

**N4H5S**  
**Single-Stage Heat Pump**  
**with R-410A Refrigerant**  
**1-1/2 To 5 Tons**



## Product Data



This unit has been designed utilizing non-ozone depleting R-410A refrigerant. Heat pumps with R-410A refrigerant provide a collection of features unmatched by any other family of equipment.

**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

#### Efficiency

- 14.3 - 15.2 SEER2 / 11.0 - 12.5 EER2 / 7.5 - 8.1 HSPF2 (depending on unit size and indoor combination installed)
- Indoor air quality accessories available

#### Sound

- Sound levels as low as 69 dBA with accessory sound blanket

#### Comfort

- System supports programmable or standard thermostat controls

#### Reliability

- Non-ozone depleting R-410A refrigerant
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Loss of charge switch
- Filter drier
- Balanced refrigeration system for maximum reliability

#### Durability

Protection Package:

- Solid, durable sheet metal construction
- Dense wire coil guard

#### Applications

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient cooling (down to 0°F/-17.8°C) with approved low ambient accessory kits

## MODEL NUMBER NOMENCLATURE

| N                        | 4                                | H                     | 5                             | S  | 18   | A                              | K   | A                                      | A                                | A                                  |
|--------------------------|----------------------------------|-----------------------|-------------------------------|--|--|--------------------------------|---|--|----------------------------------|------------------------------------|
| <b>Brand</b><br>N= Entry | <b>Refrigerant</b><br>4 = R-410A | <b>Type</b><br>H = HP | <b>SEER2</b><br>5= 14.3 SEER2 | <b>OD Design Type</b><br>S= Single Stage | <b>Nominal Capacity</b><br>18 = 1-1/2 Tons<br>24 = 2 Tons<br>30 = 2-1/2 Tons<br>36 = 3 Tons<br>42 = 3-1/2 Tons<br>48 = 4 Tons<br>60 = 5 Tons | <b>Feature</b><br>A = Standard | <b>Voltage</b><br>K = 208-230-1<br>or 208/230-1 | <b>Special Feature</b><br>A = Standard | <b>Region</b><br>A = Standard HP | <b>Major Series</b><br>A = Initial |



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).



Quality  
ISO 9001  
SAI GLOBAL



This product has been designed and tested to meet Energy Star criteria for energy efficiency when matched with appropriate components. However, proper operation, charge and service are also critical to achieving the energy efficiency. Read the product literature. Manufacturer's equipment charge list is also important. Failure to confirm proper charge and set flow may reduce energy efficiency and shorten equipment life.

## 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 Ratings Database here: [Heil Ratings](#)

## CATALOG ORDERING NUMBERS

| Size | Model Number |
|------|--------------|
| 18   | N4H5S18AKAAA |
| 24   | N4H5S24AKAAA |
| 30   | N4H5S30AKAAA |
| 36   | N4H5S36AKAAA |
| 42   | N4H5S42AKAAA |
| 48   | N4H5S48AKAAA |
| 60   | N4H5S60AKAAA |

## Standard Features

| Feature                         | 18 | 24 | 30 | 36 | 42 | 48 | 60 |
|---------------------------------|----|----|----|----|----|----|----|
| R-410A Refrigerant              | X  | X  | X  | X  | X  | X  | X  |
| Scroll Compressor               | X  | X  | X  | X  | X  | X  | X  |
| Field Installed Filter Drier    | X  | X  | X  | X  | X  | X  | X  |
| Front Seating Service Valves    | X  | X  | X  | X  | X  | X  | X  |
| Internal Pressure Relief Valve  | X  | X  | X  | X  | X  | X  | X  |
| Internal Thermal Overload       | X  | X  | X  | X  | X  | X  | X  |
| Long Line capability            | X  | X  | X  | X  | X  | X  | X  |
| Low Ambient capability with Kit | X  | X  | X  | X  | X  | X  | X  |
| Suction Line Accumulator        | X  | X  | X  | X  | X  | X  | X  |
| Loss of Charge Switch           | X  | X  | X  | X  | X  | X  | X  |

X = Standard

## Physical Data

|  |   |           |           |           |           |           |           |
|--|---|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Unit Size</b>                         | <b>18</b>                                     | <b>24</b> | <b>30</b> | <b>36</b> | <b>42</b> | <b>48</b> | <b>60</b> |
| <b>Compressor Type</b>                   | Scroll  |           |           |           |           |           |           |
| <b>Refrigerant</b>                       | R-410A  |           |           |           |           |           |           |
| Control                                  | TXV (R-410A Hard Shutoff)                     |           |           |           |           |           |           |
| Charge (lb)                              | 5.9   | 6.3       | 9.0       | 9.0       | 9.9       | 10.8      | 13.7      |
| Outdoor Htg. Piston #                    | 42  | 46        | 52        | 57        | 61        | 65        | 76        |
| <b>Cond Fan</b>                          | Forward Swept or Propeller Type, Direct Drive |           |           |           |           |           |           |
| Air Discharge                            | Vertical                                      |           |           |           |           |           |           |
| Air Qty (CFM)                            | 2346  | 2652      | 2652      | 3550      | 3716      | 3716      | 4779      |
| Motor HP                                 | 1/12  | 1/10      | 1/10      | 1/4       | 1/4       | 1/4       | 1/4       |
| Motor RPM                                | 800   | 825       | 825       | 825       | 1110      | 1110      | 825       |
| <b>Cond Coil</b>                         |   |           |           |           |           |           |           |
| Face Area (Sq ft)                        | 15.0  | 17.2      | 15.0      | 15.0      | 17.2      | 19.3      | 25.1      |
| Fins per In.                             | 20  | 20        | 20        | 20        | 20        | 20        | 20        |
| Rows                                     | 1   | 1         | 2         | 2         | 2         | 2         | 2         |
| Circuits                                 | 6   | 6         | 7         | 7         | 10        | 12        | 12        |
| <b>Valve Connect (In. ID)</b>            |   |           |           |           |           |           |           |
| Vapor                                    | 5/8   | 5/8       | 3/4       | 3/4       | 7/8       | 7/8       | 7/8       |
| Liquid                                   | 3/8"  |           |           |           |           |           |           |
| <b>Refrigerant Tubes* (In. OD)</b>       |   |           |           |           |           |           |           |
| Rated Vapor† (0-80 Ft Tube Length)       | 5/8   | 5/8       | 3/4       | 3/4       | 7/8       | 7/8       | 1 1/8     |
| Rated Liquid Line‡ (0-80 Ft Tube Length) | 3/8"  |           |           |           |           |           |           |

\*. For 15 ft. lineset

†. 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.

‡. See Liquid Line Sizing For Cooling Only Systems with R-410A Refrigerant tables.

Note: See unit Installation Instruction for proper installation.

## Vapor Line Sizing and Cooling Capacity Loss

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for HP systems with R-410A refrigerant:

Vapor Line Sizing and Cooling Capacity Losses - R-410A Refrigerant 1- Stage Heat Pump Applications

| Unit Nominal Size (Btuh) | Acceptable Vapor Line Diameters (In. OD) | Cooling Capacity Loss (%)<br>Total Equivalent Line Length (ft) |           |           |  |             |             |             |             |             |             |             |
|--------------------------|--|--|-----------|-----------|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                          |  | Standard Application   |           |           | Long Line Application Requires Accessories |             |             |             |             |             |             |             |
|                          |  | 25 (7.62)  | 50 (15.2) | 80 (24.4) | 80+ (24.4+)                                | 100 (30.48) | 125 (38.10) | 150 (45.72) | 175 (53.34) | 200 (60.96) | 225 (68.58) | 250 (76.20) |
| 18,000                   | 1/2                                      | 1  | 2         | 3         | 3  | 4           | 6           | 7           | 8           | 9           | 10          | 12          |
|                          | 5/8                                      | 0  | 0         | 1         | 1  | 1           | 1           | 2           | 2           | 3           | 3           | 3           |
| 24,000                   | 5/8                                      | 0  | 1         | 1         | 1  | 2           | 3           | 3           | 4           | 4           | 5           | 6           |
|                          | 3/4                                      | 0  | 0         | 0         | 0  | 0           | 1           | 1           | 1           | 1           | 1           | 2           |
| 30,000                   | 5/8                                      | 1  | 2         | 3         | 3  | 3           | 4           | 5           | 6           | 7           | 8           | 9           |
|                          | 3/4                                      | 0  | 0         | 1         | 1  | 1           | 1           | 2           | 2           | 2           | 3           | 3           |
|                          | 7/8                                      | 0  | 0         | 0         | 0  | 0           | 1           | 1           | 1           | 1           | 1           | 1           |
| 36,000                   | 5/8                                      | 1  | 2         | 4         | 4  | 5           | 6           | 7           | 9           | 10          | 11          | 13          |
|                          | 3/4                                      | 0  | 0         | 1         | 1  | 1           | 2           | 2           | 3           | 3           | 4           | 4           |
|                          | 7/8                                      | 0  | 0         | 0         | 0  | 0           | 1           | 1           | 1           | 1           | 2           | 2           |
| 42,000                   | 3/4                                      | 0  | 1         | 2         | 2  | 2           | 3           | 4           | 4           | 5           | 6           | 6           |
|                          | 7/8                                      | 0  | 0         | 1         | 1  | 1           | 1           | 2           | 2           | 2           | 3           | 3           |
| 48,000                   | 3/4                                      | 0  | 1         | 2         | 2  | 3           | 4           | 5           | 5           | 6           | 7           | 8           |
|                          | 7/8                                      | 0  | 0         | 1         | 1  | 1           | 2           | 2           | 2           | 3           | 3           | 4           |
| 60,000                   | 3/4                                      | 1  | 2         | 4         | 4  | 5           | 6           | 7           | 9           | 10          | 11          | 12          |
|                          | 7/8                                      | 0  | 1         | 2         | 2  | 2           | 3           | 4           | 4           | 5           | 5           | 6           |
|                          | 1 1/8                                    | 0  | 0         | 0         | 0  | 1           | 1           | 1           | 1           | 1           | 1           | 2           |

Standard Length = 80 ft. (24.4 m) or less total equivalent length

Applications in this area are long line. Accessories are required as shown recommended on Long Line Application Guidelines

Applications in this area may have height restrictions that limit allowable total equivalent length, when outdoor unit is below indoor unit See Long Line Application Guidelines

## Refrigerant Piping Length Limitations

### Maximum Line Lengths:

The maximum allowable total equivalent length for heat pumps varies 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 Heat Pump Applications

|                                   | MAXIMUM ACTUAL LENGTH*<br>ft (m)  | MAXIMUM EQUIVALENT LENGTH{<br>ft (m) | MAXIMUM VERTICAL SEPARATION<br>ft (m) |
|-----------------------------------|---|--------------------------------------|---------------------------------------|
| Units on equal level              | 200 (61)  | 250 (76.2)                           | N/A                                   |
| Outdoor unit ABOVE<br>indoor unit | 200 (61)  | 250 (76.2)                           | 200 (61)                              |
| Outdoor unit BELOW<br>indoor unit | See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit' |                                      |                                       |

\*.\* Maximum actual length not to exceed 200 ft (61 m)

#### Maximum Total Equivalent Length\* { - Outdoor Unit BELOW Indoor Unit

| Size   | Liquid Line<br>Diameter<br>w/ TXV | HP with R-410A 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) |
| 18,000 | 3/8                               | 250*   | 250*                 | 250*                  | 250*                   | 250*                   | 250*                   | 250*                   |
| 24,000 | 3/8                               | 250*   | 250*                 | 250*                  | 250*                   | 250*                   | 250*                   | 250*                   |
| 30,000 | 3/8                               | 250*   | 250*                 | 250*                  | 250*                   | 250*                   | 250*                   | 250*                   |
| 36,000 | 3/8                               | 250*   | 250*                 | 250*                  | 250*                   | 250*                   | 250*                   | 250*                   |
| 42,000 | 3/8                               | 250*   | 250*                 | 250*                  | 250*                   | 250*                   | 250*                   | 150                    |
| 48,000 | 3/8                               | 250*   | 250*                 | 250*                  | 250*                   | 230                    | 160                    | —                      |
| 60,000 | 3/8                               | 250*   | 225*                 | 190                   | 150                    | 110                    | —                      | —                      |

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

— = outside acceptable range

## Long Line Applications

An application is considered Long Line when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Heat Pump systems, the chart below shows when an application is considered Long Line. Beyond these lengths, long line accessories are required:

#### HP with R-410A Refrigerant Long Line Description ft (m) Beyond these lengths, long line accessories are required

| Liquid Line Size | Units On Same Level | Outdoor Below Indoor                 | Outdoor Above Indoor |
|------------------|---------------------|--------------------------------------|----------------------|
| 3/8              | 80 (24.4)           | 20 (6.1) vertical or 80 (24.4) total | 80 (24.4)            |

Note: See Long Line Guideline for details

**Accessories**

| ICP KIT NUMBER | KIT NAME                            | 18 | 24 | 30 | 36 | 42 | 48 | 60 |
|----------------|-------------------------------------|----|----|----|----|----|----|----|
| NASA00601CH    | Crankcase Heater                    | X  | X  | X  | X  |    |    |    |
| NASA00501CH    | Crankcase Heater                    |    |    |    |    | X  | X  | S  |
| NASA001TD      | Time Delay Relay                    | X  | X  | X  | X  | X  | X  | X  |
| NASA00101IK    | Isolation Relay                     | X  | X  | X  | X  | X  | X  | X  |
| NASA001LS      | Solenoid Valve Kit                  | X  | X  | X  | X  | X  | X  | X  |
| NASA00106SS    | Snow Stand                          | X  | X  | X  | X  | X  | X  | X  |
| NASA001AC      | Cycle Protector                     | X  | X  | X  | X  | X  | X  | X  |
| NASA00201FS    | Evaporator Freeze Stat              | X  | X  | X  | X  | X  | X  | X  |
| NASA405PS      | High Pressure Switch Kit            | X  | X  | X  | X  | X  | X  | X  |
| NASA012SC      | Hard Start                          | X  | X  | X  | X  | X  | X  | X  |
| NASA001LA      | Low Ambient Cooling Pressure Switch | X  | X  | X  | X  | X  | X  | X  |
| NAEA40501TX    | TXV Kit                             | X  | X  | X  |    |    |    |    |
| NAEA40601TX    | TXV Kit                             |    |    |    | X  | X  |    |    |
| NAEA40701TX    | TXV Kit                             |    |    |    |    |    | X  | X  |
| NAEB40501TX    | TXV Kit                             | X  | X  | X  |    |    |    |    |
| NAEB40601TX    | TXV Kit                             |    |    |    | X  | X  |    |    |
| NAEB40701TX    | TXV Kit                             |    |    |    |    |    | X  | X  |
| NASA00201SJ    | Sound Blanket                       | X  | X  | X  | X  |    |    |    |
| NASA00101SJ    | Sound Blanket                       |    |    |    |    | X  | X  | X  |
| NASA00201SF    | Support Feet                        | X  | X  | X  | X  | X  | X  | X  |

X = Accessory

S = Standard

## Accessory Usage Guideline

| Accessory                                   | REQUIRED FOR LOW-AMBIENT COOLING APPLICATIONS (Below 55°F / 12.8°C) | REQUIRED FOR LONG LINE APPLICATIONS* | REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles / 3.22 km) |
|---|---|--------------------------------------|--|
| Accumulator                                 | Standard  | Standard                             | Standard   |
| Ball Bearing Fan Motor                      | Standard  | Standard                             | Standard   |
| Compressor Start Assist Capacitor and Relay | Yes   | Yes                                  | No   |
| Crankcase Heater                            | Yes†  | Yes                                  | No   |
| Evaporator Freeze Thermostat                | Yes   | No                                   | No   |
| Hard Shutoff TXV                            | Yes   | Yes                                  | No   |
| Isolation Relay                             | Yes   | No                                   | No   |
| Liquid Line Solenoid Valve                  | No  | See Long-Line Application Guideline  | No   |
| Low Ambient Switch                          | Yes   | No                                   | No   |
| Support Feet                                | Recommended   | No                                   | Recommended  |

\*. For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 20 ft. (6.09 m) vertical differential, refer to Residential Split-System Longline Application Guideline.

†. Standard on 3 phase units only

## Accessory Description and Usage (Listed Alphabetically)

### 1. Ball-Bearing Fan Motor

A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.

### 2. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a "hard" boost to compressor motor at each start up.

Usage Guideline:

Required for single-phase scroll compressors in the following applications:

Long line

Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

### 3. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

### 4. Cycle Protector

The cycle protector is designed to prevent compressor short cycling. This control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including power outage, protector control trip, thermostat jiggling, or normal cycling.

### 5. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

### 6. Low-Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits (approximately 100 psig to 225 psig). The control will maintain working head pressure at low-ambient temperatures down to 0°F (-18°C) when properly installed and also using wind baffles. Instructions provided in accessory kit.

Usage Guideline:

A Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

### 7. Outdoor Air Temperature Sensor

This device enables the thermostat to display the outdoor temperature. This device is also required to enable special thermostat features such as auxiliary heat lock out.

Usage Guideline:

Suggested for use with compatible thermostats.

### 8. Sound Hood

Wraparound sound reducing cover for the compressor. Reduces the sound level of the compressor.

Usage Guideline:

Suggested when unit is installed closer than 15 ft (4.57 m) to quiet areas, bedrooms, etc.

Suggested when unit is installed between two houses less than 10 ft (3 m) apart.

## Accessory Description and Usage (Listed Alphabetically) Continued

### 9. Support Feet

Four or five stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

- Coastal installations.
- Windy areas or where debris is normally circulating.
- Rooftop installations.
- For improved sound ratings.

### 10. 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.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

Usage Guideline:

- Required to achieve AHRI ratings in certain equipment combinations. Refer to combination ratings.
- Hard shut off TXV or LLS required in air conditioner long line applications.
- Required for use on all zoning systems.

### 11. Time-Delay Relay

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

**NOTE:** Most indoor unit controls include this feature. For those that do not, use the guideline below.

Usage Guideline:

For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to AHRI Directory of Certified Product Performance (AHRI Directory).

When a Time-Delay Relay (TDR) is called for in the AHRI Directory, use a 30 second TDR for MicroChannel Indoor units and use a 90 second TDR for Round Tube Plate Fin Indoor units.

### 12. Winter Start Control

This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

## Electrical Data

| UNIT SIZE | V/PH      | OPER VOLTS <sup>*</sup> |     | COMPR |      | FAN  | MCA  | MAX FUSE <sup>†</sup> or<br>CKT BRK<br>AMPS |
|-----------|-----------|-------------------------|-----|-------|------|------|------|---|
|           |           | MAX                     | MIN | LRA   | RLA  | FLA  |      |   |
| 18        | 208-230-1 | 253                     | 197 | 45.7  | 10.3 | 0.50 | 13.4 | 20  |
| 24        |           |                         |     | 59.5  | 11.1 | 0.60 | 14.5 | 25  |
| 30        |           |                         |     | 67.9  | 14.1 | 0.60 | 18.2 | 30  |
| 36        |           |                         |     | 83.1  | 15.3 | 1.20 | 20.3 | 30  |
| 42        |           |                         |     | 110.0 | 18.6 | 1.40 | 24.7 | 40  |
| 48        |           |                         |     | 120.0 | 25.0 | 1.52 | 32.8 | 50  |
| 60        |           |                         |     | 150.0 | 25.6 | 1.20 | 33.2 | 50  |

\*. 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 requirements of ASHRAE Standards 90.1

Short Circuit Current Rating (SCCR): 5kA rms

## Sound Power Level Without Sound Hood

| UNIT SIZE | STANDARD<br>RATING<br>(dBA) | TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment) |      |      |      |      |      |      |
|-----------|-----------------------------|--|------|------|------|------|------|------|
|           |                             | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
| 18        | 71                          | 70.2   | 66.4 | 65.1 | 67.4 | 62.8 | 58.2 | 52.5 |
| 24        | 76                          | 66.3   | 68.4 | 69.4 | 67.7 | 64.4 | 61.4 | 55.9 |
| 30        | 76                          | 70.1   | 71.3 | 70.8 | 69.6 | 64.0 | 60.6 | 54.9 |
| 36        | 76                          | 74.0   | 72.5 | 71.7 | 70.5 | 66.1 | 61.7 | 55.6 |
| 42        | 76                          | 72.1   | 72.6 | 70.0 | 67.6 | 62.9 | 60.5 | 56.0 |
| 48        | 76                          | 75.5   | 72.4 | 71.4 | 68.3 | 63.1 | 60.5 | 55.5 |
| 60        | 76                          | 65.2   | 67.0 | 67.4 | 70.0 | 62.6 | 59.7 | 55.5 |

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

## Sound Power Level With Sound Hood

| UNIT SIZE | STANDARD<br>RATING<br>(dBA) | TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment) |      |      |      |      |      |      |
|-----------|-----------------------------|--|------|------|------|------|------|------|
|           |                             | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
| 18        | 69                          | 70.6   | 66.2 | 64.8 | 65.7 | 61.2 | 57.5 | 51.3 |
| 24        | 74                          | 66.7   | 68.1 | 68.7 | 66.5 | 63.1 | 60.0 | 53.1 |
| 30        | 74                          | 71.4   | 70.5 | 70.5 | 68.3 | 63.4 | 60.3 | 53.5 |
| 36        | 74                          | 74.7   | 72.7 | 71.8 | 68.6 | 64.3 | 59.0 | 51.6 |
| 42        | 74                          | 72.8   | 73.7 | 70.3 | 67.3 | 62.6 | 59.8 | 53.4 |
| 48        | 74                          | 76.3   | 71.9 | 71.0 | 68.1 | 62.9 | 60.0 | 53.9 |
| 60        | 73                          | 65.4   | 67.5 | 67.5 | 68.8 | 61.5 | 58.5 | 52.9 |

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

## Charging Subcooling (TXV-Type Expansion Device)

| UNIT SIZE-VOLTAGE | REQUIRED SUBCOOLING °F (°C) |
|-------------------|-----------------------------|
| 18                | 7 (3.9)                     |
| 24                | 7 (3.9)                     |
| 30                | 12 (6.7)                    |
| 36                | 12 (6.7)                    |
| 42                | 10 (5.6)                    |
| 48                | 13 (7.2)                    |
| 60                | 10 (5.6)                    |

## HP Only Replacement with Piston Indoors

This heat pump may only be installed with piston metered indoor units as replacement components in a piston system.

When installing a non-rated heat pump with a piston indoor unit, the correct piston must be installed, which should be listed in the indoor unit Installation Instructions or Product Data.

Replacement pistons can be ordered from Replacement Components (RC).



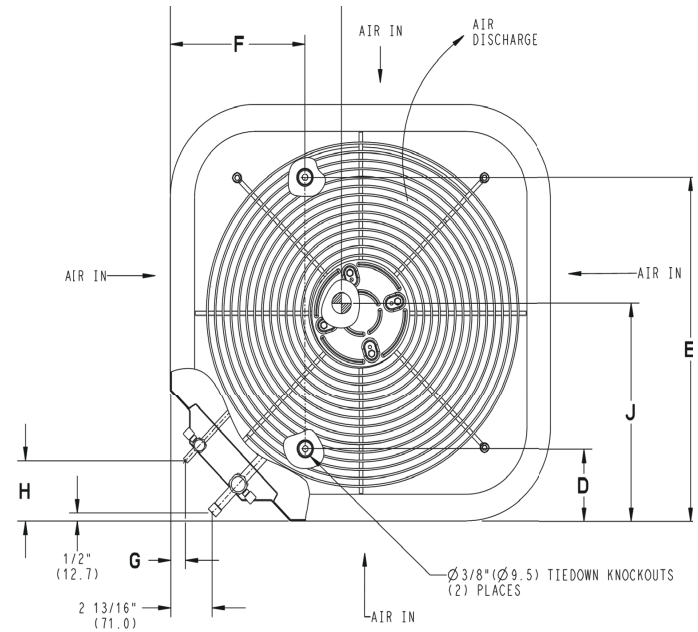
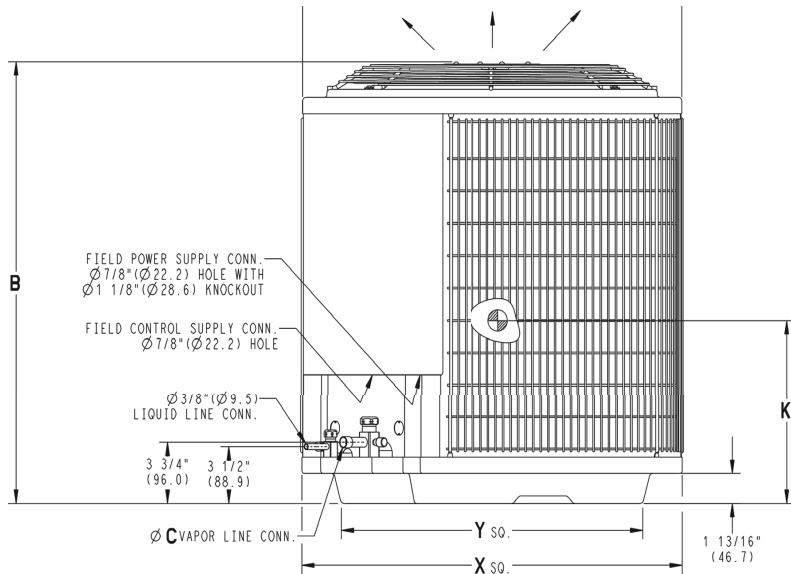
# Dimensions

| UNIT         | SERIES | ELECTRICAL CHARACTERISTICS |   |   |   |    | A    |       | B        |       | C    |      | D      |       | E        |       | F     |       | G     |      | H       |      | I      |       | J      |       | K      |       | OPERATING WEIGHT |       | SHIPPING WEIGHT |       | SHIPPING LENGTH / WIDTH (Sq.) |       | SHIPPING HEIGHT |        |
|--------------|--------|----------------------------|---|---|---|----|------|-------|----------|-------|------|------|--------|-------|----------|-------|-------|-------|-------|------|---------|------|--------|-------|--------|-------|--------|-------|------------------|-------|-----------------|-------|-------------------------------|-------|-----------------|--------|
|              |        |                            |   |   |   |    | INCH | MM    | INCH     | MM    | INCH | MM   | INCH   | MM    | INCH     | MM    | INCH  | MM    | INCH  | MM   | INCH    | MM   | INCH   | MM    | INCH   | MM    | INCH   | MM    | INCH             | MM    | INCH            | MM    | Lbs                           | Kgs   | Lbs             | Kgs    |
| N4H5S18**AAA | A      | Y                          | N | N | N | 31 | 3/16 | 792.5 | 28 11/16 | 728.7 | 5/8  | 15.9 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8 | 231.3 | 1 1/8 | 28.2 | 3 13/16 | 97.4 | 14 3/4 | 374.7 | 16 1/4 | 412.5 | 13 1/2 | 342.9 | 140              | 63.4  | 170             | 77.2  | 34 1/4                        | 870.0 | 33 15/16        | 861.6  |
| N4H5S24**AAA | A      | Y                          | N | N | N | 31 | 3/16 | 792.5 | 32 1/16  | 815.1 | 5/8  | 15.9 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8 | 231.3 | 1 1/8 | 28.2 | 3 13/16 | 97.4 | 13 3/4 | 349.3 | 14     | 355.6 | 14 1/2 | 368.3 | 159              | 72.0  | 190             | 86.1  | 34 1/4                        | 870.0 | 37 5/16         | 947.9  |
| N4H5S30**AAA | A      | Y                          | N | N | N | 31 | 3/16 | 792.5 | 28 11/16 | 728.7 | 3/4  | 19.1 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8 | 231.3 | 1 1/8 | 28.2 | 3 13/16 | 97.4 | 15 3/4 | 400.1 | 15 1/2 | 393.7 | 12 1/4 | 311.2 | 176              | 79.8  | 207             | 93.7  | 34 1/4                        | 870.0 | 33 15/16        | 861.6  |
| N4H5S36**AAA | A      | Y                          | N | N | N | 31 | 3/16 | 792.5 | 28 11/16 | 728.7 | 3/4  | 19.1 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8 | 231.3 | 1 1/8 | 28.2 | 3 13/16 | 97.4 | 14     | 355.6 | 14 1/2 | 368.3 | 14 1/2 | 368.3 | 178              | 80.7  | 208             | 94.5  | 34 1/4                        | 870.0 | 33 15/16        | 861.6  |
| N4H5S42**AAA | A      | Y                          | N | N | N | 31 | 3/16 | 792.5 | 32 1/16  | 815.1 | 7/8  | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8 | 231.3 | 1 1/8 | 28.2 | 3 13/16 | 97.4 | 15 1/4 | 397.4 | 14 1/2 | 368.3 | 13 3/4 | 349.3 | 221              | 100.4 | 252             | 114.5 | 34 1/4                        | 870.0 | 37 5/16         | 947.9  |
| N4H5S48**AAA | A      | Y                          | N | N | N | 31 | 3/16 | 792.5 | 35 1/2   | 901.4 | 7/8  | 22.2 | 6 9/16 | 166.1 | 24 11/16 | 626.3 | 9 1/8 | 231.3 | 1 1/8 | 28.2 | 3 13/16 | 97.4 | 15 1/4 | 397.4 | 15     | 391.0 | 14 3/4 | 374.7 | 228              | 103.4 | 260             | 117.9 | 34 1/4                        | 870.0 | 40 3/4          | 1034.3 |
| N4H5S60**AAA | A      | Y                          | N | N | N | 35 |      | 899.0 | 38 7/8   | 987.8 | 7/8  | 22.2 | 6 9/16 | 166.1 | 28 7/16  | 722.8 | 9 1/8 | 231.3 | 1 1/8 | 28.2 | 3 13/16 | 97.4 | 16 1/2 | 419.1 | 17 1/2 | 444.5 | 19     | 492.6 | 260              | 117.9 | 293             | 133.1 | 37 13/16                      | 960.0 | 44 1/8          | 1120.7 |

|              |               |
|--------------|---------------|
| 208-230-1-60 | Y=YES<br>N=NO |
| 208/230-3-60 |               |
| 460-3-60     |               |
| 575-3-60     |               |

**NOTES:**

1. CENTER OF GRAVITY



| UNIT SIZE         | "X"  |       | "Y"  |       |
|-------------------|--|-------|--|-------|
|                   | MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS |       | MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS |       |
| -                 | 23 1/8   | 587.3 | 17 7/8   | 454.6 |
| -                 | 25 3/4   | 654.0 | 20 7/16  | 518.5 |
| 18,24,30,36,42,48 | 31 3/16  | 792.5 | 22 15/16   | 583.2 |
| 60                | 35   | 889.0 | 26 3/4   | 679.7 |

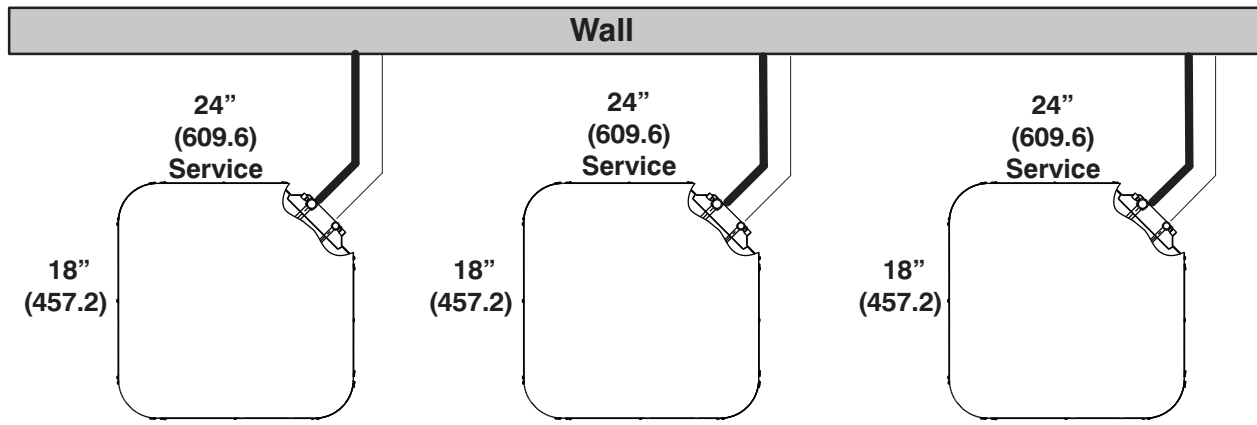
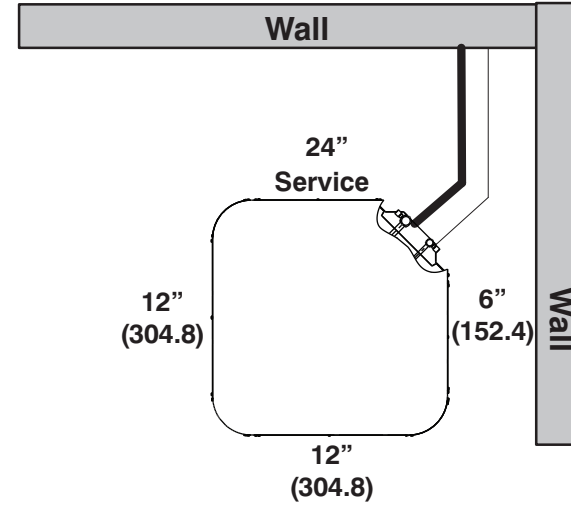
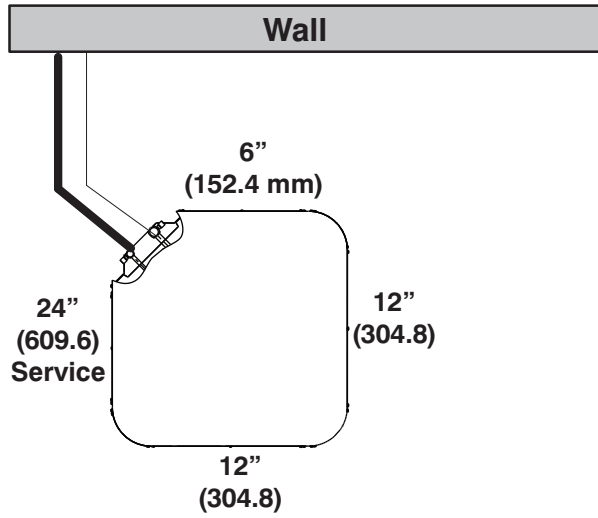
NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

# Clearances

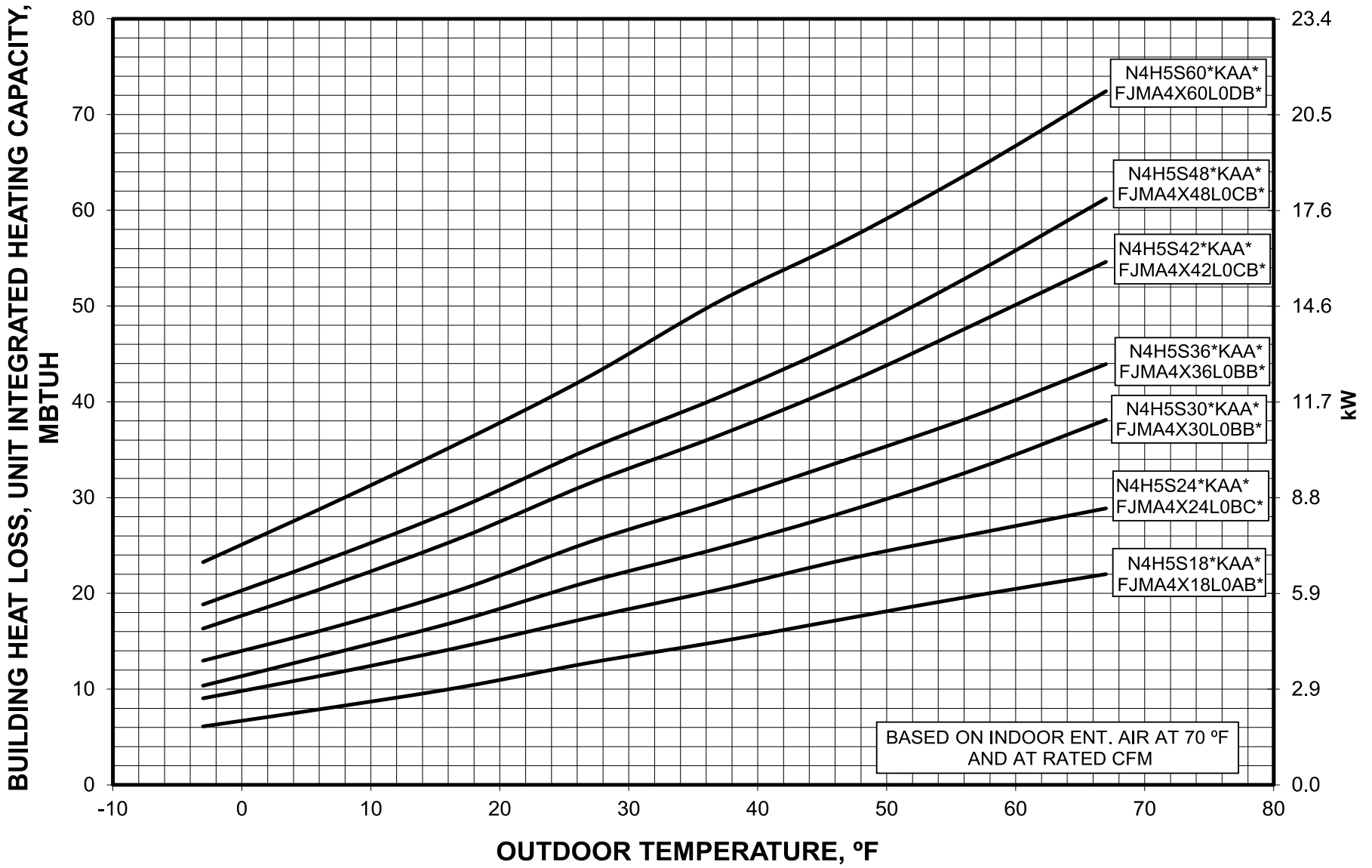
## Clearances (various examples)



**Note: Numbers in ( ) = mm**  
**Allow 48" above unit**

**IMPORTANT:** When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

# Balance Point Worksheet



Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

# DETAILED COOLING CAPACITIES#

| EVAPORATOR AIR  |               | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |            |      |                |            |      |                |            |      |                |            |      |                |            |      |                |            |      |
|---|---------------|---|------------|------|----------------|------------|------|----------------|------------|------|----------------|------------|------|----------------|------------|------|----------------|------------|------|
|   |               | 75.0 (23.9)                                 |            |      | 85.0 (29.4)    |            |      | 95.0 (35.0)    |            |      | 105.0 (40.6)   |            |      | 115.0 (46.1)   |            |      | 125.0 (51.7)   |            |      |
|   |               | Capacity MBtuh                              | Total Sys. | KW** | Capacity MBtuh | Total Sys. | KW** | Capacity MBtuh | Total Sys. | KW** | Capacity MBtuh | Total Sys. | KW** | Capacity MBtuh | Total Sys. | KW** | Capacity MBtuh | Total Sys. | KW** |
| Total   | Sens‡         |   |            |      |                |            |      |                |            |      |                |            |      |                |            |      |                |            |      |
| <b>N4H5S18AKAAA Outdoor Section With FJMA4X18L0AB* Indoor Section</b> |               |   |            |      |                |            |      |                |            |      |                |            |      |                |            |      |                |            |      |
| 525   | 72.0 (22.2)   | 20.65                                       | 10.58      | 1.15 | 19.67          | 10.21      | 1.30 | 18.65          | 9.83       | 1.47 | 17.57          | 9.44       | 1.65 | 16.37          | 9.00       | 1.87 | 15.06          | 8.54       | 2.11 |
|   | 67.0 (19.4)   | 18.74                                       | 13.02      | 1.17 | 17.84          | 12.65      | 1.31 | 16.91          | 12.27      | 1.48 | 15.92          | 11.87      | 1.66 | 14.84          | 11.44      | 1.88 | 13.64          | 10.96      | 2.12 |
|   | 63.0 (17.2)†† | 17.37                                       | 12.52      | 1.18 | 16.52          | 12.15      | 1.32 | 15.66          | 11.77      | 1.48 | 14.74          | 11.37      | 1.67 | 13.74          | 10.93      | 1.88 | 12.63          | 10.45      | 2.12 |
|   | 62.0 (16.7)   | 17.07                                       | 15.40      | 1.18 | 16.26          | 15.01      | 1.32 | 15.44          | 14.60      | 1.49 | 14.58          | 14.14      | 1.67 | 13.76          | 13.32      | 1.88 | 12.79          | 12.79      | 2.12 |
|   | 57.0 (13.9)   | 16.50                                       | 16.50      | 1.18 | 15.86          | 15.86      | 1.32 | 15.19          | 15.19      | 1.49 | 14.47          | 14.47      | 1.67 | 13.67          | 13.67      | 1.88 | 12.77          | 12.77      | 2.12 |
| 600   | 72.0 (22.2)   | 21.04                                       | 11.10      | 1.17 | 20.03          | 10.73      | 1.32 | 18.96          | 10.35      | 1.48 | 17.83          | 9.94       | 1.67 | 16.59          | 9.50       | 1.89 | 15.23          | 9.03       | 2.13 |
|   | 67.0 (19.4)   | 19.10                                       | 13.87      | 1.18 | 18.17          | 13.49      | 1.33 | 17.20          | 13.10      | 1.50 | 16.17          | 12.69      | 1.68 | 15.05          | 12.24      | 1.90 | 13.81          | 11.75      | 2.14 |
|   | 63.0 (17.2)†† | 17.71                                       | 13.31      | 1.19 | 16.84          | 12.93      | 1.34 | 15.94          | 12.54      | 1.50 | 14.99          | 12.13      | 1.69 | 13.95          | 11.68      | 1.90 | 12.80          | 11.18      | 2.14 |
|   | 62.0 (16.7)   | 17.47                                       | 16.50      | 1.19 | 16.65          | 16.06      | 1.34 | 15.88          | 15.44      | 1.50 | 15.04          | 15.04      | 1.69 | 14.18          | 14.18      | 1.90 | 13.22          | 13.22      | 2.14 |
|   | 57.0 (13.9)   | 17.19                                       | 17.19      | 1.20 | 16.50          | 16.50      | 1.34 | 15.79          | 15.79      | 1.50 | 15.02          | 15.02      | 1.69 | 14.16          | 14.16      | 1.90 | 13.20          | 13.20      | 2.14 |
| 675   | 72.0 (22.2)   | 21.34                                       | 11.60      | 1.19 | 20.29          | 11.22      | 1.34 | 19.19          | 10.84      | 1.50 | 18.02          | 10.43      | 1.69 | 16.74          | 9.98       | 1.91 | 15.35          | 9.50       | 2.15 |
|   | 67.0 (19.4)   | 19.38                                       | 14.68      | 1.20 | 18.41          | 14.29      | 1.35 | 17.42          | 13.89      | 1.51 | 16.35          | 13.47      | 1.70 | 15.20          | 13.00      | 1.92 | 13.95          | 12.48      | 2.16 |
|   | 63.0 (17.2)†† | 17.98                                       | 14.06      | 1.21 | 17.06          | 13.66      | 1.36 | 16.16          | 13.27      | 1.52 | 15.17          | 12.84      | 1.71 | 14.10          | 12.38      | 1.92 | 12.93          | 11.85      | 2.16 |
|   | 62.0 (16.7)   | 18.01                                       | 16.88      | 1.21 | 17.22          | 16.30      | 1.36 | 16.30          | 16.30      | 1.52 | 15.48          | 15.48      | 1.71 | 14.58          | 14.58      | 1.92 | 13.56          | 13.56      | 2.16 |
|   | 57.0 (13.9)   | 17.76                                       | 17.76      | 1.21 | 17.03          | 17.03      | 1.36 | 16.28          | 16.28      | 1.52 | 15.46          | 15.46      | 1.71 | 14.56          | 14.56      | 1.92 | 13.55          | 13.55      | 2.16 |
| <b>N4H5S24AKAAA Outdoor Section With FJMA4X24L0BC* Indoor Section</b> |               |   |            |      |                |            |      |                |            |      |                |            |      |                |            |      |                |            |      |
| 700   | 72.0 (22.2)   | 28.31                                       | 14.39      | 1.54 | 27.03          | 13.91      | 1.72 | 25.65          | 13.40      | 1.93 | 24.16          | 12.86      | 2.16 | 22.53          | 12.28      | 2.43 | 20.76          | 11.66      | 2.74 |
|   | 67.0 (19.4)   | 25.74                                       | 17.76      | 1.55 | 24.54          | 17.27      | 1.74 | 23.27          | 16.75      | 1.95 | 21.90          | 16.19      | 2.19 | 20.41          | 15.60      | 2.46 | 18.77          | 14.95      | 2.77 |
|   | 63.0 (17.2)†† | 23.88                                       | 17.09      | 1.56 | 22.77          | 16.59      | 1.75 | 21.58          | 16.07      | 1.96 | 20.29          | 15.51      | 2.20 | 18.89          | 14.91      | 2.48 | 17.36          | 14.25      | 2.79 |
|   | 62.0 (16.7)   | 23.47                                       | 21.02      | 1.56 | 22.40          | 20.51      | 1.75 | 21.26          | 19.94      | 1.96 | 20.04          | 19.31      | 2.20 | 18.80          | 18.80      | 2.48 | 17.57          | 17.57      | 2.79 |
|   | 57.0 (13.9)   | 22.69                                       | 22.69      | 1.57 | 21.83          | 21.83      | 1.75 | 20.91          | 20.91      | 1.96 | 19.89          | 19.89      | 2.20 | 18.78          | 18.78      | 2.48 | 17.54          | 17.54      | 2.79 |
| 780   | 72.0 (22.2)   | 28.73                                       | 14.96      | 1.56 | 27.41          | 14.48      | 1.74 | 25.98          | 13.96      | 1.95 | 24.45          | 13.41      | 2.18 | 22.77          | 12.82      | 2.45 | 20.96          | 12.19      | 2.75 |
|   | 67.0 (19.4)   | 26.13                                       | 18.68      | 1.57 | 24.89          | 18.18      | 1.76 | 23.60          | 17.66      | 1.97 | 22.18          | 17.09      | 2.20 | 20.63          | 16.47      | 2.48 | 18.98          | 15.82      | 2.79 |
|   | 63.0 (17.2)†† | 24.27                                       | 17.95      | 1.58 | 23.11          | 17.44      | 1.77 | 21.88          | 16.91      | 1.98 | 20.56          | 16.34      | 2.22 | 19.12          | 15.72      | 2.50 | 17.55          | 15.05      | 2.81 |
|   | 62.0 (16.7)   | 23.91                                       | 22.23      | 1.58 | 22.82          | 21.67      | 1.77 | 21.67          | 21.67      | 1.98 | 20.65          | 19.77      | 2.22 | 19.35          | 19.35      | 2.49 | 18.05          | 18.05      | 2.80 |
|   | 57.0 (13.9)   | 23.45                                       | 23.45      | 1.59 | 22.54          | 22.54      | 1.77 | 21.57          | 21.57      | 1.98 | 20.50          | 20.50      | 2.22 | 19.33          | 19.33      | 2.49 | 18.03          | 18.03      | 2.80 |
| 900   | 72.0 (22.2)   | 29.21                                       | 15.76      | 1.59 | 27.84          | 15.27      | 1.77 | 26.36          | 14.75      | 1.98 | 24.76          | 14.20      | 2.21 | 23.03          | 13.60      | 2.48 | 21.16          | 12.96      | 2.78 |
|   | 67.0 (19.4)   | 26.57                                       | 19.99      | 1.60 | 25.30          | 19.49      | 1.79 | 23.96          | 18.95      | 2.00 | 22.50          | 18.36      | 2.23 | 20.90          | 17.72      | 2.50 | 19.21          | 17.03      | 2.81 |
|   | 63.0 (17.2)†† | 24.75                                       | 19.19      | 1.61 | 23.51          | 18.65      | 1.80 | 22.24          | 18.11      | 2.01 | 20.86          | 17.51      | 2.25 | 19.38          | 16.87      | 2.53 | 17.78          | 16.16      | 2.84 |
|   | 62.0 (16.7)   | 24.74                                       | 23.06      | 1.61 | 23.45          | 23.45      | 1.80 | 22.77          | 20.71      | 2.01 | 21.27          | 21.27      | 2.25 | 20.02          | 20.02      | 2.52 | 18.65          | 18.65      | 2.82 |
|   | 57.0 (13.9)   | 24.39                                       | 24.39      | 1.62 | 23.42          | 23.42      | 1.80 | 22.38          | 22.38      | 2.01 | 21.24          | 21.24      | 2.25 | 20.00          | 20.00      | 2.52 | 18.63          | 18.63      | 2.82 |
| <b>N4H5S30AKAAA Outdoor Section With FJMA4X30L0BB* Indoor Section</b> |               |   |            |      |                |            |      |                |            |      |                |            |      |                |            |      |                |            |      |
| 875   | 72.0 (22.2)   | 33.73                                       | 17.56      | 1.88 | 32.26          | 17.00      | 2.08 | 30.69          | 16.41      | 2.32 | 29.01          | 15.78      | 2.59 | 27.19          | 15.11      | 2.89 | 25.19          | 14.39      | 3.24 |
|   | 67.0 (19.4)   | 30.54                                       | 21.64      | 1.87 | 29.19          | 21.08      | 2.08 | 27.76          | 20.48      | 2.31 | 26.23          | 19.85      | 2.58 | 24.56          | 19.18      | 2.88 | 22.74          | 18.43      | 3.23 |
|   | 63.0 (17.2)†† | 28.25                                       | 20.78      | 1.87 | 26.96          | 20.19      | 2.08 | 25.66          | 19.61      | 2.31 | 24.23          | 18.98      | 2.57 | 22.69          | 18.30      | 2.88 | 20.98          | 17.55      | 3.22 |
|   | 62.0 (16.7)   | 27.76                                       | 25.61      | 1.87 | 26.55          | 25.01      | 2.08 | 25.30          | 24.37      | 2.31 | 23.96          | 23.64      | 2.57 | 22.77          | 22.23      | 2.88 | 21.24          | 21.24      | 3.22 |
|   | 57.0 (13.9)   | 26.90                                       | 26.90      | 1.87 | 25.95          | 25.95      | 2.08 | 24.92          | 24.92      | 2.31 | 23.81          | 23.81      | 2.57 | 22.58          | 22.58      | 2.88 | 21.21          | 21.21      | 3.22 |
| 1055  | 72.0 (22.2)   | 34.62                                       | 18.81      | 1.93 | 33.05          | 18.23      | 2.14 | 31.39          | 17.63      | 2.37 | 29.62          | 16.98      | 2.64 | 27.70          | 16.29      | 2.95 | 25.60          | 15.55      | 3.29 |
|   | 67.0 (19.4)   | 31.35                                       | 23.69      | 1.93 | 29.91          | 23.07      | 2.13 | 28.40          | 22.47      | 2.37 | 26.81          | 21.82      | 2.63 | 25.06          | 21.10      | 2.94 | 23.16          | 20.32      | 3.28 |
|   | 63.0 (17.2)†† | 29.00                                       | 22.65      | 1.93 | 27.67          | 22.06      | 2.13 | 26.27          | 21.44      | 2.36 | 24.77          | 20.79      | 2.63 | 23.06          | 20.18      | 2.93 | 21.39          | 19.27      | 3.27 |
|   | 62.0 (16.7)   | 28.70                                       | 28.17      | 1.93 | 27.79          | 26.62      | 2.13 | 26.32          | 26.32      | 2.36 | 25.10          | 25.10      | 2.63 | 23.75          | 23.75      | 2.93 | 22.25          | 22.25      | 3.28 |
|   | 57.0 (13.9)   | 28.47                                       | 28.47      | 1.93 | 27.41          | 27.41      | 2.13 | 26.29          | 26.29      | 2.36 | 25.06          | 25.06      | 2.63 | 23.72          | 23.72      | 2.93 | 22.22          | 22.22      | 3.28 |
| 1125  | 72.0 (22.2)   | 34.88                                       | 19.27      | 1.95 | 33.28          | 18.68      | 2.16 | 31.59          | 18.07      | 2.39 | 29.79          | 17.42      | 2.66 | 27.84          | 16.73      | 2.97 | 25.71          | 15.98      | 3.31 |
|   | 67.0 (19.4)   | 31.58                                       | 24.42      | 1.95 | 30.13          | 23.81      | 2.15 | 28.60          | 23.18      | 2.39 | 26.97          | 22.55      | 2.65 | 25.21          | 21.79      | 2.96 | 23.29          | 21.01      | 3.30 |
|   | 63.0 (17.2)†† | 29.23                                       | 23.34      | 1.95 | 27.88          | 22.75      | 2.15 | 26.45          | 22.12      | 2.38 | 24.93          | 21.47      | 2.65 | 23.29          | 20.72      | 2.95 | 21.51          | 19.90      | 3.30 |
|   | 62.0 (16.7)   | 29.35                                       | 28.17      | 1.95 | 28.20          | 27.21      | 2.15 | 26.76          | 26.76      | 2.38 | 25.50          | 25.50      | 2.65 | 24.11          | 24.11      | 2.95 | 22.57          | 22.57      | 3.30 |
|   | 57.0 (13.9)   | 28.98                                       | 28.98      | 1.95 | 27.89          | 27.89      | 2.15 | 26.73          | 26.73      | 2.38 | 25.47          | 25.47      | 2.65 | 24.08          | 24.08      | 2.95 | 22.55          | 22.55      | 3.30 |

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

# DETAILED COOLING CAPACITIES# (Continued)

| EVAPORATOR AIR  |               | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |       |                |             |            |                |             |            |                |              |            |                |              |            |                |              |            |                |
|---|---------------|---|-------|----------------|-------------|------------|----------------|-------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|
|   |               | 75.0 (23.9)                                 |       |                | 85.0 (29.4) |            |                | 95.0 (35.0) |            |                | 105.0 (40.6) |            |                | 115.0 (46.1) |            |                | 125.0 (51.7) |            |                |
|   |               | CFM   | EWB   | Capacity MBtuh |             | Total Sys. | Capacity MBtuh |             | Total Sys. | Capacity MBtuh |              | Total Sys. | Capacity MBtuh |              | Total Sys. | Capacity MBtuh |              | Total Sys. | Capacity MBtuh |
| Total   | Sens‡         |   |       | KW**           | Total       | Sens‡      | KW**           | Total       | Sens‡      | KW**           | Total        | Sens‡      | KW**           | Total        | Sens‡      | KW**           | Total        | Sens‡      | KW**           |
| <b>N4H5S36AKAAA Outdoor Section With FJMA4X36L0BB* Indoor Section</b> |               |   |       |                |             |            |                |             |            |                |              |            |                |              |            |                |              |            |                |
| <b>1060</b>   | 72.0 (22.2)   | 41.65                                       | 21.37 | 2.29           | 39.73       | 20.65      | 2.56           | 37.70       | 19.88      | 2.81           | 35.53        | 19.08      | 3.10           | 33.22        | 18.24      | 3.46           | 30.74        | 17.34      | 3.94           |
|   | 67.0 (19.4)   | 37.84                                       | 26.35 | 2.33           | 36.07       | 25.61      | 2.59           | 34.20       | 24.83      | 2.85           | 32.20        | 24.01      | 3.14           | 30.07        | 23.15      | 3.49           | 27.78        | 22.23      | 3.97           |
|   | 63.0 (17.2)†† | 35.05                                       | 25.33 | 2.34           | 33.41       | 24.59      | 2.61           | 31.65       | 23.80      | 2.87           | 29.77        | 22.97      | 3.15           | 27.75        | 22.05      | 3.50           | 25.63        | 21.17      | 3.96           |
|   | 62.0 (16.7)   | 34.43                                       | 31.15 | 2.34           | 32.85       | 30.37      | 2.61           | 31.16       | 29.52      | 2.87           | 29.40        | 28.59      | 3.15           | 27.78        | 26.91      | 3.50           | 25.87        | 25.87      | 3.96           |
| <b>1200</b>   | 72.0 (22.2)   | 42.35                                       | 22.32 | 2.33           | 40.36       | 21.58      | 2.59           | 38.26       | 20.80      | 2.84           | 36.01        | 19.99      | 3.13           | 33.63        | 19.14      | 3.50           | 31.06        | 18.23      | 3.98           |
|   | 67.0 (19.4)   | 38.52                                       | 27.88 | 2.36           | 36.73       | 27.17      | 2.63           | 34.73       | 26.33      | 2.89           | 32.65        | 25.53      | 3.17           | 30.46        | 24.62      | 3.53           | 28.11        | 23.67      | 4.01           |
|   | 63.0 (17.2)†† | 35.69                                       | 26.76 | 2.38           | 33.97       | 25.98      | 2.65           | 32.15       | 25.22      | 2.91           | 30.21        | 24.37      | 3.19           | 28.15        | 23.46      | 3.54           | 25.95        | 22.50      | 4.01           |
|   | 62.0 (16.7)   | 35.17                                       | 33.16 | 2.38           | 33.55       | 32.30      | 2.65           | 31.96       | 31.04      | 2.91           | 30.19        | 30.19      | 3.19           | 28.50        | 28.50      | 3.54           | 26.68        | 26.68      | 4.01           |
| <b>1350</b>   | 72.0 (22.2)   | 42.92                                       | 23.27 | 2.36           | 40.87       | 22.52      | 2.62           | 38.70       | 21.74      | 2.88           | 36.39        | 20.92      | 3.17           | 33.94        | 20.05      | 3.54           | 31.31        | 19.13      | 4.02           |
|   | 67.0 (19.4)   | 39.04                                       | 29.46 | 2.41           | 37.15       | 28.70      | 2.67           | 35.15       | 27.89      | 2.93           | 33.03        | 27.01      | 3.22           | 30.77        | 26.12      | 3.58           | 28.38        | 25.12      | 4.05           |
|   | 63.0 (17.2)†† | 36.22                                       | 28.22 | 2.42           | 34.43       | 27.45      | 2.69           | 32.38       | 26.55      | 2.95           | 30.58        | 25.76      | 3.23           | 28.47        | 24.83      | 3.59           | 26.23        | 23.82      | 4.06           |
|   | 62.0 (16.7)   | 35.86                                       | 35.05 | 2.42           | 34.24       | 34.24      | 2.69           | 32.73       | 32.73      | 2.95           | 31.07        | 31.07      | 3.23           | 29.31        | 29.31      | 3.59           | 27.40        | 27.40      | 4.06           |
| <b>1240</b>   | 72.0 (22.2)   | 48.60                                       | 25.34 | 2.78           | 46.33       | 24.47      | 3.05           | 43.92       | 23.55      | 3.35           | 41.35        | 22.59      | 3.69           | 38.56        | 21.56      | 4.08           | 35.57        | 20.47      | 4.51           |
|   | 67.0 (19.4)   | 44.20                                       | 31.29 | 2.76           | 42.16       | 30.41      | 3.03           | 40.00       | 29.52      | 3.33           | 37.66        | 28.55      | 3.68           | 35.14        | 27.51      | 4.06           | 32.42        | 26.39      | 4.50           |
|   | 63.0 (17.2)†† | 41.02                                       | 30.12 | 2.75           | 39.13       | 29.25      | 3.02           | 37.13       | 28.33      | 3.32           | 34.97        | 27.38      | 3.66           | 32.64        | 26.34      | 4.05           | 30.10        | 25.20      | 4.49           |
|   | 62.0 (16.7)   | 40.34                                       | 37.05 | 2.75           | 38.51       | 36.14      | 3.02           | 36.60       | 35.16      | 3.32           | 34.57        | 34.05      | 3.66           | 32.61        | 32.17      | 4.05           | 30.38        | 30.38      | 4.49           |
| <b>1400</b>   | 72.0 (22.2)   | 49.37                                       | 26.42 | 2.83           | 47.01       | 25.53      | 3.10           | 44.51       | 24.60      | 3.40           | 41.83        | 23.62      | 3.74           | 38.96        | 22.57      | 4.13           | 35.87        | 21.47      | 4.56           |
|   | 67.0 (19.4)   | 44.94                                       | 33.07 | 2.81           | 42.80       | 32.18      | 3.08           | 40.60       | 31.27      | 3.38           | 38.15        | 30.26      | 3.73           | 35.54        | 29.19      | 4.11           | 32.74        | 28.03      | 4.55           |
|   | 63.0 (17.2)†† | 41.72                                       | 31.77 | 2.80           | 39.75       | 30.88      | 3.07           | 37.67       | 29.95      | 3.37           | 35.43        | 28.96      | 3.71           | 33.03        | 27.90      | 4.10           | 30.43        | 26.73      | 4.54           |
|   | 62.0 (16.7)   | 41.00                                       | 39.25 | 2.80           | 39.28       | 38.36      | 3.07           | 37.60       | 36.44      | 3.37           | 35.39        | 35.39      | 3.71           | 33.41        | 33.41      | 4.10           | 31.22        | 31.22      | 4.54           |
| <b>1575</b>   | 72.0 (22.2)   | 50.01                                       | 27.54 | 2.88           | 47.56       | 26.63      | 3.15           | 44.97       | 25.69      | 3.46           | 42.22        | 24.69      | 3.80           | 39.26        | 23.63      | 4.18           | 36.09        | 22.51      | 4.61           |
|   | 67.0 (19.4)   | 45.54                                       | 34.92 | 2.87           | 43.33       | 34.01      | 3.14           | 41.02       | 33.06      | 3.44           | 38.53        | 32.03      | 3.78           | 35.87        | 30.93      | 4.17           | 33.00        | 29.72      | 4.60           |
|   | 63.0 (17.2)†† | 42.31                                       | 33.47 | 2.85           | 40.28       | 32.57      | 3.12           | 38.12       | 31.59      | 3.43           | 35.82        | 30.60      | 3.77           | 33.37        | 29.48      | 4.16           | 30.70        | 28.27      | 4.59           |
|   | 62.0 (16.7)   | 41.94                                       | 41.55 | 2.85           | 40.30       | 39.64      | 3.12           | 38.33       | 38.33      | 3.43           | 36.38        | 36.38      | 3.77           | 34.28        | 34.28      | 4.16           | 31.98        | 31.98      | 4.60           |
| <b>1390</b>   | 72.0 (22.2)   | 55.87                                       | 29.05 | 3.15           | 53.35       | 28.08      | 3.48           | 50.68       | 27.07      | 3.86           | 47.80        | 25.99      | 4.28           | 44.69        | 24.83      | 4.76           | 41.32        | 23.59      | 5.29           |
|   | 67.0 (19.4)   | 50.74                                       | 35.74 | 3.13           | 48.44       | 34.76      | 3.46           | 46.00       | 33.74      | 3.83           | 43.37        | 32.65      | 4.26           | 40.53        | 31.47      | 4.73           | 37.44        | 30.21      | 5.26           |
|   | 63.0 (17.2)†† | 47.01                                       | 34.36 | 3.12           | 44.90       | 33.40      | 3.44           | 42.63       | 32.38      | 3.82           | 40.19        | 31.29      | 4.24           | 37.55        | 30.11      | 4.71           | 34.66        | 28.84      | 5.24           |
|   | 62.0 (16.7)   | 46.17                                       | 42.21 | 3.11           | 44.12       | 41.22      | 3.44           | 41.95       | 40.14      | 3.81           | 39.64        | 38.93      | 4.24           | 37.50        | 36.67      | 4.71           | 34.86        | 34.86      | 5.24           |
| <b>1600</b>   | 72.0 (22.2)   | 56.99                                       | 30.56 | 3.21           | 54.35       | 29.56      | 3.55           | 51.56       | 28.52      | 3.92           | 48.55        | 27.43      | 4.35           | 45.33        | 26.24      | 4.83           | 41.84        | 24.99      | 5.36           |
|   | 67.0 (19.4)   | 51.78                                       | 38.17 | 3.19           | 49.37       | 37.17      | 3.52           | 46.82       | 36.12      | 3.90           | 44.08        | 35.00      | 4.32           | 41.13        | 33.79      | 4.80           | 37.95        | 32.49      | 5.33           |
|   | 63.0 (17.2)†† | 48.01                                       | 36.63 | 3.18           | 45.82       | 35.65      | 3.51           | 43.42       | 34.59      | 3.88           | 40.88        | 33.47      | 4.30           | 38.13        | 32.24      | 4.78           | 35.16        | 30.94      | 5.31           |
|   | 62.0 (16.7)   | 47.29                                       | 45.42 | 3.18           | 45.22       | 44.28      | 3.51           | 43.24       | 42.39      | 3.88           | 40.84        | 40.84      | 4.30           | 38.59        | 38.59      | 4.78           | 36.10        | 36.10      | 5.31           |
| <b>1800</b>   | 72.0 (22.2)   | 57.79                                       | 31.89 | 3.27           | 55.06       | 30.89      | 3.61           | 52.17       | 29.83      | 3.98           | 49.08        | 28.72      | 4.41           | 45.76        | 27.53      | 4.89           | 42.17        | 26.26      | 5.42           |
|   | 67.0 (19.4)   | 52.53                                       | 40.36 | 3.25           | 50.03       | 39.35      | 3.58           | 47.40       | 38.28      | 3.96           | 44.59        | 37.12      | 4.38           | 41.55        | 35.87      | 4.86           | 38.31        | 34.52      | 5.39           |
|   | 63.0 (17.2)†† | 48.72                                       | 38.67 | 3.24           | 46.43       | 37.63      | 3.57           | 43.99       | 36.58      | 3.94           | 41.37        | 35.40      | 4.36           | 38.58        | 34.17      | 4.84           | 35.52        | 32.79      | 5.37           |
|   | 62.0 (16.7)   | 48.29                                       | 48.07 | 3.24           | 46.68       | 45.27      | 3.57           | 44.21       | 44.21      | 3.94           | 42.05        | 42.05      | 4.37           | 39.67        | 39.67      | 4.85           | 37.07        | 37.07      | 5.38           |
| 57.0 (13.9)   | 47.99         | 47.99                                       | 3.24  | 46.14          | 46.14       | 3.57       | 44.16          | 44.16       | 3.94       | 42.00          | 42.00        | 4.37       | 39.63          | 39.63        | 4.85       | 37.02          | 37.02        | 5.38       |                |

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

# DETAILED COOLING CAPACITIES# (Continued)

| EVAPORATOR AIR  |               | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |       |                |             |            |                |             |            |                |              |            |                |              |            |                |              |            |                |  |
|---|---------------|---|-------|----------------|-------------|------------|----------------|-------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--------------|------------|----------------|--|
|   |               | 75.0 (23.9)                                 |       |                | 85.0 (29.4) |            |                | 95.0 (35.0) |            |                | 105.0 (40.6) |            |                | 115.0 (46.1) |            |                | 125.0 (51.7) |            |                |  |
|   |               | CFM   | EWB   | Capacity MBtuh |             | Total Sys. | Capacity MBtuh |             | Total Sys. | Capacity MBtuh |              | Total Sys. | Capacity MBtuh |              | Total Sys. | Capacity MBtuh |              | Total Sys. | Capacity MBtuh |  |
| Total   | Sens‡         |   |       | KW**           | Total       | Sens‡      | KW**           | Total       | Sens‡      | KW**           | Total        | Sens‡      | KW**           | Total        | Sens‡      | KW**           | Total        | Sens‡      | KW**           |  |
| <b>N4H5S60AKAAA Outdoor Section With FJMA4X60L0DB* Indoor Section</b> |               |   |       |                |             |            |                |             |            |                |              |            |                |              |            |                |              |            |                |  |
| 1735  | 72.0 (22.2)   | 69.21                                       | 35.68 | 3.92           | 66.03       | 34.48      | 4.31           | 62.63       | 33.22      | 4.77           | 58.98        | 31.87      | 5.29           | 55.00        | 30.43      | 5.89           | 50.73        | 28.90      | 6.55           |  |
|   | 67.0 (19.4)   | 62.99                                       | 44.15 | 3.91           | 60.07       | 42.92      | 4.30           | 57.00       | 41.66      | 4.75           | 53.67        | 40.30      | 5.27           | 50.05        | 38.84      | 5.86           | 46.13        | 37.27      | 6.53           |  |
|   | 63.0 (17.2)†† | 58.43                                       | 42.45 | 3.90           | 55.76       | 41.25      | 4.28           | 52.91       | 40.00      | 4.73           | 49.85        | 38.64      | 5.25           | 46.50        | 37.19      | 5.84           | 42.85        | 35.62      | 6.51           |  |
|   | 62.0 (16.7)   | 57.37                                       | 52.31 | 3.90           | 54.80       | 51.06      | 4.28           | 52.09       | 49.70      | 4.73           | 49.36        | 47.68      | 5.25           | 46.28        | 46.28      | 5.84           | 43.28        | 43.28      | 6.51           |  |
| 2000  | 72.0 (22.2)   | 70.52                                       | 37.55 | 4.00           | 67.19       | 36.32      | 4.40           | 63.64       | 35.03      | 4.85           | 59.83        | 33.66      | 5.38           | 55.71        | 32.20      | 5.98           | 51.29        | 30.64      | 6.64           |  |
|   | 67.0 (19.4)   | 64.19                                       | 47.18 | 3.99           | 61.17       | 45.94      | 4.38           | 57.94       | 44.65      | 4.84           | 54.48        | 43.24      | 5.36           | 50.73        | 41.74      | 5.95           | 46.68        | 40.11      | 6.62           |  |
|   | 63.0 (17.2)†† | 59.61                                       | 45.29 | 3.98           | 56.81       | 44.07      | 4.37           | 53.84       | 42.78      | 4.82           | 50.65        | 41.37      | 5.34           | 47.16        | 39.87      | 5.93           | 43.39        | 38.24      | 6.59           |  |
|   | 62.0 (16.7)   | 58.76                                       | 56.28 | 3.98           | 56.13       | 54.83      | 4.37           | 53.44       | 53.44      | 4.82           | 50.82        | 50.82      | 5.34           | 47.92        | 47.92      | 5.94           | 44.75        | 44.75      | 6.60           |  |
| 2250  | 72.0 (22.2)   | 71.43                                       | 39.21 | 4.08           | 67.99       | 37.97      | 4.47           | 64.32       | 36.66      | 4.93           | 60.40        | 35.27      | 5.46           | 56.16        | 33.79      | 6.06           | 51.64        | 32.22      | 6.72           |  |
|   | 67.0 (19.4)   | 65.05                                       | 49.92 | 4.07           | 61.91       | 48.66      | 4.46           | 58.63       | 47.34      | 4.92           | 55.03        | 45.88      | 5.44           | 51.19        | 44.33      | 6.03           | 47.06        | 42.63      | 6.70           |  |
|   | 63.0 (17.2)†† | 60.45                                       | 47.82 | 4.06           | 57.55       | 46.58      | 4.45           | 54.50       | 45.24      | 4.90           | 51.19        | 43.81      | 5.42           | 47.62        | 42.24      | 6.01           | 43.78        | 40.51      | 6.68           |  |
|   | 62.0 (16.7)   | 59.93                                       | 59.93 | 4.06           | 57.98       | 55.94      | 4.45           | 55.01       | 55.01      | 4.90           | 52.24        | 52.24      | 5.43           | 49.20        | 49.20      | 6.02           | 45.85        | 45.85      | 6.69           |  |
|   | 57.0 (13.9)   | 59.82                                       | 59.82 | 4.06           | 57.47       | 57.47      | 4.45           | 54.95       | 54.95      | 4.90           | 52.18        | 52.18      | 5.43           | 49.15        | 49.15      | 6.02           | 45.80        | 45.80      | 6.69           |  |

#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.  
 ‡Sensible capacities shown are based on 80°F (27°C) entering air at the indoor coil. For sensible capacities at other than 80°F (27°C), deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80°F (27°C), or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80°F (27°C).

\*\*Total System. kw is total of indoor and outdoor unit kilowatts.

††At TVA rating indoor condition (75°F edb/63°F ewb). All other indoor air temperatures are at 80°F edb.

NOTE: When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

EWB — Entering Wet Bulb1

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.



# HEAT PUMP HEATING PERFORMANCE (Continued)

| INDOOR AIR  |       | OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C) |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
|---|-------|--|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|
| EDB   | CFM   | -3.0 (-19.4)                                   |        |                | 7.0 (-13.9)    |        |                | 17.0 (-8.3)    |        |                | 27.0 (-2.8)    |        |                | 37.0 (2.8)     |        |                | 47.0 (8.3)     |        |                | 57.0 (13.9)    |        |                | 67.0 (19.4)    |        |                |
|   |       | Capacity MBtuh                                 |        | Total Sys. KW† | Capacity MBtuh |        | Total Sys. KW† | Capacity MBtuh |        | Total Sys. KW† | Capacity MBtuh |        | Total Sys. KW† | Capacity MBtuh |        | Total Sys. KW† | Capacity MBtuh |        | Total Sys. KW† | Capacity MBtuh |        | Total Sys. KW† | Capacity MBtuh |        | Total Sys. KW† |
|   |       | Total  | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                |
| <b>N4H5S48AKAAA Outdoor Section With FJMA4X48L0CB* Indoor Section</b> |       |  |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
| 65.0 (18.3)   | 1390  | 19.57  | 18.00  | 2.85           | 24.39          | 22.41  | 2.96           | 29.74          | 27.12  | 3.07           | 35.56          | 31.59  | 3.20           | 41.01          | 37.32  | 3.31           | 47.17          | 47.17  | 3.45           | 54.37          | 54.37  | 3.63           | 62.01          | 62.01  | 3.78           |
|   | 1600  | 19.94  | 18.34  | 2.88           | 24.80          | 22.79  | 2.97           | 30.31          | 27.64  | 3.08           | 35.98          | 31.96  | 3.19           | 41.51          | 37.78  | 3.29           | 47.81          | 47.81  | 3.41           | 55.19          | 55.19  | 3.56           | 62.47          | 62.47  | 3.68           |
|   | 1800  | 20.25  | 18.62  | 2.91           | 25.15          | 23.11  | 3.00           | 31.02          | 28.29  | 3.11           | 36.32          | 32.26  | 3.20           | 41.92          | 38.15  | 3.28           | 48.32          | 48.32  | 3.39           | 55.75          | 55.75  | 3.51           | 62.68          | 62.68  | 3.63           |
| 70.0 (21.1)   | 1390  | 18.83  | 17.32  | 2.96           | 23.72          | 21.79  | 3.08           | 29.00          | 26.44  | 3.19           | 35.11          | 31.19  | 3.35           | 40.48          | 36.84  | 3.46           | 46.50          | 46.50  | 3.61           | 53.55          | 53.55  | 3.79           | 61.23          | 61.23  | 3.95           |
|   | 1600  | 19.20  | 17.66  | 2.99           | 24.11          | 22.15  | 3.10           | 29.46          | 26.86  | 3.20           | 35.51          | 31.54  | 3.34           | 40.96          | 37.27  | 3.44           | 47.13          | 47.13  | 3.56           | 54.36          | 54.36  | 3.73           | 61.68          | 61.68  | 3.85           |
| 75.0 (23.9)   | 1800  | 19.51  | 17.94  | 3.03           | 24.45          | 22.47  | 3.12           | 29.87          | 27.24  | 3.22           | 35.87          | 31.86  | 3.34           | 41.37          | 37.65  | 3.43           | 47.63          | 47.63  | 3.54           | 54.97          | 54.97  | 3.67           | 61.95          | 61.95  | 3.79           |
|   | 1390  | 18.07  | 16.62  | 3.08           | 23.00          | 21.13  | 3.20           | 28.29          | 25.80  | 3.33           | 34.68          | 30.81  | 3.50           | 39.98          | 36.38  | 3.62           | 45.84          | 45.84  | 3.77           | 52.73          | 52.73  | 3.96           | 60.36          | 60.36  | 4.12           |
|   | 1600  | 18.43  | 16.95  | 3.11           | 23.40          | 21.50  | 3.22           | 28.75          | 26.22  | 3.34           | 35.07          | 31.15  | 3.49           | 40.45          | 36.81  | 3.59           | 46.45          | 46.45  | 3.72           | 53.53          | 53.53  | 3.89           | 60.89          | 60.89  | 4.02           |
| 1800  | 18.74 | 17.23  | 3.14   | 23.74          | 21.81          | 3.25   | 29.13          | 26.56          | 3.35   | 35.43          | 31.47          | 3.49   | 40.85          | 37.17          | 3.58   | 46.95          | 46.95          | 3.70   | 54.15          | 54.15          | 3.84   | 61.18          | 61.18          | 3.96   |                |
| <b>N4H5S60AKAAA Outdoor Section With FJMA4X60L0DB* Indoor Section</b> |       |  |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
| 65.0 (18.3)   | 1735  | 24.41  | 22.45  | 3.46           | 30.46          | 27.99  | 3.55           | 36.84          | 33.59  | 3.66           | 43.94          | 39.03  | 3.80           | 51.13          | 46.53  | 3.97           | 57.77          | 57.77  | 4.12           | 65.36          | 65.36  | 4.31           | 73.43          | 73.43  | 4.46           |
|   | 2000  | 24.94  | 22.94  | 3.51           | 31.05          | 28.53  | 3.59           | 37.49          | 34.18  | 3.68           | 45.49          | 40.41  | 3.84           | 51.78          | 47.12  | 3.95           | 58.57          | 58.57  | 4.09           | 66.39          | 66.39  | 4.25           | 74.12          | 74.12  | 4.37           |
|   | 2250  | 25.38  | 23.34  | 3.57           | 31.53          | 28.97  | 3.63           | 38.04          | 34.69  | 3.72           | 45.99          | 40.85  | 3.86           | 52.40          | 47.69  | 3.96           | 59.21          | 59.21  | 4.08           | 67.22          | 67.22  | 4.22           | 74.60          | 74.60  | 4.32           |
| 70.0 (21.1)   | 1735  | 23.25  | 21.38  | 3.59           | 29.39          | 27.00  | 3.68           | 35.80          | 32.64  | 3.80           | 42.69          | 37.92  | 3.95           | 50.48          | 45.94  | 4.14           | 57.00          | 57.00  | 4.31           | 64.36          | 64.36  | 4.50           | 72.44          | 72.44  | 4.66           |
|   | 2000  | 23.77  | 21.86  | 3.64           | 29.96          | 27.53  | 3.72           | 36.45          | 33.24  | 3.83           | 43.52          | 38.66  | 3.96           | 51.26          | 46.65  | 4.13           | 57.74          | 57.74  | 4.26           | 65.36          | 65.36  | 4.44           | 73.17          | 73.17  | 4.56           |
| 75.0 (23.9)   | 2250  | 24.21  | 22.27  | 3.70           | 30.44          | 27.97  | 3.77           | 36.98          | 33.72  | 3.86           | 44.15          | 39.22  | 3.98           | 51.61          | 46.97  | 4.13           | 58.36          | 58.36  | 4.25           | 66.17          | 66.17  | 4.40           | 73.65          | 73.65  | 4.51           |
|   | 1735  | 22.05  | 20.28  | 3.72           | 28.28          | 25.98  | 3.82           | 34.75          | 31.69  | 3.95           | 41.62          | 36.97  | 4.11           | 49.79          | 45.31  | 4.33           | 56.23          | 56.23  | 4.50           | 63.37          | 63.37  | 4.70           | 71.41          | 71.41  | 4.87           |
|   | 2000  | 22.56  | 20.75  | 3.77           | 28.85          | 26.51  | 3.86           | 35.38          | 32.26  | 3.98           | 42.37          | 37.64  | 4.11           | 50.41          | 45.87  | 4.31           | 56.98          | 56.98  | 4.45           | 64.35          | 64.35  | 4.63           | 72.18          | 72.18  | 4.76           |
| 2250  | 22.99 | 21.14  | 3.83   | 29.32          | 26.94          | 3.91   | 35.92          | 32.75          | 4.01   | 42.96          | 38.16          | 4.13   | 50.91          | 46.33          | 4.31   | 57.48          | 57.48          | 4.44   | 65.12          | 65.12          | 4.60   | 72.65          | 72.65          | 4.70   |                |

NOTE: When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

\* The Btuh heating capacity values shown are net integrated values from which the defrost effect has been subtracted. The Btuh heating from supplement heaters should be added to those values to obtain total Sys. capacity.

† The kW values include the compressor, outdoor fan motor, and indoor blower motor. The kW from supplement heaters should be added to these values to obtain total Sys. kilowatts.

EDB — Entering Dry Bulb2

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.



## Guide Specifications

### General

Air-Cooled, Split-System Heat Pump  
N4H5S  
1-1/2 to 5 nominal tons

### System Description

Outdoor-mounted, air-cooled, split-system heat pump unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, 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 210/240.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/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 unit is 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 heat pump unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge R-410A, 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.  
Available with dense grille only.

### Fans

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

### Compressor

Compressor will be hermetically sealed.  
Compressor will be mounted on rubber vibration isolators.

### Condenser Coil

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

### Refrigeration Components

Refrigeration circuit components will include liquid-line shutoff valve with sweat connections, vapor-line shutoff valve with sweat connections, system charge of R-410A refrigerant, POE compressor oil, accumulator, and reversing valve.

### 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 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.

### Special Features

Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.

## 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. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature for cooling mode is 125°F (51.7°C).
4. Minimum outdoor operating air temperature for heating mode is -10°F (-23.3°C).
5. Maximum outdoor operating air temperature for heating mode is 66°F (18.9°C).
6. For reliable operation, unit should be level in all horizontal planes.
7. For interconnecting refrigerant tube lengths greater than 80 ft (23.4 m) and/or elevation differences between indoor and outdoor units greater than 20 ft (6.1 m), consult Residential Piping and Longline Guideline and Service Manual available from equipment distributor.
8. 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).
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
10. Do not apply capillary tube indoor coils to these units.
11. Factory-supplied filter drier must be installed