

**24VNA9 Infinity® 19VS  
Variable Speed Air Conditioner  
with Puron® Refrigerant  
2 – 5 Ton**



## Product Data



**INFINITY® 19VS**

The Infinity 19VS air conditioner offers high-efficiency variable speed performance in a remarkably small cabinet and provides up to 19 SEER cooling efficiency. The variable speed inverter capacity control delivers up to 5 stages of operation for exceptional load matching, dehumidification and zoning performance.

This product has been designed and manufactured to provide flexible system matching and work with a wide variety of indoor units and controls.

**NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory ([www.ahridirectory.org](http://www.ahridirectory.org)) for the most up-to-date ratings information.**

### INDUSTRY LEADING FEATURES / BENEFITS

#### Energy Efficiency

- Up to 19 SEER / up to 12.5 EER
- Microtube Technology™ refrigeration system

#### Sound

- Sound level as low as 56 dBA in low speed (Silencer System II).
- Soft start and smooth ramp to operating speeds

#### Comfort

- Variable speed compressor operates at 5 stages with capacity range from as wide as 25-100%
- Air cooled Inverter variable speed drive
  - System requires Infinity Touch Control with version 11 software or newer for 5 stage operation
  - Ratings provided with 2-stage thermostats and suitable non-communicating indoor products for 2-stage operation.

#### Reliability

- Puron® refrigerant - environmentally sound, won't deplete the ozone layer and low lifetime service cost.
- Front-seating service valves
- Inverter control drives compressor and fan motor
- No control module attached to fan motor
- Infinity intelligence monitors critical system parameters
- Pressure equalizer valve for easy compressor starting
- High pressure switch
- Suction pressure transducer
- Compressor discharge temperature sensor
- Suction temperature sensor
- Filter drier (field installed)
- Internal crankcase heater standard

#### Flexibility and installation:

- 2 control wires to outdoor unit in complete Infinity system and Touch Control
- Smaller and lighter than 2-stage units
- Minimum and Maximum adjustments with Infinity Touch Control
- Compatible with non-communicating thermostats

#### Durability

WeatherArmor Ultra™ protection package:

- Solid, Durable sheet metal construction
- Steel louver coil guard
- Baked-on, complete outer coverage, powder paint

#### Applications

- Line sets up to 100 ft (30.5 m) equivalent length
- No long-line accessories required.

## MODEL NUMBER NOMENCLATURE

|                |                |                     |              |             |                      |                                      |                 |                 |               |              |         |         |
|----------------|----------------|---------------------|--------------|-------------|----------------------|--------------------------------------|-----------------|-----------------|---------------|--------------|---------|---------|
| 1<br>N         | 2<br>N         | 3<br>A              | 4<br>A       | 5<br>A/N    | 6<br>N               | 7<br>N                               | 8<br>N          | 9<br>A/N        | 10<br>A/N     | 11<br>A/N    | 12<br>N | 13<br>N |
| 2              | 4              | V                   | N            | A           | 9                    | 3                                    | 6               | A               | 0             | 0            | 3       | 0       |
| Product Series | Product Family | Tier                | Major Series | SEER        | Cooling Capacity     | Variations                           | Open            | Open            | Voltage       | Minor Series |         |         |
| 24 = AC        | V = VS HP      | N = Infinity Series | A = Puron    | 9 = 19 SEER | 1,000 Btuh (nominal) | A = Standard<br>B = Design Variation | 0 = Not Defined | 0 = Not Defined | 3 = 208/230-1 | 0, 1, 2...   |         |         |



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to [www.ahridirectory.org](http://www.ahridirectory.org).



## STANDARD FEATURES

| FEATURES   | Unit Size – Voltage, Series |       |       |       |       |
|--|-----------------------------|-------|-------|-------|-------|
|  | 24A–30<br>24B–30            | 25–30 | 36–30 | 48–30 | 60–30 |
| Puron Refrigerant  | X                           | X     | X     | X     | X     |
| Variable Speed Rotary Compressor   | X                           | X     | X     | X     | X     |
| Air–Cooled Integrated Inverter Drive   | X                           | X     | X     | X     | X     |
| Louvered Coil Guard  | X                           | X     | X     | X     | X     |
| Field Installed Filter Drier   | X                           | X     | X     | X     | X     |
| Front Seating Service Valves   | X                           | X     | X     | X     | X     |
| Internal Pressure and Temperature Protection                                     | X                           | X     | X     | X     | X     |
| Suction Pressure Transducer  | X                           | X     | X     | X     | X     |
| High Pressure Switch   | X                           | X     | X     | X     | X     |
| Internal Crankcase Heater  | X                           | X     | X     | X     | X     |
| Enhanced Diagnostics with Infinity Touch™ Control (version 11 software or newer) | X                           | X     | X     | X     | X     |
| Deluxe Sound Blanket   | X                           | X     | X     | X     | X     |
| Outdoor Air Temperature Sensor   | X                           | X     | X     | X     | X     |

X = Standard

# REFRIGERANT PIPING LENGTH LIMITATIONS

## Maximum Line Lengths:

The maximum allowable total equivalent length for air conditioners can vary depending on the vertical separation. See the tables below for allowable lengths depending on whether the outdoor unit is on the same level, above or below the outdoor unit.

### Maximum Line Lengths for Air Conditioner Applications

|                                | MAXIMUM ACTUAL LENGTH<br>ft (m)   | MAXIMUM EQUIVALENT LENGTH†<br>ft (m) | MAXIMUM VERTICAL SEPARATION<br>ft (m) |
|--------------------------------|---|--------------------------------------|---------------------------------------|
| Units on equal level           | 100 (30.5)  | 100 (30.5)                           | N/A                                   |
| Outdoor unit ABOVE indoor unit | 100 (30.5)  | 100 (30.5)                           | 100 (30.5)                            |
| Outdoor unit BELOW indoor unit | See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit' |                                      |                                       |

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

### Maximum Total Equivalent Length† - Outdoor Unit BELOW Indoor Unit

| Size  | Liquid Line Diameter w/ TXV | AC with Puron® Refrigerant – Maximum Total Equivalent Length†<br>Vertical Separation ft (m) Outdoor unit BELOW indoor unit; |                      |                       |                        |                        |                        |                        |
|-------|-----------------------------|---|----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|
|       |                             | 0–20<br>(0 – 6.1)   | 21–30<br>(6.4 – 9.1) | 31–40<br>(9.4 – 12.2) | 41–50<br>(12.5 – 15.2) | 51–60<br>(15.5 – 18.3) | 61–70<br>(18.6 – 21.3) | 71–80<br>(21.6 – 24.4) |
| 2–Ton | 3/8                         | 100*  | 100*                 | 100*                  | 100*                   | 100*                   | 100*                   | 100*                   |
| 3–Ton | 3/8                         | 100*  | 100*                 | 100*                  | 100*                   | 100*                   | 100*                   | 100*                   |
| 4–Ton | 3/8                         | 100*  | 100*                 | 100*                  | 100*                   | 100                    | 100                    | --                     |
| 5–Ton | 3/8                         | 100*  | 100*                 | 100*                  | 100*                   | 100                    | 100                    | --                     |

\* Maximum actual length not to exceed 100 ft (30.5 m)

† Total equivalent length accounts for losses due to elbows or fitting.

-- = outside acceptable range

## LONG LINE APPLICATIONS

Unit is approved for up to 100 ft (30.5 m) equivalent length and vertical separations shown above with no additional accessories. Longer line set applications are not permitted.

## COOLING CAPACITY LOSS TABLE

| Nominal Size (Btuh) | Line OD (in.) | 24VNA9 Cooling Capacity Loss (%)  |            |            |            |            |
|---------------------|---------------|-----------------------------------|------------|------------|------------|------------|
|                     |               | Total Equivalent Line Length (ft) |            |            |            |            |
|                     |               | 25                                | 50         | 75         | 80         | 100        |
| 24B–30              | 5/8           | 0.5                               | 1.2        | 1.8        | 1.9        | 2.4        |
|                     | <b>3/4</b>    | <b>0.1</b>                        | <b>0.4</b> | <b>0.6</b> | <b>0.7</b> | <b>0.8</b> |
| 24A–30<br>25–30     | 5/8           | 0.5                               | 1.2        | 1.8        | 1.9        | 2.4        |
|                     | 3/4           | 0.1                               | 0.4        | 0.6        | 0.7        | 0.8        |
|                     | <b>7/8</b>    | 0.0                               | 0.1        | 0.3        | 0.3        | 0.4        |
| 36–30               | 5/8           | 1.1                               | 2.4        | 3.7        | 4.0        | 5.0        |
|                     | 3/4           | 0.3                               | 0.8        | 1.3        | 1.4        | 1.8        |
|                     | <b>7/8</b>    | 0.0                               | 0.3        | 0.5        | 0.6        | 0.8        |
| 48–30               | 3/4           | 0.7                               | 1.6        | 2.4        | 2.6        | 3.2        |
|                     | 7/8           | 0.3                               | 0.7        | 1.1        | 1.2        | 1.6        |
|                     | <b>1 1/8</b>  | 0.0                               | 0.1        | 0.2        | 0.3        | 0.4        |
| 60–30               | 3/4           | 1.0                               | 2.3        | 3.5        | 3.8        | 4.8        |
|                     | 7/8           | 0.4                               | 1.0        | 1.7        | 1.8        | 2.3        |
|                     | <b>1 1/8</b>  | 0.0                               | 0.1        | 0.3        | 0.4        | 0.5        |

Rating Line Size in **BOLD**

## MIN/MAX AIRFLOW TABLES

The indoor airflow delivered by this system varies significantly based on outdoor temperature, indoor unit combination, and system demand. The airflows on these tables are for duct design considerations. Duct systems capable of these ranges will ensure

the system will deliver full capacity at all outdoor temperatures. Minimum and maximum airflows can be adjusted from these numbers in the Infinity Control Setup screen.

| Cooling – Comfort Mode |                      |                              | Minimum Cooling<br>(Dehum or Zoning) |
|------------------------|----------------------|------------------------------|--------------------------------------|
| Size                   | Max Capacity Airflow | Highest Min Capacity Airflow |                                      |
| 2–Ton                  | 739                  | 263                          | 222                                  |
| 3–Ton                  | 990                  | 289                          | 236                                  |
| 4–Ton                  | 1389                 | 542                          | 457                                  |
| 5–Ton                  | 1600                 | 700                          | 600                                  |

| Cooling – Efficiency Mode |                      |                              |
|---------------------------|----------------------|------------------------------|
| Size                      | Max Capacity Airflow | Highest Min Capacity Airflow |
| 2–Ton                     | 825                  | 585                          |
| 3–Ton                     | 1050                 | 600                          |
| 4–Ton                     | 1400                 | 875                          |
| 5–Ton                     | 1800                 | 975                          |

### LEGEND::

**Max Capacity Airflow** – Stage 5 airflow varies depending on conditions. This is the highest airflow the system will attempt to deliver in this particular mode. Ductwork for non-zoned systems should be sized for this airflow to ensure the system can deliver full capacity when needed. Improper duct design may result in excessive airflow noise and/or cutback occurrences at max airflow conditions.

**Highest Min. Capacity Airflow** – Stage 1 airflow also varies depending on conditions. In zoned systems, each zone must be capable of delivering this airflow for the system to deliver full capacity into the zone. Otherwise, airflow may be diverted to other zones or cutback may occur.

**Min Cooling (Dehum or Zoning)** – Lowest airflow the system will deliver. May operate down to this airflow in dehumidification mode or in zoning applications where ductwork restrictions have caused the blower to cut-back.

## PHYSICAL DATA

| UNIT SIZE SERIES           | 24A–30                                     | 24B–30      | 25–30      | 36–30      | 48–30       | 60–30       |
|----------------------------|--|-------------|------------|------------|-------------|-------------|
| Operating Weight lb (kg)   | 160 (72.6)                                 | 135 (61.2)  | 160 (72.6) | 160 (72.6) | 216 (98.0)  | 241 (109.3) |
| Shipping Weight lb (kg)    | 186 (84.4)                                 | 158 (71.7)  | 186 (84.4) | 186 (84.4) | 255 (115.7) | 282 (127.9) |
| Compressor Type            | Variable Speed Rotary                      |             |            |            |             |             |
| REFRIGERANT                | Puron® (R-410A)                            |             |            |            |             |             |
| Control                    | TXV (Puron® Hard Shutoff)                  |             |            |            |             |             |
| Charge lb (kg)             | 5.5 (2.50)                                 | 4.80 (2.18) | 5.5 (2.50) | 6.0 (2.72) | 7.5 (3.40)  | 8.30 (3.76) |
| COND FAN                   | Forward Swept Propeller Type, Direct Drive |             |            |            |             |             |
| Air Discharge              | Vertical                                   |             |            |            |             |             |
| Air Qty (CFM)              | 2500                                       | 2500        | 2500       | 2500       | 4500        | 4500        |
| Motor HP                   | 1/3  | 1/5         | 1/3        | 1/3        | 1/3         | 1/3         |
| Motor RPM                  | 1050                                       | 825         | 1050       | 1050       | 850         | 900         |
| COND COIL                  |  |             |            |            |             |             |
| Face Area (Sq ft)          | 13.90                                      | 11.12       | 13.90      | 13.90      | 21.50       | 23.65       |
| Fins per In.               | 20   | 20          | 20         | 20         | 20          | 20          |
| Rows                       | 1  | 1           | 1          | 1          | 1           | 1           |
| Circuits                   | 6  | 6           | 6          | 6          | 8           | 8           |
| VALVE CONNECT. (In. ID)    |  |             |            |            |             |             |
| Vapor                      | 3/4  | 5/8         | 3/4        | 3/4        | 7/8         | 7/8         |
| Liquid                     | 3/8  |             |            |            |             |             |
| REFRIGERANT TUBES (In. OD) |  |             |            |            |             |             |
| Rated Vapor*               | 7/8  | 3/4         | 7/8        | 7/8        | 1–1/8       | 1–1/8       |
| Max Liquid Line            | 3/8  |             |            |            |             |             |

\* Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.

**Note:** See unit Installation Instruction for proper installation.

## ELECTRICAL DATA

| UNIT SIZE – VOLTAGE, SERIES | V/PH      | OPER VOLTS* |     | COMPR |       | FAN  | MCA  | MAX FUSE ** or CKT BRK AMPS |
|-----------------------------|-----------|-------------|-----|-------|-------|------|------|-----------------------------|
|                             |           | MAX         | MIN | LRA   | RLA   | FLA  |      |                             |
| 24A-30                      | 208-230-1 | 253         | 197 | N/A   | 17.7  | 1.20 | 23.6 | 40                          |
| 24B-30                      |           |             |     | N/A   | 10.32 | 0.58 | 13.5 | 20                          |
| 25-30                       |           |             |     | N/A   | 17.7  | 1.20 | 23.6 | 40                          |
| 36-30                       |           |             |     | N/A   | 18.3  | 1.20 | 24.4 | 40                          |
| 48-30                       |           |             |     | N/A   | 23.9  | 1.20 | 31.4 | 50                          |
| 60-30                       |           |             |     | N/A   | 31.3  | 1.40 | 40.8 | 60                          |

\* Permissible limits of the voltage range at which the unit will operate satisfactorily

\*\* Time-Delay fuse.

FLA – Full Load Amps

LRA – Locked Rotor Amps

MCA – Minimum Circuit Amps

RLA – Rated Load Amps

NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit.

All motors/compressors contain internal overload protection.

Complies with 2010 requirements of ASHRAE Standards 90.1

## CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

| UNIT SIZE – VOLTAGE, SERIES | If a Touch Control is installed, subcooling recommendation displayed in Charging Mode must be followed. If not, subcooling chart shown on the charging label must be followed |
|-----------------------------|---|
| 24A-30, 24B-30              |   |
| 25-30                       |   |
| 36-30                       |   |
| 48-30                       |   |
| 60-30                       |   |

## RPM-CAPACITY-SOUND (dBA)\*

| STAGE #          | COMP RPM | CAPACITY % | SOUND (dBA) |
|------------------|----------|------------|-------------|
| <b>24VNA924A</b> |          |            |             |
| 1                | 1200     | 36%        | 56          |
| 2                | 1900     | 58%        | 61          |
| 3                | 2400     | 73%        | 64          |
| 4                | 2600     | 79%        | 68          |
| 5                | 3300     | 100%       | 71          |
| <b>24VNA924B</b> |          |            |             |
| 1                | 1500     | 35%        | 55          |
| 2                | 2566     | 56%        | 60          |
| 3                | 3150     | 69%        | 65          |
| 4                | 3950     | 87%        | 66          |
| 5                | 4700     | 100%       | 68          |
| <b>24VNA925</b>  |          |            |             |
| 1                | 1200     | 36%        | 56          |
| 2                | 1900     | 58%        | 61          |
| 3                | 2400     | 73%        | 63          |
| 4                | 2600     | 79%        | 67          |
| 5                | 3300     | 100%       | 69          |
| <b>24VNA936</b>  |          |            |             |
| 1                | 1200     | 25%        | 56          |
| 2                | 2400     | 50%        | 61          |
| 3                | 3300     | 69%        | 65          |
| 4                | 4200     | 88%        | 69          |
| 5                | 4800     | 100%       | 71          |
| <b>24VNA948</b>  |          |            |             |
| 1                | 1500     | 35%        | 62          |
| 2                | 2460     | 57%        | 65          |
| 3                | 2800     | 65%        | 67          |
| 4                | 3650     | 84%        | 70          |
| 5                | 4320     | 100%       | 72          |
| <b>24VNA960</b>  |          |            |             |
| 1                | 1200     | 32%        | 57          |
| 2                | 2180     | 55%        | 61          |
| 3                | 2850     | 70%        | 64          |
| 4                | 3700     | 90%        | 70          |
| 5                | 4140     | 100%       | 72          |

\*Estimated sound for stages 2, 3, and 4

For 2-stage operation: Low = Stage 2, High = Stage 5

# SOUND POWER LEVEL (dBA)

| Unit Size – Voltage, Series | Typical Octave Band Spectrum<br>(without tone adjustment) | Min Speed Cooling | Max Speed Cooling |
|-----------------------------|---|-------------------|-------------------|
| 024A – 30                   | Freq (Hz)   | 1200 RPM          | 3300 RPM          |
|                             | 125   | 40.4              | 43.9              |
|                             | 250   | 44.4              | 53.9              |
|                             | 500   | 46.3              | 61.8              |
|                             | 1000  | 45.0              | 59.0              |
|                             | 2000  | 37.2              | 56.7              |
|                             | 4000  | 31.0              | 60.0              |
|                             | 8000  | 28.4              | 45.4              |
|                             | Sound Rating (dBA)  | 56                | 71                |
| 024B – 30                   | Freq (Hz)   | 1500 RPM          | 4700 RPM          |
|                             | 125   | 40.5              | 44.0              |
|                             | 250   | 45.5              | 49.5              |
|                             | 500   | 41.5              | 53.0              |
|                             | 1000  | 44.0              | 52.5              |
|                             | 2000  | 39.0              | 50.5              |
|                             | 4000  | 34.5              | 53.0              |
|                             | 8000  | 31.0              | 45.0              |
|                             | Sound Rating (dBA)  | 55                | 67                |
| 025 – 30                    | Freq (Hz)   | 1200 RPM          | 3300 RPM          |
|                             | 125   | 40.4              | 45.4              |
|                             | 250   | 44.4              | 57.9              |
|                             | 500   | 46.3              | 61.3              |
|                             | 1000  | 45.0              | 58.0              |
|                             | 2000  | 37.2              | 54.7              |
|                             | 4000  | 31.0              | 52.0              |
|                             | 8000  | 28.4              | 41.9              |
|                             | Sound Rating (dBA)  | 56                | 69                |
| 036 – 30                    | Freq (Hz)   | 1200 RPM          | 4800 RPM          |
|                             | 125   | 40.4              | 43.9              |
|                             | 250   | 44.4              | 53.9              |
|                             | 500   | 46.3              | 61.8              |
|                             | 1000  | 45.0              | 59.0              |
|                             | 2000  | 37.2              | 56.7              |
|                             | 4000  | 31.0              | 60.0              |
|                             | 8000  | 28.4              | 45.4              |
|                             | Sound Rating (dBA)  | 56                | 71                |
| 048 – 30                    | Freq (Hz)   | 1500 RPM          | 4320 RPM          |
|                             | 125   | 40.9              | 42.4              |
|                             | 250   | 46.4              | 54.4              |
|                             | 500   | 47.3              | 60.3              |
|                             | 1000  | 56.5              | 63.5              |
|                             | 2000  | 39.2              | 56.7              |
|                             | 4000  | 35.0              | 56.0              |
|                             | 8000  | 31.9              | 44.9              |
|                             | Sound Rating (dBA)  | 62                | 72                |
| 060 – 30                    | Freq (Hz)   | 1200 RPM          | 4140 RPM          |
|                             | 125   | 39.0              | 49.5              |
|                             | 250   | 48.0              | 59.5              |
|                             | 500   | 46.5              | 62.0              |
|                             | 1000  | 45.5              | 60.0              |
|                             | 2000  | 39.5              | 58.5              |
|                             | 4000  | 36.5              | 55.0              |
|                             | 8000  | 35.5              | 48.0              |
|                             | Sound Rating (dBA)  | 57                | 72                |

NOTE: Tested in compliance with AHRI 270–2008 but not listed with AHRI.

## ACCESSORIES

| KIT NUMBER                   | KIT NAME      | 24A-30<br>24B-30<br>25-30 | 36-30 | 48-30 | 60 |
|------------------------------|---------------|---------------------------|-------|-------|----|
| KSASF0101AAA                 | SPRT FEET KIT |                           |       | X     | X  |
| KSASF0201AAA                 | SPRT FEET KIT | X                         | X     |       |    |
| KSATX0201PUR                 | TXV KIT       | X                         |       |       |    |
| <a href="#">KSATX0301PUR</a> | TXV KIT       |                           | X     |       |    |
| KSATX0401PUR                 | TXV KIT       |                           |       | X     |    |
| KSATX0501PUR                 | TXV KIT       |                           |       |       | X  |
| KSBTX0201PUR                 | TXV KIT       | X                         |       |       |    |
| KSBTX0301PUR                 | TXV KIT       |                           | X     |       |    |
| KSBTX0401PUR                 | TXV KIT       |                           |       | X     |    |

x = Accessory S = Standard

### Accessory Description and Usage

#### Support Feet

Raises unit above base pad. 2 and 3 ton kit contains 5 feet for stable installation with small base. 4 and 5 ton kit contains 4 feet.

Usage Guideline:

Recommended for rooftop applications

#### Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Usage Guideline:

Required if indoor unit does not already contain Puron® refrigerant TXV

## CONTROLS

|                       |  |
|-----------------------|--|
| <b>SYSTXCCITN01-A</b> | Infinity Touch Control (non-Wi-Fi) version 11 or newer   |
| <b>SYSTXCCITC01-A</b> | Infinity Touch Control (Wi-Fi)   |
| <b>SYSTXCCITW01-A</b> | Infinity Touch Control with Wi-Fi & Wireless Access Point  |
| <b>SYSTXCC4ZC01</b>   | Infinity 4-Zone Damper Control Module  |
| <b>SYSTXCCSMS01</b>   | Infinity Smart Sensor (Optional wall control used to monitor temperature and/or fan control in an individual zone.)    |
| <b>SYSTXCCNIM01</b>   | Infinity Network Interface Module (Connects Heat Recovery and Energy Recovery Ventilators on non-zoning applications.) |
| <b>SYSTXCCSMS01</b>   | Infinity Smart Sensor  |

## THERMOSTATS

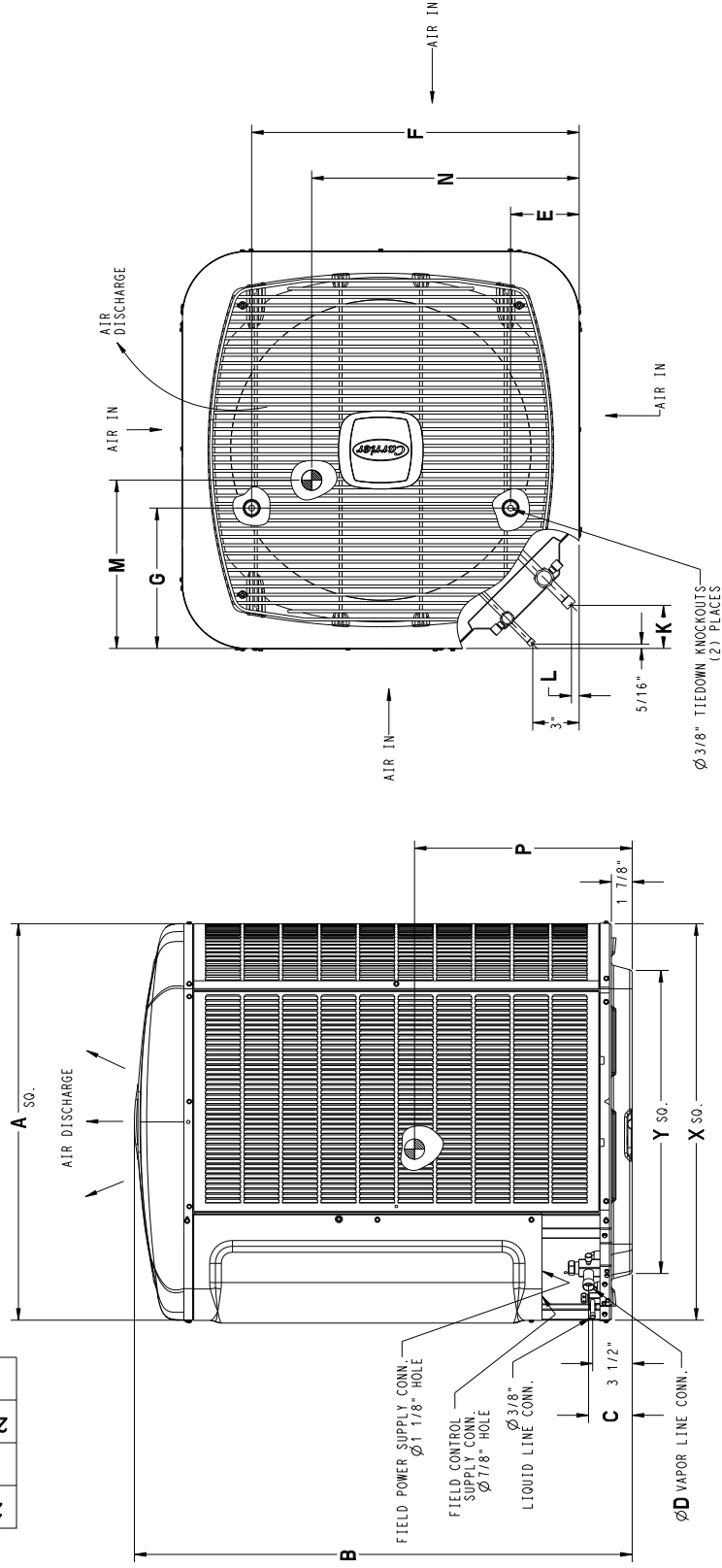
| PART NUMBER | PROGRAM | GAS | ELECTRIC | HEAT | COOL |
|-------------|---------|-----|----------|------|------|
| TP-PAC01    | 7-Day   | √   | √        | 1    | 1    |
| TP-NRH01-A  | NP      | √   | √        | 3    | 2    |
| TP-NAC01    | NP      | √   | √        | 1    | 1    |

# DIMENSIONS - ENGLISH

| UNIT      | SERIES | ELECTRICAL CHARACTERISTICS | A        | B        | C      | D    | E       | F         | G        | K        | L    | M       | N       | P       | OPERATING WEIGHT (lbs) | SHIPPING WEIGHT (lbs) | SHIPPING DIMENSIONS (L x W x H) |
|-----------|--------|----------------------------|----------|----------|--------|------|---------|-----------|----------|----------|------|---------|---------|---------|------------------------|-----------------------|---------------------------------|
| 24VNA924A | 0      | X 0 0 0                    | 23 1/8"  | 38 7/16" | 3 3/4" | 3/4" | 4 7/16" | 18 1/16"  | 7 13/16" | 2 13/16" | 1/2" | 10 3/4" | 10 3/4" | 18 1/4" | 160                    | 186                   | 25 1/4" X 25 1/4" X 43 3/8"     |
| 24VNA924B | 0      | X 0 0 0                    | 23 1/8"  | 31 5/8"  | 3 3/4" | 3/4" | 4 7/16" | 18 1/16"  | 7 13/16" | 2 13/16" | 1/2" | 11 1/4" | 11 1/4" | 14 1/2" | 135                    | 158                   | 25 1/4" X 25 1/4" X 35 5/8"     |
| 24VNA925A | 0      | X 0 0 0                    | 23 1/8"  | 38 7/16" | 3 3/4" | 3/4" | 4 7/16" | 18 1/16"  | 7 13/16" | 2 13/16" | 1/2" | 10 3/4" | 10 3/4" | 18 1/4" | 160                    | 186                   | 25 1/4" X 25 1/4" X 43 3/8"     |
| 24VNA936A | 0      | X 0 0 0                    | 23 1/8"  | 38 7/16" | 3 3/4" | 3/4" | 4 7/16" | 18 1/16"  | 7 13/16" | 2 13/16" | 1/2" | 10 3/4" | 10 3/4" | 18 1/4" | 160                    | 186                   | 25 1/4" X 25 1/4" X 43 3/8"     |
| 24VNA948A | 0      | X 0 0 0                    | 31 3/16" | 39 3/4"  | 3 7/8" | 7/8" | 6 9/16" | 24 11/16" | 9 1/8"   | 2 15/16" | 5/8" | 14 1/2" | 14 5/8" | 18 3/4" | 216                    | 255                   | 33 3/8" X 33 3/8" X 46 1/8"     |
| 24VNA960A | 0      | X 0 0 0                    | 31 3/16" | 43 3/16" | 3 7/8" | 7/8" | 6 9/16" | 24 11/16" | 9 1/8"   | 2 15/16" | 5/8" | 16 1/2" | 15"     | 20"     | 241                    | 282                   | 33 3/8" X 33 3/8" X 49 9/16"    |

X = YES  
0 = NO

|             |         |              |          |
|-------------|---------|--------------|----------|
| 208-230-160 | 230-160 | 208/230-3-60 | 460-3-60 |
|-------------|---------|--------------|----------|



| UNIT SIZE  | X" MIN GROUND MOUNTING PAD APPLICATION DIMENSIONS | Y" MIN ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS |
|------------|---|---|
| 24, 25, 36 | 23 1/8"   | 17 3/4"   |
| 48         | 25 3/4"   | 20 7/16"  |
| 60         | 31 3/16"  | 23"   |
|            | 35"   | 26 3/4"   |

When installing, allow sufficient space for airflow clearance, wiring, refrigerant piping, and service. Allow 24 in. (609.6 mm) clearance to service end of unit and 48 in. (1219.2 mm) above unit. For proper airflow, a 6-in. (152.4 mm) clearance on 1 side of unit and 12-in. (304.8 mm) on all remaining sides must be maintained. Maintain a distance of 24 in. (609.6 mm) between units or 18 in. (457.2 mm) if no overhang within 12 ft. (3.66 m). Position so water, snow, or ice from roof or eaves cannot fall directly on unit.

**NOTE:** 18" (457.2 mm) clearance option described above is approved for outdoor units with wire grille coil guard only. Units with louver panels require 24" (609.6 mm) between units.

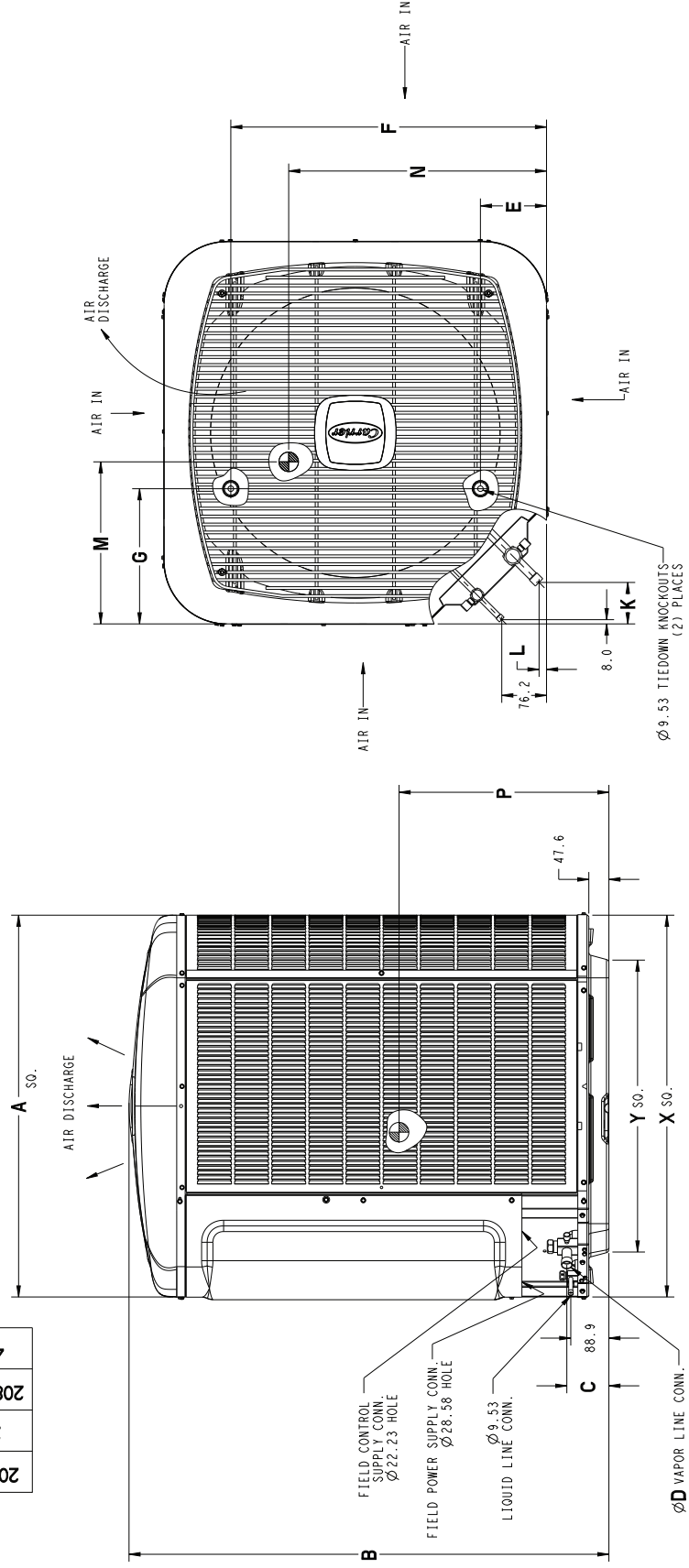
On rooftop applications, locate unit at least 6 in. (152.4 mm) above roof surface.

# DIMENSIONS - SI

| UNIT      | SERIES | ELECTRICAL CHARACTERISTICS | A     | B      | C    | D    | E     | F     | G     | K    | L    | M     | N     | P     | OPERATING WEIGHT (KGS) | SHIPPING WEIGHT (KGS) | SHIPPING DIMENSIONS (L x W x H) |
|-----------|--------|----------------------------|-------|--------|------|------|-------|-------|-------|------|------|-------|-------|-------|------------------------|-----------------------|---------------------------------|
| 24VWA924A | 0      | X 0 0 0                    | 587.3 | 975.9  | 96.1 | 19.1 | 112.7 | 458.8 | 198.4 | 71.4 | 12.7 | 273.1 | 273.1 | 463.6 | 72.6                   | 84.4                  | 641.5 X 641.5 X 1102.2          |
| 24VWA924B | 0      | X 0 0 0                    | 587.3 | 803.1  | 96.1 | 19.1 | 112.7 | 458.8 | 198.4 | 71.4 | 12.7 | 285.8 | 285.8 | 368.3 | 61.2                   | 71.7                  | 641.5 X 641.5 X 905.2           |
| 24VWA925A | 0      | X 0 0 0                    | 587.3 | 975.9  | 96.1 | 19.1 | 112.7 | 458.8 | 198.4 | 71.4 | 12.7 | 273.1 | 273.1 | 463.6 | 72.6                   | 84.4                  | 641.5 X 641.5 X 1102.2          |
| 24VWA936A | 0      | X 0 0 0                    | 587.3 | 975.9  | 96.1 | 19.1 | 112.7 | 458.8 | 198.4 | 71.4 | 12.7 | 273.1 | 273.1 | 463.6 | 72.6                   | 84.4                  | 641.5 X 641.5 X 1102.2          |
| 24VWA948A | 0      | X 0 0 0                    | 792.2 | 1010.3 | 98.4 | 22.2 | 166.7 | 627.1 | 231.8 | 74.6 | 15.9 | 368.3 | 371.5 | 476.3 | 98.0                   | 115.7                 | 846.6 X 846.6 X 1172.2          |
| 24VWA960A | 0      | X 0 0 0                    | 792.2 | 1096.7 | 98.4 | 22.2 | 166.7 | 627.1 | 231.8 | 74.6 | 15.9 | 419.1 | 381.0 | 508.0 | 109.3                  | 127.9                 | 846.6 X 846.6 X 1258.6          |

X = YES  
O = NO

|              |
|--------------|
| 460-3-60     |
| 208/230-3-60 |
| 230-160      |
| 208-230-160  |



| UNIT SIZE  | "X" MIN GROUND MOUNTING PAD APPLICATION DIMENSIONS | "Y" MIN ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS |
|------------|--|--|
| 24, 25, 36 | 587.4  | 451.3  |
| -          | 654.0  | 518.5  |
| 48, 60     | 792.2  | 583.2  |
| -          | 889.0  | 679.7  |

When installing, allow sufficient space for airflow clearance, wiring, refrigerant piping, and service. Allow 24 in. (609.6 mm) clearance to service end of unit and 48 in. (1219.2 mm) (above unit. For proper airflow, a 6-in. (152.4 mm) clearance on 1 side of unit and 12-in. (304.8 mm) on all remaining sides must be maintained. Maintain a distance of 24 in. (609.6 mm) between units or 18 in. (457.2 mm) if no overhang within 12 ft. (3.66 m) Position so water, snow, or ice from roof or eaves cannot fall directly on unit.

**NOTE:** 18" (457.2 mm) clearance option described above is approved for outdoor units with wire grille coil guard only. Units with louver panels require 24" (609.6 mm) between units.

On rooftop applications, locate unit at least 6 in. (152.4 mm) above roof surface.

## TESTED AHRI COMBINATION RATINGS\*

NOTE: Ratings contained in this document are subject to change at any time.

For AHRI ratings certificates, please refer to the AHRI directory [www.ahridirectory.org](http://www.ahridirectory.org)

Additional ratings and system combinations can be accessed via the Carrier database at: [www.MyCarrierRatings.com](http://www.MyCarrierRatings.com)

For performance data at specific application &/or design conditions with various indoor unit combinations, the equipment performance calculator can be accessed at : <http://rpmob.wrightisoft.com/>

| Model Number  | Coil Model Number | Furnace Model Number | Cooling Capacity High | SEER | EER  | ID CFM |
|---------------|-------------------|----------------------|-----------------------|------|------|--------|
| 24VNA924A**30 | FE4AN(B,F)005L+UI |                      | 23000                 | 18.0 | 11.0 | 825    |
| 24VNA924A**30 | FV4CN(B,F)003L    |                      | 22600                 | 16.0 | 11.0 | 700    |
| 24VNA924B**30 | FE4ANF002L+UI     |                      | 24000                 | 18.0 | 11.0 | 825    |
| 24VNA924B**30 | FV4CNF002L        |                      | 23800                 | 16.0 | 11.0 | 700    |
| 24VNA925A**30 | FE4AN(B,F)005L+UI |                      | 24000                 | 19.0 | 12.5 | 825    |
| 24VNA925A**30 | FV4CN(B,F)003L    |                      | 22600                 | 19.0 | 12.2 | 700    |
| 24VNA936A**30 | FE4AN(B,F)005L+UI |                      | 35000                 | 18.0 | 10.5 | 1050   |
| 24VNA936A**30 | FV4CN(B,F)005L    |                      | 35000                 | 16.0 | 10.5 | 1050   |
| 24VNA948A**30 | FE4ANB006L+UI     |                      | 46500                 | 19.0 | 11.0 | 1400   |
| 24VNA948A**30 | FV4CNB006L        |                      | 46000                 | 15.5 | 11.0 | 1400   |
| 24VNA960A**30 | FE4ANB006L+UI     |                      | 57000                 | 17.0 | 10.0 | 1600   |
| 24VNA960A**30 | FV4CNB006L        |                      | 57500                 | 15.0 | 10.0 | 1750   |

\* Ratings are net values reflecting the effects of circulating fan heat. Supplemental electric heat is not included. Ratings are based on:

**Cooling Standard:** 80°F (27°C) db 67°F (19°C) wb indoor entering air temperature and 95°F (35°C) db air entering outdoor unit.

**EER** — Energy Efficiency Ratio

**SEER** — Seasonal Energy Efficiency Ratio

**UI** — User Interface

NOTE: Ratings contained in this document are subject to change at any time.

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE

| EDB °F (°C)      | EVAP. AIR °F (°C) | 24VNA924A / FE44NF005 Efficiency Mode<br>Condenser Entering Air Temperature F (°C) |                         |       |                 |         |                         |         |                 |         |                         |       |                 |           |                         |       |                 |         |                         |       |                 |
|------------------|-------------------|--|-------------------------|-------|-----------------|---------|-------------------------|---------|-----------------|---------|-------------------------|-------|-----------------|-----------|-------------------------|-------|-----------------|---------|-------------------------|-------|-----------------|
|                  |                   | 115 (46.1)   |                         |       | 105 (40.5)      |         |                         | 95 (35) |                 |         | 85 (29.4)               |       |                 | 75 (23.9) |                         |       | 65 (18.3)       |         |                         |       |                 |
|                  |                   | ID SCFM  | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** | ID SCFM | Capacity MBtuh<br>Total | Sens†   | Total Sys. KW** | ID SCFM | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** | ID SCFM   | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** | ID SCFM | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** |
| <b>STAGE 5</b>   |                   |  |                         |       |                 |         |                         |         |                 |         |                         |       |                 |           |                         |       |                 |         |                         |       |                 |
| <b>75 (23.9)</b> | 72 (22.2)         |  | 22.60                   | 9.53  | 3.21            | 24.02   | 10.05                   | 2.61    | 25.33           | 10.54   | 2.07                    | 26.67 | 11.04           | 1.60      | 27.98                   | 11.54 | 1.20            | 29.26   | 12.02                   | 0.84  |                 |
|                  | 67 (19.4)         | <b>825</b>   | 20.56                   | 13.19 | 3.20            | 21.88   | 13.76                   | 2.63    | 23.10           | 14.31   | 2.09                    | 24.34 | 14.86           | 1.64      | 25.55                   | 15.41 | 1.24            | 26.73   | 15.95                   | 0.89  |                 |
|                  | 63 (17.2)         |  | 19.06                   | 16.04 | 3.19            | 20.29   | 16.66                   | 2.63    | 21.44           | 17.25   | 2.10                    | 22.61 | 17.85           | 1.66      | 23.74                   | 18.44 | 1.26            | 24.85   | 19.01                   | 0.93  |                 |
|                  | 57 (13.9)         |  | 18.10                   | 18.10 | 3.18            | 19.09   | 19.09                   | 2.63    | 20.04           | 20.04   | 2.11                    | 20.97 | 20.97           | 1.67      | 21.89                   | 21.89 | 1.29            | 22.78   | 22.78                   | 0.96  |                 |
|                  | 72 (22.2)         |  |                         | 22.44 | 13.14           | 3.20    | 23.85                   | 13.70   | 2.61            | 25.15   | 14.23                   | 2.06  | 26.49           | 14.77     | 1.60                    | 27.80 | 15.31           | 1.19    | 29.07                   | 15.84 | 0.84            |
| 67 (19.4)        | <b>825</b>        |  | 20.48                   | 16.76 | 3.20            | 21.79   | 17.38                   | 2.62    | 23.00           | 17.96   | 2.09                    | 24.24 | 18.56           | 1.63      | 25.45                   | 19.15 | 1.23            | 26.62   | 19.73                   | 0.89  |                 |
| 63 (17.2)        |                   | 19.26  | 19.26                   | 3.19  | 20.37           | 20.18   | 2.63                    | 21.49   | 20.85           | 2.10    | 22.63                   | 21.51 | 1.65            | 23.75     | 22.15                   | 1.26  | 24.85           | 22.77   | 0.92                    |       |                 |
| 57 (13.9)        |                   | 19.23  | 19.23                   | 3.19  | 20.28           | 20.28   | 2.63                    | 21.25   | 21.25           | 2.10    | 22.23                   | 22.23 | 1.66            | 23.18     | 23.18                   | 1.27  | 24.10           | 24.10   | 0.94                    |       |                 |
| 72 (22.2)        |                   |  | 15.08                   | 6.47  | 1.54            | 16.06   | 6.82                    | 1.33    | 16.82           | 7.10    | 1.10                    | 17.75 | 7.44            | 0.91      | 18.67                   | 7.78  | 0.72            | 19.58   | 8.12                    | 0.54  |                 |
| 67 (19.4)        |                   | <b>650</b>   | 13.68                   | 9.15  | 1.54            | 14.59   | 9.54                    | 1.35    | 15.33           | 9.87    | 1.12                    | 16.19 | 10.25           | 0.94      | 17.03                   | 10.62 | 0.76            | 17.86   | 10.99                   | 0.59  |                 |
| 63 (17.2)        | 12.70             |  | 11.25                   | 1.54  | 13.54           | 11.67   | 1.36                    | 14.27   | 12.04           | 1.13    | 15.07                   | 12.45 | 0.96            | 15.86     | 12.85                   | 0.79  | 16.62           | 13.24   | 0.62                    |       |                 |
| 57 (13.9)        | 12.27             |  | 12.27                   | 1.54  | 12.97           | 12.97   | 1.37                    | 13.58   | 13.58           | 1.14    | 14.24                   | 14.24 | 0.97            | 14.89     | 14.89                   | 0.81  | 15.52           | 15.52   | 0.65                    |       |                 |
| 72 (22.2)        |                   |  | 14.96                   | 9.12  | 1.53            | 15.93   | 9.51                    | 1.33    | 16.68           | 9.81    | 1.10                    | 17.61 | 10.18           | 0.91      | 18.52                   | 10.55 | 0.72            | 19.47   | 10.93                   | 0.54  |                 |
| 67 (19.4)        | <b>650</b>        |  | 13.64                   | 11.78 | 1.54            | 14.54   | 12.20                   | 1.35    | 15.27           | 12.55   | 1.12                    | 16.13 | 12.96           | 0.94      | 16.96                   | 13.36 | 0.76            | 17.78   | 13.76                   | 0.59  |                 |
| 63 (17.2)        |                   | 13.08  | 13.08                   | 1.54  | 13.82           | 13.82   | 1.36                    | 14.43   | 14.43           | 1.13    | 15.14                   | 15.09 | 0.96            | 15.89     | 15.56                   | 0.79  | 16.65           | 15.99   | 0.62                    |       |                 |
| 57 (13.9)        |                   | 13.06  | 13.06                   | 1.54  | 13.79           | 13.79   | 1.36                    | 14.41   | 14.41           | 1.13    | 15.10                   | 15.10 | 0.96            | 15.77     | 15.77                   | 0.79  | 16.42           | 16.42   | 0.63                    |       |                 |
| 72 (22.2)        |                   |  | 11.92                   | 5.31  | 0.85            | 12.72   | 5.59                    | 0.82    | 10.55           | 4.66    | 0.46                    | 11.18 | 4.89            | 0.44      | 11.84                   | 5.13  | 0.39            | 12.52   | 5.37                    | 0.28  |                 |
| 67 (19.4)        |                   | <b>585</b>   | 10.80                   | 7.83  | 0.86            | 11.55   | 8.14                    | 0.83    | 9.58            | 6.85    | 0.47                    | 10.16 | 7.10            | 0.47      | 10.74                   | 7.35  | 0.43            | 11.36   | 7.61                    | 0.34  |                 |
| 63 (17.2)        | 10.05             |  | 9.78                    | 0.86  | 10.74           | 10.13   | 0.84                    | 8.93    | 8.56            | 0.49    | 9.46                    | 8.83  | 0.49            | 10.00     | 9.10                    | 0.46  | 10.55           | 9.37    | 0.38                    |       |                 |
| 57 (13.9)        | 9.97              |  | 9.97                    | 0.86  | 10.57           | 10.57   | 0.85                    | 8.82    | 8.82            | 0.49    | 9.29                    | 9.29  | 0.50            | 9.75      | 9.75                    | 0.47  | 10.21           | 10.21   | 0.40                    |       |                 |
| 72 (22.2)        |                   |  | 11.80                   | 7.81  | 0.85            | 12.59   | 8.12                    | 0.82    | 10.41           | 6.81    | 0.46                    | 11.06 | 7.06            | 0.44      | 11.73                   | 7.32  | 0.38            | 12.41   | 7.59                    | 0.28  |                 |
| 67 (19.4)        | <b>585</b>        |  | 10.80                   | 10.29 | 0.86            | 11.52   | 10.64                   | 0.83    | 9.55            | 8.98    | 0.47                    | 10.13 | 9.25            | 0.47      | 10.71                   | 9.53  | 0.43            | 11.32   | 9.81                    | 0.34  |                 |
| 63 (17.2)        |                   | 10.66  | 10.66                   | 0.86  | 11.28           | 11.28   | 0.84                    | 9.40    | 9.40            | 0.48    | 9.89                    | 9.89  | 0.48            | 10.37     | 10.37                   | 0.44  | 10.87           | 10.87   | 0.36                    |       |                 |
| 57 (13.9)        |                   | 10.64  | 10.64                   | 0.86  | 11.26           | 11.26   | 0.84                    | 9.39    | 9.39            | 0.48    | 9.87                    | 9.87  | 0.48            | 10.35     | 10.35                   | 0.44  | 10.85           | 10.85   | 0.36                    |       |                 |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage

**Stage 1** — Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

| EDB °F (°C)         | EVAP. AIR<br>EWB °F (°C) | 24VNA924B / FE4ANF02L Efficiency Mode<br>Condenser Entering Air Temperature F (°C) |                         |       |                    |            |                         |         |                    |            |                         |       |                    |            |                         |       |                    |            |                         |       |                    |
|---------------------|--------------------------|--|-------------------------|-------|--------------------|------------|-------------------------|---------|--------------------|------------|-------------------------|-------|--------------------|------------|-------------------------|-------|--------------------|------------|-------------------------|-------|--------------------|
|                     |                          | 115 (46.1)   |                         |       | 105 (40.5)         |            |                         | 95 (35) |                    |            | 85 (29.4)               |       |                    | 75 (23.9)  |                         |       | 65 (18.3)          |            |                         |       |                    |
|                     |                          | ID<br>SCFM   | Capacity MBtuh<br>Total | Sens† | Total<br>Sys. KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens†   | Total<br>Sys. KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens† | Total<br>Sys. KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens† | Total<br>Sys. KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens† | Total<br>Sys. KW** |
| <b>STAGE 5</b>      |                          |  |                         |       |                    |            |                         |         |                    |            |                         |       |                    |            |                         |       |                    |            |                         |       |                    |
| <b>75</b><br>(23.9) | 72<br>(22.2)             |  | 23.43                   | 9.90  | 2.85               | 25.03      | 10.49                   | 2.52    | 28.46              | 11.02      | 2.20                    | 28.00 | 11.80              | 1.91       | 29.51                   | 12.16 | 1.63               |            | 31.01                   | 12.73 | 1.37               |
|                     | 67<br>(19.4)             | <b>825</b>   | 21.30                   | 13.70 | 2.81               | 22.76      | 14.32                   | 2.49    | 24.07              | 14.89      | 2.18                    | 25.46 | 15.50              | 1.90       | 26.82                   | 16.10 | 1.63               | <b>825</b> | 28.19                   | 16.70 | 1.38               |
|                     | 63<br>(17.2)             |  | 19.74                   | 16.69 | 2.78               | 21.07      | 17.34                   | 2.47    | 22.29              | 17.94      | 2.17                    | 23.56 | 18.57              | 1.89       | 24.85                   | 19.20 | 1.63               |            | 26.11                   | 19.82 | 1.39               |
|                     | 57<br>(13.9)             |  | 18.74                   | 18.74 | 2.76               | 19.81      | 19.81                   | 2.45    | 20.78              | 20.78      | 2.15                    | 21.79 | 21.79              | 1.88       | 22.78                   | 22.78 | 1.63               |            | 23.74                   | 23.74 | 1.39               |
|                     | 72<br>(22.2)             |  | 23.36                   | 13.70 | 2.85               | 24.96      | 14.32                   | 2.52    | 26.39              | 14.88      | 2.20                    | 27.93 | 15.49              | 1.91       | 29.44                   | 16.09 | 1.63               |            | 30.94                   | 16.89 | 1.37               |
| 67<br>(19.4)        | 21.24                    |  | 17.45                   | 2.81  | 22.89              | 18.11      | 2.49                    | 24.00   | 18.72              | 2.18       | 25.39                   | 19.36 | 1.90               | 26.76      | 19.99                   | 1.63  | 28.12              |            | 20.83                   | 1.38  |                    |
| <b>80</b><br>(26.7) | 72<br>(22.2)             | <b>825</b>   | 19.96                   | 19.96 | 2.78               | 21.18      | 20.93                   | 2.47    | 22.35              | 21.63      | 2.17                    | 23.61 | 22.94              | 1.89       | 24.86                   | 23.02 | 1.63               | <b>825</b> | 26.10                   | 23.70 | 1.38               |
|                     | 63<br>(17.2)             |  | 19.93                   | 19.93 | 2.78               | 21.05      | 21.05                   | 2.47    | 22.07              | 22.07      | 2.16                    | 23.12 | 23.12              | 1.89       | 24.16                   | 24.16 | 1.63               |            | 25.17                   | 25.17 | 1.39               |
|                     | 57<br>(13.9)             |  | 16.60                   | 7.18  | 1.72               | 17.75      | 7.59                    | 1.53    | 18.75              | 7.96       | 1.31                    | 19.88 | 8.37               | 1.12       | 20.99                   | 8.78  | 0.94               |            | 22.08                   | 9.18  | 0.77               |
|                     | 72<br>(22.2)             |  | 15.01                   | 10.22 | 1.72               | 16.06      | 10.66                   | 1.53    | 16.99              | 11.06      | 1.32                    | 18.00 | 11.49              | 1.14       | 18.99                   | 11.92 | 0.97               |            | 19.97                   | 12.94 | 0.81               |
|                     | 67<br>(19.4)             |  | 13.88                   | 12.59 | 1.71               | 14.82      | 13.06                   | 1.54    | 15.70              | 13.48      | 1.32                    | 16.62 | 13.94              | 1.15       | 17.52                   | 14.38 | 0.99               |            | 18.40                   | 14.82 | 0.84               |
| <b>80</b><br>(26.7) | 72<br>(22.2)             | <b>650</b>   | 13.48                   | 13.48 | 1.71               | 14.25      | 14.25                   | 1.54    | 14.97              | 14.97      | 1.32                    | 15.70 | 15.70              | 1.16       | 16.40                   | 16.40 | 1.01               | <b>650</b> | 17.10                   | 17.10 | 0.86               |
|                     | 67<br>(19.4)             |  | 16.54                   | 10.24 | 1.72               | 17.89      | 10.68                   | 1.53    | 18.68              | 11.07      | 1.31                    | 19.81 | 11.51              | 1.12       | 20.92                   | 11.94 | 0.94               |            | 22.01                   | 12.37 | 0.77               |
|                     | 63<br>(17.2)             |  | 14.98                   | 13.23 | 1.72               | 16.01      | 13.70                   | 1.53    | 16.94              | 14.13      | 1.32                    | 17.95 | 14.59              | 1.14       | 18.93                   | 15.05 | 0.97               |            | 19.91                   | 15.50 | 0.81               |
|                     | 72<br>(22.2)             |  | 14.42                   | 14.42 | 1.72               | 15.24      | 15.24                   | 1.53    | 15.99              | 15.99      | 1.32                    | 16.77 | 16.77              | 1.15       | 17.61                   | 17.39 | 0.99               |            | 18.46                   | 17.89 | 0.83               |
|                     | 67<br>(19.4)             |  | 14.40                   | 14.40 | 1.72               | 15.22      | 15.22                   | 1.53    | 15.96              | 15.96      | 1.32                    | 16.74 | 16.74              | 1.15       | 17.50                   | 17.50 | 0.99               |            | 18.23                   | 18.23 | 0.84               |
| <b>75</b><br>(23.9) | 72<br>(22.2)             | <b>650</b>   | 14.01                   | 6.30  | 1.38               | 15.00      | 6.65                    | 1.24    | 9.25               | 4.60       | 0.54                    | 9.85  | 4.81               | 0.46       | 10.45                   | 5.01  | 0.37               | <b>585</b> | 11.04                   | 5.22  | 0.29               |
|                     | 67<br>(19.4)             |  | 12.64                   | 9.35  | 1.39               | 13.52      | 9.73                    | 1.25    | 8.32               | 7.38       | 0.55                    | 8.85  | 7.61               | 0.48       | 9.37                    | 7.84  | 0.40               |            | 9.89                    | 8.07  | 0.33               |
|                     | 63<br>(17.2)             |  | 11.71                   | 11.62 | 1.39               | 12.49      | 12.06                   | 1.26    | 8.11               | 8.11       | 0.55                    | 8.56  | 8.56               | 0.46       | 9.00                    | 9.00  | 0.41               |            | 9.43                    | 9.43  | 0.34               |
|                     | 57<br>(13.9)             |  | 11.67                   | 11.67 | 1.39               | 12.35      | 12.35                   | 1.26    | 8.11               | 8.11       | 0.55                    | 8.55  | 8.55               | 0.48       | 8.98                    | 8.98  | 0.41               |            | 9.42                    | 9.42  | 0.34               |
|                     | 72<br>(22.2)             |  | 13.95                   | 9.39  | 1.38               | 14.94      | 9.76                    | 1.24    | 9.20               | 7.43       | 0.54                    | 9.80  | 7.66               | 0.45       | 10.39                   | 7.90  | 0.37               |            | 10.98                   | 8.13  | 0.29               |
| <b>80</b><br>(26.7) | 72<br>(22.2)             | <b>650</b>   | 12.66                   | 12.32 | 1.39               | 13.52      | 12.75                   | 1.25    | 8.77               | 8.77       | 0.54                    | 9.26  | 9.26               | 0.47       | 9.73                    | 9.73  | 0.39               | <b>585</b> | 10.19                   | 10.19 | 0.31               |
|                     | 67<br>(19.4)             |  | 12.55                   | 12.55 | 1.39               | 13.28      | 13.28                   | 1.26    | 8.77               | 8.77       | 0.54                    | 9.25  | 9.25               | 0.47       | 9.72                    | 9.72  | 0.39               |            | 10.18                   | 10.18 | 0.31               |
|                     | 63<br>(17.2)             |  | 12.53                   | 12.53 | 1.39               | 13.26      | 13.26                   | 1.26    | 8.76               | 8.76       | 0.54                    | 9.24  | 9.24               | 0.47       | 9.71                    | 9.71  | 0.39               |            | 10.17                   | 10.17 | 0.31               |
|                     | 57<br>(13.9)             |  | 14.01                   | 6.30  | 1.38               | 15.00      | 6.65                    | 1.24    | 9.25               | 4.60       | 0.54                    | 9.85  | 4.81               | 0.46       | 10.45                   | 5.01  | 0.37               |            | 11.04                   | 5.22  | 0.29               |
|                     | 72<br>(22.2)             |  | 12.64                   | 9.35  | 1.39               | 13.52      | 9.73                    | 1.25    | 8.32               | 7.38       | 0.55                    | 8.85  | 7.61               | 0.48       | 9.37                    | 7.84  | 0.40               |            | 9.89                    | 8.07  | 0.33               |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage

**Stage 1** — Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

| EDB<br>*F (°C)             | EVAP.<br>AIR | 24VNA325/FE4AHF005 Efficiency Mode<br>Condenser Entering Air Temperature F (°C) |                         |       |                       |            |                         |       |                       |            |                         |       |                       |            |                         |       |                       |            |                         |       |                       |            |                         |       |                       |
|----------------------------|--------------|---|-------------------------|-------|-----------------------|------------|-------------------------|-------|-----------------------|------------|-------------------------|-------|-----------------------|------------|-------------------------|-------|-----------------------|------------|-------------------------|-------|-----------------------|------------|-------------------------|-------|-----------------------|
|                            |              | 115 (46.1)  |                         |       |                       | 105 (40.5) |                         |       |                       | 95 (35)    |                         |       |                       | 85 (29.4)  |                         |       |                       | 75 (23.9)  |                         |       |                       | 65 (18.3)  |                         |       |                       |
|                            |              | ID<br>SCFM  | Capacity MBtuh<br>Total | Sens† | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens† | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens† | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens† | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens† | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh<br>Total | Sens† | Total<br>Sys.<br>KW** |
| <b>75</b><br><b>(23.9)</b> | 72<br>(22.2) | <b>825</b>  | 23.68                   | 9.99  | 2.51                  | 25.12      | 10.51                   | 2.21  | 26.43                 | 11.00      | 1.90                    | 27.77 | 11.50                 | 1.62       | 29.08                   | 11.99 | 1.34                  | 30.34      | 12.47                   | 1.07  | <b>825</b>            | <b>825</b> | 20.05                   | 8.32  | 0.61                  |
|                            | 67<br>(19.4) |   | 21.55                   | 13.82 | 2.50                  | 22.88      | 14.39                   | 2.21  | 24.10                 | 14.93      | 1.92                    | 25.35 | 15.48                 | 1.65       | 26.55                   | 16.01 | 1.39                  | 27.72      | 16.54                   | 1.13  |                       |            |                         |       |                       |
|                            | 63<br>(17.2) |   | 19.97                   | 16.81 | 2.49                  | 21.22      | 17.43                   | 2.22  | 22.38                 | 18.00      | 1.93                    | 23.54 | 18.59                 | 1.67       | 24.67                   | 19.16 | 1.42                  | 25.77      | 19.72                   | 1.17  |                       |            |                         |       |                       |
|                            | 57<br>(13.9) |   | 18.96                   | 18.96 | 2.48                  | 19.97      | 19.97                   | 2.21  | 20.91                 | 20.91      | 1.94                    | 21.84 | 21.84                 | 1.69       | 22.75                   | 22.75 | 1.45                  | 23.62      | 23.62                   | 1.21  |                       |            |                         |       |                       |
|                            | 72<br>(22.2) |   | 23.52                   | 13.77 | 2.50                  | 24.94      | 14.33                   | 2.20  | 26.25                 | 14.85      | 1.90                    | 27.59 | 15.38                 | 1.61       | 28.89                   | 15.91 | 1.34                  | 30.15      | 16.42                   | 1.07  |                       |            |                         |       |                       |
| <b>80</b><br><b>(26.7)</b> | 67<br>(19.4) | <b>825</b>  | 21.46                   | 17.56 | 2.50                  | 22.78      | 18.18                   | 2.21  | 24.00                 | 18.75      | 1.92                    | 25.24 | 19.33                 | 1.65       | 26.45                   | 19.90 | 1.39                  | 27.61      | 20.46                   | 1.13  | <b>825</b>            | <b>825</b> | 20.05                   | 8.32  | 0.61                  |
|                            | 63<br>(17.2) |   | 20.19                   | 20.19 | 2.49                  | 21.30      | 21.10                   | 2.22  | 22.43                 | 21.76      | 1.93                    | 23.57 | 22.40                 | 1.67       | 24.68                   | 23.02 | 1.42                  | 25.77      | 23.62                   | 1.17  |                       |            |                         |       |                       |
|                            | 57<br>(13.9) |   | 20.15                   | 20.15 | 2.49                  | 21.20      | 21.20                   | 2.22  | 22.18                 | 22.18      | 1.93                    | 23.15 | 23.15                 | 1.67       | 24.09                   | 24.09 | 1.43                  | 25.00      | 25.00                   | 1.19  |                       |            |                         |       |                       |
|                            | 72<br>(22.2) |   | 15.55                   | 6.67  | 1.25                  | 16.54      | 7.02                    | 1.17  | 17.29                 | 7.30       | 1.03                    | 18.23 | 7.64                  | 0.91       | 19.14                   | 7.98  | 0.77                  | 20.05      | 8.32                    | 0.61  |                       |            |                         |       |                       |
|                            | 67<br>(19.4) |   | 14.11                   | 9.43  | 1.25                  | 15.02      | 9.82                    | 1.18  | 15.76                 | 10.15      | 1.05                    | 16.63 | 10.52                 | 0.95       | 17.47                   | 10.89 | 0.82                  | 18.29      | 11.25                   | 0.67  |                       |            |                         |       |                       |
| <b>75</b><br><b>(23.9)</b> | 63<br>(17.2) | <b>650</b>  | 13.09                   | 11.60 | 1.25                  | 13.94      | 12.02                   | 1.19  | 14.67                 | 12.38      | 1.06                    | 15.47 | 12.78                 | 0.97       | 16.26                   | 13.17 | 0.85                  | 17.02      | 13.56                   | 0.71  | <b>650</b>            | <b>650</b> | 20.05                   | 8.32  | 0.61                  |
|                            | 57<br>(13.9) |   | 12.65                   | 12.65 | 1.25                  | 13.36      | 13.36                   | 1.20  | 13.97                 | 13.97      | 1.07                    | 14.62 | 14.62                 | 0.98       | 15.26                   | 15.26 | 0.87                  | 15.89      | 15.89                   | 0.75  |                       |            |                         |       |                       |
|                            | 72<br>(22.2) |   | 15.43                   | 9.41  | 1.24                  | 16.40      | 9.79                    | 1.17  | 17.14                 | 10.08      | 1.03                    | 18.08 | 10.45                 | 0.91       | 18.99                   | 10.81 | 0.77                  | 19.94      | 11.19                   | 0.61  |                       |            |                         |       |                       |
|                            | 67<br>(19.4) |   | 14.07                   | 12.14 | 1.25                  | 14.97      | 12.56                   | 1.18  | 15.70                 | 12.91      | 1.05                    | 16.56 | 13.31                 | 0.94       | 17.39                   | 13.70 | 0.82                  | 18.21      | 14.09                   | 0.67  |                       |            |                         |       |                       |
|                            | 63<br>(17.2) |   | 13.49                   | 13.49 | 1.25                  | 14.23      | 14.23                   | 1.19  | 14.84                 | 14.84      | 1.06                    | 15.54 | 15.49                 | 0.96       | 16.30                   | 15.95 | 0.84                  | 17.05      | 16.38                   | 0.71  |                       |            |                         |       |                       |
| <b>80</b><br><b>(26.7)</b> | 57<br>(13.9) | <b>650</b>  | 13.47                   | 13.47 | 1.25                  | 14.20      | 14.20                   | 1.19  | 14.81                 | 14.81      | 1.06                    | 15.50 | 15.50                 | 0.96       | 16.17                   | 16.17 | 0.85                  | 16.81      | 16.81                   | 0.72  | <b>650</b>            | <b>650</b> | 20.05                   | 8.32  | 0.61                  |
|                            | 72<br>(22.2) |   | 12.12                   | 5.39  | 0.73                  | 12.92      | 5.68                    | 0.75  | 13.55                 | 6.06       | 0.66                    | 14.18 | 6.35                  | 0.54       | 14.84                   | 6.62  | 0.46                  | 15.50      | 6.89                    | 0.36  |                       |            |                         |       |                       |
|                            | 67<br>(19.4) |   | 10.98                   | 7.95  | 0.74                  | 11.73      | 8.27                    | 0.77  | 12.48                 | 8.56       | 0.68                    | 13.18 | 8.85                  | 0.59       | 13.87                   | 9.14  | 0.50                  | 14.57      | 9.41                    | 0.41  |                       |            |                         |       |                       |
|                            | 63<br>(17.2) |   | 10.22                   | 9.94  | 0.74                  | 10.91      | 10.29                   | 0.77  | 11.60                 | 10.68      | 0.69                    | 12.30 | 11.00                 | 0.60       | 12.99                   | 11.37 | 0.51                  | 13.68      | 11.64                   | 0.42  |                       |            |                         |       |                       |
|                            | 57<br>(13.9) |   | 10.14                   | 10.14 | 0.74                  | 10.74      | 10.74                   | 0.78  | 11.34                 | 10.74      | 0.69                    | 11.94 | 10.74                 | 0.60       | 12.54                   | 10.74 | 0.50                  | 13.14      | 10.74                   | 0.40  |                       |            |                         |       |                       |
| <b>75</b><br><b>(23.9)</b> | 72<br>(22.2) | <b>585</b>  | 11.99                   | 7.94  | 0.73                  | 12.79      | 8.25                    | 0.75  | 13.41                 | 8.54       | 0.66                    | 14.03 | 8.83                  | 0.57       | 14.65                   | 9.12  | 0.48                  | 15.27      | 9.41                    | 0.39  | <b>585</b>            | <b>585</b> | 20.05                   | 8.32  | 0.61                  |
|                            | 67<br>(19.4) |   | 10.97                   | 10.45 | 0.74                  | 11.70      | 10.80                   | 0.76  | 12.43                 | 10.69      | 0.67                    | 13.16 | 10.58                 | 0.58       | 13.89                   | 10.37 | 0.49                  | 14.62      | 10.06                   | 0.40  |                       |            |                         |       |                       |
|                            | 63<br>(17.2) |   | 10.83                   | 10.83 | 0.74                  | 11.46      | 11.46                   | 0.77  | 12.10                 | 11.46      | 0.68                    | 12.78 | 11.46                 | 0.59       | 13.47                   | 11.46 | 0.50                  | 14.15      | 11.46                   | 0.41  |                       |            |                         |       |                       |
|                            | 57<br>(13.9) |   | 10.82                   | 10.82 | 0.74                  | 11.44      | 11.44                   | 0.77  | 12.10                 | 11.44      | 0.68                    | 12.78 | 11.44                 | 0.59       | 13.47                   | 11.44 | 0.50                  | 14.15      | 11.44                   | 0.41  |                       |            |                         |       |                       |
|                            | 72<br>(22.2) |   | 12.12                   | 5.39  | 0.73                  | 12.92      | 5.68                    | 0.75  | 13.55                 | 6.06       | 0.66                    | 14.18 | 6.35                  | 0.54       | 14.84                   | 6.62  | 0.46                  | 15.50      | 6.89                    | 0.36  |                       |            |                         |       |                       |

STAGE 5

STAGE 3

STAGE 1

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 1** – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

| EDB °F<br>(°C) | EVAP. AIR    | 24VNA96 / FE5AHF05 Efficiency Mode<br>Condenser Entering Air Temperature F (°C) |                         |                          |            |                         |                          |         |                         |                          |           |                         |                          |           |                         |                          |           |                         |                          |      |
|----------------|--------------|---|-------------------------|--------------------------|------------|-------------------------|--------------------------|---------|-------------------------|--------------------------|-----------|-------------------------|--------------------------|-----------|-------------------------|--------------------------|-----------|-------------------------|--------------------------|------|
|                |              | 115 (46.1)  |                         |                          | 105 (40.5) |                         |                          | 95 (35) |                         |                          | 85 (29.4) |                         |                          | 75 (23.9) |                         |                          | 65 (18.3) |                         |                          |      |
|                |              | ID SCFM   | Capacity MBtuh<br>Total | Total Sys. KW**<br>Sens† | ID SCFM    | Capacity MBtuh<br>Total | Total Sys. KW**<br>Sens† | ID SCFM | Capacity MBtuh<br>Total | Total Sys. KW**<br>Sens† | ID SCFM   | Capacity MBtuh<br>Total | Total Sys. KW**<br>Sens† | ID SCFM   | Capacity MBtuh<br>Total | Total Sys. KW**<br>Sens† | ID SCFM   | Capacity MBtuh<br>Total | Total Sys. KW**<br>Sens† |      |
| <b>STAGE 5</b> |              |   |                         |                          |            |                         |                          |         |                         |                          |           |                         |                          |           |                         |                          |           |                         |                          |      |
| 75<br>(23.9)   | 72<br>(22.2) | 34.24   | 14.18                   | 4.44                     | 1050       | 36.41                   | 14.99                    | 3.89    | 1050                    | 38.29                    | 15.70     | 3.36                    | 1050                     | 40.30     | 16.47                   | 2.87                     | 1050      | 42.28                   | 17.24                    | 2.41 |
|                | 67<br>(19.4) | 31.38   | 19.07                   | 4.38                     |            | 33.85                   | 19.95                    | 3.85    |                         | 35.13                    | 20.75     | 3.34                    |                          | 36.99     | 21.60                   | 2.87                     |           | 38.79                   | 22.42                    | 2.43 |
|                | 63<br>(17.2) | 29.21   | 22.90                   | 4.33                     |            | 31.07                   | 23.84                    | 3.81    |                         | 32.74                    | 24.70     | 3.31                    |                          | 34.48     | 25.59                   | 2.86                     |           | 36.17                   | 26.47                    | 2.44 |
|                | 57<br>(13.9) | 27.05   | 27.05                   | 4.27                     |            | 28.50                   | 28.50                    | 3.77    |                         | 29.85                    | 29.85     | 3.28                    |                          | 31.20     | 31.20                   | 2.84                     |           | 32.85                   | 32.25                    | 2.44 |
|                | 72<br>(22.2) | 34.04   | 18.92                   | 4.44                     |            | 36.21                   | 19.79                    | 3.88    |                         | 38.09                    | 20.56     | 3.35                    |                          | 40.10     | 21.39                   | 2.86                     |           | 42.08                   | 22.22                    | 2.41 |
| 80<br>(26.7)   | 67<br>(19.4) | 31.25   | 23.78                   | 4.38                     | 33.23      | 24.72                   | 3.84                     | 35.00   | 25.57                   | 3.33                     | 36.86     | 26.47                   | 2.86                     | 38.66     | 27.35                   | 2.42                     |           |                         |                          |      |
|                | 63<br>(17.2) | 29.21   | 27.55                   | 4.33                     | 31.05      | 28.56                   | 3.81                     | 32.70   | 29.48                   | 3.31                     | 34.43     | 30.44                   | 2.86                     | 36.11     | 31.38                   | 2.43                     |           |                         |                          |      |
|                | 57<br>(13.9) | 28.61   | 28.61                   | 4.32                     | 30.14      | 30.14                   | 3.80                     | 31.53   | 31.53                   | 3.30                     | 32.95     | 32.95                   | 2.85                     | 34.31     | 34.31                   | 2.44                     |           |                         |                          |      |
|                | 72<br>(22.2) | 21.81   | 9.32                    | 1.96                     | 23.25      | 9.85                    | 1.83                     | 24.29   | 10.24                   | 1.67                     | 25.66     | 10.75                   | 1.50                     | 27.01     | 11.26                   | 1.31                     |           |                         |                          |      |
|                | 67<br>(19.4) | 19.85   | 13.12                   | 1.96                     | 21.18      | 13.71                   | 1.84                     | 22.21   | 14.19                   | 1.68                     | 23.48     | 14.77                   | 1.52                     | 24.72     | 15.33                   | 1.35                     |           |                         |                          |      |
| 75<br>(23.9)   | 63<br>(17.2) | 18.41   | 16.08                   | 1.95                     | 19.86      | 16.73                   | 1.85                     | 20.68   | 17.29                   | 1.68                     | 21.87     | 17.91                   | 1.54                     | 23.02     | 18.53                   | 1.37                     |           |                         |                          |      |
|                | 57<br>(13.9) | 17.71   | 17.71                   | 1.95                     | 18.75      | 18.75                   | 1.85                     | 19.63   | 19.63                   | 1.68                     | 20.61     | 20.61                   | 1.54                     | 21.57     | 21.57                   | 1.39                     |           |                         |                          |      |
|                | 72<br>(22.2) | 21.64   | 13.06                   | 1.95                     | 23.07      | 13.65                   | 1.83                     | 24.08   | 14.08                   | 1.66                     | 25.46     | 14.85                   | 1.49                     | 26.81     | 15.21                   | 1.31                     |           |                         |                          |      |
|                | 67<br>(19.4) | 19.77   | 16.83                   | 1.95                     | 21.09      | 17.48                   | 1.84                     | 22.11   | 18.01                   | 1.67                     | 23.37     | 18.64                   | 1.52                     | 24.60     | 19.26                   | 1.35                     |           |                         |                          |      |
|                | 63<br>(17.2) | 18.86   | 18.86                   | 1.95                     | 19.85      | 19.95                   | 1.84                     | 20.82   | 20.82                   | 1.68                     | 21.94     | 21.87                   | 1.53                     | 23.07     | 22.38                   | 1.37                     |           |                         |                          |      |
| 80<br>(26.7)   | 57<br>(13.9) | 18.83   | 18.83                   | 1.95                     | 19.91      | 19.91                   | 1.84                     | 20.79   | 20.79                   | 1.68                     | 21.82     | 21.82                   | 1.53                     | 22.82     | 22.82                   | 1.37                     |           |                         |                          |      |
|                | 72<br>(22.2) | 14.74   | 6.58                    | 0.98                     | 15.80      | 6.96                    | 1.00                     | 16.82   | 7.41                    | 0.88                     | 17.79     | 7.81                    | 0.78                     | 18.74     | 8.11                    | 0.68                     |           |                         |                          |      |
|                | 67<br>(19.4) | 13.36   | 9.71                    | 0.98                     | 14.34      | 10.16                   | 1.02                     | 15.32   | 10.64                   | 0.92                     | 16.29     | 11.11                   | 0.82                     | 17.24     | 11.61                   | 0.72                     |           |                         |                          |      |
|                | 63<br>(17.2) | 12.47   | 12.13                   | 0.98                     | 13.37      | 12.65                   | 1.03                     | 14.37   | 13.18                   | 0.95                     | 15.34     | 13.66                   | 0.86                     | 16.31     | 14.14                   | 0.76                     |           |                         |                          |      |
|                | 57<br>(13.9) | 12.37   | 12.37                   | 0.98                     | 13.18      | 13.18                   | 1.03                     | 14.09   | 14.09                   | 0.95                     | 15.04     | 15.04                   | 0.86                     | 16.00     | 16.00                   | 0.76                     |           |                         |                          |      |
| 75<br>(23.9)   | 72<br>(22.2) | 14.58   | 9.69                    | 0.97                     | 15.63      | 10.12                   | 1.00                     | 16.67   | 10.67                   | 0.92                     | 17.64     | 11.14                   | 0.82                     | 18.61     | 11.61                   | 0.72                     |           |                         |                          |      |
|                | 67<br>(19.4) | 13.36   | 12.75                   | 0.98                     | 14.32      | 13.27                   | 1.02                     | 15.30   | 13.70                   | 0.96                     | 16.27     | 14.19                   | 0.86                     | 17.22     | 14.69                   | 0.76                     |           |                         |                          |      |
|                | 63<br>(17.2) | 13.20   | 13.20                   | 0.98                     | 14.04      | 14.04                   | 1.02                     | 14.88   | 14.88                   | 0.96                     | 15.81     | 15.81                   | 0.86                     | 16.77     | 16.77                   | 0.76                     |           |                         |                          |      |
|                | 57<br>(13.9) | 13.18   | 13.18                   | 0.98                     | 14.02      | 14.02                   | 1.02                     | 14.87   | 14.87                   | 0.96                     | 15.80     | 15.80                   | 0.86                     | 16.76     | 16.76                   | 0.76                     |           |                         |                          |      |
|                | 72<br>(22.2) | 14.74   | 6.58                    | 0.98                     | 15.80      | 6.96                    | 1.00                     | 16.82   | 7.41                    | 0.88                     | 17.79     | 7.81                    | 0.78                     | 18.74     | 8.11                    | 0.68                     |           |                         |                          |      |
| 80<br>(26.7)   | 67<br>(19.4) | 13.36   | 9.71                    | 0.98                     | 14.34      | 10.16                   | 1.02                     | 15.32   | 10.64                   | 0.92                     | 16.29     | 11.11                   | 0.82                     | 17.24     | 11.61                   | 0.72                     |           |                         |                          |      |
|                | 63<br>(17.2) | 12.47   | 12.13                   | 0.98                     | 13.37      | 12.65                   | 1.03                     | 14.37   | 13.18                   | 0.95                     | 15.34     | 13.66                   | 0.86                     | 16.31     | 14.14                   | 0.76                     |           |                         |                          |      |
|                | 57<br>(13.9) | 12.37   | 12.37                   | 0.98                     | 13.18      | 13.18                   | 1.03                     | 14.09   | 14.09                   | 0.95                     | 15.04     | 15.04                   | 0.86                     | 16.00     | 16.00                   | 0.76                     |           |                         |                          |      |
|                | 72<br>(22.2) | 14.58   | 9.69                    | 0.97                     | 15.63      | 10.12                   | 1.00                     | 16.67   | 10.67                   | 0.92                     | 17.64     | 11.14                   | 0.82                     | 18.61     | 11.61                   | 0.72                     |           |                         |                          |      |
|                | 67<br>(19.4) | 13.36   | 12.75                   | 0.98                     | 14.32      | 13.27                   | 1.02                     | 15.30   | 13.70                   | 0.96                     | 16.27     | 14.19                   | 0.86                     | 17.22     | 14.69                   | 0.76                     |           |                         |                          |      |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 1** — Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

| EDB °F<br>(°C)   | EVAR AIR<br>°F (°C) | 24VNA948 / FE4BNB006 Efficiency Mode<br>Condenser Entering Air Temperature °F (°C) |                |       |                       |            |                |       |                       |            |                |      |                       |            |                |      |                       |            |                |       |                       |            |                |       |                       |      |       |       |      |       |       |      |
|------------------|---------------------|--|----------------|-------|-----------------------|------------|----------------|-------|-----------------------|------------|----------------|------|-----------------------|------------|----------------|------|-----------------------|------------|----------------|-------|-----------------------|------------|----------------|-------|-----------------------|------|-------|-------|------|-------|-------|------|
|                  |                     | 115 (46.1)   |                |       |                       | 105 (40.5) |                |       |                       | 95 (35)    |                |      |                       | 85 (29.4)  |                |      |                       | 75 (23.9)  |                |       |                       | 65 (18.3)  |                |       |                       |      |       |       |      |       |       |      |
|                  |                     | ID<br>SCFM   | Capacity MBtuh |       | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh |       | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh |      | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh |      | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh |       | Total<br>Sys.<br>KW** | ID<br>SCFM | Capacity MBtuh |       | Total<br>Sys.<br>KW** |      |       |       |      |       |       |      |
| <b>STAGE 5</b>   |                     |  |                |       |                       |            |                |       |                       |            |                |      |                       |            |                |      |                       |            |                |       |                       |            |                |       |                       |      |       |       |      |       |       |      |
| <b>75 (23.9)</b> |                     | 72 (22.2)  | 1400           | 44.82 | 18.57                 | 5.52       | 47.96          | 19.76 | 4.88                  | 50.99      | 20.91          | 4.29 | 53.98                 | 22.06      | 3.74           | 1400 | 58.89                 | 23.19      | 3.23           | 59.70 | 24.29                 | 2.75       | 1400           | 52.01 | 30.04                 | 3.21 | 54.60 | 31.27 | 2.75 |       |       |      |
|                  |                     | 67 (19.4)  | 1400           | 40.99 | 24.95                 | 5.42       | 43.86          | 26.26 | 4.80                  | 46.65      | 27.54          | 4.23 | 49.36                 | 28.80      | 3.70           | 1400 | 48.37                 | 35.40      | 3.19           | 50.78 | 36.72                 | 2.74       | 1400           | 45.91 | 34.07                 | 3.67 | 48.37 | 35.40 | 3.19 |       |       |      |
|                  |                     | 63 (17.2)  | 1400           | 38.13 | 29.97                 | 5.34       | 40.79          | 31.36 | 4.74                  | 43.37      | 32.72          | 4.18 | 45.91                 | 34.07      | 3.67           | 1400 | 39.46                 | 39.46      | 4.12           | 43.58 | 43.09                 | 3.16       | 45.70          | 44.59 | 2.73                  | 1400 | 41.45 | 41.45 | 3.62 | 43.58 | 43.09 | 3.16 |
|                  |                     | 57 (13.9)  | 1400           | 35.29 | 35.29                 | 5.26       | 37.41          | 37.41 | 4.66                  | 39.46      | 39.46          | 4.12 | 41.45                 | 41.45      | 3.62           | 1400 | 50.77                 | 27.36      | 4.28           | 53.76 | 28.86                 | 3.22       | 59.48          | 31.07 | 2.75                  | 1400 | 53.76 | 28.86 | 3.73 | 56.66 | 29.86 | 3.22 |
|                  |                     | 72 (22.2)  | 1400           | 44.60 | 24.79                 | 5.51       | 47.74          | 26.09 | 4.88                  | 50.77      | 27.36          | 4.28 | 53.76                 | 28.86      | 3.73           | 1400 | 49.21                 | 35.31      | 3.70           | 51.86 | 36.65                 | 3.20       | 54.45          | 37.98 | 2.75                  | 1400 | 49.21 | 35.31 | 3.70 | 51.86 | 36.65 | 3.20 |
| <b>80 (26.7)</b> |                     | 67 (19.4)  | 1400           | 40.84 | 31.14                 | 5.42       | 43.71          | 32.55 | 4.80                  | 46.50      | 33.94          | 4.23 | 49.21                 | 35.31      | 3.70           | 1400 | 45.84                 | 40.54      | 3.67           | 48.30 | 41.98                 | 3.18       | 50.70          | 43.40 | 2.74                  | 1400 | 45.84 | 40.54 | 3.67 | 48.30 | 41.98 | 3.18 |
|                  |                     | 63 (17.2)  | 1400           | 38.13 | 36.06                 | 5.34       | 40.76          | 37.59 | 4.74                  | 43.33      | 39.07          | 4.18 | 45.84                 | 40.54      | 3.67           | 1400 | 43.81                 | 43.81      | 3.64           | 45.84 | 45.84                 | 3.17       | 47.82          | 47.82 | 2.73                  | 1400 | 43.81 | 43.81 | 3.64 | 45.84 | 45.84 | 3.17 |
|                  |                     | 57 (13.9)  | 1400           | 37.36 | 37.36                 | 5.32       | 39.59          | 39.59 | 4.72                  | 41.72      | 41.72          | 4.16 | 43.81                 | 43.81      | 3.64           | 1400 | 35.75                 | 15.00      | 2.00           | 37.82 | 15.78                 | 1.74       | 39.85          | 16.55 | 1.49                  | 1400 | 35.75 | 15.00 | 2.00 | 37.82 | 15.78 | 1.74 |
|                  |                     | 72 (22.2)  | 1200           | 29.42 | 12.62                 | 2.82       | 31.80          | 13.43 | 2.56                  | 33.63      | 14.20          | 2.26 | 35.75                 | 15.00      | 2.00           | 1200 | 30.73                 | 19.68      | 2.27           | 32.66 | 20.60                 | 2.02       | 36.44          | 22.40 | 1.52                  | 1200 | 30.73 | 19.68 | 2.27 | 32.66 | 20.60 | 2.02 |
|                  |                     | 67 (19.4)  | 1200           | 26.82 | 17.86                 | 2.80       | 28.83          | 18.79 | 2.56                  | 30.73      | 19.68          | 2.27 | 32.66                 | 20.60      | 2.02           | 1200 | 28.58                 | 23.99      | 2.26           | 30.39 | 25.00                 | 2.02       | 33.91          | 26.99 | 1.55                  | 1200 | 28.58 | 23.99 | 2.26 | 30.39 | 25.00 | 2.02 |
| <b>80 (26.7)</b> |                     | 63 (17.2)  | 1200           | 24.03 | 24.03                 | 2.78       | 25.61          | 25.61 | 2.55                  | 27.12      | 27.12          | 2.26 | 28.62                 | 28.62      | 2.03           | 1200 | 33.41                 | 19.57      | 2.25           | 35.52 | 20.47                 | 2.00       | 39.62          | 22.25 | 1.48                  | 1200 | 33.41 | 19.57 | 2.25 | 35.52 | 20.47 | 2.00 |
|                  |                     | 57 (13.9)  | 1200           | 29.22 | 17.78                 | 2.81       | 31.39          | 16.70 | 2.55                  | 33.41      | 19.57          | 2.25 | 35.52                 | 20.47      | 2.00           | 1200 | 30.60                 | 25.01      | 2.26           | 32.52 | 26.03                 | 2.01       | 36.30          | 28.05 | 1.52                  | 1200 | 30.60 | 25.01 | 2.26 | 32.52 | 26.03 | 2.01 |
|                  |                     | 72 (22.2)  | 1200           | 26.71 | 22.96                 | 2.80       | 28.71          | 24.01 | 2.56                  | 30.60      | 25.01          | 2.26 | 32.52                 | 26.03      | 2.01           | 1200 | 28.80                 | 28.80      | 2.26           | 30.48 | 30.24                 | 2.02       | 33.93          | 32.55 | 1.55                  | 1200 | 28.80 | 28.80 | 2.26 | 30.48 | 30.24 | 2.02 |
|                  |                     | 67 (19.4)  | 1200           | 25.56 | 25.56                 | 2.80       | 27.23          | 27.23 | 2.55                  | 28.80      | 28.80          | 2.26 | 30.48                 | 30.24      | 2.02           | 1200 | 28.76                 | 28.76      | 2.26           | 30.35 | 30.35                 | 2.02       | 33.43          | 33.43 | 1.55                  | 1200 | 28.76 | 28.76 | 2.26 | 30.35 | 30.35 | 2.02 |
|                  |                     | 57 (13.9)  | 1200           | 25.52 | 25.52                 | 2.80       | 27.19          | 27.19 | 2.55                  | 28.76      | 28.76          | 2.26 | 30.35                 | 30.35      | 2.02           | 1200 | 19.62                 | 8.56       | 0.95           | 20.96 | 9.06                  | 0.84       | 23.61          | 10.07 | 0.57                  | 1200 | 19.62 | 8.56  | 0.95 | 20.96 | 9.06  | 0.84 |
| <b>75 (23.9)</b> |                     | 72 (22.2)  | 1100           | 25.50 | 10.99                 | 2.21       | 27.46          | 11.73 | 2.07                  | 19.62      | 8.56           | 0.95 | 20.96                 | 9.06       | 0.84           | 1100 | 17.88                 | 12.38      | 0.98           | 19.11 | 12.99                 | 0.88       | 21.53          | 14.21 | 0.62                  | 875  | 22.29 | 9.57  | 0.72 | 23.61 | 10.07 | 0.57 |
|                  |                     | 67 (19.4)  | 1100           | 23.22 | 15.65                 | 2.21       | 25.04          | 16.51 | 2.08                  | 17.88      | 12.38          | 0.98 | 19.11                 | 12.99      | 0.88           | 875  | 16.68                 | 15.37      | 1.00           | 17.82 | 16.07                 | 0.90       | 20.07          | 17.46 | 0.66                  | 875  | 20.32 | 13.60 | 0.76 | 21.53 | 14.21 | 0.62 |
|                  |                     | 63 (17.2)  | 1100           | 21.57 | 19.30                 | 2.21       | 23.24          | 20.26 | 2.08                  | 16.68      | 15.37          | 1.00 | 17.82                 | 16.07      | 0.90           | 875  | 16.33                 | 16.33      | 1.00           | 17.34 | 17.34                 | 0.91       | 19.33          | 19.33 | 0.68                  | 875  | 18.95 | 16.77 | 0.79 | 20.07 | 17.46 | 0.66 |
|                  |                     | 57 (13.9)  | 1100           | 20.89 | 20.89                 | 2.20       | 22.32          | 22.32 | 2.08                  | 16.33      | 16.33          | 1.00 | 17.34                 | 17.34      | 0.91           | 875  | 19.42                 | 12.31      | 0.95           | 20.76 | 12.92                 | 0.84       | 23.43          | 14.14 | 0.57                  | 875  | 17.34 | 17.34 | 0.91 | 19.33 | 19.33 | 0.68 |
|                  |                     | 72 (22.2)  | 1100           | 25.31 | 15.59                 | 2.21       | 27.26          | 16.44 | 2.06                  | 19.42      | 12.31          | 0.95 | 20.76                 | 12.92      | 0.84           | 1100 | 17.82                 | 16.09      | 0.98           | 19.04 | 16.80                 | 0.88       | 21.44          | 18.21 | 0.62                  | 875  | 22.09 | 13.52 | 0.71 | 23.43 | 14.14 | 0.57 |
| <b>80 (26.7)</b> |                     | 67 (19.4)  | 1100           | 23.13 | 20.20                 | 2.21       | 24.93          | 21.18 | 2.07                  | 17.82      | 16.09          | 0.98 | 19.04                 | 16.80      | 0.88           | 875  | 17.35                 | 17.35      | 0.98           | 18.41 | 18.41                 | 0.89       | 20.50          | 20.50 | 0.65                  | 875  | 20.25 | 17.51 | 0.76 | 21.44 | 18.21 | 0.62 |
|                  |                     | 63 (17.2)  | 1100           | 22.25 | 22.25                 | 2.21       | 23.77          | 23.77 | 2.08                  | 17.35      | 17.35          | 0.98 | 18.41                 | 18.41      | 0.89           | 875  | 17.32                 | 17.32      | 0.98           | 18.39 | 18.39                 | 0.89       | 20.47          | 20.47 | 0.65                  | 875  | 19.46 | 19.46 | 0.78 | 20.50 | 20.50 | 0.65 |
|                  |                     | 57 (13.9)  | 1100           | 22.21 | 22.21                 | 2.21       | 23.73          | 23.73 | 2.08                  | 17.32      | 17.32          | 0.98 | 18.39                 | 18.39      | 0.89           | 875  | 17.32                 | 17.32      | 0.98           | 18.39 | 18.39                 | 0.89       | 20.47          | 20.47 | 0.65                  | 875  | 19.43 | 19.43 | 0.78 | 20.47 | 20.47 | 0.65 |
|                  |                     | 72 (22.2)  | 1100           | 25.50 | 10.99                 | 2.21       | 27.46          | 11.73 | 2.07                  | 19.62      | 8.56           | 0.95 | 20.96                 | 9.06       | 0.84           | 1100 | 17.88                 | 12.38      | 0.98           | 19.11 | 12.99                 | 0.88       | 21.53          | 14.21 | 0.62                  | 875  | 22.29 | 9.57  | 0.72 | 23.61 | 10.07 | 0.57 |
|                  |                     | 67 (19.4)  | 1100           | 23.22 | 15.65                 | 2.21       | 25.04          | 16.51 | 2.08                  | 17.88      | 12.38          | 0.98 | 19.11                 | 12.99      | 0.88           | 875  | 16.68                 | 15.37      | 1.00           | 17.82 | 16.07                 | 0.90       | 20.07          | 17.46 | 0.66                  | 875  | 20.32 | 13.60 | 0.76 | 21.53 | 14.21 | 0.62 |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 1** – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

| EDB °F<br>(°C)      | EVAR AIR<br>°F (°C) | 24VNA960 / FE4BNB00L Efficiency Mode<br>Condenser Entering Air Temperature F (°C) |                         |       |                 |            |                         |       |                 |         |                         |       |                 |           |                         |       |                 |           |                         |       |                 |           |                         |       |                 |
|---------------------|---------------------|---|-------------------------|-------|-----------------|------------|-------------------------|-------|-----------------|---------|-------------------------|-------|-----------------|-----------|-------------------------|-------|-----------------|-----------|-------------------------|-------|-----------------|-----------|-------------------------|-------|-----------------|
|                     |                     | 115 (46.1)  |                         |       |                 | 105 (40.5) |                         |       |                 | 95 (35) |                         |       |                 | 85 (29.4) |                         |       |                 | 75 (23.9) |                         |       |                 | 65 (18.3) |                         |       |                 |
|                     |                     | ID SCFM   | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** | ID SCFM    | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** | ID SCFM | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** | ID SCFM   | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** | ID SCFM   | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** | ID SCFM   | Capacity MBtuh<br>Total | Sens† | Total Sys. KW** |
| <b>75</b><br>(23.9) | 72<br>(22.2)        | 1600  | 55.38                   | 22.79 | 7.70            | 59.00      | 24.17                   | 6.73  | 62.54           | 25.53   | 5.88                    | 65.96 | 26.86           | 5.13      | 69.30                   | 28.16 | 4.47            | 1600      | 63.25                   | 35.99 | 4.32            | 66.21     | 37.38                   | 3.75  |                 |
|                     | 67<br>(19.4)        |   | 50.63                   | 30.18 | 7.50            | 53.95      | 31.68                   | 6.54  | 57.12           | 33.14   | 5.70                    | 60.22 | 34.57           | 4.96      | 63.25                   | 35.99 | 4.32            |           |                         |       |                 |           |                         |       |                 |
|                     | 63<br>(17.2)        |   | 47.11                   | 36.00 | 7.35            | 50.18      | 37.58                   | 6.40  | 53.13           | 39.12   | 5.57                    | 55.99 | 40.62           | 4.84      | 58.78                   | 42.11 | 4.21            |           |                         |       |                 |           |                         |       |                 |
|                     | 57<br>(13.9)        |   | 43.16                   | 43.16 | 7.19            | 45.55      | 45.55                   | 6.23  | 47.97           | 47.63   | 5.40                    | 50.44 | 49.37           | 4.69      | 52.86                   | 51.01 | 4.06            |           |                         |       |                 |           |                         |       |                 |
|                     | 72<br>(22.2)        |   | 55.24                   | 30.04 | 7.70            | 58.86      | 31.53                   | 6.73  | 62.40           | 33.00   | 5.88                    | 65.82 | 34.44           | 5.13      | 68.15                   | 35.85 | 4.47            |           |                         |       |                 |           |                         |       |                 |
| <b>80</b><br>(26.7) | 67<br>(19.4)        | 1600  | 50.50                   | 37.37 | 7.50            | 53.83      | 38.98                   | 6.54  | 57.00           | 40.53   | 5.70                    | 60.10 | 42.07           | 4.96      | 63.13                   | 43.59 | 4.32            | 1600      | 58.70                   | 49.67 | 4.21            | 61.44     | 51.25                   | 3.65  |                 |
|                     | 63<br>(17.2)        |   | 47.09                   | 43.10 | 7.35            | 50.13      | 44.81                   | 6.40  | 53.07           | 46.46   | 5.57                    | 55.91 | 48.08           | 4.84      | 58.70                   | 49.67 | 4.21            |           |                         |       |                 |           |                         |       |                 |
|                     | 57<br>(13.9)        |   | 45.62                   | 45.62 | 7.29            | 48.12      | 48.12                   | 6.33  | 50.51           | 50.51   | 5.49                    | 52.83 | 52.83           | 4.76      | 55.06                   | 55.06 | 4.12            |           |                         |       |                 |           |                         |       |                 |
|                     | 72<br>(22.2)        |   | 35.94                   | 15.07 | 3.39            | 38.40      | 15.98                   | 3.08  | 40.44           | 16.73   | 2.76                    | 42.79 | 17.61           | 2.51      | 45.10                   | 18.48 | 2.29            |           |                         |       |                 |           |                         |       |                 |
|                     | 67<br>(19.4)        |   | 32.49                   | 20.54 | 3.35            | 34.72      | 21.48                   | 3.05  | 36.67           | 22.32   | 2.72                    | 38.80 | 23.24           | 2.47      | 40.88                   | 24.15 | 2.24            |           |                         |       |                 |           |                         |       |                 |
| <b>75</b><br>(23.9) | 63<br>(17.2)        | 1350  | 29.95                   | 24.83 | 3.33            | 32.01      | 25.81                   | 3.03  | 33.87           | 26.70   | 2.69                    | 35.85 | 27.65           | 2.44      | 37.78                   | 28.59 | 2.22            | 1350      | 37.78                   | 28.59 | 2.22            | 39.68     | 29.52                   | 2.01  |                 |
|                     | 57<br>(13.9)        |   | 28.14                   | 28.14 | 3.32            | 29.76      | 29.76                   | 3.02  | 31.24           | 31.24   | 2.67                    | 32.75 | 32.75           | 2.42      | 34.21                   | 34.21 | 2.19            |           |                         |       |                 |           |                         |       |                 |
|                     | 72<br>(22.2)        |   | 35.82                   | 20.59 | 3.39            | 38.29      | 21.54                   | 3.08  | 40.32           | 22.34   | 2.76                    | 42.67 | 23.26           | 2.51      | 44.98                   | 24.17 | 2.29            |           |                         |       |                 |           |                         |       |                 |
|                     | 67<br>(19.4)        |   | 32.39                   | 26.01 | 3.35            | 34.62      | 26.99                   | 3.05  | 36.56           | 27.87   | 2.72                    | 38.70 | 28.83           | 2.47      | 40.78                   | 29.77 | 2.24            |           |                         |       |                 |           |                         |       |                 |
|                     | 63<br>(17.2)        |   | 30.07                   | 30.04 | 3.29            | 32.09      | 31.18                   | 3.03  | 33.90           | 32.16   | 2.69                    | 35.85 | 33.17           | 2.44      | 37.76                   | 34.16 | 2.22            |           |                         |       |                 |           |                         |       |                 |
| <b>80</b><br>(26.7) | 57<br>(13.9)        | 1350  | 30.02                   | 30.02 | 3.33            | 31.70      | 31.70                   | 3.03  | 33.22           | 33.22   | 2.68                    | 34.80 | 34.80           | 2.43      | 36.33                   | 36.33 | 2.21            | 1350      | 36.33                   | 36.33 | 2.21            | 37.82     | 37.82                   | 2.00  |                 |
|                     | 72<br>(22.2)        |   | 26.64                   | 11.34 | 1.89            | 28.56      | 12.02                   | 1.84  | 20.89           | 8.78    | 1.03                    | 22.26 | 9.26            | 1.00      | 23.59                   | 9.73  | 0.91            |           |                         |       |                 |           |                         |       |                 |
|                     | 67<br>(19.4)        |   | 23.86                   | 15.71 | 1.89            | 25.60      | 16.40                   | 1.84  | 18.63           | 11.93   | 1.02                    | 19.89 | 12.40           | 1.00      | 21.11                   | 12.85 | 0.92            |           |                         |       |                 |           |                         |       |                 |
|                     | 63<br>(17.2)        |   | 21.85                   | 19.14 | 1.89            | 23.45      | 19.83                   | 1.84  | 16.95           | 14.38   | 1.01                    | 18.11 | 14.83           | 1.00      | 19.24                   | 15.26 | 0.92            |           |                         |       |                 |           |                         |       |                 |
|                     | 57<br>(13.9)        |   | 20.91                   | 20.91 | 1.88            | 22.14      | 22.14                   | 1.84  | 15.97           | 15.97   | 1.01                    | 16.81 | 16.81           | 1.00      | 17.62                   | 17.62 | 0.94            |           |                         |       |                 |           |                         |       |                 |
| <b>75</b><br>(23.9) | 72<br>(22.2)        | 1200  | 26.55                   | 15.84 | 1.89            | 28.46      | 16.52                   | 1.84  | 20.81           | 12.06   | 1.03                    | 22.18 | 12.52           | 1.00      | 23.51                   | 12.97 | 0.91            | 975       | 21.11                   | 12.85 | 0.92            | 22.30     | 13.31                   | 0.77  |                 |
|                     | 67<br>(19.4)        |   | 23.79                   | 20.16 | 1.89            | 25.52      | 20.85                   | 1.84  | 18.58           | 15.17   | 1.02                    | 19.83 | 15.62           | 1.00      | 21.05                   | 16.05 | 0.92            |           |                         |       |                 |           |                         |       |                 |
|                     | 63<br>(17.2)        |   | 22.48                   | 22.48 | 1.89            | 23.77      | 23.77                   | 1.84  | 17.25           | 17.25   | 1.01                    | 18.20 | 17.98           | 1.00      | 19.28                   | 18.43 | 0.92            |           |                         |       |                 |           |                         |       |                 |
|                     | 57<br>(13.9)        |   | 22.44                   | 22.44 | 1.89            | 23.72      | 23.72                   | 1.84  | 17.21           | 17.21   | 1.01                    | 18.08 | 18.08           | 1.00      | 18.91                   | 18.91 | 0.93            |           |                         |       |                 |           |                         |       |                 |
|                     | 72<br>(22.2)        |   | 26.64                   | 11.34 | 1.89            | 28.56      | 12.02                   | 1.84  | 20.89           | 8.78    | 1.03                    | 22.26 | 9.26            | 1.00      | 23.59                   | 9.73  | 0.91            |           |                         |       |                 |           |                         |       |                 |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 1** – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 34

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

24VNA960

| COOLING INDOOR MODEL |      | CAPACITY | POWER            | FURNACE MODEL |  |
|----------------------|------|----------|------------------|---------------|--|
| *FE4ANB006L          | 1.00 | 1.00     |                  |               |  |
| CAP**6021AL*         | 0.99 | 0.99     | 58CV(A.X)110-20  |               |  |
| CAP**6024AL*         | 0.99 | 0.99     | 58CV(A.X)110-20  |               |  |
| CNPH*6024AL*         | 0.99 | 1.04     | 58CV(A.X)110-20  |               |  |
| CNPH*6124AL*         | 0.99 | 1.04     | 58CV(A.X)110-20  |               |  |
| CNPH*6024AL*         | 0.98 | 0.98     | 58CV(A.X)110-20  |               |  |
| CNPH*6124AL*         | 1.00 | 1.00     | 58CV(A.X)110-20  |               |  |
| CSPH*6012AL*         | 1.00 | 1.00     | 58CV(A.X)135-22  |               |  |
| CAP**6024AL*         | 0.99 | 0.99     | 58CV(A.X)135-22  |               |  |
| CNPH*6024AL*         | 0.99 | 0.99     | 58CV(A.X)135-22  |               |  |
| CNPH*6124AL*         | 1.00 | 1.00     | 58CV(A.X)135-22  |               |  |
| CNPH*6024AL*         | 0.98 | 0.98     | 58CV(A.X)135-22  |               |  |
| CNPH*6124AL*         | 1.00 | 1.00     | 58CV(A.X)135-22  |               |  |
| CSPH*6012AL*         | 1.00 | 1.00     | 58CV(A.X)155-22  |               |  |
| CAP**6024AL*         | 1.00 | 1.00     | 58CV(A.X)155-22  |               |  |
| CNPH*6024AL*         | 1.00 | 1.00     | 58CV(A.X)155-22  |               |  |
| CNPH*6124AL*         | 1.00 | 1.00     | 58CV(A.X)155-22  |               |  |
| CNPH*6024AL*         | 0.99 | 0.99     | 58CV(A.X)155-22  |               |  |
| CNPH*6124AL*         | 1.00 | 1.00     | 58CV(A.X)155-22  |               |  |
| CSPH*6012AL*         | 1.00 | 1.00     | 58CV(A.X)155-22  |               |  |
| CAP**6021AL*         | 0.99 | 1.04     | 59*N*A080V21**20 |               |  |
| CAP**6024AL*         | 0.99 | 1.04     | 59*N*A080V21**20 |               |  |
| CNPH*6024AL*         | 0.99 | 1.04     | 59*N*A080V21**20 |               |  |
| CNPH*6124AL*         | 0.99 | 1.04     | 59*N*A080V21**20 |               |  |
| CNPH*6024AL*         | 0.98 | 1.03     | 59*N*A080V21**20 |               |  |
| CNPH*6124AL*         | 0.99 | 1.04     | 59*N*A080V21**20 |               |  |
| CSPH*6012AL*         | 1.00 | 1.04     | 59*N*A080V21**20 |               |  |
| CAP**6021AL*         | 0.99 | 1.04     | 59*N*A100V21**22 |               |  |
| CAP**6024AL*         | 0.99 | 1.04     | 59*N*A100V21**22 |               |  |
| CNPH*6024AL*         | 0.99 | 1.04     | 59*N*A100V21**22 |               |  |
| CNPH*6124AL*         | 0.98 | 1.03     | 59*N*A100V21**22 |               |  |
| CNPH*6024AL*         | 1.00 | 1.00     | 59*N*A100V21**22 |               |  |
| CSPH*6012AL*         | 1.00 | 1.00     | 59*N*A100V21**22 |               |  |
| CAP**6024AL*         | 0.99 | 1.04     | 59*N*A120V24**22 |               |  |
| CNPH*6024AL*         | 0.99 | 1.04     | 59*N*A120V24**22 |               |  |
| CNPH*6124AL*         | 0.99 | 1.04     | 59*N*A120V24**22 |               |  |
| CNPH*6024AL*         | 0.99 | 1.03     | 59*N*A120V24**22 |               |  |
| CNPH*6124AL*         | 0.98 | 1.00     | 59MN7A060V21**20 |               |  |
| CNPH*6024AL*         | 0.98 | 1.09     | 59MN7A060V21**20 |               |  |
| CNPH*6124AL*         | 0.97 | 1.02     | 59MN7A060V21**20 |               |  |
| CNPH*6024AL*         | 0.99 | 1.04     | 59MN7A060V21**20 |               |  |
| CSPH*6012AL*         | 0.99 | 1.04     | 59MN7A060V21**20 |               |  |

| 2-STAGE (HI-Stage 5, Lo-Stage 2) |      | High Speed Cap. | Power | Low Speed Cap. | Power | Furnace Model    |
|----------------------------------|------|-----------------|-------|----------------|-------|------------------|
| *FV4CNB006L                      | 1.00 | 1.00            | 1.00  | 1.00           | 1.00  |                  |
| CAP**6021AL*                     | 1.01 | 1.06            | 1.01  | 1.07           | 1.04  | 58PH*110-20      |
| CSPH*6012AL*                     | 1.02 | 1.07            | 1.00  | 1.04           | 1.07  | 58PH*110-20      |
| CAP**6024AL*                     | 1.01 | 1.06            | 1.00  | 1.11           | 1.06  | 58PH*135-20      |
| CNPH*6024AL*                     | 1.01 | 1.06            | 1.01  | 1.06           | 1.06  | 58PH*135-20      |
| CNPH*6124AL*                     | 1.01 | 1.06            | 1.01  | 1.12           | 1.06  | 58PH*135-20      |
| CNPH*6024AL*                     | 1.00 | 1.05            | 1.01  | 1.06           | 1.06  | 58PH*135-20      |
| CNPH*6124AL*                     | 1.02 | 1.07            | 1.00  | 1.03           | 1.05  | 58PH*135-20      |
| CSPH*6012AL*                     | 1.02 | 1.07            | 1.01  | 1.05           | 1.07  | 58PH*135-20      |
| CAP**6021AL*                     | 1.01 | 1.06            | 1.01  | 1.07           | 1.04  | 58CTW110-22      |
| CSPH*6012AL*                     | 1.02 | 1.07            | 1.00  | 1.04           | 1.06  | 58CTW110-22      |
| CAP**6024AL*                     | 1.01 | 1.06            | 1.01  | 1.06           | 1.06  | 58CTW135-22      |
| CNPH*6024AL*                     | 1.01 | 1.06            | 1.01  | 1.06           | 1.06  | 58CTW135-22      |
| CNPH*6124AL*                     | 1.01 | 1.06            | 1.01  | 1.06           | 1.06  | 58CTW135-22      |
| CNPH*6024AL*                     | 1.00 | 1.05            | 1.01  | 1.06           | 1.06  | 58CTW135-22      |
| CNPH*6124AL*                     | 1.02 | 1.07            | 1.01  | 1.04           | 1.04  | 58CTW135-22      |
| CSPH*6012AL*                     | 1.01 | 1.06            | 1.01  | 1.07           | 1.07  | 59*P2A080E21**20 |
| CAP**6021AL*                     | 1.02 | 1.07            | 1.00  | 1.05           | 1.05  | 59*P2A080E21**20 |
| CSPH*6012AL*                     | 1.01 | 1.06            | 1.01  | 1.07           | 1.07  | 59*P2A100E21**20 |
| CAP**6024AL*                     | 1.01 | 1.06            | 1.01  | 1.07           | 1.07  | 59*P2A100E21**20 |
| CNPH*6024AL*                     | 1.01 | 1.06            | 1.01  | 1.07           | 1.07  | 59*P2A120E24**20 |
| CNPH*6124AL*                     | 1.01 | 1.06            | 1.01  | 1.07           | 1.07  | 59*P2A120E24**20 |
| CNPH*6024AL*                     | 1.00 | 1.05            | 1.01  | 1.07           | 1.07  | 59*P2A120E24**20 |
| CNPH*6124AL*                     | 1.02 | 1.07            | 1.00  | 1.04           | 1.04  | 59*P2A120E24**20 |
| CSPH*6012AL*                     | 1.02 | 1.07            | 1.00  | 1.05           | 1.05  | 59*P2A120E24**20 |
| CAP**6021AL*                     | 0.99 | 1.04            | 1.01  | 1.11           | 1.11  | 59*P2A120E24**20 |
| CSPH*6012AL*                     | 1.00 | 1.05            | 1.01  | 1.10           | 1.10  | 59*P2A120E24**20 |
| CAP**6024AL*                     | 1.00 | 1.05            | 1.01  | 1.11           | 1.11  | 59*P2A120E24**20 |
| CNPH*6024AL*                     | 1.00 | 1.05            | 1.01  | 1.11           | 1.11  | 59*P2A120E24**20 |
| CNPH*6124AL*                     | 1.00 | 1.05            | 1.01  | 1.10           | 1.10  | 59*P2A120E24**20 |
| CNPH*6024AL*                     | 1.00 | 1.05            | 1.01  | 1.10           | 1.10  | 59*P2A120E24**20 |
| CNPH*6124AL*                     | 1.00 | 1.05            | 1.01  | 1.10           | 1.10  | 59*P2A120E24**20 |
| CSPH*6012AL*                     | 1.00 | 1.05            | 1.01  | 1.08           | 1.08  | 59*P2A120E24**20 |
| CAP**6024AL*                     | 0.99 | 1.04            | 1.01  | 1.09           | 1.09  | 59*P2A120E24**20 |
| CNPH*6024AL*                     | 1.01 | 1.06            | 1.01  | 1.09           | 1.09  | 59*P2A120E24**20 |
| CNPH*6124AL*                     | 1.01 | 1.06            | 1.01  | 1.10           | 1.10  | 59*P2A120E24**20 |
| CSPH*6012AL*                     | 1.01 | 1.06            | 1.01  | 1.11           | 1.11  | 59*P2A120E24**20 |

See notes on page 34

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

| EDB<br>° F (° C)               | EVAP. AIR        |            | 105 (40.5)     |        |                  |            | 85 (35)        |        |                  |            | 75 (23.9)      |        |                  |            | 65 (18.3)      |        |                  |            |       |       |      |
|--------------------------------|------------------|------------|----------------|--------|------------------|------------|----------------|--------|------------------|------------|----------------|--------|------------------|------------|----------------|--------|------------------|------------|-------|-------|------|
|                                | EWS<br>° F (° C) | ID SCFM    | Capacity MBtuh |        | Total Sys.<br>KW | ID SCFM    | Capacity MBtuh |        | Total Sys.<br>KW | ID SCFM    | Capacity MBtuh |        | Total Sys.<br>KW | ID SCFM    | Capacity MBtuh |        | Total Sys.<br>KW |            |       |       |      |
|                                |                  |            | Total          | Sensit |                  |            | Total          | Sensit |                  |            | Total          | Sensit |                  |            | Total          | Sensit |                  |            |       |       |      |
| <b>STAGE 5</b>                 |                  |            |                |        |                  |            |                |        |                  |            |                |        |                  |            |                |        |                  |            |       |       |      |
| <b>75 (23.9)</b>               | 72<br>(22.2)     | <b>608</b> | 18.41          | 7.66   | 1.92             | <b>608</b> | 24.19          | 9.83   | 2.05             | <b>634</b> | 25.62          | 10.41  | 1.59             | <b>663</b> | 27.05          | 11.00  | 1.19             | <b>708</b> | 28.58 | 11.63 | 0.84 |
|                                | 67<br>(19.4)     |            | 16.71          | 10.40  | 1.94             |            | 22.02          | 12.63  | 2.06             |            | 23.35          | 13.37  | 1.62             |            | 24.68          | 14.13  | 1.23             |            | 26.09 | 15.02 | 0.89 |
|                                | 63<br>(17.2)     |            | 15.50          | 12.56  | 1.95             |            | 20.40          | 14.80  | 2.07             |            | 21.64          | 15.67  | 1.63             |            | 22.89          | 16.56  | 1.25             |            | 24.23 | 17.65 | 0.92 |
|                                | 57<br>(13.9)     |            | 14.52          | 14.52  | 1.95             |            | 18.30          | 18.00  | 2.07             |            | 19.43          | 19.04  | 1.65             |            | 20.56          | 20.13  | 1.28             |            | 21.81 | 21.49 | 0.95 |
|                                | 72<br>(22.2)     |            | 18.29          | 10.37  | 1.91             |            | 24.08          | 12.57  | 2.04             |            | 25.50          | 13.30  | 1.59             |            | 26.92          | 14.05  | 1.19             |            | 28.43 | 14.92 | 0.84 |
| <b>80 (26.7)</b>               | 67<br>(19.4)     | <b>608</b> | 16.65          | 13.09  | 1.94             | <b>608</b> | 21.95          | 15.35  | 2.06             | <b>634</b> | 23.28          | 16.24  | 1.62             | <b>663</b> | 24.60          | 17.16  | 1.23             | <b>708</b> | 26.00 | 18.28 | 0.89 |
|                                | 63<br>(17.2)     |            | 15.55          | 15.22  | 1.95             |            | 20.38          | 17.52  | 2.07             |            | 21.62          | 18.53  | 1.63             |            | 22.87          | 19.59  | 1.25             |            | 24.20 | 20.91 | 0.92 |
|                                | 57<br>(13.9)     |            | 15.42          | 15.42  | 1.95             |            | 19.24          | 19.24  | 2.07             |            | 20.39          | 20.39  | 1.64             |            | 21.57          | 21.57  | 1.27             |            | 22.92 | 22.92 | 0.94 |
|                                | 72<br>(22.2)     |            | 15.17          | 6.19   | 1.32             |            | 15.89          | 6.46   | 1.09             |            | 16.82          | 6.84   | 0.91             |            | 17.81          | 7.24   | 0.73             |            | 18.87 | 7.68  | 0.54 |
|                                | 67<br>(19.4)     |            | 13.78          | 8.02   | 1.34             |            | 14.47          | 8.33   | 1.11             |            | 15.33          | 8.80   | 0.93             |            | 16.24          | 9.32   | 0.76             |            | 17.22 | 9.94  | 0.59 |
| <b>75 (23.9)</b>               | 63<br>(17.2)     | <b>437</b> | 12.75          | 9.46   | 1.34             | <b>437</b> | 13.41          | 9.80   | 1.12             | <b>452</b> | 14.22          | 10.33  | 0.95             | <b>475</b> | 15.07          | 10.96  | 0.79             | <b>510</b> | 16.00 | 11.72 | 0.62 |
|                                | 57<br>(13.9)     |            | 11.46          | 11.46  | 1.35             |            | 12.02          | 11.94  | 1.12             |            | 12.74          | 12.57  | 0.97             |            | 13.52          | 13.34  | 0.82             |            | 14.39 | 14.31 | 0.66 |
|                                | 72<br>(22.2)     |            | 15.10          | 8.00   | 1.32             |            | 15.81          | 8.29   | 1.09             |            | 16.74          | 8.75   | 0.91             |            | 17.72          | 9.27   | 0.72             |            | 18.78 | 9.88  | 0.54 |
|                                | 67<br>(19.4)     |            | 13.74          | 9.82   | 1.34             |            | 14.42          | 10.15  | 1.11             |            | 15.28          | 10.70  | 0.93             |            | 16.19          | 11.34  | 0.76             |            | 17.16 | 12.14 | 0.59 |
|                                | 63<br>(17.2)     |            | 12.73          | 11.26  | 1.34             |            | 13.39          | 11.61  | 1.12             |            | 14.20          | 12.23  | 0.95             |            | 15.05          | 12.97  | 0.79             |            | 15.98 | 13.90 | 0.62 |
| 57<br>(13.9)                   | 12.15            | 12.15      | 1.34           | 12.69  | 12.69            | 1.12       | 13.42          | 13.42  | 0.96             | 14.24      | 14.24          | 0.80   | 15.18            | 15.18      | 0.64           |        |                  |            |       |       |      |
| <b>STAGE 1 - FEANF005 ONLY</b> |                  |            |                |        |                  |            |                |        |                  |            |                |        |                  |            |                |        |                  |            |       |       |      |
| <b>75 (23.9)</b>               | 72<br>(22.2)     | <b>342</b> | 11.66          | 4.74   | 0.81             | <b>250</b> | 9.26           | 3.75   | 0.47             | <b>250</b> | 9.75           | 3.95   | 0.47             | <b>250</b> | 10.23          | 4.15   | 0.43             | <b>250</b> | 10.72 | 4.35  | 0.36 |
|                                | 67<br>(19.4)     |            | 10.56          | 6.08   | 0.83             |            | 8.39           | 4.68   | 0.48             |            | 8.84           | 4.89   | 0.49             |            | 9.27           | 5.09   | 0.47             |            | 9.70  | 5.30  | 0.40 |
|                                | 63<br>(17.2)     |            | 9.75           | 7.13   | 0.83             |            | 7.74           | 5.40   | 0.49             |            | 8.15           | 5.61   | 0.51             |            | 8.56           | 5.83   | 0.49             |            | 8.96  | 6.04  | 0.44 |
|                                | 57<br>(13.9)     |            | 8.68           | 8.68   | 0.84             |            | 6.85           | 6.46   | 0.49             |            | 7.22           | 6.68   | 0.52             |            | 7.59           | 6.90   | 0.52             |            | 7.95  | 7.12  | 0.48 |
|                                | 72<br>(22.2)     |            | 11.61          | 6.08   | 0.81             |            | 9.23           | 4.68   | 0.47             |            | 9.72           | 4.88   | 0.47             |            | 10.20          | 5.09   | 0.43             |            | 10.68 | 5.30  | 0.36 |
| <b>80 (26.7)</b>               | 67<br>(19.4)     | <b>342</b> | 10.53          | 7.41   | 0.83             | <b>250</b> | 8.37           | 5.60   | 0.48             | <b>250</b> | 8.81           | 5.82   | 0.49             | <b>250</b> | 9.25           | 6.03   | 0.47             | <b>250</b> | 9.68  | 6.24  | 0.40 |
|                                | 63<br>(17.2)     |            | 9.73           | 8.46   | 0.83             |            | 7.72           | 6.32   | 0.49             |            | 8.14           | 6.54   | 0.51             |            | 8.54           | 6.76   | 0.49             |            | 8.95  | 6.98  | 0.44 |
|                                | 57<br>(13.9)     |            | 9.21           | 9.21   | 0.83             |            | 7.09           | 7.09   | 0.49             |            | 7.40           | 7.40   | 0.52             |            | 7.70           | 7.70   | 0.51             |            | 8.00  | 8.00  | 0.48 |
|                                | 72<br>(22.2)     |            | 11.66          | 4.74   | 0.81             |            | 8.99           | 3.64   | 0.47             |            | 9.59           | 3.89   | 0.48             |            | 10.23          | 4.15   | 0.43             |            | 10.66 | 4.33  | 0.36 |
|                                | 67<br>(19.4)     |            | 10.56          | 6.08   | 0.83             |            | 8.13           | 4.46   | 0.48             |            | 8.68           | 4.76   | 0.50             |            | 9.04           | 4.92   | 0.48             |            | 9.65  | 5.25  | 0.41 |
| <b>75 (23.9)</b>               | 63<br>(17.2)     | <b>342</b> | 9.75           | 7.13   | 0.83             | <b>222</b> | 7.49           | 5.09   | 0.49             | <b>234</b> | 8.00           | 5.44   | 0.51             | <b>229</b> | 8.34           | 5.58   | 0.50             | <b>245</b> | 8.91  | 5.98  | 0.44 |
|                                | 57<br>(13.9)     |            | 8.68           | 8.68   | 0.84             |            | 6.63           | 6.02   | 0.49             |            | 7.09           | 6.43   | 0.52             |            | 7.39           | 6.56   | 0.52             |            | 7.90  | 7.04  | 0.48 |
|                                | 72<br>(22.2)     |            | 11.61          | 6.08   | 0.81             |            | 8.96           | 4.47   | 0.47             |            | 9.55           | 4.76   | 0.47             |            | 10.20          | 5.09   | 0.43             |            | 10.62 | 5.26  | 0.36 |
|                                | 67<br>(19.4)     |            | 10.53          | 7.41   | 0.83             |            | 8.11           | 5.28   | 0.48             |            | 8.66           | 5.63   | 0.50             |            | 9.02           | 5.78   | 0.48             |            | 9.63  | 6.18  | 0.41 |
|                                | 63<br>(17.2)     |            | 9.73           | 8.46   | 0.83             |            | 7.48           | 5.91   | 0.49             |            | 7.99           | 6.31   | 0.51             |            | 8.33           | 6.44   | 0.50             |            | 8.89  | 6.91  | 0.44 |
| 57<br>(13.9)                   | 9.21             | 9.21       | 0.83           | 6.73   | 6.73             | 0.49       | 7.19           | 7.19   | 0.52             | 7.40       | 7.40           | 0.52   | 7.93             | 7.93       | 0.48           |        |                  |            |       |       |      |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage

**Stage 1** — Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

24VVA924B / FEANF002L Comfort + Dehumidify Mode  
Condenser Entering Air Temperature F (°C)

| EDB<br>°F (°C) | EVAP. AIR<br>EWB<br>°F (°C) | 105 (40.5)     |        |                  |         | 95 (35)        |        |                  |         | 85 (29.4)      |        |                  |         | 75 (23.9)      |        |                  |         | 65 (18.3)      |        |                  |       |        |      |      |
|----------------|-----------------------------|----------------|--------|------------------|---------|----------------|--------|------------------|---------|----------------|--------|------------------|---------|----------------|--------|------------------|---------|----------------|--------|------------------|-------|--------|------|------|
|                |                             | Capacity MBtuh |        | Total Sys.<br>KW | ID SCFM | Capacity MBtuh |        | Total Sys.<br>KW | ID SCFM | Capacity MBtuh |        | Total Sys.<br>KW | ID SCFM | Capacity MBtuh |        | Total Sys.<br>KW | ID SCFM | Capacity MBtuh |        | Total Sys.<br>KW |       |        |      |      |
|                |                             | Total          | Sensit |                  |         | Total          | Sensit |                  |         | Total          | Sensit |                  |         | Total          | Sensit |                  |         | Total          | Sensit |                  | Total | Sensit |      |      |
| 75 (23.9)      | 72<br>(22.2)                | 24.23          | 9.92   | 2.44             | 25.33   | 10.31          | 2.12   | 26.93            | 10.95   | 1.84           | 28.54  | 11.60            | 1.58    | 30.28          | 12.32  | 1.33             | 708     | 28.54          | 11.60  | 1.58             | 30.28 | 12.32  | 1.33 |      |
|                | 67<br>(19.4)                | 22.01          | 12.96  | 2.42             | 23.01   | 13.22          | 2.10   | 24.45            | 14.00   | 1.83           | 25.91  | 14.82            | 1.58    | 27.51          | 15.77  | 1.34             |         |                |        |                  |       |        |      |      |
|                | 63<br>(17.2)                | 20.38          | 15.34  | 2.39             | 21.31   | 15.50          | 2.08   | 22.64            | 16.40   | 1.82           | 24.00  | 17.33            | 1.57    | 25.48          | 18.47  | 1.35             |         |                |        |                  |       |        |      |      |
|                | 57<br>(13.9)                | 18.45          | 18.45  | 2.36             | 19.08   | 18.80          | 2.05   | 20.28            | 19.87   | 1.80           | 21.49  | 20.99            | 1.57    | 22.82          | 22.37  | 1.36             |         |                |        |                  |       |        |      |      |
|                | 72<br>(22.2)                | 24.17          | 12.95  | 2.44             | 25.27   | 13.22          | 2.12   | 26.87            | 14.00   | 1.84           | 28.48  | 14.82            | 1.58    | 30.22          | 15.77  | 1.33             |         |                |        |                  |       |        |      |      |
| 80 (26.7)      | 67<br>(19.4)                | 21.96          | 15.96  | 2.42             | 22.96   | 16.09          | 2.10   | 24.40            | 17.02   | 1.83           | 25.86  | 17.99            | 1.58    | 27.45          | 19.17  | 1.34             | 708     | 25.86          | 17.99  | 1.58             | 27.45 | 19.17  | 1.34 |      |
|                | 63<br>(17.2)                | 20.36          | 18.31  | 2.39             | 21.28   | 18.35          | 2.08   | 22.61            | 19.39   | 1.82           | 23.97  | 20.49            | 1.57    | 25.45          | 21.85  | 1.35             |         |                |        |                  |       |        |      |      |
|                | 57<br>(13.9)                | 19.56          | 19.56  | 2.38             | 20.08   | 20.08          | 2.07   | 21.29            | 21.29   | 1.81           | 22.54  | 22.54            | 1.57    | 23.97          | 23.97  | 1.35             |         |                |        |                  |       |        |      |      |
|                | 72<br>(22.2)                | 16.80          | 6.88   | 1.49             | 17.53   | 7.13           | 1.28   | 18.69            | 7.80    | 1.10           | 19.82  | 8.06             | 0.92    | 21.04          | 8.55   | 0.76             |         | 484            | 19.82  | 8.06             | 0.92  | 21.04  | 8.55 | 0.76 |
|                | 67<br>(19.4)                | 15.18          | 8.96   | 1.50             | 15.85   | 9.13           | 1.28   | 16.89            | 9.72    | 1.11           | 17.91  | 10.28            | 0.95    | 18.99          | 10.93  | 0.79             |         |                |        |                  |       |        |      |      |
| 63<br>(17.2)   | 13.98                       | 10.59          | 1.50   | 14.80            | 10.69   | 1.28           | 15.56  | 11.37            | 1.13    | 16.49          | 12.01  | 0.97             | 17.48   | 12.77          | 0.82   |                  |         |                |        |                  |       |        |      |      |
| 57<br>(13.9)   | 12.83                       | 12.83          | 1.49   | 12.99            | 12.94   | 1.29           | 13.83  | 13.75            | 1.14    | 14.64          | 14.51  | 1.00             | 15.53   | 15.43          | 0.86   |                  |         |                |        |                  |       |        |      |      |
| 72<br>(22.2)   | 16.75                       | 8.99           | 1.49   | 17.48            | 9.16    | 1.28           | 18.64  | 9.75             | 1.10    | 19.77          | 10.32  | 0.92             | 20.98   | 10.97          | 0.76   |                  |         |                |        |                  |       |        |      |      |
| 80 (26.7)      | 67<br>(19.4)                | 15.14          | 11.05  | 1.50             | 15.81   | 11.13          | 1.28   | 16.85            | 11.84   | 1.11           | 17.87  | 12.51            | 0.95    | 18.95          | 13.31  | 0.79             | 484     | 17.87          | 12.51  | 0.95             | 18.95 | 13.31  | 0.79 |      |
|                | 63<br>(17.2)                | 13.97          | 12.86  | 1.50             | 14.59   | 12.68          | 1.28   | 15.54            | 13.48   | 1.13           | 16.47  | 14.23            | 0.97    | 17.46          | 15.14  | 0.82             |         |                |        |                  |       |        |      |      |
|                | 57<br>(13.9)                | 13.43          | 13.43  | 1.50             | 13.78   | 13.78          | 1.29   | 14.66            | 14.66   | 1.13           | 15.51  | 15.51            | 0.99    | 16.47          | 16.47  | 0.84             |         |                |        |                  |       |        |      |      |
|                | 72<br>(22.2)                | 13.91          | 5.70   | 1.21             | 8.34    | 3.43           | 0.52   | 8.89             | 3.65    | 0.44           | 9.31   | 3.80             | 0.37    | 9.90           | 4.05   | 0.29             |         | 245            | 9.31   | 3.80             | 0.37  | 9.90   | 4.05 | 0.29 |
|                | 67<br>(19.4)                | 12.50          | 7.42   | 1.22             | 7.48    | 4.49           | 0.53   | 7.97             | 4.78    | 0.46           | 8.34   | 4.91             | 0.40    | 8.86           | 5.24   | 0.33             |         |                |        |                  |       |        |      |      |
| 63<br>(17.2)   | 11.48                       | 8.77           | 1.22   | 6.85             | 5.34    | 0.53           | 7.30   | 5.67             | 0.47    | 7.63           | 5.79   | 0.41             | 8.11    | 6.18           | 0.35   |                  |         |                |        |                  |       |        |      |      |
| 57<br>(13.9)   | 10.41                       | 10.41          | 1.22   | 6.25             | 6.25    | 0.54           | 6.65   | 6.65             | 0.48    | 6.87           | 6.87   | 0.43             | 7.32    | 7.32           | 0.37   |                  |         |                |        |                  |       |        |      |      |
| 72<br>(22.2)   | 13.87                       | 7.46           | 1.21   | 8.31             | 4.53    | 0.52           | 8.86   | 4.82             | 0.44    | 9.28           | 4.96   | 0.37             | 9.87    | 5.29           | 0.29   |                  |         |                |        |                  |       |        |      |      |
| 80 (26.7)      | 67<br>(19.4)                | 12.47          | 9.17   | 1.22             | 7.45    | 5.59           | 0.53   | 7.94             | 5.94    | 0.46           | 8.31   | 6.06             | 0.40    | 8.83           | 6.48   | 0.33             | 245     | 8.31           | 6.06   | 0.40             | 8.83  | 6.48   | 0.33 |      |
|                | 63<br>(17.2)                | 11.48          | 10.51  | 1.22             | 6.85    | 6.43           | 0.53   | 7.30             | 6.83    | 0.47           | 7.62   | 6.93             | 0.41    | 8.10           | 7.41   | 0.35             |         |                |        |                  |       |        |      |      |
|                | 57<br>(13.9)                | 11.08          | 11.08  | 1.22             | 6.68    | 6.68           | 0.54   | 7.10             | 7.10    | 0.48           | 7.33   | 7.33             | 0.42    | 7.81           | 7.81   | 0.36             |         |                |        |                  |       |        |      |      |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 1** – Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

| EDB<br>° F (° C) | EVAP. AIR<br>EWB<br>° F (° C) |       | 105 (40.5)     |               |               |               | 85 (35)        |               |               |               | 75 (23.9)      |               |               |               | 65 (18.3)      |               |               |        |
|------------------|-------------------------------|-------|----------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|---------------|---------------|--------|
|                  |                               |       | Capacity MBtuh |               | Total Sys. KW |               | Capacity MBtuh |               | Total Sys. KW |               | Capacity MBtuh |               | Total Sys. KW |               | Capacity MBtuh |               | Total Sys. KW |        |
|                  |                               |       | Total          | Sensit        | Total         | Sensit        | Total          | Sensit        | Total         | Sensit        | Total          | Sensit        | Total         | Sensit        | Total          | Sensit        | Total         | Sensit |
|                  |                               |       | ID SCFM        | Total Sys. KW | ID SCFM       | Total Sys. KW | ID SCFM        | Total Sys. KW | ID SCFM       | Total Sys. KW | ID SCFM        | Total Sys. KW | ID SCFM       | Total Sys. KW | ID SCFM        | Total Sys. KW |               |        |
| <b>75 (23.9)</b> | 72<br>(22.2)                  | 8.01  | 19.25          | 25.24         | 10.26         | 1.88          | 26.68          | 10.84         | 1.61          | 28.11         | 11.43          | 1.34          | 29.64         | 12.06         | 1.07           |               |               |        |
|                  | 67<br>(19.4)                  | 10.88 | 17.48          | 22.98         | 13.18         | 1.89          | 24.31          | 13.92         | 1.63          | 25.64         | 14.68          | 1.38          | 27.06         | 15.57         | 1.13           |               |               |        |
|                  | 63<br>(17.2)                  | 13.13 | 16.21          | 21.29         | 15.45         | 1.90          | 22.54          | 16.31         | 1.65          | 23.79         | 17.21          | 1.41          | 25.13         | 18.30         | 1.17           |               |               |        |
|                  | 57<br>(13.9)                  | 15.18 | 15.18          | 19.10         | 18.78         | 1.90          | 20.23          | 19.83         | 1.66          | 21.37         | 20.92          | 1.44          | 22.62         | 22.29         | 1.21           |               |               |        |
|                  | 72<br>(22.2)                  | 10.84 | 19.12          | 25.12         | 13.12         | 1.88          | 26.55          | 13.85         | 1.60          | 27.98         | 14.60          | 1.33          | 29.49         | 15.47         | 1.07           |               |               |        |
| <b>80 (26.7)</b> | 67<br>(19.4)                  | 13.69 | 17.42          | 22.91         | 16.02         | 1.89          | 24.24          | 16.91         | 1.63          | 25.56         | 17.83          | 1.38          | 26.97         | 18.96         | 1.13           |               |               |        |
|                  | 63<br>(17.2)                  | 15.91 | 16.26          | 21.26         | 18.28         | 1.90          | 22.51          | 19.29         | 1.65          | 23.76         | 20.35          | 1.41          | 25.10         | 21.68         | 1.17           |               |               |        |
|                  | 57<br>(13.9)                  | 16.12 | 16.12          | 20.08         | 20.08         | 1.90          | 21.23          | 21.23         | 1.66          | 22.41         | 22.41          | 1.42          | 23.77         | 23.77         | 1.19           |               |               |        |
|                  | 72<br>(22.2)                  | 6.37  | 15.62          | 16.33         | 6.64          | 1.03          | 17.27          | 7.02          | 0.91          | 18.26         | 7.42           | 0.78          | 19.32         | 7.87          | 0.62           |               |               |        |
|                  | 67<br>(19.4)                  | 8.25  | 14.19          | 14.88         | 8.57          | 1.04          | 15.74          | 9.03          | 0.94          | 16.66         | 9.56           | 0.82          | 17.64         | 10.18         | 0.68           |               |               |        |
| <b>75 (23.9)</b> | 63<br>(17.2)                  | 9.74  | 13.12          | 13.79         | 10.07         | 1.05          | 14.60          | 10.61         | 0.96          | 15.46         | 11.23          | 0.85          | 16.38         | 12.00         | 0.71           |               |               |        |
|                  | 57<br>(13.9)                  | 11.80 | 11.80          | 12.35         | 12.27         | 1.06          | 13.08          | 12.91         | 0.97          | 13.87         | 13.68          | 0.88          | 14.74         | 14.85         | 0.76           |               |               |        |
|                  | 72<br>(22.2)                  | 8.23  | 15.55          | 16.25         | 8.52          | 1.02          | 17.19          | 8.98          | 0.91          | 18.17         | 9.50           | 0.78          | 19.23         | 10.12         | 0.62           |               |               |        |
|                  | 67<br>(19.4)                  | 10.11 | 14.14          | 14.83         | 10.44         | 1.04          | 15.69          | 10.99         | 0.94          | 16.60         | 11.63          | 0.82          | 17.57         | 12.43         | 0.67           |               |               |        |
|                  | 63<br>(17.2)                  | 11.59 | 13.11          | 13.77         | 11.94         | 1.05          | 14.58          | 12.56         | 0.96          | 15.44         | 13.30          | 0.85          | 16.36         | 14.24         | 0.71           |               |               |        |
| 57<br>(13.9)     | 12.51                         | 12.51 | 13.05          | 13.05         | 1.05          | 13.78         | 13.78          | 0.97          | 14.60         | 14.60         | 0.86           | 15.55         | 15.55         | 0.74          |                |               |               |        |
| <b>75 (23.9)</b> | 72<br>(22.2)                  | 2.59  | 6.36           | 9.26          | 3.75          | 0.47          | 9.75           | 3.95          | 0.47          | 10.23         | 4.15           | 0.43          | 10.72         | 4.35          | 0.36           |               |               |        |
|                  | 67<br>(19.4)                  | 6.18  | 10.72          | 8.39          | 4.68          | 0.48          | 8.84           | 4.89          | 0.49          | 9.27          | 5.09           | 0.47          | 9.70          | 5.30          | 0.40           |               |               |        |
|                  | 63<br>(17.2)                  | 7.24  | 9.90           | 7.74          | 5.40          | 0.49          | 8.15           | 5.61          | 0.51          | 8.56          | 5.83           | 0.49          | 8.96          | 6.04          | 0.44           |               |               |        |
|                  | 57<br>(13.9)                  | 8.81  | 8.82           | 6.85          | 6.46          | 0.49          | 7.22           | 6.68          | 0.52          | 7.59          | 6.90           | 0.52          | 7.95          | 7.12          | 0.48           |               |               |        |
|                  | 72<br>(22.2)                  | 6.17  | 11.79          | 9.23          | 4.68          | 0.47          | 9.72           | 4.88          | 0.47          | 10.20         | 5.09           | 0.43          | 10.68         | 5.30          | 0.36           |               |               |        |
| <b>80 (26.7)</b> | 67<br>(19.4)                  | 7.53  | 10.69          | 8.37          | 5.60          | 0.48          | 8.81           | 5.82          | 0.49          | 9.25          | 6.03           | 0.47          | 9.68          | 6.24          | 0.40           |               |               |        |
|                  | 63<br>(17.2)                  | 8.60  | 9.88           | 7.72          | 6.32          | 0.49          | 8.14           | 6.54          | 0.51          | 8.54          | 6.76           | 0.49          | 8.95          | 6.98          | 0.44           |               |               |        |
|                  | 57<br>(13.9)                  | 9.35  | 9.35           | 7.09          | 7.09          | 0.49          | 7.40           | 7.40          | 0.52          | 7.70          | 7.70           | 0.51          | 8.00          | 8.00          | 0.48           |               |               |        |
|                  | 72<br>(22.2)                  | 1.29  | 3.18           | 8.99          | 3.64          | 0.47          | 9.59           | 3.89          | 0.48          | 9.99          | 4.06           | 0.44          | 10.66         | 4.33          | 0.36           |               |               |        |
|                  | 67<br>(19.4)                  | 6.18  | 10.72          | 8.13          | 4.46          | 0.48          | 8.68           | 4.76          | 0.50          | 9.04          | 4.92           | 0.48          | 9.65          | 5.25          | 0.41           |               |               |        |
| <b>75 (23.9)</b> | 63<br>(17.2)                  | 7.24  | 9.90           | 7.49          | 5.09          | 0.49          | 8.00           | 5.44          | 0.51          | 8.34          | 5.68           | 0.50          | 8.91          | 5.98          | 0.44           |               |               |        |
|                  | 57<br>(13.9)                  | 8.81  | 8.82           | 6.63          | 6.02          | 0.49          | 7.09           | 6.43          | 0.52          | 7.39          | 6.56           | 0.52          | 7.90          | 7.04          | 0.48           |               |               |        |
|                  | 72<br>(22.2)                  | 6.17  | 11.79          | 8.96          | 4.47          | 0.47          | 9.55           | 4.76          | 0.47          | 9.96          | 4.92           | 0.44          | 10.62         | 5.26          | 0.36           |               |               |        |
|                  | 67<br>(19.4)                  | 7.53  | 10.69          | 8.11          | 5.28          | 0.48          | 8.66           | 5.63          | 0.50          | 9.02          | 5.78           | 0.48          | 9.63          | 6.18          | 0.41           |               |               |        |
|                  | 63<br>(17.2)                  | 8.60  | 9.88           | 7.48          | 5.91          | 0.49          | 7.99           | 6.31          | 0.51          | 8.33          | 6.44           | 0.50          | 8.89          | 6.91          | 0.44           |               |               |        |
| 57<br>(13.9)     | 9.35                          | 9.35  | 6.73           | 6.73          | 0.49          | 7.19          | 7.19           | 0.52          | 7.40          | 7.40          | 0.52           | 7.93          | 7.93          | 0.48          |                |               |               |        |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage

**Stage 1** — Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

| EDB<br>° F (° C)                               | EVAP. AIR<br>° F (° C) | 105 (40.5)     |        |               |         | 85 (35)        |      |               |         | 75 (23.9)      |       |               |         | 65 (18.3)      |        |               |         |
|--|------------------------|----------------|--------|---------------|---------|----------------|------|---------------|---------|----------------|-------|---------------|---------|----------------|--------|---------------|---------|
|  |                        | Capacity MBtuh |        | Total Sys. KW | ID SCFM | Capacity MBtuh |      | Total Sys. KW | ID SCFM | Capacity MBtuh |       | Total Sys. KW | ID SCFM | Capacity MBtuh |        | Total Sys. KW | ID SCFM |
|  |                        | Total          | Sensit |               | Total   | Sensit         |      | Total         | Sensit  |                | Total | Sensit        |         | Total          | Sensit |               |         |
| <b>STAGE 5</b>                                 |                        |                |        |               |         |                |      |               |         |                |       |               |         |                |        |               |         |
| <b>75 (23.9)</b>                               | 72<br>(22.2)           | 35.03          | 14.21  | 3.80          | 36.79   | 14.91          | 3.28 | 38.97         | 15.79   | 2.81           | 41.14 | 16.67         | 2.38    | 43.43          | 17.61  | 1.97          |         |
|  | 67<br>(19.4)           | 32.03          | 18.10  | 3.76          | 33.69   | 18.87          | 3.26 | 35.70         | 19.98   | 2.81           | 37.69 | 21.10         | 2.39    | 39.83          | 22.39  | 2.00          | 948     |
|  | 63<br>(17.2)           | 29.78          | 21.12  | 3.72          | 31.34   | 21.94          | 3.23 | 33.23         | 23.22   | 2.80           | 35.10 | 24.53         | 2.40    | 37.11          | 26.09  | 2.02          | 948     |
|  | 57<br>(13.9)           | 26.68          | 25.51  | 3.66          | 28.08   | 26.39          | 3.19 | 29.78         | 27.92   | 2.78           | 31.49 | 29.50         | 2.40    | 33.35          | 31.47  | 2.04          | 948     |
|  | 72<br>(22.2)           | 34.90          | 17.98  | 3.79          | 36.65   | 18.72          | 3.28 | 38.82         | 19.81   | 2.81           | 40.98 | 20.92         | 2.37    | 43.26          | 22.19  | 1.97          | 948     |
| <b>80 (26.7)</b>                               | 67<br>(19.4)           | 31.95          | 21.83  | 3.75          | 33.80   | 22.64          | 3.25 | 35.61         | 23.95   | 2.81           | 37.60 | 25.30         | 2.39    | 39.72          | 26.91  | 2.00          | 948     |
|  | 63<br>(17.2)           | 29.73          | 24.84  | 3.72          | 31.29   | 25.70          | 3.23 | 33.16         | 27.18   | 2.80           | 35.04 | 28.72         | 2.39    | 37.04          | 30.61  | 2.02          | 948     |
|  | 57<br>(13.9)           | 27.71          | 27.71  | 3.68          | 28.95   | 28.95          | 3.20 | 30.66         | 30.66   | 2.78           | 32.41 | 32.41         | 2.40    | 34.42          | 34.42  | 2.04          | 948     |
|  | 72<br>(22.2)           | 21.74          | 8.83   | 1.80          | 22.72   | 9.22           | 1.63 | 24.20         | 9.82    | 1.47           | 25.61 | 10.39         | 1.30    | 27.10          | 11.00  | 1.09          | 664     |
|  | 67<br>(19.4)           | 19.76          | 11.28  | 1.80          | 20.72   | 11.74          | 1.64 | 22.09         | 12.54   | 1.49           | 23.39 | 13.27         | 1.33    | 24.77          | 14.10  | 1.14          | 664     |
| <b>STAGE 3</b>                                 |                        |                |        |               |         |                |      |               |         |                |       |               |         |                |        |               |         |
| <b>75 (23.9)</b>                               | 72<br>(22.2)           | 18.28          | 13.20  | 1.80          | 19.22   | 13.70          | 1.63 | 20.51         | 14.65   | 1.50           | 21.73 | 15.51         | 1.35    | 23.02          | 16.51  | 1.18          | 626     |
|  | 67<br>(19.4)           | 16.37          | 16.02  | 1.79          | 17.25   | 16.59          | 1.63 | 18.42         | 17.76   | 1.51           | 19.53 | 18.80         | 1.37    | 20.72          | 20.04  | 1.21          | 626     |
|  | 63<br>(17.2)           | 21.65          | 11.25  | 1.80          | 22.62   | 11.67          | 1.63 | 24.08         | 12.45   | 1.47           | 25.49 | 13.17         | 1.29    | 26.96          | 13.99  | 1.09          | 626     |
|  | 57<br>(13.9)           | 19.70          | 13.69  | 1.80          | 20.66   | 14.18          | 1.63 | 22.03         | 15.15   | 1.49           | 23.32 | 16.03         | 1.33    | 24.69          | 17.07  | 1.14          | 626     |
|  | 72<br>(22.2)           | 18.26          | 15.60  | 1.80          | 19.20   | 16.13          | 1.63 | 20.48         | 17.26   | 1.50           | 21.70 | 18.27         | 1.35    | 22.99          | 19.47  | 1.17          | 626     |
| <b>STAGE 1 - FEANP005 ONLY</b>                 |                        |                |        |               |         |                |      |               |         |                |       |               |         |                |        |               |         |
| <b>75 (23.9)</b>                               | 72<br>(22.2)           | 14.50          | 5.90   | 0.99          | 9.48    | 3.84           | 0.49 | 10.07         | 4.08    | 0.49           | 10.66 | 4.32          | 0.45    | 11.47          | 4.65   | 0.35          | 250     |
|  | 67<br>(19.4)           | 13.17          | 7.58   | 1.00          | 8.59    | 4.79           | 0.50 | 9.13          | 5.04    | 0.52           | 9.66  | 5.30          | 0.49    | 10.39          | 5.71   | 0.41          | 250     |
|  | 63<br>(17.2)           | 12.18          | 8.91   | 1.00          | 7.92    | 5.53           | 0.51 | 8.42          | 5.80    | 0.53           | 8.92  | 6.07          | 0.51    | 9.60           | 6.55   | 0.45          | 250     |
|  | 57<br>(13.9)           | 10.89          | 10.84  | 1.01          | 7.02    | 6.61           | 0.52 | 7.46          | 6.90    | 0.55           | 7.91  | 7.19          | 0.54    | 8.52           | 7.77   | 0.49          | 250     |
|  | 72<br>(22.2)           | 14.44          | 7.57   | 0.99          | 9.44    | 4.79           | 0.49 | 10.03         | 5.04    | 0.49           | 10.62 | 5.30          | 0.45    | 11.43          | 5.71   | 0.35          | 250     |
| <b>80 (26.7)</b>                               | 67<br>(19.4)           | 13.13          | 9.25   | 1.00          | 8.56    | 5.73           | 0.50 | 9.10          | 6.01    | 0.52           | 9.64  | 6.28          | 0.49    | 10.36          | 6.78   | 0.41          | 250     |
|  | 63<br>(17.2)           | 12.16          | 10.56  | 1.00          | 7.91    | 6.47           | 0.51 | 8.41          | 6.76    | 0.53           | 8.91  | 7.05          | 0.51    | 9.58           | 7.61   | 0.45          | 250     |
|  | 57<br>(13.9)           | 11.52          | 11.52  | 1.01          | 7.26    | 7.26           | 0.52 | 7.64          | 7.64    | 0.54           | 8.03  | 8.03          | 0.54    | 8.66           | 8.66   | 0.48          | 250     |
|  | 72<br>(22.2)           | 14.50          | 5.90   | 0.99          | 9.35    | 3.79           | 0.49 | 9.88          | 4.01    | 0.50           | 10.62 | 4.30          | 0.45    | 11.47          | 4.65   | 0.35          | 250     |
|  | 67<br>(19.4)           | 13.17          | 7.58   | 1.00          | 8.46    | 4.68           | 0.50 | 8.94          | 4.90    | 0.52           | 9.62  | 5.27          | 0.49    | 10.39          | 5.71   | 0.41          | 250     |
| <b>STAGE 1 - ALL OTHER INDOOR COMBINATIONS</b> |                        |                |        |               |         |                |      |               |         |                |       |               |         |                |        |               |         |
| <b>75 (23.9)</b>                               | 72<br>(22.2)           | 12.18          | 8.91   | 1.00          | 7.80    | 5.37           | 0.51 | 8.25          | 5.59    | 0.53           | 8.88  | 6.02          | 0.51    | 9.60           | 6.55   | 0.45          | 246     |
|  | 67<br>(19.4)           | 10.89          | 10.84  | 1.01          | 6.91    | 6.39           | 0.52 | 7.30          | 6.60    | 0.55           | 7.87  | 7.12          | 0.54    | 8.52           | 7.77   | 0.49          | 246     |
|  | 63<br>(17.2)           | 14.44          | 7.57   | 0.99          | 9.31    | 4.68           | 0.49 | 9.84          | 4.90    | 0.50           | 10.58 | 5.27          | 0.45    | 11.43          | 5.71   | 0.35          | 246     |
|  | 57<br>(13.9)           | 13.13          | 9.25   | 1.00          | 8.44    | 5.57           | 0.50 | 8.92          | 5.79    | 0.52           | 9.60  | 6.23          | 0.49    | 10.36          | 6.78   | 0.41          | 246     |
|  | 72<br>(22.2)           | 12.16          | 10.56  | 1.00          | 7.79    | 6.26           | 0.51 | 8.23          | 6.48    | 0.53           | 8.87  | 6.98          | 0.51    | 9.58           | 7.61   | 0.45          | 246     |
| <b>80 (26.7)</b>                               | 67<br>(19.4)           | 11.52          | 11.52  | 1.01          | 7.08    | 7.08           | 0.52 | 7.39          | 7.39    | 0.55           | 7.97  | 7.97          | 0.54    | 8.66           | 8.66   | 0.48          | 246     |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage

**Stage 1** — Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 34



# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

| EDB<br>°F (°C)   | EVAP. AIR<br>EWB<br>°F (°C) | 24VNA98 / FE4BNB06 Comfort + Dehumidify Mode<br>Condenser Entering Air Temperature °F (°C) |                         |        |                  |                  |         |                         |        |                  |                  |           |                         |        |                  |                  |           |                         |        |                  |                  |           |                         |        |                  |                  |
|------------------|-----------------------------|--|-------------------------|--------|------------------|------------------|---------|-------------------------|--------|------------------|------------------|-----------|-------------------------|--------|------------------|------------------|-----------|-------------------------|--------|------------------|------------------|-----------|-------------------------|--------|------------------|------------------|
|                  |                             | 105 (40.5)   |                         |        |                  |                  | 95 (35) |                         |        |                  |                  | 85 (29.4) |                         |        |                  |                  | 75 (23.9) |                         |        |                  |                  | 65 (18.3) |                         |        |                  |                  |
|                  |                             | ID SCFM  | Capacity MBtuh<br>Total | Sensit | Total Sys.<br>KW | Total Sys.<br>KW | ID SCFM | Capacity MBtuh<br>Total | Sensit | Total Sys.<br>KW | Total Sys.<br>KW | ID SCFM   | Capacity MBtuh<br>Total | Sensit | Total Sys.<br>KW | Total Sys.<br>KW | ID SCFM   | Capacity MBtuh<br>Total | Sensit | Total Sys.<br>KW | Total Sys.<br>KW | ID SCFM   | Capacity MBtuh<br>Total | Sensit | Total Sys.<br>KW | Total Sys.<br>KW |
| <b>75 (23.9)</b> | 72<br>(22.2)                |  | 46.42                   | 18.85  | 4.71             | 49.80            | 20.23   | 4.17                    | 3.65   | 3.19             |                  | 53.09     | 21.57                   | 3.65   | 3.19             |                  | 56.46     | 22.96                   | 3.19   | 3.19             |                  | 58.44     | 23.68                   | 2.67   | 2.67             |                  |
|                  | 67<br>(19.4)                |  | 42.40                   | 24.08  | 4.63             | 45.50            | 25.89   | 4.11                    | 3.61   | 3.17             |                  | 48.51     | 27.62                   | 3.61   | 3.17             |                  | 51.61     | 29.50                   | 3.17   | 3.17             |                  | 53.38     | 29.85                   | 2.67   | 2.67             |                  |
|                  | 63<br>(17.2)                | 1110   | 39.38                   | 28.15  | 4.57             | 42.27            | 30.30   | 4.06                    | 3.58   | 3.15             | 1184             | 37.94     | 36.72                   | 3.98   | 3.15             | 1247             | 47.99     | 34.60                   | 3.15   | 3.15             | 1330             | 49.62     | 34.64                   | 2.66   | 2.66             |                  |
|                  | 57<br>(13.9)                |  | 35.31                   | 34.09  | 4.47             | 37.94            | 36.72   | 3.98                    | 3.53   | 3.12             |                  | 40.49     | 39.19                   | 3.53   | 3.12             |                  | 43.14     | 41.99                   | 3.12   | 3.12             |                  | 44.52     | 41.65                   | 2.64   | 2.64             |                  |
|                  | 72<br>(22.2)                |  | 46.28                   | 23.95  | 4.71             | 49.62            | 25.75   | 4.16                    | 3.65   | 3.19             |                  | 52.90     | 27.46                   | 3.65   | 3.19             |                  | 56.25     | 29.32                   | 3.19   | 3.19             |                  | 58.25     | 29.68                   | 2.67   | 2.67             |                  |
| <b>80 (26.7)</b> | 67<br>(19.4)                |  | 42.29                   | 29.13  | 4.63             | 45.38            | 31.35   | 4.10                    | 3.61   | 3.17             |                  | 48.38     | 33.45                   | 3.61   | 3.17             |                  | 51.47     | 35.79                   | 3.17   | 3.17             |                  | 53.26     | 35.77                   | 2.67   | 2.67             |                  |
|                  | 63<br>(17.2)                | 1110   | 39.31                   | 33.18  | 4.57             | 42.20            | 35.74   | 4.06                    | 3.58   | 3.15             | 1184             | 45.01     | 38.14                   | 3.58   | 3.15             | 1247             | 47.91     | 40.87                   | 3.15   | 3.15             | 1330             | 49.54     | 40.54                   | 2.66   | 2.66             |                  |
|                  | 57<br>(13.9)                |  | 36.80                   | 36.80  | 4.51             | 39.58            | 39.58   | 4.01                    | 3.55   | 3.13             |                  | 42.24     | 42.24                   | 3.55   | 3.13             |                  | 45.10     | 45.10                   | 3.13   | 3.13             |                  | 45.76     | 45.76                   | 2.65   | 2.65             |                  |
|                  | 72<br>(22.2)                |  | 29.62                   | 12.03  | 2.44             | 31.87            | 12.96   | 2.16                    | 1.91   | 1.66             |                  | 34.08     | 13.86                   | 1.91   | 1.66             |                  | 36.31     | 14.77                   | 1.66   | 1.66             |                  | 38.96     | 15.92                   | 1.43   | 1.43             |                  |
|                  | 67<br>(19.4)                | 744  | 26.97                   | 15.41  | 2.44             | 29.06            | 16.68   | 2.16                    | 1.92   | 1.68             | 801              | 31.09     | 17.85                   | 1.92   | 1.68             | 887              | 33.14     | 19.06                   | 1.68   | 1.68             | 1001             | 35.59     | 20.85                   | 1.46   | 1.46             |                  |
| <b>75 (23.9)</b> | 63<br>(17.2)                |  | 24.98                   | 18.04  | 2.43             | 26.95            | 19.58   | 2.15                    | 1.92   | 1.70             |                  | 28.84     | 20.96                   | 1.92   | 1.70             |                  | 30.75     | 22.40                   | 1.70   | 1.70             |                  | 33.06     | 24.69                   | 1.49   | 1.49             |                  |
|                  | 57<br>(13.9)                |  | 22.33                   | 21.88  | 2.41             | 24.13            | 23.80   | 2.14                    | 1.92   | 1.71             |                  | 25.84     | 25.48                   | 1.92   | 1.71             |                  | 27.58     | 27.24                   | 1.71   | 1.71             |                  | 29.92     | 29.92                   | 1.51   | 1.51             |                  |
|                  | 72<br>(22.2)                |  | 29.51                   | 15.35  | 2.44             | 31.74            | 16.60   | 2.15                    | 1.91   | 1.66             |                  | 33.93     | 17.76                   | 1.91   | 1.66             |                  | 36.15     | 18.96                   | 1.66   | 1.66             |                  | 38.77     | 20.72                   | 1.43   | 1.43             |                  |
|                  | 67<br>(19.4)                | 744  | 26.90                   | 18.70  | 2.44             | 28.98            | 20.29   | 2.15                    | 1.92   | 1.68             | 801              | 31.00     | 21.72                   | 1.92   | 1.68             | 887              | 33.04     | 23.21                   | 1.68   | 1.68             | 1001             | 35.47     | 25.60                   | 1.46   | 1.46             |                  |
|                  | 57<br>(13.9)                |  | 34.45                   | 25.97  | 4.20             | 28.90            | 23.17   | 2.15                    | 1.92   | 1.70             |                  | 28.79     | 24.81                   | 1.92   | 1.70             |                  | 30.70     | 26.53                   | 1.70   | 1.70             |                  | 33.02     | 29.42                   | 1.49   | 1.49             |                  |
| <b>80 (26.7)</b> | 72<br>(22.2)                |  | 30.79                   | 29.76  | 4.10             | 33.37            | 32.41   | 3.78                    | 3.46   | 3.15             |                  | 35.77     | 34.73                   | 3.46   | 3.15             |                  | 38.24     | 37.17                   | 3.15   | 3.15             |                  | 41.59     | 41.26                   | 2.86   | 2.86             |                  |
|                  | 67<br>(19.4)                |  | 25.60                   | 10.40  | 1.99             | 18.27            | 7.44    | 0.93                    | 0.83   | 0.71             |                  | 19.44     | 7.91                    | 0.83   | 0.71             |                  | 20.67     | 8.39                    | 0.71   | 0.71             |                  | 22.04     | 8.96                    | 0.56   | 0.56             |                  |
|                  | 63<br>(17.2)                | 662  | 23.27                   | 13.31  | 1.99             | 16.64            | 9.65    | 0.95                    | 0.86   | 0.75             | 500              | 17.72     | 10.17                   | 0.86   | 0.75             | 508              | 18.84     | 10.76                   | 0.75   | 0.75             | 534              | 20.11     | 11.51                   | 0.61   | 0.61             |                  |
|                  | 57<br>(13.9)                |  | 19.26                   | 18.92  | 1.98             | 13.90            | 13.90   | 0.98                    | 0.90   | 0.81             |                  | 14.76     | 14.58                   | 0.90   | 0.81             |                  | 15.69     | 15.35                   | 0.81   | 0.81             |                  | 16.77     | 16.48                   | 0.70   | 0.70             |                  |
|                  | 72<br>(22.2)                |  | 25.60                   | 10.40  | 1.99             | 18.26            | 7.44    | 0.93                    | 0.83   | 0.71             |                  | 19.44     | 7.91                    | 0.83   | 0.71             |                  | 20.67     | 8.39                    | 0.71   | 0.71             |                  | 22.04     | 8.96                    | 0.56   | 0.56             |                  |
| <b>75 (23.9)</b> | 67<br>(19.4)                |  | 23.27                   | 13.31  | 1.99             | 16.64            | 9.65    | 0.95                    | 0.86   | 0.75             | 500              | 17.72     | 10.17                   | 0.86   | 0.75             | 508              | 18.84     | 10.76                   | 0.75   | 0.75             | 534              | 20.11     | 11.51                   | 0.61   | 0.61             |                  |
|                  | 63<br>(17.2)                |  | 21.53                   | 15.58  | 1.99             | 15.45            | 11.39   | 0.97                    | 0.88   | 0.77             |                  | 16.45     | 11.96                   | 0.88   | 0.77             |                  | 17.49     | 12.62                   | 0.77   | 0.77             |                  | 18.68     | 13.53                   | 0.65   | 0.65             |                  |
|                  | 57<br>(13.9)                |  | 19.26                   | 18.92  | 1.98             | 13.90            | 13.90   | 0.98                    | 0.90   | 0.81             |                  | 14.76     | 14.58                   | 0.90   | 0.81             |                  | 15.69     | 15.35                   | 0.81   | 0.81             |                  | 16.77     | 16.48                   | 0.70   | 0.70             |                  |
|                  | 72<br>(22.2)                |  | 25.60                   | 10.40  | 1.99             | 18.26            | 7.44    | 0.93                    | 0.83   | 0.71             |                  | 19.44     | 7.91                    | 0.83   | 0.71             |                  | 20.67     | 8.39                    | 0.71   | 0.71             |                  | 22.04     | 8.96                    | 0.56   | 0.56             |                  |
|                  | 67<br>(19.4)                | 662  | 23.27                   | 13.31  | 1.99             | 16.64            | 9.65    | 0.95                    | 0.86   | 0.75             | 500              | 17.72     | 10.17                   | 0.86   | 0.75             | 508              | 18.84     | 10.76                   | 0.75   | 0.75             | 534              | 20.11     | 11.51                   | 0.61   | 0.61             |                  |
| <b>80 (26.7)</b> | 63<br>(17.2)                |  | 21.53                   | 15.58  | 1.99             | 15.45            | 11.39   | 0.97                    | 0.88   | 0.77             |                  | 16.45     | 11.96                   | 0.88   | 0.77             |                  | 17.49     | 12.62                   | 0.77   | 0.77             |                  | 18.68     | 13.53                   | 0.65   | 0.65             |                  |
|                  | 57<br>(13.9)                |  | 19.26                   | 18.92  | 1.98             | 13.90            | 13.23   | 0.98                    | 0.90   | 0.81             |                  | 14.63     | 14.27                   | 0.90   | 0.81             |                  | 15.69     | 15.35                   | 0.81   | 0.81             |                  | 16.77     | 16.48                   | 0.70   | 0.70             |                  |
|                  | 72<br>(22.2)                |  | 25.60                   | 10.40  | 1.99             | 17.95            | 7.29    | 0.93                    | 0.83   | 0.71             |                  | 19.30     | 7.84                    | 0.83   | 0.71             |                  | 20.67     | 8.39                    | 0.71   | 0.71             |                  | 22.04     | 8.96                    | 0.56   | 0.56             |                  |
|                  | 67<br>(19.4)                | 662  | 23.27                   | 13.31  | 1.99             | 16.36            | 9.31    | 0.95                    | 0.86   | 0.75             | 457              | 17.59     | 10.02                   | 0.86   | 0.75             | 508              | 18.84     | 10.76                   | 0.75   | 0.75             | 534              | 20.11     | 11.51                   | 0.61   | 0.61             |                  |
|                  | 57<br>(13.9)                |  | 21.53                   | 15.58  | 1.99             | 15.18            | 10.89   | 0.97                    | 0.88   | 0.77             |                  | 16.33     | 11.74                   | 0.88   | 0.77             |                  | 17.49     | 12.62                   | 0.77   | 0.77             |                  | 18.68     | 13.53                   | 0.65   | 0.65             |                  |
| <b>75 (23.9)</b> | 67<br>(19.4)                |  | 23.27                   | 13.31  | 1.99             | 16.36            | 9.31    | 0.95                    | 0.86   | 0.75             | 457              | 17.59     | 10.02                   | 0.86   | 0.75             | 508              | 18.84     | 10.76                   | 0.75   | 0.75             | 534              | 20.11     | 11.51                   | 0.61   | 0.61             |                  |
|                  | 63<br>(17.2)                |  | 21.53                   | 15.58  | 1.99             | 15.18            | 10.89   | 0.97                    | 0.88   | 0.77             |                  | 16.33     | 11.74                   | 0.88   | 0.77             |                  | 17.49     | 12.62                   | 0.77   | 0.77             |                  | 18.68     | 13.53                   | 0.65   | 0.65             |                  |
|                  | 57<br>(13.9)                |  | 19.26                   | 18.92  | 1.98             | 13.59            | 13.23   | 0.98                    | 0.90   | 0.81             |                  | 14.63     | 14.27                   | 0.90   | 0.81             |                  | 15.69     | 15.35                   | 0.81   | 0.81             |                  | 16.77     | 16.48                   | 0.70   | 0.70             |                  |
|                  | 72<br>(22.2)                |  | 25.60                   | 10.40  | 1.99             | 17.95            | 7.29    | 0.93                    | 0.83   | 0.71             |                  | 19.30     | 7.84                    | 0.83   | 0.71             |                  | 20.67     | 8.39                    | 0.71   | 0.71             |                  | 22.04     | 8.96                    | 0.56   | 0.56             |                  |
|                  | 67<br>(19.4)                | 662  | 23.27                   | 13.31  | 1.99             | 16.36            | 9.31    | 0.95                    | 0.86   | 0.75             | 457              | 17.59     | 10.02                   | 0.86   | 0.75             | 508              | 18.84     | 10.76                   | 0.75   | 0.75             | 534              | 20.11     | 11.51                   | 0.61   | 0.61             |                  |
| <b>80 (26.7)</b> | 63<br>(17.2)                |  | 21.53                   | 15.58  | 1.99             | 15.18            | 10.89   | 0.97                    | 0.88   | 0.77             |                  | 16.33     | 11.74                   | 0.88   | 0.77             |                  | 17.49     | 12.62                   | 0.77   | 0.77             |                  | 18.68     | 13.53                   | 0.65   | 0.65             |                  |
|                  | 57<br>(13.9)                |  | 19.26                   | 18.92  | 1.98             | 13.59            | 13.23   | 0.98                    | 0.90   | 0.81             |                  | 14.63     | 14.27                   | 0.90   | 0.81             |                  | 15.69     | 15.35                   | 0.81   | 0.81             |                  | 16.77     | 16.48                   | 0.70   | 0.70             |                  |
|                  | 72<br>(22.2)                |  | 25.60                   | 10.40  | 1.99             | 17.95            | 7.29    | 0.93                    | 0.83   | 0.71             |                  | 19.30     | 7.84                    | 0.83   | 0.71             |                  | 20.67     | 8.39                    | 0.71   | 0.71             |                  | 22.04     | 8.96                    | 0.56   | 0.56             |                  |
|                  | 67<br>(19.4)                | 662  | 23.27                   | 13.31  | 1.99             | 16.36            | 9.31    | 0.95                    | 0.86   | 0.75             | 457              | 17.59     | 10.02                   | 0.86   | 0.75             | 508              | 18.84     | 10.76                   | 0.75   | 0.75             | 534              | 20.11     | 11.51                   | 0.61   | 0.61             |                  |
|                  | 57<br>(13.9)                |  | 21.53                   | 15.58  | 1.99             | 15.18            | 10.89   | 0.97                    | 0.88   | 0.77             |                  | 16.33     | 11.74                   | 0.88   | 0.77             |                  | 17.49     | 12.62                   | 0.77   | 0.77             |                  | 18.68     | 13.53                   | 0.65   | 0.65             |                  |

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 65 outdoor. **Stage 1** – Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 34





# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA560

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL    | 2-STAGE (Hi-Stage 5, Lo-Stage 2) |       |                | Cooling Indoor Model | High Speed Cap. | Power | Low Speed Cap. | Power            | Furnace Model |
|----------------------|----------|-------|------------------|----------------------------------|-------|----------------|----------------------|-----------------|-------|----------------|------------------|---------------|
|                      |          |       |                  | High Speed Cap.                  | Power | Low Speed Cap. |                      |                 |       |                |                  |               |
| *FE4ANB006L          | 1.00     | 1.00  | 58CV(A.X)110-20  | *FV4CNB006L                      | 1.00  | 1.00           | CAP**6021AL*         | 1.00            | 1.00  | 1.00           | 58PH*110-20      |               |
| CAP**6021AL*         | 0.99     | 0.99  | 58CV(A.X)110-20  | CAP**6021AL*                     | 1.01  | 1.06           | CSPH*6012AL*         | 1.02            | 1.07  | 1.04           | 58PH*110-20      |               |
| CAP**6024AL*         | 0.99     | 0.99  | 58CV(A.X)110-20  | CAP**6024AL*                     | 1.01  | 1.06           | CSPH*6012AL*         | 1.01            | 1.06  | 1.11           | 58PH*135-20      |               |
| CNPV*6124AL*         | 1.04     | 1.04  | 58CV(A.X)110-20  | CNPV*6024AL*                     | 1.01  | 1.06           | CNPV*6024AL*         | 1.01            | 1.06  | 1.06           | 58PH*135-20      |               |
| CNPV*6024AL*         | 0.98     | 0.98  | 58CV(A.X)110-20  | CNPV*6124AL*                     | 1.01  | 1.06           | CNPV*6124AL*         | 1.01            | 1.06  | 1.12           | 58PH*135-20      |               |
| CNPV*6124AL*         | 1.00     | 1.00  | 58CV(A.X)110-20  | CNPV*6024AL*                     | 1.00  | 1.05           | CNPV*6024AL*         | 1.00            | 1.05  | 1.01           | 58PH*135-20      |               |
| CAP**6024AL*         | 0.99     | 0.99  | 58CV(A.X)135-22  | CNPV*6124AL*                     | 1.02  | 1.07           | CNPV*6124AL*         | 1.02            | 1.07  | 1.00           | 58PH*135-20      |               |
| CNPV*6024AL*         | 0.99     | 0.99  | 58CV(A.X)135-22  | CSPH*6012AL*                     | 1.02  | 1.07           | CSPH*6012AL*         | 1.01            | 1.06  | 1.05           | 58PH*135-20      |               |
| CNPV*6124AL*         | 1.00     | 1.00  | 58CV(A.X)135-22  | CAP**6021AL*                     | 1.01  | 1.06           | CAP**6021AL*         | 1.01            | 1.06  | 1.07           | 58CTWI10-22      |               |
| CNPV*6024AL*         | 0.98     | 0.98  | 58CV(A.X)135-22  | CSPH*6012AL*                     | 1.02  | 1.07           | CSPH*6012AL*         | 1.02            | 1.07  | 1.00           | 58CTWI10-22      |               |
| CNPV*6124AL*         | 1.00     | 1.00  | 58CV(A.X)155-22  | CAP**6024AL*                     | 1.01  | 1.06           | CAP**6024AL*         | 1.01            | 1.06  | 1.04           | 58CTWI10-22      |               |
| CNPV*6024AL*         | 1.00     | 1.00  | 58CV(A.X)155-22  | CNPV*6124AL*                     | 1.01  | 1.06           | CNPV*6124AL*         | 1.01            | 1.06  | 1.06           | 58CTWI135-22     |               |
| CNPV*6124AL*         | 1.00     | 1.00  | 58CV(A.X)155-22  | CNPV*6024AL*                     | 1.00  | 1.05           | CNPV*6024AL*         | 1.00            | 1.05  | 1.01           | 58CTWI135-22     |               |
| CAP**6024AL*         | 0.99     | 0.99  | 58CV(A.X)155-22  | CNPV*6124AL*                     | 1.02  | 1.07           | CNPV*6124AL*         | 1.02            | 1.07  | 1.04           | 58CTWI135-22     |               |
| CNPV*6124AL*         | 1.00     | 1.00  | 58CV(A.X)155-22  | CSPH*6012AL*                     | 1.01  | 1.06           | CSPH*6012AL*         | 1.01            | 1.06  | 1.04           | 58CTWI35-22      |               |
| CNPV*6024AL*         | 1.00     | 1.00  | 58CV(A.X)155-22  | CAP**6021AL*                     | 1.01  | 1.06           | CAP**6021AL*         | 1.01            | 1.06  | 1.07           | 59*P2A080E21**20 |               |
| CNPV*6124AL*         | 1.00     | 1.00  | 58CV(A.X)155-22  | CSPH*6012AL*                     | 1.02  | 1.07           | CSPH*6012AL*         | 1.02            | 1.07  | 1.05           | 59*P2A080E21**20 |               |
| CAP**6021AL*         | 0.99     | 1.04  | 59*N*A080V21**20 | CAP**6021AL*                     | 1.01  | 1.06           | CAP**6021AL*         | 1.01            | 1.06  | 1.07           | 59*P2A100E21**20 |               |
| CNPV*6024AL*         | 0.99     | 1.04  | 59*N*A080V21**20 | CSPH*6012AL*                     | 1.01  | 1.06           | CSPH*6012AL*         | 1.01            | 1.06  | 1.05           | 59*P2A100E21**20 |               |
| CNPV*6124AL*         | 0.99     | 1.04  | 59*N*A080V21**20 | CAP**6024AL*                     | 1.01  | 1.06           | CAP**6024AL*         | 1.01            | 1.06  | 1.07           | 59*P2A120E24**20 |               |
| CNPV*6024AL*         | 0.98     | 1.03  | 59*N*A080V21**20 | CNPV*6124AL*                     | 1.01  | 1.06           | CNPV*6124AL*         | 1.01            | 1.06  | 1.07           | 59*P2A120E24**20 |               |
| CNPV*6124AL*         | 0.99     | 1.04  | 59*N*A080V21**20 | CNPV*6024AL*                     | 1.00  | 1.05           | CNPV*6024AL*         | 1.00            | 1.05  | 1.04           | 59*P2A120E24**20 |               |
| CAP**6021AL*         | 0.99     | 1.04  | 59*N*A100V21**22 | CNPV*6124AL*                     | 1.02  | 1.07           | CNPV*6124AL*         | 1.02            | 1.07  | 1.04           | 59*P2A120E24**20 |               |
| CNPV*100V21**22      | 0.99     | 1.04  | 59*N*A100V21**22 | CSPH*6012AL*                     | 0.99  | 1.04           | CSPH*6012AL*         | 0.99            | 1.04  | 1.11           | 59*P5A080E21**20 |               |
| CNPV*100V21**22      | 0.99     | 1.04  | 59*N*A100V21**22 | CAP**6024AL*                     | 1.00  | 1.05           | CAP**6024AL*         | 1.00            | 1.05  | 1.10           | 59*P5A080E21**20 |               |
| CNPV*100V21**22      | 0.98     | 1.03  | 59*N*A100V21**22 | CNPV*6024AL*                     | 1.00  | 1.05           | CNPV*6024AL*         | 1.00            | 1.05  | 1.11           | 59*P5A120E24**22 |               |
| CNPV*100V21**22      | 1.00     | 1.00  | 59*N*A100V21**22 | CNPV*6124AL*                     | 1.00  | 1.05           | CNPV*6124AL*         | 1.00            | 1.05  | 1.10           | 59*P5A120E24**22 |               |
| CAP**6024AL*         | 0.99     | 1.04  | 59*N*A120V24**22 | CNPV*6024AL*                     | 1.00  | 1.05           | CNPV*6024AL*         | 1.00            | 1.05  | 1.10           | 59*P5A120E24**22 |               |
| CNPV*6124AL*         | 0.99     | 1.04  | 59*N*A120V24**22 | CSPH*6012AL*                     | 1.00  | 1.05           | CSPH*6012AL*         | 1.00            | 1.05  | 1.10           | 59*P5A120E24**22 |               |
| CNPV*6024AL*         | 0.98     | 1.03  | 59*N*A120V24**22 | CSPH*6012AL*                     | 1.01  | 1.06           | CSPH*6012AL*         | 1.01            | 1.06  | 1.11           | 59*P6A100E21**20 |               |
| CNPV*6124AL*         | 0.99     | 1.03  | 59*N*A120V24**22 | CAP**6024AL*                     | 0.99  | 1.04           | CAP**6024AL*         | 0.99            | 1.04  | 1.11           | 59*P6A120E24**22 |               |
| CNPV*6024AL*         | 1.00     | 1.00  | 59*N*A120V24**22 | CNPV*6124AL*                     | 1.00  | 1.05           | CNPV*6124AL*         | 1.00            | 1.05  | 1.10           | 59*P6A120E24**22 |               |
| CAP**6021AL*         | 0.99     | 0.99  | 59*N*A120V24**22 | CNPV*6024AL*                     | 1.00  | 1.05           | CNPV*6024AL*         | 1.00            | 1.05  | 1.10           | 59*P6A120E24**22 |               |
| CNPV*6124AL*         | 1.00     | 1.00  | 59*N*A120V24**22 | CSPH*6012AL*                     | 1.00  | 1.05           | CSPH*6012AL*         | 1.00            | 1.05  | 1.10           | 59*P6A120E24**22 |               |
| CNPV*6024AL*         | 0.98     | 1.03  | 59MN7A060V21**20 | CSPH*6012AL*                     | 0.98  | 1.03           | CSPH*6012AL*         | 0.98            | 1.03  | 1.10           | 59*P6A120E24**22 |               |
| CNPV*6124AL*         | 0.98     | 1.09  | 59MN7A060V21**20 | CNPV*6124AL*                     | 1.00  | 1.05           | CNPV*6124AL*         | 1.00            | 1.05  | 1.08           | 59*P6A120E24**22 |               |
| CNPV*6024AL*         | 0.97     | 1.09  | 59MN7A060V21**20 | CSPH*6012AL*                     | 1.00  | 1.05           | CSPH*6012AL*         | 1.00            | 1.05  | 1.08           | 59*P6A120E24**22 |               |
| CNPV*6124AL*         | 0.98     | 1.09  | 59MN7A060V21**20 | CNPV*6024AL*                     | 1.00  | 1.05           | CNPV*6024AL*         | 1.00            | 1.05  | 1.09           | OVLAAB060154     |               |
| CNPV*6024AL*         | 0.97     | 1.02  | 59MN7A060V21**20 | CNPV*6124AL*                     | 1.01  | 1.06           | CNPV*6124AL*         | 1.01            | 1.06  | 1.09           | OVLAAB060154     |               |
| CNPV*6124AL*         | 0.99     | 1.04  | 59MN7A060V21**20 | CNPV*6024AL*                     | 1.01  | 1.06           | CNPV*6024AL*         | 1.01            | 1.06  | 1.07           | OVLAAB060154     |               |
| CSPH*6012AL*         | 0.99     | 1.04  | 59MN7A060V21**20 | CNPV*6124AL*                     | 1.01  | 1.06           | CNPV*6124AL*         | 1.01            | 1.06  | 1.11           | OVMAAB060154     |               |
|                      |          |       |                  | CSPH*6012AL*                     | 1.01  | 1.06           | CSPH*6012AL*         | 1.01            | 1.06  | 1.11           | OVMAAB060154     |               |

**NOTES:**  
 \* Tested combination.  
 † Total and sensible capacities are net capacities. Blower motor heat has been subtracted.  
 ‡ Sensible capacities are shown for both 80°F (27°C) and 75°F (23.4°C) entering air at the indoor coil.  
 § For sensible capacities at other than these, deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below reference temperature, or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree above reference temperature.  
 # Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240-2008. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.  
 \*\* System kw is total of indoor and outdoor unit kilowatts.  
**NOTE:** When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.  
**EWB** — Entering Wet Bulb

## GUIDE SPECIFICATIONS

### GENERAL

#### System Description

Outdoor-mounted, air-cooled, split-system air conditioning unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, forward-swept blade propeller-type condenser fan, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

#### Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 240.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have C-UL approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils are pressure tested and the outdoor units are leak tested.
- Unit constructed in ISO9001 approved facility.

#### Delivery, Storage, and Handling

- Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

#### Warranty (for inclusion by specifying engineer)

- U.S. and Canada only.

## PRODUCTS

### Equipment

- Factory-assembled, single-piece, air-cooled air conditioning unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge Puron® (R-410A) refrigerant, and special features required prior to field start-up.

### Unit Cabinet

- Unit cabinet will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.

### Fans

- Condenser fan will be direct-drive propeller type, forward swept blade, discharging air upward.

## AIR-COOLED, SPLIT-SYSTEM AIR CONDITIONER

24VNA9

- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated.
- Shafts will be corrosion resistant.
- Fan blades will be statically and dynamically balanced.
- Condenser fan openings will be equipped with coated steel wire safety guards.

### Compressor

- Compressor will be hermetically sealed.
- Compressor will be mounted on rubber vibration isolators.
- Compressor will be covered with a sound absorbing blanket.

### Condenser Coil

- Condenser coil will be air cooled.
- Coil will be constructed of aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.

### Refrigeration Components

- Refrigeration circuit components will include liquid-line front-seating shutoff valve with sweat connections, vapor-line front-seating shutoff valve with sweat connections, system charge of Puron® (R-410A) refrigerant, POE compressor oil, accumulator, charge compensator, electronic expansion valve, and reversing valve.
- Unit will be equipped with high-pressure switch, suction pressure transducer, and filter drier for Puron® refrigerant.

### Operating Characteristics

- The capacity of the unit will meet or exceed \_\_\_\_\_ Btuh at a suction temperature of \_\_\_\_\_ °F (°C). The power consumption at full load will not exceed \_\_\_\_\_ kW.
- Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of \_\_\_\_\_ Btuh or greater at conditions of \_\_\_\_\_ CFM entering air temperature at the evaporator at \_\_\_\_\_ °F (°C) wet bulb and \_\_\_\_\_ °F (°C) dry bulb, and air entering the unit at \_\_\_\_\_ °F (°C).
- The system will have a SEER of \_\_\_\_\_ Btuh/watt or greater at DOE conditions.

### Electrical Requirements

- Nominal unit electrical characteristics will be \_\_\_\_\_ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of \_\_\_\_\_ v to \_\_\_\_\_ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.
- Compliant with IEC 61000-4-5 Transient Surge Requirement.

### Special Features

- Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.
- Infinity control with appropriate software version is required for full featured operation.

## SYSTEM DESIGN SUMMARY

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. This product is not qualified for low ambient cooling operation.  
Minimum cooling outdoor operating temperatures:
  - Communicating systems: 40°F (4.44°C)
  - Non-communicating systems: 55°F (12.8°C)
3. For reliable operation, unit should be level in all horizontal planes.
4. This unit is qualified for up to 100 ft (30.5 m) equivalent length of line set without additional accessories.
5. If any refrigerant tubing is buried, provide a 6 in. (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (914.4 mm) may be buried without further consideration. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
6. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
7. Do not apply capillary tube indoor coils to these units.
8. Puron refrigerant TXV required on indoor coil.