



## Product Data

# WeatherExpert® Single Packaged Rooftop Ultra Low NOx (14 ng/J) Emissions Gas Heat/Electric Cooling

3 to 5 Nominal Tons

ecoblu<sup>TM</sup> technology



48JC(G/H)\*04, 05, 06

48JC(G/H): Single-Package Ultra Low NOx Gas Heating/Electric Cooling Rooftop Units with Puron® Refrigerant (R-410A)

**The New Carrier WeatherExpert® Ultra High Efficiency rooftop units (RTU) with EcoBlue™ Technology, Ultra Low NOx Gas heating and variable cooling capacity control were designed by customers for customers and integrate new technology to provide value added benefits never seen in this type of equipment before.**

New major design features include:

- Patented, industry's first high efficiency indoor fan system using Vane Axial Fan technology – with electronically commutated variable speed motor.
- Carrier exclusive Ultra Low NOx gas heat emissions burner box and heat exchanger design that provides 14 nanograms/joule (ng/J) operation.
- Reliable variable capacity compressor with DC inverter control on all sizes. Two LEDs (red and green) indicate inverter operating status and aid in troubleshooting.
- Reliable copper tube/aluminum fin condenser coil with 5/16 in. tubing to help reduce refrigerant charge versus prior designs.
- Noise filter reduces unwanted electromagnetic interference (EMI).
- Inverter reactor adds inductance to the line between the inverter and the compressor to limit current rise and protect the compressor.

- SystemVu™ unit controller with intuitive, intelligent operation.
- Reliable and proven copper tube/aluminum fin condenser coil with 5/16 in. tubing to help reduce refrigerant charge versus prior designs.
- New outdoor fan system with rugged, lightweight, high impact composite fan blade and variable speed motor.

48JC(G/H) WeatherExpert units from 3 to 5 tons are specifically designed to fit on Carrier roof curbs that were installed as far back as 1989, which makes replacement easy and eliminates the need for curb adapters or changing utility connections.

True variable cooling capacity control delivers efficiencies of up to 20 SEER and 18.9 SEER2. Carrier's highest efficiency in these type of models. All models are capable of either vertical or horizontal airflow.

The Carrier rooftop unit (RTU) was designed by customers for customers. 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 3 to 5 ton WeatherExpert Carrier rooftop unit (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.
- Puron® refrigerant (R-410A).
- Single point gas and electrical connections.
- Standard fully integrated SystemVu controls.

- Fully insulated cabinet with foil faced insulation helps minimize airborne fibers and improve Indoor Air Quality.
- TXV (thermostatic expansion valve) refrigerant metering system for optimum control of superheat and efficiency.
- Variable capacity compressor, indoor fan and outdoor fan with internal line-break overload protection.
- Units come with an easy access tool-less filter door. Filter track tilts out for filter removal and replacement. All filters are the same size in each unit.

NOTES:

1. Units cannot operate with Liquid Propane (LP) gas.
2. Units can operate from 0 to 2000 feet altitude only.

## Installation ease

All WeatherExpert units are field-convertible to horizontal airflow, which makes it easy to adjust to unexpected job-site complications. Lighter units make for easy replacement. Simple, fast plug-in connections to the standard SystemVu controller. Clearly labeled connection points to reduce installation time. Also, a large control box provides room to work and room to mount Carrier accessory controls.

## Easy to maintain

With the new EcoBlue Vane Axial fan system and direct drive ECM motor — there is no longer a need to adjust belts or pulleys as in past designs. This frees up maintenance and installation time.

## Table of contents

|                                     | Page |
|-------------------------------------|------|
| Features/Benefits . . . . .         | 2    |
| Model Number Nomenclature . . . . . | 5    |
| Capacity Ratings . . . . .          | 6    |
| Physical Data . . . . .             | 8    |
| Options and Accessories . . . . .   | 12   |
| Base Unit Dimensions . . . . .      | 16   |
| Accessory Dimensions . . . . .      | 19   |
| Performance Data . . . . .          | 20   |
| Fan Data . . . . .                  | 34   |
| Electrical Data . . . . .           | 47   |
| Typical Wiring Diagrams . . . . .   | 51   |
| Sequence of Operation . . . . .     | 53   |
| Application Data . . . . .          | 54   |
| Guide Specifications . . . . .      | 55   |

Easy access handles by Carrier provide quick and easy access to all normally serviced components. Our “no-strip” screw system has superior holding power and guides screws into position while preventing the screw from stripping the unit’s metal.

Sloped, corrosion resistant composite drain pan sheds water; and won’t rust.

## Easy to use

The SystemVu™ controller by Carrier puts all connections and troubleshooting points in one convenient place. Most low voltage connections are made to the same board and make it easy to access it. Setting up the fan is simple by an intuitive switch and rotary dial arrangement. Carrier rooftops have high and low pressure switches, a filter drier, and 2 in. filters standard.

## EcoBlue™ Technology

The direct drive EcoBlue™ Technology indoor fan system uses Vane Axial fan design and electrically commutated motors.

This new Vane Axial design over past belt drive systems has 75% fewer moving parts, uses up to 40% less energy and has no fan belts, blower bearings and shaft.

## Streamlined control and integration

Carrier SystemVu controllers make connecting WeatherExpert® rooftops into existing building automation systems (BAS) easy. The units are compatible with conventional thermostat controls or space sensors.

## Operating efficiency and flexibility

The 48JC(G/H) rooftops exceed ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) 90.1-2016, IECC<sup>1</sup>-2018 (International Energy Conservation Code) minimum efficiency 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.

## SystemVu™ control

Carrier’s SystemVu controller is standard on these new variable capacity WeatherExpert models. This controller takes a whole new approach to provide an intuitive, intelligent controller that not only monitors and controls the unit, but also provides linkage to multiple building automation systems.

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

### Key features include:

- Easy to read back lit four line text screen for superior visibility.
- Quick operational condition LEDs of: Run, Alert, and Fault.
- Simple navigation with large keypad buttons of: Navigation arrows, Test, Back, Enter, and Menu.
- Capable of being controlled with a conventional thermostat, space sensor, or building automation system.

- Service capabilities include:
  - Auto run test
  - Manual run test
  - Component run hours and starts
  - Commissioning reports
  - Data logging
- Full range of diagnosis:
  - Read refrigerant pressures without the need of gauges
  - Sensor faults
  - Compressor reverse rotation
  - Economizer diagnostics that meet California Title 24 requirements
- Quick data transfer via USB port:
  - Unit configuration uploading/downloading
  - Data logging
  - Software upgrades
- Built in capacity for:
  - i-Vu® open systems
  - BACnet<sup>1</sup> systems
  - CCN systems
- Configuration and alarm point capability:
  - Contain over 100 alarm codes
  - Contain over 260 status, troubleshooting, diagnostic and maintenance points
  - Contain over 270 control configuration setpoints
- Contain the capability to provide fan based dehumidification which automatically adjusts the indoor fan speed to help provide humidification in the conditioned space.

---

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



**WeatherExpert®**  
with **ecoblue™** technology  
(NEW ULTRA LOW NO<sub>x</sub> MODELS)



**Ultra Efficient Variable Speed Outdoor Fan**

- Non-corrosive blade
- Balanced blade
- Efficient airflow collar
- ECM design

**Ultra Efficient Variable Speed Vane Axial Indoor Fan**

- Direct drive ECM
- Slow ramp up
- Phase loss protection
- No belts or pulleys
- Reverse rotation protection

**Unit Controls**  
Standard Intelligent SystemVu™ controller

- Large text display
- Quick LED status
- i-Vu®, CCN, BACnet
- Quick LED status
- USB data port
- Stat or sensor capability
- Refrigerant pressure without gauges
- QR code unit start up assist

**Ultra Efficient Coils**

- Round tube/plate fin
- Copper/Aluminum
- Special coating available
- New 5/16 in. condenser tube
- Less refrigerant than past designs

**Ultra Efficient Variable Speed Compression**

- Fully hermetic scroll
- Internally protected
- Wide range of capacity control

**Cabinet Design**

- Heavy gauge base rails
- Large handled access panels
- Tool-less filter access door
- Replacement “original” fit design

**Heating**

- Natural Gas Heating  
Induced draft design with stainless steel heat exchanger with efficient dimpled gas design
- Multi speed inducer fan motor
- Integrated burner box and heat exchanger assembly
- Certified Ultra Low NO<sub>x</sub> at (14ng/j) emission rating



## 48JC(G/H) 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 | J | C | G | V | 0 | 6 | A | 2  | A  | 5  | -  | 3  | A  | 0  | A  | 0  |

### Unit Heat Type

48 - Gas Heat Packaged Rooftop

### Model Series - WeatherExpert®

JC - Ultra High Efficiency

### Heat Options

G = ULTRA Low NOx - Low Gas Heat (14 ng/J)  
H = ULTRA Low NOx - Medium Gas Heat (14 ng/J)  
(All Ultra Low NOx models include Stainless Steel HX)

### Refrig. Systems Options

V = Variable Speed Cooling Capacity  
W = Variable Speed Cooling Capacity with Humidi-MiZer® System

### Cooling Tons

04 - 3 ton  
05 - 4 ton  
06 - 5 ton

### Sensor Options

A = None  
B = RA (Return Air) Smoke Detector  
C = SA (Supply Air) Smoke Detector  
D = RA + SA Smoke Detector  
E = CO<sub>2</sub>  
F = RA Smoke Detector and CO<sub>2</sub>  
G = SA Smoke Detector and CO<sub>2</sub>  
H = RA + SA Smoke Detector and CO<sub>2</sub>  
J = Condensate Overflow Switch  
K = Condensate Overflow Switch and RA Smoke Detector  
L = Condensate Overflow Switch and RA and SA Smoke Detectors  
M = Condensate Overflow Switch and SA Smoke Detector  
N = Condensate Overflow Switch and CO<sub>2</sub>  
P = Condensate Overflow Switch w/ CO<sub>2</sub> + RA Smoke Detector  
Q = Condensate Overflow Switch w/ CO<sub>2</sub> + SA Smoke Detector  
R = Condensate Overflow Switch w/ CO<sub>2</sub> + RA and SA Smk. Det.

### Vane Axial Fan - Indoor Fan Options

1 = Direct Drive EcoBlue™ - Standard Static  
2 = Direct Drive EcoBlue - Medium Static  
3 = Direct Drive EcoBlue - High Static

### Coil Options - Round Tube/Plate Fin Condenser Coil (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  
E = Cu/Cu - Al/Cu  
F = Cu/Cu - Cu/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

### Factory Assigned

0 = Standard  
1 = LTL

### Electrical Options

A = None  
B = HACR Breaker<sup>a</sup>  
C = Non-Fused Disconnect (NFD)<sup>b</sup>  
D = Thru-The-Base (TTB) Connections  
E = HACR Circuit Breaker and TTB<sup>a</sup>  
F = Non-Fused Disconnect and TTB<sup>b</sup>  
N = Phase Monitor Protection  
P = Phase Monitor and HACR<sup>a</sup>  
Q = Phase Monitor and NFD<sup>b</sup>  
R = Phase Monitor and TTB  
S = Phase Monitor and HACR and TTB<sup>a</sup>  
T = Phase Monitor and NFD and TTB<sup>b</sup>

### Service Options

#### (Foil Face Insulation Standard)

0 = None  
1 = Unpowered Convenience Outlet  
2 = Powered Convenience Outlet  
3 = Hinged Access Panels  
4 = Hinged Access Panels and Unpowered Convenience Outlet  
5 = Hinged Panels and Powered Convenience Outlet  
6 = MERV 8 High Efficiency Filters  
7 = MERV 8 High Efficiency Filters and Unpowered Convenience Outlet  
8 = MERV 8 High Efficiency Filters and Powered Convenience Outlet  
9 = MERV 8 High Efficiency Filters and Hinged Panels  
A = MERV 8 High Efficiency Filters, Hinged Panels and Unpowered Convenience Outlet  
B = MERV 8 High Efficiency Filters, Hinged Panels and Powered Convenience Outlet

### Air Intake / Exhaust Options

A = None  
B = Temperature EconoMi\$er<sup>®</sup>2 w/ Barometric Relief  
F = Enthalpy EconoMi\$er2 w/ Barometric Relief  
U = Ultra Low Leak Temperature EconoMi\$er2 w/ Barometric Relief  
W = Ultra Low Leak Enthalpy EconoMi\$er2 w/ Barometric Relief

### Base Unit Controls

3 = SystemVu™ Controls - Standard all units

### Design Revision

- = Factory Design Revision

### Voltage

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

<sup>a</sup>HACR are not available on 460-v models.

<sup>b</sup>Non-Fused Disconnect (NFD) are not available on 460-v models.

## 48JC(G/H) AHRI Ratings<sup>a,b,c,d</sup>

| 48JC(G/H) UNIT | COOLING STAGES | NOMINAL CAPACITY (TONS) | NET COOLING CAPACITY (MBH) | TOTAL POWER (kW) | SEER | EER  |
|----------------|----------------|-------------------------|----------------------------|------------------|------|------|
| *04            | Variable Speed | 3                       | 35.0                       | 2.5              | 20.0 | 14.0 |
| *05            | Variable Speed | 4                       | 47.0                       | 3.6              | 20.0 | 13.0 |
| *06            | Variable Speed | 5                       | 58.0                       | 4.5              | 19.0 | 13.0 |

| 48JC(G/H) UNIT | NET COOLING CAPACITY 2 (MBH) | TOTAL POWER 2 (kW) | SEER2 | EER2  |
|----------------|------------------------------|--------------------|-------|-------|
| *04            | 35.0                         | 2.7                | 18.4  | 12.80 |
| *05            | 45.0                         | 3.5                | 18.9  | 12.70 |
| *06            | 57.5                         | 4.8                | 18.4  | 12.00 |

### NOTE(S):

- Rated in accordance with AHRI Standards 210/240.
- Rating are based on:  
**Cooling Standard:** 80°F (27°C) dry bulb (db), 67°F (19°C) wet bulb (wb) indoor air temperature and 95°F (35°C) db outdoor air temperature.
- All 48JC units comply with ASHRAE 90.1-2016 (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) and DOE-2018 (Department of Energy) Energy Standard for minimum SEER and EER requirements.
- 48JC(G/H) 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  
**SEER** — Seasonal Energy Efficiency Ratio



## Sound Ratings Table

| 48JC(G/H) UNIT | COOLING STAGES | OUTDOOR SOUND (dB) AT 60 Hz <sup>a,b</sup> |      |      |      |      |      |      |      |      |
|----------------|----------------|--------------------------------------------|------|------|------|------|------|------|------|------|
|                |                | A-WEIGHTED <sup>c</sup>                    | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
| *04            | Variable Speed | 75.4                                       | 81.8 | 81.8 | 77.0 | 72.6 | 69.9 | 64.6 | 59.3 | 55.6 |
| *05            | Variable Speed | 79.0                                       | 85.6 | 84.7 | 80.5 | 76.0 | 72.4 | 68.0 | 62.8 | 59.3 |
| *06            | Variable Speed | 79.0                                       | 85.6 | 84.7 | 80.5 | 76.0 | 72.4 | 68.0 | 62.8 | 59.3 |

### NOTE(S):

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

### LEGEND

- dB** — Decibel

# Capacity ratings (cont)



## Minimum - Maximum Airflow Ratings (cfm) — Natural Gas

| 48JC(G/H)<br>UNIT | HEAT LEVEL | VOLTAGE | COOLING                   |                           | HEATING                   |                           |
|-------------------|------------|---------|---------------------------|---------------------------|---------------------------|---------------------------|
|                   |            |         | MINIMUM<br>AIRFLOW<br>CFM | MAXIMUM<br>AIRFLOW<br>CFM | MINIMUM<br>AIRFLOW<br>CFM | MAXIMUM<br>AIRFLOW<br>CFM |
| *04               | LOW        | 3 Phase | 600                       | 1500                      | 600                       | 1500                      |
|                   | MED        |         |                           |                           | 1030                      | 1500                      |
| *05               | LOW        | 3 Phase | 800                       | 2000                      | 1200                      | 2000                      |
|                   | MED        |         |                           |                           | 1200                      | 2000                      |
| *06               | LOW        | 3 Phase | 1000                      | 2500                      | 1500                      | 2500                      |
|                   | MED        |         |                           |                           | 1500                      | 2500                      |

## Heat Rating Table — Ultra Low NOx Natural Gas

| 48JC(G/H)<br>UNIT | GAS HEAT | VOLTAGE | INPUT/OUTPUT<br>(MBH) | TEMPERATURE<br>RISE (°F) | THERMAL<br>EFFICIENCY (%) | AFUE Efficiency<br>(%) |
|-------------------|----------|---------|-----------------------|--------------------------|---------------------------|------------------------|
| *04               | LOW      | 3 Phase | 60 / 49               | 20-50                    | 81                        | —                      |
|                   | MED      |         | 82 / 66               | 20-60                    | 81                        | 81                     |
| *05               | LOW      | 3 Phase | 60 / 49               | 20-50                    | 81                        | —                      |
|                   | MED      |         | 82 / 66               | 20-60                    | 81                        | 81                     |
| *06               | LOW      | 3 Phase | 60 / 49               | 15-45                    | 81                        | —                      |
|                   | MED      |         | 82 / 66               | 20-60                    | 81                        | 81                     |

## 48JC(G/H) 3 Ton Physical Data

| 48JC(G/H) UNIT                                  | 48JC(G/H)V04                  | 48JC(G/H)W04                  |
|-------------------------------------------------|-------------------------------|-------------------------------|
| NOMINAL TONS                                    | 3                             | 3                             |
| BASE UNIT OPERATING WT (lb) <sup>a</sup>        | 587                           | 587                           |
| REFRIGERATION SYSTEM                            |                               |                               |
| No. Circuits/No. Compressors/Type               | 1 / 1 / Variable Speed Scroll | 1 / 1 / Variable Speed Scroll |
| Puron® (R-410A) Charge A/B (lb-oz)              | 12-0                          | —                             |
| Humidi-MiZer® Puron (R-410A) Charge A/B (lb-oz) | —                             | 15-0                          |
| 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                      | 27 / 44                       |
| EVAPORATOR COIL                                 |                               |                               |
| Material (Tube / Fin)                           | Cu/Al                         | Cu/Al                         |
| Coil Type (in. RTPF)                            | 3/8                           | 3/8                           |
| Rows / FPI                                      | 3 / 15                        | 3 / 15                        |
| Total Face Area (ft²)                           | 7.3                           | 7.3                           |
| Condensate Drain Connection Size (in.)          | 3/4                           | 3/4                           |
| CONDENSER COIL                                  |                               |                               |
| Material (Tube / Fin)                           | Cu/Al                         | Cu/Al                         |
| Coil Type (in. RTPF)                            | 5/16                          | 5/16                          |
| Rows / FPI                                      | 2 / 18                        | 2 / 18                        |
| Total Face Area (ft²)                           | 21.3                          | 21.3                          |
| HUMIDI-MIZER COIL                               |                               |                               |
| Material (Tube / Fin)                           | —                             | Cu/Al                         |
| Coil Type (in. RTPF)                            | —                             | 3/8                           |
| Rows / FPI                                      | —                             | 1 / 17                        |
| Total Face Area (ft²)                           | —                             | 5.5                           |
| EVAPORATOR FAN AND MOTOR                        |                               |                               |
| Standard Static 3 Phase                         |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 0.44                          | 0.44                          |
| Rpm Range                                       | 189-1890                      | 189-1890                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| Medium Static 3 Phase                           |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 0.71                          | 0.71                          |
| Rpm Range                                       | 219-2190                      | 219-2190                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| High Static 3 Phase                             |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 1.07                          | 1.07                          |
| Rpm Range                                       | 249-2490                      | 249-2490                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| CONDENSER FAN AND MOTOR                         |                               |                               |
| Qty / Motor Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Motor HP / rpm                                  | 1/3 / 160 - 1100              | 1/3 / 160 - 1100              |
| Fan Diameter (in.)                              | 23.0                          | 23.0                          |
| FILTERS                                         |                               |                               |
| Return Air Filter Number / size (in.)           | 4 / 16x16x2                   | 4 / 16x16x2                   |
| Outside Air Inlet Screen Number / size (in.)    | 1 / 20x24x1                   | 1 / 20x24x1                   |



## 48JC(G/H) 4 Ton Physical Data

| 48JC(G/H) UNIT                                  | 48JC(G/H)V05                  | 48JC(G/H)W05                  |
|-------------------------------------------------|-------------------------------|-------------------------------|
| NOMINAL TONS                                    | 4                             | 4                             |
| BASE UNIT OPERATING WT (lb) <sup>a</sup>        | 610                           | 610                           |
| REFRIGERATION SYSTEM                            |                               |                               |
| No. Circuits/No. Compressors/Type               | 1 / 1 / Variable Speed Scroll | 1 / 1 / Variable Speed Scroll |
| Puron® (R-410A) Charge A/B (lb-oz)              | 11-5                          | —                             |
| Humidi-MiZer® Puron (R-410A) Charge A/B (lb-oz) | —                             | 16-5                          |
| 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                      | 27 / 44                       |
| EVAPORATOR COIL                                 |                               |                               |
| Material (Tube / Fin)                           | Cu/Al                         | Cu/Al                         |
| Coil Type (in. RTPF)                            | 3/8                           | 3/8                           |
| Rows / FPI                                      | 4 / 15                        | 4 / 15                        |
| Total Face Area (ft²)                           | 7.3                           | 7.3                           |
| Condensate Drain Connection Size (in.)          | 3/4                           | 3/4                           |
| CONDENSER COIL                                  |                               |                               |
| Material (Tube / Fin)                           | Cu/Al                         | Cu/Al                         |
| Coil Type (in. RTPF)                            | 5/16                          | 5/16                          |
| Rows / FPI                                      | 2 / 18                        | 2 / 18                        |
| Total Face Area (ft²)                           | 21.3                          | 21.3                          |
| HUMIDI-MIZER COIL                               |                               |                               |
| Material (Tube / Fin)                           | —                             | Cu/Al                         |
| Coil Type (in. RTPF)                            | —                             | 3/8                           |
| Rows / FPI                                      | —                             | 2 / 17                        |
| Total Face Area (ft²)                           | —                             | 5.5                           |
| EVAPORATOR FAN AND MOTOR                        |                               |                               |
| Standard Static 3 Phase                         |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 0.72                          | 0.72                          |
| Rpm Range                                       | 190-1900                      | 190-1900                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| Medium Static 3 Phase                           |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 1.06                          | 1.06                          |
| Rpm Range                                       | 217-2170                      | 217-2170                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| High Static 3 Phase                             |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 1.96                          | 1.96                          |
| Rpm Range                                       | 266-2660                      | 266-2660                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| CONDENSER FAN AND MOTOR                         |                               |                               |
| Qty / Motor Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Motor HP / rpm                                  | 1/3 / 160 - 1100              | 1/3 / 160 - 1100              |
| Fan Diameter (in.)                              | 23.0                          | 23.0                          |
| FILTERS                                         |                               |                               |
| Return Air Filter Number / size (in.)           | 4 / 16x16x2                   | 4 / 16x16x2                   |
| Outside Air Inlet Screen Number / size (in.)    | 1 / 20x24x1                   | 1 / 20x24x1                   |

## 48JC(G/H) 5 Ton Physical Data

| 48JC(G/H) UNIT                                  | 48JC(G/H)V06                  | 48JC(G/H)W06                  |
|-------------------------------------------------|-------------------------------|-------------------------------|
| <b>NOMINAL TONS</b>                             | 5                             | 5                             |
| <b>BASE UNIT OPERATING WT (lb)<sup>a</sup></b>  | 612                           | 612                           |
| <b>REFRIGERATION SYSTEM</b>                     |                               |                               |
| No. Circuits/No. Compressors/Type               | 1 / 1 / Variable Speed Scroll | 1 / 1 / Variable Speed Scroll |
| Puron® (R-410A) Charge A/B (lb-oz)              | 12-0                          | —                             |
| Humidi-MiZer® Puron (R-410A) Charge A/B (lb-oz) | —                             | 18-0                          |
| 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                      | 27 / 44                       |
| <b>EVAPORATOR COIL</b>                          |                               |                               |
| Material (Tube / Fin)                           | Cu/Al                         | Cu/Al                         |
| Coil Type (in. RTPF)                            | 3/8                           | 3/8                           |
| Rows / FPI                                      | 4 / 15                        | 4 / 15                        |
| Total Face Area (ft²)                           | 7.3                           | 7.3                           |
| Condensate Drain Connection Size (in.)          | 3/4                           | 3/4                           |
| <b>CONDENSER COIL</b>                           |                               |                               |
| Material (Tube / Fin)                           | Cu/Al                         | Cu/Al                         |
| Coil Type (in. RTPF)                            | 5/16                          | 5/16                          |
| Rows / FPI                                      | 2 / 18                        | 2 / 18                        |
| Total Face Area (ft²)                           | 21.3                          | 21.3                          |
| <b>HUMIDI-MIZER COIL</b>                        |                               |                               |
| Material (Tube / Fin)                           | —                             | Cu/Al                         |
| Coil Type (in. RTPF)                            | —                             | 3/8                           |
| Rows / FPI                                      | —                             | 2 / 17                        |
| Total Face Area (ft²)                           | —                             | 5.5                           |
| <b>EVAPORATOR FAN AND MOTOR</b>                 |                               |                               |
| <b>Standard Static 3 Phase</b>                  |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 1.06                          | 1.06                          |
| Rpm Range                                       | 215-2150                      | 215-2150                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| <b>Medium Static 3 Phase</b>                    |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 1.44                          | 1.44                          |
| Rpm Range                                       | 239-2390                      | 239-2390                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| <b>High Static 3 Phase</b>                      |                               |                               |
| Motor Qty / Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Max Cont Bhp                                    | 2.43                          | 2.43                          |
| Rpm Range                                       | 284-2836                      | 284-2836                      |
| Fan Qty / Type                                  | 1 / Vane Axial                | 1 / Vane Axial                |
| Fan Diameter (in.)                              | 16.6                          | 16.6                          |
| <b>CONDENSER FAN AND MOTOR</b>                  |                               |                               |
| Qty / Motor Drive Type                          | 1 / Direct                    | 1 / Direct                    |
| Motor HP / rpm                                  | 1/3 / 160 - 1100              | 1/3 / 160 - 1100              |
| Fan Diameter (in.)                              | 23.0                          | 23.0                          |
| <b>FILTERS</b>                                  |                               |                               |
| Return Air Filter Number / size (in.)           | 4 / 16x16x2                   | 4 / 16x16x2                   |
| Outside Air Inlet Screen Number / size (in.)    | 1 / 20x24x1                   | 1 / 20x24x1                   |

NOTE(S):

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

### LEGEND

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

## 48JC(G/H) 3 to 5 Ton Gas Heat Data

| 48JC(G/H) UNIT                                      | 48JC(G/H)*04     | 48JC(G/H)*05     | 48JC(G/H)*06     |
|-----------------------------------------------------|------------------|------------------|------------------|
| <b>GAS CONNECTION</b>                               |                  |                  |                  |
| No. of Gas Valves                                   | 1                | 1                | 1                |
| Natural Gas Supply Line Pressure<br>(in. wg [psig]) | 5-13 [0.18-0.47] | 5-13 [0.18-0.47] | 5-13 [0.18-0.47] |
| <b>HEAT ANTICIPATOR SETTING (AMPS)</b>              |                  |                  |                  |
| First Stage                                         | 0.14             | 0.14             | 0.14             |
| <b>NATURAL GAS HEAT</b>                             |                  |                  |                  |
| <b>LOW</b>                                          |                  |                  |                  |
| No. of Stages / No. of Burners (total)              | 1 / 1            | 1 / 1            | 1 / 1            |
| Connection Size (in. NPT)                           | 1/2              | 1/2              | 1/2              |
| Rollout Switch Opens / Closes (°F)                  | 350 / 301        | 350 / 301        | 350 / 301        |
| Temperature Rise (°F)                               | 20-50            | 20-50            | 15-45            |
| <b>MEDIUM</b>                                       |                  |                  |                  |
| No. of Stages / No. of Burners (total)              | 1 / 1            | 1 / 1            | 1 / 1            |
| Connection Size (in. NPT)                           | 1/2              | 1/2              | 1/2              |
| Rollout Switch Opens / Closes (°F)                  | 350 / 301        | 350 / 301        | 350 / 301        |
| Temperature Rise (°F)                               | 20-60            | 20-60            | 20-60            |

# Options and accessories



| ITEM                                                                    | OPTION <sup>a</sup> | ACCESSORY <sup>b</sup> |
|-------------------------------------------------------------------------|---------------------|------------------------|
| <b>GAS HEAT – ULTRA LOW NOx<br/>WITH STAINLESS STEEL HEAT EXCHANGER</b> |                     |                        |
| Flue discharge deflector                                                |                     | X                      |
| <b>CABINET</b>                                                          |                     |                        |
| Thru-the-base electrical or gas-line connections                        | X                   | X                      |
| Hinged Access Panels                                                    | X                   |                        |
| <b>COIL OPTIONS</b>                                                     |                     |                        |
| Cu/Cu indoor and/or outdoor coils                                       | X                   |                        |
| Pre-coated outdoor coils                                                | X                   |                        |
| Premium, E-coated outdoor coils                                         | X                   |                        |
| <b>HUMIDITY CONTROL</b>                                                 |                     |                        |
| Humidi-MiZer® adaptive dehumidification system                          | X                   |                        |
| <b>CONDENSER PROTECTION</b>                                             |                     |                        |
| Condenser coil hail guard (louvered design)                             | X                   | X                      |
| <b>CONTROLS</b>                                                         |                     |                        |
| Thermostats, temperature sensors, and subbases                          |                     | X                      |
| Smoke detector (supply and/or return air)                               | X                   |                        |
| Horn strobe annunciator <sup>c</sup>                                    |                     | X                      |
| Phase monitor                                                           |                     | X                      |
| Condensate overflow switch                                              | X                   | X                      |
| <b>FILTERS</b>                                                          |                     |                        |
| MERV-8 return air filters                                               | X                   |                        |

## NOTE(S):

- Factory-installed option.
- Field-installed accessory.
- Requires a field-supplied 24-v transformer for each application. See price pages for details.
- Unit is equipped with SystemVu™ controls (standard) complying with California Title 24 Fault Detection and Diagnostic (FDD).
- Included with economizer.
- Sensors used to optimize economizer performance.
- See application data for assistance.
- Not available on 460-v models.
- HACR circuit breaker cannot be used on 04-06 sizes when unit FLA electrical rating exceeds 208/230-3-60 = 100 amps (FLA) - Carrier RTUBuilder automatically selects the amps limitations.
- Non-fused disconnect switch cannot be used when unit electrical rating exceeds:
  - Without factory-installed electric heat: 208/230-3-60 = 80 amps (FLA).
  - With factory-installed electric heat: 208/230-3-60 = 100 amps (FLA).
  - Carrier RTUBuilder automatically selects the amp limitations.

| ITEM                                                                                      | OPTION <sup>a</sup> | ACCESSORY <sup>b</sup> |
|-------------------------------------------------------------------------------------------|---------------------|------------------------|
| <b>ECONOMIZERS</b>                                                                        |                     |                        |
| EconoMiSer2 for DDC controls (Standard and Ultra Low Leak air damper models) <sup>d</sup> | X                   | X                      |
| Barometric relief <sup>e</sup>                                                            | X                   | X                      |
| Power exhaust - prop design                                                               |                     | X                      |
| <b>ECONOMIZER SENSORS AND IAQ DEVICES</b>                                                 |                     |                        |
| Single dry bulb temperature sensors <sup>f</sup>                                          | X                   | X                      |
| Differential dry bulb temperature sensors <sup>f</sup>                                    |                     | X                      |
| Single enthalpy sensors <sup>f</sup>                                                      | X                   | X                      |
| Differential enthalpy sensors <sup>f</sup>                                                |                     | X                      |
| CO <sub>2</sub> sensor (wall, duct, or unit mounted) <sup>g</sup>                         | X                   | X                      |
| <b>INDOOR MOTOR AND DRIVE</b>                                                             |                     |                        |
| Multiple motor and drive packages                                                         | X                   |                        |
| <b>POWER OPTIONS</b>                                                                      |                     |                        |
| Convenience outlet (powered)                                                              | X                   |                        |
| Convenience outlet (unpowered)                                                            | X                   |                        |
| HACR circuit breaker <sup>h, i</sup>                                                      | X                   |                        |
| Non-fused disconnect <sup>h, j</sup>                                                      | X                   |                        |
| <b>ROOF CURBS</b>                                                                         |                     |                        |
| Roof curb 14 in. (356 mm)                                                                 |                     | X                      |
| Roof curb 24 in. (610 mm)                                                                 |                     | X                      |

## Factory-installed options

### Economizer (dry-bulb or enthalpy)

Economizers save money. They bring in fresh, outside air for ventilation; and provide cool, outside air to cool your building. This is the preferred method of low-ambient cooling. When coupled to CO<sub>2</sub> sensors, economizers can provide even more savings by coupling the ventilation air to only that amount required.

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

Economizers include gravity controlled barometric relief that helps equalize building pressure and ambient air pressures. This can be a cost effective solution to prevent building pressurization. Economizers are available in Ultra Low Leak and standard low leak versions. Economizers can be factory-installed or easily field-installed.

### Unit mounted CO<sub>2</sub> sensor

The CO<sub>2</sub> sensor works with the economizer to intake only the correct amount of outside air for ventilation. As occupants fill your building, the CO<sub>2</sub> sensor detects their presence through increasing CO<sub>2</sub> levels, and opens the economizer appropriately. When the occupants leave, the CO<sub>2</sub> 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. Also available as a field-installed accessory.

### Smoke detector (supply and/or return air)

Trust the experts. 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 WeatherMaker® 48JC(G/H) 04-06 rooftop unit.

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

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

The WeatherMaker 48JC(G/H) 04-06 rooftop coupled with the Humidi-MiZer system is capable of operating in normal design cooling mode, sub-cooling mode, and hot gas reheat mode.

Normal design cooling mode is when the unit will operate under its normal sequence of operation by cycling compressors to maintain comfort conditions.

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

Hot Gas Reheat mode will operate when outdoor temperatures diminish and the need for latent capacity is required for sole humidity control. Hot Gas Reheat mode will provide neutral air for maximum dehumidification operation.

NOTE: The Humidi-MiZer system includes a Low Ambient controller.

### Thru-the-base connection

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, as well as control power.

### Hinged access panels

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

### Cu/Cu (indoor) coils

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

### E-coated (outdoor and indoor) coils

A flexible epoxy polymer coating uniformly applied to all coil surface areas without material bridging between fins. Coating process shall ensure complete coil encapsulation of tubes, fins, and headers.

### Pre-coated outdoor coils

A durable epoxy-phenolic coating to provide protection in mildly corrosive coastal environments. The coating minimizes galvanic action between dissimilar metals. 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

Sleek, louvered panels protect the condenser coil from hail damage, foreign objects, and incidental contact.

### Single enthalpy sensor

A single enthalpy sensor prevents the wheel from rotating if the outside air conditions are acceptable for free cooling. Both exhaust and supply blowers will remain on.

### Stainless steel heat exchanger (standard on all models)

The stainless steel heat exchanger provides the tubular heat exchanger be 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.

## Convenience outlet (powered or unpowered)

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

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

## HACR breaker

These manual reset devices provide overload and short circuit protection for the unit. The HACR breaker is factory-wired and mounted with the units with an access cover to provide protection from the environment.

NOTE: HACR breaker is not available for 460-3-60 voltage models.

## Non-fused disconnect

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

NOTE: Non-fused disconnect is not available for 460-3-60 voltage models.

## SystemVu™ controller (standard on all models)

The SystemVu controller takes on a whole new approach to provide an intuitive, intelligent controller that not only monitors and controls the unit, but also provides linkage to multiple building automation systems.

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

*Key features include:*

- Easy to read back lit four line text screen for superior visibility.
- Quick operational condition LEDs of: Run, Alert, and Fault.
- Simple navigation with large keypad buttons of: Navigation arrows, Test, Back, Enter and Menu.
- Capable of being controlled with a conventional thermostat, space sensor or build automation system.
- Service capabilities include:
  - Auto run test.
  - Manual run test.
  - Component run hours and starts.
  - Commissioning reports.
  - Data logging.
- Full range of diagnosis:
  - Read refrigerant pressures without the need of gauges.
  - Sensor faults.
  - Compressor reverse rotation.

- Economizer diagnostics that meet California Title 24 requirements.
- Quick data transfer via USB port:
  - Unit configuration uploading/downloading.
  - Data logging.
  - Software upgrades.
- Built in capacity for:
  - i-Vu® open systems.
  - BACnet systems.
  - CCN systems.
- Configuration and alarm point capability:
  - Contain over 100 alarm codes.
  - Contain over 260 status, troubleshooting, diagnostic and maintenance points.
  - Contain over 270 control configuration setpoints.

## Condensate overflow switch

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

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

## MERV-8 return air filters

This factory option upgrades the return air filters from standard unit filters to high efficiency MERV-8 filters. Non-woven MERV-8 filter media with high strength, moisture-resistant frame. Filter media is securely fastened inside the filter frame on all four sides.

## Field-installed accessories

### Filter maintenance indicator

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

### Condenser coil hail guard

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

### Differential enthalpy sensor

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

### Wall or duct mounted CO<sub>2</sub> sensor

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



## Flue discharge deflector

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.

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

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

## Filter status indicator accessory

The filter status indicator monitors static pressure across supply and exhaust filters and provides indication when filters become clogged.

## Power exhaust

Power exhaust provides superior internal building pressure control. This field-installed accessory may eliminate the need for costly, external pressure control fans.

## Phase monitor protection

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

**Options and Accessory Weights**

| OPTION / ACCESSORY NAME              | 48JC(G/H) <sup>a</sup> UNIT WEIGHT |    |     |    |     |    |
|--------------------------------------|------------------------------------|----|-----|----|-----|----|
|                                      | 04                                 |    | 05  |    | 06  |    |
|                                      | lb                                 | kg | lb  | kg | lb  | kg |
| Humidi-MiZer® System                 | 15                                 | 7  | 15  | 7  | 24  | 11 |
| Power Exhaust - Vertical             | 51                                 | 23 | 51  | 23 | 51  | 23 |
| Power Exhaust - Horizontal           | 39                                 | 18 | 39  | 18 | 39  | 18 |
| EconoMi\$er® 2                       | 35                                 | 16 | 35  | 16 | 35  | 16 |
| Hail Guard (louvered)                | 13                                 | 6  | 13  | 6  | 17  | 8  |
| Cu/Cu Condenser Coil                 | 37                                 | 17 | 74  | 34 | 90  | 41 |
| Cu/Cu Condenser and Evaporator Coils | 145                                | 66 | 160 | 73 | 160 | 73 |
| Roof Curb (14 in. curb)              | 95                                 | 43 | 95  | 43 | 95  | 43 |
| Roof Curb (24 in. curb)              | 150                                | 68 | 150 | 68 | 150 | 68 |
| CO <sub>2</sub> Sensor               | 2                                  | 1  | 2   | 1  | 2   | 1  |
| Flue Discharge Deflector             | 7                                  | 3  | 7   | 3  | 7   | 3  |
| Optional Indoor Motor/Drive          | 3                                  | 1  | 5   | 2  | 5   | 2  |
| Return Air Smoke Detector            | 7                                  | 3  | 7   | 3  | 7   | 3  |
| Supply Air Smoke Detector            | 7                                  | 3  | 7   | 3  | 7   | 3  |
| Fan Filter Switch                    | 2                                  | 1  | 2   | 1  | 2   | 1  |
| Non-Fused Disconnect                 | 15                                 | 7  | 15  | 7  | 15  | 7  |
| Powered Convenience Outlet           | 36                                 | 16 | 36  | 16 | 36  | 16 |
| Unpowered Convenience Outlet         | 4                                  | 2  | 4   | 2  | 4   | 2  |
| Enthalpy Sensor                      | 2                                  | 1  | 2   | 1  | 2   | 1  |
| Differential Enthalpy Sensor         | 3                                  | 1  | 3   | 1  | 3   | 1  |

NOTE(S):

a. Where multiple variations are available, the heaviest combination is listed.

# 48JC(G/H)\*04-06 Base Unit Dimensions

## NOTES:

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

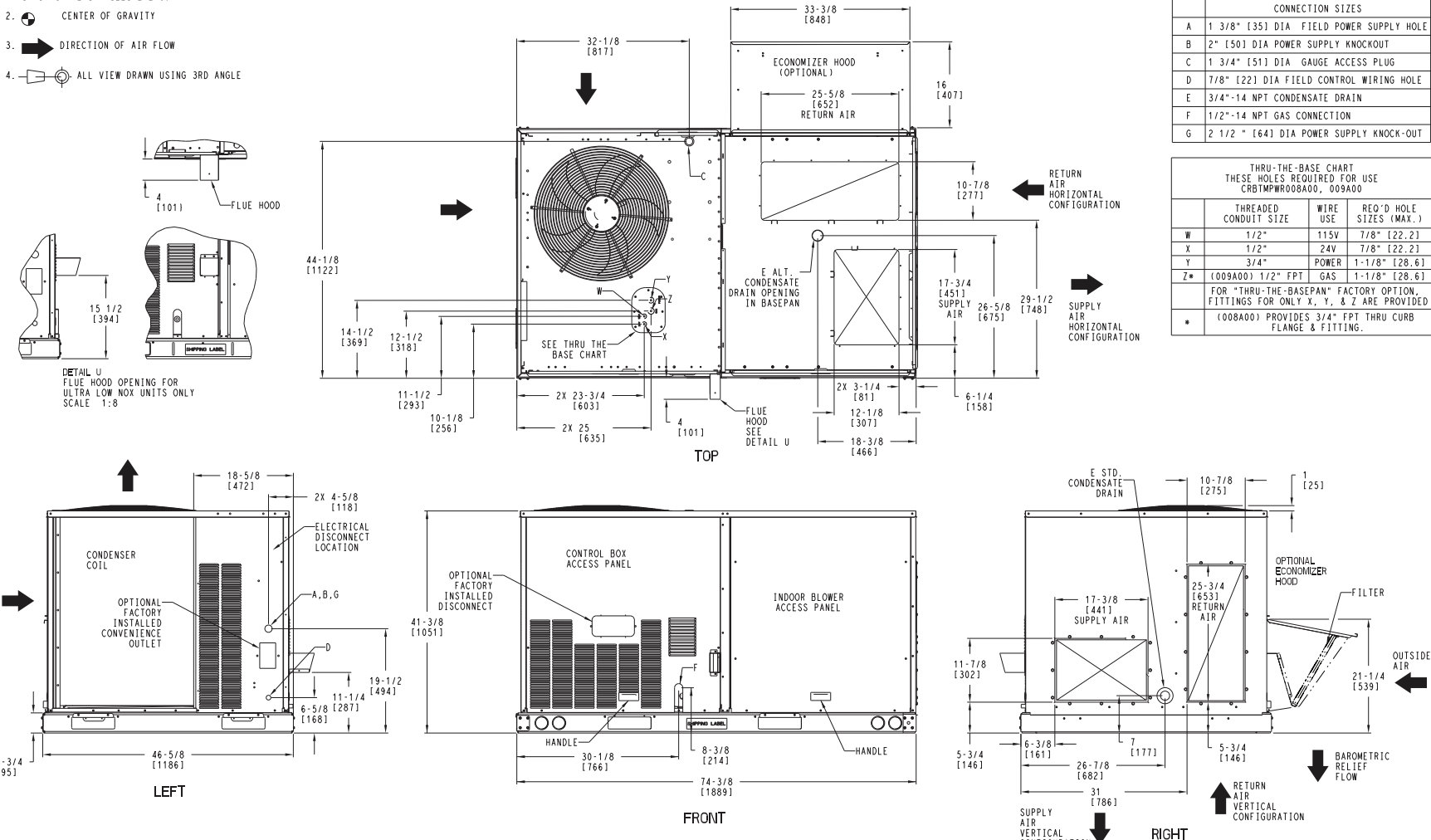


THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER CORPORATION'S WRITTEN CONSENT.

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" [50]     | 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 1/2" [64] | DIA POWER SUPPLY KNOCK-OUT    |

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

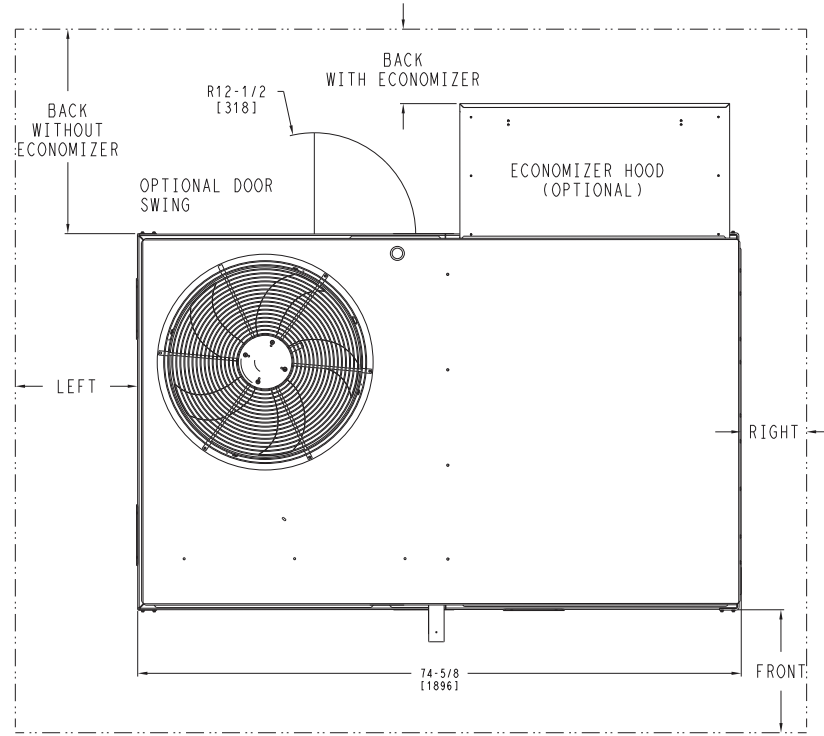
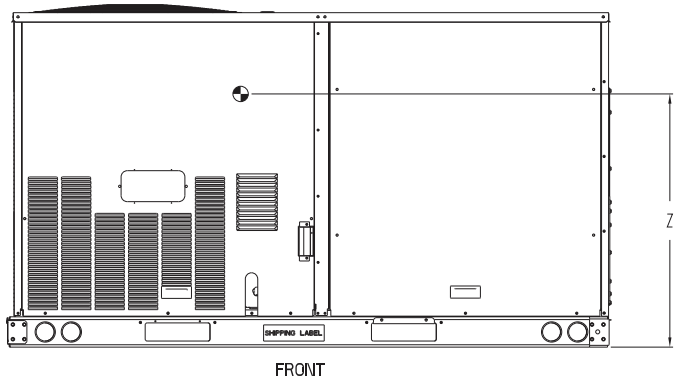
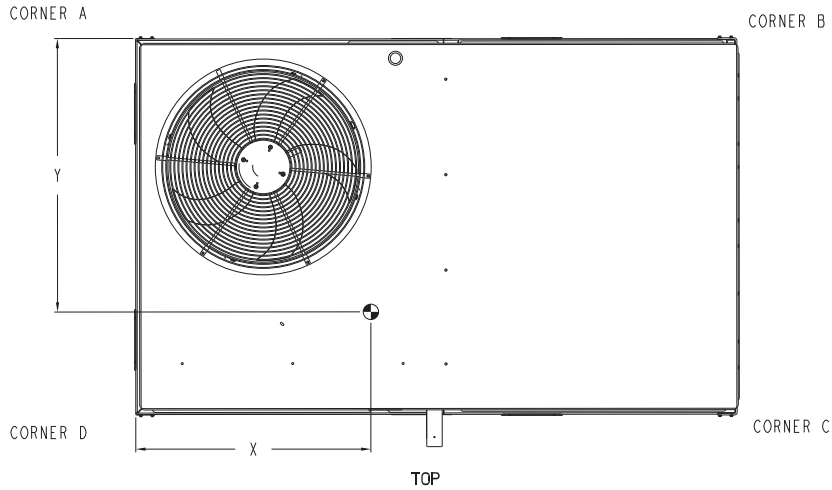


|                    |        |          |            |                                                                  |            |
|--------------------|--------|----------|------------|------------------------------------------------------------------|------------|
| ITC CLASSIFICATION | SHEET  | DATE     | SUPERCEDES | 48JCG/H 04-06 SINGLE PACKAGE ELECTRICAL<br>COOLING WITH GAS HEAT | 48TC004038 |
| U.S. ECCN:NSR      | 1 OF 3 | 11/17/20 | 2/17/20    |                                                                  |            |

48JC(G/H)\*04-06 Base Unit Dimensions (cont)

| UNIT       | STD. UNIT WEIGHT ** |     | CORNER WEIGHT (A) |     | CORNER WEIGHT (B) |     | CORNER WEIGHT (C) |     | CORNER WEIGHT (D) |     | C.G.         |              | HEIGHT       |
|------------|---------------------|-----|-------------------|-----|-------------------|-----|-------------------|-----|-------------------|-----|--------------|--------------|--------------|
|            | LBS.                | KG. | LBS.              | KG. | LBS.              | KG. | LBS.              | KG. | LBS.              | KG. | X            | Y            | Z            |
| 48JCG/H*04 | 617                 | 280 | 144               | 65  | 133               | 60  | 163               | 74  | 176               | 80  | 35 3/4 [908] | 25 3/4 [654] | 19 1/2 [495] |
| 48JCG/H*05 | 640                 | 291 | 150               | 68  | 139               | 63  | 169               | 77  | 182               | 83  | 35 7/8 [911] | 25 5/8 [651] | 19 3/8 [492] |
| 48JCG/H*06 | 642                 | 292 | 152               | 69  | 140               | 64  | 168               | 76  | 182               | 83  | 35 5/8 [905] | 25 1/2 [648] | 19 3/8 [492] |

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



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

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

|                                     |                 |                  |                       |                                                                  |            |
|-------------------------------------|-----------------|------------------|-----------------------|------------------------------------------------------------------|------------|
| ITC CLASSIFICATION<br>U.S. ECCN:NSR | SHEET<br>2 OF 3 | DATE<br>11/17/20 | SUPERCEDES<br>2/17/20 | 48JCG/H 04-06 SINGLE PACKAGE ELECTRICAL<br>COOLING WITH GAS HEAT | 48TC004038 |
|-------------------------------------|-----------------|------------------|-----------------------|------------------------------------------------------------------|------------|

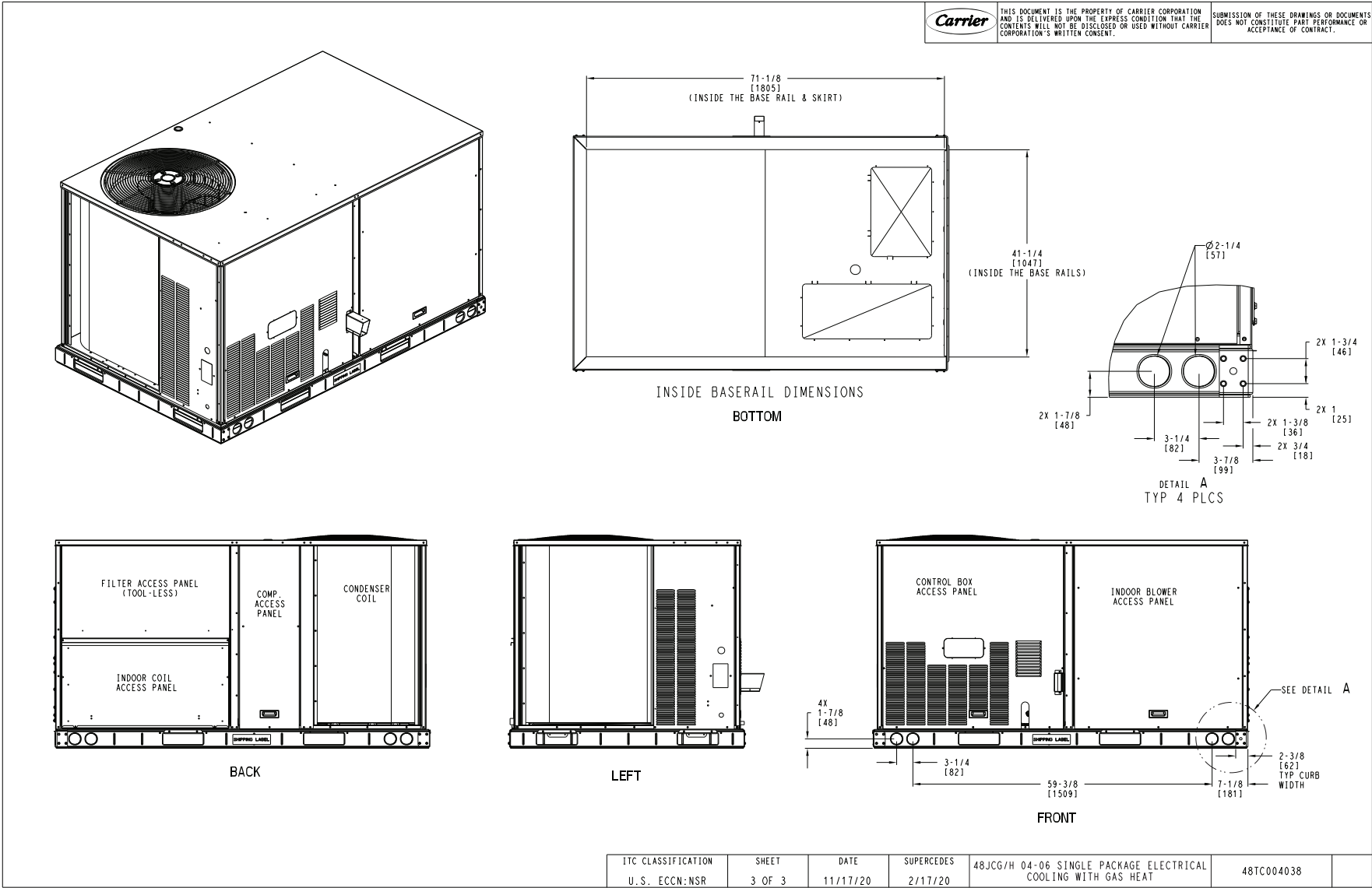


THIS DOCUMENT IS THE PROPERTY OF CARRIER CORPORATION  
AND IS DELIVERED UPON THE EXPRESS CONDITION THAT THE  
CONTENTS WILL NOT BE DISCLOSED OR USED WITHOUT CARRIER  
CORPORATION'S WRITTEN CONSENT.

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



48JC(G/H)\*04-06 Base Unit Dimensions (cont)

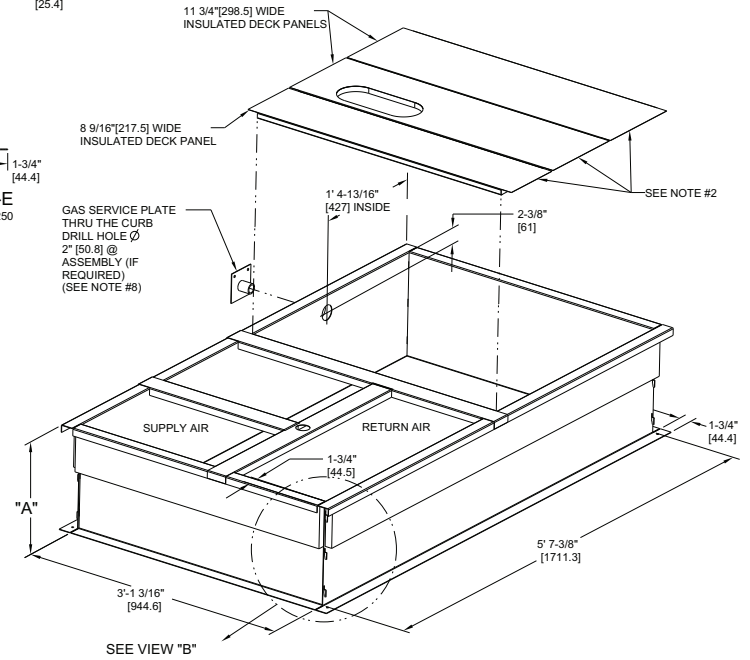
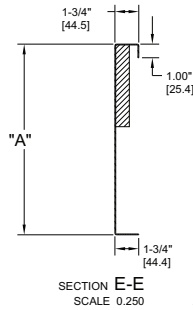
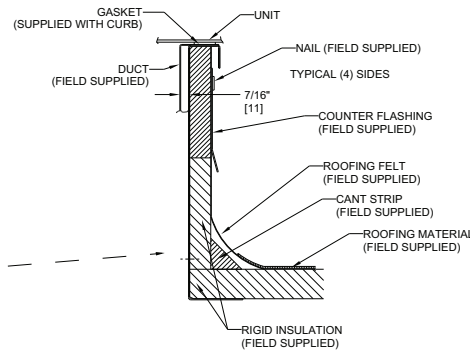
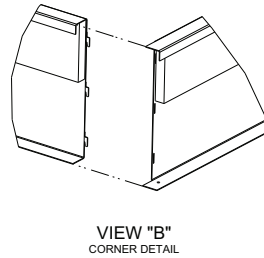
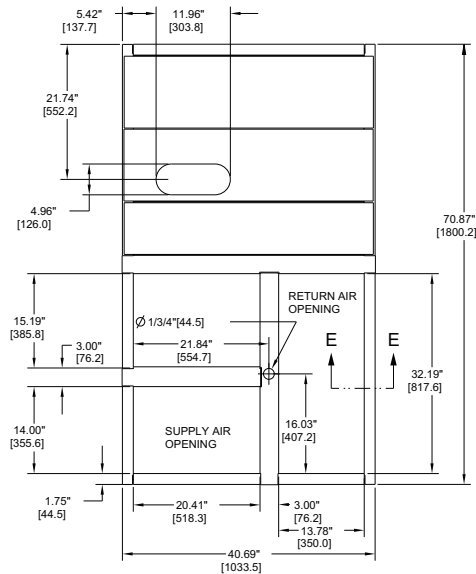


# Roof Curb Dimensions — 48JC(G/H)\*04-06

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

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

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



CERTIFIED DRAWING

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

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

## 48JC(G/H)\*04 Low Speed (2000 Compressor rpm and 700 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*04 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 750<br>cfm   | EAT<br>(wb) | 58 | TC  | 16.9                     | 16.9 | 19.2 | 15.9     | 15.9 | 18.1 | 14.8     | 14.8 | 16.9 | 13.7     | 13.7 | 15.7 | 12.5     | 12.5 | 14.4 |
|              |             |    | SHC | 14.6                     | 16.9 | 19.2 | 13.7     | 15.9 | 18.1 | 12.7     | 14.8 | 16.9 | 11.6     | 13.7 | 15.7 | 10.6     | 12.5 | 14.4 |
|              |             | 62 | TC  | 16.9                     | 16.9 | 20.0 | 15.9     | 15.9 | 18.9 | 14.8     | 14.8 | 17.7 | 13.7     | 13.7 | 16.4 | 12.5     | 12.5 | 15.0 |
|              |             |    | SHC | 13.8                     | 16.9 | 20.0 | 12.9     | 15.9 | 18.9 | 12.0     | 14.8 | 17.7 | 11.0     | 13.7 | 16.4 | 9.9      | 12.5 | 15.0 |
|              |             | 67 | TC  | 17.8                     | 17.8 | 19.1 | 16.6     | 16.6 | 18.5 | 15.3     | 15.3 | 17.8 | 13.9     | 13.9 | 17.1 | 12.6     | 12.6 | 16.1 |
|              |             |    | SHC | 11.4                     | 15.3 | 19.1 | 10.8     | 14.6 | 18.5 | 10.1     | 14.0 | 17.8 | 9.4      | 13.2 | 17.1 | 8.6      | 12.3 | 16.1 |
|              |             | 72 | TC  | 20.0                     | 20.0 | 20.0 | 18.6     | 18.6 | 18.6 | 17.3     | 17.3 | 17.3 | 15.8     | 15.8 | 15.8 | 14.2     | 14.2 | 14.2 |
|              |             |    | SHC | 7.7                      | 11.5 | 15.3 | 7.1      | 10.9 | 14.7 | 6.4      | 10.2 | 14.0 | 5.7      | 9.5  | 13.3 | 5.0      | 8.8  | 12.6 |
|              |             | 76 | TC  | —                        | 21.8 | 21.8 | —        | 20.4 | 20.4 | —        | 18.9 | 18.9 | —        | 17.4 | 17.4 | —        | 15.7 | 15.7 |
|              |             |    | SHC | —                        | 8.5  | 12.2 | —        | 7.9  | 11.6 | —        | 7.2  | 10.9 | —        | 6.5  | 10.2 | —        | 5.8  | 9.5  |
| 900<br>cfm   | EAT<br>(wb) | 58 | TC  | 17.9                     | 17.9 | 20.3 | 16.8     | 16.8 | 19.1 | 15.7     | 15.7 | 17.9 | 14.4     | 14.4 | 16.5 | 13.2     | 13.2 | 15.1 |
|              |             |    | SHC | 15.4                     | 17.9 | 20.3 | 14.5     | 16.8 | 19.1 | 13.4     | 15.7 | 17.9 | 12.3     | 14.4 | 16.5 | 11.2     | 13.2 | 15.1 |
|              |             | 62 | TC  | 17.9                     | 17.9 | 21.1 | 16.8     | 16.8 | 19.9 | 15.7     | 15.7 | 18.6 | 14.5     | 14.5 | 17.3 | 13.2     | 13.2 | 15.8 |
|              |             |    | SHC | 14.6                     | 17.9 | 21.1 | 13.7     | 16.8 | 19.9 | 12.7     | 15.7 | 18.6 | 11.6     | 14.5 | 17.3 | 10.5     | 13.2 | 15.8 |
|              |             | 67 | TC  | 18.3                     | 18.3 | 21.7 | 17.0     | 17.0 | 21.0 | 15.7     | 15.7 | 20.1 | 14.5     | 14.5 | 18.7 | 13.2     | 13.2 | 17.2 |
|              |             |    | SHC | 12.6                     | 17.2 | 21.7 | 12.0     | 16.5 | 21.0 | 11.2     | 15.6 | 20.1 | 10.3     | 14.5 | 18.7 | 9.2      | 13.2 | 17.2 |
|              |             | 72 | TC  | 20.4                     | 20.4 | 20.4 | 19.1     | 19.1 | 19.1 | 17.6     | 17.6 | 17.6 | 16.1     | 16.1 | 16.1 | 14.5     | 14.5 | 14.5 |
|              |             |    | SHC | 8.2                      | 12.7 | 17.2 | 7.6      | 12.1 | 16.6 | 6.9      | 11.4 | 15.9 | 6.2      | 10.7 | 15.2 | 5.5      | 10.0 | 14.5 |
|              |             | 76 | TC  | —                        | 22.3 | 22.3 | —        | 20.8 | 20.8 | —        | 19.3 | 19.3 | —        | 17.7 | 17.7 | —        | 16.0 | 16.0 |
|              |             |    | SHC | —                        | 9.1  | 13.4 | —        | 8.4  | 12.8 | —        | 7.7  | 12.0 | —        | 7.0  | 11.4 | —        | 6.3  | 10.6 |
| 1050<br>cfm  | EAT<br>(wb) | 58 | TC  | 18.6                     | 18.6 | 21.2 | 17.5     | 17.5 | 19.9 | 16.3     | 16.3 | 18.6 | 15.0     | 15.0 | 17.2 | 13.7     | 13.7 | 15.7 |
|              |             |    | SHC | 16.1                     | 18.6 | 21.2 | 15.1     | 17.5 | 19.9 | 14.0     | 16.3 | 18.6 | 12.9     | 15.0 | 17.2 | 11.7     | 13.7 | 15.7 |
|              |             | 62 | TC  | 18.6                     | 18.6 | 22.0 | 17.5     | 17.5 | 20.8 | 16.3     | 16.3 | 19.4 | 15.1     | 15.1 | 18.0 | 13.7     | 13.7 | 16.4 |
|              |             |    | SHC | 15.3                     | 18.6 | 22.0 | 14.3     | 17.5 | 20.8 | 13.3     | 16.3 | 19.4 | 12.1     | 15.1 | 18.0 | 11.0     | 13.7 | 16.4 |
|              |             | 67 | TC  | 18.7                     | 18.7 | 23.5 | 17.6     | 17.6 | 22.2 | 16.3     | 16.3 | 21.0 | 15.1     | 15.1 | 19.4 | 13.7     | 13.7 | 17.8 |
|              |             |    | SHC | 13.5                     | 18.5 | 23.5 | 12.6     | 17.4 | 22.2 | 11.7     | 16.3 | 21.0 | 10.7     | 15.1 | 19.4 | 9.6      | 13.7 | 17.8 |
|              |             | 72 | TC  | 20.7                     | 20.7 | 20.7 | 19.3     | 19.3 | 19.3 | 17.9     | 17.9 | 17.9 | 16.3     | 16.3 | 17.0 | 14.7     | 14.7 | 16.3 |
|              |             |    | SHC | 8.7                      | 13.8 | 19.0 | 8.0      | 13.2 | 18.4 | 7.3      | 12.5 | 17.7 | 6.6      | 11.8 | 17.0 | 5.9      | 11.1 | 16.3 |
|              |             | 76 | TC  | —                        | 22.6 | 22.6 | —        | 21.1 | 21.1 | —        | 19.6 | 19.6 | —        | 17.9 | 17.9 | —        | 16.2 | 16.2 |
|              |             |    | SHC | —                        | 9.6  | 14.6 | —        | 8.9  | 13.9 | —        | 8.2  | 13.2 | —        | 7.5  | 12.5 | —        | 6.8  | 11.7 |
| 1200<br>cfm  | EAT<br>(wb) | 58 | TC  | 19.3                     | 19.3 | 21.9 | 18.1     | 18.1 | 20.6 | 16.8     | 16.8 | 19.2 | 15.5     | 15.5 | 17.8 | 14.1     | 14.1 | 16.2 |
|              |             |    | SHC | 16.7                     | 19.3 | 21.9 | 15.6     | 18.1 | 20.6 | 14.5     | 16.8 | 19.2 | 13.3     | 15.5 | 17.8 | 12.1     | 14.1 | 16.2 |
|              |             | 62 | TC  | 19.3                     | 19.3 | 22.7 | 18.1     | 18.1 | 21.4 | 16.9     | 16.9 | 20.0 | 15.5     | 15.5 | 18.5 | 14.2     | 14.2 | 16.9 |
|              |             |    | SHC | 15.8                     | 19.3 | 22.7 | 14.8     | 18.1 | 21.4 | 13.7     | 16.9 | 20.0 | 12.6     | 15.5 | 18.5 | 11.4     | 14.2 | 16.9 |
|              |             | 67 | TC  | 19.3                     | 19.3 | 24.5 | 18.1     | 18.1 | 23.1 | 16.9     | 16.9 | 21.6 | 15.6     | 15.6 | 20.0 | 14.2     | 14.2 | 18.4 |
|              |             |    | SHC | 14.1                     | 19.3 | 24.5 | 13.1     | 18.1 | 23.1 | 12.1     | 16.9 | 21.6 | 11.1     | 15.6 | 20.0 | 10.0     | 14.2 | 18.4 |
|              |             | 72 | TC  | 20.9                     | 20.9 | 20.9 | 19.6     | 19.6 | 20.1 | 18.1     | 18.1 | 19.4 | 16.5     | 16.5 | 18.7 | 14.8     | 14.8 | 18.0 |
|              |             |    | SHC | 8.9                      | 14.6 | 20.2 | 8.4      | 14.3 | 20.1 | 7.7      | 13.6 | 19.4 | 7.0      | 12.9 | 18.7 | 6.3      | 12.1 | 18.0 |
|              |             | 76 | TC  | —                        | 22.8 | 22.8 | —        | 21.4 | 21.4 | —        | 19.8 | 19.8 | —        | 18.1 | 18.1 | —        | 16.3 | 16.3 |
|              |             |    | SHC | —                        | 10.0 | 15.5 | —        | 9.4  | 14.9 | —        | 8.7  | 14.3 | —        | 7.9  | 13.5 | —        | 7.1  | 12.6 |
| 1350<br>cfm  | EAT<br>(wb) | 58 | TC  | 19.8                     | 19.8 | 22.4 | 18.6     | 18.6 | 21.1 | 17.3     | 17.3 | 19.7 | 15.9     | 15.9 | 18.2 | 14.5     | 14.5 | 16.6 |
|              |             |    | SHC | 17.1                     | 19.8 | 22.4 | 16.0     | 18.6 | 21.1 | 14.9     | 17.3 | 19.7 | 13.7     | 15.9 | 18.2 | 12.4     | 14.5 | 16.6 |
|              |             | 62 | TC  | 19.8                     | 19.8 | 23.3 | 18.6     | 18.6 | 22.0 | 17.3     | 17.3 | 20.5 | 15.9     | 15.9 | 19.0 | 14.5     | 14.5 | 17.4 |
|              |             |    | SHC | 16.2                     | 19.8 | 23.3 | 15.2     | 18.6 | 22.0 | 14.1     | 17.3 | 20.5 | 12.9     | 15.9 | 19.0 | 11.7     | 14.5 | 17.4 |
|              |             | 67 | TC  | 19.8                     | 19.8 | 25.1 | 18.6     | 18.6 | 23.7 | 17.3     | 17.3 | 22.2 | 16.0     | 16.0 | 20.5 | 14.5     | 14.5 | 18.8 |
|              |             |    | SHC | 14.5                     | 19.8 | 25.1 | 13.5     | 18.6 | 23.7 | 12.5     | 17.3 | 22.2 | 11.4     | 16.0 | 20.5 | 10.3     | 14.5 | 18.8 |
|              |             | 72 | TC  | 21.1                     | 21.1 | 22.0 | 19.7     | 19.7 | 21.8 | 18.2     | 18.2 | 21.1 | 16.6     | 16.6 | 20.4 | 14.9     | 14.9 | 19.6 |
|              |             |    | SHC | 9.4                      | 15.7 | 22.0 | 8.8      | 15.3 | 21.8 | 8.1      | 14.6 | 21.1 | 7.4      | 13.9 | 20.4 | 6.7      | 13.2 | 19.6 |
|              |             | 76 | TC  | —                        | 23.1 | 23.1 | —        | 21.6 | 21.6 | —        | 19.9 | 19.9 | —        | 18.2 | 18.2 | —        | 16.4 | 16.4 |
|              |             |    | SHC | —                        | 10.4 | 16.6 | —        | 9.8  | 16.0 | —        | 9.1  | 15.2 | —        | 8.3  | 14.4 | —        | 7.5  | 13.4 |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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



## 48JC(G/H)\*04 Intermediate Speed (2800 Compressor rpm and 800 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*04 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 750<br>cfm   | EAT<br>(wb) | 58 | TC  | 21.5                     | 21.5 | 24.4 | 20.4     | 20.4 | 23.2 | 19.1     | 19.1 | 21.8 | 17.9     | 17.9 | 20.4 | 16.5     | 16.5 | 19.0 |
|              |             |    | SHC | 18.6                     | 21.5 | 24.4 | 17.5     | 20.4 | 23.2 | 16.4     | 19.1 | 21.8 | 15.3     | 17.9 | 20.4 | 14.1     | 16.5 | 19.0 |
|              |             | 62 | TC  | 21.7                     | 21.7 | 25.1 | 20.6     | 20.6 | 23.6 | 19.2     | 19.2 | 22.8 | 17.9     | 17.9 | 21.3 | 16.5     | 16.5 | 19.8 |
|              |             |    | SHC | 17.5                     | 21.3 | 25.1 | 16.4     | 20.0 | 23.6 | 15.6     | 19.2 | 22.8 | 14.5     | 17.9 | 21.3 | 13.3     | 16.5 | 19.8 |
|              |             | 67 | TC  | 24.2                     | 24.2 | 24.2 | 22.7     | 22.7 | 22.7 | 21.1     | 21.1 | 21.1 | 19.5     | 19.5 | 19.5 | 17.8     | 17.8 | 18.3 |
|              |             |    | SHC | 13.8                     | 17.7 | 21.5 | 13.1     | 16.9 | 20.7 | 12.3     | 16.1 | 20.0 | 11.5     | 15.3 | 19.2 | 10.7     | 14.5 | 18.3 |
|              |             | 72 | TC  | 26.9                     | 26.9 | 26.9 | 25.3     | 25.3 | 25.3 | 23.6     | 23.6 | 23.6 | 21.9     | 21.9 | 21.9 | 20.0     | 20.0 | 20.0 |
|              |             |    | SHC | 10.1                     | 13.9 | 17.6 | 9.4      | 13.1 | 16.9 | 8.6      | 12.4 | 16.2 | 7.8      | 11.6 | 15.4 | 7.0      | 10.7 | 14.5 |
|              |             | 76 | TC  | —                        | 29.2 | 29.2 | —        | 27.6 | 27.6 | —        | 25.8 | 25.8 | —        | 23.9 | 23.9 | —        | 22.0 | 22.0 |
|              |             |    | SHC | —                        | 10.9 | 14.3 | —        | 10.1 | 13.7 | —        | 9.4  | 13.0 | —        | 8.6  | 12.2 | —        | 7.7  | 11.4 |
| 900<br>cfm   | EAT<br>(wb) | 58 | TC  | 22.9                     | 22.9 | 26.0 | 21.7     | 21.7 | 24.7 | 20.4     | 20.4 | 23.2 | 19.0     | 19.0 | 21.7 | 17.6     | 17.6 | 20.1 |
|              |             |    | SHC | 19.8                     | 22.9 | 26.0 | 18.7     | 21.7 | 24.7 | 17.6     | 20.4 | 23.2 | 16.3     | 19.0 | 21.7 | 15.0     | 17.6 | 20.1 |
|              |             | 62 | TC  | 22.9                     | 22.9 | 27.1 | 21.7     | 21.7 | 25.7 | 20.4     | 20.4 | 24.2 | 19.1     | 19.1 | 22.7 | 17.6     | 17.6 | 21.0 |
|              |             |    | SHC | 18.8                     | 22.9 | 27.1 | 17.7     | 21.7 | 25.7 | 16.6     | 20.4 | 24.2 | 15.4     | 19.1 | 22.7 | 14.2     | 17.6 | 21.0 |
|              |             | 67 | TC  | 24.9                     | 24.9 | 24.9 | 23.4     | 23.4 | 23.4 | 21.7     | 21.7 | 22.6 | 20.0     | 20.0 | 21.8 | 18.2     | 18.2 | 21.0 |
|              |             |    | SHC | 15.1                     | 19.7 | 24.2 | 14.4     | 18.9 | 23.4 | 13.6     | 18.1 | 22.6 | 12.7     | 17.3 | 21.8 | 11.9     | 16.4 | 21.0 |
|              |             | 72 | TC  | 27.7                     | 27.7 | 27.7 | 26.1     | 26.1 | 26.1 | 24.3     | 24.3 | 24.3 | 22.5     | 22.5 | 22.5 | 20.5     | 20.5 | 20.5 |
|              |             |    | SHC | 10.7                     | 15.1 | 19.6 | 9.9      | 14.4 | 18.9 | 9.1      | 13.6 | 18.1 | 8.3      | 12.8 | 17.3 | 7.4      | 11.9 | 16.4 |
|              |             | 76 | TC  | —                        | 30.1 | 30.1 | —        | 28.4 | 28.4 | —        | 26.5 | 26.5 | —        | 24.6 | 24.6 | —        | 22.5 | 22.5 |
|              |             |    | SHC | —                        | 11.5 | 15.8 | —        | 10.8 | 15.1 | —        | 10.0 | 14.3 | —        | 9.2  | 13.5 | —        | 8.3  | 12.7 |
| 1050<br>cfm  | EAT<br>(wb) | 58 | TC  | 24.1                     | 24.1 | 27.3 | 22.8     | 22.8 | 25.9 | 21.4     | 21.4 | 24.4 | 20.0     | 20.0 | 22.8 | 18.4     | 18.4 | 21.1 |
|              |             |    | SHC | 20.8                     | 24.1 | 27.3 | 19.7     | 22.8 | 25.9 | 18.4     | 21.4 | 24.4 | 17.1     | 20.0 | 22.8 | 15.8     | 18.4 | 21.1 |
|              |             | 62 | TC  | 24.1                     | 24.1 | 28.4 | 22.8     | 22.8 | 27.0 | 21.4     | 21.4 | 25.4 | 20.0     | 20.0 | 23.7 | 18.4     | 18.4 | 22.0 |
|              |             |    | SHC | 19.8                     | 24.1 | 28.4 | 18.7     | 22.8 | 27.0 | 17.5     | 21.4 | 25.4 | 16.2     | 20.0 | 23.7 | 14.9     | 18.4 | 22.0 |
|              |             | 67 | TC  | 25.5                     | 25.5 | 26.8 | 23.9     | 23.9 | 26.0 | 22.3     | 22.3 | 25.5 | 20.4     | 20.4 | 24.3 | 18.6     | 18.6 | 23.3 |
|              |             |    | SHC | 16.3                     | 21.6 | 26.8 | 15.6     | 20.8 | 26.0 | 14.9     | 20.2 | 25.5 | 13.9     | 19.1 | 24.3 | 13.0     | 18.1 | 23.3 |
|              |             | 72 | TC  | 28.3                     | 28.3 | 28.3 | 26.5     | 26.5 | 26.5 | 24.8     | 24.8 | 24.8 | 22.9     | 22.9 | 22.9 | 20.9     | 20.9 | 20.9 |
|              |             |    | SHC | 11.2                     | 16.3 | 21.5 | 10.3     | 15.4 | 20.5 | 9.6      | 14.7 | 19.9 | 8.7      | 13.9 | 19.1 | 7.9      | 13.1 | 18.2 |
|              |             | 76 | TC  | —                        | 30.4 | 30.4 | —        | 28.8 | 28.8 | —        | 27.0 | 27.0 | —        | 25.0 | 25.0 | —        | 22.9 | 22.9 |
|              |             |    | SHC | —                        | 11.8 | 16.4 | —        | 11.3 | 16.3 | —        | 10.5 | 15.6 | —        | 9.7  | 14.7 | —        | 8.8  | 13.9 |
| 1200<br>cfm  | EAT<br>(wb) | 58 | TC  | 25.0                     | 25.0 | 28.4 | 23.7     | 23.7 | 26.9 | 22.2     | 22.2 | 25.3 | 20.7     | 20.7 | 23.6 | 19.1     | 19.1 | 21.8 |
|              |             |    | SHC | 21.7                     | 25.0 | 28.4 | 20.5     | 23.7 | 26.9 | 19.2     | 22.2 | 25.3 | 17.8     | 20.7 | 23.6 | 16.4     | 19.1 | 21.8 |
|              |             | 62 | TC  | 25.0                     | 25.0 | 29.5 | 23.7     | 23.7 | 28.0 | 22.2     | 22.2 | 26.3 | 20.7     | 20.7 | 24.6 | 19.1     | 19.1 | 22.8 |
|              |             |    | SHC | 20.6                     | 25.0 | 29.5 | 19.4     | 23.7 | 28.0 | 18.2     | 22.2 | 26.3 | 16.9     | 20.7 | 24.6 | 15.5     | 19.1 | 22.8 |
|              |             | 67 | TC  | 25.9                     | 25.9 | 29.1 | 24.3     | 24.3 | 28.4 | 22.6     | 22.6 | 27.5 | 20.9     | 20.9 | 25.9 | 19.3     | 19.3 | 24.2 |
|              |             |    | SHC | 17.4                     | 23.3 | 29.1 | 16.7     | 22.6 | 28.4 | 15.8     | 21.7 | 27.5 | 14.7     | 20.3 | 25.9 | 13.5     | 18.8 | 24.2 |
|              |             | 72 | TC  | 28.6                     | 28.6 | 28.6 | 27.0     | 27.0 | 27.0 | 25.2     | 25.2 | 25.2 | 23.2     | 23.2 | 23.2 | 21.2     | 21.2 | 21.2 |
|              |             |    | SHC | 11.4                     | 16.9 | 22.5 | 10.8     | 16.6 | 22.4 | 10.0     | 15.8 | 21.7 | 9.2      | 15.0 | 20.8 | 8.3      | 14.1 | 20.0 |
|              |             | 76 | TC  | —                        | —    | —    | —        | 29.3 | 29.3 | —        | 27.4 | 27.4 | —        | 25.3 | 25.3 | —        | 23.2 | 23.2 |
|              |             |    | SHC | —                        | —    | —    | —        | 11.8 | 17.5 | —        | 11.0 | 16.7 | —        | 10.2 | 15.8 | —        | 9.3  | 14.9 |
| 1350<br>cfm  | EAT<br>(wb) | 58 | TC  | 25.8                     | 25.8 | 29.3 | 24.4     | 24.4 | 27.7 | 22.9     | 22.9 | 26.1 | 21.4     | 21.4 | 24.3 | 19.7     | 19.7 | 22.5 |
|              |             |    | SHC | 22.4                     | 25.8 | 29.3 | 21.1     | 24.4 | 27.7 | 19.8     | 22.9 | 26.1 | 18.4     | 21.4 | 24.3 | 16.9     | 19.7 | 22.5 |
|              |             | 62 | TC  | 25.8                     | 25.8 | 30.4 | 24.4     | 24.4 | 28.8 | 22.9     | 22.9 | 27.1 | 21.4     | 21.4 | 25.4 | 19.7     | 19.7 | 23.4 |
|              |             |    | SHC | 21.2                     | 25.8 | 30.4 | 20.0     | 24.4 | 28.8 | 18.7     | 22.9 | 27.1 | 17.4     | 21.4 | 25.4 | 16.0     | 19.7 | 23.4 |
|              |             | 67 | TC  | 26.2                     | 26.2 | 31.7 | 24.6     | 24.6 | 30.5 | 23.0     | 23.0 | 29.1 | 21.4     | 21.4 | 27.4 | 19.7     | 19.7 | 25.3 |
|              |             |    | SHC | 18.6                     | 25.1 | 31.7 | 17.7     | 24.1 | 30.5 | 16.6     | 22.8 | 29.1 | 15.4     | 21.4 | 27.4 | 14.1     | 19.7 | 25.3 |
|              |             | 72 | TC  | 29.0                     | 29.0 | 29.0 | 27.3     | 27.3 | 27.3 | 25.5     | 25.5 | 25.5 | 23.5     | 23.5 | 23.5 | 21.4     | 21.4 | 21.7 |
|              |             |    | SHC | 11.8                     | 18.1 | 24.4 | 11.2     | 17.7 | 24.2 | 10.4     | 16.9 | 23.4 | 9.6      | 16.0 | 22.5 | 8.7      | 15.2 | 21.7 |
|              |             | 76 | TC  | —                        | 31.5 | 31.5 | —        | 29.7 | 29.7 | —        | 27.7 | 27.7 | —        | 25.6 | 25.6 | —        | 23.4 | 23.4 |
|              |             |    | SHC | —                        | 12.9 | 19.0 | —        | 12.3 | 18.6 | —        | 11.5 | 17.7 | —        | 10.6 | 16.9 | —        | 9.7  | 15.9 |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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

## 48JC(G/H)\*04 Full Speed (4400 Compressor rpm and 1100 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*04 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 900<br>cfm   | EAT<br>(wb) | 58 | TC  | 30.8                     | 30.8 | 34.9 | 29.4     | 29.4 | 33.4 | 27.9     | 27.9 | 31.8 | 26.4     | 26.4 | 30.0 | 24.7     | 24.7 | 28.2 |
|              |             |    | SHC | 26.7                     | 30.8 | 34.9 | 25.4     | 29.4 | 33.4 | 24.1     | 27.9 | 31.8 | 22.7     | 26.4 | 30.0 | 21.2     | 24.7 | 28.2 |
|              |             | 62 | TC  | 32.6                     | 32.6 | 33.1 | 30.9     | 30.9 | 32.1 | 29.0     | 29.0 | 31.1 | 27.0     | 27.0 | 30.1 | 25.0     | 25.0 | 28.9 |
|              |             |    | SHC | 24.0                     | 28.6 | 33.1 | 23.0     | 27.6 | 32.1 | 22.0     | 26.6 | 31.1 | 21.0     | 25.5 | 30.1 | 19.8     | 24.4 | 28.9 |
|              |             | 67 | TC  | 36.3                     | 36.3 | 36.3 | 34.4     | 34.4 | 34.4 | 32.4     | 32.4 | 32.4 | 30.2     | 30.2 | 30.2 | 27.9     | 27.9 | 27.9 |
|              |             |    | SHC | 19.6                     | 24.1 | 28.6 | 18.7     | 23.1 | 27.6 | 17.7     | 22.2 | 26.7 | 16.6     | 21.1 | 25.6 | 15.5     | 20.1 | 24.6 |
|              |             | 72 | TC  | 40.3                     | 40.3 | 40.3 | 38.2     | 38.2 | 38.2 | 36.0     | 36.0 | 36.0 | 33.7     | 33.7 | 33.7 | 31.2     | 31.2 | 31.2 |
|              |             |    | SHC | 15.3                     | 19.6 | 23.9 | 14.3     | 18.7 | 23.0 | 13.3     | 17.7 | 22.0 | 12.2     | 16.7 | 21.1 | 11.1     | 15.6 | 20.0 |
|              |             | 76 | TC  | —                        | 42.9 | 42.9 | —        | 41.2 | 41.2 | —        | 39.2 | 39.2 | —        | 36.7 | 36.7 | —        | 34.0 | 34.0 |
|              |             |    | SHC | —                        | 15.4 | 20.4 | —        | 14.6 | 19.5 | —        | 14.0 | 18.9 | —        | 13.0 | 16.9 | —        | 12.0 | 16.1 |
| 1050<br>cfm  | EAT<br>(wb) | 58 | TC  | 32.7                     | 32.7 | 37.0 | 31.2     | 31.2 | 35.4 | 29.6     | 29.6 | 33.6 | 27.9     | 27.9 | 31.8 | 26.1     | 26.1 | 29.8 |
|              |             |    | SHC | 28.3                     | 32.7 | 37.0 | 27.0     | 31.2 | 35.4 | 25.6     | 29.6 | 33.6 | 24.1     | 27.9 | 31.8 | 22.5     | 26.1 | 29.8 |
|              |             | 62 | TC  | 33.8                     | 33.8 | 36.5 | 31.9     | 31.9 | 35.5 | 30.0     | 30.0 | 34.3 | 28.2     | 28.2 | 32.5 | 26.2     | 26.2 | 31.1 |
|              |             |    | SHC | 26.0                     | 31.3 | 36.5 | 25       | 30.2 | 35.5 | 24.0     | 29.1 | 34.3 | 22.5     | 27.5 | 32.5 | 21.3     | 26.2 | 31.1 |
|              |             | 67 | TC  | 37.5                     | 37.5 | 37.5 | 35.5     | 35.5 | 35.5 | 33.3     | 33.3 | 33.3 | 31.1     | 31.1 | 31.1 | 28.7     | 28.7 | 28.7 |
|              |             |    | SHC | 21.0                     | 26.1 | 31.3 | 20.0     | 25.1 | 30.3 | 18.9     | 24.1 | 29.3 | 17.9     | 23.1 | 28.3 | 16.8     | 22.0 | 27.2 |
|              |             | 72 | TC  | 41.0                     | 41.0 | 41.0 | 39.3     | 39.3 | 39.3 | 37.0     | 37.0 | 37.0 | 34.6     | 34.6 | 34.6 | 32.0     | 32.0 | 32.0 |
|              |             |    | SHC | 15.7                     | 20.4 | 25.2 | 14.9     | 19.9 | 25.0 | 13.8     | 18.9 | 24.0 | 12.8     | 17.9 | 23.0 | 11.7     | 16.8 | 21.9 |
|              |             | 76 | TC  | —                        | 44.4 | 44.4 | —        | 42.6 | 42.6 | —        | 40.2 | 40.2 | —        | 37.6 | 37.6 | —        | 34.8 | 34.8 |
|              |             |    | SHC | —                        | 16.2 | 22.0 | —        | 15.6 | 19.7 | —        | 14.7 | 19.3 | —        | 13.7 | 18.5 | —        | 12.6 | 17.5 |
| 1200<br>cfm  | EAT<br>(wb) | 58 | TC  | 34.3                     | 34.3 | 38.8 | 32.7     | 32.7 | 37.1 | 31.0     | 31.0 | 35.2 | 29.2     | 29.2 | 33.2 | 27.3     | 27.3 | 31.1 |
|              |             |    | SHC | 29.7                     | 34.3 | 38.8 | 28.3     | 32.7 | 37.1 | 26.8     | 31.0 | 35.2 | 25.2     | 29.2 | 33.2 | 23.5     | 27.3 | 31.1 |
|              |             | 62 | TC  | 34.7                     | 34.7 | 39.6 | 32.8     | 32.8 | 38.3 | 31.3     | 31.3 | 36.0 | 29.3     | 29.3 | 34.6 | 27.4     | 27.4 | 32.4 |
|              |             |    | SHC | 27.9                     | 33.7 | 39.6 | 26.8     | 32.5 | 38.3 | 25.1     | 30.6 | 36.0 | 23.9     | 29.3 | 34.6 | 22.3     | 27.4 | 32.4 |
|              |             | 67 | TC  | 38.4                     | 38.4 | 38.4 | 36.3     | 36.3 | 36.3 | 34.1     | 34.1 | 34.1 | 31.8     | 31.8 | 31.8 | 29.3     | 29.3 | 29.8 |
|              |             |    | SHC | 22.2                     | 28.0 | 33.8 | 21.2     | 27.1 | 32.9 | 20.2     | 26.0 | 31.9 | 19.1     | 25.0 | 30.9 | 18.0     | 23.9 | 29.8 |
|              |             | 72 | TC  | 42.2                     | 42.2 | 42.2 | 40.2     | 40.2 | 40.2 | 37.8     | 37.8 | 37.8 | 35.3     | 35.3 | 35.3 | 32.7     | 32.7 | 32.7 |
|              |             |    | SHC | 16.2                     | 21.7 | 27.3 | 15.4     | 21.1 | 26.8 | 14.3     | 20.1 | 25.9 | 13.2     | 19.0 | 24.8 | 12.1     | 17.9 | 23.7 |
|              |             | 76 | TC  | —                        | 45.7 | 45.7 | —        | 43.6 | 43.6 | —        | 41.0 | 41.0 | —        | 38.3 | 38.3 | —        | 35.5 | 35.5 |
|              |             |    | SHC | —                        | 17.1 | 21.9 | —        | 16.3 | 21.6 | —        | 15.3 | 20.8 | —        | 14.3 | 19.8 | —        | 13.2 | 18.8 |
| 1350<br>cfm  | EAT<br>(wb) | 58 | TC  | 35.6                     | 35.6 | 40.3 | 34.0     | 34.0 | 38.5 | 32.2     | 32.2 | 36.6 | 30.3     | 30.3 | 34.5 | 28.3     | 28.3 | 32.3 |
|              |             |    | SHC | 30.9                     | 35.6 | 40.3 | 29.4     | 34.0 | 38.5 | 27.9     | 32.2 | 36.6 | 26.2     | 30.3 | 34.5 | 24.4     | 28.3 | 32.3 |
|              |             | 62 | TC  | 35.9                     | 35.9 | 41.5 | 34.0     | 34.0 | 40.1 | 32.2     | 32.2 | 38.1 | 30.4     | 30.4 | 35.9 | 28.4     | 28.4 | 33.6 |
|              |             |    | SHC | 29.1                     | 35.3 | 41.5 | 27.9     | 34.0 | 40.1 | 26.4     | 32.2 | 38.1 | 24.8     | 30.4 | 35.9 | 23.1     | 28.4 | 33.6 |
|              |             | 67 | TC  | 39.2                     | 39.2 | 39.2 | 37.0     | 37.0 | 37.0 | 34.7     | 34.7 | 34.7 | 32.3     | 32.3 | 33.4 | 29.8     | 29.8 | 32.3 |
|              |             |    | SHC | 23.4                     | 29.9 | 36.4 | 22.4     | 28.9 | 35.5 | 21.3     | 27.9 | 34.4 | 20.2     | 26.8 | 33.4 | 19.1     | 25.7 | 32.3 |
|              |             | 72 | TC  | 43.2                     | 43.2 | 43.2 | 40.9     | 40.9 | 40.9 | 38.5     | 38.5 | 38.5 | 35.9     | 35.9 | 35.9 | 33.2     | 33.2 | 33.2 |
|              |             |    | SHC | 16.7                     | 23.1 | 29.4 | 15.8     | 22.2 | 28.6 | 14.7     | 21.2 | 27.6 | 13.6     | 20.1 | 26.6 | 12.5     | 19.0 | 25.5 |
|              |             | 76 | TC  | —                        | 46.6 | 46.6 | —        | 44.3 | 44.3 | —        | 41.7 | 41.7 | —        | 38.9 | 38.9 | —        | 36.0 | 36.0 |
|              |             |    | SHC | —                        | 17.7 | 23.5 | —        | 16.8 | 22.9 | —        | 15.8 | 22.0 | —        | 14.8 | 21.0 | —        | 13.6 | 20.0 |
| 1500<br>cfm  | EAT<br>(wb) | 58 | TC  | 36.8                     | 36.8 | 41.7 | 35.1     | 35.1 | 39.8 | 33.2     | 33.2 | 37.7 | 31.3     | 31.3 | 35.6 | 29.2     | 29.2 | 33.2 |
|              |             |    | SHC | 32.0                     | 36.8 | 41.7 | 30.4     | 35.1 | 39.8 | 28.8     | 33.2 | 37.7 | 27.0     | 31.3 | 35.6 | 25.2     | 29.2 | 33.2 |
|              |             | 62 | TC  | 36.9                     | 36.9 | 43.4 | 35.1     | 35.1 | 41.4 | 33.3     | 33.3 | 39.3 | 31.3     | 31.3 | 37.0 | 29.2     | 29.2 | 34.6 |
|              |             |    | SHC | 30.4                     | 36.9 | 43.4 | 28.9     | 35.1 | 41.4 | 27.3     | 33.3 | 39.3 | 25.6     | 31.3 | 37.0 | 23.9     | 29.2 | 34.6 |
|              |             | 67 | TC  | 39.8                     | 39.8 | 39.8 | 37.5     | 37.5 | 37.9 | 35.2     | 35.2 | 36.9 | 32.7     | 32.7 | 35.8 | 30.1     | 30.1 | 34.6 |
|              |             |    | SHC | 24.5                     | 31.7 | 38.9 | 23.5     | 30.7 | 37.9 | 22.4     | 29.7 | 36.9 | 21.3     | 28.6 | 35.8 | 20.2     | 27.4 | 34.6 |
|              |             | 72 | TC  | 43.9                     | 43.9 | 43.9 | 41.5     | 41.5 | 41.5 | 39.0     | 39.0 | 39.0 | 36.4     | 36.4 | 36.4 | 33.6     | 33.6 | 33.6 |
|              |             |    | SHC | 17.2                     | 24.2 | 31.3 | 16.2     | 23.3 | 30.3 | 15.1     | 22.2 | 29.3 | 14.0     | 21.1 | 28.3 | 12.9     | 20.0 | 27.1 |
|              |             | 76 | TC  | —                        | 47.4 | 47.4 | —        | 44.9 | 44.9 | —        | 42.2 | 42.2 | —        | 39.4 | 39.4 | —        | 36.4 | 36.4 |
|              |             |    | SHC | —                        | 18.3 | 24.9 | —        | 17.3 | 24.1 | —        | 16.3 | 23.2 | —        | 15.2 | 22.1 | —        | 14.1 | 21.0 |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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

## 48JC(G/H)W04 Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

| TEMP (°F)<br>AIR ENTERING<br>CONDENSER (Edb) |     | AIR ENTERING EVAPORATOR — SCFM/BF  |      |      |             |      |      |             |      |      |
|----------------------------------------------|-----|------------------------------------|------|------|-------------|------|------|-------------|------|------|
|                                              |     | 900 / 0.01                         |      |      | 1200 / 0.02 |      |      | 1500 / 0.04 |      |      |
|                                              |     | Air Entering Evaporator — Ewb (°F) |      |      |             |      |      |             |      |      |
|                                              |     | 72                                 | 67   | 62   | 72          | 67   | 62   | 72          | 67   | 62   |
| 75                                           | TC  | 42.4                               | 37.9 | 33.8 | 45.1        | 40.6 | 36.4 | 47.0        | 42.3 | 38.2 |
|                                              | SHC | 19.3                               | 23.5 | 27.6 | 22.3        | 27.9 | 33.4 | 25.0        | 32.0 | 38.2 |
|                                              | kW  | 1.90                               | 1.93 | 1.96 | 1.88        | 1.92 | 1.94 | 1.87        | 1.90 | 1.93 |
| 85                                           | TC  | 39.7                               | 35.4 | 31.5 | 42.3        | 37.9 | 33.9 | 44.0        | 39.5 | 35.7 |
|                                              | SHC | 17.0                               | 21.2 | 25.5 | 19.8        | 25.5 | 31.1 | 22.4        | 29.4 | 35.7 |
|                                              | kW  | 2.19                               | 2.20 | 2.21 | 2.18        | 2.19 | 2.21 | 2.17        | 2.19 | 2.20 |
| 95                                           | TC  | 37.0                               | 32.9 | 29.1 | 39.4        | 35.2 | 31.3 | 40.9        | 36.7 | 33.1 |
|                                              | SHC | 14.5                               | 18.9 | 23.3 | 17.2        | 23.0 | 28.8 | 19.6        | 26.9 | 33.1 |
|                                              | kW  | 2.48                               | 2.48 | 2.48 | 2.48        | 2.48 | 2.48 | 2.48        | 2.48 | 2.48 |
| 105                                          | TC  | 34.1                               | 30.2 | 26.7 | 36.3        | 32.4 | 28.7 | 37.7        | 33.7 | 30.4 |
|                                              | SHC | 12.0                               | 16.6 | 21.1 | 14.5        | 20.5 | 26.4 | 16.8        | 24.2 | 30.4 |
|                                              | kW  | 2.78                               | 2.77 | 2.76 | 2.79        | 2.78 | 2.76 | 2.79        | 2.78 | 2.77 |
| 115                                          | TC  | 31.2                               | 27.5 | 24.2 | 33.2        | 29.4 | 26.0 | 34.4        | 30.6 | 27.6 |
|                                              | SHC | 9.4                                | 14.1 | 18.8 | 11.6        | 17.8 | 23.9 | 13.8        | 21.4 | 27.6 |
|                                              | kW  | 3.10                               | 3.08 | 3.05 | 3.11        | 3.09 | 3.07 | 3.11        | 3.09 | 3.08 |
| 125                                          | TC  | 28.2                               | 24.7 | 21.5 | 29.9        | 26.4 | 23.2 | 31.0        | 27.4 | 24.7 |
|                                              | SHC | 6.7                                | 11.5 | 16.4 | 8.7         | 15.1 | 21.3 | 10.7        | 18.5 | 24.7 |
|                                              | kW  | 3.42                               | 3.39 | 3.36 | 3.43        | 3.41 | 3.38 | 3.44        | 3.42 | 3.40 |

## 48JC(G/H)W04 Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

| TEMP (°F)<br>AIR ENTERING<br>CONDENSER (Edb) |     | AIR ENTERING EVAPORATOR — Ewb (F)              |       |       |                                              |       |       |                                                |       |       |
|----------------------------------------------|-----|------------------------------------------------|-------|-------|----------------------------------------------|-------|-------|------------------------------------------------|-------|-------|
|                                              |     | 75 Dry Bulb<br>62.5 Wet Bulb<br>(50% Relative) |       |       | 75 Dry Bulb<br>64 Wet Bulb<br>(56% Relative) |       |       | 75 Dry Bulb<br>65.3 Wet Bulb<br>(60% Relative) |       |       |
|                                              |     | Air Entering Evaporator — cfm                  |       |       |                                              |       |       |                                                |       |       |
|                                              |     | 900                                            | 1200  | 1500  | 900                                          | 1200  | 1500  | 900                                            | 1200  | 1500  |
| 80                                           | TC  | 8.57                                           | 9.09  | 9.51  | 8.77                                         | 9.26  | 9.60  | 9.52                                           | 9.89  | 9.79  |
|                                              | SHC | 0.47                                           | 2.04  | 3.65  | -0.50                                        | 0.68  | 1.83  | -1.07                                          | -0.30 | 0.29  |
|                                              | kW  | 1.75                                           | 1.73  | 1.72  | 1.73                                         | 1.71  | 1.70  | 1.72                                           | 1.70  | 1.69  |
| 75                                           | TC  | 9.11                                           | 9.45  | 9.82  | 9.24                                         | 9.81  | 10.16 | 9.67                                           | 10.10 | 10.37 |
|                                              | SHC | 0.71                                           | 2.23  | 3.84  | -0.35                                        | 0.88  | 2.06  | -1.08                                          | -0.26 | 0.57  |
|                                              | kW  | 1.75                                           | 1.73  | 1.72  | 1.73                                         | 1.71  | 1.70  | 1.72                                           | 1.70  | 1.69  |
| 70                                           | TC  | 9.35                                           | 10.00 | 9.97  | 9.63                                         | 10.58 | 10.35 | 9.98                                           | 10.53 | 10.69 |
|                                              | SHC | 0.83                                           | 2.49  | 4.05  | -0.17                                        | 1.30  | 2.28  | -0.91                                          | -0.04 | 0.79  |
|                                              | kW  | 1.75                                           | 1.73  | 1.72  | 1.74                                         | 1.72  | 1.70  | 1.72                                           | 1.70  | 1.69  |
| 60                                           | TC  | 9.79                                           | 10.52 | 10.96 | 10.30                                        | 10.87 | 11.21 | 10.50                                          | 11.15 | 11.21 |
|                                              | SHC | 1.06                                           | 2.77  | 4.55  | 0.11                                         | 1.40  | 2.65  | -0.71                                          | 0.25  | 1.05  |
|                                              | kW  | 1.75                                           | 1.73  | 1.72  | 1.74                                         | 1.72  | 1.71  | 1.72                                           | 1.71  | 1.70  |
| 50                                           | TC  | 10.50                                          | 11.24 | 11.62 | 10.90                                        | 11.60 | 11.92 | 11.36                                          | 11.81 | 12.11 |
|                                              | SHC | 1.39                                           | 3.24  | 4.98  | 0.36                                         | 1.74  | 3.02  | -0.38                                          | 0.54  | 1.44  |
|                                              | kW  | 1.76                                           | 1.74  | 1.72  | 1.74                                         | 1.72  | 1.71  | 1.73                                           | 1.71  | 1.70  |
| 40                                           | TC  | 11.12                                          | 11.93 | 12.42 | 11.57                                        | 12.32 | 12.68 | 11.94                                          | 12.60 | 12.95 |
|                                              | SHC | 1.81                                           | 3.71  | 5.54  | 0.68                                         | 2.11  | 3.48  | -0.15                                          | 0.92  | 1.87  |
|                                              | kW  | 1.76                                           | 1.74  | 1.72  | 1.75                                         | 1.72  | 1.71  | 1.73                                           | 1.71  | 1.70  |

### 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             |

## 48JC(G/H)\*05 Low Speed (1600 Compressor rpm and 500 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*05 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 1000<br>cfm  | EAT<br>(wb) | 58 | TC  | 19.5                     | 19.5 | 22.0 | 18.3     | 18.3 | 20.8 | 17.1     | 17.1 | 19.4 | 15.8     | 15.8 | 18.0 | 14.4     | 14.4 | 16.5 |
|              |             |    | SHC | 16.9                     | 19.5 | 22.0 | 15.8     | 18.3 | 20.8 | 14.7     | 17.1 | 19.4 | 13.6     | 15.8 | 18.0 | 12.3     | 14.4 | 16.5 |
|              |             | 62 | TC  | 19.5                     | 19.5 | 22.9 | 18.3     | 18.3 | 21.6 | 17.1     | 17.1 | 20.2 | 15.8     | 15.8 | 18.8 | 14.4     | 14.4 | 17.2 |
|              |             |    | SHC | 16.0                     | 19.5 | 22.9 | 15.0     | 18.3 | 21.6 | 13.9     | 17.1 | 20.2 | 12.8     | 15.8 | 18.8 | 11.6     | 14.4 | 17.2 |
|              |             | 67 | TC  | 19.5                     | 19.5 | 24.6 | 18.3     | 18.3 | 23.3 | 17.1     | 17.1 | 21.8 | 15.8     | 15.8 | 20.3 | 14.5     | 14.5 | 18.7 |
|              |             |    | SHC | 14.3                     | 19.5 | 24.6 | 13.4     | 18.3 | 23.3 | 12.4     | 17.1 | 21.8 | 11.4     | 15.8 | 20.3 | 10.3     | 14.5 | 18.7 |
|              |             | 72 | TC  | 21.6                     | 21.6 | 21.6 | 20.2     | 20.2 | 20.2 | 18.7     | 18.7 | 18.7 | 17.2     | 17.2 | 17.5 | 15.5     | 15.5 | 16.7 |
|              |             |    | SHC | 9.3                      | 14.5 | 19.7 | 8.6      | 13.8 | 19.0 | 7.9      | 13.1 | 18.3 | 7.1      | 12.3 | 17.5 | 6.4      | 11.6 | 16.7 |
|              |             | 76 | TC  | —                        | 23.6 | 23.6 | —        | 22.1 | 22.1 | —        | 20.5 | 20.5 | —        | 18.8 | 18.8 | —        | 15.9 | 15.9 |
|              |             |    | SHC | —                        | 10.3 | 15.3 | —        | 9.6  | 14.6 | —        | 8.8  | 13.8 | —        | 8.0  | 13.0 | —        | 10.3 | 15.8 |
| 1200<br>cfm  | EAT<br>(wb) | 58 | TC  | 20.3                     | 20.3 | 23.0 | 19.1     | 19.1 | 21.7 | 17.8     | 17.8 | 20.3 | 16.5     | 16.5 | 18.8 | 15.1     | 15.1 | 17.2 |
|              |             |    | SHC | 17.7                     | 20.3 | 23.0 | 16.6     | 19.1 | 21.7 | 15.4     | 17.8 | 20.3 | 14.2     | 16.5 | 18.8 | 12.9     | 15.1 | 17.2 |
|              |             | 62 | TC  | 20.4                     | 20.4 | 23.9 | 19.1     | 19.1 | 22.6 | 17.9     | 17.9 | 21.1 | 16.5     | 16.5 | 19.6 | 15.1     | 15.1 | 18.0 |
|              |             |    | SHC | 16.8                     | 20.4 | 23.9 | 15.7     | 19.1 | 22.6 | 14.6     | 17.9 | 21.1 | 13.4     | 16.5 | 19.6 | 12.2     | 15.1 | 18.0 |
|              |             | 67 | TC  | 20.4                     | 20.4 | 25.8 | 19.2     | 19.2 | 24.3 | 17.9     | 17.9 | 22.8 | 16.5     | 16.5 | 21.2 | 15.1     | 15.1 | 19.4 |
|              |             |    | SHC | 15.0                     | 20.4 | 25.8 | 14.0     | 19.2 | 24.3 | 13.0     | 17.9 | 22.8 | 11.9     | 16.5 | 21.2 | 10.7     | 15.1 | 19.4 |
|              |             | 72 | TC  | 22.0                     | 22.0 | 22.2 | 20.5     | 20.5 | 21.5 | 19.0     | 19.0 | 20.8 | 17.4     | 17.4 | 20.0 | 15.7     | 15.7 | 19.2 |
|              |             |    | SHC | 9.9                      | 16.1 | 22.2 | 9.2      | 15.4 | 21.5 | 8.5      | 14.6 | 20.8 | 7.7      | 13.9 | 20.0 | 7.0      | 13.1 | 19.2 |
|              |             | 76 | TC  | —                        | 24.0 | 24.0 | —        | 22.4 | 22.4 | —        | 20.8 | 20.8 | —        | 19.1 | 19.1 | —        | 16.5 | 16.5 |
|              |             |    | SHC | —                        | 11.0 | 16.9 | —        | 10.2 | 16.1 | —        | 9.4  | 15.3 | —        | 8.6  | 14.4 | —        | 9.8  | 16.4 |
| 1400<br>cfm  | EAT<br>(wb) | 58 | TC  | 21.0                     | 21.0 | 23.8 | 19.8     | 19.8 | 22.4 | 18.4     | 18.4 | 21.0 | 17.0     | 17.0 | 19.4 | 15.6     | 15.6 | 17.8 |
|              |             |    | SHC | 18.3                     | 21.0 | 23.8 | 17.1     | 19.8 | 22.4 | 15.9     | 18.4 | 21.0 | 14.7     | 17.0 | 19.4 | 13.3     | 15.6 | 17.8 |
|              |             | 62 | TC  | 21.1                     | 21.1 | 24.7 | 19.8     | 19.8 | 23.3 | 18.5     | 18.5 | 21.8 | 17.0     | 17.0 | 20.2 | 15.6     | 15.6 | 18.5 |
|              |             |    | SHC | 17.4                     | 21.1 | 24.7 | 16.3     | 19.8 | 23.3 | 15.1     | 18.5 | 21.8 | 13.9     | 17.0 | 20.2 | 12.6     | 15.6 | 18.5 |
|              |             | 67 | TC  | 21.1                     | 21.1 | 26.6 | 19.8     | 19.8 | 25.1 | 18.5     | 18.5 | 23.5 | 17.1     | 17.1 | 21.8 | 15.6     | 15.6 | 20.0 |
|              |             |    | SHC | 15.6                     | 21.1 | 26.6 | 14.5     | 19.8 | 25.1 | 13.4     | 18.5 | 23.5 | 12.3     | 17.1 | 21.8 | 11.1     | 15.6 | 20.0 |
|              |             | 72 | TC  | 22.2                     | 22.2 | 24.7 | 20.7     | 20.7 | 24.0 | 19.2     | 19.2 | 23.2 | 17.6     | 17.6 | 22.4 | 15.9     | 15.9 | 21.6 |
|              |             |    | SHC | 10.5                     | 17.6 | 24.7 | 9.8      | 16.9 | 24.0 | 9.1      | 16.1 | 23.2 | 8.3      | 15.4 | 22.4 | 7.6      | 14.6 | 21.6 |
|              |             | 76 | TC  | —                        | 24.2 | 24.2 | —        | 22.7 | 22.7 | —        | 21.0 | 21.0 | —        | 19.2 | 19.2 | —        | 17.4 | 17.4 |
|              |             |    | SHC | —                        | 11.6 | 18.3 | —        | 10.8 | 17.5 | —        | 10.0 | 16.5 | —        | 9.1  | 15.5 | —        | 8.1  | 14.3 |
| 1600<br>cfm  | EAT<br>(wb) | 58 | TC  | 21.6                     | 21.6 | 24.4 | 20.3     | 20.3 | 23.0 | 18.9     | 18.9 | 21.5 | 17.5     | 17.5 | 19.9 | 15.9     | 15.9 | 18.2 |
|              |             |    | SHC | 18.8                     | 21.6 | 24.4 | 17.6     | 20.3 | 23.0 | 16.3     | 18.9 | 21.5 | 15.1     | 17.5 | 19.9 | 13.7     | 15.9 | 18.2 |
|              |             | 62 | TC  | 21.6                     | 21.6 | 25.4 | 20.3     | 20.3 | 23.9 | 18.9     | 18.9 | 22.4 | 17.5     | 17.5 | 20.7 | 15.9     | 15.9 | 19.0 |
|              |             |    | SHC | 17.8                     | 21.6 | 25.4 | 16.7     | 20.3 | 23.9 | 15.5     | 18.9 | 22.4 | 14.3     | 17.5 | 20.7 | 12.9     | 15.9 | 19.0 |
|              |             | 67 | TC  | 21.6                     | 21.6 | 27.2 | 20.3     | 20.3 | 25.7 | 18.9     | 18.9 | 24.1 | 17.5     | 17.5 | 22.4 | 16.0     | 16.0 | 20.5 |
|              |             |    | SHC | 16.0                     | 21.6 | 27.2 | 14.9     | 20.3 | 25.7 | 13.8     | 18.9 | 24.1 | 12.7     | 17.5 | 22.4 | 11.4     | 16.0 | 20.5 |
|              |             | 72 | TC  | 22.4                     | 22.4 | 27.1 | 20.9     | 20.9 | 26.3 | 19.3     | 19.3 | 25.5 | 17.7     | 17.7 | 24.6 | 16.2     | 16.2 | 22.0 |
|              |             |    | SHC | 11.1                     | 19.1 | 27.1 | 10.4     | 18.4 | 26.3 | 9.7      | 17.6 | 25.5 | 8.9      | 16.8 | 24.6 | 7.8      | 14.9 | 22.0 |
|              |             | 76 | TC  | —                        | 24.4 | 24.4 | —        | 22.8 | 22.8 | —        | 21.1 | 21.1 | —        | 19.3 | 19.3 | —        | 17.5 | 17.5 |
|              |             |    | SHC | —                        | 12.0 | 19.5 | —        | 11.3 | 18.6 | —        | 10.4 | 17.6 | —        | 9.4  | 16.3 | —        | 8.5  | 17.3 |
| 1800<br>cfm  | EAT<br>(wb) | 58 | TC  | 22.0                     | 22.0 | 24.9 | 20.7     | 20.7 | 23.4 | 19.3     | 19.3 | 21.9 | 17.8     | 17.8 | 20.3 | 16.2     | 16.2 | 18.5 |
|              |             |    | SHC | 19.2                     | 22.0 | 24.9 | 18.0     | 20.7 | 23.4 | 16.7     | 19.3 | 21.9 | 15.4     | 17.8 | 20.3 | 13.9     | 16.2 | 18.5 |
|              |             | 62 | TC  | 22.1                     | 22.1 | 25.9 | 20.7     | 20.7 | 24.4 | 19.3     | 19.3 | 22.8 | 17.8     | 17.8 | 21.1 | 16.2     | 16.2 | 19.3 |
|              |             |    | SHC | 18.2                     | 22.1 | 25.9 | 17.0     | 20.7 | 24.4 | 15.8     | 19.3 | 22.8 | 14.6     | 17.8 | 21.1 | 13.2     | 16.2 | 19.3 |
|              |             | 67 | TC  | 22.1                     | 22.1 | 27.8 | 20.7     | 20.7 | 26.2 | 19.3     | 19.3 | 24.6 | 17.8     | 17.8 | 22.8 | 16.3     | 16.3 | 20.9 |
|              |             |    | SHC | 16.3                     | 22.1 | 27.8 | 15.2     | 20.7 | 26.2 | 14.1     | 19.3 | 24.6 | 12.9     | 17.8 | 22.8 | 11.7     | 16.3 | 20.9 |
|              |             | 72 | TC  | 22.5                     | 22.5 | 29.3 | 21.0     | 21.0 | 28.5 | 19.7     | 19.7 | 24.8 | 18.1     | 18.1 | 23.9 | —        | 16.9 | 22.3 |
|              |             |    | SHC | 11.6                     | 20.5 | 29.3 | 10.9     | 19.7 | 28.5 | 9.5      | 17.2 | 24.8 | 8.8      | 16.4 | 23.9 | —        | 12.4 | 22.3 |
|              |             | 76 | TC  | —                        | 24.6 | 24.6 | —        | 22.9 | 22.9 | —        | 21.2 | 21.2 | —        | 19.3 | 19.3 | —        | 17.5 | 17.5 |
|              |             |    | SHC | —                        | 12.5 | 20.6 | —        | 11.6 | 19.5 | —        | 10.7 | 18.5 | —        | 9.6  | 17.1 | —        | 8.5  | 15.6 |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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

## 48JC(G/H)\*05 Intermediate Speed (2567 Compressor rpm and 825 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*05 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 1000<br>cfm  | EAT<br>(wb) | 58 | TC  | 28.0                     | 28.0 | 31.7 | 26.5     | 26.5 | 30.1 | 25.0     | 25.0 | 28.4 | 23.5     | 23.5 | 26.7 | 21.8     | 21.8 | 24.8 |
|              |             |    | SHC | 24.3                     | 28.0 | 31.7 | 23.0     | 26.5 | 30.1 | 21.6     | 25.0 | 28.4 | 20.2     | 23.5 | 26.7 | 18.7     | 21.8 | 24.8 |
|              |             | 62 | TC  | 28.0                     | 28.0 | 32.9 | 26.6     | 26.6 | 31.3 | 25.1     | 25.1 | 29.6 | 23.5     | 23.5 | 27.8 | 21.8     | 21.8 | 25.9 |
|              |             |    | SHC | 23.1                     | 28.0 | 32.9 | 21.8     | 26.6 | 31.3 | 20.5     | 25.1 | 29.6 | 19.2     | 23.5 | 27.8 | 17.7     | 21.8 | 25.9 |
|              |             | 67 | TC  | 30.5                     | 30.5 | 30.5 | 28.7     | 28.7 | 28.7 | 26.8     | 26.8 | 27.2 | 24.8     | 24.8 | 26.2 | 22.7     | 22.7 | 25.2 |
|              |             |    | SHC | 18.5                     | 23.8 | 29   | 17.6     | 22.9 | 28.1 | 16.7     | 21.9 | 27.2 | 15.7     | 21.0 | 26.2 | 14.7     | 19.9 | 25.2 |
|              |             | 72 | TC  | 33.7                     | 33.7 | 33.7 | 31.8     | 31.8 | 31.8 | 29.8     | 29.8 | 29.8 | 27.7     | 27.7 | 27.7 | 25.4     | 25.4 | 25.4 |
|              |             |    | SHC | 13.4                     | 18.6 | 23.8 | 12.4     | 17.7 | 22.9 | 11.5     | 16.7 | 22.0 | 10.6     | 15.8 | 21.0 | 9.5      | 14.8 | 20.0 |
|              |             | 76 | TC  | —                        | 36.5 | 36.5 | —        | 34.4 | 34.4 | —        | 32.3 | 32.3 | —        | 30.1 | 30.1 | —        | 27.6 | 27.6 |
|              |             |    | SHC | —                        | 14.4 | 19.5 | —        | 13.5 | 18.6 | —        | 12.5 | 17.6 | —        | 11.6 | 16.7 | —        | 10.5 | 15.6 |
| 1200<br>cfm  | EAT<br>(wb) | 58 | TC  | 29.6                     | 29.6 | 33.5 | 28.1     | 28.1 | 31.8 | 26.5     | 26.5 | 30.1 | 24.8     | 24.8 | 28.2 | 23.0     | 23.0 | 26.2 |
|              |             |    | SHC | 25.7                     | 29.6 | 33.5 | 24.4     | 28.1 | 31.8 | 22.9     | 26.5 | 30.1 | 21.4     | 24.8 | 28.2 | 19.8     | 23.0 | 26.2 |
|              |             | 62 | TC  | 29.7                     | 29.7 | 34.8 | 28.1     | 28.1 | 33.1 | 26.5     | 26.5 | 31.3 | 24.8     | 24.8 | 29.4 | 23.0     | 23.0 | 27.3 |
|              |             |    | SHC | 24.5                     | 29.7 | 34.8 | 23.1     | 28.1 | 33.1 | 21.7     | 26.5 | 31.3 | 20.3     | 24.8 | 29.4 | 18.7     | 23.0 | 27.3 |
|              |             | 67 | TC  | 31.3                     | 31.3 | 32.7 | 29.4     | 29.4 | 31.7 | 27.5     | 27.5 | 30.8 | 25.4     | 25.4 | 29.7 | 23.3     | 23.3 | 28.6 |
|              |             |    | SHC | 20.2                     | 26.4 | 32.7 | 19.3     | 25.5 | 31.7 | 18.3     | 24.6 | 30.8 | 17.4     | 23.5 | 29.7 | 16.3     | 22.4 | 28.6 |
|              |             | 72 | TC  | 34.6                     | 34.6 | 34.6 | 32.6     | 32.6 | 32.6 | 30.5     | 30.5 | 30.5 | 28.3     | 28.3 | 28.3 | 25.9     | 25.9 | 25.9 |
|              |             |    | SHC | 14.0                     | 20.2 | 26.4 | 13.1     | 19.3 | 25.5 | 12.2     | 18.3 | 24.5 | 11.2     | 17.4 | 23.6 | 10.2     | 16.3 | 22.5 |
|              |             | 76 | TC  | —                        | 37.3 | 37.3 | —        | 35.2 | 35.2 | —        | 33.0 | 33.0 | —        | 30.7 | 30.7 | —        | 28.2 | 28.2 |
|              |             |    | SHC | —                        | 15.2 | 21.2 | —        | 14.2 | 20.3 | —        | 13.3 | 19.3 | —        | 12.3 | 18.3 | —        | 11.3 | 17.2 |
| 1400<br>cfm  | EAT<br>(wb) | 58 | TC  | 30.9                     | 30.9 | 35.0 | 29.3     | 29.3 | 33.2 | 27.6     | 27.6 | 31.3 | 25.8     | 25.8 | 29.3 | 23.9     | 23.9 | 27.2 |
|              |             |    | SHC | 26.9                     | 30.9 | 35.0 | 25.4     | 29.3 | 33.2 | 23.9     | 27.6 | 31.3 | 22.3     | 25.8 | 29.3 | 20.6     | 23.9 | 27.2 |
|              |             | 62 | TC  | 31.0                     | 31.0 | 36.3 | 29.3     | 29.3 | 34.5 | 27.7     | 27.7 | 32.6 | 25.8     | 25.8 | 30.5 | 23.9     | 23.9 | 28.4 |
|              |             |    | SHC | 25.6                     | 31.0 | 36.3 | 24.2     | 29.3 | 34.5 | 22.7     | 27.7 | 32.6 | 21.1     | 25.8 | 30.5 | 19.5     | 23.9 | 28.4 |
|              |             | 67 | TC  | 31.9                     | 31.9 | 36.2 | 30.0     | 30.0 | 35.2 | 28.0     | 28.0 | 34.1 | 26.3     | 26.3 | 30.7 | 24.3     | 24.3 | 28.6 |
|              |             |    | SHC | 21.8                     | 29   | 36.2 | 20.9     | 28.0 | 35.2 | 19.9     | 27.0 | 34.1 | 18.0     | 24.4 | 30.7 | 16.6     | 22.6 | 28.6 |
|              |             | 72 | TC  | 35.2                     | 35.2 | 35.2 | 33.1     | 33.1 | 33.1 | 30.9     | 30.9 | 30.9 | 28.7     | 28.7 | 28.7 | 26.3     | 26.3 | 26.3 |
|              |             |    | SHC | 14.6                     | 21.8 | 28.9 | 13.7     | 20.8 | 28.0 | 12.7     | 19.9 | 27.0 | 11.8     | 18.9 | 26.0 | 10.7     | 17.9 | 25.0 |
|              |             | 76 | TC  | —                        | 38.0 | 38.0 | —        | 35.8 | 35.8 | —        | 33.5 | 33.5 | —        | 31.1 | 31.1 | —        | 28.6 | 28.6 |
|              |             |    | SHC | —                        | 15.9 | 22.8 | —        | 14.9 | 21.9 | —        | 14.0 | 20.9 | —        | 12.9 | 19.8 | —        | 11.9 | 18.7 |
| 1600<br>cfm  | EAT<br>(wb) | 58 | TC  | 32.0                     | 32.0 | 36.1 | 30.3     | 30.3 | 34.3 | 28.5     | 28.5 | 32.4 | 26.7     | 26.7 | 30.3 | 24.7     | 24.7 | 28.1 |
|              |             |    | SHC | 27.8                     | 32.0 | 36.1 | 26.3     | 30.3 | 34.3 | 24.7     | 28.5 | 32.4 | 23.1     | 26.7 | 30.3 | 21.3     | 24.7 | 28.1 |
|              |             | 62 | TC  | 32.0                     | 32.0 | 37.6 | 30.3     | 30.3 | 35.7 | 28.6     | 28.6 | 33.7 | 26.7     | 26.7 | 31.5 | 24.7     | 24.7 | 29.2 |
|              |             |    | SHC | 26.5                     | 32.0 | 37.6 | 25.0     | 30.3 | 35.7 | 23.5     | 28.6 | 33.7 | 21.9     | 26.7 | 31.5 | 20.1     | 24.7 | 29.2 |
|              |             | 67 | TC  | 32.3                     | 32.3 | 39.4 | 30.8     | 30.8 | 36.1 | 29.2     | 29.2 | 32.2 | 26.8     | 26.8 | 34.0 | 24.7     | 24.7 | 31.5 |
|              |             |    | SHC | 23.3                     | 31.3 | 39.4 | 21.5     | 28.8 | 36.1 | 19.4     | 25.8 | 32.2 | 19.5     | 26.8 | 34.0 | 17.9     | 24.7 | 31.5 |
|              |             | 72 | TC  | 35.6                     | 35.6 | 35.6 | 33.5     | 33.5 | 33.5 | 31.3     | 31.3 | 31.3 | 29.0     | 29.0 | 29.0 | 26.6     | 26.6 | 27.4 |
|              |             |    | SHC | 15.2                     | 23.2 | 31.3 | 14.2     | 22.3 | 30.4 | 13.3     | 21.4 | 29.4 | 12.3     | 20.4 | 28.4 | 11.3     | 19.3 | 27.4 |
|              |             | 76 | TC  | —                        | 38.5 | 38.5 | —        | 36.2 | 36.2 | —        | 33.9 | 33.9 | —        | 31.5 | 31.5 | —        | 28.9 | 28.9 |
|              |             |    | SHC | —                        | 16.5 | 24.3 | —        | 15.5 | 23.3 | —        | 14.5 | 22.3 | —        | 13.5 | 21.2 | —        | 12.4 | 20.1 |
| 1800<br>cfm  | EAT<br>(wb) | 58 | TC  | 32.9                     | 32.9 | 37.1 | 31.1     | 31.1 | 35.2 | 29.3     | 29.3 | 33.2 | 27.4     | 27.4 | 31.1 | 25.3     | 25.3 | 28.8 |
|              |             |    | SHC | 28.6                     | 32.9 | 37.1 | 27.0     | 31.1 | 35.2 | 25.4     | 29.3 | 33.2 | 23.7     | 27.4 | 31.1 | 21.8     | 25.3 | 28.8 |
|              |             | 62 | TC  | 32.9                     | 32.9 | 38.6 | 31.2     | 31.2 | 36.6 | 29.3     | 29.3 | 34.5 | 27.4     | 27.4 | 32.4 | 25.3     | 25.3 | 30.0 |
|              |             |    | SHC | 27.2                     | 32.9 | 38.6 | 25.7     | 31.2 | 36.6 | 24.1     | 29.3 | 34.5 | 22.5     | 27.4 | 32.4 | 20.7     | 25.3 | 30.0 |
|              |             | 67 | TC  | 33.2                     | 33.2 | 39.5 | 31.8     | 31.8 | 34.8 | 29.3     | 29.3 | 37.2 | 27.4     | 27.4 | 34.9 | 25.3     | 25.3 | 32.3 |
|              |             |    | SHC | 23.6                     | 31.5 | 39.5 | 21.1     | 28.0 | 34.8 | 21.5     | 29.3 | 37.2 | 20.0     | 27.4 | 34.9 | 18.4     | 25.3 | 32.3 |
|              |             | 72 | TC  | 35.9                     | 35.9 | 35.9 | 33.8     | 33.8 | 33.8 | 31.6     | 31.6 | 31.7 | 29.2     | 29.2 | 30.8 | 26.7     | 26.7 | 29.7 |
|              |             |    | SHC | 15.7                     | 24.7 | 33.7 | 14.8     | 23.7 | 32.7 | 13.8     | 22.8 | 31.7 | 12.9     | 21.8 | 30.8 | 11.8     | 20.8 | 29.7 |
|              |             | 76 | TC  | —                        | 38.8 | 38.8 | —        | 36.6 | 36.6 | —        | 34.3 | 34.3 | —        | 31.7 | 31.7 | —        | 29.1 | 29.1 |
|              |             |    | SHC | —                        | 17.0 | 25.7 | —        | 16.1 | 24.7 | —        | 15.1 | 23.7 | —        | 14.0 | 22.5 | —        | 12.9 | 21.3 |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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

## 48JC(G/H)\*05 Full Speed (4500 Compressor rpm and 1100 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*05 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 1200<br>cfm  | EAT<br>(wb) | 58 | TC  | 42.6                     | 42.6 | 48.2 | 40.7     | 40.7 | 46.1 | 38.8     | 38.8 | 44.0 | 36.7     | 36.7 | 41.7 | 34.5     | 34.5 | 39.2 |
|              |             |    | SHC | 37.0                     | 42.6 | 48.2 | 35.3     | 40.7 | 46.1 | 33.6     | 38.8 | 44.0 | 31.8     | 36.7 | 41.7 | 29.8     | 34.5 | 39.2 |
|              |             | 62 | TC  | 44.8                     | 44.8 | 46.0 | 42.4     | 42.4 | 44.7 | 40.0     | 40.0 | 43.4 | 37.4     | 37.4 | 42.0 | 34.7     | 34.7 | 40.4 |
|              |             |    | SHC | 33.5                     | 39.8 | 46.0 | 32.2     | 38.5 | 44.7 | 30.9     | 37.2 | 43.4 | 29.5     | 35.8 | 42.0 | 28.1     | 34.2 | 40.4 |
|              |             | 67 | TC  | 49.4                     | 49.4 | 49.4 | 46.9     | 46.9 | 46.9 | 44.3     | 44.3 | 44.3 | 41.4     | 41.4 | 41.4 | 38.4     | 38.4 | 38.4 |
|              |             |    | SHC | 27.4                     | 33.6 | 39.9 | 26.1     | 32.4 | 38.6 | 24.8     | 31.1 | 37.3 | 23.5     | 29.7 | 36.0 | 22.1     | 28.3 | 34.5 |
|              |             | 72 | TC  | 54.4                     | 54.4 | 54.4 | 51.7     | 51.7 | 51.7 | 48.8     | 48.8 | 48.8 | 45.8     | 45.8 | 45.8 | 42.5     | 42.5 | 42.5 |
|              |             |    | SHC | 21.2                     | 27.4 | 33.6 | 19.9     | 26.1 | 32.4 | 18.6     | 24.8 | 31.0 | 17.3     | 23.5 | 29.7 | 15.9     | 22.1 | 28.3 |
|              |             | 76 | TC  | —                        | 58.6 | 58.6 | —        | 55.7 | 55.7 | —        | 52.7 | 52.7 | —        | 49.4 | 49.4 | —        | 45.9 | 45.9 |
|              |             |    | SHC | —                        | 22.3 | 28.3 | —        | 21.1 | 27.0 | —        | 19.8 | 25.8 | —        | 18.4 | 24.4 | —        | 17.0 | 23.0 |
| 1400<br>cfm  | EAT<br>(wb) | 58 | TC  | 45.0                     | 45.0 | 50.9 | 43.1     | 43.1 | 48.7 | 41.0     | 41.0 | 46.4 | 38.7     | 38.7 | 43.9 | 36.3     | 36.3 | 41.2 |
|              |             |    | SHC | 39.2                     | 45.0 | 50.9 | 37.4     | 43.1 | 48.7 | 35.5     | 41.0 | 46.4 | 33.5     | 38.7 | 43.9 | 31.4     | 36.3 | 41.2 |
|              |             | 62 | TC  | 46.2                     | 46.2 | 50.6 | 43.8     | 43.8 | 49.3 | 41.8     | 41.8 | 46.0 | 39.3     | 39.3 | 44.0 | 36.4     | 36.4 | 42.9 |
|              |             |    | SHC | 36.3                     | 43.5 | 50.6 | 34.9     | 42.1 | 49.3 | 32.7     | 39.3 | 46.0 | 31.0     | 37.5 | 44.0 | 29.8     | 36.4 | 42.9 |
|              |             | 67 | TC  | 50.9                     | 50.9 | 50.9 | 48.3     | 48.3 | 48.3 | 45.5     | 45.5 | 45.5 | 42.5     | 42.5 | 42.5 | 39.4     | 39.4 | 39.4 |
|              |             |    | SHC | 29.2                     | 36.4 | 43.6 | 27.9     | 35.1 | 42.3 | 26.6     | 33.8 | 41.0 | 25.2     | 32.4 | 39.6 | 23.7     | 30.9 | 38.1 |
|              |             | 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 | 43.5     | 43.5 | 43.5 |
|              |             |    | SHC | 21.9                     | 29.1 | 36.3 | 20.7     | 27.8 | 35.0 | 19.3     | 26.5 | 33.6 | 17.9     | 25.1 | 32.2 | 16.5     | 23.6 | 30.8 |
|              |             | 76 | TC  | —                        | 60.2 | 60.2 | —        | 57.2 | 57.2 | —        | 54.0 | 54.0 | —        | 50.6 | 50.6 | —        | 46.9 | 46.9 |
|              |             |    | SHC | —                        | 23.2 | 30.1 | —        | 21.9 | 28.8 | —        | 20.6 | 27.5 | —        | 19.2 | 26.2 | —        | 17.7 | 24.7 |
| 1600<br>cfm  | EAT<br>(wb) | 58 | TC  | 47.1                     | 47.1 | 53.2 | 45.0     | 45.0 | 50.9 | 42.8     | 42.8 | 48.4 | 40.4     | 40.4 | 45.8 | 37.8     | 37.8 | 42.9 |
|              |             |    | SHC | 41.0                     | 47.1 | 53.2 | 39.1     | 45.0 | 50.9 | 37.1     | 42.8 | 48.4 | 35.0     | 40.4 | 45.8 | 32.7     | 37.8 | 42.9 |
|              |             | 62 | TC  | 47.4                     | 47.4 | 54.8 | 45.5     | 45.5 | 51.1 | 43.2     | 43.2 | 49.0 | 40.4     | 40.4 | 47.6 | 37.9     | 37.9 | 44.7 |
|              |             |    | SHC | 38.8                     | 46.8 | 54.8 | 36.3     | 43.7 | 51.1 | 34.6     | 41.8 | 49.0 | 33.2     | 40.4 | 47.6 | 31.0     | 37.9 | 44.7 |
|              |             | 67 | TC  | 52.1                     | 52.1 | 52.1 | 49.3     | 49.3 | 49.3 | 46.4     | 46.4 | 46.4 | 43.4     | 43.4 | 43.4 | 40.1     | 40.1 | 41.6 |
|              |             |    | SHC | 30.8                     | 39.0 | 47.2 | 29.5     | 37.7 | 45.9 | 28.2     | 36.4 | 44.5 | 26.8     | 35.0 | 43.1 | 25.4     | 33.5 | 41.6 |
|              |             | 72 | TC  | 57.2                     | 57.2 | 57.2 | 54.2     | 54.2 | 54.2 | 51.1     | 51.1 | 51.1 | 47.8     | 47.8 | 47.8 | 44.2     | 44.2 | 44.2 |
|              |             |    | SHC | 22.6                     | 30.7 | 38.8 | 21.3     | 29.4 | 37.5 | 19.9     | 28.0 | 36.1 | 18.5     | 26.6 | 34.7 | 17.1     | 25.1 | 33.2 |
|              |             | 76 | TC  | —                        | 61.5 | 61.5 | —        | 58.3 | 58.3 | —        | 55.0 | 55.0 | —        | 51.5 | 51.5 | —        | 47.7 | 47.7 |
|              |             |    | SHC | —                        | 23.9 | 31.7 | —        | 22.6 | 30.5 | —        | 21.2 | 29.1 | —        | 19.9 | 27.7 | —        | 18.4 | 26.3 |
| 1800<br>cfm  | EAT<br>(wb) | 58 | TC  | 48.9                     | 48.9 | 55.2 | 46.6     | 46.6 | 52.7 | 44.3     | 44.3 | 50.1 | 41.8     | 41.8 | 47.4 | 39.1     | 39.1 | 44.4 |
|              |             |    | SHC | 42.5                     | 48.9 | 55.2 | 40.5     | 46.6 | 52.7 | 38.5     | 44.3 | 50.1 | 36.2     | 41.8 | 47.4 | 33.8     | 39.1 | 44.4 |
|              |             | 62 | TC  | 48.9                     | 48.9 | 57.4 | 46.7     | 46.7 | 54.8 | 44.3     | 44.3 | 52.1 | 41.8     | 41.8 | 49.3 | 39.1     | 39.1 | 46.2 |
|              |             |    | SHC | 40.4                     | 48.9 | 57.4 | 38.5     | 46.7 | 54.8 | 36.5     | 44.3 | 52.1 | 34.4     | 41.8 | 49.3 | 32.1     | 39.1 | 46.2 |
|              |             | 67 | TC  | 53.0                     | 53.0 | 53.0 | 50.2     | 50.2 | 50.2 | 47.2     | 47.2 | 48.0 | 44.0     | 44.0 | 46.5 | 40.7     | 40.7 | 45.0 |
|              |             |    | SHC | 32.4                     | 41.5 | 50.6 | 31.1     | 40.2 | 49.3 | 29.8     | 38.9 | 48.0 | 28.4     | 37.5 | 46.5 | 26.9     | 35.9 | 45.0 |
|              |             | 72 | TC  | 58.1                     | 58.1 | 58.1 | 55.1     | 55.1 | 55.1 | 51.8     | 51.8 | 51.8 | 48.4     | 48.4 | 48.4 | 44.8     | 44.8 | 44.8 |
|              |             |    | SHC | 23.1                     | 32.1 | 41.2 | 21.8     | 30.8 | 39.8 | 20.4     | 29.5 | 38.5 | 19.0     | 28.0 | 37.1 | 17.6     | 26.6 | 35.6 |
|              |             | 76 | TC  | —                        | 62.4 | 62.4 | —        | 59.2 | 59.2 | —        | 55.8 | 55.8 | —        | 52.2 | 52.2 | —        | 48.3 | 48.3 |
|              |             |    | SHC | —                        | 24.5 | 33.3 | —        | 23.2 | 32.0 | —        | 21.8 | 30.6 | —        | 20.4 | 29.2 | —        | 19.0 | 27.7 |
| 2000<br>cfm  | EAT<br>(wb) | 58 | TC  | 50.4                     | 50.4 | 56.9 | 48.1     | 48.1 | 54.3 | 45.6     | 45.6 | 51.6 | 43.0     | 43.0 | 48.7 | 40.2     | 40.2 | 45.6 |
|              |             |    | SHC | 43.9                     | 50.4 | 56.9 | 41.8     | 48.1 | 54.3 | 39.6     | 45.6 | 51.6 | 37.3     | 43.0 | 48.7 | 34.8     | 40.2 | 45.6 |
|              |             | 62 | TC  | 50.4                     | 50.4 | 59.1 | 48.1     | 48.1 | 56.5 | 45.6     | 45.6 | 53.7 | 43.0     | 43.0 | 50.7 | 40.2     | 40.2 | 47.4 |
|              |             |    | SHC | 41.7                     | 50.4 | 59.1 | 39.7     | 48.1 | 56.5 | 37.6     | 45.6 | 53.7 | 35.4     | 43.0 | 50.7 | 33.0     | 40.2 | 47.4 |
|              |             | 67 | TC  | 53.7                     | 53.7 | 54.0 | 50.8     | 50.8 | 52.6 | 47.7     | 47.7 | 51.3 | 44.5     | 44.5 | 49.8 | 41.1     | 41.1 | 48.2 |
|              |             |    | SHC | 34.0                     | 44.0 | 54.0 | 32.7     | 42.6 | 52.6 | 31.3     | 41.3 | 51.3 | 29.9     | 39.8 | 49.8 | 28.4     | 38.3 | 48.2 |
|              |             | 72 | TC  | 58.9                     | 58.9 | 58.9 | 55.8     | 55.8 | 55.8 | 52.5     | 52.5 | 52.5 | 49.0     | 49.0 | 49.0 | 45.3     | 45.3 | 45.3 |
|              |             |    | SHC | 23.6                     | 33.5 | 43.4 | 22.3     | 32.2 | 42.1 | 20.9     | 30.8 | 40.7 | 19.5     | 29.4 | 39.3 | 18.0     | 27.9 | 37.8 |
|              |             | 76 | TC  | —                        | 63.2 | 63.2 | —        | 59.9 | 59.9 | —        | 56.4 | 56.4 | —        | 52.7 | 52.7 | —        | 48.8 | 48.8 |
|              |             |    | SHC | —                        | 25.0 | 34.7 | —        | 23.7 | 33.4 | —        | 22.4 | 32.0 | —        | 20.9 | 30.5 | —        | 19.4 | 29.0 |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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

## 48JC(G/H)W05 Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

| TEMP (°F)<br>AIR ENTERING<br>CONDENSER (Edb) |     | AIR ENTERING EVAPORATOR — SCFM/BF  |      |      |             |      |      |             |      |      |
|----------------------------------------------|-----|------------------------------------|------|------|-------------|------|------|-------------|------|------|
|                                              |     | 1200 / 0.04                        |      |      | 1600 / 0.07 |      |      | 2000 / 0.10 |      |      |
|                                              |     | Air Entering Evaporator — Ewb (°F) |      |      |             |      |      |             |      |      |
|                                              |     | 72                                 | 67   | 62   | 72          | 67   | 62   | 72          | 67   | 62   |
| 75                                           | TC  | 54.9                               | 47.7 | 43.1 | 58.6        | 52.2 | 45.9 | 59.8        | 54.6 | 48.2 |
|                                              | SHC | 24.1                               | 28.4 | 34.7 | 28.2        | 35.4 | 42.7 | 31.0        | 41.2 | 48.2 |
|                                              | kW  | 2.69                               | 2.68 | 2.70 | 2.67        | 2.69 | 2.71 | 2.64        | 2.69 | 2.68 |
| 85                                           | TC  | 48.8                               | 45.2 | 39.8 | 54.4        | 48.4 | 43.0 | 56.5        | 50.4 | 45.3 |
|                                              | SHC | 18.4                               | 26.0 | 31.6 | 24.2        | 31.8 | 39.2 | 27.7        | 37.1 | 45.3 |
|                                              | kW  | 2.97                               | 3.02 | 3.01 | 3.01        | 3.02 | 3.02 | 3.01        | 3.02 | 3.01 |
| 95                                           | TC  | 47.0                               | 41.4 | 36.2 | 50.1        | 44.3 | 39.1 | 52.0        | 46.1 | 41.1 |
|                                              | SHC | 16.5                               | 22.3 | 28.1 | 20.1        | 27.8 | 35.4 | 23.4        | 33.0 | 41.1 |
|                                              | kW  | 3.35                               | 3.34 | 3.31 | 3.36        | 3.35 | 3.33 | 3.35        | 3.35 | 3.33 |
| 105                                          | TC  | 42.8                               | 37.5 | 32.5 | 45.6        | 40.1 | 35.1 | 47.3        | 41.7 | 37.2 |
|                                              | SHC | 12.6                               | 18.5 | 24.4 | 15.8        | 23.7 | 31.5 | 18.9        | 28.7 | 37.2 |
|                                              | kW  | 3.70                               | 3.67 | 3.63 | 3.71        | 3.69 | 3.65 | 3.71        | 3.69 | 3.67 |
| 115                                          | TC  | 38.6                               | 33.3 | 28.6 | 41.0        | 35.7 | 30.9 | 42.5        | 37.1 | 32.9 |
|                                              | SHC | 8.5                                | 14.5 | 20.7 | 11.4        | 19.4 | 27.5 | 14.3        | 24.2 | 32.9 |
|                                              | kW  | 4.06                               | 4.01 | 3.96 | 4.08        | 4.04 | 3.99 | 4.08        | 4.05 | 4.01 |
| 125                                          | TC  | 34.0                               | 29.1 | 24.5 | 36.2        | 31.1 | 26.5 | 37.5        | 32.3 | 28.1 |
|                                              | SHC | 4.1                                | 10.4 | 16.7 | 6.8         | 15.0 | 23.1 | 9.4         | 19.5 | 28.1 |
|                                              | kW  | 4.43                               | 4.37 | 4.30 | 4.45        | 4.40 | 4.34 | 4.46        | 4.42 | 4.37 |

## 48JC(G/H)W05 Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

| TEMP (°F)<br>AIR ENTERING<br>CONDENSER (Edb) |     | AIR ENTERING EVAPORATOR — Ewb (°F)             |       |       |                                              |       |       |                                                |       |       |
|----------------------------------------------|-----|------------------------------------------------|-------|-------|----------------------------------------------|-------|-------|------------------------------------------------|-------|-------|
|                                              |     | 75 Dry Bulb<br>62.5 Wet Bulb<br>(50% Relative) |       |       | 75 Dry Bulb<br>64 Wet Bulb<br>(56% Relative) |       |       | 75 Dry Bulb<br>65.3 Wet Bulb<br>(60% Relative) |       |       |
|                                              |     | Air Entering Evaporator — cfm                  |       |       |                                              |       |       |                                                |       |       |
|                                              |     | 1200                                           | 1600  | 2000  | 1200                                         | 1600  | 2000  | 1200                                           | 1600  | 2000  |
| 80                                           | TC  | 14.64                                          | 15.29 | 15.89 | 15.82                                        | 16.51 | 17.11 | 16.60                                          | 17.29 | 17.90 |
|                                              | SHC | -0.49                                          | -2.20 | -3.63 | 1.60                                         | -0.60 | -2.47 | 4.11                                           | 1.42  | -0.86 |
|                                              | kW  | 2.69                                           | 2.71  | 2.72  | 2.67                                         | 2.68  | 2.69  | 2.65                                           | 2.66  | 2.67  |
| 75                                           | TC  | 15.88                                          | 16.57 | 17.21 | 17.12                                        | 17.83 | 18.48 | 17.92                                          | 18.65 | 19.30 |
|                                              | SHC | 1.08                                           | -0.51 | -1.79 | 3.30                                         | 1.22  | -0.48 | 5.86                                           | 3.32  | 1.19  |
|                                              | kW  | 2.57                                           | 2.58  | 2.59  | 2.54                                         | 2.55  | 2.56  | 2.52                                           | 2.53  | 2.54  |
| 70                                           | TC  | 16.57                                          | 17.27 | 17.90 | 17.72                                        | 18.54 | 19.19 | 18.65                                          | 19.37 | 20.01 |
|                                              | SHC | 1.77                                           | 0.18  | -1.14 | 3.81                                         | 1.92  | 0.18  | 6.59                                           | 4.03  | 1.86  |
|                                              | kW  | 2.53                                           | 2.55  | 2.57  | 2.54                                         | 2.53  | 2.54  | 2.50                                           | 2.51  | 2.52  |
| 60                                           | TC  | 17.01                                          | 18.16 | 18.76 | 18.77                                        | 19.43 | 20.05 | 19.56                                          | 20.24 | 20.86 |
|                                              | SHC | 1.72                                           | 0.71  | -0.73 | 4.64                                         | 2.39  | 0.51  | 7.17                                           | 4.44  | 2.13  |
|                                              | kW  | 2.62                                           | 2.56  | 2.58  | 2.53                                         | 2.55  | 2.57  | 2.52                                           | 2.54  | 2.55  |
| 50                                           | TC  | 18.49                                          | 19.16 | 19.73 | 19.77                                        | 20.40 | 20.98 | 20.54                                          | 21.20 | 21.79 |
|                                              | SHC | 3.32                                           | 1.55  | 0.01  | 5.50                                         | 3.16  | 1.17  | 7.98                                           | 5.19  | 2.79  |
|                                              | kW  | 2.52                                           | 2.55  | 2.57  | 2.52                                         | 2.55  | 2.57  | 2.52                                           | 2.54  | 2.56  |
| 40                                           | TC  | 19.45                                          | 20.07 | 20.61 | 20.66                                        | 21.28 | 21.84 | 21.42                                          | 22.05 | 22.62 |
|                                              | SHC | 4.17                                           | 2.31  | 0.70  | 6.25                                         | 3.87  | 1.82  | 8.73                                           | 5.86  | 3.39  |
|                                              | kW  | 2.50                                           | 2.53  | 2.56  | 2.51                                         | 2.54  | 2.57  | 2.51                                           | 2.54  | 2.57  |

### 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             |



## 48JC(G/H)\*06 Low Speed (1900 Compressor rpm and 800 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*06 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 1250<br>cfm  | EAT<br>(wb) | 58 | TC  | 29.4                     | 29.4 | 33.2 | 27.9     | 27.9 | 31.6 | 26.3     | 26.3 | 29.8 | 24.6     | 24.6 | 27.9 | 22.8     | 22.8 | 25.9 |
|              |             |    | SHC | 25.6                     | 29.4 | 33.2 | 24.2     | 27.9 | 31.6 | 22.8     | 26.3 | 29.8 | 21.3     | 24.6 | 27.9 | 19.7     | 22.8 | 25.9 |
|              |             | 62 | TC  | 29.4                     | 29.4 | 34.5 | 27.9     | 27.9 | 32.8 | 26.3     | 26.3 | 31.0 | 24.6     | 24.6 | 29.1 | 22.7     | 22.7 | 26.9 |
|              |             |    | SHC | 24.3                     | 29.4 | 34.5 | 23.0     | 27.9 | 32.8 | 21.7     | 26.3 | 31.0 | 20.2     | 24.6 | 29.1 | 18.6     | 22.7 | 26.9 |
|              |             | 67 | TC  | 30.7                     | 30.7 | 33.3 | 28.9     | 28.9 | 32.5 | 27.0     | 27.0 | 31.5 | 24.9     | 24.9 | 30.5 | 23.3     | 23.3 | 26.2 |
|              |             |    | SHC | 20.4                     | 26.9 | 33.3 | 19.6     | 26.0 | 32.5 | 18.7     | 25.1 | 31.5 | 17.7     | 24.1 | 30.5 | 15.5     | 20.8 | 26.2 |
|              |             | 72 | TC  | 33.9                     | 33.9 | 33.9 | 31.9     | 31.9 | 31.9 | 29.9     | 29.9 | 29.9 | 27.6     | 27.6 | 27.6 | 25.2     | 25.2 | 25.2 |
|              |             |    | SHC | 14.0                     | 20.4 | 26.8 | 13.2     | 19.6 | 26.0 | 12.3     | 18.7 | 25.1 | 11.4     | 17.8 | 24.2 | 10.4     | 16.8 | 23.2 |
|              |             | 76 | TC  | —                        | 36.6 | 36.6 | —        | 34.5 | 34.5 | —        | 32.4 | 32.4 | —        | 30.0 | 30.0 | —        | 27.5 | 27.5 |
|              |             |    | SHC | —                        | 15.2 | 21.5 | —        | 14.3 | 20.6 | —        | 13.5 | 19.8 | —        | 12.5 | 18.9 | —        | 11.6 | 17.9 |
| 1500<br>cfm  | EAT<br>(wb) | 58 | TC  | 30.8                     | 30.8 | 34.8 | 29.2     | 29.2 | 33.1 | 27.6     | 27.6 | 31.2 | 25.7     | 25.7 | 29.2 | 23.8     | 23.8 | 27.0 |
|              |             |    | SHC | 26.8                     | 30.8 | 34.8 | 25.4     | 29.2 | 33.1 | 23.9     | 27.6 | 31.2 | 22.3     | 25.7 | 29.2 | 20.6     | 23.8 | 27.0 |
|              |             | 62 | TC  | 30.9                     | 30.9 | 36.2 | 29.3     | 29.3 | 34.4 | 27.6     | 27.6 | 32.4 | 25.7     | 25.7 | 30.3 | 23.8     | 23.8 | 28.1 |
|              |             |    | SHC | 25.5                     | 30.9 | 36.2 | 24.2     | 29.3 | 34.4 | 22.7     | 27.6 | 32.4 | 21.1     | 25.7 | 30.3 | 19.5     | 23.8 | 28.1 |
|              |             | 67 | TC  | 31.3                     | 31.3 | 37.5 | 29.5     | 29.5 | 36.4 | 28.2     | 28.2 | 31.0 | 25.8     | 25.8 | 32.7 | 23.8     | 23.8 | 30.2 |
|              |             |    | SHC | 22.4                     | 29.9 | 37.5 | 21.4     | 28.9 | 36.4 | 18.8     | 24.9 | 31.0 | 18.9     | 25.8 | 32.7 | 17.3     | 23.8 | 30.2 |
|              |             | 72 | TC  | 34.5                     | 34.5 | 34.5 | 32.5     | 32.5 | 32.5 | 30.4     | 30.4 | 30.4 | 28.1     | 28.1 | 28.1 | 25.6     | 25.6 | 26.3 |
|              |             |    | SHC | 14.7                     | 22.3 | 29.9 | 13.9     | 21.5 | 29.1 | 13.0     | 20.6 | 28.2 | 12.1     | 19.7 | 27.3 | 11.1     | 18.7 | 26.3 |
|              |             | 76 | TC  | —                        | 37.3 | 37.3 | —        | 35.2 | 35.2 | —        | 32.9 | 32.9 | —        | 30.5 | 30.5 | —        | 27.9 | 27.9 |
|              |             |    | SHC | —                        | 16.0 | 23.5 | —        | 15.2 | 22.6 | —        | 14.3 | 21.8 | —        | 13.4 | 20.8 | —        | 12.4 | 19.8 |
| 1750<br>cfm  | EAT<br>(wb) | 58 | TC  | 32.0                     | 32.0 | 36.1 | 30.3     | 30.3 | 34.2 | 28.5     | 28.5 | 32.3 | 26.6     | 26.6 | 30.2 | 24.6     | 24.6 | 27.9 |
|              |             |    | SHC | 27.8                     | 32.0 | 36.1 | 26.3     | 30.3 | 34.2 | 24.8     | 28.5 | 32.3 | 23.1     | 26.6 | 30.2 | 21.2     | 24.6 | 27.9 |
|              |             | 62 | TC  | 32.0                     | 32.0 | 37.5 | 30.3     | 30.3 | 35.6 | 28.6     | 28.6 | 33.6 | 26.6     | 26.6 | 31.4 | 24.6     | 24.6 | 29.0 |
|              |             |    | SHC | 26.5                     | 32.0 | 37.5 | 25.0     | 30.3 | 35.6 | 23.5     | 28.6 | 33.6 | 21.9     | 26.6 | 31.4 | 20.1     | 24.6 | 29.0 |
|              |             | 67 | TC  | 32.3                     | 32.3 | 38.4 | 30.6     | 30.6 | 36.6 | 28.6     | 28.6 | 36.1 | 26.7     | 26.7 | 33.8 | 24.6     | 24.6 | 31.2 |
|              |             |    | SHC | 23.0                     | 30.7 | 38.4 | 21.8     | 29.2 | 36.6 | 21.0     | 28.6 | 36.1 | 19.6     | 26.7 | 33.8 | 17.9     | 24.6 | 31.2 |
|              |             | 72 | TC  | 34.9                     | 34.9 | 34.9 | 32.9     | 32.9 | 32.9 | 30.7     | 30.7 | 31.2 | 28.4     | 28.4 | 30.3 | 25.8     | 25.8 | 29.3 |
|              |             |    | SHC | 15.4                     | 24.1 | 32.9 | 14.5     | 23.3 | 32.1 | 13.7     | 22.4 | 31.2 | 12.8     | 21.5 | 30.3 | 11.8     | 20.6 | 29.3 |
|              |             | 76 | TC  | —                        | 37.8 | 37.8 | —        | 35.6 | 35.6 | —        | 33.3 | 33.3 | —        | 30.8 | 30.8 | —        | 28.2 | 28.2 |
|              |             |    | SHC | —                        | 16.8 | 25.4 | —        | 15.9 | 24.5 | —        | 15.0 | 23.6 | —        | 14.1 | 22.7 | —        | 13.1 | 21.7 |
| 2000<br>cfm  | EAT<br>(wb) | 58 | TC  | 32.9                     | 32.9 | 37.1 | 31.1     | 31.1 | 35.2 | 29.3     | 29.3 | 33.2 | 27.3     | 27.3 | 31.0 | 25.2     | 25.2 | 28.6 |
|              |             |    | SHC | 28.6                     | 32.9 | 37.1 | 27.1     | 31.1 | 35.2 | 25.5     | 29.3 | 33.2 | 23.7     | 27.3 | 31.0 | 21.8     | 25.2 | 28.6 |
|              |             | 62 | TC  | 32.9                     | 32.9 | 38.6 | 31.2     | 31.2 | 36.6 | 29.3     | 29.3 | 34.5 | 27.3     | 27.3 | 32.2 | 25.2     | 25.2 | 29.7 |
|              |             |    | SHC | 27.2                     | 32.9 | 38.6 | 25.7     | 31.2 | 36.6 | 24.2     | 29.3 | 34.5 | 22.5     | 27.3 | 32.2 | 20.7     | 25.2 | 29.7 |
|              |             | 67 | TC  | 32.9                     | 32.9 | 41.4 | 31.2     | 31.2 | 39.3 | 29.3     | 29.3 | 37.1 | 27.4     | 27.4 | 34.6 | 25.2     | 25.2 | 32.0 |
|              |             |    | SHC | 24.4                     | 32.9 | 41.4 | 23.1     | 31.2 | 39.3 | 21.6     | 29.3 | 37.1 | 20.1     | 27.4 | 34.6 | 18.4     | 25.2 | 32.0 |
|              |             | 72 | TC  | 35.3                     | 35.3 | 35.8 | 33.2     | 33.2 | 35.0 | 31.0     | 31.0 | 34.1 | 28.6     | 28.6 | 33.2 | 26.0     | 26.0 | 32.2 |
|              |             |    | SHC | 16.0                     | 25.9 | 35.8 | 15.2     | 25.1 | 35.0 | 14.3     | 24.2 | 34.1 | 13.4     | 23.3 | 33.2 | 12.5     | 22.3 | 32.2 |
|              |             | 76 | TC  | —                        | 38.2 | 38.2 | —        | 35.9 | 35.9 | —        | 33.6 | 33.6 | —        | 31.1 | 31.1 | —        | 28.4 | 28.4 |
|              |             |    | SHC | —                        | 17.4 | 27.1 | —        | 16.6 | 26.2 | —        | 15.7 | 25.3 | —        | 14.7 | 24.4 | —        | 13.7 | 23.4 |
| 2250<br>cfm  | EAT<br>(wb) | 58 | TC  | 33.6                     | 33.6 | 38.0 | 31.8     | 31.8 | 36.0 | 30.0     | 30.0 | 33.9 | 27.9     | 27.9 | 31.6 | 25.7     | 25.7 | 29.1 |
|              |             |    | SHC | 29.3                     | 33.6 | 38.0 | 27.7     | 31.8 | 36.0 | 26.0     | 30.0 | 33.9 | 24.2     | 27.9 | 31.6 | 22.2     | 25.7 | 29.1 |
|              |             | 62 | TC  | 33.6                     | 33.6 | 39.4 | 31.8     | 31.8 | 37.4 | 30.0     | 30.0 | 35.2 | 27.9     | 27.9 | 32.9 | 25.7     | 25.7 | 30.3 |
|              |             |    | SHC | 27.9                     | 33.6 | 39.4 | 26.3     | 31.8 | 37.4 | 24.7     | 30.0 | 35.2 | 23.0     | 27.9 | 32.9 | 21.1     | 25.7 | 30.3 |
|              |             | 67 | TC  | 33.7                     | 33.7 | 42.3 | 31.9     | 31.9 | 40.2 | 30.0     | 30.0 | 37.8 | 27.9     | 27.9 | 35.3 | 25.7     | 25.7 | 32.6 |
|              |             |    | SHC | 25.0                     | 33.7 | 42.3 | 23.6     | 31.9 | 40.2 | 22.1     | 30.0 | 37.8 | 20.5     | 27.9 | 35.3 | 18.8     | 25.7 | 32.6 |
|              |             | 72 | TC  | 35.5                     | 35.5 | 38.6 | 33.4     | 33.4 | 37.8 | 31.1     | 31.1 | 36.9 | 28.7     | 28.7 | 35.9 | 26.2     | 26.2 | 34.9 |
|              |             |    | SHC | 16.6                     | 27.6 | 38.6 | 15.8     | 26.8 | 37.8 | 15.0     | 25.9 | 36.9 | 14.1     | 25.0 | 35.9 | 13.2     | 24.0 | 34.9 |
|              |             | 76 | TC  | —                        | 38.5 | 38.5 | —        | 36.2 | 36.2 | —        | 33.8 | 33.8 | —        | 31.3 | 31.3 | —        | —    | —    |
|              |             |    | SHC | —                        | 18.0 | 28.7 | —        | 17.1 | 27.8 | —        | 16.2 | 26.9 | —        | 15.3 | 26.0 | —        | —    | —    |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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

## 48JC(G/H)\*06 Intermediate Speed (2633 Compressor rpm and 950 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*06 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 1250<br>cfm  | EAT<br>(wb) | 58 | TC  | 37.1                     | 37.1 | 42.0 | 35.4     | 35.4 | 40.1 | 33.6     | 33.6 | 38.0 | 31.6     | 31.6 | 35.8 | 29.4     | 29.4 | 33.4 |
|              |             |    | SHC | 32.3                     | 37.1 | 42.0 | 30.8     | 35.4 | 40.1 | 29.2     | 33.6 | 38.0 | 27.4     | 31.6 | 35.8 | 25.5     | 29.4 | 33.4 |
|              |             | 62 | TC  | 37.3                     | 37.3 | 43.3 | 35.7     | 35.7 | 40.7 | 33.6     | 33.6 | 39.6 | 31.6     | 31.6 | 37.3 | 29.5     | 29.5 | 34.8 |
|              |             |    | SHC | 30.6                     | 37.0 | 43.3 | 28.8     | 34.8 | 40.7 | 27.7     | 33.6 | 39.6 | 26.0     | 31.6 | 37.3 | 24.2     | 29.5 | 34.8 |
|              |             | 67 | TC  | 41.1                     | 41.1 | 41.1 | 38.8     | 38.8 | 38.8 | 36.4     | 36.4 | 36.4 | 33.9     | 33.9 | 34.1 | 31.1     | 31.1 | 32.8 |
|              |             |    | SHC | 24.4                     | 30.9 | 37.3 | 23.4     | 29.8 | 36.3 | 22.3     | 28.7 | 35.2 | 21.1     | 27.6 | 34.1 | 19.9     | 26.4 | 32.8 |
|              |             | 72 | TC  | 45.2                     | 45.2 | 45.2 | 42.8     | 42.8 | 42.8 | 40.3     | 40.3 | 40.3 | 37.5     | 37.5 | 37.5 | 34.5     | 34.5 | 34.5 |
|              |             |    | SHC | 18.0                     | 24.4 | 30.8 | 16.9     | 23.4 | 29.8 | 15.8     | 22.3 | 28.7 | 14.7     | 21.1 | 27.5 | 13.5     | 19.9 | 26.3 |
|              |             | 76 | TC  | —                        | 48.7 | 48.7 | —        | 46.2 | 46.2 | —        | 43.5 | 43.5 | —        | 40.5 | 40.5 | —        | 37.3 | 37.3 |
|              |             |    | SHC | —                        | 19.1 | 25.3 | —        | 18.1 | 24.3 | —        | 17.0 | 23.3 | —        | 15.8 | 22.1 | —        | 14.6 | 20.9 |
| 1500<br>cfm  | EAT<br>(wb) | 58 | TC  | 39.3                     | 39.3 | 44.4 | 37.5     | 37.5 | 42.4 | 35.5     | 35.5 | 40.2 | 33.3     | 33.3 | 37.8 | 31.0     | 31.0 | 35.2 |
|              |             |    | SHC | 34.2                     | 39.3 | 44.4 | 32.6     | 37.5 | 42.4 | 30.8     | 35.5 | 40.2 | 28.9     | 33.3 | 37.8 | 26.8     | 31.0 | 35.2 |
|              |             | 62 | TC  | 39.4                     | 39.4 | 46.2 | 37.5     | 37.5 | 44.0 | 35.5     | 35.5 | 41.8 | 33.4     | 33.4 | 39.3 | 31.0     | 31.0 | 36.6 |
|              |             |    | SHC | 32.6                     | 39.4 | 46.2 | 31.0     | 37.5 | 44.0 | 29.3     | 35.5 | 41.8 | 27.5     | 33.4 | 39.3 | 25.5     | 31.0 | 36.6 |
|              |             | 67 | TC  | 42.2                     | 42.2 | 42.2 | 39.8     | 39.8 | 40.7 | 37.3     | 37.3 | 39.6 | 34.7     | 34.7 | 38.4 | 31.8     | 31.8 | 37.1 |
|              |             |    | SHC | 26.5                     | 34.1 | 41.8 | 25.4     | 33.1 | 40.7 | 24.3     | 32.0 | 39.6 | 23.1     | 30.8 | 38.4 | 21.9     | 29.5 | 37.1 |
|              |             | 72 | TC  | 46.4                     | 46.4 | 46.4 | 43.9     | 43.9 | 43.9 | 41.2     | 41.2 | 41.2 | 38.3     | 38.3 | 38.3 | 35.2     | 35.2 | 35.2 |
|              |             |    | SHC | 18.7                     | 26.3 | 34.0 | 17.7     | 25.3 | 32.9 | 16.6     | 24.2 | 31.8 | 15.4     | 23.0 | 30.6 | 14.2     | 21.8 | 29.4 |
|              |             | 76 | TC  | —                        | 49.9 | 49.9 | —        | 47.4 | 47.4 | —        | 44.5 | 44.5 | —        | 41.4 | 41.4 | —        | 38.1 | 38.1 |
|              |             |    | SHC | —                        | 20.0 | 27.4 | —        | 19.0 | 26.4 | —        | 17.9 | 25.3 | —        | 16.7 | 24.2 | —        | 15.5 | 22.9 |
| 1750<br>cfm  | EAT<br>(wb) | 58 | TC  | 41.1                     | 41.1 | 46.4 | 39.1     | 39.1 | 44.2 | 37.0     | 37.0 | 41.8 | 34.7     | 34.7 | 39.3 | 32.2     | 32.2 | 36.5 |
|              |             |    | SHC | 35.8                     | 41.1 | 46.4 | 34.0     | 39.1 | 44.2 | 32.1     | 37.0 | 41.8 | 30.2     | 34.7 | 39.3 | 27.9     | 32.2 | 36.5 |
|              |             | 62 | TC  | 41.1                     | 41.1 | 48.2 | 39.1     | 39.1 | 45.9 | 37.0     | 37.0 | 43.5 | 34.8     | 34.8 | 40.9 | 32.3     | 32.3 | 38.0 |
|              |             |    | SHC | 34.0                     | 41.1 | 48.2 | 32.3     | 39.1 | 45.9 | 30.5     | 37.0 | 43.5 | 28.7     | 34.8 | 40.9 | 26.5     | 32.3 | 38.0 |
|              |             | 67 | TC  | 43.0                     | 43.0 | 46.1 | 40.5     | 40.5 | 44.9 | 38       | 38.0 | 43.7 | 35.3     | 35.3 | 42.4 | 32.6     | 32.6 | 39.2 |
|              |             |    | SHC | 28.4                     | 37.2 | 46.1 | 27.3     | 36.1 | 44.9 | 26.2     | 35.0 | 43.7 | 25.0     | 33.7 | 42.4 | 23.0     | 31.1 | 39.2 |
|              |             | 72 | TC  | 47.2                     | 47.2 | 47.2 | 44.7     | 44.7 | 44.7 | 41.9     | 41.9 | 41.9 | 38.9     | 38.9 | 38.9 | 35.7     | 35.7 | 35.7 |
|              |             |    | SHC | 19.4                     | 28.2 | 36.9 | 18.4     | 27.1 | 35.9 | 17.2     | 26.0 | 34.8 | 16.1     | 24.8 | 33.6 | 14.8     | 23.6 | 32.4 |
|              |             | 76 | TC  | —                        | 50.8 | 50.8 | —        | 48.2 | 48.2 | —        | 45.2 | 45.2 | —        | 42.1 | 42.1 | —        | 38.6 | 38.6 |
|              |             |    | SHC | —                        | 20.8 | 29.3 | —        | 19.8 | 28.3 | —        | 18.6 | 27.2 | —        | 17.5 | 26.1 | —        | 16.2 | 24.8 |
| 2000<br>cfm  | EAT<br>(wb) | 58 | TC  | 42.4                     | 42.4 | 47.9 | 40.4     | 40.4 | 45.6 | 38.2     | 38.2 | 43.2 | 35.8     | 35.8 | 40.5 | 33.2     | 33.2 | 37.6 |
|              |             |    | SHC | 37.0                     | 42.4 | 47.9 | 35.2     | 40.4 | 45.6 | 33.2     | 38.2 | 43.2 | 31.1     | 35.8 | 40.5 | 28.8     | 33.2 | 37.6 |
|              |             | 62 | TC  | 42.5                     | 42.5 | 49.8 | 40.4     | 40.4 | 47.4 | 38.2     | 38.2 | 44.9 | 35.9     | 35.9 | 42.2 | 33.3     | 33.3 | 39.2 |
|              |             |    | SHC | 35.2                     | 42.5 | 49.8 | 33.4     | 40.4 | 47.4 | 31.6     | 38.2 | 44.9 | 29.6     | 35.9 | 42.2 | 27.4     | 33.3 | 39.2 |
|              |             | 67 | TC  | 43.6                     | 43.6 | 50.1 | 41.1     | 41.1 | 48.8 | 38.5     | 38.5 | 47.4 | 36.2     | 36.2 | 43.2 | 33.6     | 33.6 | 39.8 |
|              |             |    | SHC | 30.3                     | 40.2 | 50.1 | 29.2     | 39.0 | 48.8 | 27.9     | 37.7 | 47.4 | 25.5     | 34.4 | 43.2 | 23.5     | 31.7 | 39.8 |
|              |             | 72 | TC  | 47.8                     | 47.8 | 47.8 | 45.2     | 45.2 | 45.2 | 42.4     | 42.4 | 42.4 | 39.4     | 39.4 | 39.4 | 36.1     | 36.1 | 36.1 |
|              |             |    | SHC | 20.0                     | 29.9 | 39.8 | 18.9     | 28.8 | 38.7 | 17.8     | 27.7 | 37.6 | 16.7     | 26.6 | 36.5 | 15.5     | 25.4 | 35.2 |
|              |             | 76 | TC  | —                        | 51.5 | 51.5 | —        | 48.8 | 48.8 | —        | 45.8 | 45.8 | —        | 42.6 | 42.6 | —        | 39.0 | 39.0 |
|              |             |    | SHC | —                        | 21.4 | 31.1 | —        | 20.4 | 30.1 | —        | 19.3 | 29.0 | —        | 18.1 | 27.8 | —        | 16.8 | 26.5 |
| 2250<br>cfm  | EAT<br>(wb) | 58 | TC  | 43.7                     | 43.7 | 49.3 | 41.5     | 41.5 | 46.9 | 39.2     | 39.2 | 44.3 | 36.7     | 36.7 | 41.6 | 34.0     | 34.0 | 38.6 |
|              |             |    | SHC | 38.0                     | 43.7 | 49.3 | 36.1     | 41.5 | 46.9 | 34.1     | 39.2 | 44.3 | 31.9     | 36.7 | 41.6 | 29.5     | 34.0 | 38.6 |
|              |             | 62 | TC  | 43.7                     | 43.7 | 51.2 | 41.6     | 41.6 | 48.7 | 39.3     | 39.3 | 46.1 | 36.8     | 36.8 | 43.2 | 34.1     | 34.1 | 40.1 |
|              |             |    | SHC | 36.2                     | 43.7 | 51.2 | 34.4     | 41.6 | 48.7 | 32.4     | 39.3 | 46.1 | 30.3     | 36.8 | 43.2 | 28.0     | 34.1 | 40.1 |
|              |             | 67 | TC  | 44.1                     | 44.1 | 53.7 | 42.4     | 42.4 | 46.2 | 39.6     | 39.6 | 47.0 | 37.0     | 37.0 | 45.0 | 34.1     | 34.1 | 43.2 |
|              |             |    | SHC | 32.0                     | 42.9 | 53.7 | 28.2     | 37.2 | 46.2 | 28.0     | 37.5 | 47.0 | 26.5     | 35.8 | 45.0 | 25.0     | 34.1 | 43.2 |
|              |             | 72 | TC  | 48.3                     | 48.3 | 48.3 | 45.6     | 45.6 | 45.6 | 42.7     | 42.7 | 42.7 | 39.7     | 39.7 | 39.7 | 36.4     | 36.4 | 38.0 |
|              |             |    | SHC | 20.5                     | 31.5 | 42.5 | 19.5     | 30.5 | 41.4 | 18.4     | 29.4 | 40.4 | 17.2     | 28.2 | 39.2 | 16.1     | 27.0 | 38.0 |
|              |             | 76 | TC  | —                        | 52.0 | 52.0 | —        | 49.2 | 49.2 | —        | 46.2 | 46.2 | —        | 42.9 | 42.9 | —        | 39.3 | 39.3 |
|              |             |    | SHC | —                        | 22.0 | 32.7 | —        | 20.9 | 31.7 | —        | 19.8 | 30.5 | —        | 18.6 | 29.4 | —        | 17.4 | 28.1 |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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

## 48JC(G/H)\*06 Full Speed (4100 Compressor rpm and 1100 ODF rpm) Cooling Capacities<sup>a</sup>

| 48JC(G/H)*06 |             |    |     | AMBIENT TEMPERATURE (°F) |      |      |          |      |      |          |      |      |          |      |      |          |      |      |
|--------------|-------------|----|-----|--------------------------|------|------|----------|------|------|----------|------|------|----------|------|------|----------|------|------|
|              |             |    |     | 85                       |      |      | 95       |      |      | 105      |      |      | 115      |      |      | 125      |      |      |
|              |             |    |     | EAT (db)                 |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      | EAT (db) |      |      |
|              |             |    |     | 75                       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   | 75       | 80   | 85   |
| 1500<br>cfm  | EAT<br>(wb) | 58 | TC  | 52.0                     | 52.0 | 58.8 | 49.9     | 49.9 | 56.4 | 47.5     | 47.5 | 53.8 | 45.0     | 45.0 | 50.9 | 42.2     | 42.2 | 47.8 |
|              |             |    | SHC | 45.3                     | 52.0 | 58.8 | 43.4     | 49.9 | 56.4 | 41.3     | 47.5 | 53.8 | 39.1     | 45.0 | 50.9 | 36.6     | 42.2 | 47.8 |
|              |             | 62 | TC  | 54.5                     | 54.5 | 56.5 | 51.7     | 51.7 | 55.1 | 48.8     | 48.8 | 53.5 | 45.7     | 45.7 | 51.8 | 42.3     | 42.3 | 49.8 |
|              |             |    | SHC | 41.2                     | 48.9 | 56.5 | 39.8     | 47.4 | 55.1 | 38.2     | 45.9 | 53.5 | 36.6     | 44.2 | 51.8 | 34.8     | 42.3 | 49.8 |
|              |             | 67 | TC  | 59.9                     | 59.9 | 59.9 | 57.0     | 57.0 | 57.0 | 53.8     | 53.8 | 53.8 | 50.3     | 50.3 | 50.3 | 46.6     | 46.6 | 46.6 |
|              |             |    | SHC | 33.6                     | 41.2 | 48.9 | 32.2     | 39.8 | 47.5 | 30.7     | 38.3 | 46.0 | 29.1     | 36.8 | 44.4 | 27.5     | 35.1 | 42.8 |
|              |             | 72 | TC  | 65.8                     | 65.8 | 65.8 | 62.5     | 62.5 | 62.5 | 59.1     | 59.1 | 59.1 | 55.3     | 55.3 | 55.3 | 51.2     | 51.2 | 51.2 |
|              |             |    | SHC | 25.8                     | 33.4 | 41.0 | 24.4     | 32.0 | 39.6 | 22.9     | 30.5 | 38.1 | 21.4     | 29.0 | 36.6 | 19.7     | 27.3 | 34.9 |
|              |             | 76 | TC  | —                        | 70.7 | 70.7 | —        | 67.3 | 67.3 | —        | 63.6 | 63.6 | —        | 59.5 | 59.5 | —        | 55.2 | 55.2 |
|              |             |    | SHC | —                        | 27.0 | 34.2 | —        | 25.6 | 32.9 | —        | 24.2 | 31.5 | —        | 22.6 | 30.0 | —        | 21.0 | 28.4 |
| 1750<br>cfm  | EAT<br>(wb) | 58 | TC  | 54.9                     | 54.9 | 61.9 | 52.5     | 52.5 | 59.4 | 50.0     | 50.0 | 56.6 | 47.3     | 47.3 | 53.5 | 44.3     | 44.3 | 50.2 |
|              |             |    | SHC | 47.8                     | 54.9 | 61.9 | 45.7     | 52.5 | 59.4 | 43.5     | 50.0 | 56.6 | 41.1     | 47.3 | 53.5 | 38.4     | 44.3 | 50.2 |
|              |             | 62 | TC  | 56.1                     | 56.1 | 62.0 | 53.3     | 53.3 | 60.4 | 50.7     | 50.7 | 56.7 | 47.9     | 47.9 | 53.2 | 44.3     | 44.3 | 52.2 |
|              |             |    | SHC | 44.4                     | 53.2 | 62.0 | 42.9     | 51.6 | 60.4 | 40.3     | 48.5 | 56.7 | 37.8     | 45.5 | 53.2 | 36.5     | 44.3 | 52.2 |
|              |             | 67 | TC  | 61.6                     | 61.6 | 61.6 | 58.5     | 58.5 | 58.5 | 55.1     | 55.1 | 55.1 | 51.5     | 51.5 | 51.5 | 47.6     | 47.6 | 47.6 |
|              |             |    | SHC | 35.6                     | 44.5 | 53.3 | 34.2     | 43.0 | 51.8 | 32.7     | 41.5 | 50.4 | 31.1     | 40.0 | 48.8 | 29.5     | 38.3 | 47.1 |
|              |             | 72 | TC  | 67.5                     | 67.5 | 67.5 | 64.1     | 64.1 | 64.1 | 60.5     | 60.5 | 60.5 | 56.6     | 56.6 | 56.6 | 52.3     | 52.3 | 52.3 |
|              |             |    | SHC | 26.6                     | 35.3 | 44.1 | 25.2     | 33.9 | 42.7 | 23.7     | 32.4 | 41.2 | 22.1     | 30.8 | 39.6 | 20.4     | 29.2 | 37.9 |
|              |             | 76 | TC  | —                        | 72.5 | 72.5 | —        | 68.9 | 68.9 | —        | 65.0 | 65.0 | —        | 60.8 | 60.8 | —        | 56.3 | 56.3 |
|              |             |    | SHC | —                        | 27.9 | 36.3 | —        | 26.5 | 35.0 | —        | 25.0 | 33.5 | —        | 23.4 | 32.0 | —        | 21.8 | 30.3 |
| 2000<br>cfm  | EAT<br>(wb) | 58 | TC  | 57.2                     | 57.2 | 64.6 | 54.7     | 54.7 | 61.8 | 52.1     | 52.1 | 58.9 | 49.2     | 49.2 | 55.6 | 46.0     | 46.0 | 52.1 |
|              |             |    | SHC | 49.9                     | 57.2 | 64.6 | 47.7     | 54.7 | 61.8 | 45.3     | 52.1 | 58.9 | 42.7     | 49.2 | 55.6 | 39.9     | 46.0 | 52.1 |
|              |             | 62 | TC  | 58.3                     | 58.3 | 63.0 | 55.7     | 55.7 | 60.1 | 52.6     | 52.6 | 59.2 | 49.2     | 49.2 | 57.8 | 46.0     | 46.0 | 54.2 |
|              |             |    | SHC | 45.4                     | 54.2 | 63.0 | 43.3     | 51.7 | 60.1 | 42.1     | 50.7 | 59.2 | 40.6     | 49.2 | 57.8 | 37.9     | 46.0 | 54.2 |
|              |             | 67 | TC  | 62.9                     | 62.9 | 62.9 | 59.7     | 59.7 | 59.7 | 56.2     | 56.2 | 56.2 | 52.4     | 52.4 | 52.9 | 48.4     | 48.4 | 51.2 |
|              |             |    | SHC | 37.6                     | 47.5 | 57.5 | 36.1     | 46.1 | 56.0 | 34.6     | 44.6 | 54.5 | 33.0     | 43.0 | 52.9 | 31.4     | 41.3 | 51.2 |
|              |             | 72 | TC  | 68.9                     | 68.9 | 68.9 | 65.4     | 65.4 | 65.4 | 61.6     | 61.6 | 61.6 | 57.5     | 57.5 | 57.5 | 53.1     | 53.1 | 53.1 |
|              |             |    | SHC | 27.2                     | 37.1 | 47.0 | 25.8     | 35.7 | 45.6 | 24.3     | 34.2 | 44.0 | 22.7     | 32.6 | 42.5 | 21.0     | 30.9 | 40.8 |
|              |             | 76 | TC  | —                        | 73.9 | 73.9 | —        | 70.2 | 70.2 | —        | 66.1 | 66.1 | —        | 61.8 | 61.8 | —        | 57.1 | 57.1 |
|              |             |    | SHC | —                        | 28.6 | 38.2 | —        | 27.2 | 36.8 | —        | 25.7 | 35.3 | —        | 24.1 | 33.8 | —        | 22.4 | 32.1 |
| 2250<br>cfm  | EAT<br>(wb) | 58 | TC  | 59.2                     | 59.2 | 66.8 | 56.6     | 56.6 | 63.9 | 53.8     | 53.8 | 60.8 | 50.8     | 50.8 | 57.4 | 47.4     | 47.4 | 53.7 |
|              |             |    | SHC | 51.6                     | 59.2 | 66.8 | 49.3     | 56.6 | 63.9 | 46.8     | 53.8 | 60.8 | 44.1     | 50.8 | 57.4 | 41.2     | 47.4 | 53.7 |
|              |             | 62 | TC  | 59.9                     | 59.9 | 66.5 | 56.7     | 56.7 | 66.4 | 53.9     | 53.9 | 63.2 | 50.8     | 50.8 | 59.7 | 47.5     | 47.5 | 55.8 |
|              |             |    | SHC | 47.6                     | 57.1 | 66.5 | 46.9     | 56.7 | 66.4 | 44.5     | 53.9 | 63.2 | 41.9     | 50.8 | 59.7 | 39.1     | 47.5 | 55.8 |
|              |             | 67 | TC  | 63.9                     | 63.9 | 63.9 | 60.6     | 60.6 | 60.6 | 57.0     | 57.0 | 58.6 | 53.1     | 53.1 | 57.0 | 49.0     | 49.0 | 55.2 |
|              |             |    | SHC | 39.4                     | 50.5 | 61.5 | 38.0     | 49.0 | 60.1 | 36.5     | 47.5 | 58.6 | 34.9     | 45.9 | 57.0 | 33.2     | 44.2 | 55.2 |
|              |             | 72 | TC  | 69.9                     | 69.9 | 69.9 | 66.3     | 66.3 | 66.3 | 62.4     | 62.4 | 62.4 | 58.2     | 58.2 | 58.2 | 53.7     | 53.7 | 53.7 |
|              |             |    | SHC | 27.7                     | 38.7 | 49.7 | 26.3     | 37.3 | 48.3 | 24.8     | 35.8 | 46.7 | 23.2     | 34.2 | 45.1 | 21.5     | 32.5 | 43.5 |
|              |             | 76 | TC  | —                        | 75.0 | 75.0 | —        | 71.1 | 71.1 | —        | 67.0 | 67.0 | —        | 62.5 | 62.5 | —        | 57.8 | 57.8 |
|              |             |    | SHC | —                        | 29.2 | 39.9 | —        | 27.8 | 38.4 | —        | 26.2 | 36.9 | —        | 24.6 | 35.4 | —        | 22.9 | 33.7 |
| 2500<br>cfm  | EAT<br>(wb) | 58 | TC  | 61.0                     | 61.0 | 68.8 | 58.2     | 58.2 | 65.7 | 55.3     | 55.3 | 62.5 | 52.1     | 52.1 | 58.9 | 48.6     | 48.6 | 55.0 |
|              |             |    | SHC | 53.1                     | 61.0 | 68.8 | 50.7     | 58.2 | 65.7 | 48.1     | 55.3 | 62.5 | 45.3     | 52.1 | 58.9 | 42.2     | 48.6 | 55.0 |
|              |             | 62 | TC  | 61.0                     | 61.0 | 71.5 | 58.3     | 58.3 | 68.3 | 55.3     | 55.3 | 64.9 | 52.1     | 52.1 | 61.2 | 48.7     | 48.7 | 57.2 |
|              |             |    | SHC | 50.6                     | 61.0 | 71.5 | 48.2     | 58.3 | 68.3 | 45.8     | 55.3 | 64.9 | 43.1     | 52.1 | 61.2 | 40.1     | 48.7 | 57.2 |
|              |             | 67 | TC  | 64.7                     | 64.7 | 65.5 | 61.3     | 61.3 | 64.0 | 57.6     | 57.6 | 62.5 | 53.7     | 53.7 | 60.8 | 49.5     | 49.5 | 58.8 |
|              |             |    | SHC | 41.2                     | 53.3 | 65.5 | 39.7     | 51.9 | 64.0 | 38.2     | 50.3 | 62.5 | 36.6     | 48.7 | 60.8 | 34.9     | 46.9 | 58.8 |
|              |             | 72 | TC  | 70.8                     | 70.8 | 70.8 | 67.1     | 67.1 | 67.1 | 63.1     | 63.1 | 63.1 | 58.8     | 58.8 | 58.8 | 54.2     | 54.2 | 54.2 |
|              |             |    | SHC | 28.1                     | 40.2 | 52.3 | 26.7     | 38.8 | 50.8 | 25.2     | 37.3 | 49.3 | 23.6     | 35.7 | 47.7 | 21.9     | 34.0 | 46.0 |
|              |             | 76 | TC  | —                        | 75.8 | 75.8 | —        | 71.9 | 71.9 | —        | 67.7 | 67.7 | —        | 63.2 | 63.2 | —        | 58.3 | 58.3 |
|              |             |    | SHC | —                        | 29.6 | 41.3 | —        | 28.2 | 39.9 | —        | 26.6 | 38.4 | —        | 25.0 | 36.8 | —        | 23.3 | 35.1 |

NOTE(S):

a. See minimum-maximum airflow ratings on page 7.

### LEGEND

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

## 48JC(G/H)W06 Unit with Humidi-MiZer® System in Subcooling Mode — Cooling Capacities

| TEMP (°F)<br>AIR ENTERING<br>CONDENSER (Edb) |     | AIR ENTERING EVAPORATOR — SCFM/BF  |      |      |             |      |      |             |      |      |
|----------------------------------------------|-----|------------------------------------|------|------|-------------|------|------|-------------|------|------|
|                                              |     | 1500 / 0.01                        |      |      | 2000 / 0.02 |      |      | 2500 / 0.03 |      |      |
|                                              |     | Air Entering Evaporator — Ewb (°F) |      |      |             |      |      |             |      |      |
|                                              |     | 72                                 | 67   | 62   | 72          | 67   | 62   | 72          | 67   | 62   |
| 75                                           | TC  | 66.0                               | 58.1 | 50.8 | 70.1        | 62.0 | 54.6 | 71.9        | 63.7 | 57.0 |
|                                              | SHC | 28.7                               | 34.8 | 40.9 | 33.3        | 41.7 | 50.0 | 36.7        | 47.4 | 57.0 |
|                                              | kW  | 3.38                               | 3.33 | 3.28 | 3.63        | 3.58 | 3.52 | 4.01        | 3.94 | 3.85 |
| 85                                           | TC  | 60.6                               | 52.8 | 45.8 | 64.3        | 56.4 | 49.3 | 65.9        | 58.0 | 51.5 |
|                                              | SHC | 23.6                               | 29.8 | 36.2 | 27.9        | 36.4 | 44.9 | 31.1        | 41.9 | 51.5 |
|                                              | kW  | 3.79                               | 3.72 | 3.66 | 4.06        | 3.99 | 3.91 | 4.44        | 4.37 | 4.24 |
| 95                                           | TC  | 55.0                               | 47.7 | 40.8 | 58.3        | 50.8 | 43.9 | 59.6        | 52.1 | 46.0 |
|                                              | SHC | 18.4                               | 24.9 | 31.4 | 22.3        | 31.1 | 39.7 | 25.2        | 36.4 | 46.0 |
|                                              | kW  | 4.22                               | 4.14 | 4.06 | 4.50        | 4.42 | 4.32 | 4.88        | 4.80 | 4.66 |
| 105                                          | TC  | 49.5                               | 42.2 | 35.7 | 51.9        | 45.1 | 38.5 | 53.1        | 46.1 | 40.4 |
|                                              | SHC | 13.2                               | 19.7 | 26.5 | 16.3        | 25.7 | 34.5 | 19.1        | 30.7 | 40.4 |
|                                              | kW  | 4.67                               | 4.56 | 4.46 | 4.92        | 4.85 | 4.74 | 5.33        | 5.24 | 5.08 |
| 115                                          | TC  | 43.7                               | 36.8 | 30.5 | 46.1        | 39.2 | 32.9 | 47.0        | 40.0 | 34.6 |
|                                              | SHC | 7.8                                | 14.6 | 21.5 | 10.9        | 20.1 | 29.2 | 13.3        | 24.9 | 34.6 |
|                                              | kW  | 5.11                               | 5.00 | 4.88 | 5.40        | 5.28 | 5.16 | 5.80        | 5.68 | 5.51 |
| 125                                          | TC  | 37.7                               | 31.1 | 25.1 | 39.7        | 33.1 | 27.1 | 40.3        | 33.6 | 28.6 |
|                                              | SHC | 2.3                                | 9.3  | 16.3 | 5.0         | 14.4 | 23.6 | 7.1         | 18.8 | 28.6 |
|                                              | kW  | 5.56                               | 5.43 | 5.29 | 5.85        | 5.72 | 5.58 | 6.26        | 6.12 | 5.94 |

## 48JC(G/H)W06 Unit with Humidi-MiZer System in Hot Gas Reheat Mode — Cooling Capacities

| TEMP (°F)<br>AIR ENTERING<br>CONDENSER (Edb) |     | AIR ENTERING EVAPORATOR — Ewb (°F)             |       |       |                                              |       |       |                                                |       |       |
|----------------------------------------------|-----|------------------------------------------------|-------|-------|----------------------------------------------|-------|-------|------------------------------------------------|-------|-------|
|                                              |     | 75 Dry Bulb<br>62.5 Wet Bulb<br>(50% Relative) |       |       | 75 Dry Bulb<br>64 Wet Bulb<br>(56% Relative) |       |       | 75 Dry Bulb<br>65.3 Wet Bulb<br>(60% Relative) |       |       |
|                                              |     | Air Entering Evaporator — cfm                  |       |       |                                              |       |       |                                                |       |       |
|                                              |     | 1500                                           | 2000  | 2500  | 1500                                         | 2000  | 2500  | 1500                                           | 2000  | 2500  |
| 80                                           | TC  | 20.02                                          | 20.79 | 21.46 | 21.28                                        | 22.05 | 22.73 | 22.07                                          | 22.84 | 23.52 |
|                                              | SHC | 3.26                                           | 0.76  | -1.39 | 6.79                                         | 3.60  | 0.89  | 10.38                                          | 6.56  | 3.30  |
|                                              | kW  | 2.90                                           | 2.93  | 2.96  | 2.89                                         | 2.92  | 2.94  | 2.87                                           | 2.90  | 2.92  |
| 75                                           | TC  | 21.58                                          | 22.37 | 23.06 | 22.88                                        | 23.68 | 24.35 | 23.69                                          | 24.49 | 25.18 |
|                                              | SHC | 5.31                                           | 2.91  | 0.85  | 8.94                                         | 5.90  | 3.25  | 12.59                                          | 8.93  | 5.77  |
|                                              | kW  | 2.75                                           | 2.79  | 2.82  | 2.74                                         | 2.77  | 2.80  | 2.73                                           | 2.76  | 2.78  |
| 70                                           | TC  | 22.38                                          | 23.16 | 23.84 | 23.70                                        | 24.48 | 25.16 | 24.52                                          | 25.31 | 25.99 |
|                                              | SHC | 6.05                                           | 3.61  | 1.51  | 9.70                                         | 6.59  | 3.93  | 13.36                                          | 9.63  | 6.43  |
|                                              | kW  | 2.73                                           | 2.77  | 2.80  | 2.72                                         | 2.75  | 2.79  | 2.71                                           | 2.74  | 2.77  |
| 60                                           | TC  | 24.57                                          | 25.34 | 25.98 | 25.94                                        | 26.71 | 27.37 | 26.78                                          | 27.56 | 28.22 |
|                                              | SHC | 8.68                                           | 6.23  | 4.06  | 12.45                                        | 9.35  | 6.67  | 16.18                                          | 12.48 | 9.25  |
|                                              | kW  | 2.60                                           | 2.64  | 2.69  | 2.59                                         | 2.63  | 2.67  | 2.58                                           | 2.62  | 2.66  |
| 50                                           | TC  | 25.50                                          | 26.28 | 26.96 | 26.77                                        | 27.61 | 28.29 | 27.56                                          | 28.39 | 29.11 |
|                                              | SHC | 8.95                                           | 6.42  | 4.24  | 12.43                                        | 9.32  | 6.57  | 15.97                                          | 12.20 | 8.96  |
|                                              | kW  | 2.63                                           | 2.67  | 2.71  | 2.65                                         | 2.68  | 2.72  | 2.66                                           | 2.69  | 2.72  |
| 40                                           | TC  | 27.08                                          | 27.92 | 28.62 | 28.36                                        | 29.15 | 29.88 | 29.13                                          | 29.93 | 30.64 |
|                                              | SHC | 10.50                                          | 8.04  | 5.86  | 13.96                                        | 10.73 | 8.02  | 17.45                                          | 13.60 | 10.29 |
|                                              | kW  | 2.57                                           | 2.61  | 2.65  | 2.60                                         | 2.64  | 2.67  | 2.62                                           | 2.66  | 2.69  |

### LEGEND

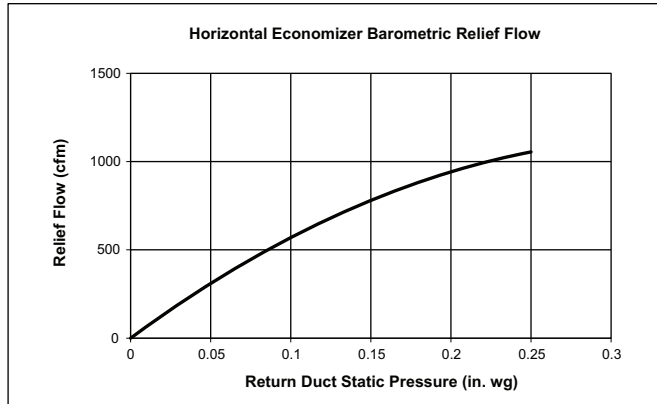
|         |   |                                              |
|---------|---|----------------------------------------------|
| Edb     | — | Entering Dry Bulb                            |
| Ewb     | — | Entering Wet Bulb                            |
| kW      | — | Compressor Power Input          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

## Gas Heat Stages

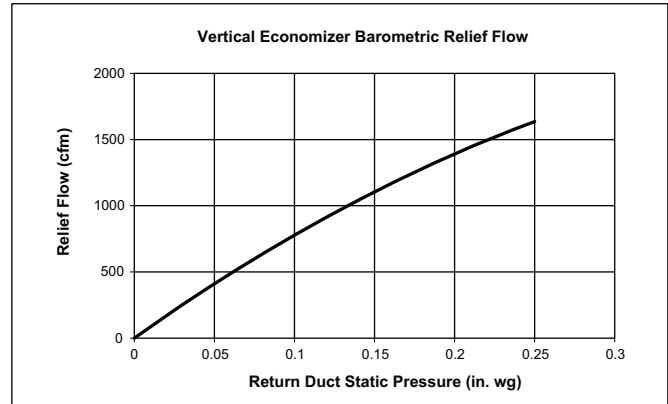
| UNIT SIZE | HEAT SIZE     |
|-----------|---------------|
| 3-Phase   | Low or Medium |
| 04        | 1             |
| 05        | 1             |
| 06        | 1             |

### Economizer Barometric Relief and Static Pressure

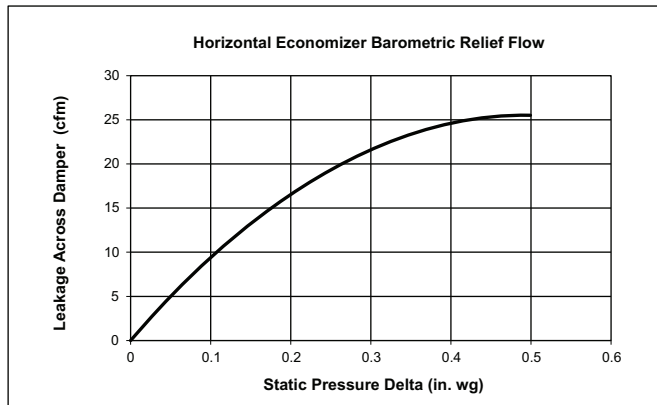
#### Horizontal Economizer Barometric Relief



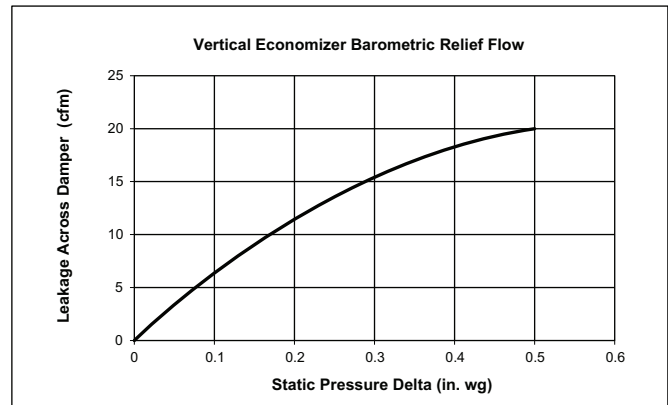
#### Vertical Economizer Barometric Relief



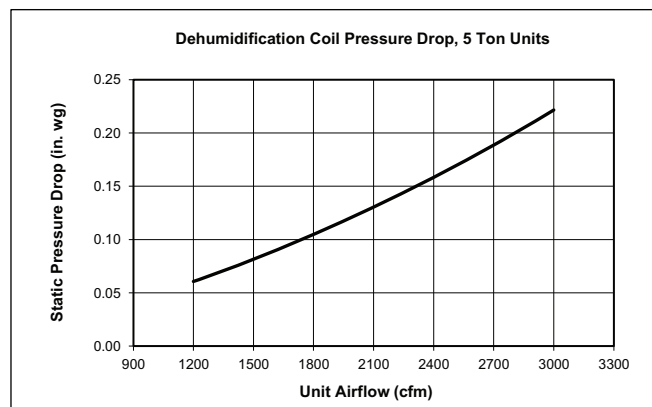
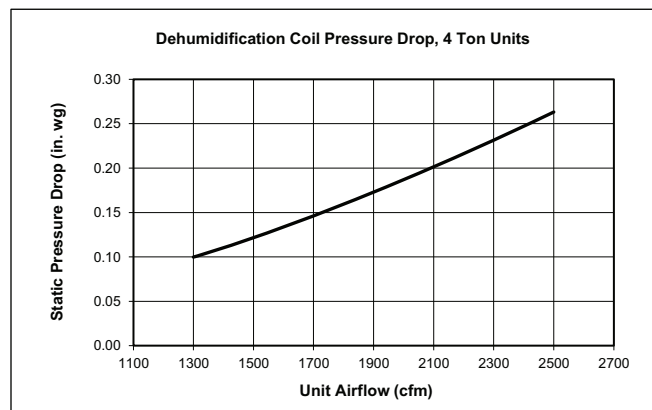
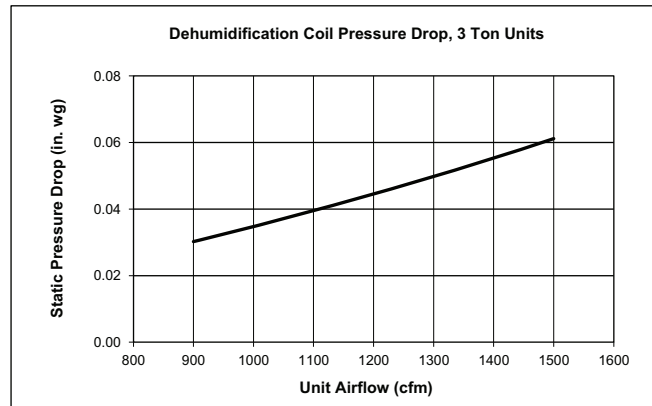
#### Horizontal Economizer Damper Leakage



#### Vertical Economizer Damper Leakage



## Humidi-MiZer® Coil Pressure Drops



## MERV-8 Filters Pressure Drop

NOTE: For factory-installed MERV-8 filters, no additional pressure drop adjustments are necessary. The standard fan tables accommodate usage.

## GENERAL FAN PERFORMANCE NOTES

1. Interpolation is permissible. Do not extrapolate.
2. External static pressure is the static pressure difference between the return duct and the supply duct plus the static pressure caused by any FIOPs or accessories.
3. Tabular data accounts for pressure loss due to clean filters, unit casing, 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/drive recommendations. In cases when two motor/drive combinations would work, Carrier recommends the lower horsepower option.
6. For information on the electrical properties of Carrier motors, please see the Electrical Data section of this book.
7. For more information on the performance limits of Carrier motors, see the Application Data section of this book.
8. The EPACT (Energy Policy Act of 1992) regulates energy requirements for specific types of indoor fan motors. Motors regulated by EPACT include any general purpose, T-frame (three-digit, 143 and larger), single-speed, foot mounted, polyphase, squirrel cage induction motors of NEMA (National Electrical Manufacturers Association) design A and B, manufactured for use in the United States. Ranging from 1 to 200 Hp, these continuous-duty motors operate on 230 and 460 volt, 60 Hz power. If a motor does not fit into these specifications, the motor does not have to be replaced by an EPACT compliant energy-efficient motor. Variable-speed motors are exempt from EPACT compliance requirements.



## 48JC(G/H)\*04 Three Phase — 3 Ton Vertical Supply (rpm - bhp)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 0.2                                         |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 900  | 1092                                        | 0.09 | 1317 | 0.16 | 1503 | 0.24 | 1666 | 0.32 | 1812 | 0.41 |
| 975  | 1140                                        | 0.10 | 1361 | 0.18 | 1543 | 0.26 | 1703 | 0.34 | 1847 | 0.44 |
| 1050 | 1190                                        | 0.12 | 1405 | 0.19 | 1584 | 0.28 | 1741 | 0.37 | 1884 | 0.47 |
| 1125 | 1241                                        | 0.13 | 1450 | 0.21 | 1626 | 0.30 | 1781 | 0.39 | 1922 | 0.49 |
| 1200 | 1294                                        | 0.15 | 1497 | 0.23 | 1670 | 0.32 | 1822 | 0.42 | 1961 | 0.53 |
| 1275 | 1348                                        | 0.17 | 1544 | 0.26 | 1714 | 0.35 | 1864 | 0.45 | 2001 | 0.56 |
| 1350 | 1404                                        | 0.19 | 1593 | 0.28 | 1759 | 0.38 | 1907 | 0.48 | 2042 | 0.59 |
| 1425 | 1460                                        | 0.22 | 1642 | 0.31 | 1805 | 0.41 | 1951 | 0.52 | 2084 | 0.63 |
| 1500 | 1517                                        | 0.24 | 1693 | 0.34 | 1852 | 0.44 | 1996 | 0.55 | 2127 | 0.67 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 1.2                                         |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 900  | 1947                                        | 0.51 | 2072 | 0.62 | 2190 | 0.73 | 2301 | 0.85 | 2406 | 0.97 |
| 975  | 1980                                        | 0.54 | 2104 | 0.65 | 2221 | 0.76 | 2331 | 0.88 | 2436 | 1.01 |
| 1050 | 2015                                        | 0.57 | 2138 | 0.68 | 2253 | 0.80 | 2362 | 0.92 | 2466 | 1.04 |
| 1125 | 2051                                        | 0.60 | 2172 | 0.71 | 2286 | 0.83 | 2395 | 0.96 | —    | —    |
| 1200 | 2088                                        | 0.63 | 2208 | 0.75 | 2321 | 0.87 | 2428 | 1.00 | —    | —    |
| 1275 | 2127                                        | 0.67 | 2245 | 0.79 | 2357 | 0.91 | 2463 | 1.04 | —    | —    |
| 1350 | 2167                                        | 0.71 | 2283 | 0.83 | 2394 | 0.96 | —    | —    | —    | —    |
| 1425 | 2207                                        | 0.75 | 2323 | 0.87 | 2432 | 1.00 | —    | —    | —    | —    |
| 1500 | 2249                                        | 0.79 | 2363 | 0.92 | 2471 | 1.05 | —    | —    | —    | —    |

Standard Static 1092-1890 rpm, 0.44 Max bhp

Medium Static 1092-2190 rpm, 0.71 Max bhp

High Static 1092-2490 rpm, 1.07 Max bhp

## 48JC(G/H)\*04 Three Phase - Standard Static — 3 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |      |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|------|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |      |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc  |
| 900  | 1092                                        | 5.8 | 1317 | 7.0 | 1503 | 8.0 | 1666 | 8.8 | 1812 | 9.6  |
| 975  | 1140                                        | 6.0 | 1361 | 7.2 | 1543 | 8.2 | 1703 | 9.0 | 1847 | 9.8  |
| 1050 | 1190                                        | 6.3 | 1405 | 7.4 | 1584 | 8.4 | 1741 | 9.2 | 1884 | 10.0 |
| 1125 | 1241                                        | 6.6 | 1450 | 7.7 | 1626 | 8.6 | 1781 | 9.4 | —    | —    |
| 1200 | 1294                                        | 6.8 | 1497 | 7.9 | 1670 | 8.8 | 1822 | 9.6 | —    | —    |
| 1275 | 1348                                        | 7.1 | 1544 | 8.2 | 1714 | 9.1 | 1864 | 9.9 | —    | —    |
| 1350 | 1404                                        | 7.4 | 1593 | 8.4 | 1759 | 9.3 | —    | —   | —    | —    |
| 1425 | 1460                                        | 7.7 | 1642 | 8.7 | 1805 | 9.6 | —    | —   | —    | —    |
| 1500 | 1517                                        | 8.0 | 1693 | 9.0 | 1852 | 9.8 | —    | —   | —    | —    |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |     |     |     |     |     |     |     |     |
|------|---------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|      | 1.2                                         |     | 1.4 |     | 1.6 |     | 1.8 |     | 2.0 |     |
|      | rpm                                         | vdc | rpm | vdc | rpm | vdc | rpm | vdc | rpm | vdc |
| 900  | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 975  | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1050 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1125 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1200 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1275 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1350 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1425 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1500 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |

Standard Static 1092-1890 rpm

## 48JC(G/H)\*04 Three Phase - Medium Static — 3 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 900  | 1092                                        | 5.0 | 1317 | 6.0 | 1503 | 6.9 | 1666 | 7.6 | 1812 | 8.3 |
| 975  | 1140                                        | 5.2 | 1361 | 6.2 | 1543 | 7.0 | 1703 | 7.8 | 1847 | 8.4 |
| 1050 | 1190                                        | 5.4 | 1405 | 6.4 | 1584 | 7.2 | 1741 | 7.9 | 1884 | 8.6 |
| 1125 | 1241                                        | 5.7 | 1450 | 6.6 | 1626 | 7.4 | 1781 | 8.1 | 1922 | 8.8 |
| 1200 | 1294                                        | 5.9 | 1497 | 6.8 | 1670 | 7.6 | 1822 | 8.3 | 1961 | 9.0 |
| 1275 | 1348                                        | 6.2 | 1544 | 7.1 | 1714 | 7.8 | 1864 | 8.5 | 2001 | 9.1 |
| 1350 | 1404                                        | 6.4 | 1593 | 7.3 | 1759 | 8.0 | 1907 | 8.7 | 2042 | 9.3 |
| 1425 | 1460                                        | 6.7 | 1642 | 7.5 | 1805 | 8.2 | 1951 | 8.9 | 2084 | 9.5 |
| 1500 | 1517                                        | 6.9 | 1693 | 7.7 | 1852 | 8.5 | 1996 | 9.1 | 2127 | 9.7 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |      |     |     |     |     |
|------|---------------------------------------------|-----|------|-----|------|------|-----|-----|-----|-----|
|      | 1.2                                         |     | 1.4  |     | 1.6  |      | 1.8 |     | 2.0 |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc  | rpm | vdc | rpm | vdc |
| 900  | 1947                                        | 8.9 | 2072 | 9.5 | 2190 | 10.0 | —   | —   | —   | —   |
| 975  | 1980                                        | 9.0 | 2104 | 9.6 | —    | —    | —   | —   | —   | —   |
| 1050 | 2015                                        | 9.2 | 2138 | 9.8 | —    | —    | —   | —   | —   | —   |
| 1125 | 2051                                        | 9.4 | 2172 | 9.9 | —    | —    | —   | —   | —   | —   |
| 1200 | 2088                                        | 9.5 | —    | —   | —    | —    | —   | —   | —   | —   |
| 1275 | 2127                                        | 9.7 | —    | —   | —    | —    | —   | —   | —   | —   |
| 1350 | 2167                                        | 9.9 | —    | —   | —    | —    | —   | —   | —   | —   |
| 1425 | —                                           | —   | —    | —   | —    | —    | —   | —   | —   | —   |
| 1500 | —                                           | —   | —    | —   | —    | —    | —   | —   | —   | —   |

Medium Static 1092-2190 rpm

## 48JC(G/H)\*04 Three Phase - High Static — 3 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 900  | 1092                                        | 4.4 | 1317 | 5.3 | 1503 | 6.0 | 1666 | 6.7 | 1812 | 7.3 |
| 975  | 1140                                        | 4.6 | 1361 | 5.5 | 1543 | 6.2 | 1703 | 6.8 | 1847 | 7.4 |
| 1050 | 1190                                        | 4.8 | 1405 | 5.6 | 1584 | 6.4 | 1741 | 7.0 | 1884 | 7.6 |
| 1125 | 1241                                        | 5.0 | 1450 | 5.8 | 1626 | 6.5 | 1781 | 7.2 | 1922 | 7.7 |
| 1200 | 1294                                        | 5.2 | 1497 | 6.0 | 1670 | 6.7 | 1822 | 7.3 | 1961 | 7.9 |
| 1275 | 1348                                        | 5.4 | 1544 | 6.2 | 1714 | 6.9 | 1864 | 7.5 | 2001 | 8.0 |
| 1350 | 1404                                        | 5.6 | 1593 | 6.4 | 1759 | 7.1 | 1907 | 7.7 | 2042 | 8.2 |
| 1425 | 1460                                        | 5.9 | 1642 | 6.6 | 1805 | 7.2 | 1951 | 7.8 | 2084 | 8.4 |
| 1500 | 1517                                        | 6.1 | 1693 | 6.8 | 1852 | 7.4 | 1996 | 8.0 | 2127 | 8.5 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 1.2                                         |     | 1.4  |     | 1.6  |     | 1.8  |     | 2.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 900  | 1947                                        | 7.8 | 2072 | 8.3 | 2190 | 8.8 | 2301 | 9.2 | 2406 | 9.7 |
| 975  | 1980                                        | 8.0 | 2104 | 8.4 | 2221 | 8.9 | 2331 | 9.4 | 2436 | 9.8 |
| 1050 | 2015                                        | 8.1 | 2138 | 8.6 | 2253 | 9.0 | 2362 | 9.5 | 2466 | 9.9 |
| 1125 | 2051                                        | 8.2 | 2172 | 8.7 | 2286 | 9.2 | 2395 | 9.6 | —    | —   |
| 1200 | 2088                                        | 8.4 | 2208 | 8.9 | 2321 | 9.3 | 2428 | 9.8 | —    | —   |
| 1275 | 2127                                        | 8.5 | 2245 | 9.0 | 2357 | 9.5 | 2463 | 9.9 | —    | —   |
| 1350 | 2167                                        | 8.7 | 2283 | 9.2 | 2394 | 9.6 | —    | —   | —    | —   |
| 1425 | 2207                                        | 8.9 | 2323 | 9.3 | 2432 | 9.8 | —    | —   | —    | —   |
| 1500 | 2249                                        | 9.0 | 2363 | 9.5 | 2471 | 9.9 | —    | —   | —    | —   |

High Static 1092-2490 rpm

## 48JC(G/H)\*05 Three Phase — 4 Ton Vertical Supply (rpm - bhp)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 0.2                                         |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 1200 | 1190                                        | 0.18 | 1383 | 0.28 | 1544 | 0.39 | 1685 | 0.51 | 1814 | 0.63 |
| 1300 | 1255                                        | 0.21 | 1441 | 0.32 | 1599 | 0.43 | 1737 | 0.55 | 1863 | 0.68 |
| 1400 | 1320                                        | 0.24 | 1500 | 0.36 | 1654 | 0.48 | 1791 | 0.61 | 1914 | 0.74 |
| 1500 | 1388                                        | 0.28 | 1561 | 0.40 | 1711 | 0.53 | 1845 | 0.66 | 1967 | 0.80 |
| 1600 | 1456                                        | 0.33 | 1623 | 0.45 | 1770 | 0.59 | 1901 | 0.73 | 2020 | 0.87 |
| 1700 | 1526                                        | 0.38 | 1685 | 0.51 | 1829 | 0.65 | 1958 | 0.79 | 2075 | 0.94 |
| 1800 | 1596                                        | 0.43 | 1749 | 0.56 | 1889 | 0.71 | 2016 | 0.87 | 2131 | 1.02 |
| 1900 | 1668                                        | 0.49 | 1814 | 0.63 | 1950 | 0.78 | 2074 | 0.94 | 2188 | 1.11 |
| 2000 | 1741                                        | 0.56 | 1881 | 0.70 | 2012 | 0.86 | 2134 | 1.03 | 2246 | 1.20 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 1.2                                         |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 1200 | 1933                                        | 0.77 | 2045 | 0.91 | 2151 | 1.06 | 2253 | 1.21 | 2351 | 1.38 |
| 1300 | 1980                                        | 0.82 | 2089 | 0.96 | 2194 | 1.12 | 2293 | 1.28 | 2389 | 1.44 |
| 1400 | 2029                                        | 0.88 | 2136 | 1.03 | 2238 | 1.19 | 2336 | 1.35 | 2430 | 1.52 |
| 1500 | 2080                                        | 0.95 | 2185 | 1.10 | 2285 | 1.26 | 2381 | 1.43 | 2473 | 1.60 |
| 1600 | 2131                                        | 1.02 | 2236 | 1.18 | 2334 | 1.34 | 2428 | 1.51 | 2519 | 1.69 |
| 1700 | 2185                                        | 1.10 | 2287 | 1.26 | 2385 | 1.43 | 2477 | 1.60 | 2566 | 1.78 |
| 1800 | 2239                                        | 1.19 | 2340 | 1.35 | 2436 | 1.53 | 2527 | 1.70 | 2615 | 1.89 |
| 1900 | 2295                                        | 1.28 | 2394 | 1.45 | 2489 | 1.63 | 2579 | 1.81 | —    | —    |
| 2000 | 2351                                        | 1.37 | 2449 | 1.55 | 2543 | 1.74 | 2632 | 1.93 | —    | —    |

Standard Static 1190-1900 rpm, 0.72 Max bhp

Medium Static 1190-2170 rpm, 1.06 Max bhp

High Static 1190-2660 rpm, 1.96 Max bhp

## 48JC(G/H)\*05 Three Phase - Standard Static — 4 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1200 | 1190                                        | 6.3 | 1383 | 7.3 | 1544 | 8.1 | 1685 | 8.9 | 1814 | 9.5 |
| 1300 | 1255                                        | 6.6 | 1441 | 7.6 | 1599 | 8.4 | 1737 | 9.1 | 1863 | 9.8 |
| 1400 | 1320                                        | 6.9 | 1500 | 7.9 | 1654 | 8.7 | 1791 | 9.4 | —    | —   |
| 1500 | 1388                                        | 7.3 | 1561 | 8.2 | 1711 | 9.0 | 1845 | 9.7 | —    | —   |
| 1600 | 1456                                        | 7.7 | 1623 | 8.5 | 1770 | 9.3 | —    | —   | —    | —   |
| 1700 | 1526                                        | 8.0 | 1685 | 8.9 | 1829 | 9.6 | —    | —   | —    | —   |
| 1800 | 1596                                        | 8.4 | 1749 | 9.2 | 1889 | 9.9 | —    | —   | —    | —   |
| 1900 | 1668                                        | 8.8 | 1814 | 9.5 | —    | —   | —    | —   | —    | —   |
| 2000 | 1741                                        | 9.2 | 1881 | 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 |
| 1200 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1300 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1400 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1500 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1600 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1700 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1800 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1900 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 2000 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |

Standard Static 1190-1900 rpm

## 48JC(G/H)\*05 Three Phase - Medium Static — 4 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1200 | 1190                                        | 5.5 | 1383 | 6.4 | 1544 | 7.1 | 1685 | 7.8 | 1814 | 8.4 |
| 1300 | 1255                                        | 5.8 | 1441 | 6.6 | 1599 | 7.4 | 1737 | 8.0 | 1863 | 8.6 |
| 1400 | 1320                                        | 6.1 | 1500 | 6.9 | 1654 | 7.6 | 1791 | 8.3 | 1914 | 8.8 |
| 1500 | 1388                                        | 6.4 | 1561 | 7.2 | 1711 | 7.9 | 1845 | 8.5 | 1967 | 9.1 |
| 1600 | 1456                                        | 6.7 | 1623 | 7.5 | 1770 | 8.2 | 1901 | 8.8 | 2020 | 9.3 |
| 1700 | 1526                                        | 7.0 | 1685 | 7.8 | 1829 | 8.4 | 1958 | 9.0 | 2075 | 9.6 |
| 1800 | 1596                                        | 7.4 | 1749 | 8.1 | 1889 | 8.7 | 2016 | 9.3 | 2131 | 9.8 |
| 1900 | 1668                                        | 7.7 | 1814 | 8.4 | 1950 | 9.0 | 2074 | 9.6 | —    | —   |
| 2000 | 1741                                        | 8.0 | 1881 | 8.7 | 2012 | 9.3 | 2134 | 9.8 | —    | —   |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |     |     |     |     |
|------|---------------------------------------------|-----|------|-----|------|-----|-----|-----|-----|-----|
|      | 1.2                                         |     | 1.4  |     | 1.6  |     | 1.8 |     | 2.0 |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm | vdc | rpm | vdc |
| 1200 | 1933                                        | 8.9 | 2045 | 9.4 | 2151 | 9.9 | —   | —   | —   | —   |
| 1300 | 1980                                        | 9.1 | 2089 | 9.6 | —    | —   | —   | —   | —   | —   |
| 1400 | 2029                                        | 9.4 | 2136 | 9.8 | —    | —   | —   | —   | —   | —   |
| 1500 | 2080                                        | 9.6 | —    | —   | —    | —   | —   | —   | —   | —   |
| 1600 | 2131                                        | 9.8 | —    | —   | —    | —   | —   | —   | —   | —   |
| 1700 | —                                           | —   | —    | —   | —    | —   | —   | —   | —   | —   |
| 1800 | —                                           | —   | —    | —   | —    | —   | —   | —   | —   | —   |
| 1900 | —                                           | —   | —    | —   | —    | —   | —   | —   | —   | —   |
| 2000 | —                                           | —   | —    | —   | —    | —   | —   | —   | —   | —   |

Medium Static 1190-2170 rpm

## 48JC(G/H)\*05 Three Phase - High Static — 4 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1200 | 1190                                        | 4.5 | 1383 | 5.2 | 1544 | 5.8 | 1685 | 6.3 | 1814 | 6.8 |
| 1300 | 1255                                        | 4.7 | 1441 | 5.4 | 1599 | 6.0 | 1737 | 6.5 | 1863 | 7.0 |
| 1400 | 1320                                        | 5.0 | 1500 | 5.6 | 1654 | 6.2 | 1791 | 6.7 | 1914 | 7.2 |
| 1500 | 1388                                        | 5.2 | 1561 | 5.9 | 1711 | 6.4 | 1845 | 6.9 | 1967 | 7.4 |
| 1600 | 1456                                        | 5.5 | 1623 | 6.1 | 1770 | 6.7 | 1901 | 7.1 | 2020 | 7.6 |
| 1700 | 1526                                        | 5.7 | 1685 | 6.3 | 1829 | 6.9 | 1958 | 7.4 | 2075 | 7.8 |
| 1800 | 1596                                        | 6.0 | 1749 | 6.6 | 1889 | 7.1 | 2016 | 7.6 | 2131 | 8.0 |
| 1900 | 1668                                        | 6.3 | 1814 | 6.8 | 1950 | 7.3 | 2074 | 7.8 | 2188 | 8.2 |
| 2000 | 1741                                        | 6.5 | 1881 | 7.1 | 2012 | 7.6 | 2134 | 8.0 | 2246 | 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 |
| 1200 | 1933                                        | 7.3 | 2045 | 7.7 | 2151 | 8.1 | 2253 | 8.5 | 2351 | 8.8 |
| 1300 | 1980                                        | 7.4 | 2089 | 7.9 | 2194 | 8.2 | 2293 | 8.6 | 2389 | 9.0 |
| 1400 | 2029                                        | 7.6 | 2136 | 8.0 | 2238 | 8.4 | 2336 | 8.8 | 2430 | 9.1 |
| 1500 | 2080                                        | 7.8 | 2185 | 8.2 | 2285 | 8.6 | 2381 | 9.0 | 2473 | 9.3 |
| 1600 | 2131                                        | 8.0 | 2236 | 8.4 | 2334 | 8.8 | 2428 | 9.1 | 2519 | 9.5 |
| 1700 | 2185                                        | 8.2 | 2287 | 8.6 | 2385 | 9.0 | 2477 | 9.3 | 2566 | 9.6 |
| 1800 | 2239                                        | 8.4 | 2340 | 8.8 | 2436 | 9.2 | 2527 | 9.5 | 2615 | 9.8 |
| 1900 | 2295                                        | 8.6 | 2394 | 9.0 | 2489 | 9.4 | 2579 | 9.7 | —    | —   |
| 2000 | 2351                                        | 8.8 | 2449 | 9.2 | 2543 | 9.6 | 2632 | 9.9 | —    | —   |

High Static 1190-2660 rpm

## 48JC(G/H)\*06 Three Phase — 5 Ton Vertical Supply (rpm - bhp)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 0.2                                         |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 1500 | 1387                                        | 0.28 | 1561 | 0.40 | 1711 | 0.53 | 1845 | 0.66 | 1967 | 0.80 |
| 1625 | 1473                                        | 0.34 | 1638 | 0.46 | 1784 | 0.60 | 1914 | 0.74 | 2034 | 0.89 |
| 1750 | 1561                                        | 0.40 | 1718 | 0.54 | 1859 | 0.68 | 1987 | 0.83 | 2103 | 0.98 |
| 1875 | 1650                                        | 0.47 | 1798 | 0.61 | 1935 | 0.77 | 2060 | 0.92 | 2174 | 1.08 |
| 2000 | 1741                                        | 0.56 | 1880 | 0.70 | 2012 | 0.86 | 2134 | 1.03 | 2246 | 1.20 |
| 2125 | 1832                                        | 0.65 | 1965 | 0.80 | 2092 | 0.97 | 2210 | 1.14 | 2320 | 1.32 |
| 2250 | 1925                                        | 0.75 | 2050 | 0.91 | 2172 | 1.08 | 2287 | 1.26 | 2394 | 1.45 |
| 2375 | 2018                                        | 0.87 | 2137 | 1.03 | 2254 | 1.21 | 2365 | 1.40 | 2470 | 1.59 |
| 2500 | 2113                                        | 1.00 | 2225 | 1.16 | 2337 | 1.35 | 2444 | 1.54 | 2547 | 1.75 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 1.2                                         |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 1500 | 2079                                        | 0.95 | 2185 | 1.10 | 2285 | 1.26 | 2381 | 1.43 | 2473 | 1.60 |
| 1625 | 2145                                        | 1.04 | 2249 | 1.20 | 2347 | 1.37 | 2440 | 1.53 | 2530 | 1.71 |
| 1750 | 2212                                        | 1.14 | 2314 | 1.31 | 2410 | 1.48 | 2502 | 1.65 | 2590 | 1.84 |
| 1875 | 2280                                        | 1.25 | 2381 | 1.43 | 2476 | 1.60 | 2566 | 1.78 | 2653 | 1.97 |
| 2000 | 2351                                        | 1.37 | 2449 | 1.55 | 2543 | 1.74 | 2632 | 1.93 | 2717 | 2.12 |
| 2125 | 2422                                        | 1.50 | 2519 | 1.69 | 2611 | 1.88 | 2699 | 2.08 | 2783 | 2.28 |
| 2250 | 2495                                        | 1.64 | 2591 | 1.84 | 2681 | 2.04 | 2767 | 2.24 | —    | —    |
| 2375 | 2569                                        | 1.79 | 2663 | 2.00 | 2752 | 2.20 | —    | —    | —    | —    |
| 2500 | 2644                                        | 1.95 | 2736 | 2.17 | 2824 | 2.38 | —    | —    | —    | —    |

Standard Static 1387-2150 rpm, 1.06 Max bhp

Medium Static 1387-2390 rpm, 1.44 Max bhp

High Static 1387-2836 rpm, 2.43 Max bhp

## 48JC(G/H)\*06 Three Phase — Standard Static — 5 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1500 | 1387                                        | 6.5 | 1561 | 7.3 | 1711 | 8.0 | 1845 | 8.6 | 1967 | 9.1 |
| 1625 | 1473                                        | 6.9 | 1638 | 7.6 | 1784 | 8.3 | 1914 | 8.9 | 2034 | 9.5 |
| 1750 | 1561                                        | 7.3 | 1718 | 8.0 | 1859 | 8.6 | 1987 | 9.2 | 2103 | 9.8 |
| 1875 | 1650                                        | 7.7 | 1798 | 8.4 | 1935 | 9.0 | 2060 | 9.6 | —    | —   |
| 2000 | 1741                                        | 8.1 | 1880 | 8.7 | 2012 | 9.4 | 2134 | 9.9 | —    | —   |
| 2125 | 1832                                        | 8.5 | 1965 | 9.1 | 2092 | 9.7 | —    | —   | —    | —   |
| 2250 | 1925                                        | 9.0 | 2050 | 9.5 | —    | —   | —    | —   | —    | —   |
| 2375 | 2018                                        | 9.4 | 2137 | 9.9 | —    | —   | —    | —   | —    | —   |
| 2500 | 2113                                        | 9.8 | —    | —   | —    | —   | —    | —   | —    | —   |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |     |     |     |     |     |     |     |     |
|------|---------------------------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|
|      | 1.2                                         |      | 1.4 |     | 1.6 |     | 1.8 |     | 2.0 |     |
|      | rpm                                         | vdc  | rpm | vdc | rpm | vdc | rpm | vdc | rpm | vdc |
| 1500 | 2079                                        | 9.7  | —   | —   | —   | —   | —   | —   | —   | —   |
| 1625 | 2145                                        | 10.0 | —   | —   | —   | —   | —   | —   | —   | —   |
| 1750 | —                                           | —    | —   | —   | —   | —   | —   | —   | —   | —   |
| 1875 | —                                           | —    | —   | —   | —   | —   | —   | —   | —   | —   |
| 2000 | —                                           | —    | —   | —   | —   | —   | —   | —   | —   | —   |
| 2125 | —                                           | —    | —   | —   | —   | —   | —   | —   | —   | —   |
| 2250 | —                                           | —    | —   | —   | —   | —   | —   | —   | —   | —   |
| 2375 | —                                           | —    | —   | —   | —   | —   | —   | —   | —   | —   |
| 2500 | —                                           | —    | —   | —   | —   | —   | —   | —   | —   | —   |

Standard Static 1387-2150 rpm

## 48JC(G/H)\*06 Three Phase - Medium Static — 5 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1500 | 1387                                        | 5.8 | 1561 | 6.5 | 1711 | 7.2 | 1845 | 7.7 | 1967 | 8.2 |
| 1625 | 1473                                        | 6.2 | 1638 | 6.9 | 1784 | 7.5 | 1914 | 8.0 | 2034 | 8.5 |
| 1750 | 1561                                        | 6.5 | 1718 | 7.2 | 1859 | 7.8 | 1987 | 8.3 | 2103 | 8.8 |
| 1875 | 1650                                        | 6.9 | 1798 | 7.5 | 1935 | 8.1 | 2060 | 8.6 | 2174 | 9.1 |
| 2000 | 1741                                        | 7.3 | 1880 | 7.9 | 2012 | 8.4 | 2134 | 8.9 | 2246 | 9.4 |
| 2125 | 1832                                        | 7.7 | 1965 | 8.2 | 2092 | 8.8 | 2210 | 9.2 | 2320 | 9.7 |
| 2250 | 1925                                        | 8.1 | 2050 | 8.6 | 2172 | 9.1 | 2287 | 9.6 | —    | —   |
| 2375 | 2018                                        | 8.4 | 2137 | 8.9 | 2254 | 9.4 | 2365 | 9.9 | —    | —   |
| 2500 | 2113                                        | 8.8 | 2225 | 9.3 | 2337 | 9.8 | —    | —   | —    | —   |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |      |      |     |      |      |     |     |
|------|---------------------------------------------|-----|------|------|------|-----|------|------|-----|-----|
|      | 1.2                                         |     | 1.4  |      | 1.6  |     | 1.8  |      | 2.0 |     |
|      | rpm                                         | vdc | rpm  | vdc  | rpm  | vdc | rpm  | vdc  | rpm | vdc |
| 1500 | 2079                                        | 8.7 | 2185 | 9.1  | 2285 | 9.6 | 2381 | 10.0 | —   | —   |
| 1625 | 2145                                        | 9.0 | 2249 | 9.4  | 2347 | 9.8 | —    | —    | —   | —   |
| 1750 | 2212                                        | 9.3 | 2314 | 9.7  | —    | —   | —    | —    | —   | —   |
| 1875 | 2280                                        | 9.5 | 2381 | 10.0 | —    | —   | —    | —    | —   | —   |
| 2000 | 2351                                        | 9.8 | —    | —    | —    | —   | —    | —    | —   | —   |
| 2125 | —                                           | —   | —    | —    | —    | —   | —    | —    | —   | —   |
| 2250 | —                                           | —   | —    | —    | —    | —   | —    | —    | —   | —   |
| 2375 | —                                           | —   | —    | —    | —    | —   | —    | —    | —   | —   |
| 2500 | —                                           | —   | —    | —    | —    | —   | —    | —    | —   | —   |

Medium Static 1387-2390 rpm

## 48JC(G/H)\*06 Three Phase - High Static — 5 Ton Vertical Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1500 | 1387                                        | 4.9 | 1561 | 5.5 | 1711 | 6.0 | 1845 | 6.5 | 1967 | 6.9 |
| 1625 | 1473                                        | 5.2 | 1638 | 5.8 | 1784 | 6.3 | 1914 | 6.7 | 2034 | 7.2 |
| 1750 | 1561                                        | 5.5 | 1718 | 6.1 | 1859 | 6.6 | 1987 | 7.0 | 2103 | 7.4 |
| 1875 | 1650                                        | 5.8 | 1798 | 6.3 | 1935 | 6.8 | 2060 | 7.3 | 2174 | 7.7 |
| 2000 | 1741                                        | 6.1 | 1880 | 6.6 | 2012 | 7.1 | 2134 | 7.5 | 2246 | 7.9 |
| 2125 | 1832                                        | 6.5 | 1965 | 6.9 | 2092 | 7.4 | 2210 | 7.8 | 2320 | 8.2 |
| 2250 | 1925                                        | 6.8 | 2050 | 7.2 | 2172 | 7.7 | 2287 | 8.1 | 2394 | 8.4 |
| 2375 | 2018                                        | 7.1 | 2137 | 7.5 | 2254 | 7.9 | 2365 | 8.3 | 2470 | 8.7 |
| 2500 | 2113                                        | 7.5 | 2225 | 7.8 | 2337 | 8.2 | 2444 | 8.6 | 2547 | 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 |
| 1500 | 2079                                        | 7.3 | 2185 | 7.7 | 2285 | 8.1  | 2381 | 8.4 | 2473 | 8.7 |
| 1625 | 2145                                        | 7.6 | 2249 | 7.9 | 2347 | 8.3  | 2440 | 8.6 | 2530 | 8.9 |
| 1750 | 2212                                        | 7.8 | 2314 | 8.2 | 2410 | 8.5  | 2502 | 8.8 | 2590 | 9.1 |
| 1875 | 2280                                        | 8.0 | 2381 | 8.4 | 2476 | 8.7  | 2566 | 9.0 | 2653 | 9.4 |
| 2000 | 2351                                        | 8.3 | 2449 | 8.6 | 2543 | 9.0  | 2632 | 9.3 | 2717 | 9.6 |
| 2125 | 2422                                        | 8.5 | 2519 | 8.9 | 2611 | 9.2  | 2699 | 9.5 | 2783 | 9.8 |
| 2250 | 2495                                        | 8.8 | 2591 | 9.1 | 2681 | 9.5  | 2767 | 9.8 | —    | —   |
| 2375 | 2569                                        | 9.1 | 2663 | 9.4 | 2752 | 9.7  | —    | —   | —    | —   |
| 2500 | 2644                                        | 9.3 | 2736 | 9.6 | 2824 | 10.0 | —    | —   | —    | —   |

High Static 1387-2836 rpm

## 48JC(G/H)\*04 Three Phase — 3 Ton Horizontal Supply (rpm - bhp)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 0.2                                         |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 900  | 1060                                        | 0.08 | 1292 | 0.15 | 1483 | 0.23 | 1650 | 0.31 | 1798 | 0.40 |
| 975  | 1106                                        | 0.09 | 1331 | 0.16 | 1519 | 0.24 | 1683 | 0.33 | 1831 | 0.43 |
| 1050 | 1154                                        | 0.11 | 1371 | 0.18 | 1556 | 0.26 | 1718 | 0.35 | 1864 | 0.45 |
| 1125 | 1204                                        | 0.12 | 1413 | 0.20 | 1594 | 0.28 | 1753 | 0.38 | 1898 | 0.48 |
| 1200 | 1255                                        | 0.14 | 1456 | 0.21 | 1633 | 0.30 | 1790 | 0.40 | 1933 | 0.50 |
| 1275 | 1308                                        | 0.16 | 1500 | 0.24 | 1673 | 0.33 | 1828 | 0.43 | 1969 | 0.53 |
| 1350 | 1361                                        | 0.18 | 1546 | 0.26 | 1715 | 0.35 | 1867 | 0.45 | 2006 | 0.56 |
| 1425 | 1416                                        | 0.20 | 1594 | 0.28 | 1757 | 0.38 | 1907 | 0.48 | 2043 | 0.59 |
| 1500 | 1472                                        | 0.22 | 1642 | 0.31 | 1801 | 0.41 | 1947 | 0.51 | 2082 | 0.63 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 1.2                                         |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 900  | 1933                                        | 0.50 | 2058 | 0.61 | 2175 | 0.72 | 2285 | 0.83 | 2390 | 0.95 |
| 975  | 1965                                        | 0.53 | 2089 | 0.63 | 2206 | 0.75 | 2315 | 0.86 | 2419 | 0.99 |
| 1050 | 1998                                        | 0.56 | 2121 | 0.66 | 2237 | 0.78 | 2346 | 0.90 | 2450 | 1.02 |
| 1125 | 2030                                        | 0.58 | 2154 | 0.70 | 2269 | 0.81 | 2377 | 0.94 | 2480 | 1.06 |
| 1200 | 2064                                        | 0.61 | 2186 | 0.73 | 2301 | 0.85 | 2409 | 0.97 | —    | —    |
| 1275 | 2099                                        | 0.64 | 2220 | 0.76 | 2333 | 0.88 | 2441 | 1.01 | —    | —    |
| 1350 | 2134                                        | 0.68 | 2254 | 0.80 | 2367 | 0.92 | 2474 | 1.05 | —    | —    |
| 1425 | 2170                                        | 0.71 | 2289 | 0.84 | 2401 | 0.96 | —    | —    | —    | —    |
| 1500 | 2208                                        | 0.75 | 2325 | 0.88 | 2436 | 1.01 | —    | —    | —    | —    |

Standard Static 1060-1890 rpm, 0.44 Max bhp

Medium Static 1060-2190 rpm, 0.71 Max bhp

High Static 1060-2490 rpm, 1.07 Max bhp

## 48JC(G/H)\*04 Three Phase - Standard Static — 3 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 900  | 1060                                        | 5.6 | 1292 | 6.8 | 1483 | 7.8 | 1650 | 8.7 | 1798 | 9.5 |
| 975  | 1106                                        | 5.9 | 1331 | 7.0 | 1519 | 8.0 | 1683 | 8.9 | 1831 | 9.7 |
| 1050 | 1154                                        | 6.1 | 1371 | 7.3 | 1556 | 8.2 | 1718 | 9.1 | 1864 | 9.9 |
| 1125 | 1204                                        | 6.4 | 1413 | 7.5 | 1594 | 8.4 | 1753 | 9.3 | —    | —   |
| 1200 | 1255                                        | 6.6 | 1456 | 7.7 | 1633 | 8.6 | 1790 | 9.5 | —    | —   |
| 1275 | 1308                                        | 6.9 | 1500 | 7.9 | 1673 | 8.9 | 1828 | 9.7 | —    | —   |
| 1350 | 1361                                        | 7.2 | 1546 | 8.2 | 1715 | 9.1 | 1867 | 9.9 | —    | —   |
| 1425 | 1416                                        | 7.5 | 1594 | 8.4 | 1757 | 9.3 | —    | —   | —    | —   |
| 1500 | 1472                                        | 7.8 | 1642 | 8.7 | 1801 | 9.5 | —    | —   | —    | —   |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |     |     |     |     |     |     |     |     |
|------|---------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|      | 1.2                                         |     | 1.4 |     | 1.6 |     | 1.8 |     | 2.0 |     |
|      | rpm                                         | vdc | rpm | vdc | rpm | vdc | rpm | vdc | rpm | vdc |
| 900  | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 975  | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1050 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1125 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1200 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1275 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1350 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1425 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1500 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |

Standard Static 1060-1890 rpm



## 48JC(G/H)\*04 Three Phase - Medium Static — 3 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 900  | 1060                                        | 4.8 | 1292 | 5.9 | 1483 | 6.8 | 1650 | 7.5 | 1798 | 8.2 |
| 975  | 1106                                        | 5.1 | 1331 | 6.1 | 1519 | 6.9 | 1683 | 7.7 | 1831 | 8.4 |
| 1050 | 1154                                        | 5.3 | 1371 | 6.3 | 1556 | 7.1 | 1718 | 7.8 | 1864 | 8.5 |
| 1125 | 1204                                        | 5.5 | 1413 | 6.5 | 1594 | 7.3 | 1753 | 8.0 | 1898 | 8.7 |
| 1200 | 1255                                        | 5.7 | 1456 | 6.6 | 1633 | 7.5 | 1790 | 8.2 | 1933 | 8.8 |
| 1275 | 1308                                        | 6.0 | 1500 | 6.8 | 1673 | 7.6 | 1828 | 8.3 | 1969 | 9.0 |
| 1350 | 1361                                        | 6.2 | 1546 | 7.1 | 1715 | 7.8 | 1867 | 8.5 | 2006 | 9.2 |
| 1425 | 1416                                        | 6.5 | 1594 | 7.3 | 1757 | 8.0 | 1907 | 8.7 | 2043 | 9.3 |
| 1500 | 1472                                        | 6.7 | 1642 | 7.5 | 1801 | 8.2 | 1947 | 8.9 | 2082 | 9.5 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |      |      |     |     |     |     |     |
|------|---------------------------------------------|-----|------|------|------|-----|-----|-----|-----|-----|
|      | 1.2                                         |     | 1.4  |      | 1.6  |     | 1.8 |     | 2.0 |     |
|      | rpm                                         | vdc | rpm  | vdc  | rpm  | vdc | rpm | vdc | rpm | vdc |
| 900  | 1933                                        | 8.8 | 2058 | 9.4  | 2175 | 9.9 | —   | —   | —   | —   |
| 975  | 1965                                        | 9.0 | 2089 | 9.5  | —    | —   | —   | —   | —   | —   |
| 1050 | 1998                                        | 9.1 | 2121 | 9.7  | —    | —   | —   | —   | —   | —   |
| 1125 | 2030                                        | 9.3 | 2154 | 9.8  | —    | —   | —   | —   | —   | —   |
| 1200 | 2064                                        | 9.4 | 2186 | 10.0 | —    | —   | —   | —   | —   | —   |
| 1275 | 2099                                        | 9.6 | —    | —    | —    | —   | —   | —   | —   | —   |
| 1350 | 2134                                        | 9.7 | —    | —    | —    | —   | —   | —   | —   | —   |
| 1425 | 2170                                        | 9.9 | —    | —    | —    | —   | —   | —   | —   | —   |
| 1500 | —                                           | —   | —    | —    | —    | —   | —   | —   | —   | —   |

Medium Static 1060-2190 rpm

## 48JC(G/H)\*04 Three Phase - High Static — 3 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 900  | 1060                                        | 4.3 | 1292 | 5.2 | 1483 | 6.0 | 1650 | 6.6 | 1798 | 7.2 |
| 975  | 1106                                        | 4.4 | 1331 | 5.3 | 1519 | 6.1 | 1683 | 6.8 | 1831 | 7.4 |
| 1050 | 1154                                        | 4.6 | 1371 | 5.5 | 1556 | 6.2 | 1718 | 6.9 | 1864 | 7.5 |
| 1125 | 1204                                        | 4.8 | 1413 | 5.7 | 1594 | 6.4 | 1753 | 7.0 | 1898 | 7.6 |
| 1200 | 1255                                        | 5.0 | 1456 | 5.8 | 1633 | 6.6 | 1790 | 7.2 | 1933 | 7.8 |
| 1275 | 1308                                        | 5.3 | 1500 | 6.0 | 1673 | 6.7 | 1828 | 7.3 | 1969 | 7.9 |
| 1350 | 1361                                        | 5.5 | 1546 | 6.2 | 1715 | 6.9 | 1867 | 7.5 | 2006 | 8.1 |
| 1425 | 1416                                        | 5.7 | 1594 | 6.4 | 1757 | 7.1 | 1907 | 7.7 | 2043 | 8.2 |
| 1500 | 1472                                        | 5.9 | 1642 | 6.6 | 1801 | 7.2 | 1947 | 7.8 | 2082 | 8.4 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |      |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|------|
|      | 1.2                                         |     | 1.4  |     | 1.6  |     | 1.8  |     | 2.0  |      |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc  |
| 900  | 1933                                        | 7.8 | 2058 | 8.3 | 2175 | 8.7 | 2285 | 9.2 | 2390 | 9.6  |
| 975  | 1965                                        | 7.9 | 2089 | 8.4 | 2206 | 8.9 | 2315 | 9.3 | 2419 | 9.7  |
| 1050 | 1998                                        | 8.0 | 2121 | 8.5 | 2237 | 9.0 | 2346 | 9.4 | 2450 | 9.8  |
| 1125 | 2030                                        | 8.2 | 2154 | 8.7 | 2269 | 9.1 | 2377 | 9.5 | 2480 | 10.0 |
| 1200 | 2064                                        | 8.3 | 2186 | 8.8 | 2301 | 9.2 | 2409 | 9.7 | —    | —    |
| 1275 | 2099                                        | 8.4 | 2220 | 8.9 | 2333 | 9.4 | 2441 | 9.8 | —    | —    |
| 1350 | 2134                                        | 8.6 | 2254 | 9.1 | 2367 | 9.5 | 2474 | 9.9 | —    | —    |
| 1425 | 2170                                        | 8.7 | 2289 | 9.2 | 2401 | 9.6 | —    | —   | —    | —    |
| 1500 | 2208                                        | 8.9 | 2325 | 9.3 | 2436 | 9.8 | —    | —   | —    | —    |

High Static 1060-2490 rpm

## 48JC(G/H)\*05 Three Phase — 4 Ton Horizontal Supply (rpm - bhp)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 0.2                                         |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 1200 | 1148                                        | 0.16 | 1343 | 0.26 | 1507 | 0.37 | 1651 | 0.48 | 1781 | 0.60 |
| 1300 | 1209                                        | 0.19 | 1397 | 0.29 | 1557 | 0.40 | 1698 | 0.52 | 1826 | 0.65 |
| 1400 | 1271                                        | 0.22 | 1452 | 0.33 | 1608 | 0.44 | 1747 | 0.57 | 1873 | 0.70 |
| 1500 | 1335                                        | 0.25 | 1508 | 0.36 | 1661 | 0.49 | 1797 | 0.62 | 1921 | 0.75 |
| 1600 | 1401                                        | 0.29 | 1565 | 0.41 | 1714 | 0.53 | 1848 | 0.67 | 1971 | 0.81 |
| 1700 | 1468                                        | 0.33 | 1624 | 0.45 | 1769 | 0.59 | 1900 | 0.73 | 2020 | 0.87 |
| 1800 | 1537                                        | 0.38 | 1685 | 0.51 | 1825 | 0.64 | 1953 | 0.79 | 2072 | 0.94 |
| 1900 | 1606                                        | 0.44 | 1747 | 0.56 | 1882 | 0.70 | 2008 | 0.85 | 2124 | 1.01 |
| 2000 | 1676                                        | 0.50 | 1810 | 0.63 | 1940 | 0.77 | 2063 | 0.93 | 2177 | 1.09 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 1.2                                         |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 1200 | 1902                                        | 0.73 | 2015 | 0.87 | 2122 | 1.02 | 2223 | 1.17 | 2320 | 1.33 |
| 1300 | 1945                                        | 0.78 | 2056 | 0.93 | 2161 | 1.07 | 2261 | 1.23 | 2356 | 1.39 |
| 1400 | 1990                                        | 0.84 | 2099 | 0.98 | 2202 | 1.13 | 2300 | 1.29 | 2395 | 1.46 |
| 1500 | 2036                                        | 0.89 | 2143 | 1.04 | 2245 | 1.20 | 2342 | 1.36 | 2435 | 1.53 |
| 1600 | 2084                                        | 0.96 | 2190 | 1.11 | 2290 | 1.27 | 2385 | 1.44 | 2477 | 1.61 |
| 1700 | 2132                                        | 1.02 | 2237 | 1.18 | 2336 | 1.35 | 2430 | 1.52 | 2520 | 1.69 |
| 1800 | 2182                                        | 1.10 | 2285 | 1.26 | 2383 | 1.43 | 2476 | 1.60 | 2565 | 1.78 |
| 1900 | 2232                                        | 1.17 | 2334 | 1.34 | 2431 | 1.52 | 2523 | 1.70 | 2611 | 1.88 |
| 2000 | 2284                                        | 1.26 | 2385 | 1.43 | 2480 | 1.61 | 2571 | 1.79 | 2658 | 1.98 |

Standard Static 1148-1900 rpm, 0.72 Max bhp

Medium Static 1148-2170 rpm, 1.06 Max bhp

High Static 1148-2660 rpm, 1.96 Max bhp

## 48JC(G/H)\*05 Three Phase - Standard Static — 4 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |      |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|------|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |      | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc  | rpm  | vdc |
| 1200 | 1148                                        | 6.0 | 1343 | 7.1 | 1507 | 7.9 | 1651 | 8.7  | 1781 | 9.4 |
| 1300 | 1209                                        | 6.4 | 1397 | 7.4 | 1557 | 8.2 | 1698 | 8.9  | 1826 | 9.6 |
| 1400 | 1271                                        | 6.7 | 1452 | 7.6 | 1608 | 8.5 | 1747 | 9.2  | 1873 | 9.9 |
| 1500 | 1335                                        | 7.0 | 1508 | 7.9 | 1661 | 8.7 | 1797 | 9.5  | —    | —   |
| 1600 | 1401                                        | 7.4 | 1565 | 8.2 | 1714 | 9.0 | 1848 | 9.7  | —    | —   |
| 1700 | 1468                                        | 7.7 | 1624 | 8.5 | 1769 | 9.3 | 1900 | 10.0 | —    | —   |
| 1800 | 1537                                        | 8.1 | 1685 | 8.9 | 1825 | 9.6 | —    | —    | —    | —   |
| 1900 | 1606                                        | 8.5 | 1747 | 9.2 | 1882 | 9.9 | —    | —    | —    | —   |
| 2000 | 1676                                        | 8.8 | 1810 | 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 |
| 1200 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1300 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1400 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1500 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1600 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1700 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1800 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 1900 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |
| 2000 | —                                           | —   | —   | —   | —   | —   | —   | —   | —   | —   |

Standard Static 1148-1900 rpm

## 48JC(G/H)\*05 Three Phase - Medium Static — 4 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1200 | 1148                                        | 5.3 | 1343 | 6.2 | 1507 | 6.9 | 1651 | 7.6 | 1781 | 8.2 |
| 1300 | 1209                                        | 5.6 | 1397 | 6.4 | 1557 | 7.2 | 1698 | 7.8 | 1826 | 8.4 |
| 1400 | 1271                                        | 5.9 | 1452 | 6.7 | 1608 | 7.4 | 1747 | 8.1 | 1873 | 8.6 |
| 1500 | 1335                                        | 6.2 | 1508 | 6.9 | 1661 | 7.7 | 1797 | 8.3 | 1921 | 8.9 |
| 1600 | 1401                                        | 6.5 | 1565 | 7.2 | 1714 | 7.9 | 1848 | 8.5 | 1971 | 9.1 |
| 1700 | 1468                                        | 6.8 | 1624 | 7.5 | 1769 | 8.2 | 1900 | 8.8 | 2020 | 9.3 |
| 1800 | 1537                                        | 7.1 | 1685 | 7.8 | 1825 | 8.4 | 1953 | 9.0 | 2072 | 9.5 |
| 1900 | 1606                                        | 7.4 | 1747 | 8.1 | 1882 | 8.7 | 2008 | 9.3 | 2124 | 9.8 |
| 2000 | 1676                                        | 7.7 | 1810 | 8.3 | 1940 | 8.9 | 2063 | 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 |
| 1200 | 1902                                        | 8.8 | 2015 | 9.3 | 2122 | 9.8  | —   | —   | —   | —   |
| 1300 | 1945                                        | 9.0 | 2056 | 9.5 | 2161 | 10.0 | —   | —   | —   | —   |
| 1400 | 1990                                        | 9.2 | 2099 | 9.7 | —    | —    | —   | —   | —   | —   |
| 1500 | 2036                                        | 9.4 | 2143 | 9.9 | —    | —    | —   | —   | —   | —   |
| 1600 | 2084                                        | 9.6 | —    | —   | —    | —    | —   | —   | —   | —   |
| 1700 | 2132                                        | 9.8 | —    | —   | —    | —    | —   | —   | —   | —   |
| 1800 | —                                           | —   | —    | —   | —    | —    | —   | —   | —   | —   |
| 1900 | —                                           | —   | —    | —   | —    | —    | —   | —   | —   | —   |
| 2000 | —                                           | —   | —    | —   | —    | —    | —   | —   | —   | —   |

Medium Static 1148-2170 rpm

## 48JC(G/H)\*05 Three Phase - High Static — 4 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1200 | 1148                                        | 4.3 | 1343 | 5.0 | 1507 | 5.7 | 1651 | 6.2 | 1781 | 6.7 |
| 1300 | 1209                                        | 4.5 | 1397 | 5.3 | 1557 | 5.9 | 1698 | 6.4 | 1826 | 6.9 |
| 1400 | 1271                                        | 4.8 | 1452 | 5.5 | 1608 | 6.0 | 1747 | 6.6 | 1873 | 7.0 |
| 1500 | 1335                                        | 5.0 | 1508 | 5.7 | 1661 | 6.2 | 1797 | 6.8 | 1921 | 7.2 |
| 1600 | 1401                                        | 5.3 | 1565 | 5.9 | 1714 | 6.4 | 1848 | 6.9 | 1971 | 7.4 |
| 1700 | 1468                                        | 5.5 | 1624 | 6.1 | 1769 | 6.7 | 1900 | 7.1 | 2020 | 7.6 |
| 1800 | 1537                                        | 5.8 | 1685 | 6.3 | 1825 | 6.9 | 1953 | 7.3 | 2072 | 7.8 |
| 1900 | 1606                                        | 6.0 | 1747 | 6.6 | 1882 | 7.1 | 2008 | 7.5 | 2124 | 8.0 |
| 2000 | 1676                                        | 6.3 | 1810 | 6.8 | 1940 | 7.3 | 2063 | 7.8 | 2177 | 8.2 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |      |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|------|
|      | 1.2                                         |     | 1.4  |     | 1.6  |     | 1.8  |     | 2.0  |      |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc  |
| 1200 | 1902                                        | 7.2 | 2015 | 7.6 | 2122 | 8.0 | 2223 | 8.4 | 2320 | 8.7  |
| 1300 | 1945                                        | 7.3 | 2056 | 7.7 | 2161 | 8.1 | 2261 | 8.5 | 2356 | 8.9  |
| 1400 | 1990                                        | 7.5 | 2099 | 7.9 | 2202 | 8.3 | 2300 | 8.6 | 2395 | 9.0  |
| 1500 | 2036                                        | 7.7 | 2143 | 8.1 | 2245 | 8.4 | 2342 | 8.8 | 2435 | 9.2  |
| 1600 | 2084                                        | 7.8 | 2190 | 8.2 | 2290 | 8.6 | 2385 | 9.0 | 2477 | 9.3  |
| 1700 | 2132                                        | 8.0 | 2237 | 8.4 | 2336 | 8.8 | 2430 | 9.1 | 2520 | 9.5  |
| 1800 | 2182                                        | 8.2 | 2285 | 8.6 | 2383 | 9.0 | 2476 | 9.3 | 2565 | 9.6  |
| 1900 | 2232                                        | 8.4 | 2334 | 8.8 | 2431 | 9.1 | 2523 | 9.5 | 2611 | 9.8  |
| 2000 | 2284                                        | 8.6 | 2385 | 9.0 | 2480 | 9.3 | 2571 | 9.7 | 2658 | 10.0 |

High Static 1148-2660 rpm

## 48JC(G/H)\*06 Three Phase — 5 Ton Horizontal Supply (rpm - bhp)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 0.2                                         |      | 0.4  |      | 0.6  |      | 0.8  |      | 1.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 1500 | 1335                                        | 0.25 | 1507 | 0.36 | 1660 | 0.49 | 1797 | 0.62 | 1921 | 0.75 |
| 1625 | 1418                                        | 0.30 | 1580 | 0.42 | 1727 | 0.55 | 1861 | 0.68 | 1983 | 0.83 |
| 1750 | 1502                                        | 0.36 | 1655 | 0.48 | 1796 | 0.61 | 1926 | 0.76 | 2046 | 0.91 |
| 1875 | 1589                                        | 0.42 | 1731 | 0.55 | 1867 | 0.69 | 1994 | 0.84 | 2111 | 0.99 |
| 2000 | 1677                                        | 0.50 | 1810 | 0.63 | 1941 | 0.77 | 2063 | 0.93 | 2177 | 1.09 |
| 2125 | 1766                                        | 0.58 | 1891 | 0.71 | 2015 | 0.86 | 2133 | 1.02 | 2245 | 1.19 |
| 2250 | 1855                                        | 0.67 | 1973 | 0.81 | 2091 | 0.96 | 2206 | 1.13 | 2314 | 1.31 |
| 2375 | 1946                                        | 0.78 | 2057 | 0.92 | 2169 | 1.07 | 2280 | 1.25 | 2385 | 1.43 |
| 2500 | 2037                                        | 0.89 | 2142 | 1.03 | 2249 | 1.20 | 2355 | 1.37 | 2457 | 1.56 |

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |      |      |      |      |      |      |      |      |      |
|------|---------------------------------------------|------|------|------|------|------|------|------|------|------|
|      | 1.2                                         |      | 1.4  |      | 1.6  |      | 1.8  |      | 2.0  |      |
|      | rpm                                         | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  | rpm  | bhp  |
| 1500 | 2036                                        | 0.89 | 2143 | 1.04 | 2245 | 1.20 | 2342 | 1.36 | 2435 | 1.53 |
| 1625 | 2096                                        | 0.97 | 2201 | 1.13 | 2301 | 1.29 | 2396 | 1.46 | 2488 | 1.63 |
| 1750 | 2157                                        | 1.06 | 2261 | 1.22 | 2359 | 1.39 | 2453 | 1.56 | 2542 | 1.74 |
| 1875 | 2220                                        | 1.16 | 2322 | 1.32 | 2419 | 1.49 | 2511 | 1.67 | 2599 | 1.85 |
| 2000 | 2284                                        | 1.26 | 2385 | 1.43 | 2480 | 1.61 | 2571 | 1.79 | 2658 | 1.98 |
| 2125 | 2350                                        | 1.37 | 2449 | 1.55 | 2543 | 1.73 | 2633 | 1.92 | 2719 | 2.12 |
| 2250 | 2417                                        | 1.49 | 2514 | 1.67 | 2607 | 1.87 | 2695 | 2.06 | 2780 | 2.26 |
| 2375 | 2485                                        | 1.62 | 2581 | 1.81 | 2672 | 2.01 | 2759 | 2.21 | —    | —    |
| 2500 | 2555                                        | 1.76 | 2649 | 1.96 | 2738 | 2.16 | 2824 | 2.37 | —    | —    |

Standard Static 1335-2150 rpm, 1.06 Max bhp

Medium Static 1335-2390 rpm, 1.44 Max bhp

High Static 1335-2836 rpm, 2.43 Max bhp

## 48JC(G/H)\*06 Three Phase - Standard Static — 5 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |      |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|------|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |      | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc  | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1500 | 1335                                        | 6.2 | 1507 | 7.0  | 1660 | 7.7 | 1797 | 8.4 | 1921 | 8.9 |
| 1625 | 1418                                        | 6.6 | 1580 | 7.3  | 1727 | 8.0 | 1861 | 8.7 | 1983 | 9.2 |
| 1750 | 1502                                        | 7.0 | 1655 | 7.7  | 1796 | 8.4 | 1926 | 9.0 | 2046 | 9.5 |
| 1875 | 1589                                        | 7.4 | 1731 | 8.1  | 1867 | 8.7 | 1994 | 9.3 | 2111 | 9.8 |
| 2000 | 1677                                        | 7.8 | 1810 | 8.4  | 1941 | 9.0 | 2063 | 9.6 | —    | —   |
| 2125 | 1766                                        | 8.2 | 1891 | 8.8  | 2015 | 9.4 | 2133 | 9.9 | —    | —   |
| 2250 | 1855                                        | 8.6 | 1973 | 9.2  | 2091 | 9.7 | —    | —   | —    | —   |
| 2375 | 1946                                        | 9.1 | 2057 | 9.6  | —    | —   | —    | —   | —    | —   |
| 2500 | 2037                                        | 9.5 | 2142 | 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 |
| 1500 | 2036                                        | 9.5 | 2143 | 10.0 | —   | —   | —   | —   | —   | —   |
| 1625 | 2096                                        | 9.7 | —    | —    | —   | —   | —   | —   | —   | —   |
| 1750 | —                                           | —   | —    | —    | —   | —   | —   | —   | —   | —   |
| 1875 | —                                           | —   | —    | —    | —   | —   | —   | —   | —   | —   |
| 2000 | —                                           | —   | —    | —    | —   | —   | —   | —   | —   | —   |
| 2125 | —                                           | —   | —    | —    | —   | —   | —   | —   | —   | —   |
| 2250 | —                                           | —   | —    | —    | —   | —   | —   | —   | —   | —   |
| 2375 | —                                           | —   | —    | —    | —   | —   | —   | —   | —   | —   |
| 2500 | —                                           | —   | —    | —    | —   | —   | —   | —   | —   | —   |

Standard Static 1335-2150 rpm

## 48JC(G/H)\*06 Three Phase - Medium Static — 5 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |      |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|------|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |      |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc  |
| 1500 | 1335                                        | 5.6 | 1507 | 6.3 | 1660 | 6.9 | 1797 | 7.5 | 1921 | 8.0  |
| 1625 | 1418                                        | 5.9 | 1580 | 6.6 | 1727 | 7.2 | 1861 | 7.8 | 1983 | 8.3  |
| 1750 | 1502                                        | 6.3 | 1655 | 6.9 | 1796 | 7.5 | 1926 | 8.1 | 2046 | 8.6  |
| 1875 | 1589                                        | 6.6 | 1731 | 7.2 | 1867 | 7.8 | 1994 | 8.3 | 2111 | 8.8  |
| 2000 | 1677                                        | 7.0 | 1810 | 7.6 | 1941 | 8.1 | 2063 | 8.6 | 2177 | 9.1  |
| 2125 | 1766                                        | 7.4 | 1891 | 7.9 | 2015 | 8.4 | 2133 | 8.9 | 2245 | 9.4  |
| 2250 | 1855                                        | 7.8 | 1973 | 8.3 | 2091 | 8.7 | 2206 | 9.2 | 2314 | 9.7  |
| 2375 | 1946                                        | 8.1 | 2057 | 8.6 | 2169 | 9.1 | 2280 | 9.5 | 2385 | 10.0 |
| 2500 | 2037                                        | 8.5 | 2142 | 9.0 | 2249 | 9.4 | 2355 | 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 |
| 1500 | 2036                                        | 8.5 | 2143 | 9.0  | 2245 | 9.4 | 2342 | 9.8 | —   | —   |
| 1625 | 2096                                        | 8.8 | 2201 | 9.2  | 2301 | 9.6 | —    | —   | —   | —   |
| 1750 | 2157                                        | 9.0 | 2261 | 9.5  | 2359 | 9.9 | —    | —   | —   | —   |
| 1875 | 2220                                        | 9.3 | 2322 | 9.7  | —    | —   | —    | —   | —   | —   |
| 2000 | 2284                                        | 9.6 | 2385 | 10.0 | —    | —   | —    | —   | —   | —   |
| 2125 | 2350                                        | 9.8 | —    | —    | —    | —   | —    | —   | —   | —   |
| 2250 | —                                           | —   | —    | —    | —    | —   | —    | —   | —   | —   |
| 2375 | —                                           | —   | —    | —    | —    | —   | —    | —   | —   | —   |
| 2500 | —                                           | —   | —    | —    | —    | —   | —    | —   | —   | —   |

Medium Static 1335-2390 rpm

## 48JC(G/H)\*06 Three Phase - High Static — 5 Ton Horizontal Supply (rpm - vdc)

| CFM  | AVAILABLE EXTERNAL STATIC PRESSURE (in. wg) |     |      |     |      |     |      |     |      |     |
|------|---------------------------------------------|-----|------|-----|------|-----|------|-----|------|-----|
|      | 0.2                                         |     | 0.4  |     | 0.6  |     | 0.8  |     | 1.0  |     |
|      | rpm                                         | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc | rpm  | vdc |
| 1500 | 1335                                        | 4.7 | 1507 | 5.3 | 1660 | 5.9 | 1797 | 6.3 | 1921 | 6.8 |
| 1625 | 1418                                        | 5.0 | 1580 | 5.6 | 1727 | 6.1 | 1861 | 6.6 | 1983 | 7.0 |
| 1750 | 1502                                        | 5.3 | 1655 | 5.8 | 1796 | 6.3 | 1926 | 6.8 | 2046 | 7.2 |
| 1875 | 1589                                        | 5.6 | 1731 | 6.1 | 1867 | 6.6 | 1994 | 7.0 | 2111 | 7.4 |
| 2000 | 1677                                        | 5.9 | 1810 | 6.4 | 1941 | 6.8 | 2063 | 7.3 | 2177 | 7.7 |
| 2125 | 1766                                        | 6.2 | 1891 | 6.7 | 2015 | 7.1 | 2133 | 7.5 | 2245 | 7.9 |
| 2250 | 1855                                        | 6.5 | 1973 | 7.0 | 2091 | 7.4 | 2206 | 7.8 | 2314 | 8.2 |
| 2375 | 1946                                        | 6.9 | 2057 | 7.3 | 2169 | 7.6 | 2280 | 8.0 | 2385 | 8.4 |
| 2500 | 2037                                        | 7.2 | 2142 | 7.6 | 2249 | 7.9 | 2355 | 8.3 | 2457 | 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 |
| 1500 | 2036                                        | 7.2 | 2143 | 7.6 | 2245 | 7.9 | 2342 | 8.3  | 2435 | 8.6 |
| 1625 | 2096                                        | 7.4 | 2201 | 7.8 | 2301 | 8.1 | 2396 | 8.4  | 2488 | 8.8 |
| 1750 | 2157                                        | 7.6 | 2261 | 8.0 | 2359 | 8.3 | 2453 | 8.6  | 2542 | 9.0 |
| 1875 | 2220                                        | 7.8 | 2322 | 8.2 | 2419 | 8.5 | 2511 | 8.9  | 2599 | 9.2 |
| 2000 | 2284                                        | 8.1 | 2385 | 8.4 | 2480 | 8.7 | 2571 | 9.1  | 2658 | 9.4 |
| 2125 | 2350                                        | 8.3 | 2449 | 8.6 | 2543 | 9.0 | 2633 | 9.3  | 2719 | 9.6 |
| 2250 | 2417                                        | 8.5 | 2514 | 8.9 | 2607 | 9.2 | 2695 | 9.5  | 2780 | 9.8 |
| 2375 | 2485                                        | 8.8 | 2581 | 9.1 | 2672 | 9.4 | 2759 | 9.7  | —    | —   |
| 2500 | 2555                                        | 9.0 | 2649 | 9.3 | 2738 | 9.7 | 2824 | 10.0 | —    | —   |

High Static 1335-2836 rpm

## Legend and Notes

### Applicable for Electrical Data Tables on pages 48 to 50

#### LEGEND

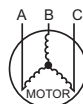
|                      |                                |
|----------------------|--------------------------------|
| <b>BRKR</b>          | — Circuit Breaker              |
| <b>C.O.</b>          | — Convenience Outlet           |
| <b>FLA</b>           | — Full Load Amps               |
| <b>IFM</b>           | — Indoor Fan Motor             |
| <b>LRA</b>           | — Locked Rotor Amps            |
| <b>MCA</b>           | — Minimum Circuit Amps         |
| <b>P.E.</b>          | — Power Exhaust                |
| <b>Pwr d fr/unit</b> | — Powered From Unit            |
| <b>PWRD C.O.</b>     | — Powered Convenience Outlet   |
| <b>RLA</b>           | — Rated Load Amps              |
| <b>UNPWR C.O.</b>    | — Unpowered Convenience Outlet |

#### NOTE(S):

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 volt units, where one value is shown, it is the same for either 208 or 230 volts.
3. **Unbalanced 3-Phase Supply Voltage**  
Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percentage of voltage imbalance.

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

Example: Supply voltage is 230-3-60



AB = 224-v

BC = 231-v

AC = 226-v

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

Determine maximum deviation from average voltage.

(AB) 227-224 = 3-v

(BC) 231-227 = 4-v

(AC) 227-226 = 1-v

Maximum deviation is 4-v.

Determine percent of voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{227} = 1.78\%$$

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.

## 48JC(G/H)\*04-06 Cooling Electrical Data

| 48JC(G/H)<br>UNIT | V-Ph-Hz  | UNIT VOLTAGE |     | COMPRESSOR |     | OFM (EA) |     | IFM  |                          |     | COMBUSTION<br>FAN MOTOR | POWER<br>EXHAUST |                 |
|-------------------|----------|--------------|-----|------------|-----|----------|-----|------|--------------------------|-----|-------------------------|------------------|-----------------|
|                   |          | RANGE        |     | RLA        | LRA | WATTS    | FLA | TYPE | EFFCY<br>AT FULL<br>LOAD | FLA | FLA                     | KIT<br>QTY       | FLA<br>(EA KIT) |
|                   |          | MIN          | MAX |            |     |          |     |      |                          |     |                         |                  |                 |
| *04               | 208-3-60 | 187          | 253 | 10.2       | 38  | 275      | 1.5 | STD  | 100%                     | 3.4 | 0.48                    | 1                | 1.9             |
|                   |          |              |     |            |     |          |     | MED  | 100%                     | 5.1 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 100%                     | 7.3 |                         |                  |                 |
|                   | 230-3-60 | 187          | 253 | 10.2       | 38  | 275      | 1.5 | STD  | 100%                     | 3.4 | 0.48                    | 1                | 1.9             |
|                   |          |              |     |            |     |          |     | MED  | 100%                     | 5.1 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 100%                     | 7.3 |                         |                  |                 |
|                   | 460-3-60 | 414          | 506 | 6.4        | 32  | 275      | 0.8 | STD  | 300%                     | 0.9 | 0.25                    | 1                | 1.0             |
|                   |          |              |     |            |     |          |     | MED  | 300%                     | 1.2 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 300%                     | 1.5 |                         |                  |                 |
| *05               | 208-3-60 | 187          | 253 | 14.1       | 38  | 275      | 1.5 | STD  | 100%                     | 5.0 | 0.48                    | 1                | 1.9             |
|                   |          |              |     |            |     |          |     | MED  | 100%                     | 7.1 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 300%                     | 5.1 |                         |                  |                 |
|                   | 230-3-60 | 187          | 253 | 14.1       | 38  | 275      | 1.5 | STD  | 100%                     | 5.0 | 0.48                    | 1                | 1.9             |
|                   |          |              |     |            |     |          |     | MED  | 100%                     | 7.1 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 300%                     | 5.1 |                         |                  |                 |
|                   | 460-3-60 | 414          | 506 | 8.3        | 38  | 275      | 0.8 | STD  | 300%                     | 1.2 | 0.25                    | 1                | 1.0             |
|                   |          |              |     |            |     |          |     | MED  | 300%                     | 1.5 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 300%                     | 2.4 |                         |                  |                 |
| *06               | 208-3-60 | 187          | 253 | 14.1       | 38  | 275      | 1.5 | STD  | 100%                     | 7.2 | 0.48                    | 1                | 1.9             |
|                   |          |              |     |            |     |          |     | MED  | 100%                     | 8.6 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 300%                     | 6.4 |                         |                  |                 |
|                   | 230-3-60 | 187          | 253 | 14.1       | 38  | 275      | 1.5 | STD  | 100%                     | 7.2 | 0.48                    | 1                | 1.9             |
|                   |          |              |     |            |     |          |     | MED  | 100%                     | 8.6 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 300%                     | 6.4 |                         |                  |                 |
|                   | 460-3-60 | 414          | 506 | 8.3        | 38  | 275      | 0.8 | STD  | 300%                     | 1.5 | 0.25                    | 1                | 1.0             |
|                   |          |              |     |            |     |          |     | MED  | 300%                     | 1.9 |                         |                  |                 |
|                   |          |              |     |            |     |          |     | HIGH | 300%                     | 2.9 |                         |                  |                 |

## 48JC(G/H)\*04-06 MCA MOCP Electrical Data

| 48JC(G/H)<br>UNIT SIZE | NOM.<br>V-Ph-Hz | IFM TYPE | NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET |                            |                 |     |                                      |                            |                 |     |
|------------------------|-----------------|----------|-------------------------------------------------------|----------------------------|-----------------|-----|--------------------------------------|----------------------------|-----------------|-----|
|                        |                 |          | NO POWER EXHAUST                                      |                            |                 |     | w/ POWER EXHAUST (powered from unit) |                            |                 |     |
|                        |                 |          | MCA                                                   | FUSE OR<br>HACR<br>BREAKER | DISCONNECT SIZE |     | MCA                                  | FUSE OR<br>HACR<br>BREAKER | DISCONNECT SIZE |     |
|                        |                 |          |                                                       |                            | FLA             | LRA |                                      |                            | FLA             | LRA |
| *04                    | 208/230-3-60    | STD      | 18                                                    | 25                         | 17              | 47  | 20                                   | 25                         | 20              | 49  |
|                        |                 | MED      | 20                                                    | 25                         | 19              | 49  | 22                                   | 30                         | 22              | 51  |
|                        |                 | HIGH     | 22                                                    | 30                         | 22              | 52  | 24                                   | 30                         | 24              | 54  |
|                        | 460-3-60        | STD      | 10                                                    | 15                         | 9               | 35  | 11                                   | 15                         | 10              | 36  |
|                        |                 | MED      | 10                                                    | 15                         | 10              | 36  | 11                                   | 15                         | 11              | 37  |
|                        |                 | HIGH     | 11                                                    | 15                         | 10              | 36  | 12                                   | 15                         | 11              | 37  |
| *05                    | 208/230-3-60    | STD      | 25                                                    | 30                         | 24              | 49  | 26                                   | 30                         | 26              | 51  |
|                        |                 | MED      | 27                                                    | 30                         | 26              | 52  | 29                                   | 40                         | 28              | 54  |
|                        |                 | HIGH     | 25                                                    | 30                         | 24              | 49  | 27                                   | 30                         | 26              | 51  |
|                        | 460-3-60        | STD      | 13                                                    | 20                         | 12              | 42  | 14                                   | 20                         | 13              | 43  |
|                        |                 | MED      | 13                                                    | 20                         | 12              | 42  | 14                                   | 20                         | 13              | 43  |
|                        |                 | HIGH     | 14                                                    | 20                         | 13              | 43  | 15                                   | 20                         | 14              | 44  |
| *06                    | 208/230-3-60    | STD      | 27                                                    | 30                         | 26              | 52  | 29                                   | 40                         | 28              | 54  |
|                        |                 | MED      | 28                                                    | 40                         | 28              | 54  | 30                                   | 40                         | 30              | 56  |
|                        |                 | HIGH     | 26                                                    | 30                         | 25              | 51  | 28                                   | 40                         | 27              | 53  |
|                        | 460-3-60        | STD      | 13                                                    | 20                         | 12              | 42  | 14                                   | 20                         | 13              | 43  |
|                        |                 | MED      | 14                                                    | 20                         | 13              | 43  | 15                                   | 20                         | 14              | 44  |
|                        |                 | HIGH     | 15                                                    | 20                         | 14              | 44  | 16                                   | 20                         | 15              | 45  |

## 48JC(G/H)\*04-06 MCA MOCP Electrical Data (cont)

| 48JC(G/H)<br>UNIT SIZE | NOM.<br>V-Ph-Hz | IFM TYPE | w/ POWERED CONVENIENCE OUTLET |                            |                 |     |                                      |                            |                 |     |
|------------------------|-----------------|----------|-------------------------------|----------------------------|-----------------|-----|--------------------------------------|----------------------------|-----------------|-----|
|                        |                 |          | NO POWER EXHAUST              |                            |                 |     | w/ POWER EXHAUST (powered from unit) |                            |                 |     |
|                        |                 |          | MCA                           | FUSE OR<br>HACR<br>BREAKER | DISCONNECT SIZE |     | MCA                                  | FUSE OR<br>HACR<br>BREAKER | DISCONNECT SIZE |     |
|                        |                 |          |                               |                            | FLA             | LRA |                                      |                            | FLA             | LRA |
| *04                    | 208/230-3-60    | STD      | 23                            | 30                         | 23              | 52  | 25                                   | 30                         | 25              | 54  |
|                        |                 | MED      | 25                            | 30                         | 25              | 54  | 27                                   | 30                         | 27              | 56  |
|                        |                 | HIGH     | 27                            | 30                         | 27              | 57  | 29                                   | 35                         | 30              | 59  |
|                        | 460-3-60        | STD      | 12                            | 15                         | 12              | 37  | 13                                   | 15                         | 13              | 38  |
|                        |                 | MED      | 13                            | 15                         | 12              | 38  | 14                                   | 15                         | 13              | 39  |
|                        |                 | HIGH     | 13                            | 15                         | 13              | 38  | 14                                   | 20                         | 14              | 39  |
| *05                    | 208/230-3-60    | STD      | 29                            | 40                         | 29              | 54  | 31                                   | 40                         | 31              | 56  |
|                        |                 | MED      | 31                            | 45                         | 32              | 57  | 33                                   | 45                         | 34              | 59  |
|                        |                 | HIGH     | 29                            | 40                         | 29              | 54  | 31                                   | 45                         | 32              | 56  |
|                        | 460-3-60        | STD      | 15                            | 20                         | 14              | 44  | 16                                   | 20                         | 16              | 45  |
|                        |                 | MED      | 15                            | 20                         | 15              | 44  | 16                                   | 20                         | 16              | 45  |
|                        |                 | HIGH     | 16                            | 20                         | 16              | 45  | 17                                   | 25                         | 17              | 46  |
| *06                    | 208/230-3-60    | STD      | 32                            | 45                         | 32              | 57  | 33                                   | 45                         | 34              | 59  |
|                        |                 | MED      | 33                            | 45                         | 33              | 59  | 35                                   | 45                         | 36              | 61  |
|                        |                 | HIGH     | 31                            | 40                         | 31              | 56  | 33                                   | 45                         | 33              | 58  |
|                        | 460-3-60        | STD      | 15                            | 20                         | 15              | 44  | 16                                   | 20                         | 16              | 45  |
|                        |                 | MED      | 16                            | 20                         | 15              | 45  | 17                                   | 20                         | 16              | 46  |
|                        |                 | HIGH     | 17                            | 20                         | 16              | 46  | 18                                   | 25                         | 17              | 47  |



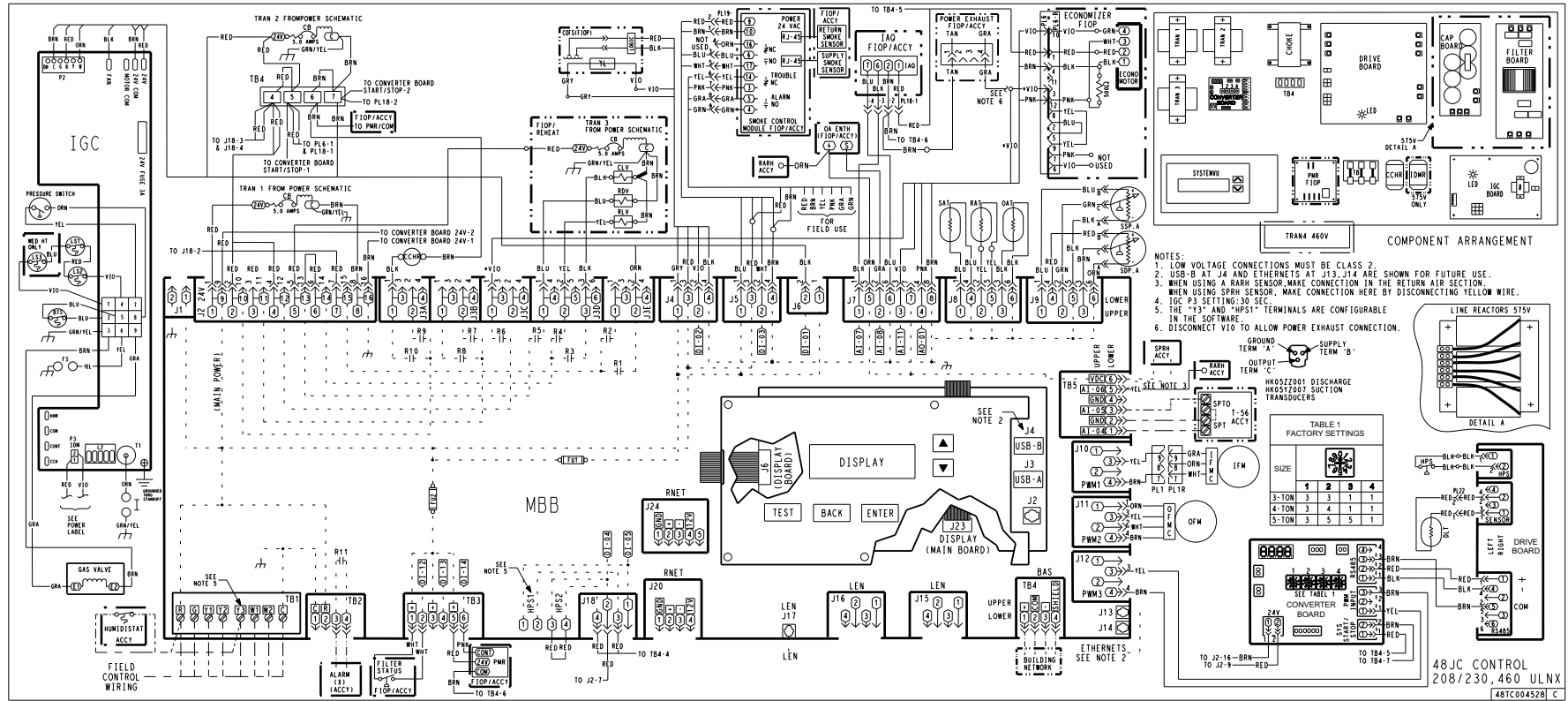
## 48JC(G/H)\*04-06 MCA MOCP Electrical Data with Factory-Installed HACR Breaker

| 48JC(G/H)<br>UNIT SIZE | NOM.<br>V-Ph-Hz | IFM TYPE | NO CONVENIENCE OUTLET OR UNPOWERED CONVENIENCE OUTLET |                 |                 |     |                                      |                 |                 |     |
|------------------------|-----------------|----------|-------------------------------------------------------|-----------------|-----------------|-----|--------------------------------------|-----------------|-----------------|-----|
|                        |                 |          | NO POWER EXHAUST                                      |                 |                 |     | w/ POWER EXHAUST (powered from unit) |                 |                 |     |
|                        |                 |          | MCA                                                   | HACR<br>BREAKER | DISCONNECT SIZE |     | MCA                                  | HACR<br>BREAKER | DISCONNECT SIZE |     |
|                        |                 |          |                                                       |                 | FLA             | LRA |                                      |                 | FLA             | LRA |
| *04                    | 208/230-3-60    | STD      | 18                                                    | 25              | 17              | 47  | 20                                   | 25              | 20              | 49  |
|                        |                 | MED      | 20                                                    | 25              | 19              | 49  | 22                                   | 30              | 22              | 51  |
|                        |                 | HIGH     | 22                                                    | 30              | 22              | 52  | 24                                   | 30              | 24              | 54  |
|                        | 460-3-60        | STD      | 10                                                    | 15              | 9               | 35  | 11                                   | 15              | 10              | 36  |
|                        |                 | MED      | 10                                                    | 15              | 10              | 36  | 11                                   | 15              | 11              | 37  |
|                        |                 | HIGH     | 11                                                    | 15              | 10              | 36  | 12                                   | 15              | 11              | 37  |
| *05                    | 208/230-3-60    | STD      | 25                                                    | 30              | 24              | 49  | 26                                   | 30              | 26              | 51  |
|                        |                 | MED      | 27                                                    | 30              | 26              | 52  | 29                                   | 40              | 28              | 54  |
|                        |                 | HIGH     | 25                                                    | 30              | 24              | 49  | 27                                   | 30              | 26              | 51  |
|                        | 460-3-60        | STD      | 13                                                    | 20              | 12              | 42  | 14                                   | 20              | 13              | 43  |
|                        |                 | MED      | 13                                                    | 20              | 12              | 42  | 14                                   | 20              | 13              | 43  |
|                        |                 | HIGH     | 14                                                    | 20              | 13              | 43  | 15                                   | 20              | 14              | 44  |
| *06                    | 208/230-3-60    | STD      | 27                                                    | 30              | 26              | 52  | 29                                   | 40              | 28              | 54  |
|                        |                 | MED      | 28                                                    | 40              | 28              | 54  | 30                                   | 40              | 30              | 56  |
|                        |                 | HIGH     | 26                                                    | 30              | 25              | 51  | 28                                   | 40              | 27              | 53  |
|                        | 460-3-60        | STD      | 13                                                    | 20              | 12              | 42  | 14                                   | 20              | 13              | 43  |
|                        |                 | MED      | 14                                                    | 20              | 13              | 43  | 15                                   | 20              | 14              | 44  |
|                        |                 | HIGH     | 15                                                    | 20              | 14              | 44  | 16                                   | 20              | 15              | 45  |

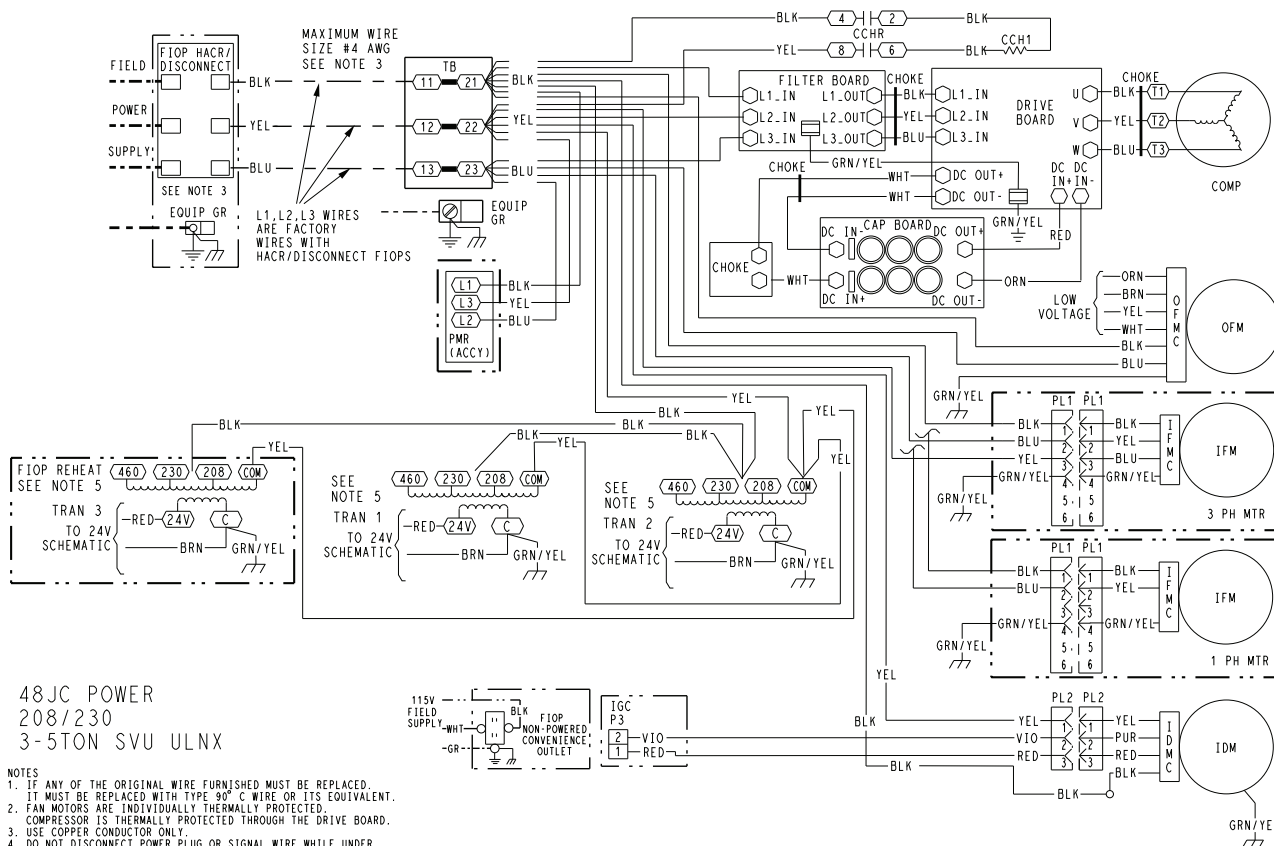
## 48JC(G/H)\*04-06 MCA MOCP Electrical Data with Factory-Installed HACR Breaker (cont)

| 48JC(G/H)<br>UNIT SIZE | NOM.<br>V-Ph-Hz | IFM TYPE | w/ POWERED CONVENIENCE OUTLET |                 |                 |     |                                      |                 |                 |     |
|------------------------|-----------------|----------|-------------------------------|-----------------|-----------------|-----|--------------------------------------|-----------------|-----------------|-----|
|                        |                 |          | NO POWER EXHAUST              |                 |                 |     | w/ POWER EXHAUST (powered from unit) |                 |                 |     |
|                        |                 |          | MCA                           | HACR<br>BREAKER | DISCONNECT SIZE |     | MCA                                  | HACR<br>BREAKER | DISCONNECT SIZE |     |
|                        |                 |          |                               |                 | FLA             | LRA |                                      |                 | FLA             | LRA |
| *04                    | 208/230-3-60    | STD      | 23                            | 30              | 23              | 52  | 25                                   | 30              | 25              | 54  |
|                        |                 | MED      | 25                            | 30              | 25              | 54  | 27                                   | 30              | 27              | 56  |
|                        |                 | HIGH     | 27                            | 30              | 27              | 57  | 29                                   | 35              | 30              | 59  |
|                        | 460-3-60        | STD      | 12                            | 15              | 12              | 37  | 13                                   | 15              | 13              | 38  |
|                        |                 | MED      | 13                            | 15              | 12              | 38  | 14                                   | 15              | 13              | 39  |
|                        |                 | HIGH     | 13                            | 15              | 13              | 38  | 14                                   | 20              | 14              | 39  |
| *05                    | 208/230-3-60    | STD      | 29                            | 40              | 29              | 54  | 31                                   | 40              | 31              | 56  |
|                        |                 | MED      | 31                            | 45              | 32              | 57  | 33                                   | 45              | 34              | 59  |
|                        |                 | HIGH     | 29                            | 40              | 29              | 54  | 31                                   | 45              | 32              | 56  |
|                        | 460-3-60        | STD      | 15                            | 20              | 14              | 44  | 16                                   | 20              | 16              | 45  |
|                        |                 | MED      | 15                            | 20              | 15              | 44  | 16                                   | 20              | 16              | 45  |
|                        |                 | HIGH     | 16                            | 20              | 16              | 45  | 17                                   | 25              | 17              | 46  |
| *06                    | 208/230-3-60    | STD      | 32                            | 45              | 32              | 57  | 33                                   | 45              | 34              | 59  |
|                        |                 | MED      | 33                            | 45              | 33              | 59  | 35                                   | 45              | 36              | 61  |
|                        |                 | HIGH     | 31                            | 40              | 31              | 56  | 33                                   | 45              | 33              | 58  |
|                        | 460-3-60        | STD      | 15                            | 20              | 15              | 44  | 16                                   | 20              | 16              | 45  |
|                        |                 | MED      | 16                            | 20              | 15              | 45  | 17                                   | 20              | 16              | 46  |
|                        |                 | HIGH     | 17                            | 20              | 16              | 46  | 18                                   | 25              | 17              | 47  |

## Typical Control Wiring Diagram — 48JC(G/H) 04-06 Unit



## Typical Power Wiring Diagram — 48JC(G/H) 04-06 Unit



48TC004529 D

# Sequence of operation

## General

The unit is optimized to control the space comfort conditions directly through a space sensor for single zone variable air volume (SZVAV) control. The unit can also be controlled traditionally with a conventional thermostat or a standard factory furnished direct return air control. Using space sensor or return air control the unit will use the temperature and setpoints to determine heating and cooling demands. Using thermostat control, the thermostat will relay the cooling and heating demands to the unit and the change in return air will assist with cooling control. The unit is compatible with BACnet, i-Vu, or CCN building systems plus supports linkage on zoning using CCN VVT and i-Vu® Open VVT controls.

## Standby operation

Standby is when there is no cooling or heating demand on the unit. During this time ventilation will run if the unit is equipped with an economizer and continuous fan. When not equipped with economizer the supply fan will run for circulation with continuous fan. The supply fan will run at the user defined ventilation speed. When not under continuous fan the supply fan will be off until cooling, heating, or ventilation demand is needed.

## Cooling operation

During cooling operation, the control will use the space temperature or return air sensor to drive a Proportional Integral (PI) control to vary the compressor speed to satisfy the cooling demand. The supply fan and outdoor fan speeds will vary with the compressor speed to maintain an efficient operation of the refrigerant system. The supply air sensor will be used to help temper the cooling capacity as needed. The unit is designed to operate from a nominal capacity down to 25% and up to 105% providing it is within the unit's operating limit.

## Additional economizer operation

When equipped with an energy savings/fresh air economizer, the outside air with a PI control will be used to satisfy the cooling demand. The supply fan will run at the user defined free cooling speed or the user defined cooling design speed while varying the economizer damper for free cooling. If the damper is not enough to satisfy the cooling demand, the compressor speed will be varied as needed to help as integrated cooling.

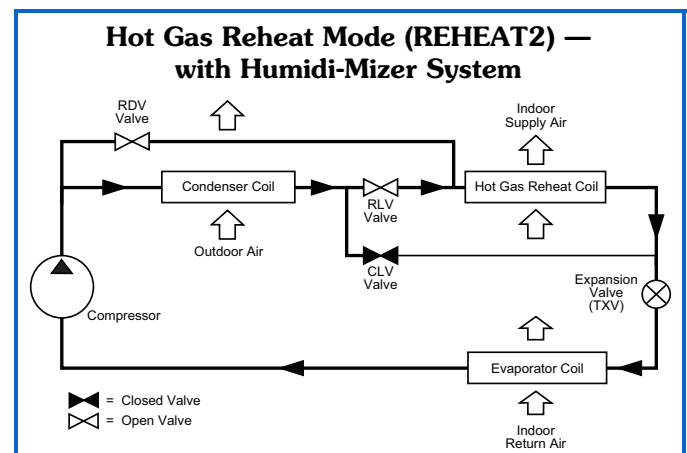
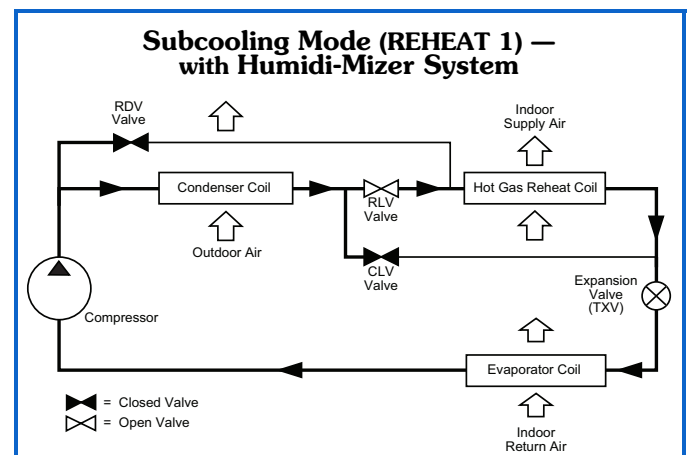
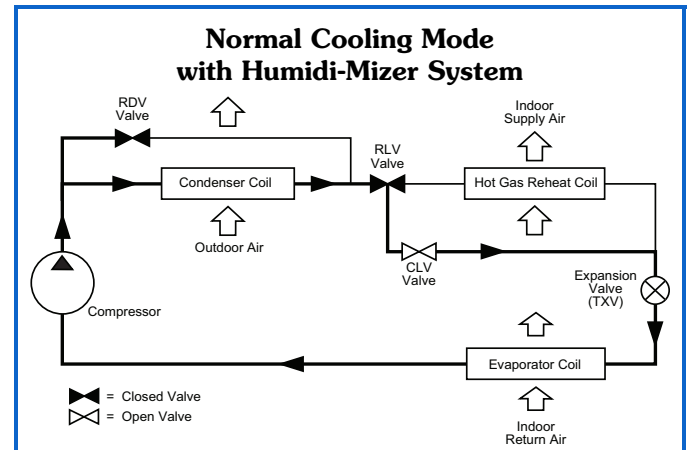
## Heating operation

The supply fan will run at the user defined heating speed while performing heating. The supply air sensor will restrict heating as needed to prevent high discharge air temperatures.

## Dehumidification operation

The unit can perform dehumidification operation in two ways: Factory-installed option Humidi-MiZer® system or a SystemVu™ controller standard feature, Supply Fan based dehumidification operation. When equipped with Humidi-MiZer option, the compressor speed and supply fan will operate at a fixed speed, and the outdoor fan will vary for head pressure control. These are used with the integrated reheat coil to provide two types of dehumidification operation: Hot gas reheat and Subcooling. Hot gas reheat uses the system to provide maximum latent cooling, while subcooling provides an improved mixture of latent and sensi-

ble cooling. When not equipped with the humidifier option the supply fan can be used to help provide dehumidification. During this type of dehumidification the system will operate with normal cooling operation but the supply air sensor and suction pressure will be used to decrease the supply fan to improve latent cooling. See the following figures.



For more information, on the SystemVu controller refer to the 48JC(G/H) 04-06 Single Package Rooftop Units with SystemVu Controller Controls, Start-up, Operation and Troubleshooting manual.

## Minimum operating ambient temperature (cooling)

In mechanical cooling mode, your Carrier rooftop unit can safely operate down to an outdoor ambient temperature of 35°F (2°C). It is possible to provide cooling at lower outdoor ambient temperatures by using less outside air and/or economizers.

## Maximum operating ambient temperature (cooling)

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

## Multiple motor and drive packages

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

## Standard stainless steel heat exchanger

The stainless steel heat exchanger provides a tubular heat exchanger 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)

Using the factory settings, the minimum temperatures for the 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

| STAINLESS STEEL         |
|-------------------------|
| 40°F (4°C) Continuous   |
| 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 max may cause blow-off, undesired airflow noise, or airflow related problems with the rooftop unit. Operating below the min may cause problems with coil

freeze-up and unsafe heating operation. Heating and cooling limitations differ when evaluating operating cfm, the minimum value is the HIGHER of the cooling and heating minimum cfm values published on page 7 and the maximum value is the LOWER of the cooling and heating minimum values published on page 7.

## Heating-to-cooling changeover

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

## Airflow

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

## Outdoor air application strategies

Economizers reduce operating expenses and compressor run time by providing a free source of cooling and a means of ventilation to match application changing needs. In fact, they should be considered for most applications. Also, consider the various economizer control methods and their benefits, as well as sensors required to accomplish your application goals. Please contact your local Carrier representative for assistance.

## Motor limits, break horsepower (bhp)

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

## Propane heating

Operation with propane gas is not allowed.

## High altitude heating

Unit can operate from 0 to 2,000 feet in altitude as standard, operation above 2,000 feet is not allowed.

## Sizing a rooftop

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

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

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



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.



## Ultra High Efficiency Gas Heat/Electric Cooling Packaged Rooftop

### HVAC Guide Specifications

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

Carrier Model Number: **48JC(G/H)\*04-06**

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

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

A. 23 06 80.13.A.) Rooftop unit (RTU) schedule:

1. Schedule is per the project specification requirements.

### Part 2 — (23 07 16) HVAC Equipment Insulation

2.01 (23 07 16.13) Decentralized, Rooftop Units:

A. (23 07 16.13.A.) Evaporator fan compartment:

1. Interior cabinet surfaces shall be insulated with a minimum 1/2 in. thick, minimum 1-1/2 lb density, flexible fiberglass insulation bonded with a phenolic binder, neoprene coated on the air side.
2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.

B. (23 07 16.13.B.) 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 up to 2 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 unit controller with Direct Digital Control (DDC) capability:

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:
  - a. RUN – meaning all systems are go.
  - b. ALERT – indicates there is currently a non-critical issue with the unit, like filters need to be replaced.
  - c. FAULT – 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 and Carrier Comfort Network® (CCN) systems. No special modules or boards are required for these capabilities. Has the capability to work with Equipment Touch™ and System Touch™ devices and ZS Sensors.
6. The ability to read refrigerant pressures at display or via BAS network of; Discharge Pressure and Suction Pressure. The need for traditional refrigerant gauges is not required.

7. USB Data Port for flash drive interaction. This will allow the transfer of data for uploads, downloads, perform software upgrades, back-up and restore data and file transfer data such as component number of starts and run hours.
8. Reverse Rotation Protection of compressors if field three phase wiring is misapplied.
9. Provide Service Capabilities of:
  - a. Auto run test
  - b. Manual run test
  - c. Component run hours and starts
  - d. Commissioning reports
  - e. Data logging
  - f. Alarm history
10. Economizer control and diagnostics. Set up economizer operation, receive feedback from actuator. Also meets the most recent California Title 24, ASHRAE 90.1 and IECC Fault Detection and Diagnostic (FDD) requirements.
11. Unit cooling operation down to 0°F (–17°C).
12. Controller shall have easy access connections around the controller perimeter area and consist of Mate-N-Lok<sup>1</sup>, terminal block and RJ style modular jack connections.
13. 365 day real time clock, 20 holiday schedules along with occupied and unoccupied scheduling.
14. Auto-Recognition for easy installation and commissioning of devices like economizers, space sensors, etc.
15. A 5°F temperature difference between cooling and heating set points to meet the latest ASHRAE 90.1 Energy Standard.
16. 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 hand-held Navigator™ display, Equipment Touch and System Touch devices.
18. Units with the factory-installed Humidi-MiZer® system option are capable of providing multiple modes of improved dehumidification as a variation of the normal cooling cycle.
19. Supply Air Tempering control operates the gas or electric heat to maintain a minimum supply air temperature during conditions where very cold outdoor air causes the supply air temperature to fall below the configured Supply Air Tempering Setpoint. This occurs during periods where DCV is active and increasing the amount of outdoor air or in cases where the system is operating at very low airflow and the calculated economizer position has increased to maintain a constant ventilation rate.

20. Demand limiting in SystemVu™ is achieved through set point expansion. The systems heating and cooling set points are expanded in steps or levels. The degree to which the set points may be expanded is defined by the 6 demand level offsets and the 2 commanded demand limit levels.
21. 3-year limited part warranty.

## **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. Unit shall have multiple transformers with 75VA capability.
2. Shall utilize color-coded wiring.
3. The heat exchanger shall be controlled by an integrated gas controller (IGC) microprocessor. See heat exchanger section of this specification.
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:
  - a. 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:
  - a. 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. Automatic reset, motor thermal overload protector.
5. Heating section shall be provided with the following minimum protections:
  - a. High temperature limit switches.
  - b. Induced draft motor speed sensor.
  - c. Flame rollout switch.
  - d. Flame proving controls.

## **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**

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

## 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® (R-410A) 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 and exceeds ASHRAE 90.1 minimum efficiency requirements.
2. Unit shall be rated in accordance with AHRI Standards 210/240.
3. Unit shall be designed to conform to ASHRAE 15.
4. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
5. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
6. Unit casing shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).
7. Unit shall be designed in accordance with ISO 9001, and shall be manufactured in a facility registered by ISO 9001:2015.

8. Roof curb shall be designed to conform to NRCA Standards.

9. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.

10. Unit shall be designed in accordance with UL Standard 1995, including tested to withstand rain.

11. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.

12. Unit shake tested to assurance level 1, ASTM D4169 to ensure shipping reliability.

#### C. (23 81 19.13.C.) Delivery, Storage, and Handling:

1. Unit shall be stored and handled per manufacturer's recommendations.
2. Lifted by crane requires either shipping top panel or spreader bars.
3. Unit shall only be stored or positioned in the upright position.

#### D. (23 81 19.13.D.) Project Conditions:

1. As specified in the contract.

#### E. (23 81 19.13.E.) Operating Characteristics:

1. Unit shall be capable of starting and running at 125°F (52°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 210/240 at ±10% voltage.
2. Compressor with standard controls shall be capable of operation down to 0°F (–17°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.
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 210/240 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 gas heat compartment.
  4. Base of unit shall have a minimum of four 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 all sizes.
  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 Stainless Steel Heat Exchanger construction — Ultra Low NOx Burner Box:
    - a. Burners shall be of premixed type constructed of stainless steel.
    - 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 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. Stainless Steel natural gas burner box and heat exchanger assembly shall provide Ultra Low NOx gas emissions of 14 nanograms/joule (ng/J).
4. 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 internally grooved copper tubes with all joints brazed.
    - b. Evaporator coils shall be leak tested to 150 psig, pressure tested to 450 psig, and qualified to UL 1995 burst test at 1775 psig.
    - c. Condenser coils shall be leak tested to 150 psig, pressure tested to 650 psig, and qualified to UL 1995 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 B117-90.
    - 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.
  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 D523-89.
    - 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 D3363-92A and cross-hatch adhesion of 4B-5B per ASTM D3359-93.
    - f. Impact resistance shall be up to 160 in.-lb (ASTM D2794-93).
    - g. Humidity and water immersion resistance shall be up to minimum 1000 and 250 hours respectively (ASTM D2247-92 and ASTM D870-92).
    - h. Corrosion durability shall be confirmed through testing to be no less than 1000 hours salt spray per ASTM B117-90.
- J. (23 81 19.13.J.) Refrigerant Components:
1. Refrigerant circuit shall include the following control, safety, and maintenance features:
    - a. TXV metering system on all models shall include a multiple feed distribution system that optimizes coil performance.
    - b. Refrigerant filter drier - Solid core design.
    - c. Service gauge connections on suction and discharge lines.
    - d. Pressure gauge access through a specially designed access port in the top panel of the unit.
  - 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).

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 fully hermetic, reliable variable capacity compressor with DC inverter control on all sizes with:
  - 1) Two LEDS (red and green) indicate inverter operating status and aid in troubleshooting.
  - 2) Noise filter reduces unwanted electromagnetic interference (EMI).
  - 3) Inverter reactor adds inductance to the line between the inverter and the compressor to limit current rise and protect the compressor.
- b. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
- c. Compressors shall be internally protected from high discharge temperature conditions.
- d. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
- e. Compressor shall be factory mounted on rubber grommets.
- f. Compressor motors shall have internal line break thermal, current overload and high pressure differential protection.
- g. Crankcase heaters shall not be required for normal operating range, unless required by compressor manufacturer due to refrigerant charge limits.

### 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 a ECM motor design.
  - b. Shall have permanently lubricated bearings.
  - c. Shall have inherent automatic-reset thermal overload protection.
  - d. Shall have slow ramp up to speed capabilities.
  - e. Shall require no fan/motor belts for operation, adjustments and or initial fan speed set up.
  - f. Fan set up on the SystemVu™ controller can eliminate the need of removal of blower access door, required on conventional belt drive systems.
  - g. Shall be internally protected from electrical phase reversal and loss.
  - h. Shall be a slide out design for easy maintenance and service.

### 2. Evaporator Fan:

- a. Shall be easily set through the SystemVu controller.
- b. Blower fan shall be a Vane Axial fan design with 75% less moving parts than a conventional belt drive system.
- c. Shall be constructed of an aluminum stator or high impact composite material on stator, rotor and air inlet casing.
- d. Shall be a patented/pending design with a corrosion resistant material and dynamically balanced.
- e. Shall have slow ramp up to speed capabilities to help reduce sound and comfort issues typically associated with single speed belt drive systems.
- f. Shall be a slide out design with two screw removal.

### M. (23 81 19.13.M.) Condenser Fans and Motors:

1. Condenser fan motors:
  - a. Shall be a totally enclosed motor.
  - b. Shall use permanently lubricated ball bearings.
  - c. Shall have inherent thermal overload protection with an automatic reset feature.
  - d. Shall use a shaft-down design on all sizes.
  - e. Shall be variable speed design and controlled by base unit SystemVu controller.
2. Condenser Fans:
  - a. Shall be a direct-driven propeller type fan constructed of high impact composite material.
  - b. Shall have high impact composite blades completely formed into one piece without blade fasteners or connectors and shall be dynamically balanced.

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

1. Integrated EconoMi\$er®2 low leak rate model:

- 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. Standard 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™ controller shall be a 4 to 20mA design controlled directly by the controller. SystemVu controller meets California Title 24, ASHRAE 90.1 and IECC Fault Detection and Diagnostic (FDD) requirements.
- h. Shall be capable of introducing up to 100% outdoor air.
- i. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
- j. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
- k. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory-installed 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 2 to 10 vdc CO<sub>2</sub> 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. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.

2. Integrated EconoMi\$er®2 Ultra Low Leak rate model:

- a. Integrated, gear driven opposing modulating blade design type capable of simultaneous economizer and compressor operation.
- b. Independent modules for vertical or horizontal return configuration shall be available. Vertical return modules shall be available as a factory-installed option.
- c. Damper blades shall be galvanized steel with composite gears. Plastic or composite blades on intake or return shall not be acceptable.
- d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
- e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
- f. Ultra Low Leak design meets California Title 24 section 140.4 and ASHRAE 90.1 requirements for 4 cfm per sq. ft. on the outside air dampers and 10 cfm per sq. ft. on the return dampers.
- g. Economizer controller on EconoMi\$er2 models with SystemVu™ controller shall be a 4-20mA design controlled directly by the controller. SystemVu controller meets California Title 24, ASHRAE 90.1 and IECC Fault Detection and Diagnostic (FDD) requirements.
- h. Shall be capable of introducing up to 100% outdoor air.
- i. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air and contain seals that meet ASHRAE 90.1 requirements.
- j. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
- k. Dry bulb outdoor air temperature sensor shall be provided as standard. Enthalpy sensor is also available on factory-installed 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 2 to 10 vdc CO<sub>2</sub> 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. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
3. Humidi-MiZer Adaptive Dehumidification System:
- a. The Humidi-MiZer Adaptive Dehumidification System shall be factory-installed and shall provide greater dehumidification of the occupied space by two modes of dehumidification operations in addition to its normal design cooling mode:
    - 1) Subcooling mode further sub cools the hot liquid refrigerant leaving the condenser coil when both temperature and humidity in the space are not satisfied.
    - 2) Hot gas reheat mode shall mix a portion of the hot gas from the discharge of the compressor with the hot liquid refrigerant leaving the condenser coil to create a two-phase heat transfer in the system, resulting in a neutral leaving air temperature when only humidity in the space is not satisfied.
4. Flue Shield:
- a. Flue shield shall provide protection from the hot sides of the gas flue hood.
5. Condenser Coil Hail Guard Assembly:
- a. Shall protect against damage from hail.
  - b. Shall be either hood style or louvered.
6. Unit-Mounted, Non-Fused Disconnect Switch (Available on units with MOCPs of 80 amps or less. Not available on 460-3-60 volt models.):
- a. Switch shall be factory-installed, internally mounted.
  - b. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
  - c. Shall be accessible from outside the unit.
  - d. Shall provide local shutdown and lockout capability.
  - e. Sized only for the unit as ordered from the factory. Does not accommodate field-installed devices.
7. HACR Breaker (Not available on 460-3-60 volt models.):
- 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.
  - b. Sized only for the unit as ordered from the factory. Does not accommodate field-installed devices.
8. Convenience Outlet:
- a. Powered convenience outlet:
    - 1) Outlet shall be powered from main line power to the rooftop unit.
    - 2) Outlet shall be powered from line side or load side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be UL certified and rated for additional outlet amperage.
    - 3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
    - 4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
    - 5) Voltage required to operate convenience outlet shall be provided by a factory-installed step-down transformer.
    - 6) Outlet shall be accessible from outside the unit.
    - 7) Outlet shall include a field-installed "Wet in Use" cover.
  - b. Factory-Installed Non-Powered convenience outlet:
    - 1) Outlet shall be powered from a separate 115/120-v power source.
    - 2) A transformer shall not be included.
    - 3) Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
    - 4) Outlet shall include 15 amp GFI receptacles with independent fuse protection.
    - 5) Outlet shall be accessible from outside the unit.
    - 6) Outlet shall include a field-installed "Wet in Use" cover.

- c. Field-Installed Non-Powered convenience outlet:
  - 1) Outlet shall be powered from a separate 115/120-v power source.
  - 2) A transformer shall not be included.
  - 3) Outlet shall be field-installed and internally mounted with easily accessible 115-v female receptacle.
  - 4) Outlet shall include 20 amp GFI receptacles. This kit provides a flexible installation method which allows code compliance for height requirements of the GFCI outlet from the finished roof surface as well as the capability to relocate the outlet to a more convenient location.
  - 5) Outlet shall be accessible from outside the unit.
  - 6) Outlet shall include a field-installed "Wet in Use" cover.
- 9. 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.
- 10. 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 four connection locations per unit.
- 11. 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.
- 12. Roof Curbs (Vertical):
  - a. Full perimeter roof curb with exhaust capability providing separate air streams for energy recovery from the exhaust air without supply air contamination.
  - b. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
  - c. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
- 13. Outdoor Air Enthalpy Sensor:
  - a. The outdoor air enthalpy sensor shall be used to provide single enthalpy control. When used in conjunction with a return air enthalpy sensor, the unit will provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.
- 14. Return Air Enthalpy Sensor:
  - a. The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
- 15. Indoor Air Quality (CO<sub>2</sub>) Sensor:
  - a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
  - b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The setpoint shall have adjustment capability.
- 16. Smoke Detectors (factory-installed only):
  - a. Shall be a four-wire controller and detector.
  - b. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
  - c. Shall use magnet-activated test/reset sensor switches.
  - d. Shall have tool-less connection terminal access.
  - e. Shall have a recessed momentary switch for testing and resetting the detector.
  - f. Controller shall include:
    - 1) One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel.
    - 2) Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment.
    - 3) One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station.
    - 4) Capable of direct connection to two individual detector modules.
    - 5) Can be wired to up to 14 other duct smoke detectors for multiple fan shut-down applications.
- 17. Hinged Access Panels:
  - a. Shall provide easy access through integrated quarter turn latches.
  - b. Shall be on major panels of: filter, control box, fan motor, and compressor.

## Guide specifications (cont)

18. Condensate overflow switch:
  - a. This sensor and related controller monitors the condensate level in the drain pan and shuts down compression operation when overflow conditions occur. It includes:
    - 1) Indicator light — solid red (more than 10 seconds on water contact – compressors disabled), blinking red (sensor disconnected).
    - 2) 10 second delay to break — eliminates nuisance trips from splashing or waves in pan (sensor needs 10 seconds of constant water contact before tripping).
    - 3) Disables the compressor(s) operation when condensate plug is detected, but still allows fans to run for economizer.
19. Foil-Faced Insulation:
  - a. Throughout unit cabinet air stream, non-fibrous and cleanable foil-faced insulation is used.
20. MERV-8 Return Air filters:
  - a. Factory option to upgrade standard unit filters to MERV-8 filters.
21. Phase Monitor Control:
  - a. Shall monitor the sequence of three phase electrical system to provide a phase reversal protection.
  - b. Shall monitor the three phase voltage inputs to provide a phase loss protection for the three phase device.
  - c. Will work on either a Delta or Wye power connection.
22. Horn/Strobe Annunciator:
  - a. Provides an audible/visual signaling device for use with factory-installed option or field-installed accessory smoke detectors:
    - 1) Requires installation of a field-supplied 24-v transformer suitable for 4.2 VA (AC) or 3.0 VA (DC) per horn/strobe accessory.
    - 2) Requires field-supplied electrical box, North American 1-gang box, 2 in. x 4 in. (51 mm x 102 mm).
    - 3) Shall have a clear colored lens.