



# HSA6

## QuietComfort™ DXC 1600 Product Specifications

### 16 SEER SINGLE-STAGE AIR CONDITIONER WITH ION® COMMUNICATING SYSTEM

1½ THRU 5 TONS SPLIT SYSTEM — 208 / 230 Volt, 1-phase, 60 Hz

#### REFRIGERATION CIRCUIT

- Scroll compressors on all models
- Filter-drier supplied with every unit for field installation
- External high and low refrigerant service ports
- Copper tube / aluminum fin coil

#### PERFORMANCE

- Communicating, self-configuring operation when used with Ion® System Control (SYST0101CW)
- Outdoor temperature sensor factory installed
- Compressor sound blanket standard
- Isolation compressor grommets

#### EASY TO INSTALL AND SERVICE

- Text based diagnostics with Ion® System Control
- Easy access service valves on all models
- Innovative control box design
- High and low pressure switches
- Only two screws to access control panel
- Factory charged with R-410A refrigerant

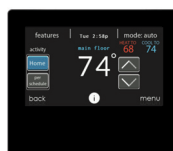
#### BUILT TO LAST

- High gloss, baked-on powder coat finish over galv. steel
- Post-painted (black) coil fins
- Coated, weather-resistant cabinet screws
- Coated inlet grille with 3/8" (10mm) spacing for extra protection
- Corner posts for extra strength and style

#### LIMITED WARRANTY\*

- 5-year No Hassle Replacement™ limited warranty
- 5-year parts limited warranty (include compressor & coil)
  - With timely registration, an additional 5-year parts limited warranty (including compressor and coil)

\* For residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.



SYST0101CW  
Recommended  
(sold separately)



This product has been designed and manufactured to meet ENERGY STAR criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow the manufacturer's refrigerant charging and air flow instructions. Failure to confirm proper charge and airflow may reduce energy efficiency and shorten equipment life.



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).

| Model Number | Size (tons) | Nominal Btu/hr | Min. Circuit Ampacity | Max. Fuse or Breaker | Operating Dimensions height x width x depth in. (mm) | Ship / Operating Weight lbs. (kg) |
|--------------|-------------|----------------|-----------------------|----------------------|------------------------------------------------------|-----------------------------------|
| HSA618GKA    | 1½          | 18,000         | 11.8                  | 20                   | 28-9/16 x 31-3/16 x 31-3/16<br>(726 x 792 x 792)     | 213 / 176<br>(96 / 80)            |
| HSA624GKA    | 2           | 24,000         | 17.6                  | 25                   | 28-9/16 x 31-3/16 x 31-3/16<br>(726 x 792 x 792)     | 212 / 176<br>(96 / 80)            |
| HSA630GKA    | 2½          | 30,000         | 16.7                  | 25                   | 32 x 31-3/16 x 31-3/16<br>(813 x 792 x 792)          | 223 / 187<br>(101 / 85)           |
| HSA636GKA    | 3           | 36,000         | 18.1                  | 30                   | 29-7/8 x 35 x 35<br>(760 x 889 x 889)                | 243 / 200<br>(110 / 91)           |
| HSA642GKA    | 3½          | 42,000         | 23.6                  | 40                   | 40-1/8 x 35 x 35<br>(1019 x 889 x 889)               | 297 / 253<br>(135 / 115)          |
| HSA648GKA    | 4           | 48,000         | 26.1                  | 40                   | 40-1/8 x 35 x 35<br>(1019 x 889 x 889)               | 340 / 295<br>(155 / 114)          |
| HSA660GKB    | 5           | 60,000         | 32.4                  | 50                   | 46-7/8 x 35 x 35<br>(1191 x 889 x 889)               | 374 / 327<br>(169 / 148)          |

| OUTDOOR UNIT MODEL NUMBER IDENTIFICATION GUIDE (single phase)                                                                                                                                                                  |   |   |   |   |      |   |   |   |    |    |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|------|---|---|---|----|----|----|
| Digit Position:                                                                                                                                                                                                                | 1 | 2 | 3 | 4 | 5, 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Example Part Number:                                                                                                                                                                                                           | H | S | A | 6 | 18   | G | K | A | 1  | 0  | 0  |
| H = Heil Mainline<br>N = Heil Entry                                                                                                                                                                                            |   |   |   |   |      |   |   |   |    |    |    |
| S = Single Stage Communicating<br>KEY CHARACTERISTIC                                                                                                                                                                           |   |   |   |   |      |   |   |   |    |    |    |
| A = Air Conditioner<br>H = Heat Pump<br>TYPE                                                                                                                                                                                   |   |   |   |   |      |   |   |   |    |    |    |
| 3 = 13 SEER<br>4 = 14 SEER<br>5 = 15 SEER<br>6 = 16 SEER<br>7 = 17 SEER<br>8 = 18 SEER<br>NOMINAL EFFICIENCY                                                                                                                   |   |   |   |   |      |   |   |   |    |    |    |
| 18 = 18,000 BTUH = 1½ tons<br>24 = 24,000 BTUH = 2 tons<br>30 = 30,000 BTUH = 2½ tons<br>36 = 36,000 BTUH = 3 tons<br>42 = 42,000 BTUH = 3½ tons<br>48 = 48,000 BTUH = 4 tons<br>60 = 60,000 BTUH = 5 tons<br>NOMINAL CAPACITY |   |   |   |   |      |   |   |   |    |    |    |
| A = Standard Grille<br>G = Coil Guard Grille<br>C = Coastal<br>FEATURES                                                                                                                                                        |   |   |   |   |      |   |   |   |    |    |    |
| K = 208/230-1-60<br>VOLTAGE                                                                                                                                                                                                    |   |   |   |   |      |   |   |   |    |    |    |
| Sales Code                                                                                                                                                                                                                     |   |   |   |   |      |   |   |   |    |    |    |
| Engineering Revision                                                                                                                                                                                                           |   |   |   |   |      |   |   |   |    |    |    |
| Extra Digit                                                                                                                                                                                                                    |   |   |   |   |      |   |   |   |    |    |    |
| Extra Digit                                                                                                                                                                                                                    |   |   |   |   |      |   |   |   |    |    |    |

| ACCESSORIES PART NUMBER IDENTIFICATION GUIDE               |   |   |   |   |   |      |      |        |  |
|------------------------------------------------------------|---|---|---|---|---|------|------|--------|--|
| Digit Position:                                            | 1 | 2 | 3 | 4 | 5 | 6, 7 | 8, 9 | 10, 11 |  |
| Example Part Number:                                       | N | A | S | A | 0 | 01   | 01   | CH     |  |
| N = Non-Branded                                            |   |   |   |   |   |      |      |        |  |
| A = Accessory<br>PRODUCT GROUP                             |   |   |   |   |   |      |      |        |  |
| S = Split System (AC & HP)<br>KIT USAGE                    |   |   |   |   |   |      |      |        |  |
| A = Original<br>B = 2nd Generation<br>MAJOR SERIES         |   |   |   |   |   |      |      |        |  |
| 0 = Generic or Not Applicable<br>4 = R-410A<br>REFRIGERANT |   |   |   |   |   |      |      |        |  |
| Product Identifier Number                                  |   |   |   |   |   |      |      |        |  |
| Package Quantity                                           |   |   |   |   |   |      |      |        |  |
| Type of Kit (Example: CH = Crankcase Heater)               |   |   |   |   |   |      |      |        |  |

| 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 | Lbs              | Kgs   | INCH            | MM    | INCH                          | MM    |                 |       |       |       |       |       |       |       |       |        |        |    |
|      | *SA618GKA100 | 1                          | Y  | N    | N  | 31   | 792.5 | 28   | 729.3  | 34   | 191 | 6    | 9/16 | 166.1 | 24 | 11/16 | 626.3 | 9    | 1/8 | 231.3 | 5/16 | 7.9  | 3  | 76.2 | 15 | 1/2              | 393.7 | 17              | 431.8 | 14                            | 355.6 | 176             | 79.8  | 213   | 96.6  | 33    | 5/16  | 846.6 | 33    | 3/16  | 843.1  | MM     |    |
|      | *SA624GKA100 | 1                          | Y  | N    | N  | 31   | 792.5 | 28   | 729.3  | 34   | 191 | 6    | 9/16 | 166.1 | 24 | 11/16 | 626.3 | 9    | 1/8 | 231.3 | 5/16 | 7.9  | 3  | 76.2 | 16 | 1/4              | 412.8 | 15              | 1/4   | 387.4                         | 14    | 355.6           | 176   | 79.8  | 213   | 96.6  | 33    | 5/16  | 846.6 | 33    | 3/16   | 843.1  | MM |
|      | *SA630GKA100 | 1                          | Y  | N    | N  | 31   | 792.5 | 32   | 815.6  | 34   | 191 | 6    | 9/16 | 166.1 | 24 | 11/16 | 626.3 | 9    | 1/8 | 231.3 | 5/16 | 7.9  | 3  | 76.2 | 15 | 3/8              | 400.1 | 14              | 3/4   | 374.7                         | 187   | 84.8            | 223   | 101.2 | 33    | 5/16  | 846.6 | 36    | 5/8   | 929.5 | MM     |        |    |
|      | *SA636GKA100 | 1                          | Y  | N    | N  | 35   | 889.0 | 30   | 767.2  | 78   | 222 | 6    | 9/16 | 166.1 | 28 | 7/16  | 722.8 | 9    | 1/8 | 231.3 | 5/16 | 7.9  | 3  | 76.2 | 16 | 3/4              | 425.5 | 14              | 355.6 | 200                           | 90.7  | 243             | 110.2 | 37    | 1/8   | 943.1 | 36    | 5/8   | 929.5 | MM    |        |        |    |
|      | *SA642GKA100 | 1                          | Y  | N    | N  | 35   | 889.0 | 40   | 1026.3 | 78   | 222 | 6    | 9/16 | 166.1 | 28 | 7/16  | 722.8 | 9    | 1/8 | 231.3 | 5/16 | 7.9  | 3  | 76.2 | 17 | 431.8            | 16    | 408.4           | 18    | 1/2                           | 469.9 | 253             | 114.8 | 297   | 134.7 | 37    | 1/8   | 943.1 | 45    | 1/4   | 1149.1 | MM     |    |
|      | *SA648GKA100 | 1                          | Y  | N    | N  | 35   | 889.0 | 47   | 1199.0 | 78   | 222 | 6    | 9/16 | 166.1 | 28 | 7/16  | 722.8 | 9    | 1/8 | 231.3 | 5/16 | 7.9  | 3  | 76.2 | 17 | 1/2              | 444.5 | 16              | 1/4   | 412.8                         | 18    | 457.2           | 295   | 133.8 | 340   | 154.2 | 37    | 1/8   | 943.1 | 45    | 1/4    | 1149.1 | MM |
|      | *SA660GKA100 | 1                          | Y  | N    | N  | 35   | 889.0 | 47   | 1199.0 | 78   | 222 | 6    | 9/16 | 166.1 | 28 | 7/16  | 722.8 | 9    | 1/8 | 231.3 | 5/16 | 7.9  | 3  | 76.2 | 17 | 1/2              | 444.5 | 17              | 1/4   | 438.2                         | 21    | 533.4           | 327   | 148.3 | 374   | 169.6 | 37    | 1/8   | 943.1 | 52    | 7/16   | 1332.0 | MM |
|      | *SA660GKB101 | 1                          | Y  | N    | N  | 35   | 889.0 | 47   | 1199.0 | 78   | 222 | 6    | 9/16 | 166.1 | 28 | 7/16  | 722.8 | 9    | 1/8 | 231.3 | 5/16 | 7.9  | 3  | 76.2 | 18 | 457.2            | 18    | 457.2           | 19    | 1/2                           | 495.3 | 299             | 135.6 | 336   | 152.4 | 37    | 1/8   | 943.1 | 52    | 7/16  | 1332.0 | MM     |    |

AIR DISCHARGE

F

I

J

E

H

G

D

C

B

A

FIELD POWER SUPPLY CONN.  
Ø 7/8" (Ø 22.2) HOLE WITH  
Ø 1 1/8" (Ø 28.6) KNOCKOUT

FIELD CONTROL SUPPLY CONN.  
Ø 7/8" (Ø 22.2) HOLE

Ø 3/8" (Ø 9.5)  
LIQUID LINE CONN.

3 3/4" 3 1/2"  
(96.0) (88.9)

Ø C VAPOR LINE CONN.

Y S.O.

X S.O.

1 13/16"  
(46.7)

1/2"  
(12.7)

2 13/16"  
(71.0)

Ø 3/8" (Ø 9.5) TIEDOWN KNOCKOUTS  
(2) PLACES

AIR IN

AIR IN

AIR IN

AIR DISCHARGE

J

D

E

NOTES:

1. CENTER OF GRAVITY

| UNIT SIZE   | "X"                                                | "Y"                                                  |
|-------------|----------------------------------------------------|------------------------------------------------------|
|             | MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS | MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS |
| -           | 23 1/8 587.3                                       | 17 7/8 454.6                                         |
| -           | 25 3/4 654.0                                       | 20 7/16 518.5                                        |
| 18.24.30    | 31 3/16 792.5                                      | 22 15/16 583.2                                       |
| 36.42.48.60 | 35 889.0                                           | 26 3/4 679.7                                         |

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

SD-5068-4 REV.D

PHYSICAL DATA

| Model Size                 | 18                           | 24             | 30             | 36             | 42             | 48             | 60              |
|----------------------------|------------------------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| Compressor Type            | Scroll                       |                |                |                |                |                |                 |
| REFRIGERANT                | R-410A                       |                |                |                |                |                |                 |
| Control                    | TXV (R-410A Hard shutoff)    |                |                |                |                |                |                 |
| Charge lb (Kg)             | 5.25<br>(2.38)               | 6.00<br>(2.72) | 6.81<br>(3.09) | 7.00<br>(3.18) | 8.62<br>(3.91) | 13.00<br>(5.9) | 14.00<br>(6.35) |
| COND FAN                   | Propeller Type, Direct Drive |                |                |                |                |                |                 |
| Air Discharge              | Vertical                     |                |                |                |                |                |                 |
| Air Qty (CFM)              | 2233                         | 2614           | 2614           | 3223           | 3810           | 4046           | 4700            |
| Motor HP                   | 1/12                         | 1/10           | 1/10           | 1/12           | 1/5            | 1/4            | 1/3             |
| Motor RPM                  | 800                          | 800            | 800            | 800            | 800            | 800            | 815             |
| COND COIL                  |                              |                |                |                |                |                |                 |
| Face Area (Sq ft)          | 15.07                        | 15.07          | 17.22          | 17.58          | 25.12          | 25.12          | 30.14           |
| Fins per In.               | 25                           | 25             | 25             | 25             | 25             | 20             | 20              |
| Rows                       | 1                            | 1              | 1              | 1              | 1              | 2              | 2               |
| Circuits                   | 3                            | 4              | 4              | 4              | 6              | 7              | 12              |
| VALVE CONNECT. (In. ID)    |                              |                |                |                |                |                |                 |
| Vapor                      | 3/4                          | 3/4            | 3/4            | 7/8            | 7/8            | 7/8            | 7/8             |
| Liquid                     | 3/8                          | 3/8            | 3/8            | 3/8            | 3/8            | 3/8            | 3/8             |
| REFRIGERANT TUBES (In. OD) |                              |                |                |                |                |                |                 |
| Rated Vapor*               | 3/4                          |                |                | 7/8            |                |                | 1-1/8           |
| Max Liquid Line            | 3/8"                         |                |                |                |                |                |                 |

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

ELECTRICAL DATA

| UNIT SIZE | V/PH      | OPER VOLTS* |     | COMPR |      | FAN  | MCA  | MAX FUSE**<br>or CKT BRK<br>AMPS |
|-----------|-----------|-------------|-----|-------|------|------|------|----------------------------------|
|           |           | MAX         | MIN | LRA   | RLA  | FLA  |      |                                  |
| 18        | 208/230/1 | 253         | 197 | 48.0  | 9.0  | 0.45 | 11.8 | 20                               |
| 24        |           |             |     | 58.3  | 13.5 | 0.70 | 17.5 | 25                               |
| 30        |           |             |     | 64.0  | 12.8 | 0.70 | 16.7 | 25                               |
| 36        |           |             |     | 77.0  | 14.1 | 0.60 | 18.2 | 30                               |
| 42        |           |             |     | 112.0 | 17.9 | 1.00 | 23.4 | 40                               |
| 48        |           |             |     | 109.0 | 19.9 | 1.20 | 26.1 | 40                               |
| 60        |           |             |     | 152.5 | 23.7 | 2.80 | 32.4 | 50                               |

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

\*\* Time-Delay fuse.

**FLA** – Full Load Amps

**LRA** – Locked Rotor Amps

**MCA** – Minimum Circuit Amps

**RLA** – Rated Load Amps

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

All motors/compressors contain internal overload protection.

Complies with 2007 requirements of ASHRAE Standards 90.1

A-WEIGHTED SOUND POWER (dBA)

| UNIT SIZE | STANDARD<br>RATING | TYPICAL OCTAVE BAND SPECTRUM (without tone adjustment) |      |      |      |      |      |      |
|-----------|--------------------|--------------------------------------------------------|------|------|------|------|------|------|
|           |                    | 125                                                    | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
| 18        | 66                 | 52.0                                                   | 56.5 | 60.5 | 61.5 | 59.0 | 53.5 | 44.5 |
| 24        | 67                 | 51.5                                                   | 58.0 | 61.5 | 62.5 | 59.5 | 54.0 | 47.5 |
| 30        | 68                 | 56.5                                                   | 60.0 | 63.0 | 62.5 | 59.5 | 54.5 | 46.0 |
| 36        | 69                 | 55.5                                                   | 61.0 | 62.0 | 62.5 | 61.0 | 57.0 | 49.0 |
| 42        | 68                 | 53.0                                                   | 60.5 | 62.0 | 63.0 | 60.5 | 58.0 | 51.0 |
| 48        | 70                 | 55.0                                                   | 61.0 | 63.5 | 63.0 | 60.5 | 57.0 | 52.0 |
| 60        | 73                 | 67.0                                                   | 68.0 | 68.0 | 71.0 | 63.0 | 55.0 | 52.0 |

**NOTE:** Tested in accordance with AHRI Standard 270-08 (not listed in AHRI).

**CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)**

| UNIT SIZE | REQUIRED SUBCOOLING °F (°C) |
|-----------|-----------------------------|
| 18        | 10 (5.6)                    |
| 24        | 10 (5.6)                    |
| 30        | 10 (5.6)                    |
| 36        | 10 (5.6)                    |
| 42        | 9 (5.0)                     |
| 48        | 10 (5.6)                    |
| 60        | 9 (5.0)                     |

**REFRIGERANT CHARGE ADJUSTMENTS**

| Liquid Line Size | R-410A Charge oz/ft (g/m)                      |
|------------------|------------------------------------------------|
|                  | 0.60 (17.74)                                   |
| 3/8              | (Factory charge for lineset = 9 oz / 266.16 g) |
| 5/16             | 0.40 (11.83)                                   |
| 1/4              | 0.27 (7.98)                                    |

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz. When using other length or diameter liquid lines, charge adjustments are required per the chart above.

**Charging Formula:**

$[(\text{Lineset oz/ft} \times \text{total length}) - (\text{factory charge for lineset})] = \text{charge adjustment}$

**Example 1:** System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula:  $(.27 \text{ oz/ft} \times 15\text{ft}) - (9 \text{ oz}) = (-4.95) \text{ oz.}$

Net result is to remove 4.95 oz of refrigerant from the system

**Example 2:** System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula:  $(.40 \text{ oz/ft.} \times 45\text{ft}) - (9 \text{ oz.}) = 9 \text{ oz.}$

Net result is to add 9 oz of refrigerant to the system

**NOTE:** Conditions must be favorable for charging by subcooling method. Indoor temperature must be 70°F to 80°F (21.1°C to 26.7°C), and outdoor temperature must be 70°F to 100°F (21.1°C to 37.8°C). If outside these conditions, adjust charge for long line sets by weigh-in method.

**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. See Accessory Usage Guideline table for required accessories. 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 Air Conditioner systems, the charts below shows when an application requires a TXV and long line accessories due to lineset length.

For Air Conditioner systems, the charts below show when an application is considered Long Line:

**AC with R-410A Refrigerant Long Line Description ft (m) Beyond these lengths, a TXV is required**

| Total Length                        | Outdoor Unit Above or Below Indoor Unit |
|-------------------------------------|-----------------------------------------|
| TXV required beyond 50 ft. (15.2 m) | TXV required beyond 20 ft. (6.1 m)      |

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

| Liquid Line Size | Units On Same Level                          | Outdoor Below Indoor                         | Outdoor Above Indoor |
|------------------|----------------------------------------------|----------------------------------------------|----------------------|
| 1/4 + TXV        | No accessories needed within allowed lengths | No accessories needed within allowed lengths | 175 (53.3)           |
| 5/16 + TXV       | 120 (36.6)                                   | 50 (15.2) vertical or 120 (36.6) total       | 120 (36.6)           |
| 3/8 + TXV        | 80 (24.4)                                    | 35 (10.7) vertical or 80 (24.4) total        | 80 (24.4)            |

# 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 AC systems with R-410A refrigerant:

## Vapor Line Sizing and Cooling Capacity Losses — R-410A Refrigerant 1-Stage Air Conditioner Applications

| Unit Nominal Size (Btuh)           | Maximum Liquid Line Diameters (In. OD) | Vapor Line Diameters (In. OD) | Cooling Capacity Loss (%)<br>Total Equivalent Line Length ft. (m) |                      |                       |                        |                        |                        |                        |                        |                        |
|------------------------------------|----------------------------------------|-------------------------------|-------------------------------------------------------------------|----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                                    |                                        |                               | 26—50<br>(7.9—15.2)                                               | 51—80<br>(15.5—24.4) | 81—100<br>(24.7—30.5) | 101—125<br>(30.8—38.1) | 126—150<br>(38.4—45.7) | 151—175<br>(46.0—53.3) | 176—200<br>(53.6—61.0) | 201—225<br>(61.3—68.6) | 226—250<br>(68.9—76.2) |
| 18<br>1 Stage<br>AC with<br>R-410A | 3/8                                    | 1/2                           | 1                                                                 | 2                    | 3                     | 5                      | 6                      | 7                      | 8                      | 9                      | 11                     |
|                                    |                                        | 5/8                           | 0                                                                 | 1                    | 1                     | 1                      | 2                      | 2                      | 2                      | 3                      | 3                      |
|                                    |                                        | 3/4                           | 0                                                                 | 0                    | 0                     | 0                      | 1                      | 1                      | 1                      | 1                      | 1                      |
| 24<br>1 Stage<br>AC with<br>R-410A | 3/8                                    | 5/8                           | 0                                                                 | 1                    | 2                     | 2                      | 3                      | 3                      | 4                      | 5                      | 5                      |
|                                    |                                        | 3/4                           | 0                                                                 | 0                    | 1                     | 1                      | 1                      | 1                      | 1                      | 2                      | 2                      |
|                                    |                                        | 7/8                           | 0                                                                 | 0                    | 0                     | 0                      | 0                      | 1                      | 1                      | 1                      | 1                      |
| 30<br>1 Stage<br>AC with<br>R-410A | 3/8                                    | 5/8                           | 1                                                                 | 2                    | 3                     | 3                      | 4                      | 5                      | 6                      | 7                      | 8                      |
|                                    |                                        | 3/4                           | 0                                                                 | 0                    | 1                     | 1                      | 1                      | 2                      | 2                      | 2                      | 3                      |
|                                    |                                        | 7/8                           | 0                                                                 | 0                    | 0                     | 0                      | 1                      | 1                      | 1                      | 1                      | 1                      |
| 36<br>1 Stage<br>AC with<br>R-410A | 3/8                                    | 5/8                           | 1                                                                 | 2                    | 4                     | 5                      | 6                      | 8                      | 9                      | 10                     | 12                     |
|                                    |                                        | 3/4                           | 0                                                                 | 1                    | 1                     | 2                      | 2                      | 3                      | 3                      | 4                      | 4                      |
|                                    |                                        | 7/8                           | 0                                                                 | 0                    | 0                     | 1                      | 1                      | 1                      | 1                      | 2                      | 2                      |
| 42<br>1 Stage<br>AC with<br>R-410A | 3/8                                    | 3/4                           | 0                                                                 | 1                    | 2                     | 2                      | 3                      | 4                      | 4                      | 5                      | 6                      |
|                                    |                                        | 7/8                           | 0                                                                 | 0                    | 1                     | 1                      | 1                      | 2                      | 2                      | 2                      | 3                      |
|                                    |                                        | 1 1/8                         | 0                                                                 | 0                    | 0                     | 0                      | 0                      | 0                      | 0                      | 0                      | 0                      |
| 48<br>1 Stage<br>AC with<br>R-410A | 3/8                                    | 3/4                           | 0                                                                 | 1                    | 2                     | 3                      | 4                      | 5                      | 5                      | 6                      | 7                      |
|                                    |                                        | 7/8                           | 0                                                                 | 0                    | 1                     | 1                      | 2                      | 2                      | 2                      | 3                      | 3                      |
|                                    |                                        | 1 1/8                         | 0                                                                 | 0                    | 0                     | 0                      | 0                      | 0                      | 0                      | 1                      | 1                      |
| 60<br>1 Stage<br>AC with<br>R-410A | 3/8                                    | 3/4                           | 1                                                                 | 2                    | 4                     | 5                      | 6                      | 7                      | 9                      | 10                     | 11                     |
|                                    |                                        | 7/8                           | 0                                                                 | 1                    | 2                     | 2                      | 3                      | 4                      | 4                      | 5                      | 5                      |
|                                    |                                        | 1 1/8                         | 0                                                                 | 0                    | 0                     | 1                      | 1                      | 1                      | 1                      | 1                      | 1                      |

Consult the Long Line Application Guideline document before purchasing/installing line sets.

Applications in shaded area may have height restrictions that limit allowable total equivalent length when outdoor unit is below indoor unit.

| Unit Size | Indoor Model      | Furnace Model | AHRI Standard Ratings |                 |          |              |              |      |
|-----------|-------------------|---------------|-----------------------|-----------------|----------|--------------|--------------|------|
|           |                   |               | Cooling 95° F (35°C)  |                 |          |              |              |      |
|           |                   |               | Capacity              | Factory Enhance | SEER     |              |              | EER  |
|           |                   |               |                       |                 | Standard | W/ Field TDR | W/ Field TXV |      |
| HSA618GKA | *EN(A,D)4X19*17** |               | 18000                 | TXV             |          | 14.5         |              | 12.0 |
| HSA624GKA | *EN(A,D)4X31*17** |               | 23800                 | TXV             |          | 14.5         |              | 12.0 |
| HSA630GKA | *EN(A,D)4X31*17** |               | 28400                 | TXV             |          | 14.5         |              | 12.0 |
| HSA636GKA | *EN(A,D)4X37*17** |               | 34400                 | TXV             |          | 14.5         |              | 12.0 |
| HSA642GKA | *EN(A,D)4X43*24** |               | 42000                 | TXV             |          | 14.5         |              | 12.0 |
| HSA648GKA | *EN(A,D)4X61*24** |               | 46500                 | TXV             |          | 14.5         |              | 12.5 |
| HSA660GKB | *EN(A,D)4X61*24** |               | 57500                 | TXV             |          | 15.0         |              | 12.5 |

† For coils not listed with a matching furnace or blower, coil rating applies with any indoor blower device.

## 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 Heil database:

<http://www.icpeqp.com/AHRIratings/ratings.aspx?Brand=Heil>

Or scan this QR code:



DETAILED COOLING CAPACITIES#

| EVAPORATOR AIR |                |                |                       | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |                       |                |                       |                |                       |                |                       |                |                       |                       |  |
|----------------|----------------|----------------|-----------------------|---------------------------------------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|----------------|-----------------------|-----------------------|--|
| CFM            | EWB<br>°F (°C) | 75 (23.9)      |                       | 85 (29.4)                                   |                       | 95 (35)        |                       | 105 (40.6)     |                       | 115 (46.1)     |                       | 125 (51.7)     |                       | Total<br>Sys.<br>KW** |  |
|                |                | Capacity MBtuh | Total<br>Sys.<br>KW** | Capacity MBtuh                              | Total<br>Sys.<br>KW** | Capacity MBtuh | Total<br>Sys.<br>KW** | Capacity MBtuh | Total<br>Sys.<br>KW** | Capacity MBtuh | Total<br>Sys.<br>KW** | Capacity MBtuh | Total<br>Sys.<br>KW** |                       |  |
| 525            | 57 (13.9)      | 21.63          | 10.95                 | 20.61                                       | 10.57                 | 19.54          | 10.18                 | 18.41          | 9.76                  | 17.21          | 9.34                  | 15.94          | 8.89                  | 1.97                  |  |
|                | 62 (16.7)      | 19.55          | 13.28                 | 18.63                                       | 12.90                 | 17.65          | 12.51                 | 16.62          | 12.09                 | 15.53          | 11.66                 | 14.37          | 11.21                 | 1.96                  |  |
|                | 63 (17.2)††    | 18.05          | 12.76                 | 17.20                                       | 12.38                 | 16.30          | 11.98                 | 15.33          | 11.57                 | 14.31          | 11.14                 | 13.23          | 10.68                 | 1.96                  |  |
|                | 67 (19.4)      | 17.71          | 15.58                 | 16.88                                       | 15.21                 | 16.01          | 14.81                 | 15.10          | 14.39                 | 14.22          | 14.22                 | 13.36          | 13.36                 | 1.96                  |  |
|                | 72 (22.2)      | 17.06          | 17.06                 | 16.42                                       | 16.42                 | 15.73          | 15.73                 | 14.99          | 14.99                 | 14.20          | 14.20                 | 13.33          | 13.33                 | 1.96                  |  |
| 600            | 57 (13.9)      | 22.11          | 11.53                 | 21.03                                       | 11.14                 | 19.90          | 10.74                 | 18.72          | 10.32                 | 17.48          | 9.88                  | 16.16          | 9.43                  | 2.00                  |  |
|                | 62 (16.7)      | 19.99          | 14.19                 | 19.02                                       | 13.81                 | 18.00          | 13.40                 | 16.92          | 12.98                 | 15.79          | 12.54                 | 14.58          | 12.08                 | 1.99                  |  |
|                | 63 (17.2)††    | 18.48          | 13.61                 | 17.58                                       | 13.22                 | 16.63          | 12.82                 | 15.63          | 12.39                 | 14.56          | 11.95                 | 13.44          | 11.49                 | 1.98                  |  |
|                | 67 (19.4)      | 18.18          | 16.82                 | 17.33                                       | 16.42                 | 16.46          | 16.46                 | 15.67          | 15.67                 | 14.81          | 14.81                 | 13.88          | 13.88                 | 1.99                  |  |
|                | 72 (22.2)      | 17.88          | 17.88                 | 17.18                                       | 17.18                 | 16.44          | 16.44                 | 15.64          | 15.64                 | 14.79          | 14.79                 | 13.86          | 13.86                 | 1.99                  |  |
| 675            | 57 (13.9)      | 22.46          | 12.08                 | 21.34                                       | 11.68                 | 20.17          | 11.27                 | 18.95          | 10.85                 | 17.66          | 10.41                 | 16.31          | 9.95                  | 2.03                  |  |
|                | 62 (16.7)      | 20.34          | 15.07                 | 19.32                                       | 14.67                 | 18.26          | 14.26                 | 17.15          | 13.83                 | 15.98          | 13.38                 | 14.75          | 12.91                 | 2.02                  |  |
|                | 63 (17.2)††    | 18.80          | 14.52                 | 17.86                                       | 14.03                 | 16.88          | 13.62                 | 15.84          | 13.18                 | 14.75          | 12.73                 | 13.60          | 12.25                 | 2.01                  |  |
|                | 67 (19.4)      | 18.61          | 18.52                 | 17.85                                       | 17.85                 | 17.05          | 17.05                 | 16.21          | 16.21                 | 15.30          | 15.30                 | 14.32          | 14.32                 | 2.01                  |  |
|                | 72 (22.2)      | 18.57          | 18.57                 | 17.82                                       | 17.82                 | 17.03          | 17.03                 | 16.18          | 16.18                 | 15.27          | 15.27                 | 14.30          | 14.30                 | 2.01                  |  |

| EVAPORATOR AIR                                                     |                | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |       |                       |                |       |                       |                |       |                       |                |       |                       |                |       |                       |                |       |                       |
|--------------------------------------------------------------------|----------------|---------------------------------------------|-------|-----------------------|----------------|-------|-----------------------|----------------|-------|-----------------------|----------------|-------|-----------------------|----------------|-------|-----------------------|----------------|-------|-----------------------|
| CFM                                                                | EWB<br>°F (°C) | 75 (23.9)                                   |       |                       | 85 (29.4)      |       |                       | 95 (35)        |       |                       | 105 (40.6)     |       |                       | 115 (46.1)     |       |                       | 125 (51.7)     |       |                       |
|                                                                    |                | Capacity MBtuh                              |       | Total<br>Sys.<br>KW** | Capacity MBtuh |       | Total<br>Sys.<br>KW** | Capacity MBtuh |       | Total<br>Sys.<br>KW** | Capacity MBtuh |       | Total<br>Sys.<br>KW** | Capacity MBtuh |       | Total<br>Sys.<br>KW** | Capacity MBtuh |       | Total<br>Sys.<br>KW** |
|                                                                    |                | Total                                       | Sens† |                       | Total          | Sens† |                       | Total          | Sens† |                       | Total          | Sens† |                       | Total          | Sens† |                       | Total          | Sens† |                       |
| *SA624GKA Outdoor Section With EN(A)D4X31*17**+ TDR Indoor Section |                |                                             |       |                       |                |       |                       |                |       |                       |                |       |                       |                |       |                       |                |       |                       |
| 700                                                                | 57 (13.9)      | 28.62                                       | 14.37 | 1.54                  | 1.73           | 25.76 | 12.66                 | 1.94           | 24.22 | 11.82                 | 2.16           | 22.61 | 10.99                 | 2.41           | 20.92 | 10.17                 | 2.69           |       |                       |
|                                                                    | 62 (16.7)      | 26.01                                       | 17.99 | 1.54                  | 1.73           | 23.39 | 15.71                 | 1.93           | 21.99 | 14.77                 | 2.15           | 20.51 | 13.85                 | 2.40           | 18.97 | 12.93                 | 2.68           |       |                       |
|                                                                    | 63 (17.2)††    | 24.07                                       | 16.91 | 1.55                  | 1.73           | 21.64 | 15.06                 | 1.92           | 20.33 | 14.14                 | 2.14           | 18.96 | 13.23                 | 2.39           | 17.51 | 12.32                 | 2.67           |       |                       |
|                                                                    | 67 (19.4)      | 23.66                                       | 20.76 | 1.55                  | 1.73           | 21.32 | 18.69                 | 1.92           | 20.11 | 20.07                 | 2.14           | 18.99 | 18.99                 | 2.39           | 17.81 | 17.81                 | 2.67           |       |                       |
|                                                                    | 72 (22.2)      | 23.01                                       | 23.01 | 1.55                  | 1.73           | 22.09 | 22.09                 | 1.92           | 20.07 | 20.07                 | 2.20           | 18.96 | 18.96                 | 2.39           | 17.78 | 17.78                 | 2.67           |       |                       |
| 800                                                                | 57 (13.9)      | 29.14                                       | 15.12 | 1.58                  | 1.77           | 26.17 | 13.37                 | 1.98           | 24.57 | 12.50                 | 2.20           | 22.90 | 11.64                 | 2.45           | 21.16 | 10.79                 | 2.73           |       |                       |
|                                                                    | 62 (16.7)      | 26.54                                       | 18.82 | 1.58                  | 1.77           | 23.80 | 16.84                 | 1.97           | 22.34 | 15.87                 | 2.19           | 20.81 | 14.90                 | 2.43           | 19.21 | 13.94                 | 2.72           |       |                       |
|                                                                    | 63 (17.2)††    | 24.59                                       | 18.05 | 1.58                  | 1.76           | 22.05 | 16.12                 | 1.96           | 20.69 | 15.16                 | 2.18           | 19.26 | 14.21                 | 2.43           | 17.77 | 13.26                 | 2.71           |       |                       |
|                                                                    | 67 (19.4)      | 24.26                                       | 22.42 | 1.58                  | 1.76           | 22.04 | 22.04                 | 1.96           | 20.92 | 20.92                 | 2.18           | 19.73 | 19.73                 | 2.43           | 18.47 | 18.47                 | 2.71           |       |                       |
|                                                                    | 72 (22.2)      | 24.05                                       | 24.05 | 1.58                  | 1.76           | 22.00 | 22.00                 | 1.96           | 20.89 | 20.89                 | 2.18           | 19.71 | 19.71                 | 2.43           | 18.45 | 18.45                 | 2.71           |       |                       |
| 900                                                                | 57 (13.9)      | 29.51                                       | 15.85 | 1.62                  | 1.81           | 26.46 | 14.05                 | 2.02           | 24.81 | 13.15                 | 2.24           | 23.10 | 12.27                 | 2.49           | 21.31 | 11.39                 | 2.77           |       |                       |
|                                                                    | 62 (16.7)      | 26.93                                       | 20.00 | 1.62                  | 1.80           | 24.10 | 17.94                 | 2.01           | 22.60 | 16.92                 | 2.23           | 21.03 | 15.91                 | 2.47           | 19.40 | 14.90                 | 2.75           |       |                       |
|                                                                    | 63 (17.2)††    | 24.97                                       | 19.15 | 1.62                  | 1.80           | 22.35 | 17.14                 | 2.00           | 20.95 | 16.14                 | 2.22           | 19.49 | 15.15                 | 2.47           | 17.97 | 14.15                 | 2.75           |       |                       |
|                                                                    | 67 (19.4)      | 24.96                                       | 24.96 | 1.62                  | 1.80           | 22.77 | 22.77                 | 2.00           | 21.59 | 21.59                 | 2.22           | 20.34 | 20.34                 | 2.47           | 19.00 | 19.00                 | 2.75           |       |                       |
|                                                                    | 72 (22.2)      | 24.92                                       | 24.92 | 1.62                  | 1.80           | 22.74 | 22.74                 | 2.00           | 21.56 | 21.56                 | 2.22           | 20.31 | 20.31                 | 2.47           | 18.98 | 18.98                 | 2.75           |       |                       |

See notes on pg. 10

## DETAILED COOLING CAPACITIES# CONTINUED

| EVAPORATOR AIR                                                     |             | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                 |                |                 |                |                 |
|--------------------------------------------------------------------|-------------|---------------------------------------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|-----------------|----------------|-----------------|----------------|-----------------|
| CFM                                                                | EWB °F (°C) | 75 (23.9)                                   |                 | 85 (29.4)      |                 | 95 (35)        |                 |                | 105 (40.6)      |                |                 | 115 (46.1)     |                 | 125 (51.7)     |                 | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** |
|                                                                    |             | Capacity MBtuh                              | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** |                 |                |                 |                |                 |
| *SA330GKA Outdoor Section With EN(A,D)4X31*17**+TDR Indoor Section |             |                                             |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                 |                |                 |                |                 |
| 900                                                                | 57 (13.9)   | 34.12                                       | 17.11           | 1.85           | 16.70           | 2.08           | 30.88           | 16.26          | 2.34            | 29.15          | 15.80           | 2.64           | 27.28           | 15.28          | 2.99            | 25.26           | 14.70          | 3.40            | 3.40           |                 |
|                                                                    | 62 (16.7)   | 31.02                                       | 21.15           | 1.86           | 20.76           | 2.09           | 28.06           | 20.35          | 2.35            | 26.46          | 19.90           | 2.65           | 24.74           | 19.40          | 3.00            | 22.87           | 18.83          | 3.40            | 3.40           |                 |
|                                                                    | 63 (17.2)†  | 28.79                                       | 20.32           | 1.87           | 19.93           | 2.09           | 26.03           | 19.51          | 2.35            | 24.52          | 19.04           | 2.65           | 22.89           | 18.52          | 3.00            | 21.12           | 17.93          | 3.40            | 3.40           |                 |
|                                                                    | 67 (19.4)   | 28.37                                       | 25.13           | 1.87           | 24.75           | 2.09           | 25.78           | 25.70          | 2.35            | 24.55          | 24.55           | 2.65           | 23.21           | 23.21          | 3.00            | 21.75           | 21.75          | 3.40            | 3.40           |                 |
|                                                                    | 72 (22.2)   | 27.93                                       | 27.93           | 1.87           | 26.86           | 2.09           | 25.73           | 25.73          | 2.35            | 24.51          | 24.51           | 2.65           | 23.18           | 23.18          | 3.00            | 21.72           | 21.72          | 3.40            | 3.40           |                 |
|                                                                    | 75 (13.9)   | 34.56                                       | 17.82           | 1.89           | 32.92           | 2.11           | 31.23           | 16.97          | 2.38            | 29.45          | 16.51           | 2.68           | 27.53           | 15.99          | 3.03            | 25.46           | 15.41          | 3.44            | 3.44           |                 |
| 1000                                                               | 62 (16.7)   | 31.45                                       | 22.30           | 1.90           | 29.95           | 2.12           | 28.40           | 21.50          | 2.38            | 26.76          | 21.05           | 2.68           | 25.00           | 20.54          | 3.03            | 23.09           | 19.97          | 3.44            | 3.44           |                 |
|                                                                    | 63 (17.2)†  | 29.21                                       | 21.39           | 1.90           | 27.81           | 2.13           | 26.36           | 20.57          | 2.39            | 24.81          | 20.10           | 2.69           | 23.15           | 19.58          | 3.04            | 21.35           | 18.98          | 3.44            | 3.44           |                 |
|                                                                    | 67 (19.4)   | 28.93                                       | 28.68           | 1.90           | 27.74           | 2.13           | 26.55           | 26.55          | 2.39            | 25.27          | 25.27           | 2.69           | 23.88           | 23.88          | 3.03            | 22.35           | 22.35          | 3.44            | 3.44           |                 |
|                                                                    | 72 (22.2)   | 28.84                                       | 28.84           | 1.90           | 27.70           | 2.13           | 26.52           | 26.52          | 2.39            | 25.23          | 25.23           | 2.69           | 23.85           | 23.85          | 3.03            | 22.32           | 22.32          | 3.44            | 3.44           |                 |
|                                                                    | 57 (13.9)   | 34.98                                       | 18.68           | 1.93           | 33.28           | 18.26          | 31.54           | 17.83          | 2.42            | 29.70          | 17.36           | 2.73           | 27.74           | 16.84          | 3.08            | 25.63           | 16.26          | 3.49            | 3.49           |                 |
|                                                                    | 62 (16.7)   | 31.86                                       | 23.68           | 1.94           | 30.31           | 23.29          | 28.73           | 22.88          | 2.43            | 27.04          | 22.43           | 2.73           | 25.25           | 21.91          | 3.08            | 23.32           | 21.32          | 3.49            | 3.49           |                 |
| 1125                                                               | 63 (17.2)†  | 29.61                                       | 22.67           | 1.94           | 28.68           | 2.17           | 26.68           | 21.85          | 2.43            | 25.10          | 21.38           | 2.73           | 23.41           | 20.84          | 3.08            | 21.59           | 20.22          | 3.49            | 3.49           |                 |
|                                                                    | 67 (19.4)   | 29.84                                       | 27.38           | 1.94           | 27.38           | 2.17           | 26.83           | 26.83          | 2.43            | 26.02          | 26.02           | 2.73           | 24.56           | 24.56          | 3.08            | 22.96           | 22.96          | 3.49            | 3.49           |                 |
|                                                                    | 72 (22.2)   | 29.80                                       | 29.80           | 1.94           | 28.59           | 2.17           | 27.34           | 27.34          | 2.43            | 25.99          | 25.99           | 2.73           | 24.53           | 24.53          | 3.08            | 22.93           | 22.93          | 3.49            | 3.49           |                 |
|                                                                    |             |                                             |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                 |                |                 |                |                 |
| EVAPORATOR AIR                                                     |             | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                 |                |                 |                |                 |
| CFM                                                                | EWB °F (°C) | 75 (23.9)                                   |                 | 85 (29.4)      |                 | 95 (35)        |                 |                | 105 (40.6)      |                |                 | 115 (46.1)     |                 | 125 (51.7)     |                 | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** |
|                                                                    |             | Capacity MBtuh                              | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** |                 |                |                 |                |                 |
| *SA632GKA Outdoor Section With EN(A,D)4X37*17**+TDR Indoor Section |             |                                             |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                |                 |                 |                |                 |                |                 |
| 1050                                                               | 57 (13.9)   | 41.79                                       | 21.33           | 2.30           | 39.58           | 20.21          | 2.55            | 37.29          | 19.10           | 2.83           | 34.92           | 17.98          | 3.14            | 32.46          | 16.86           | 3.51            | 29.88          | 15.74           | 3.93           | 3.93            |
|                                                                    | 62 (16.7)   | 37.98                                       | 26.27           | 2.28           | 35.95           | 25.04          | 2.53            | 33.86          | 23.81           | 2.81           | 31.68           | 22.58          | 3.12            | 29.42          | 21.34           | 3.49            | 27.06          | 20.10           | 3.92           | 3.92            |
|                                                                    | 63 (17.2)†  | 35.23                                       | 25.25           | 2.27           | 33.34           | 24.04          | 2.52            | 31.38          | 22.83           | 2.79           | 29.34           | 21.61          | 3.11            | 27.22          | 20.39           | 3.48            | 25.00          | 19.15           | 3.91           | 3.91            |
|                                                                    | 67 (19.4)   | 34.66                                       | 31.16           | 2.26           | 32.83           | 29.80          | 2.51            | 30.98          | 28.42           | 2.79           | 29.22           | 29.22          | 3.11            | 27.47          | 27.47           | 3.48            | 25.61          | 25.61           | 3.91           | 3.91            |
|                                                                    | 72 (22.2)   | 33.97                                       | 33.97           | 2.26           | 32.44           | 32.44          | 2.51            | 30.85          | 30.85           | 2.79           | 29.18           | 29.18          | 3.11            | 27.42          | 27.42           | 3.48            | 25.57          | 25.57           | 3.91           | 3.91            |
|                                                                    | 57 (13.9)   | 42.51                                       | 27.87           | 2.36           | 40.20           | 21.32          | 2.61            | 37.84          | 20.17           | 2.89           | 35.39           | 19.02          | 3.20            | 32.84          | 17.87           | 3.57            | 30.20          | 16.71           | 3.99           | 3.99            |
| 1200                                                               | 62 (16.7)   | 38.68                                       | 28.11           | 2.34           | 36.57           | 26.83          | 2.59            | 34.40          | 25.54           | 2.87           | 32.16           | 24.26          | 3.18            | 29.82          | 22.96           | 3.55            | 27.40          | 21.67           | 3.97           | 3.97            |
|                                                                    | 63 (17.2)†  | 35.91                                       | 26.96           | 2.33           | 33.94           | 25.70          | 2.58            | 31.91          | 24.44           | 2.85           | 29.80           | 23.17          | 3.17            | 27.61          | 21.89           | 3.54            | 25.35          | 20.60           | 3.97           | 3.97            |
|                                                                    | 67 (19.4)   | 35.54                                       | 35.26           | 2.32           | 33.84           | 33.84          | 2.58            | 32.14          | 32.14           | 2.85           | 30.35           | 30.35          | 3.17            | 28.49          | 28.49           | 3.54            | 26.52          | 26.52           | 3.97           | 3.97            |
|                                                                    | 72 (22.2)   | 35.43                                       | 35.43           | 2.32           | 33.79           | 33.79          | 2.58            | 32.09          | 32.09           | 2.85           | 30.31           | 30.31          | 3.17            | 28.45          | 28.45           | 3.54            | 26.48          | 26.48           | 3.97           | 3.97            |
|                                                                    | 57 (13.9)   | 43.03                                       | 23.57           | 2.42           | 40.66           | 22.38          | 2.67            | 38.23          | 21.20           | 2.95           | 35.70           | 20.02          | 3.26            | 33.10          | 18.84           | 3.63            | 30.39          | 17.65           | 4.04           | 4.04            |
|                                                                    | 62 (16.7)   | 39.19                                       | 29.87           | 2.40           | 37.03           | 28.54          | 2.65            | 34.81          | 27.21           | 2.93           | 32.50           | 25.87          | 3.24            | 30.12          | 24.52           | 3.61            | 27.67          | 23.16           | 4.03           | 4.03            |
| 1350                                                               | 63 (17.2)†  | 36.41                                       | 28.60           | 2.39           | 34.39           | 27.29          | 2.64            | 32.31          | 25.98           | 2.91           | 30.15           | 24.66          | 3.23            | 27.92          | 23.33           | 3.60            | 25.62          | 21.97           | 4.03           | 4.03            |
|                                                                    | 67 (19.4)   | 36.68                                       | 36.68           | 2.39           | 34.95           | 34.95          | 2.64            | 33.16          | 33.16           | 2.92           | 31.28           | 31.28          | 3.24            | 29.32          | 29.32           | 3.60            | 27.25          | 27.25           | 4.03           | 4.03            |
|                                                                    | 72 (22.2)   | 36.63                                       | 36.63           | 2.39           | 34.90           | 34.90          | 2.64            | 33.11          | 33.11           | 2.92           | 31.23           | 31.23          | 3.24            | 29.28          | 29.28           | 3.60            | 27.21          | 27.21           | 4.03           | 4.03            |

See notes on pg. 10

DETAILED COOLING CAPACITIES# CONTINUED

| EVAPORATOR AIR                                                     |                | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |                 |                |                 |                |                 |                |                 |                |                 |                |                 |       |       |       |       |      |
|--------------------------------------------------------------------|----------------|---------------------------------------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|----------------|-----------------|-------|-------|-------|-------|------|
| CFM                                                                | EWB<br>°F (°C) | 75 (23.9)                                   |                 | 85 (29.4)      |                 | 95 (35)        |                 | 105 (40.6)     |                 | 115 (46.1)     |                 | 125 (51.7)     |                 |       |       |       |       |      |
|                                                                    |                | Capacity MBtuh                              | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** |       |       |       |       |      |
| *SA642GKA Outdoor Section With EN(A,D)4X43*24**+TDR Indoor Section |                |                                             |                 |                |                 |                |                 |                |                 |                |                 |                |                 |       |       |       |       |      |
| 1225                                                               | 57 (13.9)      | 49.34                                       | 24.70           | 2.66           | 47.47           | 24.08          | 3.01            | 45.41          | 23.40           | 3.42           | 43.15           | 22.67          | 3.88            | 40.71 | 21.89 | 38.06 | 21.06 | 4.98 |
|                                                                    | 62 (16.7)      | 44.95                                       | 30.44           | 2.64           | 43.25           | 29.86          | 2.99            | 41.39          | 29.23           | 3.38           | 38.33           | 28.54          | 3.84            | 37.11 | 27.79 | 34.71 | 26.99 | 4.94 |
|                                                                    | 63 (17.2)††    | 41.76                                       | 29.29           | 2.63           | 40.20           | 28.71          | 2.97            | 38.47          | 28.07           | 3.36           | 36.56           | 27.37          | 3.82            | 34.50 | 26.62 | 32.25 | 25.80 | 4.91 |
|                                                                    | 67 (19.4)      | 41.12                                       | 36.11           | 2.63           | 39.63           | 35.56          | 2.97            | 38.01          | 34.93           | 3.36           | 36.38           | 36.38          | 3.82            | 34.75 | 34.75 | 32.94 | 32.94 | 4.92 |
|                                                                    | 72 (22.2)      | 40.25                                       | 40.25           | 2.62           | 39.10           | 39.10          | 2.96            | 37.79          | 37.79           | 3.36           | 36.33           | 36.33          | 3.82            | 34.70 | 34.70 | 32.90 | 32.90 | 4.92 |
| 1400                                                               | 57 (13.9)      | 50.16                                       | 25.99           | 2.73           | 48.18           | 25.36          | 3.08            | 46.03          | 24.68           | 3.49           | 43.68           | 23.95          | 3.95            | 41.13 | 23.16 | 38.39 | 22.32 | 5.06 |
|                                                                    | 62 (16.7)      | 45.74                                       | 32.51           | 2.71           | 43.96           | 31.94          | 3.06            | 42.00          | 31.30           | 3.46           | 39.87           | 30.61          | 3.92            | 37.56 | 29.85 | 34.83 | 29.04 | 5.02 |
|                                                                    | 63 (17.2)††    | 42.55                                       | 31.23           | 2.70           | 40.90           | 30.64          | 3.04            | 39.08          | 30.00           | 3.44           | 37.10           | 29.29          | 3.89            | 34.95 | 28.52 | 32.65 | 27.69 | 4.99 |
|                                                                    | 67 (19.4)      | 42.11                                       | 38.86           | 2.70           | 40.72           | 40.72          | 3.04            | 39.30          | 39.30           | 3.44           | 37.71           | 37.71          | 3.90            | 35.95 | 35.95 | 34.01 | 34.01 | 5.01 |
|                                                                    | 72 (22.2)      | 41.92                                       | 41.92           | 2.70           | 40.66           | 40.66          | 3.04            | 39.24          | 39.24           | 3.44           | 37.65           | 37.65          | 3.90            | 35.90 | 35.90 | 33.97 | 33.97 | 5.01 |
| 1575                                                               | 57 (13.9)      | 50.74                                       | 27.21           | 2.80           | 48.70           | 26.58          | 3.16            | 46.46          | 25.90           | 3.56           | 44.03           | 25.16          | 4.03            | 41.41 | 24.38 | 38.60 | 23.54 | 5.14 |
|                                                                    | 62 (16.7)      | 46.32                                       | 34.50           | 2.78           | 44.48           | 33.92          | 3.13            | 42.46          | 33.29           | 3.53           | 40.26           | 32.59          | 3.99            | 37.89 | 31.82 | 35.38 | 30.98 | 5.10 |
|                                                                    | 63 (17.2)††    | 43.12                                       | 33.07           | 2.77           | 41.42           | 32.49          | 3.11            | 39.54          | 31.84           | 3.51           | 37.50           | 31.12          | 3.97            | 35.30 | 30.34 | 32.96 | 29.47 | 5.07 |
|                                                                    | 67 (19.4)      | 43.35                                       | 43.35           | 2.77           | 42.00           | 42.00          | 3.11            | 40.47          | 40.47           | 3.52           | 38.78           | 38.78          | 3.98            | 36.91 | 36.91 | 34.86 | 34.86 | 5.09 |
|                                                                    | 72 (22.2)      | 43.29                                       | 43.29           | 2.77           | 41.94           | 41.94          | 3.11            | 40.42          | 40.42           | 3.52           | 38.73           | 38.73          | 3.98            | 36.87 | 36.87 | 34.82 | 34.82 | 5.09 |
| CONDENSER ENTERING AIR TEMPERATURES °F (°C)                        |                |                                             |                 |                |                 |                |                 |                |                 |                |                 |                |                 |       |       |       |       |      |
| EVAPORATOR AIR                                                     |                | 75 (23.9)                                   |                 | 85 (29.4)      |                 | 95 (35)        |                 | 105 (40.6)     |                 | 115 (46.1)     |                 | 125 (51.7)     |                 |       |       |       |       |      |
| CFM                                                                | EWB<br>°F (°C) | Capacity MBtuh                              | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** | Capacity MBtuh | Total Sys. KW** |       |       |       |       |      |
|                                                                    |                | Total                                       | Sens†           | Total          | Sens†           | Total          | Sens†           | Total          | Sens†           | Total          | Sens†           | Total          | Sens†           |       |       |       |       |      |
| *SA648GKA Outdoor Section With EN(A,D)4X61*24**+TDR Indoor Section |                |                                             |                 |                |                 |                |                 |                |                 |                |                 |                |                 |       |       |       |       |      |
| 1400                                                               | 57 (13.9)      | 56.26                                       | 27.99           | 2.63           | 53.43           | 27.01          | 3.06            | 50.50          | 26.01           | 3.49           | 47.48           | 24.98          | 3.94            | 44.30 | 23.92 | 40.93 | 22.81 | 4.90 |
|                                                                    | 62 (16.7)      | 50.89                                       | 34.43           | 2.79           | 48.38           | 33.47          | 3.18            | 45.78          | 32.48           | 3.58           | 43.08           | 31.47          | 4.00            | 40.25 | 30.42 | 37.23 | 29.31 | 4.92 |
|                                                                    | 63 (17.2)††    | 47.07                                       | 33.02           | 2.89           | 44.78           | 32.08          | 3.26            | 42.40          | 31.11           | 3.64           | 39.93           | 30.12          | 4.03            | 37.32 | 29.07 | 34.55 | 27.98 | 4.92 |
|                                                                    | 67 (19.4)      | 46.35                                       | 40.80           | 2.90           | 44.17           | 39.83          | 3.27            | 41.98          | 41.83           | 3.64           | 39.98           | 39.98          | 4.03            | 37.84 | 37.84 | 35.52 | 35.52 | 4.92 |
|                                                                    | 72 (22.2)      | 45.55                                       | 45.55           | 2.92           | 43.76           | 43.76          | 3.27            | 41.89          | 41.89           | 3.64           | 39.91           | 39.91          | 4.03            | 37.78 | 37.78 | 35.47 | 35.47 | 4.92 |
| 1600                                                               | 57 (13.9)      | 57.28                                       | 29.51           | 2.66           | 54.30           | 28.50          | 3.10            | 51.24          | 27.48           | 3.54           | 48.08           | 26.43          | 4.00            | 44.78 | 25.35 | 41.29 | 24.22 | 4.97 |
|                                                                    | 62 (16.7)      | 51.86                                       | 36.85           | 2.83           | 49.21           | 35.85          | 3.23            | 46.50          | 34.85           | 3.64           | 43.69           | 33.81          | 4.06            | 40.75 | 32.72 | 37.65 | 31.58 | 4.99 |
|                                                                    | 63 (17.2)††    | 47.99                                       | 35.27           | 2.94           | 45.57           | 34.29          | 3.31            | 43.10          | 33.30           | 3.70           | 40.52           | 32.28          | 4.10            | 37.82 | 31.20 | 34.97 | 30.07 | 5.00 |
|                                                                    | 67 (19.4)      | 47.61                                       | 47.41           | 2.94           | 45.63           | 45.63          | 3.31            | 43.61          | 43.61           | 3.69           | 41.47           | 41.47          | 4.09            | 39.16 | 39.16 | 36.67 | 36.67 | 5.00 |
|                                                                    | 72 (22.2)      | 47.50                                       | 47.50           | 2.94           | 45.56           | 45.56          | 3.31            | 43.54          | 43.54           | 3.69           | 41.41           | 41.41          | 4.09            | 39.11 | 39.11 | 36.63 | 36.63 | 5.00 |
| 1800                                                               | 57 (13.9)      | 58.02                                       | 30.95           | 2.70           | 54.93           | 29.93          | 3.15            | 51.76          | 28.88           | 3.60           | 48.49           | 27.82          | 4.06            | 45.10 | 26.72 | 41.51 | 25.58 | 5.05 |
|                                                                    | 62 (16.7)      | 52.58                                       | 39.16           | 2.87           | 49.84           | 38.15          | 3.28            | 47.04          | 37.11           | 3.70           | 44.14           | 36.04          | 4.13            | 41.13 | 34.92 | 37.98 | 33.72 | 5.07 |
|                                                                    | 63 (17.2)††    | 48.67                                       | 37.42           | 2.99           | 46.18           | 36.42          | 3.37            | 43.62          | 35.40           | 3.76           | 40.96           | 34.34          | 4.17            | 38.21 | 33.22 | 4.60  | 35.32 | 5.08 |
|                                                                    | 67 (19.4)      | 49.21                                       | 49.21           | 2.96           | 47.13           | 47.13          | 3.35            | 44.96          | 44.96           | 3.74           | 42.67           | 42.67          | 4.15            | 40.23 | 40.23 | 37.59 | 37.59 | 5.07 |
|                                                                    | 72 (22.2)      | 49.14                                       | 49.14           | 2.97           | 47.06           | 47.06          | 3.35            | 44.90          | 44.90           | 3.74           | 42.61           | 42.61          | 4.15            | 40.18 | 40.18 | 37.55 | 37.55 | 5.07 |

See notes on pg. 10

DETAILED COOLING CAPACITIES# CONTINUED

| EVAPORATOR AIR                                                |                |                | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |                       |                |         |                       |                |       |                       |                |       |                       |                |       |                       |                |            |                       |       |       |       |      |
|---------------------------------------------------------------|----------------|----------------|---------------------------------------------|-----------------------|----------------|---------|-----------------------|----------------|-------|-----------------------|----------------|-------|-----------------------|----------------|-------|-----------------------|----------------|------------|-----------------------|-------|-------|-------|------|
| CFM                                                           | EWB<br>°F (°C) | 75 (23.9)      |                                             | 85 (29.4)             |                | 95 (35) |                       |                |       | 105 (40.6)            |                |       |                       | 115 (46.1)     |       |                       |                | 125 (51.7) |                       |       |       |       |      |
|                                                               |                | Capacity MBtuh |                                             | Total<br>Sys.<br>KW** | Capacity MBtuh |         | Total<br>Sys.<br>KW** | Capacity MBtuh |       | Total<br>Sys.<br>KW** | Capacity MBtuh |       | Total<br>Sys.<br>KW** | Capacity MBtuh |       | Total<br>Sys.<br>KW** | Capacity MBtuh |            | Total<br>Sys.<br>KW** |       |       |       |      |
|                                                               |                | Total          | Sens†                                       | Total                 | Sens‡          | Total   | Sens‡                 | Total          | Sens‡ | Total                 | Sens‡          | Total | Sens‡                 | Total          | Sens‡ | Total                 | Sens‡          | Total      | Sens‡                 |       |       |       |      |
| SA660GKB Outdoor Section With EN(A,D)4X61*24** Indoor Section |                |                |                                             |                       |                |         |                       |                |       |                       |                |       |                       |                |       |                       |                |            |                       |       |       |       |      |
| 1600                                                          | 72 (22.2)      | 67.41          | 34.75                                       | 3.24                  |                | 63.92   | 33.45                 | 3.71           |       | 60.21                 | 32.09          | 4.25  |                       | 56.21          | 30.64 | 4.87                  |                | 51.85      | 29.08                 | 47.29 | 27.48 | 6.39  |      |
|                                                               | 67 (19.4)      | 61.41          | 42.78                                       | 3.23                  |                | 58.31   | 41.51                 | 3.69           |       | 55.00                 | 40.18          | 4.23  |                       | 51.44          | 38.76 | 4.85                  |                | 47.09      | 37.03                 | 43.40 | 35.59 | 6.38  |      |
|                                                               | 63 (17.2)††    | 57.06          | 41.22                                       | 3.21                  |                | 54.24   | 39.98                 | 3.68           |       | 51.22                 | 38.66          | 4.22  |                       | 47.58          | 37.09 | 4.83                  |                | 44.36      | 35.73                 | 40.59 | 34.13 | 6.37  |      |
|                                                               | 62 (16.7)      | 56.01          | 50.59                                       | 3.21                  |                | 53.30   | 49.32                 | 3.68           |       | 50.38                 | 47.94          | 4.22  |                       | 47.07          | 46.25 | 4.83                  |                | 44.15      | 44.15                 | 41.01 | 41.01 | 6.38  |      |
|                                                               | 57 (13.9)      | 54.03          | 54.03                                       | 3.20                  |                | 51.89   | 51.89                 | 3.67           |       | 49.54                 | 49.54          | 4.21  |                       | 46.96          | 46.96 | 4.84                  |                | 44.10      | 44.10                 | 40.97 | 40.97 | 6.38  |      |
| 1750                                                          | 72 (22.2)      | 68.27          | 35.89                                       | 3.27                  |                | 64.69   | 34.58                 | 3.74           |       | 60.82                 | 33.17          | 4.28  |                       | 56.74          | 31.73 | 4.90                  |                | 52.25      | 30.15                 | 47.62 | 28.54 | 6.43  |      |
|                                                               | 67 (19.4)      | 62.25          | 44.63                                       | 3.26                  |                | 59.04   | 43.34                 | 3.73           |       | 55.63                 | 41.99          | 4.27  |                       | 51.94          | 40.54 | 4.89                  |                | 47.24      | 38.68                 | 43.73 | 37.32 | 6.42  |      |
|                                                               | 63 (17.2)††    | 57.89          | 42.95                                       | 3.25                  |                | 54.95   | 41.68                 | 3.72           |       | 51.83                 | 40.35          | 4.25  |                       | 48.43          | 38.90 | 4.88                  |                | 44.79      | 37.36                 | 40.91 | 35.72 | 6.41  |      |
|                                                               | 62 (16.7)      | 56.91          | 53.05                                       | 3.24                  |                | 54.11   | 51.71                 | 3.71           |       | 51.17                 | 50.18          | 4.25  |                       | 48.17          | 48.17 | 4.88                  |                | 45.13      | 45.13                 | 41.87 | 41.87 | 6.42  |      |
|                                                               | 57 (13.9)      | 55.57          | 55.57                                       | 3.24                  |                | 53.30   | 53.30                 | 3.71           |       | 50.83                 | 50.83          | 4.25  |                       | 48.05          | 48.05 | 4.87                  |                | 45.10      | 45.10                 | 41.82 | 41.82 | 6.42  |      |
| 2000                                                          | 72 (22.2)      | 69.42          | 37.71                                       | 3.33                  |                | 65.65   | 36.37                 | 3.80           |       | 61.66                 | 34.96          | 4.34  |                       | 57.41          | 33.51 | 4.96                  |                | 52.76      | 31.87                 | 5.68  | 48.01 | 30.25 | 6.49 |
|                                                               | 67 (19.4)      | 63.34          | 47.60                                       | 3.32                  |                | 59.99   | 46.28                 | 3.79           |       | 56.42                 | 44.88          | 4.33  |                       | 52.60          | 43.39 | 4.95                  |                | 48.44      | 41.76                 | 44.15 | 40.05 | 6.49  |      |
|                                                               | 63 (17.2)††    | 58.94          | 45.70                                       | 3.30                  |                | 55.88   | 44.41                 | 3.77           |       | 52.62                 | 43.03          | 4.31  |                       | 49.13          | 41.55 | 4.94                  |                | 45.33      | 39.94                 | 41.36 | 38.22 | 6.48  |      |
|                                                               | 62 (16.7)      | 58.21          | 56.77                                       | 3.30                  |                | 55.41   | 55.41                 | 3.77           |       | 52.72                 | 52.72          | 4.32  |                       | 49.80          | 49.80 | 4.94                  |                | 46.54      | 46.54                 | 43.04 | 43.04 | 6.48  |      |
|                                                               | 57 (13.9)      | 57.76          | 57.76                                       | 3.30                  |                | 55.32   | 55.32                 | 3.77           |       | 52.66                 | 52.66          | 4.32  |                       | 49.72          | 49.72 | 4.94                  |                | 46.48      | 46.48                 | 43.00 | 43.00 | 6.48  |      |

† Total and sensible capacities are net capacities. Blower motor heat has been subtracted.  
‡ 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).  
# Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240—2008. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.  
\*\* System kw is total of indoor and outdoor unit kilowatts.  
†† 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 Bulb

# CONDENSER ONLY RATINGS\*

| SST<br>°F (°C) |     |       | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |            |            |            |           |             |             |
|----------------|-----|-------|---------------------------------------------|------------|------------|------------|-----------|-------------|-------------|
|                |     |       | 55 (12.78)                                  | 65 (18.33) | 75 (23.89) | 85 (29.44) | 95 (35.0) | 105 (40.56) | 115 (46.11) |
| *SA618GKA      |     |       |                                             |            |            |            |           |             |             |
| 30<br>(-1.11)  | TCG | 14.00 | 13.50                                       | 13.00      | 12.40      | 11.80      | 11.00     | 10.20       | 9.30        |
|                | SDT | 65.20 | 74.80                                       | 84.40      | 94.00      | 103.60     | 113.10    | 122.60      | 132.00      |
|                | KW  | 0.66  | 0.78                                        | 0.91       | 1.04       | 1.20       | 1.37      | 1.58        | 1.83        |
| 35<br>(1.67)   | TCG | 15.60 | 15.00                                       | 14.50      | 13.80      | 13.10      | 12.30     | 11.40       | 10.40       |
|                | SDT | 66.30 | 75.90                                       | 85.40      | 94.90      | 104.40     | 113.80    | 123.20      | 132.70      |
|                | KW  | 0.65  | 0.77                                        | 0.90       | 1.04       | 1.20       | 1.38      | 1.58        | 1.83        |
| 40<br>(4.44)   | TCG | 17.30 | 16.70                                       | 16.10      | 15.30      | 14.60      | 13.70     | 12.70       | 11.70       |
|                | SDT | 67.50 | 76.90                                       | 86.40      | 95.80      | 105.20     | 114.60    | 124.00      | 133.30      |
|                | KW  | 0.64  | 0.77                                        | 0.90       | 1.05       | 1.20       | 1.38      | 1.59        | 1.83        |
| 45<br>(7.22)   | TCG | 19.10 | 18.50                                       | 17.70      | 17.00      | 16.10      | 15.20     | 14.20       | 13.00       |
|                | SDT | 68.70 | 78.00                                       | 87.40      | 96.70      | 106.10     | 115.40    | 124.80      | 134.10      |
|                | KW  | 0.63  | 0.77                                        | 0.90       | 1.05       | 1.21       | 1.39      | 1.59        | 1.83        |
| 50<br>(10.0)   | TCG | 21.10 | 20.30                                       | 19.50      | 18.70      | 17.80      | 16.70     | 15.70       | 14.50       |
|                | SDT | 69.90 | 79.20                                       | 88.40      | 97.70      | 107.00     | 116.30    | 125.60      | 134.80      |
|                | KW  | 0.63  | 0.76                                        | 0.90       | 1.05       | 1.21       | 1.39      | 1.60        | 1.84        |
| 55<br>(12.78)  | TCG | 23.10 | 22.30                                       | 21.50      | 20.50      | 19.50      | 18.40     | 17.20       | 15.90       |
|                | SDT | 71.20 | 80.40                                       | 89.60      | 98.80      | 108.00     | 117.20    | 126.50      | 135.60      |
|                | KW  | 0.62  | 0.76                                        | 0.91       | 1.06       | 1.22       | 1.40      | 1.61        | 1.85        |
| *SA624GKA      |     |       |                                             |            |            |            |           |             |             |
| 30<br>(-1.11)  | TCG | 20.10 | 19.40                                       | 18.50      | 17.60      | 16.70      | 15.60     | 14.40       | 13.10       |
|                | SDT | 66.10 | 75.80                                       | 85.30      | 94.90      | 104.40     | 114.00    | 123.40      | 132.80      |
|                | KW  | 0.97  | 1.13                                        | 1.29       | 1.46       | 1.65       | 1.87      | 2.13        | 2.42        |
| 35<br>(1.67)   | TCG | 22.30 | 21.40                                       | 20.50      | 19.50      | 18.50      | 17.30     | 16.00       | 14.70       |
|                | SDT | 67.20 | 76.80                                       | 86.30      | 95.80      | 105.30     | 114.70    | 124.10      | 133.50      |
|                | KW  | 0.96  | 1.12                                        | 1.29       | 1.46       | 1.66       | 1.87      | 2.13        | 2.42        |
| 40<br>(4.44)   | TCG | 24.60 | 23.70                                       | 22.70      | 21.60      | 20.40      | 19.10     | 17.80       | 16.30       |
|                | SDT | 68.40 | 77.90                                       | 87.30      | 96.70      | 106.10     | 115.50    | 124.80      | 134.10      |
|                | KW  | 0.95  | 1.12                                        | 1.29       | 1.46       | 1.66       | 1.88      | 2.13        | 2.42        |
| 45<br>(7.22)   | TCG | 27.10 | 26.00                                       | 24.90      | 23.70      | 22.40      | 21.10     | 19.60       | 18.00       |
|                | SDT | 69.60 | 79.00                                       | 88.30      | 97.60      | 107.00     | 116.30    | 125.60      | 134.90      |
|                | KW  | 0.94  | 1.11                                        | 1.29       | 1.47       | 1.67       | 1.89      | 2.14        | 2.43        |
| 50<br>(10.0)   | TCG | 29.70 | 28.60                                       | 27.30      | 26.00      | 24.60      | 23.10     | 21.50       | 19.80       |
|                | SDT | 70.80 | 80.10                                       | 89.40      | 98.70      | 107.90     | 117.20    | 126.40      | 135.60      |
|                | KW  | 0.93  | 1.11                                        | 1.29       | 1.47       | 1.67       | 1.90      | 2.15        | 2.43        |
| 55<br>(12.78)  | TCG | 32.50 | 31.20                                       | 29.90      | 28.40      | 26.90      | 25.30     | 23.50       | 21.70       |
|                | SDT | 72.10 | 81.30                                       | 90.50      | 99.70      | 108.90     | 118.10    | 127.30      | 136.40      |
|                | KW  | 0.93  | 1.11                                        | 1.29       | 1.48       | 1.69       | 1.91      | 2.16        | 2.45        |
| *SA30GKA       |     |       |                                             |            |            |            |           |             |             |
| 30<br>(-1.11)  | TCG | 23.80 | 22.90                                       | 21.90      | 20.90      | 19.80      | 18.50     | 17.00       | 15.30       |
|                | SDT | 68.10 | 77.50                                       | 87.00      | 96.40      | 105.80     | 115.10    | 124.40      | 133.60      |
|                | KW  | 1.14  | 1.32                                        | 1.52       | 1.74       | 1.99       | 2.29      | 2.63        | 3.02        |
| 35<br>(1.67)   | TCG | 26.30 | 25.30                                       | 24.30      | 23.10      | 21.90      | 20.50     | 19.00       | 17.20       |
|                | SDT | 69.40 | 78.70                                       | 88.10      | 97.40      | 106.70     | 116.00    | 125.30      | 134.40      |
|                | KW  | 1.15  | 1.33                                        | 1.52       | 1.75       | 2.00       | 2.30      | 2.64        | 3.03        |
| 40<br>(4.44)   | TCG | 29.00 | 27.90                                       | 26.80      | 25.50      | 24.20      | 22.80     | 21.10       | 19.20       |
|                | SDT | 70.70 | 79.90                                       | 89.20      | 98.50      | 107.70     | 117.00    | 126.20      | 135.30      |
|                | KW  | 1.16  | 1.33                                        | 1.53       | 1.75       | 2.01       | 2.31      | 2.65        | 3.05        |
| 45<br>(7.22)   | TCG | 31.90 | 30.70                                       | 29.40      | 28.10      | 26.70      | 25.10     | 23.40       | 21.40       |
|                | SDT | 72.00 | 81.20                                       | 90.40      | 99.60      | 108.80     | 118.00    | 127.20      | 136.30      |
|                | KW  | 1.16  | 1.33                                        | 1.53       | 1.76       | 2.01       | 2.31      | 2.66        | 3.06        |
| 50<br>(10.0)   | TCG | 35.00 | 33.60                                       | 32.30      | 30.80      | 29.30      | 27.60     | 25.70       | 23.60       |
|                | SDT | 73.50 | 82.50                                       | 91.60      | 100.80     | 110.00     | 119.20    | 128.20      | 137.20      |
|                | KW  | 1.16  | 1.33                                        | 1.53       | 1.76       | 2.02       | 2.32      | 2.67        | 3.07        |
| 55<br>(12.78)  | TCG | 38.30 | 36.80                                       | 35.30      | 33.70      | 32.00      | 30.20     | 28.20       | 26.00       |
|                | SDT | 75.00 | 84.00                                       | 93.00      | 102.10     | 111.20     | 120.30    | 129.30      | 138.20      |
|                | KW  | 1.15  | 1.33                                        | 1.53       | 1.76       | 2.02       | 2.32      | 2.67        | 3.08        |

See notes on pg. 13

# CONDENSER ONLY RATINGS\* CONTINUED

| SST<br>°F (°C) |     |       | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |            |            |            |           |             |             |             |
|----------------|-----|-------|---------------------------------------------|------------|------------|------------|-----------|-------------|-------------|-------------|
|                |     |       | 55 (12.78)                                  | 65 (18.33) | 75 (23.89) | 85 (29.44) | 95 (35.0) | 105 (40.56) | 115 (46.11) | 125 (51.67) |
| *SA636GKA      |     |       |                                             |            |            |            |           |             |             |             |
| 30<br>(-1.11)  | TCG | 30.50 | 29.20                                       | 27.80      | 26.30      | 24.70      | 23.00     | 21.20       | 19.20       |             |
|                | SDT | 69.50 | 78.70                                       | 87.90      | 97.20      | 106.60     | 115.90    | 125.20      | 134.50      |             |
|                | KW  | 1.41  | 1.62                                        | 1.85       | 2.10       | 2.37       | 2.69      | 3.07        | 3.51        |             |
| 35<br>(1.67)   | TCG | 33.70 | 32.20                                       | 30.70      | 29.10      | 27.40      | 25.50     | 23.60       | 21.50       |             |
|                | SDT | 70.70 | 79.90                                       | 89.10      | 98.30      | 107.50     | 116.80    | 126.10      | 135.40      |             |
|                | KW  | 1.41  | 1.63                                        | 1.86       | 2.11       | 2.38       | 2.70      | 3.07        | 3.51        |             |
| 40<br>(4.44)   | TCG | 37.10 | 35.50                                       | 33.80      | 32.10      | 30.20      | 28.20     | 26.10       | 23.90       |             |
|                | SDT | 72.10 | 81.20                                       | 90.30      | 99.50      | 108.60     | 117.80    | 127.10      | 136.30      |             |
|                | KW  | 1.42  | 1.64                                        | 1.87       | 2.12       | 2.40       | 2.71      | 3.08        | 3.52        |             |
| 45<br>(7.22)   | TCG | 40.80 | 39.00                                       | 37.20      | 35.30      | 33.20      | 31.10     | 28.80       | 26.40       |             |
|                | SDT | 73.70 | 82.60                                       | 91.60      | 100.70     | 109.80     | 118.90    | 128.10      | 137.20      |             |
|                | KW  | 1.43  | 1.65                                        | 1.88       | 2.13       | 2.41       | 2.73      | 3.10        | 3.53        |             |
| 50<br>(10.0)   | TCG | 44.80 | 42.80                                       | 40.80      | 38.70      | 36.50      | 34.10     | 31.70       | 29.00       |             |
|                | SDT | 75.30 | 84.10                                       | 93.10      | 102.00     | 111.00     | 120.10    | 129.10      | 138.10      |             |
|                | KW  | 1.45  | 1.67                                        | 1.90       | 2.15       | 2.43       | 2.75      | 3.12        | 3.54        |             |
| 55<br>(12.78)  | TCG | 48.90 | 46.80                                       | 44.60      | 42.30      | 39.90      | 37.40     | 34.70       | 31.80       |             |
|                | SDT | 77.00 | 85.70                                       | 94.60      | 103.40     | 112.30     | 121.30    | 130.20      | 139.10      |             |
|                | KW  | 1.47  | 1.70                                        | 1.93       | 2.18       | 2.46       | 2.77      | 3.14        | 3.56        |             |
| *SA642GKA      |     |       |                                             |            |            |            |           |             |             |             |
| 30<br>(-1.11)  | TCG | 33.00 | 32.30                                       | 31.40      | 30.30      | 28.90      | 27.40     | 25.60       | 23.70       |             |
|                | SDT | 69.80 | 79.20                                       | 88.70      | 98.10      | 107.40     | 116.70    | 125.90      | 135.10      |             |
|                | KW  | 1.61  | 1.84                                        | 2.12       | 2.45       | 2.84       | 3.29      | 3.81        | 4.40        |             |
| 35<br>(1.67)   | TCG | 36.40 | 35.70                                       | 34.70      | 33.40      | 32.00      | 30.30     | 28.40       | 26.30       |             |
|                | SDT | 71.20 | 80.60                                       | 89.90      | 99.20      | 108.40     | 117.70    | 126.80      | 136.00      |             |
|                | KW  | 1.62  | 1.86                                        | 2.14       | 2.47       | 2.86       | 3.31      | 3.83        | 4.42        |             |
| 40<br>(4.44)   | TCG | 40.10 | 39.30                                       | 38.20      | 36.80      | 35.20      | 33.40     | 31.40       | 29.10       |             |
|                | SDT | 72.70 | 81.90                                       | 91.20      | 100.40     | 109.60     | 118.70    | 127.80      | 136.90      |             |
|                | KW  | 1.63  | 1.87                                        | 2.15       | 2.49       | 2.88       | 3.33      | 3.85        | 4.45        |             |
| 45<br>(7.22)   | TCG | 44.10 | 43.10                                       | 41.90      | 40.40      | 38.60      | 36.70     | 34.50       | 32.00       |             |
|                | SDT | 74.20 | 83.30                                       | 92.50      | 101.60     | 110.80     | 119.90    | 128.90      | 137.90      |             |
|                | KW  | 1.64  | 1.88                                        | 2.17       | 2.51       | 2.91       | 3.36      | 3.88        | 4.48        |             |
| 50<br>(10.0)   | TCG | 48.30 | 47.20                                       | 45.80      | 44.20      | 42.30      | 40.10     | 37.70       | 35.00       |             |
|                | SDT | 75.80 | 84.80                                       | 93.90      | 103.00     | 112.00     | 121.00    | 130.00      | 138.90      |             |
|                | KW  | 1.65  | 1.90                                        | 2.19       | 2.54       | 2.94       | 3.39      | 3.92        | 4.51        |             |
| 55<br>(12.78)  | TCG | 52.80 | 51.50                                       | 50.00      | 48.10      | 46.00      | 43.70     | 41.10       | 38.20       |             |
|                | SDT | 77.40 | 86.40                                       | 95.40      | 104.40     | 113.40     | 122.30    | 131.20      | 140.00      |             |
|                | KW  | 1.67  | 1.92                                        | 2.22       | 2.57       | 2.97       | 3.43      | 3.96        | 4.55        |             |
| *SA648GKA      |     |       |                                             |            |            |            |           |             |             |             |
| 30<br>(-1.11)  | TCG | 40.10 | 38.00                                       | 35.90      | 33.80      | 31.50      | 29.20     | 26.70       | 24.20       |             |
|                | SDT | 67.60 | 77.00                                       | 86.40      | 95.80      | 105.10     | 114.50    | 123.80      | 133.10      |             |
|                | KW  | 1.97  | 2.26                                        | 2.54       | 2.83       | 3.13       | 3.46      | 3.84        | 4.29        |             |
| 35<br>(1.67)   | TCG | 44.40 | 42.00                                       | 39.70      | 37.30      | 34.80      | 32.30     | 29.60       | 26.80       |             |
|                | SDT | 68.90 | 78.20                                       | 87.50      | 96.80      | 106.10     | 115.30    | 124.60      | 133.80      |             |
|                | KW  | 1.90  | 2.22                                        | 2.53       | 2.83       | 3.14       | 3.48      | 3.87        | 4.30        |             |
| 40<br>(4.44)   | TCG | 49.10 | 46.40                                       | 43.80      | 41.10      | 38.40      | 35.60     | 32.70       | 29.60       |             |
|                | SDT | 70.30 | 79.40                                       | 88.60      | 97.80      | 107.00     | 116.30    | 125.40      | 134.60      |             |
|                | KW  | 1.80  | 2.15                                        | 2.49       | 2.81       | 3.14       | 3.50      | 3.89        | 4.32        |             |
| 45<br>(7.22)   | TCG | 54.20 | 51.20                                       | 48.20      | 45.20      | 42.20      | 39.20     | 36.00       | 32.60       |             |
|                | SDT | 71.70 | 80.70                                       | 89.80      | 99.00      | 108.10     | 117.30    | 126.40      | 135.40      |             |
|                | KW  | 1.66  | 2.05                                        | 2.41       | 2.77       | 3.13       | 3.50      | 3.90        | 4.34        |             |
| 50<br>(10.0)   | TCG | 59.80 | 56.40                                       | 53.00      | 49.70      | 46.40      | 43.00     | 39.40       | 35.70       |             |
|                | SDT | 73.20 | 82.10                                       | 91.20      | 100.20     | 109.30     | 118.30    | 127.30      | 136.30      |             |
|                | KW  | 1.47  | 1.90                                        | 2.31       | 2.70       | 3.09       | 3.48      | 3.90        | 4.35        |             |
| 55<br>(12.78)  | TCG | 65.80 | 62.00                                       | 58.30      | 54.50      | 50.80      | 47.00     | 43.10       | 39.00       |             |
|                | SDT | 74.80 | 83.60                                       | 92.60      | 101.50     | 110.50     | 119.40    | 128.40      | 137.30      |             |
|                | KW  | 1.24  | 1.72                                        | 2.17       | 2.60       | 3.02       | 3.44      | 3.88        | 4.35        |             |

See notes on pg. 13

# CONDENSER ONLY RATINGS\* CONTINUED

| SST<br>°F (°C) |     | CONDENSER ENTERING AIR TEMPERATURES °F (°C) |            |            |            |           |             |             |             |
|----------------|-----|---------------------------------------------|------------|------------|------------|-----------|-------------|-------------|-------------|
|                |     | 55 (12.78)                                  | 65 (18.33) | 75 (23.89) | 85 (29.44) | 95 (35.0) | 105 (40.56) | 115 (46.11) | 125 (51.67) |
| *SA660GKB      |     |                                             |            |            |            |           |             |             |             |
| 30 (−1.1)      | TCG | 52.20                                       | 49.60      | 47.00      | 44.30      | 41.50     | 38.60       | 35.40       | 32.10       |
|                | SDT | 70.60                                       | 80.00      | 89.60      | 99.20      | 108.80    | 118.50      | 128.20      | 137.80      |
|                | KW  | 2.68                                        | 3.02       | 3.39       | 3.81       | 4.29      | 4.84        | 5.48        | 6.20        |
| 35 (1.7)       | TCG | 57.50                                       | 54.70      | 51.80      | 49.00      | 45.90     | 42.70       | 39.30       | 35.80       |
|                | SDT | 71.90                                       | 81.30      | 90.90      | 100.30     | 109.90    | 119.50      | 129.20      | 138.80      |
|                | KW  | 2.71                                        | 3.04       | 3.42       | 3.84       | 4.32      | 4.87        | 5.52        | 6.24        |
| 40 (4.4)       | TCG | 63.20                                       | 60.10      | 57.00      | 53.90      | 50.60     | 47.10       | 43.50       | 39.70       |
|                | SDT | 73.40                                       | 82.70      | 92.10      | 101.60     | 111.20    | 120.70      | 130.20      | 139.80      |
|                | KW  | 2.74                                        | 3.07       | 3.44       | 3.87       | 4.36      | 4.92        | 5.55        | 6.28        |
| 45 (7.2)       | TCG | 69.40                                       | 66.00      | 62.60      | 59.20      | 55.60     | 51.90       | 47.90       | 43.90       |
|                | SDT | 75.00                                       | 84.10      | 93.50      | 102.90     | 112.40    | 121.80      | 131.40      | 140.90      |
|                | KW  | 2.76                                        | 3.09       | 3.47       | 3.90       | 4.39      | 4.95        | 5.61        | 6.33        |
| 50 (10)        | TCG | 75.90                                       | 72.30      | 68.50      | 64.80      | 60.90     | 56.90       | 52.70       | 48.30       |
|                | SDT | 76.60                                       | 85.70      | 95.10      | 104.40     | 113.70    | 123.10      | 132.60      | 141.90      |
|                | KW  | 2.78                                        | 3.12       | 3.50       | 3.93       | 4.42      | 4.99        | 5.65        | 6.38        |
| 55 (12.8)      | TCG | 82.90                                       | 79.00      | 75.00      | 70.90      | 66.70     | 62.30       | 57.80       | 53.10       |
|                | SDT | 78.40                                       | 87.30      | 96.40      | 105.70     | 115.10    | 124.40      | 133.70      | 143.00      |
|                | KW  | 2.80                                        | 3.15       | 3.52       | 3.96       | 4.46      | 5.02        | 5.68        | 6.42        |

\* AHRI listing applies only to systems shown in Combination Ratings table.

**KW** — Outdoor Unit Kilowatts Only.

**SDT** — Saturated Temperature Leaving Compressor (°F/°C)

**SST** — Saturated Temperature Entering Compressor (°F)

**TCG** — Gross Cooling Capacity (1000 Btuh)

## ACCESSORY USAGE GUIDELINES

| ACCESSORY                                   | REQUIRED FOR LOW-AMBIENT COOLING APPLICATIONS<br>(Below 55°F / 12.8°C)‡ | REQUIRED FOR LONG LINE APPLICATIONS* |
|---------------------------------------------|-------------------------------------------------------------------------|--------------------------------------|
| Compressor Start Assist Capacitor and Relay | Yes                                                                     | Yes                                  |
| Crankcase Heater                            | Yes                                                                     | Yes                                  |
| Evaporator Freeze Thermostat                | Yes                                                                     | No                                   |
| Low-ambient Pressure Switch+                | Yes                                                                     | No                                   |
| Support Feet                                | Recommended                                                             | No                                   |
| Thermal Expansion Valve (TXV) Hard Shutoff  | Yes                                                                     | Yes†                                 |
| Winter Start Control                        | Yes                                                                     | No                                   |

‡ Non-communicating thermostat required.

\* Refer to the Long Line Application Guideline document

+ If unit equipped with ECM OD motor, both motor and fan need to be replaced per unit accessory guide to work properly. Unit will not meet AHRI rated efficiency once motor and fan are replaced to use this accessory.

† TXV required beyond 20 ft. (6.1 m) vertical separation or 50 ft. (15.2 m) total length.

## ACCESSORIES

| Part Number | Description                                            | Used On Model Size |
|-------------|--------------------------------------------------------|--------------------|
| NASA003CH   | Crankcase Heater for Scroll Compressor (208/230 V)     | 18, 24, 30, 36     |
| NASA001CH   | Crankcase Heater for Scroll Compressor (208/230 V)     | 42, 48, 60*        |
| NASA001SC   | Start Component – PTC Device                           | ALL                |
| NASA00201FS | Evaporator Freeze Thermostat                           | ALL                |
| NASA401LS   | Liquid Line Solenoid Valve, R-410A                     | ALL                |
| NASA001TD   | Time Delay Relay, Indoor Blower                        | ALL                |
| NASA00201WS | Winter Start Control                                   | ALL                |
| NASA001AC   | Anti-Cycle Timer (5 minute delay)                      | ALL                |
| NASA014SC   | Hard Start Kit (Capacitor & Relay)                     | 18 – 48            |
| NASA012SC   | Hard Start Kit (Capacitor & Relay)                     | 60                 |
| NASA401LA   | Low Ambient Kit (Pressure Switch), R-410A              | ALL                |
| NASA00201SF | Support Feet, 4" (102mm) tall                          | ALL                |
| NAEA40501TX | TXV Kit, R-410A – for use with copper or tin fan coils | 18, 24, 30         |
| NAEA40601TX | TXV Kit, R-410A – for use with copper or tin fan coils | 36, 42             |
| NAEA40701TX | TXV Kit, R-410A – for use with copper or tin fan coils | 48, 60             |
| NAEB40501TX | TXV Kit, R-410A – for use with aluminum fan coils      | 18, 24, 30         |
| NAEB40601TX | TXV Kit, R-410A – for use with aluminum fan coils      | 36, 42             |
| NAEB40701TX | TXV Kit, R-410A – for use with aluminum fan coils      | 48, 60             |
| SYST0101CW  | Ion® System Control                                    | ALL                |
| 1184959     | PSC motor                                              | 60                 |
| 1185010     | Fan                                                    | 60                 |

\*Some models may be factory installed.