/Medium Static 1094-2170 rpm

Fan data (cont)

50GEQM05 Three Phase — High Static — 4 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
1200	1047	3.9	1251	4.7	1431	5.4	1590	6.0	1735	6.5
1300	1101	4.1	1293	4.9	1467	5.5	1622	6.1	1765	6.6
1400	1158	4.4	1337	5.0	1505	5.7	1657	6.2	1796	6.8
1500	1217	4.6	1383	5.2	1545	5.8	1693	6.4	1830	6.9
1600	1277	4.8	1432	5.4	1587	6.0	1731	6.5	1865	7.0
1700	1340	5.0	1483	5.6	1631	6.1	1771	6.7	1902	7.2
1800	1404	5.3	1536	5.8	1677	6.3	1812	6.8	1940	7.3
1900	1469	5.5	1592	6.0	1724	6.5	1855	7.0	1980	7.4
2000	1535	5.8	1649	6.2	1774	6.7	1900	7.1	2021	7.6

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
1200	1869	7.0	1994	7.5	2111	7.9	2221	8.3	2324	8.7
1300	1897	7.1	2020	7.6	2136	8.0	2246	8.4	2350	8.8
1400	1926	7.2	2048	7.7	2162	8.1	2271	8.5	2375	8.9
1500	1957	7.4	2077	7.8	2190	8.2	2298	8.6	2400	9.0
1600	1990	7.5	2107	7.9	2219	8.3	2325	8.7	2427	9.1
1700	2024	7.6	2140	8.0	2250	8.5	2354	8.8	2455	9.2
1800	2060	7.7	2174	8.2	2282	8.6	2385	9.0	2484	9.3
1900	2097	7.9	2209	8.3	2315	8.7	2417	9.1	2515	9.5
2000	2136	8.0	2246	8.4	2350	8.8	2451	9.2	2547	9.6

High Static 1094-2660 rpm

Fan data (cont)

50GCQM06 Single Phase — 5 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
1500	1228	0.20	1394	0.29	1554	0.40	1701	0.53	1836	0.66
1625	1305	0.24	1457	0.33	1609	0.44	1750	0.57	1882	0.71
1750	1384	0.28	1523	0.37	1666	0.49	1802	0.62	1930	0.76
1875	1466	0.33	1592	0.43	1726	0.54	1857	0.67	1981	0.82
2000	1549	0.39	1664	0.48	1789	0.60	1914	0.74	2034	0.88
2125	1633	0.46	1739	0.55	1855	0.67	1974	0.81	2089	0.95
2250	1718	0.53	1816	0.63	1924	0.74	2036	0.88	2146	1.03
2375	1803	0.61	1894	0.71	1995	0.83	2100	0.97	2206	1.12
2500	1889	0.70	1974	0.80	2068	0.92	2167	1.06	2268	1.21

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	1961	0.80	2079	0.96	2191	1.12	2298	1.29	2399	1.47
1625	2004	0.85	2120	1.01	2229	1.18	2335	1.35	2434	1.53
1750	2050	0.91	2163	1.07	2270	1.24	2374	1.41	2472	1.60
1875	2098	0.97	2208	1.13	2314	1.31	2415	1.48	2511	1.67
2000	2148	1.04	2256	1.21	2359	1.38	2458	1.56	2553	1.75
2125	2200	1.11	2305	1.28	2407	1.46	2504	1.64	2597	1.83
2250	2254	1.20	2357	1.37	2456	1.55	2551	1.73	2643	1.93
2375	2310	1.28	2410	1.46	2507	1.64	2600	1.83	—	—
2500	2368	1.38	2465	1.56	2560	1.75	2651	1.94	—	—

Standard/Medium Static 1228-2390 rpm, 1.44 max bhp

High Static 1228-2660 rpm, 1.96 max bhp

50GCQM06 Single Phase — Standard/Medium Static — 5 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
1500	1228	5.1	1394	5.8	1554	6.5	1701	7.1	1835	7.7
1625	1305	5.5	1457	6.1	1609	6.7	1750	7.3	1881	7.9
1750	1384	5.8	1523	6.4	1666	7.0	1802	7.5	1930	8.1
1875	1466	6.1	1592	6.7	1726	7.2	1857	7.8	1981	8.3
2000	1549	6.5	1664	7.0	1789	7.5	1914	8.0	2034	8.5
2125	1633	6.8	1739	7.3	1855	7.8	1974	8.3	2089	8.7
2250	1718	7.2	1816	7.6	1924	8.1	2036	8.5	2146	9.0
2375	1803	7.5	1894	7.9	1995	8.3	2100	8.8	2206	9.2
2500	1890	7.9	1974	8.3	2068	8.7	2167	9.1	2268	9.5

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
1500	1961	8.2	2079	8.7	2191	9.2	2297	9.6	—	—
1625	2004	8.4	2120	8.9	2229	9.3	2334	9.8	—	—
1750	2050	8.6	2163	9.1	2270	9.5	2373	9.9	—	—
1875	2098	8.8	2208	9.2	2314	9.7	—	—	—	—
2000	2148	9.0	2256	9.4	2359	9.9	—	—	—	—
2125	2200	9.2	2305	9.6	—	—	—	—	—	—
2250	2254	9.4	2357	9.9	—	—	—	—	—	—
2375	2310	9.7	—	—	—	—	—	—	—	—
2500	2368	9.9	—	—	—	—	—	—	—	—

Standard/Medium Static 1228-2390 rpm

Fan data (cont)

50GCQM06 Single Phase — High Static — 5 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
1500	1228	4.6	1394	5.2	1554	5.8	1701	6.4	1836	6.9
1625	1305	4.9	1457	5.5	1609	6.0	1750	6.6	1881	7.1
1750	1384	5.2	1523	5.7	1666	6.3	1802	6.8	1930	7.3
1875	1466	5.5	1592	6.0	1726	6.5	1857	7.0	1981	7.4
2000	1549	5.8	1664	6.3	1789	6.7	1914	7.2	2034	7.6
2125	1633	6.1	1739	6.5	1855	7.0	1974	7.4	2089	7.9
2250	1718	6.5	1816	6.8	1924	7.2	2036	7.7	2146	8.1
2375	1803	6.8	1894	7.1	1995	7.5	2100	7.9	2206	8.3
2500	1890	7.1	1974	7.4	2068	7.8	2167	8.1	2268	8.5

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
1500	1961	7.4	2079	7.8	2191	8.2	2297	8.6	2399	9.0
1625	2004	7.5	2120	8.0	2229	8.4	2334	8.8	2434	9.2
1750	2050	7.7	2163	8.1	2270	8.5	2373	8.9	2472	9.3
1875	2098	7.9	2208	8.3	2314	8.7	2414	9.1	2511	9.4
2000	2148	8.1	2256	8.5	2359	8.9	2458	9.2	2553	9.6
2125	2200	8.3	2305	8.7	2407	9.0	2504	9.4	2597	9.8
2250	2254	8.5	2357	8.9	2456	9.2	2551	9.6	2643	9.9
2375	2310	8.7	2410	9.1	2507	9.4	2600	9.8	—	—
2500	2368	8.9	2465	9.3	2560	9.6	2651	10.0	—	—

High Static 1228-2660 rpm

Fan data (cont)

50GCQM06 Three Phase — 5 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
1500	1228	0.20	1394	0.29	1554	0.40	1701	0.53	1836	0.66
1625	1305	0.24	1457	0.33	1609	0.44	1750	0.57	1882	0.71
1750	1384	0.28	1523	0.37	1666	0.49	1802	0.62	1930	0.76
1875	1466	0.33	1592	0.43	1726	0.54	1857	0.67	1981	0.82
2000	1549	0.39	1664	0.48	1789	0.60	1914	0.74	2034	0.88
2125	1633	0.46	1739	0.55	1855	0.67	1974	0.81	2089	0.95
2250	1718	0.53	1816	0.63	1924	0.74	2036	0.88	2146	1.03
2375	1803	0.61	1894	0.71	1995	0.83	2100	0.97	2206	1.12
2500	1890	0.70	1974	0.80	2068	0.92	2167	1.06	2268	1.21

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	1961	0.80	2079	0.96	2191	1.12	2297	1.29	2399	1.47
1625	2004	0.85	2120	1.01	2230	1.18	2334	1.35	2434	1.53
1750	2050	0.91	2163	1.07	2270	1.24	2373	1.41	2472	1.60
1875	2098	0.97	2208	1.13	2314	1.31	2415	1.48	2511	1.67
2000	2148	1.04	2256	1.21	2359	1.38	2458	1.56	2553	1.75
2125	2200	1.11	2305	1.28	2407	1.46	2504	1.64	2597	1.83
2250	2254	1.20	2357	1.37	2456	1.55	2551	1.73	2643	1.93
2375	2310	1.28	2410	1.46	2507	1.64	2600	1.83	2690	2.03
2500	2368	1.38	2465	1.56	2560	1.75	2651	1.94	2739	2.14

Standard/Medium Static 1228-2390 rpm, 1.44 max bhp

High Static 1228-2836 rpm, 2.43 max bhp

50GCQM06 Three Phase — Standard/Medium Static — 5 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
1500	1227	5.1	1394	5.8	1554	6.5	1701	7.1	1835	7.7
1625	1305	5.5	1456	6.1	1609	6.7	1750	7.3	1881	7.9
1750	1384	5.8	1523	6.4	1666	7.0	1802	7.5	1930	8.1
1875	1466	6.1	1592	6.7	1726	7.2	1857	7.8	1981	8.3
2000	1549	6.5	1664	7.0	1789	7.5	1914	8.0	2034	8.5
2125	1633	6.8	1739	7.3	1855	7.8	1974	8.3	2089	8.7
2250	1718	7.2	1816	7.6	1924	8.1	2036	8.5	2146	9.0
2375	1803	7.5	1894	7.9	1995	8.3	2100	8.8	2206	9.2
2500	1890	7.9	1974	8.3	2068	8.7	2167	9.1	2268	9.5

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
1500	1961	8.2	2079	8.7	2191	9.2	2297	9.6	—	—
1625	2004	8.4	2120	8.9	2229	9.3	2334	9.8	—	—
1750	2050	8.6	2163	9.1	2270	9.5	2373	9.9	—	—
1875	2097	8.8	2208	9.2	2314	9.7	—	—	—	—
2000	2147	9.0	2256	9.4	2359	9.9	—	—	—	—
2125	2199	9.2	2305	9.6	—	—	—	—	—	—
2250	2254	9.4	2357	9.9	—	—	—	—	—	—
2375	2310	9.7	—	—	—	—	—	—	—	—
2500	2367	9.9	—	—	—	—	—	—	—	—

Standard/Medium Static 1228-2390 rpm

Fan data (cont)

50GCQM06 Three Phase — High Static — 5 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
1500	1227	4.3	1394	4.9	1554	5.5	1701	6.0	1835	6.5
1625	1305	4.6	1456	5.1	1609	5.7	1750	6.2	1881	6.6
1750	1384	4.9	1523	5.4	1666	5.9	1802	6.4	1930	6.8
1875	1466	5.2	1592	5.6	1726	6.1	1857	6.5	1981	7.0
2000	1549	5.5	1664	5.9	1789	6.3	1914	6.7	2034	7.2
2125	1633	5.8	1739	6.1	1855	6.5	1974	7.0	2089	7.4
2250	1718	6.1	1816	6.4	1924	6.8	2036	7.2	2146	7.6
2375	1803	6.4	1894	6.7	1995	7.0	2100	7.4	2206	7.8
2500	1890	6.7	1974	7.0	2068	7.3	2167	7.6	2268	8.0

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
1500	1961	6.9	2079	7.3	2191	7.7	2297	8.1	2399	8.5
1625	2004	7.1	2120	7.5	2229	7.9	2334	8.2	2434	8.6
1750	2050	7.2	2163	7.6	2270	8.0	2373	8.4	2472	8.7
1875	2098	7.4	2208	7.8	2314	8.2	2415	8.5	2511	8.9
2000	2148	7.6	2256	8.0	2359	8.3	2458	8.7	2553	9.0
2125	2199	7.8	2305	8.1	2407	8.5	2504	8.8	2597	9.2
2250	2254	7.9	2357	8.3	2456	8.7	2551	9.0	2643	9.3
2375	2310	8.1	2410	8.5	2507	8.8	2600	9.2	2690	9.5
2500	2367	8.3	2465	8.7	2560	9.0	2651	9.3	2739	9.7

High Static 1228-2836 rpm

Fan data (cont)

50GEQM04 Single Phase — 3 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
900	1036	0.08	1301	0.15	1517	0.24	1698	0.34	1855	0.44
975	1077	0.09	1331	0.16	1546	0.26	1727	0.36	1885	0.47
1050	1119	0.10	1362	0.18	1574	0.27	1755	0.38	1915	0.49
1125	1164	0.11	1394	0.19	1603	0.29	1783	0.39	1944	0.51
1200	1211	0.12	1429	0.20	1632	0.30	1813	0.41	1972	0.53
1275	1261	0.14	1466	0.22	1663	0.32	1841	0.43	2000	0.56
1350	1312	0.16	1506	0.24	1695	0.34	1870	0.46	2029	0.58
1425	1365	0.18	1547	0.26	1729	0.36	1901	0.48	2057	0.61
1500	1419	0.20	1591	0.28	1765	0.38	1932	0.50	2087	0.63

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1996	0.55	2123	0.67	2242	0.78	2352	0.91	2455	1.03
975	2027	0.58	2157	0.70	2276	0.82	2387	0.95	—	—
1050	2058	0.61	2189	0.73	2309	0.86	2421	0.99	—	—
1125	2088	0.63	2219	0.76	2341	0.89	2454	1.03	—	—
1200	2117	0.66	2249	0.79	2372	0.93	2486	1.07	—	—
1275	2146	0.69	2278	0.82	2402	0.97	—	—	—	—
1350	2174	0.72	2307	0.86	2431	1.00	—	—	—	—
1425	2202	0.74	2336	0.89	2460	1.04	—	—	—	—
1500	2230	0.77	2364	0.92	2488	1.07	—	—	—	—

Standard/Medium Static 1036-2190 rpm, 0.71 max bhp

High Static 1036-2490 rpm, 1.07 max bhp

50GEQM04 Single Phase — Standard/Medium Static — 3 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
900	1036	4.7	1301	5.9	1517	6.9	1698	7.8	1855	8.5
975	1077	4.9	1331	6.1	1546	7.1	1727	7.9	1885	8.6
1050	1119	5.1	1362	6.2	1574	7.2	1755	8.0	1915	8.7
1125	1164	5.3	1394	6.4	1603	7.3	1783	8.1	1944	8.9
1200	1211	5.5	1429	6.5	1632	7.5	1813	8.3	1972	9.0
1275	1261	5.8	1466	6.7	1663	7.6	1841	8.4	2000	9.1
1350	1312	6.0	1506	6.9	1695	7.7	1870	8.5	2029	9.3
1425	1365	6.2	1547	7.1	1729	7.9	1901	8.7	2057	9.4
1500	1419	6.5	1591	7.3	1765	8.1	1932	8.8	2087	9.5

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
900	1996	9.1	2123	9.7	—	—	—	—	—	—
975	2027	9.3	2157	9.8	—	—	—	—	—	—
1050	2058	9.4	2189	10.0	—	—	—	—	—	—
1125	2088	9.5	—	—	—	—	—	—	—	—
1200	2117	9.7	—	—	—	—	—	—	—	—
1275	2146	9.8	—	—	—	—	—	—	—	—
1350	2174	9.9	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Standard/Medium Static 1036-2190 rpm

Fan data (cont)

50GEQM04 Single Phase — High Static — 3 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
900	1036	4.2	1301	5.2	1517	6.1	1698	6.8	1855	7.4
975	1077	4.3	1331	5.3	1546	6.2	1727	6.9	1885	7.6
1050	1119	4.5	1362	5.5	1574	6.3	1755	7.0	1915	7.7
1125	1164	4.7	1394	5.6	1603	6.4	1783	7.2	1944	7.8
1200	1211	4.9	1429	5.7	1632	6.6	1813	7.3	1972	7.9
1275	1261	5.1	1466	5.9	1663	6.7	1841	7.4	2000	8.0
1350	1312	5.3	1506	6.0	1695	6.8	1870	7.5	2029	8.1
1425	1365	5.5	1547	6.2	1729	6.9	1901	7.6	2057	8.3
1500	1419	5.7	1591	6.4	1765	7.1	1932	7.8	2087	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
900	1996	8.0	2123	8.5	2242	9.0	2352	9.4	2455	9.9
975	2027	8.1	2157	8.7	2276	9.1	2387	9.6	—	—
1050	2058	8.3	2189	8.8	2309	9.3	2421	9.7	—	—
1125	2088	8.4	2219	8.9	2341	9.4	2454	9.9	—	—
1200	2117	8.5	2249	9.0	2372	9.5	2486	10.0	—	—
1275	2146	8.6	2278	9.1	2402	9.6	—	—	—	—
1350	2174	8.7	2307	9.3	2431	9.8	—	—	—	—
1425	2202	8.8	2336	9.4	2460	9.9	—	—	—	—
1500	2230	9.0	2364	9.5	2488	10.0	—	—	—	—

High Static 1036-2490 rpm

Fan data (cont)

50GEQM04 Three Phase — 3 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
900	1037	0.08	1301	0.15	1517	0.24	1698	0.34	1855	0.44
975	1076	0.09	1330	0.16	1545	0.26	1727	0.36	1886	0.47
1050	1119	0.10	1361	0.18	1574	0.27	1755	0.38	1915	0.49
1125	1164	0.11	1394	0.19	1602	0.29	1784	0.40	1944	0.51
1200	1212	0.12	1430	0.20	1632	0.30	1813	0.41	1972	0.53
1275	1261	0.14	1466	0.22	1663	0.32	1840	0.43	2001	0.56
1350	1313	0.16	1506	0.24	1695	0.34	1870	0.46	2029	0.58
1425	1366	0.18	1547	0.26	1729	0.36	1900	0.48	2057	0.61
1500	1420	0.20	1591	0.28	1765	0.38	1932	0.50	2087	0.63

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
900	1996	0.55	2124	0.67	2242	0.78	2352	0.91	2455	1.03
975	2028	0.58	2157	0.70	2276	0.82	2387	0.95	—	—
1050	2058	0.61	2189	0.73	2309	0.86	2421	0.99	—	—
1125	2088	0.63	2219	0.76	2341	0.89	2454	1.03	—	—
1200	2117	0.66	2249	0.79	2372	0.93	2486	1.07	—	—
1275	2146	0.69	2278	0.82	2402	0.97	—	—	—	—
1350	2174	0.72	2307	0.86	2431	1.00	—	—	—	—
1425	2203	0.74	2336	0.89	2460	1.04	—	—	—	—
1500	2230	0.77	2364	0.92	2488	1.07	—	—	—	—

Standard/Medium Static 1037-2190 rpm, 0.71 max bhp

High Static 1037-2490 rpm, 1.07 max bhp

50GEQM04 Three Phase — Standard/Medium Static — 3 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
900	1037	4.7	1301	5.9	1517	6.9	1698	7.8	1855	8.5
975	1076	4.9	1330	6.1	1545	7.1	1727	7.9	1886	8.6
1050	1119	5.1	1361	6.2	1574	7.2	1755	8.0	1915	8.7
1125	1164	5.3	1394	6.4	1602	7.3	1784	8.1	1944	8.9
1200	1212	5.5	1430	6.5	1632	7.5	1813	8.3	1972	9.0
1275	1261	5.8	1466	6.7	1663	7.6	1840	8.4	2001	9.1
1350	1313	6.0	1506	6.9	1695	7.7	1870	8.5	2029	9.3
1425	1366	6.2	1547	7.1	1729	7.9	1900	8.7	2057	9.4
1500	1420	6.5	1591	7.3	1765	8.1	1932	8.8	2087	9.5

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
900	1996	9.1	2124	9.7	—	—	—	—	—	—
975	2028	9.3	2157	9.8	—	—	—	—	—	—
1050	2058	9.4	2189	10.0	—	—	—	—	—	—
1125	2088	9.5	—	—	—	—	—	—	—	—
1200	2117	9.7	—	—	—	—	—	—	—	—
1275	2146	9.8	—	—	—	—	—	—	—	—
1350	2174	9.9	—	—	—	—	—	—	—	—
1425	—	—	—	—	—	—	—	—	—	—
1500	—	—	—	—	—	—	—	—	—	—

Standard/Medium Static 1037-2190 rpm

Fan data (cont)

50GEQM04 Three Phase — High Static — 3 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
900	1037	4.2	1301	5.2	1517	6.1	1698	6.8	1855	7.4
975	1076	4.3	1330	5.3	1545	6.2	1727	6.9	1886	7.6
1050	1119	4.5	1361	5.5	1574	6.3	1755	7.0	1915	7.7
1125	1164	4.7	1394	5.6	1602	6.4	1784	7.2	1944	7.8
1200	1212	4.9	1430	5.7	1632	6.6	1813	7.3	1972	7.9
1275	1261	5.1	1466	5.9	1663	6.7	1840	7.4	2001	8.0
1350	1313	5.3	1506	6.0	1695	6.8	1870	7.5	2029	8.1
1425	1366	5.5	1547	6.2	1729	6.9	1900	7.6	2057	8.3
1500	1420	5.7	1591	6.4	1765	7.1	1932	7.8	2087	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
900	1996	8.0	2124	8.5	2242	9.0	2352	9.4	2455	9.9
975	2028	8.1	2157	8.7	2276	9.1	2387	9.6	—	—
1050	2058	8.3	2189	8.8	2309	9.3	2421	9.7	—	—
1125	2088	8.4	2219	8.9	2341	9.4	2454	9.9	—	—
1200	2117	8.5	2249	9.0	2372	9.5	2486	10.0	—	—
1275	2146	8.6	2278	9.1	2402	9.6	—	—	—	—
1350	2174	8.7	2307	9.3	2431	9.8	—	—	—	—
1425	2203	8.8	2336	9.4	2460	9.9	—	—	—	—
1500	2230	9.0	2364	9.5	2488	10.0	—	—	—	—

High Static 1037-2490 rpm

Fan data (cont)

50GEQM05 Single Phase — 4 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
1200	1021	0.11	1227	0.19	1417	0.30	1586	0.42	1738	0.55
1300	1073	0.13	1265	0.21	1447	0.31	1612	0.43	1762	0.57
1400	1128	0.15	1305	0.23	1479	0.33	1640	0.46	1788	0.59
1500	1185	0.17	1349	0.25	1514	0.36	1670	0.48	1815	0.61
1600	1244	0.20	1396	0.28	1553	0.38	1703	0.51	1844	0.64
1700	1304	0.23	1446	0.31	1593	0.41	1737	0.53	1875	0.67
1800	1365	0.26	1498	0.34	1636	0.45	1774	0.57	1907	0.71
1900	1427	0.29	1551	0.38	1681	0.48	1813	0.60	1942	0.74
2000	1490	0.33	1607	0.42	1730	0.52	1855	0.65	1978	0.78

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1875	0.69	2003	0.84	2123	1.00	2237	1.17	2345	1.35
1300	1899	0.71	2026	0.86	2145	1.02	2258	1.19	2365	1.37
1400	1925	0.74	2050	0.89	2169	1.05	2280	1.22	2387	1.40
1500	1950	0.76	2076	0.92	2193	1.08	2304	1.26	2409	1.44
1600	1977	0.79	2101	0.95	2218	1.12	2328	1.29	2433	1.47
1700	2005	0.82	2127	0.98	2244	1.15	2353	1.33	2457	1.51
1800	2034	0.86	2155	1.02	2270	1.19	2379	1.37	—	—
1900	2066	0.89	2184	1.06	2297	1.23	2405	1.41	—	—
2000	2099	0.94	2215	1.10	2326	1.27	2432	1.45	—	—

Standard/Medium Static 1021-2170 rpm, 1.06 max bhp

High Static 1021-2460 rpm, 1.53 max bhp

50GEQM05 Single Phase — Standard/Medium Static — 4 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
1200	1021	4.7	1227	5.7	1417	6.5	1586	7.3	1738	8.0
1300	1073	4.9	1265	5.8	1447	6.7	1612	7.4	1762	8.1
1400	1128	5.2	1305	6.0	1479	6.8	1640	7.6	1788	8.2
1500	1185	5.5	1349	6.2	1514	7.0	1670	7.7	1815	8.4
1600	1244	5.7	1396	6.4	1553	7.2	1703	7.8	1844	8.5
1700	1304	6.0	1446	6.7	1593	7.3	1737	8.0	1875	8.6
1800	1365	6.3	1498	6.9	1636	7.5	1774	8.2	1907	8.8
1900	1427	6.6	1551	7.1	1681	7.7	1813	8.4	1942	8.9
2000	1490	6.9	1607	7.4	1730	8.0	1855	8.5	1978	9.1

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
900	1875	8.6	2003	9.2	2123	9.8	—	—	—	—
975	1899	8.8	2026	9.3	2145	9.9	—	—	—	—
1050	1925	8.9	2050	9.4	2169	10.0	—	—	—	—
1125	1950	9.0	2076	9.6	—	—	—	—	—	—
1200	1977	9.1	2101	9.7	—	—	—	—	—	—
1275	2005	9.2	2127	9.8	—	—	—	—	—	—
1350	2034	9.4	2155	9.9	—	—	—	—	—	—
1425	2066	9.5	—	—	—	—	—	—	—	—
1500	2099	9.7	—	—	—	—	—	—	—	—

Standard/Medium Static 1021-2170 rpm rpm

Fan data (cont)

50GEQM05 Single Phase — High Static — 4 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
1200	1021	4.2	1227	5.0	1417	5.8	1586	6.4	1738	7.1
1300	1073	4.4	1265	5.1	1447	5.9	1612	6.6	1762	7.2
1400	1128	4.6	1305	5.3	1479	6.0	1640	6.7	1788	7.3
1500	1185	4.8	1349	5.5	1514	6.2	1670	6.8	1815	7.4
1600	1244	5.1	1396	5.7	1553	6.3	1703	6.9	1844	7.5
1700	1304	5.3	1446	5.9	1593	6.5	1737	7.1	1875	7.6
1800	1365	5.5	1498	6.1	1636	6.7	1774	7.2	1907	7.8
1900	1427	5.8	1551	6.3	1681	6.8	1813	7.4	1942	7.9
2000	1490	6.1	1607	6.5	1730	7.0	1855	7.5	1978	8.0

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
1200	1875	7.6	2003	8.1	2123	8.6	2237	9.1	2345	9.5
1300	1899	7.7	2026	8.2	2145	8.7	2258	9.2	2365	9.6
1400	1925	7.8	2050	8.3	2169	8.8	2280	9.3	2387	9.7
1500	1950	7.9	2076	8.4	2193	8.9	2304	9.4	2409	9.8
1600	1977	8.0	2101	8.5	2218	9.0	2328	9.5	2433	9.9
1700	2005	8.2	2127	8.6	2244	9.1	2353	9.6	2457	10.0
1800	2034	8.3	2155	8.8	2270	9.2	2379	9.7	—	—
1900	2066	8.4	2184	8.9	2297	9.3	2405	9.8	—	—
2000	2099	8.5	2215	9.0	2326	9.5	2432	9.9	—	—

High Static 1021-2460 rpm

Fan data (cont)

50GEQM05 Three Phase — 4 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
1200	1022	0.11	1228	0.19	1417	0.30	1586	0.42	1737	0.55
1300	1074	0.13	1265	0.21	1447	0.31	1613	0.44	1762	0.57
1400	1129	0.15	1306	0.23	1479	0.33	1641	0.46	1788	0.59
1500	1186	0.17	1350	0.25	1514	0.36	1671	0.48	1816	0.62
1600	1244	0.20	1397	0.28	1553	0.38	1703	0.51	1845	0.64
1700	1304	0.23	1446	0.31	1593	0.41	1737	0.53	1875	0.67
1800	1365	0.26	1498	0.34	1636	0.45	1774	0.57	1907	0.71
1900	1427	0.29	1552	0.38	1682	0.48	1814	0.61	1942	0.74
2000	1490	0.33	1607	0.42	1730	0.52	1855	0.65	1978	0.78

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1200	1875	0.69	2003	0.84	2123	1.00	2237	1.17	2345	1.35
1300	1899	0.71	2026	0.86	2145	1.02	2258	1.19	2365	1.37
1400	1924	0.74	2050	0.89	2169	1.05	2280	1.22	2387	1.40
1500	1950	0.76	2075	0.92	2193	1.08	2304	1.26	2409	1.44
1600	1977	0.79	2101	0.95	2218	1.12	2328	1.29	2433	1.47
1700	2005	0.82	2128	0.98	2243	1.15	2353	1.33	2457	1.51
1800	2035	0.86	2156	1.02	2270	1.19	2379	1.37	2482	1.55
1900	2066	0.89	2185	1.06	2298	1.23	2405	1.41	2508	1.60
2000	2099	0.94	2215	1.10	2326	1.27	2433	1.46	2535	1.65

Standard/Medium Static 1022-2170 rpm, 1.06 max bhp

High Static 1022-2660 rpm, 1.96 max bhp

50GEQM05 Three Phase — Standard/Medium Static — 4 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
1200	1022	4.7	1228	5.7	1417	6.5	1586	7.3	1737	8.0
1300	1074	4.9	1265	5.8	1447	6.7	1613	7.4	1762	8.1
1400	1129	5.2	1306	6.0	1479	6.8	1641	7.6	1788	8.2
1500	1186	5.5	1350	6.2	1514	7.0	1671	7.7	1816	8.4
1600	1244	5.7	1397	6.4	1553	7.2	1703	7.8	1845	8.5
1700	1304	6.0	1446	6.7	1593	7.3	1737	8.0	1875	8.6
1800	1365	6.3	1498	6.9	1636	7.5	1774	8.2	1907	8.8
1900	1427	6.6	1552	7.2	1682	7.8	1814	8.4	1942	8.9
2000	1490	6.9	1607	7.4	1730	8.0	1855	8.5	1978	9.1

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
1200	1875	8.6	2003	9.2	2123	9.8	—	—	—	—
1300	1899	8.8	2026	9.3	2145	9.9	—	—	—	—
1400	1924	8.9	2050	9.4	2169	10.0	—	—	—	—
1500	1950	9.0	2075	9.6	—	—	—	—	—	—
1600	1977	9.1	2101	9.7	—	—	—	—	—	—
1700	2005	9.2	2128	9.8	—	—	—	—	—	—
1800	2035	9.4	2156	9.9	—	—	—	—	—	—
1900	2066	9.5	—	—	—	—	—	—	—	—
2000	2099	9.7	—	—	—	—	—	—	—	—

Standard/Medium Static 1022-2170 rpm

Fan data (cont)

50GEQM05 Three Phase — High Static — 4 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
1200	1022	3.8	1228	4.6	1417	5.3	1586	6.0	1737	6.5
1300	1074	4.0	1265	4.8	1447	5.4	1613	6.1	1762	6.6
1400	1129	4.2	1306	4.9	1479	5.6	1641	6.2	1788	6.7
1500	1186	4.5	1350	5.1	1514	5.7	1671	6.3	1816	6.8
1600	1244	4.7	1397	5.3	1553	5.8	1703	6.4	1845	6.9
1700	1304	4.9	1446	5.4	1593	6.0	1737	6.5	1875	7.0
1800	1365	5.1	1498	5.6	1636	6.2	1774	6.7	1907	7.2
1900	1427	5.4	1552	5.8	1682	6.3	1814	6.8	1942	7.3
2000	1490	5.6	1607	6.0	1730	6.5	1855	7.0	1978	7.4

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
1200	1875	7.0	2003	7.5	2123	8.0	2237	8.4	2345	8.8
1300	1899	7.1	2026	7.6	2145	8.1	2258	8.5	2365	8.9
1400	1924	7.2	2050	7.7	2169	8.2	2280	8.6	2387	9.0
1500	1950	7.3	2075	7.8	2193	8.2	2304	8.7	2409	9.1
1600	1977	7.4	2101	7.9	2218	8.3	2328	8.8	2433	9.1
1700	2005	7.5	2128	8.0	2243	8.4	2353	8.8	2457	9.2
1800	2035	7.7	2156	8.1	2270	8.5	2379	8.9	2482	9.3
1900	2066	7.8	2185	8.2	2298	8.6	2405	9.0	2508	9.4
2000	2099	7.9	2215	8.3	2326	8.7	2433	9.1	2535	9.5

High Static 1022-2660 rpm

Fan data (cont)

50GEQM06 Single Phase — 5 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
1500	1197	0.18	1361	0.26	1524	0.36	1679	0.49	1822	0.62
1625	1271	0.21	1421	0.29	1574	0.40	1721	0.52	1860	0.66
1750	1347	0.25	1485	0.33	1627	0.44	1767	0.56	1901	0.70
1875	1425	0.29	1553	0.38	1684	0.49	1817	0.61	1945	0.75
2000	1504	0.35	1623	0.43	1745	0.54	1870	0.66	1992	0.80
2125	1585	0.40	1695	0.49	1809	0.60	1926	0.72	2043	0.86
2250	1666	0.47	1769	0.56	1876	0.67	1986	0.79	2096	0.93
2375	1747	0.54	1844	0.63	1945	0.74	2049	0.87	2153	1.01
2500	1830	0.62	1921	0.71	2016	0.82	2114	0.95	2213	1.09

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	1954	0.77	2078	0.92	2194	1.09	2304	1.26	2408	1.44
1625	1990	0.81	2112	0.97	2227	1.13	2336	1.31	2439	1.49
1750	2028	0.85	2148	1.01	2262	1.18	2370	1.36	2472	1.54
1875	2068	0.90	2186	1.06	2298	1.23	2404	1.41	2506	1.60
2000	2111	0.95	2226	1.12	2336	1.29	2441	1.48	2541	1.66
2125	2157	1.02	2268	1.18	2375	1.36	2478	1.54	2578	1.73
2250	2206	1.08	2313	1.25	2417	1.43	2518	1.61	2616	1.81
2375	2257	1.16	2361	1.33	2461	1.50	2560	1.69	2655	1.89
2500	2312	1.24	2411	1.41	2508	1.59	2604	1.78	—	—

Standard/Medium Static 1197-2390 rpm, 1.44 max bhp

High Static 1197-2660 rpm, 1.96 max bhp

50GEQM06 Single Phase — Standard/Medium Static — 5 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
1500	1197	5.0	1361	5.7	1524	6.4	1679	7.0	1822	7.6
1625	1271	5.3	1421	5.9	1574	6.6	1721	7.2	1860	7.8
1750	1347	5.6	1485	6.2	1627	6.8	1767	7.4	1901	8.0
1875	1425	6.0	1553	6.5	1684	7.0	1817	7.6	1945	8.1
2000	1504	6.3	1623	6.8	1745	7.3	1870	7.8	1992	8.3
2125	1585	6.6	1695	7.1	1809	7.6	1926	8.1	2043	8.5
2250	1666	7.0	1769	7.4	1876	7.8	1986	8.3	2096	8.8
2375	1747	7.3	1844	7.7	1945	8.1	2049	8.6	2153	9.0
2500	1830	7.7	1921	8.0	2016	8.4	2114	8.8	2213	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
1500	1954	8.2	2078	8.7	2194	9.2	2304	9.6	—	—
1625	1990	8.3	2112	8.8	2227	9.3	2336	9.8	—	—
1750	2028	8.5	2148	9.0	2262	9.5	2370	9.9	—	—
1875	2068	8.7	2186	9.1	2298	9.6	—	—	—	—
2000	2111	8.8	2226	9.3	2336	9.8	—	—	—	—
2125	2157	9.0	2268	9.5	2375	9.9	—	—	—	—
2250	2206	9.2	2313	9.7	—	—	—	—	—	—
2375	2257	9.4	2361	9.9	—	—	—	—	—	—
2500	2312	9.7	—	—	—	—	—	—	—	—

Standard/Medium Static 1197-2390 rpm

Fan data (cont)

50GEQM06 Single Phase — High Static — 5 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
1500	1197	4.5	1361	5.1	1524	5.7	1679	6.3	1822	6.8
1625	1271	4.8	1421	5.3	1574	5.9	1721	6.5	1860	7.0
1750	1347	5.1	1485	5.6	1627	6.1	1767	6.6	1901	7.1
1875	1425	5.4	1553	5.8	1684	6.3	1817	6.8	1945	7.3
2000	1504	5.7	1623	6.1	1745	6.6	1870	7.0	1992	7.5
2125	1585	6.0	1695	6.4	1809	6.8	1926	7.2	2043	7.7
2250	1666	6.3	1769	6.7	1876	7.1	1986	7.5	2096	7.9
2375	1747	6.6	1844	6.9	1945	7.3	2049	7.7	2153	8.1
2500	1830	6.9	1921	7.2	2016	7.6	2114	7.9	2213	8.3

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
1500	1954	7.3	2078	7.8	2194	8.2	2304	8.7	2408	9.1
1625	1990	7.5	2112	7.9	2227	8.4	2336	8.8	2439	9.2
1750	2028	7.6	2148	8.1	2262	8.5	2370	8.9	2472	9.3
1875	2068	7.8	2186	8.2	2298	8.6	2404	9.0	2506	9.4
2000	2111	7.9	2226	8.4	2336	8.8	2441	9.2	2541	9.6
2125	2157	8.1	2268	8.5	2375	8.9	2478	9.3	2578	9.7
2250	2206	8.3	2313	8.7	2417	9.1	2518	9.5	2616	9.8
2375	2257	8.5	2361	8.9	2461	9.3	2560	9.6	2655	10.0
2500	2312	8.7	2411	9.1	2508	9.4	2604	9.8	—	—

High Static 1197-2660 rpm

Fan data (cont)

50GEQM06 Three Phase — 5 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
1500	1197	0.18	1361	0.26	1524	0.36	1679	0.49	1822	0.62
1625	1271	0.21	1421	0.29	1574	0.40	1721	0.52	1860	0.66
1750	1347	0.25	1485	0.33	1627	0.44	1767	0.56	1901	0.70
1875	1425	0.29	1553	0.38	1684	0.49	1817	0.61	1945	0.75
2000	1504	0.35	1623	0.43	1745	0.54	1870	0.66	1992	0.80
2125	1584	0.40	1695	0.49	1809	0.60	1926	0.72	2043	0.86
2250	1665	0.47	1769	0.56	1876	0.67	1986	0.79	2096	0.93
2375	1747	0.54	1844	0.63	1945	0.74	2049	0.87	2153	1.01
2500	1830	0.62	1921	0.71	2016	0.82	2114	0.95	2213	1.09

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1500	1954	0.77	2078	0.92	2194	1.09	2304	1.26	2408	1.44
1625	1990	0.81	2112	0.97	2227	1.13	2336	1.31	2439	1.49
1750	2028	0.85	2148	1.01	2262	1.18	2370	1.36	2472	1.54
1875	2068	0.90	2186	1.06	2298	1.23	2404	1.41	2506	1.60
2000	2111	0.95	2226	1.12	2336	1.29	2441	1.48	2541	1.66
2125	2157	1.02	2268	1.18	2375	1.36	2478	1.54	2578	1.73
2250	2206	1.08	2313	1.25	2417	1.43	2518	1.61	2616	1.81
2375	2257	1.16	2361	1.33	2461	1.50	2560	1.69	2655	1.89
2500	2312	1.24	2411	1.41	2508	1.59	2604	1.78	2697	1.97

Standard/Medium Static 1197-2390 rpm, 1.44 max bhp

High Static 1197-2836 rpm, 1.96 max bhp

50GEQM06 Three Phase — Standard/Medium Static — 5 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
1500	1197	5.0	1361	5.7	1524	6.4	1679	7.0	1822	7.6
1625	1271	5.3	1421	5.9	1574	6.6	1721	7.2	1860	7.8
1750	1347	5.6	1485	6.2	1627	6.8	1767	7.4	1901	8.0
1875	1425	6.0	1553	6.5	1684	7.0	1817	7.6	1945	8.1
2000	1504	6.3	1623	6.8	1745	7.3	1870	7.8	1992	8.3
2125	1584	6.6	1695	7.1	1809	7.6	1926	8.1	2043	8.5
2250	1665	7.0	1769	7.4	1876	7.8	1986	8.3	2096	8.8
2375	1747	7.3	1844	7.7	1945	8.1	2049	8.6	2153	9.0
2500	1830	7.7	1921	8.0	2016	8.4	2114	8.8	2213	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
1500	1954	8.2	2078	8.7	2194	9.2	2304	9.6	—	—
1625	1990	8.3	2112	8.8	2227	9.3	2336	9.8	—	—
1750	2028	8.5	2148	9.0	2262	9.5	2370	9.9	—	—
1875	2068	8.7	2186	9.1	2298	9.6	—	—	—	—
2000	2111	8.8	2226	9.3	2336	9.8	—	—	—	—
2125	2157	9.0	2268	9.5	2375	9.9	—	—	—	—
2250	2206	9.2	2313	9.7	—	—	—	—	—	—
2375	2257	9.4	2361	9.9	—	—	—	—	—	—
2500	2312	9.7	—	—	—	—	—	—	—	—

Standard/Medium Static 1197-2390 rpm

Fan data (cont)

50GEQM06 Three Phase — High Static — 5 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
1500	1197	4.2	1361	4.8	1524	5.4	1679	5.9	1822	6.4
1625	1271	4.5	1421	5.0	1574	5.6	1721	6.1	1860	6.6
1750	1347	4.7	1485	5.2	1627	5.7	1767	6.2	1901	6.7
1875	1425	5.0	1553	5.5	1684	5.9	1817	6.4	1945	6.9
2000	1504	5.3	1623	5.7	1745	6.2	1870	6.6	1992	7.0
2125	1584	5.6	1695	6.0	1809	6.4	1926	6.8	2043	7.2
2250	1665	5.9	1769	6.2	1876	6.6	1986	7.0	2096	7.4
2375	1747	6.2	1844	6.5	1945	6.9	2049	7.2	2153	7.6
2500	1830	6.5	1921	6.8	2016	7.1	2114	7.5	2213	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
1500	1954	6.9	2078	7.3	2194	7.7	2304	8.1	2408	8.5
1625	1990	7.0	2112	7.4	2227	7.9	2336	8.2	2439	8.6
1750	2028	7.2	2148	7.6	2262	8.0	2370	8.4	2472	8.7
1875	2068	7.3	2186	7.7	2298	8.1	2404	8.5	2506	8.8
2000	2111	7.4	2226	7.8	2336	8.2	2441	8.6	2541	9.0
2125	2157	7.6	2268	8.0	2375	8.4	2478	8.7	2578	9.1
2250	2206	7.8	2313	8.2	2417	8.5	2518	8.9	2616	9.2
2375	2257	8.0	2361	8.3	2461	8.7	2560	9.0	2655	9.4
2500	2312	8.2	2411	8.5	2508	8.8	2604	9.2	2697	9.5

High Static 1197-2836 rpm

Electrical data

Legend and Notes

Applicable for Electrical Data Tables on pages 58-73

LEGEND

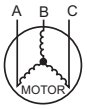
BRKR — Circuit Breaker
CO — Convenience Outlet
FLA — Full Load Amps
IFM — Indoor Fan Motor
LRA — Locked Rotor Amps
MCA — Minimum Circuit Amps
PE — Power Exhaust
PWRD CO — Powered Convenience Outlet
RLA — Rated Load Amps
UNPWR CO — Unpowered Convenience Outlet

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 show 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.

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

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.

Electrical data (cont)

50GEQ*04-06 Cooling Electrical Data

50GEQ UNIT	V-Ph-Hz	UNIT VOLTAGE RANGE		COMPRESSOR		OFM (EA)		STD SCCR kA	HIGH SCCR kA	IFM			POWER EXHAUST	
		Min	Max	RLA	LRA	Watts	FLA			Type	Efficiency at Full Load	FLA	Kit QTY	FLA (EA Kit)
M04	208/230-1-60	187	253	16.5	90	275	2.6	5	10	MED	84%	5.1	1	1.9
						275	2.6	5	10	HIGH	85%	7.3	1	1.9
	208/230-3-60	187	253	11.2	82	275	2.6	5	10	MED	84%	5.1	1	1.9
						275	2.6	5	10	HIGH	85%	7.3	1	1.9
	460-3-60	414	506	4.9	44	275	1.4	5	10	MED	85%	1.2	1	1.0
						275	1.4	5	10	HIGH	84%	1.7	1	1.0
	575-3-60	518	633	3.6	29	275	2.6	5	—	MED	84%	1.1	1	1.9
						275	2.6	5	—	HIGH	85%	1.5	1	1.9
M05	208/230-1-60	197	253	24.0	138	275	1.3	5	10	MED	86%	7.1	1	1.9
						275	1.3	5	10	HIGH	84%	9.2	1	1.9
	208/230-3-60	197	253	15.6	112	275	1.3	5	10	MED	86%	7.1	1	1.9
						275	1.3	5	10	HIGH	85%	9.2	1	1.9
	460-3-60	414	506	8.1	62	275	0.8	5	10	MED	86%	1.7	1	1.0
						275	0.8	5	10	HIGH	88%	2.6	1	1.0
	575-3-60	518	633	5.7	39	275	0.6	5	—	MED	85%	1.5	1	1.9
						275	0.6	5	—	HIGH	88%	2.3	1	1.9
M06	208/230-1-60	197	253	24.6	149	275	1.3	5	10	MED	84%	9.2	1	1.9
						275	1.3	5	10	HIGH	87%	11.7	1	1.9
	208/230-3-60	197	253	15.4	150	275	1.3	5	10	MED	84%	9.2	1	1.9
						275	1.3	5	10	HIGH	84%	6.5	1	1.9
	460-3-60	414	506	6.3	58	275	0.8	5	10	MED	86%	2.1	1	1.0
						275	0.8	5	10	HIGH	88%	3.1	1	1.0
	575-3-60	518	633	5.8	48	275	0.6	5	—	MED	85%	2.0	1	1.9
						275	0.6	5	—	HIGH	87%	2.7	1	1.9

Electrical data (cont)

50GEQM04 MCA MOCP Electrical Data

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	HIGH SCCR kA[a]	ELECTRIC HEATER			NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
								No Power Exhaust				With Power Exhaust (powered from unit)			
										Disconnect Size				Disconnect Size	
					CRHEATER ***A00	NOM (kW)	FLA	MCA	Fuse or HACR BRKR	FLA	LRA	MCA	Fuse or HACR BRKR	FLA	LRA
50GEQM04	208/230-1-60	MED	5	10	—	—	—	29	40	28	101	31	45	30	103
			5	10	323A	3.3/4.4	15.9/18.3	49/52	60/60	46/49	117/119	51/54	60/60	48/51	119/121
			5	10	324A	4.9/6.5	23.5/27.1	58/63	60/70	55/59	125/128	60/65	60/70	57/61	127/130
			5	10	325A	6.5/8.7	31.4/36.3	68/74	70/80	64/70	132/137	70/76	70/80	66/72	134/139
			5	10	326A	7.9/10.5	37.9/43.8	76/84	80/90	71/78	139/145	78/85	80/90	74/80	141/147
			5	10	327A	9.8/13.0	46.9/54.2	87/97	90/100	82/90	148/155	89/98	90/100	84/92	150/157
		HIGH	5	10	—	—	—	31	45	30	104	33	45	33	106
			5	10	323A	3.3/4.4	15.9/18.3	51/54	60/60	49/51	120/122	53/56	60/60	51/54	122/124
			5	10	324A	4.9/6.5	23.5/27.1	60/65	60/70	57/62	128/131	62/67	70/70	60/64	130/133
			5	10	325A	6.5/8.7	31.4/36.3	70/76	70/80	66/72	135/140	72/78	80/80	69/74	137/142
			5	10	326A	7.9/10.5	37.9/43.8	78/86	80/90	74/81	142/148	80/88	80/90	76/83	144/150
			5	10	327A	9.8/13.0	46.9/54.2	90/99	90/100	84/93	151/158	92/101	100/110	86/95	153/160
	208/230-3-60	MED	5	10	—	—	—	22	30	22	93	24	30	24	95
			5	10	323A	3.3/4.4	9.2/10.6	34/35	40/40	32/34	102/104	36/37	40/45	35/36	104/106
			5	10	324A	4.9/6.5	13.6/15.6	39/42	45/45	37/40	107/109	41/44	45/50	40/42	109/111
			5	10	325A	6.5/8.7	18.1/20.9	45/48	50/50	43/46	111/114	47/50	50/50	45/48	113/116
			5	10	326A	7.9/10.5	21.9/25.3	50/54	50/60	47/51	115/118	51/56	60/60	49/53	117/120
			5	10	328A	12.0/16.0	33.4/38.5	64/70	70/70	60/66	126/132	66/72	70/80	62/68	128/134
		HIGH	5	10	—	—	—	24	30	24	96	26	30	26	98
			5	10	323A	3.3/4.4	9.2/10.6	36/38	40/45	35/36	105/107	38/40	45/45	37/39	107/109
			5	10	324A	4.9/6.5	13.6/15.6	41/44	45/50	40/42	110/112	43/46	50/50	42/44	112/114
			5	10	325A	6.5/8.7	18.1/20.9	47/50	50/60	45/48	114/117	49/52	50/60	47/50	116/119
			5	10	326A	7.9/10.5	21.9/25.3	52/56	60/60	49/53	118/121	54/58	60/60	52/56	120/123
			5	10	328A	12.0/16.0	33.4/38.5	66/72	70/80	63/69	129/135	68/74	70/80	65/71	131/137
	460-3-60	MED	5	10	—	—	—	9	15	9	48	10	15	10	49
			5	10	333A	6.0	7.2	18	20	17	55	19	20	18	56
			5	10	334A	8.8	10.6	22	25	21	59	23	25	22	60
			5	10	335A	11.5	13.8	26	30	24	62	27	30	26	63
			5	10	336A	14.0	16.8	30	30	28	65	31	35	29	66
		HIGH	5	10	—	—	—	10	15	9	48	11	15	10	49
			5	10	333A	6.0	7.2	19	20	17	55	20	20	19	56
			5	10	334A	8.8	10.6	23	25	21	59	24	25	23	60
			5	10	335A	11.5	13.8	27	30	25	62	28	30	26	63
			5	10	336A	14.0	16.8	31	35	29	65	32	35	30	66
	575-3-60	MED	5	—	—	—	—	9	15	8	35	11	15	11	37
			5	—	339A	10.0	9.6	21	25	19	45	23	25	22	47
			5	—	340A	15.0	14.4	27	30	25	49	29	30	27	51
		HIGH	5	—	—	—	—	9	15	9	35	11	15	11	37
			5	—	339A	10.0	9.6	21	25	20	45	23	25	22	47
			5	—	340A	15.0	14.4	27	30	25	49	29	30	28	51

NOTE(S):

a. High SCCR (Short Circuit Current Rating) is not available on the following: units with low ambient controls, phase loss monitor, non-fused disconnect, HACR breaker, or 575V models.

Electrical data (cont)

50GEQM04 MCA MOCP Electrical Data (cont)

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			WITH POWERED CONVENIENCE OUTLET							
							No Power Exhaust				With Power Exhaust (powered from unit)			
									Disconnect Size				Disconnect Size	
				CRHEATER ****00	NOM (kW)	FLA	MCA	Fuse or HACR BRKR	FLA	LRA	MCA	Fuse or HACR BRKR	FLA	LRA
50GEQM04	208/230-1-60	MED	5	—	—	—	34	45	33	106	35	50	36	108
			5	323A	3.3/4.4	15.9/18.3	53/56	60/60	52/54	122/124	55/58	60/60	54/57	124/126
			5	324A	4.9/6.5	23.5/27.1	63/67	70/70	60/65	130/133	65/69	70/70	63/67	132/135
			5	325A	6.5/8.7	31.4/36.3	73/79	80/80	69/75	137/142	75/81	80/90	72/77	139/144
			5	326A	7.9/10.5	37.9/43.8	81/88	90/90	77/84	144/150	83/90	90/90	79/86	146/152
			5	327A	9.8/13.0	46.9/54.2	92/101	100/110	87/96	153/160	94/103	100/110	89/98	155/162
		HIGH	5	—	—	—	36	50	36	109	38	50	38	111
			5	323A	3.3/4.4	15.9/18.3	56/59	60/60	54/57	125/127	58/61	60/70	56/59	127/129
			5	324A	4.9/6.5	23.5/27.1	65/70	70/70	63/67	133/136	67/72	70/80	65/69	135/138
			5	325A	6.5/8.7	31.4/36.3	75/81	80/90	72/78	140/145	77/83	80/90	74/80	142/147
			5	326A	7.9/10.5	37.9/43.8	83/91	90/100	79/86	147/153	85/92	90/100	82/88	149/155
			5	327A	9.8/13.0	46.9/54.2	94/104	100/110	90/98	156/163	96/105	100/110	92/100	158/165
	208/230-3-60	MED	5	—	—	—	27	30	27	98	29	35	29	100
			5	323A	3.3/4.4	9.2/10.6	38/40	45/45	38/39	107/109	40/42	45/50	40/42	109/111
			5	324A	4.9/6.5	13.6/15.6	44/46	50/50	43/45	112/114	46/48	50/50	45/47	114/116
			5	325A	6.5/8.7	18.1/20.9	50/53	50/60	48/51	116/119	51/55	60/60	50/53	118/121
			5	326A	7.9/10.5	21.9/25.3	54/59	60/60	52/56	120/123	56/60	60/70	55/59	122/125
			5	328A	12.0/16.0	33.4/38.5	69/75	70/80	66/72	131/137	71/77	80/80	68/74	133/139
		HIGH	5	—	—	—	29	35	30	101	31	40	32	103
			5	323A	3.3/4.4	9.2/10.6	41/42	45/50	40/42	110/112	43/44	50/50	43/44	112/114
			5	324A	4.9/6.5	13.6/15.6	46/49	50/50	45/48	115/117	48/51	50/60	48/50	117/119
			5	325A	6.5/8.7	18.1/20.9	52/55	60/60	51/54	119/122	54/57	60/60	53/56	121/124
			5	326A	7.9/10.5	21.9/25.3	57/61	60/70	55/59	123/126	58/63	60/70	57/61	125/128
			5	328A	12.0/16.0	33.4/38.5	71/77	80/80	68/74	134/140	73/79	80/80	70/76	136/142
	460-3-60	MED	5	—	—	—	11	15	11	50	12	15	12	51
			5	333A	6.0	7.2	20	20	19	57	21	25	21	58
			5	334A	8.8	10.6	25	25	23	61	26	30	24	62
			5	335A	11.5	13.8	29	30	27	64	30	30	28	65
			5	336A	14.0	16.8	32	35	30	67	33	35	32	68
		HIGH	5	—	—	—	12	15	12	50	13	15	13	51
			5	6.0	7.2	21	25	20	57	22	25	21	58	6.0
			5	8.8	10.6	25	25	24	61	26	30	25	62	8.8
			5	11.5	13.8	29	30	28	64	30	30	29	65	11.5
			5	14.0	16.8	33	35	31	67	34	35	32	68	14.0
	575-3-60	MED	5	—	—	—	10	15	10	37	12	15	13	39
			5	339A	10.0	9.6	22	25	21	47	24	25	24	49
			5	340A	15.0	14.4	28	30	27	51	30	30	29	53
		HIGH	5	—	—	—	11	15	11	37	13	15	13	39
			5	339A	10.0	9.6	23	25	22	47	25	25	24	49
			5	340A	15.0	14.4	29	30	27	51	31	35	30	53

Electrical data (cont)

50GEQM05 MCA MOCP Electrical Data

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	HIGH SCCR kA[a]	ELECTRIC HEATER			NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
								No Power Exhaust				With Power Exhaust (powered from unit)			
										Disconnect Size				Disconnect Size	
					CRHEATER ***A00	NOM (kW)	FLA	MCA	Fuse or HACR BRKR	FLA	LRA	MCA	Fuse or HACR BRKR	FLA	LRA
50GEQM05	208/230-1-60	MED	5	10	—	—	—	39	60	37	151	41	60	39	153
			5	10	323A	3.3/4.4	15.9/18.3	59/62	70/80	56/58	167/169	61/64	80/80	58/60	169/171
			5	10	325A	6.5/8.7	31.4/36.3	78/84	80/90	73/79	182/187	80/86	80/100	76/81	184/189
			5	10	326A	7.9/10.5	37.9/43.8	86/94	100/100	81/88	189/195	88/96	100/100	83/90	191/197
			5	10	327A	9.8/13.0	46.9/54.2	97/107	100/110	91/100	198/205	99/109	100/110	93/102	200/207
			5	10	329A	13.1/17.4	62.8/72.5	117/129	125/150	109/121	214/224	119/131	125/150	112/123	216/226
			5	10	330A	14.4/19.2	69.3/80.0	125/139	150/150	117/129	220/231	127/141	150/150	119/131	222/233
			5	10	331A	15.8/21.0	75.8/87.5	134/148	150/150	124/138	227/239	136/150	150/150	127/140	229/241
		HIGH	5	10	—	—	—	41	60	40	154	43	60	42	156
			5	10	323A	3.3/4.4	15.9/18.3	61/64	80/80	58/61	170/172	63/66	80/80	60/63	172/174
			5	10	325A	6.5/8.7	31.4/36.3	80/86	80/100	76/81	185/190	82/88	90/100	78/84	187/192
			5	10	326A	7.9/10.5	37.9/43.8	88/96	100/100	83/90	192/198	90/98	100/100	85/92	194/200
			5	10	327A	9.8/13.0	46.9/54.2	100/109	100/110	94/102	201/208	101/111	110/125	96/104	203/210
			5	10	329A	13.1/17.4	62.8/72.5	119/132	125/150	112/123	217/227	121/133	125/150	114/125	219/229
			5	10	330A	14.4/19.2	69.3/80.0	128/141	150/150	119/132	223/234	129/143	150/150	122/134	225/236
			5	10	331A	15.8/21.0	75.8/87.5	136/150	150/150	127/140	230/242	138/152	150/175	129/142	232/244
	208/230-3-60	MED	5	10	—	—	—	28	40	28	125	30	45	30	127
			5	10	323A	3.3/4.4	9.2/10.6	40/42	50/50	38/40	134/136	42/44	50/50	40/42	136/138
			5	10	324A	4.9/6.5	13.6/15.6	45/48	50/50	43/46	139/141	47/50	50/60	45/48	141/143
			5	10	325A	6.5/8.7	18.1/20.9	51/54	60/60	48/52	143/146	53/56	60/60	51/54	145/148
			5	10	326A	7.9/10.5	21.9/25.3	56/60	60/60	53/57	147/150	58/62	60/70	55/59	149/152
			5	10	328A	12.0/16.0	33.4/38.5	70/76	70/80	66/72	158/164	72/78	80/80	68/74	160/166
			5	10	330A	14.4/19.2	40.0/46.2	78/86	80/90	74/81	165/171	80/88	80/90	76/83	167/173
			5	10	331A	15.8/21.0	43.8/50.5	83/91	90/100	78/86	169/176	85/93	90/100	80/88	171/178
		HIGH	5	10	—	—	—	27	40	26	123	29	40	28	125
			5	10	323A	3.3/4.4	9.2/10.6	38/40	50/50	36/38	132/134	40/42	50/50	39/40	134/136
			5	10	324A	4.9/6.5	13.6/15.6	44/46	50/50	41/44	137/139	46/48	50/50	44/46	139/141
			5	10	325A	6.5/8.7	18.1/20.9	49/53	60/60	47/50	141/144	51/55	60/60	49/52	143/146
			5	10	326A	7.9/10.5	21.9/25.3	54/58	60/60	51/55	145/148	56/60	60/60	53/57	147/150
			5	10	328A	12.0/16.0	33.4/38.5	69/75	70/80	64/70	156/162	70/77	70/80	66/72	158/164
			5	10	330A	14.4/19.2	40.0/46.2	77/85	80/90	72/79	163/169	79/86	80/90	74/81	165/171
			5	10	331A	15.8/21.0	43.8/50.5	82/90	90/90	76/84	167/174	83/92	90/100	78/86	169/176
	460-3-60	MED	5	10	—	—	—	13	20	12	66	14	20	13	67
			5	10	333A	6.0	7.2	22	25	20	73	23	25	22	74
			5	10	335A	11.5	13.8	30	30	28	80	31	35	29	81
			5	10	336A	14.0	16.8	34	35	32	83	35	35	33	84
			5	10	337A	21.5	25.9	45	45	42	92	46	50	43	93
		HIGH	5	10	—	—	—	14	20	13	68	15	20	14	69
			5	10	333A	6.0	7.2	23	25	22	75	24	25	23	76
			5	10	335A	11.5	13.8	31	35	29	82	32	35	30	83
			5	10	336A	14.0	16.8	35	35	33	85	36	40	34	86
			5	10	337A	21.5	25.9	46	50	43	94	47	50	44	95
	575-3-60	MED	5	—	—	—	—	10	15	9	42	12	15	11	44
			5	—	339A	10.0	9.6	22	25	20	52	24	25	22	54
			5	—	340A	15.0	14.4	28	30	26	56	30	30	28	58
		HIGH	5	—	—	—	—	10	15	10	43	12	15	12	45
			5	—	339A	10.0	9.6	22	25	21	53	24	25	23	55
			5	—	340A	15.0	14.4	28	30	26	57	30	30	29	59

NOTE(S):

a. High SCCR (Short Circuit Current Rating) is not available on the following: units with low ambient controls, phase loss monitor, non-fused disconnect, HACR breaker, or 575V models.

Electrical data (cont)

50GEQM05 MCA MOCP Electrical Data (cont)

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			WITH POWERED CONVENIENCE OUTLET							
							No Power Exhaust				With Power Exhaust (powered from unit)			
									Disconnect Size				Disconnect Size	
				CRHEATER ****00	NOM (kW)	FLA	MCA	Fuse or HACR BRKR	FLA	LRA	MCA	Fuse or HACR BRKR	FLA	LRA
50GEQM05	208/230-1-60	MED	5	—	—	—	44	60	43	156	46	60	45	158
			5	323A	3.3/4.4	15.9/18.3	64/67	80/80	61/64	172/174	65/68	80/80	63/66	174/176
			5	325A	6.5/8.7	31.4/36.3	83/89	90/100	79/85	187/192	85/91	100/100	81/87	189/194
			5	326A	7.9/10.5	37.9/43.8	91/98	100/100	86/93	194/200	93/100	100/100	89/95	196/202
			5	327A	9.8/13.0	46.9/54.2	102/111	110/125	97/105	203/210	104/113	110/125	99/107	205/212
			5	329A	13.1/17.4	62.8/72.5	122/134	125/150	115/126	219/229	124/136	125/150	117/128	221/231
			5	330A	14.4/19.2	69.3/80.0	130/144	150/150	122/135	225/236	132/146	150/150	125/137	227/238
			5	331A	15.8/21.0	75.8/87.5	138/153	150/175	130/143	232/244	140/155	150/175	132/146	234/246
		HIGH	5	—	—	—	46	60	45	159	48	60	47	161
			5	323A	3.3/4.4	15.9/18.3	66/69	80/80	63/66	175/177	68/71	80/80	66/68	177/179
			5	325A	6.5/8.7	31.4/36.3	85/91	100/100	81/87	190/195	87/93	100/100	83/89	192/197
			5	326A	7.9/10.5	37.9/43.8	93/101	100/110	89/96	197/203	95/102	100/110	91/98	199/205
			5	327A	9.8/13.0	46.9/54.2	104/114	110/125	99/108	206/213	106/115	110/125	101/110	208/215
			5	329A	13.1/17.4	62.8/72.5	124/136	125/150	117/129	222/232	126/138	150/150	120/131	224/234
			5	330A	14.4/19.2	69.3/80.0	132/146	150/150	125/137	228/239	134/148	150/150	127/139	230/241
			5	331A	15.8/21.0	75.8/87.5	141/155	150/175	132/146	235/247	142/157	150/175	135/148	237/249
	208/230-3-60	MED	5	—	—	—	33	45	33	130	35	50	35	132
			5	323A	3.3/4.4	9.2/10.6	45/46	50/50	44/45	139/141	47/48	50/60	46/47	141/143
			5	324A	4.9/6.5	13.6/15.6	50/53	60/60	49/51	144/146	52/55	60/60	51/53	146/148
			5	325A	6.5/8.7	18.1/20.9	56/59	60/60	54/57	148/151	58/61	60/70	56/59	150/153
			5	326A	7.9/10.5	21.9/25.3	61/65	70/70	58/62	152/155	62/67	70/70	60/64	154/157
			5	328A	12.0/16.0	33.4/38.5	75/81	80/90	72/77	163/169	77/83	80/90	74/80	165/171
			5	330A	14.4/19.2	40.0/46.2	83/91	90/100	79/86	170/176	85/93	90/100	81/88	172/178
			5	331A	15.8/21.0	43.8/50.5	88/96	90/100	83/91	174/181	90/98	90/100	86/93	176/183
		HIGH	5	—	—	—	32	45	31	128	33	45	33	130
			5	323A	3.3/4.4	9.2/10.6	43/45	50/50	42/43	137/139	45/47	50/50	44/46	139/141
			5	324A	4.9/6.5	13.6/15.6	49/51	60/60	47/49	142/144	50/53	60/60	49/51	144/146
			5	325A	6.5/8.7	18.1/20.9	54/58	60/60	52/55	146/149	56/60	60/60	54/58	148/151
			5	326A	7.9/10.5	21.9/25.3	59/63	60/70	56/60	150/153	61/65	70/70	59/63	152/155
			5	328A	12.0/16.0	33.4/38.5	73/80	80/80	70/76	161/167	75/82	80/90	72/78	163/169
			5	330A	14.4/19.2	40.0/46.2	82/89	90/90	77/84	168/174	83/91	90/100	79/87	170/176
			5	331A	15.8/21.0	43.8/50.5	86/95	90/100	82/89	172/179	88/97	90/100	84/92	174/181
	460-3-60	MED	5	—	—	—	15	20	15	68	16	20	16	69
			5	333A	6.0	7.2	24	30	23	75	25	30	24	76
			5	335A	11.5	13.8	33	35	31	82	34	35	32	83
			5	336A	14.0	16.8	36	40	34	85	37	40	35	86
			5	337A	21.5	25.9	48	50	45	94	49	50	46	95
		HIGH	5	—	—	—	16	20	16	70	17	20	17	71
			5	333A	6.0	7.2	25	30	24	77	26	30	25	78
			5	335A	11.5	13.8	33	35	32	84	34	35	33	85
			5	336A	14.0	16.8	37	40	35	87	38	40	36	88
			5	337A	21.5	25.9	49	50	46	96	50	50	47	97
	575-3-60	MED	5	—	—	—	11	15	11	44	13	15	13	46
			5	339A	10.0	9.6	23	25	22	54	25	25	24	56
			5	340A	15.0	14.4	29	30	27	58	31	35	30	60
		HIGH	5	—	—	—	12	15	12	45	14	20	14	47
			5	339A	10.0	9.6	24	25	23	55	26	30	25	57
			5	340A	15.0	14.4	30	30	28	59	32	35	31	61

Electrical data (cont)

50GEQM06 MCA MOCP Electrical Data

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	HIGH SCCR kA[a]	ELECTRIC HEATER			NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
								No Power Exhaust				With Power Exhaust (powered from unit)			
										Disconnect Size				Disconnect Size	
					CRHEATER ***A00	NOM (kW)	FLA	MCA	Fuse or HACR BRKR	FLA	LRA	MCA	Fuse or HACR BRKR	FLA	LRA
50GEQM06	208/230-1-60	MED	5	10	—	—	—	42	60	40	165	44	60	43	167
			5	10	324A	4.9/6.5	23.5/27.1	71/76	80/80	67/72	189/192	73/77	80/80	70/74	191/194
			5	10	325A	6.5/8.7	31.4/36.3	81/87	90/100	76/82	196/201	83/89	90/100	79/84	198/203
			5	10	327A	9.8/13.0	46.9/54.2	100/109	100/110	94/103	212/219	102/111	110/125	96/105	214/221
			5	10	329A	13.1/17.4	62.8/72.5	120/132	125/150	113/124	228/238	122/134	125/150	115/126	230/240
			5	10	331A	15.8/21.0	75.8/87.5	136/151	150/175	128/141	241/253	138/153	150/175	130/143	243/255
		HIGH	5	10	—	—	—	44	60	43	168	46	60	45	170
			5	10	324A	4.9/6.5	23.5/27.1	74/78	80/80	70/74	192/195	75/80	80/80	72/77	194/197
			5	10	325A	6.5/8.7	31.4/36.3	83/90	90/100	79/85	199/204	85/91	100/100	82/87	201/206
			5	10	327A	9.8/13.0	46.9/54.2	103/112	110/125	97/106	215/222	105/114	110/125	99/108	217/224
			5	10	329A	13.1/17.4	62.8/72.5	123/135	125/150	115/127	231/241	125/137	125/150	118/129	233/243
			5	10	331A	15.8/21.0	75.8/87.5	139/154	150/175	130/144	244/256	141/155	150/175	133/146	246/258
	208/230-3-60	MED	5	10	—	—	—	30	45	30	166	32	45	32	168
			5	10	324A	4.9/6.5	13.6/15.6	47/50	50/60	45/48	180/182	49/52	60/60	48/50	182/184
			5	10	326A	7.9/10.5	21.9/25.3	58/62	60/70	55/59	188/191	59/64	60/70	57/61	190/193
			5	10	328A	12.0/16.0	33.4/38.5	72/78	80/80	68/74	199/205	74/80	80/80	70/76	201/207
			5	10	331A	15.8/21.0	43.8/50.5	85/93	90/100	80/88	210/217	87/95	90/100	82/90	212/219
			5	10	332A	18.4/24.5	51.1/58.9	94/104	100/110	89/98	217/225	96/106	100/110	91/100	219/227
		HIGH	5	10	—	—	—	28	40	27	162	29	40	29	164
			5	10	324A	4.9/6.5	13.6/15.6	45/47	50/50	42/45	176/178	46/49	50/50	45/47	178/180
			5	10	326A	7.9/10.5	21.9/25.3	55/59	60/60	52/56	184/187	57/61	60/70	54/58	186/189
			5	10	328A	12.0/16.0	33.4/38.5	69/76	70/80	65/71	195/201	71/78	80/80	67/73	197/203
			5	10	331A	15.8/21.0	43.8/50.5	82/91	90/100	77/85	206/213	84/93	90/100	79/87	208/215
			5	10	332A	18.4/24.5	51.1/58.9	91/101	100/110	85/94	213/221	93/103	100/110	88/97	215/223
	460-3-60	MED	5	10	—	—	—	11	15	11	63	12	15	12	64
			5	10	333A	6.0	7.2	20	20	19	70	21	25	20	71
			5	10	335A	11.5	13.8	28	30	26	77	29	30	28	78
			5	10	336A	14.0	16.8	32	35	30	80	33	35	31	81
			5	10	337A	21.5	25.9	44	45	40	89	45	45	42	90
			5	10	338A	24.0	28.9	47	50	44	92	48	50	45	93
		HIGH	5	10	—	—	—	12	15	12	64	13	15	13	65
			5	10	333A	6.0	7.2	21	25	20	71	22	25	21	72
			5	10	335A	11.5	13.8	29	30	28	78	30	35	29	79
			5	10	336A	14.0	16.8	33	35	31	81	34	35	32	82
			5	10	337A	21.5	25.9	45	45	42	90	46	50	43	91
			5	10	338A	24.0	28.9	48	50	45	93	49	50	46	94
	575-3-60	MED	5	—	—	—	—	10	15	10	52	12	15	12	54
			5	—	340A	15.0	14.4	28	30	26	66	30	30	28	68
			5	—	341A	21.0	20.2	36	40	33	72	37	40	35	74
		HIGH	5	—	—	—	—	11	15	10	53	13	15	13	55
			5	—	340A	15.0	14.4	29	30	27	67	31	35	29	69
			5	—	341A	21.0	20.2	36	40	34	73	38	40	36	75

NOTE(S):

a. High SCCR (Short Circuit Current Rating) is not available on the following: units with low ambient controls, phase loss monitor, non-fused disconnect, HACR breaker, or 575V models.

Electrical data (cont)

50GEQM06 MCA MOCP Electrical Data (cont)

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			WITH POWERED CONVENIENCE OUTLET							
							No Power Exhaust				With Power Exhaust (powered from unit)			
									Disconnect Size				Disconnect Size	
				CRHEATER ****00	NOM (kW)	FLA	MCA	Fuse or HACR BRKR	FLA	LRA	MCA	Fuse or HACR BRKR	FLA	LRA
50GEQM06	208/230-1-60	MED	5	—	—	—	47	60	46	170	48	60	48	172
			5	324A	4.9/6.5	23.5/27.1	76/80	80/80	73/77	194/197	78/82	80/90	75/79	196/199
			5	325A	6.5/8.7	31.4/36.3	86/92	100/100	82/88	201/206	88/94	100/100	84/90	203/208
			5	327A	9.8/13.0	46.9/54.2	105/114	110/125	100/108	217/224	107/116	110/125	102/110	219/226
			5	329A	13.1/17.4	62.8/72.5	125/137	125/150	118/129	233/243	127/139	150/150	120/131	235/245
			5	331A	15.8/21.0	75.8/87.5	141/156	150/175	133/147	246/258	143/158	150/175	135/149	248/260
		HIGH	5	—	—	—	49	60	49	173	51	60	51	175
			5	324A	4.9/6.5	23.5/27.1	78/83	80/100	76/80	197/200	80/85	90/100	78/82	199/202
			5	325A	6.5/8.7	31.4/36.3	88/94	100/100	85/91	204/209	90/96	100/100	87/93	206/211
			5	327A	9.8/13.0	46.9/54.2	108/117	110/125	103/111	220/227	110/119	110/125	105/113	222/229
			5	329A	13.1/17.4	62.8/72.5	128/140	150/150	121/132	236/246	129/142	150/150	123/134	238/248
			5	331A	15.8/21.0	75.8/87.5	144/158	150/175	136/149	249/261	146/160	150/175	138/152	251/263
	208/230-3-60	MED	5	—	—	—	35	45	35	171	37	50	37	173
			5	324A	4.9/6.5	13.6/15.6	52/55	60/60	51/53	185/187	54/56	60/60	53/55	187/189
			5	326A	7.9/10.5	21.9/25.3	62/67	70/70	60/64	193/196	64/69	70/70	63/67	195/198
			5	328A	12.0/16.0	33.4/38.5	77/83	80/90	74/80	204/210	79/85	80/90	76/82	206/212
			5	331A	15.8/21.0	43.8/50.5	90/98	90/100	86/93	215/222	92/100	100/100	88/96	217/224
			5	332A	18.4/24.5	51.1/58.9	99/109	100/110	94/103	222/230	101/111	110/125	96/105	224/232
		HIGH	5	—	—	—	32	45	32	167	34	45	34	169
			5	324A	4.9/6.5	13.6/15.6	49/52	60/60	48/50	181/183	51/54	60/60	50/52	183/185
			5	326A	7.9/10.5	21.9/25.3	60/64	60/70	57/61	189/192	62/66	70/70	60/63	191/194
			5	328A	12.0/16.0	33.4/38.5	74/80	80/80	71/76	200/206	76/82	80/90	73/79	202/208
			5	331A	15.8/21.0	43.8/50.5	87/95	90/100	83/90	211/218	89/97	90/100	85/92	213/220
			5	332A	18.4/24.5	51.1/58.9	96/106	100/110	91/100	218/226	98/108	100/110	93/102	220/228
	460-3-60	MED	5	—	—	—	13	15	13	65	14	20	14	66
			5	333A	6.0	7.2	22	25	21	72	23	25	23	73
			5	335A	11.5	13.8	31	35	29	79	32	35	30	80
			5	336A	14.0	16.8	34	35	32	82	35	35	34	83
			5	337A	21.5	25.9	46	50	43	91	47	50	44	92
			5	338A	24.0	28.9	50	50	46	94	51	60	47	95
		HIGH	5	—	—	—	14	20	14	66	15	20	15	67
			5	333A	6.0	7.2	23	25	23	73	24	25	24	74
			5	335A	11.5	13.8	32	35	30	80	33	35	31	81
			5	336A	14.0	16.8	35	35	34	83	36	40	35	84
			5	337A	21.5	25.9	47	50	44	92	48	50	45	93
			5	338A	24.0	28.9	51	60	47	95	52	60	49	96
	575-3-60	MED	5	—	—	—	12	15	12	54	14	15	14	56
			5	340A	15.0	14.4	30	30	28	68	32	35	30	70
			5	341A	21.0	20.2	37	40	35	74	39	40	37	76
		HIGH	5	—	—	—	13	15	12	55	15	20	15	57
			5	340A	15.0	14.4	31	35	29	69	33	35	31	71
			5	341A	21.0	20.2	38	40	36	75	40	40	38	77

Electrical data (cont)

50GEQM04 Electric Heat Data — without Non-Fused Disconnect

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00			
								No CO or Unpowered CO		With PWRD CO	
								No PE	With PE (pwrd fr/unit)	No PE	With PE (pwrd fr/unit)
04	208/230-1-60	MED	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	037	037	037	037
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
		HIGH	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	037	037	037	037
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
	208/230-3-60	MED	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	—	—	—	—
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	—	—	—	—
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	—	—	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	037	037	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
		HIGH	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	—	—	—	—
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	—	—	—	037
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	—	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	037	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
	460-3-60	MED	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER334A00	8.8	5.0	8.1	27.6	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
		HIGH	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER334A00	8.8	5.0	8.1	27.6	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
	575-3-60	MED	CRHEATER339A00	10.0	5.0	9.2	31.3	—	—	—	—
			CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—
		HIGH	CRHEATER339A00	10.0	5.0	9.2	31.3	—	—	—	—
			CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—

Electrical data (cont)

50GEQM04 Electric Heat Data — without Non-Fused Disconnect (cont)

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	HIGH SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00	
								No CO or Unpowered CO	
								No PE	With PE (pwrd fr/unit)
04	208/230-1-60	MED	CRHEATER323A00	4.4	10.0	3.3/4.0	11.3/13.8	060	060
			CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	060	060
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	060	060
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	060	060
			CRHEATER327A00	13.0	10.0	9.8/11.9	33.3/40.7	061	061
		HIGH	CRHEATER323A00	4.4	10.0	3.3/4.0	11.3/13.8	060	060
			CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	060	060
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	060	060
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	060	060
			CRHEATER327A00	13.0	10.0	9.8/11.9	33.3/40.7	061	061
	208/230-3-60	MED	CRHEATER323A00	4.4	10.0	3.3/4.0	11.3/13.8	062	062
			CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	062	062
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	062	062
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	062	062
			CRHEATER328A00	16.0	10.0	12.0/14.7	41.0/50.1	062	062
		HIGH	CRHEATER323A00	4.4	10.0	3.3/4.0	11.3/13.8	062	062
			CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	062	062
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	062	062
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	062	062
			CRHEATER328A00	16.0	10.0	12.0/14.7	41.0/50.1	062	062
	460-3-60	MED	CRHEATER333A00	6.0	10.0	5.5	18.8	062	062
			CRHEATER334A00	8.8	10.0	8.1	27.6	062	062
			CRHEATER335A00	11.5	10.0	10.6	36.0	062	062
			CRHEATER336A00	14.0	10.0	12.9	43.9	062	062
		HIGH	CRHEATER333A00	6.0	10.0	5.5	18.8	062	062
			CRHEATER334A00	8.8	10.0	8.1	27.6	062	062
			CRHEATER335A00	11.5	10.0	10.6	36.0	062	062
			CRHEATER336A00	14.0	10.0	12.9	43.9	062	062
	575-3-60	MED	CRHEATER339A00	10.0	—	9.2	31.3	062	062
			CRHEATER340A00	15.0	—	13.8	47.0	062	062
		HIGH	CRHEATER339A00	10.0	—	9.2	31.3	062	062
			CRHEATER340A00	15.0	—	13.8	47.0	062	062

Electrical data (cont)

50GEQM04 Electric Heat Data — with Non-Fused Disconnect

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00			
								No CO or Unpowered CO		With PWRD CO	
								No PE	With PE (pwrd fr/unit)	No PE	With PE (pwrd fr/unit)
04	208/230-1-60	MED	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	037	037	037	037
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
		HIGH	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	037	037	037	040
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	041	041	041	041
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
	208/230-3-60	MED	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	037	037	037	037
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	037	037	037	037
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	037	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	037	037	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
		HIGH	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	037	037	037	037
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	037	037	037	037
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	037	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	037	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
	460-3-60	MED	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER334A00	8.8	5.0	8.1	27.6	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
		HIGH	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER334A00	8.8	5.0	8.1	27.6	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
	575-3-60	MED	CRHEATER339A00	10.0	5.0	9.2	31.3	—	—	—	—
			CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—
		HIGH	CRHEATER339A00	10.0	5.0	9.2	31.3	—	—	—	—
			CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—

Electrical data (cont)

50GEQM05 Electric Heat Data — without Non-Fused Disconnect

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00			
								No CO or Unpowered CO		With PWRD CO	
								No PE	With PE (pwrd fr/unit)	No PE	With PE (pwrd fr/unit)
05	208/230-1-60	MED	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
			CRHEATER329A00	17.4	5.0	13.1/16.0	44.6/54.5	041	041	041	041
			CRHEATER330A00	19.2	5.0	14.4/17.6	49.2/60.2	041	041	041	041
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	041	041	041	041
		HIGH	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
			CRHEATER329A00	17.4	5.0	13.1/16.0	44.6/54.5	041	041	041	041
			CRHEATER330A00	19.2	5.0	14.4/17.6	49.2/60.2	041	041	041	041
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	041	041	041	041
	208/230-3-60	MED	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	—	—	—	—
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	—	—	037	037
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	037	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	038	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
			CRHEATER330A00	19.2	5.0	14.4/17.6	49.2/60.2	039	039	039	039
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	039	039	039	039
		HIGH	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	—	—	—	—
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	—	—	—	037
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	037	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	037	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
			CRHEATER330A00	19.2	5.0	14.4/17.6	49.2/60.2	039	039	039	039
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	039	039	039	039
	460-3-60	MED	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
			CRHEATER337A00	21.5	5.0	19.7	67.4	037	037	037	037
		HIGH	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
			CRHEATER337A00	21.5	5.0	19.7	67.4	037	037	037	037
	575-3-60	MED	CRHEATER339A00	10.0	5.0	9.2	31.3	—	—	—	—
			CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—
		HIGH	CRHEATER339A00	10.0	5.0	9.2	31.3	—	—	—	—
			CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—

Electrical data (cont)

50GEQM05 Electric Heat Data — without Non-Fused Disconnect (cont)

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	HIGH SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00	
								No CO or Unpowered CO	
								No PE	With PE (pwrd fr/unit)
05	208/230-1-60	MED	CRHEATER323A00	4.4	10.0	3.3/4.0	11.3/13.8	060	060
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	060	060
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	060	060
			CRHEATER327A00	13.0	10.0	9.8/11.9	33.3/40.7	061	061
			CRHEATER329A00	17.4	10.0	13.1/16.0	44.6/54.5	061	061
			CRHEATER330A00	19.2	10.0	14.4/17.6	49.2/60.2	061	061
			CRHEATER331A00	21.0	10.0	15.8/19.3	53.8/65.8	061	061
		HIGH	CRHEATER323A00	4.4	10.0	3.3/4.0	11.3/13.8	060	060
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	060	060
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	060	060
			CRHEATER327A00	13.0	10.0	9.8/11.9	33.3/40.7	061	061
			CRHEATER329A00	17.4	10.0	13.1/16.0	44.6/54.5	061	061
			CRHEATER330A00	19.2	10.0	14.4/17.6	49.2/60.2	061	061
			CRHEATER331A00	21.0	10.0	15.8/19.3	53.8/65.8	061	061
	208/230-3-60	MED	CRHEATER323A00	4.4	10.0	3.3/4.0	11.3/13.8	062	062
			CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	062	062
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	062	062
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	062	062
			CRHEATER328A00	16.0	10.0	12.0/14.7	41.0/50.1	062	062
			CRHEATER330A00	19.2	10.0	14.4/17.6	49.2/60.2	063	063
			CRHEATER331A00	21.0	10.0	15.8/19.3	53.8/65.8	063	063
		HIGH	CRHEATER323A00	4.4	10.0	3.3/4.0	11.3/13.8	062	062
			CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	062	062
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	062	062
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	062	062
			CRHEATER328A00	16.0	10.0	12.0/14.7	41.0/50.1	062	062
			CRHEATER330A00	19.2	10.0	14.4/17.6	49.2/60.2	063	063
			CRHEATER331A00	21.0	10.0	15.8/19.3	53.8/65.8	063	063
	460-3-60	MED	CRHEATER333A00	6.0	10.0	5.5	18.8	062	062
			CRHEATER335A00	11.5	10.0	10.6	36.0	062	062
			CRHEATER336A00	14.0	10.0	12.9	43.9	062	062
			CRHEATER337A00	21.5	10.0	19.7	67.4	063	063
		HIGH	CRHEATER333A00	6.0	10.0	5.5	18.8	062	062
			CRHEATER335A00	11.5	10.0	10.6	36.0	062	062
			CRHEATER336A00	14.0	10.0	12.9	43.9	062	062
			CRHEATER337A00	21.5	10.0	19.7	67.4	063	063
	575-3-60	MED	CRHEATER339A00	10.0	—	9.2	31.3	062	062
			CRHEATER340A00	15.0	—	13.8	47.0	062	062
		HIGH	CRHEATER339A00	10.0	—	9.2	31.3	062	062
			CRHEATER340A00	15.0	—	13.8	47.0	062	062

Electrical data (cont)

50GEQM05 Electric Heat Data — with Non-Fused Disconnect

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00			
								No CO or Unpowered CO		With PWRD CO	
								No PE	With PE (pwrd fr/unit)	No PE	With PE (pwrd fr/unit)
05	208/230-1-60	MED	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
			CRHEATER329A00	17.4	5.0	13.1/16.0	44.6/54.5	041	041	041	041
			CRHEATER330A00	19.2	5.0	14.4/17.6	49.2/60.2	041	041	041	041
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	041	041	041	041
		HIGH	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
			CRHEATER329A00	17.4	5.0	13.1/16.0	44.6/54.5	041	041	041	041
			CRHEATER330A00	19.2	5.0	14.4/17.6	49.2/60.2	041	041	041	041
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	041	041	041	041
	208/230-3-60	MED	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	037	037	037	037
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	037	037	037	037
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	037	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	038	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
			CRHEATER330A00	19.2	5.0	14.4/17.6	49.2/60.2	039	039	039	039
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	039	039	039	039
		HIGH	CRHEATER323A00	4.4	5.0	3.3/4.0	11.3/13.8	037	037	037	037
			CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	037	037	037	037
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	037	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	037	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
			CRHEATER330A00	19.2	5.0	14.4/17.6	49.2/60.2	039	039	039	039
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	039	039	039	039
	460-3-60	MED	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
			CRHEATER337A00	21.5	5.0	19.7	67.4	037	037	037	037
		HIGH	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
			CRHEATER337A00	21.5	5.0	19.7	67.4	037	037	037	037
	575-3-60	MED	CRHEATER339A00	10.0	5.0	9.2	31.3	—	—	—	—
			CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—
		HIGH	CRHEATER339A00	10.0	5.0	9.2	31.3	—	—	—	—
			CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—

Electrical data (cont)

50GEQM06 Electric Heat Data — without Non-Fused Disconnect

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00			
								No CO or Unpowered CO		With PWRD CO	
								No PE	With PE (pwrd fr/unit)	No PE	With PE (pwrd fr/unit)
06	208/230-1-60	MED	CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
			CRHEATER329A00	17.4	5.0	13.1/16.0	44.6/54.5	041	041	041	041
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	041	041	041	041
		HIGH	CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
			CRHEATER329A00	17.4	5.0	13.1/16.0	44.6/54.5	041	041	041	041
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	041	041	041	041
	208/230-3-60	MED	CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	—	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	038	038	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	039	039	039	039
			CRHEATER332A00	24.5	5.0	18.4/22.5	62.8/76.8	039	039	039	039
		HIGH	CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	-	-	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	038	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	039	039	039	039
			CRHEATER332A00	24.5	5.0	18.4/22.5	62.8/76.8	039	039	039	039
	460-3-60	MED	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
			CRHEATER337A00	21.5	5.0	19.7	67.4	037	037	037	037
			CRHEATER338A00	24.0	5.0	22.0	75.2	037	037	037	037
		HIGH	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
			CRHEATER337A00	21.5	5.0	19.7	67.4	037	037	037	037
			CRHEATER338A00	24.0	5.0	22.0	75.2	037	037	037	037
	575-3-60	MED	CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—
			CRHEATER341A00	21.0	5.0	19.3	65.8	037	037	037	037
		HIGH	CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—
			CRHEATER341A00	21.0	5.0	19.3	65.8	037	037	037	037

50GEQM06 Electric Heat Data — without Non-Fused Disconnect (cont)

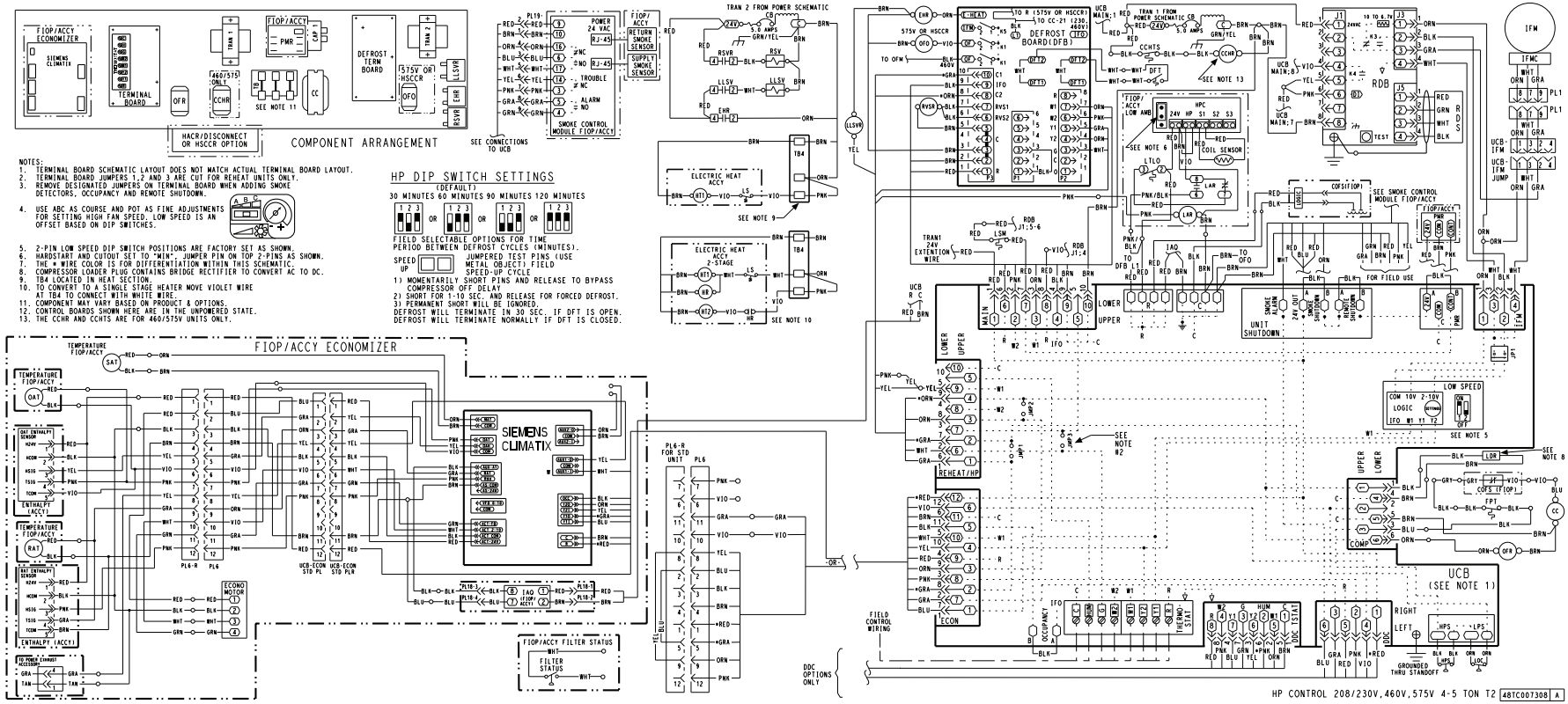
50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	HIGH SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00	
								No CO or Unpowered CO	
								No PE	With PE (pwrd fr/unit)
06	208/230-1-60	MED	CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	060	060
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	060	060
			CRHEATER327A00	13.0	10.0	9.8/11.9	33.3/40.7	061	061
			CRHEATER329A00	17.4	10.0	13.1/16.0	44.6/54.5	061	061
			CRHEATER331A00	21.0	10.0	15.8/19.3	53.8/65.8	061	061
		HIGH	CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	060	060
			CRHEATER325A00	8.7	10.0	6.5/8.0	22.3/27.3	060	060
			CRHEATER327A00	13.0	10.0	9.8/11.9	33.3/40.7	061	061
			CRHEATER329A00	17.4	10.0	13.1/16.0	44.6/54.5	061	061
			CRHEATER331A00	21.0	10.0	15.8/19.3	53.8/65.8	061	061
	208/230-3-60	MED	CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	062	062
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	062	062
			CRHEATER328A00	16.0	10.0	12.0/14.7	41.0/50.1	062	062
			CRHEATER331A00	21.0	10.0	15.8/19.3	53.8/65.8	063	063
			CRHEATER332A00	24.5	10.0	18.4/22.5	62.8/76.8	063	063
		HIGH	CRHEATER324A00	6.5	10.0	4.9/6.0	16.7/20.4	062	062
			CRHEATER326A00	10.5	10.0	7.9/9.6	26.9/32.9	062	062
			CRHEATER328A00	16.0	10.0	12.0/14.7	41.0/50.1	062	062
			CRHEATER331A00	21.0	10.0	15.8/19.3	53.8/65.8	063	063
			CRHEATER332A00	24.5	10.0	18.4/22.5	62.8/76.8	063	063
	460-3-60	MED	CRHEATER333A00	6.0	10.0	5.5	18.8	062	062
			CRHEATER335A00	11.5	10.0	10.6	36.0	062	062
			CRHEATER336A00	14.0	10.0	12.9	43.9	062	062
			CRHEATER337A00	21.5	10.0	19.7	67.4	063	063
			CRHEATER338A00	24.0	10.0	22.0	75.2	063	063
		HIGH	CRHEATER333A00	6.0	10.0	5.5	18.8	062	062
			CRHEATER335A00	11.5	10.0	10.6	36.0	062	062
			CRHEATER336A00	14.0	10.0	12.9	43.9	062	062
			CRHEATER337A00	21.5	10.0	19.7	67.4	063	063
			CRHEATER338A00	24.0	10.0	22.0	75.2	063	063
	575-3-60	MED	CRHEATER340A00	15.0	—	13.8	47.0	062	062
			CRHEATER341A00	21.0	—	19.3	65.8	063	063
		HIGH	CRHEATER340A00	15.0	—	13.8	47.0	062	062
			CRHEATER341A00	21.0	—	19.3	65.8	063	063

Electrical data (cont)

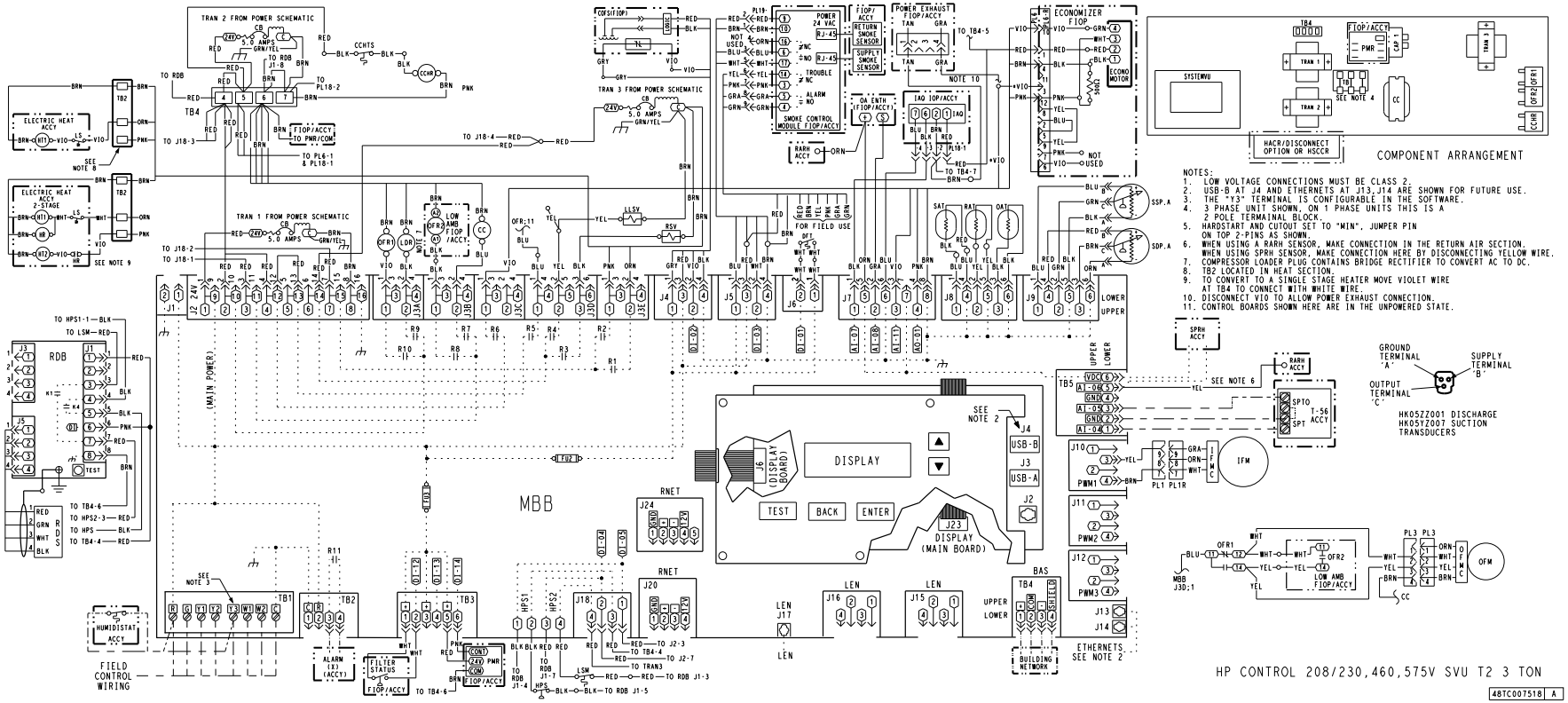
50GEQM06 Electric Heat Data — with Non-Fused Disconnect

50GEQ UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION PART NUMBER CRSINGLEXXXA00			
								No CO or Unpowered CO		With PWRD CO	
								No PE	With PE (pwrd fr/unit)	No PE	With PE (pwrd fr/unit)
06	208/230-1-60	MED	CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
			CRHEATER329A00	17.4	5.0	13.1/16.0	44.6/54.5	041	041	041	041
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	041	041	041	041
		HIGH	CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	040	040	040	040
			CRHEATER325A00	8.7	5.0	6.5/8.0	22.3/27.3	040	040	040	040
			CRHEATER327A00	13.0	5.0	9.8/11.9	33.3/40.7	041	041	041	041
			CRHEATER329A00	17.4	5.0	13.1/16.0	44.6/54.5	041	041	041	041
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	041	041	041	041
	208/230-3-60	MED	CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	037	037	037	038
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	038	038	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	039	039	039	039
			CRHEATER332A00	24.5	5.0	18.4/22.5	62.8/76.8	039	039	039	039
		HIGH	CRHEATER324A00	6.5	5.0	4.9/6.0	16.7/20.4	037	037	037	037
			CRHEATER326A00	10.5	5.0	7.9/9.6	26.9/32.9	037	038	038	038
			CRHEATER328A00	16.0	5.0	12.0/14.7	41.0/50.1	038	038	038	038
			CRHEATER331A00	21.0	5.0	15.8/19.3	53.8/65.8	039	039	039	039
			CRHEATER332A00	24.5	5.0	18.4/22.5	62.8/76.8	039	039	039	039
	460-3-60	MED	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
			CRHEATER337A00	21.5	5.0	19.7	67.4	037	037	037	037
			CRHEATER338A00	24.0	5.0	22.0	75.2	037	037	037	037
		HIGH	CRHEATER333A00	6.0	5.0	5.5	18.8	—	—	—	—
			CRHEATER335A00	11.5	5.0	10.6	36.0	—	—	—	—
			CRHEATER336A00	14.0	5.0	12.9	43.9	—	—	—	—
			CRHEATER337A00	21.5	5.0	19.7	67.4	037	037	037	037
			CRHEATER338A00	24.0	5.0	22.0	75.2	037	037	037	037
	575-3-60	MED	CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—
			CRHEATER341A00	21.0	5.0	19.3	65.8	037	037	037	037
		HIGH	CRHEATER340A00	15.0	5.0	13.8	47.0	—	—	—	—
			CRHEATER341A00	21.0	5.0	19.3	65.8	037	037	037	037

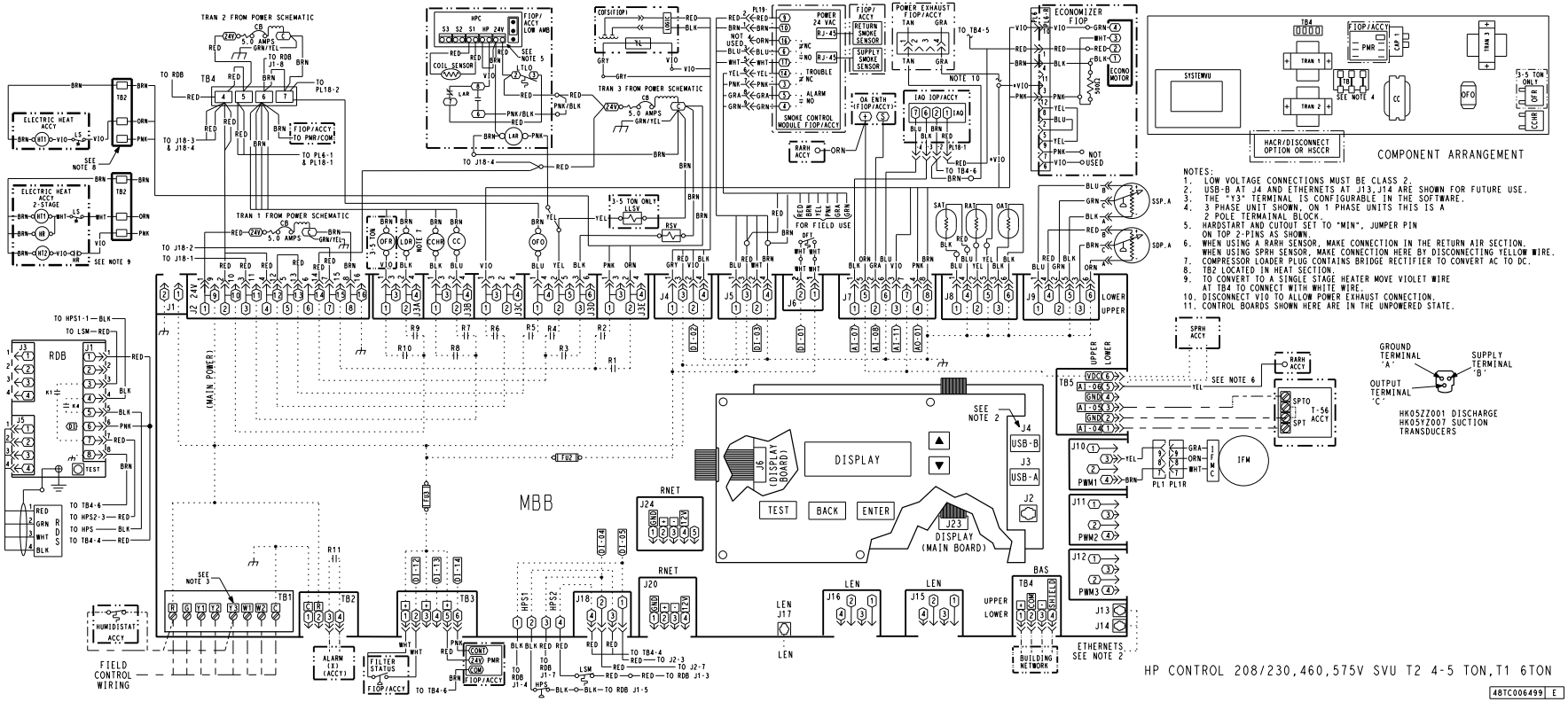
Typical Control Wiring Diagram — 50GEQ 05-06 Unit, All Voltages with Electromechanical Control and POL224 Economizer



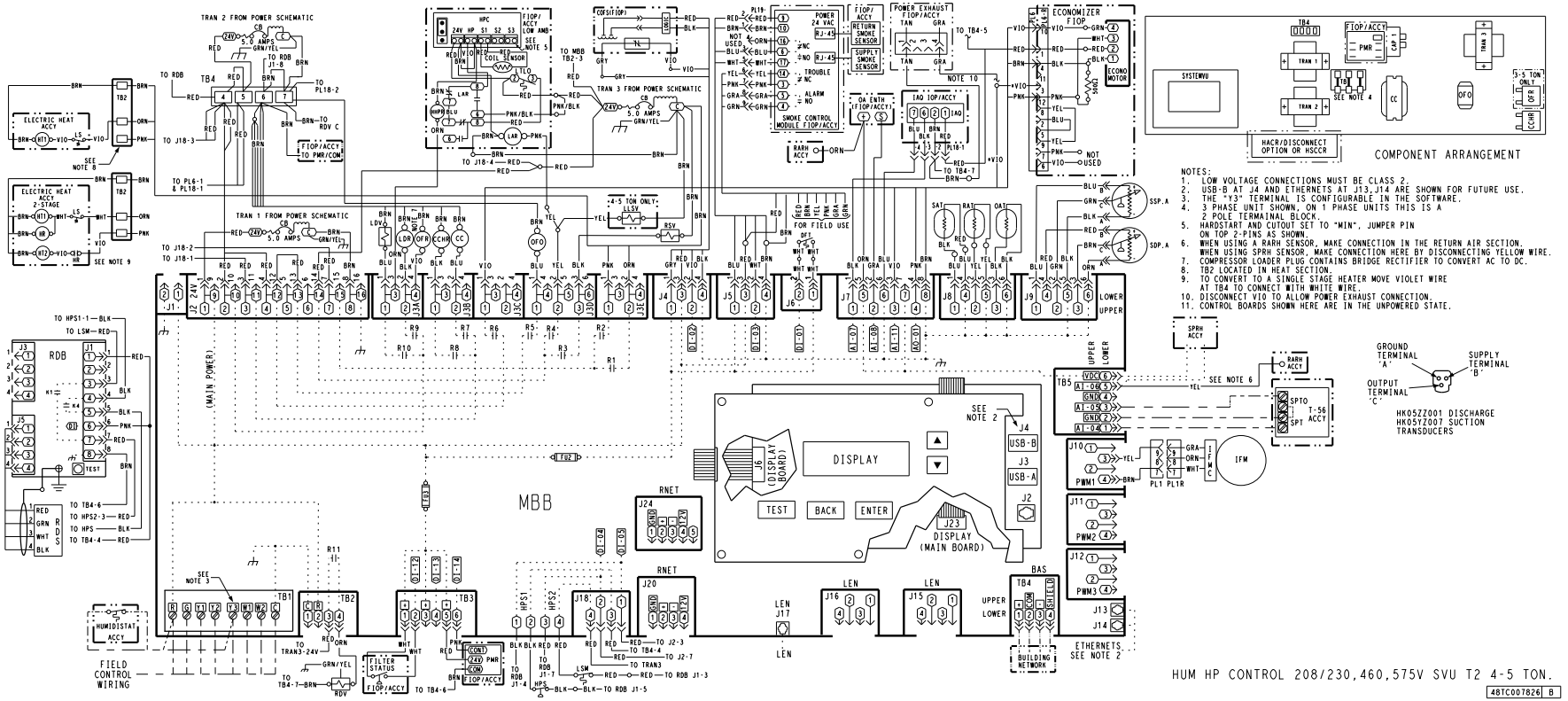
Typical Control Wiring Diagram — 50GEQ 04 Unit, All Voltages with SystemVu Controller



Typical Control Wiring Diagram — 50GEQ 05-06 Unit, All Voltages with SystemVu Controller

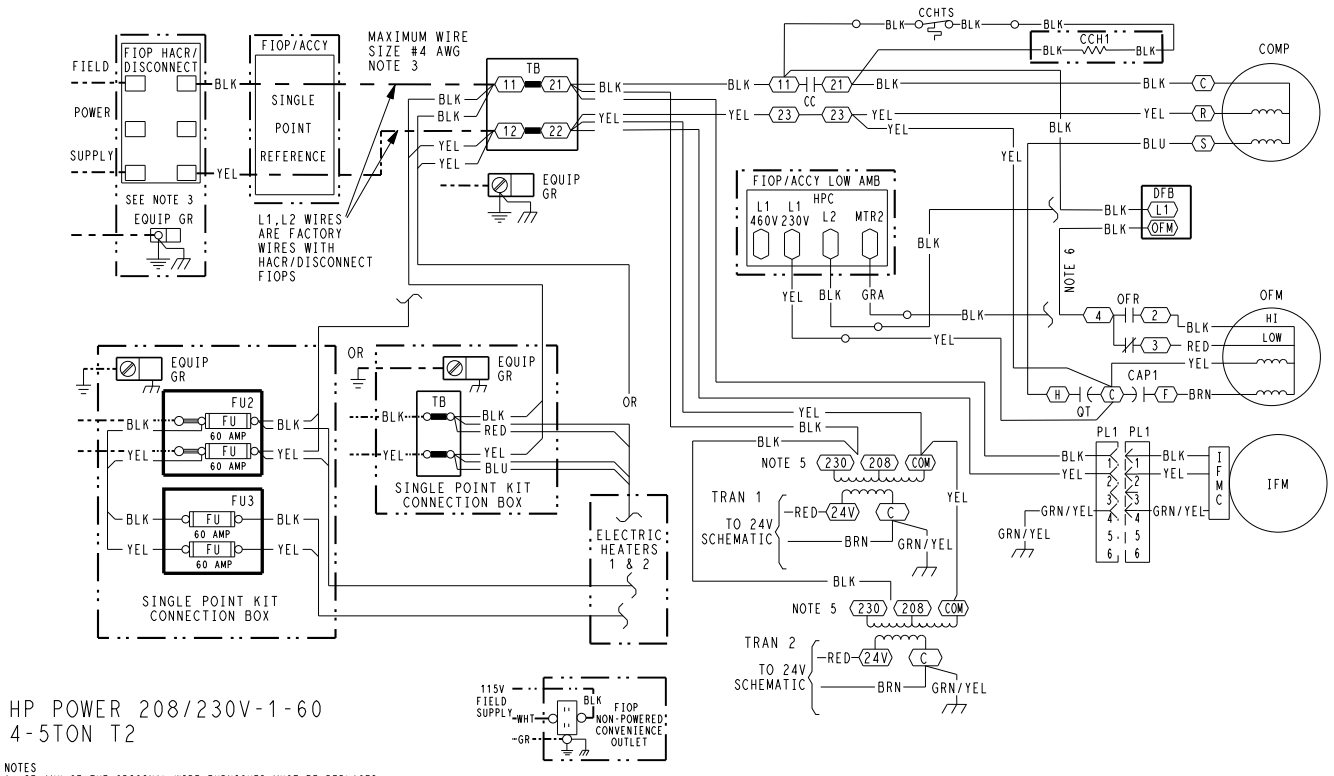


Typical Heat Pump Humidi-MiZer Control Wiring Diagram — 50GEQ 05-06 Unit, All Voltages with SystemVu Controller



Typical wiring diagram (cont)

Typical 50GEQ 05-06 Power Wiring Diagram, Electromechanical, 208/230-1-60 Shown



HP POWER 208/230V-1-60
4-5TON T2

NOTES
1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED. IT MUST BE REPLACED WITH TYPE 90° C WIRE OR ITS EQUIVALENT.
2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED.
3. USE COPPER CONDUCTOR ONLY.
4. DO NOT DISCONNECT POWER PLUG OR SIGNAL WIRE WHILE UNDER LOAD.
5. ON 208/230V UNITS, TRAN IS WIRED FOR 230V. IF UNIT IS TO BE RUN WITH 208V POWER SUPPLY, DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 208V TAP.
6. THIS WIRE NOT USED WITH LOW AMBIENT FIOP/ACCY.

LEGEND

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

ACCY	ACCESSORY
AWG	AMERICAN WIRE GAGE
BAS	BUILDING AUTOMATION NETWORK
CC	CONTACTOR,COMPRESSOR
C	COMMON
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CCHR	CRANKCASE HEATER RELAY
CCHTS	CRANKCASE HEATER TEMP SWITCH
CLO	COMPRESSOR LOCKOUT
CLV	COOLING LIQUID VALVE
COFS	CONDENSATE OVERFLOW SWITCH
COM	SIGNAL COMMON
COMP	COMPRESSOR MOTOR
DDC	DIRECT DIGITAL CONTROL
DFB	DEFROST BOARD
DFT	DEFROST THERMOSTAT
EHR	ELECTRIC HEAT RELAY
ENTH	ENTHALPY
ERV	ENERGY RECOVERY VENTILATOR
ESL	ENTHALPY SENSOR - LOW
FB	FUSE BLOCK
FIOP	FACTORY INSTALLED OPTION
FPT	FREEZE PROTECTION THERMOSTAT
FST	FAN HOUSING TEMP SENSOR
FU	FUSE
G	THERMOSTAT FAN CALL
GR(GND)	GROUND
HACR	HEATING, AIR-CONDITIONING, REFRIGERATION BREAKER
HACR	HEATING, AIR-CONDITIONING, REFRIGERATION BREAKER
HR	HEATER RELAY
HGRH	HOT GAS REHEAT
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
HUM	HUMIDISTAT
IAQ	INDOOR AIR QUALITY SENSORS
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN MOTOR CONTROL
IFO	INDOOR FAN ON SIGNAL
IRH	INDOOR RELATIVE HUMIDITY
JMP	JUMPER
L1	LINE 1
LA	LOW AMBIENT LOCKOUT
LAR	LOW AMBIENT RELAY
LAS	LOW AMBIENT SWITCH
LDR	COMPRESSOR LOADER
LEN	LOCAL EQUIPMENT NETWORK
LOC	LOSS OF CHARGE
LPS	LOW PRESSURE SWITCH
LS	LIMIT SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMP LOCKOUT
MTR	MOTOR
OAQ	OUTDOOR AIR QUALITY
OAT	OUTDOOR AIR TEMP. SEN
OFM	OUTDOOR FAN MOTOR
OFR	OUTDOOR FAN RELAY
OL	OVERLOAD
PER	POWER EXHAUST RELAY
PH	PHASE
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
PS	PRESSURE SWITCH
PWM	PULSE WIDTH MODULATION
QT	QUADRUPLE TERMINAL
R	THERMOSTAT POWER
RAT	RETURN AIR TEMP. SEN
RDB	REFRIGERANT DISSIPATION BOARD
RDS	REFRIGERANT DISSIPATION SENSOR
RDV	REHEAT DISCHARGE VALVE
RH	RELATIVE HUMIDITY
RLV	REHEAT LIQUID VALVE
RNET	LOCAL ACCESS NETWORK
RVS	REVERSING VALVE SOLENOID
SAT	SUPPLY AIR TEMP SENSOR
SDP	SYSTEM DISCHARGE PRESSURE
SPRH	SPACE RELATIVE HUMIDITY
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
SSP	SYSTEM SUCTION PRESSURE
SW	SWITCH
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD
W1	1st STAGE OF HEATING CALL
W2	2nd STAGE OF HEATING CALL
Y1	1st STAGE OF COOLING CALL
Y2	2nd STAGE OF COOLING CALL

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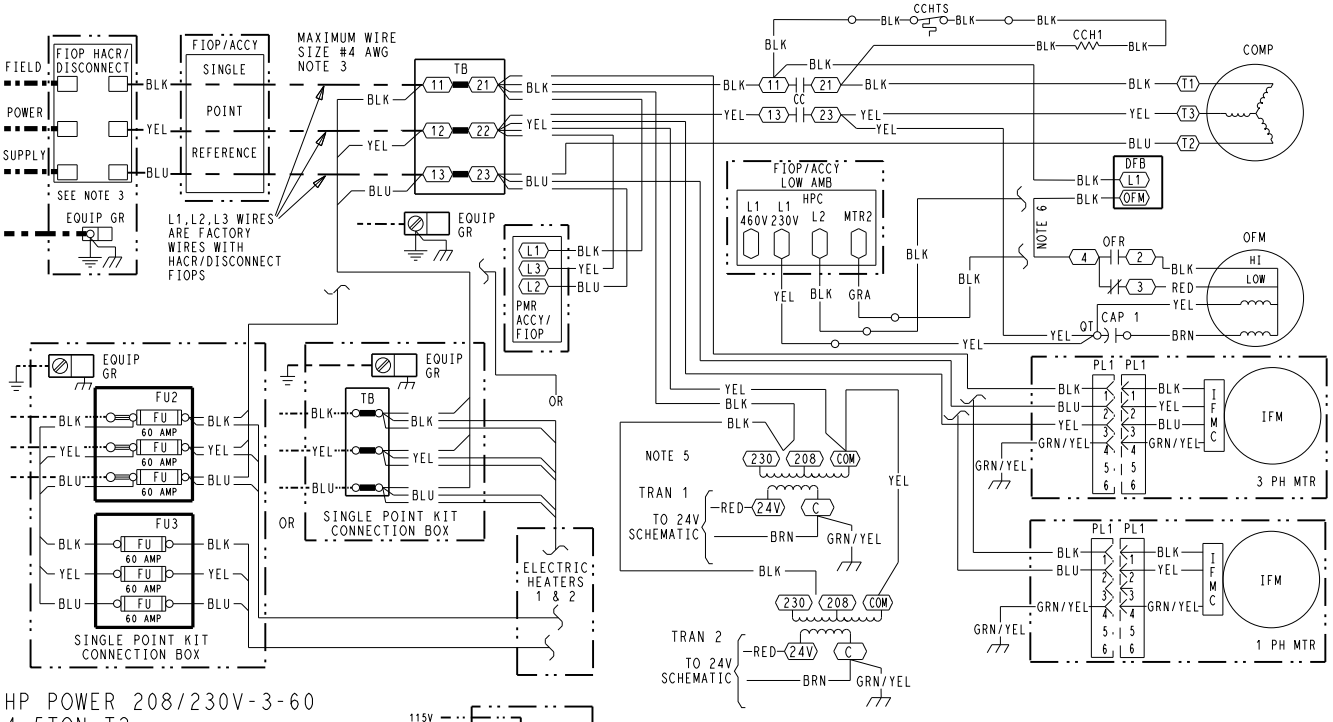
Typical wiring diagram (cont)

Typical 50GEQ 05-06 Power Wiring Diagram, Electromechanical, 208/230-3-60 Shown



NOTES
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2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED.
3. USE COPPER CONDUCTOR ONLY.
4. DO NOT DISCONNECT POWER PLUG OR SIGNAL WIRE WHILE UNDER LOAD.
5. ON 208/230V UNITS, TRAN IS WIRED FOR 230V. IF UNIT IS TO BE RUN WITH 208V POWER SUPPLY, DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 208V TAP.
6. THIS WIRE NOT USED WITH LOW AMBIENT FIOP/ACCY.

LEGEND

(X)	MARKED WIRE
(X)	TERMINAL (MARKED)
○	TERMINAL (UNMARKED)
[X]	TERMINAL BLOCK
●	SPLICE
⬡●	SPLICE (MARKED)
———	FACTORY WIRING
— ——— -	FIELD CONTROL WIRING
- - - - -	FIELD POWER WIRING
- - - - - - -	CIRCUIT BOARD TRACE
——— ·· —	ACCESSORY OR OPTIONAL WIRING

ACCY	ACCESSORY
AWG	AMERICAN WIRE GAGE
BAS	BUILDING AUTOMATION NETWORK
CC	CONTACTOR,COMPRESSOR
C	COMMON
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CCHR	CRANKCASE HEATER RELAY
CCHTS	CRANKCASE HEATER TEMP SWITCH
CLO	COMPRESSOR LOCKOUT
CLV	COOLING LIQUID VALVE
COFS	CONDENSATE OVERFLOW SWITCH
COM	SIGNAL COMMON
COMP	COMPRESSOR MOTOR
DDC	DIRECT DIGITAL CONTROL
DFB	DEFROST BOARD
DFT	DEFROST THERMOSTAT
EHR	ELECTRIC HEAT RELAY
ENTH	ENTHALPY
ERV	ENERGY RECOVERY VENTILATOR
ESL	ENTHALPY SENSOR - LOW
FB	FUSE BLOCK
FIOP	FACTORY INSTALLED OPTION
FPT	FREEZE PROTECTION THERMOSTAT
FST	FAN HOUSING TEMP SENSOR
FU	FUSE

G	THERMOSTAT FAN CALL
GR(GND)	GROUND
HACR	HEATING, AIR-CONDITIONING, REFRIGERATION BREAKER
HR	HEATER RELAY
HGRH	HOT GAS REHEAT
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
IAQ	INDOOR AIR QUALITY SENSORS
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN MOTOR CONTROL
IFO	INDOOR FAN ON SIGNAL
IRH	INDOOR RELATIVE HUMIDITY
JMP	JUMPER
L1	LINE 1
LA	LOW AMBIENT LOCKOUT
LAR	LOW AMBIENT RELAY
LAS	LOW AMBIENT SWITCH
LDR	COMPRESSOR LOADER
LEN	LOCAL EQUIPMENT NETWORK
LLSVR	LIQUID LINE SOLENOID VALVE
LOC	LOSS OF CHARGE
LPS	LOW PRESSURE SWITCH
LS	LIMIT SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMP LOCKOUT

MTR	MOTOR
OAQ	OUTDOOR AIR QUALITY
OAT	OUTDOOR AIR TEMP. SEN
OFM	OUTDOOR FAN MOTOR
OFR	OUTDOOR FAN RELAY
OL	OVERLOAD
PER	POWER EXHAUST RELAY
PH	PHASE
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
PS	PRESSURE SWITCH
PWM	PULSE WIDTH MODULATION
QT	QUADRUPLE TERMINAL
R	THERMOSTAT POWER
RAT	RETURN AIR TEMP. SENOR
RDB	REFRIGERANT DISSIPATION BOARD
RDS	REFRIGERANT DISSIPATION SENSOR
RLV	REHEAT LIQUID VALVE
RNET	LOCAL ACCESS NETWORK
RVS	REVERSING VALVE SOLENOID
SAT	SUPPLY AIR TEMP SENSOR
SDP	SYSTEM DISCHARGE PRESSURE
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
SSP	SYSTEM SUCTION PRESSURE
SW	SWITCH
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD
W1	1st STAGE OF HEATING CALL
W2	2nd STAGE OF HEATING CALL
Y1	1st STAGE OF COOLING CALL
Y2	2nd STAGE OF COOLING CALL

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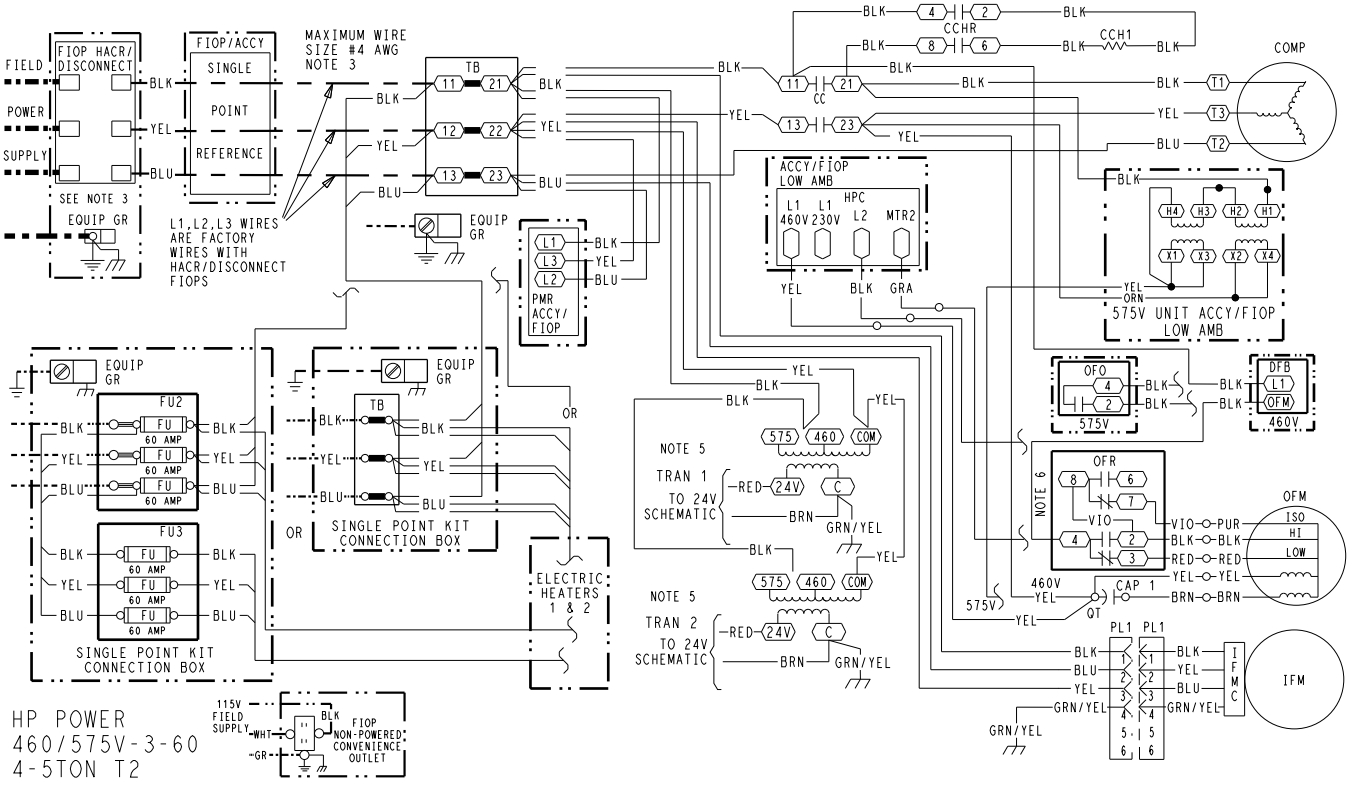
Typical wiring diagram (cont)

Typical 50GEQ 05-06 Power Wiring Diagram, Electromechanical, 460/575-3-60 Shown



NOTES
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2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED.
3. USE COPPER CONDUCTOR ONLY.
4. DO NOT DISCONNECT POWER PLUG OR SIGNAL WIRE WHILE UNDER LOAD.
5. TRANSFORMER IS DEDICATED BASED ON UNIT VOLTAGE. TAPS ONLY SHOWN TO SIMPLIFY SCHEMATIC.
6. THIS WIRE NOT USED WITH LOW AMBIENT FIOP/ACCY.

LEGEND

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

ACCY	ACCESSORY
AWG	AMERICAN WIRE GAGE
BAS	BUILDING AUTOMATION NETWORK
CC	CONTACTOR,COMPRESSOR
C	COMMON
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CCHR	CRANKCASE HEATER RELAY
CCHTS	CRANKCASE HEATER TEMP SWITCH
CLO	COMPRESSOR LOCKOUT
CLV	COOLING LIQUID VALVE
COFS	CONDENSATE OVERFLOW SWITCH
COM	SIGNAL COMMON
COMP	COMPRESSOR MOTOR
DDC	DIRECT DIGITAL CONTROL
DFB	DEFROST BOARD
DFT	DEFROST THERMOSTAT
EHR	ELECTRIC HEAT RELAY
ENTH	ENTHALPY
ERV	ENERGY RECOVERY VENTILATOR
ESL	ENTHALPY SENSOR - LOW
FB	FUSE BLOCK
FIOP	FACTORY INSTALLED OPTION
FPT	FREEZE PROTECTION THERMOSTAT
FST	FAN HOUSING TEMP SENSOR
FU	FUSE
G	THERMOSTAT FAN CALL
GR(GND)	GROUND

HACR	HEATING, AIR-CONDITIONING, REFRIGERATION BREAKER
HR	HEATER RELAY
HGRH	HOT GAS REHEAT
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
HUM	HUMIDISTAT
IAQ	INDOOR AIR QUALITY SENSORS
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN MOTOR CONTROL
IFO	INDOOR FAN ON SIGNAL
IRH	INDOOR RELATIVE HUMIDITY
JMP	JUMPER
L1	LINE 1
LA	LOW AMBIENT LOCKOUT
LAR	LOW AMBIENT RELAY
LAS	LOW AMBIENT SWITCH
LDR	COMPRESSOR LOADER
LEN	LOCAL EQUIPMENT NETWORK
LOC	LOSS OF CHARGE
LPS	LOW PRESSURE SWITCH
LS	LIMIT SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMP LOCKOUT
MTR	MOTOR
OAQ	OUTDOOR AIR QUALITY
OAT	OUTDOOR AIR TEMP. SEN
OFM	OUTDOOR FAN MOTOR
OFO	OUTDOOR FAN ON RELAY
OFR	OUTDOOR FAN RELAY
OL	OVERLOAD

PER	POWER EXHAUST RELAY
PH	PHASE
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
PS	PRESSURE SWITCH
PWM	PULSE WIDTH MODULATION
QT	QUADRUPLE TERMINAL
R	THERMOSTAT POWER
RAT	RETURN AIR TEMP. SEN
RDB	REFRIGERANT DISSIPATION BOARD
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RDV	REHEAT DISCHARGE VALVE
RH	RELATIVE HUMIDITY
RLV	REHEAT LIQUID VALVE
RNET	LOCAL ACCESS NETWORK
RVS	REVERSING VALVE SOLENOID
SAT	SUPPLY AIR TEMP SENSOR
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SPTO	SPACE TEMPERATURE OFFSET
SSP	SYSTEM SUCTION PRESSURE
SW	SWITCH
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD
W1	1st STAGE OF HEATING CALL
W2	2nd STAGE OF HEATING CALL
Y1	1st STAGE OF COOLING CALL
Y2	2nd STAGE OF COOLING CALL

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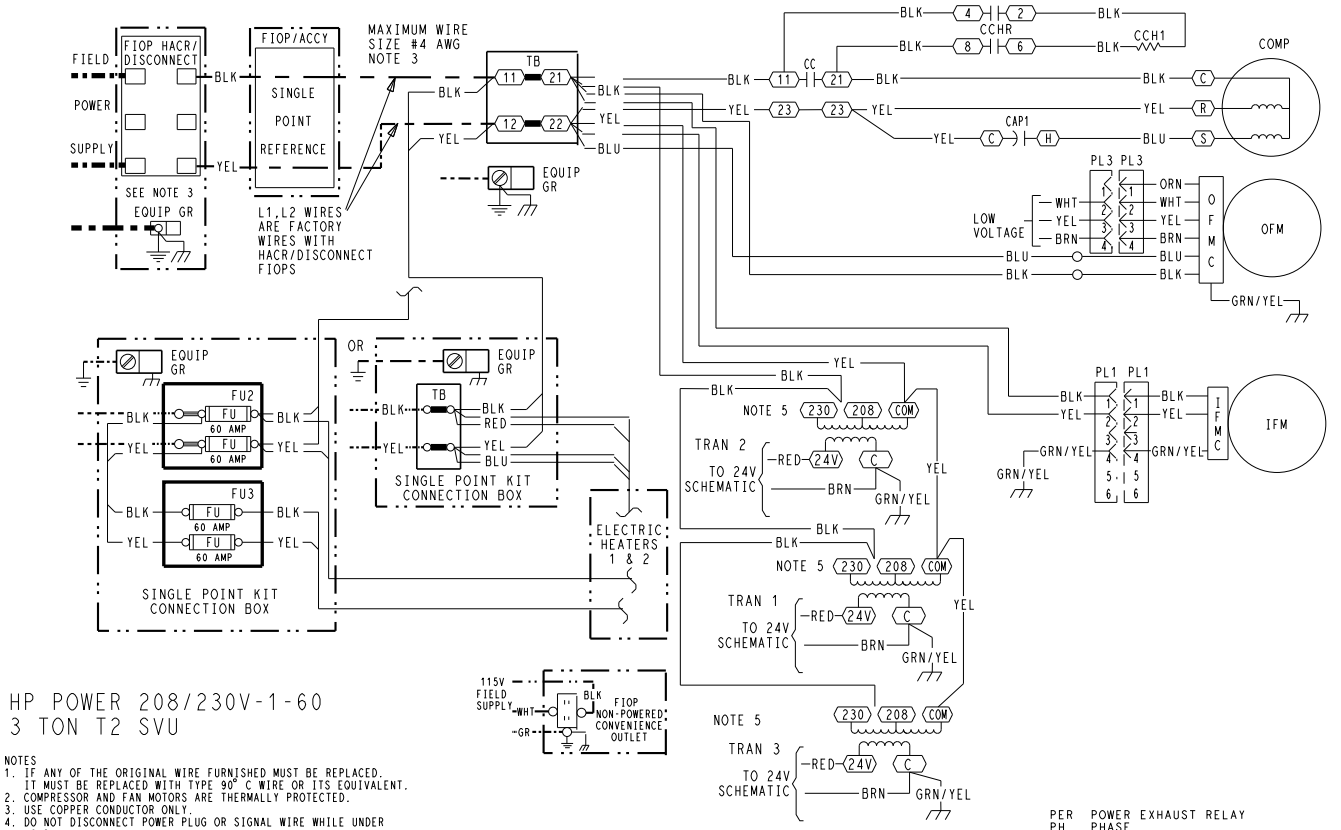
Typical wiring diagram (cont)

Typical 50GEQ 04 Power Wiring Diagram, SystemVu, 208/230-1-60 Shown



HP POWER 208/230V-1-60
3 TON T2 SVU

NOTES
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LEGEND

- MARKED WIRE
- TERMINAL (MARKED)
- TERMINAL (UNMARKED)
- TERMINAL BLOCK
- SPLICE
- SPLICE (MARKED)
- FACTORY WIRING
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- ACCESSORY OR OPTIONAL WIRING

ACCY	ACCESSORY
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OFO	OUTDOOR FAN ON RELAY
OFR	OUTDOOR FAN RELAY
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PWM	PULSE WIDTH MODULATION
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RDS	REFRIGERANT DISSIPATION SENSOR
RDV	REHEAT DISCHARGE VALVE
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SSP	SYSTEM SUCTION PRESSURE
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TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD
W1	1st STAGE OF HEATING CALL
W2	2nd STAGE OF HEATING CALL
Y1	1st STAGE OF COOLING CALL
Y2	2nd STAGE OF COOLING CALL

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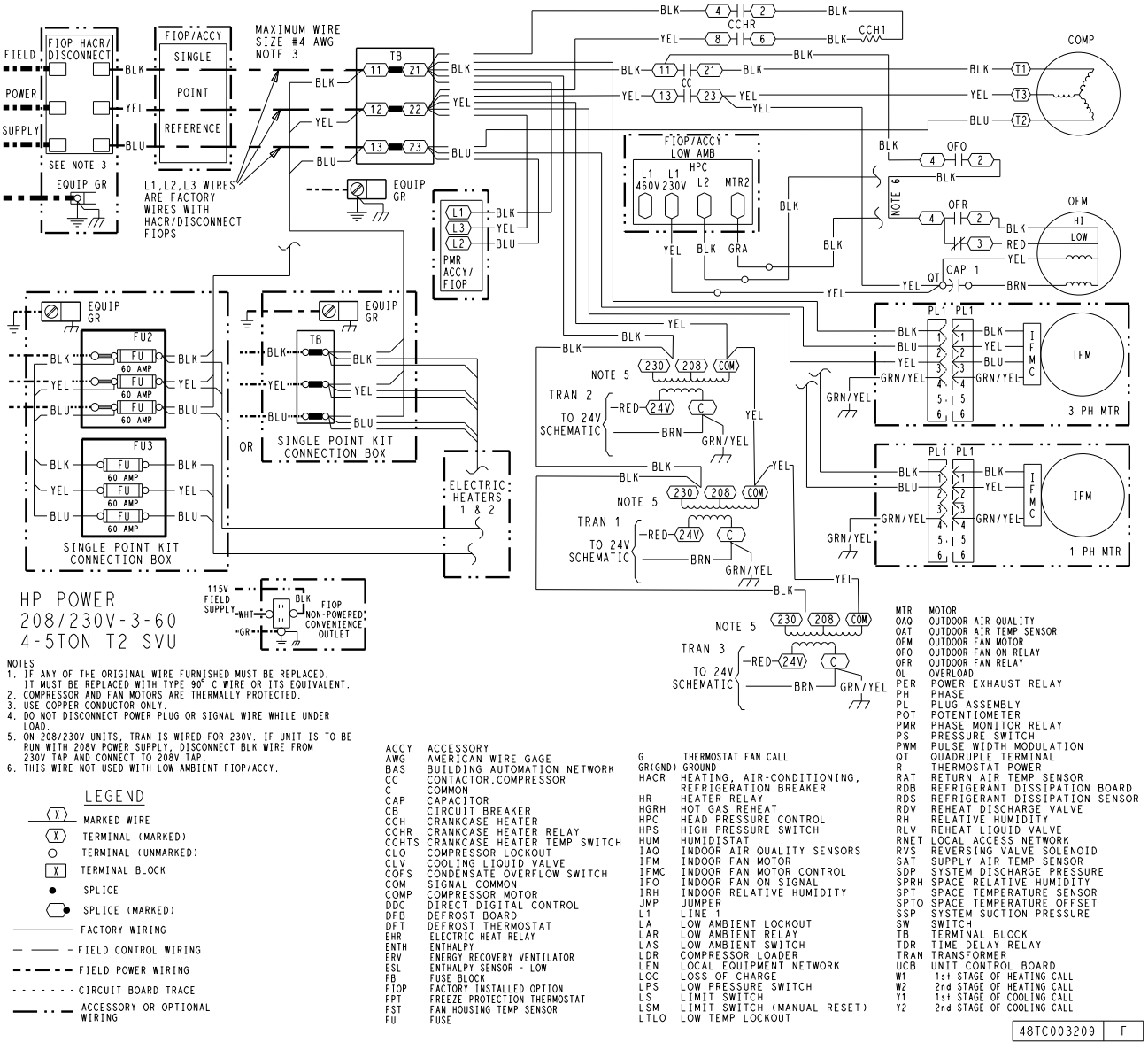
Typical wiring diagram (cont)

Typical 50GEQ 05-06 Power Wiring Diagram, SystemVu, 208/230-3-60 Shown



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6. THIS WIRE NOT USED WITH LOW AMBIENT FIOP/ACCY.

LEGEND

X	MARKED WIRE
X	TERMINAL (MARKED)
○	TERMINAL (UNMARKED)
X	TERMINAL BLOCK
●	SPLICE
⬡●	SPLICE (MARKED)
———	FACTORY WIRING
— —— -	FIELD CONTROL WIRING
- - - -	FIELD POWER WIRING
- - - - - - -	CIRCUIT BOARD TRACE
—— · -	ACCESSORY OR OPTIONAL WIRING

ACCY	ACCESSORY
AWG	AMERICAN WIRE GAGE
BAS	BUILDING AUTOMATION NETWORK
CC	CONTACTOR,COMPRESSOR
C	COMMON
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
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DDC	DIRECT DIGITAL CONTROL
DFB	DEFROST BOARD
DFT	DEFROST THERMOSTAT
EHR	ELECTRIC HEAT RELAY
ENTH	ENTHALPY
ERV	ENERGY RECOVERY VENTILATOR
ESL	ENTHALPY SENSOR - LOW
FB	FUSE BLOCK
FIOP	FACTORY INSTALLED OPTION
FPT	FREEZE PROTECTION THERMOSTAT
FST	FAN HOUSING TEMP SENSOR
FU	FUSE
G	THERMOSTAT FAN CALL
GR(GND)	GROUND
HACR	HEATING, AIR-CONDITIONING, REFRIGERATION BREAKER
HR	HEATER RELAY
HGRH	HOT GAS REHEAT
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
HUM	HUMIDISTAT
IAQ	INDOOR AIR QUALITY SENSORS
IFM	INDOOR FAN MOTOR
IFMC	INDOOR FAN MOTOR CONTROL
IFO	INDOOR FAN ON SIGNAL
IRH	INDOOR RELATIVE HUMIDITY
JMP	JUMPER
L1	LINE 1
LA	LOW AMBIENT LOCKOUT
LAR	LOW AMBIENT RELAY
LAS	LOW AMBIENT SWITCH
LDR	COMPRESSOR LOADER
LEN	LOCAL EQUIPMENT NETWORK
LOC	LOSS OF CHARGE
LPS	LOW PRESSURE SWITCH
LS	LIMIT SWITCH
LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMP LOCKOUT
MTR	MOTOR
OAQ	OUTDOOR AIR QUALITY
OAT	OUTDOOR AIR TEMP SENSOR
OFM	OUTDOOR FAN MOTOR
OFO	OUTDOOR FAN ON RELAY
OFR	OUTDOOR FAN RELAY
OL	OVERLOAD
PER	POWER EXHAUST RELAY
PH	PHASE
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
PS	PRESSURE SWITCH
PWM	PULSE WIDTH MODULATION
QT	QUADRUPLE TERMINAL
R	THERMOSTAT POWER
RAT	RETURN AIR TEMP SENSOR
RDB	REFRIGERANT DISSIPATION BOARD
RDS	REFRIGERANT DISSIPATION SENSOR
RDV	REHEAT DISCHARGE VALVE
RH	RELATIVE HUMIDITY
RLV	REHEAT LIQUID VALVE
RNET	LOCAL ACCESS NETWORK
RVS	REVERSING VALVE SOLENOID
SAT	SUPPLY AIR TEMP SENSOR
SDP	SYSTEM DISCHARGE PRESSURE
SPRH	SPACE RELATIVE HUMIDITY
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
SSP	SYSTEM SUCTION PRESSURE
SW	SWITCH
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
TRAN	TRANSFORMER
UCB	UNIT CONTROL BOARD
W1	1st STAGE OF HEATING CALL
W2	2nd STAGE OF HEATING CALL
Y1	1st STAGE OF COOLING CALL
Y2	2nd STAGE OF COOLING CALL

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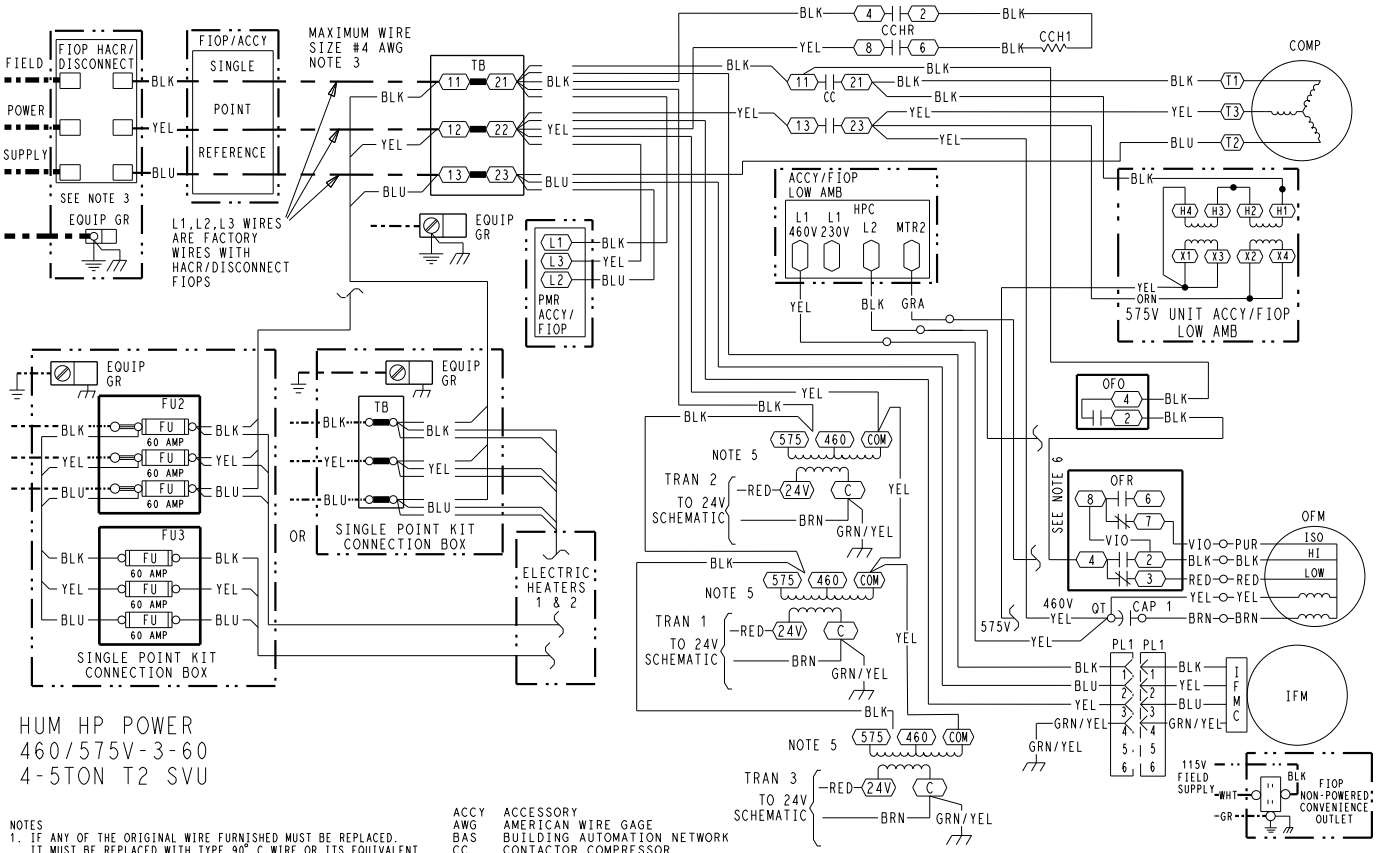
Typical wiring diagram (cont)

Typical 50GEQ 05-06 Heat Pump Humidi-MiZer Power Wiring Diagram, SystemVu Controller, 460/575V-3-60 Shown



NOTES
1. IF ANY OF THE ORIGINAL WIRE FURNISHED MUST BE REPLACED. IT MUST BE REPLACED WITH TYPE 90° C WIRE OR ITS EQUIVALENT.
2. COMPRESSOR AND FAN MOTORS ARE THERMALLY PROTECTED.
3. USE COPPER CONDUCTOR ONLY.
4. DO NOT DISCONNECT POWER PLUG OR SIGNAL WIRE WHILE UNDER LOAD.
5. TRANSFORMER IS DEDICATED BASED ON UNIT VOLTAGE. TAPS ONLY SHOWN TO SIMPLIFY SCHEMATIC.
6. THIS WIRE NOT USED WITH LOW AMBIENT FIOP/ACCY.

LEGEND

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

ACCY	ACCESSORY
AWG	AMERICAN WIRE GAGE
BAS	BUILDING AUTOMATION NETWORK
CC	CONTACTOR,COMPRESSOR
C	COMMON
CAP	CAPACITOR
CB	CIRCUIT BREAKER
CCH	CRANKCASE HEATER
CCHR	CRANKCASE HEATER RELAY
CCHTS	CRANKCASE HEATER TEMP SWITCH
CLO	COMPRESSOR LOCKOUT
CLV	COOLING LIQUID VALVE
COFS	CONDENSATE OVERFLOW SWITCH
COM	SIGNAL COMMON
COMP	COMPRESSOR MOTOR
DDC	DIRECT DIGITAL CONTROL
DFB	DEFROST BOARD
DFT	DEFROST THERMOSTAT
EHR	ELECTRIC HEAT RELAY
ENTH	ENTHALPY
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HGRH	HOT GAS REHEAT
HHPR	HUMIDIMIZER HEAT PUMP RELAY
HPC	HEAD PRESSURE CONTROL
HPS	HIGH PRESSURE SWITCH
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LSM	LIMIT SWITCH (MANUAL RESET)
LTLO	LOW TEMP LOCKOUT
MTR	MOTOR
OAQ	OUTDOOR AIR QUALITY
OAT	OUTDOOR AIR TEMP. SEN
OFM	OUTDOOR FAN MOTOR
OFR	OUTDOOR FAN RELAY
OFO	OUTDOOR FAN ON RELAY
OL	OVERLOAD
PER	POWER EXHAUST RELAY
PH	PHASE
PL	PLUG ASSEMBLY
POT	POTENTIOMETER
PMR	PHASE MONITOR RELAY
PS	PRESSURE SWITCH
PWM	PULSE WIDTH MODULATION
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RH	RELATIVE HUMIDITY
RLV	REHEAT LIQUID VALVE
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SPRH	SPACE RELATIVE HUMIDITY
SPT	SPACE TEMPERATURE SENSOR
SPTO	SPACE TEMPERATURE OFFSET
SSP	SYSTEM SUCTION PRESSURE
SW	SWITCH
TB	TERMINAL BLOCK
TDR	TIME DELAY RELAY
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UCB	UNIT CONTROL BOARD
W1	1st STAGE OF HEATING CALL
W2	2nd STAGE OF HEATING CALL
Y1	1st STAGE OF COOLING CALL
Y2	2nd STAGE OF COOLING CALL

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Sequence of operation

General

The sequence below describes the sequence of operation for an electromechanical unit with and without a factory-installed EconomizerONE (POL224 controller). For information regarding a direct digital controller, see the start-up, operations, and troubleshooting manual for the applicable controller.

Dissipation

When the factory-installed dissipation system detects a level of refrigerant leak in the unit, a safety dissipation mode will be activated. During this dissipation mode, the thermostat will be disabled and the indoor fan will run at 66% of the maximum speed of the motor. When the refrigerant leak levels are normal for 5 minutes, the unit will return to normal operation.

Electromechanical 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 compressor contactor (CC) is energized, causing the compressor and outdoor fan to run. The low indoor fan speed is 66% of the user-set fan speed, and the compressor will run at partial capacity.

If additional cooling is needed, the thermostat will add the call for Y2. This will increase the indoor fan speed to the user-set fan speed and energize the compressor loader for full compressor capacity. The outdoor fan is the same speed for Y1 and Y2.

When the thermostat removes the call for Y2 but leaves the Y1, the indoor fan will reduce speed to 66% of the user-set fan speed, the compressor loader will turn off, and the outdoor fan will remain on. When the thermostat removes the call for Y1, the compressor contactor will de-energize, shutting down the compressor and the outdoor fan. 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 of cooling operation, the Unit Control Board (UCB) will adjust the fan motor speed to provide 66% 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 to 30, 60, 90 or 120 minutes), the reversing valve solenoids (RVS1 and RVS2) are energized and the OFC is de-energized. This switches the position of the reversing valves and shuts off the outdoor fan. The electric heaters (if installed) will be energized.

Heating, unit with economizer

When the room temperature calls for heat through terminal W1, the indoor (evaporator) fan contactor (IFC) and heater contactor no. 1 (HC1) are energized and the reversing valve(s) de-energize and switch position. On units equipped for 2 stages of heat, when additional heat is needed, heater contactor no. 2 is 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 24-v. The IFC, outdoor fan contactor (OFC), C1, and C2 will be energized. The indoor fan, outdoor fans, compressor no. 1, and compressor no. 2 are energized, and reversing valves are de-energized and switch position.

If the space temperature continues to fall while W1 is energized, then W2 will be energized with 24-v and the heater contactor(s) (HC) will be energized, which will energize the electric heater(s).

When the space thermostat is satisfied, W2 will be de-energized first, and the electric heater(s) 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.

Electromechanical units with factory-installed EconomizerONE

When free cooling is not available, the compressors will be controlled by the zone thermostat. When free cooling is available, the outdoor-air damper is modulated by the EconomizerONE control to provide a 50°F (10°C) to 55°F (13°C) mixed-air temperature into the zone. As the mixed-air temperature fluctuates above 55°F (13°C) or below 50°F (10°C) dampers will be modulated (open or close) to bring the mixed-air temperature back within control. If mechanical cooling is utilized with free cooling, the outdoor-air damper will maintain its current position at the time the compressor is started. If the increase in cooling capacity causes the mixed-air temperature to drop below 45°F (7°C), then the outdoor-air damper position will be decreased to the minimum position. If the mixed-air temperature continues to fall, the outdoor-air damper will close. Control returns to normal once the mixed-air temperature rises above 48°F (9°C). The power exhaust fans will be energized and de-energized, if installed, as the outdoor-air damper opens and closes.

If field-installed accessory CO_2 sensors are connected to the EconomizerONE control, a demand controlled ventilation strategy will begin to operate. As the CO_2 level in the zone increases above the CO_2 set-point (on the EconomizerONE controller), the minimum position of the damper will be increased proportionally until the Maximum Ventilation setting is reached. As the CO_2 level decreases because of the increase in fresh air, the outdoor-air damper will follow the higher demand condition from either the DCV mode or from the free cooling mode. For EconomizerONE operation, there must be a thermostat call for the fan (G). If the unit is occupied and the fan is on, the damper will operate at minimum position. Otherwise, the damper will be closed.

When the EconomizerONE control is in the occupied mode and a call for cooling exists (Y1 on the thermostat), the control will first check for indoor fan operation. If the fan is not on, then cooling will not be activated. If the fan is on, then the control will open the EconomizerONE damper to the minimum position.

On the initial power to the EconomizerONE control, it will take the damper up to 2 1/2 minutes before it begins to position itself. After the initial power-up, further changes in damper position can take up to 90 seconds to initiate.

Sequence of operation (cont)

Damper movement from full closed to full open (or vice versa) will take between 1-1/2 and 2-1/2 minutes. If free cooling can be used as determined from the appropriate changeover command (dry bulb, outdoor enthalpy, differential dry bulb, or differential enthalpy), then the control will modulate the dampers open and closed to maintain the mixed-air temperature set-point at 50°F (10°C) to 55°F (13°C). If there is a further demand for cooling (cooling second stage — Y2 is energized), then the control will bring on compressor stage 1 to maintain the mixed-air temperature set-point. The EconomizerONE damper will be open at maximum position.

Two-Speed Note: The EconomizerONE controller will adjust the damper position as the Indoor Fan Speed changes, per its configured values.

Heating

The sequence of operation for heating is the same as for an electromechanical unit without an 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 the unit's 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.

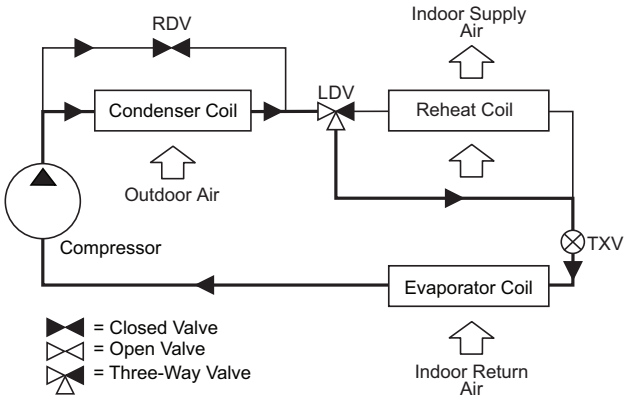
The Reheat1 and Reheat2 modes are available when the unit is not in a heating mode and when the system has not locked out reheat in colder ambient conditions.

Refer to the following figures for piping flow diagrams.

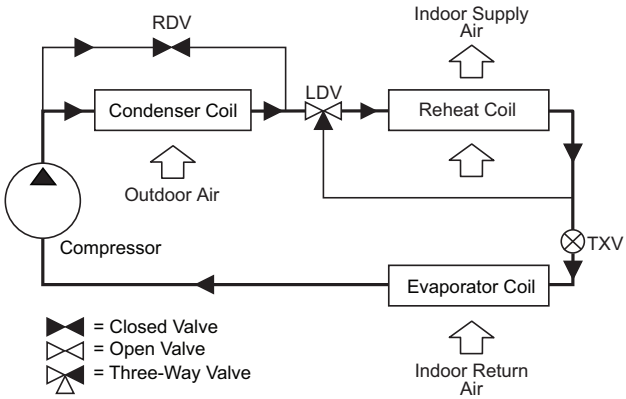
SystemVu™ controller (factory option)

For details on operating 50GEQ units equipped with the factory-installed SystemVu controller option, refer to *FEQ/GEQ/QE Series Single Packaged Rooftop Units with SystemVu Controls, Start-Up, Operation and Troubleshooting* manual.

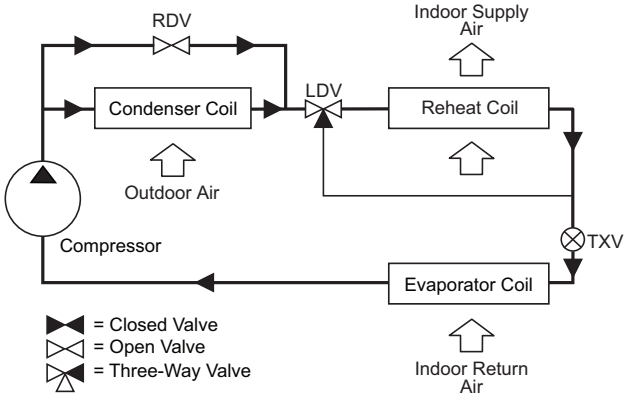
Normal Cooling Mode



Subcooling Mode (Reheat1)



Hot Gas Reheat Mode (Reheat2)



LEGEND

LDV — Liquid Diverter Valve
RDV — Reheat Discharge Valve
TXV — Thermostatic Expansion Valve

Application data

Minimum operating ambient temperature (cooling)

In mechanical cooling mode, your Carrier rooftop unit can safely operate down to an outdoor ambient temperature of 40°F (4°C). It is possible to provide cooling at lower outdoor ambient temperatures by using less outside air, economizers, and/or accessory low ambient kits.

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 reduced performance, reduced 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. The 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 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 the 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 and adding "safety factors" to the calculated load are both signs of oversizing. Oversizing an 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 fact, when a unit is equipped with an economizer, an accessory low-ambient kit may not be necessary. 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 –20°F (–29°C) using the recommended accessory low ambient controller.

Guide specifications

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.

Puron ADVANCE™

High Efficiency Heat Pump Packaged Rooftop Unit

HVAC Guide Specifications

Size Range: **3 to 5 Nominal Tons**

Carrier Model Number: **50GEQ 04-06**

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:

1. 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:

1. Thermostat must:
   a. energize both "W" and "G" when calling for heat.
   b. have capability to energize 1 or 2 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 re-porting 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] 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 three-phase wiring is misapplied.
9. Provide Service Capabilities of:
   a. Auto run test
   b. Manual run test
   c. Component run hours and starts
   d. Commissioning reports

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

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 90.1 and IECC Fault Detection and Diagnostic (FDD) requirements.
11. Unit cooling operation down to 40°F (4°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 (3°C) temperature difference between cooling and heating setpoints to meet the latest ASHRAE 90.1 Energy Standard.
16. Contain 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. 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.
19. Supply Air Tempering control operates the gas or 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.
20. Demand limiting in SystemVu 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.
21. 3-year limited part warranty.

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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 75VA capability.
2. Shall utilize color-coded wiring.
3. Shall include a Unit Control 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 and high pressure switches. Controller shall also provide an intuitive means to adjust the indoor fan speed through a simple switch and pot adjustment design.
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, 60, 90, 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.
6. Defrost system shall also include:
   a. Defrost Cycle Indicator LED.
   b. DIP switch selectable defrost time between 30, 60, 90 and 120 minutes. Factory set at 30 minutes.
   c. Molded plug connection to ensure proper connection.

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

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

   Low pressure switch shall use different color wire than the high pressure switch. The purpose is to assist the installer and service technician to correctly wire and or troubleshoot the rooftop unit.
3. 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.

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

   High temperature limit switches.

5. A2L Refrigerant Leak Dissipation System (Electromechanical):
   a. Leak dissipation system shall consist of control board and A2L sensor certified to UL 60335-2-40.
   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 thermostat 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 controller shall use onboard microprocessor and include:
      1) Automatic reset after a dissipation event has occurred.
      2) Onboard LED with flash code to indicate current unit status and hardware failures.
      3) Depressible "Test" button to allow for a system test and recall/reset of leak detection history.
      4) 24-v dry contact alarm terminal to allow for external notification of leak detection.
   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.

6. A2L Refrigerant Leak Dissipation System (SystemVu):
   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) 24-v 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 Operations 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 a fully hermetic scroll compressor(s) 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-454B) 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 DOE and ASHRAE 90.1 minimum efficiency requirements.
2. Unit shall be rated in accordance with AHRI Standards 210/240.
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 shake 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 210/240 at ±10% voltage.
2. Compressor with standard controls shall be capable of operation down to 40°F (4°C), ambient outdoor temperatures.
3. Compressor with standard controls shall be capable of operation down to –10°F (–3.9°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 vertical supply and return configurations.
6. Unit shall be field convertible from vertical to horizontal airflow on all models. No special kit required.
7. Unit shall be capable of mixed operation: vertical supply with horizontal return or horizontal supply with vertical return.

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 pre-painted 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 210/240 minimum 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 four locations for thru-the-base 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, possible either through the bottom or side of the drain pan. Connection shall be made per manufacturer's recommendations.

7. Top Panel:
   a. Shall be a single piece top panel on all sizes.
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, toolless, removable, filter access panel.
   c. Panels covering control box, indoor fan, indoor fan motor, gas components (where applicable), and compressors shall have molded composite site 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 helical 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 (3-Phase Models Only):
   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 (3-Phase Models Only):
   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 (3-Phase Models Only):
   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 and discharge lines.
   d. Pressure gauge access through a specially designed access port in the unit.
   e. Suction line accumulator to provide protection in all operating modes from cooling, heating and reverse cycle switching.
2. There shall be gauge line access port in the skin of the rooftop, covered by a black, removable plug.
   a. The plug shall be easy to remove and replace.
   b. When the plug is removed, the gauge access port shall enable maintenance personnel to route their pressure gauge lines.
   c. This gauge access port shall facilitate correct and accurate condenser pressure readings by enabling the reading with the compressor access panel on.
   d. The plug shall be made of a leak proof, UV-resistant, composite material.
3. Compressors:
   a. Unit shall use a 2-stage fully hermetic, scroll compressor.
   b. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
   c. Compressors shall be internally protected from high discharge temperature conditions.
   d. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
   e. Compressor shall be factory mounted on rubber grommets.
   f. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
   g. Crankcase heaters shall not be required for normal operating range, unless required by compressor manufacturer due to refrigerant charge limits.
   h. Compressors shall be a two stage cooling capacity design.

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 pivoting 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 an 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 DC voltage set up on Unit Control Board 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.
2. Evaporator Fan:
   a. Speed shall be easily set with dedicated selection switch and adjustment pot on unit control board or through SystemVu controller.
   b. Shall provide two stage cooling capacity control, the indoor fan speed is automatically controlled to meet the code-compliant <66% 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 an aluminum stator or high impact composite material on stator, rotor, and air inlet casing.
   f. Shall be a patented / pending design with a corrosion resistant material.

g. Fan assembly design shall be integrated into 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. Shall be a slide out design with two screw removal.

3. Shall include an easily accessible Unit Control Board (UCB) or 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 and high pressure switches. Units with the UCB shall also provide an intuitive means to adjust the indoor fan speed through a simple switch and pot adjustment design. Indoor fan speed on SystemVu units are adjusted 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 constructed of high impact composite material.

b. Shall have high impact composite blades completely formed into one piece without blade fasteners or connectors and shall be dynamically balanced.

M. (23 81 19.13.M.) Special Features Options and Accessories:

1. Integrated EconomizerONE and 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 setpoints.

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 EconomizerONE models shall be the Siemens POL224 that provides:

1) Combined minimum and DCV maximum damper position potentiometers with compressor staging relay.

2) Optional configuration via WLAN stick and Siemens Climatix™[1] smartphone app for easy setup.

3) Functions with solid-state analog enthalpy or dry bulb changeover control sensing.

4) LED indication for free cooling, sensor, and damper operation.

5) One-line LCD interface screen for setup, configuration and troubleshooting.

6) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24, ASHRAE 90.1, and IECC®[1].

7) Sensor failure loss of communication identification.

8) Capabilities for use with multiple-speed or single speed indoor fan systems.

9) Digital sensors: dry bulb and enthalpy.

h. Economizer controller on EconoMi$er 2 models with SystemVu controllers shall be a 4 to 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.

i. Shall be capable of introducing up to 100% outdoor air.

j. 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.

k. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.

l. 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 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.

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m. 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%.

n. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.

o. Dampers shall be completely closed when the unit is in the unoccupied mode.

p. Economizer controller shall accept a 0 to 10 vdc CO_2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.

q. Compressor lockout temperature on POL224 control is adjustable from –45°F to 80°F (–43°C to 26°C), set at a factory default of 32°F (0°C).

r. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.

s. Contains LED indication for free cooling, sensor, and damper operation.

2. Integrated EconomizerONE and 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 setpoints.

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 EconomizerONE models shall be the Siemens POL224 that provides:

1) One-line LCD interface screen for setup, configuration and troubleshooting.

2) Optional configuration via WLAN stick and Siemens Climatix™ smartphone app for easy setup.

3) On-board Fault Detection and Diagnostics (FDD) that senses and alerts when the economizer is not operating properly, per California Title 24, ASHRAE 90.1 and IECC.

4) Sensor failure loss of communication identification.

5) Capabilities for use with multiple-speed indoor fan systems.

6) Digital sensors: dry bulb and enthalpy.

h. Economizer controller on EconoMi$er 2 models with SystemVu controllers shall be a 4 to 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.

i. Shall be capable of introducing up to 100% outdoor air.

j. 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.

k. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.

l. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.

m. 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%.

n. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy.

o. Dampers shall be completely closed when the unit is in the unoccupied mode.

p. Economizer controller shall accept a 0 to 10 vdc CO_2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.

q. Compressor lockout temperature on POL224 control is adjustable from –45°F to 80°F (–43°C to 26°C), set at a factory default of 32°F (0°C).

r. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.

s. Contain LED indication for free cooling, sensor, and damper operation.

3. Wi-Fi/WLAN stick for EconomizerONE POL224 (field-installed):

   This item allows for the use of the Siemens Climatix™[1] mobile application.

4. 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 setpoint.
   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.

5. 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.

6. Humidi-MiZer® Adaptive Dehumidification System (3-Phase Models Only):

   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.
   c. Includes low ambient controller.

7. Low Ambient Control Package:
   a. Controller shall control coil head pressure by condenser fan speed modulation or condenser fan cycling and wind baffles.
   b. Shall consist of solid-state control and condenser coil temperature sensor to maintain condensing temperature between 90°F (32°C) and 110°F (43°C) at outdoor ambient temperatures down to –20°F (–29°C). For full low ambient control range, winter start kit is required.

8. Condenser Coil Hail Guard Assembly (Factory or field installed on 3-Phase Models Only. Field-installed on all 3 and 1-Phase Models.)
   a. Shall protect against hail and additional coil damage.
   b. Shall be louvered type.

9. Unit-Mounted, Non-Fused Disconnect Switch (Available on units with FLA of 80 amps or less):
   a. Switch shall be factory installed, internally mounted.
   b. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
   c. Shall be accessible from outside the unit.
   d. Shall provide local shutdown and lockout capability.
   e. Sized **only** for the unit as ordered from the factory. Does not accommodate field-installed devices.

10. 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.

11. Convenience Outlet:
    a. Factory-Installed Powered Convenience Outlet (3-Phase Models Only):
       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.

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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.

12. Thru-the-Base Connectors:
a. Shall provide connectors to permit gas and electrical connections to be brought to the unit through the unit basepan.
b. Minimum of 4 connection locations per unit.

13. Propeller Power Exhaust:
a. Power exhaust shall be used in conjunction with an integrated economizer.
b. Independent modules for vertical or horizontal return configurations shall be available.
c. Horizontal power exhaust is 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.

14. 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.

15. 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.

16. 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.

17. Indoor Air Quality (CO_2) 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.

18. 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.

19. Winter Start Kit:
    a. Shall contain a bypass device around the low pressure switch.
    b. Shall be required when mechanical cooling is required below 40°F (4°C).
    c. Shall not be required to operate on economizer for cooling when below an outdoor ambient of 40°F (4°C).
    d. Is not compatible with SystemVu controls.
20. Time Guard:
    a. Shall prevent compressor short-cycling by providing a 5-minute delay (±2 minutes) before restarting a compressor after shutdown for any reason.
    b. One device shall be required per compressor.
21. 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.
22. 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:

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

    Throughout unit cabinet air stream, non-fibrous and cleanable foil faced insulation is used.
24. 4 in. MERV-13 Return Air Filters (factory-installed only):
    a. Factory option to upgrade standard unit filters to 4 in. MERV-13 filters.
    b. Upgraded option shall include factory-installed 4 in. filter rack.
    c. Shall not be compatible with horizontal units with field-installed economizers.
    d. Shall not be compatible with any single phase units.
25. 4 in. Return Air Rack (field-installed only):
    a. Accessory kit is designed to hold 4 in. MERV-8 or MERV-13 filters. Filters not included in kit.
    b. Shall not be compatible with horizontal units with field installed economizers.
26. 2 in. MERV-13 Return Air Filters:
    a. Accessory kit to field upgrade standard unit filters to 2 in. MERV-13 filters.
    b. Correct size and quantity of filters shall ship in a single box.
27. 2 in. MERV-8 Return Air Filters:
    a. Accessory kit to field upgrade standard unit filters to 2 in. MERV-8 filters.
    b. Correct size and quantity of filters shall ship in a single box.
28. Phase Monitor Control:
    a. Shall monitor the sequence of 3-phase electrical system to provide a phase reversal protection.
    b. Shall monitor the 3-phase voltage inputs to provide a phase loss protection for the 3-phase device.
    c. Will work on either a Delta or Wye power connection.
29. Horn/Strobe Annunciator:
    a. Provides an audible/visual signaling device for use with factory-installed option or field installed accessory smoke detectors.
    b. Requires installation of a field-supplied 24-v transformer suitable for 4.2 VA (AC) or 3.0 VA (DC) per horn/strobe accessory.
    c. Requires field-supplied electrical box, North American 1-gang box, 2 in. x 4 in. (51 mm x 102 mm).
    d. Shall have a clear colored lens.
30. Electric Heat:
    a. Heating Section:
        1) Heater element open coil resistance wire, nickel-chrome alloy, 0.29 inch inside diameter, strung through ceramic insulators mounted on metal frame. Coil ends are staked and welded to terminal screw slots.
        2) Heater assemblies are provided with integral fusing for protection of internal heater circuits. Auto reset thermo limit controls, magnetic heater contactors (24-v coil) and terminal block all

mounted in electric heater control box (minimum 18 ga galvanized steel) attached to end of heater assembly.

31. High Short Circuit Current Rating (SCCR) Protection:
    a. Factory-installed option shall provide high short circuit current protection to compressor and all indoor and outdoor fan motors rated at 10 kA against high potential fault current situations. (Standard unit comes with 5 kA rating.)
    b. This option is not available with factory installed powered convenience outlet, non-fused disconnect, low ambient controls, phase loss monitor/protection, HACR breaker, and 575-v models.

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