

RELY ON



## Endeavor® Line *Achiever Plus*® Series Top-Discharge Universal Heat Pump



### RP17AY

Cooling Efficiencies up to: 17 SEER2 / 11.7 EER2

Heating Efficiencies up to: 9.5 HSPF2

Nominal Sizes: 2 to 5 Tons [7.0 to 17.6 kW]

Cooling & Heating Capacities: 22.2 to 57 kBTU [6.5 to 16.7 kW]

Refrigerant Type: R-454B



<sup>1</sup>Valid for RP17AY24AJVCA matched with qualifying Ruud indoor models. Proper sizing and installation of equipment is critical to achieve optimal performance. Ask your contractor for details or visit [www.energystar.gov](http://www.energystar.gov).

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## Features and Benefits

- **Flexible and Universal Install Compatibility:**
  - Works with nearly any R-454B HVAC System—including Ruud® EcoNet® Enabled systems and non-communicating systems
  - Install with any indoor system component via a Ruud algorithm (IMPORTANT: The indoor system component CFM must match the requirement of the outdoor system component)
  - Install as a Universal Replacement with minimal alterations (R-454B coil only—with TXV)
- **Quiet Operation as low as 55dBA<sup>1</sup>:** Offers sound dampening features such as a sound blanket, refrigerant tubing design, fan blade approach and innovative compressor and drive technologies—ensure that as efficiency goes up, sound levels stay low
- **EcoNet Enabled<sup>2</sup>:** Automatic system configuration and optimization
- **PlusOne® Diagnostics & Bluetooth<sup>®3, 4</sup> Connectivity:** With the Ruud Contractor & EcoNet Apps, built-in technology makes advanced set-up, monitoring, troubleshooting, and repairing the product easier than ever before
- **PlusOne Variable Speed Twin Rotary Compressor and Inverter Drive:**
  - Features variable speed operation from 35% to 100% capacity with the EcoNet Smart Thermostat or with legacy and other thermostats when the utility 1 & 2 jumpers are installed and using the Ruud algorithm<sup>5</sup>
  - Provides precise temperature control, advanced humidity control and greater efficiency
- **Brushless DC Condenser Motors (BLDC):** Enhances reliability and allows for easier serviceability
- **Swept Wing Fan Technology:** Features quieter operation and improved unit acoustics
- **7mm Condenser Copper Coil:** Requires less refrigerant allowing for a smaller and lighter footprint while enhancing reliability
- **Traditional Refrigerant Piping:** Allows for use of existing refrigerant line sets for further ease of replacement installation flexibility
- **10-Year Conditional Parts Warranty (registration required):** Coverage when installed as a heat pump only or as part of a system—with no AHRI matched system requirement
- **PlusOne Refrigerant Detection System<sup>TM6</sup>:** An integrated one-box, patented design featuring the A2L sensor and mitigation board, offering easier commissioning with a single component and simplified wiring configuration, compatibility with the any 24V thermostat<sup>7</sup> application and system protection by automatically pausing outdoor unit operation—if excess refrigerant is detected

<sup>1</sup>Based on Internal R&D Testing, 2024 Sound levels are also dependent on proper installation and location of outdoor product. <sup>2</sup>When installed as part of a complete AHRI-matched, EcoNet Enabled system. <sup>3</sup>The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks is under license. Other trademarks and trade names are those of their respective owners. <sup>4</sup>When installed as part of a complete Ruud system where both the outdoor and indoor components feature Bluetooth Technology. <sup>5</sup>Two-Stage (70% & 100% capacity) operation when installed with legacy and other thermostats when the utility 1 & 2 jumpers are not installed. <sup>6</sup>When installed as part of a complete Ruud system. The sensor is factory or field-installed in the furnace coil or air handler and is applicable to the complete heating and cooling system featuring Low GWP Refrigerant (A2L). <sup>7</sup>RP17AY system is compatible with two-stage 24V thermostat.

# Heat Pumps

| <u>R</u> | <u>P</u>                    | <u>17</u>     | <u>A</u>        | <u>Y</u>    | <u>24</u>                                                                                           | <u>A</u>       | <u>J</u>         | <u>V</u>           | <u>C</u>                             | <u>A</u>       |
|----------|-----------------------------|---------------|-----------------|-------------|-----------------------------------------------------------------------------------------------------|----------------|------------------|--------------------|--------------------------------------|----------------|
| Brand    | Product Category            | SEER2         | Region          | Refrigerant | Capacity                                                                                            | Major Series   | Voltage          | Type               | Controls                             | Minor Series   |
| R - Ruud | P - Top-Discharge Heat Pump | 17 - 17 SEER2 | A - All Regions | Y - R-454B  | 24 - 24,000 [7.03 kW]<br>36 - 36,000 [10.55 kW]<br>48 - 48,000 [14.07 kW]<br>60 - 60,000 [17.58 kW] | A - 1st Design | J - 208/230/1/60 | V - Fully Variable | C - Communicating, EcoNet, Bluetooth | A - 1st Series |

[ ] Designates Metric Conversions

| AVAILABLE MODELS | DESCRIPTION                                                                                                         |
|------------------|---------------------------------------------------------------------------------------------------------------------|
| RP17AY24AJVCA    | Endeavor® Line <i>Achiever Plus</i> ® Series 2 Ton Inverter Driven Variable Speed Top-Discharge Universal Heat Pump |
| RP17AY36AJVCA    | Endeavor® Line <i>Achiever Plus</i> ® Series 3 Ton Inverter Driven Variable Speed Top-Discharge Universal Heat Pump |
| RP17AY48AJVCA    | Endeavor® Line <i>Achiever Plus</i> ® Series 4 Ton Inverter Driven Variable Speed Top-Discharge Universal Heat Pump |
| RP17AY60AJVCA    | Endeavor® Line <i>Achiever Plus</i> ® Series 5 Ton Inverter Driven Variable Speed Top-Discharge Universal Heat Pump |

**NOTE:** RP17AY models are communicating when installed as part of a complete AHRI-matched, Ruud EcoNet Enabled System

| STANDARD EQUIPMENT                                           |
|--------------------------------------------------------------|
| R-454B Refrigerant                                           |
| EcoNet Enabled                                               |
| Variable Speed Compressor                                    |
| Compressor Sound Blanket                                     |
| Variable Speed Outdoor Fan Motor                             |
| Swept Wing Fan Blade                                         |
| Field Installed Filter Drier                                 |
| Front Seating Service Valves                                 |
| Internal Pressure Relief Valve                               |
| Internal Thermal Overload                                    |
| Long Line capability                                         |
| Low Ambient capability with Kit                              |
| 3-4-5 Expanded Valve Space                                   |
| Composite Basepan                                            |
| 2 Screw Control Box Access                                   |
| Quick release louver panel design                            |
| No fasteners to remove along bottom                          |
| Optimized Venturi Airflow                                    |
| Powder coated paint                                          |
| Rust resistant screws                                        |
| QR code                                                      |
| External gauge ports                                         |
| Service trays                                                |
| Integrated crankcase heat via motor windings (no add-on kit) |

| <b>General Data</b>                             |                       |               |               |               |
|-------------------------------------------------|-----------------------|---------------|---------------|---------------|
| MODEL NO.                                       | RP17AY24AJVCA         | RP17AY36AJVCA | RP17AY48AJVCA | RP17AY60AJVCA |
| Nominal Tonnage                                 | 2.0                   | 3.0           | 4.0           | 5.0           |
| Valve Connections                               |                       |               |               |               |
| Liquid Line O.D. – in.                          | 3/8                   | 3/8           | 3/8           | 3/8           |
| Suction Line O.D. – in.                         | 3/4                   | 3/4           | 7/8           | 7/8           |
| Refrigerant (R-454B) furnished oz. <sup>1</sup> | 98                    | 110           | 131           | 220           |
| Compressor Type                                 | Variable Speed Rotary |               |               |               |
| Outdoor Coil                                    |                       |               |               |               |
| Net face area – Outer Coil                      | 11.8                  | 21.5          | 21.5          | 23.4          |
| Net face area – Inner Coil                      | —                     | —             | —             | 23.4          |
| Tube diameter – in.                             | 0.276                 | 0.276         | 0.276         | 0.276         |
| Number of rows                                  | 1                     | 1             | 1             | 2             |
| Fins per inch                                   | 22                    | 22            | 22            | 22            |
| Outdoor Fan                                     |                       |               |               |               |
| Diameter – in.                                  | 20                    | 24            | 24            | 26            |
| Number of blades                                | 3                     | 3             | 3             | 3             |
| Motor hp                                        | 1/4                   | 1/4           | 1/4           | 1/3           |
| CFM                                             | 2109                  | 4216          | 4126          | 4631          |
| RPM                                             | 900                   | 1000          | 1000          | 900           |
| Shipping weight – lbs.                          | 188                   | 221           | 247           | 282           |
| Operating weight – lbs.                         | 181                   | 214           | 240           | 275           |

| <b>Electrical Data</b>                             |              |              |              |              |
|----------------------------------------------------|--------------|--------------|--------------|--------------|
| Line Voltage Data (Volts-Phase-Hz)                 | 208/230-1-60 | 208/230-1-60 | 208/230-1-60 | 208/230-1-60 |
| Maximum overcurrent protection (amps) <sup>2</sup> | 20           | 35           | 45           | 50           |
| Minimum circuit ampacity <sup>3</sup>              | 12           | 20           | 26           | 32           |
| Compressor                                         |              |              |              |              |
| Rated load amps                                    | 9.4          | 15.9         | 20.1         | 25.6         |
| Locked rotor amps                                  | N/A          | N/A          | N/A          | N/A          |
| Inverter Input Current                             | 19           | 19           | 28           | 28           |

<sup>1</sup>Refrigerant charge sufficient for 15 ft. length of refrigerant lines. For longer line set requirements see the installation instructions for information about set length and additional refrigerant charge required.

<sup>2</sup>HACR type circuit breaker or fuse.

<sup>3</sup>Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.

Accessories

| MODEL NO.                                       |                | RP17AY24AJVCA     | RP17AY36AJVCA     | RP17AY48AJVCA     | RP17AY60AJVCA     |
|-------------------------------------------------|----------------|-------------------|-------------------|-------------------|-------------------|
| Low ambient control                             |                | Included Standard | Included Standard | Included Standard | Included Standard |
| Compressor sound cover                          |                | Included Standard | Included Standard | Included Standard | Included Standard |
| Compressor hard start kit                       |                | N/A               | N/A               | N/A               | N/A               |
| Low pressure control                            |                | Included Standard | Included Standard | Included Standard | Included Standard |
| High pressure control                           |                | Included Standard | Included Standard | Included Standard | Included Standard |
| Liquid Line Solenoid<br>(24 VAC, 50/60 Hz)      | Solenoid Valve | 200RD2T3TVLC      | 200RD2T3TVLC      | 200RD2T3TVLC      | 200RD2T3TVLC      |
|                                                 | Solenoid Coil  | 61-AMG24V         | 61-AMG24V         | 61-AMG24V         | 61-AMG24V         |
| Liquid Line Solenoid<br>(120/240 VAC, 50/60 Hz) | Solenoid Valve | 200RD2T3TVLC      | 200RD2T3TVLC      | 200RD2T3TVLC      | 200RD2T3TVLC      |
|                                                 | Solenoid Coil  | 61-AMG120/240V    | 61-AMG120/240V    | 61-AMG120/240V    | 61-AMG120/240V    |

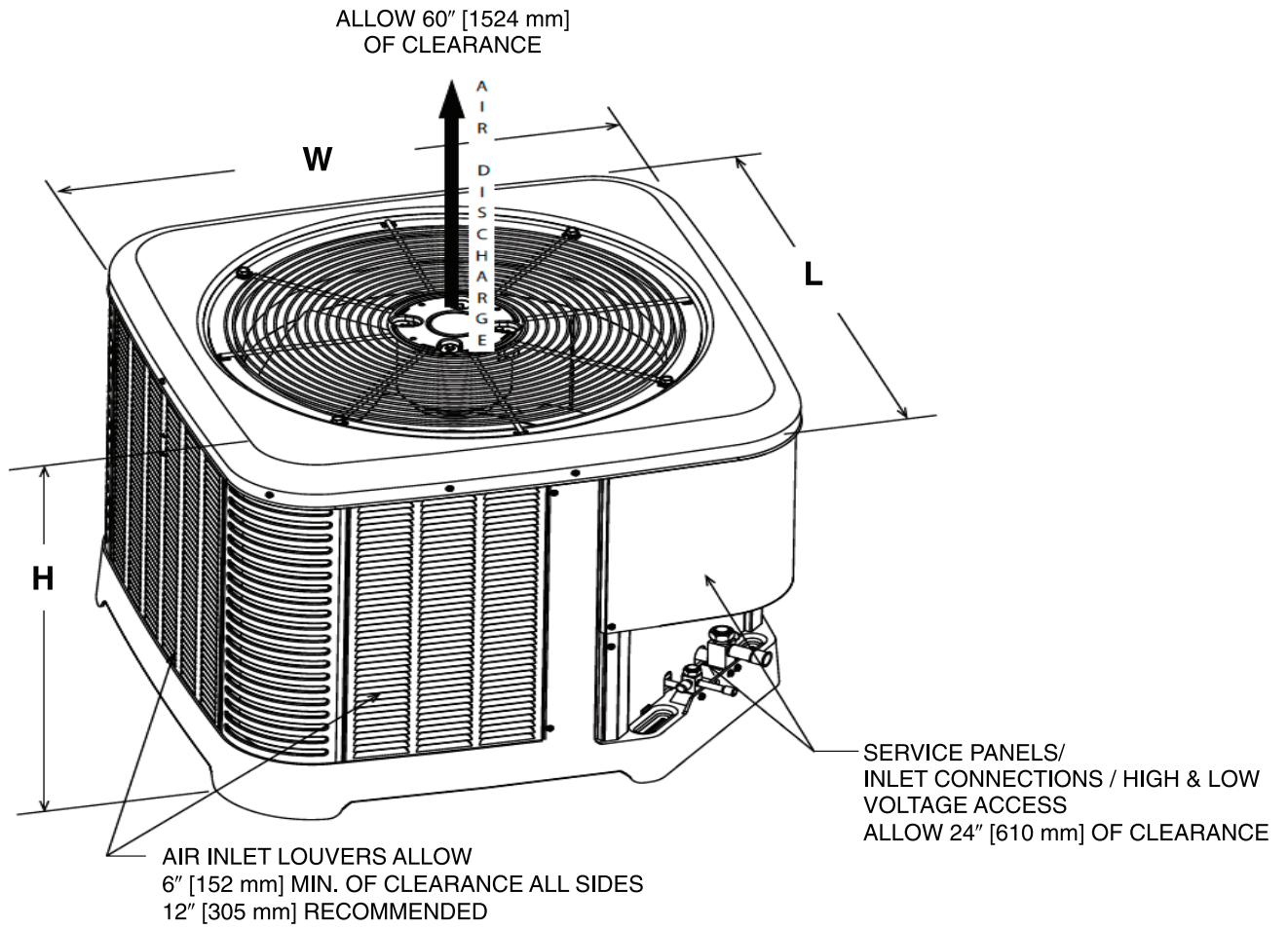
Weighted Sound Power Level (dBA)

| UNIT SIZE -<br>VOLTAGE, SERIES | SOUND PRESSURE<br>AS LOW AS (dBA) | SOUND POWER<br>AS LOW AS (dBA) | TYPICAL OCTAVE BAND SPECTRUM (dBA WITHOUT TONE ADJUSTMENT) |      |      |      |      |      |      |      |
|--------------------------------|-----------------------------------|--------------------------------|------------------------------------------------------------|------|------|------|------|------|------|------|
|                                |                                   |                                | 125                                                        | 250  | 500  | 1000 | 2000 | 4000 | 6300 | 8000 |
| RP17AY24AJVCA                  | 55                                | 62                             | 46.9                                                       | 50.4 | 56.7 | 55.9 | 53.1 | 50.8 | 51.9 | 46.8 |
| RP17AY36AJVCA                  | 58                                | 64                             | 53.8                                                       | 57.3 | 55.0 | 54.9 | 51.5 | 52.0 | 57.0 | 57.4 |
| RP17AY48AJVCA                  | 58                                | 65                             | 54.2                                                       | 59   | 66.4 | 64.8 | 63.7 | 59.7 | 56.0 | 51.5 |
| RP17AY60AJVCA                  | 57                                | 64                             | 54.6                                                       | 58.8 | 65.2 | 63.1 | 60.7 | 58.3 | 53.4 | 49.9 |

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

# Unit Dimensions

| MODEL NO.     | OPERATING  |        |            |        |           |        | SHIPPING   |         |            |        |           |        |
|---------------|------------|--------|------------|--------|-----------|--------|------------|---------|------------|--------|-----------|--------|
|               | H (Height) |        | L (Length) |        | W (Width) |        | H (Height) |         | L (Length) |        | W (Width) |        |
|               | INCHES     | mm     | INCHES     | mm     | INCHES    | mm     | INCHES     | mm      | INCHES     | mm     | INCHES    | mm     |
| RP17AY24AJVCA | 27.00      | 685.80 | 29.75      | 755.65 | 29.75     | 755.65 | 28.50      | 723.90  | 32.38      | 822.45 | 32.38     | 822.45 |
| RP17AY36AJVCA | 39.00      | 991.00 | 33.75      | 857.25 | 33.75     | 857.25 | 40.50      | 1028.70 | 36.38      | 924.05 | 36.38     | 924.05 |
| RP17AY48AJVCA | 39.00      | 991.00 | 33.75      | 857.25 | 33.75     | 857.25 | 40.50      | 1028.70 | 36.38      | 924.05 | 36.38     | 924.05 |
| RP17AY60AJVCA | 39.00      | 991.00 | 35.75      | 908.00 | 35.75     | 908.00 | 40.50      | 1028.70 | 38.38      | 974.85 | 38.38     | 974.85 |



[ ] Designates Metric Conversions

ST-A1226-02-00

## Refrigerant Line Size Information

| 17 SEER2 VARIABLE SPEED HEAT PUMP |                                  |                                 |                                                                     |           |           |            |            |            |            |            |            |            |
|-----------------------------------|----------------------------------|---------------------------------|---------------------------------------------------------------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|
| UNIT<br>SIZE                      | ALLOWABLE<br>LIQUID LINE<br>SIZE | ALLOWABLE<br>VAPOR LINE<br>SIZE | OUTDOOR UNIT ABOVE OR BELOW INDOOR UNIT<br>EQUIVALENT LENGTH (FEET) |           |           |            |            |            |            |            |            |            |
|                                   |                                  |                                 | 0-25                                                                | 26-50     | 51-75     | 76-100     | 101-125    | 126-150    | 151-175    | 176-200    | 201-225    | 226-250    |
|                                   |                                  |                                 | MAXIMUM VERTICAL SEPARATION/CAPACITY MULTIPLIER                     |           |           |            |            |            |            |            |            |            |
| 2 Ton                             | 1/4"                             | 5/8"                            | 25 / 1.00                                                           | 50 / 0.99 | 29 / 0.98 | 0 / 0.97   | 0 / 0.97   | 0 / 0.96   | 0 / 0.95   | 0 / 0.94   | 0 / 0.94   | 0 / 0.93   |
|                                   | 5/16"                            | 5/8"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.98 | 89 / 0.97  | 80 / 0.97  | 72 / 0.96  | 63 / 0.95  | 55 / 0.94  | 47 / 0.94  | 41 / 0.93  |
|                                   | 3/8"                             | 5/8"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.98 | 100 / 0.97 | 109 / 0.97 | 106 / 0.96 | 104 / 0.95 | 100 / 0.94 | 97 / 0.94  | 95 / 0.93  |
|                                   | 1/4"                             | 3/4"                            | 25 / 1.00                                                           | 50 / 1.00 | 29 / 0.99 | 0 / 0.99   | 0 / 0.99   | 0 / 0.99   | 0 / 0.98   | 0 / 0.98   | 0 / 0.98   | 0 / 0.98   |
|                                   | 5/16"                            | 3/4"                            | 25 / 1.00                                                           | 50 / 1.00 | 75 / 0.99 | 89 / 0.99  | 80 / 0.99  | 72 / 0.99  | 63 / 0.98  | 55 / 0.98  | 47 / 0.98  | 41 / 0.98  |
|                                   | 3/8"                             | 3/4"                            | 25 / 1.00                                                           | 50 / 1.00 | 75 / 0.99 | 100 / 0.99 | 109 / 0.99 | 106 / 0.99 | 104 / 0.98 | 100 / 0.98 | 97 / 0.98  | 95 / 0.98  |
| 3 Ton                             | 5/16"                            | 5/8"                            | 25 / 0.99                                                           | 50 / 0.98 | 68 / 0.96 | 50 / 0.95  | 32 / 0.93  | 14 / 0.91  | 0 / 0.9    | 0 / 0.88   | 0 / 0.87   | 0 / 0.87   |
|                                   | 3/8"                             | 5/8"                            | 25 / 0.99                                                           | 50 / 0.98 | 75 / 0.96 | 99 / 0.95  | 92 / 0.93  | 86 / 0.91  | 80 / 0.9   | 73 / 0.88  | 67 / 0.87  | 61 / 0.87  |
|                                   | 5/16"                            | 3/4"                            | 25 / 1.00                                                           | 50 / 0.99 | 68 / 0.99 | 50 / 0.98  | 32 / 0.97  | 14 / 0.97  | 0 / 0.96   | 0 / 0.96   | 0 / 0.95   | 0 / 0.95   |
|                                   | 3/8"                             | 3/4"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.99 | 99 / 0.98  | 92 / 0.97  | 86 / 0.97  | 80 / 0.96  | 73 / 0.96  | 67 / 0.95  | 61 / 0.95  |
|                                   | 1/2"                             | 3/4"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.99 | 100 / 0.98 | 119 / 0.97 | 117 / 0.97 | 116 / 0.96 | 115 / 0.96 | 114 / 0.95 | 113 / 0.95 |
|                                   | 3/8"                             | 7/8"                            | 25 / 1.00                                                           | 50 / 1.00 | 75 / 0.99 | 99 / 0.99  | 92 / 0.99  | 86 / 0.99  | 80 / 0.98  | 73 / 0.98  | 67 / 0.98  | 61 / 0.98  |
|                                   | 1/2"                             | 7/8"                            | 25 / 1.00                                                           | 50 / 1.00 | 75 / 0.99 | 100 / 0.99 | 119 / 0.99 | 117 / 0.99 | 116 / 0.98 | 115 / 0.98 | 114 / 0.98 | 113 / 0.98 |
| 4 Ton                             | 3/8"                             | 3/4"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.98 | 80 / 0.97  | 70 / 0.96  | 59 / 0.94  | 49 / 0.93  | 38 / 0.92  | 27 / 0.92  | 17 / 0.91  |
|                                   | 1/2"                             | 3/4"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.98 | 100 / 0.97 | 114 / 0.96 | 112 / 0.94 | 110 / 0.93 | 107 / 0.92 | 106 / 0.92 | 104 / 0.91 |
|                                   | 3/8"                             | 7/8"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.99 | 80 / 0.98  | 70 / 0.98  | 59 / 0.98  | 49 / 0.97  | 38 / 0.97  | 27 / 0.96  | 17 / 0.96  |
|                                   | 1/2"                             | 7/8"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.99 | 100 / 0.98 | 114 / 0.98 | 112 / 0.98 | 110 / 0.97 | 107 / 0.97 | 106 / 0.96 | 104 / 0.96 |
| 5 Ton                             | 3/8"                             | 3/4"                            | 25 / 0.99                                                           | 50 / 0.98 | 74 / 0.96 | 58 / 0.95  | 42 / 0.93  | 25 / 0.91  | 9 / 0.9    | 0 / 0.88   | 0 / 0.87   | 0 / 0.86   |
|                                   | 1/2"                             | 3/4"                            | 25 / 0.99                                                           | 50 / 0.98 | 75 / 0.96 | 100 / 0.95 | 108 / 0.93 | 105 / 0.91 | 101 / 0.9  | 98 / 0.88  | 95 / 0.87  | 93 / 0.86  |
|                                   | 3/8"                             | 7/8"                            | 25 / 1.00                                                           | 50 / 0.99 | 74 / 0.98 | 58 / 0.98  | 42 / 0.97  | 25 / 0.96  | 9 / 0.96   | 0 / 0.95   | 0 / 0.94   | 0 / 0.94   |
|                                   | 1/2"                             | 7/8"                            | 25 / 1.00                                                           | 50 / 0.99 | 75 / 0.98 | 100 / 0.98 | 108 / 0.97 | 105 / 0.96 | 101 / 0.96 | 98 / 0.95  | 95 / 0.94  | 93 / 0.94  |

**NOTES:**

1. Do not exceed 150 ft. linear line length
2. Do not exceed 50 ft. vertical separation between indoor and outdoor units
3. 3/4" vapor line should only be used for 2 Ton systems if outdoor unit is below or at same level as indoor unit to assure proper oil return
4. Always use the smallest liquid line allowable to minimize refrigerant charge
5. Applications shaded in grey are considered long lineset applications. Refer to Long Lineset Application Guide for details

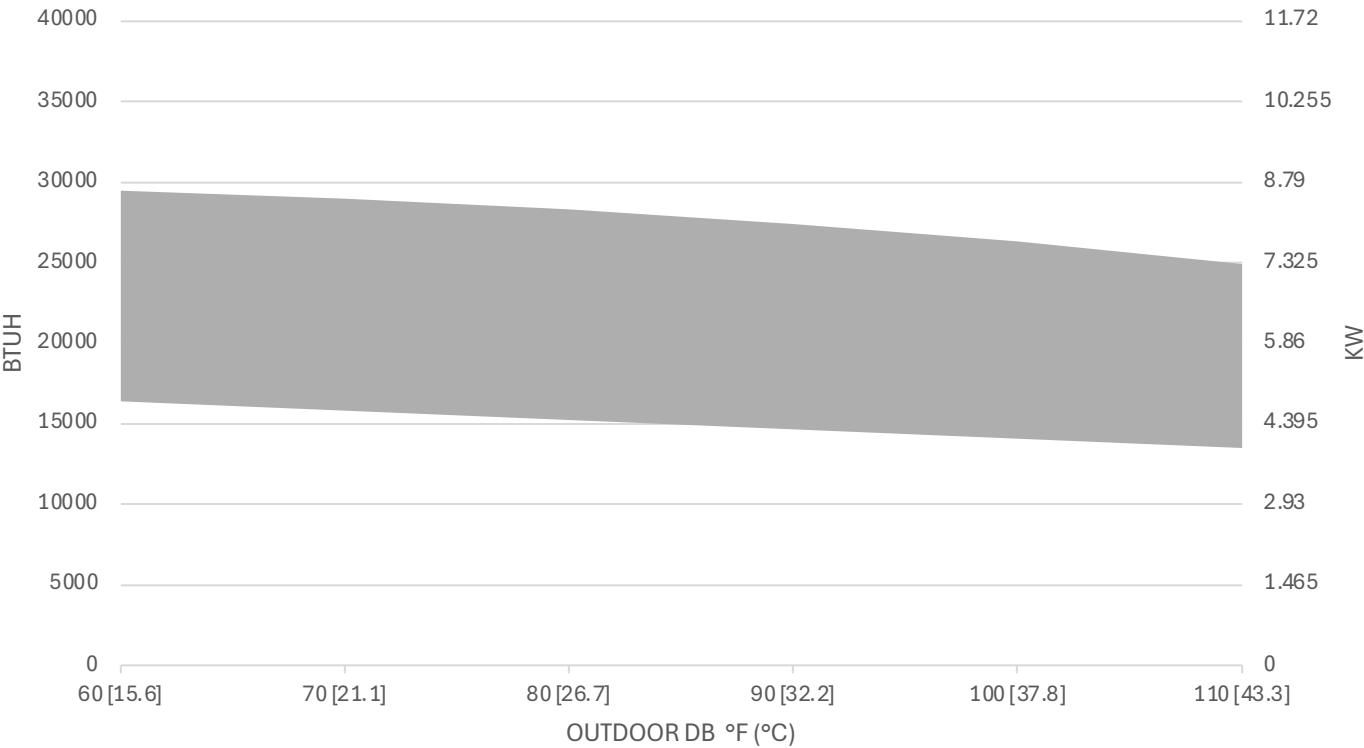
## Refrigerant Line Size Information (Con't.)

| 17 SEER2 VARIABLE SPEED HEAT PUMP |                                  |                                 |                                                                       |           |           |           |           |           |           |           |           |           |
|-----------------------------------|----------------------------------|---------------------------------|-----------------------------------------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| UNIT<br>SIZE                      | ALLOWABLE<br>LIQUID LINE<br>SIZE | ALLOWABLE<br>VAPOR LINE<br>SIZE | OUTDOOR UNIT ABOVE OR BELOW INDOOR UNIT<br>EQUIVALENT LENGTH (METERS) |           |           |           |           |           |           |           |           |           |
|                                   |                                  |                                 | 0-25                                                                  | 26-50     | 51-75     | 76-100    | 101-125   | 126-150   | 151-175   | 176-200   | 201-225   | 226-250   |
|                                   |                                  |                                 | MAXIMUM VERTICAL SEPARATION/CAPACITY MULTIPLIER                       |           |           |           |           |           |           |           |           |           |
| 2 Ton                             | 1/4"                             | 5/8"                            | 8 / 1.00                                                              | 15 / 0.99 | 9 / 0.98  | 0 / 0.97  | 0 / 0.97  | 0 / 0.96  | 0 / 0.95  | 0 / 0.94  | 0 / 0.94  | 0 / 0.93  |
|                                   | 5/16"                            | 5/8"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.98 | 27 / 0.97 | 24 / 0.97 | 22 / 0.96 | 19 / 0.95 | 17 / 0.94 | 14 / 0.94 | 12 / 0.93 |
|                                   | 3/8"                             | 5/8"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.98 | 30 / 0.97 | 33 / 0.97 | 32 / 0.96 | 32 / 0.95 | 30 / 0.94 | 30 / 0.94 | 29 / 0.93 |
|                                   | 1/4"                             | 3/4"                            | 8 / 1.00                                                              | 15 / 1.00 | 9 / 0.99  | 0 / 0.99  | 0 / 0.99  | 0 / 0.99  | 0 / 0.98  | 0 / 0.98  | 0 / 0.98  | 0 / 0.98  |
|                                   | 5/16"                            | 3/4"                            | 8 / 1.00                                                              | 15 / 1.00 | 23 / 0.99 | 27 / 0.99 | 24 / 0.99 | 22 / 0.99 | 19 / 0.98 | 17 / 0.98 | 14 / 0.98 | 12 / 0.98 |
|                                   | 3/8"                             | 3/4"                            | 8 / 1.00                                                              | 15 / 1.00 | 23 / 0.99 | 30 / 0.99 | 33 / 0.99 | 32 / 0.99 | 32 / 0.98 | 30 / 0.98 | 30 / 0.98 | 29 / 0.98 |
| 3 Ton                             | 5/16"                            | 5/8"                            | 8 / 0.99                                                              | 15 / 0.98 | 21 / 0.96 | 15 / 0.95 | 10 / 0.93 | 4 / 0.91  | 0 / 0.9   | 0 / 0.88  | 0 / 0.87  | 0 / 0.87  |
|                                   | 3/8"                             | 5/8"                            | 8 / 0.99                                                              | 15 / 0.98 | 23 / 0.96 | 30 / 0.95 | 28 / 0.93 | 26 / 0.91 | 24 / 0.9  | 22 / 0.88 | 20 / 0.87 | 19 / 0.87 |
|                                   | 5/16"                            | 3/4"                            | 8 / 1.00                                                              | 15 / 0.99 | 21 / 0.99 | 15 / 0.98 | 10 / 0.97 | 4 / 0.97  | 0 / 0.96  | 0 / 0.96  | 0 / 0.95  | 0 / 0.95  |
|                                   | 3/8"                             | 3/4"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.99 | 30 / 0.98 | 28 / 0.97 | 26 / 0.97 | 24 / 0.96 | 22 / 0.96 | 20 / 0.95 | 19 / 0.95 |
|                                   | 1/2"                             | 3/4"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.99 | 30 / 0.98 | 36 / 0.97 | 36 / 0.97 | 35 / 0.96 | 35 / 0.96 | 35 / 0.95 | 34 / 0.95 |
|                                   | 3/8"                             | 7/8"                            | 8 / 1.00                                                              | 15 / 1.00 | 23 / 0.99 | 30 / 0.99 | 28 / 0.99 | 26 / 0.99 | 24 / 0.98 | 22 / 0.98 | 20 / 0.98 | 19 / 0.98 |
|                                   | 1/2"                             | 7/8"                            | 8 / 1.00                                                              | 15 / 1.00 | 23 / 0.99 | 30 / 0.99 | 36 / 0.99 | 36 / 0.99 | 35 / 0.98 | 35 / 0.98 | 35 / 0.98 | 34 / 0.98 |
| 4 Ton                             | 3/8"                             | 3/4"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.98 | 24 / 0.97 | 21 / 0.96 | 18 / 0.94 | 15 / 0.93 | 12 / 0.92 | 8 / 0.92  | 5 / 0.91  |
|                                   | 1/2"                             | 3/4"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.98 | 30 / 0.97 | 35 / 0.96 | 34 / 0.94 | 34 / 0.93 | 33 / 0.92 | 32 / 0.92 | 32 / 0.91 |
|                                   | 3/8"                             | 7/8"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.99 | 24 / 0.98 | 21 / 0.98 | 18 / 0.98 | 15 / 0.97 | 12 / 0.97 | 8 / 0.96  | 5 / 0.96  |
|                                   | 1/2"                             | 7/8"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.99 | 30 / 0.98 | 35 / 0.98 | 34 / 0.98 | 34 / 0.97 | 33 / 0.97 | 32 / 0.96 | 32 / 0.96 |
| 5 Ton                             | 3/8"                             | 3/4"                            | 8 / 0.99                                                              | 15 / 0.98 | 23 / 0.96 | 18 / 0.95 | 13 / 0.93 | 8 / 0.91  | 3 / 0.9   | 0 / 0.88  | 0 / 0.87  | 0 / 0.86  |
|                                   | 1/2"                             | 3/4"                            | 8 / 0.99                                                              | 15 / 0.98 | 23 / 0.96 | 30 / 0.95 | 33 / 0.93 | 32 / 0.91 | 31 / 0.9  | 30 / 0.88 | 29 / 0.87 | 28 / 0.86 |
|                                   | 3/8"                             | 7/8"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.98 | 18 / 0.98 | 13 / 0.97 | 8 / 0.96  | 3 / 0.96  | 0 / 0.95  | 0 / 0.94  | 0 / 0.94  |
|                                   | 1/2"                             | 7/8"                            | 8 / 1.00                                                              | 15 / 0.99 | 23 / 0.98 | 30 / 0.98 | 33 / 0.97 | 32 / 0.96 | 31 / 0.96 | 30 / 0.95 | 29 / 0.94 | 28 / 0.94 |

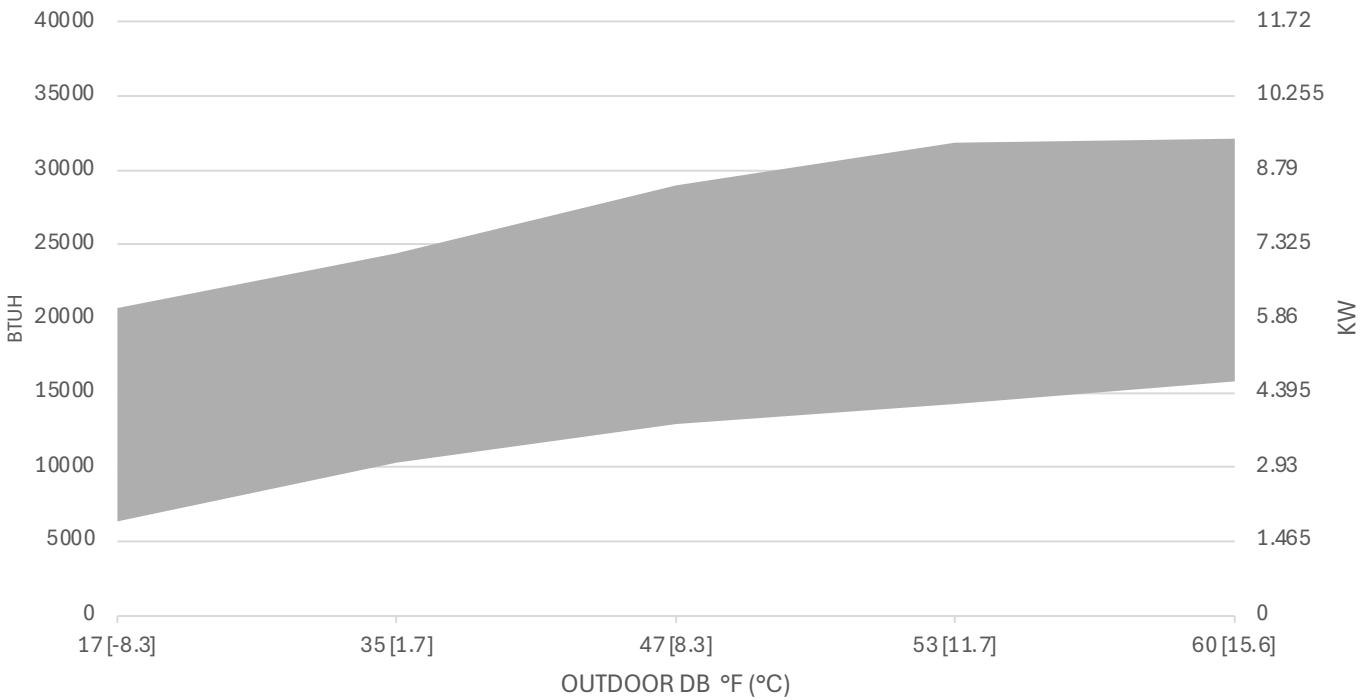
### NOTES:

- Do not exceed 46 meters linear line length
- Do not exceed 15 meters vertical separation between indoor and outdoor units
- 19.05mm [3/4"] vapor line should only be used for 2 Ton systems if outdoor unit is below or at same level as indoor unit to assure proper oil return
- Always use the smallest liquid line allowable to minimize refrigerant charge
- Applications shaded in grey are considered long lineset applications. Refer to Long Lineset Application Guide for details

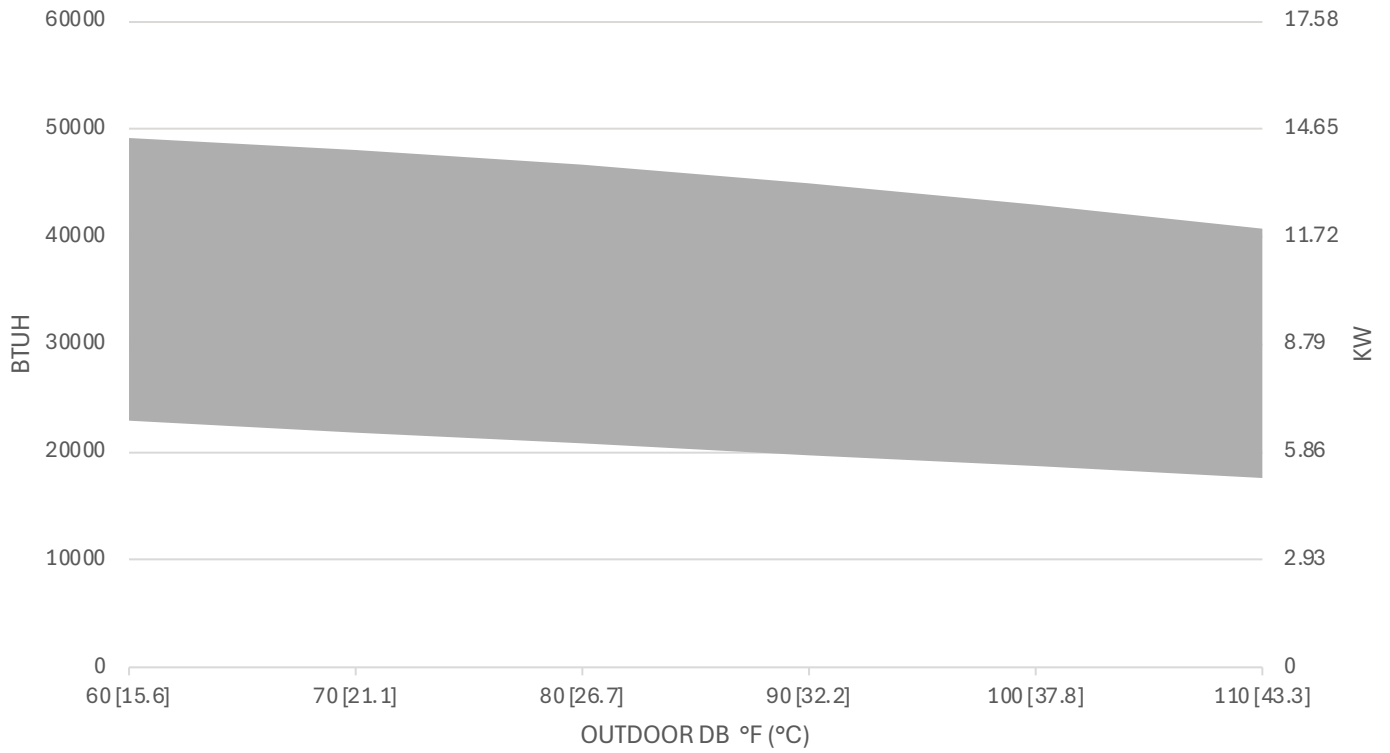
(-)P17AY24 Cooling Capacity Ranges



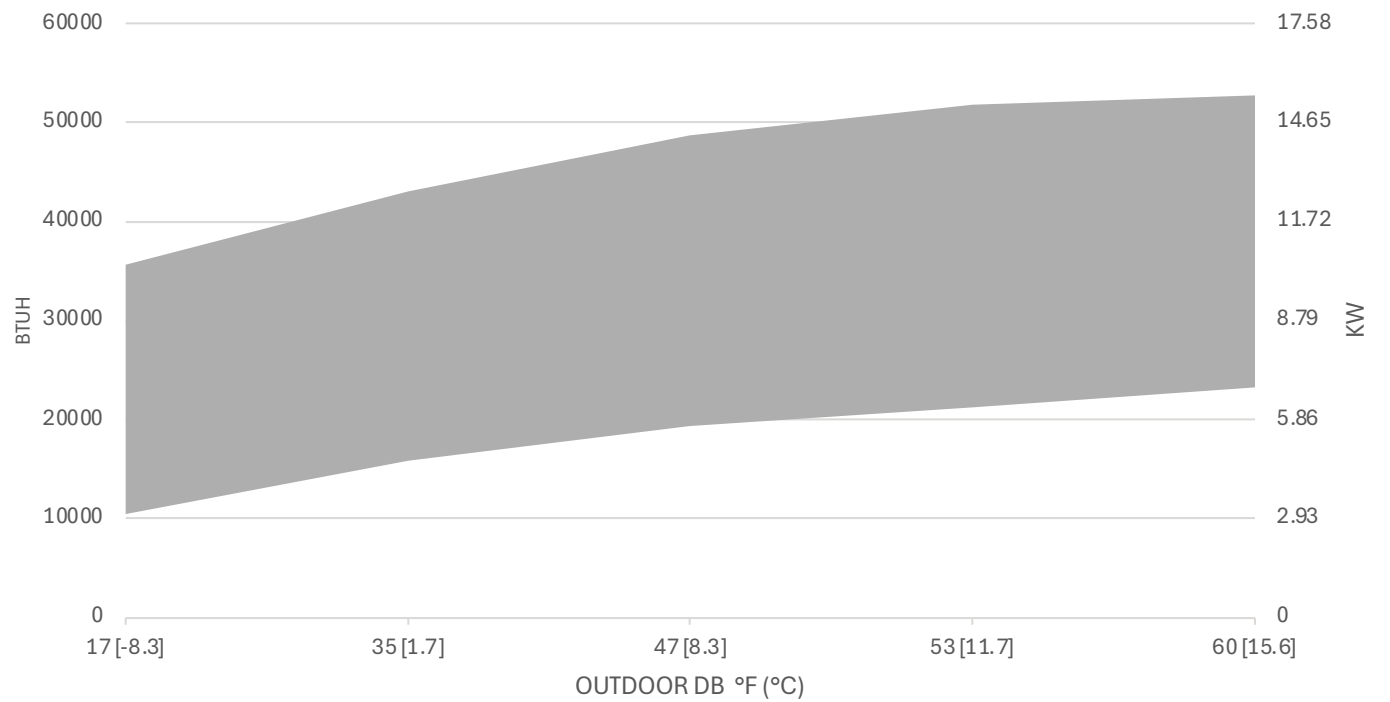
(-)P17AY24 Heating Capacity Ranges



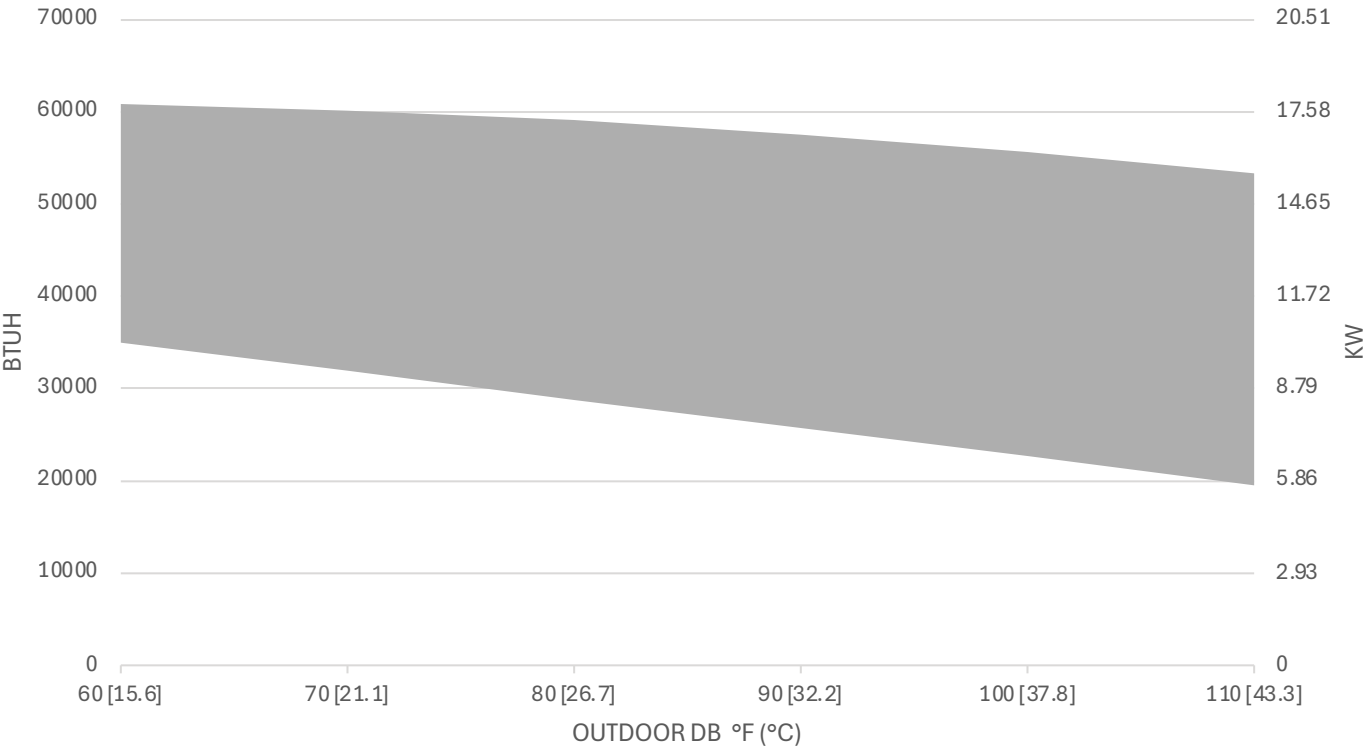
### (-)P17AY36 Cooling Capacity Ranges



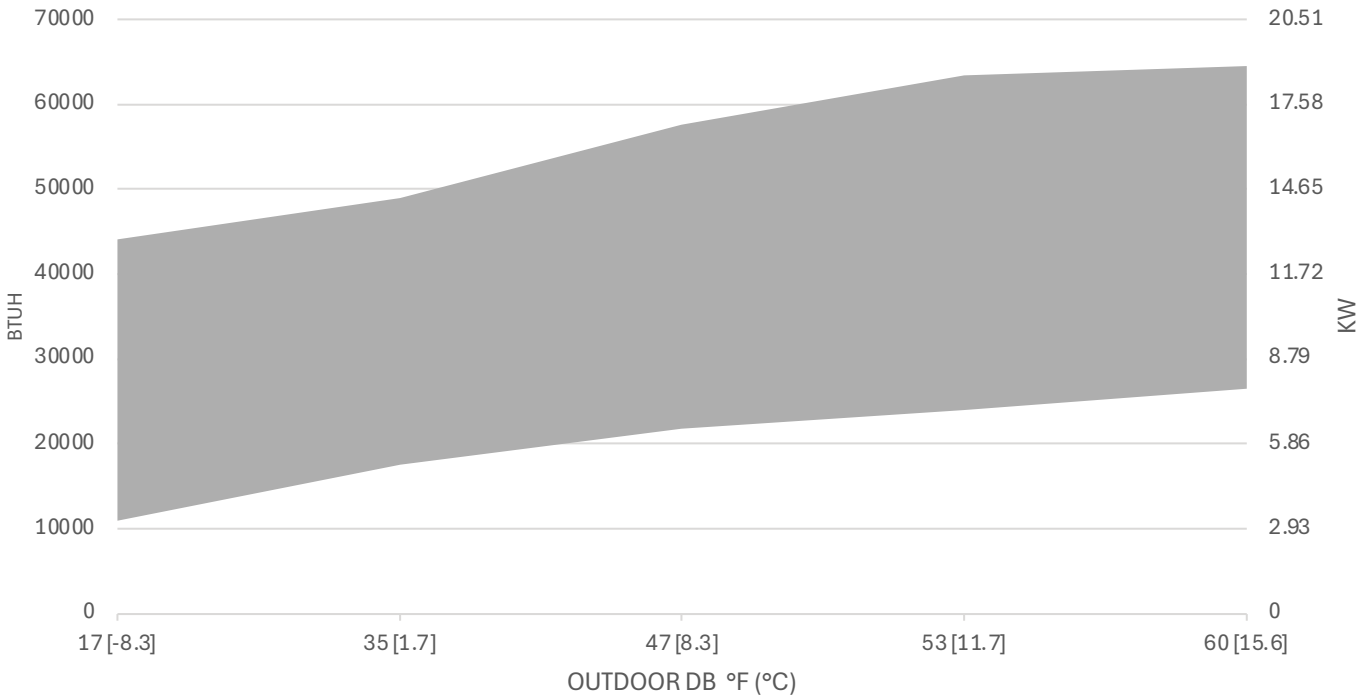
### (-)P17AY36 Heating Capacity Ranges



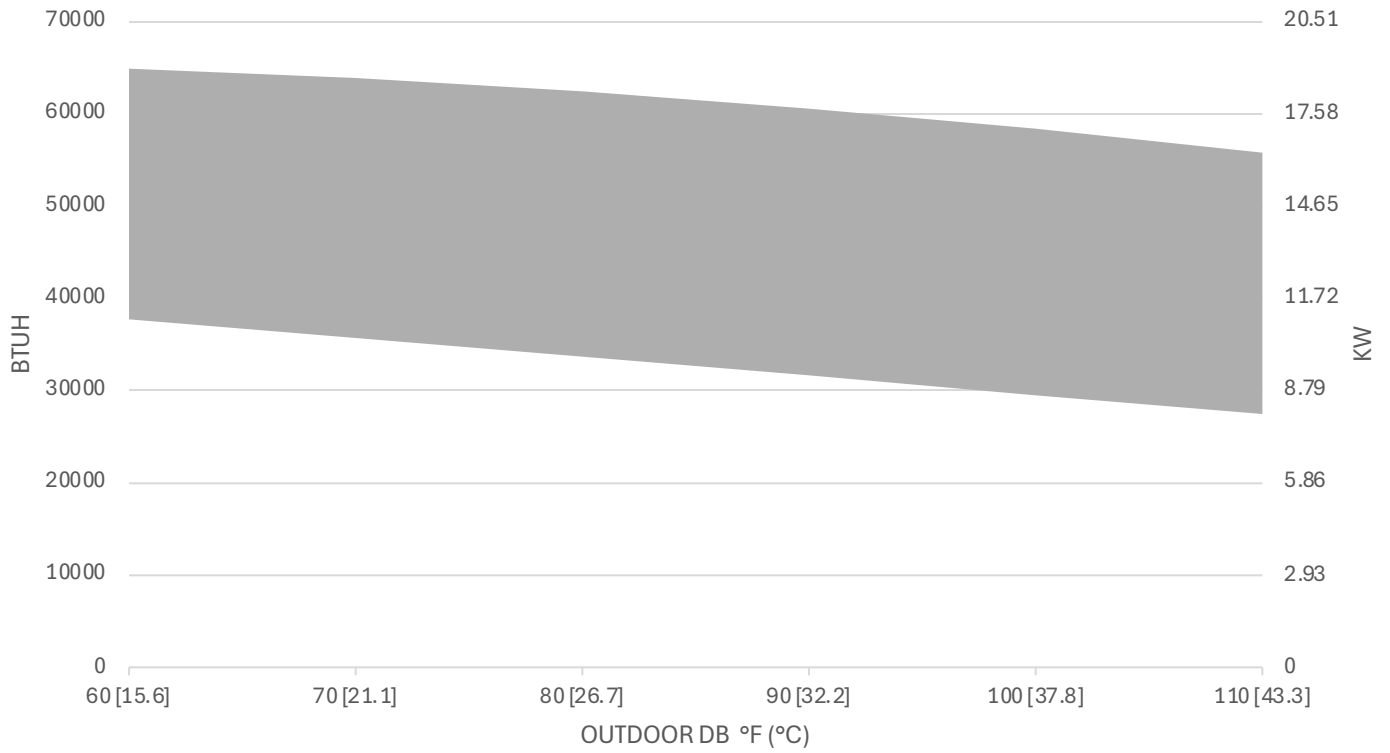
(-)P17AY48 Cooling Capacity Ranges



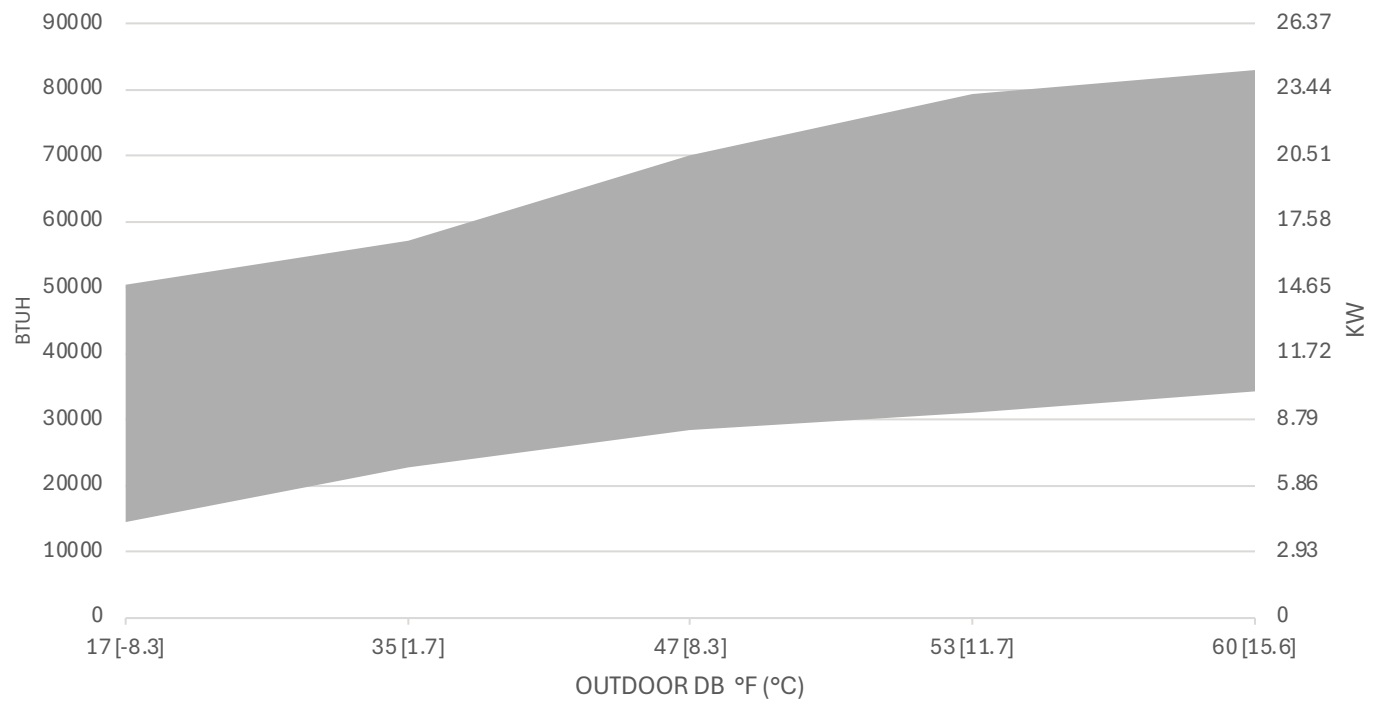
(-)P17AY48 Heating Capacity Ranges



### (-)P17AY60 Cooling Capacity Ranges



### (-)P17AY60 Heating Capacity Ranges



Performance Data @ AHRI Standard Conditions – Cooling

| DESIGNATED TESTED COMBINATION (DTC) |                |                                 |                            |                          |       |      |                     |                                                |                     |                                                |                     |                    |
|-------------------------------------|----------------|---------------------------------|----------------------------|--------------------------|-------|------|---------------------|------------------------------------------------|---------------------|------------------------------------------------|---------------------|--------------------|
| OUTDOOR UNIT                        | INDOOR UNIT    | TOTAL<br>CAPACITY<br>BTU/H [kW] | NET SENSIBLE<br>BTU/H [kW] | NET LATENT<br>BTU/H [kW] | SEER2 | EER2 | INDOOR CFM<br>[L/S] | 47 DEGREE<br>HEATING<br>CAPACITY<br>BTU/H [kW] | 47<br>DEGREE<br>COP | 17 DEGREE<br>HEATING<br>CAPACITY<br>BTU/H [kW] | 17<br>DEGREE<br>COP | REGION<br>IV HSPF2 |
| RP17AY24AJVC                        | RH2VY2417STACN | 22,800 [6.7]                    | 17,500 [5.1]               | 5,300 [1.6]              | 16.0  | 11.7 | 750 [353.8]         | 22,600 [6.6]                                   | 3.16                | 19,700 [5.8]                                   | 2.5                 | 9.0                |
| RP17AY36AJVC                        | RH2VY3617STACN | 34,200 [10.0]                   | 26,200 [7.7]               | 8,000 [2.3]              | 16.5  | 11.0 | 1,125 [530.7]       | 34,000 [10.0]                                  | 3.55                | 32,200 [9.4]                                   | 2.3                 | 9.5                |
| RP17AY48AJVC                        | RH2VY4821STACN | 45,500 [13.3]                   | 34,900 [10.2]              | 10,600 [3.1]             | 16.0  | 11.0 | 1,475 [695.8]       | 45,500 [13.3]                                  | 2.93                | 39,500 [11.6]                                  | 2.4                 | 9.5                |
| RP17AY60AJVC                        | RH2VY6024STACN | 54,001 [15.8]                   | 41,400 [12.1]              | 12,600 [3.7]             | 17.0  | 10.5 | 1,850 [872.7]       | 57,000 [16.7]                                  | 3.45                | 47,000 [13.8]                                  | 2.4                 | 9.5                |

**NOTE:** This data includes DTC (Designated Test Combination) ratings and is for reference purposes only. A full listing of official ratings and system match-ups, along with downloadable certificates, can be accessed from the AHRI website: [www.ahridirectory.org](http://www.ahridirectory.org).

[ ] Designates Metric Conversions



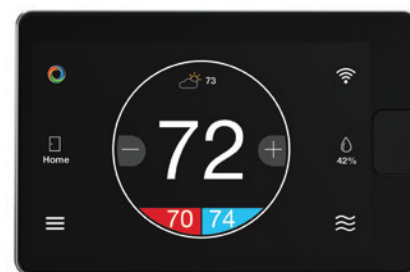
Smart, high efficiency heating & cooling and water heating systems, powered by EcoNet technology, allow homeowners, contractors, facility managers and business owners to connect, monitor and control asset performance for energy management across their networks.

## The EcoNet Smart Thermostat

### Grow Homeowner Relationships and Increase Satisfaction

**Repeat Business** — Generate more business by adding your contact information into the homeowner's EcoNet app; Homeowners can easily share critical care alerts and contact you for service

**Improved Control and Monitoring** — Homeowners can proactively monitor vital device information in the EcoNet app and know when to call, turning potential emergencies into proactive service calls



UETST900SYS



When both the indoor and outdoor units are powered by EcoNet equipment, the EcoNet® Smart Thermostat should be installed



When the indoor unit is powered by EcoNet equipment, but the outdoor unit is not, the EcoNet® Smart Thermostat should be installed

ecobee



The ecobee Smart Thermostat Lite is optimized to work with non-communicating residential heating & cooling systems by the same manufacturer.

### Hardwired for Reliability

**Batteries Not Required** — Unlike other battery-operated smart thermostats, this hardwired device minimizes the hassle of replacing batteries and reduces the risk of product failure

**Built to Last** — Designed with quality materials and software that automatically updates with the latest features

**Limited Warranty** — Give your customers added peace-of-mind with a 5-year limited warranty when installed by a professional

### Quick Installation, Easy Set Up

**Setup Designed for Pros** — Feel confident during setup with configuration options that help homeowners get the most out of their heating & cooling systems

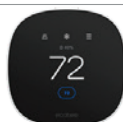
**Be There for Your Customers** — Stay connected to your customers and submit their smart thermostat warranty registration by scanning the contractor QR code on the thermostat touchscreen form the brand-specific Contractor App prompt for ecobee Thermostat Setup. If customers need to reach you, your contact information appears directly on the touchscreen



EB-STATE7RH-01



When the indoor unit is not powered by EcoNet equipment, but the outdoor unit is, the ecobee Smart Thermostat Lite | Works with EcoNet® Technology should be installed



When neither the indoor unit nor the outdoor unit are powered by EcoNet equipment, the ecobee Smart Thermostat Lite | Works with EcoNet® Technology should be installed



## GENERAL TERMS OF LIMITED WARRANTY\*

Ruud® will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

**\*For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

Conditional Parts  
(Registration Required)..... Ten (10) Years

*Applies to a heat pump only or system installation. Does not require the heat pump to be part of a properly matched system as specified by the Manufacturer and the Air Conditioning Heating & Refrigeration Institute (AHRI).*

**Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.**

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