



Product Data

WeatherMaster® Single Packaged Rooftop

3-Stage — 6 to 12.5 Nominal Tons

ecoblue™  technology



Puron
ADVANCE™

48/50GE**07, 08, 09, 12, 14

48GE: Single-Package Gas Heating/Electric Cooling Rooftop Units with Puron Advance™ Refrigerant (R-454B) and EcoBlue™ Technology
50GE: Electric Cooling Rooftop Units with Optional Electric Heat with Puron Advance™ Refrigerant (R-454B) and EcoBlue™ Technology

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

The WeatherMaster line have always stood for high efficiency cooling solutions that are innovative, high quality, and easy to use. Carrier's new 48/50GE rooftops continues 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 vane axial indoor fan system with an electronically commutated motor for simplicity and efficiency. When compared to traditional belt-driven forward curve fans, our reliable system has:
 - 75% fewer moving parts
 - Up to 40% greater efficiency

- No fan belts, pulleys, shaft, or shaft bearings
- Better sound and comfort due to slow ramp-up capability
- Internal protection from phase reversal and phase loss situations
- High external static capability
- Slide-out blower assembly design
- Reliable 3 stage cooling with tandem scroll compressors technology, fully active evaporator coil, and mixed air temperature protection on all models
- Reliable copper tube/aluminum fin condenser coil with 5/16 in. tubing to help reduce refrigerant charge and weight versus prior designs

Designed to fit on existing roof curbs, Carrier 48/50GE 6 to 12.5 ton models make replacements even easier.

Staged air volume (SAV) indoor fan speed control helps deliver IEERs up to 22.3. All models are field convertible and capable of either vertical or horizontal airflow. The 12.5 ton models require a field-installed supply air kit.

With "no-strip" screw collars, handled access panels, and more, the unit is easy to install, easy to maintain, and easy to use. Your new 6 to 12.5 ton Carrier WeatherMaster RTU provides optimum comfort and control from a packaged rooftop.

Value-added features include:

- Optional Humidi-MiZer® adaptive dehumidification system for improved part load humidity performance
- SystemVu™ intuitive intelligent controls that provides:
 - Large, full text, multi-line display
 - USB flash port for data transfer
 - Built-in i-Vu®, CCN, and BACnet®¹
 - Easy to read refrigerant pressures shown via the display — no checking gauges
 - Quick LED Status for Run, Alert, and Fault
 - Conventional thermostat or sensor capabilities
 - Historical component runtime and starts
 - Supply air tempering
 - Network Service Tool compatible
- Single point gas and electrical connections
- TXV refrigerant metering devices on 6 to 12.5 ton models
- 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

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

Table of contents

	Page
Features/Benefits	2
Model Number Nomenclature	5
Capacity Ratings	7
Physical Data	10
Options and Accessories	14
Base Unit Dimensions	19
Accessory Dimensions	37
Performance Data	39
Fan Data	65
Electrical Data	106
Typical Wiring Diagrams	135
Sequence of Operation	143
Application Data	145
Guide Specifications — 48GE	147
Guide Specifications — 50GE	158

Installation ease

All 6 to 12.5 ton WeatherMaster units are field-convertible to horizontal airflow, which makes it easy to adjust to unexpected jobsite complications. The 12.5 ton models require a simple supply duct cover kit to field convert from factory vertical to horizontal. All units have SystemVu controls standard for easy, tool free commissioning. Clearly labeled connection points reduce installation time, and a large control box provides room to work and mount Carrier accessories.

Easy to maintain

With the EcoBlue vane axial fan system and a direct drive ECM motor, belts and pulleys are a thing of the past. This frees up maintenance, installation and commissioning time. Should an adjustment be necessary, it can easily be made via the SystemVu controller 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.

Puron Advance™ features

In 2018, Carrier announced Puron Advance (R-454B) as our next generation refrigerant for light commercial rooftops. With a GWP of 466 and similar working pressure and performance to

R-410A, Puron Advance easily exceeds the EPA's new, stringent <700 GWP refrigerant requirement while minimizing unit redesign. Like other next generation refrigerants (R-32, etc.), R-454B is classified as an "A2L" refrigerant by ASHRAE^{®1} (American Society of Heating, Refrigerating, and Air-Conditioning Engineers). This designation means that R-454B is "mildly flammable" under certain conditions. While this is a change from legacy "A1 — No Flame Propagation" refrigerants like Puron (R-410A), A2Ls are still very low on the flammability scale and quite safe for use. A2L refrigerants are difficult to ignite and have an extremely low flame speed — much less so than natural gas, propane, or even rubbing alcohol. At Carrier, we are committed to safety. As such, all of our Puron Advance rooftop units include a factory-installed dissipation control board and leak sensor designed to last the lifetime of the unit. This system is certified to UL 60335-2-40 and designed to work right away, without any field configuration or wiring. In the event of a leak, these systems are designed to automatically identify and resolve the issue by dissipating the refrigerant to minimize risk to equipment, buildings, or occupants.

EcoBlue™ Technology

Our direct drive EcoBlue indoor fan system uses vane axial fan 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. The full fan and motor assembly also slides out for easier maintenance and service.

Streamlined control and integration

The 48/50GE 3-Stage units standard SystemVu controls make connecting into existing building automation systems easy.

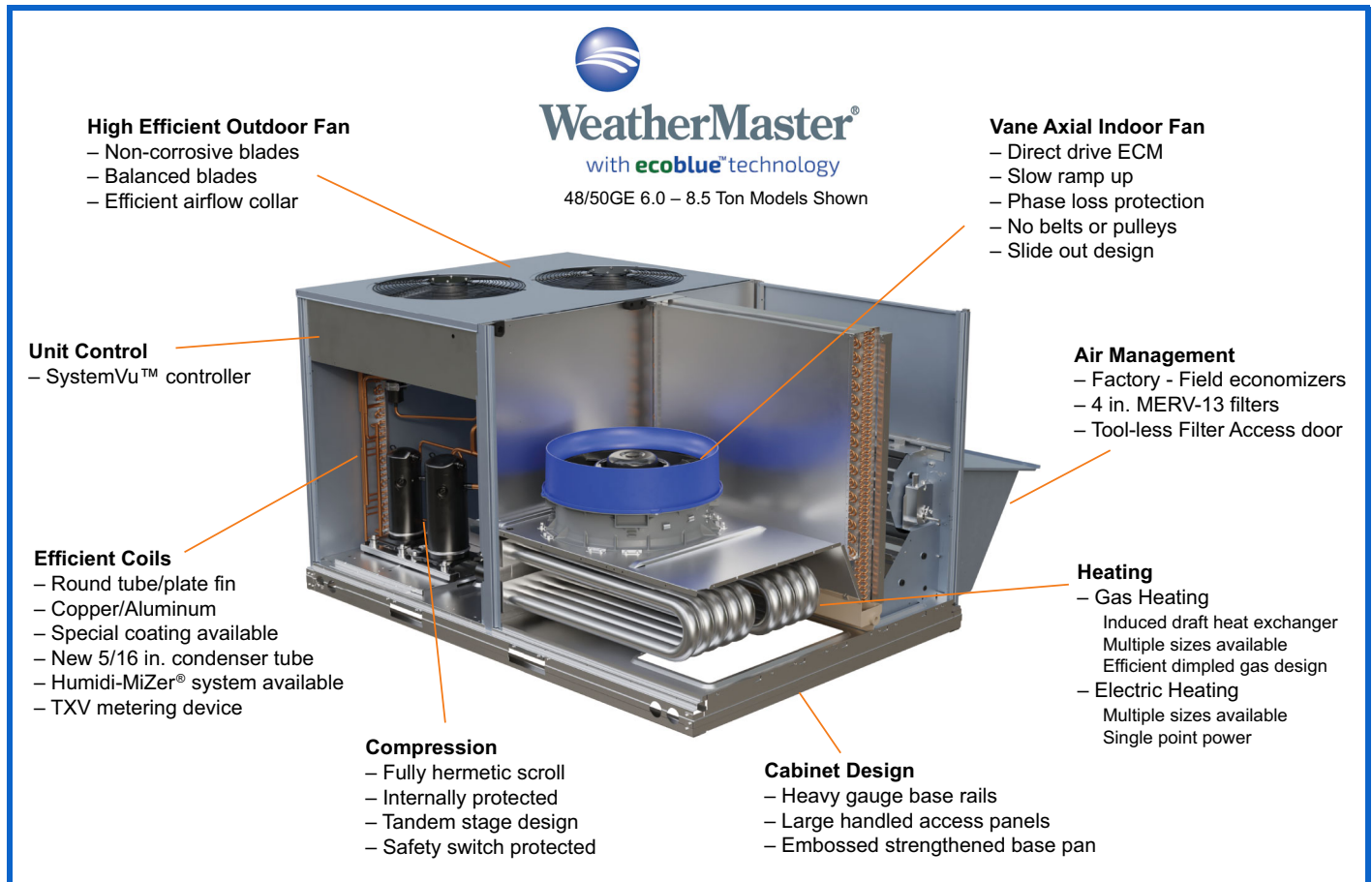
Operating efficiency and flexibility

The 48/50GE 3-Stage rooftops exceed the DOE 2023 efficiency standard, as well as ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) 90.1 and IECC^{®1} (International Energy Conservation Code) requirements.

Comfort control

Carrier's patented Humidi-MiZer[®] adaptive dehumidification system is an all-inclusive factory-installed option on gas heating/electric cooling and electric cooling/electric heat models. This system provides reliable, flexible operation to meet indoor part load sensible and latent requirements as well as multiple gas heat and electric heat sized to fit an array of applications.

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



Model number nomenclature



48GE Model Number Nomenclature

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

Unit Heat Type

48 = Gas Heat Packaged Rooftop

Model Series - WeatherMaster®

GE = Mid Tier Puron Advance™

Heat Size

D = Low Heat
E = Medium Heat
F = High Heat
S = Low Heat with Stainless Steel Exchanger
R = Medium Heat with Stainless Steel Exchanger
T = High Heat with Stainless Steel Exchanger

Refrigerant Systems Options

S = Three-Stage Cooling, Single Circuit with Humidi-MiZer System® and Pressure Relief Valve^a
T = Three-Stage Cooling, Single Circuit
U = Three-Stage Cooling, Single Circuit with Humidi-MiZer System

Cooling Tons

07 = 6.0 tons
08 = 7.5 tons
09 = 8.5 tons
12 = 10.0 tons
14 = 12.5 tons

Sensor Options

A = None
B = Return Air Smoke Detector (RA)^b
C = Supply Air Smoke Detector (SA)
D = RA + SA Smoke Detector^b
J = Condensate Overflow Switch (COFS)
K = Condensate Overflow Switch + RA Smoke Detectors^b
L = Condensate Overflow Switch + RA and SA Smoke Detectors^b
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
5 = 208/230-3-60
6 = 460-3-60

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^c (High Short Circuit Current Rating)
2 = HSCCR^c + TTB

Service Options

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

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 CO₂ Sensor
M = ULL Enthalpy Economizer with Barometric Relief and CO₂ Sensor
U = ULL Temperature Economizer with Barometric Relief
W = ULL Enthalpy Economizer with Barometric Relief

Unit Controls

3 = SystemVu™ Controller

Design Revision

- = Factory Design Revision

NOTE (S):

- Size 14 (12.5 ton) units only.
- Vertical airflow configuration only.
- Not available on the following models/options: 575V, Phase Loss Monitor, Non-Fused Disconnect, HACR Breaker, Powered Convenience Outlet, or Size 12 units.
- Not available on Size 12 units with -5 voltage (208/230-3-60) and High Static Motor.

Model number nomenclature (cont)



50GE 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	-	T	0	7	A	2	A	5	-	3	A	0	A	0

Unit Heat Type

50 = Cooling with Electric Heat

Model Series - WeatherMaster®

GE = Mid Tier Puron Advance™

Heat Size

- = No Heat
A = Low Electric Heat
B = Medium Electric Heat
C = High Electric Heat

Refrigerant Systems Options

S = Three-Stage Cooling, Single Circuit with Humidi-MiZer System® and Pressure Relief Valve^a
T = Three-Stage Cooling, Single Circuit
U = Three-Stage Cooling, Single Circuit with Humidi-MiZer System

Cooling Tons

07 = 6.0 tons
08 = 7.5 tons
09 = 8.5 tons
12 = 10.0 tons
14 = 12.5 tons

Sensor Options

A = None
B = Return Air Smoke Detector (RA)^b
C = Supply Air Smoke Detector (SA)
D = RA + SA Smoke Detector^b
J = Condensate Overflow Switch (COFS)
K = Condensate Overflow Switch + RA Smoke Detectors^b
L = Condensate Overflow Switch + RA and SA Smoke Detectors^b
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
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^c (High Short Circuit Current Rating)
2 = HSCCR^c + TTB

Service Options

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

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 CO₂ Sensor
M = ULL Enthalpy Economizer with Barometric Relief and CO₂ Sensor
U = ULL Temperature Economizer with Barometric Relief
W = ULL Enthalpy Economizer with Barometric Relief

Unit Controls

3 = SystemVu™ Controller

NOTE (S):

- Size 14 (12.5 ton) units only.
- Vertical airflow configuration only.
- Not available on the following models/options: 575V, Phase Loss Monitor, Non-Fused Disconnect, HACR Breaker, Powered Convenience Outlet, or Size 12 units.
- Not available on Size 12 units with -5 voltage (208/230-3-60) and High Static Motor.

48GE AHRI Ratings^{a,b,c,d}

48GE UNIT	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	EER	IEER WITH 3-SPEED	AHRI RATING CFM	AHRI MEDIUM PART LOAD CFM	AHRI LOW PART LOAD CFM
48GE*T07	3	6.0	72	5.4	13.3	22.1	2400	1440	960
48GE*T08	3	7.5	90	7.0	12.8	20.9	3000	1800	1200
48GE*T09	3	8.5	102	8.1	12.6	19.4	3000	1800	1200
48GE*T12	3	10.0	118	9.8	12.1	18.9	3500	2100	1400
48GE*T14	3	12.5	146	12.2	12.0	18.8	4700	2820	1880

NOTE(S):

- Rated in accordance with AHRI Standards 340/360.
- Rating are based on:
Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temperature and 95°F (35°C) db outdoor air temperature.
IEER Standard: A measure that expresses cooling part-load EER efficiency for commercial unitary air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities.
- All 48GE units comply with ASHRAE 90.1-2019 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) and DOE-2023 (Department of Energy) Energy Standard for minimum IEER requirements.
- 48GE 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
IEER — Integrated Energy Efficiency Ratio

50GE AHRI Ratings^{a,b,c,d}

50GE UNIT	COOLING STAGES	NOMINAL CAPACITY (tons)	NET COOLING CAPACITY (MBH)	TOTAL POWER (kW)	EER	IEER WITH 3-SPEED	AHRI RATING CFM	AHRI MEDIUM PART LOAD CFM	AHRI LOW PART LOAD CFM
50GE*T07	3	6.0	72	5.3	13.5	22.3	2400	1440	960
50GE*T08	3	7.5	90	6.9	13.0	21.1	3000	1800	1200
50GE*T09	3	8.5	102	8.0	12.8	19.6	3000	1800	1200
50GE*T12	3	10.0	118	9.6	12.3	19.1	3500	2100	1400
50GE*T14	3	12.5	146	12.0	12.2	19.0	4700	2820	1880

NOTE(S):

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



Sound Ratings Table^{a,b}

48/50GE UNIT	COOLING STAGES	OUTDOOR SOUND (dB) at 60 Hz								
		A-Weighted ^c	63	125	250	500	1000	2000	4000	8000
T07	3	82	90.1	82.6	81.0	79.4	77.0	73.0	70.4	66.7
T08	3	82	90.6	84.3	80.2	79.3	77.1	72.2	67.4	63.7
T09	3	82	88.6	85.0	81.6	79.5	77.4	74.1	71.0	66.3
T12	3	87	85.9	87.9	85.6	84.4	82.8	78.5	74.9	72.5
T14	3	83	89.3	86.0	82.9	80.7	78.5	73.6	69.6	64.5

NOTE(S):

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

LEGEND

dB — Decibel

Minimum - Maximum Airflow Ratings (cfm) — Natural Gas and Propane

48GE UNITS	HEAT LEVEL	COOLING				HEATING ^a	
		Minimum 3-Speed Airflow (Low Speed)	Minimum 3-Speed Airflow (Medium Speed)	Minimum 3-Speed Airflow (High Speed)	Maximum Airflow cfm	Minimum Airflow cfm	Maximum Airflow cfm
48GE*T07	LOW	720	1080	1800	3000	990	3640
	MED					1730	3160
	HIGH					1750	3250
48GE*T08	LOW	900	1350	2250	3750	1730	3800
	MED					2100	3900
	HIGH					2240	4200
48GE*T09	LOW	1020	1530	2550	4250	1730	4750
	MED					2100	4560
	HIGH					2240	4800
48GE*T12	LOW	1200	1800	3000	5000	2100	5470
	MED					2580	6720
	HIGH					2710	5420
48GE*T14	LOW	1500	2250	3750	6250	1880	7500
	MED					2450	9000
	HIGH					3000	9000

NOTE(S):

- Heating rating values are identical for aluminum heat exchangers and stainless steel heat exchangers.

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

50GE UNITS	COOLING				ELECTRIC HEAT ^a	
	Minimum 3-Speed Airflow (Low Speed)	Minimum 3-Speed Airflow (Medium Speed)	Minimum 3-Speed Airflow (High Speed)	Maximum Airflow cfm	Minimum Airflow cfm	Maximum Airflow cfm
50GE-T07	720	1080	1800	3000	1800	3000
50GE-T08	900	1350	2250	3750	2250	3750
50GE-T09	1020	1530	2550	4250	2550	4250
50GE-T12	1200	1800	3000	5000	3000	5000
50GE-T14	1500	2250	3750	6250	3750	6250

NOTE(S):

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

Heat Rating Table — Natural Gas and Propane

48GE UNITS	GAS HEAT	AL/SS HEAT EXCHANGER		TEMPERATURE RISE (°F)	THERMAL EFFICIENCY (%)
		Input/Output Stage 1 (MBH)	Input/Output Stage 2 (MBH)		
48GE*T07	LOW	55/41	72/59	15-55	82
	MED	90/66	125/103	30-55	82
	HIGH	115/96	150/123	35-65	82
48GE*T08	LOW	90/66	125/103	25-55	82
	MED	120/98	180/148	35-65	82
	HIGH	180/146	224/181	40-75	81
48GE*T09	LOW	90/66	125/103	20-55	82
	MED	120/98	180/148	30-65	82
	HIGH	180/146	224/181	35-75	81
48GE*T12	LOW	120/98	180/148	25-65	82
	MED	180/146	224/181	25-65	81
	HIGH	200/164	250/205	35-70	82
48GE*T14	LOW	120/98	150/121	15-60	81
	MED	144/116	180/146	15-55	81
	HIGH	192/155	240/195	20-60	81

LEGEND

MBH — Btuh in thousands

48/50GE 6.0 to 7.5 Ton Physical Data

48/50GE UNIT	48/50GE*T07	48/50GE*U07	48/50GE*T08	48/50GE*U08
NOMINAL TONS	6.0	6.0	7.5	7.5
BASE UNIT OPERATING WT (lb) 48/50GE^a	775/714	775/714	893/830	893/830
REFRIGERATION SYSTEM				
No. Circuits/No. Compressors/Type	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll
Puron Advance™ (R-454B) Charge (lb-oz)	11-13	—	13-10	—
Humidi-MiZer® Puron Advance (R-454B) Charge (lb-oz)	—	15-2	—	21-13
Metering Device	TXV	TXV	TXV	TXV
Humidi-MiZer Metering Device	—	TXV	—	TXV
High-Pressure Trip/Reset (psig)	630/505	630/505	630/505	630/505
Low-Pressure Trip/Reset (psig)	54/117	54/117	54/117	54/117
EVAPORATOR COIL				
Material (Tube/Fin)	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
Rows/FPI	3/15	3/15	4/15	4/15
Total Face Area (ft²)	8.9	8.9	11.1	11.1
Condensate Drain Connection Size	3/4 in.	3/4 in.	3/4 in.	3/4 in.
CONDENSER COIL				
Material	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
Rows/FPI	2/18	2/18	2/18	2/18
Total Face Area (ft²)	20.5	20.5	25.1	25.1
HUMIDI-MIZER COIL				
Material	—	Cu/Al	—	Cu/Al
Coil Type	—	5/16 in. RTPF	—	5/16 in. RTPF
Rows/FPI	—	2/18	—	2/18
Total Face Area (ft²)	—	6.0	—	8.0
EVAPORATOR FAN AND MOTOR				
Standard/Medium Static 3 Phase				
Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Direct
Maximum Cont bhp	2.4	2.4	2.4	2.4
Range (rpm)	250-2000	250-2000	250-2000	250-2000
Fan Qty/Type	1/Vane Axial	1/Vane Axial	1/Vane Axial	1/Vane Axial
Fan Diameter (in.)	22	22	22	22
High Static 3 Phase				
Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Direct
Maximum Cont bhp	3	3	3	3
Range (rpm)	250-2200	250-2200	250-2200	250-2200
Fan Qty/Type	1/Vane Axial	1/Vane Axial	1/Vane Axial	1/Vane Axial
Fan Diameter (in.)	22	22	22	22
CONDENSER FAN AND MOTOR				
Qty / Motor Drive Type	2 / Direct	2 / Direct	2 / Direct	2 / Direct
Motor hp/rpm	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b
Fan Diameter (in.)	22	22	22	22
FILTERS				
RA Filter Qty / Size (in.)	4 / 16 x 20 x 2	4 / 16 x 20 x 2	4 / 20 x 20 x 2	4 / 20 x 20 x 2
OA Inlet Screen Qty / Size (in.)	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1

NOTE(S):

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

b. 1050/770/450/350/265 rpm

LEGEND

bhp — brake horsepower
FPI — Fins Per Inch
OA — Outdoor Air
RA — Return Air

48/50GE 8.5 to 10.0 Ton Physical Data

48/50GE UNIT	48/50GE*T09	48/50GE*U09	48/50GE*T12	48/50GE*U12
NOMINAL TONS	8.5	8.5	10.0	10.0
BASE UNIT OPERATING WT (lb) 48GE/50GE^a	893/830	893/830	1034/971	1034/971
REFRIGERATION SYSTEM				
No. Circuits/No. Compressors/Type	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll	1 / 2 / Scroll
Puron Advance™ (R-454B) Charge (lb-oz)	12-8	—	16-10	—
Humidi-MiZer® Puron Advance™ (R-454B) Charge (lb-oz)	—	18-10	—	23-13
Metering Device	TXV	TXV	TXV	TXV
Humidi-MiZer Metering Device	—	TXV	—	TXV
High-Pressure Trip/Reset (psig)	630/505	630/505	630/505	630/505
Low-Pressure Trip/Reset (psig)	54/117	54/117	54/117	54/117
EVAPORATOR COIL				
Material (Tube/Fin)	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
Rows/FPI	4/15	4/15	4/15	4/15
Total Face Area (ft²)	11.1	11.1	11.1	11.1
Condensate Drain Connection Size	3/4 in.	3/4 in.	3/4 in.	3/4 in.
CONDENSER COIL				
Material	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
Rows/FPI	2/18	2/18	3/18	3/18
Total Face Area (ft²)	25.1	25.1	25.1	25.1
HUMIDI-MIZER COIL				
Material	—	Cu/Al	—	Cu/Al
Coil Type	—	5/16 in. RTPF	—	5/16 in. RTPF
Rows/FPI	—	2/18	—	2/18
Total Face Area (ft²)	—	8.0	—	8.0
EVAPORATOR FAN AND MOTOR				
Standard/Medium Static 3 Phase				
Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Direct
Maximum Cont bhp	2.4	2.4	2.4	2.4
Range (rpm)	250-2000	250-2000	250-2200	250-2200
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	1 / Vane Axial	1 / Vane Axial
Fan Diameter (in.)	22	22	22	22
High Static 3 Phase				
Motor Qty / Drive Type	1 / Direct	1 / Direct	1 / Direct	1 / Direct
Maximum Cont bhp	3	3	5	5
Range (rpm)	250-2200	250-2200	250-2200	250-2200
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial	1 / Vane Axial	1 / Vane Axial
Fan Diameter (in.)	22	22	22	22
CONDENSER FAN AND MOTOR				
Qty / Motor Drive Type	2 / Direct	2 / Direct	1 / Direct	1 / Direct
Motor hp / rpm	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b	1 / Multiple Speeds ^b	1 / Multiple Speeds ^b
Fan Diameter (in.)	22	22	22	22
FILTERS				
RA Filter Qty / Size (in.)	4 / 20 x 20 x 2	4 / 20 x 20 x 2	4 / 20 x 20 x 2	4 / 20 x 20 x 2
OA Inlet Screen Qty / Size (in.)	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1	1 / 20 x 24 x 1

NOTE(S):

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

LEGEND

bhp — brake horsepower
FPI — Fins Per Inch
OA — Outdoor Air
RA — Return Air

48/50GE 12.5 Ton Physical Data

48/50GE UNIT	48/50GE*T14	48/50GE*U14
NOMINAL TONS	12.5	12.5
BASE UNIT OPERATING WT (lb) 48GE/50GE ^a	1390/1313	1390/1313
REFRIGERATION SYSTEM		
No. Circuits/No. Compressors/Type	1 / 2 / Scroll	1 / 2 / Scroll
Puron Advance™ (R-454B) Charge (lb-oz)	25-8	—
Humidi-MiZer® Puron Advance™ (R-454B) Charge (lb-oz)	—	32-5
Metering Device	TXV	TXV
Humidi-MiZer Metering Device	—	TXV
High-Pressure Trip/Reset (psig)	630/505	630/505
Low-Pressure Trip/Reset (psig)	54/117	54/117
EVAPORATOR COIL		
Material (Tube/Fin)	Cu/Al	Cu/Al
Coil Type	3/8 in. RTPF	3/8 in. RTPF
Rows/FPI	4/15	4/15
Total Face Area (ft²)	17.5	17.5
Condensate Drain Connection Size	3/4 in.	3/4 in.
CONDENSER COIL		
Material	Cu/Al	Cu/Al
Coil Type	5/16 in. RTPF	5/16 in. RTPF
Rows/FPI	2/18	2/18
Total Face Area (ft²)	46.2	46.2
HUMIDI-MIZER COIL		
Material	—	Cu/Al
Coil Type	—	5/16 in. RTPF
Rows/FPI	—	2/18
Total Face Area (ft²)	—	8.0
EVAPORATOR FAN AND MOTOR		
Standard/Medium Static 3 Phase		
Motor Qty / Drive Type	1 / Direct	1 / Direct
Maximum Cont bhp	3	3
Range (rpm)	250-2200	250-2200
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial
Fan Diameter (in.)	22	22
High Static 3 Phase		
Motor Qty / Drive Type	1 / Direct	1 / Direct
Maximum Cont bhp	5	5
Range (rpm)	250-2200	250-2200
Fan Qty / Type	1 / Vane Axial	1 / Vane Axial
Fan Diameter (in.)	22	22
CONDENSER FAN AND MOTOR		
Qty / Motor Drive Type	3 / Direct	3 / Direct
Motor hp / rpm	1/3 / Multiple Speeds ^b	1/3 / Multiple Speeds ^b
Fan Diameter (in.)	22	22
FILTERS		
RA Filter Qty / Size (in.)	6 / 18 x 24 x 2	6 / 18 x 24 x 2
OA Inlet Screen Qty / Size (in.)	Vertical: 2 / 24 x 27 x 1 Horizontal: 1 / 30 x 39 x 1	Vertical: 2 / 24 x 27 x 1 Horizontal: 1 / 30 x 39 x 1

NOTE(S):

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

LEGEND

bhp — brake horsepower
FPI — Fins Per Inch
OA — Outdoor Air
RA — Return Air

48GE 6.0 to 12.5 Ton Gas Heat Data

48GE UNIT	48GE*T07	48GE*T08	48GE*T09	48GE*T12	48GE*T14
NOMINAL TONS	6.0	7.5	8.5	10.0	12.5
GAS CONNECTION					
No. of Gas Valves	1	1	1	1	1
Natural Gas Supply Line Pressure (in. wg)/(psig)	4-13 / 0.18-0.47	4-13 / 0.18-0.47	4-13 / 0.18-0.47	4-13 / 0.18-0.47	5-13 / 0.18-0.47
Liquid Propane Supply Line Pressure (in. wg)/(psig)	11-13 / 0.40-0.47	11-13 / 0.40-0.47	11-13 / 0.40-0.47	11-13 / 0.40-0.47	11-13 / 0.40-0.47
HEAT ANTICIPATOR SETTING (amps)					
First Stage	0.14	0.14	0.14	0.14	0.14
Second Stage	0.14	0.14	0.14	0.14	0.14
NATURAL GAS HEAT					
LOW					
No. of Stages / No. of Burners (total)	2 / 2	2 / 3	2 / 3	2 / 4	2 / 5
Connection Size	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT	3/4 in. NPT	3/4 in. NPT
Rollout Switch Opens / Closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	225 / 145
Temperature Rise (°F)	15-55	25-55	20-55	25-65	15-60
MEDIUM					
No. of Stages / No. of Burners (total)	2 / 3	2 / 4	2 / 4	2 / 5	2 / 6
Connection Size	1/2 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
Rollout Switch Opens / Closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	225 / 145
Temperature Rise (°F)	30-55	35-65	30-65	25-65	15-55
HIGH					
No. of Stages / No. of Burners (total)	2 / 4	2 / 5	2 / 5	2 / 5	2 / 8
Connection Size	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
Rollout Switch Opens / Closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	225 / 145
Temperature Rise (°F)	35-65	40-75	35-75	35-70	20-60
LIQUID PROPANE HEAT					
LOW					
No. of Stages / No. of Burners (total)	2 / 2	2 / 3	2 / 3	2 / 4	2 / 5
Connection Size	1/2 in. NPT	1/2 in. NPT	1/2 in. NPT	3/4 in. NPT	3/4 in. NPT
Rollout Switch Opens / Closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	225 / 145
Temperature Rise (°F)	15-55	25-55	20-55	25-65	15-60
MEDIUM					
No. of Stages / No. of Burners (total)	2 / 3	2 / 4	2 / 4	2 / 5	2 / 6
Connection Size	1/2 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
Rollout Switch Opens / Closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	225 / 145
Temperature Rise (°F)	30-55	35-65	30-65	25-65	15-55
HIGH					
No. of Stages / No. of Burners (total)	2 / 4	2 / 5	2 / 5	2 / 5	2 / 8
Connection Size	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT	3/4 in. NPT
Rollout Switch Opens / Closes (°F)	195 / 115	195 / 115	195 / 115	195 / 115	225 / 145
Temperature Rise (°F)	35-65	40-75	35-75	35-70	20-60

Options and accessories



ITEM	FACTORY- INSTALLED OPTION	FIELD- INSTALLED ACCESSORY
GAS HEAT (48GE units only)		
Low, Medium, or High Gas Heat — Aluminized Heat Exchanger	X	
Low, Medium or High Gas Heat — Stainless Steel Heat Exchanger	X	
Propane Conversion Kit		X
High Altitude Conversion Kit		X
Flue Discharge Deflector		X
Flue Shield (07-12 sizes only)		X
ELECTRIC HEAT (50GE units only)		
Electric Resistance Heaters	X	X
Single Point Kits	X	X
CABINET		
Thru-the-Base Electrical or Gas-Line Connections	X	X
Hinged Access Panels	X	
MERV-8, 2 in. Filters		X
MERV-13, 2 in. Filters		X
MERV-13, 4 in. Filters	X	X
4 in. Filter Rack (filters not included)		X
Disconnect Switch Bracket ^a		X
Supply Duct Cover ^a		X
COIL OPTIONS		
Cu/Cu Outdoor and/or Indoor Coils ^b	X	
Pre-coated Outdoor Coils	X	
Premium, E-Coated Outdoor and Indoor Coils	X	
HUMIDITY CONTROL		
Humidi-MiZer [®] Adaptive Dehumidification System	X	
CONDENSER PROTECTION		
Condenser Coil Hail Guard (louvered design)	X	X
CONTROLS		
Thermostats, Temperature Sensors, And Subbases		X
Smoke Detector (supply and/or return air)	X	X
Horn Strobe Annunciator ^c		X
Phase Monitor	X	X
ECONOMIZERS AND OUTDOOR AIR DAMPERS		
EconoMi\$er [®] 2 for DDC controls (Low and Ultra Low Leak air damper models) ^d	X	X
Motorized Two-Position Outdoor- Air Damper		X
Manual Outdoor-Air Damper (25% and 50%)		X
Barometric Relief ^e	X	X
Power Exhaust, Prop Design		X
Condensate Overflow Switch	X	X
ECONOMIZER SENSORS AND IAQ DEVICES		
Single Dry Bulb Temperature Sensors ^f	X	X
Differential Dry Bulb Temperature Sensors ^f		X
Differential Enthalpy Sensors ^f		X
CO ₂ Sensor (wall, duct, or unit mounted) ^f	X	X

ITEM	FACTORY- INSTALLED OPTION	FIELD- INSTALLED ACCESSORY
INDOOR MOTOR AND DRIVE		
Multiple Motor and Drive Packages	X	
Fan Filter Status Switch	X	X
POWER OPTIONS		
Convenience Outlet (powered)	X	
Convenience Outlet (unpowered)	X	
Convenience Outlet, 20 amp (unpowered)		X
Non-fused Disconnect ^g	X	
HACR breaker ^{h,i}	X	
High SCCR Protection ^j	X	
ROOF CURBS		
Roof Curb 14 in. (356 mm)		X
Roof Curb 24 in. (610 mm)		X

NOTE(S):

- For Size 14 units only.
- Cu/Cu coils are only available with louvered hail guards.
- Requires a field-supplied 24V transformer for each application. See price pages for details.
- Models with SystemVu controls comply with California Title 24 Fault Detection and Diagnostic (FDD).
- Included with economizer.
- Sensors used to optimize economizer performance.
- Non-fused disconnect switch cannot be used when unit FLA electrical rating exceeds —
48GE 07-14: 80 amps, all voltages.
50GE 07-12 without factory installed electric heat:
208/230/3/60, 460/3/60 and 575/3/60 = 80 amps.
50GE 07-12 with factory installed electric heat:
208/230/3/60 = 100 amps, 460/3/60 and 575/3/60 = 80 amps.
50GE 14 — Non-fused disconnect switch cannot be used when electrical rating exceeds: 208/230/3/60 = 200 amps, 460/3/60 and 575/3/60 = 100 amps.
Carrier RTUBuilder automatically selects the amp limitations.
- HACR circuit breaker cannot be used on 48GE 07-14 sizes when unit MOCP rating exceeds:
48GE 07-12:
208/230/3/60 = 80 amps
460/3/60 = 40 amps
575/3/60 = 35 amps
48GE 14:
208/230/3/60 = 80 amps
460/3/60 = 45 amps
575/3/60 = 30 amps
Carrier RTUBuilder automatically selects the amps limitations.
- HACR circuit breaker cannot be used on 50GE 07-14 sizes when unit MOCP rating exceeds:
50GE 07-12 without factory installed electric heat:
208/230/3/60 = 80 amps
460/3/60 = 40 amps
575/3/60 = 35 amps
50GE 07-12 with factory installed electric heat:
208/230/3/60 = 100 amps
460/3/60 = 80 amps
575/3/60 = 60 amps
50GE 14 without factory installed electric heat:
208/230/3/60 = 80 amps
460/3/60 = 45 amps
575/3/60 = 30 amps
50GE 14 with factory installed electric heat:
208/230/3/60 = 175 amps
460/3/60 = 80 amps
575/3/60 = 60 amps
Carrier RTUBuilder automatically selects the amps limitations.
- High SCCR (Short Circuit Current Rating) is not available on the following: units with Humidi-MiZer system, HACR breaker, powered convenience outlet, phase loss monitor, non-fused disconnect, or 575-v. Not available on size 12 units due to control box constraints.

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 CO₂ 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 damper to help equalize building pressure. 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 CO₂ sensor

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

Smoke detector (supply and/or return air)

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

Optional Humidi-MiZer® adaptive dehumidification system

Carrier's Humidi-MiZer adaptive dehumidification system is an all-inclusive factory-installed option that can be ordered with any WeatherMaster® 48/50GE 07-14 rooftop unit.

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

The Humidi-MiZer adaptive dehumidification system has a unique dual operational mode setting. 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 48/50GE 07-14 rooftop is capable of operating in normal design cooling mode, sub-cooling mode, and hot gas reheat mode. Normal design cooling mode is when the unit will operate under its normal sequence of operation by cycling compressors to maintain comfort conditions.

Sub-cooling mode will operate to satisfy part load type conditions when the space requires combined sensible and a higher proportion of latent load control. Hot gas reheat mode 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 controls.

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 gas lines, 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 coil assembly from contacting the sheet metal coil pan to minimize the potential for galvanic corrosion between coil and pan. Only available with louvered hail guards.

E-coated (outdoor and indoor) coils

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

Pre-coated outdoor coils

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

Condenser coil hail guard

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

Stainless steel heat exchanger (48GE units only)

For this option, the tubular heat exchanger is made out of a minimum 20 gauge type 409 stainless steel for applications where the mixed air going to the heat exchanger is expected to drop below 45°F (7°C). Stainless steel may be specified on applications where the presence of airborne contaminants require its use (applications such as paper mills) or in areas with very high outdoor humidity that may result in severe condensation in the heat exchanger during cooling operation.

Convenience outlet (powered or un-powered)

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. 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.

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. 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 a condensate plug is detected but still allows fans to run for the economizer

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.

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 compress and all indoor and outdoor fan motors. (A standard unit comes with a 5 kA rating.)

This option is not available on 575-v models or models with a factory-installed powered convenience outlet, phase loss monitor, HACR breaker, or non-fused disconnect. Not available on size 12 units due to control box constraints.

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 if outside air is suitable for free cooling.

Wall or duct mounted CO₂ sensor

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

Propane conversion kit (48GE units only)

Convert your gas heat rooftop from standard natural gas operation to propane using this field-installed kit.

High altitude conversion kit (48GE units only)

High altitudes have less oxygen, which affects the fuel/air mixture in heat exchangers. In order to maintain a proper fuel/air mixture, heat exchangers operating in altitudes above 2000 ft (610 m) require different orifices. To select the correct burner orifices or determine the heat capacity for a high altitude application, use either the selection software or the unit's service manual. High altitudes have less oxygen, which means heat exchangers need less fuel. The new gas orifices in this field-installed kit make the necessary adjustment for high altitude applications. They restore the optimal fuel to air mixture and maintain healthy combustion on altitudes above 2000 ft (610 m).

NOTE: Typical natural gas heating value ranges from 975 to 1050 Btu/ft³ at sea level nationally. The heating value goes down approximately 1.7% per every thousand feet of elevation. Standard factory orifices can typically be used up to 2000 ft (610 m) elevations without any operational issues.

Flue discharge deflector (48GE units only)

The flue discharge deflector is a useful accessory when flue gas recirculation is a concern. By venting the flue discharge upwards, the deflector minimizes the chance for a neighboring unit to intake the flue exhaust.

Filter rack kit (4 in.)

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 (quantity: 4) to accommodate unit filter rack size.

MERV-8 2 in. return air filters

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

Phase monitor protection

The phase monitor control monitors the sequence of the 3-phase electrical system to provide a 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.

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.

Fan filter status switch and maintenance indicator

When a field-installed filter maintenance indicator is used, a field-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.

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 (50GE units only)

Carrier offers a full line of accessory heaters. The heaters are very easy to use and install, and they are all pre-engineered and certified. Electric heaters are available as either factory-installed options or field-installed accessories.

Disconnect switch bracket

The accessory provides a pre-engineered and sized mounting bracket for applications requiring a unit-mounted fused and non-fused disconnect of greater than 100 amps. The bracket assures that no damage occurs to coils when mounting with screws and other fasteners (size 14 only).

Supply duct cover

This supply duct cover is required when field converting the factory standard vertical duct supply to the horizontal duct supply configuration. One required per unit (14 size only).

Options and Accessory Weights^a

OPTION / ACCESSORY NAME	48/50GE UNIT WEIGHT									
	07		08		09		12		14	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
Humidi-MiZer® System^b	25	12	34	16	34	16	34	16	55	25
Power Exhaust	55	25	55	25	55	25	55	25	85	39
EconoMi\$er® 2	75	34	75	34	75	34	75	34	135	62
Two-Position Damper	58	26	58	26	58	26	58	26	65	29
Manual Damper	18	8	18	8	18	8	18	8	25	11
High Gas Heat (48GE units only)	81	37	81	37	86	39	86	39	117	53
Hail Guard (louvered)	17	8	17	8	17	8	17	8	44	20
Cu/Cu Condenser Coil	85	39	85	39	100	46	150	68	180	82
Cu/Cu Evaporator Coil	50	23	100	46	100	46	100	46	120	55
Roof Curb (14 in. curb)	143	65	143	65	143	65	143	65	180	82
Roof Curb (24 in. curb)	245	112	245	112	245	112	245	112	255	116
CO₂ Sensor	2	1	2	1	2	1	2	1	2	1
Flue Discharge Deflector	7	3	7	3	7	3	7	3	7	3
Optional Indoor Motor^c	30	14	30	14	30	14	0	0	0	0
Return Air Smoke Detector	7	3	7	3	7	3	7	3	7	3
Supply Air Smoke Detector	7	3	7	3	7	3	7	3	7	3
Fan Filter Switch	2	1	2	1	2	1	2	1	2	1
Non-Fused Disconnect	15	7	15	7	15	7	15	7	15	7
Powered Convenience Outlet^d	36	16	36	16	36	16	36	16	36	16
Unpowered Convenience Outlet	4	2	4	2	4	2	4	2	4	2
Enthalpy Sensor	2	1	2	1	2	1	2	1	2	1
Differential Enthalpy Sensor	3	1	3	1	3	1	3	1	3	1
Single Point Box (50GE units only)	22	10	22	10	22	10	22	10	24	11
High Electric Heat (50GE units only)	26	12	26	12	26	12	26	12	31	14

NOTE(S):

- Where multiple variations are available, the heaviest combination is listed.
- For Humidi-MiZer system, add Low Ambient controller weight.
- Add the Optional Indoor Motor weight to the weight of the base unit.
- Weight includes convenience outlet and convenience outlet transformer.

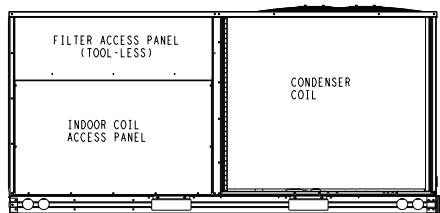
48GE**07-09 Base Unit Dimensions

NOTES:

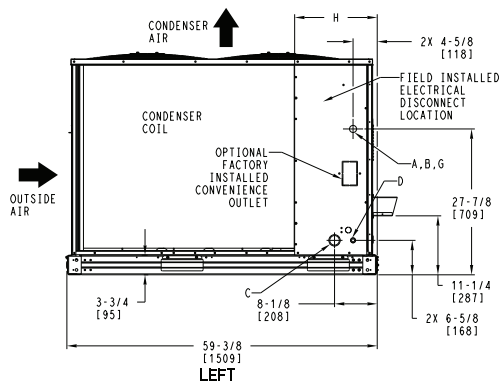
1. DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE IN MILLIMETERS.
2.  CENTER OF GRAVITY
3.  DIRECTION OF AIR FLOW
4.  ALL VIEW DRAWN USING 3RD ANGLE

UNIT	OUTDOOR COIL TYPE	J	K	H
48GE 07	RTPF	41 1/4 [1048]	33 3/4 [857]	15 7/8 [403]
48GE 08	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
48GE 09	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]

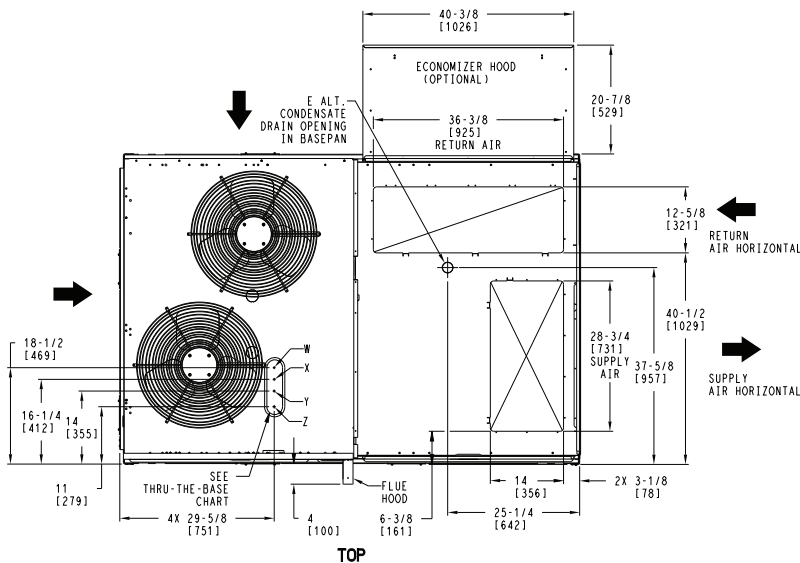
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)



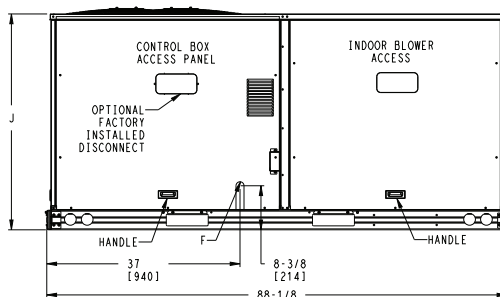
BACK



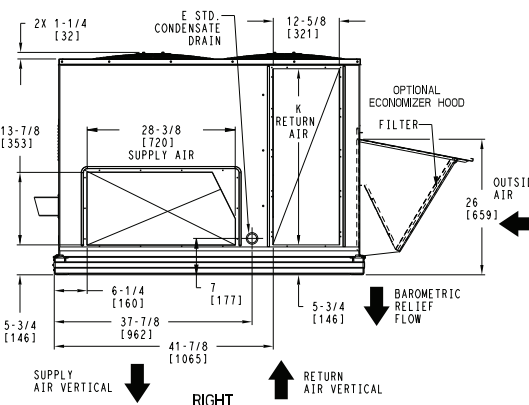
LEFT



TOP



FRONT



RIGHT

CONNECTION SIZES

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

THRU-THE-BASE CHART (FIELD INST)

THESE HOLES REQUIRED FOR USE WITH ACCY KITS:
CRBTMPW002A01: GAS THRU CURB
CRBTMPW004A01: GAS THRU BASEPAN

	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	1 1/4" (002,004)	POWER	1 3/4" [44.4]
Z *	(004) 3/4" FPT	GAS	1 3/4" [44.4]
*	(002) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING. HOLE SIZE: 2" [50.8]		

THRU-THE-BASE CHART (FIOP)

FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED. **

FOR BELOW LISTED MODELS, A FIELD SUPPLIED 1/2" ADAPTER IS REQUIRED BETWEEN BASE PAN FITTING AND GAS VALVE:
48GD,S*08,09

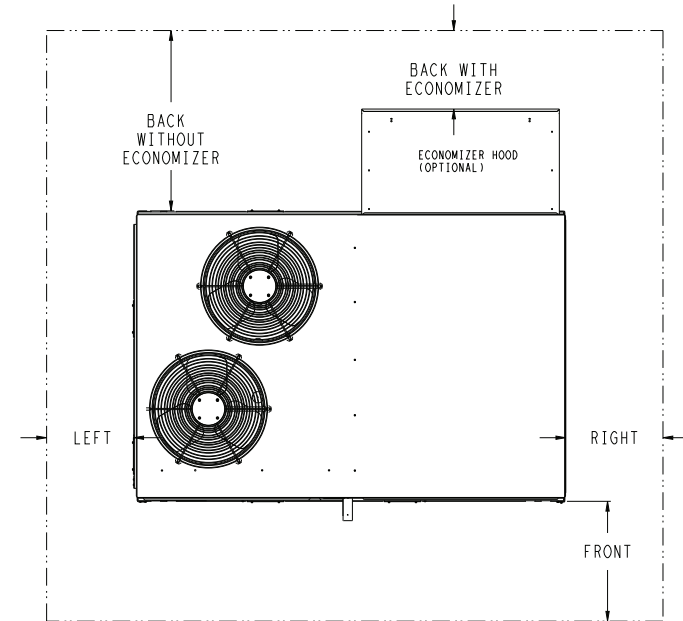
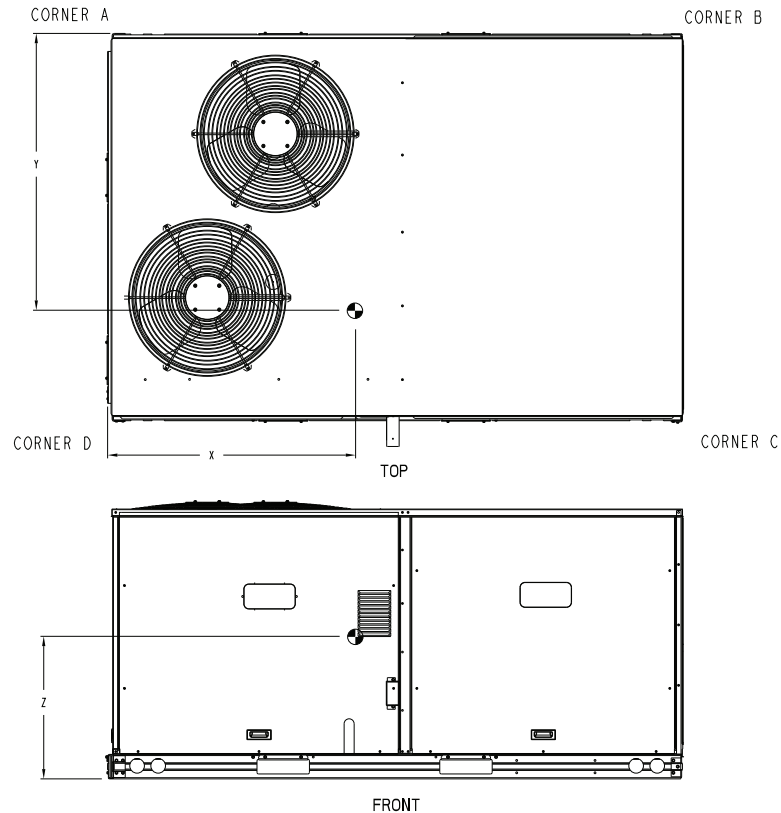
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE 07-09 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009899	REV
U.S. ECCN:NSR	1 OF 3	7/10/25	8/28/24			B

48GE**07-09 Base Unit Dimensions (cont)

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT ***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GE 07	RTPF	775	352	187	85	159	72	198	90	232	105	40 1/2 [1029]	33 [838]	19 7/8 [505]
48GE 08	RTPF	893	405	203	92	169	76	237	107	285	129	40 [1016]	34 3/4 [883]	18 5/8 [473]
48GE 09	RTPF	893	405	203	92	169	76	237	107	285	129	40 [1016]	34 3/4 [883]	18 5/8 [473]

RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)

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



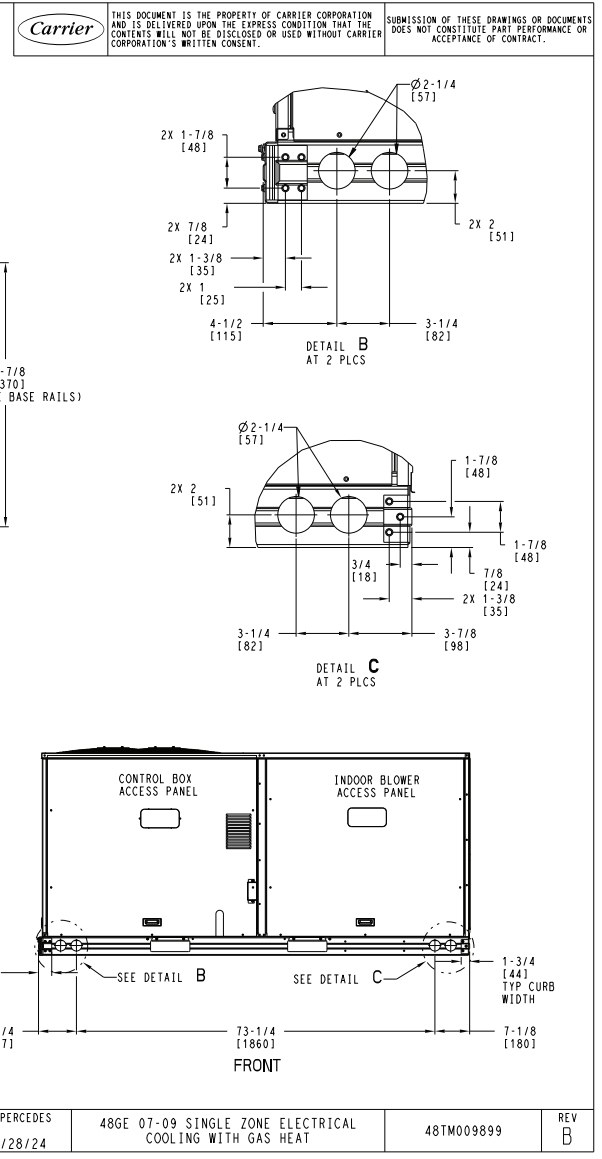
NOTE:

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

SURFACE	CLEARANCE		OPERATING CLEARANCE
	SERVICE WITH: CONDUCTIVE BARRIER	SERVICE WITH: NONCONDUCTIVE BARRIER	
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK 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 U.S. ECCN:NSR	SHEET 2 OF 3	DATE 7/10/25	SUPERCEDES 8/28/24	48GE 07-09 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009899	REV B
-------------------------------------	-----------------	-----------------	-----------------------	--	------------	----------

48GE**07-09 Base Unit Dimensions (cont)



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE 07-09 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009899	REV
U.S. ECCN:NSR	3 OF 3	7/10/25	8/28/24			B

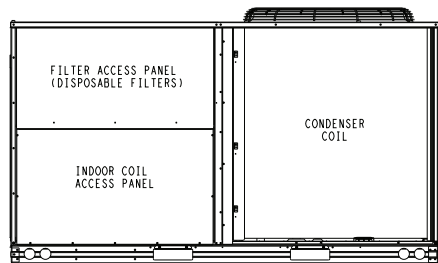


48GE**12 Base Unit Dimensions

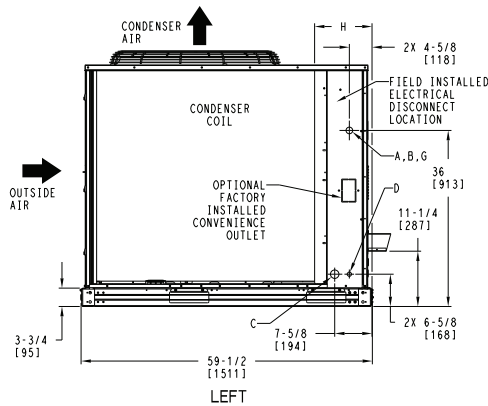
NOTES:

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

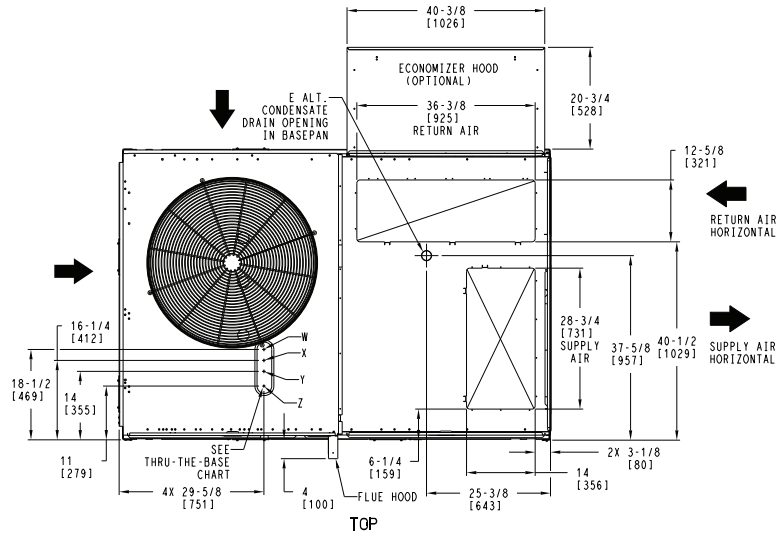
UNIT	OUTDOOR COIL TYPE	H
48GE 12	RTPF	15 7/8 [403]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)		



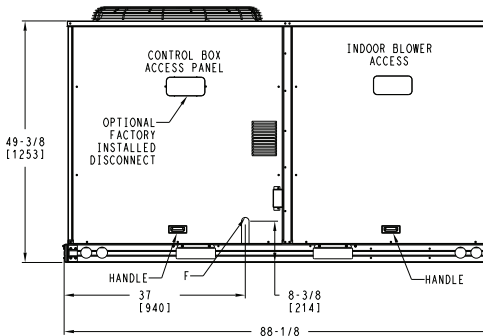
BACK



LEFT



TOP



FRONT

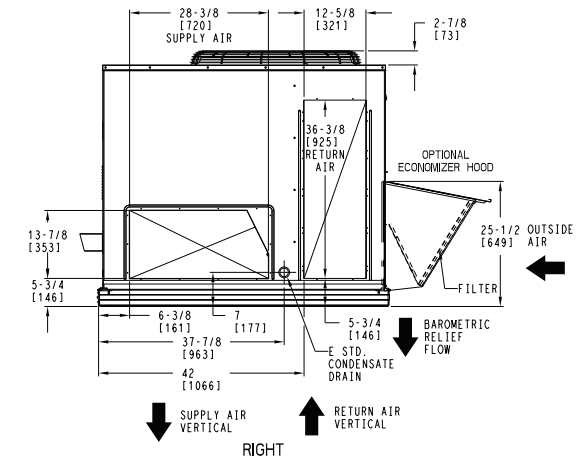


THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.

SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.

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

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPWRO2A01,004A01			
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	1 1/4" (002,004)	POWER	1 3/4" [44.4]
Z*	(004) 3/4" FPT	GAS	1 5/8" [41.3]
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED			
* (002) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.			



RIGHT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009900	REV
U.S. ECCN:NSR	1 OF 3	7/10/25	5/21/24			A

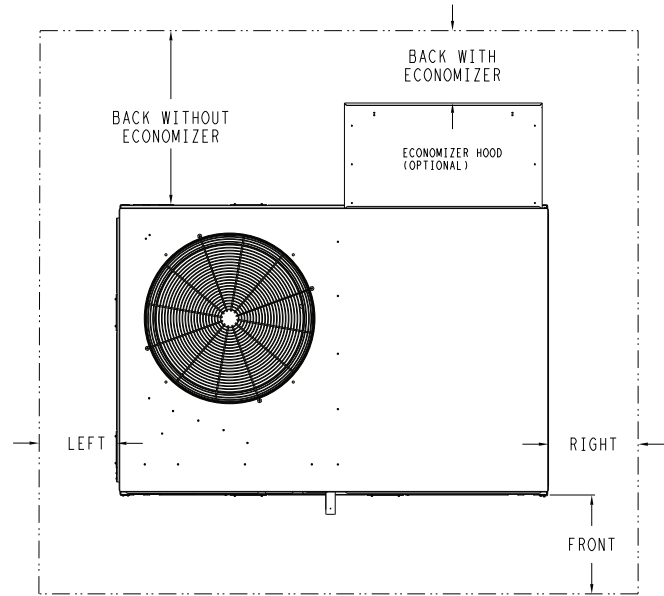
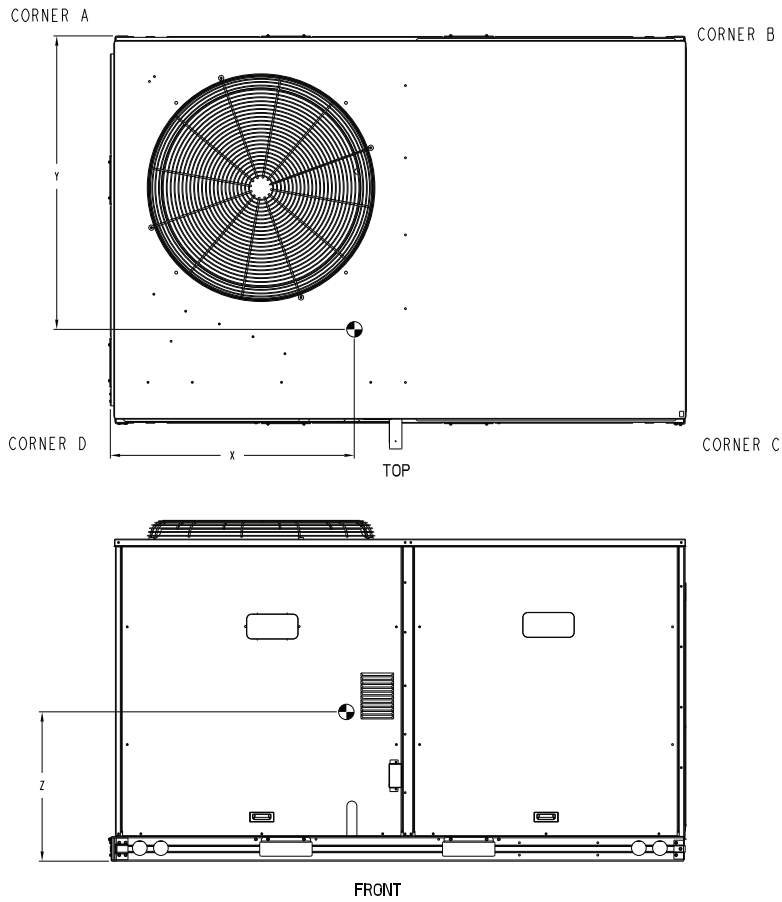


48GE**12 Base Unit Dimensions (cont)

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GE 12	RTPF	1037	470	240	109	204	93	272	124	320	145	40 1/2 [1029]	34 [864]	20 1/2 [521]

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

 THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT. SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.

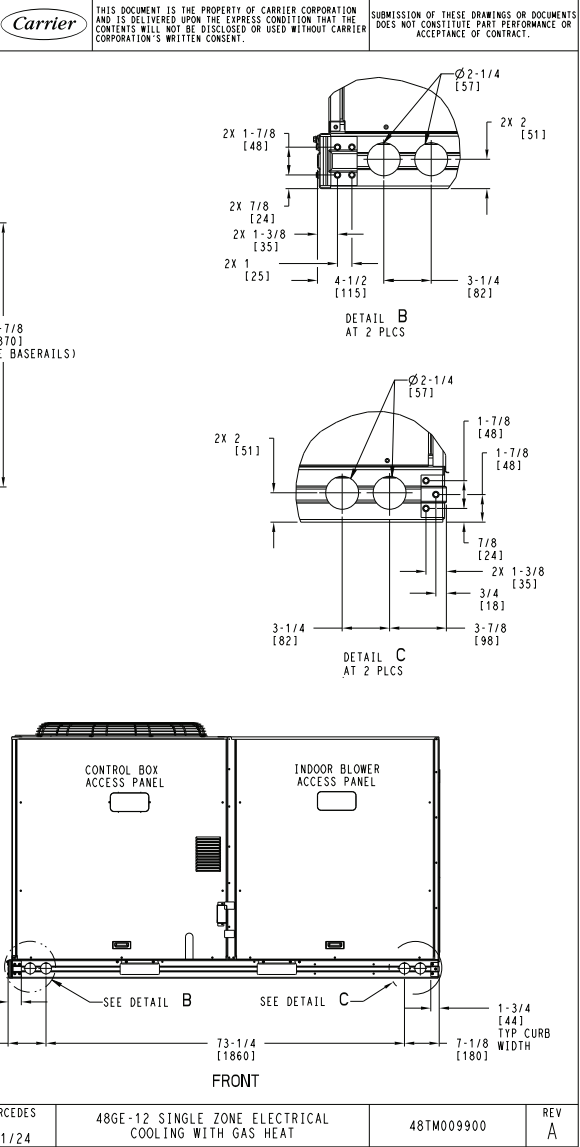


NOTE:
1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

CLEARANCE			
SURFACE	SERVICE WITH: CONDUCTIVE BARRIER	SERVICE WITH: NONCONDUCTIVE BARRIER	OPERATING 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 U.S. ECCN:NSR	SHEET 2 OF 3	DATE 7/10/25	SUPERCEDES 5/21/24	48GE-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009900	REV A
-------------------------------------	-----------------	-----------------	-----------------------	---	------------	----------

48GE**12 Base Unit Dimensions (cont)

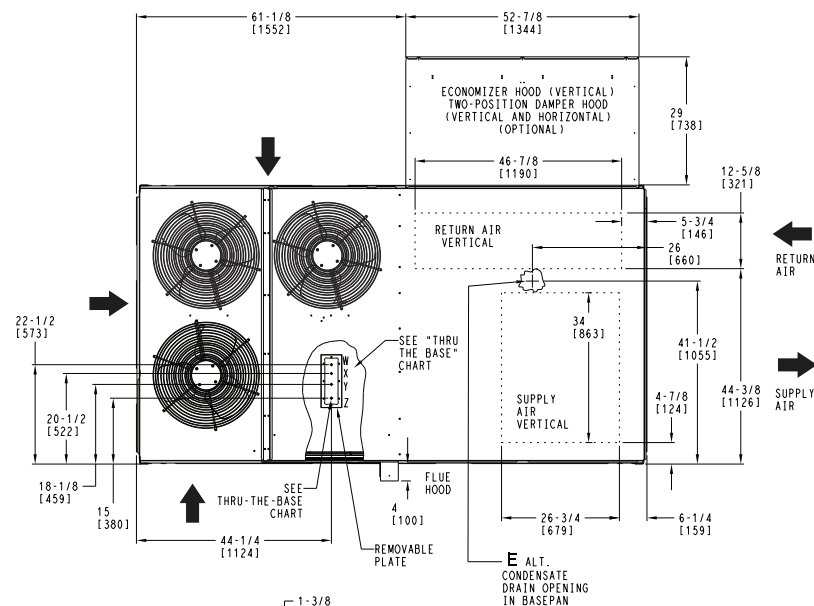
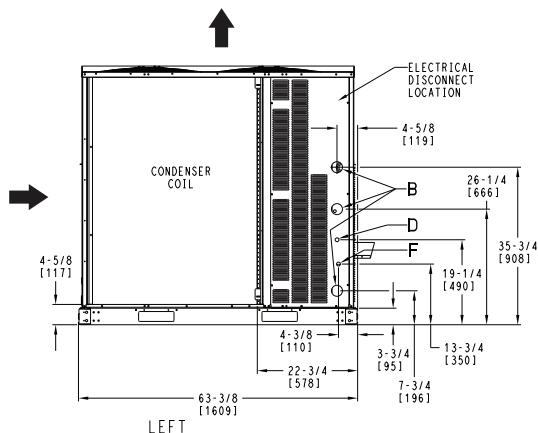


ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009900	REV
U.S. ECCN:NSR	3 OF 3	7/10/25	5/21/24			A



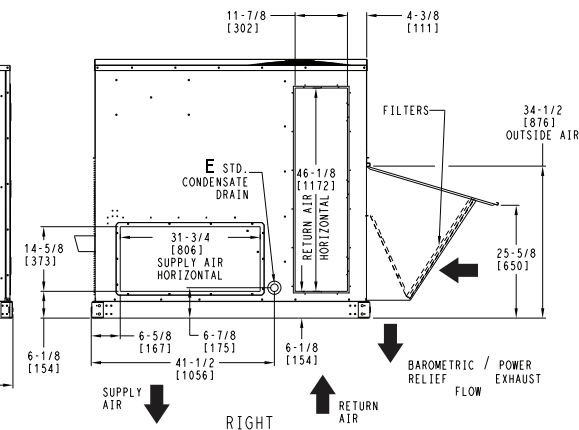
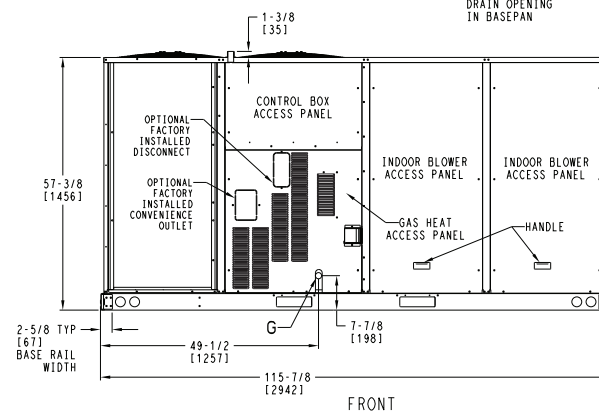
Base unit dimensions (cont)

3.  DIRECTION OF AIR FLOW



THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTPW0050A00, 006A00, 007A00				
ACCESSORY NO.		THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
005	W	1 1/2"	ACC.	7/8" [22.2]
	X	1 1/2"	24V	7/8" [22.2]
	Y	1 1/4"	POWER	1 1/2" [38.1]
006	Z	3/4" PIPE	GAS	1 3/4" [44.5]
	W	1 1/2"	ACC.	7/8" [22.2]
	X	1 1/2"	24V	7/8" [22.2]
007	Y	1 1/2"	POWER	2" [50.8]
	Z	3/4" PIPE	GAS	1 3/4" [44.5]
	W	1 1/2"	ACC.	7/8" [22.2]
007	X	1 1/2"	24V	7/8" [22.2]
	Y	2"	POWER	2 1/2" [63.5]
	Z	3/4" PIPE	GAS	1 3/4" [44.5]

FOR "THRU-THE-BASEPAIN" POWER OPTION,
FITTINGS FOR X & Y ARE PROVIDED AS
SPEC'ED ON "005"

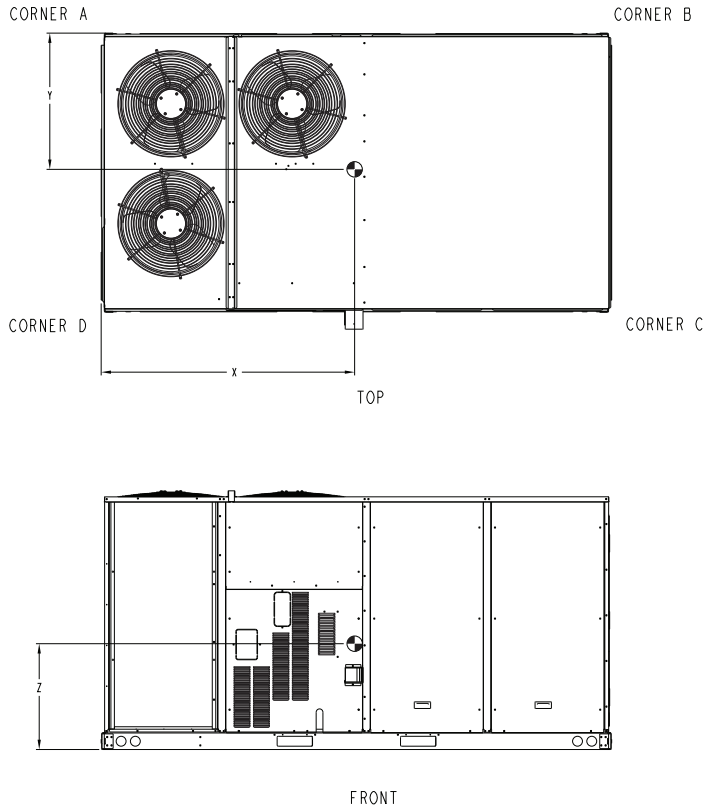


ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE 14 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009901	RE A
U.S. ECCN: NSR	1 OF 2	7/10/25	5/21/24			

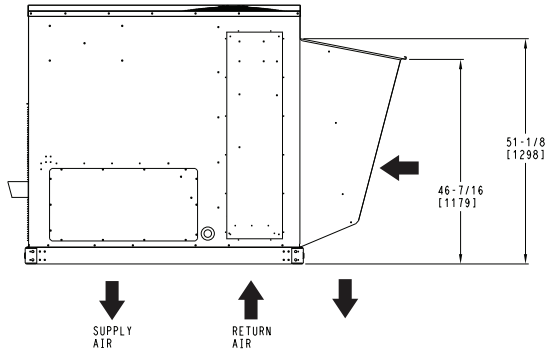
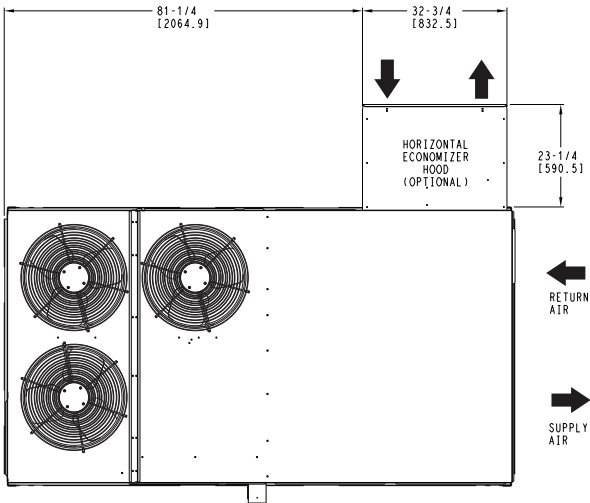
48GE**14 Base Unit Dimensions (cont)

UNIT	STD UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48GE 14	1390	631	330	150	336	153	365	166	358	163	58 1/2 [1486]	33 [838]	21 1/8 [537]

STANDARD UNIT WEIGHT IS WITH LOW HEAT & WITHOUT PACKAGING.
FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.

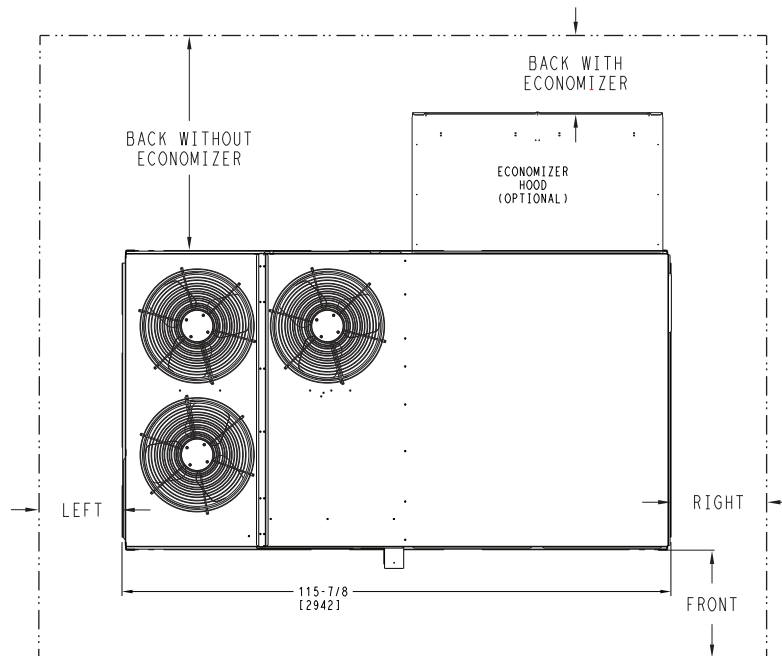


	THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.	SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48GE 14 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM009901	REV
U.S. ECCN:NSR	2 OF 2	7/10/25	5/21/24			A

48GE**14 Base Unit Dimensions — Clearances



CLEARANCE^{a, b}

SURFACE	Service with Conductive Barrier	Service with Non-conductive Barrier	Operating Clearance
FRONT	48 in. (1219 mm)	36 in. (914 mm)	18 in. (457 mm)
LEFT	48 in. (1219 mm)	42 in. (1067 mm)	18 in. (457 mm)
BACK W/O ECONOMIZER	48 in. (1219 mm)	42 in. (1067 mm)	18 in. (457 mm)
BACK W/ ECONOMIZER	36 in. (914 mm)	36 in. (914 mm)	18 in. (457 mm)
RIGHT	36 in. (914 mm)	36 in. (914 mm)	18 in. (457 mm)
LEFT	72 in. (1829 mm)	72 in. (1829 mm)	72 in. (1829 mm)

NOTE(S):

- For all minimum clearances local codes or jurisdictions may prevail.
- See page 20 for 48GE 07-09 clearances, See page 23 for 48GE 12 clearances.

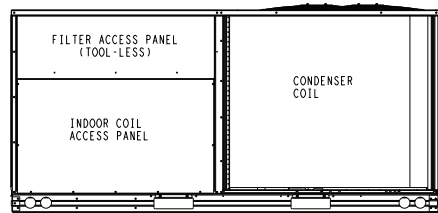
50GE**07-09 Base Unit Dimensions

NOTES:

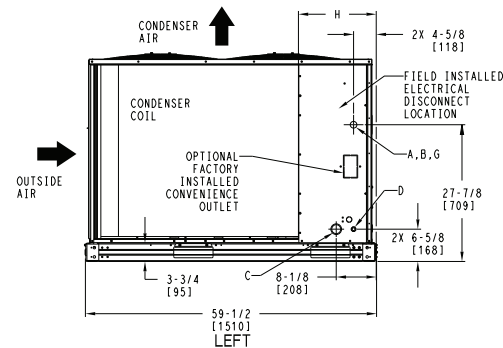
1. DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE IN MILLIMETERS.
2.  CENTER OF GRAVITY
3.  DIRECTION OF AIR FLOW
4.  ALL VIEW DRAWN USING 3RD ANGLE

UNIT	OUTDOOR COIL TYPE	J	K	H
50GE 07	RTPF	41 1/4 [1048]	33 3/4 [857]	15 7/8 [403]
50GE 08	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
50GE 09	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]

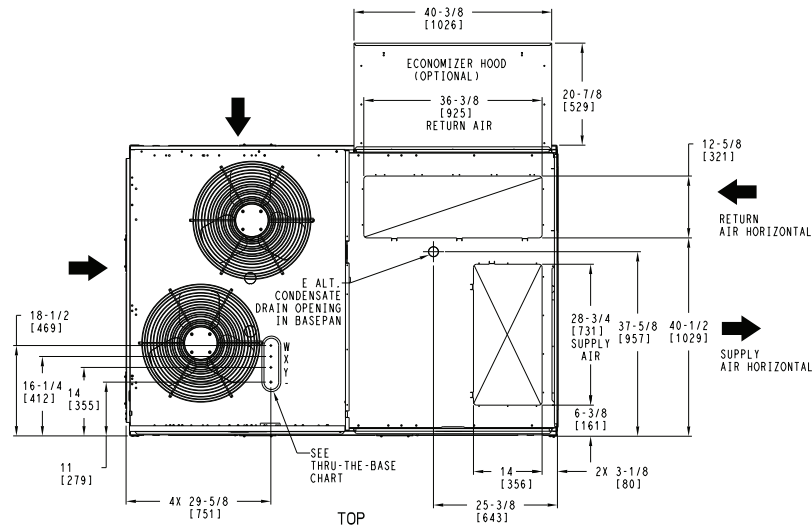
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)



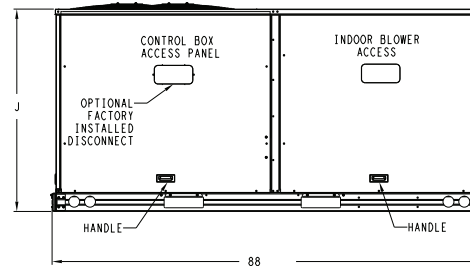
BACK



LEFT



TOP



FRONT



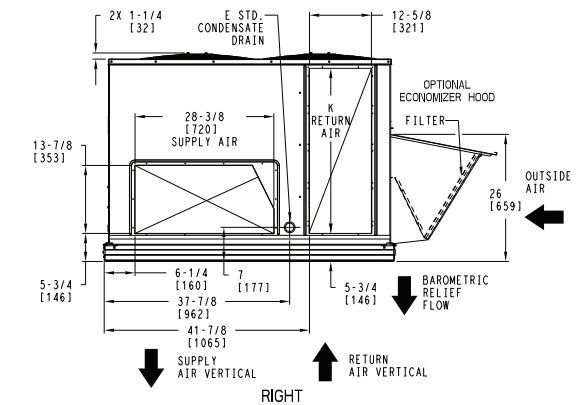
THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.

SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.

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

THRU-THE-BASE CHART (FIELD INST)			
THESE HOLES REQUIRED FOR USE WITH ACCY KITS: CRBTMPNR002A01			
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	1 1/4" (002)	POWER	1 3/4" [44.4]

THRU-THE-BASE CHART (FIOP)			
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X & Y ARE PROVIDED: (1) 1/2" & (1) 1 1/4" ELECTRICAL FITTINGS.			



RIGHT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GE 07-09 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM009908	REV
U.S. ECCN:NSR	1 OF 3	7/10/25	5/24/24			A

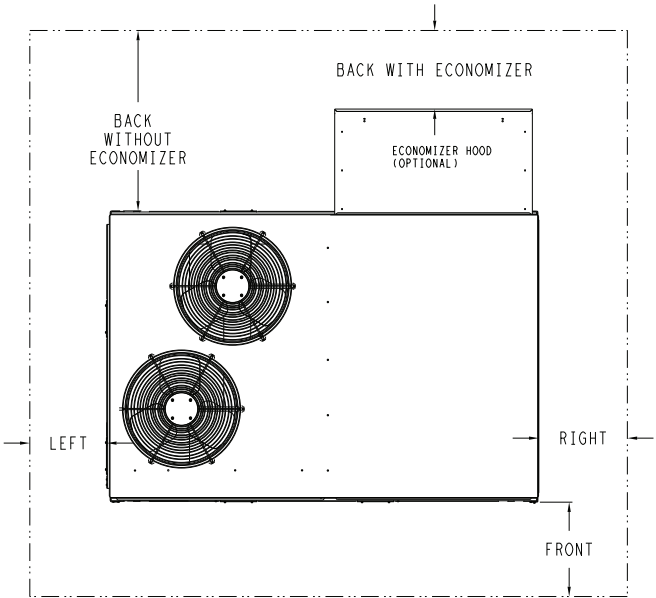
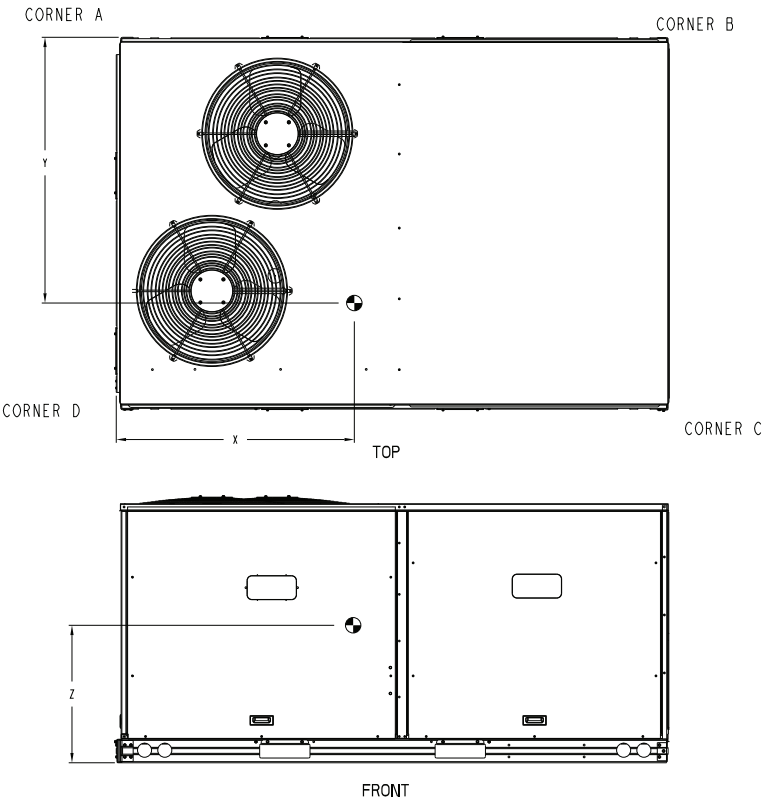
50GE**07-09 Base Unit Dimensions (cont)

Carrier THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT. SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT ***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GE 07	RTPF	714	324	174	79	144	65	180	82	216	98	40 [1016]	33 [838]	19 7/8 [505]
50GE 08	RTPF	830	376	192	87	153	69	214	97	270	123	39 [991]	34 3/4 [883]	18 5/8 [473]
50GE 09	RTPF	830	376	192	87	153	69	214	97	270	123	39 [991]	34 3/4 [883]	18 5/8 [473]

RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)

*** 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.

SURFACE	CLEARANCE		OPERATING CLEARANCE
	SERVICE WITH: CONDUCTIVE BARRIER	SERVICE WITH: NONCONDUCTIVE BARRIER	
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK 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 U.S. ECCN:NSR	SHEET 2 OF 3	DATE 7/10/25	SUPERCEDES 5/24/24	50GE 07-09 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM009908	REV A
-------------------------------------	-----------------	-----------------	-----------------------	--	------------	----------

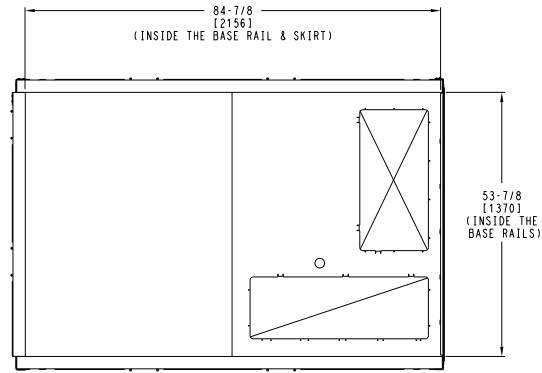
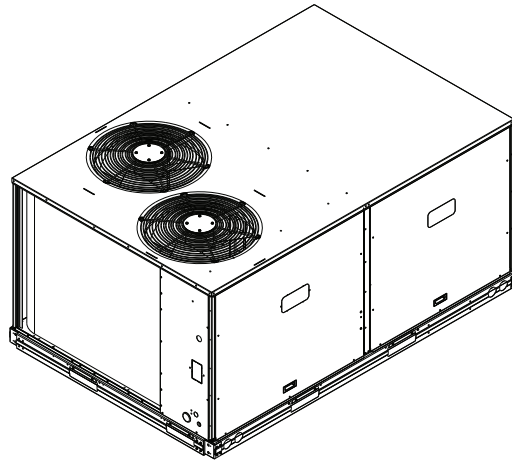


50GE**07-09 Base Unit Dimensions (cont)

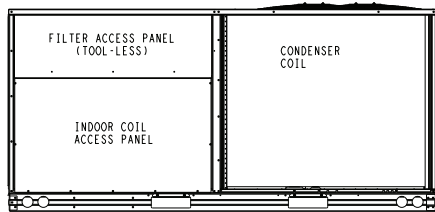


THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.

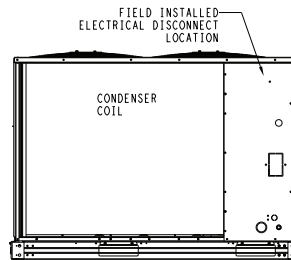
SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.



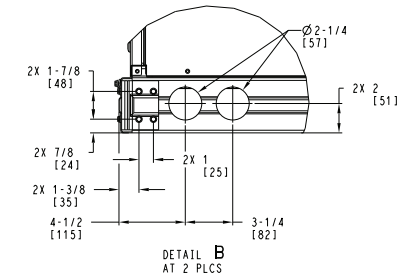
INSIDE BASERAIL DIMENSIONS
BOTTOM



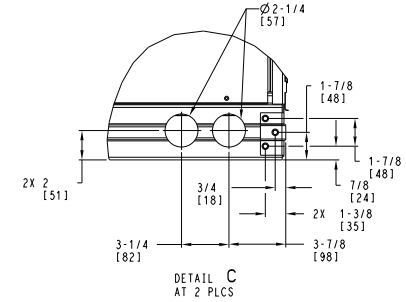
BACK



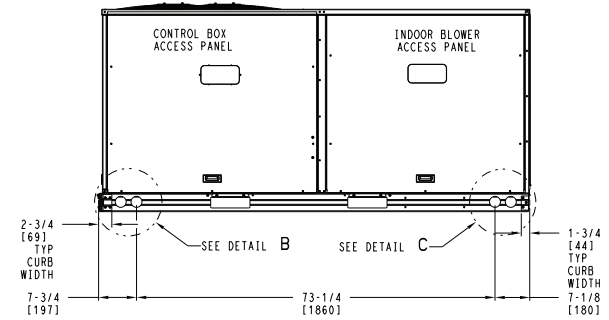
LEFT



DETAIL B
AT 2 PLCS



DETAIL C
AT 2 PLCS



FRONT

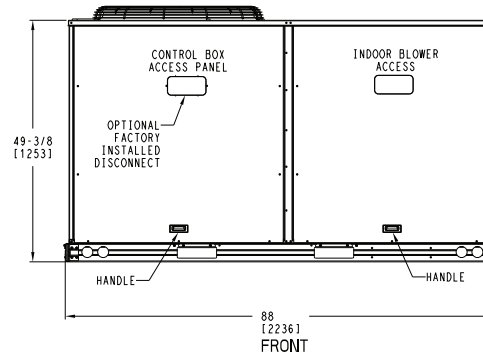
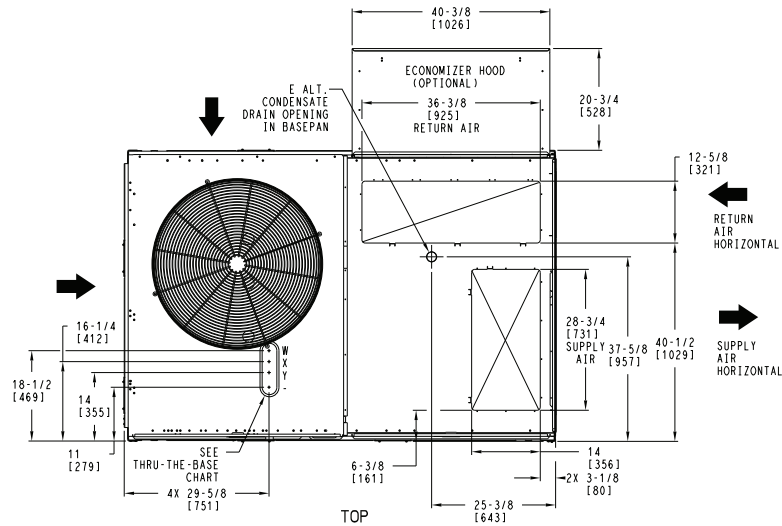
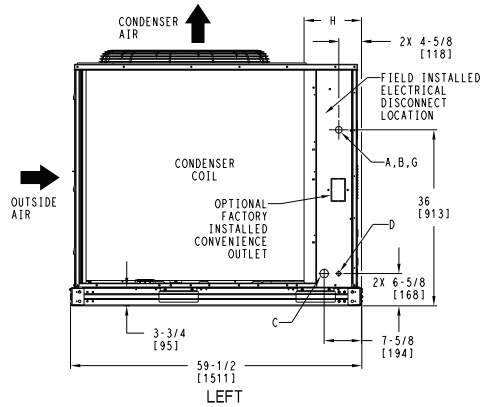
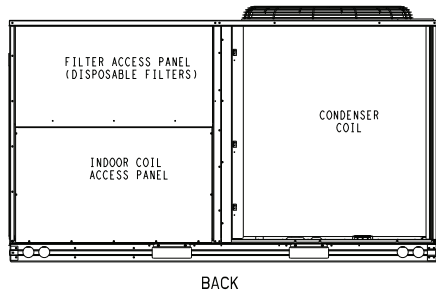
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GE 07-09 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM009908	REV
U.S. ECCN:NSR	3 OF 3	7/10/25	5/24/24			A

50GE**12 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

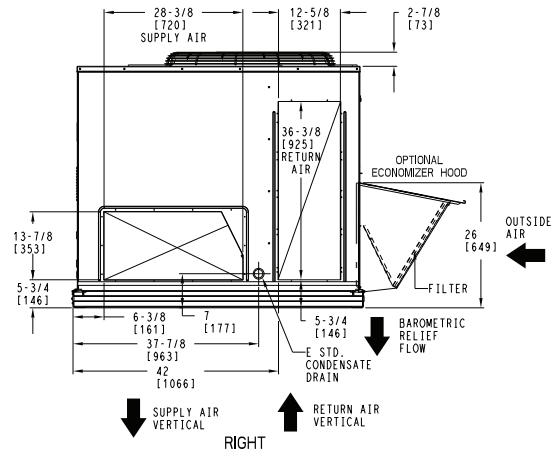
UNIT	OUTDOOR COIL TYPE	H
50GE 12	RTPF	15 7/8 [403]
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)		



	THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.	SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.
---	---	---

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

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPWR002A01			
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	1 1/4" [002]	POWER	1 3/4" [44.4]
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X & Y ARE PROVIDED			



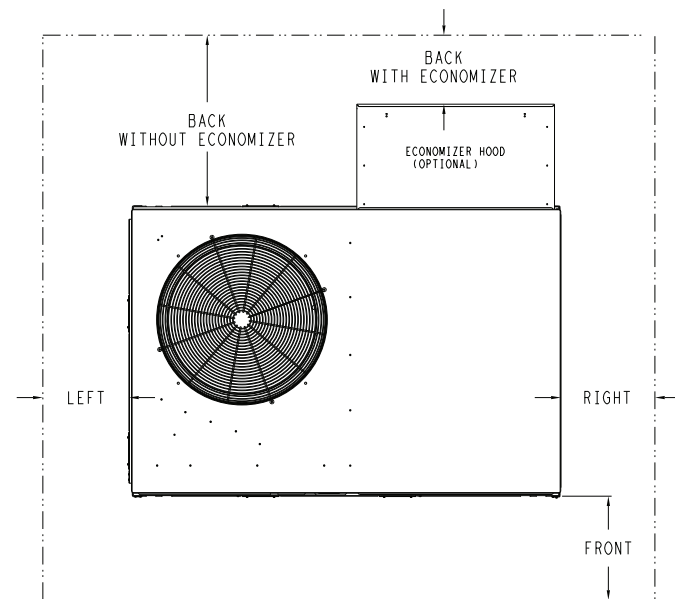
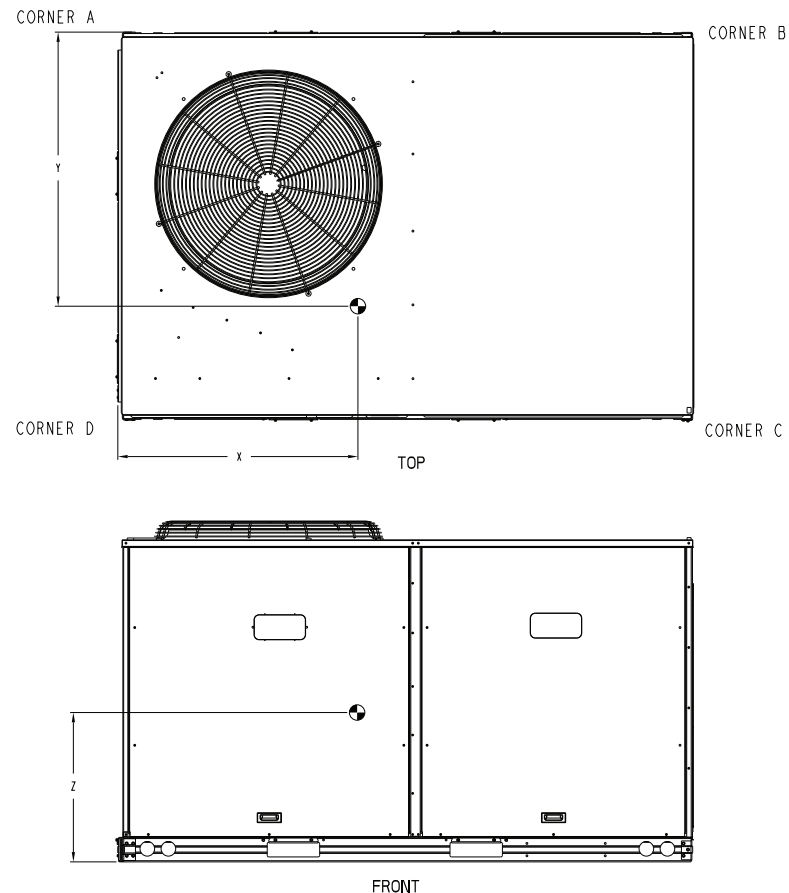
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GE-12 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM009909	REV
U.S. ECCN: NSR	1 OF 3	7/10/25	5/24/24			A

50GE**12 Base Unit Dimensions (cont)

UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GE 12	RTPF	971	440	234	106	182	82	242	110	312	142	38 1/2 [978]	34 [864]	20 1/2 [521]

RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)

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



NOTE:

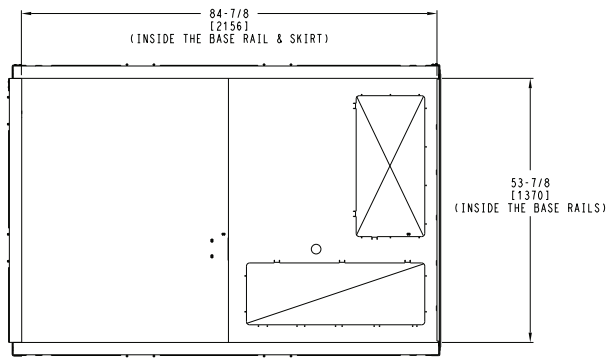
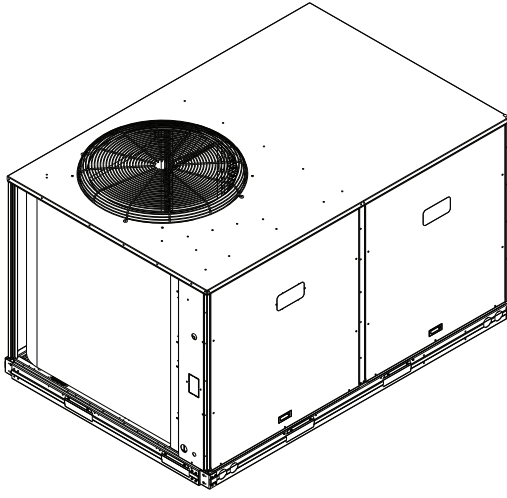
1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

SURFACE	SERVICE WITH:		OPERATING CLEARANCE
	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	
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]

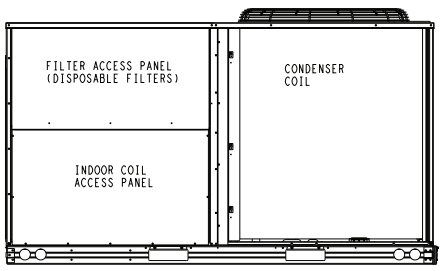
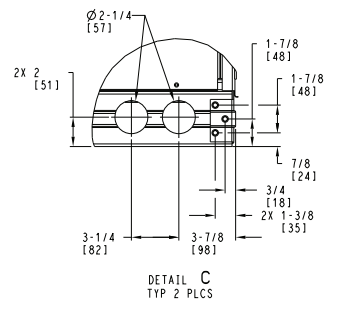
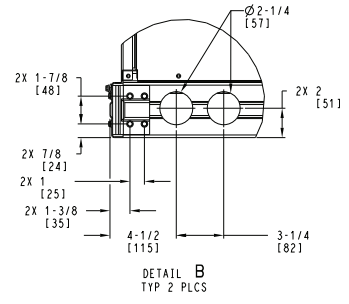
ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GE-12 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM009909	REV
U.S. ECCN:NSR	2 OF 3	7/10/25	5/24/24			A

50GE**12 Base Unit Dimensions (cont)

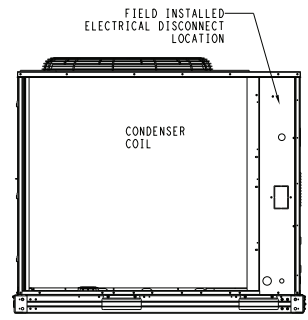
Carrier THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT. SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.



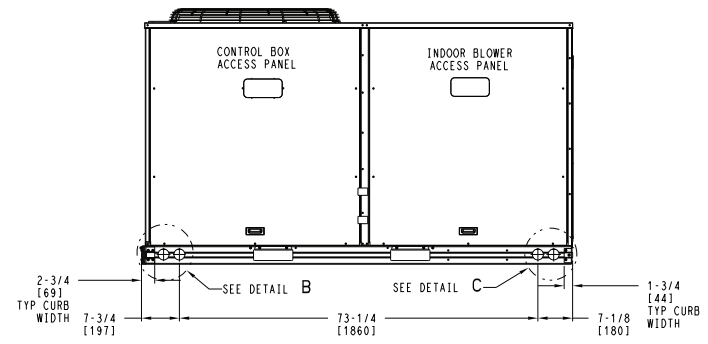
INSIDE BASERAIL DIMENSIONS
BOTTOM



BACK



LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GE-12 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM009909	REV
U.S. ECCN: NSR	3 OF 3	7/10/25	5/24/24			A

50GE**14 Base Unit Dimensions

NOTES:

1. DIMENSIONS ARE IN INCHES, DIMENSIONS IN [] ARE IN MILLIMETERS.
2.  CENTER OF GRAVITY
3.  DIRECTION OF AIR FLOW

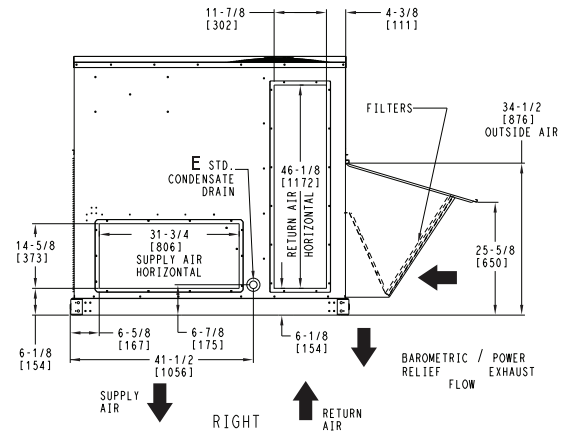
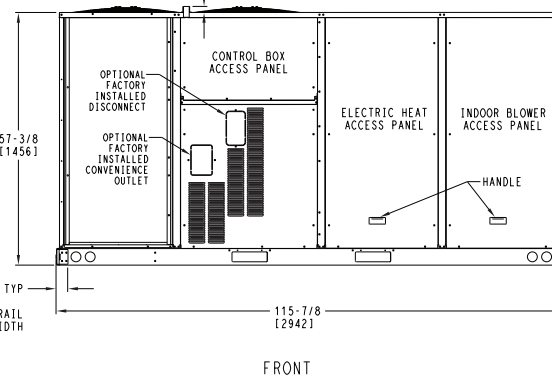
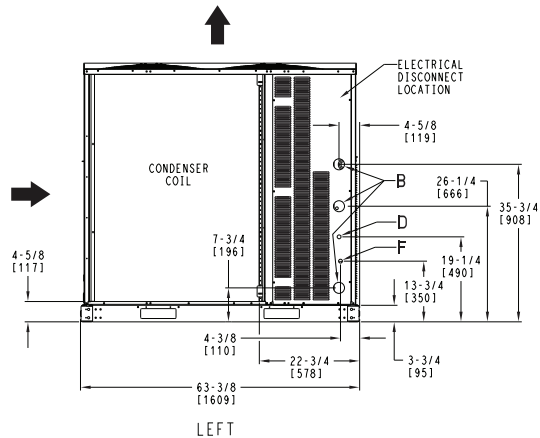
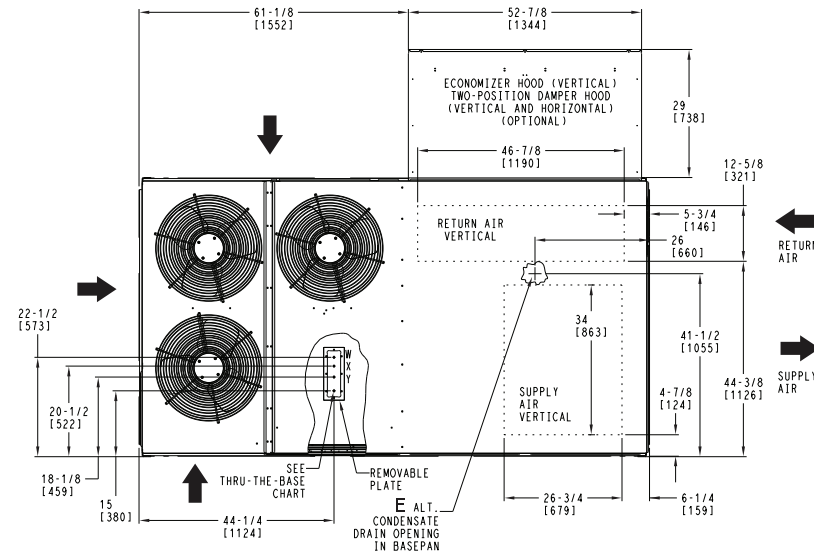
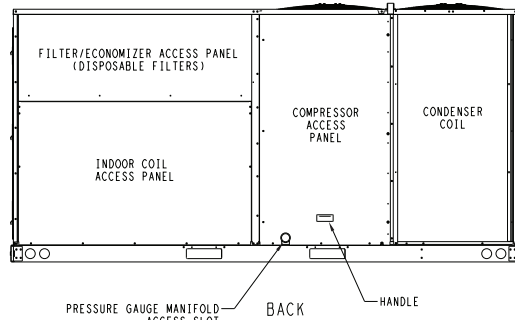
Carrier

THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.

SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.

CONNECTION SIZES			
B	2 1/2" [64]	DIA POWER SUPPLY HOLE	
D	7/8" [22]	DIA FIELD CONTROL WIRING HOLE	
E	3/4"-14 NPT	CONDENSATE DRAIN	
F	7/8" [22]	DIA FIELD CONVENIENCE OUTLET HOLE	

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPWRO05A00, 006A00, 007A00				
ACCESSORY NO.	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)	
005	W 1/2"	ACC.	7/8" [22.2]	
	X 1/2"	24V	7/8" [22.2]	
	Y 1 1/4"	POWER	1 1/2" [38.1]	
006	W 1/2"	ACC.	7/8" [22.2]	
	X 1/2"	24V	7/8" [22.2]	
	Y 1 1/2"	POWER	2" [50.8]	
007	W 1/2"	ACC.	7/8" [22.2]	
	X 1/2"	24V	7/8" [22.2]	
	Y 2"	POWER	2 1/2" [63.5]	
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR X & Y ARE PROVIDED AS SPECIFIED ON "006".				



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GE 14 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM009910	REV
U.S. ECCN:NSR	1 OF 2	7/10/25	5/24/24			A

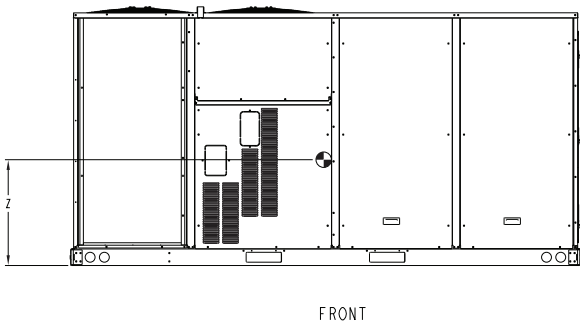
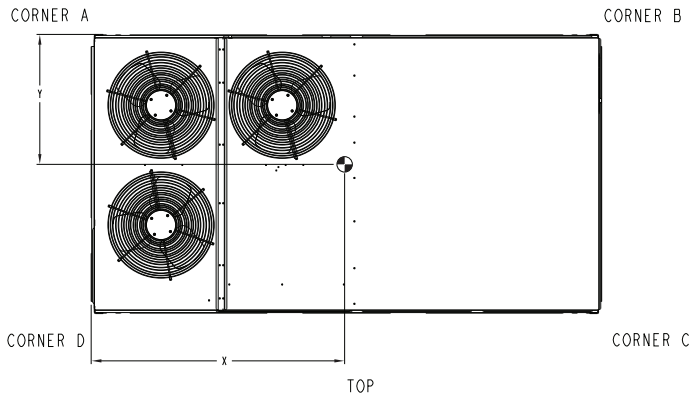
Base unit dimensions (cont)



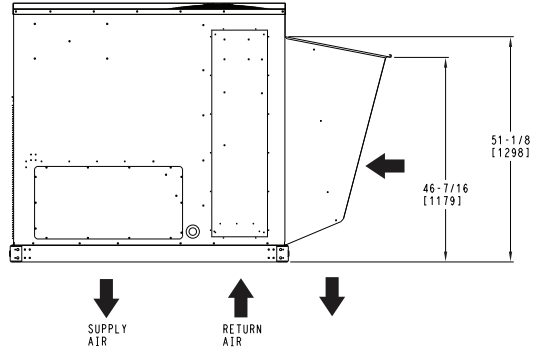
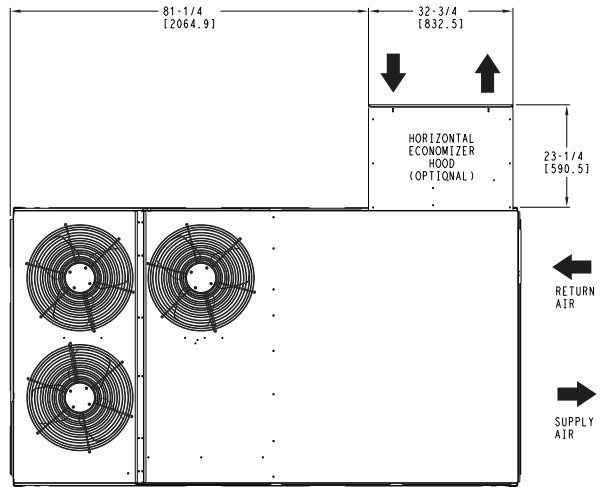
50GE**14 Base Unit Dimensions (cont)

UNIT	STD UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50GE 14	1313	596	324	147	305	138	331	150	353	160	56 1/8 [1426]	33 [838]	21 1/8 [537]

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



	THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.	SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE PART PERFORMANCE OR ACCEPTANCE OF CONTRACT.
--	---	---

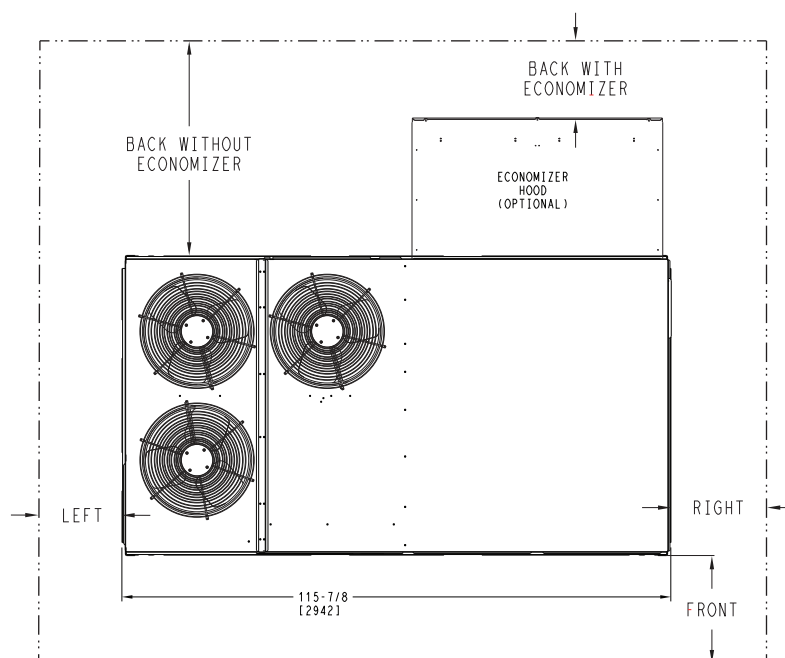


HORIZONTAL ECONOMIZER

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50GE 14 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	48TM009910	REV
U.S. ECCN:NSR	2 OF 2	7/10/25	5/24/24			A



50GE**14 Base Unit Dimensions — Clearances



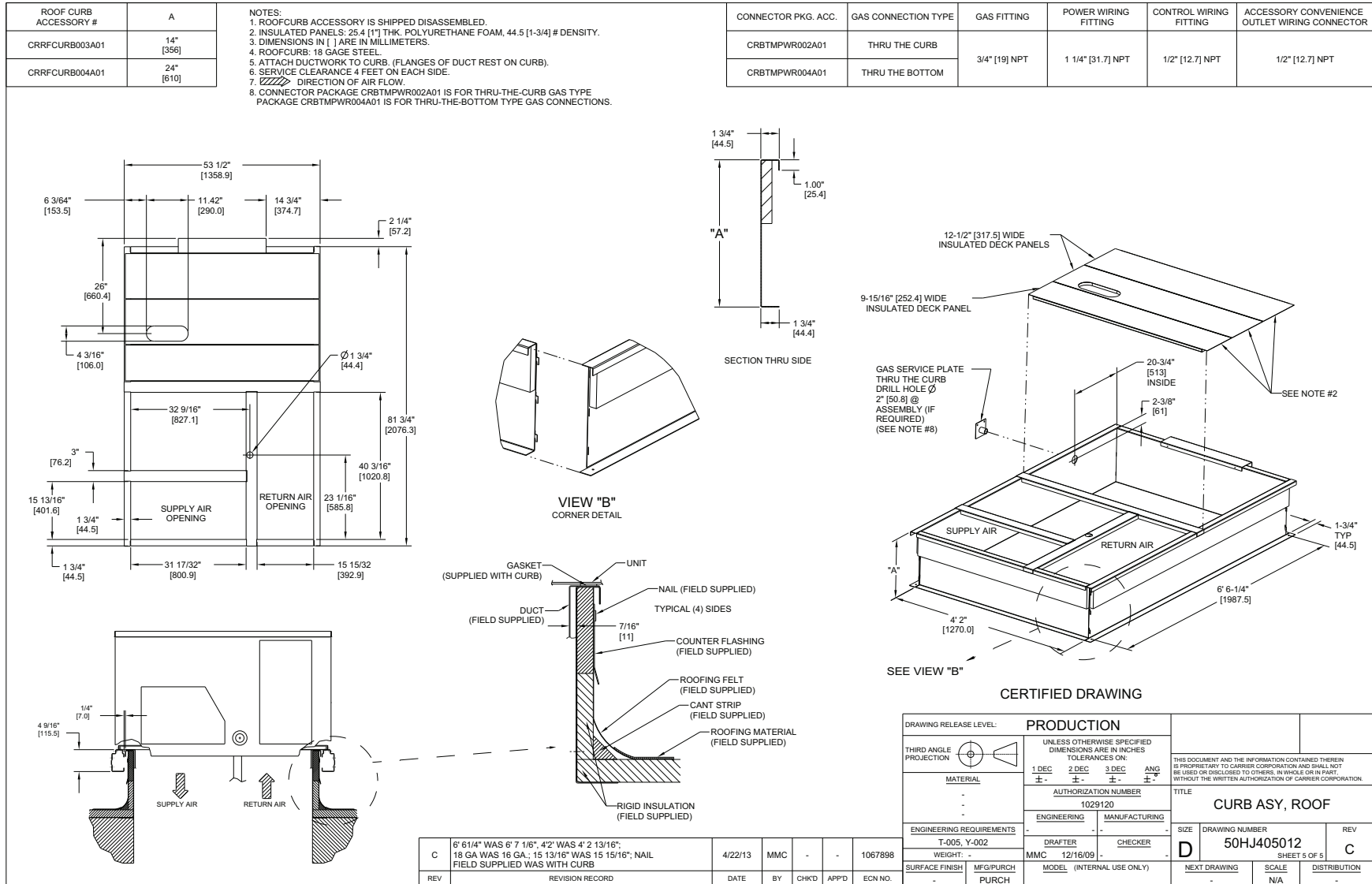
CLEARANCE^{a, b}

SURFACE	Service with Conductive Barrier	Service with Non-conductive Barrier	Operating Clearance
FRONT	48 in. (1219 mm)	36 in. (914 mm)	18 in. (457 mm)
LEFT	48 in. (1219 mm)	42 in. (1067 mm)	18 in. (457 mm)
BACK W/O ECONOMIZER	48 in. (1219 mm)	42 in. (1067 mm)	18 in. (457 mm)
BACK W/ ECONOMIZER	36 in. (914 mm)	36 in. (914 mm)	18 in. (457 mm)
RIGHT	36 in. (914 mm)	36 in. (914 mm)	18 in. (457 mm)
LEFT	72 in. (1829 mm)	72 in. (1829 mm)	72 in. (1829 mm)

NOTE(S):

- a. For all minimum clearances local codes or jurisdictions may prevail.
- b. See page 29 for 48GE 07-09 clearances, See page 32 for 48GE 12 clearances.

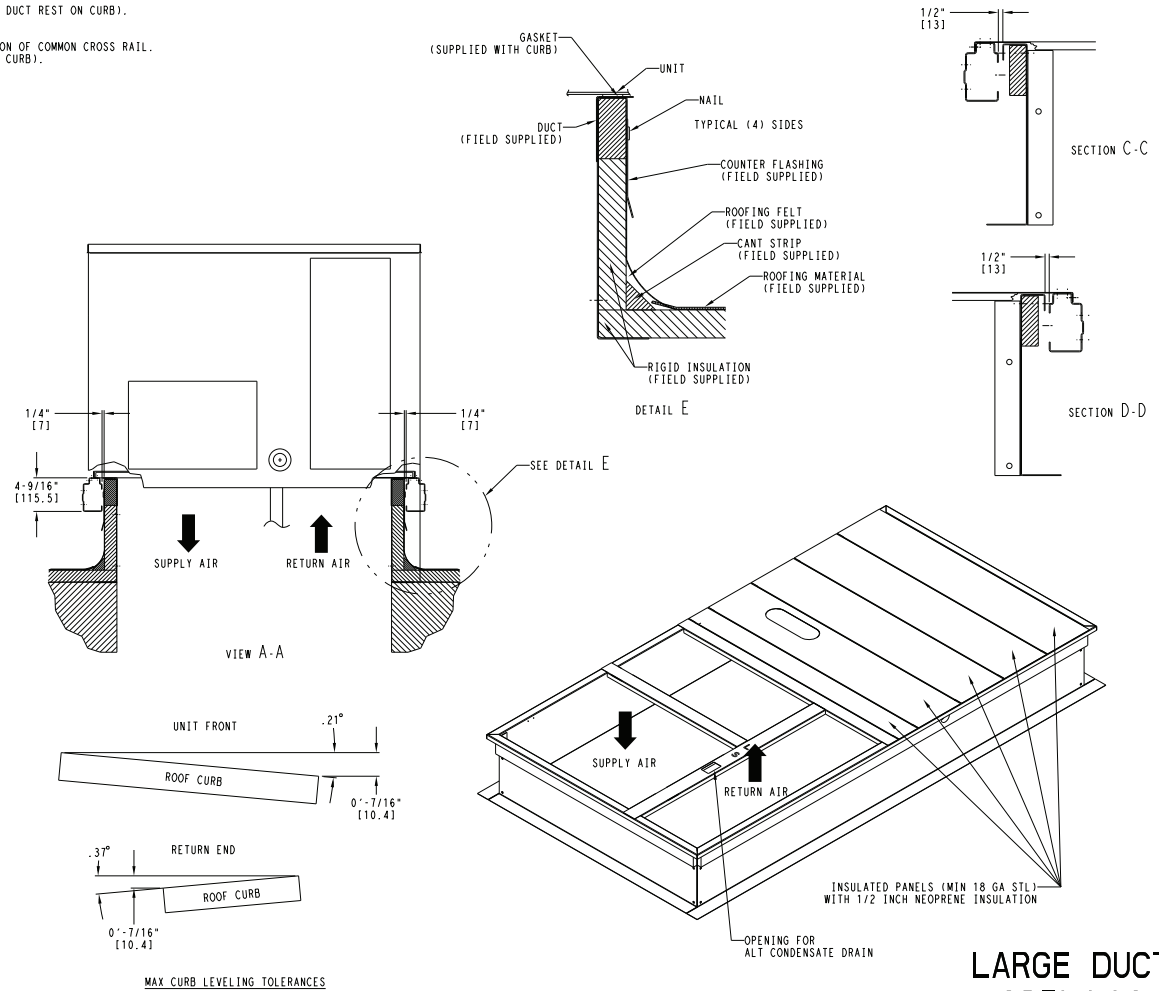
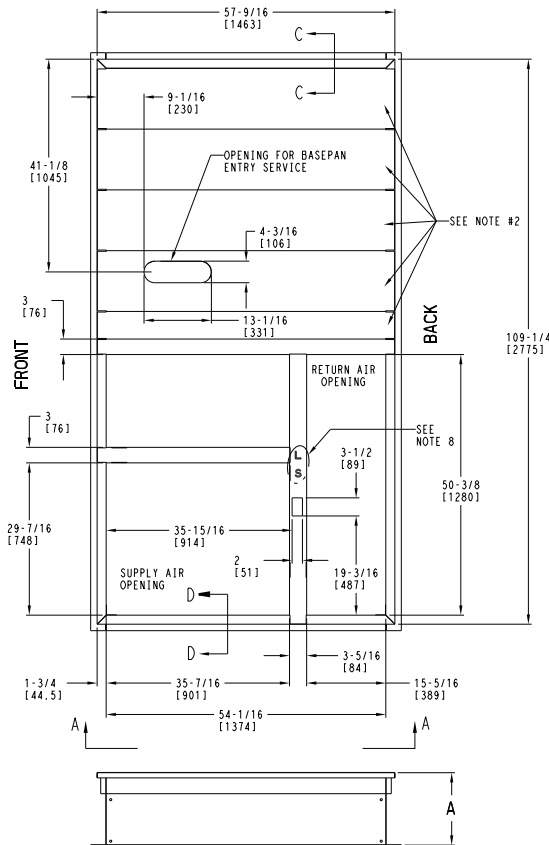
Roof Curb Dimensions — 48/50GE 07-12



Roof Curb Dimensions — 48/50GE 14

ROOF CURB ACCESSORY #	A
CRRFCURB074A00	14" [356]
CRRFCURB075A00	24" [610]

- NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
 2. INSULATED PANELS: 1/2" THK. NEOPRENE FOAM, 1.0# DENSITY.
 3. DIMENSIONS IN [] ARE IN MILLIMETERS.
 4. ROOFCURB SIDEWALLS: 16 GAGE STEEL.
 5. ATTACH DUCTWORK TO CURB: (FLANGES OF DUCT REST ON CURB).
 6. SERVICE CLEARANCE 4 FT ON EACH SIDE.
 7. DIRECTION OF AIR FLOW.
 8. "L" & "S" DESIGNATIONS DENOTE LOCATION OF COMMON CROSS RAIL. (POSITION "L" FOR LARGE DUCT OPENING CURB).



LARGE DUCT OPENINGS

50TM500780

REV B

48/50GE*T07 Three Stage Cooling Capacities

48/50GE*T07				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1800 cfm	EA (wb)	58	TC	66.3	66.3	74.7	64.1	64.1	72.2	61.6	61.6	69.4	58.9	58.9	66.4	55.9	55.9	63.0
			SHC	57.9	66.3	74.7	55.9	64.1	72.2	53.8	61.6	69.4	51.4	58.9	66.4	48.8	55.9	63.0
		62	TC	69.9	69.9	70.7	67.0	67.0	69.4	63.8	63.8	67.8	60.4	60.4	66.2	56.6	56.6	64.1
			SHC	52.2	61.5	70.7	50.9	60.1	69.4	49.4	58.6	67.8	47.8	57.0	66.2	45.9	55.0	64.1
		67	TC	76.7	76.7	76.7	73.6	73.6	73.6	70.2	70.2	70.2	66.4	66.4	66.4	62.3	62.3	62.3
			SHC	43.0	52.2	61.4	41.6	50.8	60.1	40.2	49.5	58.7	38.7	47.9	57.2	37.0	46.3	55.6
		72	TC	84.2	84.2	84.2	80.8	80.8	80.8	77.1	77.1	77.1	73.0	73.0	73.0	68.6	68.6	68.6
			SHC	33.6	42.6	51.5	32.3	41.3	50.4	30.9	39.9	49.0	29.3	38.5	47.6	27.7	36.9	46.0
		76	TC	—	90.9	90.9	—	87.2	87.2	—	83.2	83.2	—	78.9	78.9	—	74.1	74.1
			SHC	—	34.5	44.4	—	33.4	43.3	—	32.1	39.5	—	30.7	39.1	—	29.2	37.8
2100 cfm	EA (wb)	58	TC	69.9	69.9	78.8	67.5	67.5	76.1	64.9	64.9	73.1	62.0	62.0	69.9	58.8	58.8	66.2
			SHC	61.0	69.9	78.8	58.9	67.5	76.1	56.7	64.9	73.1	54.1	62.0	69.9	51.3	58.8	66.2
		62	TC	72.1	72.1	77.4	69.1	69.1	75.9	65.8	65.8	74.1	62.7	62.7	71.3	58.7	58.7	68.8
			SHC	56.2	66.8	77.4	54.7	65.3	75.9	53.1	63.6	74.1	51.0	61.2	71.3	48.7	58.7	68.8
		67	TC	79.0	79.0	79.0	75.6	75.6	75.6	72.1	72.1	72.1	68.1	68.1	68.1	63.8	63.8	63.8
			SHC	45.6	56.2	66.9	44.2	54.9	65.6	42.8	53.5	64.2	41.2	51.9	62.6	39.5	50.2	61.0
		72	TC	86.5	86.5	86.5	82.9	82.9	82.9	79.0	79.0	79.0	74.8	74.8	74.8	70.2	70.2	70.2
			SHC	34.6	45.1	55.6	33.3	43.8	54.4	31.8	42.4	53.0	30.3	40.9	51.5	28.6	39.3	49.9
		76	TC	—	93.2	93.2	—	89.3	89.3	—	85.1	85.1	—	80.6	80.6	—	75.6	75.6
			SHC	—	36.0	45.0	—	34.8	44.3	—	33.4	43.3	—	31.9	42.0	—	30.3	40.6
2400 cfm	EA (wb)	58	TC	73.0	73.0	82.2	70.4	70.4	79.4	67.6	67.6	76.2	64.5	64.5	72.7	61.1	61.1	68.9
			SHC	63.7	73.0	82.2	61.5	70.4	79.4	59.0	67.6	76.2	56.3	64.5	72.7	53.4	61.1	68.9
		62	TC	73.9	73.9	83.2	70.9	70.9	81.1	68.5	68.5	76.8	64.6	64.6	75.6	61.2	61.2	71.6
			SHC	59.6	71.4	83.2	57.9	69.5	81.1	55.1	65.9	76.8	53.6	64.6	75.6	50.8	61.2	71.6
		67	TC	80.7	80.7	80.7	77.2	77.2	77.2	73.5	73.5	73.5	69.4	69.4	69.4	65.0	65.0	66.0
			SHC	48.0	60.1	72.2	46.6	58.7	70.8	45.2	57.3	69.4	43.6	55.7	67.8	41.8	53.9	66.0
		72	TC	88.3	88.3	88.3	84.6	84.6	84.6	80.5	80.5	80.5	76.1	76.1	76.1	71.3	71.3	71.3
			SHC	35.5	47.5	59.4	34.1	46.1	58.2	32.7	44.7	56.8	31.1	43.2	55.2	29.4	41.5	53.6
		76	TC	—	95.0	95.0	—	91.0	91.0	—	86.6	86.6	—	81.9	81.9	—	76.8	76.8
			SHC	—	37.2	48.3	—	35.9	47.2	—	34.5	46.0	—	32.9	44.6	—	31.3	43.0
2700 cfm	EA (wb)	58	TC	75.6	75.6	85.2	72.9	72.9	82.1	69.9	69.9	78.8	66.7	66.7	75.1	63.1	63.1	71.1
			SHC	66.0	75.6	85.2	63.6	72.9	82.1	61.0	69.9	78.8	58.2	66.7	75.1	55.1	63.1	71.1
		62	TC	76.6	76.6	86.8	73.3	73.3	84.3	70.0	70.0	81.9	66.7	66.7	78.0	63.2	63.2	73.9
			SHC	62.5	74.6	86.8	60.7	72.5	84.3	58.1	70.0	81.9	55.4	66.7	78.0	52.5	63.2	73.9
		67	TC	82.0	82.0	82.0	78.5	78.5	78.5	74.6	74.6	74.6	70.4	70.4	72.8	65.9	65.9	70.8
			SHC	50.3	63.8	77.3	48.9	62.4	75.9	47.4	60.9	74.3	45.8	59.3	72.8	44.0	57.4	70.8
		72	TC	89.7	89.7	89.7	85.9	85.9	85.9	81.7	81.7	81.7	77.2	77.2	77.2	72.3	72.3	72.3
			SHC	36.3	49.7	63.0	34.9	48.3	61.7	33.5	46.9	60.3	31.9	45.3	58.8	30.2	43.7	57.1
		76	TC	—	96.4	96.4	—	92.2	92.2	—	87.7	87.7	—	82.8	82.8	—	77.6	77.6
			SHC	—	38.1	50.9	—	36.8	49.7	—	35.4	48.3	—	33.8	46.9	—	32.1	45.3
3000 cfm	EA (wb)	58	TC	77.8	77.8	87.7	75.0	75.0	84.5	71.9	71.9	81.0	68.5	68.5	77.2	64.8	64.8	73.0
			SHC	67.9	77.8	87.7	65.4	75.0	84.5	62.8	71.9	81.0	59.8	68.5	77.2	56.6	64.8	73.0
		62	TC	79.0	79.0	90.9	75.0	75.0	87.8	72.0	72.0	84.2	68.6	68.6	80.2	64.9	64.9	75.9
			SHC	64.8	77.9	90.9	62.3	75.0	87.8	59.8	72.0	84.2	57.0	68.6	80.2	53.9	64.9	75.9
		67	TC	83.2	83.2	83.2	79.4	79.4	80.5	75.6	75.6	79.1	71.3	71.3	77.4	66.7	66.7	75.4
			SHC	52.5	67.3	82.2	51.0	65.8	80.5	49.6	64.4	79.1	47.9	62.6	77.4	46.2	60.8	75.4
		72	TC	90.9	90.9	90.9	86.9	86.9	86.9	82.6	82.6	82.6	78.0	78.0	78.0	73.0	73.0	73.0
			SHC	37.0	51.7	66.5	35.6	50.4	65.2	34.1	48.9	63.7	32.6	47.4	62.2	30.9	45.7	60.5
		76	TC	—	97.5	97.5	—	93.2	93.2	—	88.6	88.6	—	83.6	83.6	—	78.2	78.2
			SHC	—	38.9	53.1	—	37.6	51.9	—	36.1	50.5	—	34.6	49.0	—	32.9	47.3

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T07 Two Stage Cooling Capacities

48/50GE*T07				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
1075 cfm	EA (wb)	58	TC	40.2	40.2	45.5	38.4	38.4	43.5	36.5	36.5	41.5	34.5	34.5	39.2	32.3	32.3	36.7
			SHC	34.9	40.2	45.5	33.3	38.4	43.5	31.6	36.5	41.5	29.8	34.5	39.2	27.8	32.3	36.7
		62	TC	42.5	42.5	43.2	40.3	40.3	42.0	37.9	37.9	40.7	35.3	35.3	39.3	32.6	32.6	37.8
			SHC	31.5	37.4	43.2	30.3	36.2	42.0	29.0	34.9	40.7	27.6	33.5	39.3	26.2	32.0	37.8
		67	TC	47.0	47.0	47.0	44.7	44.7	44.7	42.2	42.2	42.2	39.4	39.4	39.4	36.5	36.5	36.5
			SHC	25.9	31.8	37.6	24.8	30.6	36.5	23.5	29.3	35.2	22.1	28.0	33.9	20.7	26.6	32.5
		72	TC	52.0	52.0	52.0	49.5	49.5	49.5	46.8	46.8	46.8	43.9	43.9	43.9	40.8	40.8	40.8
			SHC	20.3	26.1	31.9	19.1	24.9	30.7	17.8	23.6	29.4	16.5	22.3	28.2	15.1	21.0	26.8
		76	TC	—	56.2	56.2	—	53.6	53.6	—	50.8	50.8	—	47.7	47.7	—	44.4	44.4
			SHC	—	21.4	27.3	—	20.2	25.5	—	19.0	24.5	—	17.7	23.3	—	16.4	22.0
1250 cfm	EA (wb)	58	TC	42.7	42.7	48.3	40.8	40.8	46.2	38.8	38.8	44.0	36.7	36.7	41.7	34.3	34.3	39.0
			SHC	37.1	42.7	48.3	35.4	40.8	46.2	33.6	38.8	44.0	31.7	36.7	41.7	29.6	34.3	39.0
		62	TC	44.0	44.0	47.8	41.7	41.7	46.6	39.2	39.2	45.2	36.7	36.7	43.3	34.3	34.3	40.6
			SHC	34.3	41.1	47.8	33.0	39.8	46.6	31.6	38.4	45.2	30.1	36.7	43.3	28.0	34.3	40.6
		67	TC	48.6	48.6	48.6	46.1	46.1	46.1	43.5	43.5	43.5	40.6	40.6	40.6	37.6	37.6	37.6
			SHC	27.8	34.6	41.4	26.5	33.4	40.2	25.2	32.1	38.9	23.9	30.7	37.5	22.5	29.3	36.1
		72	TC	53.6	53.6	53.6	51.0	51.0	51.0	48.2	48.2	48.2	45.2	45.2	45.2	41.9	41.9	41.9
			SHC	21.1	27.9	34.6	19.9	26.7	33.4	18.6	25.4	32.2	17.3	24.1	30.8	15.9	22.7	29.4
		76	TC	—	58.0	58.0	—	55.2	55.2	—	52.2	52.2	—	49.0	49.0	—	45.6	45.6
			SHC	—	22.4	28.8	—	21.2	27.7	—	20.0	26.5	—	18.6	25.3	—	17.3	23.9
1450 cfm	EA (wb)	58	TC	44.9	44.9	50.7	42.9	42.9	48.6	40.8	40.8	46.2	38.5	38.5	43.7	36.0	36.0	40.9
			SHC	39.0	44.9	50.7	37.2	42.9	48.6	35.3	40.8	46.2	33.3	38.5	43.7	31.1	36.0	40.9
		62	TC	45.2	45.2	52.0	43.0	43.0	50.5	40.8	40.8	48.1	38.5	38.5	45.4	36.0	36.0	42.6
			SHC	36.8	44.4	52.0	35.4	43.0	50.5	33.5	40.8	48.1	31.6	38.5	45.4	29.4	36.0	42.6
		67	TC	49.8	49.8	49.8	47.3	47.3	47.3	44.5	44.5	44.5	41.6	41.6	41.6	38.4	38.4	39.7
			SHC	29.5	37.3	45.0	28.2	36.0	43.8	26.9	34.7	42.5	25.6	33.3	41.1	24.1	31.9	39.7
		72	TC	54.9	54.9	54.9	52.2	52.2	52.2	49.3	49.3	49.3	46.1	46.1	46.1	42.8	42.8	42.8
			SHC	21.8	29.6	37.3	20.6	28.3	36.1	19.3	27.1	34.8	18.0	25.7	33.4	16.5	24.3	32.0
		76	TC	—	59.3	59.3	—	56.4	56.4	—	53.3	53.3	—	50.0	50.0	—	46.5	46.5
			SHC	—	23.3	30.8	—	22.1	29.6	—	20.8	28.4	—	19.5	27.1	—	18.1	25.7
1625 cfm	EA (wb)	58	TC	46.7	46.7	52.8	44.6	44.6	50.5	42.4	42.4	48.0	40.0	40.0	45.4	37.4	37.4	42.5
			SHC	40.6	46.7	52.8	38.8	44.6	50.5	36.8	42.4	48.0	34.6	40.0	45.4	32.3	37.4	42.5
		62	TC	46.8	46.8	54.9	44.7	44.7	52.6	42.5	42.5	50.0	40.0	40.0	47.2	37.4	37.4	44.2
			SHC	38.6	46.8	54.9	36.9	44.7	52.6	34.9	42.5	50.0	32.9	40.0	47.2	30.6	37.4	44.2
		67	TC	50.8	50.8	50.8	48.2	48.2	48.2	45.3	45.3	46.0	42.3	42.3	44.6	39.0	39.0	43.1
			SHC	31.1	39.9	48.6	29.9	38.6	47.3	28.6	37.3	46.0	27.2	35.9	44.6	25.7	34.4	43.1
		72	TC	56.0	56.0	56.0	53.1	53.1	53.1	50.1	50.1	50.1	46.9	46.9	46.9	43.4	43.4	43.4
			SHC	22.5	31.2	39.9	21.3	29.9	38.6	20.0	28.7	37.3	18.6	27.3	36.0	17.2	25.9	34.6
		76	TC	—	60.4	60.4	—	57.4	57.4	—	54.2	54.2	—	50.8	50.8	—	47.2	47.2
			SHC	—	24.1	32.6	—	22.9	31.4	—	21.6	30.2	—	20.3	28.8	—	18.9	27.5
1800 cfm	EA (wb)	58	TC	48.4	48.4	54.6	46.2	46.2	52.2	43.8	43.8	49.6	41.3	41.3	46.9	38.6	38.6	43.8
			SHC	42.1	48.4	54.6	40.1	46.2	52.2	38.0	43.8	49.6	35.8	41.3	46.9	33.4	38.6	43.8
		62	TC	48.4	48.4	56.8	46.3	46.3	54.4	43.9	43.9	51.6	41.4	41.4	48.8	38.7	38.7	45.6
			SHC	40.0	48.4	56.8	38.2	46.3	54.4	36.1	43.9	51.6	34.0	41.4	48.8	31.7	38.7	45.6
		67	TC	51.6	51.6	52.1	48.9	48.9	50.8	46.0	46.0	49.4	42.9	42.9	48.0	39.6	39.6	46.4
			SHC	32.8	42.4	52.1	31.5	41.1	50.8	30.1	39.8	49.4	28.7	38.4	48.0	27.2	36.8	46.4
		72	TC	56.8	56.8	56.8	53.9	53.9	53.9	50.8	50.8	50.8	47.5	47.5	47.5	43.9	43.9	43.9
			SHC	23.1	32.7	42.4	21.9	31.5	41.1	20.6	30.2	39.9	19.2	28.8	38.5	17.7	27.4	37.1
		76	TC	—	61.2	61.2	—	58.2	58.2	—	54.9	54.9	—	51.5	51.5	—	—	—
			SHC	—	24.9	34.3	—	23.7	33.1	—	22.4	31.9	—	21.0	30.5	—	—	—

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T07 One Stage Cooling Capacities

48/50GE*T07				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
725 cfm	EA (wb)	58	TC	27.6	27.6	31.1	26.6	26.6	30.1	25.6	25.6	28.9	24.4	24.4	27.6	23.1	23.1	26.2
			SHC	24.0	27.6	31.1	23.2	26.6	30.1	22.3	25.6	28.9	21.2	24.4	27.6	20.1	23.1	26.2
		62	TC	29.2	29.2	29.5	28.0	28.0	28.9	26.6	26.6	28.2	25.1	25.1	27.5	23.5	23.5	26.6
			SHC	21.8	25.6	29.5	21.1	25.0	28.9	20.4	24.3	28.2	19.7	23.6	27.5	18.9	22.8	26.6
		67	TC	32.3	32.3	32.3	30.9	30.9	30.9	29.5	29.5	29.5	27.9	27.9	27.9	26.1	26.1	26.1
			SHC	18.0	21.9	25.8	17.4	21.3	25.2	16.7	20.6	24.5	16.0	19.9	23.8	15.2	19.1	23.0
		72	TC	35.7	35.7	35.7	34.2	34.2	34.2	32.6	32.6	32.6	30.9	30.9	30.9	28.9	28.9	28.9
			SHC	14.3	18.1	21.9	13.6	17.5	21.3	13.0	16.8	20.7	12.2	16.1	20.0	11.4	15.3	19.2
		76	TC	—	38.7	38.7	—	37.1	37.1	—	35.4	35.4	—	33.5	33.5	—	31.5	31.5
			SHC	—	14.9	18.9	—	14.3	18.3	—	13.7	17.2	—	13.0	16.7	—	12.2	16.0
850 cfm	EA (wb)	58	TC	29.3	29.3	33.0	28.3	28.3	31.9	27.1	27.1	30.6	25.9	25.9	29.2	24.5	24.5	27.7
			SHC	25.5	29.3	33.0	24.6	28.3	31.9	23.6	27.1	30.6	22.5	25.9	29.2	21.3	24.5	27.7
		62	TC	30.2	30.2	32.6	28.9	28.9	31.9	27.5	27.5	31.2	25.9	25.9	30.4	24.5	24.5	28.8
			SHC	23.6	28.1	32.6	22.9	27.4	31.9	22.2	26.7	31.2	21.4	25.9	30.4	20.2	24.5	28.8
		67	TC	33.4	33.4	33.4	32.0	32.0	32.0	30.4	30.4	30.4	28.7	28.7	28.7	26.8	26.8	26.8
			SHC	19.2	23.8	28.3	18.6	23.1	27.6	17.9	22.4	26.9	17.2	21.7	26.2	16.3	20.9	25.4
		72	TC	36.9	36.9	36.9	35.3	35.3	35.3	33.6	33.6	33.6	31.8	31.8	31.8	29.7	29.7	29.7
			SHC	14.8	19.3	23.8	14.2	18.7	23.2	13.5	18.0	22.5	12.7	17.3	21.8	11.9	16.4	21.0
		76	TC	—	39.9	39.9	—	38.3	38.3	—	36.4	36.4	—	34.5	34.5	—	32.3	32.3
			SHC	—	15.7	19.8	—	15.0	19.3	—	14.4	18.7	—	13.6	18.0	—	12.9	17.3
950 cfm	EA (wb)	58	TC	30.8	30.8	34.7	29.6	29.6	33.5	28.4	28.4	32.1	27.1	27.1	30.6	25.6	25.6	28.9
			SHC	26.8	30.8	34.7	25.8	29.6	33.5	24.7	28.4	32.1	23.6	27.1	30.6	22.3	25.6	28.9
		62	TC	31.1	31.1	35.4	29.7	29.7	34.7	28.5	28.5	33.4	27.1	27.1	31.8	25.6	25.6	30.1
			SHC	25.2	30.3	35.4	24.6	29.7	34.7	23.6	28.5	33.4	22.4	27.1	31.8	21.2	25.6	30.1
		67	TC	34.3	34.3	34.3	32.7	32.7	32.7	31.1	31.1	31.1	29.3	29.3	29.3	27.4	27.4	27.8
			SHC	20.4	25.5	30.7	19.7	24.9	30.0	19.0	24.2	29.3	18.3	23.4	28.6	17.4	22.6	27.8
		72	TC	37.8	37.8	37.8	36.2	36.2	36.2	34.4	34.4	34.4	32.5	32.5	32.5	30.4	30.4	30.4
			SHC	15.3	20.4	25.6	14.7	19.8	24.9	14.0	19.1	24.2	13.2	18.4	23.5	12.4	17.5	22.7
		76	TC	—	40.9	40.9	—	39.2	39.2	—	37.3	37.3	—	35.2	35.2	—	33.0	33.0
			SHC	—	16.3	21.2	—	15.7	20.6	—	15.0	20.0	—	14.2	19.2	—	13.4	18.5
1075 cfm	EA (wb)	58	TC	32.0	32.0	36.1	30.8	30.8	34.8	29.5	29.5	33.3	28.1	28.1	31.8	26.6	26.6	30.0
			SHC	27.9	32.0	36.1	26.9	30.8	34.8	25.7	29.5	33.3	24.5	28.1	31.8	23.1	26.6	30.0
		62	TC	32.0	32.0	37.5	30.9	30.9	36.2	29.6	29.6	34.7	26.8	26.8	31.6	26.6	26.6	31.2
			SHC	26.6	32.0	37.5	25.6	30.9	36.2	24.5	29.6	34.7	22.0	26.8	31.6	22.0	26.6	31.2
		67	TC	34.9	34.9	34.9	33.4	33.4	33.4	31.7	31.7	31.7	29.8	29.8	30.9	27.8	27.8	30.0
			SHC	21.5	27.3	33.0	20.8	26.6	32.4	20.1	25.9	31.7	19.3	25.1	30.9	18.5	24.3	30.0
		72	TC	38.6	38.6	38.6	36.9	36.9	36.9	35.0	35.0	35.0	33.0	33.0	33.0	30.8	30.8	30.8
			SHC	15.8	21.5	27.3	15.1	20.9	26.6	14.4	20.2	25.9	13.6	19.4	25.2	12.8	18.6	24.4
		76	TC	—	41.7	41.7	—	39.9	39.9	—	37.9	37.9	—	35.8	35.8	—	33.5	33.5
			SHC	—	16.9	22.5	—	16.2	21.8	—	15.5	21.2	—	14.8	20.5	—	14.0	19.7
1200 cfm	EA (wb)	58	TC	33.1	33.1	37.3	31.9	31.9	35.9	30.5	30.5	34.4	29.0	29.0	32.8	27.4	27.4	31.0
			SHC	28.9	33.1	37.3	27.8	31.9	35.9	26.6	30.5	34.4	25.3	29.0	32.8	23.8	27.4	31.0
		62	TC	33.1	33.1	38.8	31.9	31.9	37.4	30.5	30.5	35.8	29.1	29.1	34.1	27.4	27.4	32.2
			SHC	27.5	33.1	38.8	26.4	31.9	37.4	25.3	30.5	35.8	24.0	29.1	34.1	22.7	27.4	32.2
		67	TC	35.5	35.5	35.5	33.9	33.9	34.7	32.1	32.1	33.9	30.3	30.3	33.1	28.2	28.2	32.2
			SHC	22.5	28.9	35.4	21.9	28.3	34.7	21.1	27.5	33.9	20.3	26.7	33.1	19.5	25.9	32.2
		72	TC	39.2	39.2	39.2	37.4	37.4	37.4	35.5	35.5	35.5	33.5	33.5	33.5	31.2	31.2	31.2
			SHC	16.2	22.6	29.0	15.6	21.9	28.3	14.8	21.2	27.6	14.1	20.5	26.9	13.2	19.6	26.1
		76	TC	—	42.4	42.4	—	40.5	40.5	—	38.5	38.5	—	—	—	—	—	—
			SHC	—	17.5	23.7	—	16.8	23.0	—	16.1	22.3	—	—	—	—	—	—

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*U07 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF (80°F db)								
		1800/0.10			2400 /0.11			3000/0.14		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	81.0	73.0	67.3	82.4	78.4	70.2	87.8	81.4	74.3
	SHC	35.3	44.1	54.3	37.6	53.3	63.6	45.1	61.0	72.4
	kW	3.8	3.7	3.7	3.7	3.8	3.7	3.8	3.8	3.7
85	TC	74.0	70.0	63.2	81.8	73.4	67.7	83.2	75.8	70.5
	SHC	28.8	41.5	50.4	37.4	48.6	61.3	40.9	55.9	68.8
	kW	4.2	4.2	4.1	4.3	4.2	4.2	4.4	4.3	4.2
95	TC	73.0	65.9	63.2	76.0	70.2	67.7	78.5	71.6	70.5
	SHC	28.2	37.7	50.4	32.2	45.9	61.3	36.8	52.1	68.8
	kW	4.8	4.7	4.1	4.9	4.8	4.2	4.9	4.8	4.2
105	TC	68.3	61.9	55.6	72.0	65.4	59.5	74.7	67.8	62.2
	SHC	24.1	34.3	43.9	28.8	41.7	54.0	33.6	48.8	61.0
	kW	5.5	5.4	5.3	5.5	5.4	5.4	5.6	5.5	5.4
115	TC	63.4	57.1	51.3	67.2	60.7	54.9	69.5	62.8	57.4
	SHC	19.8	30.2	40.2	24.8	37.6	50.0	29.3	44.5	57.4
	kW	6.2	6.1	6.0	6.2	6.1	6.1	6.3	6.2	6.1
125	TC	57.9	52.3	46.9	61.8	55.7	50.2	61.2	57.6	52.9
	SHC	15.3	26.2	36.6	20.3	33.5	45.9	21.9	40.1	51.7
	kW	6.9	6.9	6.8	7.1	6.9	6.9	7.0	7.0	6.9

48/50GE*U07 — 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								
		1800	2400	3000	1800	2400	3000	1800	2400	3000
80	TC	29.5	32.0	33.6	30.6	33.4	34.8	31.6	34.3	35.9
	SHC	7.7	13.7	19.7	4.2	9.6	14.6	1.2	5.7	10.2
	kW	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.2
75	TC	30.9	33.6	35.3	32.1	34.8	36.5	33.1	35.8	37.5
	SHC	9.1	15.2	21.3	5.8	11.0	16.3	2.8	7.2	11.8
	kW	3.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
70	TC	32.5	35.1	36.8	33.6	36.3	38.0	34.6	37.4	39.1
	SHC	10.7	16.8	22.8	7.3	12.5	17.8	4.4	8.8	13.4
	kW	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
60	TC	34.8	37.6	39.4	36.0	38.8	40.6	37.0	39.9	41.7
	SHC	13.0	19.2	25.3	9.7	15.0	20.3	6.8	11.4	16.0
	kW	3.4	3.5	3.5	3.5	3.5	3.6	3.5	3.6	3.6
50	TC	37.5	40.2	42.0	38.7	41.5	43.3	39.8	42.6	44.5
	SHC	16.4	22.5	28.5	13.3	18.4	23.6	10.6	15.0	19.4
	kW	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
40	TC	40.4	42.9	44.5	41.8	44.3	45.9	43.0	45.5	47.1
	SHC	21.0	27.0	32.8	18.3	23.4	28.5	15.9	20.3	24.7
	kW	2.8	2.9	2.9	2.9	2.9	2.9	2.9	3.0	3.0

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 Btu/h) Gross
TC	—	Total Capacity (1000 Btu/h) Gross

48/50GE*T08 Three Stage Cooling Capacities

48/50GE*T08				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
2250 cfm	EA (wb)	58	TC	79.0	79.0	89.3	75.9	75.9	85.8	72.4	72.4	82.0	68.6	68.6	77.9	64.5	64.5	73.2
			SHC	68.7	79.0	89.3	65.9	75.9	85.8	62.8	72.4	82.0	59.4	68.6	77.9	55.8	64.5	73.2
		62	TC	83.6	83.6	83.9	79.6	79.6	81.7	75.3	75.3	79.5	70.6	70.6	76.9	65.5	65.5	74.2
			SHC	61.6	72.8	83.9	59.4	70.6	81.7	57.2	68.3	79.5	54.7	65.8	76.9	52.0	63.1	74.2
		67	TC	91.9	91.9	91.9	87.5	87.5	87.5	82.8	82.8	82.8	77.8	77.8	77.8	72.3	72.3	72.3
			SHC	50.5	61.6	72.7	48.3	59.4	70.6	46.0	57.3	68.4	43.8	54.9	66.1	41.2	52.4	63.6
		72	TC	100.5	100.5	100.5	96.0	96.0	96.0	91.1	91.1	91.1	85.7	85.7	85.7	79.9	79.9	79.9
			SHC	39.1	50.1	61.0	37.0	48.0	59.0	34.9	45.8	56.8	32.5	43.5	54.5	30.0	41.0	52.2
		76	TC	—	108.3	108.3	—	103.5	103.5	—	98.2	98.2	—	92.6	92.6	—	86.4	86.4
			SHC	—	40.4	52.1	—	38.6	50.3	—	36.5	45.9	—	34.2	44.4	—	31.8	42.3
2650 cfm	EA (wb)	58	TC	83.8	83.8	94.7	80.4	80.4	90.9	76.7	76.7	86.9	72.8	72.8	82.4	68.2	68.2	77.5
			SHC	72.9	83.8	94.7	69.8	80.4	90.9	66.6	76.7	86.9	63.0	72.8	82.4	59.1	68.2	77.5
		62	TC	86.5	86.5	92.8	82.3	82.3	90.4	77.8	77.8	87.9	73.1	73.1	84.6	68.7	68.7	79.6
			SHC	66.9	79.9	92.8	64.6	77.5	90.4	62.2	75.0	87.9	59.3	71.9	84.6	55.7	67.6	79.6
		67	TC	94.8	94.8	94.8	90.2	90.2	90.2	85.2	85.2	85.2	80.0	80.0	80.0	75.5	75.5	75.5
			SHC	54.0	67.0	80.0	51.8	64.8	77.9	49.4	62.6	75.6	47.1	60.2	73.2	45.4	58.8	72.1
		72	TC	103.6	103.6	103.6	98.8	98.8	98.8	93.6	93.6	93.6	88.2	88.2	88.2	81.9	81.9	81.9
			SHC	40.5	53.4	66.2	38.5	51.3	64.3	36.2	49.1	62.1	33.8	46.9	59.8	31.3	44.3	57.3
		76	TC	—	111.4	111.4	—	106.3	106.3	—	100.7	100.7	—	95.0	95.0	—	88.5	88.5
			SHC	—	42.4	53.9	—	40.4	52.3	—	38.2	50.4	—	35.9	48.4	—	33.5	46.1
3000 cfm	EA (wb)	58	TC	87.3	87.3	98.7	83.7	83.7	94.7	79.9	79.9	90.4	75.7	75.7	85.7	71.0	71.0	80.5
			SHC	76.0	87.3	98.7	72.9	83.7	94.7	69.5	79.9	90.4	65.7	75.7	85.7	61.4	71.0	80.5
		62	TC	88.5	88.5	99.7	84.3	84.3	96.8	80.6	80.6	92.6	75.7	75.7	89.1	71.1	71.1	83.7
			SHC	71.0	85.3	99.7	68.4	82.6	96.8	65.3	79.0	92.6	62.4	75.7	89.1	58.3	71.1	83.7
		67	TC	96.6	96.6	96.6	91.9	91.9	91.9	87.3	87.3	87.3	81.4	81.4	81.4	75.8	75.8	76.7
			SHC	56.8	71.4	86.1	54.6	69.3	84.0	53.1	68.3	83.5	50.2	65.2	80.1	47.3	62.0	76.7
		72	TC	105.8	105.8	105.8	100.7	100.7	100.7	95.4	95.4	95.4	89.6	89.6	89.6	83.3	83.3	83.3
			SHC	41.8	56.3	70.8	39.6	54.1	68.7	37.3	51.9	66.5	34.9	49.5	64.2	32.3	47.0	61.6
		76	TC	—	113.5	113.5	—	108.3	108.3	—	102.5	102.5	—	96.5	96.5	—	89.9	89.9
			SHC	—	43.8	57.6	—	41.8	55.7	—	39.6	53.7	—	37.2	51.4	—	34.8	49.0
3400 cfm	EA (wb)	58	TC	90.7	90.7	102.4	86.9	86.9	98.3	82.9	82.9	93.7	78.4	78.4	88.8	73.5	73.5	83.3
			SHC	79.0	90.7	102.4	75.7	86.9	98.3	72.0	82.9	93.7	68.0	78.4	88.8	63.7	73.5	83.3
		62	TC	91.9	91.9	102.4	87.0	87.0	102.2	83.1	83.1	97.6	78.5	78.5	92.4	73.6	73.6	86.8
			SHC	73.2	87.8	102.4	71.9	87.0	102.2	68.5	83.1	97.6	64.7	78.5	92.4	60.5	73.6	86.8
		67	TC	98.7	98.7	98.7	93.8	93.8	93.8	88.9	88.9	90.3	83.0	83.0	86.2	76.8	76.8	83.1
			SHC	58.8	75.4	91.9	56.6	73.2	89.9	57.4	73.8	90.3	53.0	69.6	86.2	50.3	66.7	83.1
		72	TC	107.6	107.6	107.6	102.3	102.3	102.3	97.0	97.0	97.0	83.0	83.0	86.2	84.4	84.4	84.4
			SHC	42.9	59.3	75.7	40.7	57.2	73.6	38.5	54.9	71.3	53.0	69.6	86.2	33.5	49.9	66.4
		76	TC	—	115.4	115.4	—	110.0	110.0	—	104.2	104.2	—	97.9	97.9	—	91.0	91.0
			SHC	—	45.4	61.0	—	43.2	59.2	—	41.0	57.0	—	38.7	54.7	—	36.1	52.4
3750 cfm	EA (wb)	58	TC	93.3	93.3	105.4	89.4	89.4	101.0	85.2	85.2	96.4	80.6	80.6	91.2	75.5	75.5	85.5
			SHC	81.3	93.3	105.4	77.8	89.4	101.0	74.1	85.2	96.4	69.9	80.6	91.2	65.4	75.5	85.5
		62	TC	93.6	93.6	108.5	89.5	89.5	105.0	85.2	85.2	100.1	80.6	80.6	94.9	75.6	75.6	89.0
			SHC	76.8	92.6	108.5	74.0	89.5	105.0	70.3	85.2	100.1	66.4	80.6	94.9	62.2	75.6	89.0
		67	TC	103.2	103.2	103.2	94.8	94.8	96.4	89.4	89.4	93.9	83.8	83.8	91.3	77.7	77.7	88.6
			SHC	66.6	84.8	102.9	60.3	78.3	96.4	57.9	76.0	93.9	55.5	73.4	91.3	52.8	70.7	88.6
		72	TC	108.8	108.8	108.8	103.6	103.6	103.6	97.8	97.8	97.8	91.9	91.9	91.9	85.2	85.2	85.2
			SHC	43.8	61.8	79.9	41.7	59.7	77.7	39.3	57.4	75.4	36.9	55.0	73.0	34.4	52.4	70.6
		76	TC	—	116.7	116.7	—	111.2	111.2	—	105.4	105.4	—	98.8	98.8	—	91.9	91.9
			SHC	—	46.5	64.0	—	44.4	61.9	—	42.1	59.8	—	39.8	57.6	—	37.2	55.1

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 Btu/h) Gross
TC	Total Capacity (1000 Btu/h) Gross

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T08 Two Stage Cooling Capacities

48/50GE*T08				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
1350 cfm	EA (wb)	58	TC	55.3	55.3	62.4	53.4	53.4	60.3	51.3	51.3	57.9	49.0	49.0	55.3	46.5	46.5	52.5
			SHC	48.2	55.3	62.4	46.6	53.4	60.3	44.7	51.3	57.9	42.7	49.0	55.3	40.5	46.5	52.5
		62	TC	59.1	59.1	59.1	56.6	56.6	56.6	53.9	53.9	55.3	50.9	50.9	53.8	47.7	47.7	52.2
			SHC	43.1	50.5	57.8	41.9	49.2	56.6	40.5	47.9	55.3	39.1	46.4	53.8	37.5	44.9	52.2
		67	TC	65.1	65.1	65.1	62.3	62.3	62.3	59.4	59.4	59.4	56.2	56.2	56.2	52.7	52.7	52.7
			SHC	36.0	43.3	50.7	34.7	42.1	49.5	33.4	40.8	48.2	32.0	39.3	46.7	30.4	37.8	45.2
		72	TC	71.5	71.5	71.5	68.5	68.5	68.5	65.3	65.3	65.3	61.9	61.9	61.9	58.1	58.1	58.1
			SHC	28.6	36.0	43.4	27.4	34.8	42.2	26.1	33.5	40.9	24.7	32.1	39.5	23.2	30.6	38.0
		76	TC	—	77.0	77.0	—	73.8	73.8	—	70.4	70.4	—	66.7	66.7	—	62.7	62.7
			SHC	—	30.0	37.4	—	28.8	36.2	—	27.5	34.9	—	26.1	33.5	—	24.6	32.0
1575 cfm	EA (wb)	58	TC	58.8	58.8	66.3	56.7	56.7	64.0	54.5	54.5	61.4	52.0	52.0	58.6	49.2	49.2	55.6
			SHC	51.3	58.8	66.3	49.4	56.7	64.0	47.5	54.5	61.4	45.3	52.0	58.6	42.9	49.2	55.6
		62	TC	61.2	61.2	63.8	58.6	58.6	62.5	55.7	55.7	61.1	52.6	52.6	59.5	49.3	49.3	57.8
			SHC	46.6	55.2	63.8	45.3	53.9	62.5	44.0	52.5	61.1	42.5	51.0	59.5	40.7	49.3	57.8
		67	TC	67.3	67.3	67.3	64.4	64.4	64.4	61.2	61.2	61.2	57.8	57.8	57.8	54.2	54.2	54.2
			SHC	38.2	46.8	55.4	36.9	45.5	54.1	35.6	44.2	52.8	34.1	42.7	51.3	32.6	41.2	49.8
		72	TC	73.8	73.8	73.8	70.7	70.7	70.7	67.2	67.2	67.2	63.6	63.6	63.6	59.6	59.6	59.6
			SHC	29.6	38.2	46.9	28.3	37.0	45.6	27.0	35.6	44.3	25.6	34.2	42.8	24.0	32.7	41.3
		76	TC	—	79.3	79.3	—	75.9	75.9	—	72.3	72.3	—	68.4	68.4	—	64.2	64.2
			SHC	—	31.2	39.8	—	29.9	38.6	—	28.6	37.3	—	27.2	35.8	—	25.7	34.4
1800 cfm	EA (wb)	58	TC	61.7	61.7	69.6	59.5	59.5	67.1	57.0	57.0	64.4	54.4	54.4	61.4	51.5	51.5	58.1
			SHC	53.8	61.7	69.6	51.9	59.5	67.1	49.7	57.0	64.4	47.4	54.4	61.4	44.8	51.5	58.1
		62	TC	63.0	63.0	69.5	60.2	60.2	68.1	57.3	57.3	66.5	54.4	54.4	63.8	51.5	51.5	60.4
			SHC	50.0	59.7	69.5	48.7	58.4	68.1	47.2	56.9	66.5	45.1	54.4	63.8	42.7	51.5	60.4
		67	TC	69.0	69.0	69.0	65.9	65.9	65.9	62.7	62.7	62.7	59.1	59.1	59.1	55.3	55.3	55.3
			SHC	40.4	50.2	60.0	39.1	48.9	58.7	37.7	47.5	57.3	36.2	46.0	55.8	34.6	44.4	54.2
		72	TC	75.5	75.5	75.5	72.2	72.2	72.2	68.7	68.7	68.7	64.9	64.9	64.9	60.8	60.8	60.8
			SHC	30.5	40.3	50.2	29.2	39.0	48.9	27.8	37.7	47.5	26.4	36.2	46.1	24.8	34.7	44.5
		76	TC	—	81.0	81.0	—	77.5	77.5	—	73.8	73.8	—	69.7	69.7	—	65.4	65.4
			SHC	—	32.2	42.1	—	31.0	40.9	—	29.7	39.6	—	28.2	38.1	—	26.7	36.6
2025 cfm	EA (wb)	58	TC	64.2	64.2	72.4	61.8	61.8	69.7	59.2	59.2	66.8	56.4	56.4	63.7	53.3	53.3	60.2
			SHC	56.0	64.2	72.4	53.9	61.8	69.7	51.7	59.2	66.8	49.2	56.4	63.7	46.5	53.3	60.2
		62	TC	64.6	64.6	74.4	61.9	61.9	72.5	59.3	59.3	69.5	56.5	56.5	66.2	52.8	52.8	62.3
			SHC	53.0	63.7	74.4	51.3	61.9	72.5	49.2	59.3	69.5	46.8	56.5	66.2	43.2	52.8	62.3
		67	TC	70.3	70.3	70.3	67.2	67.2	67.2	63.8	63.8	63.8	60.1	60.1	60.2	56.2	56.2	58.5
			SHC	42.4	53.4	64.4	41.1	52.1	63.1	39.7	50.7	61.7	38.2	49.2	60.2	36.6	47.6	58.5
		72	TC	76.9	76.9	76.9	73.5	73.5	73.5	69.8	69.8	69.8	65.9	65.9	65.9	61.6	61.6	61.6
			SHC	31.3	42.3	53.4	30.0	41.0	52.1	28.6	39.6	50.7	27.1	38.2	49.2	25.6	36.6	47.6
		76	TC	—	82.4	82.4	—	78.8	78.8	—	74.9	74.9	—	70.7	70.7	—	66.3	66.3
			SHC	—	33.2	44.4	—	32.0	43.1	—	30.6	41.8	—	29.2	40.3	—	27.7	38.8
2250 cfm	EA (wb)	58	TC	66.3	66.3	74.8	63.8	63.8	72.0	61.1	61.1	69.0	58.2	58.2	65.6	55.0	55.0	62.0
			SHC	57.9	66.3	74.8	55.7	63.8	72.0	53.3	61.1	69.0	50.7	58.2	65.6	47.9	55.0	62.0
		62	TC	66.4	66.4	77.7	63.9	63.9	74.8	61.2	61.2	71.7	58.2	58.2	68.2	55.0	55.0	64.4
			SHC	55.1	66.4	77.7	53.0	63.9	74.8	50.8	61.2	71.7	48.2	58.2	68.2	45.6	55.0	64.4
		67	TC	71.4	71.4	71.4	68.1	68.1	68.1	64.7	64.7	66.0	60.9	60.9	64.4	56.9	56.9	62.8
			SHC	44.4	56.6	68.7	43.1	55.2	67.4	41.7	53.8	66.0	40.2	52.3	64.4	38.6	50.7	62.8
		72	TC	78.0	78.0	78.0	74.5	74.5	74.5	70.7	70.7	70.7	66.7	66.7	66.7	62.3	62.3	62.3
			SHC	32.0	44.3	56.5	30.7	42.9	55.2	29.3	41.5	53.8	27.8	40.1	52.3	26.3	38.5	50.7
		76	TC	—	83.5	83.5	—	79.8	79.8	—	75.8	75.8	—	71.6	71.6	—	67.0	67.0
			SHC	—	34.2	46.5	—	32.9	45.2	—	31.5	43.9	—	30.1	42.4	—	28.6	40.8

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T08 One Stage Cooling Capacities

48/50GE*T08				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	33.6	33.6	37.9	32.6	32.6	36.7	31.4	31.4	35.4	30.1	30.1	33.9	28.6	28.6	32.2
			SHC	29.3	33.6	37.9	28.5	32.6	36.7	27.4	31.4	35.4	26.3	30.1	33.9	25.0	28.6	32.2
		62	TC	35.2	35.2	36.2	33.8	33.8	35.6	32.3	32.3	34.9	30.7	30.7	34.0	28.8	28.8	33.1
			SHC	26.6	31.4	36.2	26.0	30.8	35.6	25.3	30.1	34.9	24.5	29.2	34.0	23.6	28.3	33.1
		67	TC	38.6	38.6	38.6	37.2	37.2	37.2	35.6	35.6	35.6	33.7	33.7	33.7	31.7	31.7	31.7
			SHC	21.9	26.8	31.6	21.3	26.2	31.0	20.7	25.5	30.3	19.9	24.7	29.5	19.1	23.9	28.7
		72	TC	42.3	42.3	42.3	40.9	40.9	40.9	39.1	39.1	39.1	37.1	37.1	37.1	34.9	34.9	34.9
			SHC	17.1	22.0	26.8	16.6	21.4	26.2	15.9	20.7	25.6	15.2	20.0	24.8	14.3	19.2	24.0
		76	TC	—	45.5	45.5	—	43.9	43.9	—	42.1	42.1	—	40.0	40.0	—	37.7	37.7
			SHC	—	18.1	23.0	—	17.5	22.4	—	16.9	21.8	—	16.1	21.0	—	15.3	20.2
1050 cfm	EA (wb)	58	TC	35.5	35.5	40.0	34.4	34.4	38.7	33.1	33.1	37.3	31.7	31.7	35.7	30.1	30.1	33.9
			SHC	31.0	35.5	40.0	30.0	34.4	38.7	28.9	33.1	37.3	27.7	31.7	35.7	26.3	30.1	33.9
		62	TC	36.3	36.3	39.8	34.9	34.9	39.1	33.4	33.4	38.3	31.8	31.8	37.0	30.1	30.1	35.2
			SHC	28.7	34.3	39.8	28.1	33.6	39.1	27.3	32.8	38.3	26.3	31.6	37.0	25.0	30.1	35.2
		67	TC	39.7	39.7	39.7	38.2	38.2	38.2	36.5	36.5	36.5	34.6	34.6	34.6	32.4	32.4	32.4
			SHC	23.3	28.9	34.4	22.7	28.3	33.8	22.0	27.6	33.1	21.2	26.8	32.4	20.4	25.9	31.5
		72	TC	43.5	43.5	43.5	41.9	41.9	41.9	40.1	40.1	40.1	38.0	38.0	38.0	35.7	35.7	35.7
			SHC	17.7	23.3	28.9	17.1	22.7	28.3	16.5	22.1	27.7	15.7	21.3	26.9	14.9	20.5	26.1
		76	TC	—	46.7	46.7	—	45.0	45.0	—	43.1	43.1	—	41.0	41.0	—	38.5	38.5
			SHC	—	18.8	24.5	—	18.2	23.9	—	17.6	23.2	—	16.8	22.5	—	16.0	21.6
1200 cfm	EA (wb)	58	TC	37.1	37.1	41.8	35.9	35.9	40.4	34.5	34.5	38.9	33.0	33.0	37.2	31.3	31.3	35.3
			SHC	32.3	37.1	41.8	31.3	35.9	40.4	30.1	34.5	38.9	28.8	33.0	37.2	27.3	31.3	35.3
		62	TC	37.3	37.3	43.0	35.9	35.9	42.0	34.6	34.6	40.4	33.0	33.0	38.6	31.3	31.3	36.6
			SHC	30.6	36.8	43.0	29.8	35.9	42.0	28.7	34.6	40.4	27.4	33.0	38.6	26.0	31.3	36.6
		67	TC	40.5	40.5	40.5	39.0	39.0	39.0	37.2	37.2	37.2	35.2	35.2	35.2	33.0	33.0	34.2
			SHC	24.6	30.9	37.2	24.0	30.3	36.6	23.3	29.6	35.9	22.5	28.8	35.1	21.6	27.9	34.2
		72	TC	44.3	44.3	44.3	42.7	42.7	42.7	40.9	40.9	40.9	38.7	38.7	38.7	36.3	36.3	36.3
			SHC	18.2	24.6	30.9	17.7	24.0	30.4	17.0	23.3	29.7	16.2	22.6	28.9	15.4	21.7	28.1
		76	TC	—	47.5	47.5	—	45.9	45.9	—	43.9	43.9	—	41.7	41.7	—	39.1	39.1
			SHC	—	19.4	25.8	—	18.9	25.3	—	18.2	24.6	—	17.5	23.9	—	16.6	23.0
1350 cfm	EA (wb)	58	TC	38.4	38.4	43.2	37.1	37.1	41.9	35.7	35.7	40.3	34.1	34.1	38.4	32.3	32.3	36.4
			SHC	33.5	38.4	43.2	32.4	37.1	41.9	31.2	35.7	40.3	29.8	34.1	38.4	28.2	32.3	36.4
		62	TC	38.4	38.4	44.9	37.2	37.2	43.5	35.8	35.8	41.8	34.1	34.1	39.9	32.3	32.3	37.8
			SHC	31.9	38.4	44.9	30.9	37.2	43.5	29.7	35.8	41.8	28.4	34.1	39.9	26.9	32.3	37.8
		67	TC	41.2	41.2	41.2	39.6	39.6	39.6	37.8	37.8	38.6	35.8	35.8	37.8	33.5	33.5	36.9
			SHC	25.8	32.9	39.9	25.2	32.3	39.3	24.5	31.6	38.6	23.7	30.7	37.8	22.8	29.8	36.9
		72	TC	45.0	45.0	45.0	43.4	43.4	43.4	41.5	41.5	41.5	39.2	39.2	39.2	36.8	36.8	36.8
			SHC	18.7	25.8	32.9	18.1	25.2	32.3	17.5	24.6	31.7	16.7	23.8	30.9	15.8	22.9	30.0
		76	TC	—	48.0	48.0	—	46.5	46.5	—	44.5	44.5	—	42.2	42.2	—	39.6	39.6
			SHC	—	20.0	27.1	—	19.5	26.6	—	18.8	26.0	—	18.1	25.2	—	17.3	24.4
1550 cfm	EA (wb)	58	TC	39.5	39.5	44.5	38.2	38.2	43.1	36.8	36.8	41.4	35.1	35.1	39.5	33.2	33.2	37.4
			SHC	34.5	39.5	44.5	33.4	38.2	43.1	32.1	36.8	41.4	30.6	35.1	39.5	29.0	33.2	37.4
		62	TC	39.5	39.5	46.2	38.3	38.3	44.8	36.8	36.8	43.0	35.1	35.1	41.1	33.2	33.2	38.8
			SHC	32.8	39.5	46.2	31.8	38.3	44.8	30.6	36.8	43.0	29.2	35.1	41.1	27.6	33.2	38.8
		67	TC	41.7	41.7	42.6	40.1	40.1	42.0	38.3	38.3	41.2	36.2	36.2	40.3	33.9	33.9	39.3
			SHC	27.0	34.8	42.6	26.4	34.2	42.0	25.7	33.4	41.2	24.9	32.6	40.3	24.0	31.7	39.3
		72	TC	45.5	45.5	45.5	43.9	43.9	43.9	41.9	41.9	41.9	39.7	39.7	39.7	37.2	37.2	37.2
			SHC	19.2	27.0	34.8	18.6	26.5	34.3	17.9	25.8	33.6	17.2	25.0	32.8	16.3	24.1	31.9
		76	TC	—	48.6	48.6	—	47.0	47.0	—	45.0	45.0	—	42.6	42.6	—	40.0	40.0
			SHC	—	20.6	28.5	—	20.1	28.0	—	19.4	27.3	—	18.7	26.6	—	17.8	25.7

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 Btu/h) Gross
TC	Total Capacity (1000 Btu/h) Gross

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*U08 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF (80°F db)								
		2250/0.11			3000/0.14			3750/0.15		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	113.0	101.4	89.5	120.9	108.9	97.7	125.9	113.5	103.4
	SHC	52.8	63.5	73.2	61.3	75.9	89.9	68.9	87.1	101.4
	kW	5.2	5.1	4.9	5.3	5.2	5.1	5.4	5.2	5.1
85	TC	106.5	94.4	84.3	113.6	102.1	91.1	118.0	104.6	96.9
	SHC	47.6	57.8	68.8	55.6	70.3	84.5	62.9	80.0	96.9
	kW	6.0	5.7	5.7	6.1	5.9	5.8	6.1	5.9	5.9
95	TC	99.3	88.6	78.1	102.6	91.8	84.4	110.2	98.7	90.1
	SHC	42.0	53.0	63.6	47.1	62.0	78.4	56.9	75.3	90.1
	kW	6.8	6.6	6.5	6.9	6.7	6.5	7.0	6.8	6.7
105	TC	92.1	81.4	65.2	98.7	87.5	77.0	102.0	90.9	78.3
	SHC	36.5	47.4	53.1	44.2	58.9	73.0	50.8	69.4	78.3
	kW	7.8	7.6	7.0	7.8	7.7	7.5	8.0	7.8	7.4
115	TC	84.2	73.3	64.4	89.8	79.3	70.1	93.3	82.3	71.0
	SHC	30.7	41.3	52.5	37.8	52.7	67.3	44.6	62.9	71.0
	kW	8.9	8.5	8.4	9.0	8.8	8.5	9.1	8.8	8.4
125	TC	76.2	66.0	56.9	81.0	71.2	64.2	83.6	74.0	67.2
	SHC	24.8	35.7	46.7	31.6	46.9	55.4	37.5	56.7	67.2
	kW	10.1	9.7	9.7	10.2	9.9	9.7	9.8	10.0	9.7

48/50GE*U08 — 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								
		2250	3000	3750	2250	3000	3750	2250	3000	3750
80	TC	27.7	29.1	29.2	29.0	30.7	31.9	30.4	33.2	33.2
	SHC	−0.5	0.0	0.4	−0.9	−0.5	−0.1	−1.4	−1.2	−0.7
	kW	6.0	6.1	6.1	6.1	6.2	6.2	6.1	6.2	6.2
75	TC	28.0	30.8	30.8	30.7	33.4	33.5	32.1	34.7	34.9
	SHC	−0.3	0.1	0.5	−0.9	−0.3	0.0	−1.4	−1.0	−0.6
	kW	5.7	5.8	5.8	5.7	5.8	5.9	5.8	5.9	5.9
70	TC	29.8	32.3	32.4	32.3	33.6	35.0	33.6	36.2	36.3
	SHC	−0.2	0.3	0.7	−0.7	−0.1	0.1	−1.2	−0.8	−0.5
	kW	5.4	5.5	5.5	5.4	5.5	5.5	5.5	5.6	5.6
60	TC	32.6	35.2	35.2	35.2	36.4	37.6	36.5	39.0	39.1
	SHC	0.2	0.6	1.0	−0.3	0.0	0.3	−0.9	−0.5	−0.1
	kW	5.1	5.2	5.3	5.2	5.3	5.3	5.2	5.3	5.3
50	TC	32.6	33.4	34.6	33.7	35.8	35.7	34.7	36.9	38.0
	SHC	0.6	1.4	2.2	−0.3	0.6	1.1	−1.1	−0.3	0.3
	kW	4.6	4.7	4.7	4.7	4.8	4.8	4.8	4.8	4.8
40	TC	34.7	36.6	36.3	35.8	37.7	38.4	38.2	40.0	39.6
	SHC	1.0	2.2	2.9	0.4	1.0	1.8	−0.9	0.0	0.6
	kW	4.2	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.5

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

48/50GE*T09 Three Stage Cooling Capacities

48/50GE*T09				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
2550 cfm	EA (wb)	58	TC	97.8	97.8	110.6	93.4	93.4	105.7	88.6	88.6	100.5	83.5	83.5	94.8	77.9	77.9	88.7
			SHC	85.1	97.8	110.6	81.1	93.4	105.7	76.7	88.6	100.5	72.1	83.5	94.8	67.1	77.9	88.7
		62	TC	103.2	103.2	104.9	97.8	97.8	101.0	91.8	91.8	98.5	85.5	85.5	94.4	80.0	80.0	87.5
			SHC	76.8	90.9	104.9	73.0	87.0	101.0	70.5	84.5	98.5	66.3	80.4	94.4	61.4	74.4	87.5
		67	TC	113.8	113.8	113.8	107.8	107.8	107.8	101.6	101.6	101.6	94.8	94.8	94.8	87.4	87.4	87.4
			SHC	63.3	77.4	91.4	60.4	74.4	88.4	57.1	71.1	85.1	53.3	67.3	81.3	49.8	63.8	77.8
		72	TC	125.4	125.4	125.4	119.0	119.0	119.0	112.1	112.1	112.1	104.8	104.8	104.8	97.1	97.1	97.1
			SHC	48.7	62.7	76.7	46.7	60.7	74.7	43.2	57.2	71.2	39.4	53.4	67.5	36.5	50.5	64.5
		76	TC	—	135.4	135.4	—	128.6	128.6	—	121.3	121.3	—	113.7	113.7	—	105.4	105.4
			SHC	—	52.8	66.8	—	48.9	62.9	—	46.1	60.1	—	42.1	56.1	—	39.0	53.0
3000 cfm	EA (wb)	58	TC	104.8	104.8	118.3	100.0	100.0	113.0	94.9	94.9	107.4	89.3	89.3	101.4	83.3	83.3	94.7
			SHC	91.3	104.8	118.3	87.0	100.0	113.0	82.3	94.9	107.4	77.3	89.3	101.4	72.0	83.3	94.7
		62	TC	107.5	107.5	116.5	101.8	101.8	114.1	95.6	95.6	110.1	89.5	89.5	105.5	83.5	83.5	98.7
			SHC	83.5	100.0	116.5	81.4	97.7	114.1	77.4	93.7	110.1	73.5	89.5	105.5	68.3	83.5	98.7
		67	TC	118.2	118.2	118.2	111.9	111.9	111.9	105.1	105.1	105.1	98.1	98.1	98.1	90.4	90.4	90.4
			SHC	67.4	83.9	100.4	65.2	81.7	98.2	61.3	77.8	94.3	58.1	74.6	91.1	54.0	70.5	87.0
		72	TC	129.9	129.9	129.9	123.2	123.2	123.2	116.0	116.0	116.0	108.2	108.2	108.2	100.2	100.2	100.2
			SHC	51.1	67.6	84.1	48.8	65.3	81.8	45.0	61.5	78.0	41.9	58.4	74.9	38.6	55.1	71.6
		76	TC	—	140.0	140.0	—	132.9	132.9	—	125.5	125.5	—	117.3	117.3	—	108.6	108.6
			SHC	—	54.6	71.1	—	51.8	68.3	—	48.9	65.4	—	45.7	62.2	—	41.3	57.8
3400 cfm	EA (wb)	58	TC	110.2	110.2	124.4	105.1	105.1	118.8	99.7	99.7	112.7	93.8	93.8	106.3	87.5	87.5	99.3
			SHC	96.0	110.2	124.4	91.5	105.1	118.8	86.6	99.7	112.7	81.3	93.8	106.3	75.7	87.5	99.3
		62	TC	110.8	110.8	127.1	105.3	105.3	123.6	99.8	99.8	117.2	94.0	94.0	110.6	87.6	87.6	103.3
			SHC	90.1	108.6	127.1	86.9	105.3	123.6	82.4	99.8	117.2	77.3	94.0	110.6	71.9	87.6	103.3
		67	TC	121.4	121.4	121.4	114.8	114.8	114.8	107.9	107.9	107.9	100.6	100.6	100.6	92.7	92.7	96.6
			SHC	72.3	91.0	109.7	68.6	87.3	106.0	65.4	84.1	102.8	62.8	81.5	100.2	59.2	77.9	96.6
		72	TC	133.2	133.2	133.2	126.2	126.2	126.2	118.7	118.7	118.7	110.7	110.7	110.7	102.5	102.5	102.5
			SHC	53.2	71.9	90.6	50.7	69.4	88.1	47.8	66.5	85.2	44.4	63.1	81.8	40.8	59.5	78.2
		76	TC	—	143.4	143.4	—	136.0	136.0	—	128.4	128.4	—	119.9	119.9	—	111.0	111.0
			SHC	—	57.4	76.1	—	54.4	73.1	—	51.4	70.1	—	48.0	66.7	—	44.4	63.1
3850 cfm	EA (wb)	58	TC	115.4	115.4	130.2	110.2	110.2	124.4	104.5	104.5	118.1	98.3	98.3	111.2	91.6	91.6	103.7
			SHC	100.6	115.4	130.2	96.0	110.2	124.4	91.0	104.5	118.1	85.4	98.3	111.2	79.6	91.6	103.7
		62	TC	115.6	115.6	135.3	110.2	110.2	129.1	104.5	104.5	122.5	98.4	98.4	115.6	91.8	91.8	108.1
			SHC	95.9	115.6	135.3	91.4	110.2	129.1	86.5	104.5	122.5	81.3	98.4	115.6	75.5	91.8	108.1
		67	TC	124.4	124.4	124.4	117.7	117.7	117.7	110.6	110.6	112.7	103.1	103.1	109.7	95.0	95.0	105.5
			SHC	77.3	98.3	119.3	74.4	95.4	116.3	70.8	91.8	112.7	67.7	88.7	109.7	63.6	84.6	105.5
		72	TC	136.4	136.4	136.4	129.2	129.2	129.2	121.4	121.4	121.4	113.2	113.2	113.2	104.8	104.8	104.8
			SHC	56.6	77.7	98.9	52.5	73.6	94.8	49.3	70.4	91.6	45.6	66.8	88.0	42.8	63.9	85.1
		76	TC	—	146.7	146.7	—	139.1	139.1	—	131.2	131.2	—	122.6	122.6	—	113.5	113.5
			SHC	—	60.2	81.3	—	57.0	78.0	—	53.8	75.0	—	50.3	71.4	—	46.5	67.7
4250 cfm	EA (wb)	58	TC	119.7	119.7	134.9	114.3	114.3	128.8	108.4	108.4	122.4	101.9	101.9	115.3	95.0	95.0	107.4
			SHC	104.5	119.7	134.9	99.8	114.3	128.8	94.4	108.4	122.4	88.6	101.9	115.3	82.6	95.0	107.4
		62	TC	119.9	119.9	140.2	114.3	114.3	133.7	108.3	108.3	127.0	102.1	102.1	119.8	95.2	95.2	111.8
			SHC	99.6	119.9	140.2	94.9	114.3	133.7	89.6	108.3	127.0	84.3	102.1	119.8	78.6	95.2	111.8
		67	TC	126.9	126.9	128.5	120.1	120.1	125.2	112.8	112.8	121.3	105.0	105.0	117.6	97.0	97.0	114.3
			SHC	82.2	105.4	128.5	78.9	102.1	125.2	75.0	98.1	121.3	71.4	94.5	117.6	68.0	91.2	114.3
		72	TC	138.9	138.9	138.9	131.6	131.6	131.6	123.7	123.7	123.7	115.4	115.4	115.4	106.7	106.7	106.7
			SHC	58.6	82.0	105.3	55.6	78.9	102.3	52.1	75.5	98.8	48.2	71.5	94.9	44.9	68.3	91.7
		76	TC	—	149.4	149.4	—	141.6	141.6	—	133.6	133.6	—	124.7	124.7	—	115.5	115.5
			SHC	—	62.7	86.1	—	59.5	82.9	—	56.1	79.5	—	52.4	75.8	—	48.5	71.9

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T09 Two Stage Cooling Capacities

48/50GE*T09				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
1525 cfm	EA (wb)	58	TC	57.6	57.6	65.5	54.7	54.7	62.3	51.6	51.6	58.9	48.2	48.2	55.2	44.6	44.6	51.2
			SHC	49.8	57.6	65.5	47.1	54.7	62.3	44.3	51.6	58.9	41.2	48.2	55.2	37.9	44.6	51.2
		62	TC	61.6	61.6	61.6	57.9	57.9	59.2	54.1	54.1	56.8	50.0	50.0	54.4	45.5	45.5	51.9
			SHC	44.6	53.0	61.4	42.3	50.7	59.2	40.0	48.4	56.8	37.6	46.0	54.4	35.1	43.5	51.9
		67	TC	68.6	68.6	68.6	64.7	64.7	64.7	60.5	60.5	60.5	56.1	56.1	56.1	51.3	51.3	51.3
			SHC	36.8	45.3	53.7	34.6	43.0	51.4	32.3	40.7	49.2	29.9	38.3	46.7	27.3	35.7	44.2
		72	TC	76.0	76.0	76.0	71.9	71.9	71.9	67.4	67.4	67.4	62.6	62.6	62.6	57.4	57.4	57.4
			SHC	28.9	37.3	45.7	26.7	35.1	43.5	24.4	32.8	41.2	22.0	30.4	38.8	19.4	27.8	36.2
		76	TC	—	82.6	82.6	—	78.1	78.1	—	73.4	73.4	—	68.4	68.4	—	63.0	63.0
			SHC	—	30.9	39.3	—	28.7	37.1	—	26.4	34.8	—	24.0	32.4	—	21.5	29.9
1800 cfm	EA (wb)	58	TC	61.7	61.7	70.1	58.6	58.6	66.6	55.2	55.2	62.9	51.6	51.6	59.0	47.7	47.7	54.7
			SHC	53.4	61.7	70.1	50.5	58.6	66.6	47.5	55.2	62.9	44.2	51.6	59.0	40.7	47.7	54.7
		62	TC	64.1	64.1	68.4	60.2	60.2	66.1	56.2	56.2	63.7	51.8	51.8	61.3	47.8	47.8	57.2
			SHC	48.8	58.6	68.4	46.5	56.3	66.1	44.1	53.9	63.7	41.7	51.5	61.3	38.4	47.8	57.2
		67	TC	71.2	71.2	71.2	67.0	67.0	67.0	62.7	62.7	62.7	57.9	57.9	57.9	52.9	52.9	52.9
			SHC	39.6	49.4	59.3	37.3	47.1	56.9	35.0	44.8	54.6	32.5	42.3	52.1	29.8	39.6	49.4
		72	TC	78.8	78.8	78.8	74.3	74.3	74.3	69.6	69.6	69.6	64.6	64.6	64.6	59.2	59.2	59.2
			SHC	30.2	40.0	49.9	27.9	37.8	47.6	25.6	35.4	45.2	23.1	32.9	42.8	20.5	30.4	40.2
		76	TC	—	85.4	85.4	—	80.7	80.7	—	75.9	75.9	—	70.5	70.5	—	64.8	64.8
			SHC	—	32.5	42.3	—	30.2	40.0	—	27.9	37.7	—	25.4	35.2	—	22.9	32.7
2050 cfm	EA (wb)	58	TC	65.1	65.1	73.8	61.8	61.8	70.3	58.2	58.2	66.3	54.4	54.4	62.2	50.3	50.3	57.6
			SHC	56.4	65.1	73.8	53.4	61.8	70.3	50.1	58.2	66.3	46.7	54.4	62.2	43.0	50.3	57.6
		62	TC	65.9	65.9	75.2	62.0	62.0	72.9	57.9	57.9	69.0	54.5	54.5	64.8	50.4	50.4	60.2
			SHC	52.8	64.0	75.2	50.5	61.7	72.9	46.8	57.9	69.0	44.2	54.5	64.8	40.6	50.4	60.2
		67	TC	73.0	73.0	73.0	68.7	68.7	68.7	64.2	64.2	64.2	59.3	59.3	59.3	54.2	54.2	54.8
			SHC	42.2	53.4	64.7	39.9	51.1	62.3	37.4	48.7	59.9	34.9	46.2	57.4	32.4	43.6	54.8
		72	TC	80.8	80.8	80.8	76.2	76.2	76.2	71.3	71.3	71.3	66.1	66.1	66.1	60.5	60.5	60.5
			SHC	31.4	42.6	53.8	29.1	40.3	51.5	26.7	37.9	49.1	24.2	35.4	46.6	21.6	32.8	44.0
		76	TC	—	87.6	87.6	—	82.7	82.7	—	77.7	77.7	—	72.1	72.1	—	66.1	66.1
			SHC	—	33.9	45.1	—	31.6	42.8	—	29.2	40.5	—	26.7	37.9	—	24.1	35.3
2300 cfm	EA (wb)	58	TC	68.1	68.1	77.2	64.5	64.5	73.3	60.9	60.9	69.3	56.7	56.7	64.7	52.5	52.5	60.0
			SHC	59.0	68.1	77.2	55.8	64.5	73.3	52.5	60.9	69.3	48.7	56.7	64.7	44.9	52.5	60.0
		62	TC	68.2	68.2	80.3	63.2	63.2	75.8	60.9	60.9	72.1	56.9	56.9	67.6	52.6	52.6	62.7
			SHC	56.0	68.2	80.3	50.5	63.2	75.8	49.7	60.9	72.1	46.2	56.9	67.6	42.5	52.6	62.7
		67	TC	74.6	74.6	74.6	70.2	70.2	70.2	65.5	65.5	65.5	60.5	60.5	62.6	55.1	55.1	59.9
			SHC	44.7	57.3	69.9	42.3	54.9	67.5	39.9	52.5	65.1	37.4	50.0	62.6	34.7	47.3	59.9
		72	TC	82.4	82.4	82.4	77.7	77.7	77.7	72.6	72.6	72.6	67.3	67.3	67.3	61.5	61.5	61.5
			SHC	32.4	45.1	57.7	30.1	42.7	55.3	27.7	40.4	53.0	25.1	37.8	50.4	22.5	35.1	47.7
		76	TC	—	89.3	89.3	—	84.3	84.3	—	79.1	79.1	—	73.4	73.4	—	67.4	67.4
			SHC	—	35.2	47.8	—	32.8	45.5	—	30.5	43.1	—	27.9	40.6	—	25.3	38.0
2550 cfm	EA (wb)	58	TC	70.7	70.7	80.1	66.9	66.9	76.0	63.1	63.1	71.7	58.9	58.9	67.2	54.4	54.4	62.2
			SHC	61.3	70.7	80.1	57.9	66.9	76.0	54.4	63.1	71.7	50.7	58.9	67.2	46.6	54.4	62.2
		62	TC	70.8	70.8	83.4	67.1	67.1	79.2	63.2	63.2	74.8	59.0	59.0	70.0	54.4	54.4	64.8
			SHC	58.3	70.8	83.4	55.0	67.1	79.2	51.6	63.2	74.8	48.0	59.0	70.0	44.0	54.4	64.8
		67	TC	75.8	75.8	75.8	71.3	71.3	72.7	66.5	66.5	70.3	61.4	61.4	67.7	55.9	55.9	65.0
			SHC	47.1	61.1	75.1	44.7	58.7	72.7	42.3	56.3	70.3	39.7	53.7	67.7	37.1	51.1	65.0
		72	TC	83.8	83.8	83.8	78.9	78.9	78.9	73.7	73.7	73.7	68.2	68.2	68.2	62.3	62.3	62.3
			SHC	33.4	47.4	61.4	31.0	45.1	59.1	28.6	42.6	56.6	26.0	40.1	54.1	23.4	37.4	51.4
		76	TC	—	90.7	90.7	—	85.8	85.8	—	80.3	80.3	—	—	—	—	—	—
			SHC	—	36.4	50.4	—	34.1	48.1	—	31.6	45.7	—	—	—	—	—	—

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T09 One Stage Cooling Capacities

48/50GE*T09				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
1025 cfm	EA (wb)	58	TC	36.9	36.9	42.2	34.7	34.7	39.7	32.3	32.3	37.1	29.7	29.7	34.4	27.1	27.1	31.5
			SHC	31.7	36.9	42.2	29.6	34.7	39.7	27.4	32.3	37.1	25.1	29.7	34.4	22.6	27.1	31.5
		62	TC	39.7	39.7	39.7	37.0	37.0	37.9	34.0	34.0	36.0	30.9	30.9	34.1	27.6	27.6	32.1
			SHC	28.4	34.0	39.6	26.6	32.2	37.9	24.8	30.4	36.0	22.8	28.4	34.1	20.8	26.4	32.1
		67	TC	44.6	44.6	44.6	41.7	41.7	41.7	38.7	38.7	38.7	35.4	35.4	35.4	31.9	31.9	31.9
			SHC	23.5	29.1	34.7	21.7	27.3	32.9	19.9	25.5	31.1	18.0	23.6	29.2	16.0	21.6	27.2
		72	TC	49.9	49.9	49.9	46.9	46.9	46.9	43.7	43.7	43.7	40.3	40.3	40.3	36.5	36.5	36.5
			SHC	18.5	24.1	29.7	16.7	22.3	27.9	14.9	20.5	26.1	13.0	18.6	24.2	11.0	16.6	22.2
		76	TC	—	54.6	54.6	—	51.4	51.4	—	48.0	48.0	—	44.4	44.4	—	40.6	40.6
			SHC	—	20.0	25.6	—	18.3	23.9	—	16.4	22.0	—	14.6	20.2	—	12.6	18.2
1200 cfm	EA (wb)	58	TC	39.8	39.8	45.4	37.4	37.4	42.8	34.9	34.9	40.0	32.2	32.2	37.1	29.3	29.3	34.0
			SHC	34.3	39.8	45.4	32.1	37.4	42.8	29.7	34.9	40.0	27.2	32.2	37.1	24.6	29.3	34.0
		62	TC	41.4	41.4	44.4	38.6	38.6	42.6	35.5	35.5	40.7	32.3	32.3	38.7	29.4	29.4	35.6
			SHC	31.3	37.8	44.4	29.5	36.0	42.6	27.6	34.1	40.7	25.6	32.2	38.7	23.1	29.4	35.6
		67	TC	46.4	46.4	46.4	43.4	43.4	43.4	40.2	40.2	40.2	36.8	36.8	36.8	33.2	33.2	33.2
			SHC	25.4	32.0	38.5	23.6	30.1	36.7	21.7	28.3	34.8	19.8	26.3	32.9	17.8	24.3	30.9
		72	TC	51.8	51.8	51.8	48.8	48.8	48.8	45.4	45.4	45.4	41.8	41.8	41.8	37.9	37.9	37.9
			SHC	19.4	26.0	32.5	17.7	24.2	30.8	15.8	22.3	28.9	13.9	20.4	27.0	11.8	18.4	24.9
		76	TC	—	56.5	56.5	—	53.3	53.3	—	49.8	49.8	—	46.0	46.0	—	41.9	41.9
			SHC	—	21.1	27.7	—	19.4	25.9	—	17.5	24.1	—	15.6	22.2	—	13.6	20.2
1350 cfm	EA (wb)	58	TC	42.3	42.3	48.1	39.7	39.7	45.3	37.0	37.0	42.4	34.2	34.2	39.4	31.2	31.2	36.1
			SHC	36.4	42.3	48.1	34.1	39.7	45.3	31.6	37.0	42.4	29.1	34.2	39.4	26.3	31.2	36.1
		62	TC	42.8	42.8	49.0	39.8	39.8	47.2	37.1	37.1	44.3	34.3	34.3	41.1	31.3	31.3	37.8
			SHC	34.1	41.5	49.0	32.2	39.7	47.2	29.9	37.1	44.3	27.4	34.3	41.1	24.7	31.3	37.8
		67	TC	47.8	47.8	47.8	44.7	44.7	44.7	41.5	41.5	41.5	37.9	37.9	37.9	34.2	34.2	34.4
			SHC	27.2	34.7	42.2	25.4	32.9	40.3	23.5	30.9	38.4	21.5	29.0	36.5	19.5	27.0	34.4
		72	TC	53.4	53.4	53.4	50.1	50.1	50.1	46.6	46.6	46.6	42.9	42.9	42.9	38.9	38.9	38.9
			SHC	20.3	27.8	35.3	18.5	26.0	33.5	16.6	24.1	31.6	14.7	22.1	29.6	12.6	20.1	27.6
		76	TC	—	58.1	58.1	—	54.8	54.8	—	51.1	51.1	—	47.2	47.2	—	43.0	43.0
			SHC	—	22.2	29.7	—	20.4	27.9	—	18.5	26.0	—	16.6	24.1	—	14.6	22.0
1525 cfm	EA (wb)	58	TC	44.3	44.3	50.4	41.7	41.7	47.5	38.9	38.9	44.5	35.9	35.9	41.3	32.8	32.8	37.9
			SHC	38.3	44.3	50.4	35.8	41.7	47.5	33.3	38.9	44.5	30.6	35.9	41.3	27.8	32.8	37.9
		62	TC	44.4	44.4	52.5	41.7	41.7	49.5	39.0	39.0	46.5	36.0	36.0	43.2	32.9	32.9	39.7
			SHC	36.3	44.4	52.5	33.9	41.7	49.5	31.5	39.0	46.5	28.9	36.0	43.2	26.1	32.9	39.7
		67	TC	48.9	48.9	48.9	45.7	45.7	45.7	42.3	42.3	42.3	38.8	38.8	40.0	34.8	34.8	37.9
			SHC	29.0	37.4	45.8	27.1	35.5	43.9	25.2	33.6	42.0	23.2	31.6	40.0	21.1	29.5	37.9
		72	TC	54.5	54.5	54.5	51.2	51.2	51.2	47.6	47.6	47.6	43.8	43.8	43.8	39.6	39.6	39.6
			SHC	21.1	29.5	37.9	19.3	27.7	36.1	17.3	25.8	34.2	15.4	23.8	32.2	13.3	21.7	30.1
		76	TC	—	59.4	59.4	—	56.0	56.0	—	52.2	52.2	—	48.2	48.2	—	—	—
			SHC	—	23.2	31.6	—	21.4	29.8	—	19.5	27.9	—	17.5	25.9	—	—	—
1700 cfm	EA (wb)	58	TC	46.2	46.2	52.4	43.4	43.4	49.4	40.5	40.5	46.3	37.4	37.4	43.0	34.2	34.2	39.4
			SHC	39.9	46.2	52.4	37.3	43.4	49.4	34.7	40.5	46.3	31.9	37.4	43.0	29.0	34.2	39.4
		62	TC	46.2	46.2	54.5	43.4	43.4	51.5	40.6	40.6	48.3	37.6	37.6	44.9	34.3	34.3	41.3
			SHC	37.8	46.2	54.5	35.4	43.4	51.5	32.8	40.6	48.3	30.2	37.6	44.9	27.3	34.3	41.3
		67	TC	49.8	49.8	49.8	46.5	46.5	47.4	43.1	43.1	45.5	39.4	39.4	43.5	35.5	35.5	41.4
			SHC	30.6	40.0	49.3	28.7	38.1	47.4	26.8	36.2	45.5	24.8	34.2	43.5	22.7	32.1	41.4
		72	TC	55.4	55.4	55.4	52.1	52.1	52.1	48.4	48.4	48.4	44.5	44.5	44.5	40.3	40.3	40.3
			SHC	21.8	31.1	40.5	20.0	29.3	38.7	18.0	27.4	36.7	16.0	25.4	34.7	14.0	23.3	32.7
		76	TC	—	60.6	60.6	—	57.0	57.0	—	—	—	—	—	—	—	—	—
			SHC	—	24.1	33.5	—	22.3	31.6	—	—	—	—	—	—	—	—	—

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*U09 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF (80°F db)								
		2550/0.06			3400/0.07			4250/0.09		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	126.7	114.3	106.4	128.8	124.8	112.8	137.0	129.9	119.2
	SHC	62.7	75.6	90.8	65.2	92.4	108.9	77.2	103.5	119.9
	kW	5.4	5.3	5.2	5.4	5.4	5.3	5.4	5.4	5.3
85	TC	110.3	104.5	100.4	128.3	114.9	108.2	131.4	121.1	116.1
	SHC	46.6	66.6	85.7	64.7	83.3	103.4	71.1	97.7	117.6
	kW	5.9	5.9	5.9	6.2	6.1	6.0	6.3	6.2	6.0
95	TC	109.9	101.4	97.8	114.0	110.2	107.1	122.6	114.2	115.2
	SHC	48.1	63.0	83.8	51.7	78.5	103.2	63.8	90.3	117.5
	kW	6.9	6.7	5.9	6.9	6.8	5.9	7.0	6.9	6.0
105	TC	102.1	93.8	85.1	110.7	100.9	92.5	116.1	106.7	95.0
	SHC	39.8	57.0	70.9	50.8	68.6	90.4	57.4	84.5	90.6
	kW	7.7	7.6	7.4	7.9	7.7	7.6	7.9	7.7	7.5
115	TC	94.2	84.8	76.6	101.6	93.1	82.9	108.4	95.6	91.3
	SHC	35.0	49.8	64.4	41.8	63.2	80.3	50.6	73.4	95.1
	kW	8.7	8.5	8.4	8.8	8.6	8.4	8.8	8.6	8.6
125	TC	84.1	76.1	68.2	93.0	82.6	75.3	93.5	86.6	81.9
	SHC	25.4	41.7	58.0	34.6	53.2	72.9	37.8	65.2	83.7
	kW	9.7	9.6	9.3	9.9	9.6	9.5	9.7	9.6	9.6

48/50GE*U09 — 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								
		2550	3400	4250	2550	3400	4250	2550	3400	4250
80	TC	32.4	37.1	41.7	33.9	38.8	43.2	35.2	40.0	44.5
	SHC	2.8	12.1	22.6	−3.1	5.8	14.6	−8.9	−0.4	7.5
	kW	5.6	5.7	5.7	5.7	5.8	5.8	5.7	5.8	5.8
75	TC	34.8	39.7	44.3	36.5	41.3	46.1	37.7	42.6	47.4
	SHC	5.1	14.7	25.3	−0.1	8.3	17.5	−5.3	2.4	10.3
	kW	5.3	5.4	5.4	5.4	5.4	5.5	5.4	5.5	5.5
70	TC	37.5	42.3	47.0	38.9	43.9	48.6	40.2	45.1	50.0
	SHC	7.9	17.3	28.2	2.5	10.9	20.2	−2.8	5.2	13.2
	kW	5.1	5.1	5.1	5.1	5.1	5.2	5.1	5.2	5.2
60	TC	41.8	47.1	51.9	43.4	48.6	53.3	44.8	49.8	54.9
	SHC	12.6	22.4	33.3	7.5	15.8	25.0	2.9	10.2	18.3
	kW	4.8	4.9	4.9	4.9	4.9	5.0	4.9	5.0	5.0
50	TC	46.9	51.9	56.7	48.6	53.6	58.6	49.8	54.9	59.9
	SHC	18.5	28.0	39.1	13.8	22.0	31.3	9.3	16.5	24.5
	kW	4.3	4.4	4.4	4.4	4.4	4.5	4.4	4.5	4.5
40	TC	52.4	57.3	62.0	54.2	59.1	63.6	55.7	60.4	65.1
	SHC	26.6	36.1	47.1	22.1	30.5	39.9	18.0	25.2	33.5
	kW	4.0	4.0	4.1	4.0	4.1	4.1	4.1	4.1	4.1

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

48/50GE*T12 Three Stage Cooling Capacities

48/50GE*T12				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
3000 cfm	EA (wb)	58	TC	111.5	111.5	126.0	106.8	106.8	120.8	101.7	101.7	115.0	96.0	96.0	108.7	89.8	89.8	101.8
			SHC	96.9	111.5	126.0	92.7	106.8	120.8	88.3	101.7	115.0	83.3	96.0	108.7	77.7	89.8	101.8
		62	TC	117.2	117.2	119.0	111.3	111.3	116.0	105.0	105.0	112.4	98.1	98.1	109.0	91.4	91.4	100.8
			SHC	87.3	103.1	119.0	84.3	100.2	116.0	80.7	96.6	112.4	77.3	93.2	109.0	71.1	85.9	100.8
		67	TC	128.3	128.3	128.3	121.9	121.9	121.9	114.9	114.9	114.9	107.4	107.4	107.4	99.0	99.0	99.0
			SHC	71.2	87.2	103.3	68.1	84.1	100.1	64.4	80.4	96.4	61.3	77.3	93.3	57.3	73.3	89.3
		72	TC	140.6	140.6	140.6	133.6	133.6	133.6	126.0	126.0	126.0	117.7	117.7	117.7	108.8	108.8	108.8
			SHC	54.1	70.3	86.4	52.0	68.1	84.3	48.1	64.3	80.4	45.2	61.2	77.2	40.5	56.6	72.6
		76	TC	—	151.1	151.1	—	143.6	143.6	—	135.5	135.5	—	126.6	126.6	—	117.1	117.1
			SHC	—	57.4	73.9	—	54.6	71.1	—	51.5	68.0	—	48.1	64.5	—	43.3	59.7
3500 cfm	EA (wb)	58	TC	117.7	117.7	132.9	112.6	112.6	127.2	107.1	107.1	121.1	101.0	101.0	114.4	94.2	94.2	106.7
			SHC	102.5	117.7	132.9	98.0	112.6	127.2	93.0	107.1	121.1	87.5	101.0	114.4	81.7	94.2	106.7
		62	TC	120.9	120.9	130.8	114.8	114.8	127.3	108.2	108.2	123.1	102.6	102.6	112.8	94.3	94.3	111.1
			SHC	94.2	112.5	130.8	90.8	109.1	127.3	86.9	105.0	123.1	80.1	96.4	112.8	77.6	94.3	111.1
		67	TC	131.9	131.9	131.9	125.1	125.1	125.1	117.8	117.8	117.8	109.9	109.9	109.9	101.2	101.2	101.2
			SHC	75.1	93.6	112.1	71.6	90.1	108.6	68.7	87.2	105.7	65.0	83.5	102.0	61.5	80.0	98.5
		72	TC	144.4	144.4	144.4	137.0	137.0	137.0	129.0	129.0	129.0	120.4	120.4	120.4	111.0	111.0	111.0
			SHC	56.4	75.1	93.7	52.6	71.2	89.9	49.7	68.4	87.1	46.5	65.0	83.5	42.6	61.1	79.6
		76	TC	—	155.0	155.0	—	147.1	147.1	—	138.7	138.7	—	129.3	129.3	—	119.5	119.5
			SHC	—	58.9	78.0	—	55.9	74.8	—	52.7	71.6	—	49.1	68.0	—	45.4	64.1
4000 cfm	EA (wb)	58	TC	122.8	122.8	138.7	117.4	117.4	132.5	111.5	111.5	126.0	105.0	105.0	118.9	97.9	97.9	110.9
			SHC	107.0	122.8	138.7	102.2	117.4	132.5	97.0	111.5	126.0	91.2	105.0	118.9	84.9	97.9	110.9
		62	TC	124.1	124.1	140.8	118.6	118.6	134.4	111.6	111.6	131.2	105.1	105.1	123.6	98.0	98.0	115.3
			SHC	99.9	120.3	140.8	95.7	115.1	134.4	92.0	111.6	131.2	86.7	105.1	123.6	80.6	98.0	115.3
		67	TC	134.6	134.6	134.6	127.6	127.6	127.6	120.0	120.0	120.0	111.8	111.8	111.8	102.9	102.9	107.3
			SHC	80.0	100.9	121.8	76.1	97.0	117.9	72.7	93.6	114.5	69.7	90.6	111.5	65.5	86.4	107.3
		72	TC	147.3	147.3	147.3	139.6	139.6	139.6	131.3	131.3	131.3	122.4	122.4	122.4	112.7	112.7	112.7
			SHC	56.9	78.1	99.2	54.3	75.4	96.5	51.1	72.2	93.4	47.4	68.5	89.6	43.4	64.3	85.2
		76	TC	—	158.0	158.0	—	149.9	149.9	—	141.1	141.1	—	131.5	131.5	—	121.3	121.3
			SHC	—	61.6	83.0	—	58.4	79.8	—	55.0	76.4	—	51.3	72.6	—	47.3	68.4
4500 cfm	EA (wb)	58	TC	127.0	127.0	143.4	121.3	121.3	137.2	115.2	115.2	130.3	108.4	108.4	122.7	100.9	100.9	114.3
			SHC	110.7	127.0	143.4	105.5	121.3	137.2	100.1	115.2	130.3	94.0	108.4	122.7	87.5	100.9	114.3
		62	TC	127.2	127.2	149.2	121.5	121.5	142.5	115.3	115.3	135.3	108.5	108.5	127.5	101.0	101.0	118.8
			SHC	105.1	127.2	149.2	100.4	121.5	142.5	95.2	115.3	135.3	89.4	108.5	127.5	83.2	101.0	118.8
		67	TC	136.7	136.7	136.7	129.6	129.6	129.6	121.8	121.8	123.1	113.3	113.3	119.6	104.2	104.2	115.8
			SHC	83.4	106.6	129.9	80.4	103.6	126.9	76.6	99.8	123.1	73.1	96.3	119.6	69.8	92.8	115.8
		72	TC	149.6	149.6	149.6	141.7	141.7	141.7	133.2	133.2	133.2	123.9	123.9	123.9	114.1	114.1	114.1
			SHC	58.7	82.3	105.8	55.8	79.3	102.8	52.4	75.9	99.4	48.4	71.9	95.4	44.9	68.5	92.0
		76	TC	—	160.4	160.4	—	152.0	152.0	—	143.0	143.0	—	133.2	133.2	—	122.8	122.8
			SHC	—	62.6	86.3	—	59.3	83.0	—	55.8	79.5	—	51.9	75.4	—	47.9	71.4
5000 cfm	EA (wb)	58	TC	130.7	130.7	147.4	124.7	124.7	141.0	118.3	118.3	133.7	111.2	111.2	125.8	103.4	103.4	117.1
			SHC	113.9	130.7	147.4	108.5	124.7	141.0	102.9	118.3	133.7	96.6	111.2	125.8	89.6	103.4	117.1
		62	TC	130.8	130.8	153.3	124.8	124.8	146.6	118.4	118.4	139.0	111.3	111.3	130.8	103.4	103.4	121.9
			SHC	108.2	130.8	153.3	103.1	124.8	146.6	97.8	118.4	139.0	91.8	111.3	130.8	85.0	103.4	121.9
		67	TC	138.6	138.6	139.2	131.2	131.2	135.8	123.2	123.2	131.5	114.7	114.7	127.6	105.4	105.4	123.4
			SHC	88.1	113.7	139.2	84.6	110.2	135.8	80.4	106.0	131.5	76.5	102.0	127.6	72.8	98.1	123.4
		72	TC	151.4	151.4	151.4	143.3	143.3	143.3	134.6	134.6	134.6	125.2	125.2	125.2	115.2	115.2	115.2
			SHC	60.4	86.3	112.1	57.3	83.1	109.0	53.6	79.4	105.3	49.3	75.1	101.0	45.5	71.4	97.2
		76	TC	—	162.3	162.3	—	153.7	153.7	—	144.5	144.5	—	134.5	134.5	—	123.9	123.9
			SHC	—	63.3	89.4	—	59.9	86.1	—	57.8	83.9	—	53.8	79.6	—	49.6	75.4

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T12 Two Stage Cooling Capacities

48/50GE*T12				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
1800 cfm	EA (wb)	58	TC	66.1	66.1	75.0	62.7	62.7	71.3	59.1	59.1	67.4	55.2	55.2	63.2	51.0	51.0	58.5
			SHC	57.2	66.1	75.0	54.1	62.7	71.3	50.8	59.1	67.4	47.3	55.2	63.2	43.6	51.0	58.5
		62	TC	70.0	70.0	70.6	65.8	65.8	68.3	61.4	61.4	65.6	56.7	56.7	63.0	51.6	51.6	59.7
			SHC	51.2	60.9	70.6	48.9	58.6	68.3	46.2	55.9	65.6	43.6	53.3	63.0	40.5	50.1	59.7
		67	TC	77.4	77.4	77.4	73.0	73.0	73.0	68.2	68.2	68.2	63.1	63.1	63.1	57.5	57.5	57.5
			SHC	42.2	51.9	61.6	39.2	48.9	58.6	36.7	46.4	56.1	34.5	44.2	53.9	31.7	41.4	51.1
		72	TC	85.7	85.7	85.7	80.8	80.8	80.8	75.6	75.6	75.6	70.1	70.1	70.1	63.4	63.4	63.4
			SHC	32.3	42.0	51.7	29.9	39.6	49.3	27.4	37.1	46.8	24.6	34.3	44.0	22.0	31.7	41.4
		76	TC	—	92.7	92.7	—	87.5	87.5	—	82.0	82.0	—	75.8	75.8	—	69.6	69.6
			SHC	—	34.3	43.8	—	32.4	41.9	—	29.5	39.1	—	26.5	36.1	—	24.4	34.0
2100 cfm	EA (wb)	58	TC	70.4	70.4	79.8	66.7	66.7	75.9	62.9	62.9	71.5	58.7	58.7	67.0	54.2	54.2	62.0
			SHC	60.9	70.4	79.8	57.6	66.7	75.9	54.2	62.9	71.5	50.4	58.7	67.0	46.3	54.2	62.0
		62	TC	72.6	72.6	78.0	68.2	68.2	76.0	63.6	63.6	72.9	59.3	59.3	68.2	54.2	54.2	64.8
			SHC	55.5	66.8	78.0	53.6	64.8	76.0	50.5	61.7	72.9	46.9	57.5	68.2	43.7	54.2	64.8
		67	TC	80.1	80.1	80.1	75.3	75.3	75.3	70.3	70.3	70.3	64.9	64.9	64.9	58.7	58.7	58.7
			SHC	44.7	56.0	67.4	42.2	53.5	64.8	40.0	51.3	62.6	37.4	48.7	60.0	33.9	45.2	56.6
		72	TC	88.3	88.3	88.3	83.2	83.2	83.2	77.7	77.7	77.7	71.9	71.9	71.9	65.6	65.6	65.6
			SHC	33.7	45.0	56.4	31.1	42.4	53.7	29.1	40.4	51.7	26.1	37.4	48.7	22.8	34.1	45.4
		76	TC	—	95.4	95.4	—	89.9	89.9	—	84.1	84.1	—	77.9	77.9	—	71.2	71.2
			SHC	—	36.2	47.3	—	33.3	44.3	—	31.1	42.2	—	28.0	39.1	—	25.6	36.8
2400 cfm	EA (wb)	58	TC	73.9	73.9	83.8	70.0	70.0	79.6	65.9	65.9	75.1	61.5	61.5	70.1	56.7	56.7	64.9
			SHC	64.0	73.9	83.8	60.5	70.0	79.6	56.8	65.9	75.1	53.0	61.5	70.1	48.6	56.7	64.9
		62	TC	74.7	74.7	85.9	71.6	71.6	77.9	66.0	66.0	78.2	61.6	61.6	73.0	56.8	56.8	67.6
			SHC	60.5	73.2	85.9	55.2	66.6	77.9	53.9	66.0	78.2	50.1	61.6	73.0	46.0	56.8	67.6
		67	TC	82.0	82.0	82.0	77.1	77.1	77.1	71.9	71.9	71.9	66.3	66.3	66.3	60.2	60.2	62.2
			SHC	47.9	60.7	73.5	45.0	57.8	70.6	42.5	55.3	68.1	39.6	52.4	65.2	36.6	49.4	62.2
		72	TC	90.3	90.3	90.3	84.9	84.9	84.9	79.3	79.3	79.3	73.2	73.2	73.2	66.3	66.3	66.3
			SHC	35.0	47.8	60.6	32.2	45.0	57.8	30.0	42.8	55.6	26.7	39.5	52.3	24.4	37.2	50.0
		76	TC	—	97.3	97.3	—	91.7	91.7	—	85.6	85.6	—	79.2	79.2	—	71.7	71.7
			SHC	—	38.0	50.6	—	34.8	47.5	—	32.5	45.2	—	29.3	42.0	—	26.5	39.2
2700 cfm	EA (wb)	58	TC	76.9	76.9	87.1	72.9	72.9	82.7	68.5	68.5	77.9	63.7	63.7	72.6	58.8	58.8	67.1
			SHC	66.6	76.9	87.1	63.1	72.9	82.7	59.2	68.5	77.9	54.8	63.7	72.6	50.5	58.8	67.1
		62	TC	77.0	77.0	90.7	73.0	73.0	86.0	68.6	68.6	81.1	63.8	63.8	75.7	59.0	59.0	70.1
			SHC	63.3	77.0	90.7	59.9	73.0	86.0	56.2	68.6	81.1	51.9	63.8	75.7	47.8	59.0	70.1
		67	TC	83.6	83.6	83.6	78.5	78.5	78.5	73.1	73.1	73.6	67.4	67.4	70.9	60.9	60.9	67.8
			SHC	50.8	65.2	79.6	47.6	62.0	76.4	44.8	59.2	73.6	42.4	56.6	70.9	39.3	53.6	67.8
		72	TC	91.8	91.8	91.8	86.3	86.3	86.3	80.5	80.5	80.5	74.1	74.1	74.1	67.1	67.1	67.1
			SHC	36.1	50.5	64.9	33.9	48.3	62.7	30.7	45.1	59.5	27.9	42.3	56.7	24.5	38.9	53.3
		76	TC	—	98.9	98.9	—	93.0	93.0	—	86.9	86.9	—	80.3	80.3	—	72.5	72.5
			SHC	—	38.6	52.7	—	36.3	50.5	—	33.9	48.1	—	30.5	44.8	—	27.5	41.8
3000 cfm	EA (wb)	58	TC	79.4	79.4	90.0	75.3	75.3	85.3	70.8	70.8	80.4	66.0	66.0	75.0	60.7	60.7	69.3
			SHC	68.9	79.4	90.0	65.2	75.3	85.3	61.2	70.8	80.4	56.9	66.0	75.0	52.2	60.7	69.3
		62	TC	79.6	79.6	93.6	75.4	75.4	88.9	70.9	70.9	83.7	65.6	65.6	77.8	60.8	60.8	72.2
			SHC	65.6	79.6	93.6	61.8	75.4	88.9	58.0	70.9	83.7	53.4	65.6	77.8	49.4	60.8	72.2
		67	TC	84.8	84.8	84.8	79.6	79.6	81.9	74.1	74.1	79.6	68.3	68.3	76.6	62.0	62.0	73.4
			SHC	52.8	68.7	84.5	50.2	66.1	81.9	47.9	63.7	79.6	45.0	60.8	76.6	42.0	57.7	73.4
		72	TC	93.0	93.0	93.0	87.4	87.4	87.4	81.5	81.5	81.5	75.2	75.2	75.2	68.4	68.4	68.4
			SHC	37.2	53.0	68.9	34.9	50.7	66.5	31.4	47.3	63.1	29.3	45.1	60.9	25.9	41.7	57.6
		76	TC	—	100.1	100.1	—	94.1	94.1	—	87.8	87.8	—	81.2	81.2	—	74.0	74.0
			SHC	—	40.0	55.7	—	37.6	53.3	—	34.3	49.9	—	31.7	47.3	—	28.9	44.5

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T12 One Stage Cooling Capacities

48/50GE*T12				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	36.1	36.1	42.2	31.8	31.8	37.7	27.3	27.3	33.0	22.6	22.6	28.1	17.8	17.8	23.0
			SHC	29.9	36.1	42.2	25.8	31.8	37.7	21.6	27.3	33.0	17.2	22.6	28.1	12.6	17.8	23.0
		62	TC	40.0	40.0	40.0	35.0	35.0	35.6	29.8	29.8	31.7	24.4	24.4	27.7	18.4	18.4	23.5
			SHC	26.4	32.9	39.5	22.6	29.1	35.6	18.7	25.2	31.7	14.7	21.2	27.7	10.5	17.0	23.5
		67	TC	46.6	46.6	46.6	41.4	41.4	41.4	36.0	36.0	36.0	30.2	30.2	30.2	24.2	24.2	24.2
			SHC	21.5	28.1	34.6	17.7	24.2	30.8	13.8	20.3	26.9	9.8	16.3	22.9	5.7	12.2	18.8
		72	TC	53.6	53.6	53.6	48.2	48.2	48.2	42.4	42.4	42.4	36.5	36.5	36.5	30.3	30.3	30.3
			SHC	16.5	23.1	29.6	12.7	19.3	25.8	8.8	15.3	21.8	4.8	11.4	17.9	0.7	7.3	13.8
		76	TC	—	59.6	59.6	—	54.0	54.0	—	47.9	47.9	—	41.9	41.9	—	35.4	35.4
			SHC	—	19.0	25.4	—	15.2	21.6	—	11.2	17.7	—	7.3	13.8	—	3.2	9.7
1400 cfm	EA (wb)	58	TC	39.8	39.8	46.3	35.2	35.2	41.5	30.4	30.4	36.4	25.6	25.6	31.4	20.5	20.5	25.9
			SHC	33.2	39.8	46.3	28.9	35.2	41.5	24.4	30.4	36.4	19.8	25.6	31.4	15.0	20.5	25.9
		62	TC	42.2	42.2	45.1	37.0	37.0	41.1	31.6	31.6	37.0	26.0	26.0	32.9	20.5	20.5	27.8
			SHC	29.9	37.5	45.1	25.9	33.5	41.1	21.9	29.5	37.0	17.8	25.3	32.9	13.3	20.5	27.8
		67	TC	48.9	48.9	48.9	43.4	43.4	43.4	37.7	37.7	37.7	31.8	31.8	31.8	25.5	25.5	25.5
			SHC	24.0	31.6	39.2	20.0	27.6	35.2	16.0	23.6	31.2	11.9	19.5	27.0	7.7	15.3	22.8
		72	TC	55.9	55.9	55.9	50.3	50.3	50.3	44.2	44.2	44.2	38.1	38.1	38.1	31.5	31.5	31.5
			SHC	17.9	25.5	33.1	13.9	21.5	29.1	9.9	17.5	25.1	5.8	13.4	21.0	1.6	9.2	16.8
		76	TC	—	62.0	62.0	—	56.2	56.2	—	50.0	50.0	—	43.5	43.5	—	36.7	36.7
			SHC	—	20.5	28.0	—	16.6	24.1	—	12.6	20.1	—	8.5	16.0	—	4.3	11.8
1600 cfm	EA (wb)	58	TC	42.9	42.9	49.7	38.2	38.2	44.8	33.2	33.2	39.5	28.1	28.1	34.1	22.7	22.7	28.4
			SHC	36.0	42.9	49.7	31.6	38.2	44.8	26.9	33.2	39.5	22.1	28.1	34.1	17.1	22.7	28.4
		62	TC	44.0	44.0	50.4	38.7	38.7	46.3	33.3	33.3	41.8	28.2	28.2	36.2	22.8	22.8	30.4
			SHC	33.2	41.8	50.4	29.1	37.7	46.3	24.9	33.3	41.8	20.1	28.2	36.2	15.2	22.8	30.4
		67	TC	50.6	50.6	50.6	44.9	44.9	44.9	39.1	39.1	39.1	33.0	33.0	33.0	26.5	26.5	26.8
			SHC	26.2	34.8	43.5	22.1	30.8	39.4	18.0	26.7	35.3	13.8	22.5	31.1	9.5	18.2	26.8
		72	TC	57.7	57.7	57.7	51.9	51.9	51.9	45.8	45.8	45.8	39.3	39.3	39.3	32.6	32.6	32.6
			SHC	19.0	27.7	36.3	15.0	23.6	32.3	10.9	19.5	28.2	6.7	15.4	24.0	2.4	11.1	19.7
		76	TC	—	63.8	63.8	—	57.8	57.8	—	51.1	51.1	—	44.8	44.8	—	37.7	37.7
			SHC	—	21.8	30.4	—	17.8	26.4	—	13.6	22.2	—	9.6	18.1	—	5.3	13.9
1800 cfm	EA (wb)	58	TC	45.6	45.6	52.7	40.7	40.7	47.5	35.6	35.6	42.1	30.3	30.3	36.5	24.3	24.3	30.1
			SHC	38.5	45.6	52.7	33.8	40.7	47.5	29.0	35.6	42.1	24.0	30.3	36.5	18.5	24.3	30.1
		62	TC	45.7	45.7	55.2	40.8	40.8	49.9	35.7	35.7	44.4	30.3	30.3	38.6	24.7	24.7	32.6
			SHC	36.2	45.7	55.2	31.6	40.8	49.9	26.9	35.7	44.4	22.0	30.3	38.6	16.9	24.7	32.6
		67	TC	52.0	52.0	52.0	46.2	46.2	46.2	40.2	40.2	40.2	33.9	33.9	35.1	27.3	27.3	30.7
			SHC	28.3	38.0	47.7	24.2	33.9	43.6	20.0	29.7	39.4	15.7	25.4	35.1	11.4	21.1	30.7
		72	TC	59.2	59.2	59.2	53.2	53.2	53.2	46.6	46.6	46.6	40.3	40.3	40.3	33.3	33.3	33.3
			SHC	20.0	29.7	39.4	15.9	25.6	35.3	11.7	21.4	31.1	7.5	17.2	26.9	3.2	12.8	22.5
		76	TC	—	65.3	65.3	—	59.1	59.1	—	52.5	52.5	—	45.7	45.7	—	38.5	38.5
			SHC	—	23.0	32.6	—	18.9	28.5	—	14.8	24.4	—	10.5	20.1	—	6.2	15.8
2000 cfm	EA (wb)	58	TC	47.9	47.9	55.2	42.9	42.9	49.9	37.6	37.6	44.4	32.1	32.1	38.5	26.3	26.3	32.3
			SHC	40.6	47.9	55.2	35.8	42.9	49.9	30.9	37.6	44.4	25.7	32.1	38.5	20.3	26.3	32.3
		62	TC	48.0	48.0	57.8	43.0	43.0	52.4	37.7	37.7	46.7	32.2	32.2	40.7	26.4	26.4	34.4
			SHC	38.2	48.0	57.8	33.5	43.0	52.4	28.7	37.7	46.7	23.6	32.2	40.7	18.4	26.4	34.4
		67	TC	53.1	53.1	53.1	47.3	47.3	47.6	41.0	41.0	43.3	34.7	34.7	39.0	28.0	28.0	34.5
			SHC	30.3	41.0	51.7	26.1	36.8	47.6	21.9	32.6	43.3	17.6	28.3	39.0	13.2	23.8	34.5
		72	TC	60.3	60.3	60.3	54.2	54.2	54.2	47.5	47.5	47.5	41.1	41.1	41.1	33.4	33.4	33.4
			SHC	20.9	31.7	42.4	16.8	27.5	38.3	12.5	23.2	34.0	8.3	19.0	29.7	3.7	14.4	25.1
		76	TC	—	66.4	66.4	—	60.0	60.0	—	53.4	53.4	—	46.5	46.5	—	39.1	39.1
			SHC	—	24.1	34.7	—	19.9	30.6	—	15.7	26.4	—	11.4	22.1	—	7.0	17.7

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*U12 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF (80°F db)								
		3000/0.06			4000/0.08			5000/0.10		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	125.0	115.0	102.0	131.0	123.0	110.0	138.0	123.0	112.0
	SHC	48.0	66.0	80.0	54.0	80.0	98.0	65.0	88.0	111.0
	kW	7.0	6.9	6.7	7.2	7.0	6.7	7.3	7.0	6.8
85	TC	122.0	106.0	97.0	128.0	110.0	100.0	124.0	112.0	103.0
	SHC	46.0	57.0	74.0	51.0	68.0	90.0	52.0	78.0	95.0
	kW	7.9	7.6	7.6	8.0	7.7	7.5	8.0	7.8	7.6
95	TC	108.0	101.0	90.0	116.0	103.0	90.0	112.0	105.0	94.0
	SHC	33.0	54.0	69.0	41.0	62.0	81.0	41.0	72.0	87.0
	kW	8.7	8.7	8.5	8.9	8.7	8.5	8.9	8.8	8.5
105	TC	111.0	92.0	83.0	106.0	93.0	82.0	106.0	93.0	86.0
	SHC	35.0	46.0	63.0	33.0	53.0	73.0	35.0	62.0	61.0
	kW	8.8	9.8	9.6	10.0	9.7	9.5	10.0	9.8	9.6
115	TC	88.0	82.0	76.0	94.0	81.0	74.0	96.0	83.0	74.0
	SHC	15.0	36.0	57.0	22.0	42.0	65.0	27.0	53.0	74.0
	kW	10.9	10.9	10.9	11.1	10.9	10.8	11.2	11.0	10.8
125	TC	81.0	71.0	67.0	83.0	71.0	65.0	83.0	71.0	63.0
	SHC	9.0	27.0	49.0	12.0	34.0	57.0	16.0	41.0	57.0
	kW	12.3	12.2	12.1	12.4	12.2	12.1	12.5	12.2	12.0

48/50GE*U12 — 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								
		3000	4000	5000	3000	4000	5000	3000	4000	5000
80	TC	61.0	64.9	67.8	63.6	67.2	70.3	65.8	70.0	72.5
	SHC	19.1	27.2	34.7	13.7	19.9	26.1	8.8	14.1	18.6
	kW	7.5	7.6	7.7	7.5	7.6	7.7	7.6	7.7	7.8
75	TC	64.4	68.6	71.4	67.1	71.5	73.9	69.3	73.6	76.2
	SHC	22.4	30.7	38.2	17.0	23.9	29.6	12.2	17.6	22.1
	kW	7.0	7.1	7.2	7.1	7.2	7.3	7.2	7.3	7.4
70	TC	68.0	72.1	74.9	70.6	74.9	77.5	72.8	77.1	80.4
	SHC	25.9	34.1	41.6	20.4	27.3	33.1	15.6	21.1	26.2
	kW	6.6	6.7	6.8	6.7	6.8	6.9	6.8	6.9	6.9
60	TC	75.1	76.3	79.5	75.3	79.0	82.1	77.4	81.7	84.5
	SHC	32.6	38.2	46.1	24.9	31.2	37.5	20.0	25.5	30.1
	kW	6.7	6.8	6.9	6.7	6.8	7.0	6.8	6.9	7.0
50	TC	82.3	86.0	87.5	85.1	88.2	89.6	85.5	89.0	92.1
	SHC	39.8	47.6	53.8	34.4	40.2	44.9	28.0	32.8	37.7
	kW	6.0	6.1	6.1	6.1	6.2	6.2	6.1	6.2	6.3
40	TC	90.3	93.3	96.4	92.6	96.3	99.7	93.8	97.9	101.5
	SHC	47.6	55.0	62.7	41.9	48.4	54.8	36.3	41.8	47.1
	kW	5.3	5.5	5.5	5.4	5.6	5.6	5.5	5.6	5.7

LEGEND

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

48/50GE*T14 Three Stage Cooling Capacities

48/50GE*T14				AMBIENT TEMPERATURE (°F)														
				85			95			105			115			125		
				EA (db)			EA (db)			EA (db)			EA (db)			EA (db)		
				75	80	85	75	80	85	75	80	85	75	80	85	75	80	85
3750 cfm	EA (wb)	58	TC	136.6	136.6	155.3	129.4	129.4	147.5	121.7	121.7	139.1	113.6	113.6	130.2	104.9	104.9	120.7
			SHC	117.9	136.6	155.3	111.3	129.4	147.5	104.4	121.7	139.1	96.9	113.6	130.2	89.1	104.9	120.7
		62	TC	144.1	144.1	146.6	135.7	135.7	141.4	126.4	126.4	135.8	116.5	116.5	130.1	106.0	106.0	124.1
			SHC	105.5	126.1	146.6	100.3	120.8	141.4	94.7	115.3	135.8	88.9	109.5	130.1	83.0	103.5	124.1
		67	TC	158.5	158.5	158.5	150.6	150.6	150.6	141.7	141.7	141.7	131.3	131.3	131.3	120.0	120.0	120.0
			SHC	85.1	105.7	126.3	80.3	100.9	121.5	75.1	95.7	116.3	69.4	90.0	110.5	63.4	83.9	104.5
		72	TC	173.2	173.2	173.2	165.4	165.4	165.4	157.4	157.4	157.4	147.6	147.6	147.6	135.7	135.7	135.7
			SHC	64.2	84.8	105.5	59.6	80.3	100.9	55.0	75.6	96.2	49.7	70.3	90.9	43.8	64.4	85.0
		76	TC	—	186.1	186.1	—	178.3	178.3	—	170.5	170.5	—	161.4	161.4	—	149.3	149.3
			SHC	—	68.1	88.6	—	63.6	84.2	—	59.2	79.8	—	54.4	74.9	—	48.5	69.1
4400 cfm	EA (wb)	58	TC	146.0	146.0	165.7	138.7	138.7	157.8	130.6	130.6	149.0	121.8	121.8	139.4	112.6	112.6	129.3
			SHC	126.2	146.0	165.7	119.5	138.7	157.8	112.1	130.6	149.0	104.2	121.8	139.4	95.9	112.6	129.3
		62	TC	149.2	149.2	164.1	140.9	140.9	159.0	131.5	131.5	153.4	122.0	122.0	145.5	112.7	112.7	135.1
			SHC	115.9	140.0	164.1	110.8	134.9	159.0	105.3	129.3	153.4	98.5	122.0	145.5	90.4	112.7	135.1
		67	TC	163.1	163.1	163.1	155.1	155.1	155.1	146.5	146.5	146.5	135.8	135.8	135.8	124.1	124.1	124.1
			SHC	91.7	115.8	140.0	86.9	111.1	135.2	81.9	106.1	130.2	76.2	100.3	124.4	70.1	94.2	118.3
		72	TC	177.8	177.8	177.8	169.8	169.8	169.8	161.7	161.7	161.7	152.2	152.2	152.2	139.9	139.9	139.9
			SHC	67.1	91.3	115.5	62.5	86.7	110.9	57.9	82.1	106.3	52.9	77.0	101.2	46.8	71.0	95.2
		76	TC	—	190.7	190.7	—	182.2	182.2	—	175.0	175.0	—	165.9	165.9	—	153.6	153.6
			SHC	—	71.6	95.8	—	67.0	91.1	—	62.8	87.0	—	58.0	82.1	—	52.2	76.3
5000 cfm	EA (wb)	58	TC	153.0	153.0	173.5	145.6	145.6	165.6	137.3	137.3	156.5	128.2	128.2	146.6	118.5	118.5	135.9
			SHC	132.4	153.0	173.5	125.7	145.6	165.6	118.1	137.3	156.5	109.9	128.2	146.6	101.1	118.5	135.9
		62	TC	154.0	154.0	176.8	145.6	145.6	172.2	137.5	137.5	163.2	128.4	128.4	152.9	118.7	118.7	141.9
			SHC	123.8	150.3	176.8	118.9	145.6	172.2	111.9	137.5	163.2	103.9	128.4	152.9	95.4	118.7	141.9
		67	TC	166.2	166.2	166.2	158.2	158.2	158.2	149.6	149.6	149.6	139.0	139.0	139.0	126.9	126.9	130.8
			SHC	97.5	124.9	152.3	92.8	120.2	147.6	87.9	115.2	142.6	82.2	109.6	136.9	76.0	103.4	130.8
		72	TC	180.8	180.8	180.8	172.7	172.7	172.7	164.5	164.5	164.5	155.3	155.3	155.3	142.8	142.8	142.8
			SHC	69.6	97.0	124.5	65.0	92.5	119.9	60.4	87.9	115.3	55.5	82.9	110.3	49.4	76.9	104.3
		76	TC	—	194.0	194.0	—	185.2	185.2	—	177.4	177.4	—	168.9	168.9	—	156.5	156.5
			SHC	—	74.7	102.1	—	70.1	97.4	—	65.7	93.1	—	61.2	88.6	—	55.4	82.8
5650 cfm	EA (wb)	58	TC	158.7	158.7	179.9	151.5	151.5	172.1	143.5	143.5	163.4	134.1	134.1	153.1	124.0	124.0	142.0
			SHC	137.5	158.7	179.9	130.9	151.5	172.1	123.6	143.5	163.4	115.1	134.1	153.1	105.9	124.0	142.0
		62	TC	159.0	159.0	187.4	151.5	151.5	179.0	143.9	143.9	170.5	134.3	134.3	159.7	124.1	124.1	148.2
			SHC	130.7	159.0	187.4	124.0	151.5	179.0	117.2	143.9	170.5	108.9	134.3	159.7	100.0	124.1	148.2
		67	TC	168.8	168.8	168.8	160.7	160.7	160.7	152.2	152.2	155.8	141.7	141.7	150.2	129.4	129.4	144.0
			SHC	103.6	134.5	165.4	98.9	129.8	160.7	94.0	124.9	155.8	88.5	119.3	150.2	82.3	113.1	144.0
		72	TC	183.2	183.2	183.2	175.0	175.0	175.0	166.8	166.8	166.8	157.9	157.9	157.9	145.2	145.2	145.2
			SHC	72.1	103.1	134.1	67.5	98.5	129.5	62.9	93.9	124.9	58.1	89.1	120.1	52.1	83.1	114.0
		76	TC	—	196.2	196.2	—	187.6	187.6	—	179.9	179.9	—	171.4	171.4	—	158.9	158.9
			SHC	—	77.8	108.7	—	73.2	104.1	—	69.0	99.8	—	64.4	95.3	—	58.7	89.6
6250 cfm	EA (wb)	58	TC	163.3	163.3	185.0	156.0	156.0	177.1	148.4	148.4	168.9	138.8	138.8	158.4	128.3	128.3	146.8
			SHC	141.6	163.3	185.0	134.9	156.0	177.1	127.9	148.4	168.9	119.3	138.8	158.4	109.8	128.3	146.8
		62	TC	163.3	163.3	192.3	156.1	156.1	184.3	148.3	148.3	175.6	139.0	139.0	165.2	128.4	128.4	153.2
			SHC	134.3	163.3	192.3	127.9	156.1	184.3	121.0	148.3	175.6	112.9	139.0	165.2	103.7	128.4	153.2
		67	TC	170.7	170.7	177.3	162.5	162.5	172.6	154.1	154.1	167.8	143.7	143.7	162.3	131.3	131.3	156.0
			SHC	109.1	143.2	177.3	104.4	138.5	172.6	99.6	133.7	167.8	94.1	128.2	162.3	87.9	122.0	156.0
		72	TC	185.0	185.0	185.0	176.7	176.7	176.7	168.5	168.5	168.5	159.7	159.7	159.7	147.0	147.0	147.0
			SHC	74.4	108.6	142.8	69.7	104.0	138.2	65.2	99.4	133.6	60.5	94.7	128.9	54.5	88.7	122.9
		76	TC	—	197.9	197.9	—	189.4	189.4	—	181.6	181.6	—	173.3	173.3	—	160.7	160.7
			SHC	—	80.6	114.8	—	76.1	110.2	—	71.8	105.9	—	67.4	101.5	—	61.6	95.7

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 Btu/h) Gross
TC	Total Capacity (1000 Btu/h) Gross

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T14 Two Stage Cooling Capacities

48/50GE*T14				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
2250 cfm	EA (wb)	58	TC	79.3	79.3	90.7	74.1	74.1	85.1	68.7	68.7	79.3	63.0	63.0	73.2	57.0	57.0	66.8
			SHC	67.9	79.3	90.7	63.0	74.1	85.1	58.0	68.7	79.3	52.8	63.0	73.2	47.3	57.0	66.8
		62	TC	85.3	85.3	85.6	78.8	78.8	81.3	72.4	72.4	77.0	65.5	65.5	72.6	58.3	58.3	68.0
			SHC	60.8	73.2	85.6	56.5	68.9	81.3	52.2	64.6	77.0	47.8	60.2	72.6	43.3	55.6	68.0
		67	TC	94.5	94.5	94.5	89.7	89.7	89.7	82.7	82.7	82.7	75.3	75.3	75.3	67.7	67.7	67.7
			SHC	49.4	61.8	74.2	45.9	58.3	70.7	41.6	54.0	66.3	37.1	49.5	61.8	32.6	44.9	57.3
		72	TC	104.3	104.3	104.3	98.2	98.2	98.2	92.3	92.3	92.3	85.8	85.8	85.8	78.1	78.1	78.1
			SHC	37.8	50.1	62.5	33.9	46.3	58.6	30.1	42.5	54.9	26.1	38.5	50.9	21.7	34.1	46.5
		76	TC	—	113.0	113.0	—	106.7	106.7	—	100.6	100.6	—	94.4	94.4	—	87.0	87.0
			SHC	—	40.9	53.2	—	37.1	49.4	—	33.3	45.6	—	29.5	41.8	—	25.3	37.7
2625 cfm	EA (wb)	58	TC	85.4	85.4	97.5	80.0	80.0	91.7	74.3	74.3	85.6	68.3	68.3	79.1	62.0	62.0	72.2
			SHC	73.3	85.4	97.5	68.3	80.0	91.7	63.0	74.3	85.6	57.5	68.3	79.1	51.7	62.0	72.2
		62	TC	88.4	88.4	95.8	82.1	82.1	91.6	75.5	75.5	87.2	68.4	68.4	82.9	62.1	62.1	75.8
			SHC	66.9	81.3	95.8	62.7	77.2	91.6	58.4	72.8	87.2	54.0	68.4	82.9	48.3	62.1	75.8
		67	TC	97.7	97.7	97.7	91.6	91.6	91.6	85.3	85.3	85.3	78.3	78.3	78.3	70.4	70.4	70.4
			SHC	53.4	67.8	82.2	49.4	63.8	78.3	45.4	59.8	74.2	41.1	55.5	69.9	36.4	50.9	65.3
		72	TC	107.4	107.4	107.4	101.1	101.1	101.1	95.0	95.0	95.0	88.7	88.7	88.7	80.9	80.9	80.9
			SHC	39.6	54.0	68.4	35.6	50.1	64.5	31.8	46.3	60.7	27.9	42.3	56.8	23.5	38.0	52.4
		76	TC	—	116.6	116.6	—	109.8	109.8	—	103.5	103.5	—	97.3	97.3	—	89.9	89.9
			SHC	—	43.2	57.6	—	39.2	53.6	—	35.4	49.8	—	31.6	46.0	—	27.4	41.9
3000 cfm	EA (wb)	58	TC	90.2	90.2	102.8	84.8	84.8	97.0	79.0	79.0	90.8	72.8	72.8	84.1	66.1	66.1	76.9
			SHC	77.6	90.2	102.8	72.5	84.8	97.0	67.2	79.0	90.8	61.5	72.8	84.1	55.4	66.1	76.9
		62	TC	90.8	90.8	106.1	84.9	84.9	101.3	79.1	79.1	94.9	72.9	72.9	88.0	66.3	66.3	80.6
			SHC	73.1	89.6	106.1	68.6	84.9	101.3	63.4	79.1	94.9	57.8	72.9	88.0	51.9	66.3	80.6
		67	TC	100.0	100.0	100.0	93.8	93.8	93.8	87.5	87.5	87.5	80.5	80.5	80.5	72.5	72.5	73.1
			SHC	57.1	73.6	90.1	53.1	69.6	86.1	49.1	65.6	82.0	44.8	61.3	77.8	40.2	56.7	73.1
		72	TC	110.0	110.0	110.0	103.3	103.3	103.3	97.0	97.0	97.0	90.8	90.8	90.8	83.1	83.1	83.1
			SHC	41.3	57.8	74.3	37.2	53.7	70.2	33.3	49.8	66.3	29.5	45.9	62.4	25.1	41.6	58.0
		76	TC	—	119.2	119.2	—	112.3	112.3	—	105.6	105.6	—	99.5	99.5	—	92.1	92.1
			SHC	—	45.2	61.7	—	41.2	57.7	—	37.2	53.7	—	33.5	50.0	—	29.4	45.9
3375 cfm	EA (wb)	58	TC	94.2	94.2	107.2	88.6	88.6	101.3	82.9	82.9	95.1	76.6	76.6	88.3	69.7	69.7	80.8
			SHC	81.1	94.2	107.2	76.0	88.6	101.3	70.7	82.9	95.1	64.9	76.6	88.3	58.6	69.7	80.8
		62	TC	94.1	94.1	111.5	88.7	88.7	105.6	83.0	83.0	99.3	76.7	76.7	92.4	69.8	69.8	84.7
			SHC	76.7	94.1	111.5	71.8	88.7	105.6	66.7	83.0	99.3	61.1	76.7	92.4	54.9	69.8	84.7
		67	TC	101.7	101.7	101.7	95.4	95.4	95.4	89.1	89.1	89.7	82.3	82.3	85.5	74.1	74.1	80.9
			SHC	60.7	79.2	97.7	56.7	75.2	93.7	52.7	71.2	89.7	48.5	67.0	85.5	43.8	62.3	80.9
		72	TC	112.0	112.0	112.0	105.0	105.0	105.0	98.7	98.7	98.7	92.4	92.4	92.4	84.7	84.7	84.7
			SHC	42.8	61.3	79.9	38.6	57.2	75.8	34.8	53.3	71.9	30.9	49.4	68.0	26.6	45.1	63.7
		76	TC	—	121.3	121.3	—	113.7	113.7	—	107.3	107.3	—	101.3	101.3	—	—	—
			SHC	—	47.1	65.6	—	42.8	61.4	—	39.0	57.6	—	35.3	53.9	—	—	—
3750 cfm	EA (wb)	58	TC	97.7	97.7	111.1	91.8	91.8	104.8	86.1	86.1	98.6	79.9	79.9	91.9	72.8	72.8	84.3
			SHC	84.3	97.7	111.1	78.8	91.8	104.8	73.5	86.1	98.6	67.8	79.9	91.9	61.3	72.8	84.3
		62	TC	97.6	97.6	115.5	91.9	91.9	109.2	86.2	86.2	102.9	80.0	80.0	96.1	72.9	72.9	88.2
			SHC	79.7	97.6	115.5	74.6	91.9	109.2	69.4	86.2	102.9	63.8	80.0	96.1	57.6	72.9	88.2
		67	TC	103.1	103.1	105.3	96.7	96.7	101.3	90.4	90.4	97.3	83.6	83.6	93.1	75.4	75.4	88.5
			SHC	64.2	84.8	105.3	60.1	80.7	101.3	56.1	76.7	97.3	52.0	72.6	93.1	47.4	67.9	88.5
		72	TC	113.6	113.6	113.6	106.2	106.2	106.2	99.8	99.8	99.8	93.7	93.7	93.7	86.1	86.1	86.1
			SHC	44.2	64.8	85.4	40.0	60.6	81.2	36.0	56.7	77.3	32.2	52.8	73.4	27.9	48.5	69.1
		76	TC	—	123.0	123.0	—	115.2	115.2	—	—	—	—	—	—	—	—	—
			SHC	—	48.8	69.4	—	44.5	65.1	—	—	—	—	—	—	—	—	—

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*T14 One Stage Cooling Capacities

48/50GE*T14				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	48.7	48.7	56.2	44.6	44.6	51.9	40.3	40.3	47.3	35.9	35.9	42.6	31.2	31.2	37.6
			SHC	41.2	48.7	56.2	37.4	44.6	51.9	33.3	40.3	47.3	29.2	35.9	42.6	24.8	31.2	37.6
		62	TC	52.5	52.5	53.5	47.7	47.7	49.9	42.7	42.7	46.4	37.4	37.4	42.7	31.6	31.6	39.2
			SHC	37.0	45.2	53.5	33.4	41.7	49.9	29.9	38.1	46.4	26.2	34.4	42.7	22.7	30.9	39.2
		67	TC	60.1	60.1	60.1	55.1	55.1	55.1	49.8	49.8	49.8	44.2	44.2	44.2	38.4	38.4	38.4
			SHC	30.3	38.5	46.8	26.8	35.0	43.3	23.2	31.4	39.7	19.5	27.7	36.0	15.7	24.0	32.2
		72	TC	68.4	68.4	68.4	63.0	63.0	63.0	57.5	57.5	57.5	51.7	51.7	51.7	45.6	45.6	45.6
			SHC	23.5	31.7	39.9	19.9	28.2	36.4	16.3	24.6	32.8	12.7	20.9	29.2	8.9	17.2	25.4
		76	TC	—	75.4	75.4	—	69.8	69.8	—	63.9	63.9	—	58.0	58.0	—	51.6	51.6
			SHC	—	26.2	34.4	—	22.6	30.9	—	19.0	27.2	—	15.4	23.6	—	11.7	19.9
1750 Cfm	EA (wb)	58	TC	53.1	53.1	61.0	48.7	48.7	56.4	44.2	44.2	51.6	39.5	39.5	46.6	34.5	34.5	41.3
			SHC	45.1	53.1	61.0	41.0	48.7	56.4	36.8	44.2	51.6	32.4	39.5	46.6	27.8	34.5	41.3
		62	TC	55.1	55.1	60.5	50.0	50.0	56.9	44.4	44.4	53.9	39.6	39.6	49.0	34.6	34.6	43.6
			SHC	41.3	50.9	60.5	37.7	47.3	56.9	34.6	44.2	53.9	30.1	39.6	49.0	25.6	34.6	43.6
		67	TC	62.8	62.8	62.8	57.5	57.5	57.5	52.0	52.0	52.0	46.2	46.2	46.2	40.2	40.2	40.2
			SHC	33.2	42.9	52.5	29.6	39.2	48.9	25.9	35.6	45.2	22.2	31.8	41.4	18.3	28.0	37.6
		72	TC	71.2	71.2	71.2	65.6	65.6	65.6	59.8	59.8	59.8	53.7	53.7	53.7	47.4	47.4	47.4
			SHC	25.0	34.6	44.3	21.4	31.0	40.7	17.7	27.4	37.0	14.0	23.6	33.2	10.2	19.8	29.4
		76	TC	—	78.4	78.4	—	72.5	72.5	—	66.4	66.4	—	60.1	60.1	—	53.5	53.5
			SHC	—	28.0	37.6	—	24.3	34.0	—	20.7	30.3	—	17.0	26.6	—	13.1	22.8
2000 Cfm	EA (wb)	58	TC	56.7	56.7	65.1	52.2	52.2	60.2	47.5	47.5	55.2	42.5	42.5	49.9	37.3	37.3	44.4
			SHC	48.4	56.7	65.1	44.1	52.2	60.2	39.7	47.5	55.2	35.1	42.5	49.9	30.3	37.3	44.4
		62	TC	56.8	56.8	67.8	52.3	52.3	63.0	47.6	47.6	57.9	42.6	42.6	52.5	37.4	37.4	46.8
			SHC	45.8	56.8	67.8	41.5	52.3	63.0	37.2	47.6	57.9	32.7	42.6	52.5	28.0	37.4	46.8
		67	TC	64.9	64.9	64.9	59.4	59.4	59.4	53.7	53.7	53.7	47.7	47.7	47.7	41.5	41.5	42.8
			SHC	36.0	47.0	58.0	32.3	43.3	54.3	28.6	39.6	50.6	24.7	35.7	46.7	20.8	31.8	42.8
		72	TC	73.4	73.4	73.4	67.6	67.6	67.6	61.5	61.5	61.5	55.3	55.3	55.3	48.7	48.7	48.7
			SHC	26.4	37.4	48.4	22.7	33.7	44.7	19.0	30.0	41.0	15.2	26.2	37.2	11.3	22.3	33.3
		76	TC	—	80.6	80.6	—	74.5	74.5	—	68.2	68.2	—	61.7	61.7	—	—	—
			SHC	—	29.6	40.6	—	25.9	36.9	—	22.2	33.2	—	18.4	29.4	—	—	—
2250 Cfm	EA (wb)	58	TC	59.9	59.9	68.6	55.2	55.2	63.5	50.3	50.3	58.3	45.1	45.1	52.8	39.8	39.8	47.0
			SHC	51.2	59.9	68.6	46.8	55.2	63.5	42.2	50.3	58.3	37.4	45.1	52.8	32.5	39.8	47.0
		62	TC	60.0	60.0	71.6	55.3	55.3	66.5	50.3	50.3	61.1	45.2	45.2	55.5	39.8	39.8	49.6
			SHC	48.4	60.0	71.6	44.1	55.3	66.5	39.6	50.3	61.1	34.9	45.2	55.5	30.1	39.8	49.6
		67	TC	66.5	66.5	66.5	60.9	60.9	60.9	55.0	55.0	55.8	48.9	48.9	52.0	42.5	42.5	48.0
			SHC	38.6	51.0	63.3	34.9	47.2	59.6	31.1	43.4	55.8	27.2	39.6	52.0	23.3	35.6	48.0
		72	TC	75.1	75.1	75.1	69.1	69.1	69.1	62.9	62.9	62.9	56.5	56.5	56.5	49.8	49.8	49.8
			SHC	27.6	40.0	52.3	23.9	36.2	48.6	20.1	32.5	44.8	16.2	28.6	41.0	12.3	24.7	37.0
		76	TC	—	82.3	82.3	—	76.0	76.0	—	—	—	—	—	—	—	—	—
			SHC	—	31.0	43.4	—	27.3	39.7	—	—	—	—	—	—	—	—	—
2500 Cfm	EA (wb)	58	TC	62.7	62.7	71.6	57.8	57.8	66.4	52.7	52.7	61.0	47.4	47.4	55.3	41.8	41.8	49.3
			SHC	53.7	62.7	71.6	49.1	57.8	66.4	44.4	52.7	61.0	39.5	47.4	55.3	34.3	41.8	49.3
		62	TC	62.8	62.8	74.8	57.9	57.9	69.4	52.8	52.8	63.9	47.5	47.5	58.1	41.9	41.9	52.0
			SHC	50.8	62.8	74.8	46.3	57.9	69.4	41.7	52.8	63.9	36.9	47.5	58.1	31.9	41.9	52.0
		67	TC	67.8	67.8	68.6	62.1	62.1	64.8	56.1	56.1	61.0	49.9	49.9	57.1	43.4	43.4	53.1
			SHC	41.1	54.9	68.6	37.4	51.1	64.8	33.5	47.3	61.0	29.6	43.4	57.1	25.7	39.4	53.1
		72	TC	76.4	76.4	76.4	70.3	70.3	70.3	64.0	64.0	64.0	57.5	57.5	57.5	50.6	50.6	50.6
			SHC	28.7	42.5	56.2	24.9	38.7	52.4	21.1	34.9	48.6	17.2	31.0	44.7	13.3	27.0	40.8
		76	TC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			SHC	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

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

NOTE: See minimum-maximum airflow ratings on page 8.

48/50GE*U14 — Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

TEMP (°F) AIR ENTERING CONDENSER (Edb)		AIR ENTERING EVAPORATOR — SCFM/BF (80°F db)								
		3750/0.04			5000/0.09			6250/0.15		
		Air Entering Evaporator — Ewb (°F)								
		72	67	62	72	67	62	72	67	62
75	TC	173.3	164.7	155.1	181.4	166.9	152.5	191.1	168.4	161.9
	SHC	77.1	106.1	128.7	86.2	115.2	142.6	124.5	121.6	161.4
	kW	8.2	8.2	8.1	8.4	8.2	8.0	8.9	8.1	8.1
85	TC	165.1	158.1	147.4	171.9	157.0	155.7	171.2	168.9	161.2
	SHC	70.3	101.0	122.3	75.0	106.5	144.3	78.2	129.2	160.7
	kW	9.1	9.1	9.0	9.3	9.2	9.0	9.4	9.4	9.1
95	TC	155.9	143.8	140.4	165.5	157.7	150.6	170.0	159.2	161.2
	SHC	62.3	84.5	115.4	70.5	106.9	140.1	79.0	118.3	145.7
	kW	10.3	10.1	8.7	10.5	10.3	8.9	10.7	10.4	9.0
105	TC	144.0	134.0	124.1	152.1	145.8	131.6	154.0	145.4	137.2
	SHC	49.1	76.5	99.1	58.8	94.1	123.7	61.1	106.0	135.5
	kW	11.5	11.4	11.1	11.7	11.5	11.2	11.7	11.5	11.3
115	TC	138.6	127.0	118.1	145.5	135.7	121.6	145.5	134.5	130.4
	SHC	48.1	72.9	96.4	52.7	86.9	113.6	52.8	95.3	119.1
	kW	12.8	12.7	12.4	13.1	12.7	12.5	13.2	12.8	12.6
125	TC	125.6	115.4	104.5	134.1	121.8	111.7	130.6	123.7	116.5
	SHC	35.8	61.8	85.9	41.9	73.3	103.8	41.4	84.9	114.7
	kW	14.3	14.1	13.7	14.5	14.2	13.9	14.3	14.3	13.9

48/50GE*U14 — 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								
		3750	5000	6250	3750	5000	6250	3750	5000	6250
80	TC	60.2	60.9	61.4	61.2	62.7	61.6	66.0	64.7	62.8
	SHC	22.7	15.2	13.4	28.0	16.7	14.0	33.3	19.4	15.0
	kW	8.6	8.8	8.8	8.7	8.8	8.9	8.8	8.9	9.0
75	TC	62.9	65.9	64.3	68.0	66.6	65.8	67.1	67.5	66.8
	SHC	25.3	21.3	14.3	31.6	22.7	15.2	37.9	25.4	16.2
	kW	8.1	8.3	8.4	8.2	8.4	8.4	8.3	8.4	8.5
70	TC	68.2	69.1	69.7	70.4	69.1	68.7	69.5	70.9	70.4
	SHC	31.2	23.7	17.2	36.0	25.0	17.6	40.9	28.0	19.0
	kW	7.7	7.8	7.9	7.8	7.9	8.0	7.9	8.0	8.1
60	TC	71.5	79.4	74.0	73.3	80.4	73.4	81.8	80.4	79.5
	SHC	34.2	29.2	26.9	37.7	30.5	27.3	49.0	32.4	30.8
	kW	7.3	7.5	7.6	7.4	7.6	7.6	7.5	7.7	7.7
50	TC	78.8	84.6	81.2	85.5	85.3	80.2	85.0	82.0	87.8
	SHC	43.4	39.7	31.4	51.8	42.1	32.0	58.7	43.1	36.4
	kW	6.6	6.7	6.8	6.7	6.8	6.9	6.8	6.9	7.0
40	TC	97.3	89.0	91.4	88.2	89.9	90.1	96.0	96.1	94.0
	SHC	71.2	45.4	43.3	71.6	49.4	45.1	89.7	57.7	50.1
	kW	6.0	6.2	6.2	6.1	6.3	6.3	6.2	6.4	6.4

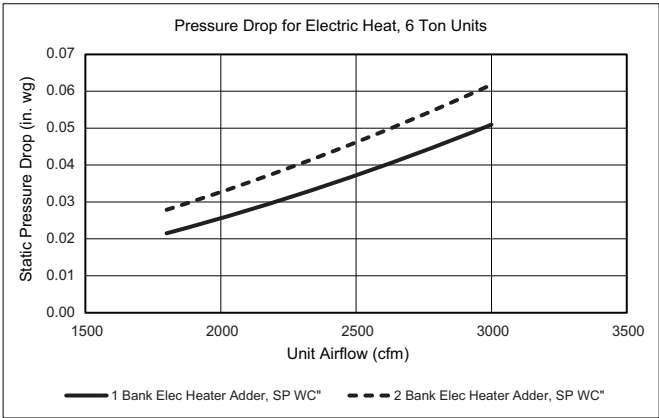
LEGEND

Edb	—	Entering dry bulb
Ewb	—	Entering wet bulb
kW	—	compressor Power Input
SCFM/BF	—	Standard Cubic Feet per Minute/Bypass Factor
SHC	—	Sensible Heat Capacity (1000 Btuh) Gross
TC	—	Total Capacity (1000 Btuh) Gross

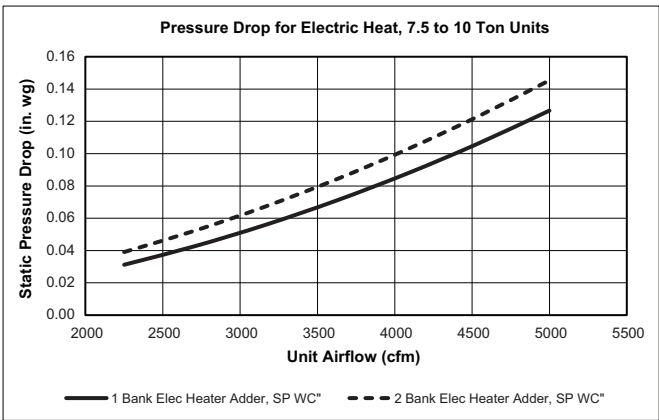


Pressure Drops for Electric Heating Units

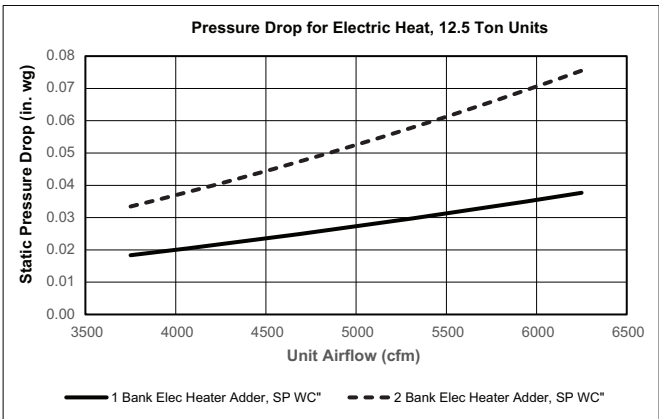
6 Ton Units



7.5, 8.5 and 10 Ton Units



12.5 Ton Units



Pressure Drops for Gas Heating Units

Gas Heat Stages

48GE UNIT SIZE	HEAT SIZE		
	LOW	MEDIUM	HIGH
07	2	2	2
08	2	2	2
09	2	2	2
12	2	2	2
14	2	2	2

Gas Heat Static Pressure Deductions (in. wg) — 6 to 8.5 Ton Units

CFM	1800	2210	2615	3025	3435	3840	4250
High Gas Heat Deduction	−0.04	−0.04	−0.03	−0.03	−0.02	−0.01	0.01
Medium Gas Heat Deduction	0.00	0.01	0.02	0.03	0.04	0.06	0.08
Low Gas Heat Deduction	0.02	0.03	0.05	0.07	0.09	0.12	0.15

Gas Heat Static Pressure Deductions (in. wg) — 10 Ton Units

CFM	3000	3335	3665	4000	4335	4665	5000
Medium Gas Heat Deduction	0.00	0.01	0.02	0.03	0.05	0.06	0.07
Low Gas Heat Deduction	−0.03	−0.01	0.01	0.03	0.06	0.08	0.12

Gas Heat Static Pressure Deductions (in. wg) — 12.5 Ton Units

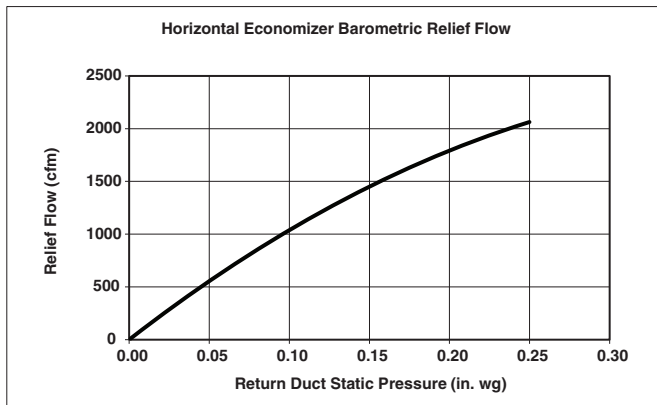
CFM	3750	4165	4585	5000	5415	5835	6250
High Gas Heat Deduction	0.10	0.11	0.12	0.14	0.15	0.17	0.18
Medium Gas Heat Deduction	0.17	0.19	0.21	0.24	0.26	0.28	0.30
Low Gas Heat Deduction	0.16	0.18	0.20	0.22	0.24	0.26	0.28

Field-installed Accessory Electric Heater Data

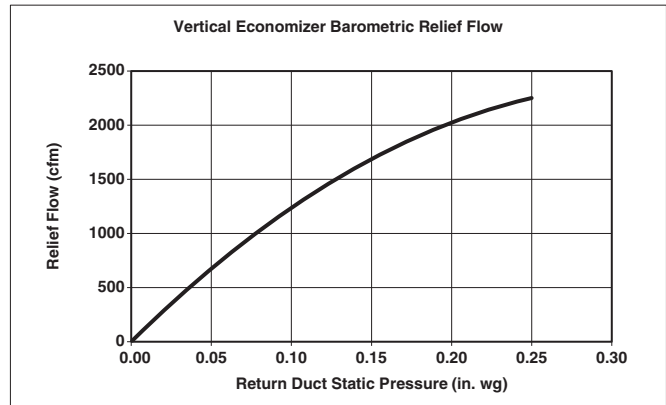
50GE UNIT SIZE	VOLTAGE	HEATER MODEL NUMBER	HEAT STAGES
07	208/230	CRHEATER410A00	1
		CRHEATER411A00	1
		CRHEATER412A00	1
		CRHEATER413A00	2
		CRHEATER414A00	2
	460	CRHEATER418A00	1
		CRHEATER419A00	1
		CRHEATER420A00	1
		CRHEATER421A00	2
	575	CRHEATER425A00	1
CRHEATER426A00		2	
08	208/230	CRHEATER411A00	1
		CRHEATER412A00	1
		CRHEATER414A00	2
		CRHEATER415A00	2
		CRHEATER416A00	2
	460	CRHEATER190A00	1
		CRHEATER420A00	1
		CRHEATER421A00	2
		CRHEATER422A00	2
	575	CRHEATER423A00	2
CRHEATER425A00		1	
09	208/230	CRHEATER427A00	2
		CRHEATER411A00	1
		CRHEATER412A00	1
		CRHEATER414A00	2
		CRHEATER415A00	2
	460	CRHEATER416A00	2
		CRHEATER419A00	1
		CRHEATER420A00	1
		CRHEATER421A00	2
	575	CRHEATER422A00	2
CRHEATER423A00		2	
12	208/230	CRHEATER425A00	1
		CRHEATER427A00	2
		CRHEATER411A00	1
		CRHEATER412A00	1
		CRHEATER415A00	2
	460	CRHEATER416A00	2
		CRHEATER417A00	2
		CRHEATER420A00	1
		CRHEATER422A00	2
	575	CRHEATER423A00	2
CRHEATER424A00		2	
14	208/230	CRHEATER425A00	2
		CRHEATER427A00	2
		CRHEATER428A00	2
		CRHEATER412A00	1
		CRHEATER414A00	2
	460	CRHEATER415A00	2
		CRHEATER416A00	2
		CRHEATER417A00	2
		CRHEATER420A00	1
	575	CRHEATER421A00	2
CRHEATER422A00		2	
CRHEATER423A00		2	
CRHEATER424A00		2	

Economizer Barometric Relief and Damper Leakage — 6 to 10 Ton Units (Sizes 07-12)

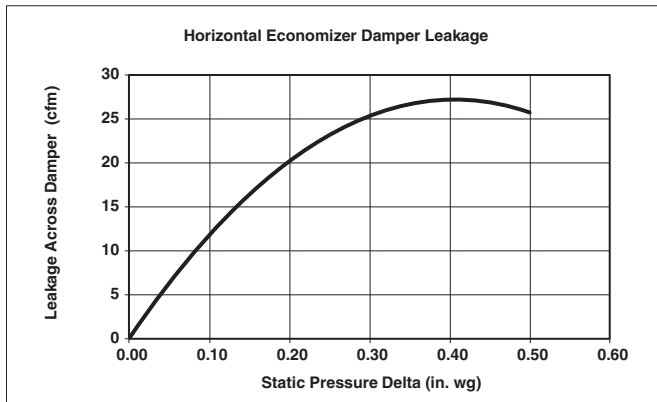
Horizontal Economizer Barometric Relief



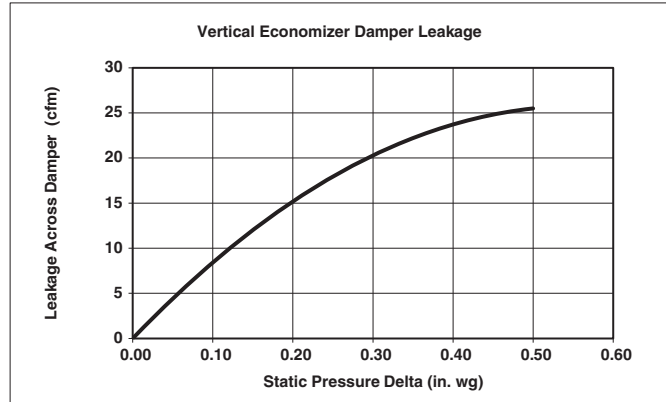
Vertical Economizer Barometric Relief



Horizontal Economizer Damper Leakage

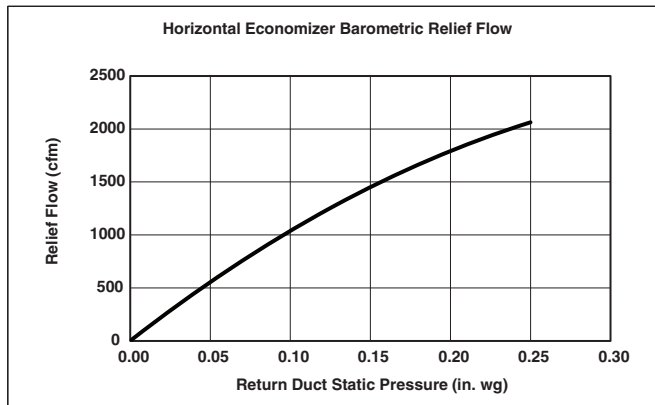


Vertical Economizer Damper Leakage

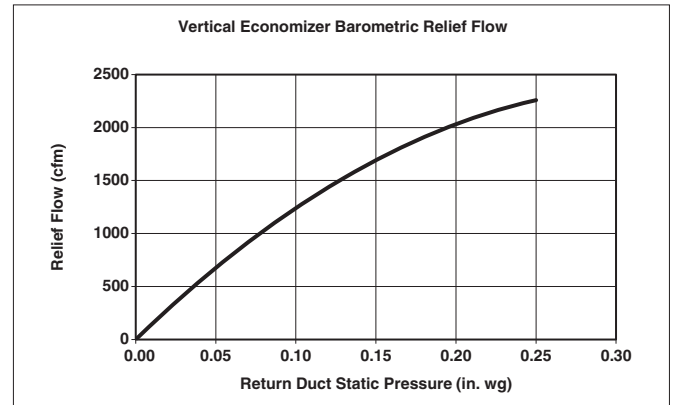


Economizer Barometric Relief and Damper Leakage — 12.5 Ton Units (Size 14)

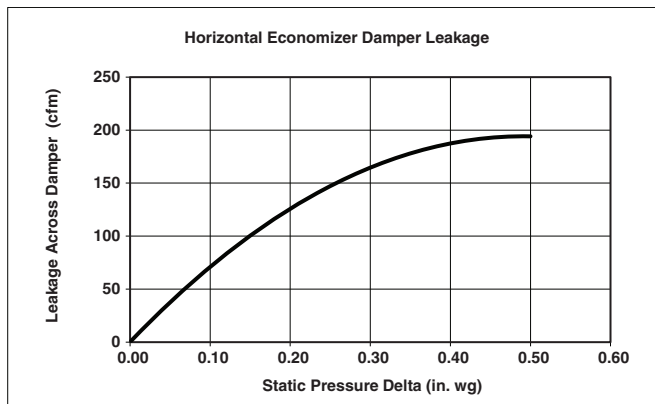
Horizontal Economizer Barometric Relief



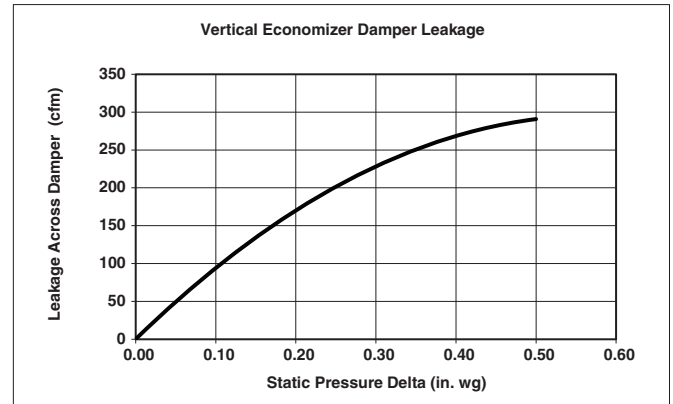
Vertical Economizer Barometric Relief



Horizontal Economizer Damper Leakage

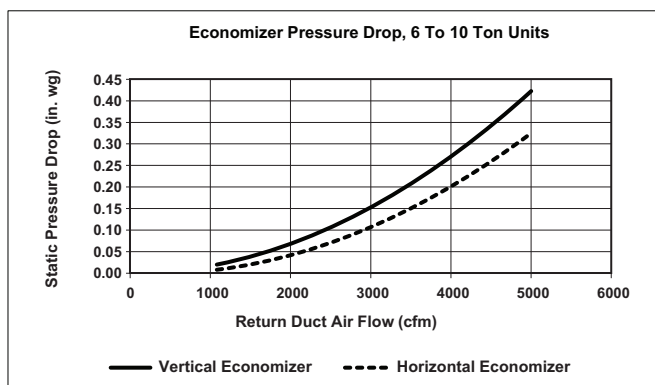


Vertical Economizer Damper Leakage

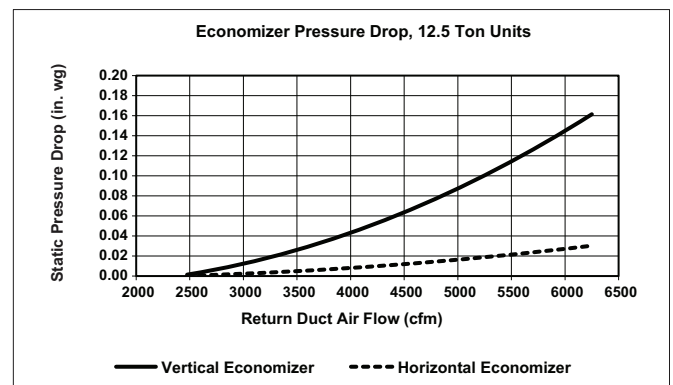


Economizer Pressure Drop 6.0 to 12.5 Ton Units

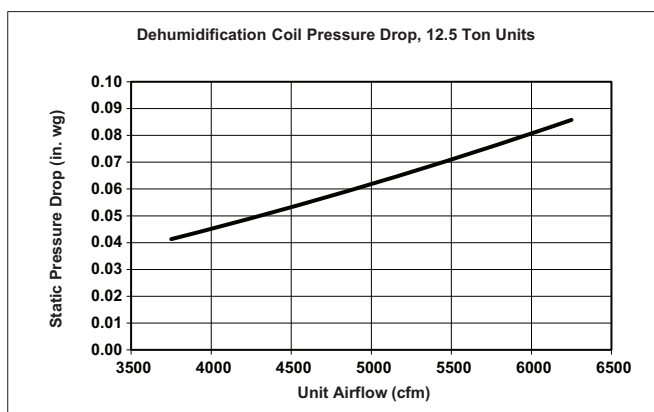
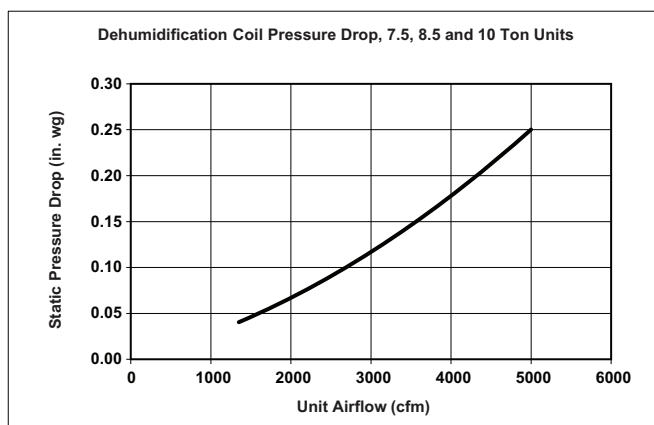
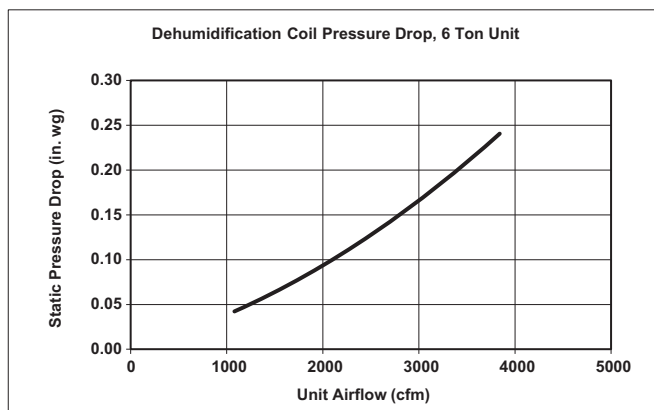
6 to 10 Ton Units (Sizes 07-12)



12.5 Ton Units (Size 14)



Humidi-MiZer® Coil Pressure Drops — 6 to 12.5 Ton Units



General Fan Performance Notes

1. Interpolation is permissible. Do not extrapolate.
2. External static pressure is the static pressure difference between the return duct and the supply duct plus the static pressure caused by any FIOPs or accessories.
3. Tabular data accounts for pressure loss due to clean filters, unit casing, wet coils, and highest gas heat exchanger (when gas heat unit).
4. Factory options and accessories may effect static pressure losses. Gas heat unit fan tables assume highest gas heat models; for fan selections with low or medium heat models, the user must deduct low and medium heat static pressures. Selection software is available, through your salesperson, to help you select the best motor/drive combination for your application.
5. The fan performance tables offer motor recommendations. In cases when 2 motors would work, the lower horsepower option is recommended.
6. Fan tables for 48GE units include highest gas heat. Utilize static pressure deduction tables on page 60 for lower gas heat capacities.
7. For information on the electrical properties of the fan motors, please see the Electrical information section of this book.
8. For more information on the performance limits of the fan motors, see the application data section of this book.
9. The EPACT (Energy Policy Act of 1992) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (3-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 Hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements.

48GEFT07 — 6 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
1800	892	0.27	1029	0.41	1148	0.57	1255	0.75	1353	0.94
1950	942	0.32	1073	0.47	1188	0.63	1293	0.82	1388	1.01
2100	993	0.37	1119	0.53	1230	0.70	1332	0.89	1425	1.09
2250	1045	0.43	1166	0.60	1274	0.78	1372	0.97	1463	1.18
2400	1098	0.50	1214	0.67	1318	0.86	1413	1.06	1503	1.28
2550	1151	0.57	1263	0.75	1364	0.95	1456	1.16	1543	1.38
2700	1205	0.65	1313	0.84	1410	1.04	1501	1.26	1585	1.48
2850	1259	0.74	1363	0.94	1458	1.15	1546	1.37	1628	1.60
3000	1314	0.83	1415	1.04	1507	1.26	1592	1.48	1672	1.71

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	1444	1.14	1529	1.35	1608	1.57	1683	1.81	1755	2.05
1950	1477	1.22	1561	1.44	1639	1.67	1714	1.90	1785	2.15
2100	1512	1.31	1594	1.53	1672	1.77	1746	2.01	1816	2.26
2250	1548	1.40	1629	1.63	1705	1.87	1778	2.12	1848	2.38
2400	1586	1.50	1665	1.73	1740	1.98	1812	2.24	1881	2.50
2550	1625	1.61	1702	1.85	1776	2.10	1847	2.36	1914	2.62
2700	1665	1.72	1741	1.97	1813	2.22	1883	2.49	1949	2.76
2850	1706	1.84	1781	2.09	1852	2.35	1920	2.62	1985	2.89
3000	1749	1.96	1821	2.22	1891	2.48	1958	2.75	2022	3.03

Std/Med Static 892-2000 rpm, 2.4 maximum bhp

High Static 892-2200 rpm, 3.0 maximum bhp

48GEFT07 — Standard/Medium Static — 6 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
1800	892	0.27	1029	0.41	1148	0.57	1255	0.75	1353	0.94
1950	942	0.32	1073	0.47	1188	0.63	1293	0.82	1388	1.01
2100	993	0.37	1119	0.53	1230	0.70	1332	0.89	1425	1.09
2250	1045	0.43	1166	0.60	1274	0.78	1372	0.97	1463	1.18
2400	1098	0.50	1214	0.67	1318	0.86	1413	1.06	1503	1.28
2550	1151	0.57	1263	0.75	1364	0.95	1456	1.16	1543	1.38
2700	1205	0.65	1313	0.84	1410	1.04	1501	1.26	1585	1.48
2850	1259	0.74	1363	0.94	1458	1.15	1546	1.37	1628	1.60
3000	1314	0.83	1415	1.04	1507	1.26	1592	1.48	1672	1.71

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
1800	1444	7.1	1529	7.6	1608	8.0	1683	8.4	1755	8.7
1950	1477	7.3	1561	7.7	1639	8.1	1714	8.5	1785	8.9
2100	1512	7.5	1594	7.9	1672	8.3	1746	8.7	1816	9.1
2250	1548	7.7	1629	8.1	1705	8.5	1778	8.9	1848	9.2
2400	1586	7.9	1665	8.3	1740	8.7	1812	9.0	1881	9.4
2550	1625	8.1	1702	8.5	1776	8.8	1847	9.2	—	—
2700	1665	8.3	1741	8.7	1813	9.0	1883	9.4	—	—
2850	1706	8.5	1781	8.9	1852	9.2	—	—	—	—
3000	1749	8.7	1821	9.1	1891	9.4	—	—	—	—

Std/Med Static 892-2000 rpm

48GEFT07 — High Static — 6 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
1800	892	4.0	1029	4.6	1148	5.1	1255	5.6	1353	6.1
1950	942	4.2	1073	4.8	1188	5.3	1293	5.8	1388	6.3
2100	993	4.4	1119	5.0	1230	5.5	1332	6.0	1425	6.4
2250	1045	4.7	1166	5.2	1274	5.7	1372	6.2	1463	6.6
2400	1098	4.9	1214	5.4	1318	5.9	1413	6.4	1503	6.8
2550	1151	5.2	1263	5.7	1364	6.1	1456	6.6	1543	7.0
2700	1205	5.4	1313	5.9	1410	6.4	1501	6.8	1585	7.2
2850	1259	5.7	1363	6.1	1458	6.6	1546	7.0	1628	7.4
3000	1314	5.9	1415	6.4	1507	6.8	1592	7.2	1672	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
1800	1444	6.5	1529	6.9	1608	7.3	1683	7.6	1755	7.9
1950	1477	6.7	1561	7.1	1639	7.4	1714	7.8	1785	8.1
2100	1512	6.8	1594	7.2	1672	7.6	1746	7.9	1816	8.2
2250	1548	7.0	1629	7.4	1705	7.7	1778	8.1	1848	8.4
2400	1586	7.2	1665	7.5	1740	7.9	1812	8.2	1881	8.5
2550	1625	7.3	1702	7.7	1776	8.0	1847	8.4	1914	8.7
2700	1665	7.5	1741	7.9	1813	8.2	1883	8.5	1949	8.8
2850	1706	7.7	1781	8.1	1852	8.4	1920	8.7	1985	9.0
3000	1749	7.9	1821	8.3	1891	8.6	1958	8.9	2022	9.2

High Static 892-2200 rpm

48GEFT08 — 7.5 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
2250	1001	0.37	1118	0.52	1225	0.69	1323	0.86	1414	1.06
2440	1065	0.45	1176	0.60	1278	0.77	1373	0.96	1460	1.15
2625	1129	0.53	1234	0.69	1331	0.87	1422	1.06	1508	1.26
2815	1196	0.62	1295	0.79	1388	0.97	1475	1.17	1558	1.38
3000	1261	0.72	1355	0.90	1444	1.09	1528	1.29	1608	1.50
3190	1329	0.84	1418	1.02	1503	1.21	1584	1.42	1661	1.64
3375	1396	0.96	1481	1.14	1562	1.34	1640	1.55	1715	1.78
3565	1465	1.09	1546	1.28	1624	1.49	1699	1.70	1771	1.93
3750	1533	1.23	1610	1.42	1685	1.63	1757	1.85	1826	2.08

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	1498	1.26	1578	1.47	1653	1.69	1724	1.91	1792	2.15
2440	1543	1.36	1620	1.58	1694	1.80	1765	2.04	1832	2.28
2625	1588	1.47	1664	1.69	1736	1.92	1805	2.16	1871	2.41
2815	1636	1.60	1710	1.82	1781	2.06	1849	2.30	1914	2.55
3000	1684	1.72	1757	1.96	1826	2.20	1892	2.44	1957	2.70
3190	1735	1.86	1806	2.10	1873	2.34	1939	2.60	2001	2.86
3375	1786	2.01	1855	2.25	1921	2.50	1985	2.76	2047	3.02
3565	1840	2.16	1907	2.41	1972	2.66	2034	2.92	2094	3.19
3750	1894	2.32	1959	2.56	2022	2.82	2083	3.08	—	—

Std/Med Static 1001-2000 rpm, 2.4 maximum bhp

High Static 1001-2200 rpm, 3.0 maximum bhp

48GEFT08 — Standard/Medium Static — 7.5 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
2250	1001	4.9	1118	5.5	1225	6.0	1323	6.5	1414	7.0
2440	1065	5.2	1176	5.8	1278	6.3	1373	6.8	1460	7.2
2625	1129	5.5	1234	6.1	1331	6.6	1422	7.0	1508	7.5
2815	1196	5.9	1295	6.4	1388	6.9	1475	7.3	1558	7.7
3000	1261	6.2	1355	6.7	1444	7.1	1528	7.6	1608	8.0
3190	1329	6.5	1418	7.0	1503	7.4	1584	7.9	1661	8.3
3375	1396	6.9	1481	7.3	1562	7.7	1640	8.1	1715	8.5
3565	1465	7.2	1546	7.7	1624	8.1	1699	8.5	1771	8.8
3750	1533	7.6	1610	8.0	1685	8.4	1757	8.8	1826	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
2250	1498	7.4	1578	7.8	1653	8.2	1724	8.6	1792	8.9
2440	1543	7.6	1620	8.0	1694	8.4	1765	8.8	1832	9.1
2625	1588	7.9	1664	8.3	1736	8.6	1805	9.0	1871	9.3
2815	1636	8.1	1710	8.5	1781	8.9	1849	9.2	—	—
3000	1684	8.4	1757	8.8	1826	9.1	1892	9.4	—	—
3190	1735	8.6	1806	9.0	1873	9.3	—	—	—	—
3375	1786	8.9	1855	9.3	1921	9.6	—	—	—	—
3565	1840	9.2	1907	9.5	—	—	—	—	—	—
3750	1894	9.5	—	—	—	—	—	—	—	—

Std/Med Static 1001-2000 rpm

48GEFT08 — High Static — 7.5 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
2250	1001	4.5	1118	5.0	1225	5.5	1323	6.0	1414	6.4
2440	1065	4.8	1176	5.3	1278	5.7	1373	6.2	1460	6.6
2625	1129	5.1	1234	5.5	1331	6.0	1422	6.4	1508	6.8
2815	1196	5.4	1295	5.8	1388	6.3	1475	6.7	1558	7.0
3000	1261	5.7	1355	6.1	1444	6.5	1528	6.9	1608	7.3
3190	1329	6.0	1418	6.4	1503	6.8	1584	7.2	1661	7.5
3375	1396	6.3	1481	6.7	1562	7.1	1640	7.4	1715	7.8
3565	1465	6.6	1546	7.0	1624	7.3	1699	7.7	1771	8.0
3750	1533	6.9	1610	7.3	1685	7.6	1757	8.0	1826	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
2250	1498	6.8	1578	7.1	1653	7.5	1724	7.8	1792	8.1
2440	1543	7.0	1620	7.3	1694	7.7	1765	8.0	1832	8.3
2625	1588	7.2	1664	7.5	1736	7.9	1805	8.2	1871	8.5
2815	1636	7.4	1710	7.7	1781	8.1	1849	8.4	1914	8.7
3000	1684	7.6	1757	8.0	1826	8.3	1892	8.6	1957	8.9
3190	1735	7.9	1806	8.2	1873	8.5	1939	8.8	2001	9.1
3375	1786	8.1	1855	8.4	1921	8.7	1985	9.0	2047	9.3
3565	1840	8.3	1907	8.6	1972	8.9	2034	9.2	2094	9.5
3750	1894	8.6	1959	8.9	2022	9.2	2083	9.5	—	—

High Static 1001-2200 rpm

48GEFT09 — 8.5 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
2550	1108	0.51	1215	0.67	1314	0.85	1406	1.04	1493	1.24
2765	1183	0.61	1283	0.78	1378	0.97	1466	1.17	1549	1.38
2975	1258	0.73	1352	0.91	1442	1.10	1526	1.30	1606	1.52
3190	1335	0.87	1424	1.05	1509	1.25	1590	1.46	1667	1.69
3400	1411	1.01	1495	1.20	1576	1.41	1654	1.63	1728	1.86
3615	1490	1.18	1570	1.38	1647	1.59	1721	1.82	1792	2.05
3825	1567	1.35	1643	1.56	1716	1.78	1788	2.01	1856	2.25
4040	1647	1.55	1719	1.76	1789	1.98	1857	2.22	1923	2.46
4250	1725	1.74	1794	1.96	1861	2.19	1926	2.43	1990	2.68

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	1574	1.46	1650	1.68	1723	1.91	1793	2.15	1859	2.40
2765	1628	1.60	1703	1.83	1774	2.07	1842	2.31	1907	2.57
2975	1683	1.75	1755	1.98	1825	2.23	1891	2.48	1955	2.74
3190	1741	1.92	1811	2.16	1879	2.41	1944	2.67	2007	2.94
3400	1799	2.10	1868	2.35	1934	2.61	1997	2.87	2059	3.15
3615	1861	2.30	1927	2.55	1991	2.81	2053	3.08	—	—
3825	1923	2.50	1987	2.76	2049	3.02	—	—	—	—
4040	1987	2.72	2050	2.98	—	—	—	—	—	—
4250	2052	2.94	—	—	—	—	—	—	—	—

Std/Med Static 1108-2000 rpm, 2.4 maximum bhp

High Static 1108-2200 rpm, 5.0 maximum bhp

48GEFT09 — Standard/Medium Static — 8.5 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
2550	1108	5.4	1215	6.0	1314	6.5	1406	6.9	1493	7.4
2765	1183	5.8	1283	6.3	1378	6.8	1466	7.3	1549	7.7
2975	1258	6.2	1352	6.7	1442	7.1	1526	7.6	1606	8.0
3190	1335	6.6	1424	7.0	1509	7.5	1590	7.9	1667	8.3
3400	1411	7.0	1495	7.4	1576	7.8	1654	8.2	1728	8.6
3615	1490	7.4	1570	7.8	1647	8.2	1721	8.6	1792	8.9
3825	1567	7.8	1643	8.2	1716	8.5	1788	8.9	1856	9.3
4040	1647	8.2	1719	8.6	1789	8.9	1857	9.3	1923	9.6
4250	1725	8.6	1794	8.9	1861	9.3	1926	9.6	—	—

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
2550	1574	7.8	1650	8.2	1723	8.6	1793	8.9	1859	9.3
2765	1628	8.1	1703	8.5	1774	8.8	1842	9.2	—	—
2975	1683	8.4	1755	8.7	1825	9.1	1891	9.4	—	—
3190	1741	8.7	1811	9.0	1879	9.4	—	—	—	—
3400	1799	9.0	1868	9.3	—	—	—	—	—	—
3615	1861	9.3	1927	9.6	—	—	—	—	—	—
3825	1923	9.6	—	—	—	—	—	—	—	—
4040	—	—	—	—	—	—	—	—	—	—
4250	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1108-2000 rpm

48GEFT09 — High Static — 8.5 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
2550	1108	5.0	1215	5.5	1314	5.9	1406	6.3	1493	6.7
2765	1183	5.3	1283	5.8	1378	6.2	1466	6.6	1549	7.0
2975	1258	5.7	1352	6.1	1442	6.5	1526	6.9	1606	7.3
3190	1335	6.0	1424	6.4	1509	6.8	1590	7.2	1667	7.5
3400	1411	6.4	1495	6.7	1576	7.1	1654	7.5	1728	7.8
3615	1490	6.7	1570	7.1	1647	7.4	1721	7.8	1792	8.1
3825	1567	7.1	1643	7.4	1716	7.8	1788	8.1	1856	8.4
4040	1647	7.4	1719	7.8	1789	8.1	1857	8.4	1923	8.7
4250	1725	7.8	1794	8.1	1861	8.4	1926	8.7	1990	9.0

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
2550	1574	7.1	1650	7.5	1723	7.8	1793	8.1	1859	8.4
2765	1628	7.4	1703	7.7	1774	8.0	1842	8.3	1907	8.6
2975	1683	7.6	1755	7.9	1825	8.3	1891	8.6	1955	8.9
3190	1741	7.9	1811	8.2	1879	8.5	1944	8.8	2007	9.1
3400	1799	8.1	1868	8.5	1934	8.8	1997	9.1	2059	9.3
3615	1861	8.4	1927	8.7	1991	9.0	2053	9.3	—	—
3825	1923	8.7	1987	9.0	2049	9.3	—	—	—	—
4040	1987	9.0	2050	9.3	—	—	—	—	—	—
4250	2052	9.3	—	—	—	—	—	—	—	—

High Static 1108-2200 rpm

48GEFT12 — 10 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
3000	1266	0.74	1360	0.92	1449	1.12	1534	1.32	1613	1.54
3250	1357	0.91	1444	1.09	1528	1.29	1608	1.51	1684	1.73
3500	1448	1.09	1530	1.28	1609	1.49	1685	1.72	1758	1.95
3750	1539	1.29	1617	1.49	1691	1.71	1764	1.94	1833	2.18
4000	1632	1.51	1705	1.72	1775	1.94	1844	2.18	1911	2.42
4250	1725	1.74	1794	1.96	1861	2.19	1926	2.43	1990	2.68
4500	1818	1.99	1884	2.22	1948	2.45	2010	2.69	2071	2.94
4750	1912	2.25	1974	2.47	2035	2.71	2095	2.96	2153	3.21
5000	2006	2.51	2066	2.74	2124	2.98	2181	3.23	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1689	1.77	1762	2.01	1831	2.25	1897	2.50	1961	2.77
3250	1757	1.97	1827	2.21	1894	2.47	1959	2.73	2021	3.00
3500	1828	2.19	1895	2.44	1960	2.70	2023	2.97	2084	3.25
3750	1900	2.42	1965	2.68	2028	2.95	2089	3.22	2148	3.50
4000	1975	2.67	2038	2.94	2099	3.21	2158	3.49	—	—
4250	2052	2.94	2112	3.20	2171	3.48	—	—	—	—
4500	2130	3.20	2188	3.47	—	—	—	—	—	—
4750	—	—	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1266-2200 rpm, 3.0 maximum bhp

High Static 1266-2200 rpm, 5.0 maximum bhp

48GEFT12 — Standard/Medium Static — 10 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
3000	1266	6.2	1360	6.7	1449	7.2	1534	7.6	1613	8.0
3250	1357	6.7	1444	7.1	1528	7.6	1608	8.0	1684	8.4
3500	1448	7.2	1530	7.6	1609	8.0	1685	8.4	1758	8.8
3750	1539	7.6	1617	8.0	1691	8.4	1764	8.8	1833	9.1
4000	1632	8.1	1705	8.5	1775	8.8	1844	9.2	1911	9.5
4250	1725	8.6	1794	8.9	1861	9.3	1926	9.6	—	—
4500	1818	9.1	1884	9.4	1948	9.7	—	—	—	—
4750	1912	9.5	1974	9.9	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

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
3000	1689	8.4	1762	8.8	1831	9.1	1897	9.5	—	—
3250	1757	8.8	1827	9.1	1894	9.5	—	—	—	—
3500	1828	9.1	1895	9.5	—	—	—	—	—	—
3750	1900	9.5	—	—	—	—	—	—	—	—
4000	—	—	—	—	—	—	—	—	—	—
4250	—	—	—	—	—	—	—	—	—	—
4500	—	—	—	—	—	—	—	—	—	—
4750	—	—	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1266-2200 rpm

48GEFT12 — High Static — 10 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
3000	1266	5.7	1360	6.1	1449	6.5	1534	6.9	1613	7.3
3250	1357	6.1	1444	6.5	1528	6.9	1608	7.3	1684	7.6
3500	1448	6.5	1530	6.9	1609	7.3	1685	7.6	1758	8.0
3750	1539	6.9	1617	7.3	1691	7.7	1764	8.0	1833	8.3
4000	1632	7.4	1705	7.7	1775	8.0	1844	8.4	1911	8.7
4250	1725	7.8	1794	8.1	1861	8.4	1926	8.7	1990	9.0
4500	1818	8.2	1884	8.5	1948	8.8	2010	9.1	2071	9.4
4750	1912	8.7	1974	9.0	2035	9.2	2095	9.5	2153	9.8
5000	2006	9.1	2066	9.4	2124	9.6	2181	9.9	—	—

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
3000	1689	7.6	1762	8.0	1831	8.3	1897	8.6	1961	8.9
3250	1757	8.0	1827	8.3	1894	8.6	1959	8.9	2021	9.2
3500	1828	8.3	1895	8.6	1960	8.9	2023	9.2	2084	9.5
3750	1900	8.6	1965	8.9	2028	9.2	2089	9.5	2148	9.8
4000	1975	9.0	2038	9.3	2099	9.5	2158	9.8	—	—
4250	2052	9.3	2112	9.6	2171	9.9	—	—	—	—
4500	2130	9.7	2188	9.9	—	—	—	—	—	—
4750	—	—	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

High Static 1266-2200 rpm

48GEFT14 — 12.5 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
3750	1076	0.65	1171	0.84	1267	1.07	1361	1.32	1452	1.61
4065	1151	0.80	1238	0.99	1327	1.23	1415	1.49	1501	1.77
4375	1226	0.96	1307	1.17	1389	1.40	1471	1.66	1552	1.96
4690	1303	1.15	1378	1.36	1455	1.61	1532	1.87	1608	2.17
5000	1380	1.36	1450	1.58	1521	1.82	1593	2.09	1665	2.39
5315	1458	1.59	1524	1.82	1591	2.07	1659	2.35	1726	2.64
5625	1536	1.84	1598	2.07	1661	2.33	1725	2.61	1789	2.91
5940	1615	2.11	1674	2.35	1733	2.61	1793	2.89	1854	3.19
6250	1693	2.39	1749	2.64	1805	2.90	1862	3.19	1920	3.49

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3750	1539	1.91	1622	2.24	1701	2.59	1776	2.94	1847	3.31
4065	1584	2.08	1664	2.42	1741	2.77	1815	3.13	1885	3.51
4375	1632	2.27	1709	2.61	1783	2.96	1855	3.34	1924	3.73
4690	1683	2.48	1757	2.83	1828	3.18	1898	3.56	1966	3.96
5000	1737	2.72	1807	3.06	1876	3.42	1943	3.80	2009	4.20
5315	1794	2.97	1861	3.31	1927	3.68	1991	4.06	2055	4.46
5625	1853	3.23	1916	3.57	1979	3.94	2041	4.32	2103	4.73
5940	1915	3.52	1975	3.86	2035	4.22	2095	4.61	2154	5.01
6250	1977	3.81	2035	4.16	2093	4.52	2150	4.90	—	—

Std/Med Static 1076-2200 rpm, 3.0 maximum bhp

High Static 1076-2200 rpm, 5.0 maximum bhp

48GEFT14 — Standard/Medium Static — 12.5 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
3750	1076	4.8	1171	5.3	1267	5.7	1361	6.1	1452	6.5
4065	1151	5.2	1238	5.6	1327	6.0	1415	6.4	1501	6.8
4375	1226	5.5	1307	5.9	1389	6.3	1471	6.6	1552	7.0
4690	1303	5.9	1378	6.2	1455	6.6	1532	6.9	1608	7.3
5000	1380	6.2	1450	6.5	1521	6.9	1593	7.2	1665	7.5
5315	1458	6.6	1524	6.9	1591	7.2	1659	7.5	1726	7.8
5625	1536	6.9	1598	7.2	1661	7.5	1725	7.8	1789	8.1
5940	1615	7.3	1674	7.6	1733	7.8	1793	8.1	1854	8.4
6250	1693	7.7	1749	7.9	1805	8.2	1862	8.4	—	—

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3750	1539	6.9	1622	7.3	1701	7.7	1776	8.0	—	—
4065	1584	7.2	1664	7.5	1741	7.9	1815	8.2	—	—
4375	1632	7.4	1709	7.7	1783	8.1	—	—	—	—
4690	1683	7.6	1757	8.0	1828	8.3	—	—	—	—
5000	1737	7.9	1807	8.2	—	—	—	—	—	—
5315	1794	8.1	—	—	—	—	—	—	—	—
5625	—	—	—	—	—	—	—	—	—	—
5940	—	—	—	—	—	—	—	—	—	—
6250	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1076-2200 rpm

48GEFT14 — High Static — 12.5 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
3750	1076	4.8	1171	5.3	1267	5.7	1361	6.1	1452	6.5
4065	1151	5.2	1238	5.6	1327	6.0	1415	6.4	1501	6.8
4375	1226	5.5	1307	5.9	1389	6.3	1471	6.6	1552	7.0
4690	1303	5.9	1378	6.2	1455	6.6	1532	6.9	1608	7.3
5000	1380	6.2	1450	6.5	1521	6.9	1593	7.2	1665	7.5
5315	1458	6.6	1524	6.9	1591	7.2	1659	7.5	1726	7.8
5625	1536	6.9	1598	7.2	1661	7.5	1725	7.8	1789	8.1
5940	1615	7.3	1674	7.6	1733	7.8	1793	8.1	1854	8.4
6250	1693	7.7	1749	7.9	1805	8.2	1862	8.4	1920	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3750	1539	6.9	1622	7.3	1701	7.7	1776	8.0	1847	8.4
4065	1584	7.2	1664	7.5	1741	7.9	1815	8.2	1885	8.5
4375	1632	7.4	1709	7.7	1783	8.1	1855	8.4	1924	8.7
4690	1683	7.6	1757	8.0	1828	8.3	1898	8.6	1966	8.9
5000	1737	7.9	1807	8.2	1876	8.5	1943	8.8	2009	9.1
5315	1794	8.1	1861	8.4	1927	8.7	1991	9.0	2055	9.3
5625	1853	8.4	1916	8.7	1979	9.0	2041	9.3	2103	9.6
5940	1915	8.7	1975	9.0	2035	9.2	2095	9.5	2154	9.8
6250	1977	9.0	2035	9.2	2093	9.5	2150	9.8	—	—

High Static 1076-2200 rpm

48GEFT07 — 6 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
1800	848	0.23	993	0.37	1119	0.53	1231	0.71	1334	0.90
1950	893	0.27	1032	0.42	1154	0.58	1263	0.76	1364	0.96
2100	940	0.31	1073	0.47	1190	0.64	1297	0.82	1395	1.03
2250	987	0.36	1114	0.52	1228	0.70	1332	0.89	1428	1.10
2400	1035	0.42	1157	0.58	1267	0.76	1368	0.96	1462	1.17
2550	1084	0.48	1201	0.65	1307	0.84	1405	1.04	1497	1.26
2700	1134	0.54	1246	0.72	1349	0.91	1444	1.12	1533	1.34
2850	1184	0.61	1292	0.80	1391	1.00	1484	1.21	1571	1.43
3000	1234	0.69	1338	0.88	1434	1.08	1525	1.30	1610	1.53

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	1428	1.10	1515	1.32	1597	1.54	1674	1.78	1747	2.02
1950	1457	1.17	1543	1.39	1625	1.62	1702	1.86	1774	2.11
2100	1487	1.24	1572	1.47	1653	1.71	1729	1.95	1802	2.21
2250	1517	1.32	1602	1.55	1682	1.79	1757	2.04	1829	2.31
2400	1550	1.40	1633	1.64	1711	1.88	1786	2.14	1858	2.41
2550	1583	1.48	1665	1.73	1742	1.98	1816	2.24	1887	2.52
2700	1618	1.58	1698	1.82	1774	2.08	1847	2.35	1917	2.62
2850	1653	1.67	1732	1.92	1807	2.18	1878	2.45	1947	2.73
3000	1690	1.77	1767	2.02	1841	2.29	1911	2.56	1979	2.84

Std/Med Static 848-2000 rpm, 2.4 maximum bhp

High Static 848-2200 rpm, 3.0 maximum bhp

48GEFT07 — Standard/Medium Static — 6 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
1800	848	4.1	993	4.8	1119	5.5	1231	6.0	1334	6.6
1950	893	4.3	1032	5.0	1154	5.6	1263	6.2	1364	6.7
2100	940	4.5	1073	5.2	1190	5.8	1297	6.4	1395	6.9
2250	987	4.8	1114	5.4	1228	6.0	1332	6.6	1428	7.1
2400	1035	5.0	1157	5.7	1267	6.2	1368	6.7	1462	7.2
2550	1084	5.3	1201	5.9	1307	6.4	1405	6.9	1497	7.4
2700	1134	5.5	1246	6.1	1349	6.7	1444	7.1	1533	7.6
2850	1184	5.8	1292	6.4	1391	6.9	1484	7.3	1571	7.8
3000	1234	6.1	1338	6.6	1434	7.1	1525	7.6	1610	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
1800	1428	7.1	1515	7.5	1597	7.9	1674	8.3	1747	8.7
1950	1457	7.2	1543	7.6	1625	8.1	1702	8.5	1774	8.8
2100	1487	7.4	1572	7.8	1653	8.2	1729	8.6	1802	9.0
2250	1517	7.5	1602	8.0	1682	8.4	1757	8.8	1829	9.1
2400	1550	7.7	1633	8.1	1711	8.5	1786	8.9	1858	9.3
2550	1583	7.9	1665	8.3	1742	8.7	1816	9.1	1887	9.4
2700	1618	8.0	1698	8.4	1774	8.8	1847	9.2	—	—
2850	1653	8.2	1732	8.6	1807	9.0	1878	9.4	—	—
3000	1690	8.4	1767	8.8	1841	9.2	—	—	—	—

Std/Med Static 848-2000 rpm

48GEFT07 — High Static — 6 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
1800	848	3.8	993	4.4	1119	5.0	1231	5.5	1334	6.0
1950	893	4.0	1032	4.6	1154	5.2	1263	5.7	1364	6.1
2100	940	4.2	1073	4.8	1190	5.3	1297	5.8	1395	6.3
2250	987	4.4	1114	5.0	1228	5.5	1332	6.0	1428	6.4
2400	1035	4.6	1157	5.2	1267	5.7	1368	6.2	1462	6.6
2550	1084	4.8	1201	5.4	1307	5.9	1405	6.3	1497	6.8
2700	1134	5.1	1246	5.6	1349	6.1	1444	6.5	1533	6.9
2850	1184	5.3	1292	5.8	1391	6.3	1484	6.7	1571	7.1
3000	1234	5.5	1338	6.0	1434	6.5	1525	6.9	1610	7.3

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
1800	1428	6.4	1515	6.8	1597	7.2	1674	7.6	1747	7.9
1950	1457	6.6	1543	7.0	1625	7.3	1702	7.7	1774	8.0
2100	1487	6.7	1572	7.1	1653	7.5	1729	7.8	1802	8.2
2250	1517	6.8	1602	7.2	1682	7.6	1757	8.0	1829	8.3
2400	1550	7.0	1633	7.4	1711	7.7	1786	8.1	1858	8.4
2550	1583	7.2	1665	7.5	1742	7.9	1816	8.2	1887	8.6
2700	1618	7.3	1698	7.7	1774	8.0	1847	8.4	1917	8.7
2850	1653	7.5	1732	7.8	1807	8.2	1878	8.5	1947	8.8
3000	1690	7.6	1767	8.0	1841	8.3	1911	8.7	1979	9.0

High Static 848-2200 rpm

48GEFT08 — 7.5 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
2250	946	0.31	1072	0.46	1188	0.62	1294	0.81	1390	1.00
2440	1004	0.37	1123	0.52	1234	0.69	1336	0.88	1430	1.08
2625	1062	0.44	1174	0.59	1280	0.77	1379	0.96	1471	1.17
2815	1123	0.52	1229	0.68	1329	0.85	1424	1.05	1513	1.26
3000	1183	0.60	1283	0.76	1379	0.95	1470	1.15	1557	1.36
3190	1246	0.69	1340	0.86	1431	1.05	1519	1.25	1603	1.47
3375	1307	0.79	1397	0.96	1484	1.16	1568	1.36	1649	1.59
3565	1371	0.90	1456	1.07	1539	1.27	1620	1.48	1698	1.70
3750	1433	1.00	1514	1.19	1594	1.38	1671	1.59	1747	1.82

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	1479	1.20	1561	1.41	1639	1.64	1712	1.87	1782	2.10
2440	1518	1.29	1599	1.51	1676	1.74	1749	1.97	1818	2.22
2625	1556	1.38	1637	1.61	1713	1.84	1785	2.08	1854	2.33
2815	1597	1.48	1677	1.72	1752	1.96	1823	2.20	1891	2.46
3000	1639	1.59	1716	1.82	1790	2.07	1861	2.33	1928	2.59
3190	1682	1.70	1759	1.95	1831	2.20	1901	2.46	1967	2.72
3375	1726	1.82	1801	2.07	1872	2.32	1940	2.58	2006	2.85
3565	1773	1.94	1845	2.19	1915	2.44	1982	2.71	2047	2.99
3750	1820	2.06	1890	2.31	1958	2.56	2024	2.83	2088	3.11

Std/Med Static 946-2000 rpm, 2.4 maximum bhp

High Static 946-2200 rpm, 3.0 maximum bhp

48GEFT08 — Standard/Medium Static — 7.5 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
2250	946	4.6	1072	5.2	1188	5.8	1294	6.4	1390	6.9
2440	1004	4.9	1123	5.5	1234	6.1	1336	6.6	1430	7.1
2625	1062	5.2	1174	5.8	1280	6.3	1379	6.8	1471	7.3
2815	1123	5.5	1229	6.0	1329	6.5	1424	7.0	1513	7.5
3000	1183	5.8	1283	6.3	1379	6.8	1470	7.3	1557	7.7
3190	1246	6.1	1340	6.6	1431	7.1	1519	7.5	1603	8.0
3375	1307	6.4	1397	6.9	1484	7.3	1568	7.8	1649	8.2
3565	1371	6.8	1456	7.2	1539	7.6	1620	8.0	1698	8.4
3750	1433	7.1	1514	7.5	1594	7.9	1671	8.3	1747	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	1479	7.3	1561	7.7	1639	8.1	1712	8.5	1782	8.9
2440	1518	7.5	1599	7.9	1676	8.3	1749	8.7	1818	9.1
2625	1556	7.7	1637	8.1	1713	8.5	1785	8.9	1854	9.2
2815	1597	7.9	1677	8.3	1752	8.7	1823	9.1	1891	9.4
3000	1639	8.1	1716	8.5	1790	8.9	1861	9.3	—	—
3190	1682	8.4	1759	8.8	1831	9.1	1901	9.5	—	—
3375	1726	8.6	1801	9.0	1872	9.3	—	—	—	—
3565	1773	8.8	1845	9.2	1915	9.6	—	—	—	—
3750	1820	9.1	1890	9.4	—	—	—	—	—	—

Std/Med Static 946-2000 rpm

48GEFT08 — High Static — 7.5 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
2250	946	4.2	1072	4.8	1188	5.3	1294	5.8	1390	6.3
2440	1004	4.5	1123	5.0	1234	5.5	1336	6.0	1430	6.4
2625	1062	4.7	1174	5.3	1280	5.8	1379	6.2	1471	6.6
2815	1123	5.0	1229	5.5	1329	6.0	1424	6.4	1513	6.8
3000	1183	5.3	1283	5.8	1379	6.2	1470	6.6	1557	7.0
3190	1246	5.6	1340	6.0	1431	6.5	1519	6.9	1603	7.2
3375	1307	5.9	1397	6.3	1484	6.7	1568	7.1	1649	7.5
3565	1371	6.2	1456	6.6	1539	6.9	1620	7.3	1698	7.7
3750	1433	6.5	1514	6.8	1594	7.2	1671	7.6	1747	7.9

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
2250	1479	6.7	1561	7.1	1639	7.4	1712	7.7	1782	8.1
2440	1518	6.9	1599	7.2	1676	7.6	1749	7.9	1818	8.2
2625	1556	7.0	1637	7.4	1713	7.8	1785	8.1	1854	8.4
2815	1597	7.2	1677	7.6	1752	7.9	1823	8.3	1891	8.6
3000	1639	7.4	1716	7.8	1790	8.1	1861	8.4	1928	8.7
3190	1682	7.6	1759	8.0	1831	8.3	1901	8.6	1967	8.9
3375	1726	7.8	1801	8.2	1872	8.5	1940	8.8	2006	9.1
3565	1773	8.0	1845	8.4	1915	8.7	1982	9.0	2047	9.3
3750	1820	8.2	1890	8.6	1958	8.9	2024	9.2	2088	9.5

High Static 946-2200 rpm

48GEFT09 — 8.5 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
2550	1043	0.42	1158	0.58	1265	0.76	1365	0.95	1458	1.16
2765	1112	0.51	1219	0.67	1321	0.85	1417	1.05	1507	1.27
2975	1180	0.60	1281	0.77	1377	0.96	1469	1.16	1556	1.38
3190	1251	0.71	1345	0.89	1437	1.08	1524	1.29	1608	1.51
3400	1321	0.83	1411	1.01	1497	1.21	1581	1.42	1661	1.65
3615	1394	0.97	1478	1.15	1560	1.35	1640	1.57	1717	1.80
3825	1465	1.11	1545	1.30	1623	1.50	1699	1.72	1774	1.96
4040	1539	1.26	1614	1.46	1689	1.67	1762	1.89	1833	2.13
4250	1611	1.42	1683	1.62	1754	1.83	1824	2.06	1892	2.30

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	1545	1.38	1626	1.60	1702	1.84	1774	2.08	1843	2.34
2765	1591	1.49	1671	1.73	1746	1.97	1818	2.22	1886	2.48
2975	1638	1.61	1716	1.86	1790	2.11	1861	2.37	1928	2.63
3190	1688	1.75	1764	2.00	1837	2.26	1906	2.52	1973	2.80
3400	1738	1.89	1813	2.15	1884	2.41	1952	2.68	2017	2.96
3615	1792	2.05	1864	2.31	1933	2.57	2000	2.85	2064	3.13
3825	1846	2.21	1915	2.47	1983	2.74	2048	3.02	—	—
4040	1902	2.38	1970	2.65	2035	2.92	—	—	—	—
4250	1959	2.56	2025	2.82	2088	3.09	—	—	—	—

Std/Med Static 1043-2000 rpm, 2.4 maximum bhp

High Static 1043-2200 rpm, 5.0 maximum bhp

48GEFT09 — Standard/Medium Static — 8.5 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
2550	1043	5.1	1158	5.7	1265	6.2	1365	6.7	1458	7.2
2765	1112	5.4	1219	6.0	1321	6.5	1417	7.0	1507	7.5
2975	1180	5.8	1281	6.3	1377	6.8	1469	7.3	1556	7.7
3190	1251	6.1	1345	6.6	1437	7.1	1524	7.6	1608	8.0
3400	1321	6.5	1411	7.0	1497	7.4	1581	7.8	1661	8.3
3615	1394	6.9	1478	7.3	1560	7.7	1640	8.1	1717	8.5
3825	1465	7.2	1545	7.7	1623	8.1	1699	8.5	1774	8.8
4040	1539	7.6	1614	8.0	1689	8.4	1762	8.8	1833	9.1
4250	1611	8.0	1683	8.4	1754	8.7	1824	9.1	1892	9.4

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
2550	1545	7.7	1626	8.1	1702	8.5	1774	8.8	1843	9.2
2765	1591	7.9	1671	8.3	1746	8.7	1818	9.1	1886	9.4
2975	1638	8.1	1716	8.5	1790	8.9	1861	9.3	—	—
3190	1688	8.4	1764	8.8	1837	9.2	1906	9.5	—	—
3400	1738	8.7	1813	9.0	1884	9.4	—	—	—	—
3615	1792	8.9	1864	9.3	—	—	—	—	—	—
3825	1846	9.2	1915	9.6	—	—	—	—	—	—
4040	1902	9.5	—	—	—	—	—	—	—	—
4250	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1043-2000 rpm

48GEFT09 — High Static — 8.5 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
2550	1043	4.7	1158	5.2	1265	5.7	1365	6.1	1458	6.6
2765	1112	5.0	1219	5.5	1321	5.9	1417	6.4	1507	6.8
2975	1180	5.3	1281	5.8	1377	6.2	1469	6.6	1556	7.0
3190	1251	5.6	1345	6.1	1437	6.5	1524	6.9	1608	7.3
3400	1321	5.9	1411	6.4	1497	6.8	1581	7.1	1661	7.5
3615	1394	6.3	1478	6.7	1560	7.0	1640	7.4	1717	7.8
3825	1465	6.6	1545	7.0	1623	7.3	1699	7.7	1774	8.0
4040	1539	6.9	1614	7.3	1689	7.6	1762	8.0	1833	8.3
4250	1611	7.3	1683	7.6	1754	7.9	1824	8.3	1892	8.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	1545	7.0	1626	7.4	1702	7.7	1774	8.0	1843	8.4
2765	1591	7.2	1671	7.6	1746	7.9	1818	8.2	1886	8.6
2975	1638	7.4	1716	7.8	1790	8.1	1861	8.4	1928	8.7
3190	1688	7.6	1764	8.0	1837	8.3	1906	8.6	1973	9.0
3400	1738	7.9	1813	8.2	1884	8.5	1952	8.9	2017	9.2
3615	1792	8.1	1864	8.4	1933	8.8	2000	9.1	2064	9.4
3825	1846	8.4	1915	8.7	1983	9.0	2048	9.3	—	—
4040	1902	8.6	1970	8.9	2035	9.2	—	—	—	—
4250	1959	8.9	2025	9.2	2088	9.5	—	—	—	—

High Static 1043-2200 rpm

48GEFT12 — 10 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
3000	1188	0.62	1288	0.78	1384	0.97	1475	1.18	1562	1.40
3250	1271	0.75	1364	0.92	1454	1.12	1540	1.33	1623	1.55
3500	1355	0.89	1441	1.07	1526	1.27	1608	1.49	1687	1.72
3750	1439	1.05	1521	1.24	1600	1.45	1678	1.67	1753	1.90
4000	1525	1.23	1601	1.42	1676	1.63	1750	1.86	1822	2.10
4250	1611	1.42	1683	1.62	1754	1.83	1824	2.06	1892	2.30
4500	1697	1.62	1765	1.82	1833	2.04	1899	2.27	1965	2.51
4750	1784	1.83	1849	2.03	1913	2.25	1976	2.48	2038	2.72
5000	1872	2.04	1933	2.25	1994	2.47	2054	2.70	2114	2.94

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1644	1.63	1722	1.87	1796	2.13	1866	2.38	1933	2.65
3250	1702	1.79	1778	2.04	1850	2.30	1919	2.57	1985	2.84
3500	1763	1.96	1836	2.22	1906	2.48	1974	2.76	2039	3.04
3750	1826	2.15	1897	2.41	1965	2.68	2031	2.96	2094	3.24
4000	1892	2.35	1960	2.61	2026	2.89	2090	3.17	2152	3.46
4250	1959	2.56	2025	2.82	2088	3.09	2150	3.38	—	—
4500	2029	2.77	2092	3.03	2153	3.31	—	—	—	—
4750	2100	2.98	2160	3.24	—	—	—	—	—	—
5000	2173	3.19	—	—	—	—	—	—	—	—

Std/Med Static 1188-2200 rpm, 3.0 maximum bhp

High Static 1188-2200 rpm, 5.0 maximum bhp

48GEFT12 — Standard/Medium Static — 10 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
3000	1188	5.8	1288	6.3	1384	6.8	1475	7.3	1562	7.7
3250	1271	6.3	1364	6.7	1454	7.2	1540	7.6	1623	8.1
3500	1355	6.7	1441	7.1	1526	7.6	1608	8.0	1687	8.4
3750	1439	7.1	1521	7.5	1600	7.9	1678	8.3	1753	8.7
4000	1525	7.6	1601	7.9	1676	8.3	1750	8.7	1822	9.1
4250	1611	8.0	1683	8.4	1754	8.7	1824	9.1	1892	9.4
4500	1697	8.4	1765	8.8	1833	9.1	1899	9.5	1965	9.8
4750	1784	8.9	1849	9.2	1913	9.6	1976	9.9	—	—
5000	1872	9.3	1933	9.7	1994	10.0	—	—	—	—

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
3000	1644	8.2	1722	8.6	1796	9.0	1866	9.3	—	—
3250	1702	8.5	1778	8.9	1850	9.2	—	—	—	—
3500	1763	8.8	1836	9.2	1906	9.5	—	—	—	—
3750	1826	9.1	1897	9.5	—	—	—	—	—	—
4000	1892	9.4	—	—	—	—	—	—	—	—
4250	—	—	—	—	—	—	—	—	—	—
4500	—	—	—	—	—	—	—	—	—	—
4750	—	—	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1188-2200 rpm

48GEFT12 — High Static — 10 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
3000	1188	5.3	1288	5.8	1384	6.2	1475	6.7	1562	7.1
3250	1271	5.7	1364	6.1	1454	6.6	1540	7.0	1623	7.3
3500	1355	6.1	1441	6.5	1526	6.9	1608	7.3	1687	7.6
3750	1439	6.5	1521	6.9	1600	7.2	1678	7.6	1753	7.9
4000	1525	6.9	1601	7.2	1676	7.6	1750	7.9	1822	8.3
4250	1611	7.3	1683	7.6	1754	7.9	1824	8.3	1892	8.6
4500	1697	7.7	1765	8.0	1833	8.3	1899	8.6	1965	8.9
4750	1784	8.1	1849	8.4	1913	8.7	1976	9.0	2038	9.3
5000	1872	8.5	1933	8.8	1994	9.0	2054	9.3	2114	9.6

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
3000	1644	7.4	1722	7.8	1796	8.1	1866	8.5	1933	8.8
3250	1702	7.7	1778	8.1	1850	8.4	1919	8.7	1985	9.0
3500	1763	8.0	1836	8.3	1906	8.6	1974	9.0	2039	9.3
3750	1826	8.3	1897	8.6	1965	8.9	2031	9.2	2094	9.5
4000	1892	8.6	1960	8.9	2026	9.2	2090	9.5	2152	9.8
4250	1959	8.9	2025	9.2	2088	9.5	2150	9.8	—	—
4500	2029	9.2	2092	9.5	2153	9.8	—	—	—	—
4750	2100	9.5	2160	9.8	—	—	—	—	—	—
5000	2173	9.9	—	—	—	—	—	—	—	—

High Static 1188-2200 rpm

48GEFT14 — 12.5 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
3750	1079	0.66	1174	0.85	1270	1.08	1364	1.33	1454	1.61
4065	1154	0.81	1242	1.00	1330	1.23	1418	1.49	1504	1.78
4375	1229	0.97	1310	1.18	1393	1.41	1475	1.68	1556	1.97
4690	1306	1.16	1382	1.38	1459	1.62	1535	1.88	1612	2.18
5000	1383	1.37	1454	1.59	1525	1.84	1598	2.11	1670	2.41
5315	1462	1.61	1528	1.83	1595	2.09	1663	2.36	1731	2.67
5625	1540	1.86	1602	2.09	1665	2.35	1729	2.63	1793	2.93
5940	1619	2.13	1678	2.37	1738	2.63	1798	2.91	1859	3.22
6250	1698	2.42	1754	2.66	1810	2.93	1867	3.21	1925	3.52

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3750	1540	1.92	1623	2.25	1701	2.59	1775	2.94	1846	3.30
4065	1586	2.09	1666	2.42	1742	2.77	1815	3.13	1885	3.51
4375	1635	2.29	1711	2.62	1785	2.97	1856	3.34	1925	3.73
4690	1687	2.50	1760	2.84	1831	3.20	1900	3.57	1967	3.97
5000	1741	2.73	1811	3.08	1879	3.44	1946	3.82	2011	4.21
5315	1798	2.99	1865	3.33	1930	3.69	1995	4.08	2058	4.48
5625	1857	3.25	1921	3.60	1984	3.97	2045	4.35	2106	4.75
5940	1920	3.55	1980	3.89	2040	4.25	2099	4.63	2158	5.04
6250	1983	3.85	2040	4.19	2098	4.56	2154	4.93	—	—

Std/Med Static 1079-2200 rpm, 3.0 maximum bhp

High Static 1079-2200 rpm, 5.0 maximum bhp

48GEFT14 — Standard/Medium Static — 12.5 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
3750	1079	4.8	1174	5.3	1270	5.7	1364	6.1	1454	6.6
4065	1154	5.2	1242	5.6	1330	6.0	1418	6.4	1504	6.8
4375	1229	5.5	1310	5.9	1393	6.3	1475	6.7	1556	7.0
4690	1306	5.9	1382	6.2	1459	6.6	1535	6.9	1612	7.3
5000	1383	6.2	1454	6.6	1525	6.9	1598	7.2	1670	7.6
5315	1462	6.6	1528	6.9	1595	7.2	1663	7.5	1731	7.8
5625	1540	7.0	1602	7.2	1665	7.5	1729	7.8	1793	8.1
5940	1619	7.3	1678	7.6	1738	7.9	1798	8.1	—	—
6250	1698	7.7	1754	7.9	1810	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
3750	1540	7.0	1623	7.3	1701	7.7	1775	8.0	—	—
4065	1586	7.2	1666	7.5	1742	7.9	1815	8.2	—	—
4375	1635	7.4	1711	7.7	1785	8.1	—	—	—	—
4690	1687	7.6	1760	8.0	1831	8.3	—	—	—	—
5000	1741	7.9	1811	8.2	—	—	—	—	—	—
5315	1798	8.1	—	—	—	—	—	—	—	—
5625	—	—	—	—	—	—	—	—	—	—
5940	—	—	—	—	—	—	—	—	—	—
6250	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1079-2200 rpm

48GEFT14 — High Static — 12.5 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
3750	1079	4.8	1174	5.3	1270	5.7	1364	6.1	1454	6.6
4065	1154	5.2	1242	5.6	1330	6.0	1418	6.4	1504	6.8
4375	1229	5.5	1310	5.9	1393	6.3	1475	6.7	1556	7.0
4690	1306	5.9	1382	6.2	1459	6.6	1535	6.9	1612	7.3
5000	1383	6.2	1454	6.6	1525	6.9	1598	7.2	1670	7.6
5315	1462	6.6	1528	6.9	1595	7.2	1663	7.5	1731	7.8
5625	1540	7.0	1602	7.2	1665	7.5	1729	7.8	1793	8.1
5940	1619	7.3	1678	7.6	1738	7.9	1798	8.1	1859	8.4
6250	1698	7.7	1754	7.9	1810	8.2	1867	8.5	1925	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
3750	1540	7.0	1623	7.3	1701	7.7	1775	8.0	1846	8.4
4065	1586	7.2	1666	7.5	1742	7.9	1815	8.2	1885	8.5
4375	1635	7.4	1711	7.7	1785	8.1	1856	8.4	1925	8.7
4690	1687	7.6	1760	8.0	1831	8.3	1900	8.6	1967	8.9
5000	1741	7.9	1811	8.2	1879	8.5	1946	8.8	2011	9.1
5315	1798	8.1	1865	8.5	1930	8.8	1995	9.1	2058	9.3
5625	1857	8.4	1921	8.7	1984	9.0	2045	9.3	2106	9.6
5940	1920	8.7	1980	9.0	2040	9.3	2099	9.5	2158	9.8
6250	1983	9.0	2040	9.3	2098	9.5	2154	9.8	—	—

High Static 1079-2200 rpm

50GE-T07 — 6 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
1800	799	0.19	952	0.33	1081	0.48	1194	0.64	1297	0.83
1950	845	0.23	993	0.37	1118	0.53	1228	0.70	1329	0.89
2100	893	0.27	1035	0.42	1156	0.58	1264	0.76	1362	0.95
2250	942	0.32	1079	0.47	1196	0.64	1301	0.83	1397	1.03
2400	992	0.37	1124	0.53	1237	0.71	1340	0.90	1433	1.11
2550	1044	0.43	1170	0.60	1280	0.79	1380	0.98	1471	1.19
2700	1096	0.49	1217	0.67	1324	0.86	1421	1.07	1511	1.28
2850	1148	0.56	1266	0.75	1369	0.95	1463	1.16	1551	1.38
3000	1202	0.64	1315	0.83	1415	1.04	1507	1.26	1593	1.48

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	1392	1.02	1480	1.23	1562	1.44	1640	1.67	1714	1.91
1950	1422	1.09	1509	1.30	1590	1.52	1667	1.75	1740	1.99
2100	1453	1.16	1539	1.38	1619	1.60	1696	1.84	1768	2.09
2250	1486	1.24	1570	1.46	1650	1.69	1725	1.93	1797	2.19
2400	1521	1.32	1603	1.55	1681	1.79	1756	2.03	1827	2.29
2550	1557	1.41	1638	1.65	1715	1.89	1788	2.14	1858	2.40
2700	1594	1.51	1674	1.75	1749	1.99	1821	2.25	1890	2.51
2850	1633	1.61	1711	1.85	1785	2.10	1856	2.37	1924	2.63
3000	1673	1.72	1749	1.96	1822	2.22	1891	2.48	1958	2.75

Std/Med Static 799-2000 rpm, 2.4 maximum bhp

High Static 799-2200 rpm, 3.0 maximum bhp

50GE-T07 — Standard/Medium Static — 6 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
1800	799	3.8	952	4.6	1081	5.3	1194	5.9	1297	6.4
1950	845	4.1	993	4.8	1118	5.5	1228	6.0	1329	6.5
2100	893	4.3	1035	5.0	1156	5.7	1264	6.2	1362	6.7
2250	942	4.6	1079	5.3	1196	5.9	1301	6.4	1397	6.9
2400	992	4.8	1124	5.5	1237	6.1	1340	6.6	1433	7.1
2550	1044	5.1	1170	5.7	1280	6.3	1380	6.8	1471	7.3
2700	1096	5.4	1217	6.0	1324	6.5	1421	7.0	1511	7.5
2850	1148	5.6	1266	6.2	1369	6.8	1463	7.2	1551	7.7
3000	1202	5.9	1315	6.5	1415	7.0	1507	7.5	1593	7.9

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
1800	1392	6.9	1480	7.3	1562	7.7	1640	8.1	1714	8.5
1950	1422	7.0	1509	7.5	1590	7.9	1667	8.3	1740	8.7
2100	1453	7.2	1539	7.6	1619	8.0	1696	8.4	1768	8.8
2250	1486	7.4	1570	7.8	1650	8.2	1725	8.6	1797	9.0
2400	1521	7.5	1603	8.0	1681	8.4	1756	8.7	1827	9.1
2550	1557	7.7	1638	8.1	1715	8.5	1788	8.9	1858	9.3
2700	1594	7.9	1674	8.3	1749	8.7	1821	9.1	1890	9.4
2850	1633	8.1	1711	8.5	1785	8.9	1856	9.3	—	—
3000	1673	8.3	1749	8.7	1822	9.1	1891	9.4	—	—

Std/Med Static 799-2000 rpm

50GE-T07 — High Static — 6 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
1800	799	3.5	952	4.2	1081	4.8	1194	5.4	1297	5.8
1950	845	3.7	993	4.4	1118	5.0	1228	5.5	1329	6.0
2100	893	4.0	1035	4.6	1156	5.2	1264	5.7	1362	6.1
2250	942	4.2	1079	4.8	1196	5.4	1301	5.9	1397	6.3
2400	992	4.4	1124	5.0	1237	5.6	1340	6.0	1433	6.5
2550	1044	4.7	1170	5.2	1280	5.8	1380	6.2	1471	6.6
2700	1096	4.9	1217	5.5	1324	6.0	1421	6.4	1511	6.8
2850	1148	5.1	1266	5.7	1369	6.2	1463	6.6	1551	7.0
3000	1202	5.4	1315	5.9	1415	6.4	1507	6.8	1593	7.2

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
1800	1392	6.3	1480	6.7	1562	7.1	1640	7.4	1714	7.8
1950	1422	6.4	1509	6.8	1590	7.2	1667	7.5	1740	7.9
2100	1453	6.6	1539	6.9	1619	7.3	1696	7.7	1768	8.0
2250	1486	6.7	1570	7.1	1650	7.5	1725	7.8	1797	8.1
2400	1521	6.9	1603	7.2	1681	7.6	1756	8.0	1827	8.3
2550	1557	7.0	1638	7.4	1715	7.8	1788	8.1	1858	8.4
2700	1594	7.2	1674	7.6	1749	7.9	1821	8.3	1890	8.6
2850	1633	7.4	1711	7.7	1785	8.1	1856	8.4	1924	8.7
3000	1673	7.6	1749	7.9	1822	8.3	1891	8.6	1958	8.9

High Static 799-2200 rpm

50GE-T08 — 7.5 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
2250	932	0.30	1056	0.44	1168	0.59	1271	0.77	1365	0.95
2440	992	0.36	1109	0.51	1216	0.67	1315	0.84	1407	1.03
2625	1053	0.43	1162	0.58	1265	0.74	1360	0.92	1449	1.12
2815	1116	0.51	1219	0.66	1317	0.83	1408	1.02	1495	1.22
3000	1178	0.59	1276	0.75	1369	0.93	1457	1.12	1541	1.32
3190	1242	0.68	1335	0.85	1424	1.03	1509	1.23	1590	1.43
3375	1306	0.78	1394	0.95	1479	1.14	1561	1.34	1639	1.55
3565	1372	0.90	1456	1.07	1537	1.26	1615	1.46	1691	1.68
3750	1436	1.01	1517	1.19	1594	1.38	1670	1.59	1742	1.80

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	1453	1.15	1535	1.35	1612	1.56	1685	1.79	1755	2.02
2440	1493	1.23	1573	1.44	1649	1.66	1722	1.89	1790	2.12
2625	1533	1.32	1612	1.54	1687	1.76	1758	2.00	1826	2.24
2815	1576	1.43	1654	1.65	1727	1.88	1797	2.11	1864	2.36
3000	1620	1.53	1696	1.76	1768	1.99	1836	2.23	1903	2.49
3190	1667	1.65	1740	1.88	1811	2.12	1878	2.36	1943	2.62
3375	1713	1.77	1785	2.00	1854	2.25	1920	2.49	1984	2.75
3565	1763	1.90	1833	2.14	1900	2.38	1965	2.63	2027	2.89
3750	1812	2.03	1880	2.26	1946	2.51	2009	2.76	2071	3.03

Std/Med Static 932-2000 rpm, 2.4 maximum bhp

High Static 932-2200 rpm, 3.0 maximum bhp

50GE-T08 — Standard/Medium Static — 7.5 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
2250	932	4.5	1056	5.1	1168	5.7	1271	6.3	1365	6.7
2440	992	4.8	1109	5.4	1216	6.0	1315	6.5	1407	7.0
2625	1053	5.1	1162	5.7	1265	6.2	1360	6.7	1449	7.2
2815	1116	5.5	1219	6.0	1317	6.5	1408	7.0	1495	7.4
3000	1178	5.8	1276	6.3	1369	6.8	1457	7.2	1541	7.6
3190	1242	6.1	1335	6.6	1424	7.0	1509	7.5	1590	7.9
3375	1306	6.4	1394	6.9	1479	7.3	1561	7.7	1639	8.1
3565	1372	6.8	1456	7.2	1537	7.6	1615	8.0	1691	8.4
3750	1436	7.1	1517	7.5	1594	7.9	1670	8.3	1742	8.7

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2250	1453	7.2	1535	7.6	1612	8.0	1685	8.4	1755	8.7
2440	1493	7.4	1573	7.8	1649	8.2	1722	8.6	1790	8.9
2625	1533	7.6	1612	8.0	1687	8.4	1758	8.8	1826	9.1
2815	1576	7.8	1654	8.2	1727	8.6	1797	9.0	1864	9.3
3000	1620	8.0	1696	8.4	1768	8.8	1836	9.2	1903	9.5
3190	1667	8.3	1740	8.7	1811	9.0	1878	9.4	—	—
3375	1713	8.5	1785	8.9	1854	9.2	1920	9.6	—	—
3565	1763	8.8	1833	9.1	1900	9.5	—	—	—	—
3750	1812	9.0	1880	9.4	1946	9.7	—	—	—	—

Std/Med Static 932-2000 rpm

50GE-T08 — High Static — 7.5 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
2250	932	4.1	1056	4.7	1168	5.2	1271	5.7	1365	6.1
2440	992	4.4	1109	5.0	1216	5.5	1315	5.9	1407	6.3
2625	1053	4.7	1162	5.2	1265	5.7	1360	6.1	1449	6.5
2815	1116	5.0	1219	5.5	1317	5.9	1408	6.3	1495	6.7
3000	1178	5.3	1276	5.7	1369	6.2	1457	6.6	1541	7.0
3190	1242	5.6	1335	6.0	1424	6.4	1509	6.8	1590	7.2
3375	1306	5.9	1394	6.3	1479	6.7	1561	7.1	1639	7.4
3565	1372	6.2	1456	6.6	1537	6.9	1615	7.3	1691	7.7
3750	1436	6.5	1517	6.8	1594	7.2	1670	7.6	1742	7.9

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
2250	1453	6.6	1535	6.9	1612	7.3	1685	7.6	1755	7.9
2440	1493	6.7	1573	7.1	1649	7.5	1722	7.8	1790	8.1
2625	1533	6.9	1612	7.3	1687	7.6	1758	8.0	1826	8.3
2815	1576	7.1	1654	7.5	1727	7.8	1797	8.1	1864	8.4
3000	1620	7.3	1696	7.7	1768	8.0	1836	8.3	1903	8.6
3190	1667	7.5	1740	7.9	1811	8.2	1878	8.5	1943	8.8
3375	1713	7.8	1785	8.1	1854	8.4	1920	8.7	1984	9.0
3565	1763	8.0	1833	8.3	1900	8.6	1965	8.9	2027	9.2
3750	1812	8.2	1880	8.5	1946	8.8	2009	9.1	2071	9.4

High Static 932-2200 rpm

50GE-T09 — 8.5 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
2550	1033	0.41	1145	0.56	1249	0.73	1346	0.91	1436	1.10
2765	1104	0.50	1209	0.65	1308	0.83	1401	1.02	1488	1.22
2975	1175	0.60	1273	0.76	1367	0.94	1456	1.13	1540	1.34
3190	1248	0.71	1341	0.88	1430	1.06	1515	1.27	1595	1.48
3400	1321	0.83	1409	1.01	1493	1.20	1574	1.41	1652	1.62
3615	1396	0.97	1479	1.15	1559	1.35	1636	1.56	1711	1.78
3825	1469	1.11	1548	1.30	1625	1.51	1699	1.72	1771	1.95
4040	1545	1.28	1620	1.47	1693	1.68	1764	1.90	1833	2.13
4250	1620	1.44	1692	1.65	1761	1.86	1829	2.08	1896	2.32

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	1521	1.31	1600	1.53	1676	1.76	1747	1.99	1816	2.23
2765	1570	1.43	1647	1.65	1721	1.89	1791	2.13	1859	2.38
2975	1619	1.56	1695	1.79	1767	2.03	1836	2.27	1902	2.53
3190	1672	1.70	1746	1.94	1816	2.18	1884	2.43	1948	2.69
3400	1726	1.85	1797	2.09	1866	2.34	1932	2.60	1995	2.86
3615	1783	2.02	1852	2.26	1918	2.51	1983	2.78	2045	3.05
3825	1840	2.19	1907	2.44	1972	2.70	2034	2.96	—	—
4040	1900	2.37	1965	2.63	2028	2.89	2089	3.16	—	—
4250	1960	2.56	2023	2.81	2084	3.08	—	—	—	—

Std/Med Static 1033-2000 rpm, 2.4 maximum bhp

High Static 1033-2200 rpm, 5.0 maximum bhp

50GE-T09 — Standard/Medium Static — 8.5 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
2550	1033	5.0	1145	5.6	1249	6.1	1346	6.6	1436	7.1
2765	1104	5.4	1209	5.9	1308	6.4	1401	6.9	1488	7.4
2975	1175	5.8	1273	6.3	1367	6.7	1456	7.2	1540	7.6
3190	1248	6.1	1341	6.6	1430	7.1	1515	7.5	1595	7.9
3400	1321	6.5	1409	7.0	1493	7.4	1574	7.8	1652	8.2
3615	1396	6.9	1479	7.3	1559	7.7	1636	8.1	1711	8.5
3825	1469	7.3	1548	7.7	1625	8.1	1699	8.5	1771	8.8
4040	1545	7.7	1620	8.0	1693	8.4	1764	8.8	1833	9.1
4250	1620	8.0	1692	8.4	1761	8.8	1829	9.1	1896	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
2550	1521	7.5	1600	7.9	1676	8.3	1747	8.7	1816	9.1
2765	1570	7.8	1647	8.2	1721	8.6	1791	8.9	1859	9.3
2975	1619	8.0	1695	8.4	1767	8.8	1836	9.2	1902	9.5
3190	1672	8.3	1746	8.7	1816	9.1	1884	9.4	—	—
3400	1726	8.6	1797	9.0	1866	9.3	—	—	—	—
3615	1783	8.9	1852	9.2	1918	9.6	—	—	—	—
3825	1840	9.2	1907	9.5	—	—	—	—	—	—
4040	1900	9.5	—	—	—	—	—	—	—	—
4250	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1033-2000 rpm

50GE-T09 — High Static — 8.5 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
2550	1033	4.6	1145	5.1	1249	5.6	1346	6.1	1436	6.5
2765	1104	4.9	1209	5.4	1308	5.9	1401	6.3	1488	6.7
2975	1175	5.3	1273	5.7	1367	6.2	1456	6.6	1540	7.0
3190	1248	5.6	1341	6.0	1430	6.4	1515	6.8	1595	7.2
3400	1321	5.9	1409	6.3	1493	6.7	1574	7.1	1652	7.5
3615	1396	6.3	1479	6.7	1559	7.0	1636	7.4	1711	7.7
3825	1469	6.6	1548	7.0	1625	7.3	1699	7.7	1771	8.0
4040	1545	7.0	1620	7.3	1693	7.7	1764	8.0	1833	8.3
4250	1620	7.3	1692	7.7	1761	8.0	1829	8.3	1896	8.6

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc	rpm	vdc
2550	1521	6.9	1600	7.2	1676	7.6	1747	7.9	1816	8.2
2765	1570	7.1	1647	7.4	1721	7.8	1791	8.1	1859	8.4
2975	1619	7.3	1695	7.7	1767	8.0	1836	8.3	1902	8.6
3190	1672	7.6	1746	7.9	1816	8.2	1884	8.5	1948	8.8
3400	1726	7.8	1797	8.1	1866	8.5	1932	8.8	1995	9.1
3615	1783	8.1	1852	8.4	1918	8.7	1983	9.0	2045	9.3
3825	1840	8.3	1907	8.6	1972	8.9	2034	9.2	—	—
4040	1900	8.6	1965	8.9	2028	9.2	2089	9.5	—	—
4250	1960	8.9	2023	9.2	2084	9.5	—	—	—	—

High Static 1033-2200 rpm

50GE-T12 — 10 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
3000	1181	0.60	1279	0.77	1372	0.95	1461	1.14	1544	1.35
3250	1264	0.73	1356	0.91	1443	1.09	1527	1.29	1607	1.51
3500	1348	0.88	1434	1.06	1517	1.25	1596	1.46	1673	1.68
3750	1433	1.04	1514	1.23	1592	1.43	1667	1.64	1740	1.86
4000	1518	1.21	1595	1.41	1669	1.61	1740	1.83	1810	2.06
4250	1605	1.41	1677	1.60	1747	1.81	1815	2.03	1882	2.27
4500	1691	1.60	1760	1.81	1826	2.02	1892	2.24	1955	2.48
4750	1778	1.81	1843	2.01	1907	2.23	1969	2.46	2030	2.69
5000	1866	2.02	1928	2.23	1988	2.44	2048	2.67	2106	2.91

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1624	1.57	1699	1.80	1771	2.04	1840	2.29	1906	2.54
3250	1684	1.73	1757	1.97	1827	2.21	1894	2.47	1958	2.72
3500	1746	1.91	1817	2.15	1884	2.40	1950	2.66	2013	2.92
3750	1811	2.10	1879	2.34	1945	2.60	2008	2.86	2070	3.13
4000	1878	2.30	1943	2.55	2007	2.81	2069	3.08	2128	3.35
4250	1947	2.51	2010	2.76	2071	3.02	2131	3.29	2189	3.56
4500	2017	2.72	2078	2.97	2138	3.24	2195	3.50	—	—
4750	2090	2.94	2148	3.19	—	—	—	—	—	—
5000	2164	3.15	—	—	—	—	—	—	—	—

Std/Med Static 1181-2200 rpm, 3.0 maximum bhp

High Static 1181-2200 rpm, 5.0 maximum bhp

50GE-T12 — Standard/Medium Static — 10 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
3000	1181	5.8	1279	6.3	1372	6.8	1461	7.2	1544	7.7
3250	1264	6.2	1356	6.7	1443	7.1	1527	7.6	1607	8.0
3500	1348	6.6	1434	7.1	1517	7.5	1596	7.9	1673	8.3
3750	1433	7.1	1514	7.5	1592	7.9	1667	8.3	1740	8.7
4000	1518	7.5	1595	7.9	1669	8.3	1740	8.7	1810	9.0
4250	1605	8.0	1677	8.3	1747	8.7	1815	9.0	1882	9.4
4500	1691	8.4	1760	8.8	1826	9.1	1892	9.4	1955	9.8
4750	1778	8.9	1843	9.2	1907	9.5	1969	9.8	—	—
5000	1866	9.3	1928	9.6	1988	9.9	—	—	—	—

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
3000	1624	8.1	1699	8.5	1771	8.8	1840	9.2	1906	9.5
3250	1684	8.4	1757	8.8	1827	9.1	1894	9.5	—	—
3500	1746	8.7	1817	9.1	1884	9.4	—	—	—	—
3750	1811	9.0	1879	9.4	—	—	—	—	—	—
4000	1878	9.4	1943	9.7	—	—	—	—	—	—
4250	1947	9.7	—	—	—	—	—	—	—	—
4500	—	—	—	—	—	—	—	—	—	—
4750	—	—	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1181-2200 rpm

50GE-T12 — High Static — 10 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
3000	1181	5.3	1279	5.7	1372	6.2	1461	6.6	1544	7.0
3250	1264	5.7	1356	6.1	1443	6.5	1527	6.9	1607	7.3
3500	1348	6.1	1434	6.5	1517	6.8	1596	7.2	1673	7.6
3750	1433	6.5	1514	6.8	1592	7.2	1667	7.5	1740	7.9
4000	1518	6.9	1595	7.2	1669	7.5	1740	7.9	1810	8.2
4250	1605	7.3	1677	7.6	1747	7.9	1815	8.2	1882	8.5
4500	1691	7.7	1760	8.0	1826	8.3	1892	8.6	1955	8.9
4750	1778	8.1	1843	8.4	1907	8.6	1969	8.9	2030	9.2
5000	1866	8.5	1928	8.7	1988	9.0	2048	9.3	2106	9.6

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
3000	1624	7.3	1699	7.7	1771	8.0	1840	8.3	1906	8.6
3250	1684	7.6	1757	8.0	1827	8.3	1894	8.6	1958	8.9
3500	1746	7.9	1817	8.2	1884	8.5	1950	8.8	2013	9.1
3750	1811	8.2	1879	8.5	1945	8.8	2008	9.1	2070	9.4
4000	1878	8.5	1943	8.8	2007	9.1	2069	9.4	2128	9.7
4250	1947	8.8	2010	9.1	2071	9.4	2131	9.7	2189	9.9
4500	2017	9.2	2078	9.4	2138	9.7	2195	10.0	—	—
4750	2090	9.5	2148	9.8	—	—	—	—	—	—
5000	2164	9.8	—	—	—	—	—	—	—	—

High Static 1181-2200 rpm

50GE-T14 — 12.5 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
3750	1001	0.53	1094	0.69	1190	0.89	1286	1.12	1379	1.38
4065	1075	0.65	1160	0.82	1248	1.02	1337	1.25	1424	1.51
4375	1148	0.79	1227	0.97	1308	1.17	1390	1.40	1473	1.67
4690	1224	0.96	1297	1.14	1372	1.35	1449	1.59	1525	1.85
5000	1299	1.14	1367	1.32	1437	1.54	1509	1.78	1581	2.05
5315	1375	1.34	1440	1.53	1505	1.75	1572	2.00	1640	2.27
5625	1451	1.55	1512	1.76	1574	1.98	1637	2.23	1700	2.50
5940	1529	1.79	1586	2.00	1644	2.23	1704	2.48	1763	2.75
6250	1606	2.04	1660	2.26	1715	2.49	1771	2.74	1828	3.01

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3750	1469	1.67	1555	1.97	1638	2.31	1716	2.65	1790	3.01
4065	1510	1.80	1593	2.12	1673	2.45	1749	2.80	1822	3.17
4375	1554	1.96	1633	2.28	1710	2.62	1784	2.97	1856	3.34
4690	1602	2.14	1677	2.46	1751	2.80	1823	3.16	1893	3.54
5000	1653	2.34	1724	2.66	1794	2.99	1864	3.36	1931	3.73
5315	1707	2.56	1775	2.87	1842	3.21	1908	3.57	1973	3.95
5625	1764	2.79	1828	3.10	1892	3.44	1955	3.80	2018	4.18
5940	1824	3.04	1885	3.36	1945	3.69	2006	4.05	2065	4.41
6250	1885	3.31	1943	3.62	2000	3.95	2058	4.30	2115	4.67

Std/Med Static 1001-2200 rpm, 3.0 maximum bhp

High Static 1001-2200 rpm, 5.0 maximum bhp

50GE-T14 — Standard/Medium Static — 12.5 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
3750	1001	4.5	1094	4.9	1190	5.3	1286	5.8	1379	6.2
4065	1075	4.8	1160	5.2	1248	5.6	1337	6.0	1424	6.4
4375	1148	5.1	1227	5.5	1308	5.9	1390	6.3	1473	6.6
4690	1224	5.5	1297	5.8	1372	6.2	1449	6.5	1525	6.9
5000	1299	5.8	1367	6.2	1437	6.5	1509	6.8	1581	7.1
5315	1375	6.2	1440	6.5	1505	6.8	1572	7.1	1640	7.4
5625	1451	6.5	1512	6.8	1574	7.1	1637	7.4	1700	7.7
5940	1529	6.9	1586	7.2	1644	7.4	1704	7.7	1763	8.0
6250	1606	7.3	1660	7.5	1715	7.8	1771	8.0	1828	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
3750	1469	6.6	1555	7.0	1638	7.4	1716	7.8	1790	8.1
4065	1510	6.8	1593	7.2	1673	7.6	1749	7.9	1822	8.3
4375	1554	7.0	1633	7.4	1710	7.7	1784	8.1	—	—
4690	1602	7.2	1677	7.6	1751	7.9	1823	8.3	—	—
5000	1653	7.5	1724	7.8	1794	8.1	—	—	—	—
5315	1707	7.7	1775	8.0	—	—	—	—	—	—
5625	1764	8.0	1828	8.3	—	—	—	—	—	—
5940	1824	8.3	—	—	—	—	—	—	—	—
6250	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1001-2200 rpm

50GE-T14 — High Static — 12.5 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
3750	1001	4.5	1094	4.9	1190	5.3	1286	5.8	1379	6.2
4065	1075	4.8	1160	5.2	1248	5.6	1337	6.0	1424	6.4
4375	1148	5.1	1227	5.5	1308	5.9	1390	6.3	1473	6.6
4690	1224	5.5	1297	5.8	1372	6.2	1449	6.5	1525	6.9
5000	1299	5.8	1367	6.2	1437	6.5	1509	6.8	1581	7.1
5315	1375	6.2	1440	6.5	1505	6.8	1572	7.1	1640	7.4
5625	1451	6.5	1512	6.8	1574	7.1	1637	7.4	1700	7.7
5940	1529	6.9	1586	7.2	1644	7.4	1704	7.7	1763	8.0
6250	1606	7.3	1660	7.5	1715	7.8	1771	8.0	1828	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
3750	1469	6.6	1555	7.0	1638	7.4	1716	7.8	1790	8.1
4065	1510	6.8	1593	7.2	1673	7.6	1749	7.9	1822	8.3
4375	1554	7.0	1633	7.4	1710	7.7	1784	8.1	1856	8.4
4690	1602	7.2	1677	7.6	1751	7.9	1823	8.3	1893	8.6
5000	1653	7.5	1724	7.8	1794	8.1	1864	8.4	1931	8.8
5315	1707	7.7	1775	8.0	1842	8.3	1908	8.7	1973	9.0
5625	1764	8.0	1828	8.3	1892	8.6	1955	8.9	2018	9.2
5940	1824	8.3	1885	8.5	1945	8.8	2006	9.1	2065	9.4
6250	1885	8.5	1943	8.8	2000	9.1	2058	9.3	2115	9.6

High Static 1001-2200 rpm

50GE-T07 — 6 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
1800	752	0.16	912	0.29	1047	0.43	1167	0.60	1275	0.78
1950	794	0.19	947	0.32	1078	0.47	1195	0.65	1301	0.83
2100	838	0.22	984	0.36	1111	0.52	1225	0.69	1329	0.89
2250	883	0.26	1023	0.40	1146	0.57	1256	0.75	1358	0.94
2400	929	0.30	1063	0.45	1182	0.62	1289	0.80	1388	1.00
2550	977	0.35	1104	0.50	1219	0.68	1324	0.87	1421	1.07
2700	1025	0.40	1147	0.56	1258	0.74	1360	0.94	1454	1.14
2850	1074	0.46	1191	0.62	1298	0.81	1397	1.01	1489	1.22
3000	1123	0.52	1236	0.69	1339	0.88	1435	1.08	1525	1.30

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
1800	1374	0.98	1465	1.19	1550	1.41	1630	1.64	1705	1.88
1950	1399	1.04	1489	1.25	1574	1.47	1653	1.71	1729	1.95
2100	1425	1.09	1514	1.31	1598	1.54	1677	1.78	1753	2.03
2250	1452	1.15	1540	1.38	1623	1.61	1702	1.86	1777	2.11
2400	1481	1.22	1568	1.45	1650	1.69	1728	1.94	1802	2.20
2550	1511	1.29	1597	1.52	1677	1.77	1754	2.02	1828	2.29
2700	1543	1.37	1627	1.60	1706	1.85	1782	2.11	1855	2.38
2850	1576	1.45	1658	1.69	1736	1.94	1811	2.20	1883	2.47
3000	1610	1.53	1691	1.77	1767	2.02	1841	2.29	1912	2.56

Std/Med Static 752-2000 rpm, 2.4 maximum bhp

High Static 752-2200 rpm, 3.0 maximum bhp

50GE-T07 — Standard/Medium Static — 6 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
1800	752	3.6	912	4.4	1047	5.1	1167	5.7	1275	6.3
1950	794	3.8	947	4.6	1078	5.3	1195	5.9	1301	6.4
2100	838	4.0	984	4.8	1111	5.4	1225	6.0	1329	6.5
2250	883	4.3	1023	5.0	1146	5.6	1256	6.2	1358	6.7
2400	929	4.5	1063	5.2	1182	5.8	1289	6.3	1388	6.9
2550	977	4.7	1104	5.4	1219	6.0	1324	6.5	1421	7.0
2700	1025	5.0	1147	5.6	1258	6.2	1360	6.7	1454	7.2
2850	1074	5.2	1191	5.8	1298	6.4	1397	6.9	1489	7.4
3000	1123	5.5	1236	6.1	1339	6.6	1435	7.1	1525	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
1800	1374	6.8	1465	7.2	1550	7.7	1630	8.1	1705	8.5
1950	1399	6.9	1489	7.4	1574	7.8	1653	8.2	1729	8.6
2100	1425	7.0	1514	7.5	1598	7.9	1677	8.3	1753	8.7
2250	1452	7.2	1540	7.6	1623	8.1	1702	8.5	1777	8.9
2400	1481	7.3	1568	7.8	1650	8.2	1728	8.6	1802	9.0
2550	1511	7.5	1597	7.9	1677	8.3	1754	8.7	1828	9.1
2700	1543	7.6	1627	8.1	1706	8.5	1782	8.9	1855	9.3
2850	1576	7.8	1658	8.2	1736	8.6	1811	9.0	1883	9.4
3000	1610	8.0	1691	8.4	1767	8.8	1841	9.2	—	—

Std/Med Static 752-2000 rpm

50GE-T07 — High Static — 6 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
1800	752	3.3	912	4.1	1047	4.7	1167	5.2	1275	5.7
1950	794	3.5	947	4.2	1078	4.8	1195	5.4	1301	5.9
2100	838	3.7	984	4.4	1111	5.0	1225	5.5	1329	6.0
2250	883	3.9	1023	4.6	1146	5.1	1256	5.6	1358	6.1
2400	929	4.1	1063	4.8	1182	5.3	1289	5.8	1388	6.3
2550	977	4.4	1104	4.9	1219	5.5	1324	6.0	1421	6.4
2700	1025	4.6	1147	5.1	1258	5.7	1360	6.1	1454	6.6
2850	1074	4.8	1191	5.3	1298	5.8	1397	6.3	1489	6.7
3000	1123	5.0	1236	5.6	1339	6.0	1435	6.5	1525	6.9

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
1800	1374	6.2	1465	6.6	1550	7.0	1630	7.4	1705	7.7
1950	1399	6.3	1489	6.7	1574	7.1	1653	7.5	1729	7.8
2100	1425	6.4	1514	6.8	1598	7.2	1677	7.6	1753	7.9
2250	1452	6.5	1540	7.0	1623	7.3	1702	7.7	1777	8.0
2400	1481	6.7	1568	7.1	1650	7.5	1728	7.8	1802	8.2
2550	1511	6.8	1597	7.2	1677	7.6	1754	7.9	1828	8.3
2700	1543	7.0	1627	7.4	1706	7.7	1782	8.1	1855	8.4
2850	1576	7.1	1658	7.5	1736	7.9	1811	8.2	1883	8.5
3000	1610	7.3	1691	7.7	1767	8.0	1841	8.3	1912	8.7

High Static 752-2200 rpm

50GE-T08 — 7.5 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
2250	873	0.25	1004	0.38	1126	0.53	1237	0.70	1338	0.89
2440	927	0.29	1051	0.43	1167	0.59	1274	0.76	1373	0.95
2625	982	0.35	1098	0.48	1208	0.65	1311	0.83	1408	1.02
2815	1040	0.41	1148	0.55	1252	0.71	1352	0.90	1445	1.10
3000	1097	0.48	1199	0.62	1298	0.79	1393	0.98	1484	1.18
3190	1156	0.55	1252	0.70	1346	0.87	1437	1.06	1525	1.27
3375	1214	0.63	1305	0.79	1395	0.96	1482	1.15	1566	1.36
3565	1275	0.72	1361	0.88	1446	1.05	1530	1.25	1611	1.46
3750	1334	0.81	1416	0.97	1498	1.15	1578	1.34	1656	1.55

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2250	1431	1.09	1517	1.30	1597	1.51	1673	1.74	1744	1.97
2440	1464	1.16	1549	1.37	1629	1.59	1704	1.83	1775	2.06
2625	1498	1.23	1582	1.45	1661	1.68	1736	1.92	1807	2.16
2815	1533	1.31	1616	1.54	1694	1.77	1769	2.01	1839	2.26
3000	1569	1.39	1651	1.63	1728	1.86	1801	2.11	1871	2.37
3190	1608	1.49	1688	1.72	1764	1.96	1836	2.21	1905	2.47
3375	1647	1.58	1725	1.82	1799	2.06	1871	2.32	1939	2.58
3565	1689	1.68	1765	1.91	1838	2.16	1908	2.42	1975	2.68
3750	1731	1.77	1805	2.01	1876	2.25	1944	2.51	2011	2.78

Std/Med Static 873-2000 rpm, 2.4 maximum bhp

High Static 873-2200 rpm, 3.0 maximum bhp

50GE-T08 — Standard/Medium Static — 7.5 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
2250	873	4.2	1004	4.9	1126	5.5	1237	6.1	1338	6.6
2440	927	4.5	1051	5.1	1167	5.7	1274	6.3	1373	6.8
2625	982	4.8	1098	5.4	1208	5.9	1311	6.5	1408	7.0
2815	1040	5.1	1148	5.6	1252	6.2	1352	6.7	1445	7.1
3000	1097	5.4	1199	5.9	1298	6.4	1393	6.9	1484	7.3
3190	1156	5.7	1252	6.2	1346	6.6	1437	7.1	1525	7.6
3375	1214	6.0	1305	6.4	1395	6.9	1482	7.3	1566	7.8
3565	1275	6.3	1361	6.7	1446	7.2	1530	7.6	1611	8.0
3750	1334	6.6	1416	7.0	1498	7.4	1578	7.8	1656	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
2250	1431	7.1	1517	7.5	1597	7.9	1673	8.3	1744	8.7
2440	1464	7.2	1549	7.7	1629	8.1	1704	8.5	1775	8.8
2625	1498	7.4	1582	7.9	1661	8.3	1736	8.6	1807	9.0
2815	1533	7.6	1616	8.0	1694	8.4	1769	8.8	1839	9.2
3000	1569	7.8	1651	8.2	1728	8.6	1801	9.0	1871	9.3
3190	1608	8.0	1688	8.4	1764	8.8	1836	9.2	1905	9.5
3375	1647	8.2	1725	8.6	1799	9.0	1871	9.3	—	—
3565	1689	8.4	1765	8.8	1838	9.2	1908	9.5	—	—
3750	1731	8.6	1805	9.0	1876	9.4	1944	9.7	—	—

Std/Med Static 873-2000 rpm

50GE-T08 — High Static — 7.5 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
2250	873	3.9	1004	4.5	1126	5.0	1237	5.6	1338	6.0
2440	927	4.1	1051	4.7	1167	5.2	1274	5.7	1373	6.2
2625	982	4.4	1098	4.9	1208	5.4	1311	5.9	1408	6.3
2815	1040	4.6	1148	5.1	1252	5.6	1352	6.1	1445	6.5
3000	1097	4.9	1199	5.4	1298	5.8	1393	6.3	1484	6.7
3190	1156	5.2	1252	5.6	1346	6.1	1437	6.5	1525	6.9
3375	1214	5.4	1305	5.9	1395	6.3	1482	6.7	1566	7.1
3565	1275	5.7	1361	6.1	1446	6.5	1530	6.9	1611	7.3
3750	1334	6.0	1416	6.4	1498	6.8	1578	7.1	1656	7.5

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
2250	1431	6.5	1517	6.8	1597	7.2	1673	7.6	1744	7.9
2440	1464	6.6	1549	7.0	1629	7.4	1704	7.7	1775	8.0
2625	1498	6.8	1582	7.1	1661	7.5	1736	7.9	1807	8.2
2815	1533	6.9	1616	7.3	1694	7.7	1769	8.0	1839	8.3
3000	1569	7.1	1651	7.5	1728	7.8	1801	8.2	1871	8.5
3190	1608	7.3	1688	7.6	1764	8.0	1836	8.3	1905	8.6
3375	1647	7.4	1725	7.8	1799	8.1	1871	8.5	1939	8.8
3565	1689	7.6	1765	8.0	1838	8.3	1908	8.7	1975	9.0
3750	1731	7.8	1805	8.2	1876	8.5	1944	8.8	2011	9.1

High Static 873-2200 rpm

50GE-T09 — 8.5 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
2550	964	0.33	1083	0.47	1196	0.64	1301	0.82	1398	1.02
2765	1029	0.40	1140	0.55	1246	0.72	1346	0.90	1441	1.11
2975	1094	0.48	1197	0.63	1297	0.80	1393	0.99	1484	1.20
3190	1161	0.57	1258	0.72	1352	0.90	1443	1.09	1531	1.31
3400	1228	0.67	1319	0.83	1408	1.01	1495	1.20	1579	1.42
3615	1297	0.78	1382	0.94	1467	1.12	1549	1.32	1630	1.54
3825	1365	0.89	1446	1.06	1526	1.25	1604	1.45	1681	1.67
4040	1435	1.02	1512	1.20	1587	1.38	1662	1.59	1736	1.81
4250	1504	1.16	1577	1.33	1649	1.52	1721	1.73	1791	1.95

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
2550	1489	1.23	1573	1.45	1652	1.68	1727	1.92	1798	2.17
2765	1529	1.32	1612	1.55	1691	1.79	1765	2.04	1835	2.29
2975	1570	1.42	1652	1.66	1729	1.90	1802	2.15	1872	2.41
3190	1614	1.53	1694	1.77	1770	2.02	1842	2.27	1911	2.54
3400	1659	1.65	1737	1.89	1811	2.14	1882	2.40	1950	2.67
3615	1707	1.77	1782	2.02	1855	2.27	1924	2.54	1991	2.81
3825	1756	1.90	1829	2.15	1899	2.41	1967	2.68	2033	2.95
4040	1808	2.05	1878	2.29	1946	2.55	2013	2.82	2077	3.10
4250	1860	2.19	1928	2.44	1994	2.69	2059	2.97	—	—

Std/Med Static 964-2000 rpm, 2.4 maximum bhp

High Static 964-2200 rpm, 5.0 maximum bhp

50GE-T09 — Standard/Medium Static — 8.5 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
2550	964	4.7	1083	5.3	1196	5.9	1301	6.4	1398	6.9
2765	1029	5.0	1140	5.6	1246	6.1	1346	6.6	1441	7.1
2975	1094	5.3	1197	5.9	1297	6.4	1393	6.9	1484	7.3
3190	1161	5.7	1258	6.2	1352	6.7	1443	7.1	1531	7.6
3400	1228	6.0	1319	6.5	1408	7.0	1495	7.4	1579	7.8
3615	1297	6.4	1382	6.8	1467	7.3	1549	7.7	1630	8.1
3825	1365	6.7	1446	7.2	1526	7.6	1604	8.0	1681	8.4
4040	1435	7.1	1512	7.5	1587	7.9	1662	8.3	1736	8.6
4250	1504	7.4	1577	7.8	1649	8.2	1721	8.6	1791	8.9

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
2550	1489	7.4	1573	7.8	1652	8.2	1727	8.6	1798	9.0
2765	1529	7.6	1612	8.0	1691	8.4	1765	8.8	1835	9.2
2975	1570	7.8	1652	8.2	1729	8.6	1802	9.0	1872	9.3
3190	1614	8.0	1694	8.4	1770	8.8	1842	9.2	1911	9.5
3400	1659	8.2	1737	8.6	1811	9.0	1882	9.4	—	—
3615	1707	8.5	1782	8.9	1855	9.3	1924	9.6	—	—
3825	1756	8.7	1829	9.1	1899	9.5	—	—	—	—
4040	1808	9.0	1878	9.4	—	—	—	—	—	—
4250	1860	9.3	1928	9.6	—	—	—	—	—	—

Std/Med Static 964-2200 rpm

50GE-T09 — High Static — 8.5 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
2550	964	4.3	1083	4.8	1196	5.4	1301	5.9	1398	6.3
2765	1029	4.6	1140	5.1	1246	5.6	1346	6.1	1441	6.5
2975	1094	4.9	1197	5.4	1297	5.8	1393	6.3	1484	6.7
3190	1161	5.2	1258	5.7	1352	6.1	1443	6.5	1531	6.9
3400	1228	5.5	1319	5.9	1408	6.3	1495	6.7	1579	7.1
3615	1297	5.8	1382	6.2	1467	6.6	1549	7.0	1630	7.4
3825	1365	6.1	1446	6.5	1526	6.9	1604	7.2	1681	7.6
4040	1435	6.5	1512	6.8	1587	7.2	1662	7.5	1736	7.9
4250	1504	6.8	1577	7.1	1649	7.5	1721	7.8	1791	8.1

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
2550	1489	6.7	1573	7.1	1652	7.5	1727	7.8	1798	8.1
2765	1529	6.9	1612	7.3	1691	7.7	1765	8.0	1835	8.3
2975	1570	7.1	1652	7.5	1729	7.8	1802	8.2	1872	8.5
3190	1614	7.3	1694	7.7	1770	8.0	1842	8.3	1911	8.7
3400	1659	7.5	1737	7.9	1811	8.2	1882	8.5	1950	8.8
3615	1707	7.7	1782	8.1	1855	8.4	1924	8.7	1991	9.0
3825	1756	8.0	1829	8.3	1899	8.6	1967	8.9	2033	9.2
4040	1808	8.2	1878	8.5	1946	8.8	2013	9.1	2077	9.4
4250	1860	8.4	1928	8.7	1994	9.0	2059	9.3	—	—

High Static 964-2200 rpm

50GE-T12 — 10 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
3000	1100	0.49	1202	0.64	1301	0.81	1396	1.00	1487	1.21
3250	1176	0.59	1270	0.74	1363	0.92	1453	1.11	1539	1.32
3500	1252	0.70	1341	0.86	1428	1.04	1512	1.24	1595	1.45
3750	1330	0.83	1413	1.00	1495	1.18	1575	1.38	1653	1.60
4000	1409	0.97	1487	1.14	1563	1.33	1639	1.53	1714	1.75
4250	1488	1.12	1561	1.29	1634	1.48	1706	1.69	1776	1.90
4500	1568	1.28	1637	1.45	1706	1.65	1774	1.85	1841	2.07
4750	1648	1.44	1714	1.62	1779	1.81	1844	2.02	1908	2.23
5000	1728	1.61	1791	1.79	1853	1.98	1915	2.19	1976	2.40

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3000	1573	1.43	1654	1.66	1732	1.91	1805	2.16	1875	2.42
3250	1622	1.55	1702	1.79	1777	2.04	1849	2.29	1919	2.57
3500	1674	1.68	1751	1.92	1825	2.18	1895	2.44	1964	2.72
3750	1729	1.83	1803	2.07	1874	2.33	1943	2.59	2010	2.87
4000	1786	1.98	1857	2.22	1926	2.48	1993	2.75	2058	3.03
4250	1846	2.14	1914	2.38	1980	2.64	2045	2.91	2108	3.18
4500	1908	2.30	1973	2.54	2036	2.80	2099	3.06	2160	3.34
4750	1971	2.46	2034	2.71	2095	2.96	2155	3.22	—	—
5000	2036	2.63	2096	2.87	2155	3.11	—	—	—	—

Std/Med Static 1100-2200 rpm, 3.0 maximum bhp

High Static 1100-2200 rpm, 5.0 maximum bhp

50GE-T12 — Standard/Medium Static — 10 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
3000	1100	5.4	1202	5.9	1301	6.4	1396	6.9	1487	7.4
3250	1176	5.8	1270	6.2	1363	6.7	1453	7.2	1539	7.6
3500	1252	6.2	1341	6.6	1428	7.1	1512	7.5	1595	7.9
3750	1330	6.6	1413	7.0	1495	7.4	1575	7.8	1653	8.2
4000	1409	7.0	1487	7.4	1563	7.8	1639	8.1	1714	8.5
4250	1488	7.4	1561	7.7	1634	8.1	1706	8.5	1776	8.8
4500	1568	7.8	1637	8.1	1706	8.5	1774	8.8	1841	9.2
4750	1648	8.2	1714	8.5	1779	8.9	1844	9.2	1908	9.5
5000	1728	8.6	1791	8.9	1853	9.2	1915	9.6	1976	9.9

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
3000	1573	7.8	1654	8.2	1732	8.6	1805	9.0	1875	9.4
3250	1622	8.1	1702	8.5	1777	8.9	1849	9.2	—	—
3500	1674	8.3	1751	8.7	1825	9.1	1895	9.5	—	—
3750	1729	8.6	1803	9.0	1874	9.4	—	—	—	—
4000	1786	8.9	1857	9.3	1926	9.6	—	—	—	—
4250	1846	9.2	1914	9.6	—	—	—	—	—	—
4500	1908	9.5	1973	9.9	—	—	—	—	—	—
4750	1971	9.9	—	—	—	—	—	—	—	—
5000	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1100-2200 rpm

50GE-T12 — High Static — 10 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
3000	1100	4.9	1202	5.4	1301	5.9	1396	6.3	1487	6.7
3250	1176	5.3	1270	5.7	1363	6.1	1453	6.6	1539	6.9
3500	1252	5.6	1341	6.0	1428	6.4	1512	6.8	1595	7.2
3750	1330	6.0	1413	6.4	1495	6.7	1575	7.1	1653	7.5
4000	1409	6.3	1487	6.7	1563	7.1	1639	7.4	1714	7.8
4250	1488	6.7	1561	7.1	1634	7.4	1706	7.7	1776	8.0
4500	1568	7.1	1637	7.4	1706	7.7	1774	8.0	1841	8.3
4750	1648	7.5	1714	7.8	1779	8.1	1844	8.4	1908	8.7
5000	1728	7.8	1791	8.1	1853	8.4	1915	8.7	1976	9.0

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
3000	1573	7.1	1654	7.5	1732	7.8	1805	8.2	1875	8.5
3250	1622	7.3	1702	7.7	1777	8.0	1849	8.4	1919	8.7
3500	1674	7.6	1751	7.9	1825	8.3	1895	8.6	1964	8.9
3750	1729	7.8	1803	8.2	1874	8.5	1943	8.8	2010	9.1
4000	1786	8.1	1857	8.4	1926	8.7	1993	9.0	2058	9.3
4250	1846	8.4	1914	8.7	1980	9.0	2045	9.3	2108	9.6
4500	1908	8.7	1973	9.0	2036	9.2	2099	9.5	2160	9.8
4750	1971	8.9	2034	9.2	2095	9.5	2155	9.8	—	—
5000	2036	9.2	2096	9.5	2155	9.8	—	—	—	—

High Static 1100-2200 rpm

50GE-T14 — 12.5 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
3750	1003	0.53	1097	0.69	1193	0.89	1289	1.12	1382	1.39
4065	1077	0.65	1163	0.82	1251	1.03	1340	1.26	1427	1.52
4375	1151	0.80	1230	0.97	1312	1.18	1394	1.42	1476	1.68
4690	1227	0.96	1300	1.14	1376	1.36	1452	1.60	1529	1.86
5000	1302	1.14	1371	1.34	1441	1.55	1513	1.79	1585	2.06
5315	1379	1.35	1443	1.54	1509	1.77	1576	2.01	1644	2.28
5625	1455	1.57	1516	1.77	1578	2.00	1641	2.25	1705	2.52
5940	1533	1.81	1590	2.01	1649	2.25	1708	2.50	1768	2.77
6250	1609	2.06	1664	2.27	1720	2.51	1776	2.76	1833	3.04

CFM	AVAILABLE EXTERNAL STATIC PRESSURE (in. wg)									
	1.2		1.4		1.6		1.8		2.0	
	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp	rpm	bhp
3750	1471	1.67	1557	1.98	1638	2.31	1716	2.65	1789	3.01
4065	1513	1.82	1595	2.13	1674	2.46	1750	2.81	1823	3.18
4375	1557	1.97	1636	2.29	1712	2.62	1786	2.98	1857	3.35
4690	1606	2.16	1681	2.48	1754	2.81	1825	3.17	1895	3.55
5000	1657	2.36	1728	2.67	1798	3.01	1867	3.37	1934	3.75
5315	1712	2.58	1779	2.89	1846	3.23	1912	3.59	1977	3.97
5625	1769	2.81	1833	3.13	1896	3.46	1959	3.82	2022	4.20
5940	1829	3.07	1890	3.38	1950	3.72	2010	4.07	2070	4.44
6250	1890	3.33	1948	3.65	2005	3.98	2063	4.33	2120	4.70

Std/Med Static 1003-2200 rpm, 3.0 maximum bhp

High Static 1003-2200 rpm, 5.0 maximum bhp

50GE-T14 — Standard/Medium Static — 12.5 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
3750	1003	4.5	1097	4.9	1193	5.4	1289	5.8	1382	6.2
4065	1077	4.8	1163	5.2	1251	5.6	1340	6.0	1427	6.4
4375	1151	5.2	1230	5.5	1312	5.9	1394	6.3	1476	6.7
4690	1227	5.5	1300	5.8	1376	6.2	1452	6.5	1529	6.9
5000	1302	5.9	1371	6.2	1441	6.5	1513	6.8	1585	7.2
5315	1379	6.2	1443	6.5	1509	6.8	1576	7.1	1644	7.4
5625	1455	6.6	1516	6.8	1578	7.1	1641	7.4	1705	7.7
5940	1533	6.9	1590	7.2	1649	7.5	1708	7.7	1768	8.0
6250	1609	7.3	1664	7.5	1720	7.8	1776	8.0	1833	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
3750	1471	6.6	1557	7.0	1638	7.4	1716	7.8	1789	8.1
4065	1513	6.8	1595	7.2	1674	7.6	1750	7.9	1823	8.3
4375	1557	7.0	1636	7.4	1712	7.7	1786	8.1	—	—
4690	1606	7.3	1681	7.6	1754	7.9	1825	8.3	—	—
5000	1657	7.5	1728	7.8	1798	8.1	—	—	—	—
5315	1712	7.7	1779	8.1	—	—	—	—	—	—
5625	1769	8.0	1833	8.3	—	—	—	—	—	—
5940	1829	8.3	—	—	—	—	—	—	—	—
6250	—	—	—	—	—	—	—	—	—	—

Std/Med Static 1003-2200 rpm

50GE-T14 — High Static — 12.5 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
3750	1003	4.5	1097	4.9	1193	5.4	1289	5.8	1382	6.2
4065	1077	4.8	1163	5.2	1251	5.6	1340	6.0	1427	6.4
4375	1151	5.2	1230	5.5	1312	5.9	1394	6.3	1476	6.7
4690	1227	5.5	1300	5.8	1376	6.2	1452	6.5	1529	6.9
5000	1302	5.9	1371	6.2	1441	6.5	1513	6.8	1585	7.2
5315	1379	6.2	1443	6.5	1509	6.8	1576	7.1	1644	7.4
5625	1455	6.6	1516	6.8	1578	7.1	1641	7.4	1705	7.7
5940	1533	6.9	1590	7.2	1649	7.5	1708	7.7	1768	8.0
6250	1609	7.3	1664	7.5	1720	7.8	1776	8.0	1833	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
3750	1471	6.6	1557	7.0	1638	7.4	1716	7.8	1789	8.1
4065	1513	6.8	1595	7.2	1674	7.6	1750	7.9	1823	8.3
4375	1557	7.0	1636	7.4	1712	7.7	1786	8.1	1857	8.4
4690	1606	7.3	1681	7.6	1754	7.9	1825	8.3	1895	8.6
5000	1657	7.5	1728	7.8	1798	8.1	1867	8.5	1934	8.8
5315	1712	7.7	1779	8.1	1846	8.4	1912	8.7	1977	9.0
5625	1769	8.0	1833	8.3	1896	8.6	1959	8.9	2022	9.2
5940	1829	8.3	1890	8.6	1950	8.8	2010	9.1	2070	9.4
6250	1890	8.6	1948	8.8	2005	9.1	2063	9.4	2120	9.6

High Static 1003-2200 rpm

Legend and Notes

Applicable for Electrical Data Tables on pages 107-134

LEGEND

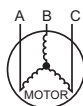
BRKR	— Circuit Breaker
C.O.	— Convenience Outlet
FLA	— Full Load Amps
IFM	— Indoor Fan Motor
LRA	— Locked Rotor Amps
MCA	— Minimum Circuit Amps
P.E.	— Power Exhaust
PWRD C.O.	— Powered Convenience Outlet
RLA	— Rated Load Amps
SCCR	— Short Circuit Current Rating
UNPWR C.O.	— Unpowered Convenience Outlet

NOTES:

1. In compliance with NEC requirements for multi-motor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be fuse or HACR breaker. Canadian units may be fuse or circuit breaker.
2. For 208/230 v units, where one value is 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.

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

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

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

48/50GE**07-14 3-Stage Cooling Electrical Data

48/50GE UNIT SIZE	V-Ph-Hz	UNIT VOLTAGE		COMP 1		COMP 2		OFM (EA)		STD SCCR kA	HIGH SCCR kA	IFM			COMBUSTION FAN MOTOR (48 SERIES ONLY)	POWER EXHAUST		
		RANGE		RLA	LRA	RLA	LRA	WATTS	FLA			TYPE	EFFCY AT FULL LOAD	FLA		FLA	KIT QTY	FLA (EA KIT)
		MIN	MAX															
07	208-3-60	187	253	12.8	103	8	68	360	2.6	5	10	MED	90%	6.4	0.48	1	3.8	
												HIGH	90%	7.5				
	230-3-60	187	253	12.8	103	8	68	360	2.6	5	10	MED	90%	6.4	0.48	1	3.8	
												HIGH	90%	7.5				
	460-3-60	414	506	5.8	50	5	38	360	1.4	5	10	MED	90%	3.0	0.25	1	1.8	
												HIGH	90%	3.5				
	575-3-60	518	633	5.1	41	4	24	360	2.6	5	—	MED	90%	2.5	0.24	1	3.8	
												HIGH	90%	3.0				
08	208-3-60	187	253	16	156	13	98	360	2.6	5	10	MED	90%	6.4	0.48	1	3.8	
												HIGH	90%	7.5				
	230-3-60	187	253	16	156	13	98	360	2.6	5	10	MED	90%	6.4	0.48	1	3.8	
												HIGH	90%	7.5				
	460-3-60	414	506	7.7	69	5	44	360	1.4	5	10	MED	90%	3.0	0.25	1	1.8	
												HIGH	90%	3.5				
	575-3-60	518	633	6.4	48	5	27	360	2.6	5	—	MED	90%	2.5	0.24	1	3.8	
												HIGH	90%	3.0				
09	208-3-60	187	253	18.6	155	13	103	360	2.6	5	10	MED	90%	6.4	0.48	1	3.8	
												HIGH	90%	7.5				
	230-3-60	187	253	18.6	155	13	103	360	2.6	5	10	MED	90%	6.4	0.48	1	3.8	
												HIGH	90%	7.5				
	460-3-60	414	506	8.3	58	6	50	360	1.4	5	10	MED	90%	3.0	0.25	1	1.8	
												HIGH	90%	3.5				
	575-3-60	518	633	7.7	48	5	41	360	2.6	5	—	MED	90%	2.5	0.24	1	3.8	
												HIGH	90%	3.0				
12	208-3-60	187	253	21.1	157	13	120	1070	7.4	5	—	MED	90%	6.4	0.48	1	3.8	
												HIGH	90%	12.6				
	230-3-60	187	253	21.1	157	13	120	1070	7.4	5	—	MED	90%	6.4	0.48	1	3.8	
												HIGH	90%	12.6				
	460-3-60	414	506	9.1	75	6	49	1070	7.4	5	—	MED	90%	3.0	0.25	1	1.8	
												HIGH	90%	5.6				
	575-3-60	518	633	7.7	48	6	41	1070	7.4	5	—	MED	90%	2.5	0.24	1	3.8	
												HIGH	90%	4.6				
14	208-3-60	187	253	24.4	200	16	156	360	2.6	5	10	MED	90%	7.5	0.48	1	3.8	
												HIGH	90%	12.6				
	230-3-60	187	253	24.4	200	16	156	360	2.6	5	10	MED	90%	7.5	0.48	1	3.8	
												HIGH	90%	12.6				
	460-3-60	414	506	11.9	103	8	69	360	1.4	5	10	MED	90%	3.5	0.25	1	1.8	
												HIGH	90%	5.6				
	575-3-60	518	633	9.4	78	6	48	360	2.6	5	—	MED	90%	3.0	0.24	1	3.8	
												HIGH	90%	4.6				

48GE**07-14 3-Stage MCA MOCP Electrical Data

48GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	HIGH SCCR kA ^a	NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET							
					NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
					MCA	FUSE OR HACR BREAKER	DISCONNECT SIZE		MCA	FUSE OR HACR BREAKER	DISCONNECT SIZE	
							FLA	LRA			FLA	LRA
48GE**07	208/230-3-60	STD/MED	5	10	36	45	38	186	40	50	42	190
		HIGH	5	10	37	45	39	188	41	50	43	192
	460-3-60	STD/MED	5	10	19	20	19	94	20	25	21	96
		HIGH	5	10	19	25	20	97	21	25	22	99
	575-3-60	STD/MED	5	—	18	20	19	75	22	25	23	79
		HIGH	5	—	19	20	19	76	22	25	24	80
48GE**08	208/230-3-60	STD/MED	5	10	45	60	46	269	49	60	51	273
		HIGH	5	10	46	60	48	271	50	60	52	275
	460-3-60	STD/MED	5	10	21	25	21	119	23	30	23	121
		HIGH	5	10	21	25	22	122	23	30	24	124
	575-3-60	STD/MED	5	—	21	25	21	85	24	30	26	89
		HIGH	5	—	21	25	22	86	25	30	26	90
48GE**09	208/230-3-60	STD/MED	5	10	48	60	49	273	52	60	54	277
		HIGH	5	10	49	60	51	275	53	60	55	279
	460-3-60	STD/MED	5	10	22	30	23	114	24	30	25	116
		HIGH	5	10	23	30	23	117	25	30	26	119
	575-3-60	STD/MED	5	—	23	30	24	99	27	30	28	103
		HIGH	5	—	23	30	24	100	27	30	29	104
48GE**12	208/230-3-60	STD/MED	5	—	53	60	55	293	57	70	59	297
		HIGH	5	—	60	80	62	302	63	80	66	306
	460-3-60	STD/MED	5	—	28	35	29	135	30	35	31	137
		HIGH	5	—	31	35	32	139	33	40	34	141
	575-3-60	STD/MED	5	—	26	30	27	100	30	35	31	104
		HIGH	5	—	28	30	29	102	32	35	34	106
48GE**14	208/230-3-60	STD/MED	5	10	62	80	64	376	66	80	68	380
		HIGH	5	10	67	80	70	383	71	80	74	387
	460-3-60	STD/MED	5	10	31	40	31	182	33	40	33	184
		HIGH	5	10	33	40	34	183	35	45	36	185
	575-3-60	STD/MED	5	—	29	35	31	140	33	40	35	144
		HIGH	5	—	31	35	32	141	35	40	37	145

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

48GE**07-14 3-Stage MCA MOCP Electrical Data (cont)

48GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	WITH POWERED CONVENIENCE OUTLET							
				NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
				MCA	FUSE OR HACR BREAKER	DISCONNECT SIZE		MCA	FUSE OR HACR BREAKER	DISCONNECT SIZE	
						FLA	LRA			FLA	LRA
48GE**07	208/230-3-60	STD/MED	5	41	50	43	191	45	50	47	195
		HIGH	5	42	50	44	193	46	50	49	197
	460-3-60	STD/MED	5	21	25	22	96	23	25	24	98
		HIGH	5	21	25	22	99	23	25	24	101
	575-3-60	STD/MED	5	20	25	21	77	24	25	25	81
		HIGH	5	20	25	21	78	24	25	26	82
48GE**08	208/230-3-60	STD/MED	5	50	60	52	274	53	60	56	278
		HIGH	5	51	60	53	276	55	60	58	280
	460-3-60	STD/MED	5	23	30	24	121	25	30	26	123
		HIGH	5	24	30	24	124	25	30	27	126
	575-3-60	STD/MED	5	22	25	23	87	26	30	28	91
		HIGH	5	23	25	24	88	27	30	28	92
48GE**09	208/230-3-60	STD/MED	5	53	60	55	278	57	70	59	282
		HIGH	5	54	60	56	280	58	70	61	284
	460-3-60	STD/MED	5	25	30	25	116	26	30	27	118
		HIGH	5	25	30	26	119	27	30	28	121
	575-3-60	STD/MED	5	25	30	26	101	28	30	30	105
		HIGH	5	25	30	26	102	29	35	30	106
48GE**12	208/230-3-60	STD/MED	5	58	70	60	298	62	80	65	302
		HIGH	5	64	80	68	307	68	80	72	311
	460-3-60	STD/MED	5	30	35	32	137	32	40	34	139
		HIGH	5	33	40	35	141	35	40	37	143
	575-3-60	STD/MED	5	27	30	29	102	31	35	33	106
		HIGH	5	30	35	31	104	33	40	36	108
48GE**14	208/230-3-60	STD/MED	5	67	80	70	381	71	80	74	385
		HIGH	5	72	80	75	388	76	90	80	392
	460-3-60	STD/MED	5	33	40	34	184	35	45	36	186
		HIGH	5	35	45	36	185	37	45	38	187
	575-3-60	STD/MED	5	31	40	33	142	35	40	37	146
		HIGH	5	33	40	34	143	37	45	39	147

50GE*T07 3-Stage MCA MOCP Electrical Data

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR KA	HIGH SCCR KA ^a	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
					CRHEATER *****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
								MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
										FLA	LRA			FLA	LRA
50GE*T07	208/230-3-60	STD/MED	5	10	—	—	—	36	45	38	186	40	50	42	190
					410A	4.9/6.5	13.6/15.6	36/36	45/45	38/38	186/186	40/40	50/50	42/42	190/190
					411A	7.8/10.4	21.7/25.0	36/40	45/45	38/38	186/186	40/44	50/50	42/42	190/190
					412A	12.0/16.0	33.4/38.5	50/57	50/60	46/52	186/186	55/61	60/70	50/56	190/190
					413A	15.8/21.0	43.8/50.5	63/72	70/80	58/65	186/186	68/76	70/80	62/70	190/190
					414A	18.8/25.0	52.1/60.1	74/84	80/90	67/76	186/186	78/88	80/90	72/81	190/190
		HIGH	5	10	—	—	—	37	45	39	188	41	50	43	192
					410A	4.9/6.5	13.6/15.6	37/37	45/45	39/39	188/188	41/41	50/50	43/43	192/192
					411A	7.8/10.4	21.7/25.0	37/41	45/45	39/39	188/188	42/46	50/50	43/43	192/192
					412A	12.0/16.0	33.4/38.5	52/58	60/60	47/53	188/188	56/63	60/70	51/57	192/192
					413A	15.8/21.0	43.8/50.5	65/73	70/80	59/67	188/188	69/78	70/80	63/71	192/192
					414A	18.8/25.0	52.1/60.1	75/85	80/90	69/78	188/188	80/90	80/90	73/82	192/192
	460-3-60	STD/MED	5	10	—	—	—	19	20	19	94	20	25	21	96
					418A	6.0	7.2	19	20	19	94	20	25	21	96
					419A	11.5	13.8	21	25	19	94	24	25	21	96
					420A	15.0	18.0	27	30	24	94	29	30	26	96
					421A	25.0	30.1	42	45	38	94	44	45	40	96
		HIGH	5	10	—	—	—	19	25	20	97	21	25	22	99
					418A	6.0	7.2	19	25	20	97	21	25	22	99
					419A	11.5	13.8	22	25	20	97	24	25	22	99
					420A	15.0	18.0	27	30	25	97	30	30	27	99
					421A	25.0	30.1	42	45	39	97	45	45	41	99
	575-3-60	STD/MED	5	—	—	—	—	18	20	19	75	22	25	23	79
					425A	18.0	17.3	25	25	23	75	30	30	27	79
					426A	24.8	23.9	33	35	30	75	38	40	35	79
		HIGH	5	—	—	—	—	19	20	19	76	22	25	24	80
					425A	18.0	17.3	26	30	23	76	31	35	28	80
					426A	24.8	23.9	34	35	31	76	39	40	35	80

NOTE(S):

- High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T07 3-Stage MCA MOCP Electrical Data (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			WITH POWERED CONVENIENCE OUTLET							
				CRHEATER *****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
							MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
50GE*T07	208/230-3-60	STD/MED	5	—	—	—	41	50	43	191	45	50	47	195
				410A	4.9/6.5	13.6/15.6	41/41	50/50	43/43	191/191	45/45	50/50	47/47	195/195
				411A	7.8/10.4	21.7/25.0	42/46	50/50	43/43	191/191	46/50	50/60	47/47	195/195
				412A	12.0/16.0	33.4/38.5	56/63	60/70	51/57	191/191	61/67	70/70	56/62	195/195
				413A	15.8/21.0	43.8/50.5	69/78	70/80	63/71	191/191	74/82	80/90	68/75	195/195
				414A	18.8/25.0	52.1/60.1	80/90	80/90	73/82	191/191	84/94	90/100	77/86	195/195
		HIGH	5	—	—	—	42	50	44	193	46	50	49	197
				410A	4.9/6.5	13.6/15.6	42/42	50/50	44/44	193/193	46/46	50/50	49/49	197/197
				411A	7.8/10.4	21.7/25.0	43/47	50/50	44/44	193/193	48/52	50/60	49/49	197/197
				412A	12.0/16.0	33.4/38.5	58/64	60/70	53/58	193/193	62/69	70/70	57/63	197/197
				413A	15.8/21.0	43.8/50.5	71/79	80/80	65/72	193/193	75/84	80/90	69/77	197/197
				414A	18.8/25.0	52.1/60.1	81/91	90/100	74/83	193/193	86/96	90/100	78/88	197/197
	460-3-60	STD/MED	5	—	—	—	21	25	22	96	23	25	24	98
				418A	6.0	7.2	21	25	22	96	23	25	24	98
				419A	11.5	13.8	24	25	22	96	26	30	24	98
				420A	15.0	18.0	29	30	27	96	32	35	29	98
				421A	25.0	30.1	45	45	41	96	47	50	43	98
		HIGH	5	—	—	—	21	25	22	99	23	25	24	101
				418A	6.0	7.2	21	25	22	99	23	25	24	101
				419A	11.5	13.8	25	25	22	99	27	30	24	101
				420A	15.0	18.0	30	30	27	99	32	35	29	101
				421A	25.0	30.1	45	45	41	99	47	50	43	101
	575-3-60	STD/MED	5	—	—	—	20	25	21	77	24	25	25	81
				425A	18.0	17.3	27	30	25	77	32	35	29	81
				426A	24.8	23.9	36	40	32	77	40	40	37	81
		HIGH	5	—	—	—	20	25	21	78	24	25	26	82
				425A	18.0	17.3	28	30	25	78	33	35	30	82
				426A	24.8	23.9	36	40	33	78	41	45	37	82

50GE*T08 3-Stage MCA MOCP Electrical Data

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	HIGH SCCR kA ^a	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
					CRHEATER ****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
								MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
										FLA	LRA			FLA	LRA
50GE*T08	208/230-3-60	STD/MED	5	10	—	—	—	45	60	46	269	49	60	51	273
					411A	7.8/10.4	21.7/25.0	45/45	60/60	46/46	269/269	49/49	60/60	51/51	273/273
					412A	12.0/16.0	33.4/38.5	50/57	60/60	46/52	269/269	55/61	60/70	51/56	273/273
					414A	18.8/25.0	52.1/60.1	74/84	80/90	67/76	269/269	78/88	80/90	72/81	273/273
					415A	24.0/32.0	66.7/77.0	92/105	100/110	84/96	269/269	97/109	100/110	88/100	273/273
					416A	31.8/42.4	88.4/102.0	119/136	125/150	109/125	269/269	124/141	125/150	113/129	273/273
		HIGH	5	10	—	—	—	46	60	48	271	50	60	52	275
					411A	7.8/10.4	21.7/25.0	46/46	60/60	48/48	271/271	50/50	60/60	52/52	275/275
					412A	12.0/16.0	33.4/38.5	52/58	60/60	48/53	271/271	56/63	60/70	52/57	275/275
					414A	18.8/25.0	52.1/60.1	75/85	80/90	69/78	271/271	80/90	80/90	73/82	275/275
					415A	24.0/32.0	66.7/77.0	93/106	100/110	85/97	271/271	98/111	100/125	90/102	275/275
					416A	31.8/42.4	88.4/102.0	120/137	125/150	110/126	271/271	125/142	125/150	115/130	275/275
	460-3-60	STD/MED	5	10	—	—	—	21	25	21	119	23	30	23	121
					419A	11.5	13.8	21	25	21	119	24	30	23	121
					420A	15.0	18.0	27	30	24	119	29	30	26	121
					421A	25.0	30.1	42	45	38	119	44	45	40	121
					422A	33.0	39.7	54	60	49	119	56	60	51	121
					423A	41.7	50.2	67	70	61	119	69	70	63	121
		HIGH	5	10	—	—	—	21	25	22	122	23	30	24	124
					419A	11.5	13.8	22	25	22	122	24	30	24	124
					420A	15.0	18.0	27	30	25	122	30	30	27	124
					421A	25.0	30.1	42	45	39	122	45	45	41	124
					422A	33.0	39.7	54	60	50	122	57	60	52	124
					423A	41.7	50.2	68	70	62	122	70	70	64	124
	575-3-60	STD/MED	5	—	—	—	—	21	25	21	85	24	30	26	89
					425A	18.0	17.3	25	25	23	85	30	30	27	89
					427A	36.0	34.6	47	50	43	85	52	60	47	89
		HIGH	5	—	—	—	—	21	25	22	86	25	30	26	90
					425A	18.0	17.3	26	30	23	86	31	35	28	90
					427A	36.0	34.6	47	50	43	86	52	60	48	90

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T08 3-Stage MCA MOCP Electrical Data (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			WITH POWERED CONVENIENCE OUTLET							
				CRHEATER *****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
							MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
50GE*T08	208/230-3-60	STD/MED	5	—	—	—	50	60	52	274	53	60	56	278
				411A	7.8/10.4	21.7/25.0	50/50	60/60	52/52	274/274	53/53	60/60	56/56	278/278
				412A	12.0/16.0	33.4/38.5	56/63	60/70	52/57	274/274	61/67	70/70	56/62	278/278
				414A	18.8/25.0	52.1/60.1	80/90	80/90	73/82	274/274	84/94	90/100	77/86	278/278
				415A	24.0/32.0	66.7/77.0	98/111	100/125	90/101	274/274	103/115	110/125	94/106	278/278
				416A	31.8/42.4	88.4/102.0	125/142	125/150	115/130	274/274	130/147	150/150	119/135	278/278
		HIGH	5	—	—	—	51	60	53	276	55	60	58	280
				411A	7.8/10.4	21.7/25.0	51/51	60/60	53/53	276/276	55/55	60/60	58/58	280/280
				412A	12.0/16.0	33.4/38.5	58/64	60/70	53/58	276/276	62/69	70/70	58/63	280/280
				414A	18.8/25.0	52.1/60.1	81/91	90/100	74/83	276/276	86/96	90/100	78/88	280/280
				415A	24.0/32.0	66.7/77.0	99/112	100/125	91/103	276/276	104/117	110/125	95/107	280/280
				416A	31.8/42.4	88.4/102.0	126/143	150/150	116/131	276/276	131/148	150/150	120/136	280/280
	460-3-60	STD/MED	5	—	—	—	23	30	24	121	25	30	26	123
				419A	11.5	13.8	24	30	24	121	26	30	26	123
				420A	15.0	18.0	29	30	27	121	32	35	29	123
				421A	25.0	30.1	45	45	41	121	47	50	43	123
				422A	33.0	39.7	57	60	52	121	59	60	54	123
				423A	41.7	50.2	70	70	64	121	72	80	66	123
		HIGH	5	—	—	—	24	30	24	124	25	30	27	126
				419A	11.5	13.8	25	30	24	124	27	30	27	126
				420A	15.0	18.0	30	30	27	124	32	35	29	126
				421A	25.0	30.1	45	45	41	124	47	50	43	126
				422A	33.0	39.7	57	60	52	124	59	60	54	126
				423A	41.7	50.2	70	70	64	124	73	80	66	126
	575-3-60	STD/MED	5	—	—	—	22	25	23	87	26	30	28	91
				425A	18.0	17.3	27	30	25	87	32	35	29	91
				427A	36.0	34.6	49	50	45	87	54	60	49	91
		HIGH	5	—	—	—	23	25	24	88	27	30	28	92
				425A	18.0	17.3	28	30	25	88	33	35	30	92
				427A	36.0	34.6	50	50	45	88	54	60	50	92

50GE*T09 3-Stage MCA MOCP Electrical Data

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR KA	HIGH SCCR KA ^a	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
					CRHEATER *****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
								MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
										FLA	LRA			FLA	LRA
50GE*T09	208/230-3-60	STD/MED	5	10	—	—	—	48	60	49	273	52	60	54	277
					411A	7.8/10.4	21.7/25.0	48/48	60/60	49/49	273/273	52/52	60/60	54/54	277/277
					412A	12.0/16.0	33.4/38.5	50/57	60/60	49/52	273/273	55/61	60/70	54/56	277/277
					414A	18.8/25.0	52.1/60.1	74/84	80/90	67/76	273/273	78/88	80/90	72/81	277/277
					415A	24.0/32.0	66.7/77.0	92/105	100/110	84/96	273/273	97/109	100/110	88/100	277/277
					416A	31.8/42.4	88.4/102.0	119/136	125/150	109/125	273/273	124/141	125/150	113/129	277/277
		HIGH	5	10	—	—	—	49	60	51	275	53	60	55	279
					411A	7.8/10.4	21.7/25.0	49/49	60/60	51/51	275/275	53/53	60/60	55/55	279/279
					412A	12.0/16.0	33.4/38.5	52/58	60/60	51/53	275/275	56/63	60/70	55/57	279/279
					414A	18.8/25.0	52.1/60.1	75/85	80/90	69/78	275/275	80/90	80/90	73/82	279/279
					415A	24.0/32.0	66.7/77.0	93/106	100/110	85/97	275/275	98/111	100/125	90/102	279/279
					416A	31.8/42.4	88.4/102.0	120/137	125/150	110/126	275/275	125/142	125/150	115/130	279/279
	460-3-60	STD/MED	5	10	—	—	—	22	30	23	114	24	30	25	116
					419A	11.5	13.8	22	30	23	114	24	30	25	116
					420A	15.0	18.0	27	30	24	114	29	30	26	116
					421A	25.0	30.1	42	45	38	114	44	45	40	116
					422A	33.0	39.7	54	60	49	114	56	60	51	116
					423A	41.7	50.2	67	70	61	114	69	70	63	116
		HIGH	5	10	—	—	—	23	30	23	117	25	30	26	119
					419A	11.5	13.8	23	30	23	117	25	30	26	119
					420A	15.0	18.0	27	30	25	117	30	30	27	119
					421A	25.0	30.1	42	45	39	117	45	45	41	119
					422A	33.0	39.7	54	60	50	117	57	60	52	119
					423A	41.7	50.2	68	70	62	117	70	70	64	119
	575-3-60	STD/MED	5	—	—	—	—	23	30	24	99	27	30	28	103
					425A	18.0	17.3	25	30	24	99	30	30	28	103
					427A	36.0	34.6	47	50	43	99	52	60	47	103
		HIGH	5	—	—	—	—	23	30	24	100	27	30	29	104
					425A	18.0	17.3	26	30	24	100	31	35	29	104
					427A	36.0	34.6	47	50	43	100	52	60	48	104

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T09 3-Stage MCA MOCP Electrical Data (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR KA	ELECTRIC HEATER			WITH POWERED CONVENIENCE OUTLET							
				CRHEATER *****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
							MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
50GE*T09	208/230-3-60	STD/MED	5	—	—	—	53	60	55	278	57	70	59	282
				411A	7.8/10.4	21.7/25.0	53/53	60/60	55/55	278/278	57/57	70/70	59/59	282/282
				412A	12.0/16.0	33.4/38.5	56/63	60/70	55/57	278/278	61/67	70/70	59/62	282/282
				414A	18.8/25.0	52.1/60.1	80/90	80/90	73/82	278/278	84/94	90/100	77/86	282/282
				415A	24.0/32.0	66.7/77.0	98/111	100/125	90/101	278/278	103/115	110/125	94/106	282/282
				416A	31.8/42.4	88.4/102.0	125/142	125/150	115/130	278/278	130/147	150/150	119/135	282/282
		HIGH	5	—	—	—	54	60	56	280	58	70	61	284
				411A	7.8/10.4	21.7/25.0	54/54	60/60	56/56	280/280	58/58	70/70	61/61	284/284
				412A	12.0/16.0	33.4/38.5	58/64	60/70	56/58	280/280	62/69	70/70	61/63	284/284
				414A	18.8/25.0	52.1/60.1	81/91	90/100	74/83	280/280	86/96	90/100	78/88	284/284
				415A	24.0/32.0	66.7/77.0	99/112	100/125	91/103	280/280	104/117	110/125	95/107	284/284
				416A	31.8/42.4	88.4/102.0	126/143	150/150	116/131	280/280	131/148	150/150	120/136	284/284
	460-3-60	STD/MED	5	—	—	—	25	30	25	116	26	30	27	118
				419A	11.5	13.8	25	30	25	116	26	30	27	118
				420A	15.0	18.0	29	30	27	116	32	35	29	118
				421A	25.0	30.1	45	45	41	116	47	50	43	118
				422A	33.0	39.7	57	60	52	116	59	60	54	118
				423A	41.7	50.2	70	70	64	116	72	80	66	118
		HIGH	5	—	—	—	25	30	26	119	27	30	28	121
				419A	11.5	13.8	25	30	26	119	27	30	28	121
				420A	15.0	18.0	30	30	27	119	32	35	29	121
				421A	25.0	30.1	45	45	41	119	47	50	43	121
				422A	33.0	39.7	57	60	52	119	59	60	54	121
				423A	41.7	50.2	70	70	64	119	73	80	66	121
	575-3-60	STD/MED	5	—	—	—	25	30	26	101	28	30	30	105
				425A	18.0	17.3	27	30	26	101	32	35	30	105
				427A	36.0	34.6	49	50	45	101	54	60	49	105
		HIGH	5	—	—	—	25	30	26	102	29	35	30	106
				425A	18.0	17.3	28	30	26	102	33	35	30	106
				427A	36.0	34.6	50	50	45	102	54	60	50	106

50GE*T12 3-Stage MCA MOCP Electrical Data

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR KA	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
				CRHEATER ****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
							MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
50GE*T12	208/230-3-60	STD/MED	5	—	—	—	53	60	55	293	57	70	59	297
				411A	7.8/10.4	21.7/25.0	53/53	60/60	55/55	293/293	57/57	70/70	59/59	297/297
				412A	12.0/16.0	33.4/38.5	53/57	60/60	55/55	293/293	57/61	70/70	59/59	297/297
				415A	24.0/32.0	66.7/77.0	92/105	100/110	84/96	293/293	97/109	100/110	88/100	297/297
				416A	31.8/42.4	88.4/102.0	119/136	125/150	109/125	293/293	124/141	125/150	113/129	297/297
				417A	37.6/50.0	104.2/120.3	139/129	150/150	127/146	293/293	143/134	150/150	132/150	297/297
		HIGH	5	—	—	—	60	80	62	302	63	80	66	306
				411A	7.8/10.4	21.7/25.0	60/60	80/80	62/62	302/302	63/63	80/80	66/66	306/306
				412A	12.0/16.0	33.4/38.5	60/64	80/80	62/62	302/302	63/69	80/80	66/66	306/306
				415A	24.0/32.0	66.7/77.0	100/112	100/125	91/103	302/302	104/117	110/125	96/107	306/306
				416A	31.8/42.4	88.4/102.0	127/144	150/150	116/132	302/302	131/148	150/150	121/136	306/306
				417A	37.6/50.0	104.2/120.3	146/137	150/150	134/153	302/302	151/141	175/175	139/157	306/306
	460-3-60	STD/MED	5	—	—	—	28	35	29	135	30	35	31	137
				420A	15.0	18.0	28	35	29	135	30	35	31	137
				422A	33.0	39.7	54	60	49	135	56	60	51	137
				423A	41.7	50.2	67	70	61	135	69	70	63	137
		HIGH	5	—	—	—	31	35	32	139	33	40	34	141
				420A	15.0	18.0	31	35	32	139	33	40	34	141
				422A	33.0	39.7	57	60	52	139	59	60	54	141
				423A	41.7	50.2	70	70	64	139	72	80	66	141
	575-3-60	STD/MED	5	—	—	—	26	30	27	100	30	35	31	104
				425A	18.0	17.3	26	30	27	100	30	35	31	104
				427A	36.0	34.6	47	50	43	100	52	60	47	104
				428A	50.0	48.1	52	60	58	100	56	60	63	104
		HIGH	5	—	—	—	28	30	29	102	32	35	34	106
				425A	18.0	17.3	28	30	29	102	33	35	34	106
				427A	36.0	34.6	49	50	45	102	54	60	49	106
				428A	50.0	48.1	54	60	61	102	59	60	65	106

50GE*T12 3-Stage MCA MOCP Electrical Data (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR kA	ELECTRIC HEATER			WITH POWERED CONVENIENCE OUTLET							
				CRHEATER ****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
							MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
50GE*T12	208/230-3-60	STD/MED	5	—	—	—	58	70	60	298	62	80	65	302
				411A	7.8/10.4	21.7/25.0	58/58	70/70	60/60	298/298	62/62	80/80	65/65	302/302
				412A	12.0/16.0	33.4/38.5	58/63	70/70	60/60	298/298	62/67	80/80	65/65	302/302
				415A	24.0/32.0	66.7/77.0	98/111	100/125	90/101	298/298	103/115	110/125	94/106	302/302
				416A	31.8/42.4	88.4/102.0	125/142	125/150	115/130	298/298	130/147	150/150	119/135	302/302
				417A	37.6/50.0	104.2/120.3	145/135	150/150	133/151	298/298	149/140	150/150	137/156	302/302
		HIGH	5	—	—	—	64	80	68	307	68	80	72	311
				411A	7.8/10.4	21.7/25.0	64/64	80/80	68/68	307/307	68/68	80/80	72/72	311/311
				412A	12.0/16.0	33.4/38.5	64/70	80/80	68/68	307/307	69/75	80/80	72/72	311/311
				415A	24.0/32.0	66.7/77.0	106/118	110/125	97/109	307/307	110/123	110/125	101/113	311/311
				416A	31.8/42.4	88.4/102.0	133/150	150/150	122/137	307/307	137/154	150/175	126/142	311/311
				417A	37.6/50.0	104.2/120.3	152/143	175/175	140/158	307/307	157/147	175/175	144/163	311/311
	460-3-60	STD/MED	5	—	—	—	30	35	32	137	32	40	34	139
				420A	15.0	18.0	30	35	32	137	32	40	34	139
				422A	33.0	39.7	57	60	52	137	59	60	54	139
				423A	41.7	50.2	70	70	64	137	72	80	66	139
		HIGH	5	—	—	—	33	40	35	141	35	40	37	143
				420A	15.0	18.0	33	40	35	141	35	40	37	143
				422A	33.0	39.7	60	60	55	141	62	70	57	143
				423A	41.7	50.2	73	80	67	141	75	80	69	143
	575-3-60	STD/MED	5	—	—	—	27	30	29	102	31	35	33	106
				425A	18.0	17.3	27	30	29	102	32	35	33	106
				427A	36.0	34.6	49	50	45	102	54	60	49	106
				428A	50.0	48.1	54	60	60	102	59	60	65	106
		HIGH	5	—	—	—	30	35	31	104	33	40	36	108
				425A	18.0	17.3	30	35	31	104	35	40	36	108
				427A	36.0	34.6	52	60	47	104	56	60	51	108
				428A	50.0	48.1	56	60	63	104	61	70	67	108

50GE*T14 3-Stage MCA MOCP Electrical Data

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR KA	HIGH SCCR KA ^a	ELECTRIC HEATER			NO CONVENIENCE OUTLET or UNPOWERED CONVENIENCE OUTLET							
					CRHEATER *****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
								MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
										FLA	LRA			FLA	LRA
50GE*T14	208/230-3-60	STD/MED	5	10	—	—	—	62	80	64	376	66	80	68	380
					412A	12.0/16.0	33.4/38.5	62/62	80/80	64/64	376/376	66/66	80/80	68/68	380/380
					414A	18.8/25.0	52.1/60.1	75/85	80/90	69/78	376/376	80/90	80/90	73/82	380/380
					415A	24.0/32.0	66.7/77.0	93/106	100/110	85/97	376/376	98/111	100/125	90/102	380/380
					416A	31.8/42.4	88.4/102.0	120/137	125/150	110/126	376/376	125/142	125/150	115/130	380/380
					417A	37.6/50.0	104.2/120.3	140/130	150/150	128/147	376/376	145/135	150/150	133/151	380/380
		HIGH	5	10	—	—	—	67	80	70	383	71	80	74	387
					412A	12.0/16.0	33.4/38.5	67/67	80/80	70/70	383/383	71/71	80/80	74/74	387/387
					414A	18.8/25.0	52.1/60.1	81/91	90/100	74/84	383/383	86/96	90/100	79/88	387/387
					415A	24.0/32.0	66.7/77.0	100/112	100/125	91/103	383/383	104/117	110/125	96/107	387/387
					416A	31.8/42.4	88.4/102.0	127/144	150/150	116/132	383/383	131/148	150/150	121/136	387/387
					417A	37.6/50.0	104.2/120.3	146/137	150/150	134/153	383/383	151/141	175/175	139/157	387/387
	460-3-60	STD/MED	5	10	—	—	—	31	40	31	182	33	40	33	184
					420A	15.0	18.0	31	40	31	182	33	40	33	184
					421A	25.0	30.1	42	45	39	182	45	45	41	184
					422A	33.0	39.7	54	60	50	182	57	60	52	184
					423A	41.7	50.2	68	70	62	182	70	70	64	184
					424A	50.0	60.1	65	70	73	182	67	70	75	184
		HIGH	5	10	—	—	—	33	40	34	183	35	45	36	185
					420A	15.0	18.0	33	40	34	183	35	45	36	185
					421A	25.0	30.1	45	45	41	183	47	50	43	185
					422A	33.0	39.7	57	60	52	183	59	60	54	185
					423A	41.7	50.2	70	70	64	183	72	80	66	185
					424A	50.0	60.1	68	80	76	183	70	80	78	185
	575-3-60	STD/MED	5	—	—	—	—	29	35	31	140	33	40	35	144
					425A	18.0	17.3	29	35	31	140	33	40	35	144
					426A	24.8	23.9	34	35	31	140	39	40	35	144
					427A	36.0	34.6	47	50	43	140	52	60	48	144
					428A	50.0	48.1	52	60	59	140	57	60	63	144
		HIGH	5	—	—	—	—	31	35	32	141	35	40	37	145
					425A	18.0	17.3	31	35	32	141	35	40	37	145
					426A	24.8	23.9	36	40	33	141	41	45	37	145
					427A	36.0	34.6	49	50	45	141	54	60	49	145
					428A	50.0	48.1	54	60	61	141	59	60	65	145

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T14 3-Stage MCA MOCP Electrical Data (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	STD SCCR KA	ELECTRIC HEATER			WITH POWERED CONVENIENCE OUTLET							
				CRHEATER ****00	NOM (kW)	FLA	NO POWER EXHAUST				WITH POWER EXHAUST (powered from unit)			
							MCA	FUSE OR HACR BRKR	DISCONNECT SIZE		MCA	FUSE OR HACR BRKR	DISCONNECT SIZE	
									FLA	LRA			FLA	LRA
50GE*T14	208/230-3-60	STD/MED	5	—	—	—	67	80	70	381	71	80	74	385
				412A	12.0/16.0	33.4/38.5	67/67	80/80	70/70	381/381	71/71	80/80	74/74	385/385
				414A	18.8/25.0	52.1/60.1	81/91	90/100	74/83	381/381	86/96	90/100	78/88	385/385
				415A	24.0/32.0	66.7/77.0	99/112	100/125	91/103	381/381	104/117	110/125	95/107	385/385
				416A	31.8/42.4	88.4/102.0	126/143	150/150	116/131	381/381	131/148	150/150	120/136	385/385
				417A	37.6/50.0	104.2/120.3	146/136	150/150	134/152	381/381	151/141	175/150	138/157	385/385
		HIGH	5	—	—	—	72	80	75	388	76	90	80	392
				412A	12.0/16.0	33.4/38.5	72/72	80/80	75/75	388/388	76/76	90/90	80/80	392/392
				414A	18.8/25.0	52.1/60.1	87/97	90/100	80/89	388/388	92/102	100/110	84/93	392/392
				415A	24.0/32.0	66.7/77.0	106/118	110/125	97/109	388/388	110/123	110/125	101/113	392/392
				416A	31.8/42.4	88.4/102.0	133/150	150/150	122/137	388/388	137/154	150/175	126/142	392/392
				417A	37.6/50.0	104.2/120.3	152/143	175/175	140/158	388/388	157/147	175/175	144/163	392/392
	460-3-60	STD/MED	5	—	—	—	33	40	34	184	35	45	36	186
				420A	15.0	18.0	33	40	34	184	35	45	36	186
				421A	25.0	30.1	45	45	41	184	47	50	43	186
				422A	33.0	39.7	57	60	52	184	59	60	54	186
				423A	41.7	50.2	70	70	64	184	73	80	66	186
				424A	50.0	60.1	68	80	76	184	70	80	78	186
		HIGH	5	—	—	—	35	45	36	185	37	45	38	187
				420A	15.0	18.0	35	45	36	185	37	45	38	187
				421A	25.0	30.1	48	50	44	185	50	50	46	187
				422A	33.0	39.7	60	60	55	185	62	70	57	187
				423A	41.7	50.2	73	80	67	185	75	80	69	187
				424A	50.0	60.1	70	80	78	185	73	80	80	187
	575-3-60	STD/MED	5	—	—	—	31	40	33	142	35	40	37	146
				425A	18.0	17.3	31	40	33	142	35	40	37	146
				426A	24.8	23.9	36	40	33	142	41	45	37	146
				427A	36.0	34.6	50	50	45	142	54	60	50	146
				428A	50.0	48.1	54	60	61	142	59	60	65	146
		HIGH	5	—	—	—	33	40	34	143	37	45	39	147
				425A	18.0	17.3	33	40	34	143	37	45	39	147
				426A	24.8	23.9	38	40	35	143	43	45	39	147
				427A	36.0	34.6	52	60	47	143	56	60	51	147
				428A	50.0	48.1	56	60	63	143	61	70	67	147

50GE*T07 3-Stage Electric Heat Data — Without Non-fused Disconnect

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwrd fr/unit)	NO P.E.	WITH P.E. (pwrd fr/unit)
50GE*T07	208/230-3-60	STD/ MED	CRHEATER410A00	6.5	5	10	4.9/6.0	16.7/20.4	042	042	042	042
			CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	042	042	042	042
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	042	043	043	043
			CRHEATER413A00	21.0	5	10	15.8/19.3	53.8/65.8	043	043	043	043
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	043	043	043	043
		HIGH	CRHEATER410A00	6.5	5	10	4.9/6.0	16.7/20.4	042	042	042	042
			CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	042	042	042	042
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	042	043	043	043
			CRHEATER413A00	21.0	5	10	15.8/19.3	53.8/65.8	043	043	043	043
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	043	043	043	043
	460-3-60	STD/ MED	CRHEATER418A00	6.0	5	10	5.5	18.8	042	042	042	042
			CRHEATER419A00	11.5	5	10	10.6	36.0	042	042	042	042
			CRHEATER420A00	15.0	5	10	13.8	47.0	042	042	042	042
			CRHEATER421A00	25.0	5	10	23.0	78.3	042	042	042	042
		HIGH	CRHEATER418A00	6.0	5	10	5.5	18.8	042	042	042	042
			CRHEATER419A00	11.5	5	10	10.6	36.0	042	042	042	042
			CRHEATER420A00	15.0	5	10	13.8	47.0	042	042	042	042
			CRHEATER421A00	25.0	5	10	23.0	78.3	042	042	042	042
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	—	16.5	56.4	042	042	042	042
			CRHEATER426A00	24.8	5	—	22.8	77.7	042	042	042	042
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	042	042	042	042
			CRHEATER426A00	24.8	5	—	22.8	77.7	042	042	042	042

NOTE(S):

- High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T07 3-Stage Electric Heat Data — Without Non-fused Disconnect (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	HSCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwr fr/unit)	NO P.E.	WITH P.E. (pwr fr/unit)
50GE*T07	208/230-3-60	STD/ MED	CRHEATER410A00	6.5	5	10	4.9/6.0	16.7/20.4	064	064	064	064
			CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	064	064	064	064
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	064	064	064	064
			CRHEATER413A00	21.0	5	10	15.8/19.3	53.8/65.8	065	065	065	065
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	065	065	065	065
		HIGH	CRHEATER410A00	6.5	5	10	4.9/6.0	16.7/20.4	064	064	064	064
			CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	064	064	064	064
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	064	064	064	064
			CRHEATER413A00	21.0	5	10	15.8/19.3	53.8/65.8	065	065	065	065
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	065	065	065	065
			CRHEATER418A00	6.0	5	10	5.5	18.8	064	064	064	064
			CRHEATER419A00	11.5	5	10	10.6	36.0	064	064	064	064
			CRHEATER420A00	15.0	5	10	13.8	47.0	064	064	064	064
			CRHEATER421A00	25	5	10	23.0	78.3	065	065	065	065
	460-3-60	STD/ MED	CRHEATER418A00	6.0	5	10	5.5	18.8	064	064	064	064
			CRHEATER419A00	11.5	5	10	10.6	36.0	064	064	064	064
			CRHEATER420A00	15.0	5	10	13.8	47.0	064	064	064	064
		HIGH	CRHEATER418A00	6.0	5	10	5.5	18.8	064	064	064	064
			CRHEATER419A00	11.5	5	10	10.6	36.0	064	064	064	064
			CRHEATER420A00	15.0	5	10	13.8	47.0	064	064	064	064
			CRHEATER421A00	25.0	5	10	23.0	78.3	065	065	065	065
			CRHEATER425A00	18.0	5	—	16.5	56.4	064	064	064	064
		HIGH	CRHEATER426A00	24.8	5	—	22.8	77.7	065	065	065	065
			CRHEATER425A00	18.0	5	—	16.5	56.4	064	064	064	064
			CRHEATER426A00	24.8	5	—	22.8	77.7	065	065	065	065
			CRHEATER426A00	24.8	5	—	22.8	77.7	065	065	065	065

NOTE(S):

- High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, or 575-v.

50GE*T07 3-Stage Electric Heat Data — With Non-fused Disconnect

50GE 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 KIT PART NUMBER CRSINGLEXXXXA00			
								NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
								NO P.E.	WITH P.E. (pwrdr fr/unit)	NO P.E.	WITH P.E. (pwrdr fr/unit)
50GE*T07	208/230-3-60	STD/ MED	CRHEATER410A00	6.5	5	4.9/6.0	16.7/20.4	042	042	042	042
			CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	042	042	042	042
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	042	043	043	043
			CRHEATER413A00	21.0	5	15.8/19.3	53.8/65.8	043	043	043	043
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	043	043	043	043
		HIGH	CRHEATER410A00	6.5	5	4.9/6.0	16.7/20.4	042	042	042	042
			CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	042	042	042	042
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	042	043	043	043
			CRHEATER413A00	21.0	5	15.8/19.3	53.8/65.8	043	043	043	043
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	043	043	043	043
			CRHEATER418A00	6.0	5	5.5	18.8	042	042	042	042
			CRHEATER419A00	11.5	5	10.6	36.0	042	042	042	042
			CRHEATER420A00	15.0	5	13.8	47.0	042	042	042	042
			CRHEATER421A00	25.0	5	23.0	78.3	042	042	042	042
	460-3-60	STD/ MED	CRHEATER418A00	6.0	5	5.5	18.8	042	042	042	042
			CRHEATER419A00	11.5	5	10.6	36.0	042	042	042	042
			CRHEATER420A00	15.0	5	13.8	47.0	042	042	042	042
		HIGH	CRHEATER418A00	6.0	5	5.5	18.8	042	042	042	042
			CRHEATER419A00	11.5	5	10.6	36.0	042	042	042	042
			CRHEATER420A00	15.0	5	13.8	47.0	042	042	042	042
			CRHEATER421A00	25.0	5	23.0	78.3	042	042	042	042
		STD/ MED	CRHEATER425A00	18.0	5	16.5	56.4	042	042	042	042
			CRHEATER426A00	24.8	5	22.8	77.7	042	042	042	042
			CRHEATER425A00	18.0	5	16.5	56.4	042	042	042	042
		HIGH	CRHEATER425A00	18.0	5	16.5	56.4	042	042	042	042
			CRHEATER426A00	24.8	5	22.8	77.7	042	042	042	042
			CRHEATER426A00	24.8	5	22.8	77.7	042	042	042	042

50GE*T08 3-Stage Electric Heat Data — Without Non-fused Disconnect

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwr fr/unit)	NO P.E.	WITH P.E. (pwr fr/unit)
50GE*T08	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	047	047	047	047
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	051	051	051	051
		HIGH	CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	047	047	047	047
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	051	051	051	051
	460-3-60	STD/ MED	CRHEATER419A00	11.5	5	10	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	10	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	10	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	10	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	10	38.3	130.7	050	050	050	050
		HIGH	CRHEATER419A00	11.5	5	10	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	10	13.8	47.0	047	047	047	047
			CRHEATER421A00	25	5	10	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	10	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	10	38.3	130.7	050	050	050	050
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	—	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	—	33.1	112.8	047	047	047	047
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	—	33.1	112.8	047	047	047	047

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T08 3-Stage Electric Heat Data — Without Non-fused Disconnect (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	HSCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwrd fr/unit)	NO P.E.	WITH P.E. (pwrd fr/unit)
50GE*T08	208/230-3-60	STD/MED	CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	067	067	067	067
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	067	067	067	067
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	068	068	068	068
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	068	068	068	068
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	069	069	069	069
		HIGH	CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	067	067	067	067
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	067	067	067	067
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	068	068	068	068
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	068	068	068	068
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	069	069	069	069
			CRHEATER419A00	11.5	5	10	10.6	36.0	067	067	067	067
			CRHEATER420A00	15.0	5	10	13.8	47.0	067	067	067	067
			CRHEATER421A00	25.0	5	10	23.0	78.3	068	068	068	068
			CRHEATER422A00	33.0	5	10	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	10	38.3	130.7	068	068	068	068
	460-3-60	STD/MED	CRHEATER419A00	11.5	5	10	10.6	36.0	067	067	067	067
			CRHEATER420A00	15.0	5	10	13.8	47.0	067	067	067	067
			CRHEATER421A00	25.0	5	10	23.0	78.3	068	068	068	068
			CRHEATER422A00	33.0	5	10	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	10	38.3	130.7	068	068	068	068
		HIGH	CRHEATER419A00	11.5	5	10	10.6	36.0	067	067	067	067
			CRHEATER420A00	15.0	5	10	13.8	47.0	067	067	067	067
			CRHEATER421A00	25.0	5	10	23.0	78.3	068	068	068	068
			CRHEATER422A00	33.0	5	10	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	10	38.3	130.7	068	068	068	068
	575-3-60	STD/MED	CRHEATER425A00	18.0	5	—	16.5	56.4	067	067	067	067
			CRHEATER427A00	36.0	5	—	33.1	112.8	068	068	068	068
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	067	067	067	067
			CRHEATER427A00	36.0	5	—	33.1	112.8	068	068	068	068

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T08 3-Stage Electric Heat Data — With Non-fused Disconnect

50GE 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 KIT PART NUMBER CRSINGLEXXXA00			
								NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
								NO P.E.	WITH P.E. (pwrdr fr/unit)	NO P.E.	WITH P.E. (pwrdr fr/unit)
50GE*T08	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	047	047	047	047
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	051	051	051	051
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	047	047	047	047
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	051	051	051	051
		STD/ MED	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
	460-3-60	HIGH	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047
		HIGH	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047

50GE*T09 3-Stage Electric Heat Data — Without Non-fused Disconnect

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwrd fr/unit)	NO P.E.	WITH P.E. (pwrd fr/unit)
50GE*T09	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	047	047	047	049
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	051	051	051	051
		HIGH	CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	047	047	047	049
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	051	051	051	051
	460-3-60	STD/ MED	CRHEATER419A00	11.5	5	10	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	10	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	10	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	10	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	10	38.3	130.7	050	050	050	050
		HIGH	CRHEATER419A00	11.5	5	10	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	10	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	10	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	10	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	10	38.3	130.7	050	050	050	050
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	—	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	—	33.1	112.8	047	047	047	047
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	—	33.1	112.8	047	047	047	047

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T09 3-Stage Electric Heat Data — Without Non-fused Disconnect (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	HSCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwr fr/unit)	NO P.E.	WITH P.E. (pwr fr/unit)
50GE*T09	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	067	067	067	067
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	067	067	067	067
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	068	068	068	068
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	068	068	068	068
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	069	069	069	069
		HIGH	CRHEATER411A00	10.4	5	10	7.8/9.6	26.7/32.6	067	067	067	067
			CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	067	067	067	067
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	068	068	068	068
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	068	068	068	068
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	069	069	069	069
	460-3-60	STD/ MED	CRHEATER419A00	11.5	5	10	10.6	36.0	067	067	067	067
			CRHEATER420A00	15.0	5	10	13.8	47.0	067	067	067	067
			CRHEATER421A00	25.0	5	10	23.0	78.3	068	068	068	068
			CRHEATER422A00	33.0	5	10	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	10	38.3	130.7	068	068	068	068
		HIGH	CRHEATER419A00	11.5	5	10	10.6	36.0	067	067	067	067
			CRHEATER420A00	15.0	5	10	13.8	47.0	067	067	067	067
			CRHEATER421A00	25.0	5	10	23.0	78.3	068	068	068	068
			CRHEATER422A00	33.0	5	10	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	10	38.3	130.7	068	068	068	068
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	—	16.5	56.4	067	067	067	067
			CRHEATER427A00	36.0	5	—	33.1	112.8	068	068	068	068
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	067	067	067	067
			CRHEATER427A00	36.0	5	—	33.1	112.8	068	068	068	068

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T09 3-Stage Electric Heat Data — With Non-fused Disconnect

50GE 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 KIT PART NUMBER CRSINGLEXXXA00			
								NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
								NO P.E.	WITH P.E. (pwrdr fr/unit)	NO P.E.	WITH P.E. (pwrdr fr/unit)
50GE*T09	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	047	047	047	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	051	051	051	051
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	047	047	047	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	051	051	051	051
		STD/ MED	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
	460-3-60	HIGH	CRHEATER419A00	11.5	5	10.6	36.0	047	047	047	047
			CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047
		HIGH	CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047

50GE*T12 3-Stage Electric Heat Data — Without Non-fused Disconnect

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwrd fr/unit)	NO P.E.	WITH P.E. (pwrd fr/unit)
50GE*T12	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	—	7.8/9.6	26.7/32.6	047	049	049	049
			CRHEATER412A00	16.0	5	—	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER415A00	32.0	5	—	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	—	31.8/38.9	108.7/132.9	051	051	051	051
			CRHEATER417A00	50.0	5	—	37.6/45.9	128.1/156.7	051	051	051	051
		HIGH	CRHEATER411A00	10.4	5	—	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16.0	5	—	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER415A00	32.0	5	—	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	—	31.8/38.9	108.7/132.9	051	051	051	051
			CRHEATER417A00	50.0	5	—	37.6/45.9	128.1/156.7	051	051	051	051
	460-3-60	STD/ MED	CRHEATER420A00	15.0	5	—	13.8	47.0	047	047	047	047
			CRHEATER422A00	33.0	5	—	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	—	38.3	130.7	050	050	050	050
		HIGH	CRHEATER424A00	50.0	5	—	45.9	156.7	050	050	050	050
			CRHEATER420A00	15.0	5	—	13.8	47.0	047	047	047	047
			CRHEATER422A00	33.0	5	—	30.3	103.4	047	047	047	050
			CRHEATER423A00	41.7	5	—	38.3	130.7	050	050	050	050
			CRHEATER424A00	50.0	5	—	45.9	156.7	050	050	050	050
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	—	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	—	33.1	112.8	047	047	047	047
			CRHEATER428A00	50.0	5	—	45.9	156.7	047	047	047	047
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	—	33.1	112.8	047	047	047	047
			CRHEATER428A00	50.0	5	—	45.9	156.7	047	047	047	050

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker or 575-v.

50GE*T12 3-Stage Electric Heat Data — Without Non-fused Disconnect (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	HSCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwrdr/unit)	NO P.E.	WITH P.E. (pwrdr/unit)
50GE*T12	208/230-3-60	STD/MED	CRHEATER411A00	10.4	5	—	7.8/9.6	26.7/32.6	067	067	067	067
			CRHEATER412A00	16.0	5	—	12.0/14.7	41.0/50.1	067	067	067	067
			CRHEATER415A00	32.0	5	—	24.0/29.4	82.0/100.3	068	068	068	068
			CRHEATER416A00	42.4	5	—	31.8/38.9	108.7/132.9	069	069	069	069
			CRHEATER417A00	50.0	5	—	37.6/45.9	128.1/156.7	069	069	069	069
		HIGH	CRHEATER411A00	10.4	5	—	7.8/9.6	26.7/32.6	067	067	067	067
			CRHEATER412A00	16.0	5	—	12.0/14.7	41.0/50.1	067	067	067	067
			CRHEATER415A00	32.0	5	—	24.0/29.4	82.0/100.3	068	068	068	068
			CRHEATER416A00	42.4	5	—	31.8/38.9	108.7/132.9	069	069	069	069
			CRHEATER417A00	50.0	5	—	37.6/45.9	128.1/156.7	069	069	069	069
	460-3-60	STD/MED	CRHEATER420A00	15.0	5	—	13.8	47.0	067	067	067	067
			CRHEATER422A00	33.0	5	—	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	—	38.3	130.7	068	068	068	068
		HIGH	CRHEATER424A00	50.0	5	—	45.9	156.7	068	068	068	068
			CRHEATER420A00	15.0	5	—	13.8	47.0	067	067	067	067
			CRHEATER422A00	33.0	5	—	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	—	38.3	130.7	068	068	068	068
			CRHEATER424A00	50.0	5	—	45.9	156.7	068	068	068	068
	575-3-60	STD/MED	CRHEATER425A00	18.0	5	—	16.5	56.4	067	067	067	067
			CRHEATER427A00	36.0	5	—	33.1	112.8	068	068	068	068
			CRHEATER428A00	50.0	5	—	45.9	156.7	068	068	068	068
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	067	067	067	067
			CRHEATER427A00	36.0	5	—	33.1	112.8	068	068	068	068
			CRHEATER428A00	50.0	5	—	45.9	156.7	068	068	068	068

NOTE(S):

- a. High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T12 3-Stage Electric Heat Data — With Non-fused Disconnect

50GE 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 KIT PART NUMBER CRSINGLEXXXXA00			
								NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
								NO P.E.	WITH P.E. (pwrdr fr/unit)	NO P.E.	WITH P.E. (pwrdr fr/unit)
50GE*T12	208/230-3-60	STD/ MED	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	047	049	049	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	047	049	049	049
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	051	051	051	051
			CRHEATER417A00	50.0	5	37.6/45.9	128.1/156.7	051	051	051	051
		HIGH	CRHEATER411A00	10.4	5	7.8/9.6	26.7/32.6	049	049	049	049
			CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	051	051	051	051
			CRHEATER417A00	50.0	5	37.6/45.9	128.1/156.7	051	051	051	051
		STD/ MED	CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
			CRHEATER424A00	50.0	5	45.9	156.7	050	050	050	050
			CRHEATER425A00	50.0	5	45.9	156.7	050	050	050	050
	460-3-60	HIGH	CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	050
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
		STD/ MED	CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	050
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
		HIGH	CRHEATER420A00	15.0	5	13.8	47.0	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	050
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
	575-3-60	STD/ MED	CRHEATER424A00	50.0	5	45.9	156.7	050	050	050	050
			CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047
		HIGH	CRHEATER428A00	50.0	5	45.9	156.7	047	047	047	047
			CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047
		STD/ MED	CRHEATER428A00	50.0	5	45.9	156.7	047	047	047	050
			CRHEATER425A00	18.0	5	16.5	56.4	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047

50GE*T14 3-Stage Electric Heat Data — Without Non-fused Disconnect

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwrd fr/unit)	NO P.E.	WITH P.E. (pwrd fr/unit)
50GE*T14	208/230-3-60	STD/ MED	CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	051	051	051	051
			CRHEATER417A00	50.0	5	10	37.6/45.9	128.1/156.7	051	051	051	051
		HIGH	CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	051	051	051	051
			CRHEATER417A00	50.0	5	10	37.6/45.9	128.1/156.7	051	051	051	051
	460-3-60	STD/ MED	CRHEATER420A00	15.0	5	10	13.8	47.0	—	—	—	—
			CRHEATER421A00	25.0	5	10	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	10	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	10	38.3	130.7	050	050	050	050
			CRHEATER424A00	50.0	5	10	45.9	156.7	050	050	050	050
		HIGH	CRHEATER420A00	15.0	5	10	13.8	47.0	—	—	—	—
			CRHEATER421A00	25.0	5	10	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	10	30.3	103.4	047	047	047	050
			CRHEATER423A00	41.7	5	10	38.3	130.7	050	050	050	050
			CRHEATER424A00	50.0	5	10	45.9	156.7	050	050	050	050
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	—	16.5	56.4	—	—	—	—
			CRHEATER426A00	24.8	5	—	22.8	77.7	047	047	047	047
			CRHEATER427A00	36.0	5	—	33.1	112.8	047	047	047	047
			CRHEATER428A00	50.0	5	—	45.9	156.7	047	047	047	047
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	—	—	—	—
			CRHEATER426A00	24.8	5	—	22.8	77.7	047	047	047	047
			CRHEATER427A00	36.0	5	—	33.1	112.8	047	047	047	047
			CRHEATER428A00	50.0	5	—	45.9	156.7	047	047	047	050

NOTE(S):

- High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T14 3-Stage Electric Heat Data — Without Non-fused Disconnect (cont)

50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	HIGH SCCR kA ^a	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	HSCCR SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXA00			
									NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
									NO P.E.	WITH P.E. (pwrd fr/unit)	NO P.E.	WITH P.E. (pwrd fr/unit)
50GE*T14	208/230-3-60	STD/ MED	CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	067	067	067	067
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	068	068	068	068
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	068	068	068	068
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	069	069	069	069
			CRHEATER417A00	50.0	5	10	37.6/45.9	128.1/156.7	069	069	069	069
		HIGH	CRHEATER412A00	16.0	5	10	12.0/14.7	41.0/50.1	067	067	067	067
			CRHEATER414A00	25.0	5	10	18.8/23.0	64.1/78.3	068	068	068	068
			CRHEATER415A00	32.0	5	10	24.0/29.4	82.0/100.3	068	068	068	068
			CRHEATER416A00	42.4	5	10	31.8/38.9	108.7/132.9	069	069	069	069
			CRHEATER417A00	50.0	5	10	37.6/45.9	128.1/156.7	069	069	069	069
	460-3-60	STD/ MED	CRHEATER420A00	15.0	5	10	13.8	47.0	067	067	067	067
			CRHEATER421A00	25.0	5	10	23.0	78.3	068	068	068	068
			CRHEATER422A00	33.0	5	10	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	10	38.3	130.7	068	068	068	068
			CRHEATER424A00	50.0	5	10	45.9	156.7	068	068	068	068
		HIGH	CRHEATER420A00	15.0	5	10	13.8	47.0	067	067	067	067
			CRHEATER421A00	25.0	5	10	23.0	78.3	068	068	068	068
			CRHEATER422A00	33.0	5	10	30.3	103.4	068	068	068	068
			CRHEATER423A00	41.7	5	10	38.3	130.7	068	068	068	068
			CRHEATER424A00	50.0	5	10	45.9	156.7	068	068	068	068
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	—	16.5	56.4	067	067	067	067
			CRHEATER426A00	24.8	5	—	22.8	77.7	068	068	068	068
			CRHEATER427A00	36.0	5	—	33.1	112.8	068	068	068	068
			CRHEATER428A00	50.0	5	—	45.9	156.7	068	068	068	068
		HIGH	CRHEATER425A00	18.0	5	—	16.5	56.4	067	067	067	067
			CRHEATER426A00	24.8	5	—	22.8	77.7	068	068	068	068
			CRHEATER427A00	36.0	5	—	33.1	112.8	068	068	068	068
			CRHEATER428A00	50.0	5	—	45.9	156.7	068	068	068	068

NOTE(S):

- High SCCR (Short Circuit Current Rating) is not available on units with Humidi-MiZer system, powered convenience outlet, phase loss monitor, non-fused disconnect, HACR breaker, or 575-v.

50GE*T14 3-Stage Electric Heat Data — With Non-fused Disconnect

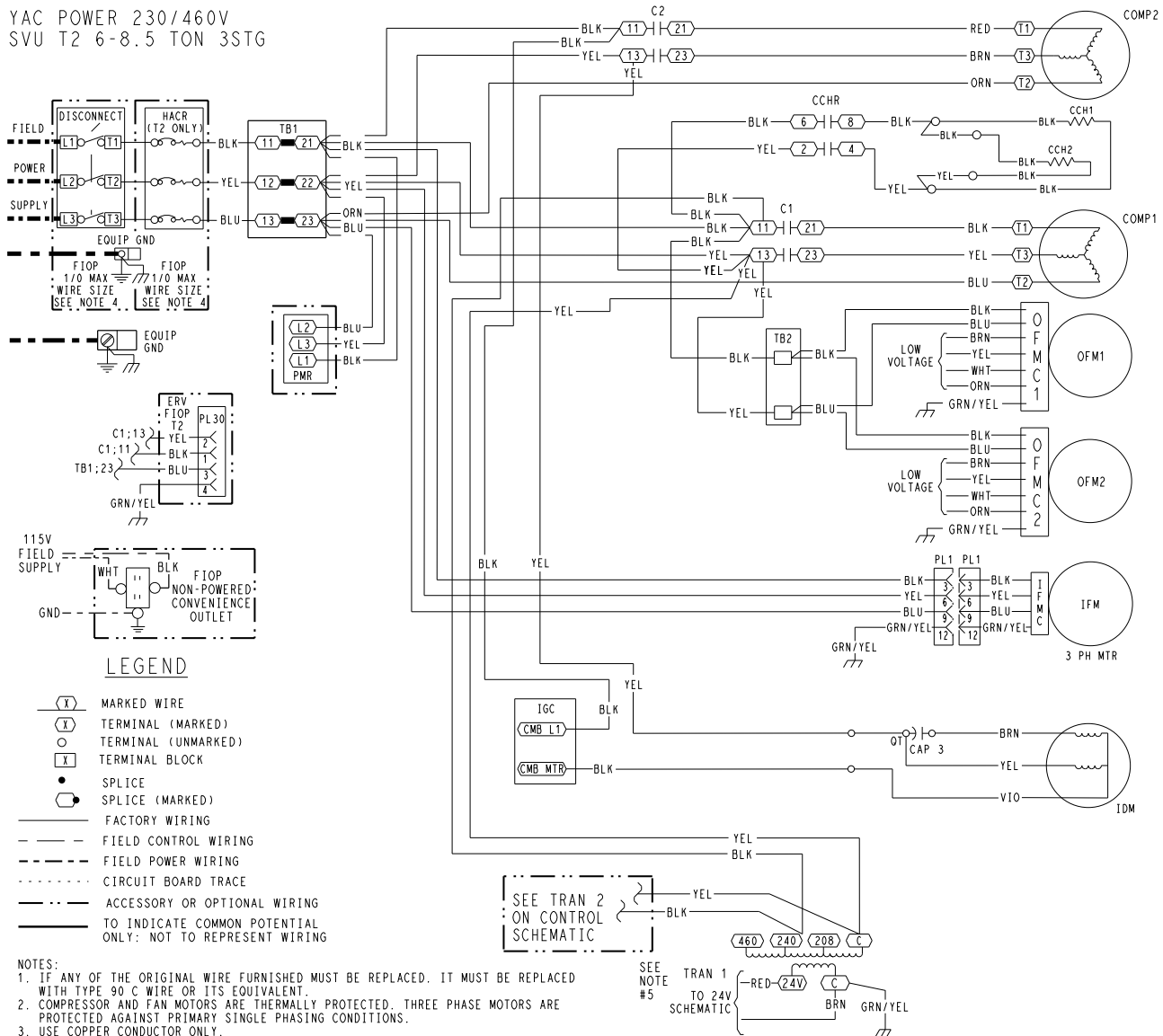
50GE UNIT SIZE	NOM. V-Ph-Hz	IFM TYPE	ELECTRIC HEATER PART NUMBER	NOM (kW)	STD SCCR kA	APPLICATION (kW)	APPLICATION OUTPUT (MBH)	SINGLE POINT OR JUNCTION KIT PART NUMBER CRSINGLEXXXXA00			
								NO C.O. OR UNPOWERED C.O.		WITH PWRD C.O.	
								NO P.E.	WITH P.E. (pwrd fr/unit)	NO P.E.	WITH P.E. (pwrd fr/unit)
50GE*T14	208/230-3-60	STD/ MED	CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	051	051	051	051
			CRHEATER417A00	50.0	5	37.6/45.9	128.1/156.7	051	051	051	051
		HIGH	CRHEATER412A00	16.0	5	12.0/14.7	41.0/50.1	049	049	049	049
			CRHEATER414A00	25.0	5	18.8/23.0	64.1/78.3	049	049	049	049
			CRHEATER415A00	32.0	5	24.0/29.4	82.0/100.3	049	049	049	049
			CRHEATER416A00	42.4	5	31.8/38.9	108.7/132.9	051	051	051	051
			CRHEATER417A00	50.0	5	37.6/45.9	128.1/156.7	051	051	051	051
	460-3-60	STD/ MED	CRHEATER420A00	15.0	5	13.8	47.0	—	—	—	—
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	047
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
			CRHEATER424A00	50.0	5	45.9	156.7	050	050	050	050
		HIGH	CRHEATER420A00	15.0	5	13.8	47.0	—	—	—	—
			CRHEATER421A00	25.0	5	23.0	78.3	047	047	047	047
			CRHEATER422A00	33.0	5	30.3	103.4	047	047	047	050
			CRHEATER423A00	41.7	5	38.3	130.7	050	050	050	050
			CRHEATER424A00	50.0	5	45.9	156.7	050	050	050	050
	575-3-60	STD/ MED	CRHEATER425A00	18.0	5	16.5	56.4	—	—	—	—
			CRHEATER426A00	24.8	5	22.8	77.7	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047
			CRHEATER428A00	50.0	5	45.9	156.7	047	047	047	047
		HIGH	CRHEATER425A00	18.0	5	16.5	56.4	—	—	—	—
			CRHEATER426A00	24.8	5	22.8	77.7	047	047	047	047
			CRHEATER427A00	36.0	5	33.1	112.8	047	047	047	047
			CRHEATER428A00	50.0	5	45.9	156.7	047	047	047	050

Typical wiring diagrams



Typical 3-Stage Power Wiring Diagram, for SystemVu™ Controller Units, 48GE 07-09 230/460-3-60 Units Shown

YAC POWER 230/460V
SVU T2 6-8.5 TON 3STG



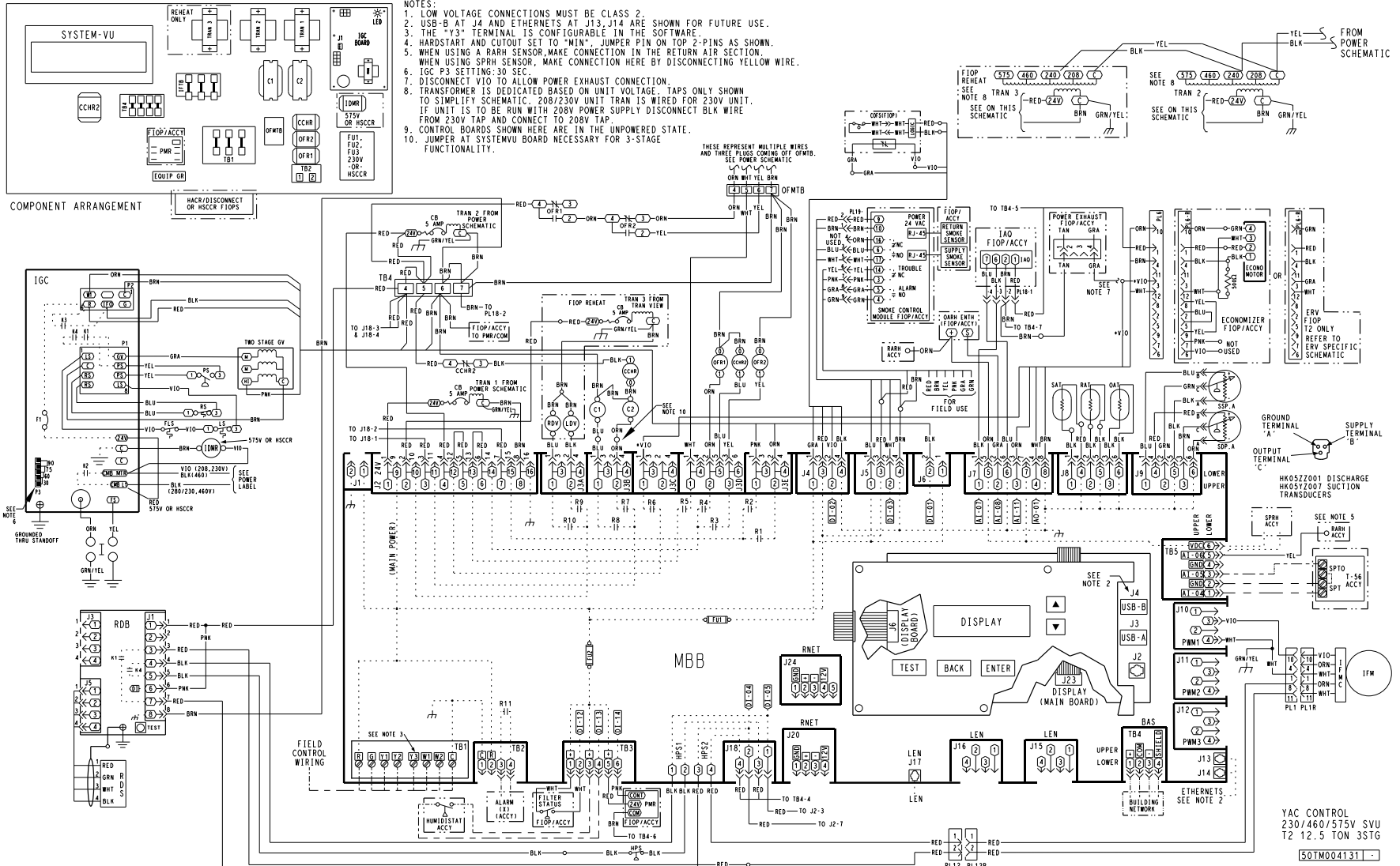
ACCY ACCESSORY
AMB AMBIENT
C CONTACTOR, COMPRESSOR
CAP CAPACITOR
CB CIRCUIT BREAKER
CCH CRANKCASE HEATER
CCHR CRANKCASE HEATER RELAY
CMB COMBUSTION
COFS CONDENSATE OVERFLOW SWT
COMP COMPRESSOR MOTOR
CDC DIRECT DIGITAL CONTROL
ERV ENERGY RECOVERY VENTILATOR
FIOF FACTORY INSTALLED OPTION
FLS FAN LIMIT SWITCH
FPT FREEZE PROTECTION THERMOSTAT
FSD FIRE SHUT DOWN
FS FLAME SENSOR
FU FUSE
GND GROUND
GVR GAS VALVE RELAY
HPC HEAD PRESSURE CONTROL
HPS HIGH PRESSURE SWITCH

HS HALL EFFECT SENSOR
I IGNITOR
IAQ INDOOR AIR QUALITY SENSORS
IDM INDUCED DRAFT MOTOR
IFCB INDOOR FAN CIRCUIT BREAKER
IFM INDOOR FAN MOTOR
IFMC INDOOR FAN CONTROLLER
IGC INTEGRATED GAS CONTROL
JMP JUMPER
LA LOW AMBIENT
LDV LIQUID DIVERter VALVE
LPS LOW PRESSURE SWITCH
LSM LIMIT SWITCH (MANUAL RESET)
LS LIMIT SWITCH
LTLO LOW TEMPERATURE LOCKOUT
MGV MAIN GAS VALVE
MOV VOLTAGE RESTRICTOR
MTR MOTOR
MTS MIXED AIR TEMPERATURE SWITCH
OAO OUTDOOR AIR QUALITY
OARH OUTSIDE AIR RELATIVE HUMIDITY
OAT OUTDOOR AIR TEMP. SENSOR

OFM OUTDOOR FAN MOTOR
OFR OUTDOOR FAN RELAY
OL OVERLOAD
PL PLUG ASSEMBLY
POT POTENTIOMETER
PMR PHASE MONITOR RELAY
QT QUADRUPE TERMINAL
RARH RETURN AIR RELATIVE HUMIDITY
RAT RETURN AIR TEMP. SENSOR
RDB REFRIGERANT DISSIPATION BOARD
RDS REFRIGERANT DISSIPATION SENSOR
RDV REHEAT DISCHARGE VALVE
RS ROLLOUT SWITCH
SAT SUPPLY AIR TEMP. SENSOR
SEN SENSOR
SPRH SPACE RELATIVE HUMIDITY
SPT SPACE TEMPERATURE SENSOR
SPTO SPACE TEMPERATURE OFFSET
STD STANDARD
TB TERMINAL BLOCK
TDR TIME DELAY RELAY (WINTER START)
TRAN TRANSFORMER
UCB UNIT CONTROL BOARD

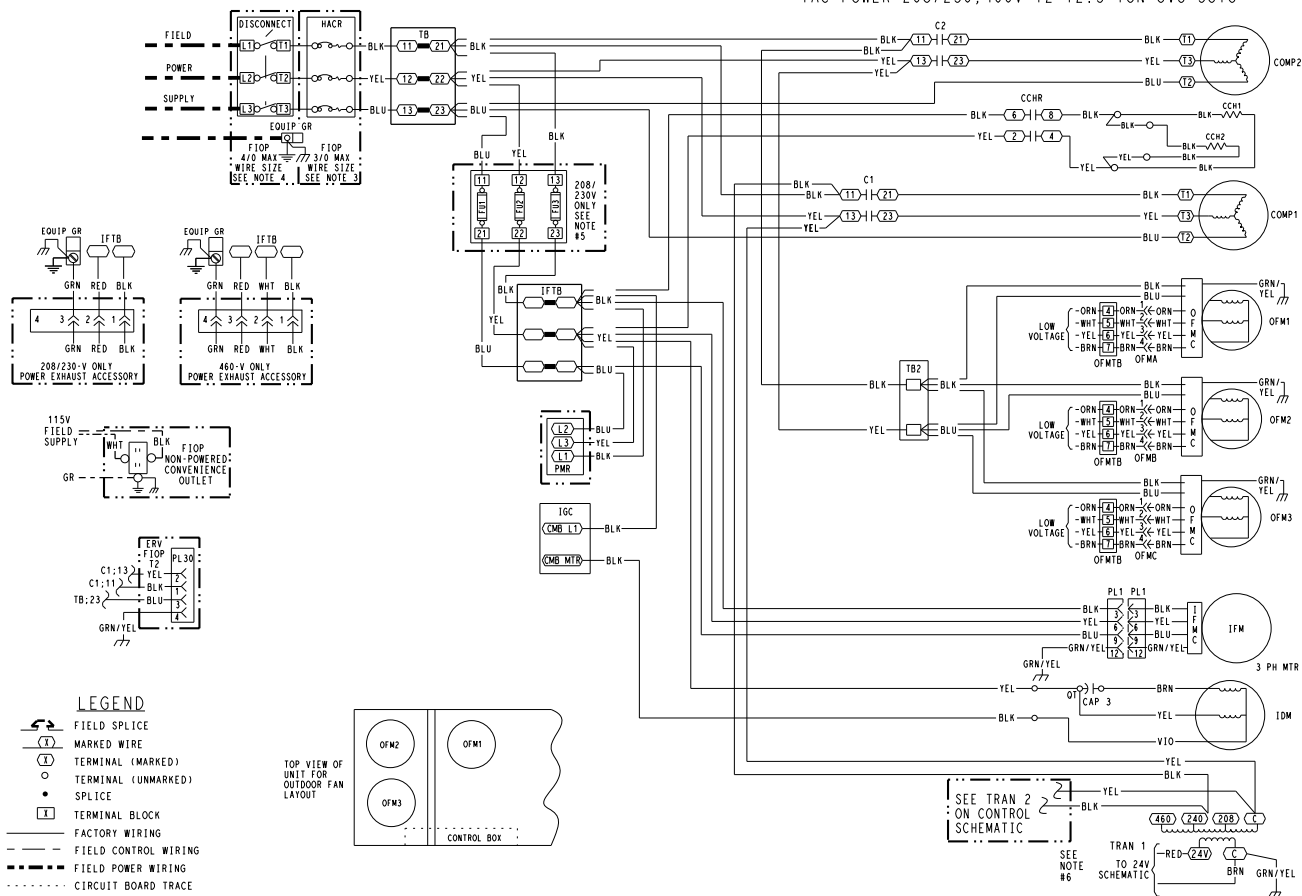
48TM010169 -

Typical 3-Stage 48GE**14 Control Wiring Diagram, SystemVu™ Controller



Typical 3-Stage 48GE**14 Power Wiring Diagram SystemVu™ Control Unit 230/460-3-60 Units Shown

YAC POWER 208/230,460V T2 12.5 TON SVU 3STG



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. THREE PHASE MOTORS ARE PROTECTED AGAINST PRIMARY SINGLE PHASING CONDITIONS.
3. USE COPPER, COPPER CLAD ALUMINUM OR ALUMINUM CONDUCTORS.
4. USE COPPER CONDUCTORS ONLY.
5. F01, F02, AND F03, REPLACE WITH 250V 60A BUSSMAN FRNR 60.
6. TRANSFORMER IS DEDICATED BASED ON UNIT VOLTAGE. TAPS ONLY SHOWN TO SIMPLIFY SCHEMATIC. 208/230V UNIT TRAN IS WIRED FOR 230V UNIT. IF UNIT IS TO BE RUN WITH 208V POWER SUPPLY DISCONNECT BLK WIRE FROM 230V TAP AND CONNECT TO 200V TAP.

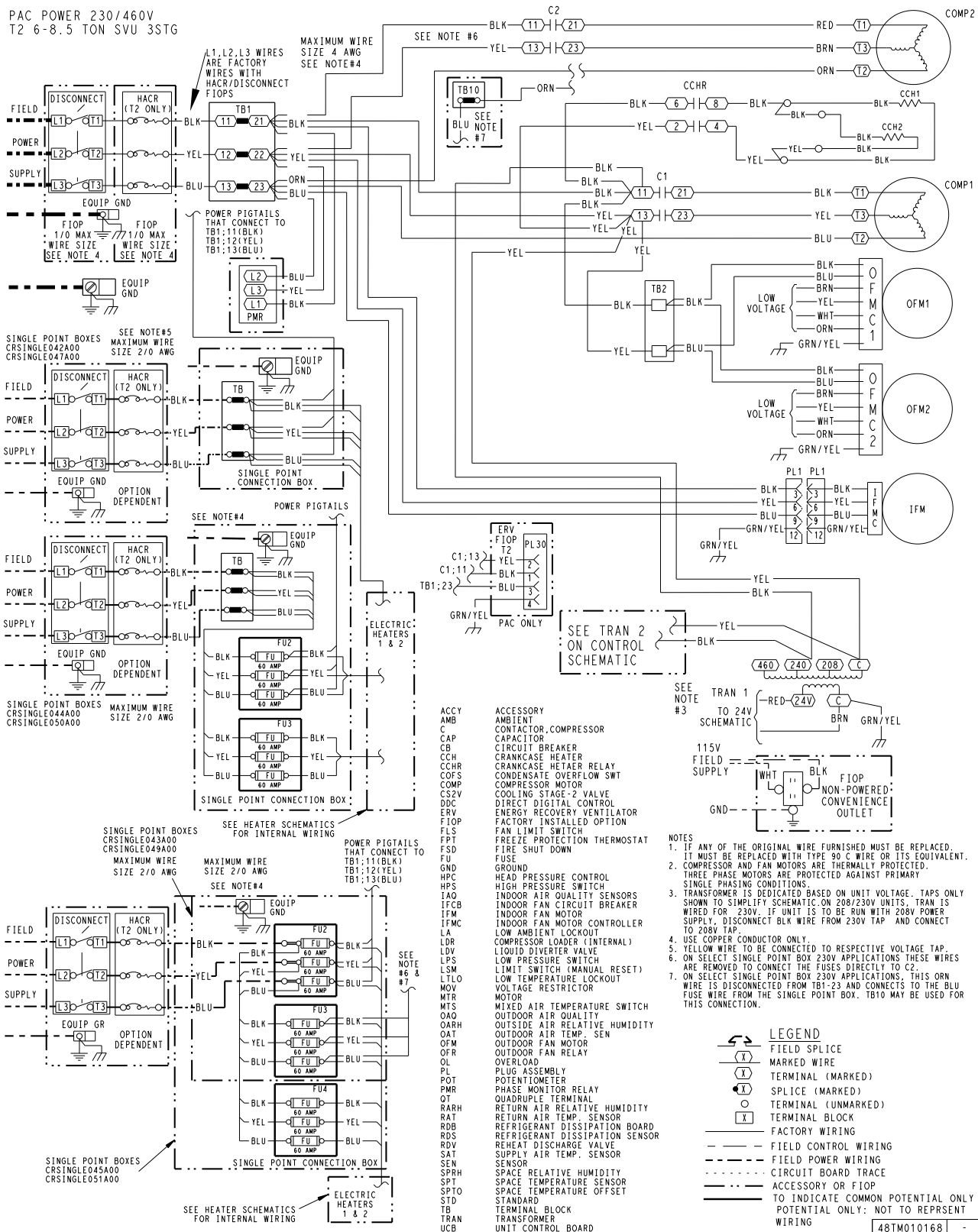
ACCY	ACCESSORY	IAO	IGNITOR	OFR	OUTDOOR FAN RELAY
AMB	AMBIENT	IND	INDOOR AIR QUALITY SENSORS	OL	OVERLOAD
C	CONTACTOR, COMPRESSOR	INDM	INDUCED DRAFT MOTOR	PL	PLUG ASSEMBLY
CAP	CAPACITOR	IFCB	INDOOR FAN CIRCUIT BREAKER	POT	POTENTIOMETER
CB	CIRCUIT BREAKER	IFM	INDOOR FAN MOTOR	PMR	PHASE MONITOR RELAY
CH	CRANKCASE HEATER	IFMC	INDOOR FAN CONTROLLER	QT	QUADRUPLE TERMINAL
CCHR	CRANKCASE HEATER RELAY	IGC	INTEGRATED GAS CONTROL	RAH	RETURN AIR RELATIVE HUMIDITY
CMB	COMBUSTION	IFTB	INDOOR FAN TERMINAL BLOCK	RAT	RETURN AIR TEMP. SENSOR
COTS	CONDENSATE OVERFLOW SWT	JMP	JUMPER	ROB	REFRIGERANT DISSIPATION BOARD
COMP	COMPRESSOR MOTOR	LA	LOW AMBIENT	RDS	REFRIGERANT DISSIPATION SENSOR
DDC	DIRECT DIGITAL CONTROL	LAR	LOW AMBIENT RELAY	RDV	REHEAT DISCHARGE VALVE
EHR	ELECTRIC HEATER RELAY	LAV	LIQUID DIVERTER VALVE	RS	ROLLOUT SWITCH
ERV	ENERGY RECOVERY VENTILATOR	LPS	LOW PRESSURE SWITCH	RVSR	REVERSING VALVE SOLENOID RELAY
FIOP	FACTORY INSTALLED OPTION	LPM	LIMIT SWITCH (MANUAL RESET)	SAT	SUPPLY AIR TEMP. SENSOR
FLS	FAN LIMIT SWITCH	LS	LIMIT SWITCH	SEN	SENSOR
FPT	FREEZE PROTECTION THERMOSTAT	LTO	LOW TEMPERATURE LOCKOUT	SPRH	SPACE RELATIVE HUMIDITY
FSD	FIRE SHUT DOWN	MGV	MAIN GAS VALVE	SPT	SPACE TEMPERATURE SENSOR
FS	FLAME SENSOR	MOV	VOLTAGE RESTRICTOR	SPTO	SPACE TEMPERATURE OFFSET
FU	FUSE	MTR	MOTOR	STD	STANDARD
GND	GROUND	MTS	MIXED AIR TEMPERATURE SWITCH	TB	TERMINAL BLOCK
GVR	GAS VALVE RELAY	OAO	OUTDOOR AIR QUALITY	TBR	TEMPERATURE BYPASS RELAY
HPC	HEAD PRESSURE CONTROL	OARH	OUTSIDE AIR RELATIVE HUMIDITY	TDR	TIME DELAY RELAY (WINTER START)
HPS	HIGH PRESSURE SWITCH	OAT	OUTDOOR AIR TEMP. SENSOR	TRAN	TRANSFORMER
HS	HALL EFFECT SENSOR	OFM	OUTDOOR FAN MOTOR	UCB	UNIT CONTROL BOARD

50TM004133 -



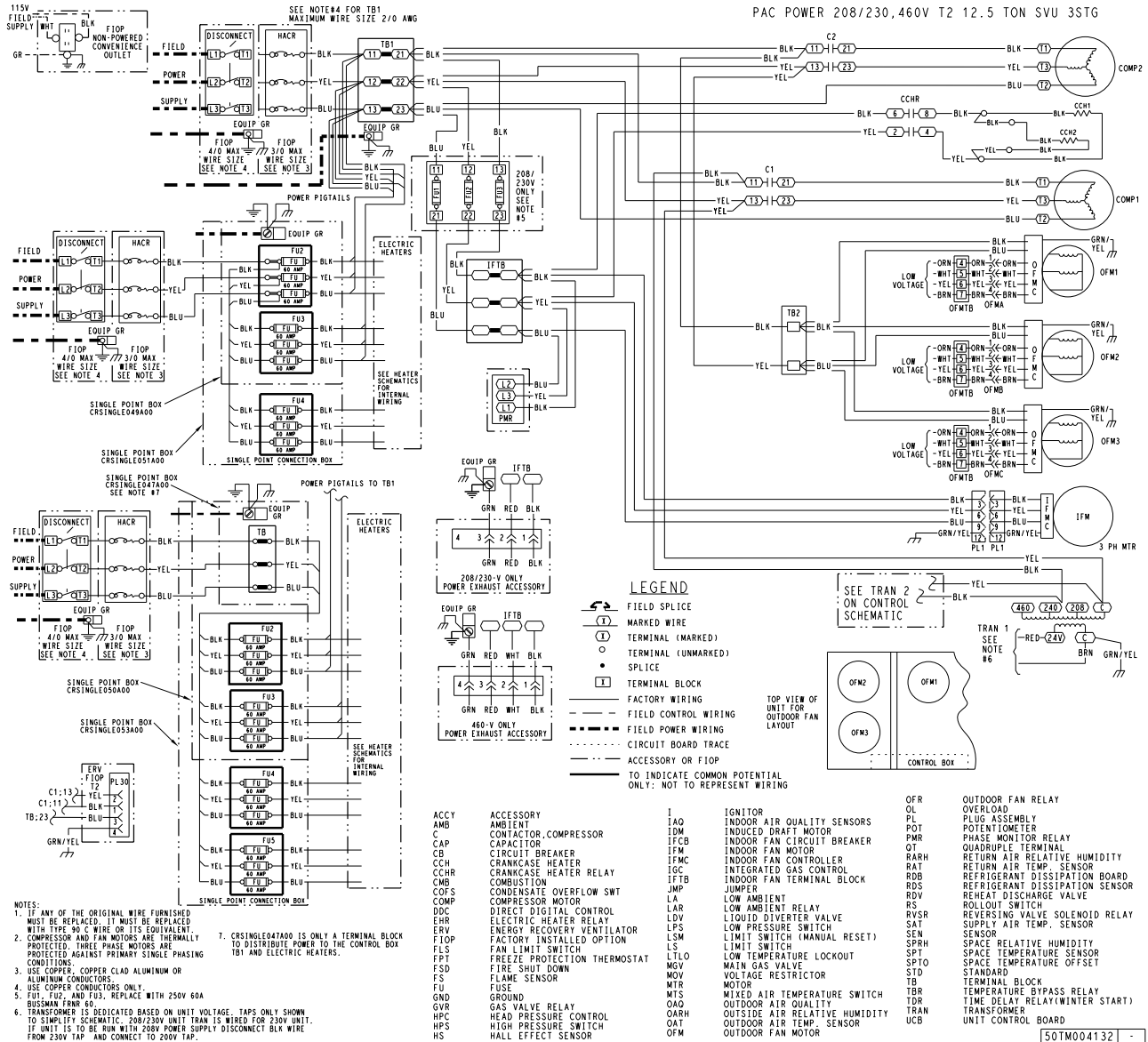
Typical 3-Stage Power Wiring Diagram, for SystemVu Controller Units, 50GE 07-09 230/460-3-60 Units Shown

PAC POWER 230/460V
T2 6-8.5 TON SVU 3STG



[illegible]

Typical 3-Stage 50GE**14 Power Wiring Diagram SystemVu™ Control Unit — 208/230, 460-3-60 Shown



General

The SystemVu controller is standard on all 48/50GE 3-stage units. The sequence below describes the sequence of operation for 48/50GE 3-stage units with and without a factory-installed economizer. For more information regarding the SystemVu controller, see the 48/50FE 04-30, 48/50GE 04-28 Single Package Rooftop Units with SystemVu Controls Version X.X, Start-Up, Operation and Troubleshooting manual.

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.

Cooling without economizer

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

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

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

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

NOTE: Per ASHRAE 90.1-2019 and IECC-2018 standards, during the first stage cooling operation the SystemVu controller will adjust the fan motor speed to provide 40% of the total cfm established for the unit. During the second stage cooling operation the SystemVu controller will adjust the fan motor speed to provide 60% of the total cfm established for the unit.

Cooling with economizer

For detailed information on free cooling operation for 48/50GEQ 3-stage units with factory-installed economizer see the 48/50FE 04-30, 48/50GE 04-28 Single Package

Rooftop Units with SystemVu Controls Version X.X, Start-Up, Operation and Troubleshooting manual.

Heating, unit with economizer

Upon a request for heating from the space thermostat terminal, W1 will be energized with 24V. The indoor fan will run at high speed, and outdoor fan C1 and C2 will be energized in heating. The indoor fan, outdoor fans, and compressor are energized. The reversing valve is de-energized and switch positions. The economizer is set to minimum position (ventilation position). If the space temperature continues to fall with W1 energized, W2 will bring on gas heat. As the space temperature rises the W2 will de-energize and the compressors will continue to operate, until the thermostat set point is achieved de-energizing W1. If the thermostat is set to Auto, the indoor fan will de-energize and the economizer will close. If the indoor fan is set to On, the indoor fan will continue to operate and the economizer will remain at minimum position (vent position). On units equipped for 2 stages of heat, when additional heat is needed, second stage of gas heat energized through W2. The economizer damper moves to the minimum position. When the thermostat is satisfied, the damper moves to the fully closed position.

Heating, unit without economizer

Upon a request for heating from the space thermostat, terminal W1 will be energized with 24V. The indoor fan, outdoor fan C1 and C2 will be energized. The indoor fan, outdoor fans, and compressor 1, and compressor 2 are energized and reversing valves are deenergized and switch position. If the space temperature continues to fall while W1 is energized, W2 will be energized with 24V, and gas heat will be energized. When the space thermostat is satisfied, W2 will be de-energized first, and gas heating will be de-energized. Upon a further rise in space temperature, W1 will be de-energized.

Gas heating (48GE units)

NOTE: WeatherMaster® units have 2 stages of gas heat.

When the thermostat calls for heating, power is sent to W on the Integrated Gas Controller (IGC) board. An LED (light-emitting diode) on the IGC board turns on and remains on during normal operation. A check is made to ensure that the roll-out switch and limit switch are closed. If the check was successful, then the induced-draft motor is energized, and when its speed is satisfactory, as proven by the flue gas pressure switch, the ignition activation period begins. The burners will ignite within 5 seconds. If the burners do not light, there is a 22 second delay before another 5 second attempt. This sequence is repeated for 15 minutes or until the burners light. If, after the 15 minutes, the burners still have not lit, heating is locked out. To reset the control, break 24-v power to the thermostat.

When ignition occurs, the IGC board will continue to monitor the condition of the roll-out switch, the limit switches, the flue gas pressure switch, and the flame sensor. Forty-five seconds after ignition occurs, assuming the unit is controlled through a room thermostat set for fan auto, the indoor-fan motor will energize (and the outdoor-air dampers will open to their minimum position). If, for some reason, the over-temperature limit opens prior to the start of the indoor fan blower, then the unit will shorten the 45 second delay to 5 seconds less than the time from initiation of heat to when the limit tripped. Gas will not be interrupted to the burners and heating will continue. Once the fan-on delay has been modified, it will not change back to 45 seconds until power is reset to the control. On units with

Sequence of operation (cont)



2 stages of heat, when additional heat is required, W2 closes and initiates power to the second stage of the main gas valve. When the thermostat is satisfied, W1 and W2 open and the gas valve closes, interrupting the flow of gas to the main burners. If the unit is controlled through a room thermostat set for fan auto, then the indoor-fan motor will continue to operate for an additional 45 seconds and then stop. A LED indicator is provided on the IGC to monitor operation.

Electric heating (50GE units)

Units have either 1 or 2 stages of electric heat. When the thermostat calls for heating, power is applied to G and the W1 terminals at the unit. The unit control will energize the indoor fan contactor and the first stage of electric heat. On units with 2-stage heating, when additional heating is required, the second stage of electric heat (if equipped) will be energized when power is applied at the W2 terminal on the unit.

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

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, a small reheat condenser coil downstream of the evaporator, and variable-speed control of some or all outdoor fans. 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.

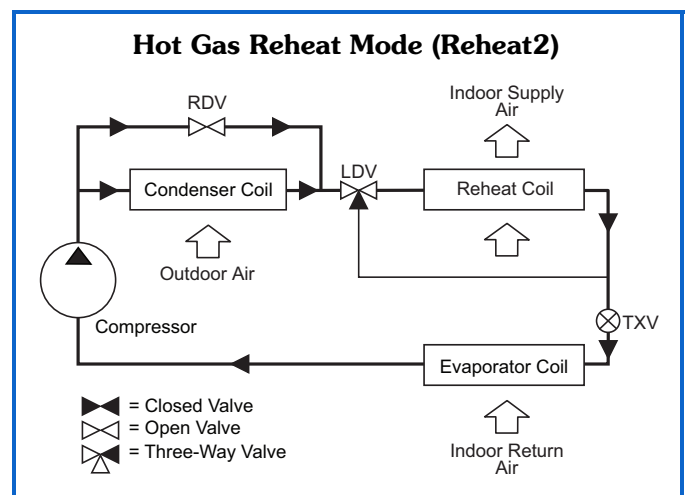
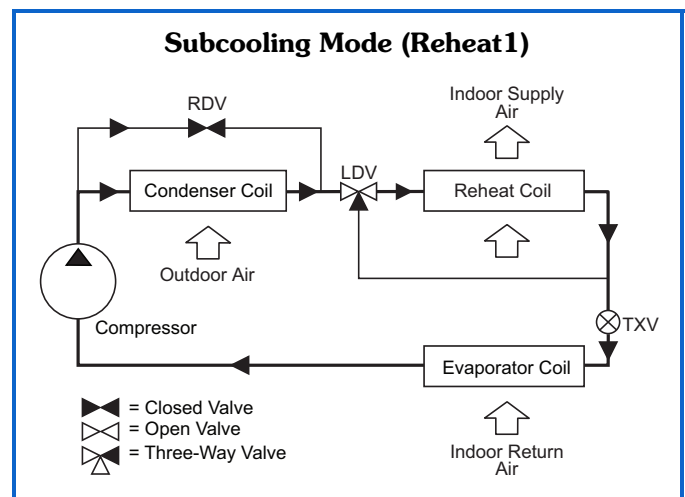
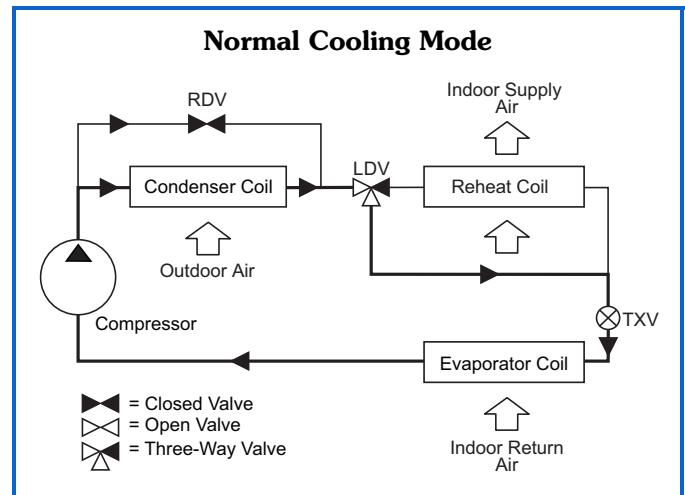
Cool — provides a normal ratio of sensible and latent cooling effect from the evaporator coil.

Reheat1 — provides increased latent cooling while slightly reducing the sensible cooling effect.

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 low ambient lockout switch is closed.

Refer to the following figures for piping flow diagrams.



LEGEND

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

Minimum operating ambient temperature (cooling)

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

Stainless steel heat exchanger (48GE units only)

For this option, the tubular heat exchanger is made out of a minimum 20 gauge type 409 stainless steel for applications where the mixed air to the heat exchanger is expected to drop below 45°F (7°C). Stainless steel may be specified on applications where the presence of airborne contaminants require its use (applications such as paper mills) or in area with very high outdoor humidity that may result in severe condensation in the heat exchanger during cooling operation.

Minimum mixed air temperature (heating) (48GE units only)

Using the factory settings, the minimum temperatures for mixed air (the combined temperature of the warm return air and the cold outdoor air) entering the dimpled gas heat exchangers are shown in the following table.

Minimum Temperature for Mixed Air Temperature

ALUMINIZED	STAINLESS STEEL
50°F (10°C) Continuous	40°F (4°C) Continuous
45°F (7°C) Intermittent	35°F (2°C) Intermittent

Operating at lower mixed-air temperatures may be possible if a field-supplied, outdoor-air thermostat initiates both heat stages when the temperature is less than the minimum temperatures listed above. Please contact your local Carrier representative for assistance.

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 8 and the maximum value is the LOWER of the cooling and heating maximum values published on page 8.

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.

Propane heating (48GE units only)

Propane has different physical qualities than natural gas. As a result, propane requires a different fuel to air mixture. To optimize the fuel/air mixture for propane, Carrier sells different burner orifices in an easy-to-install accessory kit. To select the correct burner orifices or determine the heat capacity for a propane application, use either the selection software or the unit's service manual.

High altitude heating

High altitudes have less oxygen, which affects the fuel/air mixture in heat exchangers. In order to maintain a proper fuel/air mixture, heat exchangers operating in altitudes above 2000 ft (610 m) require different orifices. To select the correct burner orifices or determine the heat capacity for a high altitude application, use either the selection software or the unit's service manual.

High altitudes have less oxygen, which means heat exchangers need less fuel. The new gas orifices in Carrier's field-installed kit make the necessary adjustment for high altitude applications. They restore the optimal fuel to air mixture and maintain healthy combustion at altitudes above 2000 ft (610 m).

NOTE: Typical natural gas heating value ranges from 975 to 1050 Btu/ft³ at sea level nationally. The heating value goes down approximately 1.7% per every thousand feet of elevation. Standard factory orifices can typically be used up to 2000 ft (610 m) elevation without any operational issues.

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.

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.



Gas Heat/Electric Cooling Packaged Rooftop

HVAC Guide Specifications

Size Range: **6 to 12.5 Nominal Tons**

Carrier Model Number: **48GE**07-14 — Three Stage**

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.) Gas 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 3 stages of cooling, and 2 different stages of heating.
 - c. include capability for occupancy scheduling.

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

4.01 (23 09 23.13) Decentralized, Rooftop Units:

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

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

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

9. Provide Service Capabilities of:
 - a. Auto run test
 - b. Manual run test
 - c. Component run hours and starts
 - d. Commissioning reports
 - e. Data logging
 - f. Alarm history
10. Economizer control and diagnostics. Set up economizer operation, receive feedback from actuator. Also meets the most recent California Title 24, ASHRAE^{®1} 90.1 and IECC^{®1} Fault Detection and Diagnostic (FDD) requirements.
11. Unit cooling operation down to -10°F (-23°C).
12. Controller shall have easy access connections around the controller perimeter area and consist of Mate-N-Lok^{®1}, terminal block and RJ style modular jack connections.
13. 365 day real time clock, 20 holiday schedules along with occupied and unoccupied scheduling.
14. Auto-Recognition for easy installation and commissioning of devices like economizers, space sensors etc.
15. A 5°F (3°C) temperature difference between cooling and heating setpoints to meet the latest ASHRAE 90.1 Energy Standard.
16. 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 setpoint expansion. The systems heating and cooling setpoints are expanded in steps or levels. The degree to which the setpoints may be expanded is defined by the 6 demand level offsets and the 2 commanded demand limit levels.

21. 3-year limited part warranty.

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

5.01 (23 09 33.13) Decentralized, Rooftop Units:

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

1. Shall be complete with self-contained low-voltage control circuit protected by a resettable circuit breaker on the 24-v transformer side. Transformer shall have 75VA capability.
2. Shall utilize color-coded wiring.
3. Shall include a SystemVu Controller to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, gas controller, economizer, thermostat, and low and high pressure switches.
4. The heat exchanger shall be controlled by an integrated gas controller (IGC) microprocessor. See heat exchanger section of this specification.
5. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.

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. Mixed Air Auto Reset Temperature Switch:
All cooling units contain a low return air (or mixed air - depending on unit configuration) temperature switch for compressor protection. The switch prevents compressor operation at mixed air temperatures below 60°F (15°C) to ensure long term reliability but allows continued fan and economizer operation (if in-stalled). The switch will automatically reset when the return/mixed air temperature warms above 65°F (18°C) and will allow compressor operation to continue.
5. Automatic reset, motor thermal overload protector.
6. Heating section shall be provided with the following minimum protections:
 - a. High temperature limit switches.
 - b. Induced draft motor pressure switch.
 - c. Flame rollout switch.
 - d. Flame proving controls.

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

7. 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 gas combustion for 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 340/360.
3. Unit shall be designed to conform to ASHRAE 15.
4. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
5. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
6. Unit casing shall be capable of withstanding 500 hour salt spray exposure per ASTM B117 (scribed specimen).
7. Unit shall be designed in accordance with ISO 9001, and shall be manufactured in a facility registered by ISO 9001:2015.
8. Roof curb shall be designed to conform to NRCA Standards.
9. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.
10. Unit shall be designed in accordance with UL Standard 60335-1 and 60335-2-40, including testing to withstand rain. Unit shall be IPX4 rated.
11. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.

12. Unit 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 (51°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 340/360 at ±10% voltage.
 2. Compressor with standard controls shall be capable of operation down to -10°F (-23°C) ambient outdoor temperatures.
 3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
 4. Unit shall be factory configured for vertical supply and return configurations.
 5. Unit shall be field convertible from vertical to horizontal airflow on all models. No special kit required except on 14 size models that require a Supply Duct Kit field installed for horizontal air flow.
 6. 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 prepainted baked enamel finish on all externally exposed surfaces.
 2. Unit cabinet exterior paint shall be: film thickness, (dry) 0.003 inches minimum, gloss (per ASTM D523, 60°F/16°C): 60, Hardness: H-2H Pencil hardness.
 3. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 340/360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2 in. thick, 1 lb density, flexible fiberglass insulation, neoprene coated on the air side. Aluminum foil-faced fiberglass insulation shall be used in the heat compartment.
 4. Base of unit shall have a minimum of 4 locations for thru-the-base gas and electrical connections (factory-installed or field-installed), standard.
5. Base Rail:
 - a. Unit shall have base rails on a minimum of 2 sides.
 - b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
 - c. Holes shall be provided in the base rail for moving the rooftop by fork truck.
 - d. Base rail shall be a minimum of 16 gauge thickness.
6. Condensate Pan and Connections:
 - a. Shall be a sloped condensate drain pan made of a corrosion resistant material.
 - b. Shall comply with ASHRAE Standard 62.
 - c. Shall use a 3/4 in. 14 NPT drain connection, 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 07-12 size models and 2 piece on 14 size models.
8. Gas Connections:
 - a. All gas piping connecting to unit gas valve shall enter the unit cabinet at a single location on side of unit (horizontal plane).
 - b. Thru-the-Base Capability:
 - 1) Standard unit shall have a thru-the-base gas-line location using a raised, embossed portion of the unit basepan.
 - 2) Optional, factory approved, water-tight connection method must be used for thru-the-base gas connections.
 - 3) No basepan penetration, other than those authorized by the manufacturer, is permitted.
9. 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.
10. Component Access Panels (standard):
 - a. Cabinet panels shall be easily removable for servicing.
 - b. Unit shall have one factory installed, tool-less, removable, filter access panel.

- c. Panels covering control box, indoor fan, indoor fan motor, gas components (where applicable), and compressors shall have molded composite handles.
- d. Handles shall be UV modified, composite. They shall be permanently attached, and recessed into the panel.
- e. Screws on the vertical portion of all removable access panel shall engage into heat resistant, molded composite collars.
- f. Collars shall be removable and easily replaceable using manufacturer recommended parts.

H. (23 81 19.13.H.) Gas Heat:

1. General:
 - a. Heat exchanger shall be an induced draft design. Positive pressure heat exchanger designs shall not be allowed.
 - b. Shall incorporate a direct-spark ignition system and redundant main gas valve.
 - c. Gas supply pressure at the inlet to the rooftop unit gas valve must match that required by the manufacturer.
2. The heat exchanger shall be controlled by an integrated gas controller (IGC) microprocessor.
 - a. IGC board shall notify users of fault using an LED (light-emitting diode).
 - b. The LED shall be visible without removing the control box access panel.
 - c. IGC board shall contain algorithms that modify evaporator fan operation to prevent future cycling on high temperature limit switch.
 - d. Unit shall be equipped with anti-cycle protection with one short cycle on unit flame rollout switch or 4 continuous short cycles on the high temperature limit switch. Fault indication shall be made using an LED.
3. Standard Heat Exchanger Construction:
 - a. Heat exchanger shall be of the tubular-section type constructed of a minimum of 20-gauge steel coated with a nominal 1.2 mil aluminum-silicone alloy for corrosion resistance.
 - b. Burners shall be of the in-shot type constructed of aluminum-coated steel.
 - c. Burners shall incorporate orifices for rated heat output up to 2000 ft (610 m) elevation. Additional accessory kits may be required for applications above 2000 ft (610 m) elevation, depending on local gas supply conditions.
 - d. Each heat exchanger tube shall contain multiple dimples for increased heating effectiveness.

4. Optional Stainless Steel Heat Exchanger Construction:
 - a. Use energy saving, direct-spark ignition system.
 - b. Use a redundant main gas valve.
 - c. Burners shall be of the in-shot type constructed of aluminum-coated steel.
 - d. All gas piping shall enter the unit cabinet at a single location on side of unit (horizontal plane).
 - e. The optional stainless steel heat exchanger shall be of the tubular-section type, constructed of a minimum of 20-gauge type 409 stainless steel.
 - f. Type 409 stainless steel shall be used in heat exchanger tubes and vestibule plate.
 - g. Complete stainless steel heat exchanger allows for greater application flexibility.
5. Induced Draft Combustion Motor and Blower:
 - a. Shall be a direct-drive, single inlet, forward-curved centrifugal type.
 - b. Shall be made from steel with a corrosion resistant finish.
 - c. Shall have permanently lubricated sealed bearings.
 - d. Shall have inherent thermal overload protection.
 - e. Shall have an automatic reset feature.

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

1. Standard Aluminum Fin-Copper Tube Coils:
 - a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internal helically grooved copper tubes with all joints brazed.
 - b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 60335-2-40 burst test at 1775 psig.
 - c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 60335-2-40 burst test at 1980 psig.
2. Optional Pre-coated Aluminum-Fin Condenser Coils:
 - a. Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments.
 - b. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube.
 - c. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.

- d. Corrosion durability of fin stock shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117.
 - e. Corrosion durability of fin stock shall be confirmed through testing to have no visible corrosion after 48 hour immersion in a room temperature solution of 5% salt, 1% acetic acid.
 - f. Fin stock coating shall pass 2000 hours of the following: one week exposure in the prohesion chamber followed by one week of accelerated ultraviolet light testing. Prohesion chamber: the solution shall contain 3.5% sodium chloride and 0.35% ammonium sulfate. The exposure cycle is one hour of salt fog application at ambient followed by one hour drying at 95°F (35°C).
 3. Optional Copper-Fin Evaporator and Condenser Coils:
 - a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
 - b. Galvanized steel tube sheets shall not be acceptable.
 - c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.
 4. Optional E-coated Aluminum-Fin Evaporator and Condenser Coils:
 - a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
 - b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
 - c. Color shall be high gloss black with gloss per ASTM D523.
 - d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.
 - e. Superior hardness characteristics of 2H per ASTM D3363 and cross-hatch adhesion of 4B-5B per ASTM D3359.
 - f. Impact resistance shall be up to 160 in. lb (ASTM D2794).
 - g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247 and ASTM D870).
 - h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117.
- J. (23 81 19.13.J.) 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 fixed panel on the left side of the unit on size 07-12 or compressor access panel on size 14.
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 tandem scroll compressor assembly on a single refrigeration circuit with three stages of cooling for efficient comfort cooling operation.
 - b. Evaporator coils shall be a full active design to help better control latent removal and minimize unconditioned bypass air.
 - c. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
 - d. Compressors shall be internally protected from high discharge temperature conditions.
 - e. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
 - f. Compressor shall be factory-mounted on rubber grommets.
 - g. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
 - h. Crankcase heaters shall not be required for normal operating range, unless required by the manufacturer due to refrigerant charge limits.
- K. (23 81 19.13.K.) 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.
- L. (23 81 19.13.L.) 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 SystemVu controller shall eliminate the need of removal of blower access door, required on conventional belt drive systems.
 - h. Shall be internally protected from electrical phase reversal.
 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 3 stage cooling capacity control, the indoor fan speed is automatically controlled to meet the code-compliant 40% low fan speed, 60% medium 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 to fan deck, dynamically balanced, and require no additional vibration isolation for normal operation.
 - h. Shall have slow ramp up to speed capabilities to help reduce sound and comfort issues typically associated with single speed belt drive systems.
 - i. Shall be a slide out design with removal of a few support brackets.
3. Shall include an easily accessible SystemVu Board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, gas controller, economizer, thermostat, low and high pressure switches. Controller shall also provide an intuitive means to adjust the indoor fan speed.
- M. (23 81 19.13.M.) Condenser Fans and Motors:
 1. Condenser Fan Motors:
 - a. Shall be a totally enclosed ECM motor.
 - b. Shall use permanently lubricated bearings.
 - c. Shall have inherent thermal overload protection with an automatic reset feature.
 - d. Shall use a shaft-down design on all sizes.
 2. Condenser Fans:
 - a. Shall be a direct-driven propeller type fan.
 - b. Shall have galvalum blades riveted to steel spider that have corrosion-resistant properties and shall be dynamically balanced.
- N. (23 81 19.13.N.) Special Features Options and Accessories:
 1. Integrated EconoMi\$er® 2 Low Leak Rate Models.
 - a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
 - b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory installed option.
 - c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
 - d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below set points.
 - e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
 - f. Low leak rate shall be equipped with dampers not to exceed 2% leakage at 1 in. wg pressure differential.
 - g. Economizer controller on EconoMi\$er 2 models with SystemVu 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.
 - h. Shall be capable of introducing up to 100% outdoor air.
 - i. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.

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

Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 25 or 50% outdoor air for year round ventilation.
5. Humidi-MiZer® Adaptive Dehumidification System:

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

 - a. Subcooling mode further sub cools the hot liquid refrigerant leaving the condenser coil when both temperature and humidity in the space are not satisfied.
 - b. Hot gas reheat mode shall mix a portion of the hot gas from the discharge of the compressor with the hot liquid refrigerant leaving the condenser coil to create a 2-phase heat transfer in the system, resulting in a neutral leaving air temperature when only humidity in the space is not satisfied.
 - c. Includes low ambient controller.
6. Propane Conversion Kit:
 - a. Package shall contain all the necessary hardware and instructions to convert a standard natural gas unit for use with liquefied propane, up to 2000 ft (610 m) elevation.
 - b. Additional accessory kits may be required for applications above 2000 ft (610 m) elevation.
7. Flue Shield (07 to 12 sizes only):
 - a. Flue shield shall provide protection from the hot sides of the gas flue hood.
8. Condenser Coil Hail Guard Assembly:
 - a. Shall protect against hail and additional coil damage.
 - b. Shall be louvered type.
9. Unit-Mounted, Non-Fused Disconnect Switch:
 - a. Available on 6 to 12.5 ton units with FLA of 100 amps or less.
 - b. Switch shall be factory installed, internally mounted.
 - c. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
 - d. Shall be accessible from outside the unit.
 - e. Shall provide local shutdown and lockout capability.
 - f. Sized **only** for the unit as ordered from the factory. Does not accommodate field-installed devices.
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:
 - 1) Outlet shall be powered from main line power to the rooftop unit.
 - 2) Outlet shall be powered from line side or load side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be UL certified and rated for additional outlet amperage.
 - 3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
 - 4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
 - 5) Voltage required to operate convenience outlet shall be provided by a factory installed step-down transformer.
 - 6) Outlet shall be accessible from outside the unit.
 - 7) Outlet shall include a field installed “Wet in Use” cover.
 - b. Factory-Installed Non-Powered Convenience Outlet:
 - 1) Outlet shall be powered from a separate 115/120-v power source.
 - 2) A transformer shall not be included.
 - 3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
 - 4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
 - 5) Outlet shall be accessible from outside the unit.
 - 6) Outlet shall include a field installed “Wet in Use” cover.
 - c. Field-Installed Non-Powered Convenience Outlet:
 - 1) Outlet shall be powered from a separate 115/120v 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. Flue Discharge Deflector:
- a. Flue discharge deflector shall direct unit exhaust vertically instead of horizontally.
 - b. Deflector shall be defined as a "natural draft" device by the National Fuel and Gas (NFG) code.
13. Thru-the-Base Connectors:
- a. Kits 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.
14. Supply Duct Cover (size 14 only):
- Required when field converting the factory standard vertical duct supply to horizontal duct supply configuration. One required per unit.
15. 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 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.
16. 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.
17. High Altitude Gas Conversion Kit:
- Package shall contain all the necessary hardware and instructions to convert a standard natural gas unit to operate from 2000 to 7000 ft (610 to 2134 m) elevation with natural gas or from 0 to 7000 ft (0 to 2134 m) elevation with liquefied propane.
18. 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.
19. 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.
20. Indoor Air Quality (CO₂) Sensor:
- a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
 - b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The setpoint shall have adjustment capability.
21. Smoke Detectors:
- a. Shall be a 4-Wire controller and detector.
 - b. Shall be environmentally 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 shut-down applications.
22. Disconnect Switch Bracket (size 14 only):
- Provides a pre-engineered and sized mounting bracket for applications requiring a unit mounted fused and non-fused disconnect of greater than 100 amps. Bracket assures that no damage will occur to coils when mounting with screws and other fasteners.

- 23. 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.
- 24. 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 compressors operation when condensate plug is detected, but still allows fans to run for economizer.
- 25. Foil Faced Insulation:

Throughout unit cabinet air stream, non-fibrous and cleanable foil faced insulation is used.
- 26. 4 in. MERV-13 Return Air Filters:
 - 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.
- 27. 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.
- 28. 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.
- 29. 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.
- 30. 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.
- 31. 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.
- 32. 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, and 575-v models. Size 12 unit is also not available with the High SCCR option.

Note about this specification:

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



Cooling Only/Electric Heat Packaged Rooftop

HVAC Guide Specifications

Size Range: **6 to 12.5 Nominal Tons**

Carrier Model Number: **50GE**07-14 — Three Stage**

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 3 stages of cooling, and 2 different stages of heating.
 - c. include capability for occupancy scheduling.

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

4.01 (23 09 23.13) Decentralized, Rooftop Units:

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

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

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

9. Provide Service Capabilities of:
 - a. Auto run test
 - b. Manual run test
 - c. Component run hours and starts
 - d. Commissioning reports
 - e. Data logging
 - f. Alarm history
10. Economizer control and diagnostics. Set up economizer operation, receive feedback from actuator. Also meets the most recent California Title 24, ASHRAE^{®1} 90.1 and IECC^{®1} Fault Detection and Diagnostic (FDD) requirements.
11. Unit cooling operation down to -10°F (-23°C).
12. Controller shall have easy access connections around the controller perimeter area and consist of Mate-N-Lok^{®1}, terminal block and RJ style modular jack connections.
13. 365 day real time clock, 20 holiday schedules along with occupied and unoccupied scheduling.
14. Auto-Recognition for easy installation and commissioning of devices like economizers, space sensors, etc.
15. A 5°F (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 setpoint expansion. The systems heating and cooling setpoints are expanded in steps or levels. The degree to which the setpoints may be expanded is defined by the 6 demand level offsets and the 2 commanded demand limit levels.

21. 3-year limited part warranty.

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

5.01 (23 09 33.13) Decentralized, Rooftop Units:

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

1. Shall be complete with self-contained low-voltage control circuit protected by a resettable circuit breaker on the 24-v transformer side. Transformer shall have 75VA capability.
2. Shall utilize color-coded wiring.
3. Shall include a SystemVu Controller to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, gas controller, economizer, thermostat, and low and high pressure switches.
4. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.

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. Mixed Air Auto Reset Temperature Switch:
All cooling units contain a low return air (or mixed air - depending on unit configuration) temperature switch for compressor protection. The switch prevents compressor operation at mixed air temperatures below 60°F (15°C) to ensure long term reliability but allows continued fan and economizer operation (if installed). The switch will automatically reset when the return/mixed air temperature warms above 65°F (18°C) and will allow compressor operation to continue.
5. Heating section shall be provided with the following minimum protections:
High temperature limit switches.
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.

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

- 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, cooling unit utilizing fully hermetic scroll compressor(s) for cooling 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 340/360.
- 3. Unit shall be designed to conform to ASHRAE 15.
- 4. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
- 5. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- 6. Unit casing shall be capable of withstanding 500 hour salt spray exposure per ASTM B117 (scribed specimen).
- 7. Unit shall be designed in accordance with ISO 9001, and shall be manufactured in a facility registered by ISO 9001:2015.
- 8. Roof curb shall be designed to conform to NRCA Standards.
- 9. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.
- 10. Unit shall be designed in accordance with UL Standard 60335-1 and 60335-2-40, including tested 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 (51°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 340/360 at ±10% voltage.
 2. Compressor with standard controls shall be capable of operation down to -10°F (-23°C) ambient outdoor temperatures.
 3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
 4. Unit shall be factory configured for vertical supply and return configurations.
 5. Unit shall be field convertible from vertical to horizontal airflow on all models. No special kit required except on 14 size models that requires a Supply Duct Kit field installation for horizontal air flow.
 6. 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 prepainted baked enamel finish on all externally exposed surfaces.
 2. Unit cabinet exterior paint shall be: film thickness, (dry) 0.003 in. minimum, gloss (per ASTM D523, 60°F/16°C): 60, Hardness: H-2H Pencil hardness.
 3. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 340/360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2 in. thick, 1 lb density, flexible fiberglass insulation, neoprene coated on the air side. Aluminum foil-faced fiberglass insulation shall be used in the heat compartment.
 4. Base of unit shall have a minimum of 4 locations for thru-the-base gas and electrical connections (factory-installed or field-installed), standard.
 5. Base Rail:
 - a. Unit shall have base rails on a minimum of 2 sides.
 - b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
 - c. Holes shall be provided in the base rail for moving the rooftop by fork truck.
 - d. Base rail shall be a minimum of 16 gauge thickness.
6. Condensate Pan and Connections:
 - a. Shall be a sloped condensate drain pan made of a corrosion resistant material.
 - b. Shall comply with ASHRAE Standard 62.
 - c. Shall use a 3/4 in. 14 NPT drain connection, 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 07-12 models and 2 piece on 14 size models.
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, tool-less, removable, filter access panel.
 - c. Panels covering control box, indoor fan, indoor fan motor, gas components (where applicable), and compressors shall have molded composite handles.
 - d. Handles shall be UV modified, composite. They shall be permanently attached, and recessed into the panel.
 - e. Screws on the vertical portion of all removable access panel shall engage into heat resistant, molded composite collars.
 - f. Collars shall be removable and easily replaceable using manufacturer recommended parts.
- H. (23 81 19.13.H.) Coils:
 1. Standard Aluminum Fin-Copper Tube Coils:
 - a. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internal 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:
 - a. Shall have a durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments.
 - b. Coating shall be applied to the aluminum fin stock prior to the fin stamping process to create an inert barrier between the aluminum fin and copper tube.
 - c. Epoxy-phenolic barrier shall minimize galvanic action between dissimilar metals.
 - d. Corrosion durability of fin stock shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117.
 - e. Corrosion durability of fin stock shall be confirmed through testing to have no visible corrosion after 48 hour immersion in a room temperature solution of 5% salt, 1% acetic acid.
 - f. Fin stock coating shall pass 2000 hours of the following: one week exposure in the prohesion chamber followed by one week of accelerated ultraviolet light testing. Prohesion chamber: the solution shall contain 3.5% sodium chloride and 0.35% ammonium sulfate. The exposure cycle is one hour of salt fog application at ambient followed by one hour drying at 95°F (35°C).
 3. Optional Copper-Fin Evaporator and Condenser Coils:
 - a. Shall be constructed of copper fins mechanically bonded to copper tubes and copper tube sheets.
 - b. Galvanized steel tube sheets shall not be acceptable.
 - c. A polymer strip shall prevent coil assembly from contacting the sheet metal coil pan to minimize potential for galvanic corrosion between coil and pan.
 4. Optional E-coated Aluminum-Fin Evaporator and Condenser Coils:
 - a. Shall have a flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins.
 - b. Coating process shall ensure complete coil encapsulation of tubes, fins and headers.
 - c. Color shall be high gloss black with gloss per ASTM D523.
 - d. Uniform dry film thickness from 0.8 to 1.2 mil on all surface areas including fin edges.
 - e. Superior hardness characteristics of 2H per ASTM D3363 and cross-hatch adhesion of 4B-5B per ASTM D3359.
 - f. Impact resistance shall be up to 160 in.-lb (ASTM D2794).
 - g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247 and ASTM D870).
 - h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117.

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

 1. Refrigerant circuit shall include the following control, safety, and maintenance features:
 - a. Thermostatic Expansion Valve (TXV) shall help provide optimum performance across the entire operating range. Shall contain removable power element to allow change out of power element and bulb without removing the valve body.
 - b. Refrigerant filter drier — Solid core design with pre and post-filter service gauge connections for filter diagnostics and maintenance.
 - c. Service gauge connections on suction and discharge lines.
 - d. Pressure gauge access through a specially designed access port in the fixed panel on the left side of the unit on size 07-12 or compressor access panel on size 14.
 2. There shall be gauge line access port in the skin of the rooftop:
 - 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 tandem scroll compressor assembly on a single refrigeration circuit with three stages of cooling for efficient comfort cooling operation.
 - b. Evaporator coils shall be a full active design to help better control latent removal and minimize unconditioned bypass air.
 - c. Compressor motors shall be cooled by refrigerant gas passing through motor windings.

- d. Compressors shall be internally protected from high discharge temperature conditions.
 - e. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
 - f. Compressor shall be factory-mounted on rubber grommets.
 - g. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
 - h. Crankcase heaters shall not be required for normal operating range, unless required by the manufacturer due to refrigerant charge limits.
- 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 SystemVu controller shall eliminate the need of removal of blower access door, required on conventional belt drive systems.
 - h. Shall be internally protected from electrical phase reversal.
 - 2. Evaporator Fan:
 - a. Speed shall be easily set through SystemVu controller.
 - b. Shall provide multistage 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 on board 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 removal of a few support brackets.
3. Shall include an easily accessible SystemVu Board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, gas controller, economizer, thermostat, and low and high pressure switches. Controller shall also provide an intuitive means to adjust the indoor fan speed.
- L. (23 81 19.13.L.) Condenser Fans and Motors:
- 1. Condenser Fan Motors:
 - a. Shall be a totally enclosed ECM motor.
 - b. Shall use permanently lubricated bearings.
 - c. Shall have inherent thermal overload protection with an automatic reset feature.
 - d. Shall use a shaft-down design on all sizes.
 - 2. Condenser Fans:
 - a. Shall be a direct-driven propeller type fan.
 - b. Shall have galvalum blades riveted to steel spider that have corrosion-resistant properties and shall be dynamically balanced.
- M. (23 81 19.13.M.) Special Features Options and Accessories:
- 1. Integrated EconoMi\$er® 2 Low Leak Rate Models.
 - a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
 - b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory installed option.
 - c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.

- d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below 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 EconoMi\$er 2 models with SystemVu™ controllers shall be a 4 to 20mA design controlled directly by the controller. SystemVu controllers meet California Title 24, ASHRAE 90.1, and IECC Fault Detection and Diagnostic (FDD) requirements.
 - h. Shall be capable of introducing up to 100% outdoor air.
 - i. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
 - j. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
 - k. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.
 - l. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.
 - m. The economizer shall maintain minimum air-flow into the building during occupied period and provide design ventilation rate for full occupancy.
 - n. Dampers shall be completely closed when the unit is in the unoccupied mode.
 - o. Economizer controller shall accept a 0 to 10 vdc CO₂ sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.
 - p. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
 - q. Contains LED indication for free cooling, sensor, and damper operation.
2. Integrated EconoMi\$er 2 Ultra Low Leak Rate Models.
- a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
 - b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory-installed option.
 - c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
 - d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below set points.
 - e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
 - f. Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements for 4 cfm per sq ft on the outside air dampers and 10 cfm per sq ft on the return dampers.
 - g. Economizer controller on EconoMi\$er 2 models with SystemVu controller 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.
 - h. Shall be capable of introducing up to 100% outdoor air.
 - i. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
 - j. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
 - k. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory installed only. Outdoor air sensor setpoint shall be adjustable and shall range from 40°F to 100°F (4°C to 38°C). Additional sensor options shall be available as accessories.
 - l. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 100%, with a range of 0% to 100%.
 - m. The economizer shall maintain minimum air-flow into the building during occupied period and provide design ventilation rate for full occupancy.
 - n. Dampers shall be completely closed when the unit is in the unoccupied mode.
 - o. Economizer controller shall accept a 0 to 10 vdc CO₂ sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor air damper to provide ventilation based on the sensor input.

- p. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
 - q. Contains LED indicators for free cooling, sensor, and damper operation.
- 3. Two-Position Damper (field-installed only):
 - a. Damper shall be a Two-Position Damper. Damper travel shall be from the full closed position to the field adjustable %-open 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.
- 4. Manual Damper (field-installed only):
 - a. Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 25% or 50% outdoor air for year round ventilation.
- 5. Humidi-MiZer® Adaptive Dehumidification System:

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

 - a. Subcooling mode further sub cools the hot liquid refrigerant leaving the condenser coil when both temperature and humidity in the space are not satisfied.
 - b. Hot gas reheat mode shall mix a portion of the hot gas from the discharge of the compressor with the hot liquid refrigerant leaving the condenser coil to create a 2-phase heat transfer in the system, resulting in a neutral leaving air temperature when only humidity in the space is not satisfied.
 - c. Includes low ambient controller.
- 6. Condenser Coil Hail Guard Assembly:
 - a. Shall protect against hail and additional coil damage.
 - b. Shall be louvered type.
- 7. Unit-Mounted, Non-Fused Disconnect Switch:
 - a. Without factory installed electric heat:

Available on 6 to 10 ton units with FLA of 80 amps or less. Available on 12.5 ton units with FLA of 100 amps or less (460/575V) or 200 amps or less (208/230V).
 - b. With factory installed electric heat:

Available on 6 to 10 ton units with FLA of 80 amps or less (460/575V) or FLA of 100 amps or less (208/230V). Available on 12.5 ton units with FLA of 100 amps or less (460/575V) or 200 amps or less (208/230V).
 - c. Switch shall be factory installed, internally mounted.
 - d. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
 - e. Shall be accessible from outside the unit.
 - f. Shall provide local shutdown and lockout capability.
 - g. Sized **only** for the unit as ordered from the factory. Does not accommodate field-installed devices.
- 8. HACR Breaker:
 - a. These manual reset devices provide overload and short circuit protection for the unit. Factory wired and mounted with the units, with access cover to help provide environmental protection. On 575V applications, HACR breaker can only be used with WYE power distribution systems. Use on Delta power distribution systems is prohibited.
 - b. Sized **only** for the unit as ordered from the factory. Does not accommodate field-installed devices.
- 9. Convenience Outlet:
 - a. Factory-Installed Powered Convenience Outlet:
 - 1) Outlet shall be powered from main line power to the rooftop unit.
 - 2) Outlet shall be powered from line side or load side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be UL certified and rated for additional outlet amperage.
 - 3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
 - 4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
 - 5) Voltage required to operate convenience outlet shall be provided by a factory installed step-down transformer.

- 6) Outlet shall be accessible from outside the unit.
 - 7) Outlet shall include a field installed “Wet in Use” cover.
 - b. Factory-Installed Non-Powered Convenience Outlet:
 - 1) Outlet shall be powered from a separate 115/120-v power source.
 - 2) A transformer shall not be included.
 - 3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
 - 4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
 - 5) Outlet shall be accessible from outside the unit.
 - 6) Outlet shall include a field installed “Wet in Use” cover.
 - c. Field-Installed Non-Powered Convenience Outlet:
 - 1) Outlet shall be powered from a separate 115/120v power source.
 - 2) A transformer shall not be included.
 - 3) Outlet shall be field-installed and internally mounted with easily accessible 115-v female receptacle.
 - 4) Outlet shall include 20 amp GFI receptacles. This kit provides a flexible installation method which allows code compliance for height requirements of the GFCI outlet from the finished roof surface as well as the capability to relocate the outlet to a more convenient location.
 - 5) Outlet shall be accessible from outside the unit.
 - 6) Outlet shall include a field installed “Wet in Use” cover.
10. Thru-the-Base Connectors:
 - a. Kits shall provide connectors to permit electrical connections to be brought to the unit through the unit basepan.
 - b. Minimum of 4 connection locations per unit.
11. Supply Duct Cover (size 14 only):
 - a. Required when field converting the factory standard vertical duct supply to horizontal duct supply configuration. One required per unit.
12. 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 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.
13. 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.
14. 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.
15. 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.
16. Indoor Air Quality (CO₂) Sensor:
 - a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
 - b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The setpoint shall have adjustment capability.
17. Smoke Detectors:
 - a. Shall be a 4-wire controller and detector.
 - b. Shall be environmentally 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 shut-down applications.
18. Disconnect Switch Bracket (size 14 only):
Provides a pre-engineered and sized mounting bracket for applications requiring a unit mounted fused and non-fused disconnect of greater than 100 amps. Bracket assures that no damage will occur to coils when mounting with screws and other fasteners.
19. 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.
20. 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 compressors operation when condensate plug is detected, but still allows fans to run for Economizer.
21. Foil Faced Insulation:
Throughout unit cabinet air stream, non-fibrous and cleanable foil faced insulation is used.
22. 4 in. MERV-13 Return Air Filters:
 - 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.
23. 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.
24. 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.
25. 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.
26. 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.
27. 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.
28. Electric Heat (factory or field installed):
 - a. Heating Section:
 - 1) Heater element open coil resistance wire, nickel-chrome alloy, 0.29 in. 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.
29. 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, phase loss monitor/protection, HACR breaker, and 575-v models. Size 12 unit is also not available with the High SCCR option.

