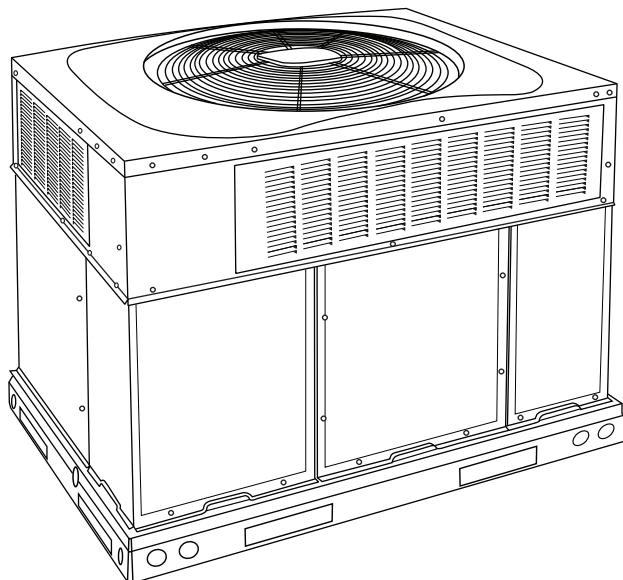


## Product Data



A09033

**Fig. 1 - Unit 677E**

Single-Packaged Products with Energy-Saving Features and Puron® refrigerant.

- Up to 15.5 SEER
- 12.0 - 12.5 EER
- 8.2 to 8.5 HSPF
- 81% AFUE (Single phase models)
- Direct Spark Ignition
- Factory-Installed TXV
- Multi-speed ECM Blower Motor-Standard
- Sound Levels as low as 68dBA
- Two Stage Cooling
- Two Stage Heating (208/230 VAC models)
- Dehumidification Feature

### FEATURES/BENEFITS

One-piece heating and cooling units with low sound levels, easy installation, low maintenance, and dependable performance.

Bryant's unique refrigerant designed to be environmentally balanced. Puron is an HFC refrigerant which does not contain chlorine that can harm the ozone layer. Puron refrigerant is in service in millions of systems proving highly reliable and is non-ozone depleting.

#### Easy Installation

Factory-assembled package is a compact, fully self-contained, combination gas heating/electric cooling unit that is prewired, pre-piped, and pre-charged for minimum installation expense. These units are available in a variety of standard and optional heating/cooling size combinations with voltage options to meet residential and light commercial requirements. Units are lightweight and install easily on a rooftop or at ground level. The high tech composite base eliminates rust problems associated with ground level applications.

#### Innovative Unit Base Design

On the inside a high-tech composite material will not rust and incorporates a sloped drain pan which improves drainage and helps inhibit mold, algae and bacterial growth. On the outside metal base rails provide added stability as well as easier handling and rigging.

#### Convertible duct configuration

Unit is designed for use in either downflow or horizontal applications. Each unit is converted from horizontal to downflow and includes two horizontal duct covers. Downflow operation is provided in the field to allow vertical ductwork connections. The basepan seals on the bottom openings to ensure a positive seal in the vertical airflow mode.

#### Efficient operation

**High-efficiency design** offers SEER (Seasonal Energy Efficiency Ratios) of 15.0 to 15.5, 12.0 to 12.5 EER, HSPF of up to 8.5, and AFUE (Annual Fuel Utilization Efficiency) ratings as high as 81%.

**Energy-saving, direct spark ignition** saves gas by operating only when the room thermostat calls for heating. Standard units are furnished with natural gas controls. A low-cost field installed kit for propane conversion is available for all units.

**Low NOx units** are designed for California installations and meet 40 ng/J NOx emissions. Can be installed in air quality management districts with a 40 ng/J NOx emissions requirement.

#### Durable, dependable components

**Compressors** have two stages of cooling and are designed for high efficiency. Each compressor is hermetically sealed against contamination to help promote longer life and dependable operation. Each compressor also has vibration isolation to provide quieter operation. All compressors have internal high pressure and overcurrent protection.

**Monoport inshot burners** produce precise air-to-gas mixture, which provides for clean and efficient combustion. The large monoport on the inshot (or injection type) burners seldom, if ever, requires cleaning. All gas furnace components are accessible in one compartment.

**Turbo-tubular™ heat exchangers** are constructed of aluminized steel for corrosion resistance and optimum heat transfer for improved efficiency. The tubular design permits hot gases to make multiple passes across the path of the supply air.

In addition, dimples located on the heat exchanger walls force the hot gases to stay in close contact with the walls, improving heat transfer.

Stainless steel heat exchanger available as factory installed option.

**Multi-speed ECM Blower Motor** is standard on all models.

**High Efficiency Inducer Motor** on single phase models.

**Direct-drive PSC (Permanent Split Capacitor) condenser-fan motors** are designed to help reduce energy consumption and provide for cooling operation down to 40°F (4.4°C) outdoor temperature. Motormaster® II low ambient kit is available as a field-installed accessory.

**Thermostatic Expansion Valve** - A hard shutoff, balance port TXV maintains a constant superheat at the evaporator exit (cooling cycle) resulting in higher overall system efficiency.

**Refrigerant system** is designed to provide dependability. Liquid filter driers are used to promote clean, unrestricted operation. Each unit leaves the factory with a full refrigerant charge. Refrigerant service connections make checking operating pressures easier.

**High and Low Pressure Switches** provide added reliability for the compressor.

**Indoor and Outdoor coils** are computer-designed for optimum heat transfer and efficiency. The indoor coil is fabricated from copper tube and aluminum fins and is located inside the unit for protection against damage. The outdoor coil is internally mounted on the top tier of the unit.

**Low sound ratings** ensure a quiet indoor and outdoor environment with sound ratings as low as 68dBA.

**Dehumidification Feature**

This unit has independent fan speeds for low stage cooling and high stage cooling. In addition, 208/230 VAC models have the field-selectable capability to run an enhanced dehumidification ('DHUM') speed on high stage cooling (as low as 320CFM per ton). Coupled with the improved dehumidification associated with low stage cooling, the DHUM speed allows for a complete dehumidification solution independent of cooling stage. 208/230 VAC models also have independent fan speeds for low stage gas heating and high stage gas heating. The dehumidification control must open the control circuit on humidity rise above the dehumidification set point.

**Heating**

- Reliable direct spark ignition system
- Inducer motors with ball bearings
- Low stage heating delivers 65% of high-stage capacity (208/230 VAC models)

**Easy to service cabinets** provide easy 3-panel accessibility to serviceable components during maintenance and installation. The basepan with integrated drain pan provides easy ground level installation with mounting pad. A nesting feature ensures a positive basepan to roof curb seal when the unit is roof mounted. A convenient 3/4-in. (19.05 mm) wide perimeter flange makes frame mounting on a rooftop easy.

**Standard horizontal metal duct covers** with insulation come with the unit and cover the horizontal duct openings. These can be left in place if the units are converted to downflow.

**Integrated Gas Control (IGC) board** provides safe and efficient control of heating and simplifies trouble-shooting through its built-in diagnostic function.

**Cabinets** are constructed of heavyduty, phosphated, zinc-coated prepainted steel capable of withstanding 500 hours in salt spray. Interior surfaces of the evaporator/heat exchanger compartment are insulated with foil-faced insulation, which keeps the conditioned air from being affected by the outdoor ambient temperature and provides improved indoor air quality. (Conforms to American Society of Heating, Refrigeration and Air Conditioning Engineers 62.2.) The sloped drain pan minimizes standing water in the drain. An external drain is provided.

**Louvered grille** provides hail and vandalism protection for the coil.

**Short-Cycling protection** for the compressor is incorporated into our defrost control board ensuring a five minute delay (+/-2 minutes) before restarting compressor after shutdown for any reason.

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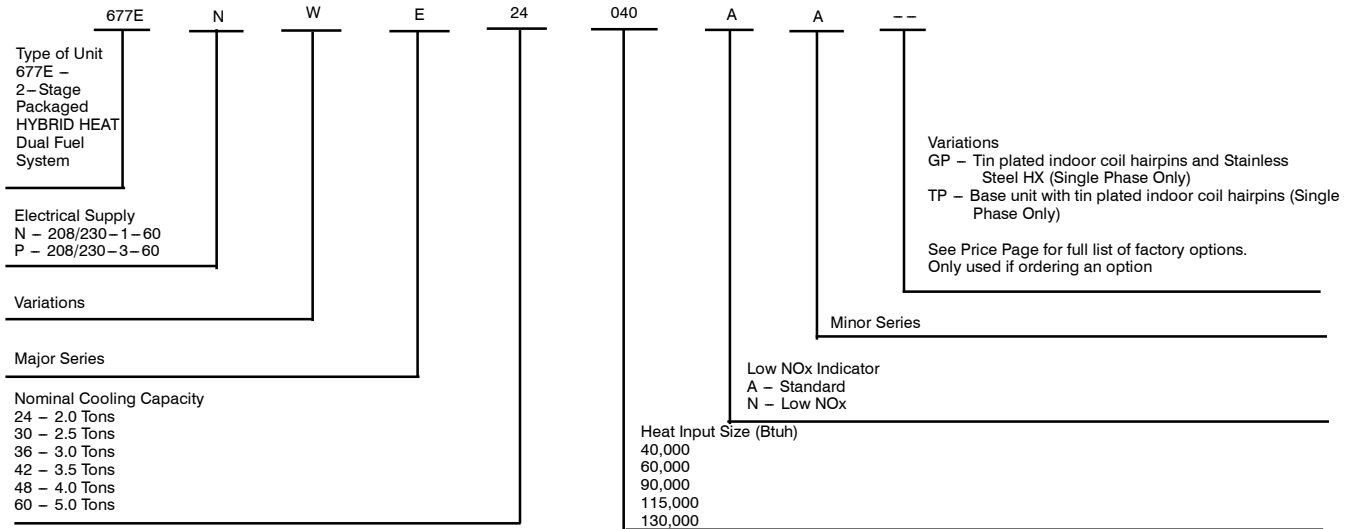
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## MODEL NUMBER NOMENCLATURE



677E



### For California Residents:

For installation in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 14ng/J NOx emission limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: [www.CleanAirFurnaceRebate.com](http://www.CleanAirFurnaceRebate.com).

## AHRI\* CAPACITIES

### Cooling Capacities and Efficiencies

| 677E--C<br>Unit Size | Nominal<br>Tons | Standard CFM<br>(High / Low Stage) | Net Cooling<br>Capacities - Btuh<br>(High Stage) | EER @A** | SEER† |
|----------------------|-----------------|------------------------------------|--------------------------------------------------|----------|-------|
| 24                   | 2               | 855 / 675                          | 22800                                            | 12.0     | 15.0  |
| 30                   | 2-1/2           | 1000 / 775                         | 29400                                            | 12.0     | 15.0  |

| 677E--A, E<br>Unit Size | Nominal<br>Tons | Standard CFM<br>(High / Low Stage) | Net Cooling<br>Capacities - Btuh<br>(High Stage) | EER @A** | SEER† |
|-------------------------|-----------------|------------------------------------|--------------------------------------------------|----------|-------|
| 36                      | 3               | 1200 / 900                         | 34000                                            | 12.0     | 15.0  |
| 42                      | 3-1/2           | 1400 / 1050                        | 42000                                            | 12.0     | 15.0  |
| 48                      | 4               | 1600 / 1200                        | 47500                                            | 12.5     | 15.5  |
| 60                      | 5               | 1750 / 1400                        | 57000                                            | 12.0     | 15.0  |

## AHRI\* CAPACITIES (CONT)

### Heat Pump Heating Capacities and Efficiencies

| 677E—C<br>Unit Size | Heating<br>Capacity<br>(BTUH) @ 47_F<br>(8.3_C) | COP @ 47_F<br>(8.3_C) | Heating<br>Capacity<br>(BTUH) @<br>17_F (---8.3_C) | COP @ 17_F<br>(---8.3_C) | HSPF | Heating Cd |
|---------------------|-------------------------------------------------|-----------------------|----------------------------------------------------|--------------------------|------|------------|
| 24                  | 23,400                                          | 3.9                   | 12200                                              | 2.3                      | 8.2  | 0.25       |
| 30                  | 30,000                                          | 3.7                   | 16200                                              | 2.3                      | 8.2  | 0.25       |

| 677E—A, E<br>Unit Size | Heating<br>Capacity<br>(BTUH) @ 47_F<br>(8.3_C) | COP @ 47_F<br>(8.3_C) | Heating<br>Capacity<br>(BTUH) @<br>17_F (---8.3_C) | COP @ 17_F<br>(---8.3_C) | HSPF | Heating Cd |
|------------------------|-------------------------------------------------|-----------------------|----------------------------------------------------|--------------------------|------|------------|
| 36                     | 34,000                                          | 3.7                   | 17200                                              | 2.3                      | 8.2  | 0.25       |
| 42                     | 42,000                                          | 3.6                   | 24000                                              | 2.5                      | 8.2  | 0.25       |
| 48                     | 47,000                                          | 3.7                   | 26000                                              | 2.3                      | 8.2  | 0.25       |
| 60                     | 57,000                                          | 3.5                   | 32400                                              | 2.4                      | 8.5  | 0.25       |

#### LEGEND

**dB**—Sound Levels (decibels)

**db**—Dry Bulb

**SEER**—Seasonal Energy Efficiency Ratio

**wb**—Wet Bulb

**COP**—Coefficient of Performance

\* Air Conditioning, Heating & Refrigeration Institute.

\*\*At "A" conditions—80°F (26.7°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor db.

† Rated in accordance with U.S. Government DOE Department of Energy) test procedures and/or AHRI Standards 210/240.

#### Notes:

1. Ratings are net values, reflecting the effects of circulating fan heat.

Ratings are based on:

**Cooling Standard:** 80°F (26.7°C) db, 67°F wb (19.4°C) indoor entering—air temperature and 95°F db (35°C) outdoor entering—air temperature.

2. Before purchasing this appliance, read important energy cost and efficiency information available from AHRI directory.org.

## Heating Capacities and Efficiencies 208/230 VAC Models Single Phase

| UNIT SIZE                        | HEATING INPUT<br>(BTUH)<br>HIGH/LOW | OUTPUT CAPACITY<br>(BTUH)<br>HIGH / LOW | TEMPERATURE<br>RISE<br>RANGE<br>HIGH °F (°C) | TEMPERATURE<br>RISE<br>RANGE<br>LOW °F (°C) | AFUE (%) |
|----------------------------------|-------------------------------------|-----------------------------------------|----------------------------------------------|---------------------------------------------|----------|
| 24040<br>30040                   | 40,000 / 26,000                     | 33,000 / 22,000                         | 25-55 (14-31)                                | 25-55 (14-31)                               | 81.0     |
| 24060<br>30060<br>36060<br>42060 | 60,000 / 39,000                     | 49,000 / 32,000                         | 25-55 (14-31)                                | 25-55 (14-31)                               | 81.0     |
| 36090<br>42090<br>48090<br>60090 | 90,000 / 58,500                     | 74,000 / 48,000                         | 35-65 (19-36)                                | 35-65 (19-36)                               | 81.0     |
| 48115<br>60115                   | 115,000 / 75,000                    | 94,000 / 62,000                         | 30-60 (17-33)                                | 30-60 (17-33)                               | 81.0     |
| 48130<br>60130                   | 127,000 / 84,500                    | 104,000 / 70,000                        | 35-65 (19-36)                                | 35-65 (19-36)                               | 81.0     |

### LEGEND

AFUE – Annual Fuel Utilization Efficiency

NOTE: Before purchasing this appliance, read important energy cost and efficiency information available from AHRIdirectory.org.

677E

## Heating Capacities and Efficiencies 208/230 VAC Models 3-Phase

| UNIT SIZE                        | HEATING INPUT<br>(BTUH)<br>HIGH/LOW | OUTPUT CAPACITY<br>(BTUH)<br>HIGH / LOW | TEMPERATURE<br>RISE<br>RANGE<br>HIGH °F (°C) | TEMPERATURE<br>RISE<br>RANGE<br>LOW °F (°C) | AFUE (%) |
|----------------------------------|-------------------------------------|-----------------------------------------|----------------------------------------------|---------------------------------------------|----------|
| 24040<br>30040                   | 40,000 / 26,000                     | 32,000 / 21,000                         | 20-50 (11-28)                                | 15-45 (8-25)                                | 78       |
| 24060<br>30060<br>36060<br>42060 | 60,000 / 39,000                     | 49,000 / 31,000                         | 25-55 (14-31)                                | 25-55 (14-31)                               | 78.6     |
| 36090<br>42090<br>48090<br>60090 | 90,000 / 58,500                     | 74,000 / 47,000                         | 35-65 (19-36)                                | 35-65 (19-36)                               | 79.2     |
| 48115<br>60115                   | 115,000 / 75,000                    | 93,000 / 61,000                         | 30-60 (17-33)                                | 30-60 (17-33)                               | 80.1     |
| 48130<br>60130                   | 130,000 / 84,500                    | 103,000 / 68,000                        | 35-65 (19-36)                                | 35-65 (19-36)                               | 80.0     |

### LEGEND

AFUE – Annual Fuel Utilization Efficiency

NOTE: Before purchasing this appliance, read important energy cost and efficiency information available from AHRIdirectory.org.

## A-Weighted Sound Power Level (dBA)

| 677E – C<br>Unit Size | Sound Ratings<br>(dBA) | TYPICAL OCTAVE BAND SPECTRUM(dBA without tone adjustment) |     |     |      |      |      |      |
|-----------------------|------------------------|-----------------------------------------------------------|-----|-----|------|------|------|------|
|                       |                        | 125                                                       | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 24                    | 68                     | 77                                                        | 65  | 65  | 63   | 57   | 52   | 48   |
| 30                    | 69                     | 70                                                        | 66  | 67  | 65   | 58   | 56   | 54   |

| 677E – A, E<br>Unit Size | Sound Ratings<br>(dBA) | TYPICAL OCTAVE BAND SPECTRUM(dBA without tone adjustment) |      |     |      |      |      |      |
|--------------------------|------------------------|-----------------------------------------------------------|------|-----|------|------|------|------|
|                          |                        | 125                                                       | 250  | 500 | 1000 | 2000 | 4000 | 8000 |
| 36                       | 73                     | 64                                                        | 63.5 | 68  | 68   | 65.5 | 60.5 | 52.5 |
| 42                       | 71                     | 64                                                        | 62   | 65  | 66   | 63.5 | 59.5 | 52.5 |
| 48                       | 74                     | 59.5                                                      | 65   | 70  | 67   | 64.5 | 60.5 | 52.5 |
| 60                       | 73                     | 68                                                        | 63   | 66  | 66   | 65   | 59.5 | 52.5 |

NOTE: Tested in accordance with AHRI Standard 270–1995 (not listed in AHRI).

# PHYSICAL DATA

| MODEL FAMILY                                                                   | 677E -- C       |            |            |            | 677C -- A, E |            |            |            |
|--------------------------------------------------------------------------------|-----------------|------------|------------|------------|--------------|------------|------------|------------|
| UNIT SIZE                                                                      | 24040           | 24060      | 30040      | 30060      | 36060        | 36090      | 42060      | 42090      |
| NOMINAL CAPACITY (ton)                                                         | 2               | 2          | 2-1/2      | 2-1/2      | 3            | 3          | 3-1/2      | 3-1/2      |
| SHIPPING WEIGHT** lb.                                                          | 362             | 362        | 408        | 408        | 467          | 467        | 506        | 506        |
| SHIPPING WEIGHT** (kg)                                                         | 164             | 164        | 185        | 185        | 212          | 212        | 230        | 230        |
| COMPRESSORS                                                                    | Scroll          |            |            |            |              |            |            |            |
| Quantity                                                                       | 1               |            |            |            |              |            |            |            |
| REFRIGERANT (R-410A)                                                           |                 |            |            |            |              |            |            |            |
| Quantity lb.                                                                   | 8.2             | 8.2        | 11.2       | 11.2       | 11.0         | 11.0       | 14.6       | 14.6       |
| Quantity (kg)                                                                  | 3.7             | 3.7        | 5.1        | 5.1        | 5.0          | 5.0        | 6.6        | 6.6        |
| REFRIGERANT METERING DEVICE                                                    | TXV, Indoor TXV |            |            |            |              |            |            |            |
| ORIFICE OD in.                                                                 | .032 (2)        | .032 (2)   | .035 (1)   | .038 (1)   | .042 (2)     | .042 (2)   | .042 (2)   | .042 (2)   |
| (mm)                                                                           | .81 (2)         | .81 (2)    | .89 (1)    | .97 (1)    | 1.07 (2)     | 1.07 (2)   | 1.07 (2)   | 1.07 (2)   |
| OUTDOOR COIL                                                                   |                 |            |            |            |              |            |            |            |
| Rows...Fins/in.                                                                | 1...21          | 1...21     | 2...21     | 2...21     | 2...21       | 2...21     | 2...21     | 2...21     |
| Face Area (sq ft)                                                              | 18.8            | 18.8       | 18.8       | 18.8       | 13.6         | 13.6       | 19.4       | 19.4       |
| OUTDOOR FAN                                                                    |                 |            |            |            |              |            |            |            |
| Nominal CFM                                                                    | 2100            | 2100       | 2500       | 2500       | 3000         | 3000       | 3000       | 3000       |
| Diameter in.                                                                   | 24              | 24         | 24         | 24         | 26           | 26         | 26         | 26         |
| Diameter (mm)                                                                  | 609.6           | 609.6      | 609.6      | 609.6      | 660.4        | 660.4      | 660.4      | 660.4      |
| Motor Hp (Rpm)                                                                 | 1/12 (800)      | 1/12 (800) | 1/8 (810)  | 1/8 (810)  | 1/5 (810)    | 1/5 (810)  | 1/5 (810)  | 1/5 (810)  |
| INDOOR COIL                                                                    |                 |            |            |            |              |            |            |            |
| Rows...Fins/in.                                                                | 3...17          | 3...17     | 3...17     | 3...17     | 3...17       | 3...17     | 3...17     | 3...17     |
| Face Area (sq ft)                                                              | 3.7             | 3.7        | 3.7        | 3.7        | 4.7          | 4.7        | 4.7        | 4.7        |
| INDOOR BLOWER                                                                  |                 |            |            |            |              |            |            |            |
| Nominal Low Stage Cooling Airflow (Cfm)                                        | 675             | 675        | 775        | 775        | 900          | 900        | 1050       | 1050       |
| Nominal High Stage Cooling Airflow (Cfm)                                       | 855             | 855        | 1000       | 1000       | 1200         | 1200       | 1400       | 1400       |
| Size in.                                                                       | 10x10           | 10x10      | 10x10      | 10x10      | 11x10        | 11x10      | 11x10      | 11x10      |
| Size (mm.)                                                                     | 254x254         | 254x254    | 254x254    | 254x254    | 279.4x254    | 279.4x254  | 279.4x254  | 279.4x254  |
| Motor HP (RPM)                                                                 | 1/2 (1050)      | 1/2 (1050) | 1/2 (1050) | 1/2 (1050) | 3/4 (1000)   | 3/4 (1000) | 3/4 (1075) | 3/4 (1075) |
| FURNACE SECTION*                                                               |                 |            |            |            |              |            |            |            |
| Burner Orifice No. (Qty...Drill Size)                                          | 2...44          | 3...44     | 2...44     | 3...44     | 3...44       | 3...38     | 3...44     | 3...38     |
| Natural Gas (Factory Installed)                                                | 2...55          | 3...55     | 2...55     | 3...55     | 3...55       | 3...53     | 3...55     | 3...53     |
| Propane Gas                                                                    |                 |            |            |            |              |            |            |            |
| HIGH-PRESSURE SWITCH                                                           | 650 +/- 15      |            |            |            |              |            |            |            |
| (psig) Cut-out Reset (Auto)                                                    | 420 +/- 25      |            |            |            |              |            |            |            |
| LOSS-OF-CHARGE / LOW-PRESSURE SWITCH (Liquid Line) (psig) cut-out Reset (auto) | 20 +/- 5        |            |            |            |              |            |            |            |
|                                                                                | 45 +/- 5        |            |            |            |              |            |            |            |
| RETURN-AIR FILTERS†‡                                                           |                 |            |            |            |              |            |            |            |
| Throwaway Size in.                                                             | 20x20x1         | 20x24x1    |            |            | 24x30x1      |            |            |            |
| (mm)                                                                           | 508x508x25      | 508x610x25 |            |            | 610x762x25   |            |            |            |

\*Based on altitude of 0 to 2000 ft (0-610 m).

† Required filter sizes shown are based on the larger of the AHRI (Air Conditioning Heating and Refrigeration Institute) rated cooling airflow or the heating airflow velocity of 300 ft/minute for throwaway type. Air filter pressure drop for non-standard filters must not exceed 0.08 IN. W.C.

‡ If using accessory filter rack refer to the filter rack installation instructions for correct filter sizes and quantity.

## PHYSICAL DATA (CONT)

| MODEL FAMILY                                                     | 677E -- A, E    |            |            |            |            |            |
|------------------------------------------------------------------|-----------------|------------|------------|------------|------------|------------|
| UNIT SIZE                                                        | 48090           | 48115      | 48130      | 60090      | 60115      | 60130      |
| NOMINAL CAPACITY (ton)                                           | 4               | 4          | 4          | 5          | 5          | 5          |
| SHIPPING WEIGHT lb                                               | 509             | 509        | 509        | 562        | 562        | 562        |
| SHIPPING WEIGHT kg                                               | 231             | 231        | 231        | 255        | 255        | 255        |
| COMPRESSORS                                                      | Scroll          |            |            |            |            |            |
| Quantity                                                         | 1               |            |            |            |            |            |
| REFRIGERANT (R-410A)                                             |                 |            |            |            |            |            |
| Quantity lb                                                      | 12.0            | 12.0       | 12.0       | 14.8       | 14.8       | 14.8       |
| Quantity (kg.)                                                   | 5.4             | 5.4        | 5.4        | 6.7        | 6.7        | 6.7        |
| REFRIGERANT METERING DEVICE                                      | TXV, Indoor TXV |            |            |            |            |            |
| ORIFICE ID in.                                                   | .042 (2)        | .042 (2)   | .042 (2)   | .052 (2)   | .052 (2)   | .052 (2)   |
| (mm)                                                             | 1.07 (2)        | 1.07 (2)   | 1.07 (2)   | 1.32 (2)   | 1.32 (2)   | 1.32 (2)   |
| OUTDOOR COIL                                                     |                 |            |            |            |            |            |
| Rows...Fins/in.                                                  | 2...21          | 2...21     | 2...21     | 2...21     | 2...21     | 2...21     |
| Face Area (sq ft)                                                | 17.5            | 17.5       | 17.5       | 23.3       | 23.3       | 23.3       |
| OUTDOOR FAN                                                      |                 |            |            |            |            |            |
| Nominal Cfm                                                      | 3300            | 3300       | 3300       | 3600       | 3600       | 3600       |
| Diameter in.                                                     | 26              | 26         | 26         | 26         | 26         | 26         |
| Diameter (mm)                                                    | 660.4           | 660.4      | 660.4      | 660.4      | 660.4      | 660.4      |
| Motor Hp (Rpm)                                                   | 1/5 (810)       | 1/5 (810)  | 1/5 (810)  | 1/5 (810)  | 1/5 (810)  | 1/5 (810)  |
| INDOOR COIL                                                      |                 |            |            |            |            |            |
| Rows...Fins/in.                                                  | 3...17          | 3...17     | 3...17     | 4...17     | 4...17     | 4...17     |
| Face Area (sq ft)                                                | 5.7             | 5.7        | 5.7        | 5.7        | 5.7        | 5.7        |
| INDOOR BLOWER                                                    |                 |            |            |            |            |            |
| Nominal Low Stage Cooling Airflow (Cfm)                          | 1200            | 1200       | 1200       | 1400       | 1400       | 1400       |
| Nominal High Stage Cooling Airflow (Cfm)                         | 1600            | 1600       | 1600       | 1750       | 1750       | 1750       |
| Size in.                                                         | 11x10           | 11x10      | 11x10      | 11x10      | 11x10      | 11x10      |
| Size (mm)                                                        | 279.4x254       | 279.4x254  | 279.4x254  | 279.4x254  | 279.4x254  | 279.4x254  |
| Motor HP (RPM)                                                   | 1.0 (1075)      | 1.0 (1075) | 1.0 (1075) | 1.0 (1075) | 1.0 (1075) | 1.0 (1075) |
| FURNACE SECTION*                                                 |                 |            |            |            |            |            |
| Burner Orifice No. (Qty...Drill Size)                            |                 |            |            |            |            |            |
| Natural Gas (Factory Installed)                                  | 3...38          | 3...33     | 3...31     | 3...38     | 3...33     | 3...31     |
| Propane Gas                                                      | 3...53          | 3...51     | 3...49     | 3...53     | 3...51     | 3...49     |
| HIGH-PRESSURE SWITCH                                             | 650 +/- 15      |            |            |            |            |            |
| (psig) Cut-out Reset (Auto)                                      | 420 +/- 25      |            |            |            |            |            |
| LOSS-OF-CHARGE / LOW-PRESSURE SWITCH (psig) cut-out Reset (auto) | 20 +/- 5        |            |            |            |            |            |
| RETURN-AIR FILTERS Throwaway†‡ in.                               | 24x36x1         |            |            |            |            |            |
| (mm)                                                             | 610x914x25      |            |            |            |            |            |

\*Based on altitude of 0 to 2000 ft (0–610 m).

† Required filter sizes shown are based on the larger of the AHRI (Air Conditioning Heating and Refrigeration Institute) rated cooling airflow or the heating airflow velocity of 300 ft/minute for throwaway type. Air filter pressure drop for non–standard filters must not exceed 0.08 IN. W.C.

‡ If using accessory filter rack refer to the filter rack installation instructions for correct filter sizes and quantity.

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## OPTIONS AND ACCESSORIES

| ITEM                                  | DESCRIPTION                                                                                                                                                                                                              | FACTORY<br>INSTALLED<br>OPTION | FIELD<br>INSTALLED<br>ACCESSORY |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------|
| Coil Options                          | Base unit with tin plated indoor coil hairpins                                                                                                                                                                           | X                              |                                 |
| Compressor Start Kit                  | Compressor Start Kit assists compressor start-up by providing additional starting torque on sing phase units only.                                                                                                       |                                | X                               |
| Corporate Thermostats                 | Thermostats provide control for the system heating and cooling functions.                                                                                                                                                |                                | X                               |
| Crankcase Heater                      | Crankcase Heater provides anti-floodback protection for low-load cooling applications.                                                                                                                                   |                                | X*                              |
| Economizer                            | Vertical Economizer with Jade Honeywell W7220 Controller, Honeywell communicating actuator, and dry bulb sensor. (Contact MicroMetl Customer Service at 1-800-662-4822 to order.)                                        |                                | X                               |
|                                       | Horizontal Economizer with Jade Honeywell W7220 Controller, Honeywell communicating actuator, and dry bulb sensor. (Contact MicroMetl Customer Service at 1-800-662-4822 to order.)                                      |                                | X                               |
| Filter Rack                           | Filter Rack features easy installation, serviceability, and high-filtering performance for vertical applications. Includes 1-in. filter.                                                                                 |                                | X                               |
| Flat Roof Curb                        | 14-in. (356 mm) Flat Roof Curb is available for roof mounted applications.                                                                                                                                               |                                | X                               |
| Flue Discharge Deflector              | Directs flue gas exhaust 90 degrees upward from current discharge.                                                                                                                                                       |                                | X                               |
| Heat Exchanger                        | Stainless Steel Heat Exchanger                                                                                                                                                                                           | X                              |                                 |
| High Altitude Propane Conversion Kit  | High Altitude Propane Conversion Kit is for use at 2001 to 6000 ft. (611 – 1829 m) above sea level. Kit consists of propane gas orifices that compensate for gas heat operation at high altitude.                        |                                | X                               |
| Low Ambient Kit                       | Low Ambient Kit (Motormaster II Control) allows the use of mechanical cooling down to outdoor temperatures as low as 0°F (–18°C) when properly installed.                                                                |                                | X                               |
| Manual Outside Air Damper             | Manual Outside Air Damper includes hood and filter rack with adjustable damper blade for up to 25% outdoor air.                                                                                                          |                                | X                               |
| Natural to Propane Gas Conversion Kit | Natural to Propane Gas Conversion Kit allows for conversion from natural gas to propane gas (0–2000 ft) (0–610 m)                                                                                                        |                                | X                               |
| Propane to Natural Gas Conversion Kit | Propane to Natural Gas Conversion Kit allows for conversion from propane to natural gas for altitudes of 0–2000 ft (0–610 m)                                                                                             |                                | X                               |
| Square-to-Round Duct Transition Kit   | Square-to-Round Duct Transition Kit enable 24–48 size units to be fitted to 14 in. (356 mm) round ductwork.                                                                                                              |                                | X                               |
| Time Guard II                         | Automatically prevents the compressor from restarting for at least 4 minutes and 45 seconds after shutdown of the compressor. Not required when a corporate programmable thermostat is applied or with a RTU-MP control. |                                | X                               |

\*Refer to Price Page for application detail.

UNIT DIMENSIONS - 677E 24-30

REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

|                          | INCHES (MM) |
|--------------------------|-------------|
| TOP OF UNIT.....         | 14 (355.1)  |
| DUCT SIDE OF UNIT.....   | 2 (50.8)    |
| SIDE OPPOSITE DUCTS..... | 14 (355.6)  |
| BOTTOM OF UNIT.....      | 1/2 (12.7)  |
| FLUE PANEL.....          | 36 (914.4)  |

NEC. REQUIRED CLEARANCES

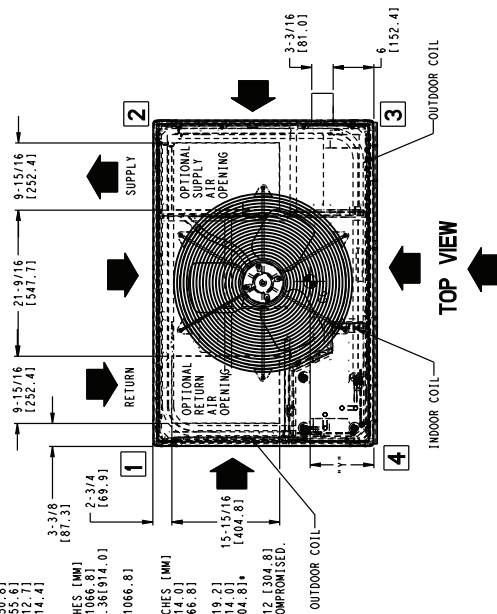
|                                                    | INCHES (MM) |
|----------------------------------------------------|-------------|
| BETWEEN UNITS, POWER ENTRY SIDE.....               | 42 (1066.8) |
| UNIT AND UNGROUND SURFACES, POWER ENTRY SIDE.....  | 42 (1066.8) |
| UNIT AND UNGROUND SURFACES, POWER ENTRY OTHER..... | 36 (914.4)  |
| GROUND SURFACES, POWER ENTRY SIDE.....             | 42 (1066.8) |

REQUIRED CLEARANCE FOR OPERATION AND SERVICING

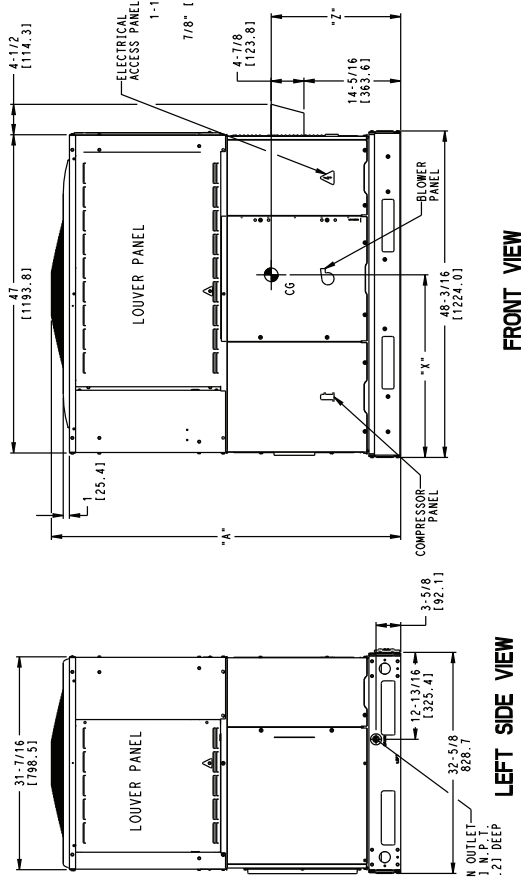
|                               | INCHES (MM) |
|-------------------------------|-------------|
| EVAP. COIL ACCESS SIDE.....   | 36 (914.4)  |
| POWER ENTRY SIDE.....         | 42 (1066.8) |
| (EXCEPT FOR NEC REQUIREMENTS) |             |
| UNIT TOP ACCESS SIDE.....     | 48 (1219.2) |
| DUCT SIDE DUCTS.....          | 36 (914.4)  |
| DUCT PANEL.....               | 32 (812.8)  |

\*MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 12 (304.8) FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAYBE COMPROMISED.

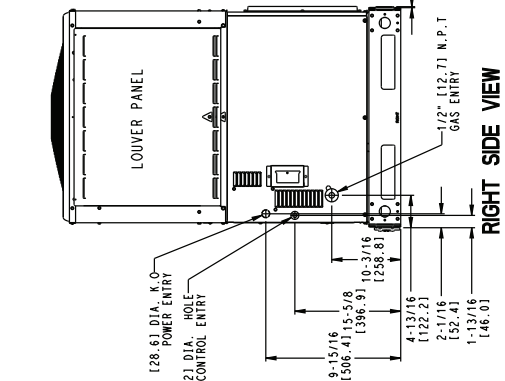
DIMENSIONS IN ( ) ARE IN MM



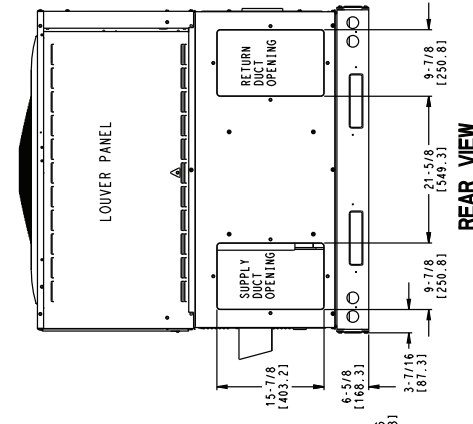
TOP VIEW



FRONT VIEW



RIGHT SIDE VIEW



REAR VIEW

| UNIT                      | ELECTRICAL CHARACTERISTICS | UNIT WT. LB | UNIT HEIGHT IN/MM | CENTER OF GRAVITY IN/MM |      |          |
|---------------------------|----------------------------|-------------|-------------------|-------------------------|------|----------|
| 677ENW24(040/060)(A/N/A)* | 208/230-1-60               | 353         | 160.2             | 51-3/4                  | 1315 | 22-13/16 |
| 677ENW30(040/060)(A/N/A)* | 208/230-1-60               | 399         | 181.0             | 51-3/4                  | 1315 | 22-13/16 |
| 677ENW36(040/060)(A/N/A)* | 208/230-1-60               | 399         | 181.0             | 51-3/4                  | 1315 | 22-13/16 |
| 677ENW42(040/060)(A/N/A)* | 208/230-1-60               | 399         | 181.0             | 51-3/4                  | 1315 | 22-13/16 |

| UNIT                      | VOLTAGE | CORNER WEIGHT LB/KG |      |      |
|---------------------------|---------|---------------------|------|------|
| 677ENW24(040/060)(A/N/A)* | 208/230 | 53.0                | 24.0 | 70.6 |
| 677ENW30(040/060)(A/N/A)* | 208/230 | 59.9                | 27.2 | 79.8 |
| 677ENW36(040/060)(A/N/A)* | 208/230 | 59.9                | 27.2 | 79.8 |
| 677ENW42(040/060)(A/N/A)* | 208/230 | 59.9                | 27.2 | 79.8 |

NOTE: 1. ALL TABLE DATA RELEVANT FOR ALL FACTORY INSTALLED OPTIONS EXCEPT ECONOMIZER.  
2. \* - INDICATES ALL TOP CODES FOR THE MODELS LISTED.

LEFT SIDE VIEW

UNIT DIMENSIONS - 677E 36-60

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REQUIRED CLEARANCES TO COMBUSTIBLE MATL.

TOP OF UNIT..... 14 (355.6)  
DUCT SIDE OF UNIT..... 12 (304.8)  
SIDE OPPOSITE DUCTS..... 14 (355.6)  
BOTTOM OF UNIT..... 12 (304.8)  
FLUE PANEL..... 36 (914.4)

INCHES (MM)

NEC. REQUIRED CLEARANCES.

BETWEEN UNITS, POWER ENTRY SIDE..... 14 (355.6)  
UNIT AND UNGROUND SURFACES, POWER ENTRY SIDE..... 14 (355.6)  
UNIT AND BLOCK OR CONCRETE WALLS AND OTHER GROUND SURFACES, POWER ENTRY SIDE..... 42 (1066.8)

INCHES (MM)

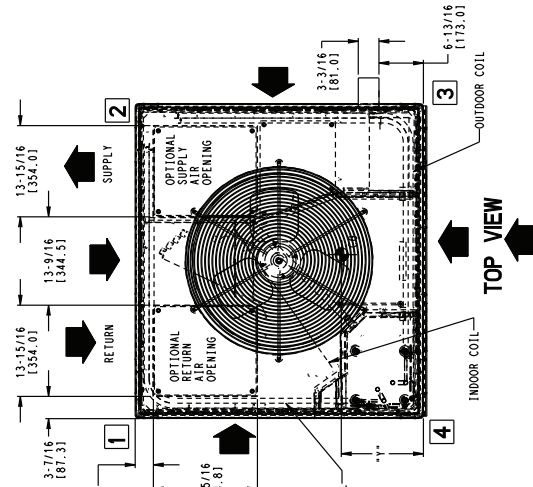
REQUIRED CLEARANCE FOR OPERATION AND SERVICING

EVAP. COIL ACCESS SIDE..... 36 (914.4)  
POWER ENTRY SIDE..... 42 (1066.8)  
UNIT TOP FOR NEC REQUIREMENTS..... 48 (1219.2)  
DUCT SIDE OPPOSITE DUCTS..... 36 (914.4)  
DUCT PANEL..... 12 (304.8)

INCHES (MM)

\*MINIMUM DISTANCES: IF UNIT IS PLACED LESS THAN 12 (304.8) FROM WALL SYSTEM, THEN SYSTEM PERFORMANCE MAYBE COMPROMISED.

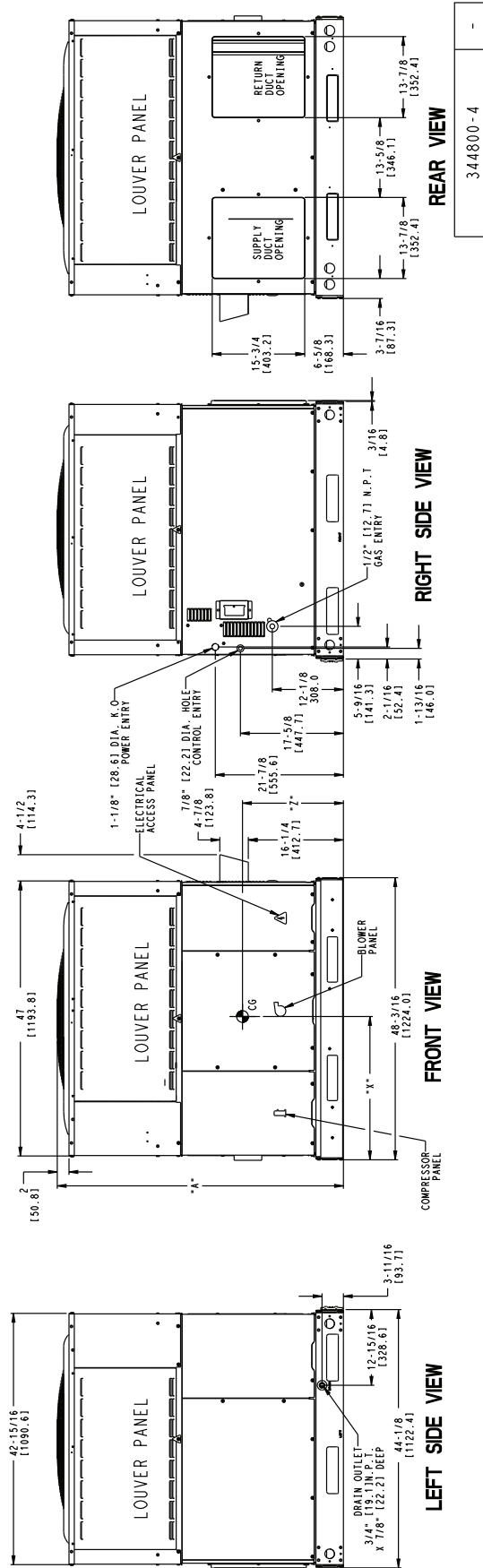
DIMENSIONS IN ( ) ARE IN MM



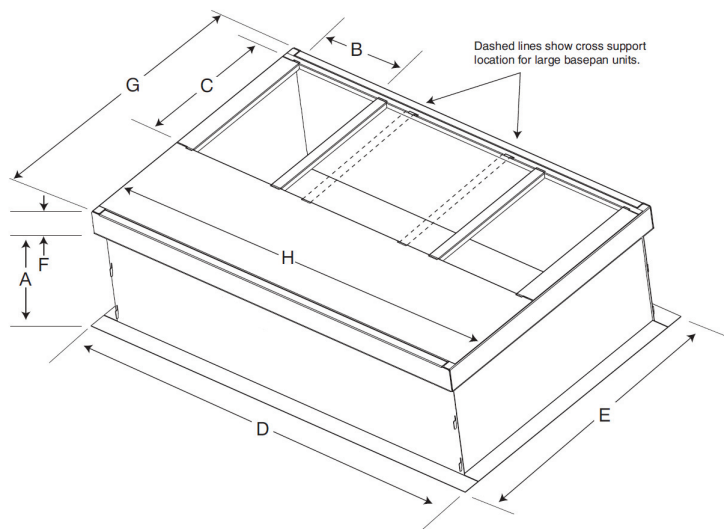
| UNIT                         | ELECTRICAL CHARACTERISTICS | UNIT WT. LB. KG. | UNIT HEIGHT IN/MM | INLET AIR | Y    | 1        | 2     | 3  | 4     |
|------------------------------|----------------------------|------------------|-------------------|-----------|------|----------|-------|----|-------|
| 677ENW36-060/090/1A/N/A*     | 208/230-1-60               | 459              | 208.2             | 44-3/4    | 1137 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677ENW42-060/090/1A/N/A*     | 208/230-1-60               | 498              | 225.9             | 50-3/4    | 1288 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677ENW48-090/115/130/1A/N/A* | 208/230-1-60               | 501              | 227.3             | 48-3/4    | 1238 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677ENW36-060/090/1A/N/A*     | 208/230-3-60               | 459              | 208.2             | 44-3/4    | 1137 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677ENW42-060/090/1A/N/A*     | 208/230-3-60               | 498              | 225.9             | 50-3/4    | 1288 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677ENW48-090/115/130/1A/N/A* | 208/230-3-60               | 501              | 227.3             | 48-3/4    | 1238 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677EPW36-060/090/1A/N/A*     | 208/230-1-60               | 459              | 208.2             | 44-3/4    | 1137 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677EPW42-060/090/1A/N/A*     | 208/230-1-60               | 498              | 225.9             | 50-3/4    | 1288 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677EPW48-090/115/130/1A/N/A* | 208/230-1-60               | 501              | 227.3             | 48-3/4    | 1238 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677EPW36-060/090/1A/N/A*     | 208/230-3-60               | 459              | 208.2             | 44-3/4    | 1137 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677EPW42-060/090/1A/N/A*     | 208/230-3-60               | 498              | 225.9             | 50-3/4    | 1288 | 22-13/16 | 579.4 | 18 | 457.2 |
| 677EPW48-090/115/130/1A/N/A* | 208/230-3-60               | 501              | 227.3             | 48-3/4    | 1238 | 22-13/16 | 579.4 | 18 | 457.2 |

| UNIT                         | VOLTAGE | CORNER WEIGHT LBS/KG                       |
|------------------------------|---------|--------------------------------------------|
| 677ENW36-060/090/1A/N/A*     | 208/230 | 68.9 31.2 91.8 41.6 137.7 62.5 160.7 72.9  |
| 677ENW42-060/090/1A/N/A*     | 208/230 | 74.7 33.9 99.6 45.2 149.4 67.8 174.3 79.1  |
| 677ENW48-090/115/130/1A/N/A* | 208/230 | 75.2 34.1 100.2 45.5 150.3 68.2 175.4 79.5 |
| 677ENW36-060/090/1A/N/A*     | 208/230 | 83.1 37.1 110.8 50.3 166.2 75.4 193.9 88.0 |
| 677EPW36-060/090/1A/N/A*     | 208/230 | 68.9 31.2 91.8 41.6 137.7 62.5 160.7 72.9  |
| 677EPW42-060/090/1A/N/A*     | 208/230 | 74.7 33.9 99.6 45.2 149.4 67.8 174.3 79.1  |
| 677EPW48-090/115/130/1A/N/A* | 208/230 | 75.2 34.1 100.2 45.5 150.3 68.2 175.4 79.5 |
| 677EPW36-060/090/1A/N/A*     | 208/230 | 83.1 37.1 110.8 50.3 166.2 75.4 193.9 88.0 |

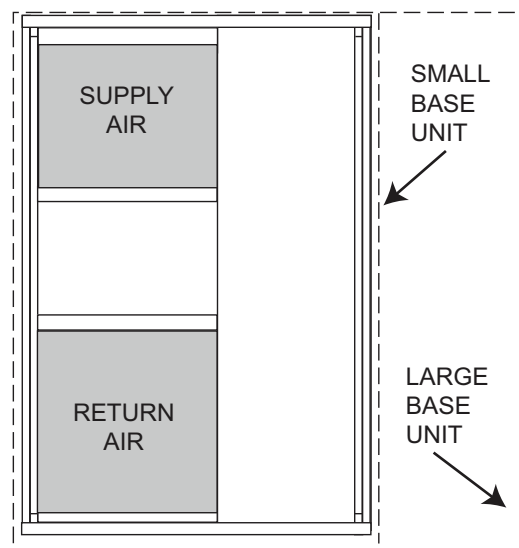
NOTE: 1. ALL TABLE DATA RELEVANT FOR ALL FACTORY INSTALLED OPTIONS EXCEPT ECONOMIZER.  
2. \* - INDICATES ALL F10P CODES FOR THE MODELS LISTED.



## 677E



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## SMALL OR LARGE BASE UNIT

A180216

NOTES:

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## SELECTION PROCEDURE (WITH EXAMPLE)

### 1. Determine cooling and heating requirements at design conditions:

Given:

Required Cooling Capacity (TC) ..... 34,000 Btuh  
 Sensible Heat Capacity (SHC) ..... 25,000 Btuh  
 Required Heating Capacity ..... 60,000 Btuh  
 Condenser Entering Air Temperature ..... 95°F (35°C)  
 Indoor-Air Temperature . 80°F (26°C)edb 67°F (19°C)ewb  
 Evaporator Air Quantity ..... 1200 CFM  
 External Static Pressure ..... 0.100 IN. W.C.  
 Electrical Characteristics ..... 208-1-60

### 2. Select unit based on required cooling capacity.

Enter Net Cooling Capacities table at condenser entering temperature of 95°F (35°C). Unit 036 at 1200 cfm and 67°F (19°C) ewb (entering wet bulb) will provide a total capacity of 34,200 Btuh and a SHC of 27,400 Btuh. Calculate SHC correction, if required, using Note 4 under Cooling Capacities tables.

### 3. Select heating capacity of unit to provide design condition requirement.

In the Heating Capacities and Efficiencies table, note that the unit 036090 (208/230 VAC) will provide 74,000 Btuh with an input of 90,000 Btuh in high stage and will provide 48,000 Btuh of heating in low stage.

### 4. Determine fan speed and power requirements at design conditions.

Before entering the air delivery tables, calculate the total static pressure required. From the given example, the Wet Coil Pressure Drop Table, and the Filter Pressure Drop Table:

|                          |                      |
|--------------------------|----------------------|
| External Static Pressure | 0.100 IN. W.C        |
| Filter                   | 0.07 IN. W.C         |
| Wet Coil Pressure Drop   | <u>0.180</u> IN. W.C |
| Total Static Pressure    | 0.287 IN. W.C        |

Enter the table for Dry Coil Air Delivery—Horizontal and Downflow Discharge. At .287 IN. W.C. ESP, the closest speed to 1200 CFM is Med-Low (pink wire), which delivers 1267 CFM at .3 in ESP.

### 5. Select unit that corresponds to power source available.

The Electrical Data Table shows that the unit is designed to operate at 208-1-60.

PERFORMANCE DATA

024 High Cool

| EVAPORATOR AIR |               | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
|----------------|---------------|-----------------------------------------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|
| CFM            | EWB           | 75 (23.9)                                     |       |              | 85 (29.4)      |       |              | 95 (35)        |       |              | 105 (40.6)     |       |              | 115 (46.1)     |       |              | 125 (51.7)     |       |              |
|                |               | Capacity MBtuh                                |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |
|                |               | Total                                         | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              |
| 700            | 57<br>(13.8)  | 21.49                                         | 21.49 | 1.52         | 20.88          | 20.88 | 1.68         | 20.17          | 20.17 | 1.86         | 19.34          | 19.34 | 2.07         | 18.35          | 18.35 | 2.33         | 17.24          | 17.24 | 2.63         |
|                | 62<br>(16.6)  | 22.16                                         | 20.20 | 1.53         | 21.34          | 19.92 | 1.69         | 20.42          | 19.56 | 1.87         | 19.39          | 19.31 | 2.07         | 18.38          | 18.38 | 2.33         | 17.27          | 17.27 | 2.63         |
|                | 63*<br>(17.2) | 22.52                                         | 16.49 | 1.53         | 21.70          | 16.18 | 1.69         | 20.76          | 15.83 | 1.87         | 19.72          | 15.37 | 2.08         | 18.47          | 14.84 | 2.33         | 17.08          | 14.20 | 2.63         |
|                | 67<br>(19.4)  | 24.17                                         | 17.07 | 1.55         | 23.27          | 16.75 | 1.71         | 22.26          | 16.40 | 1.89         | 21.16          | 15.98 | 2.10         | 19.94          | 15.50 | 2.35         | 18.54          | 14.96 | 2.65         |
|                | 72<br>(22.2)  | 26.41                                         | 13.85 | 1.57         | 25.43          | 13.48 | 1.73         | 24.35          | 13.08 | 1.91         | 23.16          | 12.65 | 2.13         | 21.88          | 12.19 | 2.38         | 20.48          | 11.70 | 2.68         |
|                | 57<br>(13.8)  | 22.87                                         | 22.87 | 1.55         | 22.18          | 22.18 | 1.71         | 21.38          | 21.38 | 1.90         | 20.49          | 20.49 | 2.11         | 19.46          | 19.46 | 2.36         | 18.29          | 18.29 | 2.66         |
| 855            | 62<br>(16.6)  | 23.05                                         | 22.37 | 1.56         | 22.21          | 22.21 | 1.71         | 21.42          | 21.42 | 1.90         | 20.52          | 20.52 | 2.11         | 19.48          | 19.48 | 2.36         | 18.31          | 18.31 | 2.66         |
|                | 63*<br>(17.2) | 23.32                                         | 18.13 | 1.56         | 22.40          | 17.85 | 1.72         | 21.40          | 17.49 | 1.89         | 20.26          | 17.06 | 2.10         | 18.97          | 16.52 | 2.36         | 17.54          | 15.88 | 2.65         |
|                | 67<br>(19.4)  | 25.01                                         | 18.82 | 1.57         | 24.02          | 18.52 | 1.73         | 22.93          | 18.17 | 1.91         | 21.73          | 17.78 | 2.13         | 20.43          | 17.31 | 2.38         | 18.99          | 16.76 | 2.67         |
|                | 72<br>(22.2)  | 27.31                                         | 15.01 | 1.59         | 26.24          | 14.65 | 1.75         | 25.06          | 14.26 | 1.94         | 23.79          | 13.83 | 2.15         | 22.43          | 13.35 | 2.41         | 20.95          | 12.85 | 2.70         |
|                | 57<br>(13.8)  | 23.27                                         | 23.27 | 1.56         | 22.55          | 22.55 | 1.72         | 21.73          | 21.73 | 1.91         | 20.81          | 20.81 | 2.12         | 19.76          | 19.76 | 2.37         | 18.58          | 18.58 | 2.67         |
|                | 62<br>(16.6)  | 23.63                                         | 22.15 | 1.57         | 22.58          | 22.58 | 1.72         | 21.76          | 21.76 | 1.91         | 20.84          | 20.84 | 2.12         | 19.79          | 19.79 | 2.37         | 18.60          | 18.60 | 2.67         |
| 900            | 63*<br>(17.2) | 23.53                                         | 18.66 | 1.57         | 22.59          | 18.38 | 1.72         | 21.56          | 18.02 | 1.90         | 20.41          | 17.59 | 2.11         | 19.10          | 17.05 | 2.36         | 17.67          | 16.41 | 2.66         |
|                | 67<br>(19.4)  | 25.24                                         | 19.38 | 1.58         | 24.22          | 19.08 | 1.74         | 23.11          | 18.74 | 1.92         | 21.90          | 18.34 | 2.13         | 20.57          | 17.88 | 2.39         | 19.12          | 17.31 | 2.68         |
|                | 72<br>(22.2)  | 27.55                                         | 15.36 | 1.60         | 26.45          | 15.01 | 1.76         | 25.25          | 14.62 | 1.95         | 23.94          | 14.21 | 2.16         | 22.57          | 13.73 | 2.41         | 21.07          | 13.22 | 2.71         |
|                |               |                                               |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
|                |               |                                               |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
|                |               |                                               |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 024 High Heat

| INDOOR AIR   |     | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |           |       |            |       |           |       |              |                |       |              |
|--------------|-----|--------------------------------------------------|-------|-----------|-------|------------|-------|-----------|-------|--------------|----------------|-------|--------------|
| EDB          | CFM | -10 (-23.3)                                      |       | 0 (-17.8) |       | 10 (-12.2) |       | 20 (-6.7) |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |
|              |     | Total                                            | Integ | Total     | Integ | Total      | Integ | Total     | Integ |              | Total          | Integ |              |
| 65<br>(18.3) | 700 | 5.87                                             | 5.40  | 1.15      | 7.69  | 6.60       | 9.71  | 1.40      | 13.29 | 1.40         | 13.29          | 12.05 | 1.50         |
|              | 855 | 5.92                                             | 5.45  | 1.15      | 7.75  | 6.65       | 9.76  | 1.42      | 13.35 | 1.42         | 13.35          | 12.10 | 1.51         |
|              | 900 | 5.93                                             | 5.45  | 1.15      | 7.76  | 6.66       | 9.77  | 1.42      | 13.37 | 1.42         | 13.37          | 12.12 | 1.51         |
| 70<br>(21.1) | 700 | 5.80                                             | 5.34  | 1.20      | 7.60  | 6.52       | 9.58  | 1.46      | 13.10 | 1.46         | 13.10          | 11.88 | 1.55         |
|              | 855 | 5.87                                             | 5.40  | 1.20      | 7.66  | 6.58       | 9.63  | 1.47      | 13.16 | 1.47         | 13.16          | 11.94 | 1.56         |
|              | 900 | 5.87                                             | 5.40  | 1.20      | 7.67  | 6.59       | 9.65  | 1.47      | 13.17 | 1.47         | 13.17          | 11.95 | 1.58         |
| 75<br>(23.9) | 700 | 5.72                                             | 5.26  | 1.26      | 7.50  | 6.44       | 9.44  | 1.51      | 12.92 | 1.51         | 12.92          | 11.72 | 1.61         |
|              | 855 | 5.80                                             | 5.33  | 1.26      | 7.56  | 6.50       | 9.50  | 1.52      | 12.99 | 1.52         | 12.99          | 11.77 | 1.63         |
|              | 900 | 5.80                                             | 5.34  | 1.26      | 7.58  | 6.50       | 9.51  | 1.52      | 12.99 | 1.52         | 12.99          | 11.78 | 1.63         |

| INDOOR AIR   |     | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |          |       |         |       |           |       |              |                |       |              |
|--------------|-----|--------------------------------------------------|-------|----------|-------|---------|-------|-----------|-------|--------------|----------------|-------|--------------|
| EDB          | CFM | 30 (-1.1)                                        |       | 40 (4.4) |       | 50 (10) |       | 60 (15.6) |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |
|              |     | Total                                            | Integ | Total    | Integ | Total   | Integ | Total     | Integ |              | Total          | Integ |              |
| 65<br>(18.3) | 700 | 16.97                                            | 14.87 | 1.70     | 20.83 | 20.83   | 25.42 | 1.77      | 29.44 | 1.77         | 29.44          | 29.44 | 1.88         |
|              | 855 | 16.93                                            | 14.84 | 1.70     | 20.80 | 20.80   | 25.35 | 1.77      | 29.32 | 1.77         | 29.32          | 29.32 | 1.88         |
|              | 900 | 16.94                                            | 14.85 | 1.71     | 20.80 | 20.80   | 25.35 | 1.78      | 29.30 | 1.78         | 29.30          | 29.30 | 1.88         |
| 70<br>(21.1) | 700 | 16.64                                            | 14.58 | 1.75     | 20.58 | 20.58   | 25.26 | 1.85      | 29.34 | 1.85         | 29.34          | 29.34 | 1.97         |
|              | 855 | 16.72                                            | 14.65 | 1.76     | 20.65 | 20.65   | 25.21 | 1.85      | 29.22 | 1.85         | 29.22          | 29.22 | 1.97         |
|              | 900 | 16.73                                            | 14.66 | 1.76     | 20.65 | 20.65   | 25.20 | 1.85      | 29.21 | 1.85         | 29.21          | 29.21 | 1.97         |
| 75<br>(23.9) | 700 | 16.42                                            | 14.38 | 1.83     | 20.45 | 20.45   | 25.11 | 1.92      | 29.21 | 1.92         | 29.21          | 29.21 | 2.06         |
|              | 855 | 16.49                                            | 14.45 | 1.84     | 20.60 | 20.60   | 25.06 | 1.93      | 29.12 | 1.93         | 29.12          | 29.12 | 2.05         |
|              | 900 | 16.50                                            | 14.46 | 1.84     | 20.38 | 20.38   | 25.05 | 1.93      | 29.11 | 1.93         | 29.11          | 29.11 | 2.05         |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

024 Low Cool

| EVAPORATOR<br>AIR |               | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |       |                    |                |                |       |                    |                |                |       |                    |                |                |       |                    |                |
|-------------------|---------------|-----------------------------------------------|-------|--------------------|----------------|----------------|-------|--------------------|----------------|----------------|-------|--------------------|----------------|----------------|-------|--------------------|----------------|
|                   |               | 75 (23.9)                                     |       |                    |                | 85 (29.4)      |       |                    |                | 95 (35)        |       |                    |                | 105 (40.6)     |       |                    |                |
|                   |               | Capacity MBtuh                                |       | Total<br>Sys<br>KW | Capacity MBtuh | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |
|                   |               | Total                                         | Sens  |                    |                | Total          | Sens  |                    |                | Total          | Sens  |                    |                | Total          | Sens  |                    |                |
| CFM               | EWB           | Capacity MBtuh                                |       | Total<br>Sys<br>KW | Capacity MBtuh | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |
|                   |               | Total                                         | Sens  |                    |                | Total          | Sens  |                    |                | Total          | Sens  |                    |                | Total          | Sens  |                    |                |
| 525               | 57<br>(13.8)  | 18.15                                         | 18.15 | 1.06               | 17.65          | 17.65          | 17.65 | 1.19               | 16.95          | 16.95          | 16.95 | 1.34               | 16.00          | 16.00          | 16.00 | 1.52               | 14.98          |
|                   | 62<br>(16.6)  | 18.61                                         | 17.42 | 1.05               | 17.93          | 17.21          | 17.21 | 1.19               | 17.04          | 16.87          | 16.87 | 1.34               | 16.03          | 16.03          | 15.00 | 1.52               | 15.00          |
|                   | 63*<br>(17.2) | 18.94                                         | 14.19 | 1.05               | 18.25          | 13.94          | 13.94 | 1.19               | 17.37          | 13.55          | 13.55 | 1.34               | 16.17          | 13.01          | 12.45 | 1.52               | 14.86          |
|                   | 67<br>(19.4)  | 20.32                                         | 14.68 | 1.04               | 19.55          | 14.43          | 14.43 | 1.18               | 18.63          | 14.09          | 14.09 | 1.34               | 17.55          | 13.65          | 13.10 | 1.52               | 16.22          |
|                   | 72<br>(22.2)  | 22.23                                         | 11.87 | 1.03               | 21.38          | 11.56          | 11.56 | 1.18               | 20.38          | 11.19          | 11.19 | 1.34               | 19.27          | 10.78          | 10.35 | 1.52               | 18.06          |
| 675               | 57<br>(13.8)  | 19.64                                         | 19.64 | 1.06               | 19.04          | 19.04          | 19.04 | 1.20               | 18.28          | 18.28          | 18.28 | 1.36               | 17.36          | 17.36          | 16.24 | 1.53               | 16.24          |
|                   | 62<br>(16.6)  | 19.85                                         | 18.78 | 1.06               | 19.07          | 19.07          | 19.07 | 1.20               | 18.31          | 18.31          | 18.31 | 1.36               | 17.38          | 17.38          | 16.27 | 1.53               | 16.27          |
|                   | 63*<br>(17.2) | 19.76                                         | 16.08 | 1.06               | 18.98          | 15.87          | 15.87 | 1.20               | 18.01          | 15.55          | 15.55 | 1.36               | 16.80          | 15.03          | 15.42 | 1.53               | 15.42          |
|                   | 67<br>(19.4)  | 21.20                                         | 16.70 | 1.05               | 20.33          | 16.47          | 16.47 | 1.19               | 19.31          | 16.18          | 16.18 | 1.35               | 18.14          | 15.80          | 15.25 | 1.53               | 16.79          |
|                   | 72<br>(22.2)  | 23.17                                         | 13.18 | 1.04               | 22.22          | 12.89          | 12.89 | 1.19               | 21.11          | 12.54          | 12.54 | 1.35               | 19.91          | 12.14          | 11.69 | 1.53               | 18.61          |
| 700               | 57<br>(13.8)  | 19.85                                         | 19.85 | 1.06               | 19.23          | 19.23          | 19.23 | 1.20               | 18.46          | 18.46          | 18.46 | 1.36               | 17.54          | 17.54          | 16.41 | 1.54               | 16.41          |
|                   | 62<br>(16.6)  | 20.11                                         | 18.71 | 1.06               | 19.26          | 19.26          | 19.26 | 1.20               | 18.49          | 18.49          | 18.49 | 1.36               | 17.56          | 17.56          | 16.44 | 1.54               | 16.44          |
|                   | 63*<br>(17.2) | 19.86                                         | 16.40 | 1.06               | 19.07          | 16.18          | 16.18 | 1.20               | 18.09          | 15.87          | 15.87 | 1.36               | 16.88          | 15.35          | 15.49 | 1.54               | 15.49          |
|                   | 67<br>(19.4)  | 21.32                                         | 17.02 | 1.05               | 20.44          | 16.80          | 16.80 | 1.20               | 19.39          | 16.51          | 16.51 | 1.36               | 18.22          | 16.14          | 15.59 | 1.54               | 16.87          |
|                   | 72<br>(22.2)  | 23.29                                         | 13.38 | 1.04               | 22.33          | 13.09          | 13.09 | 1.19               | 21.20          | 12.75          | 12.75 | 1.35               | 19.98          | 12.36          | 11.91 | 1.54               | 18.68          |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 024 Low Heat

| INDOOR AIR   |     | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |      |
|--------------|-----|--------------------------------------------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|------|
| EDB          | CFM | 0 (-17.8)                                        |       |              | 10 (-12.2)     |       |              | 20 (-6.7)      |       |              | 30 (-1.1)      |       |              | 40 (4.4)       |       |              | 50 (10)        |       |              | 60 (15.6)      |       |              |      |
|              |     | Capacity MBtuh                                   |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |      |
|              |     | Total                                            | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              |      |
| 65<br>(18.3) |     | 525                                              | 4.54  | 4.50         | 1.00           | 6.59  | 6.06         | 1.06           | 8.44  | 7.65         | 1.13           | 11.85 | 10.38        | 1.17           | 14.14 | 14.14        | 1.22           | 17.65 | 17.65        | 1.27           | 21.47 | 21.47        | 1.29 |
|              |     | 675                                              | 4.56  | 4.52         | 0.99           | 6.64  | 6.09         | 1.04           | 8.48  | 7.69         | 1.13           | 11.90 | 10.43        | 1.17           | 14.21 | 14.21        | 1.22           | 17.60 | 17.60        | 1.26           | 21.49 | 21.49        | 1.29 |
|              |     | 700                                              | 4.56  | 4.52         | 0.98           | 6.65  | 6.10         | 1.04           | 8.51  | 7.71         | 1.13           | 11.92 | 10.45        | 1.18           | 14.22 | 14.22        | 1.22           | 17.58 | 17.58        | 1.26           | 21.47 | 21.47        | 1.29 |
| 70<br>(21.1) |     | 525                                              | 4.52  | 4.48         | 1.07           | 6.52  | 5.99         | 1.12           | 8.31  | 7.53         | 1.19           | 11.65 | 10.20        | 1.22           | 13.90 | 13.90        | 1.26           | 17.35 | 17.35        | 1.32           | 21.24 | 21.24        | 1.33 |
|              |     | 675                                              | 4.56  | 4.52         | 1.05           | 6.59  | 6.06         | 1.11           | 8.38  | 7.60         | 1.18           | 11.71 | 10.26        | 1.22           | 13.96 | 13.96        | 1.27           | 17.37 | 17.37        | 1.31           | 21.28 | 21.28        | 1.34 |
|              |     | 700                                              | 4.58  | 4.54         | 1.05           | 6.62  | 6.07         | 1.10           | 8.40  | 7.62         | 1.19           | 11.73 | 10.28        | 1.23           | 13.98 | 13.98        | 1.27           | 17.37 | 17.37        | 1.31           | 21.22 | 21.22        | 1.34 |
| 75<br>(23.9) |     | 525                                              | 4.43  | 4.39         | 1.13           | 6.42  | 5.89         | 1.18           | 8.15  | 7.39         | 1.25           | 11.42 | 10.01        | 1.26           | 13.65 | 13.65        | 1.31           | 17.05 | 17.05        | 1.37           | 21.01 | 21.01        | 1.39 |
|              |     | 675                                              | 4.50  | 4.46         | 1.12           | 6.50  | 5.96         | 1.17           | 8.24  | 7.47         | 1.24           | 11.50 | 10.07        | 1.27           | 13.70 | 13.70        | 1.31           | 17.11 | 17.11        | 1.38           | 20.93 | 20.93        | 1.39 |
|              |     | 700                                              | 4.52  | 4.48         | 1.11           | 6.52  | 5.99         | 1.16           | 8.26  | 7.50         | 1.24           | 11.51 | 10.09        | 1.27           | 13.72 | 13.72        | 1.32           | 17.25 | 17.25        | 1.38           | 20.91 | 20.91        | 1.39 |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

030 High Cool

| EVAPORATOR AIR |              | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
|----------------|--------------|-----------------------------------------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|
| CFM            | EWB          | 75 (23.9)                                     |       |              | 85 (29.4)      |       |              | 95 (35)        |       |              | 105 (40.6)     |       |              | 115 (46.1)     |       |              | 125 (51.7)     |       |              |
|                |              | Capacity MBtuh                                |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |
|                |              | Total                                         | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              |
| 875            | 57<br>(13.9) | 27.21                                         | 27.21 | 1.90         | 26.37          | 26.37 | 2.10         | 25.44          | 25.44 | 2.34         | 24.37          | 24.37 | 2.62         | 23.17          | 23.17 | 2.92         | 21.82          | 21.82 | 3.26         |
|                | 62<br>(16.7) | 28.23                                         | 25.45 | 1.92         | 27.09          | 25.02 | 2.11         | 25.89          | 24.50 | 2.35         | 24.58          | 23.88 | 2.62         | 23.21          | 23.21 | 2.92         | 21.86          | 21.86 | 3.26         |
|                | 63*<br>17.2) | 28.71                                         | 20.79 | 1.92         | 27.58          | 20.34 | 2.12         | 26.35          | 19.83 | 2.35         | 24.99          | 19.25 | 2.62         | 23.47          | 18.57 | 2.93         | 21.78          | 17.81 | 3.26         |
|                | 67<br>(19.4) | 30.91                                         | 21.57 | 1.95         | 29.69          | 21.12 | 2.14         | 28.37          | 20.62 | 2.38         | 26.94          | 20.05 | 2.65         | 25.35          | 19.42 | 2.96         | 23.60          | 18.72 | 3.29         |
|                | 72<br>(13.9) | 33.94                                         | 17.52 | 1.99         | 32.62          | 17.03 | 2.19         | 31.20          | 16.50 | 2.42         | 29.67          | 15.94 | 2.70         | 27.97          | 15.33 | 3.00         | 26.12          | 14.67 | 3.33         |
| 1000           | 57<br>(13.9) | 28.45                                         | 28.45 | 1.95         | 27.55          | 27.55 | 2.14         | 26.54          | 26.54 | 2.38         | 25.40          | 25.40 | 2.66         | 24.13          | 24.13 | 2.97         | 22.71          | 22.71 | 3.30         |
|                | 62<br>(16.7) | 29.02                                         | 27.38 | 1.95         | 27.83          | 26.90 | 2.15         | 26.60          | 26.53 | 2.38         | 25.44          | 25.44 | 2.66         | 24.16          | 24.16 | 2.97         | 22.74          | 22.74 | 3.30         |
|                | 63*<br>17.2) | 29.44                                         | 22.19 | 1.96         | 28.24          | 21.73 | 2.15         | 26.93          | 21.21 | 2.39         | 25.49          | 20.61 | 2.66         | 23.90          | 19.93 | 2.96         | 22.15          | 19.17 | 3.29         |
|                | 67<br>(19.4) | 31.69                                         | 23.08 | 1.98         | 30.39          | 22.61 | 2.18         | 29.00          | 22.10 | 2.42         | 27.48          | 21.53 | 2.69         | 25.81          | 20.89 | 2.99         | 23.99          | 20.17 | 3.32         |
|                | 72<br>(13.9) | 34.81                                         | 18.55 | 2.03         | 33.40          | 18.03 | 2.22         | 31.90          | 17.49 | 2.46         | 30.27          | 16.91 | 2.73         | 28.50          | 16.28 | 3.04         | 26.55          | 15.60 | 3.37         |
| 1125           | 57<br>(13.9) | 29.54                                         | 29.54 | 1.99         | 28.56          | 28.56 | 2.18         | 27.48          | 27.48 | 2.42         | 26.27          | 26.27 | 2.70         | 24.93          | 24.93 | 3.01         | 23.44          | 23.44 | 3.34         |
|                | 62<br>(16.7) | 29.72                                         | 29.10 | 1.99         | 28.61          | 28.61 | 2.18         | 27.52          | 27.52 | 2.42         | 26.31          | 26.31 | 2.70         | 24.96          | 24.96 | 3.01         | 23.47          | 23.47 | 3.34         |
|                | 63*<br>17.2) | 30.03                                         | 23.53 | 1.99         | 28.76          | 23.07 | 2.19         | 27.39          | 22.53 | 2.42         | 25.88          | 21.92 | 2.69         | 24.24          | 21.24 | 2.99         | 22.45          | 20.46 | 3.32         |
|                | 67<br>(19.4) | 32.34                                         | 24.51 | 2.02         | 30.95          | 24.05 | 2.22         | 29.49          | 23.52 | 2.45         | 27.91          | 22.94 | 2.72         | 26.16          | 22.29 | 3.03         | 24.30          | 21.55 | 3.36         |
|                | 72<br>(13.9) | 35.47                                         | 19.51 | 2.07         | 33.98          | 19.01 | 2.26         | 32.41          | 18.44 | 2.50         | 30.72          | 17.85 | 2.77         | 28.87          | 17.21 | 3.07         | 26.86          | 16.52 | 3.40         |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 030 High Heat

| INDOOR AIR   |      | OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C) |       |        |           |       |        |            |       |        |           |       |        |
|--------------|------|------------------------------------------------|-------|--------|-----------|-------|--------|------------|-------|--------|-----------|-------|--------|
| EDB          | CFM  | -10 (-23.3)                                    |       |        | 0 (-17.8) |       |        | 10 (-12.2) |       |        | 20 (-6.7) |       |        |
|              |      | Capacity                                       | MBtuh | Total  | Capacity  | MBtuh | Total  | Capacity   | MBtuh | Total  | Capacity  | MBtuh | Total  |
|              |      | Total                                          | Integ | Sys KW | Total     | Integ | Sys KW | Total      | Integ | Sys KW | Total     | Integ | Sys KW |
| 65<br>(18.3) | 875  | 6.87                                           | 6.32  | 1.51   | 8.94      | 8.23  | 1.65   | 14.03      | 12.87 | 1.83   | 18.81     | 17.06 | 1.98   |
|              | 1000 | 6.94                                           | 6.39  | 1.54   | 9.00      | 8.28  | 1.67   | 14.09      | 12.94 | 1.85   | 18.88     | 17.12 | 2.01   |
|              | 1125 | 7.00                                           | 6.45  | 1.55   | 9.06      | 8.33  | 1.69   | 14.17      | 13.01 | 1.88   | 18.96     | 17.19 | 2.03   |
| 70<br>(21.1) | 875  | 6.73                                           | 6.19  | 1.57   | 8.81      | 8.10  | 1.71   | 13.85      | 12.72 | 1.89   | 18.60     | 16.86 | 2.05   |
|              | 1000 | 6.80                                           | 6.26  | 1.58   | 8.86      | 8.16  | 1.72   | 13.92      | 12.78 | 1.92   | 18.67     | 16.93 | 2.08   |
|              | 1125 | 6.87                                           | 6.32  | 1.60   | 8.92      | 8.21  | 1.75   | 14.00      | 12.84 | 1.93   | 18.75     | 17.00 | 2.11   |
| 75<br>(23.9) | 875  | 6.59                                           | 6.06  | 1.61   | 8.67      | 7.98  | 1.76   | 13.68      | 12.56 | 1.96   | 18.38     | 16.67 | 2.13   |
|              | 1000 | 6.67                                           | 6.14  | 1.62   | 8.74      | 8.04  | 1.78   | 13.75      | 12.62 | 1.97   | 18.46     | 16.74 | 2.15   |
|              | 1125 | 6.74                                           | 6.20  | 1.64   | 8.79      | 8.09  | 1.81   | 13.82      | 12.69 | 2.00   | 18.54     | 16.81 | 2.17   |

| INDOOR AIR   |      | OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C) |       |        |          |       |        |          |       |        |           |       |        |
|--------------|------|------------------------------------------------|-------|--------|----------|-------|--------|----------|-------|--------|-----------|-------|--------|
| EDB          | CFM  | 30 (-1.1)                                      |       |        | 40 (4.4) |       |        | 50 (10)  |       |        | 60 (15.6) |       |        |
|              |      | Capacity                                       | MBtuh | Total  | Capacity | MBtuh | Total  | Capacity | MBtuh | Total  | Capacity  | MBtuh | Total  |
|              |      | Total                                          | Integ | Sys KW | Total    | Integ | Sys KW | Total    | Integ | Sys KW | Total     | Integ | Sys KW |
| 65<br>(18.3) | 875  | 22.48                                          | 19.70 | 2.03   | 26.63    | 26.63 | 2.17   | 31.28    | 31.28 | 2.31   | 36.40     | 36.40 | 2.46   |
|              | 1000 | 22.56                                          | 19.77 | 2.05   | 26.70    | 26.70 | 2.19   | 31.36    | 31.36 | 2.33   | 36.49     | 36.49 | 2.48   |
|              | 1125 | 22.64                                          | 19.83 | 2.08   | 26.77    | 26.77 | 2.21   | 31.44    | 31.44 | 2.35   | 36.58     | 36.58 | 2.50   |
| 70<br>(21.1) | 875  | 22.24                                          | 19.49 | 2.09   | 26.34    | 26.34 | 2.23   | 30.91    | 30.91 | 2.38   | 35.94     | 35.94 | 2.54   |
|              | 1000 | 22.32                                          | 19.56 | 2.12   | 26.41    | 26.41 | 2.26   | 30.97    | 30.97 | 2.38   | 35.99     | 35.99 | 2.51   |
|              | 1125 | 22.40                                          | 19.62 | 2.14   | 26.49    | 26.49 | 2.28   | 31.06    | 31.06 | 2.41   | 36.09     | 36.09 | 2.55   |
| 75<br>(23.9) | 875  | 22.00                                          | 19.28 | 2.17   | 26.05    | 26.05 | 2.31   | 30.52    | 30.52 | 2.44   | 35.44     | 35.44 | 2.58   |
|              | 1000 | 22.08                                          | 19.34 | 2.20   | 26.12    | 26.12 | 2.32   | 30.60    | 30.60 | 2.46   | 35.53     | 35.53 | 2.61   |
|              | 1125 | 22.15                                          | 19.41 | 2.21   | 26.20    | 26.20 | 2.34   | 30.67    | 30.67 | 2.47   | 35.59     | 35.59 | 2.60   |

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PERFORMANCE DATA (CONT)

030 Low Cool

| EVAPORATOR<br>AIR |               | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |               |                    |                   |           |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |            |                    |                   |       |                    |       |      |  |
|-------------------|---------------|-----------------------------------------------|---------------|--------------------|-------------------|-----------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|------------|--------------------|-------------------|-------|--------------------|-------|------|--|
|                   |               | 75 (23.9)                                     |               |                    |                   | 85 (29.4) |                    |                   |       | 95 (35)            |                   |       |                    | 105 (40.6)        |       |                    |                   | 115 (46.1) |                    |                   |       | 125 (51.7)         |       |      |  |
|                   |               | Capacity<br>MBtuh                             |               | Total<br>Sys<br>KW | Capacity<br>MBtuh |           | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |            | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW |       |      |  |
| Total             | Sens          | Total                                         | Sens          |                    | Total             | Sens      |                    | Total             | Sens  |                    | Total             | Sens  |                    | Total             | Sens  |                    | Total             | Sens       |                    | Total             | Sens  |                    | Total | Sens |  |
| CFM               | EWB           | 655                                           | 57<br>(13.8)  | 22.68              | 22.68             | 1.40      | 22.01              | 22.01             | 1.57  | 21.21              | 21.21             | 1.76  | 20.22              | 20.22             | 1.98  | 19.08              | 19.08             | 2.22       | 17.83              | 17.83             | 2.51  | 17.83              | 17.83 | 2.51 |  |
|                   |               |                                               | 62<br>(16.6)  | 23.35              | 21.67             | 1.40      | 22.42              | 21.37             | 1.57  | 21.41              | 20.94             | 1.76  | 20.29              | 20.17             | 1.98  | 19.11              | 19.11             | 2.22       | 17.86              | 17.86             | 2.51  | 17.86              | 17.86 | 2.51 |  |
|                   |               |                                               | 63*<br>(17.2) | 23.75              | 17.64             | 1.40      | 22.85              | 17.28             | 1.57  | 21.82              | 16.83             | 1.76  | 20.56              | 16.29             | 1.97  | 19.12              | 15.62             | 2.22       | 17.54              | 14.94             | 2.51  | 17.54              | 14.94 | 2.51 |  |
|                   |               |                                               | 67<br>(19.4)  | 25.55              | 18.28             | 1.39      | 24.57              | 17.94             | 1.56  | 23.50              | 17.52             | 1.75  | 22.28              | 17.03             | 1.97  | 20.83              | 16.45             | 2.21       | 19.17              | 15.76             | 2.49  | 19.17              | 15.76 | 2.49 |  |
|                   |               |                                               | 72<br>(22.2)  | 28.05              | 14.77             | 1.38      | 26.99              | 14.38             | 1.55  | 25.83              | 13.95             | 1.75  | 24.56              | 13.48             | 1.96  | 23.12              | 12.96             | 2.20       | 21.47              | 12.37             | 2.48  | 21.47              | 12.37 | 2.48 |  |
| 775               | 57<br>(13.8)  | 23.95                                         | 23.95         | 1.42               | 23.20             | 23.20     | 1.59               | 22.35             | 22.35 | 1.78               | 21.33             | 21.33 | 2.00               | 20.14             | 20.14 | 2.24               | 18.79             | 18.79      | 2.52               | 18.79             | 18.79 | 2.52               |       |      |  |
|                   | 62<br>(16.6)  | 24.15                                         | 23.69         | 1.42               | 23.24             | 23.24     | 1.59               | 22.39             | 22.39 | 1.78               | 21.36             | 21.36 | 2.00               | 20.17             | 20.17 | 2.24               | 18.82             | 18.82      | 2.52               | 18.82             | 18.82 | 2.52               |       |      |  |
|                   | 63*<br>(17.2) | 24.46                                         | 19.16         | 1.42               | 23.47             | 18.83     | 1.59               | 22.36             | 18.41 | 1.78               | 21.07             | 17.85 | 2.00               | 19.58             | 17.17 | 2.25               | 17.93             | 16.46      | 2.53               | 17.93             | 16.46 | 2.53               |       |      |  |
|                   | 67<br>(19.4)  | 26.31                                         | 19.90         | 1.41               | 25.25             | 19.58     | 1.58               | 24.08             | 19.20 | 1.77               | 22.78             | 18.73 | 1.99               | 21.29             | 18.13 | 2.24               | 19.59             | 17.42      | 2.51               | 19.59             | 17.42 | 2.51               |       |      |  |
|                   | 72<br>(22.2)  | 28.86                                         | 15.87         | 1.41               | 27.73             | 15.47     | 1.58               | 26.50             | 15.02 | 1.77               | 25.14             | 14.54 | 1.98               | 23.62             | 14.00 | 2.23               | 21.89             | 13.40      | 2.50               | 21.89             | 13.40 | 2.50               |       |      |  |
| 840               | 57<br>(13.8)  | 24.54                                         | 24.54         | 1.43               | 23.76             | 23.76     | 1.60               | 22.87             | 22.87 | 1.79               | 21.83             | 21.83 | 2.01               | 20.61             | 20.61 | 2.25               | 19.23             | 19.23      | 2.53               | 19.23             | 19.23 | 2.53               |       |      |  |
|                   | 62<br>(16.6)  | 25.08                                         | 23.76         | 1.43               | 23.80             | 23.80     | 1.60               | 22.91             | 22.91 | 1.79               | 21.86             | 21.86 | 2.01               | 20.64             | 20.64 | 2.25               | 19.25             | 19.25      | 2.53               | 19.25             | 19.25 | 2.53               |       |      |  |
|                   | 63*<br>(17.2) | 24.76                                         | 19.96         | 1.43               | 23.75             | 19.63     | 1.60               | 22.60             | 19.21 | 1.79               | 21.28             | 18.66 | 2.01               | 19.77             | 17.98 | 2.26               | 18.11             | 17.25      | 2.54               | 18.11             | 17.25 | 2.54               |       |      |  |
|                   | 67<br>(19.4)  | 26.64                                         | 20.76         | 1.43               | 25.54             | 20.44     | 1.60               | 24.34             | 20.06 | 1.79               | 23.01             | 19.59 | 2.00               | 21.48             | 19.00 | 2.25               | 19.77             | 18.28      | 2.53               | 19.77             | 18.28 | 2.53               |       |      |  |
|                   | 72<br>(22.2)  | 29.22                                         | 16.40         | 1.42               | 28.04             | 16.02     | 1.59               | 26.77             | 15.59 | 1.78               | 25.38             | 15.10 | 2.00               | 23.82             | 14.56 | 2.24               | 22.06             | 13.96      | 2.51               | 22.06             | 13.96 | 2.51               |       |      |  |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 030 Low Heat

| INDOOR AIR   |     | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
|--------------|-----|--------------------------------------------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|
|              |     | 0 (–17.8)                                        |       |              | 10 (–12.2)     |       |              | 20 (–6.7)      |       |              | 30 (–1.1)      |       |              | 40 (4.4)       |       |              | 50 (10)        |       |              | 60 (15.6)      |       |              |
|              |     | Capacity MBtuh                                   |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |
| EDB          | CFM | Total                                            | Integ | Total        | Integ          | Total | Integ        | Total          | Integ | Total        | Integ          | Total | Integ        | Total          | Integ | Total        | Integ          | Total | Integ        | Total          | Integ |              |
|              |     |                                                  |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
| 65<br>(18.3) | 655 | 5.49                                             | 5.05  | 1.47         | 8.07           | 7.41  | 1.51         | 11.41          | 10.35 | 1.55         | 13.66          | 11.97 | 1.62         | 18.53          | 18.53 | 1.69         | 22.40          | 22.40 | 1.73         | 27.08          | 27.08 | 1.75         |
|              | 775 | 5.57                                             | 5.13  | 1.47         | 8.16           | 7.49  | 1.52         | 11.49          | 10.42 | 1.57         | 13.73          | 12.03 | 1.64         | 18.61          | 18.61 | 1.72         | 22.44          | 22.44 | 1.74         | 27.17          | 27.17 | 1.77         |
|              | 840 | 5.61                                             | 5.16  | 1.48         | 8.20           | 7.53  | 1.53         | 11.53          | 10.46 | 1.58         | 13.77          | 12.07 | 1.65         | 18.65          | 18.65 | 1.73         | 22.48          | 22.48 | 1.75         | 27.21          | 27.21 | 1.79         |
| 70<br>(21.1) | 655 | 5.39                                             | 4.96  | 1.52         | 7.94           | 7.29  | 1.57         | 11.24          | 10.19 | 1.62         | 13.48          | 11.80 | 1.68         | 18.28          | 18.28 | 1.76         | 22.07          | 22.07 | 1.78         | 26.74          | 26.74 | 1.81         |
|              | 775 | 5.47                                             | 5.04  | 1.53         | 8.03           | 7.37  | 1.58         | 11.33          | 10.27 | 1.63         | 13.55          | 11.87 | 1.70         | 18.36          | 18.36 | 1.78         | 22.15          | 22.15 | 1.81         | 26.82          | 26.82 | 1.84         |
|              | 840 | 5.52                                             | 5.08  | 1.53         | 8.08           | 7.42  | 1.58         | 11.36          | 10.30 | 1.64         | 13.58          | 11.90 | 1.71         | 18.40          | 18.40 | 1.79         | 22.19          | 22.19 | 1.81         | 26.86          | 26.86 | 1.84         |
| 75<br>(23.9) | 655 | 5.28                                             | 4.86  | 1.58         | 7.82           | 7.18  | 1.64         | 11.07          | 10.04 | 1.68         | 13.28          | 11.64 | 1.75         | 18.03          | 18.03 | 1.84         | 21.78          | 21.78 | 1.85         | 26.40          | 26.40 | 1.88         |
|              | 775 | 5.38                                             | 4.95  | 1.59         | 7.91           | 7.26  | 1.64         | 11.17          | 10.12 | 1.70         | 13.36          | 11.70 | 1.77         | 18.11          | 18.11 | 1.85         | 21.85          | 21.85 | 1.87         | 26.48          | 26.48 | 1.90         |
|              | 840 | 5.42                                             | 4.99  | 1.59         | 7.96           | 7.30  | 1.65         | 11.21          | 10.16 | 1.71         | 13.39          | 11.73 | 1.79         | 18.14          | 18.14 | 1.86         | 21.89          | 21.89 | 1.88         | 26.52          | 26.52 | 1.91         |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

036 High Cool

| EVAPORATOR<br>AIR |     | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |
|-------------------|-----|---------------------------------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|
|                   |     | 75 (23.9)                                   |       |                    | 85 (29.4)         |       |                    | 95 (35)           |       |                    | 105 (40.5)        |       |                    | 115 (46.1)        |       |                    |
|                   |     | Capacity<br>MBtuh                           |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW |
|                   |     | Total                                       | Sens  |                    | Total             | Sens  |                    | Total             | Sens  |                    | Total             | Sens  |                    | Total             | Sens  |                    |
| 1050              | CFM |                                             |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |
|                   | EWB |                                             |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |
|                   |     | 57<br>(13.9)                                | 34.39 | 34.39              | 2.37              | 32.14 | 32.14              | 2.56              | 29.88 | 29.88              | 2.77              | 27.60 | 27.60              | 2.99              | 25.28 | 25.28              |
|                   |     | 62<br>(16.7)                                | 35.59 | 31.08              | 2.38              | 33.00 | 30.10              | 2.57              | 30.42 | 29.04              | 2.77              | 27.85 | 27.91              | 2.99              | 25.32 | 25.32              |
|                   |     | 63*<br>(17.2)                               | 36.08 | 25.33              | 2.39              | 33.45 | 24.43              | 2.57              | 30.80 | 23.49              | 2.77              | 28.15 | 22.54              | 2.99              | 25.46 | 21.55              |
|                   |     | 67<br>(19.4)                                | 38.94 | 26.37              | 2.41              | 36.08 | 25.44              | 2.60              | 33.23 | 24.49              | 2.80              | 30.37 | 23.50              | 3.02              | 27.47 | 22.48              |
| 1200              |     | 72<br>(13.9)                                | 42.65 | 21.59              | 2.44              | 39.53 | 20.70              | 2.63              | 36.41 | 19.78              | 2.83              | 33.27 | 18.83              | 3.05              | 30.12 | 17.84              |
|                   |     | 57<br>(13.9)                                | 35.97 | 35.97              | 2.42              | 33.58 | 33.58              | 2.60              | 31.18 | 31.18              | 2.81              | 28.75 | 28.75              | 3.03              | 26.29 | 26.29              |
|                   |     | 62<br>(16.7)                                | 36.62 | 33.39              | 2.42              | 33.94 | 32.28              | 2.61              | 31.27 | 31.27              | 2.81              | 28.80 | 28.80              | 3.03              | 26.33 | 26.33              |
|                   |     | 63*<br>(17.2)                               | 37.03 | 27.00              | 2.42              | 34.27 | 26.05              | 2.61              | 31.52 | 25.09              | 2.81              | 28.76 | 24.10              | 3.03              | 25.98 | 23.06              |
|                   |     | 67<br>(19.4)                                | 39.95 | 28.16              | 2.45              | 36.97 | 27.19              | 2.63              | 34.00 | 26.20              | 2.83              | 31.02 | 25.17              | 3.05              | 28.01 | 24.11              |
|                   |     | 72<br>(13.9)                                | 43.73 | 22.73              | 2.48              | 40.48 | 21.79              | 2.67              | 37.23 | 20.84              | 2.87              | 33.97 | 19.86              | 3.09              | 30.70 | 18.84              |
| 1350              |     | 57<br>(13.9)                                | 37.34 | 37.34              | 2.46              | 34.82 | 34.82              | 2.64              | 32.29 | 32.29              | 2.85              | 29.73 | 29.73              | 3.07              | 27.14 | 27.14              |
|                   |     | 62<br>(16.7)                                | 37.64 | 35.05              | 2.46              | 34.88 | 34.88              | 2.65              | 32.34 | 32.34              | 2.85              | 29.78 | 29.78              | 3.07              | 27.18 | 27.18              |
|                   |     | 63*<br>(17.2)                               | 37.79 | 28.60              | 2.46              | 34.93 | 27.62              | 2.64              | 32.09 | 26.62              | 2.84              | 29.25 | 25.59              | 3.06              | 26.38 | 24.50              |
|                   |     | 67<br>(19.4)                                | 40.75 | 29.88              | 2.49              | 37.68 | 28.88              | 2.67              | 34.61 | 27.85              | 2.87              | 31.53 | 26.79              | 3.09              | 28.45 | 25.67              |
|                   |     | 72<br>(13.9)                                | 44.59 | 23.79              | 2.52              | 41.23 | 22.83              | 2.71              | 37.88 | 21.85              | 2.90              | 34.52 | 20.84              | 3.12              | 31.15 | 19.79              |
|                   |     |                                             |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 036 High Heat

| INDOOR AIR       |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |                    |                |       |                    |                |       |                    |                |       |                    |
|------------------|------|--------------------------------------------------|-------|--------------------|----------------|-------|--------------------|----------------|-------|--------------------|----------------|-------|--------------------|
|                  |      | -10 (-23.3)                                      |       |                    | 0 (-17.8)      |       |                    | 10 (-12.2)     |       |                    | 20 (-6.7)      |       |                    |
| EDB<br>° F (° C) | CFM  | Capacity MBtuh                                   |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW |
|                  |      | Total                                            | Integ |                    | Total          | Integ |                    | Total          | Integ |                    | Total          | Integ |                    |
| 65<br>(18.3)     | 1050 | 9.02                                             | 8.29  | 1.99               | 12.22          | 11.25 | 2.12               | 15.90          | 14.60 | 2.24               | 20.56          | 18.65 | 2.36               |
|                  | 1200 | 9.14                                             | 8.41  | 2.01               | 12.39          | 11.40 | 2.13               | 16.11          | 14.79 | 2.23               | 20.77          | 18.83 | 2.35               |
|                  | 1350 | 9.28                                             | 8.54  | 2.02               | 12.54          | 11.54 | 2.14               | 16.30          | 14.96 | 2.24               | 20.95          | 19.00 | 2.34               |
| 70<br>(21.1)     | 1050 | 8.61                                             | 7.92  | 2.09               | 11.81          | 10.87 | 2.22               | 15.47          | 14.20 | 2.34               | 19.83          | 17.99 | 2.46               |
|                  | 1200 | 8.76                                             | 8.06  | 2.10               | 12.00          | 11.04 | 2.23               | 15.69          | 14.41 | 2.34               | 20.46          | 18.55 | 2.46               |
|                  | 1350 | 8.90                                             | 8.19  | 2.12               | 12.16          | 11.19 | 2.24               | 15.89          | 14.58 | 2.34               | 20.64          | 18.72 | 2.45               |
| 75<br>(23.9)     | 1050 | 8.18                                             | 7.52  | 2.18               | 11.37          | 10.46 | 2.32               | 15.02          | 13.78 | 2.45               | 19.22          | 17.43 | 2.56               |
|                  | 1200 | 8.33                                             | 7.66  | 2.19               | 11.56          | 10.64 | 2.33               | 15.24          | 13.99 | 2.44               | 19.51          | 17.69 | 2.55               |
|                  | 1350 | 8.46                                             | 7.78  | 2.21               | 11.72          | 10.78 | 2.34               | 15.43          | 14.16 | 2.45               | 19.79          | 17.95 | 2.55               |

| INDOOR AIR       |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |                    |                |       |                    |                |       |                    |                |       |                    |
|------------------|------|--------------------------------------------------|-------|--------------------|----------------|-------|--------------------|----------------|-------|--------------------|----------------|-------|--------------------|
|                  |      | 30 (-1.1)                                        |       |                    | 40 (4.4)       |       |                    | 50 (10)        |       |                    | 60 (15.6)      |       |                    |
| EDB<br>° F (° C) | CFM  | Capacity MBtuh                                   |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW |
|                  |      | Total                                            | Integ |                    | Total          | Integ |                    | Total          | Integ |                    | Total          | Integ |                    |
| 65<br>(18.3)     | 1050 | 24.91                                            | 21.83 | 2.46               | 29.96          | 29.96 | 2.57               | 35.89          | 35.89 | 2.70               | 43.12          | 43.12 | 2.87               |
|                  | 1200 | 25.17                                            | 22.05 | 2.43               | 30.31          | 30.31 | 2.53               | 36.38          | 36.38 | 2.65               | 43.81          | 43.81 | 2.80               |
|                  | 1350 | 25.39                                            | 22.25 | 2.42               | 30.60          | 30.60 | 2.51               | 36.78          | 36.78 | 2.62               | 44.35          | 44.35 | 2.76               |
| 70<br>(21.1)     | 1050 | 24.58                                            | 21.54 | 2.58               | 29.54          | 29.54 | 2.69               | 35.33          | 35.33 | 2.82               | 42.44          | 42.44 | 2.99               |
|                  | 1200 | 24.83                                            | 21.75 | 2.55               | 29.88          | 29.88 | 2.65               | 35.81          | 35.81 | 2.77               | 43.10          | 43.10 | 2.92               |
|                  | 1350 | 25.05                                            | 21.95 | 2.53               | 30.16          | 30.16 | 2.62               | 36.19          | 36.19 | 2.73               | 43.60          | 43.60 | 2.88               |
| 75<br>(23.9)     | 1050 | 24.24                                            | 21.24 | 2.70               | 29.12          | 29.12 | 2.81               | 34.79          | 34.79 | 2.94               | 41.72          | 41.72 | 3.12               |
|                  | 1200 | 24.50                                            | 21.46 | 2.67               | 29.45          | 29.45 | 2.77               | 35.25          | 35.25 | 2.89               | 42.38          | 42.38 | 3.05               |
|                  | 1350 | 24.70                                            | 21.64 | 2.65               | 29.73          | 29.73 | 2.74               | 35.63          | 35.63 | 2.85               | 42.90          | 42.90 | 3.01               |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

036 Low Cool

| EVAPORATOR<br>AIR |               | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |
|-------------------|---------------|-----------------------------------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|
|                   |               | 75 (23.9)                                     |       |                    | 85 (29.4)         |       |                    | 95 (35)           |       |                    | 105 (40.6)        |       |                    | 115 (46.1)        |       |                    | 125 (51.7)        |       |                    |
|                   |               | Capacity<br>MBtuh                             |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW |
| CFM               | EWB           | Total                                         | Sens  | Total              | Sens              | Total | Sens               | Total             | Sens  | Total              | Sens              | Total | Sens               | Total             | Sens  | Total              | Sens              | Total | Sens               |
|                   |               |                                               |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |
| 785               | 57<br>(13.8)  | 24.53                                         | 24.53 | 1.58               | 23.23             | 23.23 | 1.75               | 21.88             | 21.88 | 1.94               | 20.46             | 20.46 | 2.15               | 18.94             | 18.94 | 17.33              | 17.33             | 17.33 | 2.66               |
|                   | 62<br>(16.6)  | 25.14                                         | 23.46 | 1.57               | 23.61             | 22.37 | 1.75               | 22.06             | 21.22 | 1.94               | 20.49             | 20.49 | 2.15               | 18.98             | 18.98 | 17.36              | 17.36             | 17.36 | 2.66               |
|                   | 63*<br>(17.2) | 25.47                                         | 18.96 | 1.57               | 23.90             | 18.03 | 1.75               | 22.29             | 17.10 | 1.94               | 20.59             | 16.15 | 2.15               | 18.79             | 15.18 | 16.90              | 14.19             | 14.19 | 2.66               |
|                   | 67<br>(19.4)  | 27.50                                         | 19.76 | 1.55               | 25.80             | 18.79 | 1.72               | 24.05             | 17.81 | 1.92               | 22.22             | 16.84 | 2.13               | 20.30             | 15.84 | 18.28              | 14.82             | 14.82 | 2.64               |
|                   | 72<br>(22.2)  | 30.11                                         | 15.99 | 1.52               | 28.26             | 15.09 | 1.70               | 26.37             | 14.21 | 1.89               | 24.39             | 13.28 | 2.11               | 22.32             | 12.36 | 20.13              | 11.42             | 11.42 | 2.62               |
| 900               | 57<br>(13.8)  | 25.61                                         | 25.61 | 1.59               | 24.22             | 24.22 | 1.77               | 22.78             | 22.78 | 1.96               | 21.26             | 21.26 | 2.17               | 19.66             | 19.66 | 17.95              | 17.95             | 17.95 | 2.67               |
|                   | 62<br>(16.6)  | 25.85                                         | 25.13 | 1.59               | 24.29             | 24.29 | 1.77               | 22.82             | 22.82 | 1.96               | 21.30             | 21.30 | 2.17               | 19.69             | 19.69 | 17.98              | 17.98             | 17.98 | 2.67               |
|                   | 63*<br>(17.2) | 26.08                                         | 20.23 | 1.59               | 24.44             | 19.26 | 1.77               | 22.75             | 18.29 | 1.96               | 20.98             | 17.30 | 2.17               | 19.12             | 16.28 | 17.17              | 15.23             | 15.23 | 2.68               |
|                   | 67<br>(19.4)  | 28.14                                         | 21.11 | 1.57               | 26.37             | 20.10 | 1.74               | 24.54             | 19.09 | 1.94               | 22.65             | 18.07 | 2.15               | 20.65             | 17.02 | 18.57              | 15.95             | 15.95 | 2.67               |
|                   | 72<br>(22.2)  | 30.81                                         | 16.82 | 1.54               | 28.88             | 15.89 | 1.72               | 26.90             | 14.98 | 1.91               | 24.84             | 14.02 | 2.13               | 22.69             | 13.07 | 20.43              | 12.11             | 12.11 | 2.64               |
| 1010              | 57<br>(13.8)  | 26.49                                         | 26.49 | 1.61               | 25.03             | 25.03 | 1.78               | 23.51             | 23.51 | 1.97               | 21.91             | 21.91 | 2.19               | 20.23             | 20.23 | 18.44              | 18.44             | 18.44 | 2.69               |
|                   | 62<br>(16.6)  | 26.53                                         | 26.53 | 1.61               | 25.07             | 25.07 | 1.78               | 23.54             | 23.54 | 1.97               | 21.95             | 21.95 | 2.18               | 20.26             | 20.26 | 18.47              | 18.47             | 18.47 | 2.69               |
|                   | 63*<br>(17.2) | 26.53                                         | 21.40 | 1.61               | 24.84             | 20.39 | 1.79               | 23.09             | 19.38 | 1.98               | 21.28             | 18.33 | 2.19               | 19.38             | 17.26 | 17.40              | 16.12             | 16.12 | 2.70               |
|                   | 67<br>(19.4)  | 28.64                                         | 22.35 | 1.59               | 26.80             | 21.33 | 1.76               | 24.92             | 20.27 | 1.96               | 22.96             | 19.18 | 2.17               | 20.93             | 18.08 | 18.80              | 16.93             | 16.93 | 2.69               |
|                   | 72<br>(22.2)  | 31.34                                         | 17.57 | 1.56               | 29.34             | 16.61 | 1.74               | 27.29             | 15.67 | 1.93               | 25.17             | 14.69 | 2.15               | 22.96             | 13.71 | 20.64              | 12.73             | 12.73 | 2.66               |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 036 Low Heat

| INDOOR AIR   |      | OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C) |              |                |              |                |              |                |              |                |              |                |              |                |              |                |              |                |              |
|--------------|------|------------------------------------------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------|--------------|
| EDB          | CFM  | 0 (-17.8)                                      |              | 10 (-12.2)     |              | 20 (-6.7)      |              | 30 (-1.1)      |              | 40 (4.4)       |              | 50 (10)        |              | 60 (15.6)      |              |                |              |                |              |
|              |      | Capacity MBtuh                                 | Total Sys KW | Capacity MBtuh | Total Sys KW | Capacity MBtuh | Total Sys KW | Capacity MBtuh | Total Sys KW | Capacity MBtuh | Total Sys KW | Capacity MBtuh | Total Sys KW | Capacity MBtuh | Total Sys KW | Capacity MBtuh | Total Sys KW | Capacity MBtuh | Total Sys KW |
|              |      | Total                                          | Integ        | Total          | Integ        | Total          | Integ        | Total          | Integ        | Total          | Integ        | Total          | Integ        | Total          | Integ        | Total          | Integ        | Total          | Integ        |
| 65<br>(18.3) | 785  | 6.33                                           | 5.82         | 1.76           | 1.78         | 12.07          | 10.95        | 1.80           | 15.61        | 13.68          | 1.82         | 19.82          | 19.82        | 1.84           | 24.39        | 24.39          | 1.86         | 29.08          | 29.08        |
|              | 900  | 6.46                                           | 5.95         | 1.77           | 1.78         | 12.30          | 11.15        | 1.80           | 15.89        | 13.92          | 1.80         | 20.50          | 20.50        | 1.83           | 24.73        | 24.73          | 1.83         | 29.54          | 29.54        |
|              | 1010 | 6.60                                           | 6.07         | 1.79           | 1.80         | 12.50          | 11.33        | 1.80           | 16.13        | 14.13          | 1.80         | 20.74          | 20.74        | 1.82           | 25.01        | 25.01          | 1.80         | 29.90          | 29.90        |
| 70<br>(21.1) | 785  | 5.88                                           | 5.41         | 1.84           | 1.86         | 11.62          | 10.54        | 1.88           | 15.14        | 13.27          | 1.90         | 19.18          | 19.18        | 1.93           | 24.04        | 24.04          | 1.96         | 28.64          | 28.64        |
|              | 900  | 6.03                                           | 5.55         | 1.86           | 1.87         | 11.86          | 10.76        | 1.88           | 15.44        | 13.53          | 1.89         | 19.59          | 19.59        | 1.90           | 24.36        | 24.36          | 1.92         | 29.09          | 29.09        |
|              | 1010 | 6.16                                           | 5.67         | 1.87           | 1.88         | 12.06          | 10.94        | 1.89           | 15.68        | 13.74          | 1.89         | 19.96          | 19.96        | 1.90           | 24.64        | 24.64          | 1.90         | 29.44          | 29.44        |
| 75<br>(23.9) | 785  | 5.38                                           | 4.95         | 1.92           | 1.95         | 11.13          | 10.10        | 1.97           | 14.65        | 12.84          | 1.99         | 18.65          | 18.65        | 2.02           | 23.65        | 23.65          | 2.07         | 28.19          | 28.19        |
|              | 900  | 5.53                                           | 5.09         | 1.94           | 1.96         | 11.38          | 10.32        | 1.97           | 14.94        | 13.09          | 1.98         | 19.03          | 19.03        | 2.00           | 23.99        | 23.99          | 2.02         | 28.63          | 28.63        |
|              | 1010 | 5.66                                           | 5.21         | 1.96           | 1.97         | 11.58          | 10.50        | 1.98           | 15.19        | 13.31          | 1.98         | 19.33          | 19.33        | 1.99           | 24.27        | 24.27          | 2.00         | 28.98          | 28.98        |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

042 High Cool

| EVAPORATOR<br>AIR |               | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |
|-------------------|---------------|---------------------------------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|
|                   |               | 75 (23.9)                                   |       |                    | 85 (29.4)         |       |                    | 95 (35)           |       |                    | 105 (40.5)        |       |                    | 115 (46.1)        |       |                    |
|                   |               | Capacity<br>MBtuh                           |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW |
|                   |               | Total                                       | Sens  |                    | Total             | Sens  |                    | Total             | Sens  |                    | Total             | Sens  |                    | Total             | Sens  |                    |
| 1225              | 57<br>(13.9)  | 42.15                                       | 42.15 | 2.91               | 39.67             | 39.67 | 3.15               | 37.10             | 37.10 | 3.43               | 34.44             | 34.44 | 3.74               | 31.67             | 31.67 | 4.09               |
|                   | 62<br>(16.7)  | 43.66                                       | 37.75 | 2.91               | 40.79             | 36.21 | 3.16               | 37.82             | 34.59 | 3.43               | 34.81             | 32.83 | 3.74               | 31.72             | 31.72 | 4.09               |
|                   | 63*<br>(17.2) | 44.22                                       | 30.75 | 2.92               | 41.29             | 29.38 | 3.16               | 38.26             | 27.98 | 3.44               | 35.13             | 26.53 | 3.75               | 31.92             | 25.05 | 4.09               |
|                   | 67<br>(19.4)  | 47.58                                       | 31.92 | 2.93               | 44.40             | 30.51 | 3.17               | 41.12             | 29.05 | 3.45               | 37.74             | 27.56 | 3.76               | 34.27             | 26.03 | 4.11               |
|                   | 72<br>(13.9)  | 51.88                                       | 26.10 | 2.94               | 48.39             | 24.77 | 3.19               | 44.80             | 23.40 | 3.48               | 41.12             | 22.00 | 3.79               | 37.36             | 20.56 | 4.13               |
|                   | 57<br>(13.9)  | 44.00                                       | 44.00 | 2.96               | 41.36             | 41.36 | 3.20               | 38.61             | 38.61 | 3.48               | 35.76             | 35.76 | 3.79               | 32.82             | 32.82 | 4.14               |
| 1400              | 62<br>(16.7)  | 44.86                                       | 40.47 | 2.96               | 41.88             | 38.78 | 3.20               | 38.84             | 36.91 | 3.48               | 35.83             | 35.83 | 3.79               | 32.87             | 32.87 | 4.14               |
|                   | 63*<br>(17.2) | 45.32                                       | 32.69 | 2.96               | 42.25             | 31.27 | 3.21               | 39.08             | 29.80 | 3.48               | 35.82             | 28.30 | 3.79               | 32.48             | 26.75 | 4.13               |
|                   | 67<br>(19.4)  | 48.76                                       | 34.00 | 2.97               | 45.44             | 32.52 | 3.22               | 42.00             | 31.00 | 3.50               | 38.47             | 29.45 | 3.81               | 34.87             | 27.85 | 4.15               |
|                   | 72<br>(13.9)  | 53.13                                       | 27.39 | 2.99               | 49.49             | 26.01 | 3.24               | 45.74             | 24.58 | 3.52               | 41.91             | 23.13 | 3.84               | 38.00             | 21.64 | 4.18               |
|                   | 57<br>(13.9)  | 45.59                                       | 45.59 | 3.00               | 42.79             | 42.79 | 3.25               | 39.89             | 39.89 | 3.53               | 36.89             | 36.89 | 3.84               | 33.78             | 33.78 | 4.18               |
|                   | 62<br>(16.7)  | 45.93                                       | 42.90 | 3.01               | 42.88             | 42.88 | 3.25               | 39.95             | 39.95 | 3.53               | 36.94             | 36.94 | 3.84               | 33.83             | 33.83 | 4.18               |
| 1575              | 63*<br>(17.2) | 46.20                                       | 34.55 | 3.01               | 43.02             | 33.07 | 3.25               | 39.73             | 31.55 | 3.53               | 36.36             | 29.98 | 3.84               | 32.93             | 28.36 | 4.18               |
|                   | 67<br>(19.4)  | 49.71                                       | 36.01 | 3.02               | 46.25             | 34.46 | 3.27               | 42.69             | 32.88 | 3.55               | 39.04             | 31.27 | 3.86               | 35.34             | 29.58 | 4.20               |
|                   | 72<br>(13.9)  | 54.13                                       | 28.61 | 3.04               | 50.36             | 27.18 | 3.29               | 46.48             | 25.71 | 3.57               | 42.52             | 24.21 | 3.88               | 38.49             | 22.67 | 4.22               |
|                   | 57<br>(13.9)  | 42.15                                       | 42.15 | 2.91               | 39.67             | 39.67 | 3.15               | 37.10             | 37.10 | 3.43               | 34.44             | 34.44 | 3.74               | 31.67             | 31.67 | 4.09               |
|                   | 62<br>(16.7)  | 43.66                                       | 37.75 | 2.91               | 40.79             | 36.21 | 3.16               | 37.82             | 34.59 | 3.43               | 34.81             | 32.83 | 3.74               | 31.72             | 31.72 | 4.09               |
|                   | 63*<br>(17.2) | 44.22                                       | 30.75 | 2.92               | 41.29             | 29.38 | 3.16               | 38.26             | 27.98 | 3.44               | 35.13             | 26.53 | 3.75               | 31.92             | 25.05 | 4.09               |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 042 High Heat

| INDOOR AIR       |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |                |                    |            |       |                |                    |                    |                    |
|------------------|------|--------------------------------------------------|-------|----------------|--------------------|------------|-------|----------------|--------------------|--------------------|--------------------|
| EDB<br>° F (° C) | CFM  | -10 (-23.3)                                      |       | 0 (-17.8)      |                    | 10 (-12.2) |       | 20 (-6.7)      |                    | Total<br>Sys<br>KW | Total<br>Sys<br>KW |
|                  |      | Total                                            | Integ | Capacity MBtuh | Total<br>Sys<br>KW | Total      | Integ | Capacity MBtuh | Total<br>Sys<br>KW |                    |                    |
| 65<br>(18.3)     | 1225 | 12.38                                            | 11.39 | 16.20          | 2.44               | 16.20      | 14.91 | 20.94          | 2.73               | 25.45              | 23.08              |
|                  | 1400 | 12.54                                            | 11.54 | 16.40          | 2.46               | 16.40      | 15.09 | 21.12          | 2.73               | 25.69              | 23.30              |
|                  | 1575 | 12.70                                            | 11.68 | 16.57          | 2.48               | 16.57      | 15.25 | 21.30          | 2.73               | 25.90              | 23.48              |
| 70<br>(21.1)     | 1225 | 12.00                                            | 11.04 | 15.81          | 2.55               | 15.81      | 14.55 | 20.66          | 2.85               | 25.14              | 22.80              |
|                  | 1400 | 12.18                                            | 11.21 | 16.02          | 2.56               | 16.02      | 14.74 | 20.87          | 2.84               | 25.38              | 23.02              |
|                  | 1575 | 12.34                                            | 11.36 | 16.21          | 2.58               | 16.21      | 14.92 | 21.05          | 2.85               | 25.59              | 23.21              |
| 75<br>(23.9)     | 1225 | 11.58                                            | 10.65 | 15.39          | 2.66               | 15.39      | 14.16 | 19.77          | 2.95               | 24.82              | 22.51              |
|                  | 1400 | 11.76                                            | 10.82 | 15.61          | 2.68               | 15.61      | 14.36 | 20.08          | 2.95               | 25.07              | 22.74              |
|                  | 1575 | 11.93                                            | 10.98 | 15.80          | 2.70               | 15.80      | 14.53 | 20.39          | 2.96               | 25.27              | 22.92              |

| INDOOR AIR       |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |                |                    |         |       |                |                    |                    |                    |
|------------------|------|--------------------------------------------------|-------|----------------|--------------------|---------|-------|----------------|--------------------|--------------------|--------------------|
| EDB<br>° F (° C) | CFM  | 30 (-1.1)                                        |       | 40 (4.4)       |                    | 50 (10) |       | 60 (15.6)      |                    | Total<br>Sys<br>KW | Total<br>Sys<br>KW |
|                  |      | Total                                            | Integ | Capacity MBtuh | Total<br>Sys<br>KW | Total   | Integ | Capacity MBtuh | Total<br>Sys<br>KW |                    |                    |
| 65<br>(18.3)     | 1225 | 30.72                                            | 26.92 | 36.92          | 3.00               | 36.92   | 36.92 | 44.40          | 3.38               | 53.33              | 53.33              |
|                  | 1400 | 31.04                                            | 27.20 | 37.35          | 2.98               | 37.35   | 37.35 | 44.96          | 3.33               | 53.96              | 53.96              |
|                  | 1575 | 31.32                                            | 27.44 | 37.71          | 2.97               | 37.71   | 37.71 | 45.36          | 3.32               | 53.92              | 53.92              |
| 70<br>(21.1)     | 1225 | 30.32                                            | 26.57 | 36.37          | 3.13               | 36.37   | 36.37 | 43.69          | 3.52               | 52.49              | 52.49              |
|                  | 1400 | 30.63                                            | 26.84 | 36.81          | 3.11               | 36.81   | 36.81 | 44.28          | 3.47               | 53.14              | 53.14              |
|                  | 1575 | 30.91                                            | 27.08 | 37.16          | 3.10               | 37.16   | 37.16 | 44.67          | 3.45               | 53.30              | 53.30              |
| 75<br>(23.9)     | 1225 | 29.92                                            | 26.21 | 35.85          | 3.27               | 35.85   | 35.85 | 43.00          | 3.67               | 51.60              | 51.60              |
|                  | 1400 | 30.23                                            | 26.49 | 36.26          | 3.24               | 36.26   | 36.26 | 43.56          | 3.61               | 52.28              | 52.28              |
|                  | 1575 | 30.49                                            | 26.72 | 36.61          | 3.23               | 36.61   | 36.61 | 43.98          | 3.59               | 52.60              | 52.60              |

See Legend and Notes on Page 37.

# PERFORMANCE DATA (CONT)

## 042 Low Cool

| EVAPORATOR<br>AIR |               | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |  |
|-------------------|---------------|-----------------------------------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|--|
|                   |               | 75 (23.9)                                     |       |                    | 85 (29.4)         |       |                    | 95 (35)           |       |                    | 105 (40.6)        |       |                    | 115 (46.1)        |       |                    | 125 (51.7)        |       |                    |  |
|                   |               | Capacity<br>MBtuh                             |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW |  |
| CFM               | EWB           | Total                                         | Sens  | Total              | Sens              | Total | Sens               | Total             | Sens  | Total              | Sens              | Total | Sens               | Total             | Sens  | Total              | Sens              | Total | Sens               |  |
|                   |               |                                               |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |  |
| 915               | 57<br>(13.8)  | 29.52                                         | 29.52 | 1.89               | 29.22             | 29.22 | 2.01               | 28.70             | 28.70 | 2.13               | 27.93             | 27.93 | 2.27               | 26.88             | 26.88 | 2.41               | 25.49             | 25.49 | 2.56               |  |
|                   | 62<br>(16.6)  | 30.35                                         | 27.95 | 1.89               | 29.81             | 27.74 | 2.00               | 29.02             | 27.38 | 2.13               | 28.00             | 28.00 | 2.27               | 26.92             | 26.92 | 2.41               | 25.53             | 25.53 | 2.56               |  |
|                   | 63*<br>(17.2) | 30.73                                         | 22.60 | 1.89               | 30.17             | 22.37 | 2.00               | 29.34             | 22.03 | 2.13               | 28.23             | 21.62 | 2.27               | 26.79             | 21.11 | 2.41               | 24.97             | 20.46 | 2.57               |  |
|                   | 67<br>(19.4)  | 33.18                                         | 23.50 | 1.86               | 32.56             | 23.25 | 1.98               | 31.66             | 22.90 | 2.10               | 30.47             | 22.48 | 2.24               | 28.92             | 21.95 | 2.38               | 26.99             | 21.31 | 2.54               |  |
|                   | 72<br>(22.2)  | 36.31                                         | 19.06 | 1.83               | 35.62             | 18.72 | 1.95               | 34.66             | 18.28 | 2.07               | 33.38             | 17.76 | 2.20               | 31.75             | 17.14 | 2.35               | 29.70             | 16.41 | 2.50               |  |
| 1050              | 57<br>(13.8)  | 30.80                                         | 30.80 | 1.92               | 30.44             | 30.44 | 2.03               | 29.85             | 29.85 | 2.15               | 29.01             | 29.01 | 2.29               | 27.86             | 27.86 | 2.43               | 26.37             | 26.37 | 2.57               |  |
|                   | 62<br>(16.6)  | 31.19                                         | 29.95 | 1.92               | 30.63             | 29.64 | 2.03               | 29.90             | 29.90 | 2.15               | 29.06             | 29.06 | 2.28               | 27.91             | 27.91 | 2.42               | 26.41             | 26.41 | 2.57               |  |
|                   | 63*<br>(17.2) | 31.46                                         | 24.07 | 1.91               | 30.84             | 23.84 | 2.03               | 29.94             | 23.52 | 2.15               | 28.76             | 23.12 | 2.29               | 27.23             | 22.59 | 2.44               | 25.34             | 21.93 | 2.59               |  |
|                   | 67<br>(19.4)  | 33.99                                         | 25.06 | 1.89               | 33.28             | 24.83 | 2.00               | 32.32             | 24.48 | 2.13               | 31.03             | 24.06 | 2.26               | 29.41             | 23.54 | 2.41               | 27.39             | 22.87 | 2.56               |  |
|                   | 72<br>(22.2)  | 37.17                                         | 20.01 | 1.86               | 36.41             | 19.66 | 1.97               | 35.37             | 19.22 | 2.09               | 34.01             | 18.69 | 2.23               | 32.28             | 18.07 | 2.37               | 30.12             | 17.33 | 2.52               |  |
| 1180              | 57<br>(13.8)  | 31.85                                         | 31.85 | 1.94               | 31.44             | 31.44 | 2.05               | 30.79             | 30.79 | 2.17               | 29.88             | 29.88 | 2.30               | 28.65             | 28.65 | 2.44               | 27.06             | 27.06 | 2.59               |  |
|                   | 62<br>(16.6)  | 31.93                                         | 31.93 | 1.94               | 31.49             | 31.49 | 2.05               | 30.84             | 30.84 | 2.17               | 29.92             | 29.92 | 2.30               | 28.69             | 28.69 | 2.44               | 27.10             | 27.10 | 2.58               |  |
|                   | 63*<br>(17.2) | 32.02                                         | 25.41 | 1.94               | 31.34             | 25.20 | 2.06               | 30.40             | 24.88 | 2.18               | 29.15             | 24.46 | 2.31               | 27.58             | 23.93 | 2.46               | 25.63             | 23.19 | 2.61               |  |
|                   | 67<br>(19.4)  | 34.59                                         | 26.49 | 1.92               | 33.84             | 26.29 | 2.03               | 32.80             | 25.94 | 2.15               | 31.47             | 25.52 | 2.29               | 29.77             | 24.97 | 2.43               | 27.69             | 24.26 | 2.58               |  |
|                   | 72<br>(22.2)  | 37.82                                         | 20.86 | 1.89               | 37.00             | 20.51 | 2.00               | 35.90             | 20.07 | 2.12               | 34.47             | 19.54 | 2.25               | 32.66             | 18.91 | 2.39               | 30.42             | 18.18 | 2.54               |  |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 042 Low Heat

| INDOOR AIR   |     | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |      |
|--------------|-----|--------------------------------------------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|------|
|              |     | 0 (-17.8)                                        |       |              | 10 (-12.2)     |       |              | 20 (-6.7)      |       |              | 30 (-1.1)      |       |              | 40 (4.4)       |       |              | 50 (10)        |       |              | 60 (15.6)      |       |              |      |
| EDB          | CFM | Capacity MBtuh                                   |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |      |
|              |     | Total                                            | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              |      |
| 65<br>(18.3) |     | 915                                              | 9.04  | 8.31         | 1.92           | 12.13 | 11.13        | 1.98           | 15.70 | 14.24        | 2.05           | 20.29 | 17.77        | 2.15           | 24.62 | 24.62        | 2.22           | 29.49 | 29.49        | 2.29           | 35.11 | 35.11        | 2.37 |
|              |     | 1050                                             | 9.18  | 8.45         | 1.94           | 12.35 | 11.33        | 1.99           | 15.98 | 14.50        | 2.05           | 20.62 | 18.07        | 2.14           | 24.92 | 24.92        | 2.19           | 29.90 | 29.90        | 2.26           | 35.67 | 35.67        | 2.32 |
|              |     | 1180                                             | 9.34  | 8.59         | 1.96           | 12.53 | 11.50        | 2.01           | 16.19 | 14.68        | 2.06           | 20.83 | 18.25        | 2.14           | 25.18 | 25.18        | 2.19           | 30.24 | 30.24        | 2.24           | 36.11 | 36.11        | 2.29 |
| 70<br>(21.1) |     | 915                                              | 8.66  | 7.97         | 2.00           | 11.79 | 10.82        | 2.07           | 15.35 | 13.93        | 2.14           | 19.49 | 17.08        | 2.23           | 24.31 | 24.31        | 2.33           | 29.09 | 29.09        | 2.40           | 34.59 | 34.59        | 2.48 |
|              |     | 1050                                             | 8.83  | 8.12         | 2.02           | 11.99 | 11.01        | 2.08           | 15.61 | 14.15        | 2.14           | 19.90 | 17.44        | 2.22           | 24.61 | 24.61        | 2.30           | 29.49 | 29.49        | 2.36           | 35.14 | 35.14        | 2.43 |
|              |     | 1180                                             | 8.98  | 8.26         | 2.04           | 12.16 | 11.16        | 2.09           | 15.82 | 14.35        | 2.15           | 20.46 | 17.93        | 2.23           | 24.86 | 24.86        | 2.29           | 29.82 | 29.82        | 2.34           | 35.58 | 35.58        | 2.40 |
| 75<br>(23.9) |     | 915                                              | 8.23  | 7.58         | 2.08           | 11.35 | 10.42        | 2.16           | 14.93 | 13.54        | 2.24           | 19.01 | 16.65        | 2.33           | 23.97 | 23.97        | 2.44           | 28.67 | 28.67        | 2.52           | 34.06 | 34.06        | 2.60 |
|              |     | 1050                                             | 8.42  | 7.75         | 2.10           | 11.58 | 10.63        | 2.17           | 15.19 | 13.78        | 2.24           | 19.35 | 16.95        | 2.32           | 24.28 | 24.28        | 2.41           | 29.08 | 29.08        | 2.48           | 34.61 | 34.61        | 2.55 |
|              |     | 1180                                             | 8.57  | 7.89         | 2.13           | 11.77 | 10.80        | 2.19           | 15.42 | 13.98        | 2.25           | 19.63 | 17.20        | 2.32           | 24.54 | 24.54        | 2.40           | 29.40 | 29.40        | 2.45           | 35.05 | 35.05        | 2.51 |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

048 High Cool

| EVAPORATOR AIR |               | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
|----------------|---------------|-----------------------------------------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|
| CFM            | EWB           | 75 (23.9)                                     |       |              | 85 (29.4)      |       |              | 95 (35)        |       |              | 105 (40.5)     |       |              | 115 (46.1)     |       |              | 125 (51.7)     |       |              |
|                |               | Capacity MBtuh                                |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |
|                |               | Total                                         | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              | Total          | Sens  |              |
| 1400           | 57<br>(13.9)  | 47.11                                         | 47.11 | 2.97         | 44.71          | 44.71 | 3.38         | 42.15          | 42.15 | 3.86         | 39.43          | 39.43 | 4.41         | 36.54          | 36.54 | 5.03         | 33.45          | 33.45 | 5.72         |
|                | 62<br>(16.7)  | 48.61                                         | 43.41 | 2.98         | 45.76          | 41.86 | 3.39         | 42.79          | 40.20 | 3.87         | 39.69          | 38.37 | 4.41         | 36.59          | 36.59 | 5.03         | 33.49          | 33.49 | 5.72         |
|                | 63*<br>(17.2) | 49.20                                         | 35.20 | 2.98         | 46.30          | 33.84 | 3.40         | 43.23          | 32.41 | 3.87         | 40.00          | 30.92 | 4.41         | 36.61          | 29.37 | 5.03         | 33.04          | 27.72 | 5.72         |
|                | 67<br>(19.4)  | 53.05                                         | 36.63 | 3.01         | 49.87          | 35.20 | 3.42         | 46.54          | 33.72 | 3.90         | 43.04          | 32.17 | 4.44         | 39.37          | 30.57 | 5.05         | 35.55          | 28.88 | 5.74         |
|                | 72<br>(13.9)  | 57.95                                         | 29.84 | 3.04         | 54.46          | 28.46 | 3.45         | 50.80          | 27.03 | 3.93         | 46.99          | 25.54 | 4.47         | 42.99          | 24.00 | 5.08         | 38.80          | 22.38 | 5.77         |
|                | 57<br>(13.9)  | 49.16                                         | 49.16 | 3.03         | 46.58          | 46.58 | 3.45         | 43.82          | 43.82 | 3.93         | 40.91          | 40.91 | 4.48         | 37.82          | 37.82 | 5.10         | 34.53          | 34.53 | 5.79         |
| 1600           | 62<br>(16.7)  | 49.94                                         | 46.53 | 3.04         | 47.00          | 44.81 | 3.45         | 43.92          | 43.92 | 3.93         | 40.98          | 40.98 | 4.48         | 37.87          | 37.87 | 5.10         | 34.58          | 34.58 | 5.79         |
|                | 63*<br>(17.2) | 50.40                                         | 37.46 | 3.04         | 47.35          | 36.04 | 3.46         | 44.12          | 34.55 | 3.93         | 40.73          | 33.00 | 4.48         | 37.20          | 31.37 | 5.09         | 33.51          | 29.60 | 5.78         |
|                | 67<br>(19.4)  | 54.35                                         | 39.05 | 3.07         | 51.01          | 37.55 | 3.48         | 47.50          | 36.00 | 3.96         | 43.83          | 34.41 | 4.50         | 40.01          | 32.71 | 5.12         | 36.01          | 30.93 | 5.80         |
|                | 72<br>(13.9)  | 59.33                                         | 31.33 | 3.10         | 55.66          | 29.89 | 3.51         | 51.82          | 28.40 | 3.99         | 47.83          | 26.86 | 4.53         | 43.65          | 25.25 | 5.15         | 39.30          | 23.58 | 5.83         |
| 1800           | 57<br>(13.9)  | 50.93                                         | 50.93 | 3.10         | 48.17          | 48.17 | 3.51         | 45.25          | 45.25 | 4.00         | 42.16          | 42.16 | 4.54         | 38.88          | 38.88 | 5.16         | 35.42          | 35.42 | 5.85         |
|                | 62<br>(16.7)  | 51.07                                         | 51.07 | 3.10         | 48.26          | 48.26 | 3.51         | 45.32          | 45.32 | 4.00         | 42.22          | 42.22 | 4.54         | 38.94          | 38.94 | 5.16         | 35.46          | 35.46 | 5.85         |
|                | 63*<br>(17.2) | 51.36                                         | 39.62 | 3.10         | 48.17          | 38.15 | 3.51         | 44.83          | 36.60 | 3.99         | 41.31          | 34.98 | 4.54         | 37.65          | 33.24 | 5.15         | 33.86          | 31.35 | 5.84         |
|                | 67<br>(19.4)  | 55.37                                         | 41.38 | 3.12         | 51.89          | 39.81 | 3.54         | 48.24          | 38.21 | 4.02         | 44.44          | 36.52 | 4.56         | 40.49          | 34.75 | 5.18         | 36.37          | 32.81 | 5.86         |
|                | 72<br>(13.9)  | 60.42                                         | 32.73 | 3.15         | 56.58          | 31.25 | 3.57         | 52.59          | 29.71 | 4.05         | 48.47          | 28.11 | 4.59         | 44.14          | 26.45 | 5.21         | 39.66          | 24.72 | 5.89         |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 048 High Heat

| INDOOR AIR       |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |                    |                |                    |                |                    |                |                    |                    |                    |
|------------------|------|--------------------------------------------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|--------------------|--------------------|
| EDB<br>° F (° C) | CFM  | -10 (-23.3)                                      |                    | 0 (-17.8)      |                    | 10 (-12.2)     |                    | 20 (-6.7)      |                    | Total<br>Sys<br>KW | Total<br>Sys<br>KW |
|                  |      | Capacity MBtuh                                   | Total<br>Sys<br>KW | Capacity MBtuh | Total<br>Sys<br>KW | Capacity MBtuh | Total<br>Sys<br>KW | Capacity MBtuh | Total<br>Sys<br>KW |                    |                    |
| 65<br>(18.3)     | 1400 | 14.53                                            | 2.55               | 19.50          | 2.69               | 25.15          | 2.87               | 30.02          | 27.23              | 3.03               | 3.03               |
|                  | 1600 | 14.79                                            | 2.58               | 19.77          | 2.71               | 25.42          | 2.87               | 30.34          | 27.51              | 3.02               | 3.02               |
|                  | 1800 | 15.01                                            | 2.62               | 20.02          | 2.74               | 25.66          | 2.89               | 30.62          | 27.77              | 3.03               | 3.03               |
| 70<br>(21.1)     | 1400 | 14.00                                            | 2.66               | 18.97          | 2.81               | 24.76          | 3.00               | 29.67          | 26.91              | 3.17               | 3.17               |
|                  | 1600 | 14.26                                            | 2.69               | 19.26          | 2.83               | 25.08          | 3.00               | 29.97          | 27.18              | 3.16               | 3.16               |
|                  | 1800 | 14.49                                            | 2.72               | 19.53          | 2.86               | 25.33          | 3.02               | 30.26          | 27.44              | 3.17               | 3.17               |
| 75<br>(23.9)     | 1400 | 13.37                                            | 2.76               | 18.38          | 2.93               | 23.58          | 3.11               | 29.28          | 26.56              | 3.32               | 3.32               |
|                  | 1600 | 13.63                                            | 2.80               | 18.68          | 2.95               | 23.94          | 3.12               | 29.61          | 26.85              | 3.31               | 3.31               |
|                  | 1800 | 13.87                                            | 2.83               | 18.95          | 2.98               | 24.26          | 3.14               | 29.88          | 27.10              | 3.32               | 3.32               |

| INDOOR AIR       |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |                    |                |                    |                |                    |                |                    |                    |                    |
|------------------|------|--------------------------------------------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|--------------------|--------------------|
| EDB<br>° F (° C) | CFM  | 30 (-1.1)                                        |                    | 40 (4.4)       |                    | 50 (10)        |                    | 60 (15.6)      |                    | Total<br>Sys<br>KW | Total<br>Sys<br>KW |
|                  |      | Capacity MBtuh                                   | Total<br>Sys<br>KW | Capacity MBtuh | Total<br>Sys<br>KW | Capacity MBtuh | Total<br>Sys<br>KW | Capacity MBtuh | Total<br>Sys<br>KW |                    |                    |
| 65<br>(18.3)     | 1400 | 35.53                                            | 3.21               | 41.86          | 3.43               | 49.38          | 3.69               | 57.39          | 57.39              | 3.97               | 3.97               |
|                  | 1600 | 35.92                                            | 3.20               | 42.35          | 3.40               | 49.83          | 3.62               | 56.49          | 56.49              | 3.90               | 3.90               |
|                  | 1800 | 36.26                                            | 3.20               | 42.74          | 3.40               | 49.29          | 3.61               | 55.21          | 55.21              | 3.87               | 3.87               |
| 70<br>(21.1)     | 1400 | 35.05                                            | 3.36               | 41.24          | 3.58               | 48.65          | 3.85               | 56.80          | 56.80              | 4.15               | 4.15               |
|                  | 1600 | 35.46                                            | 3.34               | 41.74          | 3.55               | 49.26          | 3.80               | 56.11          | 56.11              | 4.07               | 4.07               |
|                  | 1800 | 35.80                                            | 3.34               | 42.14          | 3.55               | 49.00          | 3.77               | 55.02          | 55.02              | 4.04               | 4.04               |
| 75<br>(23.9)     | 1400 | 34.59                                            | 3.52               | 40.64          | 3.75               | 47.91          | 4.03               | 56.18          | 56.18              | 4.33               | 4.33               |
|                  | 1600 | 34.97                                            | 3.50               | 41.13          | 3.71               | 48.49          | 3.98               | 55.71          | 55.71              | 4.26               | 4.26               |
|                  | 1800 | 35.31                                            | 3.50               | 41.53          | 3.70               | 48.62          | 3.94               | 54.73          | 54.73              | 4.23               | 4.23               |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

| 048 Low Cool   |               | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |       |              |              |                |       |              |              |                |       |              |              |                |       |              |              |                |       |              |              |            |  |  |  |
|----------------|---------------|---------------------------------------------|-------|--------------|--------------|----------------|-------|--------------|--------------|----------------|-------|--------------|--------------|----------------|-------|--------------|--------------|----------------|-------|--------------|--------------|------------|--|--|--|
| EVAPORATOR AIR |               | 75 (23.9)                                   |       |              |              | 85 (29.4)      |       |              |              | 95 (35)        |       |              |              | 105 (40.6)     |       |              |              | 115 (46.1)     |       |              |              | 125 (51.7) |  |  |  |
| CFM            | EWB           | Capacity MBtuh                              |       | Total Sys KW | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Total Sys KW |            |  |  |  |
|                |               | Total                                       | Sens  |              |              | Total          | Sens  |              |              | Total          | Sens  |              |              | Total          | Sens  |              |              | Total          | Sens  |              |              |            |  |  |  |
| 1050           | 57<br>(13.8)  | 33.27                                       | 33.27 | 2.13         | 2.13         | 32.91          | 32.91 | 2.29         | 2.44         | 31.43          | 31.43 | 2.61         | 2.77         | 30.20          | 30.20 | 2.77         | 2.94         | 28.53          | 28.53 | 2.94         | 2.94         |            |  |  |  |
|                | 62<br>(16.6)  | 34.14                                       | 31.57 | 2.12         | 2.12         | 33.49          | 31.34 | 2.28         | 2.44         | 31.48          | 31.48 | 2.61         | 2.77         | 30.25          | 30.25 | 2.77         | 2.94         | 28.57          | 28.57 | 2.94         | 2.94         |            |  |  |  |
|                | 63*<br>(17.2) | 34.56                                       | 25.44 | 2.12         | 2.12         | 33.88          | 25.18 | 2.28         | 2.44         | 31.64          | 24.39 | 2.61         | 2.78         | 29.96          | 23.82 | 2.78         | 2.95         | 27.79          | 23.09 | 2.95         | 2.95         |            |  |  |  |
|                | 67<br>(19.4)  | 37.33                                       | 26.48 | 2.10         | 2.10         | 36.59          | 26.21 | 2.26         | 2.42         | 34.17          | 25.38 | 2.59         | 2.76         | 32.36          | 24.80 | 2.76         | 2.93         | 30.02          | 24.05 | 2.93         | 2.93         |            |  |  |  |
|                | 72<br>(22.2)  | 40.83                                       | 21.39 | 2.07         | 2.07         | 40.03          | 21.00 | 2.23         | 2.40         | 37.44          | 19.93 | 2.57         | 2.74         | 35.50          | 19.21 | 2.74         | 2.91         | 33.03          | 18.36 | 2.91         | 2.91         |            |  |  |  |
| 1200           | 57<br>(13.8)  | 34.64                                       | 34.64 | 2.17         | 2.17         | 34.21          | 34.21 | 2.32         | 2.48         | 32.56          | 32.56 | 2.64         | 2.80         | 31.21          | 31.21 | 2.80         | 2.97         | 29.39          | 29.39 | 2.97         | 2.97         |            |  |  |  |
|                | 62<br>(16.6)  | 35.04                                       | 33.73 | 2.16         | 2.16         | 34.34          | 34.34 | 2.32         | 2.48         | 32.61          | 32.61 | 2.64         | 2.80         | 31.26          | 31.26 | 2.80         | 2.97         | 29.43          | 29.43 | 2.97         | 2.97         |            |  |  |  |
|                | 63*<br>(17.2) | 35.33                                       | 27.01 | 2.16         | 2.16         | 34.58          | 26.78 | 2.32         | 2.48         | 32.17          | 26.02 | 2.64         | 2.81         | 30.39          | 25.43 | 2.81         | 2.98         | 28.12          | 24.64 | 2.98         | 2.98         |            |  |  |  |
|                | 67<br>(19.4)  | 38.18                                       | 28.17 | 2.14         | 2.14         | 37.34          | 27.92 | 2.30         | 2.46         | 34.73          | 27.11 | 2.62         | 2.79         | 32.82          | 26.52 | 2.79         | 2.96         | 30.37          | 25.73 | 2.96         | 2.96         |            |  |  |  |
|                | 72<br>(22.2)  | 41.74                                       | 22.41 | 2.11         | 2.11         | 40.84          | 22.01 | 2.27         | 2.43         | 38.06          | 20.93 | 2.60         | 2.77         | 36.01          | 20.21 | 2.77         | 2.94         | 33.40          | 19.33 | 2.94         | 2.94         |            |  |  |  |
| 1310           | 57<br>(13.8)  | 35.51                                       | 35.51 | 2.19         | 2.19         | 35.04          | 35.04 | 2.35         | 2.50         | 33.27          | 33.27 | 2.66         | 2.83         | 31.84          | 31.84 | 2.83         | 2.99         | 29.92          | 29.92 | 2.99         | 2.99         |            |  |  |  |
|                | 62<br>(16.6)  | 35.63                                       | 35.63 | 2.19         | 2.19         | 35.10          | 35.10 | 2.35         | 2.50         | 33.32          | 33.32 | 2.66         | 2.82         | 31.88          | 31.88 | 2.82         | 2.99         | 29.95          | 29.95 | 2.99         | 2.99         |            |  |  |  |
|                | 63*<br>(17.2) | 35.78                                       | 28.12 | 2.19         | 2.19         | 34.98          | 27.92 | 2.35         | 2.51         | 32.48          | 27.13 | 2.67         | 2.84         | 30.64          | 26.54 | 2.84         | 3.00         | 28.32          | 25.67 | 3.00         | 3.00         |            |  |  |  |
|                | 67<br>(19.4)  | 38.66                                       | 29.36 | 2.17         | 2.17         | 37.79          | 29.14 | 2.33         | 2.49         | 35.06          | 28.32 | 2.65         | 2.82         | 33.08          | 27.71 | 2.82         | 2.99         | 30.57          | 26.86 | 2.99         | 2.99         |            |  |  |  |
|                | 72<br>(22.2)  | 42.26                                       | 23.11 | 2.14         | 2.14         | 41.32          | 22.71 | 2.30         | 2.46         | 38.41          | 21.62 | 2.63         | 2.80         | 36.28          | 20.89 | 2.80         | 2.97         | 33.60          | 20.03 | 2.97         | 2.97         |            |  |  |  |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 048 Low Heat

| INDOOR AIR   |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
|--------------|------|--------------------------------------------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|
|              |      | 0 (-17.8)                                        |       |              | 10 (-12.2)     |       |              | 20 (-6.7)      |       |              | 30 (-1.1)      |       |              | 40 (4.4)       |       |              | 50 (10)        |       |              | 60 (15.6)      |       |              |
| EDB          | CFM  | Capacity MBtuh                                   |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |
|              |      | Total                                            | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              |
| 65<br>(18.3) | 1050 | 11.11                                            | 10.22 | 2.08         | 14.97          | 13.74 | 2.18         | 19.32          | 17.52 | 2.28         | 24.76          | 21.69 | 2.40         | 29.74          | 29.74 | 2.50         | 35.43          | 35.43 | 2.60         | 41.98          | 41.98 | 2.72         |
|              | 1200 | 11.33                                            | 10.43 | 2.10         | 15.24          | 13.98 | 2.19         | 19.64          | 17.81 | 2.29         | 25.09          | 21.98 | 2.39         | 30.12          | 30.12 | 2.47         | 35.92          | 35.92 | 2.56         | 42.67          | 42.67 | 2.66         |
|              | 1310 | 11.50                                            | 10.58 | 2.12         | 15.42          | 14.15 | 2.21         | 19.86          | 18.01 | 2.30         | 25.30          | 22.17 | 2.40         | 30.37          | 30.37 | 2.47         | 36.23          | 36.23 | 2.55         | 43.10          | 43.10 | 2.64         |
| 70<br>(21.1) | 1050 | 10.58                                            | 9.73  | 2.18         | 14.45          | 13.26 | 2.29         | 18.80          | 17.05 | 2.39         | 23.87          | 20.91 | 2.51         | 29.36          | 29.36 | 2.63         | 34.95          | 34.95 | 2.74         | 41.35          | 41.35 | 2.86         |
|              | 1200 | 10.82                                            | 9.96  | 2.21         | 14.75          | 13.53 | 2.30         | 19.14          | 17.36 | 2.40         | 24.71          | 21.66 | 2.52         | 29.73          | 29.73 | 2.60         | 35.44          | 35.44 | 2.70         | 42.01          | 42.01 | 2.80         |
|              | 1310 | 10.99                                            | 10.11 | 2.23         | 14.94          | 13.71 | 2.32         | 19.37          | 17.56 | 2.41         | 24.94          | 21.85 | 2.52         | 29.99          | 29.99 | 2.60         | 35.74          | 35.74 | 2.68         | 42.43          | 42.43 | 2.78         |
| 75<br>(23.9) | 1050 | 9.98                                             | 9.18  | 2.28         | 13.89          | 12.74 | 2.39         | 18.25          | 16.55 | 2.51         | 23.17          | 20.30 | 2.63         | 28.97          | 28.97 | 2.77         | 34.46          | 34.46 | 2.88         | 40.76          | 40.76 | 3.01         |
|              | 1200 | 10.23                                            | 9.42  | 2.31         | 14.18          | 13.01 | 2.41         | 18.59          | 16.86 | 2.52         | 23.59          | 20.67 | 2.62         | 29.34          | 29.34 | 2.74         | 34.94          | 34.94 | 2.84         | 41.38          | 41.38 | 2.95         |
|              | 1310 | 10.39                                            | 9.56  | 2.33         | 14.37          | 13.19 | 2.43         | 18.82          | 17.06 | 2.53         | 23.90          | 20.94 | 2.63         | 29.58          | 29.58 | 2.73         | 35.25          | 35.25 | 2.82         | 41.77          | 41.77 | 2.92         |

See Legend and Notes on Page 37.

# PERFORMANCE DATA (CONT)

## 060 High Cool

| EVAPORATOR<br>AIR |               | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) |       |                    |                   |           |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |            |                    |                   |      |                    |  |  |  |
|-------------------|---------------|-----------------------------------------------|-------|--------------------|-------------------|-----------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|------------|--------------------|-------------------|------|--------------------|--|--|--|
|                   |               | 75 (23.9)                                     |       |                    |                   | 85 (29.4) |                    |                   |       | 95 (35)            |                   |       |                    | 105 (40.5)        |       |                    |                   | 115 (46.1) |                    |                   |      | 125 (51.7)         |  |  |  |
|                   |               | Capacity<br>MBtuh                             |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |           | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |       | Total<br>Sys<br>KW | Capacity<br>MBtuh |            | Total<br>Sys<br>KW | Capacity<br>MBtuh |      | Total<br>Sys<br>KW |  |  |  |
| CFM               | EWB           | Total                                         | Sens  | Total              | Sens              | Total     | Sens               | Total             | Sens  | Total              | Sens              | Total | Sens               | Total             | Sens  | Total              | Sens              | Total      | Sens               | Total             | Sens |                    |  |  |  |
| 1750              | 57<br>(13.9)  | 57.44                                         | 57.44 | 3.93               | 54.77             | 54.77     | 4.30               | 51.93             | 51.93 | 4.72               | 48.86             | 48.86 | 5.20               | 45.50             | 45.50 | 5.74               | 41.82             | 41.82      | 6.35               |                   |      |                    |  |  |  |
|                   | 62<br>(16.7)  | 58.92                                         | 53.63 | 3.94               | 55.72             | 51.56     | 4.30               | 52.40             | 49.33 | 4.72               | 48.95             | 48.95 | 5.20               | 45.56             | 45.56 | 5.74               | 41.87             | 41.87      | 6.35               |                   |      |                    |  |  |  |
|                   | 63*<br>(17.2) | 59.72                                         | 43.48 | 3.95               | 56.43             | 41.68     | 4.31               | 53.00             | 39.81 | 4.72               | 49.26             | 37.88 | 5.20               | 45.27             | 35.84 | 5.74               | 40.98             | 33.69      | 6.33               |                   |      |                    |  |  |  |
|                   | 67<br>(19.4)  | 64.33                                         | 45.27 | 3.96               | 60.76             | 43.42     | 4.33               | 57.00             | 41.50 | 4.75               | 52.98             | 39.51 | 5.23               | 48.64             | 37.41 | 5.78               | 44.00             | 35.20      | 6.38               |                   |      |                    |  |  |  |
|                   | 72<br>(13.9)  | 70.52                                         | 36.52 | 3.98               | 66.58             | 34.82     | 4.35               | 62.44             | 33.03 | 4.78               | 58.02             | 31.15 | 5.27               | 53.26             | 29.17 | 5.82               | 48.13             | 27.10      | 6.43               |                   |      |                    |  |  |  |
|                   | 57<br>(13.9)  | 59.81                                         | 59.81 | 4.03               | 56.94             | 56.94     | 4.40               | 53.87             | 53.87 | 4.82               | 50.58             | 50.58 | 5.30               | 46.95             | 46.95 | 5.84               | 43.01             | 43.01      | 6.45               |                   |      |                    |  |  |  |
| 2000              | 62<br>(16.7)  | 60.44                                         | 57.39 | 4.04               | 57.14             | 57.14     | 4.40               | 53.98             | 53.98 | 4.82               | 50.65             | 50.65 | 5.30               | 47.02             | 47.02 | 5.85               | 43.07             | 43.07      | 6.45               |                   |      |                    |  |  |  |
|                   | 63*<br>(17.2) | 60.98                                         | 46.34 | 4.04               | 57.52             | 44.46     | 4.40               | 53.86             | 42.50 | 4.82               | 50.02             | 40.45 | 5.29               | 45.85             | 38.28 | 5.83               | 41.42             | 35.97      | 6.43               |                   |      |                    |  |  |  |
|                   | 67<br>(19.4)  | 65.66                                         | 48.34 | 4.06               | 61.92             | 46.40     | 4.42               | 57.95             | 44.40 | 4.84               | 53.76             | 42.29 | 5.33               | 49.23             | 40.05 | 5.87               | 44.43             | 37.68      | 6.47               |                   |      |                    |  |  |  |
|                   | 72<br>(13.9)  | 71.93                                         | 38.45 | 4.07               | 67.84             | 36.64     | 4.44               | 63.49             | 34.76 | 4.87               | 58.87             | 32.81 | 5.36               | 53.87             | 30.76 | 5.91               | 48.56             | 28.62      | 6.52               |                   |      |                    |  |  |  |
|                   | 57<br>(13.9)  | 61.83                                         | 61.83 | 4.13               | 58.77             | 58.77     | 4.49               | 55.50             | 55.50 | 4.91               | 51.98             | 51.98 | 5.40               | 48.14             | 48.14 | 5.94               | 43.96             | 43.96      | 6.55               |                   |      |                    |  |  |  |
|                   | 62<br>(16.7)  | 61.94                                         | 61.94 | 4.13               | 58.88             | 58.88     | 4.49               | 55.59             | 55.59 | 4.91               | 52.06             | 52.06 | 5.40               | 48.20             | 48.20 | 5.95               | 44.01             | 44.01      | 6.55               |                   |      |                    |  |  |  |
| 2250              | 63*<br>(17.2) | 61.94                                         | 49.07 | 4.13               | 58.35             | 47.09     | 4.49               | 54.57             | 45.04 | 4.91               | 50.55             | 42.88 | 5.39               | 46.29             | 40.56 | 5.92               | 41.76             | 38.01      | 6.52               |                   |      |                    |  |  |  |
|                   | 67<br>(19.4)  | 66.67                                         | 51.29 | 4.15               | 62.78             | 49.25     | 4.51               | 58.68             | 47.14 | 4.93               | 54.31             | 44.93 | 5.42               | 49.66             | 42.54 | 5.96               | 44.75             | 39.90      | 6.56               |                   |      |                    |  |  |  |
|                   | 72<br>(13.9)  | 73.03                                         | 40.23 | 4.16               | 68.77             | 38.36     | 4.53               | 64.27             | 36.42 | 4.96               | 59.45             | 34.41 | 5.45               | 54.27             | 32.28 | 6.00               | 48.82             | 30.09      | 6.61               |                   |      |                    |  |  |  |
|                   |               |                                               |       |                    |                   |           |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |            |                    |                   |      |                    |  |  |  |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 060 High Heat

| INDOOR AIR       |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |                    |                |       |                    |                |       |                    |                |       |                    |
|------------------|------|--------------------------------------------------|-------|--------------------|----------------|-------|--------------------|----------------|-------|--------------------|----------------|-------|--------------------|
|                  |      | -10 (-23.3)                                      |       |                    | 0 (-17.8)      |       |                    | 10 (-12.2)     |       |                    | 20 (-6.7)      |       |                    |
| EDB<br>° F (° C) | CFM  | Capacity MBtuh                                   |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW |
|                  |      | Total                                            | Integ |                    | Total          | Integ |                    | Total          | Integ |                    | Total          | Integ |                    |
| 65<br>(18.3)     | 1750 | 17.80                                            | 16.38 | 3.09               | 23.12          | 21.27 | 3.24               | 29.49          | 27.07 | 3.45               | 35.51          | 32.20 | 3.66               |
|                  | 2000 | 18.09                                            | 16.65 | 3.14               | 23.46          | 21.58 | 3.29               | 29.85          | 27.39 | 3.49               | 35.90          | 32.56 | 3.68               |
|                  | 2250 | 18.38                                            | 16.91 | 3.20               | 23.78          | 21.88 | 3.34               | 30.14          | 27.67 | 3.53               | 36.27          | 32.89 | 3.72               |
| 70<br>(21.1)     | 1750 | 17.37                                            | 15.98 | 3.23               | 22.62          | 20.81 | 3.39               | 29.17          | 26.77 | 3.61               | 35.11          | 31.84 | 3.82               |
|                  | 2000 | 17.67                                            | 16.26 | 3.28               | 22.97          | 21.14 | 3.43               | 29.52          | 27.09 | 3.64               | 35.49          | 32.18 | 3.84               |
|                  | 2250 | 17.95                                            | 16.52 | 3.34               | 23.30          | 21.44 | 3.48               | 29.84          | 27.39 | 3.68               | 35.85          | 32.51 | 3.88               |
| 75<br>(23.9)     | 1750 | 16.92                                            | 15.57 | 3.38               | 22.13          | 20.37 | 3.54               | 28.05          | 25.74 | 3.73               | 34.74          | 31.51 | 3.98               |
|                  | 2000 | 17.23                                            | 15.85 | 3.43               | 22.48          | 20.68 | 3.58               | 28.55          | 26.21 | 3.77               | 35.11          | 31.85 | 4.00               |
|                  | 2250 | 17.51                                            | 16.11 | 3.49               | 22.80          | 20.98 | 3.63               | 29.46          | 27.04 | 3.84               | 35.45          | 32.15 | 4.04               |

| INDOOR AIR       |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |                    |                |       |                    |                |       |                    |                |       |                    |
|------------------|------|--------------------------------------------------|-------|--------------------|----------------|-------|--------------------|----------------|-------|--------------------|----------------|-------|--------------------|
|                  |      | 30 (-1.1)                                        |       |                    | 40 (4.4)       |       |                    | 50 (10)        |       |                    | 60 (15.6)      |       |                    |
| EDB<br>° F (° C) | CFM  | Capacity MBtuh                                   |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW | Capacity MBtuh |       | Total<br>Sys<br>KW |
|                  |      | Total                                            | Integ |                    | Total          | Integ |                    | Total          | Integ |                    | Total          | Integ |                    |
| 65<br>(18.3)     | 1750 | 42.61                                            | 37.33 | 3.90               | 50.89          | 50.89 | 4.17               | 60.88          | 60.88 | 4.50               | 72.89          | 72.89 | 4.89               |
|                  | 2000 | 43.12                                            | 37.78 | 3.91               | 51.52          | 51.52 | 4.17               | 61.59          | 61.59 | 4.49               | 73.28          | 73.28 | 4.86               |
|                  | 2250 | 43.57                                            | 38.18 | 3.94               | 52.05          | 52.05 | 4.20               | 62.16          | 62.16 | 4.52               | 73.30          | 73.30 | 4.89               |
| 70<br>(21.1)     | 1750 | 42.05                                            | 36.84 | 4.06               | 50.17          | 50.17 | 4.34               | 59.99          | 59.99 | 4.68               | 71.93          | 71.93 | 5.11               |
|                  | 2000 | 42.55                                            | 37.28 | 4.07               | 50.79          | 50.79 | 4.34               | 60.73          | 60.73 | 4.67               | 72.49          | 72.49 | 5.06               |
|                  | 2250 | 42.99                                            | 37.67 | 4.10               | 51.31          | 51.31 | 4.37               | 61.29          | 61.29 | 4.70               | 72.59          | 72.59 | 5.08               |
| 75<br>(23.9)     | 1750 | 41.51                                            | 36.37 | 4.23               | 49.47          | 49.47 | 4.52               | 59.13          | 59.13 | 4.87               | 70.88          | 70.88 | 5.33               |
|                  | 2000 | 41.99                                            | 36.79 | 4.24               | 50.07          | 50.07 | 4.52               | 59.86          | 59.86 | 4.86               | 71.62          | 71.62 | 5.28               |
|                  | 2250 | 42.42                                            | 37.16 | 4.27               | 50.58          | 50.58 | 4.54               | 60.44          | 60.44 | 4.88               | 71.82          | 71.82 | 5.29               |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

060 Low Cool

| EVAPORATOR AIR |               | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |                   |       |                    |
|----------------|---------------|---------------------------------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|-------------------|-------|--------------------|
| CFM            | EWB           | 75 (23.9)                                   |       | Total<br>Sys<br>KW | 85 (29.4)         |       | Total<br>Sys<br>KW | 95 (35)           |       | Total<br>Sys<br>KW | 105 (40.6)        |       | Total<br>Sys<br>KW | 115 (46.1)        |       | Total<br>Sys<br>KW | 125 (51.7)        |       | Total<br>Sys<br>KW |
|                |               | Capacity<br>MBtuh                           | Sens  |                    | Capacity<br>MBtuh | Sens  |                    | Capacity<br>MBtuh | Sens  |                    | Capacity<br>MBtuh | Sens  |                    | Capacity<br>MBtuh | Sens  |                    | Capacity<br>MBtuh | Sens  |                    |
| 1200           | 57<br>(13.8)  | 40.13                                       | 40.13 | 2.50               | 39.38             | 39.38 | 2.95               | 38.39             | 38.39 | 3.46               | 37.11             | 37.11 | 4.05               | 35.44             | 35.44 | 4.74               | 33.29             | 33.29 | 5.53               |
|                | 62<br>(16.6)  | 41.27                                       | 37.88 | 2.49               | 40.14             | 37.00 | 2.94               | 38.78             | 35.99 | 3.46               | 37.18             | 37.18 | 4.05               | 35.49             | 35.49 | 4.74               | 33.34             | 33.34 | 5.53               |
|                | 63*<br>(17.2) | 41.89                                       | 30.79 | 2.49               | 40.71             | 29.98 | 2.94               | 39.27             | 29.11 | 3.45               | 37.48             | 28.13 | 4.05               | 35.23             | 27.02 | 4.74               | 32.48             | 25.74 | 5.54               |
|                | 67<br>(19.4)  | 45.24                                       | 32.06 | 2.46               | 43.95             | 31.22 | 2.91               | 42.39             | 30.32 | 3.43               | 40.45             | 29.33 | 4.02               | 38.06             | 28.21 | 4.72               | 35.12             | 26.94 | 5.52               |
|                | 72<br>(22.2)  | 49.70                                       | 26.10 | 2.42               | 48.29             | 25.23 | 2.87               | 46.59             | 24.29 | 3.39               | 44.50             | 23.26 | 3.99               | 41.93             | 22.13 | 4.68               | 38.79             | 20.87 | 5.48               |
| 1400           | 57<br>(13.8)  | 42.19                                       | 42.19 | 2.53               | 41.32             | 41.32 | 2.98               | 40.21             | 40.21 | 3.49               | 38.78             | 38.78 | 4.09               | 36.94             | 36.94 | 4.78               | 34.60             | 34.60 | 5.57               |
|                | 62<br>(16.6)  | 42.61                                       | 41.01 | 2.53               | 41.43             | 41.43 | 2.98               | 40.30             | 40.30 | 3.49               | 38.84             | 38.84 | 4.09               | 36.98             | 36.98 | 4.78               | 34.64             | 34.64 | 5.57               |
|                | 63*<br>(17.2) | 43.05                                       | 33.17 | 2.53               | 41.75             | 32.33 | 2.98               | 40.19             | 31.42 | 3.49               | 38.27             | 30.40 | 4.09               | 35.91             | 29.23 | 4.79               | 33.04             | 27.85 | 5.59               |
|                | 67<br>(19.4)  | 46.48                                       | 34.60 | 2.50               | 45.07             | 33.74 | 2.95               | 43.37             | 32.81 | 3.47               | 41.30             | 31.77 | 4.07               | 38.76             | 30.60 | 4.76               | 35.69             | 29.24 | 5.56               |
|                | 72<br>(22.2)  | 51.04                                       | 27.68 | 2.46               | 49.50             | 26.79 | 2.91               | 47.65             | 25.81 | 3.43               | 45.42             | 24.76 | 4.03               | 42.66             | 23.59 | 4.73               | 39.35             | 22.29 | 5.53               |
| 1545           | 57<br>(13.8)  | 43.47                                       | 43.47 | 2.55               | 42.52             | 42.52 | 3.00               | 41.32             | 41.32 | 3.52               | 39.79             | 39.79 | 4.11               | 37.84             | 37.84 | 4.81               | 35.38             | 35.38 | 5.60               |
|                | 62<br>(16.6)  | 43.55                                       | 43.55 | 2.55               | 42.59             | 42.59 | 3.00               | 41.38             | 41.38 | 3.52               | 39.85             | 39.85 | 4.11               | 37.88             | 37.88 | 4.80               | 35.41             | 35.41 | 5.60               |
|                | 63*<br>(17.2) | 43.71                                       | 34.82 | 2.55               | 42.35             | 33.95 | 3.01               | 40.72             | 33.01 | 3.53               | 38.74             | 31.95 | 4.13               | 36.29             | 30.73 | 4.82               | 33.36             | 29.25 | 5.62               |
|                | 67<br>(19.4)  | 47.19                                       | 36.38 | 2.52               | 45.70             | 35.50 | 2.98               | 43.93             | 34.53 | 3.50               | 41.78             | 33.45 | 4.10               | 39.16             | 32.22 | 4.79               | 36.02             | 30.77 | 5.60               |
|                | 72<br>(22.2)  | 51.81                                       | 28.77 | 2.48               | 50.18             | 27.86 | 2.94               | 48.25             | 26.87 | 3.46               | 45.91             | 25.79 | 4.06               | 43.06             | 24.60 | 4.76               | 39.63             | 23.29 | 5.56               |

See Legend and Notes on Page 37.

## PERFORMANCE DATA (CONT)

## 060 Low Heat

| INDOOR AIR   |      | OUTDOOR COIL ENTERING AIR TEMPERATURES ° F (° C) |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |                |       |              |
|--------------|------|--------------------------------------------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|----------------|-------|--------------|
|              |      | 0 (-17.8)                                        |       |              | 10 (-12.2)     |       |              | 20 (-6.7)      |       |              | 30 (-1.1)      |       |              | 40 (4.4)       |       |              | 50 (10)        |       |              | 60 (15.6)      |       |              |
| EDB          | CFM  | Capacity MBtuh                                   |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW | Capacity MBtuh |       | Total Sys KW |
|              |      | Total                                            | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              | Total          | Integ |              |
| 65<br>(18.3) | 1200 | 13.75                                            | 12.65 | 2.74         | 18.28          | 16.78 | 2.81         | 23.27          | 21.10 | 2.88         | 29.47          | 25.83 | 2.99         | 34.90          | 34.90 | 3.04         | 40.90          | 40.90 | 3.11         | 47.80          | 47.80 | 3.19         |
|              | 1400 | 14.02                                            | 12.90 | 2.76         | 18.61          | 17.08 | 2.81         | 23.65          | 21.45 | 2.87         | 29.87          | 26.17 | 2.95         | 35.33          | 35.33 | 2.98         | 41.47          | 41.47 | 3.03         | 48.64          | 48.64 | 3.09         |
|              | 1545 | 14.20                                            | 13.07 | 2.77         | 18.83          | 17.29 | 2.82         | 23.92          | 21.69 | 2.87         | 30.11          | 26.38 | 2.94         | 35.61          | 35.61 | 2.96         | 41.82          | 41.82 | 2.99         | 49.14          | 49.14 | 3.04         |
| 70<br>(21.1) | 1200 | 13.07                                            | 12.02 | 2.88         | 17.65          | 16.20 | 2.96         | 22.63          | 20.53 | 3.03         | 28.19          | 24.70 | 3.11         | 34.46          | 34.46 | 3.21         | 40.36          | 40.36 | 3.28         | 47.09          | 47.09 | 3.37         |
|              | 1400 | 13.34                                            | 12.27 | 2.90         | 17.97          | 16.49 | 2.96         | 23.03          | 20.88 | 3.02         | 28.69          | 25.14 | 3.08         | 34.88          | 34.88 | 3.15         | 40.92          | 40.92 | 3.20         | 47.90          | 47.90 | 3.26         |
|              | 1545 | 13.52                                            | 12.44 | 2.92         | 18.18          | 16.69 | 2.97         | 23.29          | 21.12 | 3.02         | 29.10          | 25.50 | 3.07         | 35.15          | 35.15 | 3.12         | 41.27          | 41.27 | 3.16         | 48.38          | 48.38 | 3.21         |
| 75<br>(23.9) | 1200 | 12.34                                            | 11.35 | 3.02         | 16.96          | 15.56 | 3.10         | 21.96          | 19.92 | 3.18         | 27.47          | 24.07 | 3.27         | 34.00          | 34.00 | 3.39         | 39.82          | 39.82 | 3.46         | 46.37          | 46.37 | 3.55         |
|              | 1400 | 12.59                                            | 11.59 | 3.04         | 17.28          | 15.86 | 3.11         | 22.36          | 20.28 | 3.17         | 27.95          | 24.49 | 3.23         | 34.45          | 34.45 | 3.33         | 40.38          | 40.38 | 3.38         | 47.15          | 47.15 | 3.44         |
|              | 1545 | 12.78                                            | 11.76 | 3.06         | 17.50          | 16.06 | 3.12         | 22.62          | 20.52 | 3.17         | 28.27          | 24.77 | 3.22         | 34.71          | 34.71 | 3.30         | 40.72          | 40.72 | 3.34         | 47.63          | 47.63 | 3.39         |

See Legend and Notes on Page 37.

PERFORMANCE DATA (CONT)

\* At 75°F (24°C) entering dry bulb—Tennessee Valley Authority (TVA) rating conditions; all others at 80°F (27°C) dry bulb.

LEGEND

- BF—Bypass Factor
- edb—Entering Dry—Bulb
- Ewb—Entering Wet—Bulb
- kW — Total Unit Power Input
- SHC—Sensible Heat Capacity (1000 Btuh)
- TC — Total Capacity (1000 Btuh) (net)
- rh—Relative Humidity

COOLING NOTES:

- 1. Ratings are net; they account for the effects of the evaporator—fan motor power and heat.
- 2. Direct interpolation is permissible. Do not extrapolate.
- 3. The following formulas may be used:

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

$t_{lwb} = \frac{\text{Wet-bulb temperature corresponding to enthalpy air leaving evaporator coil (} h_{lwb} \text{)}}$

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

Where: h<sub>ewb</sub> = Enthalpy of air entering evaporator coil

- 4. The SHC is based on 805 F (26.6°C) edb temperature of air entering evaporator coil. Below 80°F (26.6°C) edb, subtract (corr factor x cfm) from SHC.

Above 80° F (26.6°C) edb, add (corr factor x cfm) to SHC.

Correction Factor = 1.10 x (1 + BF) x (edb – 80).

- 5. Integrated capacity is maximum (instantaneous) capacity less the effect of frost on the outdoor coil and the heat required to defrost it.

## PERFORMANCE DATA (CONT)

### GAS ADJUSTMENT

#### Natural Gas Orifice Sizes and Manifold Pressure

##### 208/230VAC Models

| Nameplate Input, High Stage (Btu/hr) |                                       | ALTITUDE OF INSTALLATION (FT. [m] ABOVE SEA LEVEL) U.S.A.* |                               |                               |                                |                                |
|--------------------------------------|---------------------------------------|------------------------------------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|
|                                      |                                       | 0 to 2000<br>[0 to 610]                                    | 2001 to 3000*<br>[610 to 914] | 3001 to 4000<br>[915 to 1219] | 4001 to 5000<br>[1220 to 1524] | 5001 to 6000<br>[1524 to 1829] |
| 40000                                | Orifice No. (Qty)                     | 44 (2)                                                     | 45 (2)†                       | 48 (2)†                       | 48 (2)†                        | 48 (2)†                        |
|                                      | Manifold Press. High / Low (in. W.C.) | 3.2 / 1.4                                                  | 3.2 / 1.4                     | 3.8 / 1.6                     | 3.5 / 1.5                      | 3.2 / 1.4                      |
| 60000                                | Orifice No. (Qty)                     | 44 (3)                                                     | 45 (3)†                       | 48 (3)†                       | 48 (3)†                        | 48 (3)†                        |
|                                      | Manifold Press. High / Low (in. W.C.) | 3.2 / 1.4                                                  | 3.2 / 1.4                     | 3.8 / 1.6                     | 3.5 / 1.5                      | 3.2 / 1.4                      |
| 90000                                | Orifice No. (Qty)                     | 38 (3)                                                     | 41 (3)†                       | 41 (3)†                       | 42 (3)†                        | 42 (3)†                        |
|                                      | Manifold Press. High / Low (in. W.C.) | 3.6 / 1.6                                                  | 3.8 / 1.6                     | 3.4 / 1.5                     | 3.4 / 1.5                      | 3.2 / 1.4                      |
| 115000                               | Orifice No. (Qty)                     | 33 (3)                                                     | 36 (3)†                       | 36 (3)†                       | 36 (3)†                        | 38 (3)†                        |
|                                      | Manifold Press. High / Low (in. W.C.) | 3.8 / 1.7                                                  | 3.8 / 1.7                     | 3.6 / 1.6                     | 3.3 / 1.4                      | 3.6 / 1.5                      |
| 127000                               | Orifice No. (Qty)                     | 31 (3)                                                     | 31 (3)                        | 33 (3)†                       | 33 (3)†                        | 34 (3)†                        |
|                                      | Manifold Press. High / Low (in. W.C.) | 3.7 / 1.7                                                  | 3.2 / 1.4                     | 3.5 / 1.6                     | 3.2 / 1.4                      | 3.2 / 1.4                      |
| 130000                               | Orifice No. (Qty)                     | 31 (3)                                                     | 31 (3)                        | 33 (3)†                       | 33 (3)†                        | 34 (3)†                        |
|                                      | Manifold Press. High / Low (in. W.C.) | 3.8 / 1.7                                                  | 3.2 / 1.4                     | 3.7 / 1.6                     | 3.4 / 1.4                      | 3.3 / 1.4                      |

\*In the U.S.A., the input rating for altitudes above 2000 ft (610m) must be reduced by 4% for each 1000 ft (305 m) above sea level.

In Canada, the input rating for altitudes from 2001 to 4500 ft (611 to 1372 m) above sea level must be derated by 10% by an authorized gas conversion station or dealer.

For Canadian Installations from 2000 to 4500 ft, use U.S.A. column 2001 to 3000 ft (610 to 914 m).

† Orifices available through your distributor.

**NOTE:** Orifice sizes and manifold pressure settings are based on natural gas with a heating value of 1025 Btu/ft<sup>3</sup> and a specific gravity of .6.

#### Propane Gas Orifice Sizes and Manifold Pressure

##### 208/230VAC Models

| Nameplate Input, High Stage (Btu/hr) |                                       | ALTITUDE OF INSTALLATION (FT. ABOVE SEA LEVEL) U.S.A.*† |                               |                               |                                |                                |
|--------------------------------------|---------------------------------------|---------------------------------------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------------|
|                                      |                                       | 0 to 2000<br>[0 to 610]                                 | 2001 to 3000*<br>[610 to 914] | 3001 to 4000<br>[915 to 1219] | 4001 to 5000<br>[1220 to 1524] | 5001 to 6000<br>[1524 to 1829] |
| 40000                                | Orifice No. (Qty)                     | 55 (2)                                                  | 56 (2)                        | 56 (2)                        | 56 (2)                         | 56 (2)                         |
|                                      | Manifold Press. High / Low (in. W.C.) | 10.0/5.0                                                | 11.0/6.0                      | 11.0/5.5                      | 11.0/5.0                       | 10.7/4.8                       |
| 60000                                | Orifice No. (Qty)                     | 55 (3)                                                  | 56 (3)                        | 56 (3)                        | 56 (3)                         | 56 (3)                         |
|                                      | Manifold Press. High / Low (in. W.C.) | 10.0/5.0                                                | 11.0/6.0                      | 11.0/5.5                      | 11.0/5.0                       | 10.7/4.8                       |
| 90000                                | Orifice No. (Qty)                     | 53 (3)                                                  | 54 (3)                        | 54 (3)                        | 54 (3)                         | 54 (3)                         |
|                                      | Manifold Press. High / Low (in. W.C.) | 10.0/5.4                                                | 11.0/6.4                      | 11.0/5.9                      | 11.0/5.4                       | 11.0/5.0                       |
| 115000                               | Orifice No. (Qty)                     | 51 (3)                                                  | 52 (3)                        | 52 (3)                        | 53 (3)                         | 53 (3)                         |
|                                      | Manifold Press. High / Low (in. W.C.) | 10.0/5.4                                                | 11.0/5.0                      | 10.6/4.8                      | 11.0/6.1                       | 11.0/5.5                       |
| 127,000<br>(1-Phase)                 | Orifice No. (Qty)                     | 49 (3)                                                  | 50 (3)                        | 51 (3)                        | 52 (3)                         | 52 (3)                         |
|                                      | Manifold Press. High / Low (in. W.C.) | 10.0/5.4                                                | 11.0/4.8                      | 11.0/4.9                      | 11.0/5.2                       | 11.0/5.0                       |
| 130000<br>(3-Phase)                  | Manifold Press. High / Low (in. W.C.) | 10.0/5.4                                                | 11.0/4.8                      | 11.0/4.9                      | 11.0/5.2                       | 11.0/5.0                       |

\*In the U.S.A., the input rating for altitudes above 2000 ft (610m) must be reduced by 4% for each 1000 ft (305 m) above sea level.

In Canada, the input rating for altitudes from 2001 to 4500 ft (611 to 1372 m) above sea level must be derated by 10% by an authorized gas conversion station or dealer.

For Canadian Installations from 2000 to 4500 ft, use U.S.A. column 2001 to 3000 ft (610 to 914 m).

† Use Kit No. CPLPCONV013C00 (0–2000 ft [0–610 m] above sea level. Use Kit No. CPLPCONV014C00 (2001–6000 ft [611–1829 m] above sea level.

## PERFORMANCE DATA (CONT)

### High Altitude Compensation: Natural Gas 208/230VAC Models

| Nameplate<br>Input, High<br>Stage<br>(Btu/hr) | Rated Heating Input (Btu/hr), Natural Gas at Installation Altitude Above Sea Level, U.S.A.* |              |                                  |              |                                  |              |                                   |              |                                   |              |
|-----------------------------------------------|---------------------------------------------------------------------------------------------|--------------|----------------------------------|--------------|----------------------------------|--------------|-----------------------------------|--------------|-----------------------------------|--------------|
|                                               | 0 to 2000 ft<br>0 to 610 m                                                                  |              | 2001 to 3000 ft*<br>610 to 914 m |              | 3001 to 4000 ft<br>915 to 1219 m |              | 4001 to 5000 ft<br>1220 to 1524 m |              | 5001 to 6000 ft<br>1524 to 1829 m |              |
|                                               | High<br>Stage                                                                               | Low<br>Stage | High<br>Stage                    | Low<br>Stage | High<br>Stage                    | Low<br>Stage | High<br>Stage                     | Low<br>Stage | High<br>Stage                     | Low<br>Stage |
| 40000                                         | 40000                                                                                       | 26000        | 36000                            | 23400        | 34400                            | 22300        | 32800                             | 21300        | 31200                             | 20300        |
| 60000                                         | 60000                                                                                       | 39000        | 54000                            | 35100        | 51600                            | 33500        | 49200                             | 32000        | 46800                             | 30400        |
| 90000                                         | 90000                                                                                       | 58500        | 81000                            | 52700        | 77400                            | 50300        | 73800                             | 48000        | 70200                             | 45600        |
| 115000                                        | 115000                                                                                      | 75000        | 103500                           | 67500        | 98900                            | 64500        | 94300                             | 61500        | 89700                             | 58500        |
| 127000<br>(1 – Phase)                         | 127000                                                                                      | 84500        | 117000                           | 76100        | 111800                           | 72700        | 106600                            | 69300        | 101400                            | 65900        |
| 130000<br>(3 – Phase)                         | 130000                                                                                      | 84500        | 117000                           | 76100        | 111800                           | 72700        | 106600                            | 69300        | 101400                            | 65900        |

\*In the U.S.A., the input rating for altitudes above 2000 ft (610m) must be reduced by 4% for each 1000 ft (305 m) above Sea level.

In Canada, the input rating for altitudes from 2001 to 4500 ft (611 to 1372 m) above sea level must be derated by 10% by an authorized gas conversion station or dealer.

For Canadian Installations from 2000 to 4500 ft (610–1372 m), use U.S.A. column 2001 to 3000 ft (611 to 914 m).

### High Altitude Compensation: Propane Gas 208/230VAC Models

| Nameplate<br>Input, High<br>Stage<br>(Btu/hr) | Rated Heating Input (Btu/hr), LP Gas at Installation Altitude Above Sea Level, U.S.A.* |              |                                  |              |                                  |              |                                   |              |                                   |              |
|-----------------------------------------------|----------------------------------------------------------------------------------------|--------------|----------------------------------|--------------|----------------------------------|--------------|-----------------------------------|--------------|-----------------------------------|--------------|
|                                               | 0 to 2000 ft<br>0 to 610 m                                                             |              | 2001 to 3000 ft*<br>610 to 914 m |              | 3001 to 4000 ft<br>915 to 1219 m |              | 4001 to 5000 ft<br>1220 to 1524 m |              | 5001 to 6000 ft<br>1524 to 1829 m |              |
|                                               | High<br>Stage                                                                          | Low<br>Stage | High<br>Stage                    | Low<br>Stage | High<br>Stage                    | Low<br>Stage | High<br>Stage                     | Low<br>Stage | High<br>Stage                     | Low<br>Stage |
| 40000                                         | 38000                                                                                  | 26000        | 31700                            | 23400        | 31700                            | 22300        | 31700                             | 21300        | 31200                             | 20300        |
| 60000                                         | 57000                                                                                  | 39000        | 47500                            | 35100        | 47500                            | 33500        | 47500                             | 32000        | 46800                             | 30400        |
| 90000                                         | 79000                                                                                  | 58500        | 68900                            | 52700        | 68900                            | 50300        | 68600                             | 48000        | 68600                             | 45600        |
| 115000                                        | 103000                                                                                 | 75000        | 100400                           | 67500        | 98900                            | 64500        | 83000                             | 61500        | 83000                             | 58500        |
| 127000<br>(1 – Phase)                         | 116000                                                                                 | 84500        | 115500                           | 76100        | 111800                           | 72700        | 101300                            | 69300        | 100400                            | 65900        |
| 130000<br>(3 – Phase)                         | 116000                                                                                 | 84500        | 115500                           | 76100        | 111800                           | 72700        | 101300                            | 69300        | 100400                            | 65900        |

\*In the U.S.A., the input rating for altitudes above 2000 ft (610m) must be reduced by 4% for each 1000 ft (305 m) above sea level.

In Canada, the input rating for altitudes from 2001 to 4500 ft (611 to 1372 m) above sea level must be derated by 10% by an authorized gas conversion station or dealer.

For Canadian Installations from 2000 to 4500 ft (610–1372 m), use U.S.A. column 2001 to 3000 ft (611 to 914 m).

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# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS

| Unit  | Heating Rise Range      | Motor Speed | Wire Color | Allowable Functions                                                                       |                              | External Static Pressure (in. WC) |         |         |         |         |         |      |      |      |      |
|-------|-------------------------|-------------|------------|-------------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|------|------|------|------|
|       |                         |             |            |                                                                                           |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7  | 0.8  | 0.9  | 1    |
| 24040 | Low <sup>3</sup>        | Blue        |            | Low Stage Gas Heating<br>Alternate Low Stage Cooling                                      | CFM                          | 714                               | 525     | --      | --      | --      | --      | --   | --   | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.08                              | 0.07    | --      | --      | --      | --      | --   | --   | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 27 (15)                           | 37 (21) | NA      | NA      | NA      | NA      | NA   | NA   | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA   | NA   | NA   | NA   |
|       | Med – Low <sup>1</sup>  | Pink        |            | Low Stage Cooling<br>Alternate Low Stage Gas Heating                                      | CFM                          | 777                               | 692     | 583     | 465     | 318     | --      | --   | --   | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.09                              | 0.10    | 0.10    | 0.11    | 0.12    | --      | --   | --   | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 25 (14)                           | 28 (16) | 34 (19) | 42 (23) | NA      | NA      | NA   | NA   | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 39 (21)                           | 43 (24) | 51 (29) | NA      | NA      | NA      | NA   | NA   | NA   | NA   |
|       | Medium <sup>4</sup>     | Red         |            | High Stage Gas Heating<br>Alternate High Stage Cooling<br>Alternate Low Stage Gas Heating | CFM                          | 743                               | 694     | 628     | 563     | 497     | 426     | 300  | --   | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.12                              | 0.13    | 0.13    | 0.13    | 0.14    | 0.15    | 0.15 | --   | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 26 (15)                           | 28 (16) | 31 (17) | 35 (19) | 39 (22) | 46 (25) | NA   | NA   | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 40 (22)                           | 43 (24) | 48 (26) | 53 (30) | NA      | NA      | NA   | NA   | NA   | NA   |
|       | Med – High <sup>2</sup> | Orange      |            | High Stage Cooling<br>Alternate High Stage Gas Heating                                    | CFM                          | 904                               | 841     | 769     | 705     | 628     | 522     | 372  | --   | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.16                              | 0.17    | 0.17    | 0.18    | 0.19    | 0.19    | 0.20 | --   | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA   | NA   | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 33 (18)                           | 36 (20) | 39 (22) | 42 (24) | 48 (26) | NA      | NA   | NA   | NA   | NA   |
|       | High                    | Black       |            | High Static, High Stage Cooling Only                                                      | CFM                          | 1291                              | 1206    | 1142    | 1081    | 1017    | 951     | 888  | 823  | 753  | 668  |
|       |                         |             |            |                                                                                           | BHP                          | 0.31                              | 0.32    | 0.33    | 0.34    | 0.34    | 0.35    | 0.36 | 0.36 | 0.37 | 0.37 |

## Notes:

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

<sup>1</sup> Factory-shipped low stage cooling speed

<sup>2</sup> Factory-shipped high stage cooling speed

<sup>3</sup> Factory-shipped low stage gas heating speed

<sup>4</sup> Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

"NA" = Not allowed for particular gas heating speed

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS**

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color | Allowable Functions                                                                       |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |      |      |      |
|-------|----------------------------------------------|-------------------------|------------|-------------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|------|------|------|
|       |                                              |                         |            |                                                                                           |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8  | 0.9  | 1    |
| 24060 | 25 – 55°F Low Stage,<br>25 – 55°F High Stage | Low <sup>1</sup>        | Blue       | Low Stage Cooling<br>Alternate Low Stage Gas Heating                                      | CFM                          | 714                               | 525     | --      | --      | --      | --      | --      | --   | --   | --   |
|       |                                              |                         |            |                                                                                           | BHP                          | 0.08                              | 0.07    | --      | --      | --      | --      | --      | --   | --   | --   |
|       |                                              |                         |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 41 (23)                           | 55 (31) | NA      | NA      | NA      | NA      | NA      | NA   | NA   | NA   |
|       |                                              | Med – Low <sup>3</sup>  | Pink       | Low Stage Gas Heating<br>Alternate Low Stage Cooling                                      | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   | NA   |
|       |                                              |                         |            |                                                                                           | CFM                          | 777                               | 692     | 583     | 465     | 318     | --      | --      | --   | --   | --   |
|       |                                              |                         |            |                                                                                           | BHP                          | 0.09                              | 0.10    | 0.10    | 0.11    | 0.12    | --      | --      | --   | --   | --   |
|       | 25 – 55°F High Stage                         | Medium <sup>2</sup>     | Red        | High Stage Cooling<br>Alternate Low Stage Gas Heating<br>Alternate High Stage Gas Heating | Low Stage Heat Rise °F (°C)  | 38 (21)                           | 43 (24) | 50 (28) | NA      | NA      | NA      | NA      | NA   | NA   | NA   |
|       |                                              |                         |            |                                                                                           | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   | NA   |
|       |                                              |                         |            |                                                                                           | CFM                          | 904                               | 841     | 769     | 705     | 628     | 522     | 372     | --   | --   | --   |
|       |                                              | Med – High <sup>4</sup> | Orange     | High Stage Gas Heating<br>Alternate High Stage Cooling                                    | BHP                          | 0.16                              | 0.17    | 0.17    | 0.18    | 0.19    | 0.19    | 0.20    | --   | --   | --   |
|       |                                              |                         |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 33 (18)                           | 35 (19) | 38 (21) | 42 (23) | 47 (26) | NA      | NA      | NA   | NA   | NA   |
|       |                                              |                         |            |                                                                                           | High Stage Heat Rise °F (°C) | 50 (28)                           | 54 (30) | NA      | NA      | NA      | NA      | NA      | NA   | NA   | NA   |
|       |                                              | High                    | Black      | High Static, High Stage Cooling Only                                                      | CFM                          | 1229                              | 1171    | 1105    | 1049    | 980     | 913     | 838     | 775  | 679  | 516  |
|       |                                              |                         |            |                                                                                           | BHP                          | 0.28                              | 0.30    | 0.30    | 0.31    | 0.32    | 0.33    | 0.33    | 0.34 | 0.34 | 0.33 |
|       |                                              |                         |            |                                                                                           | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   | NA   |
|       |                                              |                         |            |                                                                                           | High Stage Heat Rise °F (°C) | 37 (20)                           | 39 (21) | 41 (23) | 43 (24) | 46 (26) | 50 (28) | 54 (30) | NA   | NA   | NA   |
|       |                                              |                         |            |                                                                                           | CFM                          | 1291                              | 1206    | 1142    | 1081    | 1017    | 951     | 888     | 823  | 753  | 668  |
|       |                                              |                         |            |                                                                                           | BHP                          | 0.31                              | 0.32    | 0.33    | 0.34    | 0.34    | 0.35    | 0.36    | 0.36 | 0.37 | 0.37 |

Notes:  
 \* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).  
 1 Factory-shipped low stage cooling speed  
 2 Factory-shipped high stage cooling speed  
 3 Factory-shipped low stage gas heating speed  
 4 Factory-shipped high stage gas heating speed  
 Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.  
 "NA" = Not allowed for particular gas heating speed

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS

| Unit  | Heating Rise Range      | Motor Speed | Wire Color | Allowable Functions                                                                       |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |      |      |
|-------|-------------------------|-------------|------------|-------------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|------|------|
|       |                         |             |            |                                                                                           |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9  | 1    |
| 30040 | Low <sup>3</sup>        | Blue        |            | Low Stage Gas Heating<br>Alternate Low Stage Cooling                                      | CFM                          | 714                               | 525     | --      | --      | --      | --      | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.08                              | 0.07    | --      | --      | --      | --      | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 26 (15)                           | 36 (20) | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 41 (23)                           | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   |
|       | Med – Low <sup>1</sup>  | Pink        |            | Low Stage Gas Heating<br>Alternate Low Stage Cooling                                      | CFM                          | 831                               | 765     | 670     | 586     | 466     | 376.5   | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.11                              | 0.12    | 0.12    | 0.13    | 0.13    | 0.14    | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 23 (13)                           | 25 (14) | 28 (16) | 32 (18) | 40 (22) | NA      | NA      | NA      | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 35 (19)                           | 38 (21) | 43 (24) | 50 (28) | NA      | NA      | NA      | NA      | NA   | NA   |
|       | Medium <sup>4</sup>     | Red         |            | High Stage Gas Heating<br>Alternate High Stage Cooling<br>Alternate Low Stage Gas Heating | CFM                          | 877                               | 779     | 698     | 598     | 519     | 410     | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.12                              | 0.12    | 0.13    | 0.14    | 0.15    | 0.15    | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 21 (12)                           | 24 (13) | 27 (15) | 31 (17) | 36 (20) | NA      | NA      | NA      | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 33 (18)                           | 37 (21) | 42 (23) | 49 (27) | NA      | NA      | NA      | NA      | NA   | NA   |
|       | Med – High <sup>2</sup> | Orange      |            | High Stage Cooling<br>Alternate High Stage Gas Heating                                    | CFM                          | 1139                              | 1069    | 1012    | 937     | 870     | 786     | 724     | 626     | 512  | 381  |
|       |                         |             |            |                                                                                           | BHP                          | 0.22                              | 0.23    | 0.24    | 0.24    | 0.25    | 0.26    | 0.26    | 0.27    | 0.27 | 0.28 |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 26 (14)                           | 27 (15) | 29 (16) | 31 (17) | 33 (19) | 37 (21) | 40 (22) | 47 (26) | NA   | NA   |
|       | High                    | Black       |            | High Static, High Stage Cooling Only                                                      | CFM                          | 1531                              | 1460    | 1382    | 1301    | 1209    | 1114    | 1003    | 890     | 764  | 629  |
|       |                         |             |            |                                                                                           | BHP                          | 0.53                              | 0.52    | 0.50    | 0.48    | 0.46    | 0.44    | 0.42    | 0.40    | 0.37 | 0.35 |

## Notes:

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

<sup>1</sup> Factory-shipped low stage cooling speed

<sup>2</sup> Factory-shipped high stage cooling speed

<sup>3</sup> Factory-shipped low stage gas heating speed

<sup>4</sup> Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

"NA" = Not allowed for particular gas heating speed

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS**

| Unit  | Heating Rise Range      | Motor Speed | Wire Color | Allowable Functions                                                                       |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |      |      |
|-------|-------------------------|-------------|------------|-------------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|------|------|
|       |                         |             |            |                                                                                           |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9  | 1    |
| 30060 | Low <sup>3</sup>        | Blue        |            | Low Stage Gas Heating<br>Alternate Low Stage Cooling                                      | CFM                          | 777                               | 692     | 583     | 465     | 318     | --      | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.09                              | 0.10    | 0.10    | 0.11    | 0.12    | --      | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 37 (21)                           | 41 (23) | 49 (27) | NA      | NA      | NA      | NA      | NA      | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   |
|       | Med – Low <sup>1</sup>  | Pink        |            | Low Stage Cooling<br>Alternate Low Stage Gas Heating                                      | CFM                          | 831                               | 765     | 670     | 586     | 466     | 299     | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | BHP                          | 0.11                              | 0.12    | 0.12    | 0.13    | 0.13    | 0.14    | --      | --      | --   | --   |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 34 (19)                           | 37 (21) | 43 (24) | 49 (27) | NA      | NA      | NA      | NA      | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 54 (30)                           | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   |
|       | Medium <sup>2</sup>     | Red         |            | High Stage Cooling<br>Alternate Low Stage Gas Heating<br>Alternate High Stage Gas Heating | CFM                          | 1139                              | 1069    | 1012    | 937     | 870     | 786     | 724     | 626     | 512  | 381  |
|       |                         |             |            |                                                                                           | BHP                          | 0.22                              | 0.23    | 0.24    | 0.24    | 0.25    | 0.26    | 0.26    | 0.27    | 0.27 | 0.28 |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 25 (14)                           | 27 (15) | 28 (16) | 30 (17) | 33 (18) | 36 (20) | 39 (22) | 46 (26) | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 39 (22)                           | 42 (23) | 44 (24) | 47 (26) | 51 (28) | NA      | NA      | NA      | NA   | NA   |
|       | Med – High <sup>4</sup> | Orange      |            | High Stage Gas Heating<br>Alternate High Stage Cooling                                    | CFM                          | 1229                              | 1171    | 1105    | 1049    | 980     | 913     | 838     | 775     | 679  | 516  |
|       |                         |             |            |                                                                                           | BHP                          | 0.28                              | 0.30    | 0.30    | 0.31    | 0.32    | 0.33    | 0.33    | 0.34    | 0.34 | 0.33 |
|       |                         |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA   |
|       |                         |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 36 (20)                           | 38 (21) | 40 (22) | 42 (23) | 45 (25) | 49 (27) | 53 (29) | NA      | NA   | NA   |
|       | High                    | Black       |            | High Static, High Stage Cooling Only                                                      | CFM                          | 1531                              | 1460    | 1382    | 1301    | 1209    | 1114    | 1003    | 890     | 764  | 629  |
|       |                         |             |            |                                                                                           | BHP                          | 0.53                              | 0.52    | 0.50    | 0.48    | 0.46    | 0.44    | 0.42    | 0.40    | 0.37 | 0.35 |

**Notes:**

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

1 Factory-shipped low stage cooling speed

2 Factory-shipped high stage cooling speed

3 Factory-shipped low stage gas heating speed

4 Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

"NA" = Not allowed for particular gas heating speed

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color | Allowable Functions                                                                 |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-------------------------|------------|-------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                         |            |                                                                                     |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 36060 | 25 – 55°F Low Stage,<br>25 – 55°F High Stage | Low <sup>3</sup>        | Blue       | Low Stage Gas Heating                                                               | CFM                          | 694                               | 624     | 533     | 460     | 383     | 328     | --      | --      | --      | --      |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.05                              | 0.05    | 0.06    | 0.07    | 0.07    | 0.08    | --      | --      | --      | --      |
|       |                                              |                         |            |                                                                                     | Low Stage Heat Rise °F (°C)  | 41 (23)                           | 46 (25) | 54 (30) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med – Low <sup>1</sup>  | Pink       | Low Stage Cooling Alternate Low Stage Gas Heating                                   | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                     | CFM                          | 934                               | 864     | 810     | 745     | 698     | 649     | 571     | 525     | 486     | 428     |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.10                              | 0.10    | 0.11    | 0.12    | 0.13    | 0.14    | 0.14    | 0.15    | 0.16    | 0.17    |
|       | 25 – 55°F Low Stage,<br>25 – 55°F High Stage | Medium <sup>4</sup>     | Red        | High Stage Gas Heating Alternate High Stage Cooling Alternate Low Stage Gas Heating | Low Stage Heat Rise °F (°C)  | 31 (17)                           | 33 (18) | 35 (20) | 38 (21) | 41 (23) | 44 (24) | 50 (28) | 54 (30) | NA      | NA      |
|       |                                              |                         |            |                                                                                     | High Stage Heat Rise °F (°C) | 48 (26)                           | 52 (29) | 55 (31) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                     | CFM                          | 1213                              | 1169    | 1110    | 1065    | 1016    | 964     | 923     | 878     | 820     | 777     |
|       |                                              | Med – High <sup>2</sup> | Orange     | High Stage Cooling Alternate High Stage Gas Heating                                 | BHP                          | 0.16                              | 0.17    | 0.17    | 0.19    | 0.20    | 0.21    | 0.22    | 0.23    | 0.24    | 0.25    |
|       |                                              |                         |            |                                                                                     | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                     | High Stage Heat Rise °F (°C) | 37 (20)                           | 38 (21) | 40 (22) | 42 (23) | 44 (24) | 46 (26) | 48 (27) | 51 (28) | 54 (30) | NA      |
|       |                                              | High                    | Black      | High Static, High Stage Cooling Only                                                | CFM                          | 1251                              | 1198    | 1149    | 1104    | 1066    | 1017    | 970     | 932     | 892     | 839     |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.19                              | 0.21    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                         |            |                                                                                     | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                     | High Stage Heat Rise °F (°C) | 36 (20)                           | 37 (21) | 39 (22) | 40 (22) | 42 (23) | 44 (24) | 46 (25) | 48 (27) | 50 (28) | 53 (29) |
|       |                                              |                         |            |                                                                                     | CFM                          | 1466                              | 1423    | 1384    | 1343    | 1308    | 1263    | 1219    | 1183    | 1145    | 1106    |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.30                              | 0.31    | 0.33    | 0.34    | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    |

## Notes:

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

1 Factory-shipped low stage cooling speed

2 Factory-shipped high stage cooling speed

3 Factory-shipped low stage gas heating speed

4 Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

"NA" = Not allowed for particular gas heating speed

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS**

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color | Allowable Functions                                    |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-------------------------|------------|--------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                         |            |                                                        |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 36090 | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Low <sup>3</sup>        | Blue       | Low Stage Gas Heating<br>Alternate Low Stage Cooling   | CFM                          | 1097                              | 971     | 823     | 747     | 669     | 636     | 558     | 513     | 456     | 412     |
|       |                                              |                         |            |                                                        | BHP                          | 0.12                              | 0.11    | 0.10    | 0.11    | 0.12    | 0.13    | 0.13    | 0.14    | 0.15    | 0.16    |
|       |                                              |                         |            |                                                        | Low Stage Heat Rise °F (°C)  | 39 (22)                           | 44 (25) | 52 (29) | 58 (32) | 64 (36) | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | CFM                          | 934                               | 864     | 810     | 745     | 698     | 649     | 571     | 525     | 486     | 428     |
|       |                                              |                         |            |                                                        | BHP                          | 0.10                              | 0.10    | 0.11    | 0.12    | 0.13    | 0.14    | 0.14    | 0.15    | 0.16    | 0.17    |
|       | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Med – Low <sup>1</sup>  | Pink       | Low Stage Cooling<br>Alternate Low Stage Gas Heating   | Low Stage Heat Rise °F (°C)  | 46 (26)                           | 50 (28) | 53 (29) | 58 (32) | 62 (34) | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | CFM                          | 1251                              | 1198    | 1149    | 1104    | 1066    | 1017    | 970     | 932     | 892     | 839     |
|       |                                              |                         |            |                                                        | BHP                          | 0.19                              | 0.21    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                         |            |                                                        | Low Stage Heat Rise °F (°C)  | NA                                | 36 (20) | 37 (21) | 39 (22) | 40 (22) | 42 (23) | 44 (25) | 46 (26) | 48 (27) | 51 (28) |
|       |                                              |                         |            |                                                        | High Stage Heat Rise °F (°C) | 54 (30)                           | 56 (31) | 59 (33) | 61 (34) | 63 (35) | NA      | NA      | NA      | NA      | NA      |
|       | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Med – High <sup>4</sup> | Orange     | High Stage Gas Heating<br>Alternate High Stage Cooling | CFM                          | 1451                              | 1415    | 1372    | 1327    | 1287    | 1249    | 1212    | 1168    | 1130    | 1094    |
|       |                                              |                         |            |                                                        | BHP                          | 0.29                              | 0.30    | 0.31    | 0.32    | 0.32    | 0.35    | 0.36    | 0.37    | 0.38    | 0.39    |
|       |                                              |                         |            |                                                        | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | High Stage Heat Rise °F (°C) | 46 (26)                           | 48 (26) | 49 (27) | 51 (28) | 52 (29) | 54 (30) | 56 (31) | 58 (32) | 60 (33) | 62 (34) |
|       |                                              |                         |            |                                                        | CFM                          | 1466                              | 1423    | 1384    | 1343    | 1308    | 1263    | 1219    | 1183    | 1145    | 1106    |
|       |                                              |                         |            |                                                        | BHP                          | 0.30                              | 0.31    | 0.33    | 0.34    | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    |

**Notes:**

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

<sup>1</sup> Factory-shipped low stage cooling speed

<sup>2</sup> Factory-shipped high stage cooling speed

<sup>3</sup> Factory-shipped low stage gas heating speed

<sup>4</sup> Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

"NA" = Not allowed for particular gas heating speed

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color | Allowable Functions                                                                 |                              | External Static Pressure (in. WC) |         |         |         |                    |         |         |         |         |         |
|-------|----------------------------------------------|-------------------------|------------|-------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|--------------------|---------|---------|---------|---------|---------|
|       |                                              |                         |            |                                                                                     |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5                | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 42060 | 25 – 55°F Low Stage,<br>25 – 55°F High Stage | Low <sup>3</sup>        | Blue       | Low Stage Gas Heating                                                               | CFM                          | 694                               | 624     | 533     | 460     | 383                | 328     | --      | --      | --      | --      |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.05                              | 0.05    | 0.06    | 0.07    | 0.07               | 0.08    | --      | --      | --      | --      |
|       |                                              |                         |            |                                                                                     | Low Stage Heat Rise °F (°C)  | 41 (23)                           | 46 (25) | 54 (30) | NA      | NA                 | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                     | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA                 | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med – Low <sup>1</sup>  | Pink       | Low Stage Cooling Alternate Low Stage Gas Heating Alternate High Stage Gas Heating  | CFM                          | 1076                              | 1026    | 972     | 918     | 872                | 827     | 771     | 714     | 666     | 611     |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.13                              | 0.14    | 0.15    | 0.15    | 0.17               | 0.18    | 0.18    | 0.20    | 0.21    | 0.22    |
|       |                                              |                         |            |                                                                                     | Low Stage Heat Rise °F (°C)  | 27 (15)                           | 28 (15) | 29 (16) | 31 (17) | 33 (18)            | 35 (19) | 37 (21) | 40 (22) | 43 (24) | 47 (26) |
|       |                                              |                         |            |                                                                                     | High Stage Heat Rise °F (°C) | 41 (23)                           | 43 (24) | 46 (25) | 48 (27) | 51 (28)            | 54 (30) | NA      | NA      | NA      | NA      |
|       | 25 – 55°F Low Stage,<br>25 – 55°F High Stage | Medium <sup>4</sup>     | Red        | High Stage Gas Heating Alternate High Stage Cooling Alternate Low Stage Gas Heating | CFM                          | 1213                              | 1169    | 1110    | 1065    | 1016               | 964     | 923     | 878     | 820     | 777     |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.16                              | 0.17    | 0.17    | 0.19    | 0.20               | 0.21    | 0.22    | 0.23    | 0.24    | 0.25    |
|       |                                              |                         |            |                                                                                     | Low Stage Heat Rise °F (°C)  | NA                                | NA      | 26 (14) | 27 (15) | 28 (16)            | 30 (16) | 31 (17) | 33 (18) | 35 (19) | 37 (20) |
|       |                                              |                         |            |                                                                                     | High Stage Heat Rise °F (°C) | 37 (20)                           | 38 (21) | 40 (22) | 42 (23) | 44 (24)            | 46 (26) | 48 (27) | 51 (28) | 54 (30) | NA      |
|       |                                              | Med – High <sup>2</sup> | Orange     | High Stage Cooling Alternate High Stage Gas Heating                                 | CFM                          | 1451                              | 1415    | 1372    | 1327    | 1287               | 1249    | 1212    | 1168    | 1130    | 1094    |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.29                              | 0.30    | 0.31    | 0.32    | 248.5 <sub>9</sub> | 0.35    | 0.36    | 0.37    | 0.38    | 0.39    |
|       |                                              |                         |            |                                                                                     | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA                 | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                     | High Stage Heat Rise °F (°C) | 31 (17)                           | 31 (17) | 32 (18) | 34 (18) | 35 (19)            | 36 (20) | 37 (20) | 38 (21) | 39 (22) | 41 (23) |
|       | High                                         | High                    | Black      | High Static, High Stage Cooling Only                                                | CFM                          | 1633                              | 1590    | 1552    | 1518    | 1483               | 1444    | 1406    | 1372    | 1340    | 1303    |
|       |                                              |                         |            |                                                                                     | BHP                          | 0.41                              | 0.43    | 0.44    | 0.45    | 0.47               | 0.48    | 0.49    | 0.50    | 0.51    | 0.53    |

## Notes:

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

1 Factory-shipped low stage cooling speed

2 Factory-shipped high stage cooling speed

3 Factory-shipped low stage gas heating speed

4 Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

"NA" = Not allowed for particular gas heating speed

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS**

| Unit  | Heating Rise Range                           | Motor Speed | Wire Color | Allowable Functions                                                                       |                              | External Static Pressure (in. WC) |         |         |         |                    |         |         |         |         |         |
|-------|----------------------------------------------|-------------|------------|-------------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|--------------------|---------|---------|---------|---------|---------|
|       |                                              |             |            |                                                                                           |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5                | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 42090 | Low <sup>3</sup>                             | Blue        |            | Low Stage Gas Heating<br>Alternate Low Stage Cooling                                      | CFM                          | 1097                              | 971     | 823     | 747     | 669                | 636     | 558     | 513     | 456     | 412     |
|       |                                              |             |            |                                                                                           | BHP                          | 0.12                              | 0.11    | 0.10    | 0.11    | 0.12               | 0.13    | 0.13    | 0.14    | 0.15    | 0.16    |
|       |                                              |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 39 (22)                           | 44 (25) | 52 (29) | 58 (32) | 64 (36)            | NA      | NA      | NA      | NA      | NA      |
|       |                                              |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 61 (34)                           | NA      | NA      | NA      | NA                 | NA      | NA      | NA      | NA      | NA      |
|       | Med – Low <sup>1</sup>                       | Pink        |            | Low Stage Cooling<br>Alternate Low Stage Gas Heating                                      | CFM                          | 1076                              | 1026    | 972     | 918     | 872                | 827     | 771     | 714     | 666     | 611     |
|       |                                              |             |            |                                                                                           | BHP                          | 0.13                              | 0.14    | 0.15    | 0.15    | 0.17               | 0.18    | 0.18    | 0.20    | 0.21    | 0.22    |
|       |                                              |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | 40 (22)                           | 42 (23) | 44 (25) | 47 (26) | 49 (27)            | 52 (29) | 56 (31) | 60 (33) | 64 (36) | NA      |
|       |                                              |             |            |                                                                                           | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA                 | NA      | NA      | NA      | NA      | NA      |
|       | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Red         |            | High Stage Gas Heating<br>Alternate High Stage Cooling<br>Alternate Low Stage Gas Heating | CFM                          | 1251                              | 1198    | 1149    | 1104    | 1066               | 1017    | 970     | 932     | 892     | 839     |
|       |                                              |             |            |                                                                                           | BHP                          | 0.19                              | 0.21    | 0.21    | 0.23    | 0.24               | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | NA                                | 36 (20) | 37 (21) | 39 (22) | 40 (22)            | 42 (23) | 44 (25) | 46 (26) | 48 (27) | 51 (28) |
|       |                                              |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 54 (30)                           | 56 (31) | 59 (33) | 61 (34) | 63 (35)            | NA      | NA      | NA      | NA      | NA      |
|       | Med – High <sup>2</sup>                      | Orange      |            | High Stage Cooling<br>Alternate High Stage Gas Heating                                    | CFM                          | 1451                              | 1415    | 1372    | 1327    | 1287               | 1249    | 1212    | 1168    | 1130    | 1094    |
|       |                                              |             |            |                                                                                           | BHP                          | 0.29                              | 0.30    | 0.31    | 0.32    | 248.5 <sub>9</sub> | 0.35    | 0.36    | 0.37    | 0.38    | 0.39    |
|       |                                              |             |            |                                                                                           | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA                 | NA      | NA      | NA      | NA      | NA      |
|       |                                              |             |            |                                                                                           | High Stage Heat Rise °F (°C) | 46 (26)                           | 48 (26) | 49 (27) | 51 (28) | 52 (29)            | 54 (30) | 56 (31) | 58 (32) | 60 (33) | 62 (34) |
|       | High <sup>4</sup>                            | Black       |            | High Static, High Stage Cooling Only                                                      | CFM                          | 1633                              | 1590    | 1552    | 1518    | 1483               | 1444    | 1406    | 1372    | 1340    | 1303    |
|       |                                              |             |            |                                                                                           | BHP                          | 0.41                              | 0.43    | 0.44    | 0.45    | 0.47               | 0.48    | 0.49    | 0.50    | 0.51    | 0.53    |

Notes:  
 \* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).  
 1 Factory-shipped low stage cooling speed  
 2 Factory-shipped high stage cooling speed  
 3 Factory-shipped low stage gas heating speed  
 4 Factory-shipped high stage gas heating speed  
 Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.  
 "NA" = Not allowed for particular gas heating speed

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color | Allowable Functions                                                                      |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-------------------------|------------|------------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                         |            |                                                                                          |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 48090 | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Low <sup>3</sup>        | Blue       | Low Stage Gas Heating<br>Alternate Low Stage Cooling                                     | CFM                          | 1067                              | 904     | 703     | 587     | 501     | 449     | 380     | 340     | --      | --      |
|       |                                              |                         |            |                                                                                          | BHP                          | 0.12                              | 0.10    | 0.09    | 0.09    | 0.09    | 0.10    | 0.11    | 0.12    | --      | --      |
|       |                                              |                         |            |                                                                                          | Low Stage Heat Rise °F (°C)  | 40 (22)                           | 48 (26) | 61 (34) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med – Low <sup>1</sup>  | Pink       | Low Stage Cooling<br>Alternate Low Stage Gas Heating<br>Alternate High Stage Gas Heating | High Stage Heat Rise °F (°C) | 63 (35)                           | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                          | CFM                          | 1271                              | 1229    | 1177    | 1121    | 1066    | 1027    | 974     | 942     | 887     | 839     |
|       |                                              |                         |            |                                                                                          | BHP                          | 0.19                              | 0.20    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Medium <sup>4</sup>     | Red        | High Stage Gas Heating<br>Alternate High Stage Cooling                                   | Low Stage Heat Rise °F (°C)  | NA                                | 35 (19) | 36 (20) | 38 (21) | 40 (22) | 42 (23) | 44 (25) | 46 (25) | 48 (27) | 51 (28) |
|       |                                              |                         |            |                                                                                          | High Stage Heat Rise °F (°C) | 53 (29)                           | 55 (30) | 57 (32) | 60 (33) | 63 (35) | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                          | CFM                          | 1340                              | 1299    | 1240    | 1191    | 1139    | 1091    | 1050    | 1001    | 952     | 895     |
|       |                                              |                         |            |                                                                                          | BHP                          | 0.22                              | 0.23    | 0.24    | 0.25    | 0.26    | 0.28    | 0.29    | 0.30    | 0.31    | 0.32    |
|       |                                              | Med – High <sup>2</sup> | Orange     | High Stage Cooling<br>Alternate High Stage Gas Heating                                   | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                          | High Stage Heat Rise °F (°C) | 50 (28)                           | 52 (29) | 54 (30) | 57 (31) | 59 (33) | 62 (34) | 64 (36) | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                          | CFM                          | 1686                              | 1650    | 1617    | 1576    | 1544    | 1503    | 1468    | 1433    | 1393    | 1356    |
|       |                                              |                         |            |                                                                                          | BHP                          | 0.42                              | 0.44    | 0.45    | 0.46    | 0.48    | 0.49    | 0.51    | 0.52    | 0.53    | 0.55    |
|       | High                                         |                         | Black      | High Static, High Stage Cooling Only                                                     | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                          | High Stage Heat Rise °F (°C) | 40 (22)                           | 41 (23) | 42 (23) | 43 (24) | 44 (24) | 45 (25) | 46 (26) | 47 (26) | 48 (27) | 50 (28) |
|       |                                              |                         |            |                                                                                          | CFM                          | 1854                              | 1837    | 1781    | 1784    | 1720    | 1698    | 1655    | 1625    | 1578    | 1532    |
|       |                                              |                         |            |                                                                                          | BHP                          | 0.56                              | 0.57    | 0.60    | 0.59    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.67    |

## Notes:

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

1 Factory-shipped low stage cooling speed

2 Factory-shipped high stage cooling speed

3 Factory-shipped low stage gas heating speed

4 Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

"NA" = Not allowed for particular gas heating speed

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS**

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color                           | Allowable Functions                                                                  |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |         |      |    |
|-------|----------------------------------------------|-------------------------|--------------------------------------|--------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|------|----|
|       |                                              |                         |                                      |                                                                                      |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1    |    |
| 48115 | 30 – 60°F Low Stage,<br>30 – 60°F High Stage | Low <sup>1</sup>        | Blue                                 | Low Stage Cooling<br>Alternate Low Stage Gas Heating                                 | CFM                          | 1271                              | 1229    | 1177    | 1121    | 1066    | 1027    | 974     | 942     | 887     | 839  |    |
|       |                                              |                         |                                      |                                                                                      | BHP                          | 0.19                              | 0.20    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29 |    |
|       |                                              |                         |                                      |                                                                                      | Low Stage Heat Rise °F (°C)  | 44 (24)                           | 45 (25) | 47 (26) | 50 (28) | 52 (29) | 54 (30) | 57 (32) | 59 (33) | NA      | NA   |    |
|       |                                              | Med – Low <sup>3</sup>  | Pink                                 | Low Stage Gas Heating<br>Alternate Low Stage Cooling<br>Alternate High Stage Cooling | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   |    |
|       |                                              |                         |                                      |                                                                                      | CFM                          | 1340                              | 1299    | 1240    | 1191    | 1139    | 1091    | 1050    | 1001    | 952     | 895  |    |
|       |                                              |                         |                                      |                                                                                      | BHP                          | 0.22                              | 0.23    | 0.24    | 0.25    | 0.26    | 0.28    | 0.29    | 0.30    | 0.31    | 0.32 |    |
|       | 30 – 60°F Low Stage,<br>30 – 60°F High Stage | Medium <sup>2</sup>     | Red                                  | High Stage Cooling<br>Alternate High Stage Gas Heating                               | Low Stage Heat Rise °F (°C)  | 42 (23)                           | 43 (24) | 45 (25) | 47 (26) | 49 (27) | 51 (28) | 53 (30) | 56 (31) | 59 (33) | NA   |    |
|       |                                              |                         |                                      |                                                                                      | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA |
|       |                                              |                         |                                      |                                                                                      | CFM                          | 1686                              | 1650    | 1617    | 1576    | 1544    | 1503    | 1468    | 1433    | 1393    | 1356 |    |
|       |                                              | Med – High <sup>4</sup> | Orange                               | High Stage Gas Heating<br>Alternate High Stage Cooling                               | BHP                          | 0.42                              | 0.44    | 0.45    | 0.46    | 0.48    | 0.49    | 0.51    | 0.52    | 0.53    | 0.55 |    |
|       |                                              |                         |                                      |                                                                                      | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA |
|       |                                              |                         |                                      |                                                                                      | High Stage Heat Rise °F (°C) | 52 (29)                           | 53 (29) | 54 (30) | 55 (31) | 56 (31) | 58 (32) | 59 (33) | NA      | NA      | NA   |    |
|       | High                                         |                         | Black                                | High Static, High Stage Cooling Only                                                 | CFM                          | 1854                              | 1837    | 1781    | 1784    | 1720    | 1698    | 1655    | 1625    | 1578    | 1532 |    |
|       |                                              |                         |                                      |                                                                                      | BHP                          | 0.56                              | 0.57    | 0.60    | 0.59    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.67 |    |
|       |                                              |                         |                                      |                                                                                      | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA   | NA |
|       | High                                         | Black                   | High Static, High Stage Cooling Only | High Stage Heat Rise °F (°C)                                                         | 47 (26)                      | 47 (26)                           | 49 (27) | 49 (27) | 51 (28) | 51 (28) | 53 (29) | 53 (30) | 55 (31) | 57 (32) |      |    |
|       |                                              |                         |                                      | CFM                                                                                  | 1934                         | 1900                              | 1855    | 1815    | 1778    | 1737    | 1695    | 1656    | 1606    | 1528    |      |    |
|       |                                              |                         |                                      | BHP                                                                                  | 0.59                         | 0.61                              | 0.62    | 0.64    | 0.65    | 0.67    | 0.68    | 0.70    | 0.70    | 0.68    |      |    |

Notes:  
 \* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).  
 1 Factory-shipped low stage cooling speed  
 2 Factory-shipped high stage cooling speed  
 3 Factory-shipped low stage gas heating speed  
 4 Factory-shipped high stage gas heating speed  
 Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.  
 "NA" = Not allowed for particular gas heating speed

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color | Allowable Functions                                                                  |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-------------------------|------------|--------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                         |            |                                                                                      |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 48130 | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Low <sup>1</sup>        | Blue       | Low Stage Cooling<br>Alternate Low Stage Gas Heating                                 | CFM                          | 1271                              | 1229    | 1177    | 1121    | 1066    | 1027    | 974     | 942     | 887     | 839     |
|       |                                              |                         |            |                                                                                      | BHP                          | 0.19                              | 0.20    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                         |            |                                                                                      | Low Stage Heat Rise °F (°C)  | 49 (27)                           | 51 (28) | 53 (30) | 56 (31) | 59 (33) | 61 (34) | 64 (36) | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                      | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                      | CFM                          | 1340                              | 1299    | 1240    | 1191    | 1139    | 1091    | 1050    | 1001    | 952     | 895     |
|       |                                              |                         |            |                                                                                      | BHP                          | 0.22                              | 0.23    | 0.24    | 0.25    | 0.26    | 0.28    | 0.29    | 0.30    | 0.31    | 0.32    |
|       | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Med – Low <sup>3</sup>  | Pink       | Low Stage Gas Heating<br>Alternate Low Stage Cooling<br>Alternate High Stage Cooling | Low Stage Heat Rise °F (°C)  | 47 (26)                           | 48 (27) | 51 (28) | 53 (29) | 55 (31) | 57 (32) | 60 (33) | 63 (35) | NA      | NA      |
|       |                                              |                         |            |                                                                                      | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                      | CFM                          | 1686                              | 1650    | 1617    | 1576    | 1544    | 1503    | 1468    | 1433    | 1393    | 1356    |
|       |                                              |                         |            |                                                                                      | BHP                          | 0.42                              | 0.44    | 0.45    | 0.46    | 0.48    | 0.49    | 0.51    | 0.52    | 0.53    | 0.55    |
|       |                                              |                         |            |                                                                                      | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                      | High Stage Heat Rise °F (°C) | 57 (32)                           | 58 (32) | 59 (33) | 61 (34) | 62 (35) | 64 (35) | 65(36 ) | NA      | NA      | NA      |
|       | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Med – High <sup>4</sup> | Orange     | High Stage Gas Heating<br>Alternate High Stage Cooling                               | CFM                          | 1854                              | 1837    | 1781    | 1784    | 1720    | 1698    | 1655    | 1625    | 1578    | 1532    |
|       |                                              |                         |            |                                                                                      | BHP                          | 0.56                              | 0.57    | 0.60    | 0.59    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.67    |
|       |                                              |                         |            |                                                                                      | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                      | High Stage Heat Rise °F (°C) | 52 (29)                           | 52 (29) | 54 (30) | 54 (30) | 56 (31) | 56 (31) | 58 (32) | 59 (33) | 61 (34) | 63 (35) |
|       |                                              |                         |            |                                                                                      | CFM                          | 1934                              | 1900    | 1855    | 1815    | 1778    | 1737    | 1695    | 1656    | 1606    | 1528    |
|       |                                              |                         |            |                                                                                      | BHP                          | 0.59                              | 0.61    | 0.62    | 0.64    | 0.65    | 0.67    | 0.68    | 0.70    | 0.70    | 0.68    |

## Notes:

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

1 Factory-shipped low stage cooling speed

2 Factory-shipped high stage cooling speed

3 Factory-shipped low stage gas heating speed

4 Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

"NA" = Not allowed for particular gas heating speed

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS**

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color | Allowable Functions                                                                   |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-------------------------|------------|---------------------------------------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                         |            |                                                                                       |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 60090 | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Low <sup>3</sup>        | Blue       | Low Stage Gas Heating                                                                 | CFM                          | 908                               | 865     | 800     | 747     | 690     | 629     | 583     | 532     | 500     | 447     |
|       |                                              |                         |            |                                                                                       | BHP                          | 0.12                              | 0.13    | 0.13    | 0.14    | 0.15    | 0.16    | 0.17    | 0.18    | 0.19    | 0.20    |
|       |                                              |                         |            |                                                                                       | Low Stage Heat Rise °F (°C)  | 47 (26)                           | 50 (28) | 54 (30) | 58 (32) | 62 (35) | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med – Low <sup>4</sup>  | Pink       | High Stage Gas Heating<br>Alternate Low Stage Cooling<br>Alternate High Stage Cooling | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                       | CFM                          | 1415                              | 1384    | 1340    | 1314    | 1270    | 1236    | 1192    | 1159    | 1116    | 1076    |
|       |                                              |                         |            |                                                                                       | BHP                          | 0.32                              | 0.34    | 0.35    | 0.36    | 0.37    | 0.39    | 0.39    | 0.41    | 0.42    | 0.44    |
|       | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Medium <sup>1</sup>     | Red        | Low Stage Cooling<br>Alternate High Stage Gas Heating                                 | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                       | High Stage Heat Rise °F (°C) | 48 (26)                           | 49 (27) | 50 (28) | 51 (29) | 53 (29) | 55 (30) | 57 (31) | 58 (32) | 60 (34) | 63 (35) |
|       |                                              |                         |            |                                                                                       | CFM                          | 1454                              | 1405    | 1364    | 1316    | 1281    | 1234    | 1198    | 1147    | 1105    | 1056    |
|       |                                              | Med – High <sup>2</sup> | Orange     | High Stage Cooling<br>Alternate High Stage Gas Heating                                | BHP                          | 0.34                              | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    | 0.42    | 0.43    | 0.45    |
|       |                                              |                         |            |                                                                                       | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                       | High Stage Heat Rise °F (°C) | 46 (26)                           | 48 (27) | 49 (27) | 51 (28) | 53 (29) | 55 (30) | 56 (31) | 59 (33) | 61 (34) | 64 (35) |
|       | High Static, High Stage Cooling Only         | High                    | Black      |                                                                                       | CFM                          | 1818                              | 1770    | 1731    | 1693    | 1657    | 1621    | 1579    | 1546    | 1505    | 1436    |
|       |                                              |                         |            |                                                                                       | BHP                          | 0.56                              | 0.57    | 0.59    | 0.60    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.68    |
|       |                                              |                         |            |                                                                                       | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                                                       | High Stage Heat Rise °F (°C) | 37 (21)                           | 38 (21) | 39 (22) | 40 (22) | 41 (23) | 42 (23) | 43 (24) | 44 (24) | 45 (25) | 47 (26) |
|       |                                              |                         |            |                                                                                       | CFM                          | 2138                              | 2084    | 2025    | 1967    | 1893    | 1829    | 1754    | 1678    | 1591    | 1475    |
|       |                                              |                         |            |                                                                                       | BHP                          | 0.98                              | 0.95    | 0.93    | 0.90    | 0.86    | 0.84    | 0.80    | 0.76    | 0.74    | 0.68    |

Notes:  
 \* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).  
 1 Factory-shipped low stage cooling speed  
 2 Factory-shipped high stage cooling speed  
 3 Factory-shipped low stage gas heating speed  
 4 Factory-shipped high stage gas heating speed  
 Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.  
 "NA" = Not allowed for particular gas heating speed

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS

| Unit  | Heating Rise Range      | Motor Speed | Wire Color | Allowable Functions                                    |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |         |         |
|-------|-------------------------|-------------|------------|--------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                         |             |            |                                                        |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 60115 | Low <sup>3</sup>        | Blue        |            | Low Stage Gas Heating<br>Alternate Low Stage Cooling   | CFM                          | 1182                              | 1137    | 1102    | 1053    | 1012    | 966     | 920     | 868     | 830     | 783     |
|       |                         |             |            |                                                        | BHP                          | 0.21                              | 0.22    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.30    | 0.31    |
|       |                         |             |            |                                                        | Low Stage Heat Rise °F (°C)  | 47 (26)                           | 49 (27) | 51 (28) | 53 (29) | 55 (31) | 58 (32) | NA      | NA      | NA      | NA      |
|       |                         |             |            |                                                        | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       | Med – Low <sup>1</sup>  | Pink        |            | Low Stage Cooling<br>Alternate Low Stage Gas Heating   | CFM                          | 1454                              | 1405    | 1364    | 1316    | 1281    | 1234    | 1198    | 1147    | 1105    | 1056    |
|       |                         |             |            |                                                        | BHP                          | 0.34                              | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    | 0.42    | 0.43    | 0.45    |
|       |                         |             |            |                                                        | Low Stage Heat Rise °F (°C)  | 38 (21)                           | 40 (22) | 41 (23) | 42 (24) | 44 (25) | 45 (26) | 47 (27) | 49 (28) | 51 (29) | NA      |
|       |                         |             |            |                                                        | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       | Medium <sup>2</sup>     | Red         |            | High Stage Cooling<br>Alternate High Stage Gas Heating | CFM                          | 1818                              | 1770    | 1731    | 1693    | 1657    | 1621    | 1579    | 1546    | 1505    | 1436    |
|       |                         |             |            |                                                        | BHP                          | 0.56                              | 0.57    | 0.59    | 0.60    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.66    |
|       |                         |             |            |                                                        | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                         |             |            |                                                        | High Stage Heat Rise °F (°C) | 48 (27)                           | 49 (27) | 50 (28) | 51 (29) | 52 (29) | 54 (30) | 55 (31) | 56 (31) | 58 (32) | NA      |
|       | Med – High <sup>4</sup> | Orange      |            | High Stage Gas Heating<br>Alternate High Stage Cooling | CFM                          | 1881                              | 1849    | 1818    | 1793    | 1763    | 1729    | 1679    | 1610    | 1523    | 1479    |
|       |                         |             |            |                                                        | BHP                          | 0.67                              | 0.69    | 0.70    | 0.71    | 0.72    | 0.73    | 0.73    | 0.71    | 0.68    | 0.65    |
|       |                         |             |            |                                                        | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                         |             |            |                                                        | High Stage Heat Rise °F (°C) | 46 (26)                           | 47 (26) | 48 (27) | 48 (27) | 49 (27) | 50 (28) | 52 (29) | 54 (30) | 57 (32) | 59 (33) |
|       | High                    | Black       |            | High Static, High Stage Cooling Only                   | CFM                          | 2138                              | 2084    | 2025    | 1967    | 1893    | 1829    | 1754    | 1678    | 1591    | 1475    |
|       |                         |             |            |                                                        | BHP                          | 0.98                              | 0.95    | 0.93    | 0.90    | 0.86    | 0.84    | 0.80    | 0.76    | 0.74    | 0.68    |

## Notes:

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

1 Factory-shipped low stage cooling speed

2 Factory-shipped high stage cooling speed

3 Factory-shipped low stage gas heating speed

4 Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.  
"NA" = Not allowed for particular gas heating speed

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC SINGLE PHASE MODELS**

| Unit  | Heating Rise Range                           | Motor Speed             | Wire Color | Allowable Functions                                    |                              | External Static Pressure (in. WC) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-------------------------|------------|--------------------------------------------------------|------------------------------|-----------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                         |            |                                                        |                              | 0.1                               | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 60130 | 35 – 65°F Low Stage,<br>35 – 65°F High Stage | Low <sup>3</sup>        | Blue       | Low Stage Gas Heating<br>Alternate Low Stage Cooling   | CFM                          | 1182                              | 1137    | 1102    | 1053    | 1012    | 966     | 920     | 868     | 830     | 783     |
|       |                                              |                         |            |                                                        | BHP                          | 0.21                              | 0.22    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.30    | 0.31    |
|       |                                              |                         |            |                                                        | Low Stage Heat Rise °F (°C)  | 53 (29)                           | 55 (31) | 57 (32) | 59 (32) | 62 (34) | 65 (36) | NA      | NA      | NA      | NA      |
|       |                                              | Med – Low <sup>1</sup>  | Pink       | Low Stage Cooling<br>Alternate Low Stage Gas Heating   | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | CFM                          | 1454                              | 1405    | 1364    | 1316    | 1281    | 1234    | 1198    | 1147    | 1105    | 1056    |
|       |                                              |                         |            |                                                        | BHP                          | 0.34                              | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    | 0.42    | 0.43    | 0.45    |
|       | 35 – 65°F High Stage                         | Medium <sup>2</sup>     | Red        | High Stage Cooling<br>Alternate High Stage Gas Heating | Low Stage Heat Rise °F (°C)  | 43 (24)                           | 45 (25) | 46 (26) | 48 (26) | 49 (27) | 51 (28) | 52 (29) | 55 (30) | 57 (31) | 59 (33) |
|       |                                              |                         |            |                                                        | High Stage Heat Rise °F (°C) | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | CFM                          | 1818                              | 1770    | 1731    | 1693    | 1657    | 1621    | 1579    | 1546    | 1505    | 1436    |
|       |                                              | Med – High <sup>4</sup> | Orange     | High Stage Gas Heating<br>Alternate High Stage Cooling | BHP                          | 0.56                              | 0.57    | 0.59    | 0.60    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.66    |
|       |                                              |                         |            |                                                        | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | High Stage Heat Rise °F (°C) | 53 (29)                           | 54 (30) | 55 (31) | 57 (31) | 58 (32) | 59 (33) | 61 (34) | 62 (34) | 64 (35) | NA      |
|       | High                                         | High                    | Black      | High Static, High Stage Cooling Only                   | CFM                          | 1881                              | 1849    | 1818    | 1793    | 1763    | 1729    | 1679    | 1610    | 1523    | 1479    |
|       |                                              |                         |            |                                                        | BHP                          | 0.67                              | 0.69    | 0.70    | 0.71    | 0.72    | 0.73    | 0.73    | 0.71    | 0.68    | 0.65    |
|       |                                              |                         |            |                                                        | Low Stage Heat Rise °F (°C)  | NA                                | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                         |            |                                                        | High Stage Heat Rise °F (°C) | 51 (28)                           | 52 (29) | 53 (29) | 53 (30) | 54 (30) | 55 (31) | 57 (32) | 60 (33) | 63 (35) | 65 (36) |
|       |                                              |                         |            |                                                        | CFM                          | 2138                              | 2084    | 2025    | 1967    | 1893    | 1829    | 1754    | 1678    | 1591    | 1475    |
|       |                                              |                         |            |                                                        | BHP                          | 0.98                              | 0.95    | 0.93    | 0.90    | 0.86    | 0.84    | 0.80    | 0.76    | 0.74    | 0.68    |

Notes:  
 \* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).  
 1 Factory-shipped low stage cooling speed  
 2 Factory-shipped high stage cooling speed  
 3 Factory-shipped low stage gas heating speed  
 4 Factory-shipped high stage gas heating speed  
 Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.  
 "NA" = Not allowed for particular gas heating speed

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 24040 | 15 - 45°F Low Stage,<br>20 - 50°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 714                                 | 525     |         |         |         |         |         |         |         |         |
|       |                                              |                       |            | BHP                          | 0.08                                | 0.07    |         |         |         |         |         |         |         |         |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 26 (15)                             | 36 (20) | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 41 (23)                             | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 777                                 | 692     | 583     | 465     | 318     |         |         |         |         |         |
|       |                                              |                       |            | BHP                          | 0.09                                | 0.10    | 0.10    | 0.11    | 0.12    |         |         |         |         |         |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 24 (13)                             | 27 (15) | 32 (18) | 40 (22) | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 37 (21)                             | 42 (23) | 50 (28) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       | 15 - 45°F Low Stage,<br>20 - 50°F High Stage | Medium <sup>4</sup>   | Red        | CFM                          | 877                                 | 779     | 698     | 598     | 519     | 410     |         |         |         |         |
|       |                                              |                       |            | BHP                          | 0.12                                | 0.12    | 0.13    | 0.14    | 0.15    | 0.15    |         |         |         |         |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 21 (12)                             | 24 (13) | 27 (15) | 31 (17) | 36 (20) | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 33 (18)                             | 37 (21) | 42 (23) | 49 (27) | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-High <sup>2</sup> | Orange     | CFM                          | 904                                 | 841     | 769     | 705     | 628     | 522     | 372     |         |         |         |
|       |                                              |                       |            | BHP                          | 0.16                                | 0.17    | 0.17    | 0.18    | 0.19    | 0.19    | 0.20    |         |         |         |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 21 (12)                             | 22 (12) | 24 (14) | 27 (15) | 30 (17) | 36 (20) | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 32 (18)                             | 35 (19) | 38 (21) | 41 (23) | 46 (26) | NA      | NA      | NA      | NA      | NA      |
|       | High                                         | Black                 |            | CFM                          | 1291                                | 1206    | 1142    | 1081    | 1017    | 951     | 888     | 823     | 753     | 668     |
|       |                                              |                       |            | BHP                          | 0.31                                | 0.32    | 0.33    | 0.34    | 0.34    | 0.35    | 0.36    | 0.36    | 0.37    | 0.37    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 15 (8)                              | 16 (9)  | 16 (9)  | 17 (10) | 18 (10) | 20 (11) | 21 (12) | 23 (13) | 25 (14) | 28 (16) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 23 (13)                             | 24 (13) | 25 (14) | 27 (15) | 29 (16) | 31 (17) | 33 (18) | 35 (20) | 39 (21) | 44 (24) |

**DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)**

| Unit  | Heating Rise Range    | Motor Speed | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|-----------------------|-------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                       |             |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 24060 | Low <sup>1</sup>      | Blue        |            | CFM                          | 777                                 | 692     | 583     | 465     | 318     | ---     | ---     | ---     | ---     | ---     |
|       |                       |             |            | BHP                          | 0.09                                | 0.10    | 0.10    | 0.11    | 0.12    | ---     | ---     | ---     | ---     | ---     |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | 37 (20)                             | 41 (23) | 49 (27) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                       |             |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       | Med-Low <sup>3</sup>  | Pink        |            | CFM                          | 877                                 | 779     | 698     | 598     | 519     | 410     | ---     | ---     | ---     | ---     |
|       |                       |             |            | BHP                          | 0.12                                | 0.12    | 0.13    | 0.14    | 0.15    | 0.15    | ---     | ---     | ---     | ---     |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | 21 (12)                             | 24 (13) | 27 (15) | 31 (17) | 36 (20) | NA      | NA      | NA      | NA      | NA      |
|       |                       |             |            | High Stage Heat Rise °F (°C) | 33 (18)                             | 37 (21) | 42 (23) | 49 (27) | NA      | NA      | NA      | NA      | NA      | NA      |
|       | Medium <sup>2</sup>   | Red         |            | CFM                          | 904                                 | 841     | 769     | 705     | 628     | 522     | 372     | ---     | ---     | ---     |
|       |                       |             |            | BHP                          | 0.16                                | 0.17    | 0.17    | 0.18    | 0.19    | 0.19    | 0.20    | ---     | ---     | ---     |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | 32 (18)                             | 34 (19) | 37 (21) | 40 (22) | 45 (25) | 55 (30) | NA      | NA      | NA      | NA      |
|       |                       |             |            | High Stage Heat Rise °F (°C) | 49 (27)                             | 53 (29) | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       | Med-High <sup>4</sup> | Orange      |            | CFM                          | 1229                                | 1171    | 1105    | 1049    | 980     | 913     | 838     | 775     | 679     | 516     |
|       |                       |             |            | BHP                          | 0.28                                | 0.30    | 0.30    | 0.31    | 0.32    | 0.33    | 0.33    | 0.34    | 0.34    | 0.33    |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 26 (14) | 27 (15) | 29 (16) | 31 (17) | 34 (19) | 37 (20) | 42 (23) | 55 (31) |
|       |                       |             |            | High Stage Heat Rise °F (°C) | 36 (20)                             | 38 (21) | 40 (22) | 42 (24) | 45 (25) | 49 (27) | 53 (29) | NA      | NA      | NA      |
|       | High                  | Black       |            | CFM                          | 1291                                | 1206    | 1142    | 1081    | 1017    | 951     | 888     | 823     | 753     | 668     |
|       |                       |             |            | BHP                          | 0.31                                | 0.32    | 0.33    | 0.34    | 0.34    | 0.35    | 0.36    | 0.36    | 0.37    | 0.37    |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 25 (14) | 26 (15) | 28 (16) | 30 (17) | 32 (18) | 35 (19) | 38 (21) | 43 (24) |
|       |                       |             |            | High Stage Heat Rise °F (°C) | 34 (19)                             | 37 (20) | 39 (22) | 41 (23) | 44 (24) | 47 (26) | 50 (28) | 54 (30) | NA      | NA      |

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 30040 | 15 - 45°F Low Stage,<br>20 - 50°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 714                                 | 525     |         |         |         |         |         |         |         |         |
|       |                                              |                       |            | BHP                          | 0.08                                | 0.07    |         |         |         |         |         |         |         |         |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 26 (15)                             | 36 (20) | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 41 (23)                             | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 831                                 | 765     | 670     | 586     | 466     | 299     |         |         |         |         |
|       |                                              |                       |            | BHP                          | 0.11                                | 0.12    | 0.12    | 0.13    | 0.13    | 0.14    |         |         |         |         |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 23 (13)                             | 25 (14) | 28 (16) | 32 (18) | 40 (22) | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 35 (19)                             | 38 (21) | 43 (24) | 50 (28) | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Medium <sup>4</sup>   | Red        | CFM                          | 877                                 | 779     | 698     | 598     | 519     | 410     |         |         |         |         |
|       |                                              |                       |            | BHP                          | 0.12                                | 0.12    | 0.13    | 0.14    | 0.15    | 0.15    |         |         |         |         |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 21 (12)                             | 24 (13) | 27 (15) | 31 (17) | 36 (20) | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 33 (18)                             | 37 (21) | 42 (23) | 49 (27) | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-High <sup>2</sup> | Orange     | CFM                          | 1139                                | 1069    | 1012    | 937     | 870     | 786     | 724     | 626     | 512     | 381     |
|       |                                              |                       |            | BHP                          | 0.22                                | 0.23    | 0.24    | 0.24    | 0.25    | 0.26    | 0.26    | 0.27    | 0.27    | 0.28    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 17 (9)                              | 18 (10) | 19 (10) | 20 (11) | 22 (12) | 24 (13) | 26 (14) | 30 (17) | 37 (20) | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 26 (14)                             | 27 (15) | 29 (16) | 31 (17) | 33 (19) | 37 (21) | 40 (22) | 47 (26) | NA      | NA      |
|       |                                              | High                  | Black      | CFM                          | 1531                                | 1460    | 1382    | 1301    | 1209    | 1114    | 1003    | 890     | 764     | 629     |
|       |                                              |                       |            | BHP                          | 0.53                                | 0.52    | 0.50    | 0.48    | 0.46    | 0.44    | 0.42    | 0.40    | 0.37    | 0.35    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | 16 (9)  | 17 (9)  | 19 (10) | 21 (12) | 25 (14) | 30 (17) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | NA                                  | 20 (11) | 21 (12) | 22 (12) | 24 (13) | 26 (15) | 29 (16) | 33 (18) | 38 (21) | 46 (26) |

**DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)**

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 30060 | 25 - 55°F Low Stage,<br>25 - 55°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 777                                 | 692     | 583     | 465     | 318     | ---     | ---     | ---     | ---     | ---     |
|       |                                              |                       |            | BHP                          | 0.09                                | 0.10    | 0.10    | 0.11    | 0.12    | ---     | ---     | ---     | ---     | ---     |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 37 (21)                             | 41 (23) | 49 (27) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 831                                 | 765     | 670     | 586     | 466     | 299     | ---     | ---     | ---     | ---     |
|       |                                              |                       |            | BHP                          | 0.11                                | 0.12    | 0.12    | 0.13    | 0.13    | 0.14    | ---     | ---     | ---     | ---     |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 34 (19)                             | 37 (21) | 43 (24) | 49 (27) | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 54 (30)                             | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Medium <sup>2</sup>   | Red        | CFM                          | 1139                                | 1069    | 1012    | 937     | 870     | 786     | 724     | 626     | 512     | 381     |
|       |                                              |                       |            | BHP                          | 0.22                                | 0.23    | 0.24    | 0.24    | 0.25    | 0.26    | 0.26    | 0.27    | 0.27    | 0.28    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 25 (14)                             | 27 (15) | 28 (16) | 30 (17) | 33 (18) | 36 (20) | 39 (22) | 46 (26) | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 39 (22)                             | 42 (23) | 44 (24) | 47 (26) | 51 (28) | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-High <sup>4</sup> | Orange     | CFM                          | 1229                                | 1171    | 1105    | 1049    | 980     | 913     | 838     | 775     | 679     | 516     |
|       |                                              |                       |            | BHP                          | 0.28                                | 0.30    | 0.30    | 0.31    | 0.32    | 0.33    | 0.33    | 0.34    | 0.34    | 0.33    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 26 (14) | 27 (15) | 29 (16) | 31 (17) | 34 (19) | 37 (21) | 42 (23) | 55 (31) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 36 (20)                             | 38 (21) | 40 (22) | 42 (23) | 45 (25) | 49 (27) | 53 (29) | NA      | NA      | NA      |
|       |                                              | High                  | Black      | CFM                          | 1531                                | 1460    | 1382    | 1301    | 1209    | 1114    | 1003    | 890     | 764     | 629     |
|       |                                              |                       |            | BHP                          | 0.53                                | 0.52    | 0.50    | 0.48    | 0.46    | 0.44    | 0.42    | 0.40    | 0.37    | 0.35    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | 26 (14) | 28 (16) | 32 (18) | 37 (21) | 45 (25) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 29 (16)                             | 30 (17) | 32 (18) | 34 (19) | 37 (21) | 40 (22) | 44 (24) | 50 (28) | NA      | NA      |

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 36060 | 25 - 55°F Low Stage,<br>25 - 55°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 694                                 | 624     | 533     | 460     | 383     | 328     | ---     | ---     | ---     | ---     |
|       |                                              |                       |            | BHP                          | 0.05                                | 0.05    | 0.06    | 0.07    | 0.07    | 0.08    | ---     | ---     | ---     | ---     |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 41 (23)                             | 46 (25) | 54 (30) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 934                                 | 864     | 810     | 745     | 698     | 649     | 571     | 525     | 486     | 428     |
|       |                                              |                       |            | BHP                          | 0.10                                | 0.10    | 0.11    | 0.12    | 0.13    | 0.14    | 0.14    | 0.15    | 0.16    | 0.17    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 31 (17)                             | 33 (18) | 35 (20) | 38 (21) | 41 (23) | 44 (24) | 50 (28) | 54 (30) | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 48 (26)                             | 52 (29) | 55 (31) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       | 25 - 55°F Low Stage,<br>25 - 55°F High Stage | Medium <sup>4</sup>   | Red        | CFM                          | 1213                                | 1169    | 1110    | 1065    | 1016    | 964     | 923     | 878     | 820     | 777     |
|       |                                              |                       |            | BHP                          | 0.16                                | 0.17    | 0.17    | 0.19    | 0.20    | 0.21    | 0.22    | 0.23    | 0.24    | 0.25    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 26 (14) | 27 (15) | 28 (16) | 30 (16) | 31 (17) | 33 (18) | 35 (19) | 37 (20) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 37 (20)                             | 38 (21) | 40 (22) | 42 (23) | 44 (24) | 46 (26) | 48 (27) | 51 (28) | 54 (30) | NA      |
|       |                                              | Med-High <sup>2</sup> | Orange     | CFM                          | 1251                                | 1198    | 1149    | 1104    | 1066    | 1017    | 970     | 932     | 892     | 839     |
|       |                                              |                       |            | BHP                          | 0.19                                | 0.21    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 25 (14) | 26 (14) | 27 (15) | 28 (16) | 29 (16) | 31 (17) | 32 (18) | 34 (19) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 36 (20)                             | 37 (21) | 39 (22) | 40 (22) | 42 (23) | 44 (24) | 46 (25) | 48 (27) | 50 (28) | 53 (29) |
|       | High                                         | Black                 |            | CFM                          | 1466                                | 1423    | 1384    | 1343    | 1308    | 1263    | 1219    | 1183    | 1145    | 1106    |
|       |                                              |                       |            | BHP                          | 0.30                                | 0.31    | 0.33    | 0.34    | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | 25 (14) | 26 (14) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 30 (17)                             | 31 (17) | 32 (18) | 33 (18) | 34 (19) | 35 (20) | 37 (20) | 38 (21) | 39 (22) | 40 (22) |

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)**

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |            |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|------------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5        | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 36090 | 35 - 65°F Low Stage,<br>35 - 65°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 1097                                | 971     | 823     | 747     | 669        | 636     | 558     | 513     | 456     | 412     |
|       |                                              |                       |            | BHP                          | 0.12                                | 0.11    | 0.10    | 0.11    | 0.12       | 0.13    | 0.13    | 0.14    | 0.15    | 0.16    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 39 (22)                             | 44 (25) | 52 (29) | 58 (32) | 64 (36)    | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 61 (34)                             | NA      | NA      | NA      | NA         | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 934                                 | 864     | 810     | 745     | 698        | 649     | 571     | 525     | 486     | 428     |
|       |                                              |                       |            | BHP                          | 0.10                                | 0.10    | 0.11    | 0.12    | 0.13       | 0.14    | 0.14    | 0.15    | 0.16    | 0.17    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 46 (26)                             | 50 (28) | 53 (29) | 58 (32) | 62 (34)    | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA         | NA      | NA      | NA      | NA      | NA      |
|       | 35 - 65°F Low Stage,<br>35 - 65°F High Stage | Medium <sup>2</sup>   | Red        | CFM                          | 1251                                | 1198    | 1149    | 1104    | 1066       | 1017    | 970     | 932     | 892     | 839     |
|       |                                              |                       |            | BHP                          | 0.19                                | 0.21    | 0.21    | 0.23    | 0.24       | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | 36 (20) | 37 (21) | 39 (22) | 40 (22)    | 42 (23) | 44 (25) | 46 (26) | 48 (27) | 51 (28) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 54 (30)                             | 56 (31) | 59 (33) | 61 (34) | 63 (35)    | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-High <sup>4</sup> | Orange     | CFM                          | 1451                                | 1415    | 1372    | 1327    | 1287       | 1249    | 1212    | 1168    | 1130    | 1094    |
|       |                                              |                       |            | BHP                          | 0.29                                | 0.30    | 0.31    | 0.32    | 248.<br>59 | 0.35    | 0.36    | 0.37    | 0.38    | 0.39    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA         | NA      | 35 (20) | 37 (20) | 38 (21) | 39 (22) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 46 (26)                             | 48 (26) | 49 (27) | 51 (28) | 52 (29)    | 54 (30) | 56 (31) | 58 (32) | 60 (33) | 62 (34) |
|       | High                                         | Black                 |            | CFM                          | 1466                                | 1423    | 1384    | 1343    | 1308       | 1263    | 1219    | 1183    | 1145    | 1106    |
|       |                                              |                       |            | BHP                          | 0.30                                | 0.31    | 0.33    | 0.34    | 0.35       | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA         | NA      | 35 (20) | 36 (20) | 38 (21) | 39 (22) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 46 (26)                             | 47 (26) | 49 (27) | 50 (28) | 52 (29)    | 53 (30) | 55 (31) | 57 (32) | 59 (33) | 61 (34) |

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 42060 | 25 - 55°F Low Stage,<br>25 - 55°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 694                                 | 624     | 533     | 460     | 383     | 328     | ---     | ---     | ---     | ---     |
|       |                                              |                       |            | BHP                          | 0.05                                | 0.05    | 0.06    | 0.07    | 0.07    | 0.08    | ---     | ---     | ---     | ---     |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 41 (23)                             | 46 (25) | 54 (30) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 1076                                | 1026    | 972     | 918     | 872     | 827     | 771     | 714     | 666     | 611     |
|       |                                              |                       |            | BHP                          | 0.13                                | 0.14    | 0.15    | 0.15    | 0.17    | 0.18    | 0.18    | 0.20    | 0.21    | 0.22    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 27 (15)                             | 28 (15) | 29 (16) | 31 (17) | 33 (18) | 35 (19) | 37 (21) | 40 (22) | 43 (24) | 47 (26) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 41 (23)                             | 43 (24) | 46 (25) | 48 (27) | 51 (28) | 54 (30) | NA      | NA      | NA      | NA      |
|       |                                              | Medium <sup>4</sup>   | Red        | CFM                          | 1213                                | 1169    | 1110    | 1065    | 1016    | 964     | 923     | 878     | 820     | 777     |
|       |                                              |                       |            | BHP                          | 0.16                                | 0.17    | 0.17    | 0.19    | 0.20    | 0.21    | 0.22    | 0.23    | 0.24    | 0.25    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 26 (14) | 27 (15) | 28 (16) | 30 (16) | 31 (17) | 33 (18) | 35 (19) | 37 (20) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 37 (20)                             | 38 (21) | 40 (22) | 42 (23) | 44 (24) | 46 (26) | 48 (27) | 51 (28) | 54 (30) | NA      |
|       |                                              | Med-High <sup>2</sup> | Orange     | CFM                          | 1451                                | 1415    | 1372    | 1327    | 1287    | 1249    | 1212    | 1168    | 1130    | 1094    |
|       |                                              |                       |            | BHP                          | 0.29                                | 0.30    | 0.31    | 0.32    | 248.59  | 0.35    | 0.36    | 0.37    | 0.38    | 0.39    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | 25 (14) | 26 (15) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 31 (17)                             | 31 (17) | 32 (18) | 34 (18) | 35 (19) | 36 (20) | 37 (20) | 38 (21) | 39 (22) | 41 (23) |
|       | High                                         | Black                 |            | CFM                          | 1633                                | 1590    | 1552    | 1518    | 1483    | 1444    | 1406    | 1372    | 1340    | 1303    |
|       |                                              |                       |            | BHP                          | 0.41                                | 0.43    | 0.44    | 0.45    | 0.47    | 0.48    | 0.49    | 0.50    | 0.51    | 0.53    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 27 (15)                             | 28 (16) | 29 (16) | 29 (16) | 30 (17) | 31 (17) | 32 (18) | 32 (18) | 33 (18) | 34 (19) |

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |            |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|------------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5        | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 42090 | 35 - 65°F Low Stage,<br>35 - 65°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 1097                                | 971     | 823     | 747     | 669        | 636     | 558     | 513     | 456     | 412     |
|       |                                              |                       |            | BHP                          | 0.12                                | 0.11    | 0.10    | 0.11    | 0.12       | 0.13    | 0.13    | 0.14    | 0.15    | 0.16    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 39 (22)                             | 44 (25) | 52 (29) | 58 (32) | 64 (36)    | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 61 (34)                             | NA      | NA      | NA      | NA         | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 1076                                | 1026    | 972     | 918     | 872        | 827     | 771     | 714     | 666     | 611     |
|       |                                              |                       |            | BHP                          | 0.13                                | 0.14    | 0.15    | 0.15    | 0.17       | 0.18    | 0.18    | 0.20    | 0.21    | 0.22    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 40 (22)                             | 42 (23) | 44 (25) | 47 (26) | 49 (27)    | 52 (29) | 56 (31) | 60 (33) | 64 (36) | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 63 (35)                             | NA      | NA      | NA      | NA         | NA      | NA      | NA      | NA      | NA      |
|       | 35 - 65°F Low Stage,<br>35 - 65°F High Stage | Medium                | Red        | CFM                          | 1251                                | 1198    | 1149    | 1104    | 1066       | 1017    | 970     | 932     | 892     | 839     |
|       |                                              |                       |            | BHP                          | 0.19                                | 0.21    | 0.21    | 0.23    | 0.24       | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | 36 (20) | 37 (21) | 39 (22) | 40 (22)    | 42 (23) | 44 (25) | 46 (26) | 48 (27) | 51 (28) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 54 (30)                             | 56 (31) | 59 (33) | 61 (34) | 63 (35)    | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-High <sup>2</sup> | Orange     | CFM                          | 1451                                | 1415    | 1372    | 1327    | 1287       | 1249    | 1212    | 1168    | 1130    | 1094    |
|       |                                              |                       |            | BHP                          | 0.29                                | 0.30    | 0.31    | 0.32    | 248.<br>59 | 0.35    | 0.36    | 0.37    | 0.38    | 0.39    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA         | NA      | 35 (20) | 37 (20) | 38 (21) | 39 (22) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 46 (26)                             | 48 (26) | 49 (27) | 51 (28) | 52 (29)    | 54 (30) | 56 (31) | 58 (32) | 60 (33) | 62 (34) |
|       | High <sup>4</sup>                            | Black                 |            | CFM                          | 1633                                | 1590    | 1552    | 1518    | 1483       | 1444    | 1406    | 1372    | 1340    | 1303    |
|       |                                              |                       |            | BHP                          | 0.41                                | 0.43    | 0.44    | 0.45    | 0.47       | 0.48    | 0.49    | 0.50    | 0.51    | 0.53    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA         | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 41 (23)                             | 42 (24) | 43 (24) | 44 (25) | 45 (25)    | 47 (26) | 48 (27) | 49 (27) | 50 (28) | 52 (29) |

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 48090 | 35 - 65°F Low Stage,<br>35 - 65°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 1067                                | 904     | 703     | 587     | 501     | 449     | 380     | 340     | ---     | ---     |
|       |                                              |                       |            | BHP                          | 0.12                                | 0.10    | 0.09    | 0.09    | 0.09    | 0.10    | 0.11    | 0.12    | ---     | ---     |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 40 (22)                             | 48 (26) | 61 (34) | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 63 (35)                             | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 1271                                | 1229    | 1177    | 1121    | 1066    | 1027    | 974     | 942     | 887     | 839     |
|       |                                              |                       |            | BHP                          | 0.19                                | 0.20    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | 35 (19) | 36 (20) | 38 (21) | 40 (22) | 42 (23) | 44 (25) | 46 (25) | 48 (27) | 51 (28) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 53 (29)                             | 55 (30) | 57 (32) | 60 (33) | 63 (35) | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Medium <sup>4</sup>   | Red        | CFM                          | 1340                                | 1299    | 1240    | 1191    | 1139    | 1091    | 1050    | 1001    | 952     | 895     |
|       |                                              |                       |            | BHP                          | 0.22                                | 0.23    | 0.24    | 0.25    | 0.26    | 0.28    | 0.29    | 0.30    | 0.31    | 0.32    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 35 (19) | 36 (20) | 38 (21) | 39 (22) | 41 (23) | 43 (24) | 45 (25) | 48 (27) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 50 (28)                             | 52 (29) | 54 (30) | 57 (31) | 59 (33) | 62 (34) | 64 (36) | NA      | NA      | NA      |
|       |                                              | Med-High <sup>2</sup> | Orange     | CFM                          | 1686                                | 1650    | 1617    | 1576    | 1544    | 1503    | 1468    | 1433    | 1393    | 1356    |
|       |                                              |                       |            | BHP                          | 0.42                                | 0.44    | 0.45    | 0.46    | 0.48    | 0.49    | 0.51    | 0.52    | 0.53    | 0.55    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 40 (22)                             | 41 (23) | 42 (23) | 43 (24) | 44 (24) | 45 (25) | 46 (26) | 47 (26) | 48 (27) | 50 (28) |
|       |                                              | High                  | Black      | CFM                          | 1854                                | 1837    | 1781    | 1784    | 1720    | 1698    | 1655    | 1625    | 1578    | 1532    |
|       |                                              |                       |            | BHP                          | 0.56                                | 0.57    | 0.60    | 0.59    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.67    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 36 (20)                             | 37 (20) | 38 (21) | 38 (21) | 39 (22) | 40 (22) | 41 (23) | 41 (23) | 43 (24) | 44 (24) |

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)**

| Unit  | Heating Rise Range                           | Motor Speed          | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                      |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 48115 | 30 - 60°F Low Stage,<br>30 - 60°F High Stage | Low <sup>1</sup>     | Blue       | CFM                          | 1271                                | 1229    | 1177    | 1121    | 1066    | 1027    | 974     | 942     | 887     | 839     |
|       |                                              |                      |            | BHP                          | 0.19                                | 0.20    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | 44 (24)                             | 45 (25) | 47 (26) | 50 (28) | 52 (29) | 54 (30) | 57 (32) | 59 (33) | NA      | NA      |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>3</sup> | Pink       | CFM                          | 1340                                | 1299    | 1240    | 1191    | 1139    | 1091    | 1050    | 1001    | 952     | 895     |
|       |                                              |                      |            | BHP                          | 0.22                                | 0.23    | 0.24    | 0.25    | 0.26    | 0.28    | 0.29    | 0.30    | 0.31    | 0.32    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | 42 (23)                             | 43 (24) | 45 (25) | 47 (26) | 49 (27) | 51 (28) | 53 (30) | 56 (31) | 59 (33) | NA      |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Medium <sup>2</sup>  | Red        | CFM                          | 1686                                | 1650    | 1617    | 1576    | 1544    | 1503    | 1468    | 1433    | 1393    | 1356    |
|       |                                              |                      |            | BHP                          | 0.42                                | 0.44    | 0.45    | 0.46    | 0.48    | 0.49    | 0.51    | 0.52    | 0.53    | 0.55    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | 33 (18)                             | 34 (19) | 35 (19) | 35 (20) | 36 (20) | 37 (21) | 38 (21) | 39 (22) | 40 (22) | 41 (23) |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | 52 (29)                             | 53 (29) | 54 (30) | 55 (31) | 56 (31) | 58 (32) | 59 (33) | NA      | NA      | NA      |
|       |                                              | Med-High             | Orange     | CFM                          | 1854                                | 1837    | 1781    | 1784    | 1720    | 1698    | 1655    | 1625    | 1578    | 1532    |
|       |                                              |                      |            | BHP                          | 0.56                                | 0.57    | 0.60    | 0.59    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.67    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | 30 (17)                             | 30 (17) | 31 (17) | 31 (17) | 32 (18) | 33 (18) | 34 (19) | 34 (19) | 35 (20) | 36 (20) |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | 47 (26)                             | 47 (26) | 49 (27) | 49 (27) | 51 (28) | 51 (28) | 53 (29) | 53 (30) | 55 (31) | 57 (32) |
|       |                                              | High <sup>4</sup>    | Black      | CFM                          | 1934                                | 1900    | 1855    | 1815    | 1778    | 1737    | 1695    | 1656    | 1606    | 1528    |
|       |                                              |                      |            | BHP                          | 0.59                                | 0.61    | 0.62    | 0.64    | 0.65    | 0.67    | 0.68    | 0.70    | 0.70    | 0.68    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 30 (17) | 31 (17) | 31 (17) | 32 (18) | 33 (18) | 34 (19) | 35 (19) | 37 (20) |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | 45 (25)                             | 46 (25) | 47 (26) | 48 (27) | 49 (27) | 50 (28) | 51 (28) | 52 (29) | 54 (30) | 57 (32) |

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)

| Unit  | Heating Rise Range                           | Motor Speed          | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                      |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 48130 | 35 - 65°F Low Stage,<br>35 - 65°F High Stage | Low <sup>1</sup>     | Blue       | CFM                          | 1271                                | 1229    | 1177    | 1121    | 1066    | 1027    | 974     | 942     | 887     | 839     |
|       |                                              |                      |            | BHP                          | 0.19                                | 0.20    | 0.21    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.29    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | 49 (27)                             | 51 (28) | 53 (30) | 56 (31) | 59 (33) | 61 (34) | 64 (36) | NA      | NA      | NA      |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>3</sup> | Pink       | CFM                          | 1340                                | 1299    | 1240    | 1191    | 1139    | 1091    | 1050    | 1001    | 952     | 895     |
|       |                                              |                      |            | BHP                          | 0.22                                | 0.23    | 0.24    | 0.25    | 0.26    | 0.28    | 0.29    | 0.30    | 0.31    | 0.32    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | 47 (26)                             | 48 (27) | 51 (28) | 53 (29) | 55 (31) | 57 (32) | 60 (33) | 63 (35) | NA      | NA      |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Medium <sup>2</sup>  | Red        | CFM                          | 1686                                | 1650    | 1617    | 1576    | 1544    | 1503    | 1468    | 1433    | 1393    | 1356    |
|       |                                              |                      |            | BHP                          | 0.42                                | 0.44    | 0.45    | 0.46    | 0.48    | 0.49    | 0.51    | 0.52    | 0.53    | 0.55    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | 37 (21)                             | 38 (21) | 39 (22) | 40 (22) | 41 (23) | 42 (23) | 43 (24) | 44 (24) | 45 (25) | 46 (26) |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | 57 (32)                             | 58 (32) | 59 (33) | 61 (34) | 62 (35) | 64 (35) | 65 (36) | NA      | NA      | NA      |
|       |                                              | Med-High             | Orange     | CFM                          | 1854                                | 1837    | 1781    | 1784    | 1720    | 1698    | 1655    | 1625    | 1578    | 1532    |
|       |                                              |                      |            | BHP                          | 0.56                                | 0.57    | 0.60    | 0.59    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.67    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | 35 (20) | 35 (20) | 36 (20) | 37 (20) | 38 (21) | 39 (21) | 40 (22) | 41 (23) |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | 52 (29)                             | 52 (29) | 54 (30) | 54 (30) | 56 (31) | 56 (31) | 58 (32) | 59 (33) | 61 (34) | 63 (35) |
|       |                                              | High <sup>4</sup>    | Black      | CFM                          | 1934                                | 1900    | 1855    | 1815    | 1778    | 1737    | 1695    | 1656    | 1606    | 1528    |
|       |                                              |                      |            | BHP                          | 0.59                                | 0.61    | 0.62    | 0.64    | 0.65    | 0.67    | 0.68    | 0.70    | 0.70    | 0.68    |
|       |                                              |                      |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | 35 (19) | 35 (20) | 36 (20) | 37 (21) | 38 (21) | 39 (22) | 41 (23) |
|       |                                              |                      |            | High Stage Heat Rise °F (°C) | 50 (28)                             | 50 (28) | 52 (29) | 53 (29) | 54 (30) | 55 (31) | 57 (31) | 58 (32) | 60 (33) | 63 (35) |

**DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)**

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 60090 | 35 - 65°F Low Stage,<br>35 - 65°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 908                                 | 865     | 800     | 747     | 690     | 629     | 583     | 532     | 500     | 447     |
|       |                                              |                       |            | BHP                          | 0.12                                | 0.13    | 0.13    | 0.14    | 0.15    | 0.16    | 0.17    | 0.18    | 0.19    | 0.20    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 47 (26)                             | 50 (28) | 54 (30) | 58 (32) | 62 (35) | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>4</sup>  | Pink       | CFM                          | 1415                                | 1384    | 1340    | 1314    | 1270    | 1236    | 1192    | 1159    | 1116    | 1076    |
|       |                                              |                       |            | BHP                          | 0.32                                | 0.34    | 0.35    | 0.36    | 0.37    | 0.39    | 0.39    | 0.41    | 0.42    | 0.44    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | 35 (19) | 36 (20) | 37 (21) | 38 (21) | 40 (22) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 48 (26)                             | 49 (27) | 50 (28) | 51 (29) | 53 (29) | 55 (30) | 57 (31) | 58 (32) | 60 (34) | 63 (35) |
|       |                                              | Medium <sup>1</sup>   | Red        | CFM                          | 1454                                | 1405    | 1364    | 1316    | 1281    | 1234    | 1198    | 1147    | 1105    | 1056    |
|       |                                              |                       |            | BHP                          | 0.34                                | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    | 0.42    | 0.43    | 0.45    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | 35 (19) | 36 (20) | 37 (21) | 39 (22) | 41 (23) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 46 (26)                             | 48 (27) | 49 (27) | 51 (28) | 53 (29) | 55 (30) | 56 (31) | 59 (33) | 61 (34) | 64 (35) |
|       |                                              | Med-High <sup>2</sup> | Orange     | CFM                          | 1818                                | 1770    | 1731    | 1693    | 1657    | 1621    | 1579    | 1546    | 1505    | 1436    |
|       |                                              |                       |            | BHP                          | 0.56                                | 0.57    | 0.59    | 0.60    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.66    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 37 (21)                             | 38 (21) | 39 (22) | 40 (22) | 41 (23) | 42 (23) | 43 (24) | 44 (24) | 45 (25) | 47 (26) |
|       | High                                         | Black                 |            | CFM                          | 2138                                | 2084    | 2025    | 1967    | 1893    | 1829    | 1754    | 1678    | 1591    | 1475    |
|       |                                              |                       |            | BHP                          | 0.98                                | 0.95    | 0.93    | 0.90    | 0.86    | 0.84    | 0.80    | 0.76    | 0.74    | 0.68    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | 36 (20) | 37 (20) | 38 (21) | 40 (22) | 42 (24) | 46 (25) |

# DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)

| Unit  | Heating Rise Range                           | Motor Speed           | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|----------------------------------------------|-----------------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                                              |                       |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 60115 | 30 - 60°F Low Stage,<br>30 - 60°F High Stage | Low <sup>3</sup>      | Blue       | CFM                          | 1182                                | 1137    | 1102    | 1053    | 1012    | 966     | 920     | 868     | 830     | 783     |
|       |                                              |                       |            | BHP                          | 0.21                                | 0.22    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.30    | 0.31    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 47 (26)                             | 49 (27) | 51 (28) | 53 (29) | 55 (31) | 58 (32) | NA      | NA      | NA      | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Med-Low <sup>1</sup>  | Pink       | CFM                          | 1454                                | 1405    | 1364    | 1316    | 1281    | 1234    | 1198    | 1147    | 1105    | 1056    |
|       |                                              |                       |            | BHP                          | 0.34                                | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    | 0.42    | 0.43    | 0.45    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 38 (21)                             | 40 (22) | 41 (23) | 42 (24) | 44 (24) | 45 (25) | 47 (26) | 49 (27) | 51 (28) | NA      |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 60 (33)                             | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       |                                              | Medium <sup>2</sup>   | Red        | CFM                          | 1818                                | 1770    | 1731    | 1693    | 1657    | 1621    | 1579    | 1546    | 1505    | 1436    |
|       |                                              |                       |            | BHP                          | 0.56                                | 0.57    | 0.59    | 0.60    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.66    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 31 (17)                             | 32 (18) | 32 (18) | 33 (18) | 34 (19) | 34 (19) | 35 (20) | 36 (20) | 37 (21) | 39 (22) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 48 (27)                             | 49 (27) | 50 (28) | 51 (29) | 52 (29) | 54 (30) | 55 (31) | 56 (31) | 58 (32) | NA      |
|       |                                              | Med-High <sup>4</sup> | Orange     | CFM                          | 1881                                | 1849    | 1818    | 1793    | 1763    | 1729    | 1679    | 1610    | 1523    | 1479    |
|       |                                              |                       |            | BHP                          | 0.67                                | 0.69    | 0.70    | 0.71    | 0.72    | 0.73    | 0.73    | 0.71    | 0.68    | 0.65    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | 30 (16)                             | 30 (17) | 31 (17) | 31 (17) | 32 (18) | 32 (18) | 33 (18) | 35 (19) | 37 (20) | 38 (21) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 46 (26)                             | 47 (26) | 48 (27) | 48 (27) | 49 (27) | 50 (28) | 52 (29) | 54 (30) | 57 (32) | 59 (33) |
|       |                                              | High                  | Black      | CFM                          | 2138                                | 2084    | 2025    | 1967    | 1893    | 1829    | 1754    | 1678    | 1591    | 1475    |
|       |                                              |                       |            | BHP                          | 0.98                                | 0.95    | 0.93    | 0.90    | 0.86    | 0.84    | 0.80    | 0.76    | 0.74    | 0.68    |
|       |                                              |                       |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | 31 (17) | 32 (18) | 33 (18) | 35 (19) | 38 (21) |
|       |                                              |                       |            | High Stage Heat Rise °F (°C) | 41 (23)                             | 42 (23) | 43 (24) | 44 (25) | 46 (26) | 48 (26) | 50 (28) | 52 (29) | 55 (30) | 59 (33) |

# **DRY COIL AIR DELIVERY\* - HORIZONTAL AND DOWNFLOW DISCHARGE - 208/230 VAC 3-PHASE MODELS (CONT)**

| Unit  | Heating Rise Range    | Motor Speed | Wire Color |                              | External Static Pressure (IN. W.C.) |         |         |         |         |         |         |         |         |         |
|-------|-----------------------|-------------|------------|------------------------------|-------------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|       |                       |             |            |                              | 0.1                                 | 0.2     | 0.3     | 0.4     | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1       |
| 60130 | Low <sup>3</sup>      | Blue        |            | CFM                          | 1182                                | 1137    | 1102    | 1053    | 1012    | 966     | 920     | 868     | 830     | 783     |
|       |                       |             |            | BHP                          | 0.21                                | 0.22    | 0.23    | 0.24    | 0.25    | 0.26    | 0.27    | 0.28    | 0.30    | 0.31    |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | 53 (29)                             | 55 (31) | 57 (32) | 59 (32) | 62 (34) | 65 (36) | NA      | NA      | NA      | NA      |
|       |                       |             |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       | Med-Low <sup>1</sup>  | Pink        |            | CFM                          | 1454                                | 1405    | 1364    | 1316    | 1281    | 1234    | 1198    | 1147    | 1105    | 1056    |
|       |                       |             |            | BHP                          | 0.34                                | 0.35    | 0.36    | 0.37    | 0.38    | 0.40    | 0.41    | 0.42    | 0.43    | 0.45    |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | 43 (24)                             | 45 (25) | 46 (26) | 48 (26) | 49 (27) | 51 (28) | 52 (29) | 55 (30) | 57 (31) | 59 (33) |
|       |                       |             |            | High Stage Heat Rise °F (°C) | NA                                  | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      | NA      |
|       | Medium <sup>2</sup>   | Red         |            | CFM                          | 1818                                | 1770    | 1731    | 1693    | 1657    | 1621    | 1579    | 1546    | 1505    | 1436    |
|       |                       |             |            | BHP                          | 0.56                                | 0.57    | 0.59    | 0.60    | 0.62    | 0.63    | 0.64    | 0.66    | 0.67    | 0.66    |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | NA                                  | 35 (20) | 36 (20) | 37 (21) | 38 (21) | 39 (21) | 40 (22) | 41 (23) | 42 (23) | 44 (24) |
|       |                       |             |            | High Stage Heat Rise °F (°C) | 53 (29)                             | 54 (30) | 55 (31) | 57 (31) | 58 (32) | 59 (33) | 61 (34) | 62 (34) | 64 (35) | NA      |
|       | Med-High <sup>4</sup> | Orange      |            | CFM                          | 1881                                | 1849    | 1818    | 1793    | 1763    | 1729    | 1679    | 1610    | 1523    | 1479    |
|       |                       |             |            | BHP                          | 0.67                                | 0.69    | 0.70    | 0.71    | 0.72    | 0.73    | 0.73    | 0.71    | 0.68    | 0.65    |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | 35 (19) | 36 (20) | 36 (20) | 37 (21) | 39 (22) | 41 (23) | 42 (24) |
|       |                       |             |            | High Stage Heat Rise °F (°C) | 51 (28)                             | 52 (29) | 53 (29) | 53 (30) | 54 (30) | 55 (31) | 57 (32) | 60 (33) | 63 (35) | 65 (36) |
|       | High                  | Black       |            | CFM                          | 2138                                | 2084    | 2025    | 1967    | 1893    | 1829    | 1754    | 1678    | 1591    | 1475    |
|       |                       |             |            | BHP                          | 0.98                                | 0.95    | 0.93    | 0.90    | 0.86    | 0.84    | 0.80    | 0.76    | 0.74    | 0.68    |
|       |                       |             |            | Low Stage Heat Rise °F (°C)  | NA                                  | NA      | NA      | NA      | NA      | NA      | 36 (20) | 37 (21) | 39 (22) | 42 (24) |
|       |                       |             |            | High Stage Heat Rise °F (°C) | 45 (25)                             | 46 (26) | 47 (26) | 49 (27) | 51 (28) | 52 (29) | 55 (30) | 57 (32) | 60 (33) | 65 (36) |

**Notes:**

\* Air delivery values are without air filter and are for dry coil (See Wet Coil Pressure Drop Table).

1 Factory-shipped low stage cooling speed

2 Factory-shipped high stage cooling speed

3 Factory-shipped low stage gas heating speed

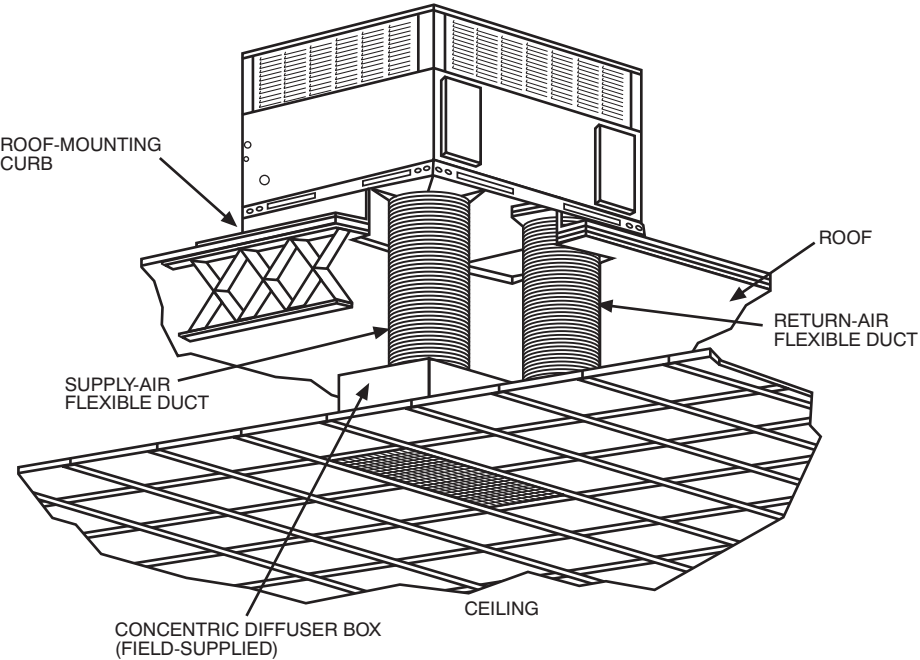
4 Factory-shipped high stage gas heating speed

Shaded areas indicate speed/static combinations that are not permitted for dehumidification speed.

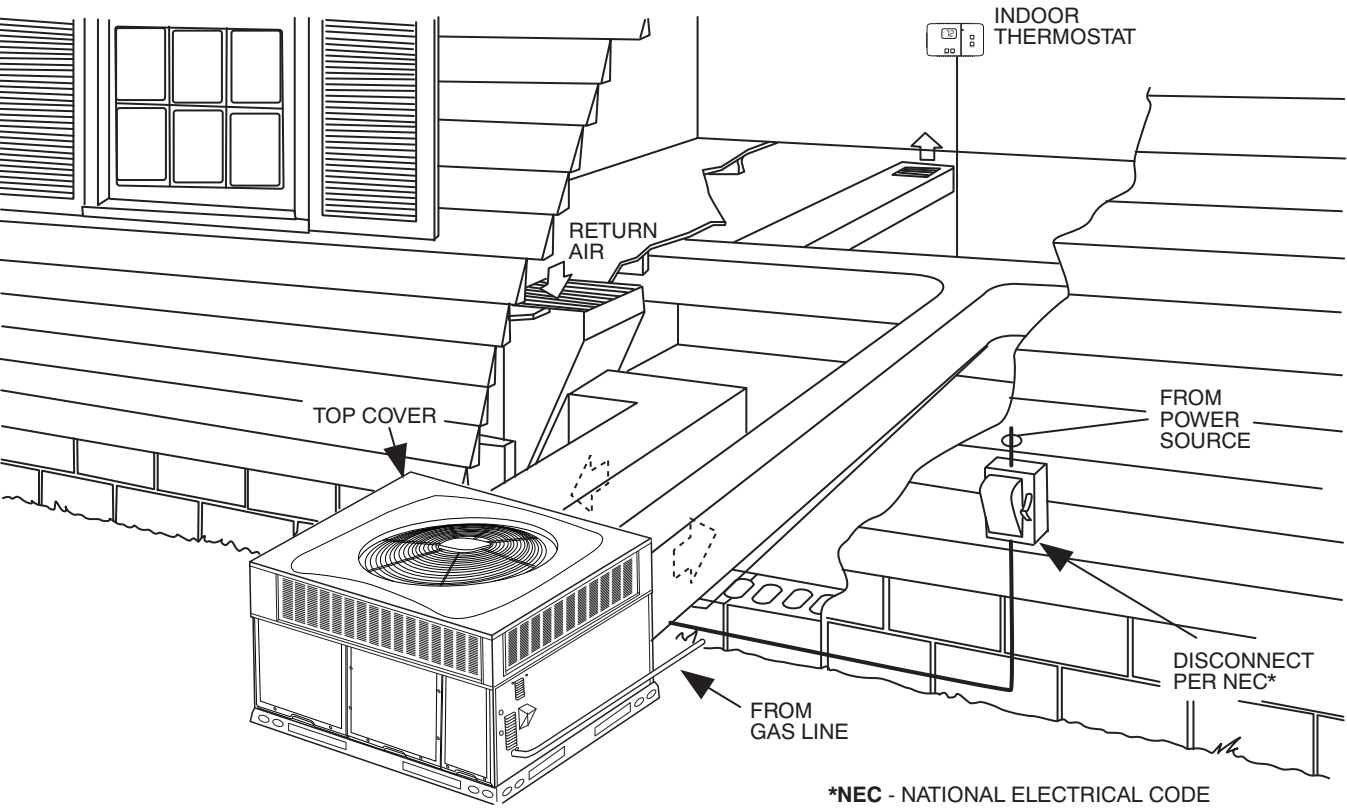
"NA" = Not allowed for particular heating speed



TYPICAL PIPING AND WIRING



A09233



\*NEC - NATIONAL ELECTRICAL CODE

A09234

677E

## APPLICATION DATA

**Condensate trap** — A 2-in. (50.8 mm) condensate trap must be field supplied.

**Ductwork** — Secure downflow discharge ductwork to roof curb. For horizontal discharge applications, attach ductwork to unit with flanges.

**To convert a unit to downflow discharge** — Units are equipped with factory-installed inserts in the down-flow openings. Removal of the inserts is similar to removing an electrical knock-out. Use the duct cover to seal the horizontal discharge openings in the unit. Units installed in horizontal discharge orientation do not require duct covers.

**Airflow** — Units are draw-thru in the cooling mode and blow-thru in the heating mode.

**Maximum cooling airflow** — To minimize the possibility of condensate blow-off from the evaporator, airflow through the units should not exceed 450 cfm per ton.

**Minimum cooling airflow** — Minimum cooling airflow is 350 cfm per ton.

**Minimum ambient cooling operation temperature** — All standard units have a minimum ambient operating temperature of 40°F (4°C). With accessory low ambient temperature kit, units can operate at temperatures down to 0°F (-17°C).

**Minimum temperature** — Air entering the heat exchanger in heating mode must be a minimum of 55°F (13°C) continuous and a maximum of 80°F (27°C) continuous.

# ELECTRICAL DATA

| UNIT               | NOMINAL      | VOLTAGE RANGE |     | COMPRESSOR |       | OFM | IFM | IDM | POWER SUPPLY |      |
|--------------------|--------------|---------------|-----|------------|-------|-----|-----|-----|--------------|------|
|                    |              | MIN           | MAX | RLA        | LRA   | FLA | FLA | FLA | MCA          | MOCF |
| 2404030<br>2406030 | 208/230-1-60 | 197           | 253 | 11.7       | 58.3  | 0.6 | 4.1 | .27 | 19.3         | 30   |
| 3004030<br>3006030 | 208/230-1-60 | 197           | 253 | 13.4       | 73.0  | 0.9 | 4.1 | .27 | 21.8         | 30   |
| 3004050<br>3006050 | 208/230-3-60 | 197           | 253 | 9.0        | 58.0  | 0.9 | 4.1 | .21 | 16.3         | 20   |
| 3606030<br>3609030 | 208/230-1-60 | 197           | 253 | 15.3       | 83.0  | 1.2 | 6.0 | .27 | 26.3         | 40   |
| 3606050<br>3609050 | 208/230-3-60 | 197           | 253 | 11.6       | 73.0  | 1.2 | 6.0 | .21 | 21.7         | 30   |
| 4206030<br>4209030 | 208/230-1-60 | 197           | 253 | 20.4       | 96.0  | 1.2 | 6.0 | 1.5 | 29.6         | 45   |
| 4206050<br>4209050 | 208/230-3-60 | 197           | 253 | 14.2       | 88.0  | 1.2 | 6.0 | .21 | 25.0         | 35   |
| 4809030            | 208/230-1-60 | 197           | 253 | 21.2       | 104.0 | 1.2 | 7.6 | .27 | 35.3         | 50   |
| 4811530            |              |               |     |            |       |     |     |     |              |      |
| 4813030            |              |               |     |            |       |     |     |     |              |      |
| 4809050            | 208/230-3-60 | 197           | 253 | 14.0       | 83.1  | 1.2 | 7.6 | .21 | 26.3         | 40   |
| 4811550            |              |               |     |            |       |     |     | .50 |              |      |
| 4813050            |              |               |     |            |       |     |     | .50 |              |      |
| 6009030            | 208/230-1-60 | 197           | 253 | 28.8       | 152.9 | 1.2 | 7.6 | .27 | 44.8         | 60   |
| 6011530            |              |               |     |            |       |     |     |     |              |      |
| 6013030            |              |               |     |            |       |     |     |     |              |      |
| 6009050            | 208/230-3-60 | 197           | 253 | 16.2       | 110.0 | 1.2 | 7.6 | .21 | 29.1         | 40   |
| 6011550            |              |               |     |            |       |     |     | .50 |              |      |
| 6013050            |              |               |     |            |       |     |     | .50 |              |      |

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LEGEND

- FLA - Full Load Amps
- IDM - Inducer Motor
- IFM - Indoor Fan Motor
- LRA - Locked Rotor Amps
- MCA - Minimum Circuit Amps
- MOCP - Maximum Over Current Protection
- OFM - Outdoor Fan Motor
- RLA - Rated Load Amps

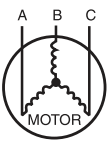
NOTES:

1. In compliance with NEC (National Electrical Code) requirements for multimotor and combination load equipment (refer to NEC Articles 430 and 440), the overcurrent protective device for the unit shall be Power Supply fuse or circuit breaker.
2. Minimum wire size is based on 60 C copper wire. If other than 60 C wire is used, or if length exceeds wire length in table, determine size from NEC.
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

% Voltage imbalance

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

EXAMPLE: Supply voltage is 230-3-60.



AB = 228 v  
BC = 231 v  
AC = 227 v

$$\text{Average Voltage} = \frac{228 + 231 + 227}{3}$$
$$= \frac{686}{3}$$
$$= 229$$

Determine maximum deviation from average voltage.

(AB) 229 - 228 = 1 v  
(BC) 231 - 229 = 2 v  
(AC) 229 - 227 = 2 v

Maximum deviation is 2 v.

Determine percent of voltage imbalance

$$\% \text{ Voltage Imbalance} = 100 \times \frac{2}{229}$$
$$= 0.8\%$$

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

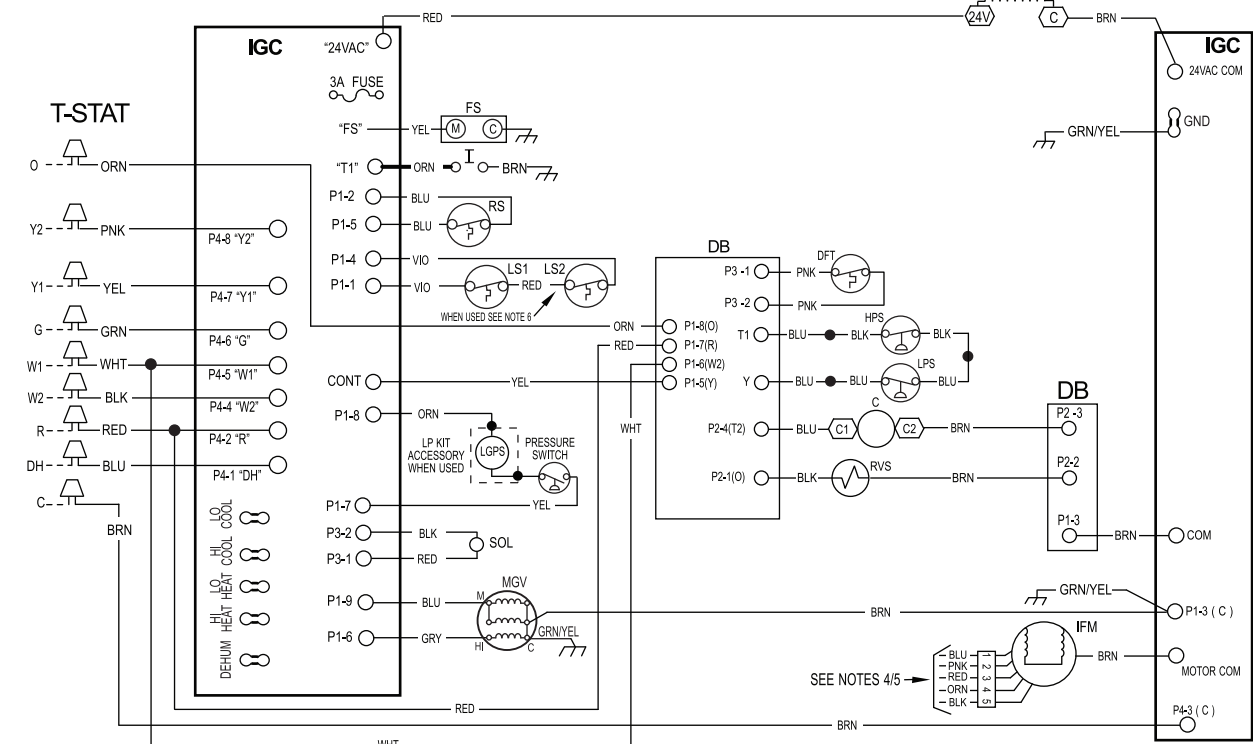
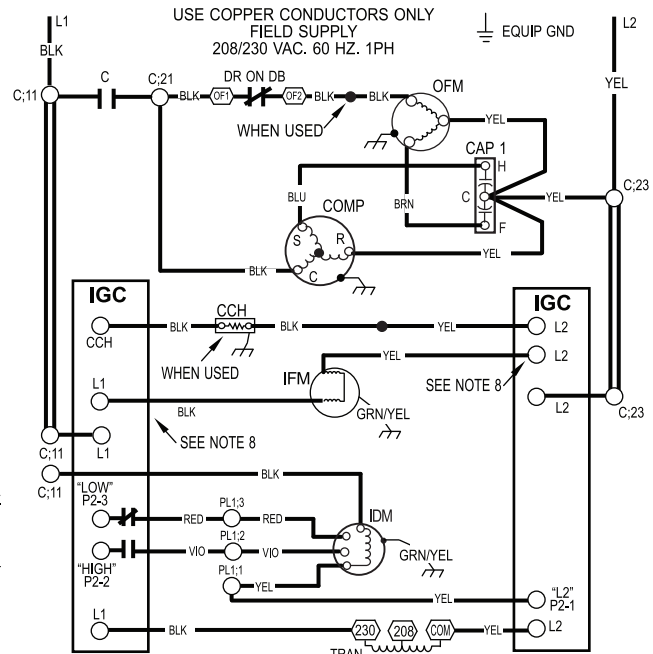
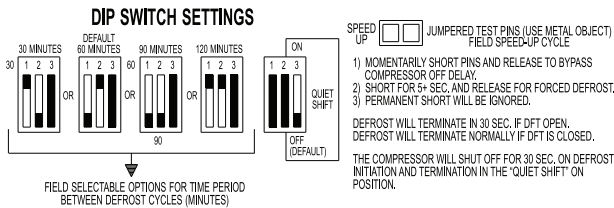
**IMPORTANT:** If the supply voltage phase imbalance is more than 2%, contact your local electric utility company immediately.

**SCHEMATIC 208/230-1-60**



## 677E

**DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING**



48VR500037 REV. A

A14624



# LADDER WIRING SCHEMATIC GAS INPUTS 40, 60, 90 KBTU/HR 208/230-3-60

## LADDER WIRING DIAGRAM

**DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING**

### LEGEND

|      |                              |        |                                     |
|------|------------------------------|--------|-------------------------------------|
|      | FIELD SPICE                  | DR     | DEFROST BOARD RELAY                 |
|      | TERMINAL (MARKED)            | EQUIP  | EQUIPMENT                           |
|      | TERMINAL (UNMARKED)          | FS     | FLAME SENSOR                        |
|      | SPICE                        | GND    | GROUND                              |
|      | SPICE (MARKED)               | HPS    | HIGH PRESSURE SWITCH                |
|      | FACTORY LO VOLTAGE           | I      | IGNITOR                             |
|      | FIELD CONTROL WIRING         | IDM    | INDUCED DRAFT MOTOR                 |
|      | FIELD POWER WIRING           | IFM    | INDOOR FAN MOTOR                    |
|      | ACCESSORY OR OPTIONAL WIRING | IGC    | INTERGRATED GAS UNIT CONTROLLER     |
|      | FACTORY HI VOLTAGE           | LGPS   | LOW GAS PRESSURE SWITCH (WHEN USED) |
| C    | CONTACTOR                    | LPS    | LOW PRESSURE SWITCH                 |
| CAP1 | CAPACITOR, COMP              | LS1    | PRIMARY LIMIT SWITCH                |
| CAP2 | CAPACITOR, INDUCER           | LS2    | SECONDARY LIMIT SWITCH              |
| CCH  | CRANKCASE HEATER             | MGV    | MAIN GAS VALVE                      |
| COMP | COMPRESSOR MOTOR             | OT     | OUTDOOR FAN MOTOR                   |
| DB   | DEFROST BOARD                | PL1    | QUADRUPLE TERMINAL                  |
| DFT  | DEFROST TEMPERATURE SWITCH   | PL2    | IGC TO INDUCER MOTOR PLUG           |
|      |                              | RS     | INDUCER MOTOR PLUG                  |
|      |                              | SOL    | ROLLOUT SWITCH                      |
|      |                              | TRAN   | COMPRESSOR SOLENOID                 |
|      |                              | T-STAT | TRANSFORMER                         |
|      |                              |        | THERMOSTAT                          |

### DIP SWITCH SETTINGS



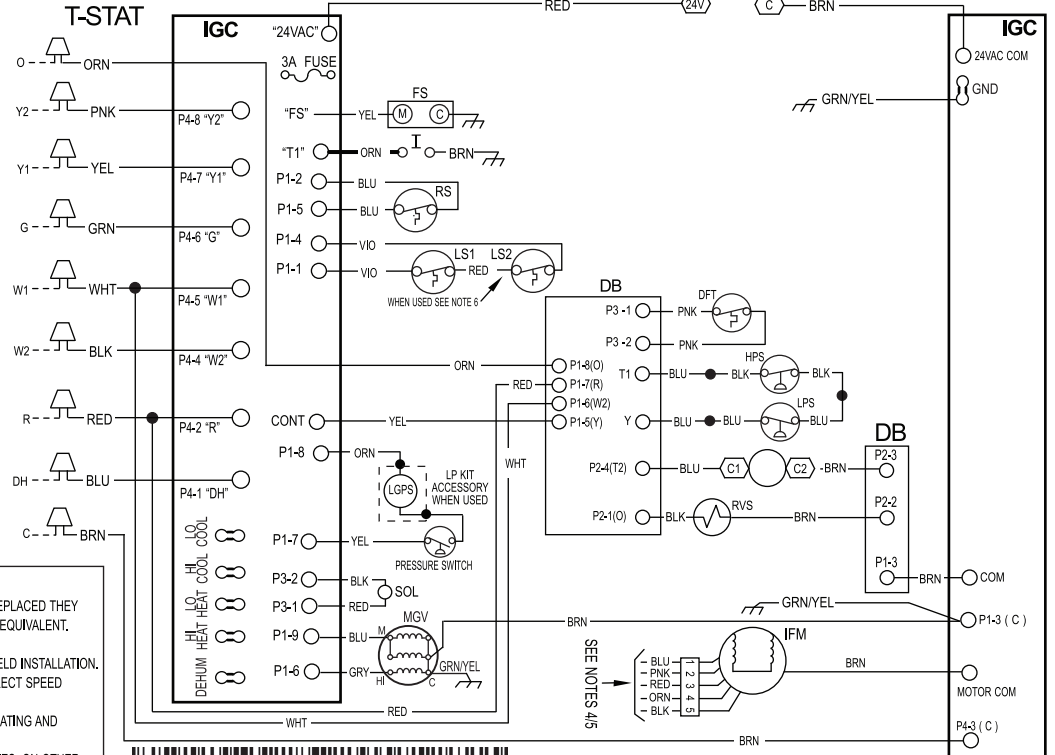
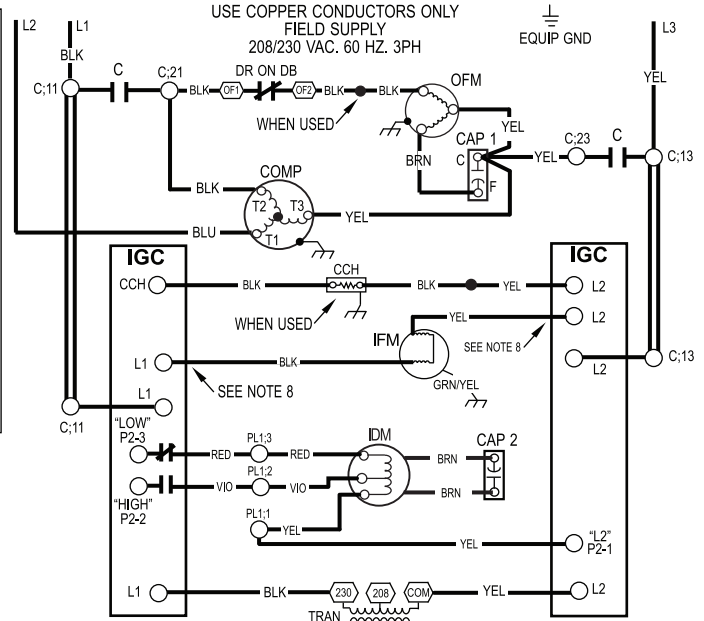
FIELD SELECTABLE OPTIONS FOR TIME PERIOD BETWEEN DEFROST CYCLES (MINUTES)

**SPEED UP** JUMPED TEST PINS (USE METAL OBJECT) FIELD SPEED-UP CYCLE

1) MOMENTARILY SHORT PINS AND RELEASE TO BYPASS COMPRESSOR OFF DELAY.  
2) SHORT FOR 5+ SEC. AND RELEASE FOR FORCED DEFROST.  
3) PERMANENT SHORT WILL BE IGNORED.

DEFROST WILL TERMINATE IN 30 SEC. IF DFT OPEN, DEFROST WILL TERMINATE NORMALLY IF DFT IS CLOSED.

THE COMPRESSOR WILL SHUT OFF FOR 30 SEC. ON DEFROST INITIATION AND TERMINATION IN THE "QUIET SHIFT" ON POSITION.



### NOTES:

- IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED THEY MUST BE REPLACED WITH THE SAME WIRE OR ITS EQUIVALENT.
- SEE PRE-SALE LITERATURE FOR THERMOSTATS.
- USE 75 DEGREES C COPPER CONDUCTORS FOR FIELD INSTALLATION.
- REFER TO INSTALLATION INSTRUCTIONS FOR CORRECT SPEED SELECTION FOR IFM.
- SEE INSTALLATION INSTRUCTIONS FOR PROPER HEATING AND COOLING CONNECTIONS FOR YOUR UNIT.
- ON SOME MODELS LS1 AND LS2 ARE WIRED IN SERIES. ON OTHER MODELS ONLY LS1 IS USED.
- THIS FUSE IS MANUFACTURED BY LITTLE FUSE, P/N 257003.
- DO NOT DISCONNECT PLUG UNDER LOAD.
- N.E.C. CLASS 2, 24V.



48VR500009 REV. D

48VR500009 REV. D



A14620

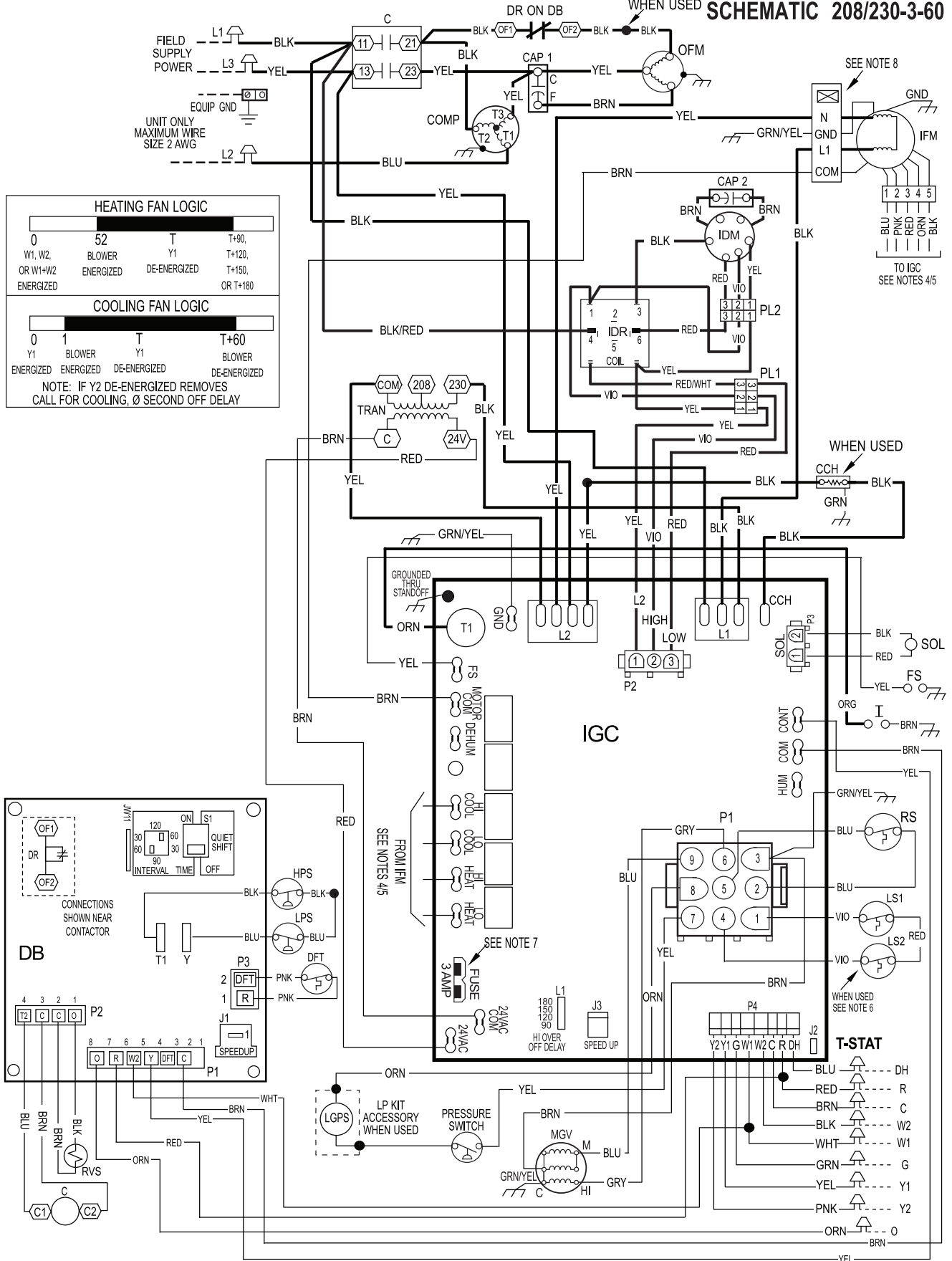
# CONNECTION WIRING SCHEMATIC GAS INPUTS 115, 130 208/230-3-60

## CONNECTION WIRING DIAGRAM

**DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING**

**SCHEMATIC 208/230-3-60**

677E



## 677E

**DANGER: ELECTRICAL SHOCK HAZARD DISCONNECT POWER BEFORE SERVICING**

 FIELD SPICE  
 TERMINAL (MARKED)  
 TERMINAL (UNMARKED)  
 SPLICE  
 SPLICE (MARKED)  
 FACTORY LO VOLTAGE  
 FIELD CONTROL WIRING  
 FIELD POWER WIRING  
 ACCESSORY OR OPTIONAL WIRING

|      |                            |
|------|----------------------------|
| C    | FACTORY HI VOLTAGE         |
| CAP1 | CONTACTOR                  |
| CAP2 | CAPACITOR, COMP            |
| CH   | CAPACITOR, INDUCER         |
| COMP | CRANKCASE HEATER           |
| DB   | COMPRESSOR MOTOR           |
| DFT  | DEFROST BOARD              |
| DR   | DEFROST TEMPERATURE SWITCH |
|      | DEFROST RELAY              |

|        |                                     |
|--------|-------------------------------------|
| EQUIP  | EQUIPMENT                           |
| FS     | FLAME SENSOR                        |
| GND    | GROUND                              |
| HPS    | HIGH PRESSURE SWITCH                |
| IDM    | IGNITOR                             |
| IDR    | INDUCED DRAFT MOTOR                 |
| IFM    | INDUCER RELAY                       |
| IGC    | INDOOR FAN MOTOR                    |
| LGPS   | INTERGRATED GAS UNIT CONTROLLER     |
| LPS    | LOW GAS PRESSURE SWITCH (WHEN USED) |
| LS1    | LOW PRESSURE SWITCH                 |
| LS2    | PRIMARY LIMIT SWITCH                |
| MGV    | SECONDARY LIMIT SWITCH              |
| OFM    | MAIN GAS VALVE                      |
| OT     | OUTDOOR FAN MOTOR                   |
| PL1    | QUADRUPLE TERMINAL                  |
| PL2    | IGC TO INDUCER MOTOR PLUG           |
| RS     | INDUCER MOTOR PLUG                  |
| SOL    | ROLLOUT SWITCH                      |
| TRAN   | COMPRESSOR SOLENOID                 |
| T-STAT | TRANSFORMER                         |
|        | THERMOSTAT                          |

30 MINUTES      DEFAULT 60 MINUTES      90 MINUTES      120 MINUTES

30      60      90      120

1 2 3      1 2 3      1 2 3      1 2 3

OR

OR

OR

OR

90

FIELD SELECTABLE OPTIONS FOR TIME PERIOD  
BETWEEN DEEFOST CYCLES (MINUTES)

**OUTDOOR FAN SECTION**

**COMPRESSOR SECTION**

**INDOOR FAN SECTION**

**CONTROL BOX AREA**

**GAS SECTION**

Diagram components and connections:

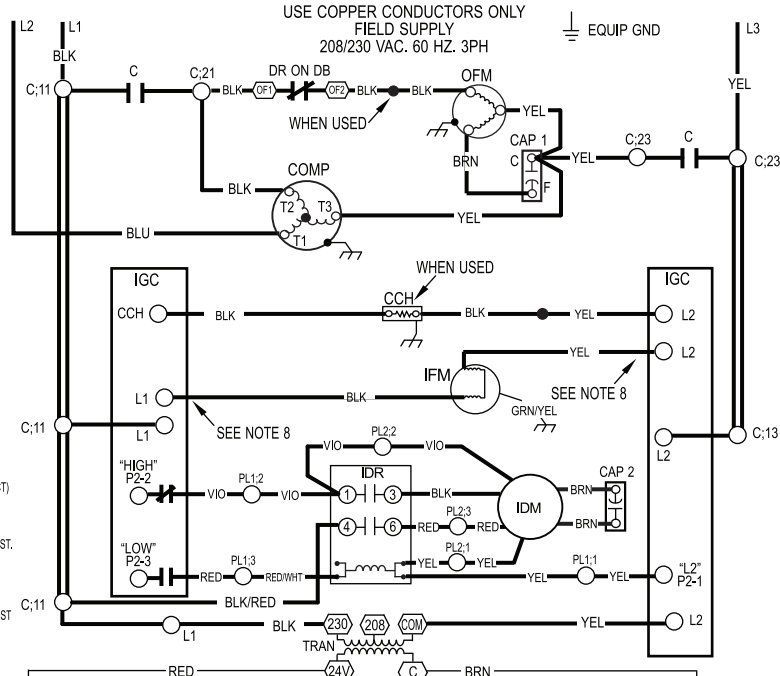
- Outdoor Fan Section:** OFM (Outdoor Fan Motor).
- Compressor Section:** LPS, HPS, SOL, COMP, T3, T1, T2.
- Indoor Fan Section:** LS2, CAP, C, F, IFM, LS1.
- Control Box Area:** IGC, TRAN, 23, 13, 21, C, 11, DB.
- Gas Section:** PRS, CAP2, IDR, IDM, MG/1, RS, FS, I.

UNIT.

48NS500010 BEV. D

USE COPPER CONDUCTORS ONLY  
FIELD SUPPLY  
208/230 VAC. 60 HZ. 3PH

 EQUIP GND



1. IF ANY OF THE ORIGINAL WIRES FURNISHED ARE REPLACED THEY MUST BE REPLACED WITH THE SAME WIRE OR ITS EQUIVALENT.
2. SEE PRE-SALE LITERATURE FOR THERMOSTATS.
3. USE 75 DEGREES C COPPER CONDUCTORS FOR FIELD INSTALLATION.
4. REFER TO INSTALLATION INSTRUCTIONS FOR CORRECT SPEED SELECTION FOR IFM.
5. SEE INSTALLATION INSTRUCTIONS FOR PROPER HEATING AND COOLING CONNECTIONS FOR YOUR UNIT.
6. ON SOME MODELS LS1 AND LS2 ARE WIRED IN SERIES. ON OTHER MODELS ONLY LS1 IS USED.
7. THIS FUSE IS MANUFACTURED BY LITTLE FUSE, PIN 257003.
8. DO NOT DISCONNECT PLUG UNDER LOAD.
9. N.E.C. CLASS 2, 24V.

48VR500010 REV. D

A14622

## CONTROLS

### Operating sequence

#### 208/230 VAC Models:

On a call for low stage heating, terminal W1 on the thermostat is energized. On a call for high stage heating both terminals W1 and W2 are energized. Regardless of the stage of the heating call, the induced-draft motor is turned on to high speed for a 15 sec pre-purge time. After the pre-purge, when the pressure switch senses that sufficient combustion air is being moved by the induced-draft motor, the ignition sequence begins. The IGC will energize the sparkers and the low stage gas valve solenoid. Upon sensing flame, the IGC will check the heating call. If W2 is not energized, the IGC will drop the induced-draft motor to low speed and maintain the gas valve on low stage. If W2 is energized, the IGC will maintain the induced-draft motor on high speed and energize the high stage gas valve solenoid. Thirty sec after flame is sensed the IGC will turn on the evaporator fan motor. If W2 is not energized, the evaporator fan motor will run on low heat speed. If W2 is energized, the evaporator fan motor will run on high heat speed. After the call for heat is satisfied, the IGC will run the evaporator fan motor an additional field-selectable time of 90, 120, 150, or 180 sec before shutting the evaporator fan motor off.

#### Cooling Sequence of Operation

##### a. Continuous Fan

- (1.) Thermostat closes circuit R to G energizing the blower motor for continuous fan. The indoor fan is energized on low speed.

##### b. Cooling Mode

- (1.) Low Stage: Thermostat closes R to G, R to Y1 and R to O. The compressor and indoor fan are energized on low speed. The outdoor fan is also energized.
- (2.) High Stage: Thermostat closes R to G, R to Y1, R to Y2 and R to O. The compressor and indoor fan are energized on high speed. The outdoor fan is also energized.

##### c. Heat Pump Mode

- (1.) Low Stage: Thermostat closes R to G, R to Y1. The compressor and indoor fan are energized on low speed. The outdoor fan is also energized.
- (2.) High Stage: Thermostat closes R to G, R to Y1, R to Y2. The compressor and indoor fan are energized on high speed. The outdoor fan is also energized.

##### d. Defrost Mode

- (1.) Outdoor Fan is disabled, thermostat closes R to O and R to W1. Low stage gas heat tempers the leaving air. When defrost is complete, unit will return to heating mode. If room thermostat is satisfied during defrost, unit will shut down and restart in defrost on next call for heat.

**NOTE:** On units with a Time Guard® II device: Once the compressor has started and then stopped, it cannot be restarted again until 5 minutes have elapsed.

## GUIDE SPECIFICATIONS

### Packaged Gas Heating/Electric Cooling Units

#### Constant Volume Application

#### HVAC Guide Specifications

Size Range: **2 to 5 Tons, Nominal Cooling  
40,000 to 130,000 Btuh,  
Nominal Heating Input**

#### SYSTEM DESCRIPTION

Outdoor rooftop or ground mounted air conditioner and gas furnace system utilizing a two-stage scroll compressor for cooling duty. Unit shall discharge supply air vertically or horizontally as shown on contract drawings. Outdoor fan/coil section shall have a draw-thru design with vertical discharge for minimum sound levels.

#### QUALITY ASSURANCE

- A. Unit shall be rated in accordance with AHRI Standards 210/240 and 270-1995.
- B. Unit shall be designed in accordance with UL Standard 1995 and ANSI Z 21.47.
- C. Unit shall be manufactured in a facility registered to ISO 9001 manufacturing quality standard.
- D. Unit shall be UL listed and c-UL certified as a total package for safety requirements.
- E. Roof curb shall be designed to conform to NRCA Standards.
- F. Insulation and adhesives shall meet NFPA 90.1 requirements for flame spread and smoke generation.
- G. Cabinet insulation shall meet ASHRAE Standard 62.2.

#### DELIVERY, STORAGE AND HANDLING

Unit shall be stored and handled per manufacturer's recommendations.

#### Part 2 — Products

##### EQUIPMENT

##### A. General:

Factory-assembled, single-piece, heating and cooling unit. Contained within the enclosure shall be all factory wiring, piping, controls, refrigerant charge with R-410A refrigerant, and special features required prior to field start-up.

##### B. Unit Cabinet:

1. Unit cabinet shall be constructed of phosphated, zinc-coated, pre-painted steel capable of with-standing 500 hours in salt spray.
2. Normal service shall be through 3 removable cabinet panels.
3. The unit shall be constructed on a rust proof unit base that has an externally trapped, integrated sloped drain.
4. Evaporator fan compartment top surface shall be insulated with a minimum 1/2-in. (12.7 mm) thick, flexible fiberglass insulation, coated on the air side and retained by adhesive and mechanical means. The evaporator wall sections will be insulated with a minimum semi-rigid foil-faced board capable of being wiped clean. Aluminum foil-faced fiberglass insulation shall be used in the entire indoor air cavity section.
5. Unit shall have a field-supplied condensate trap.

##### C. Fans:

1. The evaporator fan shall be a multi-speed, direct-drive, as shown on equipment drawings.
2. Fan wheel shall be made from steel, be double-inlet type with forward curved blades with corrosion resistant finish. Fan wheel shall be dynamically balanced.
3. Condenser fan shall be direct drive propeller type with aluminum blades riveted to corrosion resistant steel spiders, be dynamically balanced, and discharge air vertically.

##### D. Compressor:

1. Fully hermetic compressors with factory-installed vibration isolation.
2. Two-stage scroll compressors shall be standard on all units.

##### E. Coils:

Evaporator and condenser coils shall have aluminum plate fins mechanically bonded to seamless copper tubes with all joints brazed. Tube sheet openings shall be belled to prevent tube wear.

##### F. Heating Section:

1. Induced-draft combustion type with energy saving direct spark ignition system and redundant main gas valve.
2. Induced-draft motors shall provide adequate airflow for combustion.
3. The heat exchangers shall be constructed of aluminized steel for corrosion resistance.
4. Burners shall be of the in-shot type constructed of aluminum coated steel.
5. All gas piping and electric power shall enter the unit cabinet at a single location.

##### G. Refrigerant Components:

Refrigerant expansion device shall be of the TXV (thermostatic expansion valve) type for cooling and fixed orifice for heating.

##### H. Filters:

Filter section shall consist of field-installed, throwaway, 1-in. (25 mm) thick fiberglass filters of commercially available sizes.

##### I. Controls and Safeties:

1. Unit controls shall be complete with a self-contained low voltage control circuit.
2. Compressors shall incorporate a solid-state compressor protector that provides reset capability.

##### J. Operating Characteristics:

1. Unit shall be capable of starting and running at 125°F (51°C) ambient outdoor temperature per maximum load criteria of AHRI Standard 210.
2. Compressor with standard controls shall be capable of operation down to 40°F (4°C) ambient outdoor temperature.
3. Units shall be provided with fan time delay to prevent cold air delivery before the heat exchanger warms up.
4. Unit shall be provided with fan time delay after the thermostat is satisfied.

##### K. Electrical Requirements:

All unit power wiring shall enter the unit cabinet at a single location.

##### L. Motors:

1. Compressor motors shall be of the refrigerant-cooled type with line-break thermal and current overload protection.
2. All fan motors shall have permanently lubricated bearings, and inherent, automatic reset, thermal overload protection.
3. Condenser fan motor shall be totally enclosed.
4. Evaporator Fan Motor to be multi-speed ECM blower motor.

##### M. Compressor Protection:

Solid-state control shall protect compressor by preventing "short cycling."

## GUIDE SPECIFICATIONS (CONT)

### N. Low NOx:

Shall provide NOx reduction to meet 40 ng/J NOx emissions requirements as shipped from the factory.

### O. Special Option/Kits Available:

#### 1. Coil Options

Base unit with tin plated indoor coil hairpins available as a factory installed option.

#### 2. Compressor Start Kit (single phase units only):

Shall provide additional starting torque for single-phase compressors.

#### 3. Corporate Thermostat:

To provide for one-stage heating and cooling in addition manual or automatic changeover and indoor fan control.

#### 4. Crankcase Heater Kit:

Shall provide anti-floodback protection for low-load cooling applications.

#### 5. Economizer for two-stage operation:

(Horizontal and Vertical with Jade Honeywell W7220 controller, Honeywell communicating actuator, and dry bulb sensor. (Contact MicroMetl Customer Service at 1-800-662-4822 to order.)

**NOTE:** The enhanced dehumidification feature on high stage cooling does not support use of an economizer.

e. Economizer controls capable of providing free cooling using outside air.

f. Equipped with low leakage dampers not to exceed 3% leakage, at 1.0 IN. W.C. pressure differential.

g. Spring return motor shuts off outdoor damper on power failure.

#### 6. Filter Rack Kit:

Shall provide filter mounting for downflow applications. Offered as a field installed accessory.

#### 7. Flat Roof Curb Kit:

Curbs shall have seal strip and a wood nailer for flashing and shall be installed per manufacturer's instructions.

#### 8. Flue Discharge Deflector Kit

Directs flue gas exhaust; 90 degrees upward from current discharge.

#### 9. Heat Exchanger Option

Stainless Steel Heat Exchanger available as a factory installed option.

#### 10. High Altitude Propane Conversion Kit:

Shall consist of all required hardware to convert to propane gas heat operation at 2001 to 6000 ft (611 to 1829 m) above sea level.

#### 11. Low Ambient Package Kit:

Shall consist of a solid-state control and condenser coil temperature sensor for controlling condenser-fan motor operation, which shall allow unit to operate down to 0°F (-18°C) outdoor ambient temperature when properly installed.

#### 12. Manual Outdoor Air Damper Kit:

Package shall consist of damper, birdscreen, and rainhood which can be preset to admit outdoor air for year-round ventilation.

#### 13. Natural-to-Propane Conversion Kit:

Shall be complete with all required hardware to convert to propane gas operation at 10.0 IN. W.C. manifold pressure.

#### 14. Propane-to-Natural Conversion Kit

Shall be complete with all hardware to convert to natural gas at standard altitude (0 to 2000 ft [0 to 610 m] above sea level).

#### 15. Square-To-Round Duct Transitions Kit (24-48 models):

Shall have the ability to convert the supply and return openings from rectangular to round.





