

**GH5SAN5  
Single-Stage Heat Pump  
with Puron Advance™ Refrigerant  
1.5 To 5 Tons**



## Product Data



This unit has been designed utilizing Carrier's non-ozone depleting and low global warming potential Puron Advance™ refrigerant. Heat pumps with Puron Advance™ refrigerant provide a collection of features unmatched by any other family of equipment.

### Industry leading Features / Benefits

#### Efficiency

- 14.3 - 16.0 SEER2 / 10.0 - 12.5 EER2 / 7.5 - 7.8 HSPF2 (depending on unit size and indoor combination installed)
- Microtube technology refrigeration system
- Indoor air quality accessories available

#### Comfort

- System supports programmable or standard thermostat controls

#### Sound

- Sound levels as low as 68 dBA

#### Reliability

- Non-ozone depleting and low global warming potential Puron Advance™ 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 Long Line Guide for more information.)
- Low ambient cooling (down to 0°F/-17.8°C) with approved low ambient accessory kits

#### Limited Warranty

- 5-year parts limited warranty (including compressor and coil)
- 10-year parts limited warranty (including compressor and coil) with timely registration\*
  - Equipment must be registered within 90 days of original installation, except in jurisdictions where warranty benefits cannot be conditioned on registration.

\* Applies to original purchaser/homeowner and not available to subsequent owners except in jurisdictions where applicable laws dictate otherwise.

**See warranty certificate for complete details and restrictions.**

## MODEL NUMBER NOMENCLATURE

| 1           | 2       | 3              | 4                | 5            | 6             | 7           | 8, 9                                                                                                             | 10           | 11                                                                               | 12              |
|-------------|---------|----------------|------------------|--------------|---------------|-------------|------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------------------------------------------------|-----------------|
| G           | H       | 5              | S                | A            | N             | 5           | 18                                                                                                               | 0            | 0                                                                                | A               |
| Brand Type  | OD Type | SEER2          | OD Design Type   | Major Series | Voltage       | Refrigerant | Nominal Capacity (X 1,000 BTUH)                                                                                  | Feature      | Special Feature                                                                  | Region          |
| G = Builder | H = HP  | 5 = 14.3 SEER2 | S = Single-Stage | A = Initial  | N = 208-230-1 | 5 = R-454B  | 18/19 = 1.5 Tons<br>24 = 2 Tons<br>30/31 = 2.5 Tons<br>36 = 3 Tons<br>42 = 3.5Tons<br>48 = 4 Tons<br>60 = 5 Tons | 0 = Standard | 0 = Standard<br>1 = Compressor Electrical Rating Change<br>2 = Coil Optimization | A = Standard HP |



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).



Requirements for heat exchanger and condenser coils must be met. Energy Star products for energy efficiency when matched with appropriate coil technology. However, proper refrigerant charge and pressure are also critical to achieving energy efficiency. Read label of the product for details. If the product is not properly charged or has incorrect pressure, it will not meet the energy efficiency requirements. Proper charge and pressure are critical to energy efficiency and shorter 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: [www.MyCarrierRatings.com](http://www.MyCarrierRatings.com)

## CATALOG ORDERING NUMBERS

| Size | Model Number |
|------|--------------|
| 18   | GH5SAN51800A |
| 19   | GH5SAN51900A |
| 24   | GH5SAN52400A |
| 30   | GH5SAN53000A |
| 31   | GH5SAN53100A |
| 36   | GH5SAN53600A |
| 42   | GH5SAN54200A |
| 48   | GH5SAN54801A |
| 60   | GH5SAN56000A |

## Standard Features

| Feature                                    | 18 | 19 | 24 | 30 | 31 | 36 | 42 | 48 | 60 |
|--------------------------------------------|----|----|----|----|----|----|----|----|----|
| Puron Advance™ Refrigerant                 | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Scroll Compressor                          | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Field Installed Filter Drier               | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Front Seating Service Valves               | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Internal Pressure Relief Valve             | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Internal Thermal Overload                  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Long Line capability                       | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Low Ambient capability with Kit            | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Suction Line Accumulator                   | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Loss of Charge Switch                      | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Field Installed Liquid Line Solenoid Valve |    | X  |    |    |    |    |    |    |    |

X = Standard

## Physical Data

| UNIT SIZE SERIES            | 18                                            | 19         | 24        | 30        | 31        | 36        | 42        | 48         | 60        |
|-----------------------------|-----------------------------------------------|------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|
| Compressor Type             | Scroll                                        |            |           |           |           |           |           |            |           |
| REFRIGERANT                 | Puron Advance™ (R-454B)                       |            |           |           |           |           |           |            |           |
| Factory Charge lb (kg)*     | 6.5(2.95)                                     | 8.6 (3.90) | 5.4(2.45) | 6.1(2.77) | 8.1(3.67) | 7.6(3.45) | 7.3(3.31) | 10.5(4.76) | 8.7(3.95) |
| Outdoor Heating Piston #    | 42                                            | 40         | 46        | 52        | 46        | 52        | 61        | 65         | 70        |
| COND FAN                    | Forward Swept or Propeller Type, Direct Drive |            |           |           |           |           |           |            |           |
| Air Discharge               | Vertical                                      |            |           |           |           |           |           |            |           |
| Air Qty (CFM)               | 1900                                          | 2300       | 3500      | 3000      | 3100      | 3500      | 3000      | 3800       | 4300      |
| Motor HP                    | 1/12                                          | 1/12       | 1/10      | 1/10      | 1/10      | 1/4       | 1/5       | 1/4        | 1/4       |
| Motor RPM                   | 800                                           | 800        | 825       | 825       | 825       | 825       | 1100      | 1110       | 800       |
| COND COIL                   |                                               |            |           |           |           |           |           |            |           |
| Face Area (Sq ft)           | 17.2                                          | 19.3       | 19.3      | 21.4      | 21.4      | 17.2      | 17.2      | 21.4       | 22.6      |
| Fins per In.                | 20                                            | 20         | 20        | 20        | 20        | 20        | 20        | 20         | 20        |
| Rows                        | 1                                             | 2          | 1         | 1         | 2         | 2         | 2         | 2          | 2         |
| Circuits                    | 7                                             | 6          | 6         | 7         | 8         | 8         | 10        | 12         | 12        |
| VALVE CONNECT. (In. ID)     |                                               |            |           |           |           |           |           |            |           |
| Vapor                       | 3/4                                           | 3/4        | 3/4       | 3/4       | 3/4       | 3/4       | 7/8       | 7/8        | 7/8       |
| Liquid                      | 3/8"                                          |            |           |           |           |           |           |            |           |
| REFRIGERANT TUBES* (In. OD) |                                               |            |           |           |           |           |           |            |           |
| Rated Vapor†                | 5/8                                           | 5/8        | 5/8       | 3/4       | 3/4       | 3/4       | 7/8       | 7/8        | 1 1/8     |
| Rated Liquid Line‡          | 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 Puron Advance™ (R-454B) Refrigerant tables.

Note: See unit Installation Instructions 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 Puron Advance™ refrigerant:

**Table 1 – Vapor Line Sizing and Cooling Capacity Losses - Puron Advance™ Refrigerant 1-Stage Heat Pump Applications**

| Unit<br>Nominal<br>Size (kBtuh) | Maximum<br>Liquid Line<br>Diameters<br>(In. OD) | Acceptable<br>Vapor Line<br>Diameters<br>(In. OD) | Cooling Capacity Loss (%)<br>Total Equivalent Line Length ft.<br>1-Stage HP with Puron Advance™ Refrigerant |       |                                            |         |         |         |         |         |         |
|---------------------------------|-------------------------------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------|---------|---------|---------|---------|---------|---------|
|                                 |                                                 |                                                   | Total Equivalent Line Length (ft)                                                                           |       |                                            |         |         |         |         |         |         |
|                                 |                                                 |                                                   | Standard Application                                                                                        |       | Long Line Application Requires Accessories |         |         |         |         |         |         |
|                                 |                                                 |                                                   | 26-50                                                                                                       | 51-80 | 81-100                                     | 101-125 | 126-150 | 151-175 | 176-200 | 201-225 | 226-250 |
| 18                              | 3/8                                             | 1/2                                               | 2                                                                                                           | 5     | 6                                          | 8       | 10      | 12      | 13      | 15      | 16      |
|                                 |                                                 | 5/8                                               | 1                                                                                                           | 2     | 3                                          | 4       | 4       | 5       | 6       | 7       | 7       |
| 19                              | 3/8                                             | 1/2                                               | 2                                                                                                           | 5     | 6                                          | 8       | 10      | 12      | 13      | 15      | 16      |
|                                 |                                                 | 5/8                                               | 1                                                                                                           | 2     | 3                                          | 4       | 4       | 5       | 6       | 7       | 7       |
| 24                              | 3/8                                             | 5/8                                               | 1                                                                                                           | 3     | 4                                          | 5       | 6       | 7       | 8       | 9       | 10      |
|                                 |                                                 | 3/4                                               | 1                                                                                                           | 1     | 2                                          | 3       | 3       | 4       | 4       | 5       | 5       |
| 30                              | 3/8                                             | 5/8                                               | 2                                                                                                           | 4     | 5                                          | 6       | 8       | 9       | 10      | 11      | 13      |
|                                 |                                                 | 3/4                                               | 1                                                                                                           | 2     | 2                                          | 3       | 4       | 4       | 5       | 6       | 6       |
|                                 |                                                 | 7/8                                               | 1                                                                                                           | 1     | 2                                          | 2       | 2       | 3       | 3       | 4       | 4       |
| 31                              | 3/8                                             | 5/8                                               | 2                                                                                                           | 4     | 5                                          | 6       | 8       | 9       | 10      | 11      | 13      |
|                                 |                                                 | 3/4                                               | 1                                                                                                           | 2     | 2                                          | 3       | 4       | 4       | 5       | 6       | 6       |
|                                 |                                                 | 7/8                                               | 1                                                                                                           | 1     | 2                                          | 2       | 2       | 3       | 3       | 4       | 4       |
| 36                              | 3/8                                             | 5/8                                               | 2                                                                                                           | 4     | 6                                          | 7       | 9       | 10      | 12      | 13      | 14      |
|                                 |                                                 | 3/4                                               | 1                                                                                                           | 2     | 3                                          | 3       | 4       | 5       | 6       | 6       | 7       |
|                                 |                                                 | 7/8                                               | 1                                                                                                           | 1     | 2                                          | 2       | 3       | 3       | 4       | 4       | 5       |
| 42                              | 3/8                                             | 3/4                                               | 1                                                                                                           | 3     | 3                                          | 4       | 5       | 6       | 7       | 8       | 9       |
|                                 |                                                 | 7/8                                               | 1                                                                                                           | 2     | 2                                          | 3       | 3       | 4       | 4       | 5       | 6       |
| 48                              | 3/8                                             | 3/4                                               | 1                                                                                                           | 3     | 4                                          | 5       | 6       | 8       | 9       | 10      | 11      |
|                                 |                                                 | 7/8                                               | 1                                                                                                           | 2     | 2                                          | 3       | 4       | 4       | 5       | 6       | 6       |
| 60                              | 3/8                                             | 3/4                                               | 2                                                                                                           | 4     | 5                                          | 7       | 8       | 10      | 11      | 12      | 14      |
|                                 |                                                 | 7/8                                               | 1                                                                                                           | 2     | 3                                          | 4       | 5       | 6       | 6       | 7       | 8       |
|                                 |                                                 | 1 1/8                                             | 0                                                                                                           | 0     | 0                                          | 1       | 1       | 1       | 2       | 2       | 3       |

Applications in this area are long Line. Accessories are required as shown in Accessory Usage Guideline Table

## 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 indoor 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 Puron Advance™ 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 /<br>19,000 | 3/8                               | 250*                                                                                                                               | 250*                 | 250*                  | 250*                   | 250*                   | 250*                   | 250*                   |
| 24,000             | 3/8                               | 250*                                                                                                                               | 250*                 | 250*                  | 250*                   | 250*                   | 250*                   | 250*                   |
| 30,000 /<br>31,000 | 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, any application using a 3/8" liquid line with equivalent length greater than 80ft (24.4m) is considered long line.

## Accessories

| KIT NUMBER    | KIT NAME                            | 18 | 19 | 24 | 30 | 31 | 36 | 42 | 48 | 60 |
|---------------|-------------------------------------|----|----|----|----|----|----|----|----|----|
| KSAFT0101AAA  | Evaporator Freeze Stat              | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KAATD0101TDR  | Time Delay Relay(90 sec. TDR)       | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KAATD0201TDR  | Time Delay Relay(30 sec. TDR)       | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KSALA0301410  | Low Ambient Cooling Pressure Switch | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KSALA1001AAA  | MotorMaster® Low Ambient Controller | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KSAHS2501AAA  | Hard Start Kit                      | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KSAHS2701AAA* | Hard Start Kit                      |    |    |    |    |    |    | X  | X  | X  |
| KSACY0101AAA  | Cycle Protector                     | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KSASF0201AAA  | Support Foot Assembly               | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KHALS0401LLS† | Solenoid Valve Kit                  | X  |    | X  | X  | X  | X  | X  | X  | X  |
| KAAWS0101AAA  | Winter Start Kit                    | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KAAHI0601PUR  | High Pressure Switch                | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KAACH1701AAA  | Crankcase Heater                    | X  | X  | X  | X  | X  | X  |    |    |    |
| KAACH1601AAA  | Crankcase Heater                    |    |    |    |    |    |    | X  | X  | X  |
| KAACH2501AAA  | Crankcase Heater (460-3)            |    |    |    |    |    | X  |    |    |    |
| KAACH2601AAA  | Crankcase Heater (460-3)            |    |    |    |    |    |    |    | X  | X  |
| KHAIR0201AAA  | Isolation Relay                     | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KHASS0606MPK  | Snow Stand                          | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| KSASH2301COP  | Sound Blanket                       | X  | X  | X  | X  | X  | X  |    |    |    |
| KSASH2401COP  | Sound Blanket                       |    |    |    |    |    |    | X  | X  | X  |

\*. Only use on models that have a "C" in position 15 of the 16 digit model number

†. Do not use hard shutoff TXV with liquid solenoid valve

X= Accessory

## 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                                                             |
| Isolation Relay                              | Yes                                                                 | No                                   | No                                                             |
| Liquid Line Solenoid Valve                   | No                                                                  | See Long-Line Guideline              | No                                                             |
| Motor Master® Control or 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), refer to Residential Split-System Long Line Application Guideline.

†. Not used on 3-phase units

## Accessory Description and Usage

### 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. MotorMaster® Low-Ambient Controller

A fan-speed control device activated by a temperature sensor, designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to 0°F/-17.8°C), it maintains condensing temperature at 100°F ±10°F (37.8°C ±5.5°C).

Usage Guideline:

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

Suggested for all commercial applications.

### 8. 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.

### 9. Sound Blanket

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 Continued...

### 10. 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.

### 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 Micro Channel 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* |     | COMPR |      | FAN  | MCA  | MAX FUSE† or<br>CKT BRK<br>AMPS |
|-----------|-----------|-------------|-----|-------|------|------|------|---------------------------------|
|           |           | MAX         | MIN | LRA   | RLA  | FLA  |      |                                 |
| 18        | 208-230-1 | 253         | 197 | 45.1  | 8.3  | 0.50 | 10.9 | 15                              |
| 19        |           |             |     | 45.1  | 8.3  | 0.50 | 11.0 | 15                              |
| 24        |           |             |     | 64.4  | 10.3 | 0.60 | 13.5 | 20                              |
| 30        |           |             |     | 67.0  | 12.5 | 0.70 | 16.3 | 25                              |
| 31        |           |             |     | 67.0  | 12.5 | 0.70 | 16.3 | 25                              |
| 36        |           |             |     | 86.0  | 14.4 | 1.20 | 19.2 | 30                              |
| 42        |           |             |     | 123.0 | 19.0 | 1.05 | 24.9 | 40                              |
| 48        |           |             |     | 126.0 | 22.4 | 1.40 | 29.4 | 40                              |
| 60        |           |             |     | 157.0 | 23.7 | 1.50 | 31.1 | 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.

Short Circuit Current Rating (SCCR): 5kA rms

## Sound Power Level without Sound Shield

| UNIT SIZE | STANDARD<br>RATING<br>(dBA) | TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment) |     |     |      |      |      |      |
|-----------|-----------------------------|------------------------------------------------------------|-----|-----|------|------|------|------|
|           |                             | 125                                                        | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 18        | 72                          | 64                                                         | 66  | 67  | 68   | 63   | 60   | 55   |
| 19        | 71                          | 68                                                         | 66  | 66  | 68   | 62   | 61   | 57   |
| 24        | 71                          | 66                                                         | 65  | 64  | 64   | 59   | 56   | 55   |
| 30        | 70                          | 65                                                         | 64  | 66  | 64   | 61   | 56   | 54   |
| 31        | 68                          | 68                                                         | 64  | 65  | 64   | 60   | 57   | 54   |
| 36        | 76                          | 71                                                         | 70  | 69  | 66   | 63   | 59   | 53   |
| 42        | 76                          | 70                                                         | 71  | 71  | 72   | 65   | 63   | 60   |
| 48        | 76                          | 70                                                         | 72  | 70  | 68   | 63   | 62   | 61   |
| 60        | 74                          | 67                                                         | 69  | 69  | 71   | 63   | 61   | 63   |

## Sound Power Level with Accessory Sound Shield

| UNIT SIZE | STANDARD<br>RATING<br>(dBA) | TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment) |     |     |      |      |      |      |
|-----------|-----------------------------|------------------------------------------------------------|-----|-----|------|------|------|------|
|           |                             | 125                                                        | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 18        | 70                          | 64                                                         | 66  | 66  | 67   | 62   | 59   | 53   |
| 19        | 70                          | 69                                                         | 65  | 66  | 67   | 61   | 60   | 54   |
| 24        | 68                          | 67                                                         | 65  | 64  | 65   | 60   | 54   | 50   |
| 30        | 67                          | 65                                                         | 65  | 65  | 62   | 59   | 54   | 51   |
| 31        | 67                          | 67                                                         | 65  | 65  | 62   | 58   | 54   | 51   |
| 36        | 75                          | 70                                                         | 69  | 68  | 65   | 62   | 58   | 51   |
| 42        | 74                          | 71                                                         | 72  | 71  | 70   | 64   | 62   | 58   |
| 48        | 75                          | 71                                                         | 72  | 70  | 67   | 62   | 60   | 56   |
| 60        | 72                          | 69                                                         | 68  | 70  | 69   | 61   | 58   | 59   |

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

## Charging Subcooling (TXV-Type Expansion Device)

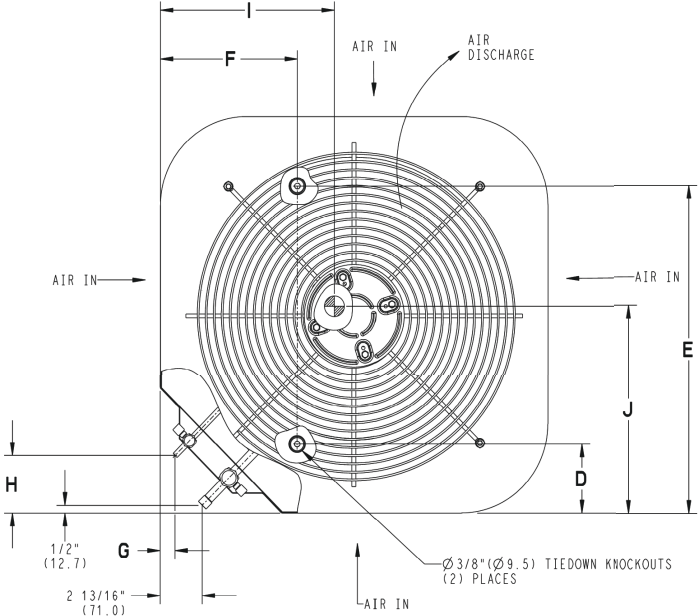
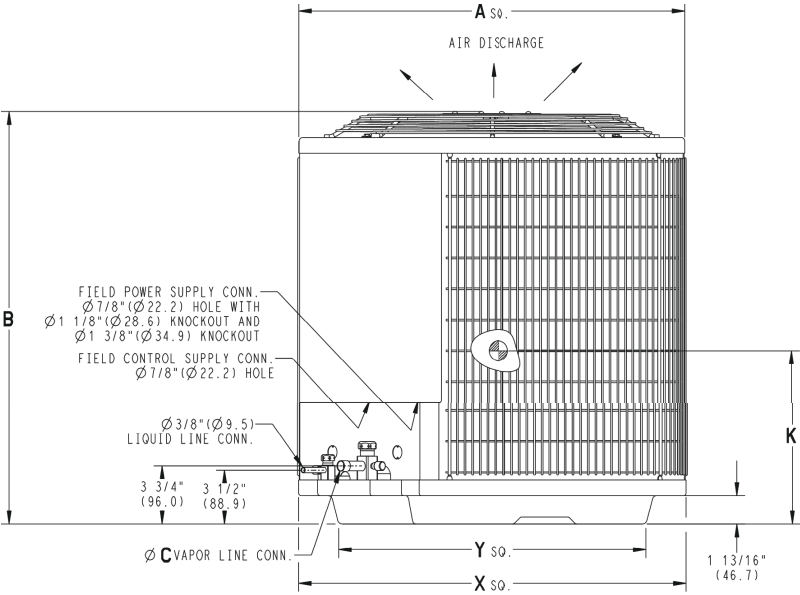
| UNIT SIZE-VOLTAGE | REQUIRED SUBCOOLING °F (°C) |
|-------------------|-----------------------------|
| 18                | 6 (3.3)                     |
| 19                | 6 (3.3)                     |
| 24                | 6 (3.3)                     |
| 30                | 12 (6.7)                    |
| 31                | 7 (3.9)                     |
| 36                | 10 (5.6)                    |
| 42                | 12 (6.7)                    |
| 48                | 13 (7.2)                    |
| 60                | 7 (3.9)                     |

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   | INCH  | MM    | INCH  | MM   |       |      |       |       |       |        |        |       |
| GH5SA*51800A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 31 | 11/16 | 804.3 | 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             | 12 | 1/2             | 317.5 | 11                            | 279.4 | 11              | 3/4   | 298.5 | 147   | 66.7  | 167  | 75.7  | 32   | 3/16  | 817.9 | 34    | 7/16   | 875.2  |       |
| GH5SA*51900A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 35 | 1/16  | 890.7 | 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 | 1/2             | 368.3 | 15                            | 3/4   | 400.1           | 15    | 3/4   | 400.1 | 150   | 68.0 | 171   | 77.6 | 32    | 3/16  | 817.9 | 37     | 7/8    | 961.6 |
| GH5SA*52400A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 35 | 1/16  | 890.7 | 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             | 13 | 330.2           | 15    | 1/8                           | 384.2 | 16              | 1/2   | 419.1 | 175   | 79.4  | 195  | 88.5  | 32   | 3/16  | 817.9 | 37    | 7/8    | 961.6  |       |
| GH5SA*53000A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 38 | 7/16  | 977.1 | 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    | 3/4                           | 374.7 | 15              | 1/2   | 393.7 | 167   | 75.7  | 198  | 85.3  | 32   | 3/16  | 817.9 | 41    | 1/4    | 1048.0 |       |
| GH5SA*53100A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 38 | 7/16  | 977.1 | 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             | 19 | 482.6           | 16    | 406.4                         | 17    | 1/2             | 444.5 | 178   | 80.7  | 198   | 89.8 | 32    | 3/16 | 817.9 | 41    | 1/4   | 1048.0 |        |       |
| GH5SA*53600A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 31 | 11/16 | 804.3 | 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             | 12 | 304.8           | 14    | 1/8                           | 358.8 | 16              | 1/4   | 412.8 | 172   | 78.0  | 192  | 87.1  | 32   | 3/16  | 817.9 | 34    | 7/16   | 875.2  |       |
| GH5SA*54200A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 31 | 11/16 | 804.3 | 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             | 13 | 1/2             | 342.9 | 14                            | 1/4   | 362.0           | 15    | 381.0 | 203   | 92.1  | 223  | 101.2 | 32   | 3/16  | 817.9 | 34    | 7/16   | 875.2  |       |
| GH5SA*54800A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 38 | 7/16  | 977.1 | 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 | 381.0           | 17    | 1/4                           | 438.2 | 19              | 1/2   | 495.3 | 231   | 104.8 | 252  | 114.3 | 32   | 3/16  | 817.9 | 41    | 1/4    | 1048.0 |       |
| GH5SA*54901A | A      | Y                          | N | N | N | N | 31   | 3/16 | 792.5 | 38 | 7/16  | 977.1 | 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 | 381.0           | 17    | 1/4                           | 438.2 | 19              | 1/2   | 495.3 | 231   | 104.8 | 252  | 114.3 | 32   | 3/16  | 817.9 | 41    | 1/4    | 1048.0 |       |
| GH5SA*56000A | A      | Y                          | N | N | N | N | 35   |      | 889.0 | 35 | 1/16  | 890.7 | 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             | 13 | 330.2           | 15    | 1/2                           | 393.7 | 16              | 3/4   | 425.5 | 233   | 105.7 | 254  | 115.2 | 36   | 914.9 | 37    | 7/8   | 961.6  |        |       |

|              |               |
|--------------|---------------|
| 209-230-1-60 | Y=YES<br>N=NO |
| 209-230-3-60 |               |
| 489-3-60     |               |
| 575-3-60     |               |

NOTES:  
1. CENTER OF GRAVITY

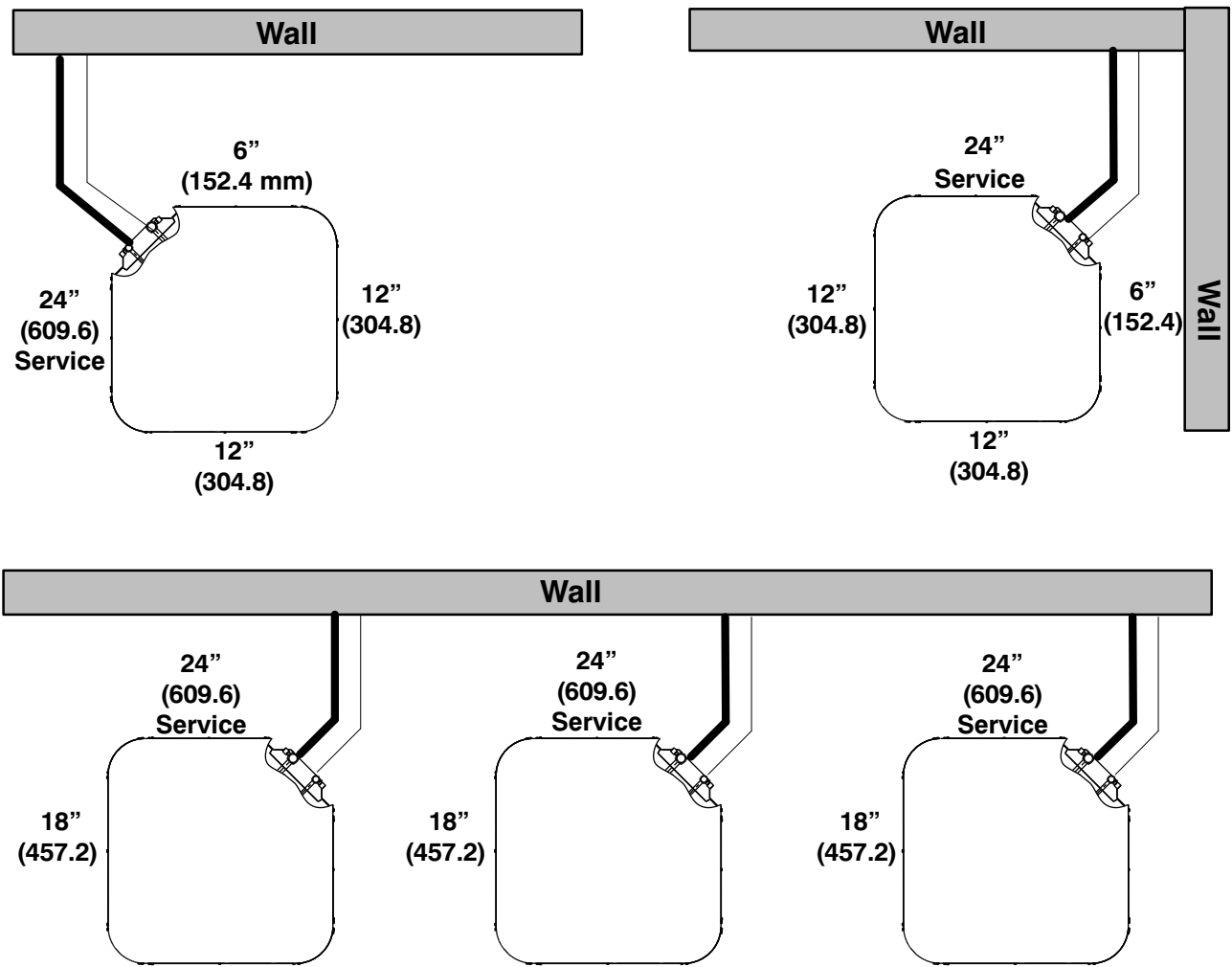


| UNIT SIZE         | "X"                                                   |      | "Y"                                                     |    |       |       |
|-------------------|-------------------------------------------------------|------|---------------------------------------------------------|----|-------|-------|
|                   | MINIMUM GROUND MOUNTING<br>PAD APPLICATION DIMENSIONS |      | MINIMUM ROOF-TOP MOUNTING<br>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.)

Clearances

Clearances (various examples)



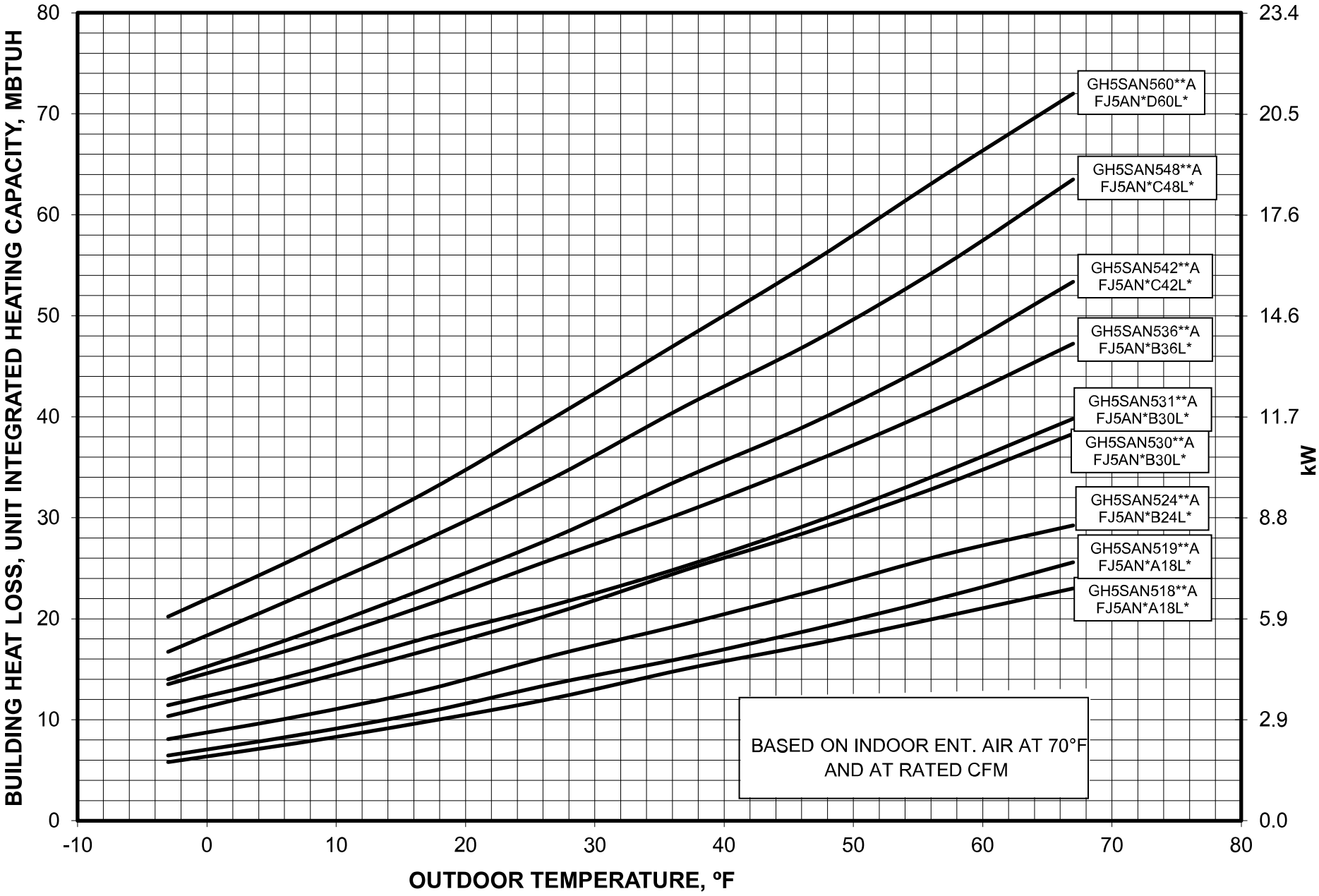
Note: Numbers in ( ) = mm  
Allow 48" above unit

**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.

12



DETAILED COOLING CAPACITIES

| EVAPORATOR AIR                                              |               | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
|-------------------------------------------------------------|---------------|---------------------------------------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|
| CFM                                                         | EWB           | 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. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. |
|                                                             |               | Total                                       | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       |
| GH5SAN518**AOutdoor Section With FJ5AN*A18L* Indoor Section |               |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 540                                                         | 72.0 (22.2)   | 20.56                                       | 10.51 | 1.16       | 19.66          | 10.18 | 1.31       | 18.67          | 9.82  | 1.47       | 17.45          | 9.38  | 1.64       | 16.46          | 9.04  | 1.84       | 15.26          | 8.62  | 2.06       |
|                                                             | 67.0 (19.4)   | 18.72                                       | 13.04 | 1.17       | 17.91          | 12.71 | 1.32       | 17             | 12.35 | 1.48       | 16.02          | 11.95 | 1.65       | 15.01          | 11.56 | 1.85       | 13.93          | 11.13 | 2.07       |
|                                                             | 63 (17.2)††   | 17.38                                       | 12.54 | 1.18       | 16.62          | 12.21 | 1.33       | 15.78          | 11.85 | 1.48       | 14.81          | 11.41 | 1.66       | 13.94          | 11.07 | 1.86       | 12.94          | 10.64 | 2.08       |
|                                                             | 62.0 (16.7)   | 17.16                                       | 15.51 | 1.18       | 16.43          | 15.16 | 1.33       | 15.64          | 14.77 | 1.48       | 14.82          | 14.82 | 1.66       | 14.02          | 14.02 | 1.85       | 13.18          | 13.18 | 2.07       |
|                                                             | 57.0 (13.9)   | 16.76                                       | 16.76 | 1.18       | 16.16          | 16.16 | 1.33       | 15.49          | 15.49 | 1.49       | 14.78          | 14.78 | 1.66       | 14             | 14    | 1.85       | 13.16          | 13.16 | 2.07       |
| 600                                                         | 72.0 (22.2)   | 20.83                                       | 10.93 | 1.17       | 19.9           | 10.59 | 1.32       | 18.88          | 10.23 | 1.48       | 17.78          | 9.85  | 1.66       | 16.61          | 9.45  | 1.85       | 15.36          | 9.01  | 2.08       |
|                                                             | 67.0 (19.4)   | 18.99                                       | 13.73 | 1.19       | 18.15          | 13.39 | 1.33       | 17.22          | 13.02 | 1.49       | 16.22          | 12.63 | 1.67       | 15.18          | 12.21 | 1.86       | 14.07          | 11.78 | 2.09       |
|                                                             | 63 (17.2)††   | 17.65                                       | 13.18 | 1.19       | 16.86          | 12.84 | 1.34       | 16             | 12.47 | 1.5        | 14.96          | 12.03 | 1.67       | 14.1           | 11.67 | 1.87       | 13.08          | 11.24 | 2.09       |
|                                                             | 62.0 (16.7)   | 17.5                                        | 16.41 | 1.19       | 16.76          | 16.03 | 1.34       | 15.99          | 15.99 | 1.5        | 15.13          | 15.13 | 1.67       | 14.41          | 14.41 | 1.87       | 13.53          | 13.53 | 2.09       |
|                                                             | 57.0 (13.9)   | 17.3                                        | 17.3  | 1.2        | 16.67          | 16.67 | 1.34       | 15.97          | 15.97 | 1.5        | 15.21          | 15.21 | 1.67       | 14.39          | 14.39 | 1.87       | 13.51          | 13.51 | 2.09       |
| 675                                                         | 72.0 (22.2)   | 21.1                                        | 11.43 | 1.19       | 20.14          | 11.09 | 1.34       | 19.08          | 10.73 | 1.5        | 17.95          | 10.33 | 1.68       | 16.75          | 9.93  | 1.87       | 15.49          | 9.5   | 2.1        |
|                                                             | 67.0 (19.4)   | 19.26                                       | 14.55 | 1.2        | 18.39          | 14.21 | 1.35       | 17.43          | 13.83 | 1.51       | 16.41          | 13.44 | 1.69       | 15.33          | 13.01 | 1.88       | 14.21          | 12.55 | 2.1        |
|                                                             | 63 (17.2)††   | 17.91                                       | 13.95 | 1.21       | 17.1           | 13.6  | 1.36       | 16.21          | 13.22 | 1.52       | 15.13          | 12.77 | 1.69       | 14.22          | 12.38 | 1.89       | 13.22          | 11.94 | 2.11       |
|                                                             | 62.0 (16.7)   | 17.91                                       | 17.91 | 1.21       | 17.24          | 17.24 | 1.36       | 16.49          | 16.49 | 1.52       | 15.68          | 15.68 | 1.69       | 14.77          | 14.77 | 1.88       | 13.88          | 13.88 | 2.11       |
|                                                             | 57.0 (13.9)   | 17.88                                       | 17.88 | 1.21       | 17.21          | 17.21 | 1.36       | 16.47          | 16.47 | 1.52       | 15.66          | 15.66 | 1.69       | 14.78          | 14.78 | 1.88       | 13.87          | 13.87 | 2.11       |
| GH5SAN519**A Outdoor Section With FJ5AN*A18L*Indoor Section |               |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 525                                                         | 72.0 (22.2)   | 21.56                                       | 10.94 | 1.12       | 20.70          | 10.62 | 1.27       | 19.74          | 10.27 | 1.42       | 18.70          | 9.89  | 1.59       | 17.57          | 9.50  | 1.79       | 16.37          | 9.06  | 2.00       |
|                                                             | 67.0 (19.4)   | 19.50                                       | 13.43 | 1.14       | 18.71          | 13.11 | 1.28       | 17.84          | 12.75 | 1.44       | 16.90          | 12.37 | 1.61       | 15.87          | 11.97 | 1.80       | 14.80          | 11.53 | 2.02       |
|                                                             | 63.0 (17.2)†† | 18.02                                       | 12.89 | 1.15       | 17.29          | 12.57 | 1.29       | 16.48          | 12.21 | 1.45       | 15.59          | 11.84 | 1.62       | 14.65          | 11.43 | 1.81       | 13.65          | 10.98 | 2.03       |
|                                                             | 62.0 (16.7)   | 17.75                                       | 15.88 | 1.15       | 17.05          | 15.54 | 1.29       | 16.28          | 15.17 | 1.45       | 15.45          | 14.75 | 1.62       | 14.59          | 14.59 | 1.81       | 13.77          | 13.77 | 2.02       |
|                                                             | 57.0 (13.9)   | 17.19                                       | 17.19 | 1.15       | 16.63          | 16.63 | 1.30       | 16.00          | 16.00 | 1.45       | 15.31          | 15.31 | 1.62       | 14.57          | 14.57 | 1.81       | 13.75          | 13.75 | 2.02       |
| 605                                                         | 72.0 (22.2)   | 22.01                                       | 11.54 | 1.14       | 21.11          | 11.21 | 1.28       | 20.11          | 10.85 | 1.44       | 19.02          | 10.47 | 1.61       | 17.85          | 10.07 | 1.80       | 16.56          | 9.61  | 2.02       |
|                                                             | 67.0 (19.4)   | 19.93                                       | 14.39 | 1.15       | 19.11          | 14.06 | 1.30       | 18.20          | 13.70 | 1.46       | 17.22          | 13.31 | 1.63       | 16.16          | 12.89 | 1.82       | 15.04          | 12.43 | 2.03       |
|                                                             | 63.0 (17.2)†† | 18.43                                       | 13.79 | 1.17       | 17.66          | 13.45 | 1.31       | 16.82          | 13.09 | 1.47       | 15.91          | 12.66 | 1.64       | 14.93          | 12.28 | 1.83       | 13.88          | 11.84 | 2.05       |
|                                                             | 62.0 (16.7)   | 18.25                                       | 17.15 | 1.17       | 17.54          | 16.78 | 1.31       | 16.78          | 16.78 | 1.47       | 16.01          | 16.01 | 1.64       | 15.20          | 15.20 | 1.83       | 14.33          | 14.33 | 2.04       |
|                                                             | 57.0 (13.9)   | 18.01                                       | 18.01 | 1.17       | 17.40          | 17.40 | 1.31       | 16.73          | 16.73 | 1.47       | 15.98          | 15.98 | 1.64       | 15.18          | 15.18 | 1.83       | 14.30          | 14.30 | 2.04       |
| 675                                                         | 72.0 (22.2)   | 22.31                                       | 12.04 | 1.16       | 21.38          | 11.70 | 1.30       | 20.35          | 11.34 | 1.46       | 19.23          | 10.95 | 1.63       | 18.02          | 10.53 | 1.82       | 16.70          | 10.07 | 2.03       |
|                                                             | 67.0 (19.4)   | 20.22                                       | 15.20 | 1.17       | 19.37          | 14.86 | 1.32       | 18.44          | 14.49 | 1.47       | 17.43          | 14.09 | 1.64       | 16.35          | 13.66 | 1.84       | 15.18          | 13.19 | 2.05       |
|                                                             | 63.0 (17.2)†† | 18.71                                       | 14.54 | 1.18       | 17.92          | 14.20 | 1.33       | 17.05          | 13.82 | 1.48       | 16.11          | 13.42 | 1.66       | 15.10          | 13.00 | 1.85       | 14.05          | 12.52 | 2.06       |
|                                                             | 62.0 (16.7)   | 18.67                                       | 18.67 | 1.18       | 17.99          | 17.99 | 1.33       | 17.27          | 17.27 | 1.48       | 16.49          | 16.49 | 1.65       | 15.64          | 15.64 | 1.84       | 14.72          | 14.72 | 2.06       |
|                                                             | 57.0 (13.9)   | 18.60                                       | 18.60 | 1.18       | 17.96          | 17.96 | 1.33       | 17.25          | 17.25 | 1.48       | 16.46          | 16.46 | 1.65       | 15.62          | 15.62 | 1.84       | 14.70          | 14.70 | 2.06       |

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) |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
|-------------------------------------------------------------|-------------|---------------------------------------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|
| CFM                                                         | EWB         | 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. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. |
|                                                             |             | Total                                       | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       |
| GH5SAN524**A Outdoor Section With FJ5AN*B24L*Indoor Section |             |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 665                                                         | 72.0 (22.2) | 26.92                                       | 13.97 | 1.47       | 25.78          | 13.53 | 1.65       | 24.57          | 13.07 | 1.85       | 23.28          | 12.59 | 2.09       | 21.88          | 12.06 | 2.35       | 20.37          | 11.5  | 2.64       |
|                                                             | 67.0 (19.4) | 24.56                                       | 17.17 | 1.48       | 23.51          | 16.72 | 1.66       | 22.4           | 16.25 | 1.87       | 21.2           | 15.74 | 2.1        | 19.95          | 15.23 | 2.36       | 18.57          | 14.66 | 2.66       |
|                                                             | 63 (17.2)†† | 22.82                                       | 16.55 | 1.49       | 21.83          | 16.09 | 1.67       | 20.8           | 15.62 | 1.87       | 19.7           | 15.13 | 2.11       | 18.52          | 14.6  | 2.37       | 17.26          | 14.04 | 2.67       |
|                                                             | 62.0 (16.7) | 22.46                                       | 20.29 | 1.49       | 21.5           | 19.83 | 1.67       | 20.51          | 19.34 | 1.88       | 19.46          | 18.82 | 2.11       | 18.35          | 18.23 | 2.37       | 17.24          | 17.24 | 2.67       |
|                                                             | 57.0 (13.9) | 21.6                                        | 21.6  | 1.5        | 20.84          | 20.84 | 1.67       | 20.03          | 20.03 | 1.88       | 19.17          | 19.17 | 2.11       | 18.24          | 18.24 | 2.37       | 17.21          | 17.21 | 2.67       |
| 800                                                         | 72.0 (22.2) | 27.58                                       | 14.93 | 1.5        | 26.37          | 14.48 | 1.68       | 25.1           | 14.01 | 1.89       | 23.74          | 13.51 | 2.12       | 22.27          | 12.98 | 2.38       | 20.68          | 12.41 | 2.67       |
|                                                             | 67.0 (19.4) | 25.21                                       | 18.75 | 1.51       | 24.1           | 18.29 | 1.69       | 22.94          | 17.81 | 1.9        | 21.69          | 17.31 | 2.13       | 20.37          | 16.74 | 2.39       | 18.95          | 16.16 | 2.69       |
|                                                             | 63 (17.2)†† | 23.46                                       | 18.03 | 1.52       | 22.42          | 17.56 | 1.7        | 21.33          | 17.07 | 1.91       | 20.17          | 16.56 | 2.14       | 18.93          | 16.02 | 2.4        | 17.6           | 15.42 | 2.7        |
|                                                             | 62.0 (16.7) | 23.23                                       | 22.42 | 1.52       | 22.25          | 21.9  | 1.7        | 21.3           | 21.17 | 1.91       | 20.27          | 20.27 | 2.14       | 19.23          | 19.23 | 2.4        | 18.1           | 18.1  | 2.69       |
|                                                             | 57.0 (13.9) | 22.91                                       | 22.91 | 1.52       | 22.07          | 22.07 | 1.7        | 21.19          | 21.19 | 1.91       | 20.24          | 20.24 | 2.14       | 19.21          | 19.21 | 2.4        | 18.06          | 18.06 | 2.69       |
| 900                                                         | 72.0 (22.2) | 27.91                                       | 15.6  | 1.52       | 26.68          | 15.15 | 1.7        | 25.36          | 14.67 | 1.91       | 23.97          | 14.17 | 2.14       | 22.46          | 13.63 | 2.4        | 20.82          | 13.06 | 2.7        |
|                                                             | 67.0 (19.4) | 25.56                                       | 19.86 | 1.54       | 24.42          | 19.39 | 1.72       | 23.22          | 18.9  | 1.92       | 21.94          | 18.39 | 2.15       | 20.58          | 17.82 | 2.42       | 19.11          | 17.22 | 2.71       |
|                                                             | 63 (17.2)†† | 23.81                                       | 19.06 | 1.55       | 22.74          | 18.59 | 1.73       | 21.61          | 18.09 | 1.93       | 20.41          | 17.56 | 2.16       | 19.16          | 17    | 2.43       | 17.79          | 16.39 | 2.72       |
|                                                             | 62.0 (16.7) | 23.75                                       | 23.75 | 1.55       | 22.82          | 22.82 | 1.72       | 21.88          | 21.88 | 1.93       | 20.87          | 20.87 | 2.16       | 19.78          | 19.78 | 2.42       | 18.58          | 18.58 | 2.72       |
|                                                             | 57.0 (13.9) | 23.67                                       | 23.67 | 1.55       | 22.79          | 22.79 | 1.72       | 21.85          | 21.85 | 1.93       | 20.85          | 20.85 | 2.16       | 19.76          | 19.76 | 2.42       | 18.56          | 18.56 | 2.72       |
| GH5SAN530**A Outdoor Section With FJ5AN*B30L*Indoor Section |             |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 915                                                         | 72.0 (22.2) | 34.58                                       | 18.36 | 1.89       | 33             | 17.76 | 2.13       | 31.31          | 17.13 | 2.39       | 29.54          | 16.47 | 2.68       | 27.68          | 15.79 | 3.01       | 25.76          | 15.1  | 3.4        |
|                                                             | 67.0 (19.4) | 31.39                                       | 22.78 | 1.88       | 29.94          | 22.17 | 2.11       | 28.4           | 21.53 | 2.37       | 26.78          | 20.87 | 2.65       | 25.09          | 20.18 | 2.98       | 23.34          | 19.47 | 3.36       |
|                                                             | 63 (17.2)†† | 29.09                                       | 21.88 | 1.87       | 27.74          | 21.27 | 2.1        | 26.29          | 20.62 | 2.35       | 24.78          | 19.95 | 2.63       | 23.2           | 19.24 | 2.96       | 21.56          | 18.54 | 3.33       |
|                                                             | 62.0 (16.7) | 28.7                                        | 27.11 | 1.87       | 27.4           | 26.47 | 2.1        | 26.05          | 25.76 | 2.35       | 24.68          | 24.68 | 2.63       | 23.4           | 23.4  | 2.96       | 21.89          | 21.89 | 3.34       |
|                                                             | 57.0 (13.9) | 28.06                                       | 28.06 | 1.87       | 26.99          | 26.99 | 2.1        | 25.85          | 25.85 | 2.35       | 24.64          | 24.64 | 2.63       | 23.36          | 23.36 | 2.96       | 22.01          | 22.01 | 3.34       |
| 1000                                                        | 72.0 (22.2) | 34.98                                       | 18.98 | 1.92       | 33.35          | 18.37 | 2.16       | 31.62          | 17.73 | 2.42       | 29.83          | 17.08 | 2.7        | 27.93          | 16.4  | 3.04       | 25.94          | 15.69 | 3.43       |
|                                                             | 67.0 (19.4) | 31.78                                       | 23.8  | 1.91       | 30.3           | 23.19 | 2.14       | 28.72          | 22.54 | 2.39       | 27.06          | 21.85 | 2.68       | 25.35          | 21.13 | 3          | 23.55          | 20.44 | 3.39       |
|                                                             | 63 (17.2)†† | 29.47                                       | 22.83 | 1.9        | 28.08          | 22.21 | 2.13       | 26.6           | 21.55 | 2.38       | 25.05          | 20.87 | 2.66       | 23.44          | 20.16 | 2.98       | 21.78          | 19.43 | 3.36       |
|                                                             | 62.0 (16.7) | 29.19                                       | 28.46 | 1.9        | 27.89          | 27.75 | 2.13       | 26.7           | 26.54 | 2.38       | 25.32          | 25.32 | 2.66       | 23.98          | 23.98 | 2.99       | 22.57          | 22.57 | 3.38       |
|                                                             | 57.0 (13.9) | 28.86                                       | 28.86 | 1.9        | 27.74          | 27.74 | 2.13       | 26.55          | 26.55 | 2.38       | 25.28          | 25.28 | 2.66       | 23.95          | 23.95 | 2.99       | 22.54          | 22.54 | 3.38       |
| 1125                                                        | 72.0 (22.2) | 35.44                                       | 19.85 | 1.96       | 33.76          | 19.24 | 2.2        | 31.98          | 18.6  | 2.46       | 30.14          | 17.94 | 2.75       | 28.19          | 17.25 | 3.08       | 26.15          | 16.56 | 3.47       |
|                                                             | 67.0 (19.4) | 32.24                                       | 25.25 | 1.95       | 30.71          | 24.62 | 2.18       | 29.09          | 23.96 | 2.43       | 27.39          | 23.27 | 2.72       | 25.63          | 22.55 | 3.05       | 23.81          | 21.79 | 3.43       |
|                                                             | 63 (17.2)†† | 29.92                                       | 24.17 | 1.94       | 28.48          | 23.53 | 2.17       | 26.96          | 22.86 | 2.42       | 25.37          | 22.17 | 2.7        | 23.73          | 21.44 | 3.03       | 22.03          | 20.67 | 3.41       |
|                                                             | 62.0 (16.7) | 29.99                                       | 29.87 | 1.94       | 28.7           | 28.7  | 2.17       | 27.44          | 27.44 | 2.42       | 26.1           | 26.1  | 2.71       | 24.7           | 24.7  | 3.04       | 23.21          | 23.21 | 3.43       |
|                                                             | 57.0 (13.9) | 29.84                                       | 29.84 | 1.94       | 28.66          | 28.66 | 2.17       | 27.4           | 27.4  | 2.42       | 26.07          | 26.07 | 2.71       | 24.66          | 24.66 | 3.04       | 23.16          | 23.16 | 3.42       |

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) |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
|-------------------------------------------------------------|---------------|---------------------------------------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|
| CFM                                                         | EWB           | 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. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. |
|                                                             |               | Total                                       | Sens† | KW**       | Total          | Sens† | KW**       | Total          | Sens† | KW**       | Total          | Sens† | KW**       | Total          | Sens† | KW**       | Total          | Sens† | KW**       |
| GH5SAN531**A Outdoor Section With FJ5AN*B30L*Indoor Section |               |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 830                                                         | 72.0 (22.2)   | 34.07                                       | 17.62 | 1.77       | 32.57          | 17.04 | 2.00       | 30.96          | 16.43 | 2.25       | 29.24          | 15.78 | 2.53       | 27.41          | 15.10 | 2.84       | 25.47          | 14.39 | 3.20       |
|                                                             | 67.0 (19.4)   | 30.83                                       | 21.53 | 1.77       | 29.47          | 20.95 | 1.99       | 28.00          | 20.33 | 2.24       | 26.44          | 19.68 | 2.51       | 24.78          | 19.01 | 2.82       | 23.04          | 18.30 | 3.18       |
|                                                             | 63.0 (17.2)†† | 28.52                                       | 20.69 | 1.76       | 27.24          | 20.11 | 1.99       | 25.88          | 19.49 | 2.23       | 24.42          | 18.84 | 2.50       | 22.89          | 18.16 | 2.81       | 21.27          | 17.44 | 3.16       |
|                                                             | 62.0 (16.7)   | 28.04                                       | 25.38 | 1.76       | 26.81          | 24.79 | 1.99       | 25.50          | 24.15 | 2.23       | 24.12          | 23.46 | 2.50       | 22.69          | 22.69 | 2.81       | 21.34          | 21.34 | 3.16       |
|                                                             | 57.0 (13.9)   | 26.97                                       | 26.97 | 1.76       | 26.00          | 26.00 | 1.99       | 24.95          | 24.95 | 2.23       | 23.82          | 23.82 | 2.50       | 22.61          | 22.61 | 2.81       | 21.31          | 21.31 | 3.16       |
| 1000                                                        | 72.0 (22.2)   | 35.03                                       | 18.89 | 1.82       | 33.44          | 18.30 | 2.05       | 31.72          | 17.67 | 2.30       | 29.93          | 17.04 | 2.58       | 27.99          | 16.31 | 2.90       | 25.82          | 15.52 | 3.25       |
|                                                             | 67.0 (19.4)   | 31.75                                       | 23.59 | 1.81       | 30.30          | 22.99 | 2.04       | 28.75          | 22.35 | 2.29       | 27.10          | 21.68 | 2.56       | 25.36          | 20.99 | 2.87       | 23.52          | 20.23 | 3.23       |
|                                                             | 63.0 (17.2)†† | 29.39                                       | 22.61 | 1.81       | 28.04          | 22.01 | 2.04       | 26.59          | 21.37 | 2.28       | 25.06          | 20.69 | 2.55       | 23.44          | 19.99 | 2.86       | 21.76          | 19.27 | 3.22       |
|                                                             | 62.0 (16.7)   | 29.09                                       | 28.14 | 1.81       | 27.83          | 27.47 | 2.04       | 26.63          | 26.40 | 2.28       | 25.27          | 25.27 | 2.55       | 23.93          | 23.93 | 2.86       | 22.51          | 22.51 | 3.22       |
|                                                             | 57.0 (13.9)   | 28.71                                       | 28.71 | 1.81       | 27.64          | 27.64 | 2.04       | 26.48          | 26.48 | 2.28       | 25.23          | 25.23 | 2.55       | 23.90          | 23.90 | 2.86       | 22.47          | 22.47 | 3.22       |
| 1125                                                        | 72.0 (22.2)   | 35.55                                       | 19.78 | 1.86       | 33.90          | 19.18 | 2.09       | 32.13          | 18.54 | 2.34       | 30.27          | 17.87 | 2.62       | 28.28          | 17.20 | 2.93       | 26.17          | 16.43 | 3.29       |
|                                                             | 67.0 (19.4)   | 32.24                                       | 25.03 | 1.85       | 30.75          | 24.42 | 2.08       | 29.14          | 23.77 | 2.33       | 27.45          | 23.08 | 2.60       | 25.67          | 22.35 | 2.91       | 23.79          | 21.58 | 3.27       |
|                                                             | 63.0 (17.2)†† | 29.86                                       | 23.94 | 1.85       | 28.47          | 23.33 | 2.07       | 26.98          | 22.67 | 2.32       | 25.40          | 21.98 | 2.59       | 23.75          | 21.25 | 2.90       | 22.02          | 20.48 | 3.25       |
|                                                             | 62.0 (16.7)   | 29.80                                       | 29.80 | 1.85       | 28.63          | 28.63 | 2.07       | 27.40          | 27.40 | 2.32       | 26.08          | 26.08 | 2.59       | 24.67          | 24.67 | 2.90       | 23.15          | 23.15 | 3.26       |
|                                                             | 57.0 (13.9)   | 29.73                                       | 29.73 | 1.85       | 28.59          | 28.59 | 2.07       | 27.36          | 27.36 | 2.32       | 26.04          | 26.04 | 2.59       | 24.63          | 24.63 | 2.90       | 23.12          | 23.12 | 3.26       |
| GH5SAN536**A Outdoor Section With FJ5AN*B36L*Indoor Section |               |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 1050                                                        | 72.0 (22.2)   | 42.54                                       | 21.74 | 2.43       | 40.63          | 21.02 | 2.66       | 38.54          | 20.24 | 2.91       | 36.29          | 19.42 | 3.21       | 33.89          | 18.55 | 3.55       | 31.34          | 17.65 | 3.95       |
|                                                             | 67.0 (19.4)   | 38.6                                        | 26.83 | 2.41       | 36.9           | 26.13 | 2.65       | 35             | 25.34 | 2.92       | 32.95          | 24.51 | 3.22       | 30.77          | 23.63 | 3.57       | 28.49          | 22.72 | 3.98       |
|                                                             | 63 (17.2)††   | 35.78                                       | 25.8  | 2.4        | 34.19          | 25.09 | 2.64       | 32.42          | 24.3  | 2.91       | 30.52          | 23.47 | 3.22       | 28.48          | 22.61 | 3.58       | 26.38          | 21.68 | 4          |
|                                                             | 62.0 (16.7)   | 35.27                                       | 31.84 | 2.4        | 33.74          | 31.1  | 2.64       | 32.06          | 30.28 | 2.91       | 30.27          | 29.35 | 3.22       | 28.48          | 28.48 | 3.58       | 26.75          | 26.75 | 3.98       |
|                                                             | 57.0 (13.9)   | 34.19                                       | 34.19 | 2.39       | 32.96          | 32.96 | 2.64       | 31.58          | 31.58 | 2.91       | 30.07          | 30.07 | 3.22       | 28.44          | 28.44 | 3.58       | 26.71          | 26.71 | 3.99       |
| 1200                                                        | 72.0 (22.2)   | 43.29                                       | 22.8  | 2.48       | 41.3           | 22.07 | 2.71       | 39.11          | 21.28 | 2.96       | 36.78          | 20.44 | 3.25       | 34.24          | 19.52 | 3.59       | 31.66          | 18.65 | 3.99       |
|                                                             | 67.0 (19.4)   | 39.32                                       | 28.59 | 2.47       | 37.55          | 27.87 | 2.71       | 35.57          | 27.07 | 2.97       | 33.44          | 26.21 | 3.27       | 31.19          | 25.31 | 3.62       | 28.84          | 24.37 | 4.03       |
|                                                             | 63 (17.2)††   | 36.47                                       | 27.43 | 2.45       | 34.81          | 26.7  | 2.7        | 32.97          | 25.9  | 2.97       | 30.99          | 25.04 | 3.27       | 28.91          | 24.14 | 3.63       | 26.72          | 23.2  | 4.05       |
|                                                             | 62.0 (16.7)   | 36.12                                       | 34.17 | 2.45       | 34.56          | 33.35 | 2.7        | 32.98          | 32.1  | 2.97       | 31.23          | 31.23 | 3.27       | 29.49          | 29.49 | 3.63       | 27.63          | 27.63 | 4.04       |
|                                                             | 57.0 (13.9)   | 35.61                                       | 35.61 | 2.45       | 34.29          | 34.29 | 2.7        | 32.8           | 32.8  | 2.97       | 31.18          | 31.18 | 3.27       | 29.44          | 29.44 | 3.62       | 27.59          | 27.59 | 4.04       |
| 1350                                                        | 72.0 (22.2)   | 43.84                                       | 23.81 | 2.54       | 41.78          | 23.07 | 2.76       | 39.53          | 22.27 | 3.02       | 37.12          | 21.42 | 3.3        | 34.56          | 20.53 | 3.64       | 31.85          | 19.6  | 4.04       |
|                                                             | 67.0 (19.4)   | 39.87                                       | 30.27 | 2.52       | 38.02          | 29.52 | 2.76       | 36             | 28.71 | 3.02       | 33.81          | 27.83 | 3.32       | 31.49          | 26.9  | 3.66       | 29.11          | 25.93 | 4.07       |
|                                                             | 63 (17.2)††   | 37                                          | 28.98 | 2.51       | 35.27          | 28.23 | 2.75       | 33.38          | 27.41 | 3.02       | 31.35          | 26.54 | 3.32       | 29.21          | 25.49 | 3.67       | 27             | 24.62 | 4.09       |
|                                                             | 62.0 (16.7)   | 36.91                                       | 36.91 | 2.51       | 35.43          | 35.43 | 2.75       | 33.86          | 33.86 | 3.02       | 32.15          | 32.15 | 3.32       | 30.3           | 30.3  | 3.67       | 28.32          | 28.32 | 4.08       |
|                                                             | 57.0 (13.9)   | 36.79                                       | 36.79 | 2.51       | 35.38          | 35.38 | 2.75       | 33.82          | 33.82 | 3.02       | 32.11          | 32.11 | 3.32       | 30.27          | 30.27 | 3.67       | 28.31          | 28.31 | 4.08       |

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) |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
|--------------------------------------------------------------|-------------|---------------------------------------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|
| CFM                                                          | EWB         | 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. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. |
|                                                              |             | Total                                       | Sens† | KW**       | Total          | Sens† | KW**       | Total          | Sens† | KW**       | Total          | Sens† | KW**       | Total          | Sens† | KW**       | Total          | Sens† | KW**       |
| GH5SAN542**A Outdoor Section With FJ5AN*C42L* Indoor Section |             |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 1240                                                         | 72.0 (22.2) | 49.41                                       | 25.83 | 2.78       | 47.34          | 25.04 | 3.09       | 45.14          | 24.21 | 3.44       | 42.71          | 23.31 | 3.84       | 40.15          | 22.37 | 4.3        | 37.39          | 21.37 | 4.83       |
|                                                              | 67.0 (19.4) | 44.91                                       | 31.96 | 2.76       | 43.04          | 31.17 | 3.07       | 41             | 30.32 | 3.42       | 38.8           | 29.41 | 3.82       | 36.47          | 28.46 | 4.28       | 33.98          | 27.45 | 4.81       |
|                                                              | 63 (17.2)†† | 41.63                                       | 30.71 | 2.74       | 39.89          | 29.93 | 3.05       | 38             | 29.08 | 3.4        | 35.95          | 28.17 | 3.8        | 33.77          | 27.21 | 4.26       | 31.45          | 26.19 | 4.79       |
|                                                              | 62.0 (16.7) | 41.08                                       | 37.94 | 2.74       | 39.42          | 37.12 | 3.05       | 37.62          | 36.21 | 3.4        | 35.72          | 35.01 | 3.8        | 33.78          | 33.78 | 4.26       | 31.87          | 31.87 | 4.79       |
|                                                              | 57.0 (13.9) | 39.95                                       | 39.95 | 2.74       | 38.6           | 38.6  | 3.05       | 37.11          | 37.11 | 3.4        | 35.49          | 35.49 | 3.8        | 33.72          | 33.72 | 4.26       | 31.82          | 31.82 | 4.79       |
| 1400                                                         | 72.0 (22.2) | 50.19                                       | 26.99 | 2.83       | 48.05          | 26.19 | 3.14       | 45.75          | 25.34 | 3.49       | 43.26          | 24.44 | 3.89       | 40.6           | 23.48 | 4.35       | 37.75          | 22.47 | 4.88       |
|                                                              | 67.0 (19.4) | 45.66                                       | 33.86 | 2.81       | 43.72          | 33.05 | 3.12       | 41.61          | 32.19 | 3.47       | 39.35          | 31.26 | 3.87       | 36.94          | 30.28 | 4.33       | 34.38          | 29.24 | 4.86       |
|                                                              | 63 (17.2)†† | 42.36                                       | 32.48 | 2.79       | 40.56          | 31.68 | 3.1        | 38.59          | 30.81 | 3.45       | 36.48          | 29.88 | 3.85       | 34.24          | 28.9  | 4.31       | 31.86          | 27.85 | 4.84       |
|                                                              | 62.0 (16.7) | 42                                          | 40.44 | 2.79       | 40.31          | 39.53 | 3.1        | 38.59          | 38.26 | 3.45       | 36.8           | 36.63 | 3.85       | 34.87          | 34.87 | 4.32       | 32.86          | 32.86 | 4.85       |
|                                                              | 57.0 (13.9) | 41.45                                       | 41.45 | 2.79       | 40.01          | 40.01 | 3.1        | 38.42          | 38.42 | 3.45       | 36.69          | 36.69 | 3.85       | 34.83          | 34.83 | 4.32       | 32.81          | 32.81 | 4.85       |
| 1575                                                         | 72.0 (22.2) | 50.83                                       | 28.19 | 2.88       | 48.62          | 27.38 | 3.19       | 46.25          | 26.53 | 3.54       | 43.66          | 25.6  | 3.94       | 40.94          | 24.64 | 4.4        | 38.03          | 23.62 | 4.93       |
|                                                              | 67.0 (19.4) | 46.3                                        | 35.84 | 2.86       | 44.29          | 35.02 | 3.17       | 42.12          | 34.14 | 3.52       | 39.8           | 33.19 | 3.92       | 37.33          | 32.18 | 4.38       | 34.72          | 31.09 | 4.91       |
|                                                              | 63 (17.2)†† | 42.98                                       | 34.32 | 2.85       | 41.12          | 33.5  | 3.16       | 39.1           | 32.61 | 3.51       | 36.93          | 31.66 | 3.91       | 34.63          | 30.64 | 4.37       | 32.21          | 29.55 | 4.9        |
|                                                              | 62.0 (16.7) | 43.03                                       | 42.54 | 2.85       | 41.35          | 41.35 | 3.16       | 39.66          | 39.66 | 3.51       | 37.83          | 37.83 | 3.91       | 35.84          | 35.84 | 4.37       | 33.7           | 33.7  | 4.9        |
|                                                              | 57.0 (13.9) | 42.82                                       | 42.82 | 2.85       | 41.29          | 41.29 | 3.16       | 39.61          | 39.61 | 3.51       | 37.78          | 37.78 | 3.91       | 35.82          | 35.82 | 4.37       | 33.69          | 33.69 | 4.9        |
| GH5SAN548**A Outdoor Section With FJ5AN*C48L*Indoor Section  |             |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 1250                                                         | 72.0 (22.2) | 56.66                                       | 28.52 | 3.15       | 54.39          | 27.64 | 3.52       | 51.91          | 26.69 | 3.95       | 49.15          | 25.65 | 4.43       | 46.05          | 24.49 | 4.98       | 42.62          | 23.24 | 5.61       |
|                                                              | 67.0 (19.4) | 51.3                                        | 34.6  | 3.14       | 49.27          | 33.73 | 3.5        | 47             | 32.78 | 3.92       | 44.48          | 31.73 | 4.4        | 41.69          | 30.58 | 4.94       | 38.53          | 29.3  | 5.57       |
|                                                              | 63 (17.2)†† | 47.5                                        | 33.32 | 3.13       | 45.58          | 32.44 | 3.48       | 43.48          | 31.48 | 3.9        | 41.14          | 30.44 | 4.37       | 38.53          | 29.28 | 4.92       | 35.61          | 28    | 5.54       |
|                                                              | 62.0 (16.7) | 46.66                                       | 40.62 | 3.13       | 44.79          | 39.73 | 3.48       | 42.76          | 38.76 | 3.89       | 40.51          | 37.68 | 4.37       | 38.02          | 36.46 | 4.92       | 35.31          | 35.31 | 5.54       |
|                                                              | 57.0 (13.9) | 44.41                                       | 44.41 | 3.12       | 42.96          | 42.96 | 3.47       | 41.36          | 41.36 | 3.88       | 39.57          | 39.57 | 4.36       | 37.55          | 37.55 | 4.91       | 35.24          | 35.24 | 5.54       |
| 1600                                                         | 72.0 (22.2) | 58.89                                       | 31.23 | 3.24       | 56.4           | 30.32 | 3.62       | 53.69          | 29.33 | 4.05       | 50.71          | 28.26 | 4.54       | 47.38          | 27.07 | 5.1        | 43.69          | 25.78 | 5.72       |
|                                                              | 67.0 (19.4) | 53.41                                       | 38.98 | 3.23       | 51.15          | 38.06 | 3.6        | 48.72          | 37.07 | 4.02       | 46             | 35.96 | 4.51       | 43             | 34.78 | 5.05       | 39.66          | 33.45 | 5.68       |
|                                                              | 63 (17.2)†† | 49.49                                       | 37.39 | 3.23       | 47.39          | 36.46 | 3.58       | 45.11          | 35.47 | 4          | 42.59          | 34.38 | 4.48       | 39.8           | 33.17 | 5.02       | 36.69          | 31.84 | 5.65       |
|                                                              | 62.0 (16.7) | 48.96                                       | 46.5  | 3.23       | 46.99          | 45.48 | 3.58       | 45.02          | 43.97 | 4          | 42.79          | 42.79 | 4.48       | 40.49          | 40.49 | 5.03       | 37.87          | 37.87 | 5.66       |
|                                                              | 57.0 (13.9) | 48.27                                       | 48.27 | 3.22       | 46.6           | 46.6  | 3.58       | 44.77          | 44.77 | 4          | 42.73          | 42.73 | 4.48       | 40.42          | 40.42 | 5.03       | 37.82          | 37.82 | 5.66       |
| 1800                                                         | 72.0 (22.2) | 59.74                                       | 32.68 | 3.3        | 57.16          | 31.75 | 3.68       | 54.36          | 30.75 | 4.11       | 51.26          | 29.65 | 4.6        | 47.81          | 28.43 | 5.15       | 44.06          | 27.15 | 5.78       |
|                                                              | 67.0 (19.4) | 54.23                                       | 41.34 | 3.29       | 51.9           | 40.4  | 3.66       | 49.39          | 39.39 | 4.08       | 46.6           | 38.27 | 4.56       | 43.52          | 37.04 | 5.11       | 40.11          | 35.66 | 5.74       |
|                                                              | 63 (17.2)†† | 50.27                                       | 39.57 | 3.28       | 48.12          | 38.64 | 3.64       | 45.77          | 37.61 | 4.06       | 43.18          | 36.49 | 4.54       | 40.3           | 35.24 | 5.08       | 37.13          | 33.85 | 5.71       |
|                                                              | 62.0 (16.7) | 50.1                                        | 50.1  | 3.28       | 48.27          | 48.27 | 3.64       | 46.33          | 46.33 | 4.06       | 44.16          | 44.16 | 4.54       | 41.72          | 41.72 | 5.09       | 38.97          | 38.97 | 5.73       |
|                                                              | 57.0 (13.9) | 49.95                                       | 49.95 | 3.28       | 48.2           | 48.2  | 3.64       | 46.26          | 46.26 | 4.06       | 44.1           | 44.1  | 4.54       | 41.66          | 41.66 | 5.1        | 38.91          | 38.91 | 5.73       |

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) |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
|-------------------------------------------------------------|-------------|---------------------------------------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|----------------|-------|------------|
| CFM                                                         | EWB         | 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. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. | Capacity MBtuh |       | Total Sys. |
|                                                             |             | Total                                       | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       | Total          | Sens‡ | KW**       |
| GH5SAN560**A Outdoor Section With FJ5AN*D60L*Indoor Section |             |                                             |       |            |                |       |            |                |       |            |                |       |            |                |       |            |                |       |            |
| 1775                                                        | 72.0 (22.2) | 69.13                                       | 35.84 | 4.07       | 66.01          | 34.69 | 4.53       | 62.68          | 33.48 | 5.05       | 58.98          | 32.15 | 5.64       | 55.14          | 30.78 | 6.31       | 50.84          | 29.3  | 7.06       |
|                                                             | 67.0 (19.4) | 63.31                                       | 44.81 | 4.03       | 60.51          | 43.67 | 4.49       | 57.5           | 42.45 | 5          | 54.24          | 41.14 | 5.59       | 50.69          | 39.73 | 6.25       | 46.83          | 38.21 | 7.01       |
|                                                             | 63 (17.2)†† | 58.99                                       | 43.17 | 4.01       | 56.42          | 42.04 | 4.46       | 53.64          | 40.83 | 4.97       | 50.62          | 39.52 | 5.55       | 47.35          | 38.12 | 6.22       | 43.77          | 36.6  | 6.98       |
|                                                             | 62.0 (16.7) | 58.15                                       | 53.51 | 4.01       | 55.69          | 52.32 | 4.45       | 53.05          | 51.01 | 4.96       | 50.43          | 49.01 | 5.55       | 47.56          | 47.56 | 6.22       | 44.54          | 44.54 | 6.98       |
|                                                             | 57.0 (13.9) | 56.88                                       | 56.88 | 4          | 54.86          | 54.86 | 4.45       | 52.64          | 52.64 | 4.96       | 50.19          | 50.19 | 5.55       | 47.49          | 47.49 | 6.22       | 44.48          | 44.48 | 6.98       |
| 2000                                                        | 72.0 (22.2) | 70.03                                       | 37.44 | 4.15       | 66.79          | 36.27 | 4.61       | 63.34          | 35.04 | 5.13       | 59.6           | 33.72 | 5.72       | 55.57          | 32.31 | 6.39       | 51.18          | 30.8  | 7.14       |
|                                                             | 67.0 (19.4) | 64.23                                       | 47.48 | 4.11       | 61.33          | 46.31 | 4.56       | 58.21          | 45.07 | 5.08       | 54.83          | 43.73 | 5.67       | 51.19          | 42.3  | 6.33       | 47.24          | 40.74 | 7.09       |
|                                                             | 63 (17.2)†† | 59.92                                       | 45.66 | 4.09       | 57.25          | 44.5  | 4.54       | 54.37          | 43.27 | 5.05       | 51.26          | 41.94 | 5.63       | 47.89          | 40.5  | 6.3        | 44.22          | 38.93 | 7.05       |
|                                                             | 62.0 (16.7) | 59.36                                       | 57.03 | 4.09       | 56.89          | 56.89 | 4.53       | 54.43          | 54.43 | 5.05       | 51.79          | 51.79 | 5.64       | 48.93          | 48.93 | 6.31       | 45.73          | 45.73 | 7.07       |
|                                                             | 57.0 (13.9) | 58.9                                        | 58.9  | 4.08       | 56.73          | 56.73 | 4.53       | 54.36          | 54.36 | 5.05       | 51.75          | 51.75 | 5.64       | 48.87          | 48.87 | 6.31       | 45.68          | 45.68 | 7.07       |
| 2250                                                        | 72.0 (22.2) | 70.76                                       | 39.14 | 4.23       | 67.42          | 37.96 | 4.7        | 63.84          | 36.71 | 5.22       | 60             | 35.37 | 5.81       | 55.87          | 33.96 | 6.48       | 51.32          | 32.43 | 7.23       |
|                                                             | 67.0 (19.4) | 64.99                                       | 50.33 | 4.2        | 62             | 49.14 | 4.65       | 58.79          | 47.87 | 5.17       | 55.33          | 46.5  | 5.76       | 51.6           | 45.01 | 6.42       | 47.57          | 43.38 | 7.18       |
|                                                             | 63 (17.2)†† | 60.7                                        | 48.31 | 4.17       | 57.95          | 47.13 | 4.62       | 54.98          | 45.86 | 5.13       | 51.79          | 44.49 | 5.72       | 48.34          | 43.01 | 6.38       | 44.62          | 41.36 | 7.14       |
|                                                             | 62.0 (16.7) | 61.03                                       | 59.18 | 4.18       | 58.5           | 58.5  | 4.63       | 55.97          | 55.97 | 5.14       | 53.2           | 53.2  | 5.73       | 50.14          | 50.14 | 6.4        | 46.76          | 46.76 | 7.17       |
|                                                             | 57.0 (13.9) | 60.74                                       | 60.74 | 4.17       | 58.42          | 58.42 | 4.62       | 55.9           | 55.9  | 5.14       | 53.14          | 53.14 | 5.73       | 50.13          | 50.13 | 6.41       | 46.71          | 46.71 | 7.17       |

# Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240-2020. 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

HEAT PUMP HEATING PERFORMANCE

| INDOOR AIR                                                   |      | OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C) |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
|--------------------------------------------------------------|------|------------------------------------------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|
|                                                              |      | -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)    |        |                |
| EDB                                                          | CFM  | Capacity MBtuh                                 |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† |
|                                                              |      | Total                                          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                |
| GH5SAN518**A Outdoor Section With FJ5AN*A18L* Indoor Section |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
| 65 (18.3)                                                    | 540  | 6.11                                           | 5.62   | 1.09           | 7.97           | 7.33   | 1.13           | 10.10          | 9.21   | 1.18           | 11.85          | 10.52  | 1.22           | 15.23          | 13.86  | 1.28           | 17.74          | 17.74  | 1.33           | 20.52          | 20.52  | 1.39           | 23.29          | 23.29  | 1.42           |
|                                                              | 600  | 6.18                                           | 5.69   | 1.09           | 8.07           | 7.42   | 1.13           | 10.22          | 9.32   | 1.17           | 12.63          | 11.22  | 1.22           | 15.36          | 13.97  | 1.27           | 17.92          | 17.92  | 1.31           | 20.75          | 20.75  | 1.36           | 23.46          | 23.46  | 1.39           |
|                                                              | 675  | 6.28                                           | 5.78   | 1.10           | 8.18           | 7.52   | 1.14           | 10.34          | 9.43   | 1.18           | 12.78          | 11.35  | 1.22           | 15.50          | 14.10  | 1.26           | 18.09          | 18.09  | 1.30           | 20.87          | 20.87  | 1.33           | 23.61          | 23.61  | 1.37           |
| 70.0 (21.1)                                                  | 540  | 5.80                                           | 5.34   | 1.13           | 7.69           | 7.06   | 1.18           | 9.81           | 8.95   | 1.23           | 12.17          | 10.81  | 1.28           | 15.02          | 13.66  | 1.34           | 17.50          | 17.50  | 1.40           | 20.21          | 20.21  | 1.45           | 23.00          | 23.00  | 1.49           |
|                                                              | 600  | 5.89                                           | 5.42   | 1.14           | 7.79           | 7.16   | 1.18           | 9.93           | 9.06   | 1.23           | 12.33          | 10.95  | 1.27           | 15.15          | 13.79  | 1.33           | 17.67          | 17.67  | 1.37           | 20.44          | 20.44  | 1.43           | 23.18          | 23.18  | 1.46           |
|                                                              | 675  | 5.98                                           | 5.50   | 1.15           | 7.90           | 7.26   | 1.19           | 10.06          | 9.18   | 1.23           | 12.47          | 11.07  | 1.27           | 15.29          | 13.92  | 1.32           | 17.84          | 17.84  | 1.36           | 20.64          | 20.64  | 1.40           | 23.33          | 23.33  | 1.43           |
| 75 (23.9)                                                    | 540  | 5.49                                           | 5.05   | 1.17           | 7.42           | 6.82   | 1.23           | 9.51           | 8.67   | 1.28           | 11.90          | 10.57  | 1.34           | 14.77          | 13.44  | 1.40           | 17.25          | 17.25  | 1.46           | 19.92          | 19.92  | 1.52           | 22.69          | 22.69  | 1.57           |
|                                                              | 600  | 5.57                                           | 5.13   | 1.18           | 7.48           | 6.88   | 1.23           | 9.63           | 8.78   | 1.28           | 12.01          | 10.67  | 1.33           | 14.92          | 13.58  | 1.39           | 17.42          | 17.42  | 1.44           | 20.13          | 20.13  | 1.49           | 22.88          | 22.88  | 1.53           |
|                                                              | 675  | 5.67                                           | 5.21   | 1.19           | 7.59           | 6.98   | 1.23           | 9.76           | 8.90   | 1.28           | 12.17          | 10.81  | 1.33           | 15.07          | 13.72  | 1.38           | 17.59          | 17.59  | 1.42           | 20.35          | 20.35  | 1.47           | 23.04          | 23.04  | 1.50           |
| GH5SAN519**A Outdoor Section With FJ5AN*A18L* Indoor Section |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
| 65 (18.3)                                                    | 525  | 6.61                                           | 6.08   | 1.15           | 8.60           | 7.90   | 1.20           | 10.88          | 9.92   | 1.25           | 13.67          | 12.14  | 1.31           | 16.19          | 14.73  | 1.37           | 19.02          | 19.02  | 1.43           | 22.15          | 22.15  | 1.50           | 25.58          | 25.58  | 1.58           |
|                                                              | 605  | 6.74                                           | 6.20   | 1.16           | 8.75           | 8.04   | 1.21           | 10.97          | 10.01  | 1.25           | 13.81          | 12.27  | 1.30           | 16.40          | 14.93  | 1.35           | 19.30          | 19.30  | 1.40           | 22.51          | 22.51  | 1.46           | 26.05          | 26.05  | 1.54           |
|                                                              | 675  | 6.84                                           | 6.29   | 1.18           | 8.86           | 8.14   | 1.21           | 11.19          | 10.20  | 1.26           | 13.92          | 12.36  | 1.30           | 16.56          | 15.07  | 1.34           | 19.50          | 19.50  | 1.39           | 22.77          | 22.77  | 1.44           | 26.37          | 26.37  | 1.51           |
| 70.0 (21.1)                                                  | 525  | 6.32                                           | 5.81   | 1.20           | 8.31           | 7.64   | 1.25           | 10.59          | 9.65   | 1.31           | 13.44          | 11.94  | 1.37           | 15.95          | 14.52  | 1.43           | 18.72          | 18.72  | 1.49           | 21.79          | 21.79  | 1.57           | 25.16          | 25.16  | 1.65           |
|                                                              | 605  | 6.45                                           | 5.93   | 1.21           | 8.46           | 7.78   | 1.26           | 10.70          | 9.76   | 1.30           | 13.62          | 12.10  | 1.36           | 16.16          | 14.71  | 1.41           | 19.00          | 19.00  | 1.47           | 22.15          | 22.15  | 1.53           | 25.62          | 25.62  | 1.60           |
|                                                              | 675  | 6.54                                           | 6.02   | 1.22           | 8.57           | 7.88   | 1.26           | 10.89          | 9.93   | 1.31           | 13.75          | 12.21  | 1.36           | 16.31          | 14.85  | 1.40           | 19.20          | 19.20  | 1.45           | 22.40          | 22.40  | 1.51           | 25.93          | 25.93  | 1.58           |
| 75 (23.9)                                                    | 525  | 6.01                                           | 5.53   | 1.24           | 8.01           | 7.36   | 1.30           | 10.28          | 9.37   | 1.36           | 12.83          | 11.40  | 1.43           | 15.71          | 14.30  | 1.50           | 18.43          | 18.43  | 1.56           | 21.44          | 21.44  | 1.64           | 24.74          | 24.74  | 1.72           |
|                                                              | 605  | 6.13                                           | 5.64   | 1.26           | 8.16           | 7.50   | 1.31           | 10.46          | 9.53   | 1.36           | 13.05          | 11.59  | 1.42           | 15.92          | 14.49  | 1.48           | 18.70          | 18.70  | 1.53           | 21.79          | 21.79  | 1.60           | 25.19          | 25.19  | 1.68           |
|                                                              | 675  | 6.23                                           | 5.73   | 1.27           | 8.27           | 7.60   | 1.31           | 10.59          | 9.65   | 1.36           | 13.52          | 12.00  | 1.42           | 16.07          | 14.62  | 1.47           | 18.89          | 18.89  | 1.52           | 22.04          | 22.04  | 1.58           | 25.50          | 25.50  | 1.65           |
| GH5SAN524**A Outdoor Section With FJ5AN*B24L* Indoor Section |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
| 65 (18.3)                                                    | 665  | 8.52                                           | 7.84   | 1.43           | 10.71          | 9.84   | 1.47           | 13.36          | 12.18  | 1.52           | 16.70          | 14.83  | 1.60           | 19.74          | 17.96  | 1.67           | 23.10          | 23.10  | 1.75           | 26.61          | 26.61  | 1.83           | 29.51          | 29.51  | 1.89           |
|                                                              | 800  | 8.76                                           | 8.06   | 1.45           | 10.98          | 10.09  | 1.47           | 13.67          | 12.46  | 1.52           | 16.99          | 15.09  | 1.58           | 20.06          | 18.25  | 1.63           | 23.51          | 23.51  | 1.70           | 26.78          | 26.78  | 1.75           | 29.62          | 29.62  | 1.81           |
|                                                              | 900  | 8.92                                           | 8.20   | 1.46           | 11.15          | 10.25  | 1.49           | 13.86          | 12.64  | 1.52           | 17.14          | 15.23  | 1.58           | 20.26          | 18.43  | 1.62           | 23.75          | 23.75  | 1.68           | 26.81          | 26.81  | 1.72           | 29.62          | 29.62  | 1.77           |
| 70.0 (21.1)                                                  | 665  | 8.08                                           | 7.44   | 1.48           | 10.31          | 9.47   | 1.52           | 12.98          | 11.84  | 1.58           | 16.43          | 14.59  | 1.68           | 19.48          | 17.73  | 1.75           | 22.80          | 22.80  | 1.83           | 26.34          | 26.34  | 1.92           | 29.24          | 29.24  | 1.99           |
|                                                              | 800  | 8.31                                           | 7.64   | 1.50           | 10.57          | 9.71   | 1.53           | 13.28          | 12.11  | 1.58           | 16.72          | 14.85  | 1.66           | 19.79          | 18.01  | 1.71           | 23.19          | 23.19  | 1.78           | 26.55          | 26.55  | 1.84           | 29.37          | 29.37  | 1.90           |
|                                                              | 900  | 8.46                                           | 7.78   | 1.51           | 10.73          | 9.86   | 1.54           | 13.47          | 12.28  | 1.59           | 16.89          | 15.00  | 1.65           | 19.98          | 18.18  | 1.70           | 23.43          | 23.43  | 1.77           | 26.61          | 26.61  | 1.81           | 29.39          | 29.39  | 1.86           |
| 75 (23.9)                                                    | 665  | 7.60                                           | 6.99   | 1.53           | 9.90           | 9.10   | 1.58           | 12.61          | 11.49  | 1.65           | 15.71          | 13.96  | 1.74           | 19.24          | 17.50  | 1.84           | 22.50          | 22.50  | 1.93           | 26.06          | 26.06  | 2.02           | 28.96          | 28.96  | 2.08           |
|                                                              | 800  | 7.85                                           | 7.23   | 1.55           | 10.15          | 9.33   | 1.59           | 12.90          | 11.76  | 1.65           | 16.12          | 14.32  | 1.72           | 19.54          | 17.78  | 1.80           | 22.89          | 22.89  | 1.87           | 26.31          | 26.31  | 1.94           | 29.10          | 29.10  | 1.99           |
|                                                              | 900  | 8.00                                           | 7.36   | 1.57           | 10.31          | 9.47   | 1.61           | 13.07          | 11.92  | 1.66           | 16.44          | 14.60  | 1.72           | 19.71          | 17.94  | 1.79           | 23.12          | 23.12  | 1.85           | 26.39          | 26.39  | 1.91           | 29.13          | 29.13  | 1.95           |
| GH5SAN530**A Outdoor Section With FJ5AN*B30L* Indoor Section |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
| 65 (18.3)                                                    | 915  | 10.87                                          | 10.00  | 1.69           | 13.99          | 12.85  | 1.74           | 17.36          | 15.83  | 1.79           | 21.52          | 19.12  | 1.88           | 25.19          | 22.92  | 1.94           | 29.23          | 29.23  | 2.02           | 33.77          | 33.77  | 2.13           | 38.80          | 38.80  | 2.24           |
|                                                              | 1000 | 10.98                                          | 10.10  | 1.71           | 14.14          | 13.00  | 1.75           | 17.54          | 15.99  | 1.80           | 21.71          | 19.28  | 1.87           | 25.39          | 23.10  | 1.93           | 29.49          | 29.49  | 2.00           | 34.10          | 34.10  | 2.10           | 38.98          | 38.98  | 2.19           |
|                                                              | 1125 | 11.18                                          | 10.28  | 1.73           | 14.34          | 13.18  | 1.76           | 17.77          | 16.21  | 1.81           | 21.93          | 19.48  | 1.87           | 25.64          | 23.33  | 1.92           | 29.79          | 29.79  | 1.99           | 34.50          | 34.50  | 2.08           | 39.10          | 39.10  | 2.15           |
| 70.0 (21.1)                                                  | 915  | 10.35                                          | 9.52   | 1.76           | 13.50          | 12.41  | 1.81           | 16.87          | 15.38  | 1.87           | 20.58          | 18.28  | 1.94           | 24.82          | 22.58  | 2.03           | 28.80          | 28.80  | 2.12           | 33.26          | 33.26  | 2.23           | 38.28          | 38.28  | 2.35           |
|                                                              | 1000 | 10.52                                          | 9.68   | 1.77           | 13.66          | 12.55  | 1.82           | 17.05          | 15.55  | 1.87           | 20.82          | 18.50  | 1.94           | 25.02          | 22.76  | 2.02           | 29.05          | 29.05  | 2.10           | 33.58          | 33.58  | 2.20           | 38.50          | 38.50  | 2.30           |
|                                                              | 1125 | 10.69                                          | 9.84   | 1.79           | 13.86          | 12.74  | 1.84           | 17.29          | 15.76  | 1.88           | 21.16          | 18.79  | 1.95           | 25.27          | 22.99  | 2.02           | 29.36          | 29.36  | 2.09           | 33.96          | 33.96  | 2.18           | 38.66          | 38.66  | 2.26           |
| 75 (23.9)                                                    | 915  | 9.84                                           | 9.05   | 1.83           | 13.00          | 11.95  | 1.88           | 16.36          | 14.91  | 1.95           | 20.04          | 17.80  | 2.03           | 24.45          | 22.25  | 2.13           | 28.37          | 28.37  | 2.22           | 32.79          | 32.79  | 2.34           | 37.75          | 37.75  | 2.47           |
|                                                              | 1000 | 9.96                                           | 9.17   | 1.84           | 13.16          | 12.09  | 1.90           | 16.54          | 15.08  | 1.95           | 20.26          | 18.00  | 2.02           | 24.65          | 22.43  | 2.12           | 28.61          | 28.61  | 2.20           | 33.08          | 33.08  | 2.31           | 38.00          | 38.00  | 2.42           |
|                                                              | 1125 | 10.17                                          | 9.36   | 1.86           | 13.35          | 12.27  | 1.91           | 16.78          | 15.30  | 1.96           | 20.54          | 18.24  | 2.03           | 24.89          | 22.65  | 2.11           | 28.92          | 28.92  | 2.19           | 33.44          | 33.44  | 2.28           | 38.19          | 38.19  | 2.37           |

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) |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |       |
|-------------------------------------------------------------|------|------------------------------------------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|-------|
|                                                             |      | -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)    |        |                |       |
| EDB                                                         | CFM  | Capacity MBtuh                                 |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† |       |
|                                                             |      | Total                                          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total |
| GH5SAN531**A Outdoor Section With FJ5AN*B30L*Indoor Section |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |       |
| 65 (18.3)                                                   | 830  | 11.83                                          | 10.88  | 1.77           | 14.92          | 13.71  | 1.82           | 18.40          | 16.78  | 1.90           | 21.78          | 19.35  | 1.97           | 25.66          | 23.35  | 2.06           | 30.09          | 30.09  | 2.18           | 35.12          | 35.12  | 2.35           | 40.36          | 40.36  | 2.51           |       |
|                                                             | 1000 | 12.10                                          | 11.13  | 1.79           | 15.25          | 14.02  | 1.84           | 18.71          | 17.05  | 1.89           | 22.16          | 19.69  | 1.95           | 26.14          | 23.79  | 2.03           | 30.68          | 30.68  | 2.14           | 35.71          | 35.71  | 2.27           | 40.70          | 40.70  | 2.42           |       |
|                                                             | 1125 | 12.27                                          | 11.29  | 1.81           | 15.50          | 14.24  | 1.85           | 18.89          | 17.22  | 1.90           | 22.39          | 19.88  | 1.95           | 26.41          | 24.03  | 2.03           | 31.00          | 31.00  | 2.13           | 35.85          | 35.85  | 2.25           | 40.60          | 40.60  | 2.40           |       |
| 70.0 (21.1)                                                 | 830  | 11.44                                          | 10.52  | 1.84           | 14.50          | 13.33  | 1.90           | 18.12          | 16.52  | 1.99           | 21.40          | 19.01  | 2.06           | 25.25          | 22.97  | 2.15           | 29.60          | 29.60  | 2.28           | 34.56          | 34.56  | 2.46           | 39.86          | 39.86  | 2.63           |       |
|                                                             | 1000 | 11.71                                          | 10.78  | 1.86           | 14.83          | 13.63  | 1.91           | 18.42          | 16.79  | 1.98           | 21.81          | 19.37  | 2.04           | 25.72          | 23.40  | 2.12           | 30.18          | 30.18  | 2.24           | 35.23          | 35.23  | 2.39           | 40.24          | 40.24  | 2.53           |       |
|                                                             | 1125 | 11.88                                          | 10.93  | 1.88           | 15.03          | 13.81  | 1.93           | 18.60          | 16.96  | 1.99           | 22.01          | 19.55  | 2.04           | 25.99          | 23.65  | 2.12           | 30.50          | 30.50  | 2.23           | 35.44          | 35.44  | 2.35           | 40.34          | 40.34  | 2.51           |       |
| 75 (23.9)                                                   | 830  | 11.02                                          | 10.14  | 1.91           | 14.07          | 12.93  | 1.98           | 17.80          | 16.23  | 2.07           | 21.06          | 18.70  | 2.15           | 24.84          | 22.60  | 2.26           | 29.12          | 29.12  | 2.39           | 34.01          | 34.01  | 2.57           | 39.37          | 39.37  | 2.76           |       |
|                                                             | 1000 | 11.30                                          | 10.39  | 1.93           | 14.40          | 13.23  | 1.99           | 18.13          | 16.53  | 2.07           | 21.43          | 19.03  | 2.14           | 25.30          | 23.02  | 2.22           | 29.69          | 29.69  | 2.34           | 34.69          | 34.69  | 2.50           | 39.78          | 39.78  | 2.66           |       |
|                                                             | 1125 | 11.47                                          | 10.55  | 1.96           | 14.60          | 13.41  | 2.01           | 18.31          | 16.70  | 2.08           | 21.69          | 19.26  | 2.14           | 25.56          | 23.26  | 2.22           | 30.00          | 30.00  | 2.33           | 34.97          | 34.97  | 2.47           | 39.89          | 39.89  | 2.63           |       |
| GH5SAN536** Outdoor Section With FJ5AN*B36L*Indoor Section  |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |       |
| 65 (18.3)                                                   | 1050 | 14.05                                          | 12.93  | 2.17           | 17.66          | 16.22  | 2.23           | 22.24          | 20.28  | 2.33           | 26.39          | 23.44  | 2.42           | 31.03          | 28.24  | 2.53           | 36.16          | 36.16  | 2.66           | 41.82          | 41.82  | 2.80           | 47.97          | 47.97  | 2.92           |       |
|                                                             | 1200 | 14.30                                          | 13.15  | 2.20           | 17.93          | 16.48  | 2.25           | 22.51          | 20.53  | 2.33           | 26.69          | 23.71  | 2.42           | 31.41          | 28.58  | 2.51           | 36.64          | 36.64  | 2.63           | 42.46          | 42.46  | 2.77           | 48.35          | 48.35  | 2.87           |       |
|                                                             | 1350 | 14.52                                          | 13.36  | 2.23           | 18.18          | 16.70  | 2.27           | 22.75          | 20.74  | 2.35           | 26.96          | 23.94  | 2.42           | 31.73          | 28.88  | 2.51           | 37.05          | 37.05  | 2.62           | 42.96          | 42.96  | 2.75           | 48.53          | 48.53  | 2.84           |       |
| 70.0 (21.1)                                                 | 1050 | 13.52                                          | 12.43  | 2.25           | 17.15          | 15.76  | 2.31           | 21.36          | 19.48  | 2.41           | 26.02          | 23.11  | 2.53           | 30.57          | 27.82  | 2.64           | 35.60          | 35.60  | 2.78           | 41.11          | 41.11  | 2.92           | 47.23          | 47.23  | 3.05           |       |
|                                                             | 1200 | 13.77                                          | 12.67  | 2.27           | 17.43          | 16.02  | 2.33           | 21.80          | 19.88  | 2.42           | 26.32          | 23.38  | 2.52           | 30.95          | 28.16  | 2.63           | 36.08          | 36.08  | 2.75           | 41.73          | 41.73  | 2.88           | 47.70          | 47.70  | 2.99           |       |
|                                                             | 1350 | 13.99                                          | 12.87  | 2.31           | 17.68          | 16.25  | 2.36           | 22.39          | 20.41  | 2.45           | 26.59          | 23.61  | 2.53           | 31.27          | 28.46  | 2.63           | 36.48          | 36.48  | 2.74           | 42.24          | 42.24  | 2.87           | 47.92          | 47.92  | 2.96           |       |
| 75 (23.9)                                                   | 1050 | 12.93                                          | 11.90  | 2.32           | 16.60          | 15.25  | 2.40           | 20.77          | 18.94  | 2.51           | 25.64          | 22.77  | 2.65           | 30.11          | 27.40  | 2.77           | 35.04          | 35.04  | 2.90           | 40.45          | 40.45  | 3.04           | 46.44          | 46.44  | 3.19           |       |
|                                                             | 1200 | 13.18                                          | 12.13  | 2.35           | 16.88          | 15.51  | 2.42           | 21.11          | 19.24  | 2.51           | 25.94          | 23.04  | 2.64           | 30.48          | 27.74  | 2.75           | 35.51          | 35.51  | 2.87           | 41.03          | 41.03  | 3.00           | 47.01          | 47.01  | 3.11           |       |
|                                                             | 1350 | 13.41                                          | 12.34  | 2.38           | 17.13          | 15.75  | 2.45           | 21.40          | 19.51  | 2.53           | 26.20          | 23.27  | 2.64           | 30.80          | 28.03  | 2.74           | 35.90          | 35.90  | 2.85           | 41.51          | 41.51  | 2.99           | 47.29          | 47.29  | 3.08           |       |
| GH5SAN542** Outdoor Section With FJ5AN*C42L*Indoor Section  |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |       |
| 65 (18.3)                                                   | 1240 | 14.60                                          | 13.44  | 2.39           | 18.83          | 17.31  | 2.49           | 23.59          | 21.50  | 2.60           | 28.72          | 25.51  | 2.71           | 34.41          | 31.32  | 2.85           | 40.01          | 40.01  | 2.97           | 46.57          | 46.57  | 3.12           | 54.10          | 54.10  | 3.31           |       |
|                                                             | 1400 | 14.83                                          | 13.64  | 2.41           | 19.08          | 17.53  | 2.50           | 23.85          | 21.75  | 2.60           | 29.10          | 25.85  | 2.70           | 34.74          | 31.61  | 2.82           | 40.44          | 40.44  | 2.92           | 47.13          | 47.13  | 3.07           | 54.64          | 54.64  | 3.22           |       |
|                                                             | 1575 | 15.05                                          | 13.85  | 2.43           | 19.32          | 17.76  | 2.52           | 24.11          | 21.98  | 2.61           | 29.42          | 26.13  | 2.71           | 35.06          | 31.90  | 2.81           | 40.84          | 40.84  | 2.90           | 47.64          | 47.64  | 3.03           | 55.05          | 55.05  | 3.16           |       |
| 70.0 (21.1)                                                 | 1240 | 14.00                                          | 12.88  | 2.50           | 18.26          | 16.78  | 2.61           | 23.04          | 21.01  | 2.73           | 28.15          | 25.00  | 2.85           | 34.01          | 30.95  | 2.99           | 39.50          | 39.50  | 3.11           | 45.93          | 45.93  | 3.27           | 53.38          | 53.38  | 3.48           |       |
|                                                             | 1400 | 14.23                                          | 13.09  | 2.52           | 18.51          | 17.01  | 2.62           | 23.32          | 21.27  | 2.73           | 28.48          | 25.30  | 2.83           | 34.33          | 31.24  | 2.96           | 39.92          | 39.92  | 3.07           | 46.47          | 46.47  | 3.21           | 53.95          | 53.95  | 3.38           |       |
|                                                             | 1575 | 14.46                                          | 13.30  | 2.55           | 18.77          | 17.24  | 2.64           | 23.59          | 21.51  | 2.74           | 28.80          | 25.58  | 2.83           | 34.64          | 31.52  | 2.95           | 40.31          | 40.31  | 3.05           | 46.98          | 46.98  | 3.18           | 54.41          | 54.41  | 3.31           |       |
| 75 (23.9)                                                   | 1240 | 13.37                                          | 12.30  | 2.63           | 17.68          | 16.24  | 2.74           | 22.39          | 20.41  | 2.86           | 27.57          | 24.49  | 2.98           | 33.60          | 30.58  | 3.14           | 38.99          | 38.99  | 3.27           | 45.29          | 45.29  | 3.43           | 52.62          | 52.62  | 3.64           |       |
|                                                             | 1400 | 13.60                                          | 12.51  | 2.65           | 17.94          | 16.49  | 2.75           | 22.67          | 20.67  | 2.86           | 27.90          | 24.78  | 2.97           | 33.93          | 30.87  | 3.12           | 39.39          | 39.39  | 3.22           | 45.82          | 45.82  | 3.37           | 53.25          | 53.25  | 3.55           |       |
|                                                             | 1575 | 13.83                                          | 12.72  | 2.68           | 18.19          | 16.71  | 2.77           | 22.97          | 20.94  | 2.87           | 28.20          | 25.04  | 2.97           | 34.22          | 31.14  | 3.10           | 39.78          | 39.78  | 3.20           | 46.32          | 46.32  | 3.33           | 53.74          | 53.74  | 3.48           |       |
| GH5SAN548** Outdoor Section With FJ5AN*C48L*Indoor Section  |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |       |
| 65 (18.3)                                                   | 1250 | 17.68                                          | 16.27  | 2.83           | 22.95          | 21.09  | 2.96           | 28.59          | 26.07  | 3.10           | 34.91          | 31.00  | 3.25           | 41.53          | 37.79  | 3.41           | 48.12          | 48.12  | 3.57           | 55.75          | 55.75  | 3.77           | 64.50          | 64.50  | 4.04           |       |
|                                                             | 1600 | 18.33                                          | 16.86  | 2.86           | 23.68          | 21.76  | 2.97           | 29.41          | 26.82  | 3.08           | 36.30          | 32.24  | 3.22           | 42.36          | 38.55  | 3.32           | 49.20          | 49.20  | 3.44           | 57.22          | 57.22  | 3.60           | 66.50          | 66.50  | 3.81           |       |
|                                                             | 1800 | 18.63                                          | 17.14  | 2.89           | 24.01          | 22.06  | 3.00           | 29.78          | 27.16  | 3.09           | 36.61          | 32.52  | 3.22           | 42.73          | 38.88  | 3.31           | 49.67          | 49.67  | 3.41           | 57.82          | 57.82  | 3.55           | 67.24          | 67.24  | 3.73           |       |
| 70.0 (21.1)                                                 | 1250 | 16.72                                          | 15.38  | 2.95           | 22.16          | 20.36  | 3.09           | 27.86          | 25.40  | 3.24           | 34.08          | 30.27  | 3.39           | 41.05          | 37.36  | 3.58           | 47.50          | 47.50  | 3.74           | 54.97          | 54.97  | 3.95           | 63.50          | 63.50  | 4.23           |       |
|                                                             | 1600 | 17.42                                          | 16.02  | 2.98           | 22.81          | 20.96  | 3.10           | 28.65          | 26.12  | 3.22           | 34.98          | 31.06  | 3.34           | 41.85          | 38.08  | 3.48           | 48.56          | 48.56  | 3.60           | 56.41          | 56.41  | 3.77           | 65.49          | 65.49  | 3.99           |       |
|                                                             | 1800 | 17.61                                          | 16.20  | 3.01           | 23.19          | 21.31  | 3.12           | 29.01          | 26.45  | 3.23           | 35.48          | 31.51  | 3.34           | 42.22          | 38.42  | 3.46           | 49.02          | 49.02  | 3.57           | 57.01          | 57.01  | 3.72           | 66.28          | 66.28  | 3.92           |       |
| 75 (23.9)                                                   | 1250 | 15.90                                          | 14.63  | 3.08           | 21.27          | 19.55  | 3.24           | 27.07          | 24.68  | 3.38           | 33.36          | 29.63  | 3.55           | 40.57          | 36.92  | 3.76           | 46.89          | 46.89  | 3.93           | 54.17          | 54.17  | 4.15           | 62.50          | 62.50  | 4.43           |       |
|                                                             | 1600 | 16.50                                          | 15.18  | 3.12           | 22.04          | 20.25  | 3.24           | 27.89          | 25.43  | 3.36           | 34.21          | 30.38  | 3.49           | 41.36          | 37.63  | 3.65           | 47.93          | 47.93  | 3.78           | 55.60          | 55.60  | 3.95           | 64.47          | 64.47  | 4.18           |       |
|                                                             | 1800 | 16.78                                          | 15.43  | 3.14           | 22.36          | 20.54  | 3.26           | 28.23          | 25.74  | 3.37           | 34.58          | 30.71  | 3.48           | 41.70          | 37.95  | 3.63           | 48.38          | 48.38  | 3.75           | 56.20          | 56.20  | 3.90           | 65.25          | 65.25  | 4.11           |       |

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) |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
|------------------------------------------------------------|------|------------------------------------------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|----------------|--------|----------------|
|                                                            |      | -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)    |        |                |
| EDB                                                        | CFM  | Capacity MBtuh                                 |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† | Capacity MBtuh |        | Total Sys. kW† |
|                                                            |      | Total                                          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                | Total          | Integ* |                |
| GH5SAN560** Outdoor Section With FJ5AN*D60L*Indoor Section |      |                                                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |                |        |                |
| 65<br>(18.3)                                               | 1775 | 20.98                                          | 19.30  | 3.48           | 26.81          | 24.64  | 3.60           | 33.31          | 30.37  | 3.73           | 41.27          | 36.66  | 3.89           | 48.26          | 43.92  | 4.00           | 56.18          | 56.18  | 4.15           | 64.59          | 64.59  | 4.28           | 72.80          | 72.80  | 4.46           |
|                                                            | 2000 | 21.30                                          | 19.60  | 3.52           | 27.17          | 24.97  | 3.63           | 33.72          | 30.74  | 3.75           | 41.61          | 36.96  | 3.89           | 48.71          | 44.32  | 3.98           | 56.76          | 56.76  | 4.11           | 64.90          | 64.90  | 4.21           | 72.96          | 72.96  | 4.37           |
|                                                            | 2250 | 21.63                                          | 19.90  | 3.57           | 27.52          | 25.29  | 3.67           | 34.11          | 31.10  | 3.77           | 41.97          | 37.28  | 3.90           | 49.14          | 44.71  | 3.99           | 57.21          | 57.21  | 4.09           | 65.10          | 65.10  | 4.18           | 72.93          | 72.93  | 4.31           |
| 70.0<br>(21.1)                                             | 1775 | 20.21                                          | 18.59  | 3.63           | 26.08          | 23.97  | 3.76           | 32.57          | 29.70  | 3.89           | 40.05          | 35.57  | 4.04           | 47.74          | 43.44  | 4.20           | 55.50          | 55.50  | 4.35           | 63.90          | 63.90  | 4.49           | 72.01          | 72.01  | 4.68           |
|                                                            | 2000 | 20.54                                          | 18.90  | 3.67           | 26.45          | 24.31  | 3.79           | 33.00          | 30.08  | 3.90           | 41.18          | 36.57  | 4.07           | 48.17          | 43.84  | 4.17           | 56.07          | 56.07  | 4.31           | 64.24          | 64.24  | 4.42           | 72.23          | 72.23  | 4.58           |
|                                                            | 2250 | 20.87                                          | 19.20  | 3.72           | 26.81          | 24.64  | 3.83           | 33.40          | 30.46  | 3.94           | 41.55          | 36.90  | 4.08           | 48.60          | 44.22  | 4.17           | 56.57          | 56.57  | 4.28           | 64.47          | 64.47  | 4.38           | 72.26          | 72.26  | 4.52           |
| 75<br>(23.9)                                               | 1775 | 19.35                                          | 17.80  | 3.79           | 25.28          | 23.23  | 3.93           | 31.80          | 29.00  | 4.07           | 39.05          | 34.68  | 4.22           | 47.24          | 42.99  | 4.41           | 54.82          | 54.82  | 4.56           | 63.20          | 63.20  | 4.71           | 71.22          | 71.22  | 4.91           |
|                                                            | 2000 | 19.69                                          | 18.11  | 3.83           | 25.66          | 23.58  | 3.96           | 32.23          | 29.39  | 4.08           | 39.56          | 35.13  | 4.22           | 47.65          | 43.36  | 4.37           | 55.38          | 55.38  | 4.51           | 63.56          | 63.56  | 4.63           | 71.47          | 71.47  | 4.80           |
|                                                            | 2250 | 20.02                                          | 18.42  | 3.88           | 26.03          | 23.92  | 3.99           | 32.64          | 29.76  | 4.11           | 40.09          | 35.61  | 4.24           | 48.06          | 43.74  | 4.37           | 55.91          | 55.91  | 4.49           | 63.81          | 63.81  | 4.59           | 71.54          | 71.54  | 4.74           |

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

## Guide Specifications

### General

Air-Cooled, Split-System Heat Pump  
GH5SAN5  
1.5 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 Puron Advance™, and special features required prior to field start-up.

### Unit Cabinet

Unit cabinet will be constructed of galvanized steel and coated with pre-paint.  
Available with dense grill 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 or class F 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 Puron Advance™ refrigerant, POE compressor oil, accumulator, reversing valve and solenoid valve (19 size only).

### 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, \_\_\_\_\_ 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
12. Factory-supplied liquid line solenoid valve must be installed on 19 size HP.