

24ACB3
Performance™ 13 Series Air Conditioner
with Puron® Refrigerant
1-1/2 To 5 Nominal Tons (Size 18 To 60)



Product Data



Performance
SERIES

Carrier's Air Conditioners with Puron® refrigerant provide a collection of features unmatched by any other family of equipment. The 24ACB has been designed utilizing Carrier's Puron refrigerant. The environmentally sound refrigerant allows you to make a responsible decision in the protection of the earth's ozone layer.

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. Refer to the combination ratings in the Product Data for system combinations that meet Energy Star® guidelines.

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

INDUSTRY LEADING FEATURES / BENEFITS

EFFICIENCY

- 13 - 15 SEER/11 - 12 EER
- Microtube Technology™ refrigeration system
- Indoor air quality accessories available

SOUND

- Sound level as low as 74 dBA

COMFORT

- System supports Thermidistat™ Control or standard thermostat

RELIABILITY

- Puron® refrigerant - environmentally sound, won't deplete the ozone layer and low lifetime service cost.
- Front-seating service valves
- Scroll compressor
- Internal pressure-relief valve
- Internal thermal overload
- Low-pressure switch
- High-pressure switch
- Filter drier
- Balanced refrigeration system for maximum reliability

DURABILITY

WeatherArmor Ultra™ protection package:

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

APPLICATIONS

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient (down to -20°F/-28.9°C) with accessory kit

MODEL NUMBER NOMENCLATURE

| | | | | | | | | | | | | |
|----------------|----------------|---------------|--------------|-----------|------------------|--------------|---------------|---------------|-------------|--------------|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| N | N | A | A | A/N | N | N | N | A/N | A/N | A/N | N | N |
| 2 | 4 | A | C | B | 3 | 3 | 6 | A | 0 | 0 | 3 | 1 |
| Product Series | Product Family | Tier | Major Series | SEER | Cooling Capacity | Variations | Open | Open | Voltage | Minor Series | | |
| 24 = AC | A= RES AC | C=Performance | B = Puron | 3=13 SEER | | A = Standard | 0=Not Defined | 0=Not Defined | 3=208/230-1 | 0, 1, 2... | | |



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



ISO 9001
QMI-SAI Global



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 all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

STANDARD FEATURES

| Feature | 18 | 24 | 30 | 36 | 42 | 48 | 60 |
|----------------------------------|----|----|----|----|----|----|----|
| Puron Refrigerant | X | X | X | X | X | X | X |
| Up to 14.5 SEER / 11.5 EER | X | X | X | X | X | X | |
| Scroll Compressor | X | X | X | X | X | X | X |
| Louvered Coil Guard | X | X | X | X | X | X | X |
| Field – Installed Filter Drier | X | X | X | X | X | X | X |
| Front – Seating Service Valves | X | X | X | X | X | X | X |
| Internal Pressure – Relief Valve | X | X | X | X | X | X | X |
| Internal Thermal Overload | X | X | X | X | X | X | X |
| Long Line capability | X | X | X | X | X | X | X |
| Low Ambient capability with Kit | X | X | X | X | X | X | X |
| Low – Pressure Switch | X | X | X | X | X | X | X |
| High – Pressure Switch | X | X | X | X | X | X | X |
| Compressor Sound Blanket | X | X | X | X | X | X | X |

X = Standard

REFRIGERANT PIPING LENGTH LIMITATIONS

Liquid Line Sizing and Maximum Total Equivalent Lengths† for Cooling Only Systems with Puron® Refrigerant:

The maximum allowable length of a residential split system depends on the liquid line diameter and vertical separation between indoor and outdoor units.

See Table below for liquid line sizing and maximum lengths :

Maximum Total Equivalent Length Outdoor Unit BELOW Indoor Unit

| Size | Liquid Line Connection | Liquid Line Diam. w/ TXV | AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit BELOW Indoor Vertical Separation ft (m) | | | | | | | | |
|----------------------|------------------------|--------------------------|--|----------------|-----------------|-----------------|------------------|-------------------|-------------------|-------------------|-------------------|
| | | | 0-5 (0-1.5) | 6-10 (1.8-3.0) | 11-20 (3.4-6.1) | 21-30 (6.4-9.1) | 31-40 (9.4-12.2) | 41-50 (12.5-15.2) | 51-60 (15.5-18.3) | 61-70 (18.6-21.3) | 71-80 (21.6-24.4) |
| 018 AC with Puron | 3/8 | 1/4 | 150 | 150 | 125 | 100 | 100 | 75 | -- | -- | -- |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 225* | 150 |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 024 AC with Puron | 3/8 | 1/4 | 75 | 75 | 75 | 50 | 50 | -- | -- | -- | -- |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 225* | 175 | 125 | 100 |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 030 AC with Puron | 3/8 | 1/4 | 30 | -- | -- | -- | -- | -- | -- | -- | -- |
| | | 5/16 | 175 | 225* | 200 | 175 | 125 | 100 | 75 | -- | -- |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 036 AC with Puron | 3/8 | 5/16 | 175 | 150 | 150 | 100 | 100 | 100 | 75 | -- | -- |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 042 AC with Puron | 3/8 | 5/16 | 125 | 100 | 100 | 75 | 75 | 50 | -- | -- | -- |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 150 |
| 048 AC with Puron | 3/8 | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 230 | 160 | -- |
| 060 AC with Puron | 3/8 | 3/8 | 250* | 250* | 250* | 225* | 190 | 150 | 110 | -- | -- |

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

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

-- = outside acceptable range

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Maximum Total Equivalent Length Outdoor Unit ABOVE Indoor Unit

| Size | Liquid Line Connection | Liquid Line Diam. w/ TXV | AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit ABOVE Indoor Vertical Separation ft (m) | | | | | | | |
|----------------------|------------------------|--------------------------|--|------------------|-------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| | | | 25 (7.6) | 26-50 (7.9-15.2) | 51-75 (15.5-22.9) | 76-100 (23.2-30.5) | 101-125 (30.8-38.1) | 126-150 (38.4-45.7) | 151-175 (46.0-53.3) | 176-200 (53.6-61.0) |
| 018 AC with Puron | 3/8 | 1/4 | 175 | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 024 AC with Puron | 3/8 | 1/4 | 100 | 125 | 175 | 200 | 225* | 250* | 250* | 250* |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 030 AC with Puron | 3/8 | 1/4 | 30 | -- | -- | -- | -- | -- | -- | -- |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 036 AC with Puron | 3/8 | 5/16 | 225* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 042 AC with Puron | 3/8 | 5/16 | 175 | 200 | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 048 AC with Puron | 3/8 | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 060 AC with Puron | 3/8 | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |

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

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

-- = outside acceptable range

REFRIGERANT CHARGE ADJUSTMENTS

| Liquid Line Size | Puron Charge oz/ft (g/m) |
|------------------|--|
| 3/8 | 0.60 (17.74) (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

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 chart below shows when an application is considered Long Line.

AC WITH PURON® 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 | No accessories needed within allowed lengths | No accessories needed within allowed lengths | 175 (53.3) |
| 5/16 | 120 (36.6) | 50 (15.2) vertical or 120 (36.6) total | 120 (36.6) |
| 3/8 | 80 (24.4) | 35 (10.7) vertical or 80 (24.4) total | 80 (24.4) |

Note: See Long Line Guideline for details

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 Puron refrigerant:

Vapor Line Sizing and Cooling Capacity Losses — Puron® Refrigerant 1-Stage Air Conditioner Applications

| Unit Nominal Size (Btuh) | Maximum Liquid Line Diameters (In. OD) | Vapor Line Diameters (In. OD) | Cooling Capacity Loss (%) | | | | | | | | | |
|------------------------------------|--|-------------------------------|--------------------------------------|----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---|
| | | | Total Equivalent Line Length ft. (m) | | | | | | | | | |
| | | | 26-50 (7.9-15.2) | 51-80 (15.5-24.4) | 81-100 (24.7-30.5) | 101-125 (30.8-38.1) | 126-150 (38.4-45.7) | 151-175 (46.0-53.3) | 176-200 (53.6-61.0) | 201-225 (61.3-68.6) | 226-250 (68.9-76.2) | |
| 018 1 Stage AC with Puron | 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 | 1 |
| 024 1 Stage AC with Puron | 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 | 1 |
| 030 1 Stage AC with Puron | 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 | 1 |
| 036 1 Stage AC with Puron | 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 | 2 |
| 042 1 Stage AC with Puron | 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 | 0 |
| 048 1 Stage AC with Puron | 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 | 1 |
| 060 1 Stage AC with Puron | 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 | 1 |

Applications in this area may be long line and may have height restrictions. See the *Residential Piping and Long Line Guideline*.

ACCESSORY THERMOSTATS

| PART NUMBER | PROGRAM | GAS | ELECTRIC | HEAT PUMP | HYBRID HEAT | HEAT | COOL |
|--------------------|---------|-----|----------|-----------|-------------|------|------|
| Performance | | | | | | | |
| TP-PRH01-A | 7-Day | √ | √ | √ | √ | 3 | 2 |
| TP-PAC01 | 7-Day | √ | √ | | | 1 | 1 |
| TP-NRH01-A | NP | √ | √ | √ | √ | 3 | 2 |
| TP-NAC01 | NP | √ | √ | | | 1 | 1 |

| THERMOSTAT ACCESSORIES | | |
|-------------------------------|---|---------------------------------|
| PART NUMBER | BRIEF DESCRIPTION | THERMOSTATS USED WITH |
| SYSTXCCRRS01 | Indoor Remote Room Temperature Sensor | All TP – thermostats |
| TP-EXP01-A | ExP Computer Programming Accessory | TP-P thermostats |
| TSTATXXCNV10‡ | Thermostat Conversion Kit (4 to 5 wire) – 10 pack | All Carrier branded thermostats |
| TX-LBP01 | Large Decorative Backplate | TP-Pxx, TP-Nxx, TC-Pxx |
| TSTATXXSEN01-B* | Outdoor Air Temperature Sensor | All TP – thermostats |

ACCESSORIES

| ORDER NUMBER | DESCRIPTION | 18-30 | 24-30 | 30-30 | 36-30 | 42-30 | 48-30 | 60-31 |
|--------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|
| KAACH1201AAA | CRANKCASE HTR | | | | | X | X | X |
| KAACH1401AAA | CRANKCASE HTR | X | X | X | X | | | |
| KSACY0101AAA | CYCLE PROTECTOR | X | X | X | X | X | X | X |
| KAFT0101AAA | FREEZE THERMOSTAT | X | X | X | X | X | X | X |
| KSAS1701AAA | HARD START (CAP / RELAY) | X | X | X | X | X | X | X |
| KSALA0301410 | LOW AMBIENT PSW | X | X | X | X | X | X | X |
| HC32GE234 | MOTOR FAN BALL BEARING 230V | X | | | | | | |
| HC34GE239 | MOTOR FAN BALL BEARING 230V | | X | X | | | | |
| HC40GE226 | MOTOR FAN BALL BEARING 230V | | | | X | | | |
| HC38GE228 | MOTOR FAN BALL BEARING 230V | | | | | X | | |
| HC40GE228 | MOTOR FAN BALL BEARING 230V | | | | | | X | X |
| KSALA0601AAA | MOTORMASTER 230V | X | X | X | X | X | X | X |
| KAALS0201LLS | SOLENOID VALVE | X | X | X | X | X | X | X |
| KAACS0201PTC | START ASSIST PTC | X | X | X | X | X | X | X |
| KSASF0101AAA | SUPPORT FEET | X | X | X | X | X | X | X |
| KAATD0101TDR | TIME DELAY RELAY | X | X | X | X | X | X | X |
| KSATX0201PUR | TXV PURON HSO | X | X | X | | | | |
| KSATX0301PUR | TXV PURON HSO | | | | X | X | | |
| KSATX0401PUR | TXV PURON HSO | | | | | | X | |
| KSATX0501PUR | TXV PURON HSO | | | | | | | X |
| KAAWS0101AAA | WINTER START | X | X | X | X | X | X | X |

x = Accessory

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ACCESSORY USAGE GUIDELINE

| ACCESSORY | REQUIRED FOR LOW-AMBI- ENT COOLING APPLICATIONS (Below 55°F/12.8°C) | REQUIRED FOR LONG LINE APPLICATIONS* (Over 80 ft./24.38 m) | REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles/3.22 km) |
|---|---|---|---|
| Ball Bearing Fan Motor | Yes† | No | No |
| Compressor Start Assist Capacitor and Relay | Yes | Yes | No |
| Crankcase Heater | Yes | Yes | No |
| Evaporator Freeze Thermostat | Yes | No | No |
| Hard Shut-Off TXV | Yes | Yes | Yes |
| Liquid Line Solenoid Valve | No | No | No |
| Motor Master® Control or Low-ambient Pressure Switch | Yes | No | No |
| Support Feet | Recommended | No | Recommended |
| Winter Start Control | Yes | No | No |

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

† Required for Low-Ambient Controller (full modulation feature) MotorMaster® Control.

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ACCESSORY DESCRIPTION AND USAGE (LISTED ALPHABETICALLY)

1. Ball-Bearing Fan Motor

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

Usage Guideline:

Required on all units when using MotorMaster®

2. Compressor Start Assist - Capacitor and Relay

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

Usage Guideline:

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

Long line

Low-ambient cooling

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

3. Compressor Start Assist — PTC Type

Solid state electrical device which gives a "soft" boost to the compressor at each start-up.

Usage Guideline:

Suggested in installations with marginal power supply.

4. Crankcase Heater

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

Usage Guideline:

Required in Low-ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

5. Cycle Protector

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

6. Evaporator Freeze Thermostat

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

Usage Guideline:

Required when Low-ambient kit has been added.

7. Low-Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits. The control will maintain working head pressure at low-ambient temperatures down to 0°F (-17.8°C) when properly installed.

Usage Guideline:

A Low-Ambient Pressure Switch must be used when cooling operation is at outdoor temperatures below 55°F (12.8°C) to a minimum of 0°F (-17.8°C).

Suggested for all commercial applications.

8. MotorMaster® Low-Ambient Controller

A fan-speed control device activated by a temperature sensor, designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to -20°F (-28.9°C), it maintains condensing temperature at 100°F ±10°F (37.8°C ± 6.5°C).

Usage Guideline:

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

Suggested for all commercial applications.

ACCESSORY DESCRIPTION AND USAGE (LISTED ALPHABETICALLY) (CONT)

9. Outdoor Air Temperature Sensor

Designed for use with Carrier Thermostats listed in this publication. This device enables the thermostat to display the outdoor temperature. This device also

is required to enable special thermostat features such as auxiliary heat lock out.

Usage Guideline:

Suggested for all Carrier thermostats listed in this publication.

10. Support Feet

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

Usage Guideline:

Suggested in the following applications:

Coastal installations.

Windy areas or where debris is normally circulating.

Rooftop installations.

For improved sound ratings.

11. Thermostatic Expansion Valve (TXV)

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

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

NOTE: When using a hard shutoff TXV with single phase reciprocating compressors, a Compressor Start Assist Capacitor and Relay is required.

Usage Guideline:

Accessory required to meet AHRI rating and system reliability, where indoor not equipped.

Hard shutoff TXV or LLS required in air conditioner long line applications.

Required for use on all zoning systems.

12. Time-Delay Relay

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

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

Usage Guideline:

Accessory required to meet AHRI rating, where indoor not equipped.

13. Winter Start Control

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

PHYSICAL DATA

| UNIT SIZE SERIES | 18-30 | 24-30 | 30-30 | 36-30 | 42-30 | 48-30 | 60-31 |
|----------------------------|------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Operating Weight lb (kg) | 135 (61.2) | 135 (61.2) | 149 (67.6) | 166 (75.3) | 210 (95.3) | 236 (107.0) | 261 (118.4) |
| Shipping Weight lb (kg) | 156 (70.8) | 156 (70.8) | 171 (77.6) | 189 (85.7) | 238 (108.0) | 264 (119.7) | 295 (133.8) |
| Compressor Type | Scroll | | | | | | |
| REFRIGERANT | Puron® (R-410A) | | | | | | |
| Control | TXV (Puron® Hard Shutoff) | | | | | | |
| Charge lb (kg) | 3.57 (1.62) | 3.72 (1.69) | 4.50 (2.04) | 5.05 (2.29) | 5.84 (2.65) | 8.00 (3.63) | 8.44 (3.83) |
| COND FAN | Propeller Type, Direct Drive | | | | | | |
| Air Discharge | Vertical | | | | | | |
| Air Qty (CFM) | 1880 | 2200 | 2200 | 2950 | 3170 | 3365 | 4050 |
| Motor HP | 1/12 | 1/10 | 1/10 | 1/4 | 1/5 | 1/4 | 1/4 |
| Motor RPM | 1100 | 1100 | 1100 | 1100 | 825 | 825 | 825 |
| COND COIL | | | | | | | |
| Face Area (Sq. ft.) | 9.85 | 9.85 | 11.49 | 14.77 | 17.25 | 21.56 | 25.15 |
| Fins per In. | 20 | 20 | 25 | 25 | 25 | 25 | 25 |
| Rows | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Circuits | 3 | 3 | 3 | 3 | 4 | 5 | 5 |
| VALVE CONNECT. (In. ID) | | | | | | | |
| Vapor | 5/8 | 5/8 | 3/4 | 3/4 | 7/8 | 7/8 | 7/8 |
| Liquid | 3/8 | | | | | | |
| REFRIGERANT TUBES (In. OD) | | | | | | | |
| Rated Vapor* | 5/8 | 5/8 | 3/4 | 3/4 | 7/8 | 7/8 | 1-1/8 |
| Liquid | 3/8 | | | | | | |

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

Note: See unit Installation Instruction for proper installation.

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ELECTRICAL DATA

| UNIT SIZE - VOLTAGE, SERIES | V/PH | OPER VOLTS* | | COMPR | | FAN | MCA | MIN WIRE SIZE† | MIN WIRE SIZE† | MAX LENGTH ft (m)‡ | MAX LENGTH ft (m)‡ | MAX FUSE** or CKT BRK AMPS |
|-----------------------------------|-----------|----------------|------|-------|------|------|------|----------------------|----------------------|--------------------------|--------------------------|--|
| | | MAX | MIN. | LRA | RLA | FLA | | 60° C | 75° C | 60° C | 75° C | |
| 18-30 | 208-230-1 | 253 | 197 | 48.0 | 9.0 | 0.5 | 11.8 | 14 | 14 | 67 (20.4) | 64 (19.5) | 15 |
| 24-30 | | | | 58.3 | 13.5 | 0.75 | 17.6 | 14 | 14 | 45 (13.7) | 43 (13.1) | 25 |
| 30-30 | | | | 64.0 | 12.8 | 0.75 | 16.8 | 14 | 14 | 47 (14.3) | 45 (13.7) | 25 |
| 36-30 | | | | 77.0 | 14.1 | 1.4 | 19.0 | 12 | 12 | 66 (20.1) | 63 (19.2) | 30 |
| 42-30 | | | | 112.0 | 17.9 | 1.2 | 23.6 | 12 | 12 | 53 (16.2) | 51 (15.5) | 40 |
| 48-30 | | | | 109.0 | 19.9 | 1.2 | 26.2 | 10 | 10 | 76 (23.2) | 73 (22.3) | 40 |
| 60-31 | | | | 134.0 | 26.4 | 1.2 | 34.2 | 8 | 8 | 91 (27.7) | 86 (26.2) | 50 |

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

† If wire is applied at ambient greater than 30° C (86° F), consult table 310-16 of the NEC (ANSI/NFPA 70). The ampacity of non-metallic-sheathed cable (NM), trade name ROMEX, shall be that of 60° C (140° F) conditions, per the NEC (ANSI/NFPA 70) Article 336-26. If other than uncoated (no-plated), 60° or 75° C (140° or 167° C) insulation, copper wire (solid wire for 10 AWG or smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the NEC (ANSI/NFPA 70).

‡ Length shown is as measured 1 way along wire path between unit and service panel for voltage drop not to exceed 2%.

** 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

24ACB3

A-WEIGHTED SOUND POWER (dBA)

| UNIT SIZE - VOLTAGE, SERIES | STANDARD RATING (dBA) | TYPICAL OCTAVE BAND SPECTRUM (dBA, without tone adjustment) | | | | | | |
|-----------------------------|-----------------------------|---|------|------|------|------|------|------|
| | | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| 18-30 | 74 | 50.0 | 61.5 | 64.5 | 66.5 | 64.0 | 61.0 | 54.5 |
| 24-30 | 75 | 55.5 | 63.5 | 67.0 | 70.0 | 66.0 | 63.5 | 57.0 |
| 30-30 | 74 | 52.5 | 63.0 | 68.5 | 70.0 | 66.5 | 62.5 | 56.5 |
| 36-30 | 75 | 57.0 | 65.0 | 67.5 | 69.5 | 67.5 | 65.0 | 60.0 |
| 42-30 | 74 | 55.0 | 64.0 | 68.0 | 68.5 | 64.5 | 60.0 | 54.0 |
| 48-30 | 74 | 52.5 | 62.5 | 65.5 | 69.0 | 63.5 | 60.5 | 56.0 |
| 60-31 | 74 | 54.0 | 59.0 | 65.5 | 67.5 | 63.5 | 60.0 | 55.5 |

NOTE: Tested in accordance with AHRI Standard 270-2008 (not listed in AHRI).

CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

| UNIT SIZE - VOLTAGE, SERIES | REQUIRED SUBCOOLING °F (°C) |
|-----------------------------|-----------------------------|
| 18-30 | 8 (4.4) |
| 24-30 | 13 (7.2) |
| 30-30 | 16 (8.9) |
| 36-30 | 16 (8.9) |
| 42-30 | 10 (5.6) |
| 48-30 | 17 (9.4) |
| 60-31 | 11 (6.1) |

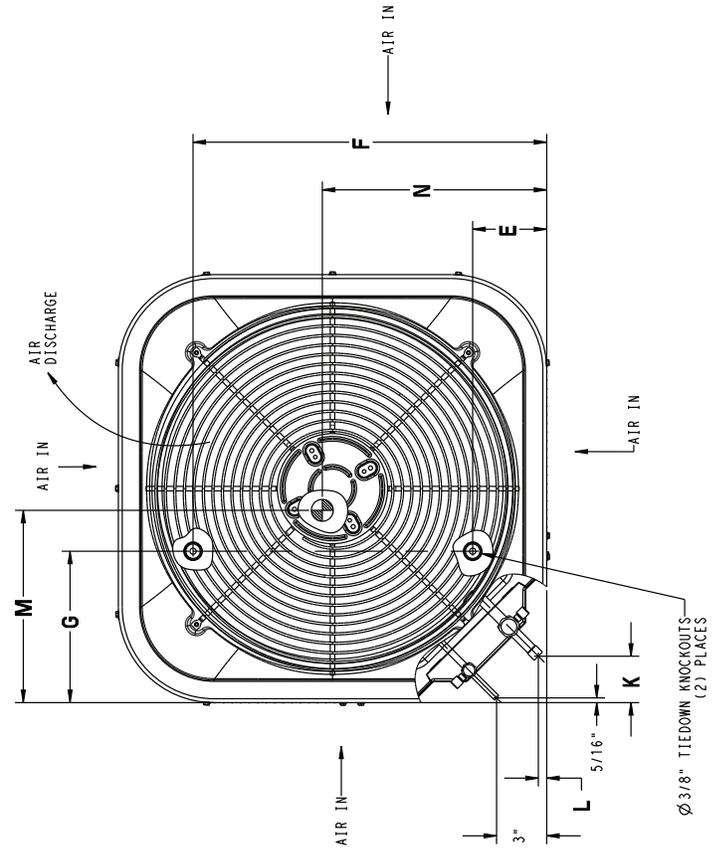
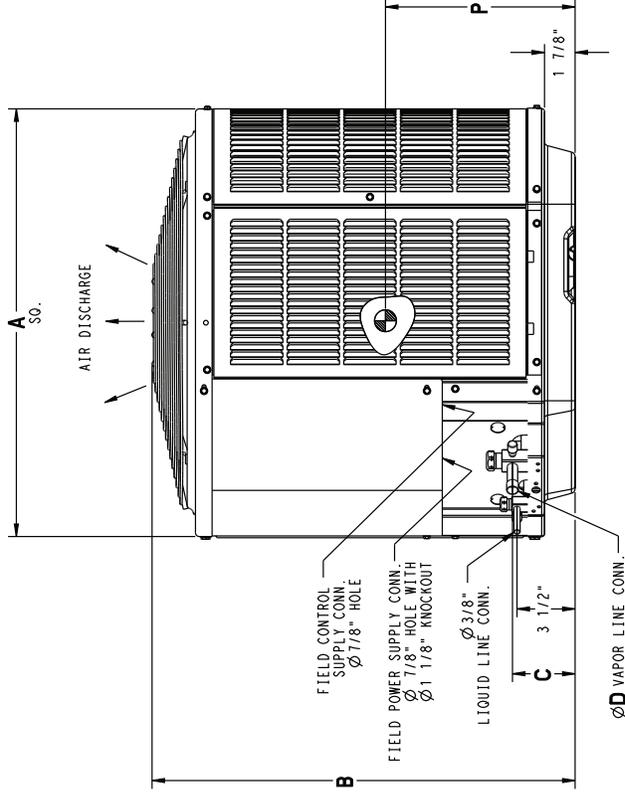
24ACB3

DIMENSIONS - ENGLISH

| UNIT | SERIES | ELECTRICAL CHARACTERISTICS | A | B | C | D | E | F | G | K | L | M | N | P | OPERATING WEIGHT (lbs) | SHIPPING WEIGHT (lbs) | SHIPPING DIMENSIONS (L x W x H) |
|----------|--------|----------------------------|----------|----------|--------|------|---------|-----------|--------|----------|------|---------|---------|---------|------------------------|-----------------------|---------------------------------|
| 24ACB318 | 0 | X 0 0 0 | 25 3/4" | 25" | 3 3/4" | 5/8" | 4 7/16" | 21 1/4" | 9 1/8" | 2 13/16" | 1/2" | 12 1/2" | 12 3/8" | 12 3/8" | 135 | 156 | 26 7/8" X 30 1/16" X 32 9/16" |
| 24ACB324 | 0 | X 0 0 0 | 25 3/4" | 25" | 3 3/4" | 5/8" | 4 7/16" | 21 1/4" | 9 1/8" | 2 13/16" | 1/2" | 13" | 11 7/8" | 12 3/8" | 135 | 156 | 26 7/8" X 30 1/16" X 32 9/16" |
| 24ACB330 | 0 | X 0 0 0 | 25 3/4" | 28 7/16" | 3 3/4" | 3/4" | 4 7/16" | 21 1/4" | 9 1/8" | 2 13/16" | 1/2" | 12 1/4" | 13 3/4" | 12 3/4" | 149 | 171 | 26 7/8" X 30 1/16" X 32 9/16" |
| 24ACB336 | 0 | X 0 0 0 | 25 3/4" | 35 1/4" | 3 3/4" | 3/4" | 4 7/16" | 21 1/4" | 9 1/8" | 2 13/16" | 1/2" | 12" | 13" | 14 3/4" | 166 | 189 | 26 7/8" X 30 1/16" X 32 9/16" |
| 24ACB342 | 0 | X 0 0 0 | 31 3/16" | 32 5/16" | 3 7/8" | 7/8" | 6 9/16" | 24 11/16" | 9 1/8" | 2 15/16" | 5/8" | 15 3/4" | 16 1/4" | 13 3/4" | 210 | 238 | 32 3/8" X 35 1/2" X 35 15/16" |
| 24ACB348 | 0 | X 0 0 0 | 31 3/16" | 39 1/8" | 3 7/8" | 7/8" | 6 9/16" | 24 11/16" | 9 1/8" | 2 15/16" | 5/8" | 14 1/4" | 17 1/4" | 19 1/4" | 236 | 264 | 32 3/8" X 35 1/2" X 42 3/4" |
| 24ACB360 | 1 | X 0 0 0 | 35" | 39 1/8" | 3 7/8" | 7/8" | 6 9/16" | 28 7/16" | 9 1/8" | 2 15/16" | 5/8" | 20 5/8" | 19 3/4" | 18 3/8" | 261 | 295 | 36 1/8" X 39 5/16" X 42 3/4" |

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

X = YES
O = NO



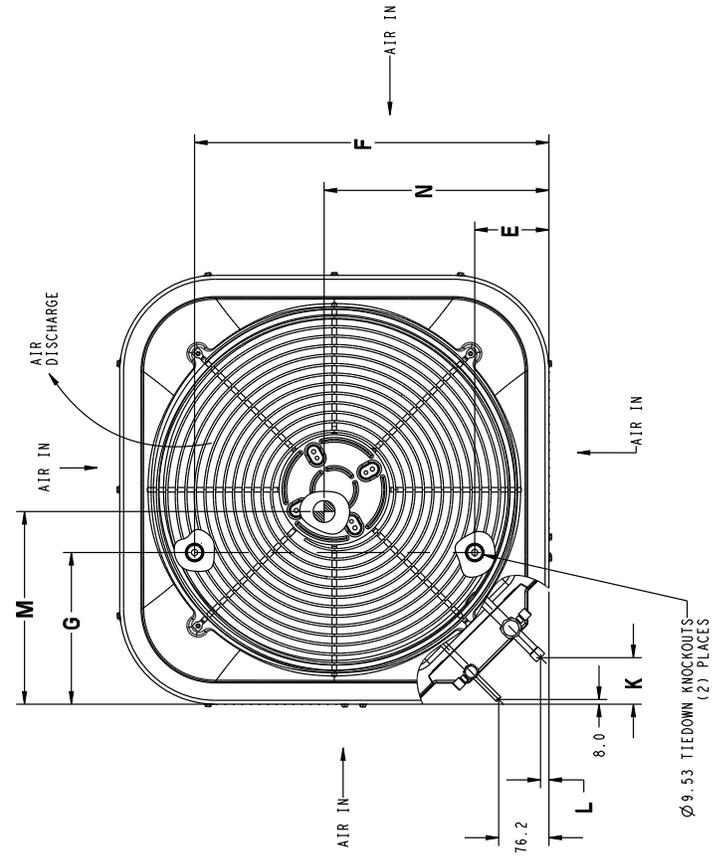
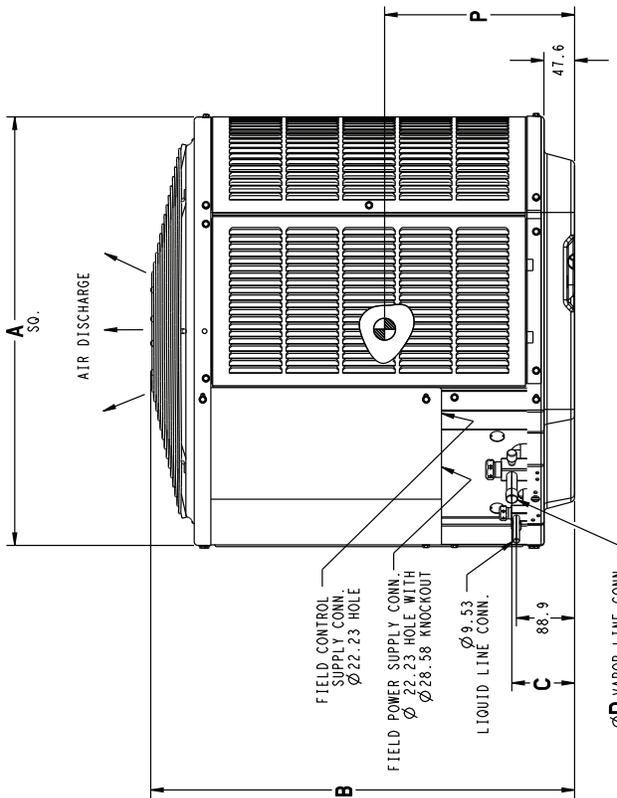
| UNIT SIZE | MINIMUM MOUNTING PAD DIMENSIONS |
|----------------|---------------------------------|
| 18, 24, 30, 36 | 26" X 26" |
| 42, 48 | 31 1/2" X 31 1/2" |
| 60 | 35" X 35" |

DIMENSIONS - SI

| UNIT | SERIES | ELECTRICAL CHARACTERISTICS | A | B | C | D | E | F | G | K | L | M | N | P | OPERATING WEIGHT (Kgs) | SHIPPING WEIGHT (Kgs) | SHIPPING DIMENSIONS (L x W x H) |
|----------|--------|----------------------------|-------|-------|------|------|-------|-------|-------|------|------|-------|-------|-------|------------------------|-----------------------|---------------------------------|
| 24ACB318 | 0 | X 0 0 0 | 654.0 | 635.0 | 95.2 | 15.9 | 112.7 | 539.8 | 231.8 | 71.4 | 12.7 | 317.5 | 314.3 | 314.3 | 61.2 | 70.8 | 682.6 X 763.6 X 827.1 |
| 24ACB324 | 0 | X 0 0 0 | 654.0 | 635.0 | 95.2 | 15.9 | 112.7 | 539.8 | 231.8 | 71.4 | 12.7 | 330.2 | 301.6 | 314.3 | 61.2 | 70.8 | 682.6 X 763.6 X 827.1 |
| 24ACB330 | 0 | X 0 0 0 | 654.0 | 722.3 | 95.2 | 19.0 | 112.7 | 539.8 | 231.8 | 71.4 | 12.7 | 311.2 | 349.2 | 323.8 | 67.6 | 77.6 | 682.6 X 763.6 X 827.1 |
| 24ACB336 | 0 | X 0 0 0 | 654.0 | 895.4 | 95.2 | 19.0 | 112.7 | 539.8 | 231.8 | 71.4 | 12.7 | 304.8 | 330.2 | 374.6 | 75.3 | 85.7 | 682.6 X 763.6 X 1000.1 |
| 24ACB342 | 0 | X 0 0 0 | 792.2 | 820.8 | 98.4 | 22.2 | 166.7 | 627.1 | 231.8 | 74.6 | 15.9 | 400.0 | 412.8 | 349.2 | 95.2 | 108.0 | 822.3 X 901.7 X 912.8 |
| 24ACB348 | 0 | X 0 0 0 | 792.2 | 993.8 | 98.4 | 22.2 | 166.7 | 627.1 | 231.8 | 74.6 | 15.9 | 362.0 | 438.2 | 489.0 | 107.0 | 119.7 | 822.3 X 901.7 X 1085.8 |
| 24ACB360 | 1 | X 0 0 0 | 889.0 | 993.8 | 98.4 | 22.2 | 166.7 | 722.3 | 231.8 | 74.6 | 15.9 | 523.9 | 501.6 | 466.7 | 118.4 | 133.8 | 917.6 X 998.6 X 1085.8 |

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

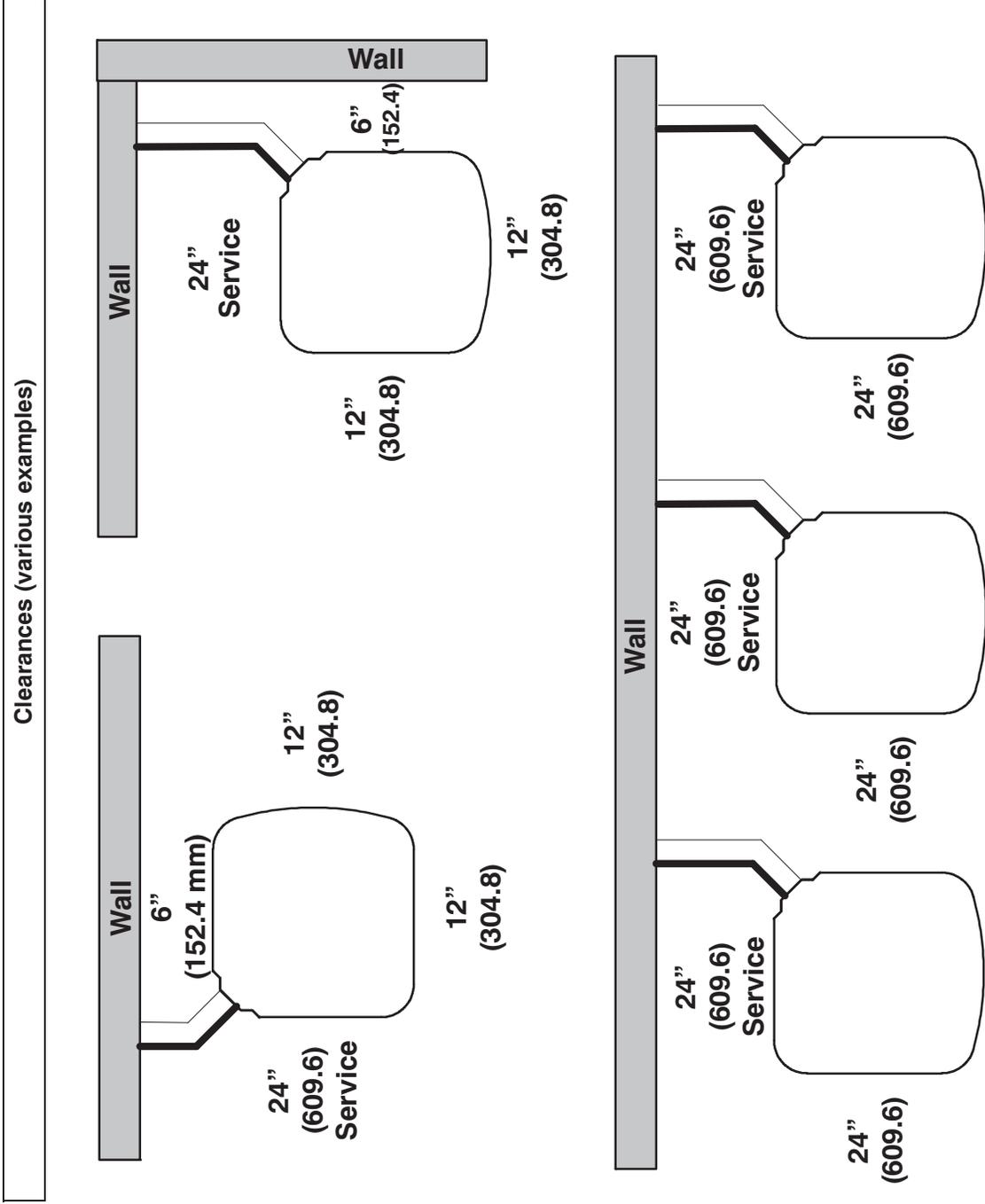
X = YES
O = NO



| UNIT SIZE | MINIMUM MOUNTING PAD DIMENSIONS |
|----------------|---------------------------------|
| 18, 24, 30, 36 | 660.4 X 660.4 |
| 42, 48 | 800.1 X 800.1 |
| 60 | 889.0 X 889.0 |

24ACB3

CLEARANCES



Note: Numbers in () = mm

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

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

Additional ratings and system combinations can be accessed via the Carrier database at:

http://cactaxcredits.info/carrier-ratings/ac_ratings_srch.php

Equipment performance calculator can be accessed at: <http://rpmob.wrightsoft.com/>

| Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|--------------|------------------|---------------|----------|------|------|
| 24ACB318A30 | CAP**1814A**+TDR | | 17,500 | 11.0 | 13.0 |
| 24ACB324A30 | CAP**2414A**+TDR | | 23,000 | 11.0 | 13.0 |
| 24ACB330A30 | CAP**3014A**+TDR | | 28,000 | 11.0 | 13.0 |
| 24ACB336A30 | CAP**3617A**+TDR | | 34,000 | 11.0 | 13.0 |
| 24ACB342A30 | CAP**4221A**+TDR | | 41,000 | 11.0 | 13.0 |
| 24ACB348A30 | CAP**4821A**+TDR | | 46,000 | 11.0 | 13.0 |
| 24ACB360A31 | CAP**6024A**+TDR | | 57,500 | 11.0 | 13.0 |

* AHRI = Air Conditioning, Heating & Refrigeration Institute

EER — Energy Efficiency Ratio

SEER — Seasonal Energy Efficiency Ratio

TDR — Time–Delay Relay. In most cases, only 1 method should be used to achieve TDR function. Using more than 1 method in a system may cause degradation in performance. Use either the accessory Time–Delay Relay KAATD0101TDR or a furnace equipped with TDR. Most Carrier furnaces are equipped with TDR.

NOTES:

1. Ratings are net values reflecting the effects of circulating fan motor heat. Supplemental electric heat is not included.
2. Tested outdoor/indoor combinations have been tested in accordance with DOE test procedures for central air conditioners. Ratings for other combinations are determined under DOE computer simulation procedures.
3. Determine actual CFM values obtainable for your system by referring to fan performance data in fan coil or furnace coil literature.
4. Do not apply with capillary tube coils as performance and reliability are affected.

24ACB3

DETAILED COOLING CAPACITIES#

| 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) | | |
| | | 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† | Total | Sens† |
| 24ACB318A30 Outdoor Section With 18 Indoor Section | | | | | | | | | | | | | | | | | | | |
| 525 | 72 (22.2) | 20.46 | 10.76 | 1.21 | 19.55 | 10.41 | 1.36 | 18.59 | 10.05 | 1.53 | 17.62 | 9.69 | 1.71 | 16.57 | 9.30 | 1.91 | 15.40 | 8.88 | 2.13 |
| | 67 (19.4) | 18.79 | 13.26 | 1.22 | 17.95 | 12.90 | 1.37 | 17.05 | 12.52 | 1.53 | 16.12 | 12.14 | 1.72 | 15.13 | 11.74 | 1.92 | 14.03 | 11.30 | 2.13 |
| | 62 (16.7) | 17.27 | 15.73 | 1.22 | 16.49 | 15.36 | 1.37 | 15.68 | 14.97 | 1.54 | 14.83 | 14.55 | 1.72 | 14.00 | 14.00 | 1.92 | 13.15 | 13.15 | 2.13 |
| 600 | 72 (22.2) | 20.79 | 11.28 | 1.24 | 19.83 | 10.92 | 1.39 | 18.83 | 10.56 | 1.56 | 17.83 | 10.19 | 1.74 | 16.76 | 9.80 | 1.94 | 15.55 | 9.37 | 2.16 |
| | 67 (19.4) | 19.11 | 14.10 | 1.25 | 18.23 | 13.73 | 1.40 | 17.30 | 13.36 | 1.56 | 16.35 | 12.97 | 1.74 | 15.33 | 12.57 | 1.94 | 14.20 | 12.12 | 2.16 |
| | 62 (16.7) | 17.66 | 16.88 | 1.25 | 16.87 | 16.49 | 1.40 | 16.06 | 16.06 | 1.56 | 15.32 | 15.32 | 1.75 | 14.51 | 14.51 | 1.94 | 13.61 | 13.61 | 2.16 |
| 675 | 72 (22.2) | 21.03 | 11.77 | 1.27 | 20.02 | 11.40 | 1.42 | 18.99 | 11.03 | 1.58 | 17.97 | 10.67 | 1.77 | 16.88 | 10.28 | 1.97 | 15.65 | 9.85 | 2.18 |
| | 67 (19.4) | 19.33 | 14.90 | 1.27 | 18.43 | 14.54 | 1.42 | 17.48 | 14.15 | 1.59 | 16.51 | 13.77 | 1.77 | 15.48 | 13.35 | 1.97 | 14.33 | 12.89 | 2.19 |
| | 62 (16.7) | 18.01 | 17.91 | 1.28 | 17.30 | 17.30 | 1.43 | 16.54 | 16.54 | 1.59 | 15.76 | 15.76 | 1.77 | 14.92 | 14.92 | 1.97 | 13.97 | 13.97 | 2.19 |
| 700 | 72 (22.2) | 27.11 | 14.29 | 1.61 | 25.97 | 13.86 | 1.81 | 24.75 | 13.40 | 2.03 | 23.47 | 12.92 | 2.28 | 22.09 | 12.41 | 2.55 | 20.55 | 11.85 | 2.84 |
| | 67 (19.4) | 24.89 | 17.62 | 1.61 | 23.81 | 17.16 | 1.81 | 22.66 | 16.68 | 2.03 | 21.45 | 16.19 | 2.28 | 20.15 | 15.66 | 2.55 | 18.73 | 15.09 | 2.85 |
| | 62 (16.7) | 22.86 | 20.91 | 1.61 | 21.86 | 20.44 | 1.81 | 20.81 | 19.93 | 2.04 | 19.72 | 19.39 | 2.28 | 18.65 | 18.65 | 2.56 | 17.57 | 17.57 | 2.86 |
| 800 | 72 (22.2) | 27.54 | 14.98 | 1.64 | 26.35 | 14.54 | 1.84 | 25.08 | 14.08 | 2.06 | 23.76 | 13.60 | 2.31 | 22.34 | 13.09 | 2.58 | 20.75 | 12.52 | 2.88 |
| | 67 (19.4) | 25.31 | 18.74 | 1.64 | 24.19 | 18.29 | 1.85 | 23.00 | 17.81 | 2.07 | 21.75 | 17.31 | 2.31 | 20.42 | 16.77 | 2.59 | 18.96 | 16.19 | 2.88 |
| | 62 (16.7) | 23.37 | 22.46 | 1.65 | 22.36 | 21.95 | 1.85 | 21.35 | 21.35 | 2.07 | 20.38 | 20.38 | 2.32 | 19.33 | 19.33 | 2.59 | 18.18 | 18.18 | 2.89 |
| 900 | 72 (22.2) | 27.83 | 15.64 | 1.68 | 26.61 | 15.19 | 1.88 | 25.31 | 14.72 | 2.10 | 23.96 | 14.25 | 2.34 | 22.50 | 13.73 | 2.61 | 20.87 | 13.16 | 2.91 |
| | 67 (19.4) | 25.61 | 19.83 | 1.68 | 24.46 | 19.37 | 1.88 | 23.25 | 18.88 | 2.10 | 21.97 | 18.37 | 2.35 | 20.61 | 17.83 | 2.62 | 19.12 | 17.24 | 2.92 |
| | 62 (16.7) | 23.85 | 23.85 | 1.68 | 22.96 | 22.96 | 1.88 | 22.00 | 22.00 | 2.10 | 20.98 | 20.98 | 2.35 | 19.87 | 19.87 | 2.62 | 18.66 | 18.66 | 2.92 |
| See notes on pg. 17 | 72 (22.2) | 23.87 | 23.87 | 1.68 | 22.97 | 22.97 | 1.88 | 22.00 | 22.00 | 2.10 | 20.98 | 20.98 | 2.35 | 19.87 | 19.87 | 2.62 | 18.66 | 18.66 | 2.92 |

| 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) | | |
| | | 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† | Total | Sens† |
| 24ACB324A30 Outdoor Section With 24 Indoor Section | | | | | | | | | | | | | | | | | | | |
| 700 | 72 (22.2) | 27.11 | 14.29 | 1.61 | 25.97 | 13.86 | 1.81 | 24.75 | 13.40 | 2.03 | 23.47 | 12.92 | 2.28 | 22.09 | 12.41 | 2.55 | 20.55 | 11.85 | 2.84 |
| | 67 (19.4) | 24.89 | 17.62 | 1.61 | 23.81 | 17.16 | 1.81 | 22.66 | 16.68 | 2.03 | 21.45 | 16.19 | 2.28 | 20.15 | 15.66 | 2.55 | 18.73 | 15.09 | 2.85 |
| | 62 (16.7) | 22.86 | 20.91 | 1.61 | 21.86 | 20.44 | 1.81 | 20.81 | 19.93 | 2.04 | 19.72 | 19.39 | 2.28 | 18.65 | 18.65 | 2.56 | 17.57 | 17.57 | 2.86 |
| 800 | 72 (22.2) | 27.54 | 14.98 | 1.64 | 26.35 | 14.54 | 1.84 | 25.08 | 14.08 | 2.06 | 23.76 | 13.60 | 2.31 | 22.34 | 13.09 | 2.58 | 20.75 | 12.52 | 2.88 |
| | 67 (19.4) | 25.31 | 18.74 | 1.64 | 24.19 | 18.29 | 1.85 | 23.00 | 17.81 | 2.07 | 21.75 | 17.31 | 2.31 | 20.42 | 16.77 | 2.59 | 18.96 | 16.19 | 2.88 |
| | 62 (16.7) | 23.37 | 22.46 | 1.65 | 22.36 | 21.95 | 1.85 | 21.35 | 21.35 | 2.07 | 20.38 | 20.38 | 2.32 | 19.33 | 19.33 | 2.59 | 18.18 | 18.18 | 2.89 |
| 900 | 72 (22.2) | 27.83 | 15.64 | 1.68 | 26.61 | 15.19 | 1.88 | 25.31 | 14.72 | 2.10 | 23.96 | 14.25 | 2.34 | 22.50 | 13.73 | 2.61 | 20.87 | 13.16 | 2.91 |
| | 67 (19.4) | 25.61 | 19.83 | 1.68 | 24.46 | 19.37 | 1.88 | 23.25 | 18.88 | 2.10 | 21.97 | 18.37 | 2.35 | 20.61 | 17.83 | 2.62 | 19.12 | 17.24 | 2.92 |
| | 62 (16.7) | 23.85 | 23.85 | 1.68 | 22.96 | 22.96 | 1.88 | 22.00 | 22.00 | 2.10 | 20.98 | 20.98 | 2.35 | 19.87 | 19.87 | 2.62 | 18.66 | 18.66 | 2.92 |
| See notes on pg. 17 | 72 (22.2) | 23.87 | 23.87 | 1.68 | 22.97 | 22.97 | 1.88 | 22.00 | 22.00 | 2.10 | 20.98 | 20.98 | 2.35 | 19.87 | 19.87 | 2.62 | 18.66 | 18.66 | 2.92 |

See notes on pg. 17

DETAILED COOLING CAPACITIES# CONTINUED

| EVAPORATOR AIR | | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) | | | | | | | | | | | | | | | | | |
|---|-----------|---|------------------|----------------|-----------|-----------------------|----------------|---------|-----------------------|----------------|------------|-----------------------|----------------|------------|-----------------------|----------------|------------|-----------------------|------|
| | | 75 (23.9) | | | 85 (29.4) | | | 95 (35) | | | 105 (40.6) | | | 115 (46.1) | | | 125 (51.7) | | |
| | | CFM | EWB ° 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** | |
| Total | Sens† | | | Total | Sens† | | Total | Sens† | | Total | Sens† | | Total | Sens† | | Total | Sens† | | |
| 24ACB330A30 Outdoor Section With 30 Indoor Section | | | | | | | | | | | | | | | | | | | |
| | 72 (22.2) | 33.13 | 17.60 | 2.01 | 31.70 | 17.06 | 2.23 | 30.20 | 16.49 | 2.47 | 28.59 | 15.90 | 2.75 | 26.87 | 15.27 | 3.06 | 25.01 | 14.60 | 3.38 |
| | 67 (19.4) | 30.12 | 21.64 | 2.01 | 28.78 | 21.09 | 2.23 | 27.37 | 20.50 | 2.48 | 25.87 | 19.89 | 2.76 | 24.27 | 19.25 | 3.07 | 22.59 | 18.58 | 3.42 |
| | 62 (16.7) | 27.50 | 25.68 | 2.01 | 26.29 | 25.09 | 2.23 | 25.03 | 24.47 | 2.48 | 23.75 | 23.75 | 2.77 | 22.56 | 22.56 | 3.08 | 21.27 | 21.27 | 3.43 |
| | 57 (13.9) | 26.93 | 26.93 | 2.01 | 25.94 | 25.94 | 2.24 | 24.89 | 24.89 | 2.48 | 23.76 | 23.76 | 2.77 | 22.56 | 22.56 | 3.08 | 21.27 | 21.27 | 3.43 |
| | 72 (22.2) | 33.69 | 18.46 | 2.05 | 32.21 | 17.92 | 2.27 | 30.64 | 17.34 | 2.52 | 28.98 | 16.74 | 2.80 | 27.20 | 16.10 | 3.11 | 25.32 | 15.44 | 3.45 |
| | 67 (19.4) | 30.64 | 23.04 | 2.05 | 29.26 | 22.48 | 2.27 | 27.80 | 21.89 | 2.52 | 26.25 | 21.27 | 2.80 | 24.61 | 20.61 | 3.12 | 22.87 | 19.92 | 3.46 |
| | 62 (16.7) | 28.16 | 27.55 | 2.06 | 26.95 | 26.95 | 2.28 | 25.86 | 25.86 | 2.53 | 24.67 | 24.67 | 2.81 | 23.39 | 23.39 | 3.12 | 22.02 | 22.02 | 3.47 |
| | 57 (13.9) | 28.03 | 28.03 | 2.06 | 26.98 | 26.98 | 2.28 | 25.86 | 25.86 | 2.53 | 24.67 | 24.67 | 2.81 | 23.39 | 23.39 | 3.12 | 22.02 | 22.02 | 3.47 |
| | 72 (22.2) | 34.09 | 19.27 | 2.10 | 32.57 | 18.72 | 2.32 | 30.96 | 18.14 | 2.56 | 29.26 | 17.54 | 2.84 | 27.43 | 16.89 | 3.15 | 25.50 | 16.22 | 3.49 |
| | 67 (19.4) | 31.03 | 24.36 | 2.10 | 29.61 | 23.80 | 2.32 | 28.12 | 23.20 | 2.57 | 26.54 | 22.57 | 2.85 | 24.86 | 21.90 | 3.16 | 23.10 | 21.19 | 3.50 |
| | 62 (16.7) | 28.94 | 28.94 | 2.10 | 27.83 | 27.83 | 2.32 | 26.66 | 26.66 | 2.57 | 25.40 | 25.40 | 2.85 | 24.06 | 24.06 | 3.16 | 22.61 | 22.61 | 3.48 |
| | 57 (13.9) | 28.94 | 28.94 | 2.10 | 27.83 | 27.83 | 2.32 | 26.66 | 26.66 | 2.57 | 25.41 | 25.41 | 2.85 | 24.06 | 24.06 | 3.16 | 22.62 | 22.62 | 3.51 |
| 24ACB336A30 Outdoor Section With 36 Indoor Section | | | | | | | | | | | | | | | | | | | |
| CONDENSER ENTERING AIR TEMPERATURES ° F (° C) | | | | | | | | | | | | | | | | | | | |
| 105 (40.6) | | | | | | | | | | | | | | | | | | | |
| 95 (35) | | | | | | | | | | | | | | | | | | | |
| 85 (29.4) | | | | | | | | | | | | | | | | | | | |
| 75 (23.9) | | | | | | | | | | | | | | | | | | | |
| | 72 (22.2) | 40.12 | 21.34 | 2.48 | 38.42 | 20.70 | 2.74 | 36.61 | 20.02 | 3.03 | 34.70 | 19.31 | 3.35 | 32.62 | 18.55 | 3.71 | 30.32 | 17.72 | 4.09 |
| | 67 (19.4) | 36.62 | 26.34 | 2.47 | 35.03 | 25.67 | 2.73 | 33.34 | 24.97 | 3.02 | 31.55 | 24.24 | 3.34 | 29.62 | 23.47 | 3.70 | 27.50 | 22.62 | 4.09 |
| | 62 (16.7) | 33.54 | 31.31 | 2.46 | 32.11 | 30.61 | 2.72 | 30.61 | 29.86 | 3.01 | 29.06 | 29.06 | 3.34 | 27.62 | 27.62 | 3.70 | 25.99 | 25.99 | 4.09 |
| | 57 (13.9) | 32.88 | 32.88 | 2.46 | 31.70 | 31.70 | 2.72 | 30.44 | 30.44 | 3.01 | 29.09 | 29.09 | 3.34 | 27.63 | 27.63 | 3.70 | 26.00 | 26.00 | 4.09 |
| | 72 (22.2) | 40.72 | 22.34 | 2.54 | 38.96 | 21.69 | 2.80 | 37.09 | 21.00 | 3.09 | 35.11 | 20.28 | 3.41 | 32.97 | 19.51 | 3.76 | 30.60 | 18.67 | 4.15 |
| | 67 (19.4) | 37.19 | 27.96 | 2.53 | 35.54 | 27.28 | 2.79 | 33.80 | 26.58 | 3.08 | 31.96 | 25.85 | 3.40 | 29.98 | 25.06 | 3.76 | 27.81 | 24.20 | 4.15 |
| | 62 (16.7) | 34.30 | 33.50 | 2.52 | 32.84 | 32.84 | 2.78 | 31.55 | 31.55 | 3.07 | 30.12 | 30.12 | 3.40 | 28.56 | 28.56 | 3.75 | 26.83 | 26.83 | 4.14 |
| | 57 (13.9) | 34.15 | 34.15 | 2.52 | 32.69 | 32.69 | 2.78 | 31.55 | 31.55 | 3.07 | 30.12 | 30.12 | 3.40 | 28.56 | 28.56 | 3.75 | 26.83 | 26.83 | 4.14 |
| | 72 (22.2) | 41.16 | 23.27 | 2.60 | 39.34 | 22.61 | 2.86 | 37.42 | 21.92 | 3.14 | 35.40 | 21.20 | 3.47 | 33.21 | 20.42 | 3.82 | 30.78 | 19.57 | 4.21 |
| | 67 (19.4) | 37.62 | 29.51 | 2.59 | 35.93 | 28.83 | 2.85 | 34.15 | 28.12 | 3.14 | 32.27 | 27.38 | 3.46 | 30.25 | 26.57 | 3.81 | 28.05 | 25.67 | 4.20 |
| | 62 (16.7) | 35.18 | 35.18 | 2.58 | 33.86 | 33.86 | 2.84 | 32.45 | 32.45 | 3.13 | 30.95 | 30.95 | 3.46 | 29.31 | 29.31 | 3.81 | 27.50 | 27.50 | 4.20 |
| | 57 (13.9) | 35.19 | 35.19 | 2.58 | 33.86 | 33.86 | 2.84 | 32.46 | 32.46 | 3.13 | 30.95 | 30.95 | 3.46 | 29.31 | 29.31 | 3.81 | 27.50 | 27.50 | 4.20 |

See notes on pg. 17

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) | | |
| | | 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† | Total | Sens† |
| 24ACB342A30 Outdoor Section With 42 Indoor Section | | | | | | | | | | | | | | | | | | | |
| 1225 | 72 (22.2) | 48.51 | 25.52 | 3.33 | 46.40 | 24.71 | 3.68 | 44.17 | 23.66 | 4.06 | 41.83 | 22.99 | 39.30 | 22.05 | 4.51 | 36.50 | 21.03 | 4.99 | 33.41 |
| | 67 (19.4) | 44.49 | 31.40 | 3.31 | 42.53 | 30.57 | 3.66 | 40.46 | 29.71 | 4.08 | 38.30 | 28.81 | 35.96 | 27.87 | 4.50 | 33.41 | 26.84 | 4.98 | 31.44 |
| | 62 (16.7) | 40.85 | 37.25 | 3.29 | 39.08 | 36.40 | 3.65 | 37.24 | 35.50 | 4.04 | 35.33 | 34.54 | 33.39 | 33.39 | 4.48 | 31.44 | 31.44 | 4.97 | 31.44 |
| | 57 (13.9) | 39.76 | 39.76 | 3.29 | 38.32 | 38.32 | 3.64 | 36.79 | 36.79 | 4.04 | 35.17 | 35.17 | 33.41 | 33.41 | 4.48 | 31.45 | 31.45 | 4.97 | 31.45 |
| | 72 (22.2) | 49.22 | 26.65 | 3.40 | 47.02 | 25.82 | 3.76 | 44.72 | 24.97 | 4.15 | 42.30 | 24.08 | 39.69 | 23.14 | 5.07 | 36.79 | 22.10 | 5.59 | 33.16 |
| 1400 | 67 (19.4) | 45.18 | 33.25 | 3.38 | 43.15 | 32.40 | 3.74 | 41.00 | 31.53 | 4.13 | 38.76 | 30.63 | 36.37 | 29.68 | 5.05 | 33.74 | 28.63 | 5.58 | 31.45 |
| | 62 (16.7) | 41.71 | 39.81 | 3.37 | 39.92 | 38.90 | 3.72 | 38.04 | 38.04 | 4.12 | 36.38 | 36.38 | 34.50 | 34.50 | 5.05 | 32.41 | 32.41 | 5.58 | 31.45 |
| | 57 (13.9) | 41.28 | 41.28 | 3.37 | 39.74 | 39.74 | 3.72 | 38.11 | 38.11 | 4.12 | 36.38 | 36.38 | 34.50 | 34.50 | 5.05 | 32.41 | 32.41 | 5.58 | 31.45 |
| 1575 | 72 (22.2) | 49.76 | 27.73 | 3.48 | 47.49 | 26.90 | 3.84 | 45.12 | 26.04 | 4.23 | 42.63 | 25.14 | 39.95 | 24.19 | 5.14 | 36.99 | 23.14 | 5.66 | 33.16 |
| | 67 (19.4) | 45.71 | 35.04 | 3.46 | 43.61 | 34.19 | 3.82 | 41.42 | 33.32 | 4.21 | 39.13 | 32.41 | 36.68 | 31.44 | 5.13 | 33.99 | 30.36 | 5.65 | 31.45 |
| | 62 (16.7) | 42.55 | 42.13 | 3.45 | 40.89 | 40.89 | 3.80 | 39.17 | 39.17 | 4.20 | 37.34 | 37.34 | 35.37 | 35.37 | 5.12 | 33.16 | 33.16 | 5.65 | 31.45 |
| | 57 (13.9) | 42.52 | 42.52 | 3.45 | 40.89 | 40.89 | 3.80 | 39.17 | 39.17 | 4.20 | 37.35 | 37.35 | 35.37 | 35.37 | 5.12 | 33.16 | 33.16 | 5.65 | 31.45 |
| 24ACB348A30 Outdoor Section With 48 Indoor Section | | | | | | | | | | | | | | | | | | | |
| 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) | | |
| | | 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† | Total | Sens† |
| 1400 | 72 (22.2) | 55.04 | 28.49 | 3.35 | 52.62 | 27.54 | 3.75 | 50.08 | 26.56 | 4.20 | 47.38 | 25.54 | 44.49 | 24.45 | 5.30 | 41.25 | 23.26 | 6.01 | 37.13 |
| | 67 (19.4) | 49.86 | 34.52 | 3.35 | 47.63 | 33.55 | 3.75 | 45.27 | 32.56 | 4.21 | 42.77 | 31.51 | 40.10 | 30.41 | 5.33 | 37.08 | 29.19 | 6.08 | 34.52 |
| | 62 (16.7) | 45.26 | 40.60 | 3.35 | 43.30 | 39.77 | 3.76 | 41.26 | 38.91 | 4.22 | 39.15 | 38.04 | 37.27 | 37.27 | 5.34 | 35.05 | 35.05 | 6.09 | 34.52 |
| | 57 (13.9) | 44.65 | 44.65 | 3.35 | 42.99 | 42.99 | 3.76 | 41.23 | 41.23 | 4.22 | 39.35 | 39.35 | 37.33 | 37.33 | 5.34 | 35.06 | 35.06 | 6.09 | 34.52 |
| 1600 | 72 (22.2) | 56.06 | 29.65 | 3.42 | 53.54 | 28.89 | 3.82 | 50.89 | 27.89 | 4.27 | 48.09 | 26.65 | 45.09 | 25.55 | 5.36 | 41.76 | 24.34 | 6.06 | 37.13 |
| | 67 (19.4) | 50.79 | 36.35 | 3.42 | 48.45 | 35.38 | 3.82 | 46.00 | 34.36 | 4.28 | 43.40 | 33.30 | 40.63 | 32.17 | 5.39 | 37.50 | 30.93 | 6.14 | 34.52 |
| | 62 (16.7) | 46.36 | 43.45 | 3.42 | 44.40 | 42.66 | 3.83 | 42.52 | 41.92 | 4.17 | 40.77 | 40.77 | 38.63 | 38.63 | 5.40 | 36.19 | 36.19 | 6.15 | 34.52 |
| | 57 (13.9) | 46.41 | 46.41 | 3.42 | 44.64 | 44.64 | 3.83 | 42.77 | 42.77 | 4.28 | 40.78 | 40.78 | 38.63 | 38.63 | 5.40 | 36.19 | 36.19 | 6.15 | 34.52 |
| 1800 | 72 (22.2) | 56.83 | 30.71 | 3.49 | 54.22 | 29.73 | 3.89 | 51.49 | 28.72 | 4.34 | 48.61 | 27.66 | 45.53 | 26.54 | 5.43 | 42.11 | 25.32 | 6.12 | 37.13 |
| | 67 (19.4) | 51.48 | 38.05 | 3.49 | 49.06 | 37.05 | 3.89 | 46.53 | 36.02 | 4.35 | 43.86 | 34.94 | 41.00 | 33.80 | 5.46 | 37.80 | 32.58 | 6.20 | 34.52 |
| | 62 (16.7) | 47.45 | 46.27 | 3.50 | 45.69 | 45.69 | 3.90 | 44.03 | 44.03 | 4.36 | 41.94 | 41.94 | 39.69 | 39.69 | 5.47 | 37.12 | 37.12 | 6.21 | 34.52 |
| | 57 (13.9) | 47.87 | 47.87 | 3.49 | 46.01 | 46.01 | 3.90 | 44.04 | 44.04 | 4.36 | 41.95 | 41.95 | 39.69 | 39.69 | 5.47 | 37.13 | 37.13 | 6.21 | 34.52 |

See notes on pg. 17

DETAILED COOLING CAPACITIES# CONTINUED

| EVAPORATOR AIR | | CONDENSER ENTERING AIR TEMPERATURES ° F (° C) | | | | | | | | | | | | | | | | | |
|----------------|-----------|--|------------------|----------------|-----------|-----------------------|----------------|---------|-----------------------|----------------|------------|-----------------------|----------------|------------|-----------------------|----------------|------------|-----------------------|------|
| | | 75 (23.9) | | | 85 (29.4) | | | 95 (35) | | | 105 (40.6) | | | 115 (46.1) | | | 125 (51.7) | | |
| | | CFM | EWB ° 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** | |
| Total | Sens† | | | Total | Sens† | | Total | Sens† | | Total | Sens† | | Total | Sens† | | | | | |
| | | 24ACB30A30 Outdoor Section With 60 Indoor Section | | | | | | | | | | | | | | | | | |
| 1750 | 72 (22.2) | 67.65 | 35.66 | 4.15 | 64.56 | 34.48 | 4.58 | 61.30 | 33.25 | 5.06 | 57.89 | 31.98 | 5.58 | 54.20 | 30.63 | 6.15 | 50.10 | 29.15 | 6.77 |
| | 67 (19.4) | 62.07 | 43.94 | 4.10 | 59.24 | 42.75 | 4.53 | 56.25 | 41.50 | 5.01 | 53.12 | 40.22 | 5.54 | 49.74 | 38.85 | 6.11 | 46.03 | 37.38 | 6.74 |
| | 62 (16.7) | 57.01 | 52.17 | 4.06 | 54.45 | 50.95 | 4.49 | 51.79 | 49.66 | 4.97 | 48.04 | 48.27 | 5.50 | 46.34 | 46.34 | 6.08 | 43.50 | 43.50 | 6.72 |
| | 57 (13.9) | 55.50 | 55.50 | 4.04 | 53.42 | 53.42 | 4.48 | 51.22 | 51.22 | 4.96 | 48.89 | 48.89 | 5.50 | 46.35 | 46.35 | 6.08 | 43.51 | 43.51 | 6.72 |
| | 72 (22.2) | 68.69 | 37.30 | 4.26 | 65.46 | 36.09 | 4.69 | 62.07 | 34.85 | 5.16 | 58.54 | 33.56 | 5.69 | 54.71 | 32.19 | 6.26 | 50.48 | 30.89 | 6.87 |
| 2000 | 67 (19.4) | 63.07 | 46.60 | 4.21 | 60.11 | 45.38 | 4.64 | 57.00 | 44.12 | 5.11 | 53.75 | 42.82 | 5.64 | 50.27 | 41.45 | 6.21 | 46.44 | 39.94 | 6.84 |
| | 62 (16.7) | 58.17 | 55.80 | 4.16 | 55.57 | 54.47 | 4.59 | 52.95 | 52.95 | 5.07 | 50.49 | 50.49 | 5.61 | 47.78 | 47.78 | 6.19 | 44.74 | 44.74 | 6.82 |
| | 57 (13.9) | 57.57 | 57.57 | 4.16 | 55.35 | 55.35 | 4.59 | 52.99 | 52.99 | 5.07 | 50.50 | 50.50 | 5.61 | 47.78 | 47.78 | 6.19 | 44.74 | 44.74 | 6.82 |
| 2250 | 72 (22.2) | 69.44 | 38.83 | 4.36 | 66.10 | 37.62 | 4.79 | 62.61 | 36.36 | 5.27 | 58.97 | 35.06 | 5.79 | 55.04 | 33.67 | 6.36 | 50.70 | 32.16 | 6.97 |
| | 67 (19.4) | 63.79 | 49.12 | 4.31 | 60.73 | 47.89 | 4.74 | 57.53 | 46.62 | 5.21 | 54.20 | 45.31 | 5.74 | 50.63 | 43.90 | 6.31 | 46.72 | 42.34 | 6.93 |
| | 62 (16.7) | 59.18 | 59.18 | 4.27 | 56.90 | 56.90 | 4.70 | 54.41 | 54.41 | 5.18 | 51.77 | 51.77 | 5.72 | 48.91 | 48.91 | 6.30 | 45.70 | 45.70 | 6.93 |
| 57 (13.9) | 59.25 | 59.25 | 4.27 | 56.90 | 56.90 | 4.70 | 54.42 | 54.42 | 5.18 | 51.78 | 51.78 | 5.72 | 48.91 | 48.91 | 6.30 | 45.70 | 45.70 | 6.93 | |

† 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 ° 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) |
| 24ACB318A30 | | | | | | | | | |
| 30 (-1.11) | TCG | 15.90 | 15.00 | 14.10 | 13.10 | 12.20 | 11.20 | 10.20 | 9.10 |
| | SDT | 67.80 | 77.30 | 86.80 | 96.30 | 105.90 | 115.50 | 125.10 | 134.80 |
| | KW | 0.80 | 0.92 | 1.06 | 1.20 | 1.36 | 1.54 | 1.73 | 1.92 |
| 35 (1.67) | TCG | 17.50 | 16.50 | 15.50 | 14.50 | 13.50 | 12.50 | 11.40 | 10.20 |
| | SDT | 68.80 | 78.20 | 87.70 | 97.20 | 106.70 | 116.20 | 125.80 | 135.40 |
| | KW | 0.80 | 0.92 | 1.05 | 1.20 | 1.36 | 1.54 | 1.73 | 1.94 |
| 40 (4.44) | TCG | 19.20 | 18.20 | 17.10 | 16.00 | 14.90 | 13.80 | 12.60 | 11.40 |
| | SDT | 69.80 | 79.20 | 88.70 | 98.10 | 107.50 | 117.00 | 126.50 | 136.00 |
| | KW | 0.79 | 0.91 | 1.05 | 1.20 | 1.36 | 1.54 | 1.74 | 1.95 |
| 45 (7.22) | TCG | 21.00 | 19.90 | 18.80 | 17.60 | 16.40 | 15.20 | 14.00 | 12.60 |
| | SDT | 70.90 | 80.30 | 89.70 | 99.10 | 108.40 | 117.80 | 127.20 | 136.70 |
| | KW | 0.79 | 0.91 | 1.05 | 1.20 | 1.36 | 1.54 | 1.74 | 1.95 |
| 50 (10.0) | TCG | 22.90 | 21.70 | 20.40 | 19.20 | 17.90 | 16.60 | 15.30 | 13.90 |
| | SDT | 72.00 | 81.40 | 90.70 | 100.10 | 109.30 | 118.70 | 128.00 | 137.30 |
| | KW | 0.79 | 0.91 | 1.04 | 1.19 | 1.36 | 1.54 | 1.74 | 1.95 |
| 55 (12.78) | TCG | 24.80 | 23.50 | 22.10 | 20.80 | 19.40 | 18.00 | 16.70 | 15.20 |
| | SDT | 73.10 | 82.50 | 91.80 | 101.10 | 110.30 | 119.50 | 128.80 | 138.00 |
| | KW | 0.78 | 0.90 | 1.04 | 1.19 | 1.36 | 1.54 | 1.74 | 1.95 |
| 24ACB324A30 | | | | | | | | | |
| 30 (-1.11) | TCG | 21.20 | 20.00 | 18.80 | 17.60 | 16.40 | 15.10 | 13.80 | 12.50 |
| | SDT | 71.90 | 81.20 | 90.60 | 100.10 | 109.50 | 119.00 | 128.60 | 138.20 |
| | KW | 1.04 | 1.19 | 1.37 | 1.56 | 1.77 | 2.01 | 2.26 | 2.53 |
| 35 (1.67) | TCG | 23.30 | 22.10 | 20.80 | 19.50 | 18.20 | 16.80 | 15.40 | 13.90 |
| | SDT | 73.20 | 82.50 | 91.80 | 101.10 | 110.50 | 119.90 | 129.40 | 139.00 |
| | KW | 1.03 | 1.19 | 1.37 | 1.56 | 1.77 | 2.01 | 2.27 | 2.54 |
| 40 (4.44) | TCG | 25.60 | 24.20 | 22.90 | 21.50 | 20.00 | 18.60 | 17.10 | 15.50 |
| | SDT | 74.60 | 83.80 | 93.00 | 102.30 | 111.50 | 120.90 | 130.30 | 139.70 |
| | KW | 1.03 | 1.19 | 1.37 | 1.56 | 1.78 | 2.01 | 2.27 | 2.55 |
| 45 (7.22) | TCG | 28.00 | 26.50 | 25.00 | 23.50 | 22.00 | 20.40 | 18.80 | 17.10 |
| | SDT | 76.00 | 85.10 | 94.30 | 103.50 | 112.60 | 121.90 | 131.20 | 140.50 |
| | KW | 1.03 | 1.19 | 1.37 | 1.56 | 1.78 | 2.01 | 2.27 | 2.55 |
| 50 (10.0) | TCG | 30.50 | 28.90 | 27.30 | 25.70 | 24.00 | 22.30 | 20.60 | 18.80 |
| | SDT | 77.50 | 86.60 | 95.60 | 104.70 | 113.80 | 122.90 | 132.10 | 141.20 |
| | KW | 1.03 | 1.19 | 1.37 | 1.56 | 1.77 | 2.01 | 2.27 | 2.55 |
| 55 (12.78) | TCG | 33.00 | 31.30 | 29.60 | 27.80 | 26.10 | 24.30 | 22.40 | 20.40 |
| | SDT | 79.00 | 88.00 | 97.00 | 106.00 | 114.90 | 124.00 | 133.00 | 142.00 |
| | KW | 1.03 | 1.19 | 1.37 | 1.56 | 1.77 | 2.01 | 2.27 | 2.55 |
| 24ACB330A30 | | | | | | | | | |
| 30 (-1.11) | TCG | 24.60 | 23.30 | 22.00 | 20.60 | 19.10 | 17.70 | 16.10 | 14.50 |
| | SDT | 72.10 | 81.50 | 91.00 | 100.60 | 110.20 | 120.00 | 129.90 | 139.90 |
| | KW | 1.33 | 1.50 | 1.69 | 1.91 | 2.14 | 2.40 | 2.67 | 2.97 |
| 35 (1.67) | TCG | 27.10 | 25.70 | 24.30 | 22.80 | 21.30 | 19.70 | 18.00 | 16.20 |
| | SDT | 73.40 | 82.70 | 92.20 | 101.60 | 111.20 | 120.90 | 130.70 | 140.60 |
| | KW | 1.34 | 1.51 | 1.70 | 1.91 | 2.14 | 2.40 | 2.69 | 3.00 |
| 40 (4.44) | TCG | 29.80 | 28.30 | 26.80 | 25.20 | 23.50 | 21.80 | 20.00 | 18.20 |
| | SDT | 74.70 | 84.00 | 93.30 | 102.70 | 112.20 | 121.80 | 131.50 | 141.30 |
| | KW | 1.34 | 1.51 | 1.70 | 1.91 | 2.15 | 2.41 | 2.70 | 3.01 |
| 45 (7.22) | TCG | 32.70 | 31.10 | 29.40 | 27.70 | 26.00 | 24.10 | 22.20 | 20.20 |
| | SDT | 76.10 | 85.20 | 94.50 | 103.80 | 113.10 | 122.70 | 132.30 | 142.00 |
| | KW | 1.35 | 1.52 | 1.71 | 1.92 | 2.15 | 2.42 | 2.71 | 3.02 |
| 50 (10.0) | TCG | 35.80 | 34.10 | 32.30 | 30.50 | 28.60 | 26.60 | 24.60 | 22.40 |
| | SDT | 77.50 | 86.60 | 95.70 | 104.90 | 114.20 | 123.60 | 133.10 | 142.60 |
| | KW | 1.35 | 1.52 | 1.71 | 1.92 | 2.16 | 2.42 | 2.71 | 3.03 |
| 55 (12.78) | TCG | 39.10 | 37.20 | 35.30 | 33.40 | 31.30 | 29.30 | 27.10 | 24.80 |
| | SDT | 79.00 | 88.00 | 97.00 | 106.10 | 115.20 | 124.50 | 133.90 | 143.30 |
| | KW | 1.36 | 1.53 | 1.72 | 1.93 | 2.16 | 2.42 | 2.71 | 3.03 |
| 24ACB336A30 | | | | | | | | | |
| 30 (-1.11) | TCG | 31.50 | 29.90 | 28.20 | 26.50 | 24.70 | 22.80 | 20.90 | 18.80 |
| | SDT | 72.10 | 81.10 | 90.20 | 99.30 | 108.50 | 117.70 | 127.00 | 136.30 |
| | KW | 1.62 | 1.82 | 2.05 | 2.31 | 2.59 | 2.90 | 3.23 | 3.58 |
| 35 (1.67) | TCG | 34.70 | 32.90 | 31.10 | 29.20 | 27.30 | 25.30 | 23.20 | 21.00 |
| | SDT | 73.70 | 82.50 | 91.50 | 100.50 | 109.60 | 118.70 | 127.90 | 137.10 |
| | KW | 1.63 | 1.83 | 2.06 | 2.32 | 2.60 | 2.91 | 3.25 | 3.61 |
| 40 (4.44) | TCG | 38.10 | 36.20 | 34.20 | 32.20 | 30.10 | 27.90 | 25.70 | 23.30 |
| | SDT | 75.30 | 84.00 | 92.80 | 101.80 | 110.70 | 119.80 | 128.90 | 138.00 |
| | KW | 1.64 | 1.84 | 2.07 | 2.33 | 2.62 | 2.93 | 3.27 | 3.63 |
| 45 (7.22) | TCG | 41.70 | 39.60 | 37.50 | 35.30 | 33.10 | 30.70 | 28.30 | 25.70 |
| | SDT | 77.00 | 85.60 | 94.30 | 103.10 | 112.00 | 121.00 | 129.90 | 138.90 |
| | KW | 1.65 | 1.86 | 2.09 | 2.34 | 2.63 | 2.94 | 3.28 | 3.65 |
| 50 (10.0) | TCG | 45.60 | 43.30 | 41.00 | 38.60 | 36.20 | 33.70 | 31.00 | 28.20 |
| | SDT | 78.90 | 87.30 | 95.90 | 104.60 | 113.30 | 122.20 | 131.00 | 139.90 |
| | KW | 1.67 | 1.87 | 2.10 | 2.36 | 2.64 | 2.96 | 3.30 | 3.67 |
| 55 (12.78) | TCG | 49.60 | 47.10 | 44.60 | 42.00 | 39.40 | 36.70 | 33.80 | 30.80 |
| | SDT | 80.80 | 89.10 | 97.50 | 106.10 | 114.70 | 123.40 | 132.10 | 140.80 |
| | KW | 1.69 | 1.89 | 2.12 | 2.38 | 2.66 | 2.97 | 3.31 | 3.68 |

24ACB3

See notes on page 19

CONDENSER ONLY RATINGS* CONTINUED

| SST °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) |
| 24ACB342A30 | | | | | | | | | |
| 30 (-1.11) | TCG | 38.00 | 36.00 | 33.90 | 31.90 | 29.70 | 27.60 | 25.30 | 22.90 |
| | SDT | 73.20 | 82.30 | 91.40 | 100.60 | 109.80 | 119.10 | 128.40 | 137.70 |
| | KW | 1.95 | 2.20 | 2.48 | 2.80 | 3.14 | 3.53 | 3.95 | 4.41 |
| 35 (1.67) | TCG | 41.90 | 39.70 | 37.40 | 35.10 | 32.80 | 30.50 | 28.00 | 25.50 |
| | SDT | 74.80 | 83.70 | 92.80 | 101.90 | 111.00 | 120.20 | 129.40 | 138.60 |
| | KW | 1.97 | 2.22 | 2.50 | 2.81 | 3.16 | 3.54 | 3.97 | 4.43 |
| 40 (4.44) | TCG | 46.00 | 43.60 | 41.10 | 38.70 | 36.20 | 33.60 | 30.90 | 28.10 |
| | SDT | 76.40 | 85.20 | 94.20 | 103.20 | 112.20 | 121.30 | 130.40 | 139.50 |
| | KW | 1.98 | 2.23 | 2.52 | 2.83 | 3.18 | 3.56 | 3.98 | 4.44 |
| 45 (7.22) | TCG | 50.30 | 47.70 | 45.10 | 42.40 | 39.60 | 36.80 | 33.90 | 30.90 |
| | SDT | 78.10 | 86.90 | 95.70 | 104.60 | 113.50 | 122.50 | 131.40 | 140.40 |
| | KW | 2.01 | 2.26 | 2.54 | 2.85 | 3.19 | 3.58 | 4.00 | 4.45 |
| 50 (10.0) | TCG | 54.90 | 52.10 | 49.20 | 46.20 | 43.20 | 40.20 | 37.00 | 33.60 |
| | SDT | 80.00 | 88.60 | 97.20 | 106.00 | 114.80 | 123.70 | 132.50 | 141.30 |
| | KW | 2.03 | 2.28 | 2.56 | 2.87 | 3.21 | 3.60 | 4.01 | 4.47 |
| 55 (12.78) | TCG | 59.70 | 56.60 | 53.40 | 50.20 | 46.90 | 43.50 | 40.10 | 36.40 |
| | SDT | 81.90 | 90.30 | 98.90 | 107.50 | 116.20 | 124.90 | 133.60 | 142.20 |
| | KW | 2.06 | 2.30 | 2.58 | 2.89 | 3.23 | 3.62 | 4.03 | 4.48 |
| 24ACB348A30 | | | | | | | | | |
| 30 (-1.11) | TCG | 41.60 | 39.30 | 37.10 | 34.80 | 32.40 | 30.00 | 27.40 | 24.80 |
| | SDT | 73.90 | 83.20 | 92.60 | 101.90 | 111.30 | 120.80 | 130.20 | 139.70 |
| | KW | 2.24 | 2.54 | 2.87 | 3.24 | 3.64 | 4.08 | 4.56 | 5.08 |
| 35 (1.67) | TCG | 45.80 | 43.40 | 40.90 | 38.50 | 35.90 | 33.30 | 30.60 | 27.70 |
| | SDT | 75.40 | 84.70 | 93.90 | 103.20 | 112.50 | 121.90 | 131.30 | 140.70 |
| | KW | 2.25 | 2.55 | 2.88 | 3.25 | 3.66 | 4.10 | 4.59 | 5.11 |
| 40 (4.44) | TCG | 50.30 | 47.70 | 45.10 | 42.40 | 39.60 | 36.80 | 33.90 | 30.90 |
| | SDT | 77.00 | 86.20 | 95.30 | 104.50 | 113.80 | 123.00 | 132.30 | 141.60 |
| | KW | 2.26 | 2.56 | 2.89 | 3.26 | 3.67 | 4.12 | 4.61 | 5.14 |
| 45 (7.22) | TCG | 55.10 | 52.30 | 49.50 | 46.60 | 43.60 | 40.60 | 37.50 | 34.20 |
| | SDT | 78.60 | 87.70 | 96.80 | 105.90 | 115.00 | 124.20 | 133.40 | 142.60 |
| | KW | 2.27 | 2.57 | 2.90 | 3.27 | 3.68 | 4.13 | 4.62 | 5.15 |
| 50 (10.0) | TCG | 60.20 | 57.20 | 54.20 | 51.10 | 47.90 | 44.60 | 41.20 | 37.70 |
| | SDT | 80.30 | 89.40 | 98.40 | 107.40 | 116.40 | 125.50 | 134.50 | 143.50 |
| | KW | 2.28 | 2.59 | 2.92 | 3.29 | 3.70 | 4.15 | 4.64 | 5.17 |
| 55 (12.78) | TCG | 65.70 | 62.50 | 59.20 | 55.80 | 52.40 | 48.90 | 45.20 | 41.30 |
| | SDT | 82.10 | 91.10 | 100.00 | 108.90 | 117.80 | 126.80 | 135.70 | 144.50 |
| | KW | 2.30 | 2.60 | 2.94 | 3.30 | 3.71 | 4.16 | 4.65 | 5.18 |
| 24ACB360A30 | | | | | | | | | |
| 30 (-1.11) | TCG | 53.30 | 50.40 | 47.40 | 44.50 | 41.50 | 38.40 | 35.20 | 31.90 |
| | SDT | 74.40 | 83.30 | 92.20 | 101.30 | 110.40 | 119.50 | 128.60 | 137.70 |
| | KW | 2.61 | 2.94 | 3.32 | 3.73 | 4.20 | 4.71 | 5.27 | 5.88 |
| 35 (1.67) | TCG | 58.70 | 55.50 | 52.20 | 49.00 | 45.70 | 42.30 | 38.90 | 35.20 |
| | SDT | 76.10 | 84.90 | 93.70 | 102.70 | 111.70 | 120.70 | 129.70 | 138.70 |
| | KW | 2.65 | 2.98 | 3.36 | 3.77 | 4.24 | 4.75 | 5.31 | 5.91 |
| 40 (4.44) | TCG | 64.30 | 60.80 | 57.30 | 53.80 | 50.20 | 46.50 | 42.60 | 38.60 |
| | SDT | 78.00 | 86.60 | 95.30 | 104.20 | 113.00 | 121.90 | 130.80 | 139.60 |
| | KW | 2.70 | 3.03 | 3.40 | 3.82 | 4.28 | 4.79 | 5.35 | 5.95 |
| 45 (7.22) | TCG | 70.30 | 66.50 | 62.70 | 58.80 | 54.80 | 50.70 | 46.50 | 42.10 |
| | SDT | 79.90 | 88.40 | 97.00 | 105.70 | 114.50 | 123.20 | 132.00 | 140.60 |
| | KW | 2.75 | 3.08 | 3.46 | 3.87 | 4.33 | 4.84 | 5.39 | 5.99 |
| 50 (10.0) | TCG | 76.70 | 72.50 | 68.20 | 64.00 | 59.60 | 55.20 | 50.60 | 45.60 |
| | SDT | 82.00 | 90.40 | 98.80 | 107.40 | 116.00 | 124.60 | 133.20 | 141.70 |
| | KW | 2.81 | 3.14 | 3.51 | 3.93 | 4.38 | 4.89 | 5.44 | 6.03 |
| 55 (12.78) | TCG | 83.30 | 78.70 | 74.10 | 69.40 | 64.60 | 59.70 | 54.70 | 49.30 |
| | SDT | 84.20 | 92.40 | 100.70 | 109.10 | 117.50 | 126.00 | 134.40 | 142.70 |
| | KW | 2.87 | 3.20 | 3.57 | 3.98 | 4.44 | 4.94 | 5.48 | 6.07 |

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

KW – Outdoor Unit Kilowatts Only.

SDT – Saturated Temperature Leaving Compressor (°F)

SST – Saturated Temperature Entering Compressor (°F/°C)

TCG – Gross Cooling Capacity (1000 Btuh)

24ACB3

GUIDE SPECIFICATIONS

GENERAL

System Description

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

Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 210.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have c-UL-us approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils will be leak tested at 150 psig and pressure tested at 450 psig.
- Unit constructed in ISO9001 approved facility.

Delivery, Storage, and Handling

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

Warranty (for inclusion by specifying engineer)

- U.S. and Canada only.

PRODUCTS

Equipment

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

Unit Cabinet

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

AIR-COOLED, SPLIT-SYSTEM AIR CONDITIONER

24ACB3

1-1/2 TO 5 NOMINAL TONS

Fans

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

Compressor

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

Condenser Coil

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

Refrigeration Components

- Refrigeration circuit components will include liquid-line shutoff valve with sweat connections, vapor-line shutoff valve with sweat connections, system charge of Puron® (R-410A) refrigerant, and compressor oil.
- Unit will be equipped with filter drier for Puron refrigerant.

Operating Characteristics

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

Electrical Requirements

- Nominal unit electrical characteristics will be _____ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.

Special Features

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