



## Commercial Renaissance® Line Classic® Series Packaged Heat Pumps



### RHPDYB Series

Efficiencies up to: 11.0 EER, 14.1 IEER & 3.4 COP

Nominal Sizes: 7.5, 8.5 & 10 Tons [26.4, 29.9 & 35.2 kW]

Cooling Capacities: 86k Btu/h [25.2 kW] to 114k Btu/h [33.4 kW]

Refrigerant Type: R-454B

ASHRAE 90.1 2022 Compliant Models



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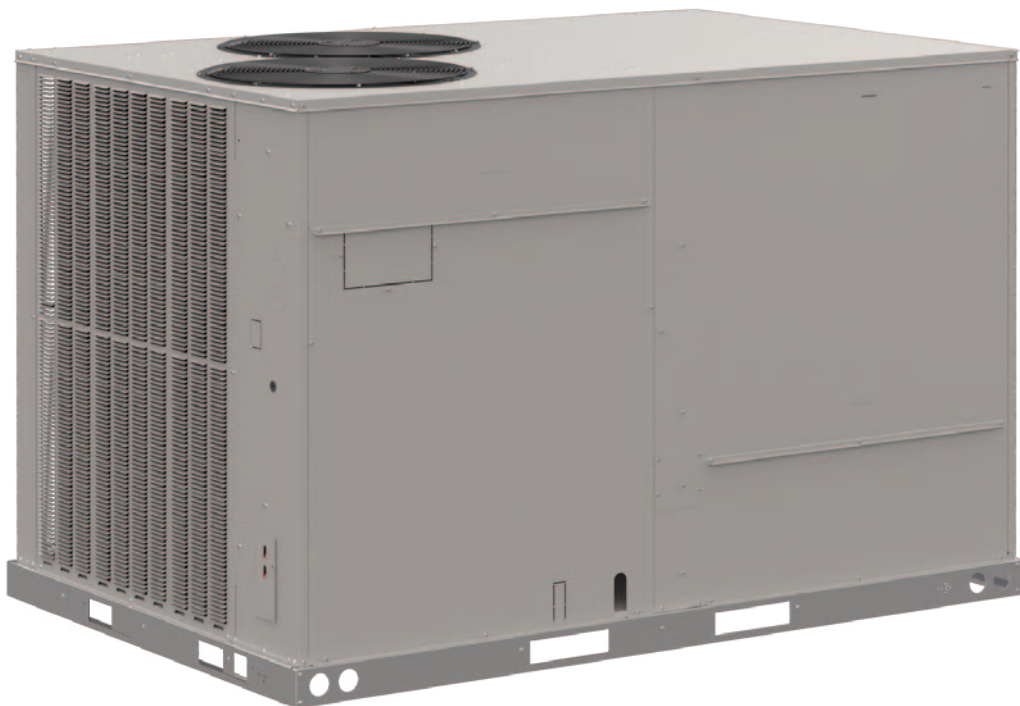
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## STANDARD FEATURES INCLUDE

### Manufacturing & Quality Features:

- Factory charged with R-454 refrigerant
- Wired and run tested at the factory
- Powder Paint Finish meets ASTM® B117 test requirements. G90 galvanized steel coated on each side
- Foil faced insulation encapsulated throughout entire unit minimizes airborne fibers in the air stream

### Performance Features:

- Cooling operation up to 125°F ambient
- Scroll compressors with internal line break overload and high-pressure protection
- Two stages of cooling and heat pump operation
- Full MicroChannel coils with patented defrost design
- High pressure and low pressure/loss of charge protection

### Convenience & Serviceability Features:

- Forkable base rails for easy handling and lifting
- Color-coded and labeled wiring
- Laser-etched panel doors to identify each compartment from the exterior
- External, lockable gauge ports
- Field convertible airflow - vertical downflow or horizontal sideflow
- Solid-core liquid line filter drier
- Filter access features hinged access with heavy-duty gasketing and 1/4 turn latches
- Slide-out indoor fan assembly for added service convenience
- Slide-out, internally sloped condensate drain pan with overflow switch, conforms to ASHRAE 62 standards
- Qwik-change flex-fit filter rack for easy filter size changes
- Factory-installed refrigerant leak detection system

## FACTORY-INSTALLED OPTIONS:

- Louvered panels
- Hinged access doors
- Low ambient/freeze stat
- Non-powered convenience outlet
- Vertical Economizer (Title 24 and ASHRAE 90.1 2022 compliant)
- Supply and return smoke detector
- ElectroFin® E-Coat for Microchannel Condenser Coil
- ClearControl™ Direct Digital Control (DDC)
- Comfort Alert® Phase-monitor Protection

## FIELD-INSTALLED ACCESSORY EQUIPMENT

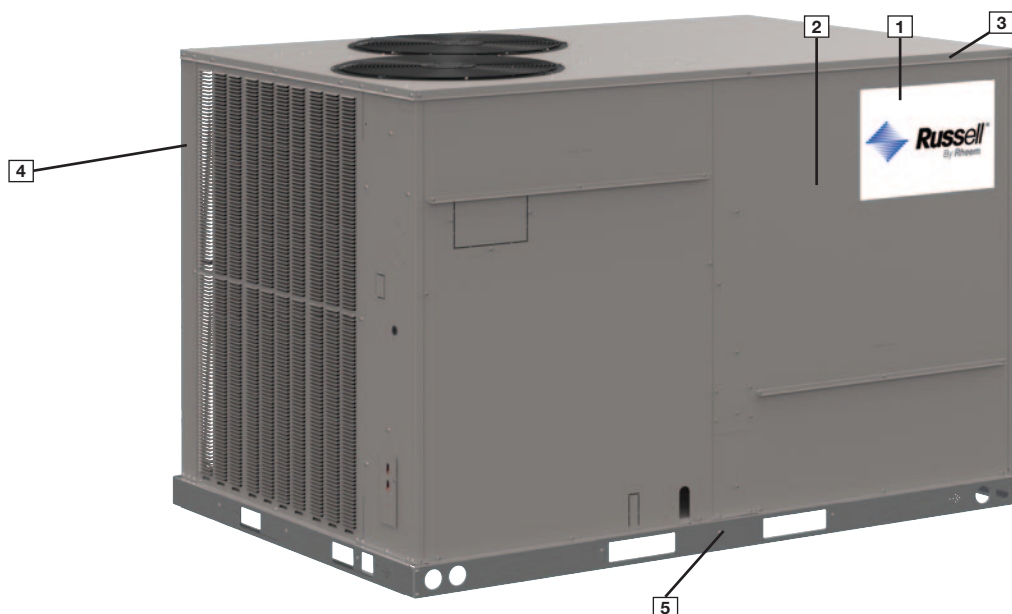
| Accessory                                                                                              | Model Number  | Factory Installation Available? |
|--------------------------------------------------------------------------------------------------------|---------------|---------------------------------|
| Non-DDC Economizer with No Controls (Downflow) <i>MicroMetl Economizer, Belimo® Actuator</i>           | RXRD-31MDDAM3 | No                              |
| Non-DDC Economizer with Single Enthalpy (Downflow) <i>MicroMetl Economizer with Siemens® Controls</i>  | RXRD-11MDDAM3 | Yes                             |
| Non-DDC Economizer with Single Enthalpy (Downflow) <i>RRS Economizer with Siemens Controller</i>       | RXRD-51MDDAM3 | No                              |
| Non-DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Siemens Controls</i> | RXRD-11MDHAM3 | No                              |
| Non-DDC Economizer with Single Enthalpy (Horizontal) <i>RRS Economizer with Siemens Controller</i>     | RXRD-51MDHAM3 | No                              |
| Economizer Universal DDC Interface Kit <sup>1</sup>                                                    | RXRX-DDC01    | Yes                             |

<sup>1</sup>Does not have to be selected individually. This accessory will be included with the factory-installed economizer for a DDC unit if required.

## FIELD-INSTALLED ACCESSORY EQUIPMENT (CONTINUED)

| Accessory                                                     | Model Number | Factory Installation Available? |
|---------------------------------------------------------------|--------------|---------------------------------|
| Power Exhaust (230V) Kit for Downflow Economizer <i>RRS</i>   | RXXR-RDF01C  | No                              |
| Power Exhaust (230V) Kit for Horizontal Economizer <i>RRS</i> | RXXR-RDF03C  | No                              |
| Power Exhaust (230V) Kit, Convertible <i>MicroMetl</i>        | RXXR-CDF01C  | No                              |
| Power Exhaust (460V) Kit for Downflow Economizer <i>RRS</i>   | RXXR-RDF01D  | No                              |
| Power Exhaust (460V) Kit for Horizontal Economizer <i>RRS</i> | RXXR-RDF03D  | No                              |
| Power Exhaust (460V) Kit, Convertible <i>MicroMetl</i>        | RXXR-CDF01D  | No                              |
| Power Exhaust (575V) Kit for Downflow Economizer <i>RRS</i>   | RXXR-RDF01Y  | No                              |
| Power Exhaust (575V) Kit for Horizontal Economizer <i>RRS</i> | RXXR-RDF03Y  | No                              |
| Concentric Adapter 7.5 & 8.5 Ton Drop                         | RXMC-DD01    | No                              |
| Concentric Adapter 10 Ton Drop                                | RXMC-DD02    | No                              |
| Concentric Diffuser 7.5 & 8.5 Ton Drop                        | RXRN-AED2000 | No                              |
| Concentric Diffuser 10.0 Ton Drop                             | RXRN-AED3415 | No                              |
| Concentric Diffuser 7.5 & 8.5 Ton Flush                       | RXRN-AEF2000 | No                              |
| Concentric Diffuser 10.0 Ton Flush                            | RXRN-AEF3415 | No                              |
| Convenience Outlet, Non-Powered                               | RXXR-BN01    | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 10kW                     | RXJJ-DD10CP  | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 15kW                     | RXJJ-DD15CP  | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 20kW                     | RXJJ-DD20CP  | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 30kW                     | RXJJ-DD30CP  | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 40kW                     | RXJJ-DD40CP  | Yes                             |
| Electric Heater Kit   460V, 3ph, 10kW                         | RXJJ-DD10DNV | Yes                             |
| Electric Heater Kit   460V, 3ph, 15kW                         | RXJJ-DD15DNV | Yes                             |
| Electric Heater Kit   460V, 3ph, 20kW                         | RXJJ-DD20DNV | Yes                             |
| Electric Heater Kit   460V, 3ph, 30kW                         | RXJJ-DD30DNV | Yes                             |
| Electric Heater Kit   460V, 3ph, 40kW                         | RXJJ-DD40DNV | Yes                             |
| Electric Heater Kit   575V, 3ph, 10kW                         | RXJJ-DD10Y   | No                              |
| Electric Heater Kit   575V, 3ph, 15kW                         | RXJJ-DD15Y   | No                              |
| Electric Heater Kit   575V, 3ph, 20kW                         | RXJJ-DD20Y   | No                              |
| Electric Heater Kit   575V, 3ph, 30kW                         | RXJJ-DD30Y   | No                              |
| Electric Heater Kit   575V, 3ph, 40kW                         | RXJJ-DD40Y   | No                              |
| Fresh Air Damper, Manual                                      | RXRF-ADA1    | No                              |
| Fresh Air Damper, Motorized                                   | RXRF-ADB1    | No                              |

| Accessory                                                    | Model Number   | Factory Installation Available? |
|--------------------------------------------------------------|----------------|---------------------------------|
| MERV 8 Filter 7.5 & 8.5 Ton                                  | RXMF-M08A22020 | No                              |
| MERV 8 Filter 10 Ton                                         | RXMF-M08A22520 | No                              |
| MERV 13 Filter 7.5 & 8.5 Ton                                 | RXMF-M13A22020 | No                              |
| MERV 13 Filter 10 Ton                                        | RXMF-M13A22520 | No                              |
| Outdoor Coil Louver Kit - 7.5 & 8.5 Ton                      | RXXR-ADD04A    | Yes                             |
| Outdoor Coil Louver Kit - 10 Ton                             | RXXR-ADD04B    | Yes                             |
| Roofcurb Adapter                                             | RXXR-DDCAE     | No                              |
| Roofcurb, 14"                                                | RXKG-DDD14     | No                              |
| Roofcurb, 24"                                                | RXKG-DDD24     | No                              |
| Single Point Wiring Kit   208/230V, 60A, 7.5 Ton             | RXJX-AC0605    | No                              |
| Single Point Wiring Kit   208/230V, 80A, 7.5 Ton             | RXJX-AC0805    | No                              |
| Single Point Wiring Kit   208/230V, 90A, 8.5 & 10 Ton        | RXJX-AC0909    | No                              |
| Single Point Wiring Kit   460V, 40A, 7.5 Ton                 | RXJX-AD0405    | No                              |
| Single Point Wiring Kit   460V, 40A, 8.5 & 10 Ton            | RXJX-AD0409    | No                              |
| Single Point Wiring Kit   460V, 60A, 7.5 Ton                 | RXJX-AD0605    | No                              |
| Single Point Wiring Kit   460V, 60A, 8.5 & 10 Ton            | RXJX-AD0609    | No                              |
| Unfused Service Disconnect                                   | RXXR-BP01      | Yes                             |
| UV-C Light Kit 208/230V                                      | RXXR-UVC34D    | No                              |
| UV-C Light Kit Transformer 460 & 575V                        | RXXR-UVCTD     | No                              |
| Comfort Alert (1 Per Compressor)   3ph, DDC                  | RXXR-AZ01      | Yes                             |
| Comfort Alert (1 Per Compressor)   3ph, Non-DDC              | RXXR-AZ02      | Yes                             |
| Communication Card, BACnet®                                  | RXXR-AY01      | No                              |
| Communication Card, LonWorks®                                | RXXR-AY02      | No                              |
| Dual Enthalpy, Temperature and Humidity Sensor (for Siemens) | PD555460       | No                              |
| Freeze Stat Kit                                              | RXXR-AM01      | Yes                             |
| Low-Ambient Control Kit                                      | RXRZ-A04       | Yes                             |
| Sensor, Carbon Dioxide (Wall Mount)                          | RXXR-AR02      | No                              |
| Sensor, Room Humidity                                        | RHC-ZNS4       | No                              |
| Sensor, Room Temperature and Relative Humidity               | RHC-ZNS5       | No                              |
| Smoke Detector Kit, Return                                   | RXXR-BS03      | No                              |
| Smoke Detector Kit, Return/Supply                            | RXXR-BS04      | No                              |



### Cabinet and Foundation

Outwardly, the large Russell® By Rheem Commercial label (1) identifies the brand to the customer. The sheet-metal cabinet (2) uses 18-gauge material for structural components with an underlying coat of G90. To ensure the leak-proof integrity of these units, the design utilizes a one-piece top with a 1/8" drip lip (3) as well as gasket-protected panels and screws. The Russell By Rheem hail guard (optional) (4) sets the standard for coil protection in the industry. Electro deposition, baked-on enamel that is tested to withstand a rigorous 1000-hour salt spray test, per ASTM® B117.

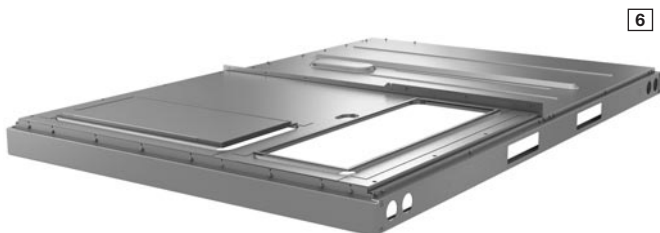
Anything built to last must start with the right foundation. Following that model, the foundation is comprised of 14-gauge, commercial-grade, full perimeter base rails (5) that integrate fork slots and rigging holes to save set-up time on the job site.

### Easy Installation

The Renaissance line features a footprint that simplifies the replacement process by eliminating the need for a new curb adapter and being able to match inlet, outlet and electrical connections of the most common/industry-standard configurations.

### Base Pan

The base pan is stamped to form a 7/8" flange around the supply and return cover, which eliminates the worry of water entering the conditioned space (6). All insulation is secured with both adhesive and mechanical fasteners, and all edges are hidden.



### Drain Pan

The Qwik-Clean Drain Pan (7) is made from a composite material that resists the growth of harmful bacteria. With both side and center drain options, the drain pan slides out completely for easy cleaning. It also features a standard overflow switch.



### Test Standards

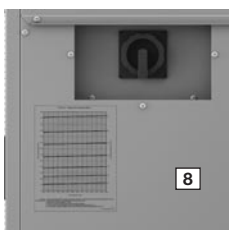
During development, each unit was tested to U.L. 60335-2-40, AHRI 340-360 as well as other Russell By Rheem-required reliability tests. Russell By Rheem adheres to stringent ISO 9001 quality procedures, and each unit bears the U.L. and AHRI certification labels located on the unit nameplate. Contractors can be assured that when a Russell By Rheem packaged unit arrives at the job, it is ready to go with a factory charge and quality checks.

### Easy Access

All major compartments are easily accessible from the front of the unit: the electrical compartment, blower compartment, heating section, and outdoor section. Each compartment has mechanical fasteners. Panels are permanently embossed with the compartment name (e.g. control/filter access, blower access, and electric heat access). The filter compartment is accessed through a large, mechanically fastened panel. Information is readily available on the outside of the panel, with a nameplate that contains the model and serial numbers, electrical data, and other important unit information. Hinged access is available as an option for the electrical, blower, and filter compartments.

## Charging Charts, Wiring Diagrams, & Labels

The unit charging chart is located on the outside of the compressor access panel. Electrical wiring diagrams are found on the control box cover, which allows contractors to move them to more readable locations. The model and serial numbers are located on the right of the control box. Having this information on the inside means easier model identification for the life of the product. The production line quality test assurance label is also placed in this location ([8]).



## Filter Rack

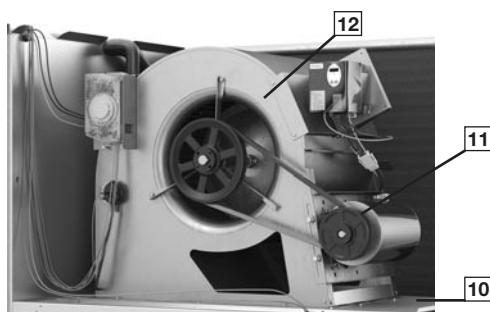
Located within the filter compartment, the Qwik-Change Flex-Fit Rack ([9]) allows easy changeover between 2" and 4" standard size and readily available filters.



## Blower Assembly

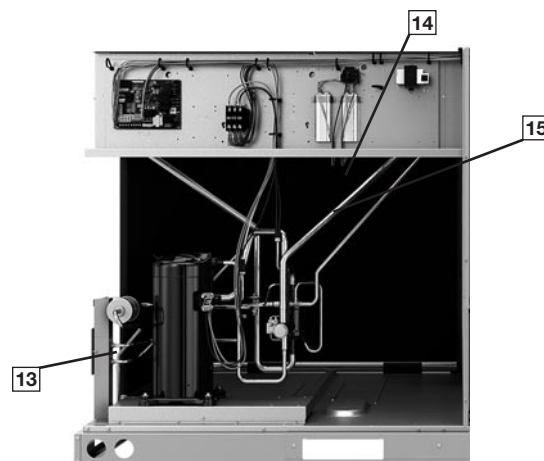
Removing three screws provides full access to the blower compartment. Inside, the Qwik-Slide Blower Assembly ([10]) is incredibly easy to access and remove. This makes servicing internal components such as blower motor, TXV, and microchannel coil much easier. The entire assembly slides out by removing the 3/8" screws from the blower retention bracket. The adjustable motor pulley ([11]) can easily be adjusted by loosening the bolts on either side of the motor mount. Removing the bolts allows for easy removal of the blower pulley by pushing the blower assembly up to loosen the belt. Once the pulley is removed, the motor sheave can be adjusted to the desired number of turns, ranging from 0 to 6 turns open.

Where the demands for the job require high static, Russell By Rheem offers drives that deliver nominal airflow up to 2" of static. By referring to the airflow performance tables listed in the installation instructions, proper static pressure and CFM requirements can be dialed in. The scroll housing ([12]) and blower scroll provide quiet and efficient airflow. The blower sheave is secured by an "H" bushing that firmly secures the pulley to the blower shaft, resulting in years of trouble-free operation. The "H" bushing allows for easy removal of the blower pulley from the shaft. This is an improvement from a set screw, which can score the shaft and create burrs that make blower-pulley removal difficult.



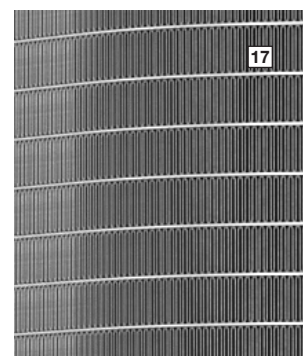
## High and Low Pressure Switches & Freeze Stat

High-pressure ([13]) and low-pressure ([14]) switches are standard. They are located in the outdoor section along with the low-ambient control ([15]). The optional Freeze Stat ([16]) (standard on models with ClearControl), is clipped onto the suction line in the blower compartment. The low ambient control allows the compressor to operate down to 0 degrees ambient temperature by cycling the outdoor fans on high-pressure. The high-pressure switch shuts off the compressors if pressures exceeding 610 PSIG are detected. The low-pressure switch shuts off the compressors if low-pressure is detected due to loss of charge. Built-in Smart Logic reduces nuisance calls by only shutting off compressors after the third detection. The freeze stat protects the compressor if the evaporator coil gets too cold (below freezing) due to low airflow.



## MicroChannel Evaporator & TXV

The MicroChannel Evaporator ([17]) is accessible through the blower compartment, and through the filter rack, to simplify cleaning. The evaporator uses MicroChannel technology for maximum heat transfer, light weight, fewer manually brazed connections and reduced refrigerant charge. The TXV metering device maintains superheat over a wide range of varying temperatures optimizing unit performance for all conditions.



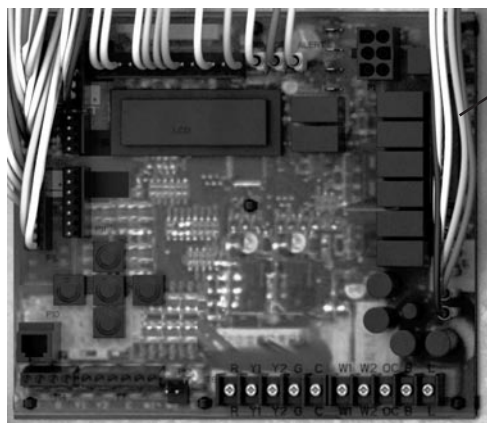
## Control Box

Inside the control box ([18]), each electrical component is clearly labeled; that label matches the component to the wire diagram for ease of trouble shooting. All wiring is numbered on each end of the termination and is color-coded to match the wiring diagram. The control transformer has a low voltage circuit breaker that trips if an electrical short occurs. There is a blower contactor and compressor contactor for each compressor.



## ClearControl

The optional ClearControl system consisting of a rooftop unit controller, temperature sensors, and pressure sensors, allows real-time monitoring and communication between rooftop units. The Rooftop Unit Controller (RTU-C) that is factory mounted and wired into the control panel. The RTU-C is a solid-state, microprocessor-based control board that provides flexible control and extensive diagnostics for all unit functions. The RTU-C, using proportional/integral control algorithms, performs specific unit functions that govern unit operation in response to zone conditions, system temperatures, system pressures, ambient conditions, and electrical inputs. The RTU-C features a 16 x 2 character LCD display and a five-button keypad for local configuration and direct diagnosis of the system ([19]). Features include a clogged filter switch (CFS), fan proving switch (FPS), return air temperature sensor (RAT), discharge air temperature sensor (DAT), and outdoor air temperature sensor (OAT). Freeze sensors (FS) are used in place of freeze stats to allow measurement of refrigerant suction line temperatures.

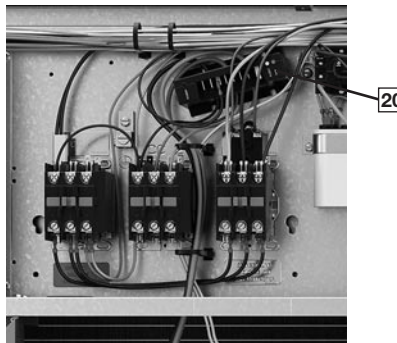


The RHPDYB with the RTU-C is specifically designed to be applied in four distinct applications:

- 1. BACnet Communication** — The RHPDYB is compatible with a third party building management system that supports the BACnet Application Specific Controller device profile, with the use of a field-installed BACnet Communication Module. The BACnet Communication Module plugs onto the unit RTU-C controller and allows communication between the RTU-C and the BACnet MSTP network. A zone sensor, a BACnet network zone sensor, a BACnet thermostat, or DDC controller may be used to send the zone temperature or thermostat demands to the RTU-C. The BACnet Communication Module is compatible with MSTP EIA-485 daisy chain networks communicating at 38.4 bps. It is compatible with twisted pair, shielded cables.
- 2. LonWorks Communication** — The RHPDYB is compatible with a third party building management system that supports the LonMark Space Comfort Controller (SCC) functional profile or LonMark Discharge Air Controller (DAC) functional profile. This is accomplished with a field-installed LonMark communication module. The LonMark Communication Module plugs onto the RTU-C controller and allows communication between the RTU-C and a LonWorks network. A zone sensor, a LonTalk network zone sensor, or a LonTalk thermostat or DDC controller may be used to send the zone temperature or thermostat demands to the RTU-C. The LonMark Communication Module utilizes an FTT-10A free topology transceiver communicating at 78.8 kbps. It is compatible with Echelon qualified, twisted pair cable, Belden 8471, or NEMA Level 4 cables. The module can communicate up to 1640 feet with no repeater. The LonWorks limit of 64 nodes per segment applies to this device.
- 3. 24V Thermostat Compatibility** — The RHPDYB is compatible with a programmable 24 volt thermostat. Connections are made via conventional thermostat screw terminals. Extensive unit status and diagnostics are displayed on the LCD screen of the RTU-C.
- 4. Zone Sensor Compatibility** — The RHPDYB is compatible with a zone sensor and a mechanical or solid state time clock connected to the RTU-C. Extensive unit status and diagnostics are displayed on the LCD screen of the RTU-C.

## Comfort Alert

A factory or field-installed Comfort Alert ([20]) module is available for power phase-monitoring protection and additional compressor diagnostics. The alarms can be displayed on the RTU-C display, through the (BAS) network, or connected to the "L-Terminal" of a thermostat for notification.



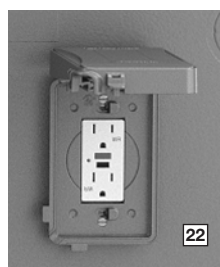
## Variable Frequency Drive

The supply fan Variable Frequency Drive (VFD) (21) optimizes energy usage year round by providing a lower speed for first stage cooling operation, improving IEER over the conventional constant fan system. Operating in the constant fan mode at the reduced speed can use as little as  $\frac{1}{5}$  of the energy of a conventional constant fan system. Also, by operating at a lower speed on first stage cooling, up to 126% more moisture is removed, improving comfort during low load operation. The VFD comes standard. The VFD supply fan factory option meets California Title 24 and ASHRAE 90.1-2022 requirements for multi blower speed control. VFD also ramps up to the desired speed, reducing stress on the supply fan components and noise from a sudden inrush of air. Because the airflow is cut in half during first stage cooling and constant fan operation, noise is much less during these modes of operation.



## Convenience Outlet

For added convenience in the field, factory-installed option of non-powered convenience outlet (22) is available. Low and high voltage can enter from the side or through the base. Low-voltage connections are made through the low-voltage terminal strip. For ease of access, the U.L.-required low voltage barrier can be temporarily removed for low-voltage termination and then reinstalled. The high-voltage connection is terminated at the number 1 compressor contactor.



## External Lockable Gauge Ports

To the right left of the compressor compartment are the externally mounted lockable gauge ports. They are permanently identified by embossed lettering that identifies the compressor circuit, high-pressure connection, (23) and low-pressure connection (24). Because the gauge ports are mounted externally, an accurate diagnostic of system operation can be performed without removing access panels. Brass caps on the Schrader fitting ensure the gauge parts are leak proof.



## Compressor

The compressor compartment houses the heartbeat of the unit. The scroll compressor (25) is known for its long life and for reliable, quiet, and efficient operation. The suction and discharge lines are designed with shock loops (26) to absorb the strain and stress that the starting torque, steady state operation, and shut-down cycle impose on the refrigerant tubing. The units have two stages of efficient cooling operation. Each unit comes standard with a filter dryer.



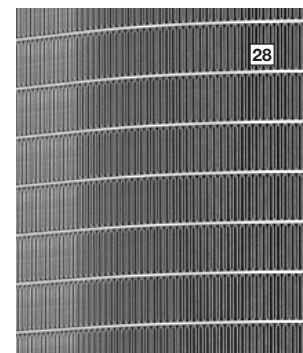
## Condenser Fans

The condenser fan motors (27) can easily be accessed and maintained through the top of the unit. A down-mount fan provides corrosion protection and easy removal. The polarized plug connection allows the motor to be changed quickly and eliminates the need to snake wires through the unit.



## MicroChannel Condenser Technology

The outdoor coil uses the latest MicroChannel technology (28) for the most effective method of heat transfer. The outdoor coil is protected by optional louvered panels, which allow unobstructed airflow while protecting the unit from both the environment and vandalism.



## Coil Coating

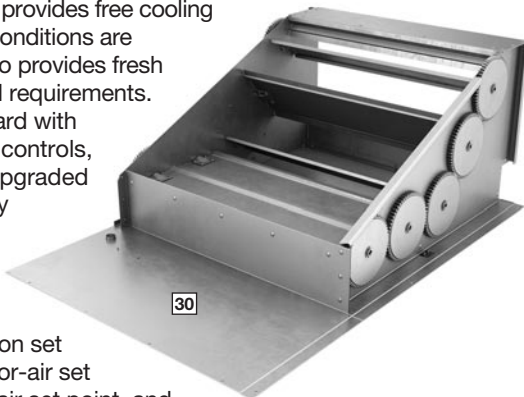
Every unit offers the option of factory-applied E-Coat condenser coating (29) that delivers superior corrosion resistance for outdoor coils to operate in the harshest of environments.



## Economizer and Dampers

Each unit is designed for both down flow or horizontal applications (30) for job configuration flexibility. The return air compartment can also contain an economizer. Each unit is pre-wired for the economizer to allow quick, plug-in installation.

Available as a factory-installed option, the economizer provides free cooling when outdoor conditions are suitable and also provides fresh air to meet local requirements. It comes standard with single enthalpy controls, which can be upgraded to dual enthalpy easily in the field. The economizer control has a minimum position set point, an outdoor-air set point, a mixed-air set point, and a CO<sub>2</sub> set point. Barometric relief is standard on all economizers.



Power Exhaust is easily field-installed. The power exhaust is housed in the barometric relief opening and is easily slipped in with a plug-in assembly. The wire harness to the economizer also has accommodations for a smoke detector.

The damper minimum position, actual damper position, power exhaust on/off set point, mixed air temperature limit set point, and Demand Controlled Ventilation (DCV) set point can be read and adjusted at the unit controller display or remotely through a network connection. The Space CO<sub>2</sub> level, mixed air temperature, and Economizer Status (free cooling available, single or dual enthalpy) can be read at the unit controller display or remotely through a network connection. Economizer faults will trigger a network alarm and can be read at the unit controller display or remotely through a network connection.

## Roofcurb

The roofcurb (31) is made for tool-less assembly at the jobsite by engaging tabs in slots of adjacent curb sides, which makes the assembly process quick and easy.



## Refrigerant Leak Detection

In the event of a detected refrigerant leak, the refrigerant leak detection sensor will trigger the mitigation procedure that shuts off the compressor(s) and turns on the indoor blower motor.

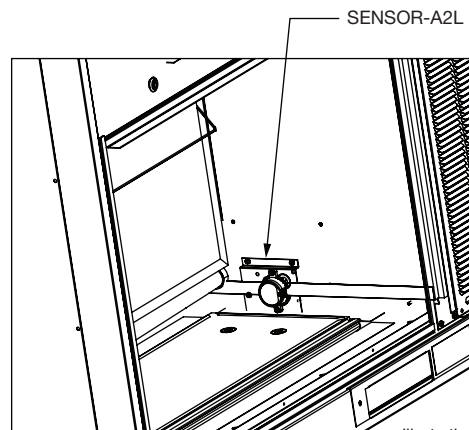
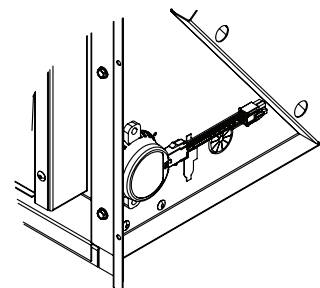
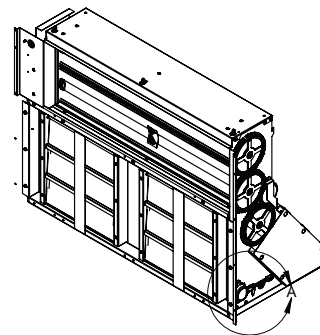
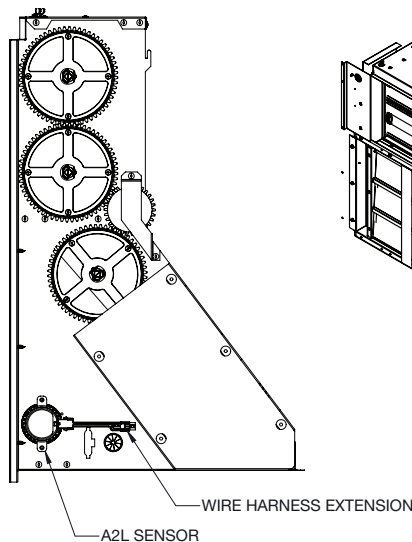


Illustration  
ST-A1365-27-00

If a field-installed vertical economizer will be installed during the unit installation, the A2L leak detection sensor must be relocated as shown below. For more information, refer to the unit installation and Operation Manual.



DETAIL A  
SCALE 1 : 4

| <b>R</b> | <b>HP</b> | <b>D</b> | <b>Y</b> | <b>B</b> | <b>090</b> | <b>A</b>  | <b>C</b>  | <b>F</b>  | <b>15</b>    | <b>2</b>  | <b>A</b>  | <b>A</b>  | <b>***</b> |           |           |
|----------|-----------|----------|----------|----------|------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|------------|-----------|-----------|
| <b>1</b> | <b>23</b> | <b>4</b> | <b>5</b> | <b>6</b> | <b>789</b> | <b>10</b> | <b>11</b> | <b>12</b> | <b>13 14</b> | <b>15</b> | <b>16</b> | <b>17</b> | <b>18</b>  | <b>19</b> | <b>20</b> |

#### 1—Brand

R = Russell By Rheem

#### 2, 3—Unit Type

HP = Packaged Heat Pump

#### 4—Cabinet Type

D = Medium Commercial

#### 5—Refrigerant

Y = R-454B

#### 6—Efficiency Level

B = Standard Efficiency

#### 7, 8, 9—Capacity

090 = 7.5 Ton

102 = 8.5 Ton

120 = 10 Ton

#### 10—Major Series

A = 1st Design

#### 11—Voltage

C = 3 PH, 208/230V, 60 Hz

D = 3 PH, 460V, 60 Hz

Y = 3PH, 575V, 60 Hz

#### 12—Drive

F = Belt Drive – VFD Low

G = Belt Drive – VFD Medium

H = Belt Drive – VFD High

#### 13, 14—Heat Capacity

00 = No Heat

10 = 10 kW

15 = 15 kW

20 = 20 kW

30 = 30 kW

40 = 40 kW

#### 15—Number of Stages

0 = No stages

1 = 1 stage

2 = 2 stage

#### 16—Control

A = CoreCommand™

B = CoreCommand &  
Comfort Alert

C = ClearControl

D = ClearControl &  
Comfort Alert

#### 17—Minor Series

A = 1st Design

#### 18, 19, 20—Option Code

See next page

## FACTORY-INSTALLED OPTION CODES FOR RHPDYB (7.5 TO 10 TON)

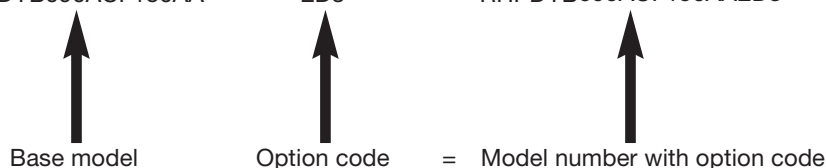
| 18                                      |      |    |    | 19                                  |      |    | 20                         |      |    |    |
|-----------------------------------------|------|----|----|-------------------------------------|------|----|----------------------------|------|----|----|
| LV = Louver protection                  |      |    |    | LF = Low Ambient & Freeze Stat      |      |    | EC = Downflow Economizer   |      |    |    |
| HA = Hinged Access                      |      |    |    | NP = Non-powered Convenience Outlet |      |    | SS = Supply Smoke Detector |      |    |    |
| CC = Coil Coating                       |      |    |    |                                     |      |    | RS = Return Smoke Detector |      |    |    |
| Option code character highlighted below |      |    |    |                                     |      |    |                            |      |    |    |
| A                                       | None |    |    | A                                   | None |    | 0                          | None |    |    |
| B                                       | LV   |    |    | B                                   | LF   |    | 1                          | EC   |    |    |
| C                                       | HA   |    |    | C                                   | NP   |    | 2                          | RS   |    |    |
| D                                       | LV   | HA |    | D                                   | LF   | NP | 3                          | EC   | RS |    |
| E                                       | LV   | CC |    |                                     |      |    | 4                          | SS   | RS |    |
| F                                       | LV   | HA | CC |                                     |      |    | 5                          | EC   | SS | RS |

### Instructions for Factory-Installed Option(s) Selection

**Note:** Three characters following the model number will be utilized to designate a factory-installed option or combination of options. If no factory option(s) is required, "AA0" follows the model number.

- **Step 1:** In the table above, based on the desired features, choose option code character from highlighted options on the left side under the number 18. For example, the option code character "E" has Louver protection and Coil Coating.
- **Step 2:** In the table above, based on the desired features, choose option code character from highlighted options on the left side under the number 19. For example, the option code character "D" has Low Ambient / Freeze Stat and Non-powered convenience outlet.
- **Step 3:** In the table above, based on the desired features, choose option code character from highlighted options on the left side under the number 20. For example, the option code character "3" has Downflow Economizer and Return Smoke.
- The resulting option code from examples above is: "ED3"
- **Step 4:** Add your option code selection to the end of model number

◦ Example: RHPDYB090ACF150AA      ED3      =      RHPDYB090ACF150AAED3



To select an RHPDYB Cooling and Heating unit to meet a job requirement, follow this procedure, with example, using data supplied in this specification sheet.

# 1. DETERMINE COOLING AND HEATING REQUIREMENTS AND SPECIFIC OPERATING CONDITIONS FROM PLANS AND SPECS.

## Example:

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Voltage—                        | 230 V – 3 Phase – 60 Hz              |
| Total Cooling Capacity—         | 118,000 Btu/h [34.57 kW]             |
| Sensible Cooling Capacity—      | 79,600 Btu/h [23.32 kW]              |
| Heating Capacity—               | 150,000 Btu/h [40 kW]                |
| *Condenser Entering Air—        | 95°F [35.0°C] DB                     |
| *Evaporator Mixed Air Entering— | 65°F [18.3°C] WB<br>78°F [25.6°C] DB |
| *Indoor Air Flow (vertical)—    | 3600 CFM [1699 L/s]                  |
| *External Static Pressure—      | 0.40 in. WG [.10 kPa]                |

# 2. SELECT UNIT TO MEET COOLING REQUIREMENTS.

Since total cooling is within the range of a nominal 10 ton [35.1 kW] unit, enter cooling performance table at 95°F [35.0°C] DB condenser inlet air. Interpolate between 63°F [17.2°C] WB and 67°F [19.4°C] to determine total and sensible capacity and power input for 65°F [18.3°C] WB evaporator inlet air at 3750 CFM [1770 L/s] indoor air flow (table basis):

Total Cooling Capacity = 118,900 Btu/h [34.82 kW]  
Sensible Cooling Capacity = 99,950 Btu/h [29.27 kW]  
Power Input (Compressor and Cond. Fans) = 8,950 watts

Use formula  $[1.10 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$  in note to determine sensible capacity at 80°F [26.7°C] DB evaporator entering air:

$99,950 + (1.10 \times 3,600 \times (1 - 0.03) \times (78 - 80))$   
Sensible Cooling Capacity = 92,268 Btu/h [27.02 kW]

# 3. CORRECT CAPACITIES OF STEP 2 FOR ACTUAL AIR FLOW.

Select factors from airflow correction table at 3600 CFM [1699 L/s] and apply to data obtained in step 2 to obtain gross capacity:

Total Capacity =  $118,900 \times 0.98 = 116,522$  Btu/h [34.12 kW]  
Sensible Capacity =  $92,268 \times 0.95 = 87,655$  Btu/h [25.67 kW]  
Power Input =  $8,950 \times 0.99 = 8,861$  Watts

These are Gross Capacities, not corrected for blower motor heat or power.

# 4. DETERMINE BLOWER SPEED AND WATTS TO MEET SYSTEM DESIGN.

Enter Indoor Blower performance table at 3600 CFM [1699 L/s]. Total ESP (external static pressure) per the spec of 0.40 in. WG [.10 kPa] includes the system duct and grilles. Add from the table "Component Air Resistance," 0.076 in. WG [.02 kPa] for wet coil, 0 in. WG [.00 kPa] for downflow air flow for a total selection static pressure of 0.476 (0.5) in. WG [.12 kPa], and determine:

RPM = 771  
WATTS = 1,494  
DRIVE = F (VFD, low static)

# 5. CALCULATE INDOOR BLOWER Btu/h HEAT EFFECT FROM MOTOR WATTS, STEP 4.

$$1,576 \times 3.412 = 5,377 \text{ Btu/h [1.57 kW]}$$

# 6. CALCULATE NET COOLING CAPACITIES, EQUAL TO GROSS CAPACITY, STEP 3, MINUS INDOOR BLOWER MOTOR HEAT.

$$\text{Net Total Capacity} = 116,522 - 5,377 = 111,145 \text{ Btu/h [32.54 kW]}$$

$$\text{Net Sensible Capacity} = 87,655 - 5,377 = 82,278 \text{ Btu/h [24.09 kW]}$$

# 7. CALCULATE UNIT INPUT AND JOB EER.

$$\text{Total Power Input} = 8,861 \text{ (step 3)} + 1,576 \text{ (step 4)} = 10,437 \text{ Watts}$$

$$\text{EER} = \frac{\text{Net Total Btu/h [kW] (step 6)}}{\text{Power Input, Watts (above)}} = \frac{111,145}{10,437} = 10.65$$

# 8. SELECT UNIT HEATING CAPACITY.

From Heater Kit Table select kW to meet heating capacity requirement; multiply kW x 3412 to convert to Btu/h.

Use 40 kW Heater Kit

Heater Kit Model: RXJJ-DD40CP      Heater Kit Capacity: 135,120 Btu/h [39.6 kW]

Add indoor blower heat effect (step 5) to Heater Kit Capacity to get total heating capacity:

$$135,120 + 5,377 = 140,497 \text{ Btu/h [41.1 kW]}$$

# 9. CHOOSE MODEL RHPDYB120ACF402AA.

**\*NOTE:** These operating conditions are typical of a commercial application in a 95°F/79°F [35°C/26°C] design area with indoor design of 76°F [24°C] DB and 50% RH and 10% ventilation air, with the unit roof mounted and centered on the zone it conditions by ducts.

[ ] Designates Metric Conversions

## GENERAL DATA—RHPDYB MODELS—7.5–10 TON

| Model RHPDYB Series                                  | 090ACF                    | 090ACG                    | 090ACH                    | 090ADF                    |
|------------------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Cooling Performance<sup>A</sup></b>               |                           |                           |                           | <b>CONTINUED</b> →        |
| Nominal Cooling Capacity Btu/h [kW]                  | 90,000 [26.37]            | 90,000 [26.37]            | 90,000 [26.37]            | 90,000 [26.37]            |
| EER / IEER <sup>B</sup>                              | 11/14.1                   | 11/14.1                   | 11/14.1                   | 11/14.1                   |
| Nominal CFM/AHRI Rated CFM [L/s]                     | 3,000/3,300 [1,416/1,577] | 3,000/3,300 [1,416/1,577] | 3,000/3,300 [1,416/1,577] | 3,000/3,300 [1,416/1,577] |
| AHRI Net Cooling Capacity Btu/h [kW]                 | 86,000 [25.2]             | 86,000 [25.2]             | 86,000 [25.2]             | 86,000 [25.2]             |
| Net Sensible Capacity Btu/h [kW]                     | 64,500 [18.9]             | 64,500 [18.9]             | 64,500 [18.9]             | 64,500 [18.9]             |
| Net Latent Capacity Btu/h [kW]                       | 21,500 [6.3]              | 21,500 [6.3]              | 21,500 [6.3]              | 21,500 [6.3]              |
| Net System Power [kW]                                | 7.82                      | 7.82                      | 7.82                      | 7.82                      |
| <b>Heating Performance (Heat Pumps)</b>              |                           |                           |                           |                           |
| High Temp. Btu/h [kW] Rating @ 47°F                  | 84,000 [24.62]            | 84,000 [24.62]            | 84,000 [24.62]            | 84,000 [24.62]            |
| System Power kW/COP @ 47°F                           | 7.24/3.4                  | 7.24/3.4                  | 7.24/3.4                  | 7.24/3.4                  |
| Low Temp. Btu/h [kW] Rating @ 17°F                   | 48,000 [14.06]            | 48,000 [14.06]            | 48,000 [14.06]            | 48,000 [14.06]            |
| System Power kW/COP @ 17°F                           | 6.25/2.25                 | 6.25/2.25                 | 6.25/2.25                 | 6.25/2.25                 |
| <b>Compressor</b>                                    |                           |                           |                           |                           |
| No./Stage/Type                                       | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b>         | 87                        | 87                        | 87                        | 87                        |
| <b>Outdoor Coil - Fin Type</b>                       | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1 [25.4]                  | 1 [25.4]                  | 1 [25.4]                  | 1 [25.4]                  |
| Face Area sq. ft. [sq. m]                            | 22.8 [2.12]               | 22.8 [2.12]               | 22.8 [2.12]               | 22.8 [2.12]               |
| Rows / FPI [FPcm]                                    | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                |
| <b>Indoor Coil - Fin Type</b>                        | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32]                 | 1.26 [32]                 | 1.26 [32.00]              | 1.26 [32.00]              |
| Face Area sq. ft. [sq. m]                            | 10.9 [1.01]               | 10.9 [1.01]               | 10.9 [1.01]               | 10.9 [1.01]               |
| Rows / FPI [FPcm]                                    | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                |
| Refrigerant Control                                  | TXV                       | TXV                       | TXV                       | TXV                       |
| Drain Connection No./Size in. [mm]                   | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          |
| <b>Outdoor Fan - Type</b>                            | Propeller                 | Propeller                 | Propeller                 | Propeller                 |
| No. Used/Diameter in. [mm]                           | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            |
| Drive Type/No. Speeds                                | Direct/1                  | Direct/1                  | Direct/1                  | Direct/1                  |
| CFM [L/s]                                            | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             |
| No. Motors at HP                                     | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               |
| Motor RPM                                            | 1,075                     | 1,075                     | 1,075                     | 1,050                     |
| <b>Indoor Fan - Type</b>                             | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            |
| No. Used/Wheel Diameter x Width in. [mm]             | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         |
| Drive Type                                           | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         |
| No. Speeds                                           | Single Speed              | Single Speed              | Single Speed              | Single Speed              |
| No. Motors                                           | 1                         | 1                         | 1                         | 1                         |
| Motor HP                                             | 2                         | 3                         | 3                         | 2                         |
| Motor RPM                                            | 1,725                     | 1,725                     | 1,725                     | 1,725                     |
| Motor Frame Size                                     | 56                        | 56                        | 56                        | 56                        |
| <b>Filter - Type</b>                                 | Disposable                | Disposable                | Disposable                | Disposable                |
| Furnished                                            | Yes                       | Yes                       | Yes                       | Yes                       |
| (NO.) Size Recommended in. [mm x mm x mm]            | (4)2x20x20 [51x508x508]   | (4)2x20x20 [51x508x508]   | (4)2x20x20 [51x508x508]   | (4)2x20x20 [51x508x508]   |
| <b>Refrigerant Charge Oz. [g]</b>                    | 172.8 [4,898.8]           | 172.8 [4,898.8]           | 172.8 [4,898.8]           | 172.8 [4,898.8]           |
| <b>Weights</b>                                       |                           |                           |                           |                           |
| Net Weight lbs. [kg]                                 | 780 [354]                 | 790 [358]                 | 791 [359]                 | 780 [354]                 |
| Ship Weight lbs. [kg]                                | 819 [371]                 | 829 [376]                 | 830 [377]                 | 819 [371]                 |

See Page 21 for Notes.

[ ] Designates Metric Conversions

## GENERAL DATA—RHPDYB MODELS—7.5–10 TON

| Model RHPDYB Series                                  | 090ADG                    | 090ADH                    | 090AYF                    | 090AYG                    |
|------------------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Cooling Performance<sup>A</sup></b>               |                           |                           |                           | <b>CONTINUED</b> →        |
| Nominal Cooling Capacity Btu/h [kW]                  | 90,000 [26.37]            | 90,000 [26.37]            | 90,000 [26.37]            | 90,000 [26.37]            |
| EER / IEER <sup>B</sup>                              | 11/14.1                   | 11/14.1                   | 11/14.1                   | 11/14.1                   |
| Nominal CFM/AHRI Rated CFM [L/s]                     | 3,000/3,300 [1,416/1,577] | 3,000/3,300 [1,416/1,577] | 3,000/3,300 [1,416/1,577] | 3,000/3,300 [1,416/1,577] |
| AHRI Net Cooling Capacity Btu/h [kW]                 | 86,000 [25.2]             | 86,000 [25.2]             | 86,000 [25.2]             | 86,000 [25.2]             |
| Net Sensible Capacity Btu/h [kW]                     | 64,500 [18.9]             | 64,500 [18.9]             | 64,500 [18.9]             | 64,500 [18.9]             |
| Net Latent Capacity Btu/h [kW]                       | 21,500 [6.3]              | 21,500 [6.3]              | 21,500 [6.3]              | 21,500 [6.3]              |
| Net System Power [kW]                                | 7.82                      | 7.82                      | 7.82                      | 7.82                      |
| <b>Heating Performance (Heat Pumps)</b>              |                           |                           |                           |                           |
| High Temp. Btu/h [kW] Rating @ 47°F                  | 84,000 [24.62]            | 84,000 [24.62]            | 84,000 [24.62]            | 84,000 [24.62]            |
| System Power kW/COP @ 47°F                           | 7.24/3.4                  | 7.24/3.4                  | 7.24/3.4                  | 7.24/3.4                  |
| Low Temp. Btu/h [kW] Rating @ 17°F                   | 48,000 [14.06]            | 48,000 [14.06]            | 48,000 [14.06]            | 48,000 [14.06]            |
| System Power kW/COP @ 17°F                           | 6.25/2.25                 | 6.25/2.25                 | 6.25/2.25                 | 6.25/2.25                 |
| <b>Compressor</b>                                    |                           |                           |                           |                           |
| No./Stage/Type                                       | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b>         | 87                        | 87                        | 87                        | 87                        |
| <b>Outdoor Coil - Fin Type</b>                       | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1 [25.4]                  | 1 [25.4]                  | 1 [25.4]                  | 1 [25.4]                  |
| Face Area sq. ft. [sq. m]                            | 22.8 [2.12]               | 22.8 [2.12]               | 22.8 [2.12]               | 22.8 [2.12]               |
| Rows / FPI [FPcm]                                    | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                |
| <b>Indoor Coil - Fin Type</b>                        | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              |
| Face Area sq. ft. [sq. m]                            | 10.9 [1.01]               | 10.9 [1.01]               | 10.9 [1.01]               | 10.9 [1.01]               |
| Rows / FPI [FPcm]                                    | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                |
| Refrigerant Control                                  | TXV                       | TXV                       | TXV                       | TXV                       |
| Drain Connection No./Size in. [mm]                   | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          |
| <b>Outdoor Fan - Type</b>                            | Propeller                 | Propeller                 | Propeller                 | Propeller                 |
| No. Used/Diameter in. [mm]                           | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            |
| Drive Type/No. Speeds                                | Direct/1                  | Direct/1                  | Direct/1                  | Direct/1                  |
| CFM [L/s]                                            | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             |
| No. Motors at HP                                     | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               |
| Motor RPM                                            | 1,050                     | 1,050                     | 1,050                     | 1,050                     |
| <b>Indoor Fan - Type</b>                             | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            |
| No. Used/Wheel Diameter x Width in. [mm]             | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         |
| Drive Type                                           | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         |
| No. Speeds                                           | Single Speed              | Single Speed              | Single Speed              | Single Speed              |
| No. Motors                                           | 1                         | 1                         | 2                         | 1                         |
| Motor HP                                             | 3                         | 3                         | 3                         | 3                         |
| Motor RPM                                            | 1,725                     | 1,725                     | 1,725                     | 1,725                     |
| Motor Frame Size                                     | 56                        | 56                        | 56                        | 56                        |
| <b>Filter - Type</b>                                 | Disposable                | Disposable                | Disposable                | Disposable                |
| Furnished                                            | Yes                       | Yes                       | Yes                       | Yes                       |
| (NO.) Size Recommended in. [mm x mm x mm]            | (4)2x20x20 [51x508x508]   | (4)2x20x20 [51x508x508]   | (4)2x20x20 [51x508x508]   | (4)2x20x20 [51x508x508]   |
| <b>Refrigerant Charge Oz. [g]</b>                    | 172.8 [4,898.8]           | 172.8 [4,898.8]           | 172.8 [4,898.8]           | 172.8 [4,898.8]           |
| <b>Weights</b>                                       |                           |                           |                           |                           |
| Net Weight lbs. [kg]                                 | 790 [358]                 | 791 [359]                 | 780 [354]                 | 790 [358]                 |
| Ship Weight lbs. [kg]                                | 829 [376]                 | 830 [377]                 | 819 [371]                 | 829 [376]                 |

See Page 21 for Notes.

[ ] Designates Metric Conversions

## GENERAL DATA—RHPDYB MODELS—7.5–10 TON

| Model RHPDYB Series                                  | 090AYH                    | 102ACF                    | 102ACG                    | 102ACH                                                                                               |
|------------------------------------------------------|---------------------------|---------------------------|---------------------------|------------------------------------------------------------------------------------------------------|
| <b>Cooling Performance<sup>A</sup></b>               |                           |                           |                           | <b>CONTINUED</b>  |
| Nominal Cooling Capacity Btu/h [kW]                  | 90,000 [26.37]            | 102,000 [29.89]           | 102,000 [29.89]           | 102,000 [29.89]                                                                                      |
| EER / IEER <sup>B</sup>                              | 11/14.1                   | 11/14.1                   | 11/14.1                   | 11/14.1                                                                                              |
| Nominal CFM/AHRI Rated CFM [L/s]                     | 3,000/3,300 [1,416/1,577] | 3,400/3,350 [1,604/1,581] | 3,400/3,350 [1,604/1,581] | 3,400/3,350 [1,604/1,581]                                                                            |
| AHRI Net Cooling Capacity Btu/h [kW]                 | 86,000 [25.2]             | 96,000 [28.1]             | 96,000 [28.1]             | 96,000 [28.1]                                                                                        |
| Net Sensible Capacity Btu/h [kW]                     | 64,500 [18.9]             | 72,750 [21.3]             | 72,750 [21.3]             | 72,750 [21.3]                                                                                        |
| Net Latent Capacity Btu/h [kW]                       | 21,500 [6.3]              | 24,250 [7.1]              | 24,250 [7.1]              | 24,250 [7.1]                                                                                         |
| Net System Power [kW]                                | 7.82                      | 8.82                      | 8.82                      | 8.82                                                                                                 |
| <b>Heating Performance (Heat Pumps)</b>              |                           |                           |                           |                                                                                                      |
| High Temp. Btu/h [kW] Rating @ 47°F                  | 84,000 [24.62]            | 96,000 [28.1]             | 96,000 [28.1]             | 96,000 [28.1]                                                                                        |
| System Power kW/COP @ 47°F                           | 7.24/3.4                  | 8.36/3.4                  | 8.36/3.4                  | 8.36/3.4                                                                                             |
| Low Temp. Btu/h [kW] Rating @ 17°F                   | 48,000 [14.06]            | 56,000 [16.4]             | 56,000 [16.4]             | 56,000 [16.4]                                                                                        |
| System Power kW/COP @ 17°F                           | 6.25/2.25                 | 7.29/2.25                 | 7.29/2.25                 | 7.29/2.25                                                                                            |
| <b>Compressor</b>                                    |                           |                           |                           |                                                                                                      |
| No./Stage/Type                                       | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                                                                                           |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b>         | 87                        | 82                        | 82                        | 82                                                                                                   |
| <b>Outdoor Coil - Fin Type</b>                       | Louvered                  | Louvered                  | Louvered                  | Louvered                                                                                             |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel                                                                                         |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1 [25.4]                  | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]                                                                                         |
| Face Area sq. ft. [sq. m]                            | 22.8 [2.12]               | 28.8 [2.68]               | 28.8 [2.68]               | 28.8 [2.68]                                                                                          |
| Rows / FPI [FPcm]                                    | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                                                                                           |
| <b>Indoor Coil - Fin Type</b>                        | Louvered                  | Louvered                  | Louvered                  | Louvered                                                                                             |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel                                                                                         |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]                                                                                         |
| Face Area sq. ft. [sq. m]                            | 10.9 [1.01]               | 13.2 [1.23]               | 13.2 [1.23]               | 13.2 [1.23]                                                                                          |
| Rows / FPI [FPcm]                                    | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                                                                                           |
| Refrigerant Control                                  | TXV                       | TXV                       | TXV                       | TXV                                                                                                  |
| Drain Connection No./Size in. [mm]                   | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]                                                                                     |
| <b>Outdoor Fan - Type</b>                            | Propeller                 | Propeller                 | Propeller                 | Propeller                                                                                            |
| No. Used/Diameter in. [mm]                           | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]                                                                                       |
| Drive Type/No. Speeds                                | Direct/1                  | Direct/1                  | Direct/1                  | Direct/1                                                                                             |
| CFM [L/s]                                            | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]                                                                                        |
| No. Motors at HP                                     | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP                                                                                          |
| Motor RPM                                            | 1,050                     | 1,075                     | 1,075                     | 1,075                                                                                                |
| <b>Indoor Fan - Type</b>                             | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            | FC Centrifugal                                                                                       |
| No. Used/Wheel Diameter x Width in. [mm]             | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]                                                                                    |
| Drive Type                                           | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)                                                                                    |
| No. Speeds                                           | Single Speed              | Single Speed              | Single Speed              | Single Speed                                                                                         |
| No. Motors                                           | 1                         | 1                         | 1                         | 1                                                                                                    |
| Motor HP                                             | 3                         | 2                         | 3                         | 3                                                                                                    |
| Motor RPM                                            | 1,725                     | 1,725                     | 1,725                     | 1,725                                                                                                |
| Motor Frame Size                                     | 56                        | 56                        | 56                        | 56                                                                                                   |
| <b>Filter - Type</b>                                 | Disposable                | Disposable                | Disposable                | Disposable                                                                                           |
| Furnished                                            | Yes                       | Yes                       | Yes                       | Yes                                                                                                  |
| (NO.) Size Recommended in. [mm x mm x mm]            | (4)2x20x20 [51x508x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]                                                                              |
| <b>Refrigerant Charge Oz. [g]</b>                    | 172.8 [4,898.8]           | 211.2 [5,987.4]           | 211.2 [5,987.4]           | 211.2 [5,987.4]                                                                                      |
| <b>Weights</b>                                       |                           |                           |                           |                                                                                                      |
| Net Weight lbs. [kg]                                 | 790 [358]                 | 814 [369]                 | 824 [373]                 | 825 [374]                                                                                            |
| Ship Weight lbs. [kg]                                | 829 [376]                 | 853 [387]                 | 863 [391]                 | 864 [392]                                                                                            |

See Page 21 for Notes.

[ ] Designates Metric Conversions

## GENERAL DATA—RHPDYB MODELS—7.5–10 TON

| Model RHPDYB Series                                  | 102ADF                    | 102ADG                    | 102ADH                    | 102AYF                    |
|------------------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Cooling Performance<sup>A</sup></b>               |                           |                           |                           | <b>CONTINUED</b> →        |
| Nominal Cooling Capacity Btu/h [kW]                  | 102,000 [29.89]           | 102,000 [29.89]           | 102,000 [29.89]           | 102,000 [29.89]           |
| EER / IEER <sup>B</sup>                              | 11/14.1                   | 11/14.1                   | 11/14.1                   | 11/14.1                   |
| Nominal CFM/AHRI Rated CFM [L/s]                     | 3,400/3,350 [1,604/1,581] | 3,400/3,350 [1,604/1,581] | 3,400/3,350 [1,604/1,581] | 3,400/3,350 [1,604/1,581] |
| AHRI Net Cooling Capacity Btu/h [kW]                 | 96,000 [28.1]             | 96,000 [28.1]             | 96,000 [28.1]             | 96,000 [28.1]             |
| Net Sensible Capacity Btu/h [kW]                     | 72,750 [21.3]             | 72,750 [21.3]             | 72,750 [21.3]             | 72,750 [21.3]             |
| Net Latent Capacity Btu/h [kW]                       | 24,250 [7.1]              | 24,250 [7.1]              | 24,250 [7.1]              | 24,250 [7.1]              |
| Net System Power [kW]                                | 8.82                      | 8.82                      | 8.82                      | 8.82                      |
| <b>Heating Performance (Heat Pumps)</b>              |                           |                           |                           |                           |
| High Temp. Btu/h [kW] Rating @ 47°F                  | 96,000 [28.1]             | 96,000 [28.1]             | 96,000 [28.1]             | 96,000 [28.1]             |
| System Power kW/COP @ 47°F                           | 8.36/3.4                  | 8.36/3.4                  | 8.36/3.4                  | 8.36/3.4                  |
| Low Temp. Btu/h [kW] Rating @ 17°F                   | 56,000 [16.4]             | 56,000 [16.4]             | 56,000 [16.4]             | 56,000 [16.4]             |
| System Power kW/COP @ 17°F                           | 7.29/2.25                 | 7.29/2.25                 | 7.29/2.25                 | 7.29/2.25                 |
| <b>Compressor</b>                                    |                           |                           |                           |                           |
| No./Stage/Type                                       | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b>         | 82                        | 82                        | 82                        | 82                        |
| <b>Outdoor Coil - Fin Type</b>                       | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              |
| Face Area sq. ft. [sq. m]                            | 28.8 [2.68]               | 28.8 [2.68]               | 28.8 [2.68]               | 28.8 [2.68]               |
| Rows / FPI [FPcm]                                    | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                |
| <b>Indoor Coil - Fin Type</b>                        | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              |
| Face Area sq. ft. [sq. m]                            | 13.2 [1.23]               | 13.2 [1.23]               | 13.2 [1.23]               | 13.2 [1.23]               |
| Rows / FPI [FPcm]                                    | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                |
| Refrigerant Control                                  | TXV                       | TXV                       | TXV                       | TXV                       |
| Drain Connection No./Size in. [mm]                   | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          |
| <b>Outdoor Fan - Type</b>                            | Propeller                 | Propeller                 | Propeller                 | Propeller                 |
| No. Used/Diameter in. [mm]                           | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            |
| Drive Type/No. Speeds                                | Direct/1                  | Direct/1                  | Direct/1                  | Direct/1                  |
| CFM [L/s]                                            | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             |
| No. Motors at HP                                     | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               |
| Motor RPM                                            | 1050                      | 1050                      | 1050                      | 1050                      |
| <b>Indoor Fan - Type</b>                             | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            |
| No. Used/Wheel Diameter x Width in. [mm]             | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         |
| Drive Type                                           | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         |
| No. Speeds                                           | Single Speed              | Single Speed              | Single Speed              | Single Speed              |
| No. Motors                                           | 1                         | 1                         | 1                         | 1                         |
| Motor HP                                             | 2                         | 3                         | 3                         | 2                         |
| Motor RPM                                            | 1,725                     | 1,725                     | 1,725                     | 1,725                     |
| Motor Frame Size                                     | 56                        | 56                        | 56                        | 56                        |
| <b>Filter - Type</b>                                 | Disposable                | Disposable                | Disposable                | Disposable                |
| Furnished                                            | Yes                       | Yes                       | Yes                       | Yes                       |
| (NO.) Size Recommended in. [mm x mm x mm]            | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   |
| <b>Refrigerant Charge Oz. [g]</b>                    | 211.2 [5,987.4]           | 211.2 [5,987.4]           | 211.2 [5,987.4]           | 211.2 [5,987.4]           |
| <b>Weights</b>                                       |                           |                           |                           |                           |
| Net Weight lbs. [kg]                                 | 814 [369]                 | 824 [373]                 | 825 [374]                 | 814 [369]                 |
| Ship Weight lbs. [kg]                                | 853 [387]                 | 863 [391]                 | 864 [392]                 | 853 [387]                 |

See Page 21 for Notes.

[ ] Designates Metric Conversions

## GENERAL DATA—RHPDYB MODELS—7.5–10 TON

| Model RHPDYB Series                                  | 102AYG                    | 102AYH                    | 120ACF                    | 120ACG                    |
|------------------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Cooling Performance<sup>A</sup></b>               |                           |                           |                           | <b>CONTINUED</b> →        |
| Nominal Cooling Capacity Btu/h [kW]                  | 102,000 [29.89]           | 102,000 [29.89]           | 120,000 [35.16]           | 120,000 [35.16]           |
| EER / IEER <sup>B</sup>                              | 11/14.1                   | 11/14.1                   | 11/14.1                   | 11/14.1                   |
| Nominal CFM/AHRI Rated CFM [L/s]                     | 3,400/3,350 [1,604/1,581] | 3,400/3,350 [1,604/1,581] | 4,000/4,000 [1,888/1,888] | 4,000/4,000 [1,888/1,888] |
| AHRI Net Cooling Capacity Btu/h [kW]                 | 96,000 [28.1]             | 96,000 [28.1]             | 114,000 [33.4]            | 114,000 [33.4]            |
| Net Sensible Capacity Btu/h [kW]                     | 72,750 [21.3]             | 72,750 [21.3]             | 85,500 [25.1]             | 85,500 [25.1]             |
| Net Latent Capacity Btu/h [kW]                       | 24,250 [7.1]              | 24,250 [7.1]              | 28,500 [8.4]              | 28,500 [8.4]              |
| Net System Power [kW]                                | 8.82                      | 8.82                      | 10.36                     | 10.36                     |
| <b>Heating Performance (Heat Pumps)</b>              |                           |                           |                           |                           |
| High Temp. Btu/h [kW] Rating @ 47°F                  | 96,000 [28.1]             | 96,000 [28.1]             | 112,000 [32.8]            | 112,000 [32.8]            |
| System Power kW/COP @ 47°F                           | 8.36/3.4                  | 8.36/3.4                  | 9.65/3.4                  | 9.65/3.4                  |
| Low Temp. Btu/h [kW] Rating @ 17°F                   | 56,000 [16.4]             | 56,000 [16.4]             | 68,000 [19.9]             | 68,000 [19.9]             |
| System Power kW/COP @ 17°F                           | 7.29/2.25                 | 7.29/2.25                 | 8.86/2.25                 | 8.86/2.25                 |
| <b>Compressor</b>                                    |                           |                           |                           |                           |
| No./Stage/Type                                       | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b>         | 82                        | 82                        | 81                        | 81                        |
| <b>Outdoor Coil - Fin Type</b>                       | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32]                 | 1.26 [32]                 |
| Face Area sq. ft. [sq. m]                            | 28.8 [2.68]               | 28.8 [2.68]               | 28.8 [2.68]               | 28.8 [2.68]               |
| Rows / FPI [FPcm]                                    | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                |
| <b>Indoor Coil - Fin Type</b>                        | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              |
| Face Area sq. ft. [sq. m]                            | 13.2 [1.23]               | 13.2 [1.23]               | 13.2 [1.23]               | 13.2 [1.23]               |
| Rows / FPI [FPcm]                                    | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                |
| Refrigerant Control                                  | TXV                       | TXV                       | TXV                       | TXV                       |
| Drain Connection No./Size in. [mm]                   | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          |
| <b>Outdoor Fan - Type</b>                            | Propeller                 | Propeller                 | Propeller                 | Propeller                 |
| No. Used/Diameter in. [mm]                           | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            |
| Drive Type/No. Speeds                                | Direct/1                  | Direct/1                  | Direct/1                  | Direct/1                  |
| CFM [L/s]                                            | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             |
| No. Motors at HP                                     | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               |
| Motor RPM                                            | 1,050                     | 1,050                     | 1,075                     | 1,075                     |
| <b>Indoor Fan - Type</b>                             | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            |
| No. Used/Wheel Diameter x Width in. [mm]             | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         |
| Drive Type                                           | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         |
| No. Speeds                                           | Single Speed              | Single Speed              | Single Speed              | Single Speed              |
| No. Motors                                           | 1                         | 1                         | 1                         | 1                         |
| Motor HP                                             | 3                         | 3                         | 2                         | 3                         |
| Motor RPM                                            | 1,725                     | 1,725                     | 1,725                     | 1,725                     |
| Motor Frame Size                                     | 56                        | 56                        | 56                        | 56                        |
| <b>Filter - Type</b>                                 | Disposable                | Disposable                | Disposable                | Disposable                |
| Furnished                                            | Yes                       | Yes                       | Yes                       | Yes                       |
| (NO.) Size Recommended in. [mm x mm x mm]            | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   |
| <b>Refrigerant Charge Oz. [g]</b>                    | 211.2 [5,987.4]           | 211.2 [5,987.4]           | 209.6 [5,942.1]           | 209.6 [5,942.1]           |
| <b>Weights</b>                                       |                           |                           |                           |                           |
| Net Weight lbs. [kg]                                 | 825 [374]                 | 825 [374]                 | 856 [388]                 | 866 [392]                 |
| Ship Weight lbs. [kg]                                | 864 [392]                 | 864 [392]                 | 895 [406]                 | 905 [410]                 |

See Page 21 for Notes.

[ ] Designates Metric Conversions

## GENERAL DATA—RHPDYB MODELS—7.5–10 TON

| Model RHPDYB Series                                  | 120ACH                    | 120ADF                    | 120ADG                    | 120ADH                    |
|------------------------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Cooling Performance<sup>A</sup></b>               |                           |                           |                           | <b>CONTINUED →</b>        |
| Nominal Cooling Capacity Btu/h [kW]                  | 120,000 [35.16]           | 120,000 [35.16]           | 120,000 [35.16]           | 120,000 [35.16]           |
| EER / IEER <sup>B</sup>                              | 11/14.1                   | 11/14.1                   | 11/14.1                   | 11/14.1                   |
| Nominal CFM/AHRI Rated CFM [L/s]                     | 4,000/4,000 [1,888/1,888] | 4,000/4,000 [1,888/1,888] | 4,000/3,900 [1,888/1,841] | 4,000/3,900 [1,888/1,841] |
| AHRI Net Cooling Capacity Btu/h [kW]                 | 114,000 [33.4]            | 114,000 [33.4]            | 114,000 [33.4]            | 114,000 [33.4]            |
| Net Sensible Capacity Btu/h [kW]                     | 85,500 [25.1]             | 85,500 [25.1]             | 85,500 [25.1]             | 85,500 [25.1]             |
| Net Latent Capacity Btu/h [kW]                       | 28,500 [8.4]              | 28,500 [8.4]              | 28,500 [8.4]              | 28,500 [8.4]              |
| Net System Power [kW]                                | 10.36                     | 10.36                     | 10.36                     | 10.36                     |
| <b>Heating Performance (Heat Pumps)</b>              |                           |                           |                           |                           |
| High Temp. Btu/h [kW] Rating @ 47°F                  | 112,000 [32.8]            | 112,000 [32.8]            | 112,000 [32.8]            | 112,000 [32.8]            |
| System Power kW/COP @ 47°F                           | 9.65/3.4                  | 9.65/3.4                  | 9.65/3.4                  | 9.65/3.4                  |
| Low Temp. Btu/h [kW] Rating @ 17°F                   | 68,000 [19.9]             | 68,000 [19.9]             | 68,000 [19.9]             | 68,000 [19.9]             |
| System Power kW/COP @ 17°F                           | 8.86/2.25                 | 8.86/2.25                 | 8.86/2.25                 | 8.86/2.25                 |
| <b>Compressor</b>                                    |                           |                           |                           |                           |
| No./Stage/Type                                       | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b>         | 81                        | 81                        | 81                        | 81                        |
| <b>Outdoor Coil - Fin Type</b>                       | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32]                 | 1.26 [32]                 |
| Face Area sq. ft. [sq. m]                            | 28.8 [2.68]               | 28.8 [2.68]               | 28.8 [2.68]               | 28.8 [2.68]               |
| Rows / FPI [FPcm]                                    | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                |
| <b>Indoor Coil - Fin Type</b>                        | Louvered                  | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              |
| Face Area sq. ft. [sq. m]                            | 13.2 [1.23]               | 13.2 [1.23]               | 13.2 [1.23]               | 13.2 [1.23]               |
| Rows / FPI [FPcm]                                    | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                |
| Refrigerant Control                                  | TXV                       | TXV                       | TXV                       | TXV                       |
| Drain Connection No./Size in. [mm]                   | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          |
| <b>Outdoor Fan - Type</b>                            | Propeller                 | Propeller                 | Propeller                 | Propeller                 |
| No. Used/Diameter in. [mm]                           | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            |
| Drive Type/No. Speeds                                | Direct/1                  | Direct/1                  | Direct/1                  | Direct/1                  |
| CFM [L/s]                                            | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             |
| No. Motors at HP                                     | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               |
| Motor RPM                                            | 1,075                     | 1,050                     | 1,050                     | 1,050                     |
| <b>Indoor Fan - Type</b>                             | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            |
| No. Used/Wheel Diameter x Width in. [mm]             | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         |
| Drive Type                                           | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         |
| No. Speeds                                           | Single Speed              | Single Speed              | Single Speed              | Single Speed              |
| No. Motors                                           | 1                         | 1                         | 1                         | 1                         |
| Motor HP                                             | 3                         | 2                         | 3                         | 3                         |
| Motor RPM                                            | 1,725                     | 1,725                     | 1,725                     | 1,725                     |
| Motor Frame Size                                     | 56                        | 56                        | 56                        | 56                        |
| <b>Filter - Type</b>                                 | Disposable                | Disposable                | Disposable                | Disposable                |
| Furnished                                            | Yes                       | Yes                       | Yes                       | Yes                       |
| (NO.) Size Recommended in. [mm x mm x mm]            | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   |
| <b>Refrigerant Charge Oz. [g]</b>                    | 209.6 [5,942.1]           | 209.6 [5,942.1]           | 209.6 [5,942.1]           | 209.6 [5,942.1]           |
| <b>Weights</b>                                       |                           |                           |                           |                           |
| Net Weight lbs. [kg]                                 | 867 [393]                 | 856 [388]                 | 866 [392]                 | 867 [393]                 |
| Ship Weight lbs. [kg]                                | 906 [411]                 | 895 [406]                 | 905 [410]                 | 906 [411]                 |

See Page 21 for Notes.

[ ] Designates Metric Conversions

## GENERAL DATA—RHPDYB MODELS—7.5–10 TON

| Model RHPDYB Series                                  | 120AYF                    | 120AYG                    | 120AYH                    |
|------------------------------------------------------|---------------------------|---------------------------|---------------------------|
| <b>Cooling Performance<sup>A</sup></b>               |                           |                           |                           |
| Nominal Cooling Capacity Btu/h [kW]                  | 120,000 [35.16]           | 120,000 [35.16]           | 120,000 [35.16]           |
| EER / IEER <sup>B</sup>                              | 11/14.1                   | 11/14.1                   | 11/14.1                   |
| Nominal CFM/AHRI Rated CFM [L/s]                     | 4,000/4,000 [1,888/1,888] | 4,000/4,000 [1,888/1,888] | 4,000/3,900 [1,888/1,841] |
| AHRI Net Cooling Capacity Btu/h [kW]                 | 114,000 [33.4]            | 114,000 [33.4]            | 114,000 [33.4]            |
| Net Sensible Capacity Btu/h [kW]                     | 85,500 [25.1]             | 85,500 [25.1]             | 85,500 [25.1]             |
| Net Latent Capacity Btu/h [kW]                       | 28,500 [8.4]              | 28,500 [8.4]              | 28,500 [8.4]              |
| Net System Power [kW]                                | 10.36                     | 10.36                     | 10.36                     |
| <b>Heating Performance (Heat Pumps)</b>              |                           |                           |                           |
| High Temp. Btu/h [kW] Rating @ 47°F                  | 112,000 [32.8]            | 112,000 [32.8]            | 112,000 [32.8]            |
| System Power kW/COP @ 47°F                           | 9.65/3.4                  | 9.65/3.4                  | 9.65/3.4                  |
| Low Temp. Btu/h [kW] Rating @ 17°F                   | 68,000 [19.9]             | 68,000 [19.9]             | 68,000 [19.9]             |
| System Power kW/COP @ 17°F                           | 8.86/2.25                 | 8.86/2.25                 | 8.86/2.25                 |
| <b>Compressor</b>                                    |                           |                           |                           |
| No./Stage/Type                                       | 1/2/Scroll                | 1/2/Scroll                | 1/2/Scroll                |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b>         |                           |                           |                           |
|                                                      | 81                        | 81                        | 81                        |
| <b>Outdoor Coil - Fin Type</b>                       |                           |                           |                           |
| Tube Type                                            | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32]                 | 1.26 [32]                 | 1.26 [32]                 |
| Face Area sq. ft. [sq. m]                            | 28.8 [2.68]               | 28.8 [2.68]               | 28.8 [2.68]               |
| Rows / FPI [FPcm]                                    | 1 / 16 [6]                | 1 / 16 [6]                | 1 / 16 [6]                |
| <b>Indoor Coil - Fin Type</b>                        |                           |                           |                           |
| Tube Type                                            | Louvered                  | Louvered                  | Louvered                  |
| Tube Type                                            | MicroChannel              | MicroChannel              | MicroChannel              |
| Rifled: Tube Size OD or MicroChannel: Depth in. [mm] | 1.26 [32.00]              | 1.26 [32.00]              | 1.26 [32.00]              |
| Face Area sq. ft. [sq. m]                            | 13.2 [1.23]               | 13.2 [1.23]               | 13.2 [1.23]               |
| Rows / FPI [FPcm]                                    | 1 / 20 [8]                | 1 / 20 [8]                | 1 / 20 [8]                |
| Refrigerant Control                                  | TXV                       | TXV                       | TXV                       |
| Drain Connection No./Size in. [mm]                   | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          | 1 / 0.75 [19.05]          |
| <b>Outdoor Fan - Type</b>                            |                           |                           |                           |
| No. Used/Diameter in. [mm]                           | Propeller                 | Propeller                 | Propeller                 |
| Drive Type/No. Speeds                                | 2/24.0 [609.6]            | 2/24.0 [609.6]            | 2/24.0 [609.6]            |
| CFM [L/s]                                            | Direct/1                  | Direct/1                  | Direct/1                  |
| No. Motors at HP                                     | 8,000 [3,775]             | 8,000 [3,775]             | 8,000 [3,775]             |
| Motor RPM                                            | 2 at 1/2 HP               | 2 at 1/2 HP               | 2 at 1/2 HP               |
|                                                      | 1,075                     | 1,075                     | 1,050                     |
| <b>Indoor Fan - Type</b>                             |                           |                           |                           |
| No. Used/Wheel Diameter x Width in. [mm]             | FC Centrifugal            | FC Centrifugal            | FC Centrifugal            |
| Drive Type                                           | 1/15x15 [381x381]         | 1/15x15 [381x381]         | 1/15x15 [381x381]         |
| No. Speeds                                           | Belt (Adjustable)         | Belt (Adjustable)         | Belt (Adjustable)         |
| No. Motors                                           | Single Speed              | Single Speed              | Single Speed              |
| Motor HP                                             | 1                         | 1                         | 1                         |
| Motor RPM                                            | 2                         | 3                         | 3                         |
| Motor Frame Size                                     | 1,725                     | 1,725                     | 1,725                     |
|                                                      | 56                        | 56                        | 56                        |
| <b>Filter - Type</b>                                 |                           |                           |                           |
| Furnished                                            | Disposable                | Disposable                | Disposable                |
| (NO.) Size Recommended in. [mm x mm x mm]            | Yes                       | Yes                       | Yes                       |
|                                                      | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   | (4)2x25x20 [51x635x508]   |
| <b>Refrigerant Charge Oz. [g]</b>                    |                           |                           |                           |
|                                                      | 209.6 [5,942.1]           | 209.6 [5,942.1]           | 209.6 [5,942.1]           |
| <b>Weights</b>                                       |                           |                           |                           |
| Net Weight lbs. [kg]                                 | 856 [388]                 | 866 [392]                 | 867 [393]                 |
| Ship Weight lbs. [kg]                                | 895 [406]                 | 905 [410]                 | 906 [411]                 |

See Page 21 for Notes.

[ ] Designates Metric Conversions

## NOTES:

- A. Cooling Performance is rated at 95°F ambient, 80°F entering dry bulb, 67°F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal CFM. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 340/360.
- B. EER and Integrated Energy Efficiency (IEER) are rated in accordance with AHRI Standard 340/360 and DOE test standards.
- C. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

[ ] Designates Metric Conversions

## WEIGHTED SOUND POWER LEVEL (dBA)

| MODEL     | STD. RATING<br>(dBA) | FREQUENCY (Hz) |     |     |      |      |      |      |
|-----------|----------------------|----------------|-----|-----|------|------|------|------|
|           |                      | 125            | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| RHPDYB090 | 87.0                 | 62             | 74  | 77  | 77   | 74   | 70   | 67   |
| RHPDYB102 | 81.7                 | 56             | 65  | 72  | 71   | 69   | 64   | 53   |
| RHPDYB120 | 81.0                 | 61             | 64  | 69  | 67   | 67   | 66   | 62   |

## COOLING PERFORMANCE DATA—RHPDYB090

| ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①           |                                                |                                                |                                    |                                    |                                   |                                    |                                   |                                   |                                   |                                   |                                   |
|-----------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------|------------------------------------|-----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| wbE                                                 |                                                |                                                | 71°F [21.7°C]                      |                                    |                                   | 67°F [19.4°C]                      |                                   |                                   | 63°F [17.2°C]                     |                                   |                                   |
| CFM [L/s]                                           |                                                |                                                | 3600 [1699]                        | 3025 [1428]                        | 2400 [1133]                       | 3600 [1699]                        | 3025 [1428]                       | 2400 [1133]                       | 3600 [1699]                       | 3025 [1428]                       | 2400 [1133]                       |
| DR ①                                                |                                                |                                                | .05                                | .09                                | .12                               | .05                                | .09                               | .12                               | .05                               | .09                               | .12                               |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br>°F<br>[°C] | 75<br>[23.9]                                   | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 105.5 [30.9]<br>63.8 [18.7]<br>6.9 | 102.0 [29.9]<br>58.6 [17.2]<br>6.8 | 98.1 [28.8]<br>53.0 [15.5]<br>6.7 | 101.7 [29.8]<br>78.2 [22.9]<br>6.8 | 98.3 [28.8]<br>71.9 [21.1]<br>6.7 | 94.6 [27.7]<br>64.9 [19.0]<br>6.5 | 96.8 [28.4]<br>85.7 [25.1]<br>6.7 | 93.6 [27.4]<br>78.7 [23.1]<br>6.5 | 90.1 [26.4]<br>71.1 [20.8]<br>6.4 |
|                                                     | 80<br>[26.7]                                   | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 103.8 [30.4]<br>63.8 [18.7]<br>7.3 | 100.3 [29.4]<br>58.6 [17.2]<br>7.1 | 96.6 [28.3]<br>52.9 [15.5]<br>7.0 | 100.0 [29.3]<br>78.2 [22.9]<br>7.1 | 96.6 [28.3]<br>71.8 [21.0]<br>7.0 | 93.0 [27.3]<br>64.9 [19.0]<br>6.8 | 95.1 [27.9]<br>85.6 [25.1]<br>7.0 | 91.9 [26.9]<br>78.7 [23.1]<br>6.8 | 88.5 [25.9]<br>71.1 [20.8]<br>6.7 |
|                                                     | 85<br>[29.4]                                   | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 101.8 [29.8]<br>63.4 [18.6]<br>7.6 | 98.4 [28.8]<br>58.2 [17.1]<br>7.4  | 94.7 [27.8]<br>52.6 [15.4]<br>7.3 | 98.0 [28.7]<br>77.8 [22.8]<br>7.4  | 94.7 [27.8]<br>71.5 [21.0]<br>7.3 | 91.2 [26.7]<br>64.6 [18.9]<br>7.1 | 93.1 [27.3]<br>85.2 [25.0]<br>7.3 | 90.0 [26.4]<br>78.3 [22.9]<br>7.2 | 86.6 [25.4]<br>70.7 [20.7]<br>7.0 |
|                                                     | 90<br>[32.2]                                   | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 99.6 [29.2]<br>62.6 [18.3]<br>7.9  | 96.3 [28.2]<br>57.5 [16.9]<br>7.8  | 92.6 [27.1]<br>52.0 [15.2]<br>7.6 | 95.7 [28.0]<br>77.0 [22.6]<br>7.7  | 92.6 [27.1]<br>70.8 [20.8]<br>7.6 | 89.1 [26.1]<br>63.9 [18.7]<br>7.5 | 90.9 [26.6]<br>84.5 [24.8]<br>7.6 | 87.9 [25.8]<br>77.6 [22.7]<br>7.5 | 84.6 [24.8]<br>70.1 [20.5]<br>7.3 |
|                                                     | 95<br>[35]                                     | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 97.1 [28.5]<br>61.6 [18.1]<br>8.2  | 93.8 [27.5]<br>56.5 [16.6]<br>8.1  | 90.3 [26.5]<br>51.1 [15.0]<br>7.9 | 93.2 [27.3]<br>76.0 [22.3]<br>8.0  | 90.1 [26.4]<br>69.8 [20.5]<br>7.9 | 86.7 [25.4]<br>63.0 [18.5]<br>7.8 | 88.4 [25.9]<br>83.4 [24.4]<br>7.9 | 85.4 [25.0]<br>76.6 [22.5]<br>7.8 | 82.2 [24.1]<br>69.2 [20.3]<br>7.6 |
|                                                     | 100<br>[37.8]                                  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 94.3 [27.6]<br>60.1 [17.6]<br>8.5  | 91.1 [26.7]<br>55.2 [16.2]<br>8.4  | 87.7 [25.7]<br>49.9 [14.6]<br>8.2 | 90.5 [26.5]<br>74.5 [21.8]<br>8.3  | 87.4 [25.6]<br>68.5 [20.1]<br>8.2 | 84.2 [24.7]<br>61.9 [18.1]<br>8.1 | 85.6 [25.1]<br>82.0 [24.0]<br>8.2 | 82.7 [24.2]<br>75.3 [22.1]<br>8.1 | 79.6 [23.3]<br>68.1 [20.0]<br>7.9 |
|                                                     | 105<br>[40.6]                                  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 91.2 [26.7]<br>58.4 [17.1]<br>8.8  | 88.2 [25.8]<br>53.6 [15.7]<br>8.7  | 84.9 [24.9]<br>48.4 [14.2]<br>8.5 | 87.4 [25.6]<br>72.8 [21.3]<br>8.7  | 84.5 [24.8]<br>66.8 [19.6]<br>8.5 | 81.3 [23.8]<br>60.4 [17.7]<br>8.4 | 82.6 [24.2]<br>80.2 [23.5]<br>8.5 | 79.8 [23.4]<br>73.7 [21.6]<br>8.4 | 76.8 [22.5]<br>66.6 [19.5]<br>8.2 |
|                                                     | 110<br>[43.3]                                  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 87.9 [25.8]<br>56.3 [16.5]<br>9.1  | 85.0 [24.9]<br>51.7 [15.2]<br>9.0  | 81.8 [24.0]<br>46.7 [13.7]<br>8.8 | 84.1 [24.6]<br>70.7 [20.7]<br>9.0  | 81.3 [23.8]<br>64.9 [19.0]<br>8.8 | 78.2 [22.9]<br>58.6 [17.2]<br>8.7 | 79.2 [23.2]<br>78.1 [22.9]<br>8.8 | 76.6 [22.5]<br>71.8 [21.0]<br>8.7 | 73.7 [21.6]<br>64.8 [19.0]<br>8.5 |
|                                                     | 115<br>[46.1]                                  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 84.4 [24.7]<br>53.8 [15.8]<br>9.4  | 81.5 [23.9]<br>49.4 [14.5]<br>9.3  | 78.5 [23.0]<br>44.7 [13.1]<br>9.1 | 80.5 [23.6]<br>68.2 [20.0]<br>9.3  | 77.8 [22.8]<br>62.7 [18.4]<br>9.1 | 74.9 [22.0]<br>56.6 [16.6]<br>9.0 | 75.7 [22.2]<br>75.7 [22.2]<br>9.2 | 73.1 [21.4]<br>69.5 [20.4]<br>9.0 | 70.4 [20.6]<br>62.8 [18.4]<br>8.8 |
|                                                     | 120<br>[48.9]                                  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 80.5 [23.6]<br>51.0 [14.9]<br>9.8  | 77.8 [22.8]<br>46.9 [13.7]<br>9.6  | 74.9 [22.0]<br>42.3 [12.4]<br>9.4 | 76.7 [22.5]<br>65.4 [19.2]<br>9.6  | 74.1 [21.7]<br>60.1 [17.6]<br>9.4 | 71.3 [20.9]<br>54.3 [15.9]<br>9.3 | 71.8 [21.0]<br>71.8 [21.0]<br>9.5 | 69.4 [20.3]<br>66.9 [19.6]<br>9.3 | 66.8 [19.6]<br>60.5 [17.7]<br>9.1 |
| 125<br>[51.7]                                       | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 76.4 [22.4]<br>47.9 [14.0]<br>10.1             | 73.8 [21.6]<br>44.0 [12.9]<br>9.9  | 71.1 [20.8]<br>39.7 [11.6]<br>9.7  | 72.5 [21.2]<br>62.3 [18.3]<br>9.9 | 70.1 [20.5]<br>57.2 [16.8]<br>9.7  | 67.5 [19.8]<br>51.7 [15.2]<br>9.6 | 67.7 [19.8]<br>67.7 [19.8]<br>9.8 | 65.4 [19.2]<br>64.1 [18.8]<br>9.6 | 63.0 [18.5]<br>57.9 [17.0]<br>9.4 |                                   |

DR —Depression ratio  
dbE —Entering air dry bulb  
wbE —Entering air wet bulb

Total —Total capacity x 1000 Btu/h  
Sens —Sensible capacity x 1000 Btu/h  
Power —kW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].

[ ] Designates Metric Conversions

## COOLING PERFORMANCE DATA—RHPDYB102

| ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ① |                                                |                                                |                                     |                                    |                                    |                                    |                                    |                                    |                                    |                                    |                                    |
|-------------------------------------------|------------------------------------------------|------------------------------------------------|-------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| wbE                                       |                                                |                                                | 71°F [21.7°C]                       |                                    |                                    | 67°F [19.4°C]                      |                                    |                                    | 63°F [17.2°C]                      |                                    |                                    |
| CFM [L/s]                                 |                                                |                                                | 4075 [1923]                         | 3350 [1581]                        | 2700 [1274]                        | 4075 [1923]                        | 3350 [1581]                        | 2700 [1274]                        | 4075 [1923]                        | 3350 [1581]                        | 2700 [1274]                        |
| DR ①                                      |                                                |                                                | .05                                 | .09                                | .12                                | .05                                | .09                                | .12                                | .05                                | .09                                | .12                                |
| OUTDOOR DRY BULB TEMPERATURE °F [°C]      | 75 [23.9]                                      | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 123.5 [36.2]<br>75.0 [22.0]<br>7.5  | 118.8 [34.8]<br>68.1 [20.0]<br>7.3 | 114.6 [33.6]<br>62.0 [18.2]<br>7.2 | 116.2 [34.1]<br>88.9 [26.1]<br>7.2 | 111.8 [32.8]<br>80.7 [23.7]<br>7.0 | 107.8 [31.6]<br>73.4 [21.5]<br>6.9 | 109.0 [31.9]<br>95.1 [27.9]<br>6.9 | 104.9 [30.7]<br>86.4 [25.3]<br>6.8 | 101.2 [29.7]<br>78.5 [23.0]<br>6.7 |
|                                           | 80 [26.7]                                      | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 121.2 [35.5]<br>74.4 [21.8]<br>7.7  | 116.6 [34.2]<br>67.5 [19.8]<br>7.6 | 112.5 [33.0]<br>61.4 [18.0]<br>7.5 | 113.9 [33.4]<br>88.2 [25.8]<br>7.5 | 109.6 [32.1]<br>80.1 [23.5]<br>7.3 | 105.7 [31.0]<br>72.9 [21.4]<br>7.2 | 106.8 [31.3]<br>94.4 [27.7]<br>7.2 | 102.7 [30.1]<br>85.8 [25.1]<br>7.1 | 99.1 [29.0]<br>78.0 [22.9]<br>6.9  |
|                                           | 85 [29.4]                                      | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 118.7 [34.8]<br>73.5 [21.5]<br>8.1  | 114.2 [33.5]<br>66.7 [19.5]<br>7.9 | 110.2 [32.3]<br>60.7 [17.8]<br>7.8 | 111.4 [32.6]<br>87.3 [25.6]<br>7.8 | 107.2 [31.4]<br>79.3 [23.2]<br>7.7 | 103.4 [30.3]<br>72.1 [21.1]<br>7.5 | 104.3 [30.6]<br>93.5 [27.4]<br>7.5 | 100.3 [29.4]<br>84.9 [24.9]<br>7.4 | 96.8 [28.4]<br>77.2 [22.6]<br>7.3  |
|                                           | 90 [32.2]                                      | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 115.9 [34.0]<br>72.3 [21.2]<br>8.5  | 111.6 [32.7]<br>65.7 [19.3]<br>8.3 | 107.6 [31.5]<br>59.7 [17.5]<br>8.2 | 108.6 [31.8]<br>86.1 [25.2]<br>8.2 | 104.5 [30.6]<br>78.2 [22.9]<br>8.0 | 100.8 [29.5]<br>71.2 [20.9]<br>7.9 | 101.5 [29.7]<br>92.3 [27.1]<br>7.9 | 97.6 [28.6]<br>83.9 [24.6]<br>7.8  | 94.2 [27.6]<br>76.3 [22.4]<br>7.6  |
|                                           | 95 [35]                                        | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 112.9 [33.1]<br>70.9 [20.8]<br>8.9  | 108.6 [31.8]<br>64.4 [18.9]<br>8.8 | 104.8 [30.7]<br>58.5 [17.1]<br>8.6 | 105.6 [30.9]<br>84.7 [24.8]<br>8.7 | 101.6 [29.8]<br>76.9 [22.5]<br>8.5 | 98.0 [28.7]<br>70.0 [20.5]<br>8.4  | 98.5 [28.9]<br>90.9 [26.6]<br>8.4  | 94.7 [27.8]<br>82.6 [24.2]<br>8.2  | 91.4 [26.8]<br>75.1 [22.0]<br>8.1  |
|                                           | 100 [37.8]                                     | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 109.6 [32.1]<br>69.2 [20.3]<br>9.5  | 105.5 [30.9]<br>62.8 [18.4]<br>9.3 | 101.8 [29.8]<br>57.1 [16.7]<br>9.1 | 102.3 [30.0]<br>83.0 [24.3]<br>9.2 | 98.5 [28.9]<br>75.4 [22.1]<br>9.0  | 95.0 [27.8]<br>68.6 [20.1]<br>8.8  | 95.2 [27.9]<br>89.2 [26.1]<br>8.9  | 91.6 [26.8]<br>81.0 [23.7]<br>8.7  | 88.3 [25.9]<br>73.7 [21.6]<br>8.6  |
|                                           | 105 [40.6]                                     | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 106.1 [31.1]<br>67.2 [19.7]<br>10.0 | 102.1 [29.9]<br>61.1 [17.9]<br>9.8 | 98.5 [28.9]<br>55.5 [16.3]<br>9.7  | 98.8 [29.0]<br>81.1 [23.8]<br>9.7  | 95.0 [27.8]<br>73.6 [21.6]<br>9.6  | 91.7 [26.9]<br>67.0 [19.6]<br>9.4  | 91.6 [26.8]<br>87.3 [25.6]<br>9.5  | 88.1 [25.8]<br>79.3 [23.2]<br>9.3  | 85.0 [24.9]<br>72.1 [21.1]<br>9.1  |
|                                           | 110 [43.3]                                     | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 102.2 [30.0]<br>65.0 [19.1]<br>10.6 | 98.4 [28.8]<br>59.1 [17.3]<br>10.4 | 94.9 [27.8]<br>53.7 [15.7]<br>10.3 | 94.9 [27.8]<br>78.9 [23.1]<br>10.4 | 91.3 [26.8]<br>71.6 [21.0]<br>10.2 | 88.1 [25.8]<br>65.2 [19.1]<br>10.0 | 87.8 [25.7]<br>85.1 [24.9]<br>10.1 | 84.5 [24.8]<br>77.3 [22.7]<br>9.9  | 81.5 [23.9]<br>70.3 [20.6]<br>9.7  |
|                                           | 115 [46.1]                                     | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 98.2 [28.8]<br>62.6 [18.3]<br>11.3  | 94.4 [27.7]<br>56.8 [16.6]<br>11.1 | 91.1 [26.7]<br>51.7 [15.2]<br>10.9 | 90.9 [26.6]<br>76.4 [22.4]<br>11.1 | 87.4 [25.6]<br>69.4 [20.3]<br>10.8 | 84.3 [24.7]<br>63.1 [18.5]<br>10.7 | 83.7 [24.5]<br>82.6 [24.2]<br>10.8 | 80.5 [23.6]<br>75.0 [22.0]<br>10.6 | 77.7 [22.8]<br>68.2 [20.0]<br>10.4 |
|                                           | 120 [48.9]                                     | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 93.8 [27.5]<br>59.8 [17.5]<br>12.1  | 90.3 [26.5]<br>54.3 [15.9]<br>11.8 | 87.1 [25.5]<br>49.4 [14.5]<br>11.6 | 86.5 [25.4]<br>73.7 [21.6]<br>11.8 | 83.2 [24.4]<br>66.9 [19.6]<br>11.6 | 80.3 [23.5]<br>60.9 [17.8]<br>11.4 | 79.3 [23.2]<br>79.3 [23.2]<br>11.5 | 76.3 [22.4]<br>72.6 [21.3]<br>11.3 | 73.7 [21.6]<br>66.0 [19.3]<br>11.1 |
| 125 [51.7]                                | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 89.2 [26.1]<br>56.8 [16.6]<br>12.9             | 85.8 [25.1]<br>51.6 [15.1]<br>12.6  | 82.8 [24.3]<br>47.0 [13.8]<br>12.4 | 81.9 [24.0]<br>70.7 [20.7]<br>12.6 | 78.8 [23.1]<br>64.2 [18.8]<br>12.4 | 76.0 [22.3]<br>58.4 [17.1]<br>12.1 | 74.7 [21.9]<br>74.7 [21.9]<br>12.3 | 71.9 [21.1]<br>69.9 [20.5]<br>12.1 | 69.4 [20.3]<br>63.5 [18.6]<br>11.9 |                                    |

DR —Depression ratio  
dbE —Entering air dry bulb  
wbE —Entering air wet bulb

Total —Total capacity x 1000 Btu/h  
Sens —Sensible capacity x 1000 Btu/h  
Power —kW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].

[ ] Designates Metric Conversions

## COOLING PERFORMANCE DATA—RHPDYB120

| ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ① |               |                                                |                                     |                                     |                                     |                                     |                                     |                                     |                                      |                                     |                                     |
|-------------------------------------------|---------------|------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|
| wbE                                       |               |                                                | 71°F [21.7°C]                       |                                     |                                     | 67°F [19.4°C]                       |                                     |                                     | 63°F [17.2°C]                        |                                     |                                     |
| CFM [L/s]                                 |               |                                                | 4775 [2254]                         | 3900 [1841]                         | 3175 [1498]                         | 4775 [2254]                         | 3900 [1841]                         | 3175 [1498]                         | 4775 [2254]                          | 3900 [1841]                         | 3175 [1498]                         |
| DR ①                                      |               |                                                | .05                                 | .09                                 | .12                                 | .05                                 | .09                                 | .12                                 | .05                                  | .09                                 | .12                                 |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 75<br>[23.9]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 145.4 [42.6]<br>90.9 [26.6]<br>9.1  | 139.7 [40.9]<br>82.3 [24.1]<br>8.9  | 135.0 [39.6]<br>75.1 [22.0]<br>8.8  | 136.7 [40.1]<br>98.4 [28.8]<br>9.1  | 131.4 [38.5]<br>89.1 [26.1]<br>8.9  | 126.9 [37.2]<br>81.3 [23.8]<br>8.8  | 128.1 [37.5]<br>106.0 [31.1]<br>9.0  | 123.1 [36.1]<br>95.9 [28.1]<br>8.8  | 118.9 [34.8]<br>87.6 [25.7]<br>8.7  |
|                                           | 80<br>[26.7]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 142.8 [41.9]<br>90.8 [26.6]<br>9.6  | 137.2 [40.2]<br>82.2 [24.1]<br>9.4  | 132.6 [38.9]<br>75.1 [22.0]<br>9.2  | 134.1 [39.3]<br>98.3 [28.8]<br>9.6  | 128.9 [37.8]<br>89.0 [26.1]<br>9.4  | 124.5 [36.5]<br>81.3 [23.8]<br>9.2  | 125.5 [36.8]<br>105.9 [31.0]<br>9.5  | 120.6 [35.3]<br>95.9 [28.1]<br>9.3  | 116.5 [34.1]<br>87.6 [25.7]<br>9.2  |
|                                           | 85<br>[29.4]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 139.9 [41.0]<br>90.4 [26.5]<br>10.1 | 134.4 [39.4]<br>81.8 [24.0]<br>9.9  | 129.9 [38.1]<br>74.7 [21.9]<br>9.7  | 131.1 [38.4]<br>97.9 [28.7]<br>10.1 | 126.0 [36.9]<br>88.6 [26.0]<br>9.9  | 121.7 [35.7]<br>80.9 [23.7]<br>9.7  | 122.5 [35.9]<br>105.5 [30.9]<br>10.0 | 117.7 [34.5]<br>95.5 [28.0]<br>9.8  | 113.7 [33.3]<br>87.2 [25.6]<br>9.6  |
|                                           | 90<br>[32.2]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 136.5 [40.0]<br>89.6 [26.3]<br>10.6 | 131.2 [38.5]<br>81.1 [23.8]<br>10.4 | 126.8 [37.2]<br>74.0 [21.7]<br>10.2 | 127.8 [37.5]<br>97.1 [28.5]<br>10.5 | 122.8 [36.0]<br>87.9 [25.8]<br>10.3 | 118.7 [34.8]<br>80.2 [23.5]<br>10.2 | 119.2 [34.9]<br>104.7 [30.7]<br>10.5 | 114.5 [33.6]<br>94.7 [27.8]<br>10.3 | 110.7 [32.4]<br>86.5 [25.4]<br>10.1 |
|                                           | 95<br>[35]    | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 132.9 [39.0]<br>88.4 [25.9]<br>11.1 | 127.6 [37.4]<br>80.0 [23.4]<br>10.8 | 123.3 [36.1]<br>73.0 [21.4]<br>10.7 | 124.1 [36.4]<br>95.8 [28.1]<br>11.0 | 119.3 [35.0]<br>86.8 [25.4]<br>10.8 | 115.2 [33.8]<br>79.2 [23.2]<br>10.6 | 115.5 [33.9]<br>103.5 [30.3]<br>11.0 | 111.0 [32.5]<br>93.6 [27.4]<br>10.8 | 107.2 [31.4]<br>85.5 [25.1]<br>10.6 |
|                                           | 100<br>[37.8] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 128.8 [37.7]<br>86.8 [25.4]<br>11.5 | 123.7 [36.3]<br>78.5 [23.0]<br>11.3 | 119.6 [35.1]<br>71.7 [21.0]<br>11.1 | 120.1 [35.2]<br>94.2 [27.6]<br>11.5 | 115.4 [33.8]<br>85.3 [25.0]<br>11.3 | 111.5 [32.7]<br>77.9 [22.8]<br>11.1 | 111.4 [32.6]<br>101.9 [29.9]<br>11.5 | 107.1 [31.4]<br>92.2 [27.0]<br>11.2 | 103.5 [30.3]<br>84.2 [24.7]<br>11.0 |
|                                           | 105<br>[40.6] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 124.4 [36.5]<br>84.8 [24.9]<br>12.0 | 119.5 [35.0]<br>76.7 [22.5]<br>11.8 | 115.5 [33.9]<br>70.1 [20.5]<br>11.6 | 115.6 [33.9]<br>92.3 [27.1]<br>12.0 | 111.1 [32.6]<br>83.5 [24.5]<br>11.8 | 107.4 [31.5]<br>76.3 [22.4]<br>11.6 | 107.0 [31.4]<br>99.9 [29.3]<br>11.9  | 102.8 [30.1]<br>90.4 [26.5]<br>11.7 | 99.4 [29.1]<br>82.6 [24.2]<br>11.5  |
|                                           | 110<br>[43.3] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 119.6 [35.1]<br>82.4 [24.2]<br>12.5 | 114.9 [33.7]<br>74.6 [21.9]<br>12.3 | 111.0 [32.5]<br>68.1 [20.0]<br>12.1 | 110.9 [32.5]<br>89.9 [26.3]<br>12.5 | 106.5 [31.2]<br>81.4 [23.9]<br>12.3 | 102.9 [30.2]<br>74.3 [21.8]<br>12.1 | 102.2 [30.0]<br>97.5 [28.6]<br>12.4  | 98.2 [28.8]<br>88.3 [25.9]<br>12.2  | 94.9 [27.8]<br>80.6 [23.6]<br>12.0  |
|                                           | 115<br>[46.1] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 114.4 [33.5]<br>79.6 [23.3]<br>13.0 | 110.0 [32.2]<br>72.1 [21.1]<br>12.8 | 106.2 [31.1]<br>65.8 [19.3]<br>12.5 | 105.7 [31.0]<br>87.1 [25.5]<br>13.0 | 101.6 [29.8]<br>78.9 [23.1]<br>12.7 | 98.1 [28.8]<br>72.0 [21.1]<br>12.5  | 97.1 [28.5]<br>94.7 [27.8]<br>12.9   | 93.3 [27.3]<br>85.8 [25.1]<br>12.7  | 90.1 [26.4]<br>78.3 [22.9]<br>12.5  |
|                                           | 120<br>[48.9] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 108.9 [31.9]<br>76.5 [22.4]<br>13.5 | 104.7 [30.7]<br>69.3 [20.3]<br>13.2 | 101.1 [29.6]<br>63.2 [18.5]<br>13.0 | 100.2 [29.4]<br>84.0 [24.6]<br>13.5 | 96.3 [28.2]<br>76.0 [22.3]<br>13.2  | 93.0 [27.3]<br>69.4 [20.3]<br>13.0  | 91.6 [26.8]<br>91.6 [26.8]<br>13.4   | 88.0 [25.8]<br>82.9 [24.3]<br>13.1  | 85.0 [24.9]<br>75.7 [22.2]<br>12.9  |
|                                           | 125<br>[51.7] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 103.1 [30.2]<br>73.0 [21.4]<br>14.0 | 99.0 [29.0]<br>66.1 [19.4]<br>13.7  | 95.7 [28.0]<br>60.3 [17.7]<br>13.5  | 94.3 [27.6]<br>80.5 [23.6]<br>14.0  | 90.6 [26.6]<br>72.8 [21.3]<br>13.7  | 87.6 [25.7]<br>66.5 [19.5]<br>13.5  | 85.7 [25.1]<br>85.7 [25.1]<br>13.9   | 82.4 [24.2]<br>79.7 [23.4]<br>13.6  | 79.6 [23.3]<br>72.8 [21.3]<br>13.4  |

DR —Depression ratio  
dbE —Entering air dry bulb  
wbE—Entering air wet bulb

Total —Total capacity x 1000 Btu/h  
Sens —Sensible capacity x 1000 Btu/h  
Power —kW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].

[ ] Designates Metric Conversions

## HEATING PERFORMANCE DATA—RHPDYB090

| IDB                                              |               |                            | 60°F [15.6°C]      |                    |                    | 70°F [21.1°C]      |                    |                    | 80°F [26.7°C]      |                    |                    |
|--------------------------------------------------|---------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| CFM [L/s]                                        |               |                            | 3375 [1593]        | 3025 [1428]        | 2250 [1062]        | 3375 [1593]        | 3025 [1428]        | 2250 [1062]        | 3375 [1593]        | 3025 [1428]        | 2250 [1062]        |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br>°F [°C] | 0<br>[-17.8]  | Total kBtu/h [kW]<br>Power | 32.1 [9.4]<br>6.0  | 31.9 [9.3]<br>6.1  | 31.3 [9.2]<br>6.2  | 30.7 [9.0]<br>6.3  | 30.4 [8.9]<br>6.4  | 29.9 [8.8]<br>6.6  | 29.2 [8.6]<br>7.2  | 29.0 [8.5]<br>7.3  | 28.5 [8.4]<br>7.6  |
|                                                  | 5<br>[-15.0]  | Total kBtu/h [kW]<br>Power | 37.9 [11.1]<br>6   | 37.6 [11.0]<br>6.1 | 36.9 [10.8]<br>6.3 | 36.5 [10.7]<br>6.3 | 36.2 [10.6]<br>6.4 | 35.5 [10.4]<br>6.6 | 35.1 [10.3]<br>7.3 | 34.8 [10.2]<br>7.4 | 34.1 [10.0]<br>7.6 |
|                                                  | 10<br>[-12.2] | Total kBtu/h [kW]<br>Power | 43.7 [12.8]<br>6.1 | 43.4 [12.7]<br>6.2 | 42.6 [12.5]<br>6.3 | 42.3 [12.4]<br>6.4 | 42.0 [12.3]<br>6.5 | 41.2 [12.1]<br>6.7 | 40.9 [12.0]<br>7.3 | 40.5 [11.9]<br>7.4 | 39.8 [11.7]<br>7.7 |
|                                                  | 15<br>[-9.4]  | Total kBtu/h [kW]<br>Power | 49.6 [14.5]<br>6.1 | 49.2 [14.4]<br>6.2 | 48.3 [14.2]<br>6.4 | 48.1 [14.1]<br>6.4 | 47.7 [14.0]<br>6.5 | 46.8 [13.7]<br>6.8 | 46.7 [13.7]<br>7.4 | 46.3 [13.6]<br>7.5 | 45.4 [13.3]<br>7.7 |
|                                                  | 20<br>[-6.7]  | Total kBtu/h [kW]<br>Power | 55.4 [16.2]<br>6.2 | 54.9 [16.1]<br>6.3 | 53.9 [15.8]<br>6.5 | 53.9 [15.8]<br>6.5 | 53.5 [15.7]<br>6.6 | 52.5 [15.4]<br>6.8 | 52.5 [15.4]<br>7.4 | 52.0 [15.2]<br>7.5 | 51.1 [15.0]<br>7.8 |
|                                                  | 25<br>[-3.9]  | Total kBtu/h [kW]<br>Power | 61.2 [17.9]<br>6.2 | 60.7 [17.8]<br>6.3 | 59.6 [17.5]<br>6.5 | 59.7 [17.5]<br>6.5 | 59.2 [17.4]<br>6.6 | 58.2 [17.1]<br>6.9 | 58.3 [17.1]<br>7.5 | 57.8 [16.9]<br>7.6 | 56.8 [16.6]<br>7.8 |
|                                                  | 30<br>[-1.1]  | Total kBtu/h [kW]<br>Power | 67.0 [19.6]<br>6.3 | 66.4 [19.5]<br>6.4 | 65.2 [19.1]<br>6.6 | 65.5 [19.2]<br>6.6 | 65.0 [19.1]<br>6.7 | 63.8 [18.7]<br>6.9 | 64.1 [18.8]<br>7.5 | 63.6 [18.6]<br>7.6 | 62.4 [18.3]<br>7.9 |
|                                                  | 35<br>[1.7]   | Total kBtu/h [kW]<br>Power | 72.8 [21.3]<br>6.3 | 72.2 [21.2]<br>6.4 | 70.9 [20.8]<br>6.6 | 71.4 [20.9]<br>6.6 | 70.8 [20.8]<br>6.7 | 69.5 [20.4]<br>7.0 | 69.9 [20.5]<br>7.6 | 69.3 [20.3]<br>7.7 | 68.1 [20.0]<br>7.9 |
|                                                  | 40<br>[4.4]   | Total kBtu/h [kW]<br>Power | 78.6 [23.0]<br>6.4 | 78.0 [22.9]<br>6.5 | 76.5 [22.4]<br>6.7 | 77.2 [22.6]<br>6.7 | 76.5 [22.4]<br>6.8 | 75.1 [22.0]<br>7.0 | 75.7 [22.2]<br>7.6 | 75.1 [22.0]<br>7.7 | 73.7 [21.6]<br>8.0 |
|                                                  | 45<br>[7.2]   | Total kBtu/h [kW]<br>Power | 84.4 [24.7]<br>6.4 | 83.7 [24.5]<br>6.5 | 82.2 [24.1]<br>6.7 | 83.0 [24.3]<br>6.7 | 82.3 [24.1]<br>6.8 | 80.8 [23.7]<br>7.1 | 81.5 [23.9]<br>7.7 | 80.9 [23.7]<br>7.8 | 79.4 [23.3]<br>8.0 |
|                                                  | 50<br>[10.0]  | Total kBtu/h [kW]<br>Power | 90.2 [26.4]<br>6.5 | 89.5 [26.2]<br>6.6 | 87.8 [25.7]<br>6.8 | 88.8 [26.0]<br>6.8 | 88.1 [25.8]<br>6.9 | 86.4 [25.3]<br>7.1 | 87.3 [25.6]<br>7.7 | 86.6 [25.4]<br>7.8 | 85.0 [24.9]<br>8.1 |

IDB—Indoor air dry bulb

## HEATING PERFORMANCE DATA—RHPDYB102

| IDB                                              |               |                            | 60°F [15.6°C]       |                     |                    | 70°F [21.1°C]       |                    |                    | 80°F [26.7°C]       |                    |                    |
|--------------------------------------------------|---------------|----------------------------|---------------------|---------------------|--------------------|---------------------|--------------------|--------------------|---------------------|--------------------|--------------------|
| CFM [L/s]                                        |               |                            | 3825 [1805]         | 3350 [1581]         | 2550 [1203]        | 3825 [1805]         | 3350 [1581]        | 2550 [1203]        | 3825 [1805]         | 3350 [1581]        | 2550 [1203]        |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br>°F [°C] | 0<br>[-17.8]  | Total kBtu/h [kW]<br>Power | 33.1 [9.7]<br>5.2   | 32.7 [9.6]<br>5.3   | 32.2 [9.4]<br>5.4  | 32.5 [9.5]<br>5.8   | 32.1 [9.4]<br>5.9  | 31.6 [9.3]<br>6.1  | 31.9 [9.3]<br>6.5   | 31.5 [9.2]<br>6.6  | 31.0 [9.1]<br>6.8  |
|                                                  | 5<br>[-15.0]  | Total kBtu/h [kW]<br>Power | 39.9 [11.7]<br>5.4  | 39.5 [11.6]<br>5.5  | 38.8 [11.4]<br>5.7 | 39.3 [11.5]<br>6.1  | 38.9 [11.4]<br>6.2 | 38.2 [11.2]<br>6.4 | 38.7 [11.3]<br>6.7  | 38.3 [11.2]<br>6.9 | 37.7 [11.0]<br>7.1 |
|                                                  | 10<br>[-12.2] | Total kBtu/h [kW]<br>Power | 46.8 [13.7]<br>5.7  | 46.3 [13.6]<br>5.8  | 45.5 [13.3]<br>6.0 | 46.1 [13.5]<br>6.3  | 45.7 [13.4]<br>6.5 | 44.9 [13.2]<br>6.7 | 45.5 [13.3]<br>7.0  | 45.1 [13.2]<br>7.1 | 44.3 [13.0]<br>7.3 |
|                                                  | 15<br>[-9.4]  | Total kBtu/h [kW]<br>Power | 53.6 [15.7]<br>5.9  | 53.1 [15.6]<br>6.0  | 52.2 [15.3]<br>6.2 | 53.0 [15.5]<br>6.6  | 52.5 [15.4]<br>6.7 | 51.6 [15.1]<br>6.9 | 52.4 [15.4]<br>7.2  | 51.9 [15.2]<br>7.3 | 51.0 [14.9]<br>7.6 |
|                                                  | 20<br>[-6.7]  | Total kBtu/h [kW]<br>Power | 60.4 [17.7]<br>6.1  | 59.8 [17.5]<br>6.2  | 58.8 [17.2]<br>6.4 | 59.8 [17.5]<br>6.8  | 59.2 [17.4]<br>6.9 | 58.2 [17.1]<br>7.1 | 59.2 [17.4]<br>7.4  | 58.6 [17.2]<br>7.5 | 57.6 [16.9]<br>7.8 |
|                                                  | 25<br>[-3.9]  | Total kBtu/h [kW]<br>Power | 67.3 [19.7]<br>6.3  | 66.6 [19.5]<br>6.4  | 65.5 [19.2]<br>6.6 | 66.7 [19.5]<br>6.9  | 66.0 [19.3]<br>7.0 | 64.9 [19.0]<br>7.3 | 66.1 [19.4]<br>7.6  | 65.4 [19.2]<br>7.7 | 64.3 [18.8]<br>7.9 |
|                                                  | 30<br>[-1.1]  | Total kBtu/h [kW]<br>Power | 74.1 [21.7]<br>6.4  | 73.4 [21.5]<br>6.5  | 72.1 [21.1]<br>6.7 | 73.5 [21.5]<br>7.1  | 72.8 [21.3]<br>7.2 | 71.5 [21.0]<br>7.4 | 72.9 [21.4]<br>7.7  | 72.2 [21.2]<br>7.8 | 70.9 [20.8]<br>8.1 |
|                                                  | 35<br>[1.7]   | Total kBtu/h [kW]<br>Power | 81.0 [23.7]<br>6.5  | 80.1 [23.5]<br>6.6  | 78.8 [23.1]<br>6.8 | 80.4 [23.6]<br>7.2  | 79.5 [23.3]<br>7.3 | 78.2 [22.9]<br>7.5 | 79.7 [23.4]<br>7.8  | 78.9 [23.1]<br>7.9 | 77.6 [22.7]<br>8.2 |
|                                                  | 40<br>[4.4]   | Total kBtu/h [kW]<br>Power | 87.8 [25.7]<br>6.6  | 86.9 [25.5]<br>6.7  | 85.4 [25.0]<br>6.9 | 87.2 [25.6]<br>7.2  | 86.3 [25.3]<br>7.4 | 84.8 [24.9]<br>7.6 | 86.6 [25.4]<br>7.9  | 85.7 [25.1]<br>8.0 | 84.3 [24.7]<br>8.3 |
|                                                  | 45<br>[7.2]   | Total kBtu/h [kW]<br>Power | 94.6 [27.7]<br>6.6  | 93.7 [27.5]<br>6.7  | 92.1 [27.0]<br>6.9 | 94.0 [27.5]<br>7.3  | 93.1 [27.3]<br>7.4 | 91.5 [26.8]<br>7.6 | 93.4 [27.4]<br>7.9  | 92.5 [27.1]<br>8.1 | 90.9 [26.6]<br>8.3 |
|                                                  | 50<br>[10.0]  | Total kBtu/h [kW]<br>Power | 101.5 [29.7]<br>6.6 | 100.5 [29.5]<br>6.8 | 98.7 [28.9]<br>7.0 | 100.9 [29.6]<br>7.3 | 99.9 [29.3]<br>7.4 | 98.2 [28.8]<br>7.6 | 100.3 [29.4]<br>7.9 | 99.3 [29.1]<br>8.1 | 97.6 [28.6]<br>8.3 |

IDB—Indoor air dry bulb

[ ] Designates Metric Conversions

HEATING PERFORMANCE DATA—RHPDYB120

| IDB                                                 |               |                            | 60°F [15.6°C]       |                     |                     | 70°F [21.1°C]       |                     |                     | 80°F [26.7°C]       |                     |                      |
|-----------------------------------------------------|---------------|----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| CFM [L/s]                                           |               |                            | 4575 [2159]         | 3900 [1841]         | 3050 [1439]         | 4575 [2159]         | 3900 [1841]         | 3050 [1439]         | 4575 [2159]         | 3900 [1841]         | 3050 [1439]          |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br>°F<br>[°C] | 0<br>[-17.8]  | Total kBtu/h [kW]<br>Power | 43.8 [12.8]<br>6.4  | 43.3 [12.7]<br>6.5  | 42.6 [12.5]<br>6.7  | 41.7 [12.2]<br>7.1  | 41.2 [12.1]<br>7.3  | 40.5 [11.9]<br>7.5  | 39.6 [11.6]<br>7.8  | 39.1 [11.5]<br>8.0  | 38.5 [11.3]<br>8.2   |
|                                                     | 5<br>[-15.0]  | Total kBtu/h [kW]<br>Power | 51.7 [15.2]<br>6.6  | 51.1 [15.0]<br>6.7  | 50.3 [14.7]<br>6.9  | 49.6 [14.5]<br>7.3  | 49.0 [14.4]<br>7.5  | 48.2 [14.1]<br>7.7  | 47.5 [13.9]<br>8.0  | 46.9 [13.7]<br>8.2  | 46.2 [13.5]<br>8.4   |
|                                                     | 10<br>[-12.2] | Total kBtu/h [kW]<br>Power | 59.6 [17.5]<br>6.8  | 58.9 [17.3]<br>6.9  | 58.0 [17.0]<br>7.1  | 57.5 [16.9]<br>7.5  | 56.8 [16.6]<br>7.7  | 55.9 [16.4]<br>7.9  | 55.4 [16.2]<br>8.2  | 54.7 [16.0]<br>8.4  | 53.9 [15.8]<br>8.6   |
|                                                     | 15<br>[-9.4]  | Total kBtu/h [kW]<br>Power | 67.5 [19.8]<br>6.9  | 66.7 [19.5]<br>7.1  | 65.7 [19.3]<br>7.3  | 65.4 [19.2]<br>7.7  | 64.6 [18.9]<br>7.9  | 63.6 [18.6]<br>8.1  | 63.3 [18.6]<br>8.4  | 62.5 [18.3]<br>8.6  | 61.6 [18.1]<br>8.8   |
|                                                     | 20<br>[-6.7]  | Total kBtu/h [kW]<br>Power | 75.4 [22.1]<br>7.1  | 74.5 [21.8]<br>7.3  | 73.4 [21.5]<br>7.5  | 73.3 [21.5]<br>7.9  | 72.4 [21.2]<br>8.1  | 71.3 [20.9]<br>8.3  | 71.2 [20.9]<br>8.6  | 70.3 [20.6]<br>8.8  | 69.2 [20.3]<br>9.0   |
|                                                     | 25<br>[-3.9]  | Total kBtu/h [kW]<br>Power | 83.3 [24.4]<br>7.3  | 82.3 [24.1]<br>7.5  | 81.0 [23.7]<br>7.7  | 81.2 [23.8]<br>8.1  | 80.2 [23.5]<br>8.2  | 79.0 [23.2]<br>8.5  | 79.1 [23.2]<br>8.8  | 78.2 [22.9]<br>9.0  | 76.9 [22.5]<br>9.2   |
|                                                     | 30<br>[-1.1]  | Total kBtu/h [kW]<br>Power | 91.3 [26.8]<br>7.5  | 90.1 [26.4]<br>7.7  | 88.7 [26.0]<br>7.9  | 89.1 [26.1]<br>8.3  | 88.1 [25.8]<br>8.4  | 86.7 [25.4]<br>8.7  | 87.0 [25.5]<br>9.0  | 86.0 [25.2]<br>9.2  | 84.6 [24.8]<br>9.4   |
|                                                     | 35<br>[1.7]   | Total kBtu/h [kW]<br>Power | 99.2 [29.1]<br>7.7  | 98.0 [28.7]<br>7.9  | 96.4 [28.3]<br>8.1  | 97.1 [28.5]<br>8.4  | 95.9 [28.1]<br>8.6  | 94.4 [27.7]<br>8.9  | 94.9 [27.8]<br>9.1  | 93.8 [27.5]<br>9.3  | 92.3 [27.1]<br>9.6   |
|                                                     | 40<br>[4.4]   | Total kBtu/h [kW]<br>Power | 107.1 [31.4]<br>7.9 | 105.8 [31.0]<br>8.1 | 104.1 [30.5]<br>8.3 | 105.0 [30.8]<br>8.6 | 103.7 [30.4]<br>8.8 | 102.1 [29.9]<br>9.1 | 102.8 [30.1]<br>9.3 | 101.6 [29.8]<br>9.5 | 100.0 [29.3]<br>9.8  |
|                                                     | 45<br>[7.2]   | Total kBtu/h [kW]<br>Power | 115.0 [33.7]<br>8.1 | 113.6 [33.3]<br>8.2 | 111.8 [32.8]<br>8.5 | 112.9 [33.1]<br>8.8 | 111.5 [32.7]<br>9.0 | 109.8 [32.2]<br>9.3 | 110.8 [32.5]<br>9.5 | 109.4 [32.1]<br>9.7 | 107.7 [31.6]<br>10.0 |
|                                                     | 50<br>[10.0]  | Total kBtu/h [kW]<br>Power | 122.9 [36.0]<br>8.3 | 121.4 [35.6]<br>8.4 | 119.5 [35.0]<br>8.7 | 120.8 [35.4]<br>9.0 | 119.3 [35.0]<br>9.2 | 117.4 [34.4]<br>9.5 | 118.7 [34.8]<br>9.7 | 117.2 [34.3]<br>9.9 | 115.4 [33.8]<br>10.2 |

IDB—Indoor air dry bulb

[ ] Designates Metric Conversions

# AIRFLOW PERFORMANCE— 7.5 TON — 60 Hz — DOWNFLOW

| Model RHPDYB090       |            | Voltage 208/230, 460, 575 — 3 phase 60 Hz      |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |     |      |     |      |     |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|------------|------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Air Flow<br>CFM [L/s] |            | External Static Pressure—Inches of Water [kPa] |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |     |      |     |      |     |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0.1 [0.02]            | 0.2 [0.05] | 0.3 [0.07]                                     | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | 1.1 [0.27] | 1.2 [0.30] | 1.3 [0.32] | 1.4 [0.35] | 1.5 [0.37] | 1.6 [0.40] | 1.7 [0.42] | 1.8 [0.45] | 1.9 [0.47] | 2.0 [0.50] |      |     |      |     |      |     |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RPM W                 | RPM W      | RPM W                                          | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      | RPM W      |      |     |      |     |      |     |      |     |      |     |      |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2400 [1133]           | —          | —                                              | —          | —          | —          | —          | 567        | 800        | 603        | 833        | 638        | 870        | 672        | 911        | 706        | 955        | 739        | 1003       | 772        | 1055 | 803 | 1111 | 835 | 1170 | 865 | 1233 | 895 | 1300 | 925 | 1370 | 954 | 1444 | 982  | 1522 | 1009 | 1604 | 1036 | 1689 | 1063 | 1779 |      |      |      |      |
| 2500 [1180]           | —          | —                                              | —          | —          | —          | —          | 575        | 827        | 610        | 862        | 645        | 900        | 678        | 942        | 712        | 987        | 744        | 1036       | 776        | 1089 | 808 | 1146 | 838 | 1207 | 869 | 1271 | 898 | 1339 | 927 | 1411 | 955 | 1486 | 983  | 1565 | 1010 | 1648 | 1037 | 1735 | 1062 | 1825 |      |      |      |      |
| 2600 [1227]           | —          | —                                              | —          | —          | —          | —          | 548        | 825        | 583        | 857        | 618        | 892        | 652        | 932        | 685        | 975        | 718        | 1022       | 750        | 1072 | 781 | 1127 | 812 | 1185 | 843 | 1246 | 872 | 1312 | 901 | 1381 | 930 | 1454 | 958  | 1531 | 985  | 1611 | 1011 | 1695 | 1037 | 1783 | 1063 | 1875 |      |      |
| 2700 [1274]           | —          | —                                              | —          | —          | —          | —          | 557        | 856        | 591        | 889        | 626        | 926        | 659        | 966        | 692        | 1011       | 724        | 1059       | 756        | 1111 | 787 | 1166 | 817 | 1226 | 847 | 1289 | 876 | 1355 | 905 | 1426 | 933 | 1500 | 960  | 1578 | 987  | 1660 | 1013 | 1745 | 1038 | 1834 | 1063 | 1927 |      |      |
| 2800 [1321]           | —          | —                                              | —          | —          | —          | —          | 566        | 890        | 600        | 924        | 634        | 962        | 667        | 1004       | 699        | 1049       | 731        | 1099       | 762        | 1152 | 793 | 1209 | 822 | 1269 | 852 | 1333 | 880 | 1401 | 909 | 1473 | 936 | 1549 | 963  | 1628 | 989  | 1711 | 1015 | 1797 | 1040 | 1888 | 1064 | 1982 |      |      |
| 2900 [1368]           | —          | —                                              | —          | —          | —          | —          | 576        | 926        | 609        | 962        | 642        | 1001       | 675        | 1044       | 707        | 1091       | 738        | 1141       | 769        | 1196 | 799 | 1254 | 828 | 1315 | 857 | 1381 | 885 | 1450 | 913 | 1523 | 940 | 1600 | 966  | 1680 | 992  | 1764 | 1017 | 1852 | 1041 | 1944 | 1065 | 2039 |      |      |
| 3000 [1416]           | —          | —                                              | —          | —          | —          | —          | 552        | 932        | 586        | 965        | 619        | 1002       | 651        | 1042       | 683        | 1087       | 715        | 1135       | 745        | 1187 | 776 | 1242 | 805 | 1301 | 834 | 1364 | 862 | 1431 | 890 | 1502 | 917 | 1576 | 944  | 1654 | 969  | 1735 | 995  | 1821 | 1019 | 1910 | 1043 | 2003 | 1066 | 2099 |
| 3100 [1463]           | —          | —                                              | —          | —          | —          | —          | 562        | 972        | 596        | 1007       | 629        | 1045       | 661        | 1087       | 692        | 1132       | 723        | 1181       | 753        | 1234 | 783 | 1291 | 812 | 1352 | 840 | 1416 | 868 | 1484 | 895 | 1556 | 922 | 1631 | 948  | 1710 | 973  | 1793 | 998  | 1880 | 1022 | 1970 | 1045 | 2064 | 1068 | 2122 |
| 3200 [1510]           | —          | —                                              | —          | —          | —          | —          | 574        | 1015       | 606        | 1051       | 639        | 1090       | 670        | 1133       | 701        | 1180       | 732        | 1231       | 761        | 1285 | 791 | 1343 | 819 | 1405 | 847 | 1470 | 874 | 1540 | 901 | 1612 | 927 | 1689 | 952  | 1770 | 977  | 1854 | 1002 | 1942 | 1025 | 2033 | 1048 | 2129 | 1070 | 2268 |
| 3300 [1557]           | 552        | 1028                                           | 585        | 1061       | 617        | 1098       | 649        | 1139       | 680        | 1183       | 711        | 1231       | 741        | 1283       | 770        | 1338       | 799        | 1398       | 827        | 1461 | 854 | 1527 | 881 | 1598 | 907 | 1672 | 933 | 1750 | 957 | 1831 | 982 | 1917 | 1005 | 2006 | 1029 | 2099 | 1051 | 2195 | 1073 | 2296 |      |      |      |      |
| 3400 [1604]           | 564        | 1075                                           | 597        | 1110       | 629        | 1148       | 660        | 1190       | 691        | 1235       | 721        | 1284       | 750        | 1337       | 779        | 1394       | 807        | 1455       | 834        | 1519 | 861 | 1587 | 888 | 1659 | 913 | 1734 | 938 | 1813 | 963 | 1896 | 987 | 1983 | 1010 | 2073 | 1032 | 2167 | 1054 | 2265 | 1076 | 2367 |      |      |      |      |
| 3500 [1652]           | 577        | 1125                                           | 609        | 1161       | 640        | 1200       | 671        | 1243       | 701        | 1290       | 731        | 1340       | 760        | 1395       | 788        | 1453       | 815        | 1514       | 843        | 1580 | 869 | 1649 | 895 | 1722 | 920 | 1799 | 944 | 1879 | 968 | 1968 | 982 | 2051 | 1014 | 2143 | 1037 | 2238 | 1058 | 2337 | 1079 | 2440 |      |      |      |      |
| 3600 [1699]           | 590        | 1178                                           | 621        | 1215       | 652        | 1255       | 683        | 1299       | 712        | 1347       | 741        | 1399       | 770        | 1455       | 797        | 1514       | 824        | 1577       | 851        | 1644 | 877 | 1714 | 902 | 1788 | 927 | 1866 | 951 | 1948 | 991 | 1948 | 991 | 2043 | 997  | 2122 | 991  | 2215 | 1041 | 2312 | 1062 | 2412 | 1082 | 2516 |      |      |

NOTE: F-Drive left of the bold line, G-Drive right of bold lines, H-Drive right of double line.

| Drive Package  | F           |     |     |     | G           |     |     |     | H           |     |     |     |
|----------------|-------------|-----|-----|-----|-------------|-----|-----|-----|-------------|-----|-----|-----|
| Motor H.P. [W] | 2 [1,491.4] |     |     |     | 3 [2,237.1] |     |     |     | 3 [2,237.1] |     |     |     |
| Blower Sheave  | AK84H       |     |     |     | AK84H       |     |     |     | AK84H       |     |     |     |
| Motor Sheave   | 1VL40       |     |     |     | 1VP50       |     |     |     | 1VP56       |     |     |     |
| Belt           | A49         |     |     |     | A50         |     |     |     | A51         |     |     |     |
| Turns Open     | 0           | 1   | 2   | 3   | 4           | 5   | 0   | 1   | 2           | 3   | 4   | 5   |
| RPM            | 766         | 722 | 677 | 634 | 591         | 544 | 990 | 948 | 906         | 864 | 822 | 779 |

NOTES: 1. Do not set motor sheave below minimum or maximum turns open shown.

2. Re-adjustment of sheave required to achieve rated airflow at AHRl minimum External Static Pressure

3. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

4. Factory sheave settings are shown in bold type.

[ ] Designates Metric Conversions

# AIRFLOW PERFORMANCE—7.5 TON — 60 Hz — DOWNFLOW (CONTINUED)

| Airflow                            |              | AIRFLOW CORRECTION FACTORS* |          |            |                                       | COMPONENT AIRFLOW RESISTANCE                                                     |                                                                                 |                         |                          |  |
|------------------------------------|--------------|-----------------------------|----------|------------|---------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|--|
| CFM [L/s]                          | Total kBtu/h | Sensible kBtu/h             | Power kW | Wet Coil   | Vertical Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF2000 &<br>Concentric Adapter<br>RXMC-DD01 (Flush) | Concentric Diffuser<br>RXRN-AED2000 &<br>Concentric Adapter<br>RXMC-DD01 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |  |
| Resistance — Inches of Water [kPa] |              |                             |          |            |                                       |                                                                                  |                                                                                 |                         |                          |  |
| 2400 [1133]                        | 0.97         | 0.92                        | 0.99     | 0.06 [.01] | 0.01 [.00]                            | 0.66 [.16]                                                                       | 0.53 [.13]                                                                      | 0.093 [.02]             | 0.047 [.01]              |  |
| 2500 [1180]                        | 0.98         | 0.93                        | 0.99     | 0.06 [.01] | 0.02 [.00]                            | 0.71 [.18]                                                                       | 0.57 [.14]                                                                      | 0.098 [.02]             | 0.055 [.01]              |  |
| 2600 [1227]                        | 0.99         | 0.95                        | 0.99     | 0.06 [.02] | 0.02 [.01]                            | 0.75 [.19]                                                                       | 0.60 [.15]                                                                      | 0.103 [.02]             | 0.062 [.01]              |  |
| 2700 [1274]                        | 0.99         | 0.96                        | 0.99     | 0.07 [.02] | 0.03 [.01]                            | 0.80 [.20]                                                                       | 0.65 [.16]                                                                      | 0.108 [.03]             | 0.070 [.02]              |  |
| 2800 [1321]                        | 0.99         | 0.98                        | 1.00     | 0.07 [.02] | 0.04 [.01]                            | 0.85 [.21]                                                                       | 0.69 [.17]                                                                      | 0.113 [.03]             | 0.078 [.02]              |  |
| 2900 [1368]                        | 1.00         | 1.00                        | 1.00     | 0.08 [.02] | 0.04 [.01]                            | 0.91 [.23]                                                                       | 0.74 [.18]                                                                      | 0.117 [.03]             | 0.085 [.02]              |  |
| 3000 [1416]                        | 1.01         | 1.01                        | 1.00     | 0.08 [.02] | 0.05 [.01]                            | 0.96 [.24]                                                                       | 0.79 [.20]                                                                      | 0.122 [.03]             | 0.093 [.02]              |  |
| 3100 [1463]                        | 1.01         | 1.03                        | 1.00     | 0.09 [.02] | 0.06 [.02]                            | 1.02 [.25]                                                                       | 0.86 [.21]                                                                      | 0.127 [.03]             | 0.100 [.02]              |  |
| 3200 [1510]                        | 1.02         | 1.04                        | 1.01     | 0.10 [.02] | 0.07 [.02]                            | 1.08 [.27]                                                                       | 0.92 [.23]                                                                      | 0.132 [.03]             | 0.108 [.03]              |  |
| 3300 [1557]                        | 1.02         | 1.06                        | 1.01     | 0.10 [.03] | 0.08 [.02]                            | 1.15 [.29]                                                                       | 0.99 [.25]                                                                      | 0.137 [.03]             | 0.115 [.03]              |  |
| 3400 [1604]                        | 1.03         | 1.08                        | 1.01     | 0.11 [.03] | 0.09 [.02]                            | 1.21 [.30]                                                                       | 1.05 [.26]                                                                      | 0.142 [.03]             | 0.123 [.03]              |  |
| 3500 [1652]                        | 1.04         | 1.09                        | 1.01     | 0.11 [.03] | 0.10 [.02]                            | 1.29 [.32]                                                                       | 1.09 [.27]                                                                      | 0.147 [.04]             | 0.131 [.03]              |  |
| 3600 [1699]                        | 1.04         | 1.11                        | 1.02     | 0.12 [.03] | 0.11 [.03]                            | 1.36 [.34]                                                                       | 1.13 [.28]                                                                      | 0.152 [.04]             | 0.138 [.03]              |  |

\*Multiply correction factor times gross performance data resulting sensible capacity cannot exceed total capacity.

[ ] Designates Metric Conversions

# AIRFLOW PERFORMANCE— 7.5 TON — 60 Hz — SIDEFLOW

| Air<br>Flow<br>CFM [L/s] | Model RHPDYB090                                |            | Voltage 208/230, 460, 575 — 3 phase 60 Hz |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------------------------------------------------|------------|-------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          | External Static Pressure—Inches of Water [kPa] |            |                                           |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                          | 0.1 [0.02]                                     | 0.2 [0.05] | 0.3 [0.07]                                | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | 1.1 [0.27] | 1.2 [0.30] | 1.3 [0.32] | 1.4 [0.35] | 1.5 [0.37] | 1.6 [0.40] | 1.7 [0.42] | 1.8 [0.45] | 1.9 [0.47] | 2.0 [0.50] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RPM                      | W                                              | RPM        | W                                         | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2400 [1133]              | —                                              | —          | —                                         | 558        | 804        | 594        | 845        | 630        | 890        | 665        | 936        | 700        | 985        | 734        | 1035       | 767        | 1089       | 799        | 1144       | 831        | 1202 | 861  | 1262 | 892  | 1325 | 921  | 1389 | 950  | 1456 | 978  | 1526 | 1005 | 1597 | 1032 | 1671 | 1057 | 1747 |      |      |      |      |
| 2500 [1180]              | —                                              | —          | —                                         | 565        | 834        | 601        | 877        | 637        | 922        | 671        | 970        | 705        | 1019       | 739        | 1071       | 771        | 1126       | 803        | 1182       | 834        | 1241 | 864  | 1302 | 894  | 1366 | 923  | 1432 | 951  | 1500 | 978  | 1570 | 1005 | 1643 | 1031 | 1718 | 1057 | 1795 |      |      |      |      |
| 2600 [1227]              | —                                              | —          | —                                         | 573        | 867        | 609        | 911        | 644        | 957        | 678        | 1006       | 711        | 1056       | 744        | 1109       | 776        | 1165       | 807        | 1222       | 838        | 1282 | 867  | 1335 | 896  | 1409 | 925  | 1476 | 953  | 1545 | 979  | 1617 | 1006 | 1690 | 1031 | 1766 | 1056 | 1845 |      |      |      |      |
| 2700 [1274]              | —                                              | —          | —                                         | 546        | 859        | 581        | 902        | 616        | 947        | 651        | 994        | 684        | 1044       | 717        | 1095       | 749        | 1149       | 781        | 1206       | 812        | 1265 | 842  | 1376 | 871  | 1389 | 899  | 1455 | 927  | 1522 | 954  | 1593 | 981  | 1665 | 1007 | 1740 | 1032 | 1817 | 1056 | 1896 |      |      |
| 2800 [1321]              | —                                              | —          | —                                         | 555        | 895        | 590        | 939        | 624        | 985        | 668        | 1033       | 691        | 1084       | 724        | 1136       | 757        | 1182       | 786        | 1249       | 816        | 1309 | 846  | 1371 | 875  | 1435 | 903  | 1521 | 930  | 1571 | 957  | 1642 | 983  | 1717 | 1008 | 1792 | 1032 | 1870 | 1056 | 1950 |      |      |
| 2900 [1368]              | —                                              | —          | —                                         | 564        | 933        | 599        | 978        | 633        | 1025       | 666        | 1074       | 699        | 1126       | 730        | 1180       | 762        | 1236       | 792        | 1294       | 822        | 1355 | 851  | 1418 | 879  | 1484 | 906  | 1552 | 933  | 1622 | 959  | 1694 | 985  | 1769 | 1009 | 1845 | 1033 | 1925 | 1056 | 2006 |      |      |
| 3000 [1416]              | —                                              | —          | —                                         | 574        | 973        | 608        | 1019       | 641        | 1067       | 674        | 1117       | 706        | 1171       | 738        | 1225       | 768        | 1282       | 798        | 1342       | 827        | 1404 | 856  | 1468 | 883  | 1534 | 910  | 1603 | 937  | 1674 | 962  | 1748 | 987  | 1823 | 1011 | 1901 | 1035 | 1982 | 1057 | 2064 |      |      |
| 3100 [1463]              | —                                              | —          | —                                         | 550        | 970        | 584        | 1015       | 611        | 1063       | 641        | 1117       | 706        | 1216       | 745        | 1272       | 775        | 1331       | 804        | 1391       | 833        | 1454 | 861  | 1520 | 888  | 1587 | 915  | 1657 | 940  | 1729 | 965  | 1804 | 990  | 1880 | 1013 | 1959 | 1036 | 2041 | 1058 | 2124 |      |      |
| 3200 [1510]              | —                                              | —          | —                                         | 561        | 1013       | 594        | 1059       | 628        | 1117       | 660        | 1152       | 723        | 1265       | 753        | 1322       | 782        | 1381       | 811        | 1443       | 839        | 1507 | 867  | 1573 | 893  | 1627 | 919  | 1713 | 945  | 1786 | 969  | 1862 | 993  | 1939 | 1016 | 2020 | 1038 | 2102 | 1060 | 2187 |      |      |
| 3300 [1557]              | —                                              | —          | —                                         | 572        | 1059       | 605        | 1105       | 638        | 1154       | 670        | 1206       | 701        | 1259       | 731        | 1315       | 761        | 1373       | 790        | 1434       | 818        | 1497 | 846  | 1562 | 873  | 1629 | 899  | 1699 | 924  | 1771 | 949  | 1845 | 973  | 1922 | 996  | 2001 | 1019 | 2082 | 1041 | 2165 | 1062 | 2251 |
| 3400 [1604]              | 550                                            | 1060       | 584                                       | 1106       | 616        | 1154       | 648        | 1204       | 680        | 1256       | 710        | 1311       | 740        | 1368       | 770        | 1427       | 798        | 1489       | 826        | 1552       | 853  | 1619 | 879  | 1687 | 905  | 1758 | 930  | 1831 | 954  | 1906 | 977  | 1984 | 1000 | 2064 | 1022 | 2146 | 1043 | 2231 | 1064 | 2317 |      |
| 3500 [1652]              | 563                                            | 1109       | 596                                       | 1155       | 628        | 1204       | 659        | 1255       | 690        | 1309       | 720        | 1364       | 750        | 1423       | 778        | 1483       | 806        | 1545       | 834        | 1610       | 860  | 1678 | 886  | 1747 | 911  | 1818 | 935  | 1893 | 959  | 1969 | 982  | 2048 | 1004 | 2129 | 1026 | 2212 | 1046 | 2298 | 1069 | 2386 |      |
| 3600 [1699]              | 575                                            | 1159       | 608                                       | 1207       | 640        | 1257       | 671        | 1309       | 701        | 1363       | 731        | 1420       | 759        | 1479       | 788        | 1541       | 815        | 1604       | 842        | 1670       | 868  | 1739 | 893  | 1809 | 918  | 1882 | 941  | 1957 | 965  | 2035 | 987  | 2114 | 2196 | 1030 | 2281 | 1050 | 2367 | 1069 | 2456 |      |      |

**NOTE:** F-Drive left of the bold line, G-Drive right of bold lines, H-Drive right of double line.

| Drive Package  | F           |     |            | G           |     |     | H           |       |            |
|----------------|-------------|-----|------------|-------------|-----|-----|-------------|-------|------------|
| Motor H.P. [W] | 2 [1,491.4] |     |            | 3 [2,237.1] |     |     | 3 [2,237.1] |       |            |
| Blower Sheave  | AK84H       |     |            | AK84H       |     |     | AK84H       |       |            |
| Motor Sheave   | 1VL40       |     |            | 1VP50       |     |     | 1VP56       |       |            |
| Belt           | A49         |     |            | A50         |     |     | A51         |       |            |
| Turns Open     | 0           | 1   | 2          | 2           | 3   | 4   | 5           | 0     | 1          |
| RPM            | 766         | 720 | <b>676</b> | 632         | 587 | 545 | 503         | 1,075 | 1,067      |
|                |             |     |            |             |     |     |             | 1,031 | 989        |
|                |             |     |            |             |     |     |             | 947   | <b>906</b> |

**NOTES:** 1. Do not set motor sheave below minimum or maximum turns open shown.

2. Re-adjustment of sheave required to achieve rated airflow at AHR1 minimum External Static Pressure

3. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

4. Factory sheave settings are shown in bold type.

[ ] Designates Metric Conversions

# AIRFLOW PERFORMANCE—7.5 TON — 60 Hz — SIDEFLOW (CONTINUED)

| Airflow     | AIRFLOW CORRECTION FACTORS * |              |                 |          | COMPONENT AIRFLOW RESISTANCE |                                         |                                                                                  |                                                                                 |                         |                          |
|-------------|------------------------------|--------------|-----------------|----------|------------------------------|-----------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|
|             | CFM [L/s]                    | Total kBtu/h | Sensible kBtu/h | Power kW | Wet Coil                     | Horizontal Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF2000 &<br>Concentric Adapter<br>RXMC-DD01 (Flush) | Concentric Diffuser<br>RXRN-AED2000 &<br>Concentric Adapter<br>RXMC-DD01 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |
|             |                              |              |                 |          |                              |                                         |                                                                                  |                                                                                 |                         |                          |
| 2400 [1133] | 0.97                         | 0.92         | 0.99            | 0.99     | 0.06 [.01]                   | 0.21 [0.05]                             | 0.66 [.16]                                                                       | 0.53 [.13]                                                                      | 0.093 [.02]             | 0.047 [.01]              |
| 2500 [1180] | 0.97                         | 0.93         | 0.99            | 0.99     | 0.06 [.01]                   | 0.25 [0.06]                             | 0.71 [.18]                                                                       | 0.57 [.14]                                                                      | 0.098 [.02]             | 0.055 [.01]              |
| 2600 [1227] | 0.98                         | 0.95         | 0.99            | 0.99     | 0.06 [.02]                   | 0.28 [0.07]                             | 0.75 [.19]                                                                       | 0.60 [.15]                                                                      | 0.103 [.02]             | 0.062 [.01]              |
| 2700 [1274] | 0.99                         | 0.96         | 0.99            | 0.99     | 0.07 [.02]                   | 0.32 [0.08]                             | 0.80 [.20]                                                                       | 0.65 [.16]                                                                      | 0.108 [.03]             | 0.070 [.02]              |
| 2800 [1321] | 0.99                         | 0.98         | 1.00            | 1.00     | 0.07 [.02]                   | 0.36 [0.09]                             | 0.85 [.21]                                                                       | 0.69 [.17]                                                                      | 0.113 [.03]             | 0.078 [.02]              |
| 2900 [1368] | 1.00                         | 1.00         | 1.00            | 1.00     | 0.08 [.02]                   | 0.39 [0.10]                             | 0.91 [.23]                                                                       | 0.74 [.18]                                                                      | 0.117 [.03]             | 0.085 [.02]              |
| 3000 [1416] | 1.01                         | 1.01         | 1.00            | 1.00     | 0.08 [.02]                   | 0.43 [0.11]                             | 0.96 [.24]                                                                       | 0.79 [.20]                                                                      | 0.122 [.03]             | 0.093 [.02]              |
| 3100 [1463] | 1.01                         | 1.03         | 1.00            | 1.00     | 0.09 [.02]                   | 0.47 [0.12]                             | 1.02 [.25]                                                                       | 0.86 [.21]                                                                      | 0.127 [.03]             | 0.100 [.02]              |
| 3200 [1510] | 1.02                         | 1.04         | 1.01            | 1.01     | 0.10 [.02]                   | 0.51 [0.13]                             | 1.08 [.27]                                                                       | 0.92 [.23]                                                                      | 0.132 [.03]             | 0.108 [.03]              |
| 3300 [1557] | 1.02                         | 1.06         | 1.01            | 1.01     | 0.10 [.03]                   | 0.54 [0.14]                             | 1.15 [.29]                                                                       | 0.99 [.25]                                                                      | 0.137 [.03]             | 0.115 [.03]              |
| 3400 [1604] | 1.03                         | 1.08         | 1.01            | 1.01     | 0.11 [.03]                   | 0.58 [0.14]                             | 1.21 [.30]                                                                       | 1.05 [.26]                                                                      | 0.142 [.03]             | 0.123 [.03]              |
| 3500 [1652] | 1.04                         | 1.09         | 1.01            | 1.01     | 0.11 [.03]                   | 0.62 [0.15]                             | 1.29 [.32]                                                                       | 1.09 [.27]                                                                      | 0.147 [.04]             | 0.131 [.03]              |
| 3600 [1699] | 1.04                         | 1.11         | 1.02            | 1.02     | 0.12 [.03]                   | 0.66 [0.16]                             | 1.36 [.34]                                                                       | 1.13 [.28]                                                                      | 0.152 [.04]             | 0.138 [.03]              |

\*Multiply correction factor times gross performance data resulting sensible capacity cannot exceed total capacity.

[ ] Designates Metric Conversions

| Air Flow<br>CFM (L/s) | Model RHPDYB102  |                 | Voltage 208/230, 460, 575 — 3 phase 60 Hz |                 |                   |                 |                   |                 |                  |                 |                   |                 | External Static Pressure—Inches of Water [kPa] |                 |                  |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                  |                    |                  |                    |                  |                    |                  |                    |                  |                    |                  |                    |                  |                    |                  |                    |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |                     |                   |
|-----------------------|------------------|-----------------|-------------------------------------------|-----------------|-------------------|-----------------|-------------------|-----------------|------------------|-----------------|-------------------|-----------------|------------------------------------------------|-----------------|------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|--------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|---------------------|-------------------|
|                       | 0.1 [0.2]<br>RPM | 0.2 [0.25]<br>W | 0.3 [0.37]<br>RPM                         | 0.4 [0.47]<br>W | 0.5 [0.56]<br>RPM | 0.6 [0.67]<br>W | 0.7 [0.77]<br>RPM | 0.8 [0.87]<br>W | 0.9 [1.0]<br>RPM | 1.0 [1.12]<br>W | 1.1 [1.25]<br>RPM | 1.2 [1.37]<br>W | 1.3 [1.5]<br>RPM                               | 1.4 [1.67]<br>W | 1.5 [1.8]<br>RPM | 1.6 [1.93]<br>W | 1.7 [2.05]<br>RPM | 1.8 [2.17]<br>W | 1.9 [2.29]<br>RPM | 2.0 [2.41]<br>W | 2.1 [2.53]<br>RPM | 2.2 [2.65]<br>W | 2.3 [2.77]<br>RPM | 2.4 [2.89]<br>W | 2.5 [3.01]<br>RPM | 2.6 [3.13]<br>W | 2.7 [3.25]<br>RPM | 2.8 [3.37]<br>W | 2.9 [3.49]<br>RPM | 3.0 [3.61]<br>W | 3.1 [3.73]<br>RPM | 3.2 [3.85]<br>W | 3.3 [3.97]<br>RPM | 3.4 [4.09]<br>W | 3.5 [4.21]<br>RPM | 3.6 [4.33]<br>W | 3.7 [4.45]<br>RPM | 3.8 [4.57]<br>W | 3.9 [4.69]<br>RPM | 4.0 [4.81]<br>W | 4.1 [4.93]<br>RPM | 4.2 [5.05]<br>W | 4.3 [5.17]<br>RPM | 4.4 [5.29]<br>W | 4.5 [5.41]<br>RPM | 4.6 [5.53]<br>W | 4.7 [5.65]<br>RPM | 4.8 [5.77]<br>W | 4.9 [5.89]<br>RPM | 5.0 [6.01]<br>W | 5.1 [6.13]<br>RPM | 5.2 [6.25]<br>W | 5.3 [6.37]<br>RPM | 5.4 [6.49]<br>W | 5.5 [6.61]<br>RPM | 5.6 [6.73]<br>W | 5.7 [6.85]<br>RPM | 5.8 [6.97]<br>W | 5.9 [7.09]<br>RPM | 6.0 [7.21]<br>W | 6.1 [7.33]<br>RPM | 6.2 [7.45]<br>W | 6.3 [7.57]<br>RPM | 6.4 [7.69]<br>W | 6.5 [7.81]<br>RPM | 6.6 [7.93]<br>W | 6.7 [8.05]<br>RPM | 6.8 [8.17]<br>W | 6.9 [8.29]<br>RPM | 7.0 [8.41]<br>W | 7.1 [8.53]<br>RPM | 7.2 [8.65]<br>W | 7.3 [8.77]<br>RPM | 7.4 [8.89]<br>W | 7.5 [9.01]<br>RPM | 7.6 [9.13]<br>W | 7.7 [9.25]<br>RPM | 7.8 [9.37]<br>W | 7.9 [9.49]<br>RPM | 8.0 [9.61]<br>W | 8.1 [9.73]<br>RPM | 8.2 [9.85]<br>W | 8.3 [9.97]<br>RPM | 8.4 [10.09]<br>W | 8.5 [10.21]<br>RPM | 8.6 [10.33]<br>W | 8.7 [10.45]<br>RPM | 8.8 [10.57]<br>W | 8.9 [10.69]<br>RPM | 9.0 [10.81]<br>W | 9.1 [10.93]<br>RPM | 9.2 [11.05]<br>W | 9.3 [11.17]<br>RPM | 9.4 [11.29]<br>W | 9.5 [11.41]<br>RPM | 9.6 [11.53]<br>W | 9.7 [11.65]<br>RPM | 9.8 [11.77]<br>W | 9.9 [11.89]<br>RPM | 10.0 [12.01]<br>W | 10.1 [12.13]<br>RPM | 10.2 [12.25]<br>W | 10.3 [12.37]<br>RPM | 10.4 [12.49]<br>W | 10.5 [12.61]<br>RPM | 10.6 [12.73]<br>W | 10.7 [12.85]<br>RPM | 10.8 [12.97]<br>W | 10.9 [13.09]<br>RPM | 11.0 [13.21]<br>W | 11.1 [13.33]<br>RPM | 11.2 [13.45]<br>W | 11.3 [13.57]<br>RPM | 11.4 [13.69]<br>W | 11.5 [13.81]<br>RPM | 11.6 [13.93]<br>W | 11.7 [14.05]<br>RPM | 11.8 [14.17]<br>W | 11.9 [14.29]<br>RPM | 12.0 [14.41]<br>W | 12.1 [14.53]<br>RPM | 12.2 [14.65]<br>W | 12.3 [14.77]<br>RPM | 12.4 [14.89]<br>W | 12.5 [15.01]<br>RPM | 12.6 [15.13]<br>W | 12.7 [15.25]<br>RPM | 12.8 [15.37]<br>W | 12.9 [15.49]<br>RPM | 13.0 [15.61]<br>W | 13.1 [15.73]<br>RPM | 13.2 [15.85]<br>W | 13.3 [15.97]<br>RPM | 13.4 [16.09]<br>W | 13.5 [16.21]<br>RPM | 13.6 [16.33]<br>W | 13.7 [16.45]<br>RPM | 13.8 [16.57]<br>W | 13.9 [16.69]<br>RPM | 14.0 [16.81]<br>W | 14.1 [16.93]<br>RPM | 14.2 [17.05]<br>W | 14.3 [17.17]<br>RPM | 14.4 [17.29]<br>W | 14.5 [17.41]<br>RPM | 14.6 [17.53]<br>W | 14.7 [17.65]<br>RPM | 14.8 [17.77]<br>W | 14.9 [17.89]<br>RPM | 15.0 [18.01]<br>W | 15.1 [18.13]<br>RPM | 15.2 [18.25]<br>W | 15.3 [18.37]<br>RPM | 15.4 [18.49]<br>W | 15.5 [18.61]<br>RPM | 15.6 [18.73]<br>W | 15.7 [18.85]<br>RPM | 15.8 [18.97]<br>W | 15.9 [19.09]<br>RPM | 16.0 [19.21]<br>W | 16.1 [19.33]<br>RPM | 16.2 [19.45]<br>W | 16.3 [19.57]<br>RPM | 16.4 [19.69]<br>W | 16.5 [19.81]<br>RPM | 16.6 [19.93]<br>W | 16.7 [20.05]<br>RPM | 16.8 [20.17]<br>W | 16.9 [20.29]<br>RPM | 17.0 [20.41]<br>W | 17.1 [20.53]<br>RPM | 17.2 [20.65]<br>W | 17.3 [20.77]<br>RPM | 17.4 [20.89]<br>W | 17.5 [21.01]<br>RPM | 17.6 [21.13]<br>W | 17.7 [21.25]<br>RPM | 17.8 [21.37]<br>W | 17.9 [21.49]<br>RPM | 18.0 [21.61]<br>W | 18.1 [21.73]<br>RPM | 18.2 [21.85]<br>W | 18.3 [21.97]<br>RPM | 18.4 [22.09]<br>W | 18.5 [22.21]<br>RPM | 18.6 [22.33]<br>W | 18.7 [22.45]<br>RPM | 18.8 [22.57]<br>W | 18.9 [22.69]<br>RPM | 19.0 [22.81]<br>W | 19.1 [22.93]<br>RPM | 19.2 [23.05]<br>W | 19.3 [23.17]<br>RPM | 19.4 [23.29]<br>W | 19.5 [23.41]<br>RPM | 19.6 [23.53]<br>W | 19.7 [23.65]<br>RPM | 19.8 [23.77]<br>W | 19.9 [23.89]<br>RPM | 20.0 [24.01]<br>W | 20.1 [24.13]<br>RPM | 20.2 [24.25]<br>W | 20.3 [24.37]<br>RPM | 20.4 [24.49]<br>W | 20.5 [24.61]<br>RPM | 20.6 [24.73]<br>W | 20.7 [24.85]<br>RPM | 20.8 [24.97]<br>W | 20.9 [25.09]<br>RPM | 21.0 [25.21]<br>W | 21.1 [25.33]<br>RPM | 21.2 [25.45]<br>W | 21.3 [25.57]<br>RPM | 21.4 [25.69]<br>W |

**NOTE:** F-Drive left of the bold line, G-Drive right of bold lines, H-Drive right of double line.

| Drive Package  | F           |     |            |     | G           |     |     |       | H           |     |     |            |
|----------------|-------------|-----|------------|-----|-------------|-----|-----|-------|-------------|-----|-----|------------|
| Motor H.P. [W] | 2 [1,491.4] |     |            |     | 3 [2,237.1] |     |     |       | 3 [2,237.1] |     |     |            |
| Blower Sheave  | AK84H       |     |            |     | AK84H       |     |     |       | AK84H       |     |     |            |
| Motor Sheave   | 1VP40       |     |            |     | 1VP50       |     |     |       | 1VP56       |     |     |            |
| Belt           | A49         |     |            |     | A50         |     |     |       | A51         |     |     |            |
| Turns Open     | 0           | 1   | 2          | 3   | 4           | 5   | 0   | 1     | 2           | 3   | 4   | 5          |
| RPM            | 765         | 724 | <b>680</b> | 640 | 601         | 558 | 978 | 940   | 899         | 860 | 818 | <b>777</b> |
|                |             |     |            |     |             |     |     | 1,052 | 1,018       | 979 | 941 | <b>901</b> |

**NOTES:** 1. Do not set motor sheave below minimum or maximum turns open shown.

2. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
3. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.
4. Factory sheave settings are shown in bold type.

**[ ] Designates Metric Conversions**

# AIRFLOW PERFORMANCE—8.5 TON — 60 Hz — DOWNFLOW (CONTINUED)

| Airflow     | AIRFLOW CORRECTION FACTORS * |              |                 |          | COMPONENT AIRFLOW RESISTANCE |                                       |                                                                                  |                                                                                 |                         |                          |
|-------------|------------------------------|--------------|-----------------|----------|------------------------------|---------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|
|             | CFM [L/s]                    | Total kBtu/h | Sensible kBtu/h | Power kW | Wet Coil                     | Vertical Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF2000 &<br>Concentric Adapter<br>RXMC-DD01 (Flush) | Concentric Diffuser<br>RXRN-AED2000 &<br>Concentric Adapter<br>RXMC-DD01 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |
|             |                              |              |                 |          |                              |                                       |                                                                                  |                                                                                 |                         |                          |
|             |                              |              |                 |          |                              |                                       |                                                                                  |                                                                                 |                         |                          |
| 2400 [1133] | 0.97                         | 0.92         | 0.99            | 0.99     | 0.06 [.01]                   | 0.21 [0.05]                           | 0.66 [.16]                                                                       | 0.53 [.13]                                                                      | 0.093 [.02]             | 0.047 [.01]              |
| 2500 [1180] | 0.97                         | 0.93         | 0.99            | 0.99     | 0.06 [.01]                   | 0.25 [0.06]                           | 0.71 [.18]                                                                       | 0.57 [.14]                                                                      | 0.098 [.02]             | 0.055 [.01]              |
| 2600 [1227] | 0.98                         | 0.95         | 0.99            | 0.99     | 0.06 [.02]                   | 0.28 [0.07]                           | 0.75 [.19]                                                                       | 0.60 [.15]                                                                      | 0.103 [.02]             | 0.062 [.01]              |
| 2700 [1274] | 0.99                         | 0.96         | 0.99            | 0.99     | 0.07 [.02]                   | 0.32 [0.08]                           | 0.80 [.20]                                                                       | 0.65 [.16]                                                                      | 0.108 [.03]             | 0.070 [.02]              |
| 2800 [1321] | 0.99                         | 0.98         | 1.00            | 1.00     | 0.07 [.02]                   | 0.36 [0.09]                           | 0.85 [.21]                                                                       | 0.69 [.17]                                                                      | 0.113 [.03]             | 0.078 [.02]              |
| 2900 [1368] | 1.00                         | 1.00         | 1.00            | 1.00     | 0.08 [.02]                   | 0.39 [0.10]                           | 0.91 [.23]                                                                       | 0.74 [.18]                                                                      | 0.117 [.03]             | 0.085 [.02]              |
| 3000 [1416] | 1.01                         | 1.01         | 1.00            | 1.00     | 0.08 [.02]                   | 0.43 [0.11]                           | 0.96 [.24]                                                                       | 0.79 [.20]                                                                      | 0.122 [.03]             | 0.093 [.02]              |
| 3100 [1463] | 1.01                         | 1.03         | 1.00            | 1.00     | 0.09 [.02]                   | 0.47 [0.12]                           | 1.02 [.25]                                                                       | 0.86 [.21]                                                                      | 0.127 [.03]             | 0.100 [.02]              |
| 3200 [1510] | 1.02                         | 1.04         | 1.01            | 1.01     | 0.10 [.02]                   | 0.51 [0.13]                           | 1.08 [.27]                                                                       | 0.92 [.23]                                                                      | 0.132 [.03]             | 0.108 [.03]              |
| 3300 [1557] | 1.02                         | 1.06         | 1.01            | 1.01     | 0.10 [.03]                   | 0.54 [0.14]                           | 1.15 [.29]                                                                       | 0.99 [.25]                                                                      | 0.137 [.03]             | 0.115 [.03]              |
| 3400 [1604] | 1.03                         | 1.08         | 1.01            | 1.01     | 0.11 [.03]                   | 0.58 [0.14]                           | 1.21 [.30]                                                                       | 1.05 [.26]                                                                      | 0.142 [.03]             | 0.123 [.03]              |
| 3500 [1652] | 1.04                         | 1.09         | 1.01            | 1.01     | 0.11 [.03]                   | 0.62 [0.15]                           | 1.29 [.32]                                                                       | 1.09 [.27]                                                                      | 0.147 [.04]             | 0.131 [.03]              |
| 3600 [1699] | 1.04                         | 1.11         | 1.02            | 1.02     | 0.12 [.03]                   | 0.66 [0.16]                           | 1.36 [.34]                                                                       | 1.13 [.28]                                                                      | 0.152 [.04]             | 0.138 [.03]              |

\*Multiply correction factor times gross performance data resulting sensible capacity cannot exceed total capacity.

[ ] Designates Metric Conversions

# AIRFLOW PERFORMANCE—8.5 TON — 60 Hz — SIDEFLOW

| Air<br>Flow<br>CFM [L/s] | Model RHPDYB102 Voltage 208/230, 460, 575 — 3 phase 60 Hz |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|-----------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          | External Static Pressure—Inches of Water [kPa]            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                          | 0.1 [0.02]                                                | 0.2 [0.05] | 0.3 [0.07] | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | 1.1 [0.27] | 1.2 [0.30] | 1.3 [0.32] | 1.4 [0.35] | 1.5 [0.37] | 1.6 [0.40] | 1.7 [0.42] | 1.8 [0.45] | 1.9 [0.47] | 2.0 [0.50] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RPM                      | W                                                         | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2700 [127.4]             | —                                                         | —          | —          | —          | 583        | 707        | 613        | 760        | 643        | 815        | 673        | 874        | 703        | 935        | 733        | 998        | 762        | 1065       | 792        | 1134       | 821  | 1206 | 850  | 1280 | 879  | 1358 | 908  | 1438 | 937  | 1520 | 966  | 1606 | 995  | 1694 | 1023 | 1785 |      |      |      |      |
| 2800 [132.1]             | —                                                         | —          | —          | 559        | 688        | 589        | 740        | 618        | 794        | 648        | 852        | 677        | 912        | 706        | 974        | 736        | 1040       | 765        | 1108       | 794        | 1179 | 823  | 1252 | 851  | 1329 | 880  | 1408 | 908  | 1490 | 937  | 1574 | 965  | 1661 | 993  | 1751 | 1021 | 1844 |      |      |      |
| 2900 [136.8]             | —                                                         | —          | —          | 565        | 722        | 594        | 776        | 623        | 832        | 653        | 891        | 681        | 953        | 710        | 1017       | 739        | 1084       | 768        | 1154       | 796        | 1227 | 825  | 1302 | 853  | 1381 | 881  | 1461 | 909  | 1545 | 937  | 1631 | 965  | 1720 | 992  | 1812 | 1020 | 1906 |      |      |      |
| 3000 [141.6]             | —                                                         | —          | —          | 572        | 759        | 600        | 815        | 629        | 873        | 658        | 934        | 686        | 997        | 715        | 1064       | 743        | 1133       | 771        | 1204       | 799        | 1279 | 827  | 1356 | 855  | 1436 | 882  | 1518 | 910  | 1604 | 937  | 1692 | 965  | 1782 | 992  | 1876 | 1019 | 1972 |      |      |      |
| 3100 [146.3]             | —                                                         | —          | —          | 579        | 800        | 607        | 857        | 635        | 917        | 663        | 980        | 691        | 1045       | 719        | 1113       | 747        | 1184       | 775        | 1257       | 802        | 1334 | 830  | 1412 | 857  | 1494 | 884  | 1579 | 910  | 1666 | 938  | 1755 | 965  | 1848 | 992  | 1943 | 1018 | 2041 |      |      |      |
| 3200 [151.0]             | —                                                         | —          | 558        | 788        | 586        | 844        | 614        | 903        | 642        | 965        | 669        | 1029       | 697        | 1096       | 724        | 1166       | 751        | 1238       | 779        | 1314       | 806  | 1392 | 833  | 1472 | 860  | 1556 | 886  | 1642 | 913  | 1731 | 939  | 1822 | 966  | 1917 | 992  | 2014 | 1018 | 2114 |      |      |
| 3300 [155.7]             | —                                                         | —          | 566        | 833        | 594        | 891        | 621        | 952        | 648        | 1016       | 676        | 1082       | 703        | 1151       | 730        | 1222       | 756        | 1296       | 783        | 1373       | 810  | 1453 | 836  | 1536 | 862  | 1621 | 889  | 1709 | 915  | 1799 | 941  | 1893 | 967  | 1989 | 993  | 2088 | 1018 | 2189 |      |      |
| 3400 [160.4]             | —                                                         | —          | 575        | 882        | 602        | 942        | 629        | 1004       | 656        | 1070       | 682        | 1138       | 709        | 1208       | 735        | 1282       | 762        | 1358       | 788        | 1436       | 814  | 1518 | 840  | 1602 | 866  | 1689 | 892  | 1779 | 917  | 1871 | 943  | 1966 | 968  | 2084 | 994  | 2165 | 1019 | 2268 |      |      |
| 3500 [165.2]             | —                                                         | 557        | 876        | 584        | 934        | 610        | 996        | 637        | 1060       | 663        | 1127       | 689        | 1197       | 715        | 1269       | 741        | 1344       | 767        | 1422       | 793        | 1503 | 819  | 1586 | 844  | 1672 | 870  | 1761 | 895  | 1852 | 920  | 1946 | 945  | 2043 | 970  | 2143 | 995  | 2245 | 1020 | 2350 |      |
| 3600 [169.9]             | —                                                         | 567        | 929        | 593        | 990        | 619        | 1053       | 645        | 1119       | 671        | 1188       | 697        | 1259       | 722        | 1334       | 748        | 1411       | 773        | 1490       | 799        | 1572 | 824  | 1658 | 849  | 1745 | 874  | 1836 | 899  | 1929 | 948  | 2025 | 948  | 2124 | 927  | 2225 | 997  | 2329 | 1021 | 2436 |      |
| 3700 [174.6]             | —                                                         | 577        | 986        | 603        | 1049       | 628        | 1114       | 654        | 1182       | 679        | 1252       | 705        | 1325       | 730        | 1401       | 755        | 1480       | 780        | 1561       | 804        | 1645 | 829  | 1732 | 854  | 1822 | 878  | 1914 | 903  | 2009 | 927  | 2107 | 951  | 2207 | 975  | 2310 | 999  | 2416 | 1023 | 2525 |      |
| 3800 [179.3]             | 562                                                       | 985        | 588        | 1047       | 613        | 1111       | 638        | 1178       | 663        | 1247       | 688        | 1319       | 713        | 1394       | 737        | 1472       | 762        | 1553       | 786        | 1636       | 811  | 1722 | 835  | 1810 | 859  | 1902 | 883  | 1996 | 907  | 2092 | 931  | 2192 | 954  | 2294 | 978  | 2399 | 1001 | 2507 | 1025 | 2617 |
| 3900 [184.0]             | 574                                                       | 1047       | 599        | 1110       | 623        | 1176       | 648        | 1245       | 673        | 1316       | 697        | 1390       | 721        | 1467       | 746        | 1546       | 770        | 1629       | 794        | 1714       | 817  | 1801 | 841  | 1892 | 865  | 1985 | 888  | 2081 | 912  | 2179 | 935  | 2280 | 958  | 2384 | 981  | 2491 | 1004 | 2607 | 1020 | 2713 |
| 4000 [188.8]             | 586                                                       | 1112       | 610        | 1177       | 634        | 1245       | 658        | 1315       | 683        | 1388       | 706        | 1464       | 730        | 1543       | 754        | 1624       | 778        | 1708       | 801        | 1795       | 824  | 1884 | 848  | 1976 | 871  | 2071 | 894  | 2169 | 917  | 2269 | 940  | 2372 | 962  | 2478 | 985  | 2586 | 1007 | 2697 | 1030 | 2811 |
| 4100 [193.5]             | 598                                                       | 1181       | 622        | 1248       | 645        | 1317       | 669        | 1389       | 693        | 1464       | 716        | 1542       | 740        | 1622       | 763        | 1705       | 786        | 1791       | 809        | 1879       | 832  | 1970 | 855  | 2064 | 877  | 2161 | 890  | 2260 | 922  | 2362 | 945  | 2466 | 968  | 2575 | 989  | 2685 | 1011 | 2798 | 1033 | 2913 |

NOTE: F-Drive left of the bold line, G-Drive right of bold lines, H-Drive right of double line.

| Drive Package  | F           |     |     |     |     |     | G           |     |     |     |     |     | H           |       |       |     |     |     |
|----------------|-------------|-----|-----|-----|-----|-----|-------------|-----|-----|-----|-----|-----|-------------|-------|-------|-----|-----|-----|
| Motor H.P. [W] | 2 [1,491.4] |     |     |     |     |     | 3 [2,237.1] |     |     |     |     |     | 3 [2,237.1] |       |       |     |     |     |
| Blower Sheave  | AK84H       |     |     |     |     |     | AK84H       |     |     |     |     |     | AK84H       |       |       |     |     |     |
| Motor Sheave   | 1VP40       |     |     |     |     |     | 1VP50       |     |     |     |     |     | 1VP56       |       |       |     |     |     |
| Belt           | A49         |     |     |     |     |     | A50         |     |     |     |     |     | A51         |       |       |     |     |     |
| Turns Open     | 0           | 1   | 2   | 3   | 4   | 5   | 0           | 1   | 2   | 3   | 4   | 5   | 0           | 1     | 2     | 3   | 4   | 5   |
| RPM            | 765         | 724 | 684 | 641 | 598 | 557 | 970         | 942 | 898 | 861 | 821 | 779 | —           | 1,045 | 1,017 | 981 | 942 | 902 |

NOTES: 1. Do not set motor sheave below minimum or maximum turns open shown.

2. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure

3. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

4. Factory sheave settings are shown in bold type.

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—8.5 TON — 60 Hz — SIDEFLOW (CONTINUED)

| Airflow                            |              | AIRFLOW CORRECTION FACTORS * |          |             |                                       | COMPONENT AIRFLOW RESISTANCE                                                     |                                                                                 |                         |                          |  |
|------------------------------------|--------------|------------------------------|----------|-------------|---------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|--|
| CFM [L/s]                          | Total kBtu/h | Sensible kBtu/h              | Power kW | Wet Coil    | Vertical Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF2000 &<br>Concentric Adapter<br>RXMC-DD01 (Flush) | Concentric Diffuser<br>RXRN-AED2000 &<br>Concentric Adapter<br>RXMC-DD01 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |  |
| Resistance — Inches of Water [kPa] |              |                              |          |             |                                       |                                                                                  |                                                                                 |                         |                          |  |
| 2700 [1274]                        | 0.99         | 0.96                         | 0.99     | 0.07 [0.02] | 0.32 [0.08]                           | 0.80 [0.20]                                                                      | 0.65 [0.16]                                                                     | 0.108 [0.03]            | 0.070 [0.02]             |  |
| 2800 [1321]                        | 0.99         | 0.98                         | 1.00     | 0.07 [0.02] | 0.36 [0.09]                           | 0.85 [0.21]                                                                      | 0.69 [0.17]                                                                     | 0.113 [0.03]            | 0.078 [0.02]             |  |
| 2900 [1368]                        | 1.00         | 1.00                         | 1.00     | 0.08 [0.02] | 0.39 [0.10]                           | 0.91 [0.23]                                                                      | 0.74 [0.18]                                                                     | 0.117 [0.03]            | 0.085 [0.02]             |  |
| 3000 [1416]                        | 1.01         | 1.01                         | 1.00     | 0.08 [0.02] | 0.43 [0.11]                           | 0.96 [0.24]                                                                      | 0.79 [0.20]                                                                     | 0.122 [0.03]            | 0.093 [0.02]             |  |
| 3100 [1463]                        | 1.01         | 1.03                         | 1.00     | 0.09 [0.02] | 0.47 [0.12]                           | 1.02 [0.25]                                                                      | 0.86 [0.21]                                                                     | 0.127 [0.03]            | 0.100 [0.02]             |  |
| 3200 [1510]                        | 1.02         | 1.04                         | 1.01     | 0.10 [0.02] | 0.51 [0.13]                           | 1.08 [0.27]                                                                      | 0.92 [0.23]                                                                     | 0.132 [0.03]            | 0.108 [0.03]             |  |
| 3300 [1557]                        | 1.02         | 1.06                         | 1.01     | 0.10 [0.03] | 0.54 [0.14]                           | 1.15 [0.29]                                                                      | 0.99 [0.25]                                                                     | 0.137 [0.03]            | 0.115 [0.03]             |  |
| 3400 [1604]                        | 1.03         | 1.08                         | 1.01     | 0.11 [0.03] | 0.58 [0.14]                           | 1.21 [0.30]                                                                      | 1.05 [0.26]                                                                     | 0.142 [0.03]            | 0.123 [0.03]             |  |
| 3500 [1652]                        | 1.04         | 1.09                         | 1.01     | 0.11 [0.03] | 0.62 [0.15]                           | 1.29 [0.32]                                                                      | 1.09 [0.27]                                                                     | 0.147 [0.04]            | 0.131 [0.03]             |  |
| 3600 [1699]                        | 1.04         | 1.11                         | 1.02     | 0.12 [0.03] | 0.66 [0.16]                           | 1.36 [0.34]                                                                      | 1.13 [0.28]                                                                     | 0.152 [0.04]            | 0.138 [0.03]             |  |
| 3700 [1746]                        | 1.05         | 1.12                         | 1.02     | 0.13 [0.03] | 0.70 [0.17]                           | 1.43 [0.36]                                                                      | 1.18 [0.29]                                                                     | 0.157 [0.04]            | 0.146 [0.04]             |  |
| 3800 [1793]                        | 1.05         | 1.14                         | 1.02     | 0.13 [0.03] | 0.74 [0.18]                           | 1.50 [0.37]                                                                      | 1.23 [0.31]                                                                     | 0.162 [0.04]            | 0.153 [0.04]             |  |
| 3900 [1840]                        | 1.06         | 1.16                         | 1.02     | 0.14 [0.04] | 0.77 [0.19]                           | 1.59 [0.40]                                                                      | 1.31 [0.33]                                                                     | 0.167 [0.04]            | 0.161 [0.04]             |  |
| 4000 [1888]                        | 1.07         | 1.17                         | 1.02     | 0.15 [0.04] | 0.81 [0.20]                           | 1.68 [0.42]                                                                      | 1.38 [0.34]                                                                     | 0.171 [0.04]            | 0.169 [0.04]             |  |
| 4100 [1935]                        | 1.07         | 1.19                         | 1.03     | 0.15 [0.04] | 0.85 [0.21]                           | 1.74 [0.43]                                                                      | 1.44 [0.36]                                                                     | 0.176 [0.04]            | 0.176 [0.04]             |  |

\*Multiply correction factor times gross performance data resulting sensible capacity cannot exceed total capacity.

[ ] Designates Metric Conversions

## AIRFLOW PERFORMANCE—10 TON — 60 Hz — DOWNFLOW

| Air Flow<br>CFM [L/s] |     | Model RHPDYB120 Voltage 208/230, 460, 575 — 3 phase 60 Hz |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----|-----------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       |     | External Static Pressure—Inches of Water [kPa]            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                       |     | 0.1 [0.02]                                                | 0.2 [0.05] | 0.3 [0.07] | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | 1.1 [0.27] | 1.2 [0.30] | 1.3 [0.32] | 1.4 [0.35] | 1.5 [0.37] | 1.6 [0.40] | 1.7 [0.42] | 1.8 [0.45] | 1.9 [0.47] | 2.0 [0.50] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RPM                   | W   | RPM                                                       | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM  | W    | RPM  | W    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 3200 [1510]           | 620 | 952                                                       | 648        | 1005       | 676        | 1059       | 704        | 1115       | 732        | 1174       | 759        | 1234       | 785        | 1295       | 812        | 1359       | 838        | 1425       | 864        | 1492       | 889        | 1562 | 914  | 1633 | 939  | 1706 | 964  | 1781 | 988  | 1858 | 1011 | 1937 | 1035 | 2017 | 1058 | 2100 | 1081 | 2184 | 1103 | 2270 |
| 3300 [1557]           | 634 | 998                                                       | 662        | 1053       | 690        | 1110       | 718        | 1169       | 745        | 1229       | 771        | 1292       | 798        | 1356       | 824        | 1422       | 850        | 1491       | 875        | 1561       | 900        | 1632 | 925  | 1706 | 949  | 1782 | 973  | 1859 | 997  | 1939 | 1020 | 2020 | 1043 | 2103 | 1066 | 2188 | 1088 | 2275 | 1110 | 2363 |
| 3400 [1604]           | 649 | 1049                                                      | 677        | 1106       | 704        | 1166       | 731        | 1227       | 758        | 1290       | 784        | 1355       | 810        | 1422       | 836        | 1491       | 861        | 1561       | 886        | 1634       | 911        | 1708 | 935  | 1784 | 959  | 1863 | 983  | 1942 | 1006 | 2024 | 1029 | 2108 | 1052 | 2194 | 1074 | 2281 | 1096 | 2370 | 1118 | 2462 |
| 3500 [1652]           | 663 | 1105                                                      | 691        | 1165       | 718        | 1227       | 744        | 1291       | 771        | 1356       | 797        | 1424       | 822        | 1493       | 848        | 1564       | 873        | 1637       | 897        | 1712       | 922        | 1789 | 946  | 1868 | 969  | 1948 | 993  | 2031 | 1016 | 2115 | 1038 | 2201 | 1060 | 2289 | 1082 | 2379 | 1104 | 2471 | 1125 | 2565 |
| 3600 [1699]           | 678 | 1166                                                      | 705        | 1229       | 732        | 1293       | 758        | 1359       | 784        | 1427       | 809        | 1497       | 835        | 1569       | 860        | 1643       | 884        | 1718       | 909        | 1796       | 932        | 1875 | 956  | 1956 | 979  | 2039 | 1002 | 2124 | 1025 | 2211 | 1047 | 2300 | 1069 | 2390 | 1091 | 2483 | 1112 | 2577 | 1133 | 2673 |
| 3700 [1746]           | 693 | 1232                                                      | 719        | 1297       | 745        | 1364       | 771        | 1433       | 797        | 1503       | 822        | 1576       | 847        | 1650       | 872        | 1726       | 896        | 1804       | 920        | 1884       | 943        | 1966 | 967  | 2050 | 990  | 2135 | 1012 | 2223 | 1034 | 2312 | 1056 | 2403 | 1078 | 2496 | 1099 | 2591 | 1120 | 2688 | 1140 | 2787 |
| 3800 [1793]           | 707 | 1303                                                      | 734        | 1371       | 759        | 1440       | 785        | 1511       | 810        | 1584       | 835        | 1659       | 860        | 1736       | 884        | 1815       | 908        | 1896       | 931        | 1978       | 954        | 2062 | 977  | 2148 | 1000 | 2237 | 1022 | 2326 | 1044 | 2418 | 1065 | 2512 | 1086 | 2607 | 1107 | 2705 | 1128 | 2804 | 1148 | 2905 |
| 3900 [1840]           | 722 | 1380                                                      | 748        | 1450       | 773        | 1521       | 799        | 1595       | 823        | 1671       | 848        | 1748       | 872        | 1827       | 896        | 1909       | 919        | 1992       | 942        | 2077       | 965        | 2163 | 988  | 2252 | 1010 | 2343 | 1032 | 2435 | 1053 | 2529 | 1074 | 2626 | 1095 | 2724 | 1116 | 2823 | 1136 | 2925 | 1156 | 3029 |
| 4000 [1888]           | 737 | 1461                                                      | 762        | 1533       | 787        | 1608       | 812        | 1684       | 837        | 1762       | 861        | 1842       | 884        | 1924       | 908        | 2007       | 931        | 2093       | 954        | 2180       | 976        | 2270 | 998  | 2361 | 1020 | 2454 | 1042 | 2549 | 1063 | 2646 | 1083 | 2744 | 1104 | 2845 | 1124 | 2947 | 1144 | 3051 | 1163 | 3158 |
| 4100 [1935]           | 752 | 1547                                                      | 777        | 1622       | 801        | 1699       | 826        | 1778       | 850        | 1858       | 874        | 1941       | 897        | 2025       | 920        | 2111       | 943        | 2199       | 965        | 2289       | 987        | 2381 | 1009 | 2475 | 1030 | 2570 | 1051 | 2668 | 1072 | 2767 | 1093 | 2868 | 1113 | 2971 | 1132 | 3076 | 1152 | 3183 | —    | —    |
| 4200 [1982]           | 766 | 1639                                                      | 791        | 1716       | 815        | 1796       | 839        | 1877       | 863        | 1960       | 887        | 2045       | 910        | 2132       | 932        | 2220       | 955        | 2311       | 977        | 2403       | 998        | 2497 | 1020 | 2594 | 1041 | 2692 | 1061 | 2792 | 1082 | 2893 | 1102 | 2997 | 1121 | 3102 | 1141 | 3210 | 1160 | 3319 | —    | —    |
| 4300 [2029]           | 781 | 1735                                                      | 806        | 1815       | 830        | 1897       | 853        | 1981       | 877        | 2066       | 900        | 2154       | 922        | 2243       | 944        | 2334       | 966        | 2427       | 988        | 2522       | 1009       | 2619 | 1030 | 2718 | 1051 | 2818 | 1071 | 2920 | 1091 | 3025 | 1111 | 3131 | 1130 | 3239 | 1149 | 3349 | —    | —    |      |      |
| 4400 [2076]           | 796 | 1837                                                      | 820        | 1919       | 844        | 2004       | 867        | 2090       | 890        | 2178       | 913        | 2268       | 935        | 2360       | 957        | 2453       | 978        | 2549       | 1000       | 2646       | 1021       | 2745 | 1041 | 2847 | 1061 | 2950 | 1081 | 3054 | 1101 | 3161 | 1120 | 3270 | 1139 | 3380 | 1158 | 3493 | —    | —    |      |      |
| 4500 [2123]           | 811 | 1944                                                      | 835        | 2029       | 858        | 2115       | 881        | 2204       | 903        | 2295       | 926        | 2387       | 947        | 2481       | 969        | 2577       | 990        | 2675       | 1011       | 2775       | 1032       | 2877 | 1052 | 2981 | 1072 | 3086 | 1091 | 3194 | 1111 | 3303 | 1130 | 3414 | 1148 | 3527 | —    | —    | —    | —    |      |      |
| 4600 [2171]           | 826 | 2056                                                      | 849        | 2143       | 872        | 2232       | 895        | 2323       | 917        | 2416       | 939        | 2511       | 960        | 2608       | 981        | 2707       | 1002       | 2807       | 1023       | 2910       | 1043       | 3014 | 1063 | 3120 | 1082 | 3228 | 1101 | 3338 | 1120 | 3449 | 1139 | 3563 | 1157 | 3679 | —    | —    | —    | —    |      |      |
| 4700 [2218]           | 841 | 2172                                                      | 864        | 2262       | 886        | 2354       | 908        | 2448       | 930        | 2543       | 952        | 2641       | 973        | 2740       | 994        | 2841       | 1014       | 2944       | 1034       | 3049       | 1054       | 3156 | 1074 | 3264 | 1093 | 3375 | 1112 | 3487 | 1130 | 3601 | 1148 | 3717 | —    | —    | —    | —    | —    | —    |      |      |
| 4800 [2265]           | 856 | 2294                                                      | 878        | 2387       | 900        | 2481       | 922        | 2577       | 944        | 2675       | 965        | 2775       | 986        | 2877       | 1006       | 2980       | 1026       | 3086       | 1046       | 3193       | 1065       | 3302 | 1084 | 3414 | 1103 | 3526 | 1122 | 3641 | 1140 | 3758 | 1158 | 3877 | —    | —    | —    | —    | —    | —    |      |      |

**NOTE:** F-Drive left of the bold line, G-Drive right of bold lines, H-Drive right of double line.

| Drive Package  | F           |     |     |     |     | G           |       |     |     |     | H           |     |       |       |       |       |     |     |
|----------------|-------------|-----|-----|-----|-----|-------------|-------|-----|-----|-----|-------------|-----|-------|-------|-------|-------|-----|-----|
| Motor H.P. [W] | 2 [1,491.4] |     |     |     |     | 3 [2,237.1] |       |     |     |     | 3 [2,237.1] |     |       |       |       |       |     |     |
| Blower Sheave  | AK79H       |     |     |     |     | AK79H       |       |     |     |     | AK79H       |     |       |       |       |       |     |     |
| Motor Sheave   | 1VL40       |     |     |     |     | 1VP50       |       |     |     |     | 1VP56       |     |       |       |       |       |     |     |
| Belt           | A49         |     |     |     |     | A50         |       |     |     |     | A51         |     |       |       |       |       |     |     |
| Turns Open     | 0           | 1   | 2   | 3   | 4   | 5           | 0     | 1   | 2   | 3   | 4           | 5   | 0     | 1     | 2     | 3     | 4   | 5   |
| RPM            | 826         | 781 | 735 | 689 | 643 | 591         | 1,041 | 999 | 956 | 914 | 870         | 826 | 1,159 | 1,121 | 1,080 | 1,039 | 998 | 955 |

**NOTES:** 1. Factory sheave settings are shown in bold type.

2. Do not set motor sheave below minimum or maximum turns open shown.

3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure

4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE— 10 TON — 60 Hz — DOWNFLOW (CONTINUED)

| Airflow | AIRFLOW CORRECTION FACTORS* |                |                 |          | COMPONENT AIRFLOW RESISTANCE |                                         |                                                                                 |                                                                                |                         |                          |
|---------|-----------------------------|----------------|-----------------|----------|------------------------------|-----------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------|--------------------------|
|         | CFM [L/s]                   | Total I kBtu/h | Sensible kBtu/h | Power kW | Wet Coil                     | Horizontal Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF3415<br>&Concentric Adapter<br>RXMC-DD02 (Flush) | Concentric Diffuser<br>RXRN-AED3415<br>&Concentric Adapter<br>RXMC-DD02 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |
|         |                             |                |                 |          |                              |                                         |                                                                                 |                                                                                |                         |                          |
|         | 3200 [1510]                 | 0.96           | 0.91            | 0.98     | 0.07 [02]                    | 0.07 [02]                               | 0.74 [18]                                                                       | 0.56 [14]                                                                      | 0.100 [02]              | 0.058 [02]               |
|         | 3300 [1557]                 | 0.97           | 0.92            | 0.99     | 0.07 [02]                    | 0.08 [02]                               | 0.79 [20]                                                                       | 0.59 [15]                                                                      | 0.104 [03]              | 0.065 [02]               |
|         | 3400 [1604]                 | 0.97           | 0.93            | 0.99     | 0.07 [02]                    | 0.09 [02]                               | 0.84 [21]                                                                       | 0.62 [15]                                                                      | 0.108 [03]              | 0.071 [02]               |
|         | 3500 [1652]                 | 0.98           | 0.94            | 0.99     | 0.08 [02]                    | 0.10 [02]                               | 0.90 [22]                                                                       | 0.66 [16]                                                                      | 0.112 [03]              | 0.077 [02]               |
|         | 3600 [1699]                 | 0.98           | 0.95            | 0.99     | 0.08 [02]                    | 0.11 [03]                               | 0.95 [24]                                                                       | 0.69 [17]                                                                      | 0.116 [03]              | 0.083 [02]               |
|         | 3700 [1746]                 | 0.99           | 0.97            | 1.00     | 0.09 [02]                    | 0.12 [03]                               | 1.00 [25]                                                                       | 0.73 [18]                                                                      | 0.120 [03]              | 0.089 [02]               |
|         | 3800 [1793]                 | 0.99           | 0.98            | 1.00     | 0.09 [02]                    | 0.13 [03]                               | 1.04 [26]                                                                       | 0.76 [19]                                                                      | 0.124 [03]              | 0.095 [02]               |
|         | 3900 [1840]                 | 1.00           | 0.99            | 1.00     | 0.09 [02]                    | 0.15 [04]                               | 1.09 [27]                                                                       | 0.80 [20]                                                                      | 0.128 [03]              | 0.102 [02]               |
|         | 4000 [1888]                 | 1.00           | 1.00            | 1.01     | 0.10 [02]                    | 0.16 [04]                               | 1.13 [28]                                                                       | 0.84 [21]                                                                      | 0.132 [03]              | 0.108 [03]               |
|         | 4100 [1935]                 | 1.00           | 1.01            | 1.01     | 0.10 [03]                    | 0.17 [04]                               | 1.19 [30]                                                                       | 0.88 [22]                                                                      | 0.136 [03]              | 0.114 [03]               |
|         | 4200 [1982]                 | 1.01           | 1.02            | 1.01     | 0.11 [03]                    | 0.19 [05]                               | 1.24 [31]                                                                       | 0.92 [23]                                                                      | 0.140 [03]              | 0.120 [03]               |
|         | 4300 [2029]                 | 1.01           | 1.03            | 1.01     | 0.11 [03]                    | 0.20 [05]                               | 1.31 [33]                                                                       | 0.97 [24]                                                                      | 0.144 [03]              | 0.126 [03]               |
|         | 4400 [2076]                 | 1.02           | 1.05            | 1.02     | 0.12 [03]                    | 0.21 [05]                               | 1.37 [34]                                                                       | 1.02 [25]                                                                      | 0.148 [04]              | 0.132 [03]               |
|         | 4500 [2123]                 | 1.02           | 1.06            | 1.02     | 0.13 [03]                    | 0.23 [06]                               | 1.43 [35]                                                                       | 1.07 [27]                                                                      | 0.152 [04]              | 0.138 [03]               |
|         | 4600 [2171]                 | 1.03           | 1.07            | 1.02     | 0.13 [03]                    | 0.24 [06]                               | 1.48 [37]                                                                       | 1.11 [28]                                                                      | 0.156 [04]              | 0.145 [04]               |
|         | 4700 [2218]                 | 1.03           | 1.08            | 1.03     | 0.14 [03]                    | 0.26 [06]                               | 1.54 [38]                                                                       | 1.15 [29]                                                                      | 0.160 [04]              | 0.151 [04]               |
|         | 4800 [2265]                 | 1.04           | 1.09            | 1.03     | 0.14 [04]                    | 0.28 [07]                               | 1.59 [40]                                                                       | 1.19 [30]                                                                      | 0.164 [04]              | 0.157 [04]               |

\*Multiply correction factor times gross performance data resulting sensible capacity cannot exceed total capacity.

[ ] Designates Metric Conversions

## AIRFLOW PERFORMANCE—10 TON — 60 Hz — SIDEFLOW

| Air<br>Flow<br>CFM [L/s] | Model RHPDYB120 Voltage 208/230, 460, 575 — 3 phase 60 Hz |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|-----------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          | External Static Pressure—Inches of Water [kPa]            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                          | 0.1 [0.02]                                                | 0.2 [0.05] | 0.3 [0.07] | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | 1.1 [0.27] | 1.2 [0.30] | 1.3 [0.32] | 1.4 [0.35] | 1.5 [0.37] | 1.6 [0.40] | 1.7 [0.42] | 1.8 [0.45] | 1.9 [0.47] | 2.0 [0.50] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RPM                      | W                                                         | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 3200 [1510]              | —                                                         | —          | 620        | 1031       | 650        | 1078       | 679        | 1128       | 708        | 1180       | 736        | 1235       | 765        | 1291       | 792        | 1349       | 820        | 1410       | 847        | 1472       | 874  | 1537 | 900  | 1604 | 926  | 1672 | 951  | 1743 | 977  | 1817 | 1001 | 1892 | 1026 | 1969 | 1050 | 2049 | 1074 | 2130 | 1097 | 2214 |
| 3300 [1557]              | 603                                                       | 1031       | 632        | 1079       | 661        | 1129       | 690        | 1181       | 719        | 1235       | 747        | 1292       | 775        | 1350       | 802        | 1411       | 829        | 1474       | 855        | 1538       | 882  | 1605 | 908  | 1674 | 933  | 1746 | 958  | 1819 | 983  | 1894 | 1007 | 1972 | 1031 | 2051 | 1055 | 2133 | 1078 | 2217 | 1101 | 2303 |
| 3400 [1604]              | 615                                                       | 1081       | 644        | 1131       | 673        | 1183       | 702        | 1238       | 730        | 1294       | 757        | 1353       | 785        | 1414       | 812        | 1476       | 838        | 1541       | 864        | 1608       | 890  | 1678 | 915  | 1749 | 941  | 1822 | 965  | 1898 | 990  | 1976 | 1014 | 2055 | 1037 | 2137 | 1060 | 2221 | 1083 | 2307 | 1106 | 2395 |
| 3500 [1652]              | 628                                                       | 1134       | 657        | 1187       | 685        | 1241       | 713        | 1298       | 741        | 1357       | 768        | 1418       | 795        | 1481       | 821        | 1546       | 847        | 1613       | 873        | 1682       | 899  | 1754 | 924  | 1827 | 948  | 1903 | 972  | 1981 | 996  | 2061 | 1020 | 2143 | 1043 | 2227 | 1066 | 2313 | 1088 | 2401 | 1110 | 2492 |
| 3600 [1699]              | 641                                                       | 1191       | 669        | 1246       | 697        | 1303       | 725        | 1362       | 752        | 1423       | 779        | 1486       | 805        | 1551       | 831        | 1619       | 857        | 1688       | 882        | 1760       | 907  | 1834 | 932  | 1909 | 956  | 1987 | 980  | 2067 | 1003 | 2149 | 1026 | 2234 | 1049 | 2320 | 1071 | 2409 | 1098 | 2499 | 1115 | 2592 |
| 3700 [1746]              | 654                                                       | 1252       | 682        | 1309       | 709        | 1368       | 737        | 1430       | 763        | 1493       | 790        | 1558       | 816        | 1626       | 841        | 1695       | 866        | 1767       | 891        | 1841       | 916  | 1917 | 940  | 1995 | 964  | 2075 | 987  | 2158 | 1010 | 2242 | 1033 | 2329 | 1055 | 2417 | 1077 | 2508 | 1099 | 2601 | 1120 | 2696 |
| 3800 [1793]              | 667                                                       | 1317       | 695        | 1376       | 722        | 1438       | 748        | 1501       | 775        | 1567       | 801        | 1634       | 826        | 1704       | 851        | 1776       | 876        | 1850       | 901        | 1926       | 925  | 2004 | 948  | 2085 | 972  | 2167 | 995  | 2252 | 1017 | 2338 | 1040 | 2427 | 1061 | 2518 | 1083 | 2611 | 1104 | 2706 | 1125 | 2804 |
| 3900 [1840]              | 681                                                       | 1386       | 708        | 1447       | 734        | 1511       | 760        | 1576       | 786        | 1644       | 812        | 1714       | 837        | 1786       | 862        | 1860       | 886        | 1937       | 910        | 2015       | 934  | 2095 | 957  | 2178 | 980  | 2263 | 1003 | 2350 | 1025 | 2439 | 1046 | 2530 | 1068 | 2623 | 1089 | 2718 | 1110 | 2815 | 1130 | 2915 |
| 4000 [1888]              | 694                                                       | 1458       | 721        | 1521       | 747        | 1587       | 773        | 1657       | 798        | 1725       | 823        | 1798       | 848        | 1872       | 872        | 1948       | 896        | 2027       | 920        | 2108       | 943  | 2190 | 966  | 2275 | 988  | 2362 | 1010 | 2451 | 1032 | 2542 | 1053 | 2636 | 1074 | 2731 | 1095 | 2829 | 1115 | 2928 | 1135 | 3030 |
| 4100 [1935]              | 708                                                       | 1534       | 734        | 1600       | 760        | 1668       | 785        | 1738       | 810        | 1810       | 835        | 1885       | 859        | 1961       | 883        | 2040       | 906        | 2121       | 930        | 2204       | 952  | 2289 | 975  | 2376 | 997  | 2465 | 1018 | 2557 | 1040 | 2650 | 1061 | 2746 | 1081 | 2843 | 1101 | 2943 | 1121 | 3045 | 1141 | 3149 |
| 4200 [1982]              | 722                                                       | 1613       | 747        | 1682       | 773        | 1752       | 797        | 1825       | 822        | 1899       | 846        | 1976       | 870        | 2055       | 894        | 2136       | 917        | 2219       | 939        | 2304       | 962  | 2391 | 984  | 2481 | 1005 | 2572 | 1027 | 2666 | 1047 | 2761 | 1068 | 2859 | 1089 | 2959 | 1108 | 3061 | 1127 | 3165 | 1146 | 3272 |
| 4300 [2029]              | 735                                                       | 1697       | 761        | 1767       | 786        | 1840       | 810        | 1915       | 834        | 1992       | 858        | 2071       | 881        | 2152       | 904        | 2235       | 927        | 2320       | 949        | 2408       | 971  | 2497 | 993  | 2589 | 1014 | 2683 | 1035 | 2779 | 1055 | 2877 | 1075 | 2977 | 1095 | 3079 | 1114 | 3183 | 1133 | 3290 | 1152 | 3398 |
| 4400 [2076]              | 750                                                       | 1784       | 787        | 1932       | 823        | 2009       | 847        | 2088       | 870        | 2169       | 893        | 2253       | 915        | 2338       | 938        | 2426       | 960        | 2515       | 981        | 2607       | 1027 | 2701 | 1023 | 2797 | 1043 | 2895 | 1063 | 2995 | 1083 | 3098 | 1102 | 3202 | 1121 | 3309 | 1140 | 3417 | 1158 | 3528 |      |      |
| 4500 [2123]              | 764                                                       | 1875       | 788        | 1950       | 812        | 2027       | 836        | 2107       | 859        | 2188       | 882        | 2271       | 904        | 2357       | 927        | 2445       | 948        | 2535       | 970        | 2627       | 991  | 2721 | 1012 | 2817 | 1032 | 2915 | 1052 | 3015 | 1071 | 3118 | 1091 | 3223 | 1110 | 3329 | 1128 | 3438 | 1146 | 3549 |      |      |
| 4600 [2171]              | 778                                                       | 1970       | 802        | 2047       | 826        | 2126       | 849        | 2208       | 872        | 2292       | 894        | 2377       | 916        | 2465       | 938        | 2555       | 959        | 2647       | 980        | 2742       | 1001 | 2838 | 1021 | 2936 | 1041 | 3037 | 1061 | 3140 | 1080 | 3244 | 1099 | 3351 | 1117 | 3460 | 1135 | 3571 | 1153 | 3685 |      |      |
| 4700 [2218]              | 793                                                       | 2068       | 816        | 2148       | 839        | 2229       | 862        | 2313       | 884        | 2399       | 906        | 2487       | 928        | 2577       | 949        | 2670       | 970        | 2764       | 991        | 2860       | 1011 | 2959 | 1031 | 3060 | 1050 | 3163 | 1069 | 3267 | 1088 | 3374 | 1107 | 3484 | 1124 | 3595 | 1142 | 3708 | 1159 | 3824 |      |      |
| 4800 [2265]              | 807                                                       | 2170       | 830        | 2252       | 853        | 2336       | 875        | 2422       | 897        | 2510       | 919        | 2601       | 940        | 2693       | 961        | 2788       | 982        | 2884       | 1002       | 2983       | 1021 | 3084 | 1041 | 3187 | 1060 | 3292 | 1078 | 3399 | 1097 | 3508 | 1115 | 3620 | 1132 | 3733 | 1149 | 3849 |      |      |      |      |

NOTE: F-Drive left of the bold line, G-Drive right of bold lines, H-Drive right of double line.

| Drive Package  | F           |     |     |     |     |     | G           |     |     |     |     |     | H           |       |       |       |     |     |
|----------------|-------------|-----|-----|-----|-----|-----|-------------|-----|-----|-----|-----|-----|-------------|-------|-------|-------|-----|-----|
| Motor H.P. [W] | 2 [1,491.4] |     |     |     |     |     | 3 [2,237.1] |     |     |     |     |     | 3 [2,237.1] |       |       |       |     |     |
| Blower Sheave  | AK79H       |     |     |     |     |     | AK79H       |     |     |     |     |     | AK79H       |       |       |       |     |     |
| Motor Sheave   | 1VL40       |     |     |     |     |     | 1VP50       |     |     |     |     |     | 1VP56       |       |       |       |     |     |
| Belt           | A49         |     |     |     |     |     | A50         |     |     |     |     |     | A51         |       |       |       |     |     |
| Turns Open     | 0           | 1   | 2   | 3   | 4   | 5   | 0           | 1   | 2   | 3   | 4   | 5   | 0           | 1     | 2     | 3     | 4   | 5   |
| RPM            | 817         | 773 | 731 | 685 | 641 | 594 | 1,038       | 996 | 954 | 912 | 866 | 824 | 1,152       | 1,117 | 1,077 | 1,035 | 994 | 950 |

NOTES: 1. Factory sheave settings are shown in bold type.

2. Do not set motor sheave below minimum or maximum turns open shown.

3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure

4. Drive data shown is for horizontal airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure..

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE— 10 TON — 60 Hz — SIDEFLOW (CONTINUED)

| Airflow     | AIRFLOW CORRECTION FACTORS* |              |                 |             | COMPONENT AIRFLOW RESISTANCE |                                      |                                                                         |                                                                        |              |                      |                       |
|-------------|-----------------------------|--------------|-----------------|-------------|------------------------------|--------------------------------------|-------------------------------------------------------------------------|------------------------------------------------------------------------|--------------|----------------------|-----------------------|
|             | CFM [L/s]                   | Total kBTu/h | Sensible kBTu/h | Power kW    | Wet Coil                     | Horizontal Economizer RA Damper Open | Resistance — Inches of Water [kPa]                                      |                                                                        |              | Pressure Drop MERV 8 | Pressure Drop MERV 13 |
|             |                             |              |                 |             |                              |                                      | Concentric Diffuser RXRN-AEF3415 & Concentric Adapter RXMC-DD02 (Flush) | Concentric Diffuser RXRN-AED3415 & Concentric Adapter RXMC-DD02 (Drop) |              |                      |                       |
| 3200 [1510] | 0.96                        | 0.91         | 0.98            | 0.07 [0.02] | 0.31 [0.08]                  | 0.74 [0.18]                          | 0.56 [0.14]                                                             | 0.100 [0.02]                                                           | 0.100 [0.02] | 0.058 [0.02]         |                       |
| 3300 [1557] | 0.97                        | 0.92         | 0.99            | 0.07 [0.02] | 0.36 [0.09]                  | 0.79 [0.20]                          | 0.59 [0.15]                                                             | 0.104 [0.03]                                                           | 0.104 [0.03] | 0.065 [0.02]         |                       |
| 3400 [1604] | 0.97                        | 0.93         | 0.99            | 0.07 [0.02] | 0.42 [0.10]                  | 0.84 [0.21]                          | 0.62 [0.15]                                                             | 0.108 [0.03]                                                           | 0.108 [0.03] | 0.071 [0.02]         |                       |
| 3500 [1652] | 0.98                        | 0.94         | 0.99            | 0.08 [0.02] | 0.47 [0.12]                  | 0.90 [0.22]                          | 0.66 [0.16]                                                             | 0.112 [0.03]                                                           | 0.112 [0.03] | 0.077 [0.02]         |                       |
| 3600 [1699] | 0.98                        | 0.95         | 0.99            | 0.08 [0.02] | 0.52 [0.13]                  | 0.95 [0.24]                          | 0.69 [0.17]                                                             | 0.116 [0.03]                                                           | 0.116 [0.03] | 0.083 [0.02]         |                       |
| 3700 [1746] | 0.99                        | 0.97         | 1.00            | 0.09 [0.02] | 0.58 [0.14]                  | 1.00 [0.25]                          | 0.73 [0.18]                                                             | 0.120 [0.03]                                                           | 0.120 [0.03] | 0.089 [0.02]         |                       |
| 3800 [1793] | 0.99                        | 0.98         | 1.00            | 0.09 [0.02] | 0.63 [0.16]                  | 1.04 [0.26]                          | 0.76 [0.19]                                                             | 0.124 [0.03]                                                           | 0.124 [0.03] | 0.095 [0.02]         |                       |
| 3900 [1840] | 1.00                        | 0.99         | 1.00            | 0.09 [0.02] | 0.68 [0.17]                  | 1.09 [0.27]                          | 0.80 [0.20]                                                             | 0.128 [0.03]                                                           | 0.128 [0.03] | 0.102 [0.02]         |                       |
| 4000 [1888] | 1.00                        | 1.00         | 1.01            | 0.10 [0.02] | 0.73 [0.18]                  | 1.13 [0.28]                          | 0.84 [0.21]                                                             | 0.132 [0.03]                                                           | 0.132 [0.03] | 0.108 [0.03]         |                       |
| 4100 [1935] | 1.00                        | 1.01         | 1.01            | 0.10 [0.03] | 0.78 [0.19]                  | 1.19 [0.30]                          | 0.88 [0.22]                                                             | 0.136 [0.03]                                                           | 0.136 [0.03] | 0.114 [0.03]         |                       |
| 4200 [1982] | 1.01                        | 1.02         | 1.01            | 0.11 [0.03] | 0.83 [0.21]                  | 1.24 [0.31]                          | 0.92 [0.23]                                                             | 0.140 [0.03]                                                           | 0.140 [0.03] | 0.120 [0.03]         |                       |
| 4300 [2029] | 1.01                        | 1.03         | 1.01            | 0.11 [0.03] | 0.88 [0.22]                  | 1.31 [0.33]                          | 0.97 [0.24]                                                             | 0.144 [0.03]                                                           | 0.144 [0.03] | 0.126 [0.03]         |                       |
| 4400 [2076] | 1.02                        | 1.05         | 1.02            | 0.12 [0.03] | 0.93 [0.23]                  | 1.37 [0.34]                          | 1.02 [0.25]                                                             | 0.148 [0.04]                                                           | 0.148 [0.04] | 0.132 [0.03]         |                       |
| 4500 [2123] | 1.02                        | 1.06         | 1.02            | 0.13 [0.03] | 0.98 [0.24]                  | 1.43 [0.35]                          | 1.07 [0.27]                                                             | 0.152 [0.04]                                                           | 0.152 [0.04] | 0.138 [0.03]         |                       |
| 4600 [2171] | 1.03                        | 1.07         | 1.02            | 0.13 [0.03] | 1.03 [0.26]                  | 1.48 [0.37]                          | 1.11 [0.28]                                                             | 0.156 [0.04]                                                           | 0.156 [0.04] | 0.145 [0.04]         |                       |
| 4700 [2218] | 1.03                        | 1.08         | 1.03            | 0.14 [0.03] | 1.07 [0.27]                  | 1.54 [0.38]                          | 1.15 [0.29]                                                             | 0.160 [0.04]                                                           | 0.160 [0.04] | 0.151 [0.04]         |                       |
| 4800 [2265] | 1.04                        | 1.09         | 1.03            | 0.14 [0.04] | 1.12 [0.28]                  | 1.59 [0.40]                          | 1.19 [0.30]                                                             | 0.164 [0.04]                                                           | 0.164 [0.04] | 0.157 [0.04]         |                       |

\*Multiply correction factor times gross performance data resulting sensible capacity cannot exceed total capacity.

[ ] Designates Metric Conversions

| ELECTRICAL DATA – RHPDYB SERIES |                                                               |         |                  |         |                  |         |                  |
|---------------------------------|---------------------------------------------------------------|---------|------------------|---------|------------------|---------|------------------|
|                                 |                                                               | 090ACF  | 090ACG<br>090ACH | 090ADF  | 090ADG<br>090ADH | 090AYF  | 090AYG<br>090AYH |
| Unit Information                | Unit Operating Voltage Range                                  | 187-253 | 187-253          | 414-506 | 414-506          | 518-633 | 518-633          |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | Hz                                                            | 60      | 60               | 60      | 60               | 60      | 60               |
|                                 | Minimum Circuit Ampacity                                      | 43/43   | 46/46            | 20      | 21               | 16      | 17               |
|                                 | Minimum Circuit Ampacity with Power Exhaust                   | 48/48   | 51/51            | 22      | 24               | 17      | 18               |
|                                 | Minimum Overcurrent Protection Device Size                    | 50/50   | 60/60            | 25      | 25               | 20      | 20               |
|                                 | Minimum Overcurrent Protection Device Size with Power Exhaust | 60/60   | 60/60            | 25      | 30               | 20      | 20               |
|                                 | Maximum Overcurrent Protection Device Size                    | 60/60   | 70/70            | 25      | 30               | 20      | 25               |
|                                 | Maximum Overcurrent Protection Device Size with Power Exhaust | 70/70   | 70/70            | 30      | 30               | 25      | 25               |
| Compressor Motor                | No.                                                           | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | Amps (RLA), Comp. 1                                           | 25.2    | 25.2             | 10.6    | 10.6             | 8.6     | 8.6              |
|                                 | Amps (LRA), Comp. 1                                           | 178.5   | 178.5            | 79.1    | 79.1             | 65.0    | 65.0             |
| Condenser Motor                 | No.                                                           | 2       | 2                | 2       | 2                | 2       | 2                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | HP                                                            | 1/2     | 1/2              | 1/2     | 1/2              | 1/2     | 1/2              |
|                                 | Amps (FLA, each)                                              | 2.4     | 2.4              | 1.5     | 1.5              | 1.1     | 1.1              |
|                                 | Amps (LRA, each)                                              | 5.6     | 5.6              | 3.1     | 3.1              | 2.5     | 2.5              |
| Evaporator Fan                  | No.                                                           | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | HP                                                            | 2       | 3                | 2       | 3                | 2       | 3                |
|                                 | Amps (FLA, each)                                              | 6.2     | 9.2              | 3.0     | 4.6              | 2.4     | 3.5              |
|                                 | Amps (LRA, each)                                              | 47.0    | 74.5             | 24.0    | 38.1             | 19.0    | 30.0             |

| ELECTRICAL DATA – RHPDYB SERIES |                                                               |         |                  |         |                  |         |                  |
|---------------------------------|---------------------------------------------------------------|---------|------------------|---------|------------------|---------|------------------|
|                                 |                                                               | 102ACF  | 102ACG<br>102ACH | 102ADF  | 102ADG<br>102ADH | 102AYF  | 102AYG<br>102AYH |
| Unit Information                | Unit Operating Voltage Range                                  | 187-253 | 187-253          | 414-506 | 414-506          | 518-633 | 518-633          |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | Hz                                                            | 60      | 60               | 60      | 60               | 60      | 60               |
|                                 | Minimum Circuit Ampacity                                      | 45/45   | 48/48            | 22      | 24               | 17      | 18               |
|                                 | Minimum Circuit Ampacity with Power Exhaust                   | 50/50   | 53/53            | 25      | 26               | 18      | 19               |
|                                 | Minimum Overcurrent Protection Device Size                    | 60/60   | 60/60            | 25      | 30               | 20      | 20               |
|                                 | Minimum Overcurrent Protection Device Size with Power Exhaust | 60/60   | 60/60            | 30      | 30               | 20      | 25               |
|                                 | Maximum Overcurrent Protection Device Size                    | 70/70   | 70/70            | 30      | 35               | 25      | 25               |
|                                 | Maximum Overcurrent Protection Device Size with Power Exhaust | 70/70   | 70/70            | 35      | 35               | 25      | 25               |
| Compressor Motor                | No.                                                           | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | Amps (RLA), Comp. 1                                           | 26.8    | 26.8             | 12.5    | 12.5             | 9.4     | 9.4              |
|                                 | Amps (LRA), Comp. 1                                           | 190.7   | 190.7            | 100.2   | 100.2            | 65.0    | 65.0             |
| Condenser Motor                 | No.                                                           | 2       | 2                | 2       | 2                | 2       | 2                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | HP                                                            | 1/2     | 1/2              | 1/2     | 1/2              | 1/2     | 1/2              |
|                                 | Amps (FLA, each)                                              | 2.4     | 2.4              | 1.5     | 1.5              | 1.5     | 1.5              |
|                                 | Amps (LRA, each)                                              | 5.6     | 5.6              | 3.1     | 3.1              | 3.1     | 3.1              |
| Evaporator Fan                  | No.                                                           | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | HP                                                            | 2       | 3                | 2       | 3                | 2       | 3                |
|                                 | Amps (FLA, each)                                              | 6.2     | 9.2              | 3.0     | 4.6              | 2.4     | 3.5              |
|                                 | Amps (LRA, each)                                              | 47.0    | 74.5             | 24.0    | 38.1             | 19.0    | 30.0             |

| ELECTRICAL DATA – RHPDYB SERIES |                                                               |         |                  |         |                  |         |                  |
|---------------------------------|---------------------------------------------------------------|---------|------------------|---------|------------------|---------|------------------|
|                                 |                                                               | 120ACF  | 120ACG<br>120ACH | 120ADF  | 120ADG<br>120ADH | 120AYF  | 120AYG<br>120AYH |
| Unit Information                | Unit Operating Voltage Range                                  | 187-253 | 187-253          | 414-506 | 414-506          | 518-633 | 518-633          |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | Hz                                                            | 60      | 60               | 60      | 60               | 60      | 60               |
|                                 | Minimum Circuit Ampacity                                      | 45/45   | 48/48            | 24      | 26               | 19      | 21               |
|                                 | Minimum Circuit Ampacity with Power Exhaust                   | 50/50   | 53/53            | 27      | 28               | 21      | 22               |
|                                 | Minimum Overcurrent Protection Device Size                    | 60/60   | 60/60            | 30      | 30               | 25      | 25               |
|                                 | Minimum Overcurrent Protection Device Size with Power Exhaust | 60/60   | 60/60            | 30      | 35               | 25      | 25               |
|                                 | Maximum Overcurrent Protection Device Size                    | 70/70   | 70/70            | 35      | 35               | 30      | 30               |
|                                 | Maximum Overcurrent Protection Device Size with Power Exhaust | 70/70   | 70/70            | 40      | 40               | 30      | 30               |
| Compressor Motor                | No.                                                           | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | Amps (RLA), Comp. 1                                           | 26.5    | 26.5             | 14.0    | 14.0             | 11.5    | 11.5             |
|                                 | Amps (LRA), Comp. 1                                           | 255.0   | 255.0            | 123.0   | 123.0            | 93.7    | 93.7             |
| Condenser Motor                 | No.                                                           | 2       | 2                | 2       | 2                | 2       | 2                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | HP                                                            | 1/2     | 1/2              | 1/2     | 1/2              | 1/2     | 1/2              |
|                                 | Amps (FLA, each)                                              | 2.4     | 2.4              | 1.5     | 1.5              | 1.5     | 1.5              |
|                                 | Amps (LRA, each)                                              | 5.6     | 5.6              | 3.1     | 3.1              | 3.1     | 3.1              |
| Evaporator Fan                  | No.                                                           | 1       | 1                | 1       | 1                | 1       | 1                |
|                                 | Volts                                                         | 208/230 | 208/230          | 460     | 460              | 575     | 575              |
|                                 | Phase                                                         | 3       | 3                | 3       | 3                | 3       | 3                |
|                                 | HP                                                            | 2       | 3                | 2       | 3                | 2       | 3                |
|                                 | Amps (FLA, each)                                              | 6.2     | 9.2              | 3.0     | 4.6              | 2.4     | 3.5              |
|                                 | Amps (LRA, each)                                              | 47.0    | 74.5             | 24.0    | 38.1             | 19.0    | 30.0             |

| 208/230V THREE PHASE, 60 Hz, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION |                    |                               |                   |                            |                                            |                                |                                                                 |                                     |                                        |                                    |                                                                  |                                            |                                                                    |
|---------------------------------------------------------------------------------------------|--------------------|-------------------------------|-------------------|----------------------------|--------------------------------------------|--------------------------------|-----------------------------------------------------------------|-------------------------------------|----------------------------------------|------------------------------------|------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------|
| Single Power Supply For Both Unit and Heater Kit                                            |                    |                               |                   |                            |                                            |                                | Separate Power Supply For Both Unit and Heater Kit              |                                     |                                        |                                    |                                                                  |                                            |                                                                    |
| Unit Model No.<br>RHPDYB                                                                    | Heater Kit         |                               |                   | Air Conditioner            |                                            |                                |                                                                 | Heater Kit                          |                                        | Air Conditioner                    |                                                                  |                                            |                                                                    |
|                                                                                             | Model No.<br>RXJJ- | Rated Heater kW<br>@ 208/230V | Heater Kit<br>FLA | Unit Min. Ckt.<br>Amperage | Unit Min. Ckt.<br>Optional Powered Exhaust | Max. Fuse or<br>Ckt. Bkr. Size | Max. Fuse or Ckt.<br>Bkr. Size With<br>Optional Powered Exhaust | Heater Kit<br>Min. Ckt.<br>Amperage | Heater Kit<br>Max Fuse or<br>Ckt. Bkr. | Air Cond.<br>Min. Ckt.<br>Amperage | Air Cond. Min.<br>Ckt. Amperage with<br>Optional Powered Exhaust | Air Cond. Max<br>Fuse or Ckt.<br>Bkt. Size | Air Cond. Max<br>Ckt. Amperage<br>with Optional<br>Powered Exhaust |
| 090ACF                                                                                      | NONE*              | —                             | —                 | 43/43                      | 48/48                                      | 60/60                          | 70/70                                                           | —                                   | —                                      | 43/43                              | 48/48                                                            | 60/60                                      | 70/70                                                              |
|                                                                                             | DD10CP             | 7.4/9.9                       | 20.6/23.8         | 69/73                      | 74/78                                      | 80/90                          | 90/90                                                           | 26/30                               | 30/30                                  | 43/43                              | 48/48                                                            | 60/60                                      | 70/70                                                              |
|                                                                                             | DD15CP             | 10.8/14.4                     | 30.0/34.6         | 80/86                      | 86/92                                      | 90/100                         | 100/100                                                         | 38/44                               | 40/45                                  | 43/43                              | 48/48                                                            | 60/60                                      | 70/70                                                              |
|                                                                                             | DD20CP             | 14.8/19.8                     | 41.2/47.6         | 94/102                     | 100/108                                    | 100/110                        | 110/110                                                         | 52/60                               | 60/60                                  | 43/43                              | 48/48                                                            | 60/60                                      | 70/70                                                              |
|                                                                                             | DD30CP             | 21.6/28.8                     | 60.0/69.3         | 118/130                    | 123/135                                    | 125/150                        | 125/150                                                         | 75/87                               | 80/90                                  | 43/43                              | 48/48                                                            | 60/60                                      | 70/70                                                              |
| 090ACG                                                                                      | DD40CP             | 29.7/39.6                     | 82.4/95.2         | 146/162                    | 151/167                                    | 150/175                        | 175/175                                                         | 103/119                             | 110/125                                | 43/43                              | 48/48                                                            | 60/60                                      | 70/70                                                              |
|                                                                                             | NONE*              | —                             | —                 | 46/46                      | 51/51                                      | 70/70                          | 70/70                                                           | —                                   | —                                      | 46/46                              | 51/51                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD10CP             | 7.4/9.9                       | 20.6/23.8         | 72/76                      | 77/81                                      | 90/90                          | 90/90                                                           | 26/30                               | 30/30                                  | 46/46                              | 51/51                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD15CP             | 10.8/14.4                     | 30.0/34.6         | 83/89                      | 89/95                                      | 100/100                        | 100/110                                                         | 38/44                               | 40/45                                  | 46/46                              | 51/51                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD20CP             | 14.8/19.8                     | 41.2/47.6         | 97/105                     | 103/111                                    | 110/110                        | 110/125                                                         | 52/60                               | 60/60                                  | 46/46                              | 51/51                                                            | 70/70                                      | 70/70                                                              |
| 090ACH                                                                                      | DD30CP             | 21.6/28.8                     | 60.0/69.3         | 121/133                    | 126/138                                    | 125/150                        | 150/150                                                         | 75/87                               | 80/90                                  | 46/46                              | 51/51                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD40CP             | 29.7/39.6                     | 82.4/95.2         | 149/165                    | 154/170                                    | 150/175                        | 175/175                                                         | 103/119                             | 110/125                                | 46/46                              | 51/51                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | NONE*              | —                             | —                 | 45/45                      | 50/50                                      | 70/70                          | 70/70                                                           | —                                   | —                                      | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD10CP             | 7.4/9.9                       | 20.6/23.8         | 71/75                      | 76/80                                      | 90/90                          | 90/100                                                          | 26/30                               | 30/30                                  | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD15CP             | 10.8/14.4                     | 30.0/34.6         | 82/88                      | 88/94                                      | 100/100                        | 100/110                                                         | 38/44                               | 40/45                                  | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
| 102ACF                                                                                      | DD20CP             | 14.8/19.8                     | 41.2/47.6         | 96/104                     | 102/110                                    | 110/110                        | 110/110                                                         | 52/60                               | 60/60                                  | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD30CP             | 21.6/28.8                     | 60.0/69.3         | 120/132                    | 125/137                                    | 125/150                        | 125/150                                                         | 75/87                               | 80/90                                  | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD40CP             | 29.7/39.6                     | 82.4/95.2         | 148/164                    | 153/169                                    | 150/175                        | 175/175                                                         | 103/119                             | 110/125                                | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | NONE*              | —                             | —                 | 48/48                      | 53/53                                      | 70/70                          | 70/70                                                           | —                                   | —                                      | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD10CP             | 7.4/9.9                       | 20.6/23.8         | 74/78                      | 79/83                                      | 90/90                          | 100/100                                                         | 26/30                               | 30/30                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
| 102ACG                                                                                      | DD15CP             | 10.8/14.4                     | 30.0/34.6         | 85/91                      | 91/97                                      | 100/100                        | 100/110                                                         | 38/44                               | 40/45                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD20CP             | 14.8/19.8                     | 41.2/47.6         | 99/107                     | 105/113                                    | 110/110                        | 110/125                                                         | 52/60                               | 60/60                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD30CP             | 21.6/28.8                     | 60.0/69.3         | 123/135                    | 128/140                                    | 125/150                        | 150/150                                                         | 75/87                               | 80/90                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD40CP             | 29.7/39.6                     | 82.4/95.2         | 151/167                    | 156/172                                    | 175/175                        | 175/175                                                         | 103/119                             | 110/125                                | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | NONE*              | —                             | —                 | 48/48                      | 53/53                                      | 70/70                          | 70/70                                                           | —                                   | —                                      | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
| 102ACH                                                                                      | DD10CP             | 7.4/9.9                       | 20.6/23.8         | 74/78                      | 79/83                                      | 90/90                          | 100/100                                                         | 26/30                               | 30/30                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD15CP             | 10.8/14.4                     | 30.0/34.6         | 85/91                      | 91/97                                      | 100/100                        | 100/110                                                         | 38/44                               | 40/45                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD20CP             | 14.8/19.8                     | 41.2/47.6         | 99/107                     | 105/113                                    | 110/110                        | 110/125                                                         | 52/60                               | 60/60                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD30CP             | 21.6/28.8                     | 60.0/69.3         | 123/135                    | 128/140                                    | 125/150                        | 150/150                                                         | 75/87                               | 80/90                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD40CP             | 29.7/39.6                     | 82.4/95.2         | 151/167                    | 156/172                                    | 175/175                        | 175/175                                                         | 103/119                             | 110/125                                | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
| 120ACF                                                                                      | NONE*              | —                             | —                 | 45/45                      | 50/50                                      | 70/70                          | 70/70                                                           | —                                   | —                                      | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD10CP             | 7.4/9.9                       | 20.6/23.8         | 70/74                      | 76/80                                      | 90/90                          | 90/90                                                           | 26/30                               | 30/30                                  | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD15CP             | 10.8/14.4                     | 30.0/34.6         | 82/88                      | 88/93                                      | 100/100                        | 100/110                                                         | 38/44                               | 40/45                                  | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD20CP             | 14.8/19.8                     | 41.2/47.6         | 96/104                     | 102/110                                    | 110/110                        | 110/110                                                         | 52/60                               | 60/60                                  | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD30CP             | 21.6/28.8                     | 60.0/69.3         | 120/131                    | 125/137                                    | 125/150                        | 125/150                                                         | 75/87                               | 80/90                                  | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
| 120ACG                                                                                      | DD40CP             | 29.7/39.6                     | 82.4/95.2         | 148/164                    | 153/169                                    | 150/175                        | 175/175                                                         | 103/119                             | 110/125                                | 45/45                              | 50/50                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | NONE*              | —                             | —                 | 48/48                      | 53/53                                      | 70/70                          | 70/70                                                           | —                                   | —                                      | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD10CP             | 7.4/9.9                       | 20.6/23.8         | 73/77                      | 79/83                                      | 90/90                          | 90/100                                                          | 26/30                               | 30/30                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD15CP             | 10.8/14.4                     | 30.0/34.6         | 85/91                      | 91/96                                      | 100/100                        | 100/110                                                         | 38/44                               | 40/45                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD20CP             | 14.8/19.8                     | 41.2/47.6         | 99/107                     | 105/113                                    | 110/110                        | 110/125                                                         | 52/60                               | 60/60                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
| 120ACH                                                                                      | DD30CP             | 21.6/28.8                     | 60.0/69.3         | 123/134                    | 128/140                                    | 125/150                        | 150/150                                                         | 75/87                               | 80/90                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD40CP             | 29.7/39.6                     | 82.4/95.2         | 151/167                    | 156/172                                    | 175/175                        | 175/175                                                         | 103/119                             | 110/125                                | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | NONE*              | —                             | —                 | 48/48                      | 53/53                                      | 70/70                          | 70/70                                                           | —                                   | —                                      | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD10CP             | 7.4/9.9                       | 20.6/23.8         | 73/77                      | 79/83                                      | 90/90                          | 90/100                                                          | 26/30                               | 30/30                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |
|                                                                                             | DD15CP             | 10.8/14.4                     | 30.0/34.6         | 85/91                      | 91/96                                      | 100/100                        | 100/110                                                         | 38/44                               | 40/45                                  | 48/48                              | 53/53                                                            | 70/70                                      | 70/70                                                              |

\*= For Canadian use only. Uses "p" fuses for inductive circuit.

| 460V THREE PHASE, 60 Hz, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION |                    |                               |                   |                            |                                            |                                |                                                                 |                                     |                                        |                                    |                                                                  |                                            |                                                                    |  |
|-----------------------------------------------------------------------------------------|--------------------|-------------------------------|-------------------|----------------------------|--------------------------------------------|--------------------------------|-----------------------------------------------------------------|-------------------------------------|----------------------------------------|------------------------------------|------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------|--|
| Separate Power Supply For Both Unit and Heater Kit                                      |                    |                               |                   |                            |                                            |                                |                                                                 |                                     |                                        |                                    |                                                                  |                                            |                                                                    |  |
| Unit Model No.<br>RHPDYB                                                                | Heater Kit         |                               |                   | Air Conditioner            |                                            |                                |                                                                 | Heater Kit                          |                                        | Air Conditioner                    |                                                                  |                                            |                                                                    |  |
|                                                                                         | Model No.<br>RXJJ- | Rated Heater kW<br>@ 208/230V | Heater Kit<br>FLA | Unit Min. Ckt.<br>Ampacity | Unit Min. Ckt.<br>Optional Powered Exhaust | Max. Fuse or<br>Ckt. Bkr. Size | Max. Fuse or Ckt.<br>Bkr. Size With<br>Optional Powered Exhaust | Heater Kit<br>Min. Ckt.<br>Ampacity | Heater Kit<br>Max Fuse or<br>Ckt. Bkr. | Air Cond.<br>Min. Ckt.<br>Ampacity | Air Cond. Min.<br>Ckt. Ampacity with<br>Optional Powered Exhaust | Air Cond. Max<br>Fuse or Ckt.<br>Bkr. Size | Air Cond. Max<br>Ckt. Ampacity<br>with Optional<br>Powered Exhaust |  |
| 090ADF                                                                                  | NONE*              | —                             | —                 | 20                         | 22                                         | 25                             | 30                                                              | —                                   | —                                      | 20                                 | 22                                                               | 25                                         | 30                                                                 |  |
|                                                                                         | DD10DNV            | 9.9                           | 11.9              | 35                         | 37                                         | 40                             | 40                                                              | 15                                  | 15                                     | 20                                 | 22                                                               | 25                                         | 30                                                                 |  |
|                                                                                         | DD15DNV            | 14.4                          | 17.3              | 41                         | 44                                         | 45                             | 45                                                              | 22                                  | 25                                     | 20                                 | 22                                                               | 25                                         | 30                                                                 |  |
|                                                                                         | DD20DNV            | 19.8                          | 23.8              | 49                         | 52                                         | 60                             | 60                                                              | 30                                  | 30                                     | 20                                 | 22                                                               | 25                                         | 30                                                                 |  |
|                                                                                         | DD30DNV            | 28.8                          | 34.6              | 63                         | 66                                         | 70                             | 70                                                              | 44                                  | 45                                     | 20                                 | 22                                                               | 25                                         | 30                                                                 |  |
| 090ADG                                                                                  | DD40DNV            | 39.6                          | 47.6              | 79                         | 82                                         | 80                             | 90                                                              | 60                                  | 60                                     | 20                                 | 22                                                               | 25                                         | 30                                                                 |  |
|                                                                                         | NONE*              | —                             | —                 | 21                         | 24                                         | 30                             | 30                                                              | —                                   | —                                      | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | DD10DNV            | 9.9                           | 11.9              | 36                         | 39                                         | 40                             | 45                                                              | 15                                  | 15                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | DD15DNV            | 14.4                          | 17.3              | 43                         | 46                                         | 45                             | 50                                                              | 22                                  | 25                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | DD20DNV            | 19.8                          | 23.8              | 51                         | 54                                         | 60                             | 60                                                              | 30                                  | 30                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
| 090ADH                                                                                  | DD30DNV            | 28.8                          | 34.6              | 65                         | 67                                         | 70                             | 70                                                              | 44                                  | 45                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | DD40DNV            | 39.6                          | 47.6              | 81                         | 84                                         | 90                             | 90                                                              | 60                                  | 60                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | NONE*              | —                             | —                 | 21                         | 24                                         | 30                             | 30                                                              | —                                   | —                                      | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | DD10DNV            | 9.9                           | 11.9              | 36                         | 39                                         | 40                             | 45                                                              | 15                                  | 15                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | DD15DNV            | 14.4                          | 17.3              | 43                         | 46                                         | 45                             | 50                                                              | 22                                  | 25                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
| 102ADF                                                                                  | DD20DNV            | 19.8                          | 23.8              | 51                         | 54                                         | 60                             | 60                                                              | 30                                  | 30                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | DD30DNV            | 28.8                          | 34.6              | 65                         | 67                                         | 70                             | 70                                                              | 44                                  | 45                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | DD40DNV            | 39.6                          | 47.6              | 82                         | 84                                         | 90                             | 90                                                              | 60                                  | 60                                     | 21                                 | 24                                                               | 30                                         | 30                                                                 |  |
|                                                                                         | NONE*              | —                             | —                 | 22                         | 25                                         | 30                             | 35                                                              | —                                   | —                                      | 22                                 | 25                                                               | 30                                         | 35                                                                 |  |
|                                                                                         | DD10DNV            | 9.9                           | 11.9              | 37                         | 40                                         | 45                             | 45                                                              | 15                                  | 15                                     | 22                                 | 25                                                               | 30                                         | 35                                                                 |  |
| 102ADG                                                                                  | DD15DNV            | 14.4                          | 17.3              | 44                         | 46                                         | 50                             | 50                                                              | 22                                  | 25                                     | 22                                 | 25                                                               | 30                                         | 35                                                                 |  |
|                                                                                         | DD20DNV            | 19.8                          | 23.8              | 52                         | 55                                         | 60                             | 60                                                              | 30                                  | 30                                     | 22                                 | 25                                                               | 30                                         | 35                                                                 |  |
|                                                                                         | DD30DNV            | 28.8                          | 34.6              | 65                         | 68                                         | 70                             | 70                                                              | 44                                  | 45                                     | 22                                 | 25                                                               | 30                                         | 35                                                                 |  |
|                                                                                         | DD40DNV            | 39.6                          | 47.6              | 82                         | 84                                         | 90                             | 90                                                              | 60                                  | 60                                     | 22                                 | 25                                                               | 30                                         | 35                                                                 |  |
|                                                                                         | NONE*              | —                             | —                 | 24                         | 26                                         | 35                             | 35                                                              | —                                   | —                                      | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
| 102ADH                                                                                  | DD10DNV            | 9.9                           | 11.9              | 39                         | 41                                         | 45                             | 45                                                              | 15                                  | 15                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | DD15DNV            | 14.4                          | 17.3              | 45                         | 48                                         | 50                             | 50                                                              | 22                                  | 25                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | DD20DNV            | 19.8                          | 23.8              | 53                         | 56                                         | 60                             | 60                                                              | 30                                  | 30                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | DD30DNV            | 28.8                          | 34.6              | 67                         | 70                                         | 70                             | 70                                                              | 44                                  | 45                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | DD40DNV            | 39.6                          | 47.6              | 83                         | 86                                         | 90                             | 90                                                              | 60                                  | 60                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
| 120ADF                                                                                  | NONE*              | —                             | —                 | 24                         | 26                                         | 35                             | 35                                                              | —                                   | —                                      | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | DD10DNV            | 9.9                           | 11.9              | 39                         | 41                                         | 45                             | 50                                                              | 15                                  | 15                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | DD15DNV            | 14.4                          | 17.3              | 45                         | 48                                         | 50                             | 50                                                              | 22                                  | 25                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | DD20DNV            | 19.8                          | 23.8              | 53                         | 56                                         | 60                             | 60                                                              | 30                                  | 30                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | DD30DNV            | 28.8                          | 34.6              | 67                         | 70                                         | 70                             | 70                                                              | 44                                  | 45                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
| 120ADG                                                                                  | DD40DNV            | 39.6                          | 47.6              | 83                         | 86                                         | 90                             | 90                                                              | 60                                  | 60                                     | 24                                 | 26                                                               | 35                                         | 35                                                                 |  |
|                                                                                         | NONE*              | —                             | —                 | 24                         | 27                                         | 35                             | 40                                                              | —                                   | —                                      | 24                                 | 27                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD10DNV            | 9.9                           | 11.9              | 39                         | 42                                         | 45                             | 50                                                              | 15                                  | 15                                     | 24                                 | 27                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD15DNV            | 14.4                          | 17.3              | 46                         | 48                                         | 50                             | 50                                                              | 22                                  | 25                                     | 24                                 | 27                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD20DNV            | 19.8                          | 23.8              | 54                         | 56                                         | 60                             | 60                                                              | 30                                  | 30                                     | 24                                 | 27                                                               | 35                                         | 40                                                                 |  |
| 120ADH                                                                                  | DD30DNV            | 28.8                          | 34.6              | 67                         | 70                                         | 70                             | 70                                                              | 44                                  | 45                                     | 24                                 | 27                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD40DNV            | 39.6                          | 47.6              | 83                         | 86                                         | 90                             | 90                                                              | 60                                  | 60                                     | 24                                 | 27                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | NONE*              | —                             | —                 | 26                         | 28                                         | 35                             | 40                                                              | —                                   | —                                      | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD10DNV            | 9.9                           | 11.9              | 40                         | 43                                         | 50                             | 50                                                              | 15                                  | 15                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD15DNV            | 14.4                          | 17.3              | 47                         | 50                                         | 50                             | 50                                                              | 22                                  | 25                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
| 120ADH                                                                                  | DD20DNV            | 19.8                          | 23.8              | 55                         | 58                                         | 60                             | 60                                                              | 30                                  | 30                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD30DNV            | 28.8                          | 34.6              | 69                         | 72                                         | 70                             | 80                                                              | 44                                  | 45                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD40DNV            | 39.6                          | 47.6              | 85                         | 88                                         | 90                             | 90                                                              | 60                                  | 60                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | NONE*              | —                             | —                 | 26                         | 28                                         | 35                             | 40                                                              | —                                   | —                                      | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD10DNV            | 9.9                           | 11.9              | 40                         | 43                                         | 50                             | 50                                                              | 15                                  | 15                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
| 120ADH                                                                                  | DD15DNV            | 14.4                          | 17.3              | 47                         | 50                                         | 50                             | 50                                                              | 22                                  | 25                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD20DNV            | 19.8                          | 23.8              | 55                         | 58                                         | 60                             | 60                                                              | 30                                  | 30                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD30DNV            | 28.8                          | 34.6              | 69                         | 72                                         | 70                             | 80                                                              | 44                                  | 45                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD40DNV            | 39.6                          | 47.6              | 85                         | 88                                         | 90                             | 90                                                              | 60                                  | 60                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | NONE*              | —                             | —                 | 26                         | 28                                         | 35                             | 40                                                              | —                                   | —                                      | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
| 120ADH                                                                                  | DD10DNV            | 9.9                           | 11.9              | 40                         | 43                                         | 50                             | 50                                                              | 15                                  | 15                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD15DNV            | 14.4                          | 17.3              | 47                         | 50                                         | 50                             | 50                                                              | 22                                  | 25                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD20DNV            | 19.8                          | 23.8              | 55                         | 58                                         | 60                             | 60                                                              | 30                                  | 30                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD30DNV            | 28.8                          | 34.6              | 69                         | 72                                         | 70                             | 80                                                              | 44                                  | 45                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |
|                                                                                         | DD40DNV            | 39.6                          | 47.6              | 85                         | 88                                         | 90                             | 90                                                              | 60                                  | 60                                     | 26                                 | 28                                                               | 35                                         | 40                                                                 |  |

\* = For Canadian use only. Uses "P" fuses for inductive circuit.

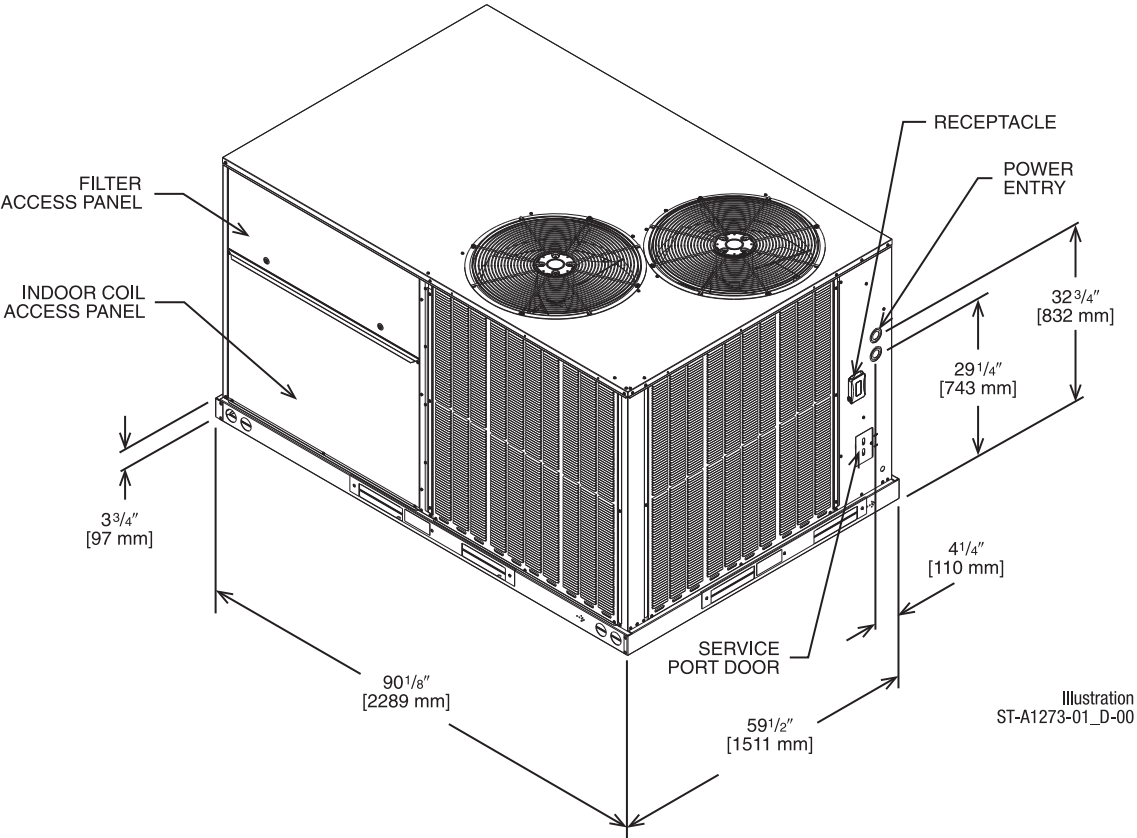
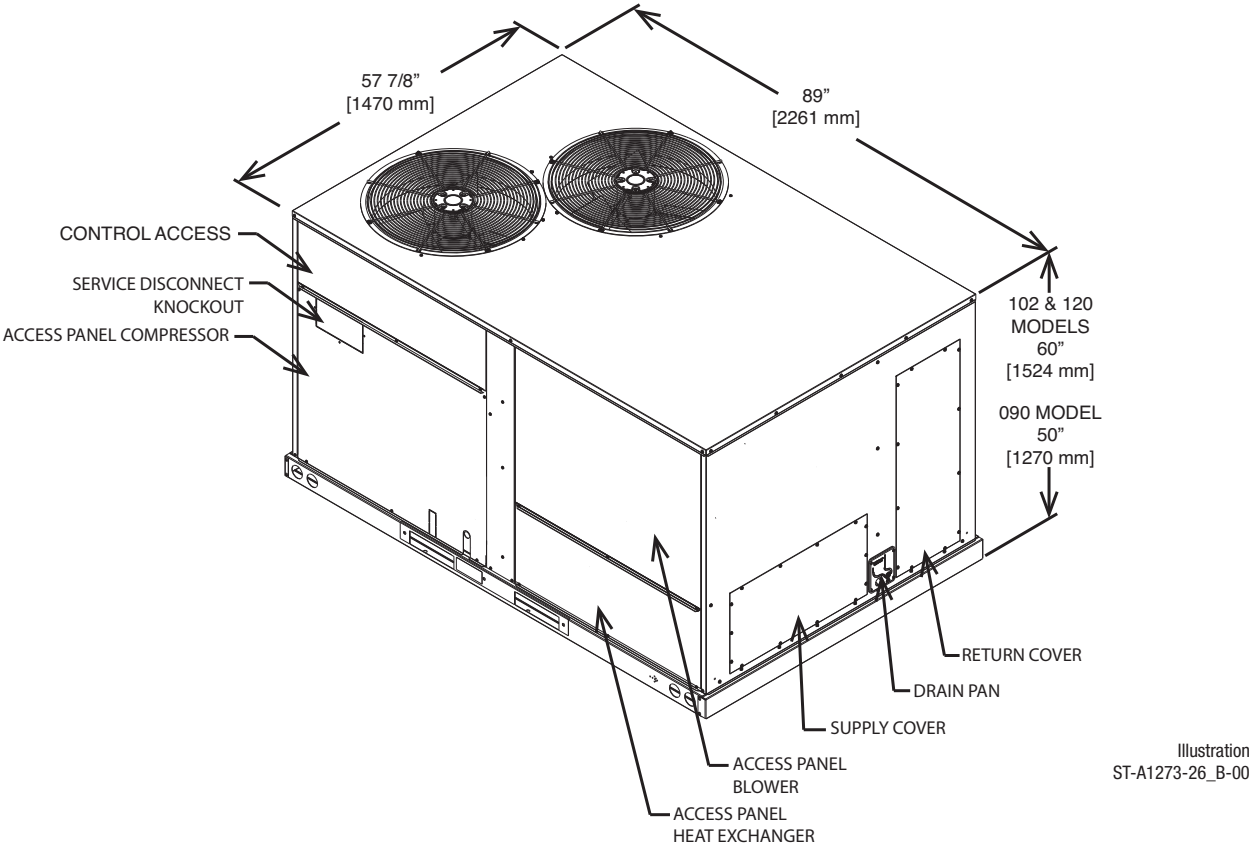
| 575V THREE PHASE, 60 Hz, AUXILIARY ELECTRIC HEATER KITS CHARACTERISTICS AND APPLICATION |                    |                               |                   |                            |                                            |                                |                                                                 |                                    |                                        |                                    |                                                                 |                                            |                                                                    |
|-----------------------------------------------------------------------------------------|--------------------|-------------------------------|-------------------|----------------------------|--------------------------------------------|--------------------------------|-----------------------------------------------------------------|------------------------------------|----------------------------------------|------------------------------------|-----------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------------------|
| Single Power Supply For Both Unit and Heater Kit                                        |                    |                               |                   |                            |                                            |                                | Separate Power Supply For Both Unit and Heater Kit              |                                    |                                        |                                    |                                                                 |                                            |                                                                    |
| Unit Model No.<br>RHPDYB                                                                | Heater Kit         |                               |                   | Air Conditioner            |                                            |                                |                                                                 | Heater Kit                         |                                        | Air Conditioner                    |                                                                 |                                            |                                                                    |
|                                                                                         | Model No.<br>RXJJ- | Rated Heater kW<br>@ 208/230V | Heater Kit<br>FLA | Unit Min. Ckt.<br>Ampacity | Unit Min. Ckt.<br>Optional Powered Exhaust | Max. Fuse or Ckt.<br>Bkr. Size | Max. Fuse or Ckt.<br>Bkr. Size With<br>Optional Powered Exhaust | Heater Kit<br>Min.Ckt.<br>Ampacity | Heater Kit<br>Max Fuse or<br>Ckt. Bkr. | Air Cond.<br>Min. Ckt.<br>Ampacity | Air Cond. Min.<br>Ckt.Ampacity with<br>Optional Powered Exhaust | Air Cond. Max<br>Fuse or Ckt.<br>Bkt. Size | Air Cond. Max<br>Ckt. Ampacity<br>with Optional<br>Powered Exhaust |
| 090AYF                                                                                  | NONE*              | —                             | —                 | 16                         | 17                                         | 20                             | 25                                                              | —                                  | —                                      | 16                                 | 17                                                              | 20                                         | 25                                                                 |
|                                                                                         | DD10Y              | 10                            | 9.6               | 28                         | 29                                         | 30                             | 30                                                              | 13                                 | 15                                     | 16                                 | 17                                                              | 20                                         | 25                                                                 |
|                                                                                         | DD15Y              | 15                            | 14.4              | 34                         | 35                                         | 35                             | 35                                                              | 19                                 | 20                                     | 16                                 | 17                                                              | 20                                         | 25                                                                 |
|                                                                                         | DD20Y              | 20                            | 19.3              | 40                         | 41                                         | 40                             | 40                                                              | 25                                 | 25                                     | 16                                 | 17                                                              | 20                                         | 25                                                                 |
|                                                                                         | DD30Y              | 30                            | 28.9              | 52                         | 53                                         | 60                             | 60                                                              | 37                                 | 40                                     | 16                                 | 17                                                              | 20                                         | 25                                                                 |
| 090AYG                                                                                  | DD40Y              | 40                            | 38.5              | 64                         | 65                                         | 70                             | 70                                                              | 49                                 | 50                                     | 16                                 | 17                                                              | 20                                         | 25                                                                 |
|                                                                                         | NONE*              | —                             | —                 | 17                         | 18                                         | 25                             | 25                                                              | —                                  | —                                      | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD10Y              | 10                            | 9.6               | 29                         | 30                                         | 30                             | 35                                                              | 13                                 | 15                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD15Y              | 15                            | 14.4              | 35                         | 36                                         | 35                             | 40                                                              | 19                                 | 20                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD20Y              | 20                            | 19.3              | 41                         | 42                                         | 45                             | 45                                                              | 25                                 | 25                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
| 090AYH                                                                                  | DD30Y              | 30                            | 28.9              | 53                         | 54                                         | 60                             | 60                                                              | 37                                 | 40                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD40Y              | 40                            | 38.5              | 65                         | 66                                         | 70                             | 70                                                              | 49                                 | 50                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | NONE*              | —                             | —                 | 17                         | 18                                         | 25                             | 25                                                              | —                                  | —                                      | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD10Y              | 10                            | 9.6               | 29                         | 30                                         | 30                             | 35                                                              | 13                                 | 15                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD15Y              | 15                            | 14.4              | 35                         | 36                                         | 35                             | 40                                                              | 19                                 | 20                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
| 102AYF                                                                                  | DD20Y              | 20                            | 19.3              | 41                         | 42                                         | 45                             | 45                                                              | 25                                 | 25                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD30Y              | 30                            | 28.9              | 53                         | 54                                         | 60                             | 60                                                              | 37                                 | 40                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD40Y              | 40                            | 38.5              | 65                         | 66                                         | 70                             | 70                                                              | 49                                 | 50                                     | 17                                 | 18                                                              | 25                                         | 25                                                                 |
|                                                                                         | NONE*              | —                             | —                 | 18                         | 19                                         | 25                             | 25                                                              | —                                  | —                                      | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD10Y              | 10                            | 9.6               | 30                         | 31                                         | 35                             | 35                                                              | 13                                 | 15                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
| 102AYG                                                                                  | DD15Y              | 15                            | 14.4              | 36                         | 37                                         | 40                             | 40                                                              | 19                                 | 20                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD20Y              | 20                            | 19.3              | 42                         | 43                                         | 45                             | 45                                                              | 25                                 | 25                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD30Y              | 30                            | 28.9              | 54                         | 55                                         | 60                             | 60                                                              | 37                                 | 40                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD40Y              | 40                            | 38.5              | 66                         | 67                                         | 70                             | 70                                                              | 49                                 | 50                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | NONE*              | —                             | —                 | 18                         | 19                                         | 25                             | 25                                                              | —                                  | —                                      | 18                                 | 19                                                              | 25                                         | 25                                                                 |
| 102AYH                                                                                  | DD10Y              | 10                            | 9.6               | 30                         | 31                                         | 35                             | 35                                                              | 13                                 | 15                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD15Y              | 15                            | 14.4              | 36                         | 37                                         | 40                             | 40                                                              | 19                                 | 20                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD20Y              | 20                            | 19.3              | 42                         | 43                                         | 45                             | 45                                                              | 25                                 | 25                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD30Y              | 30                            | 28.9              | 54                         | 55                                         | 60                             | 60                                                              | 37                                 | 40                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
|                                                                                         | DD40Y              | 40                            | 38.5              | 66                         | 67                                         | 70                             | 70                                                              | 49                                 | 50                                     | 18                                 | 19                                                              | 25                                         | 25                                                                 |
| 120AYF                                                                                  | NONE*              | —                             | —                 | 19                         | 21                                         | 30                             | 30                                                              | —                                  | —                                      | 19                                 | 21                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD10Y              | 10                            | 9.6               | 31                         | 33                                         | 40                             | 40                                                              | 13                                 | 15                                     | 19                                 | 21                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD15Y              | 15                            | 14.4              | 38                         | 39                                         | 40                             | 45                                                              | 19                                 | 20                                     | 19                                 | 21                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD20Y              | 20                            | 19.3              | 44                         | 45                                         | 45                             | 50                                                              | 25                                 | 25                                     | 19                                 | 21                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD30Y              | 30                            | 28.9              | 56                         | 57                                         | 60                             | 60                                                              | 37                                 | 40                                     | 19                                 | 21                                                              | 30                                         | 30                                                                 |
| 120AYG                                                                                  | DD40Y              | 40                            | 38.5              | 68                         | 69                                         | 70                             | 70                                                              | 49                                 | 50                                     | 19                                 | 21                                                              | 30                                         | 30                                                                 |
|                                                                                         | NONE*              | —                             | —                 | 21                         | 22                                         | 30                             | 30                                                              | —                                  | —                                      | 21                                 | 22                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD10Y              | 10                            | 9.6               | 33                         | 34                                         | 40                             | 40                                                              | 13                                 | 15                                     | 21                                 | 22                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD15Y              | 15                            | 14.4              | 39                         | 40                                         | 45                             | 45                                                              | 19                                 | 20                                     | 21                                 | 22                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD20Y              | 20                            | 19.3              | 44                         | 46                                         | 45                             | 50                                                              | 25                                 | 25                                     | 21                                 | 22                                                              | 30                                         | 30                                                                 |
| 120AYH                                                                                  | DD30Y              | 30                            | 28.9              | 57                         | 58                                         | 60                             | 60                                                              | 37                                 | 40                                     | 21                                 | 22                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD40Y              | 40                            | 38.5              | 69                         | 70                                         | 70                             | 70                                                              | 49                                 | 50                                     | 21                                 | 22                                                              | 30                                         | 30                                                                 |
|                                                                                         | NONE*              | —                             | —                 | 21                         | 22                                         | 30                             | 30                                                              | —                                  | —                                      | 21                                 | 22                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD10Y              | 10                            | 9.6               | 33                         | 34                                         | 40                             | 40                                                              | 13                                 | 15                                     | 21                                 | 22                                                              | 30                                         | 30                                                                 |
|                                                                                         | DD15Y              | 15                            | 14.4              | 39                         | 40                                         | 45                             | 45                                                              | 19                                 | 20                                     | 21                                 | 22                                                              | 30                                         | 30                                                                 |

\*= For Canadian use only. Uses "p" fuses for inductive circuit.

## A2L REFRIGERANT INSTALLATION SAFETY DATA

| Model                          |                            | RHPDYB090                               | RHPDYB102 | RHPDYB120 |
|--------------------------------|----------------------------|-----------------------------------------|-----------|-----------|
| Refrigerant Charge Weight (oz) |                            | 172.8                                   | 211.2     | 209.6     |
| Minimum Circulation Qmin (CFM) |                            | 575.0                                   | 702.0     | 697.0     |
| Altitude above Sea Level (ft)  | Altitude Adjustment Factor | Minimum total space area, TAmin (sq-ft) |           |           |
| 0                              | 1.000                      | 319                                     | 389       | 386       |
| 1000                           | 1.025                      | 326                                     | 399       | 396       |
| 2000                           | 1.051                      | 335                                     | 409       | 406       |
| 3000                           | 1.078                      | 343                                     | 420       | 416       |
| 4000                           | 1.107                      | 353                                     | 431       | 428       |
| 5000                           | 1.138                      | 362                                     | 443       | 440       |
| 6000                           | 1.170                      | 373                                     | 455       | 452       |
| 6500                           | 1.187                      | 378                                     | 462       | 459       |

UNIT DIMENSIONS



[ ] Designates Metric Conversions

# SUPPLY AND RETURN DIMENSIONS FOR HORIZONTAL APPLICATIONS

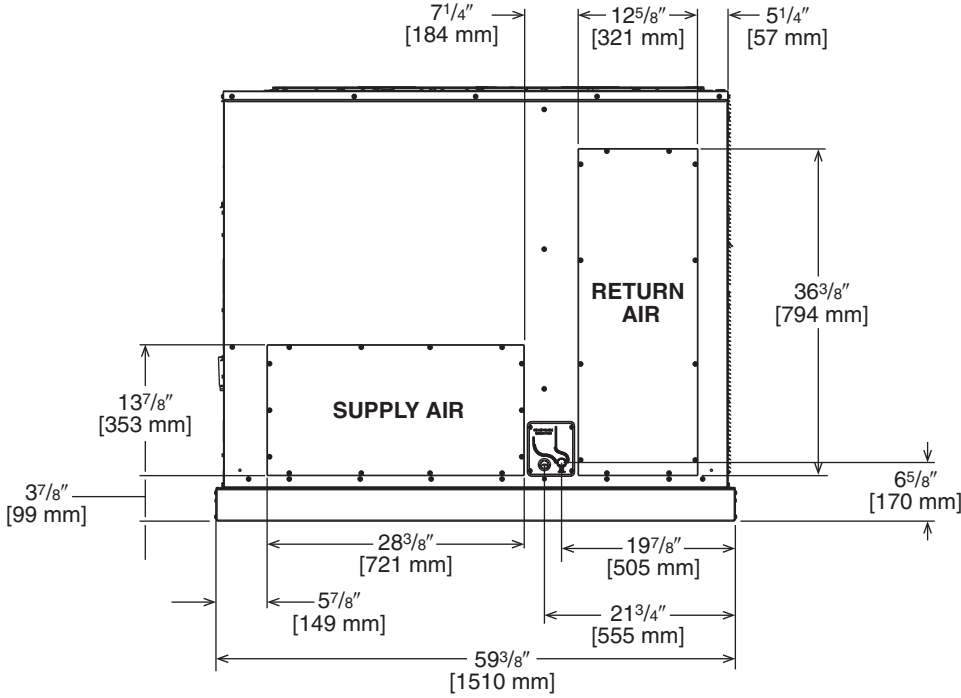
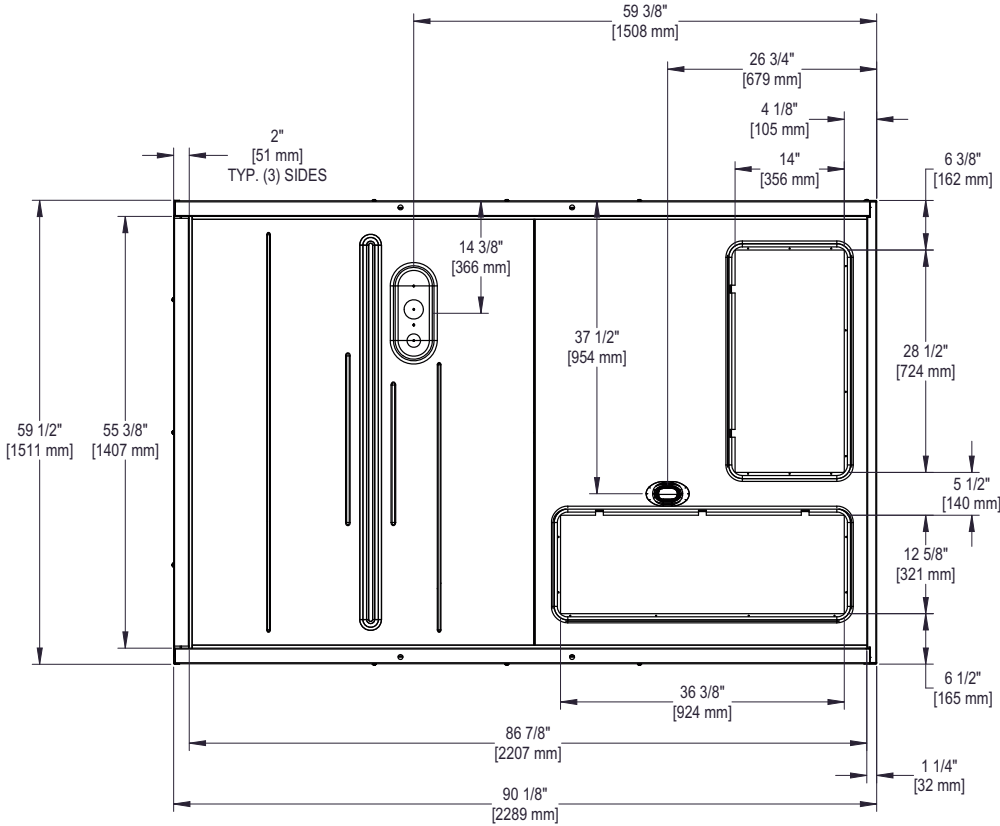


Illustration  
00-71-3721A-TS

# SUPPLY AND RETURN DIMENSIONS FOR DOWNFLOW APPLICATIONS (VIEW FROM BOTTOM UP)



ST-A1273-01\_A

[ ] Designates Metric Conversions

WEIGHTS

| Capacity Tons [kW] | Corner Weights by Percentage |     |     |     |
|--------------------|------------------------------|-----|-----|-----|
|                    | A                            | B   | C   | D   |
| 7.5-10 [21.1-35.2] | 26%                          | 34% | 17% | 23% |

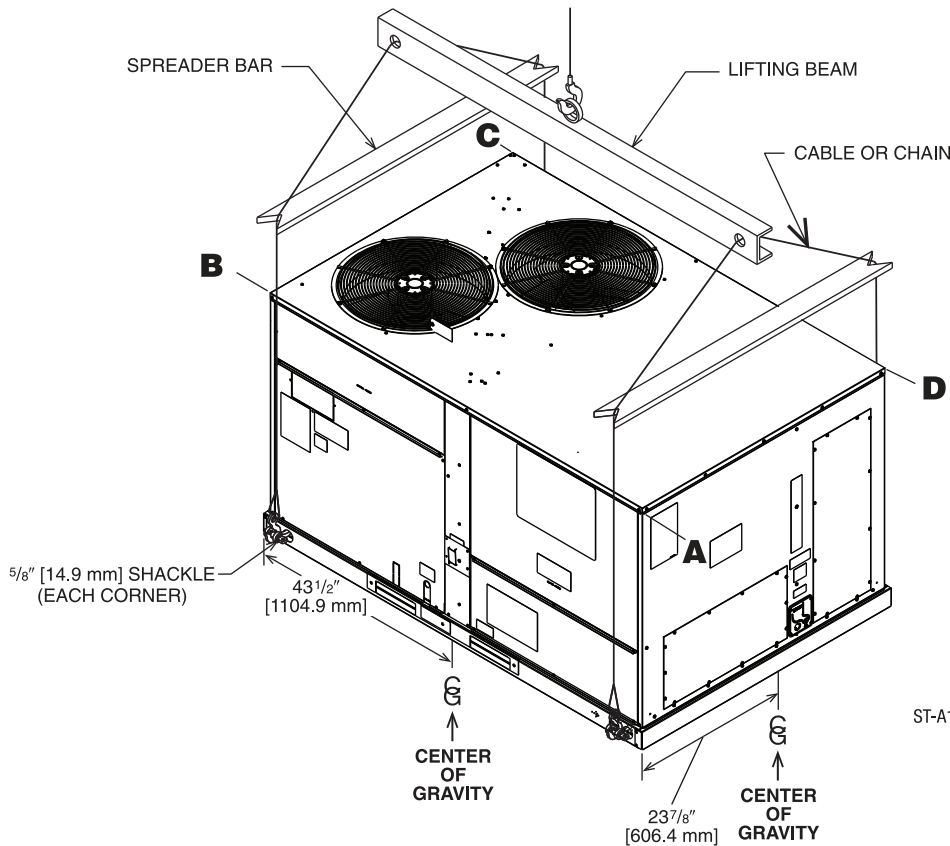


Illustration  
ST-A1273-01\_J-00

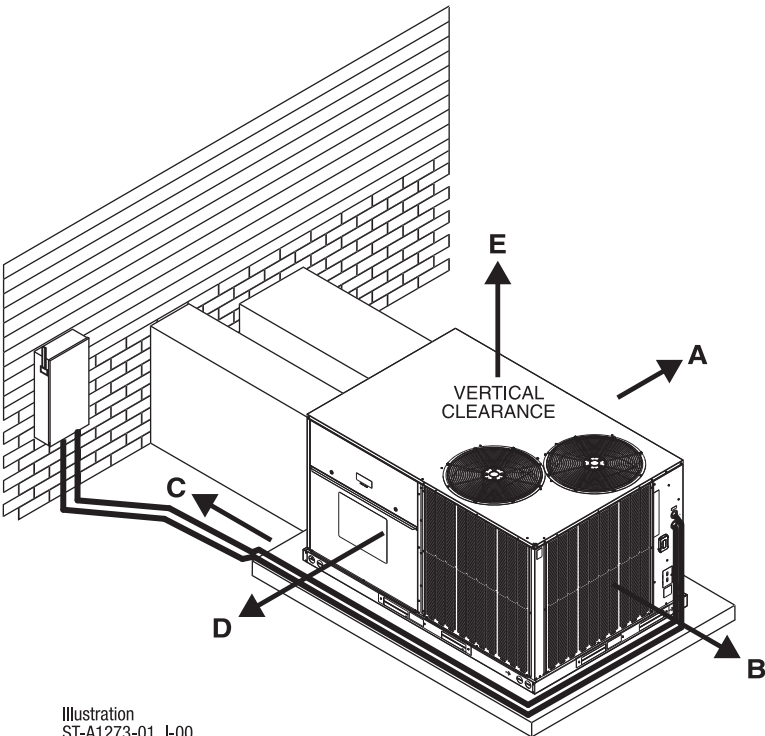


Illustration  
ST-A1273-01\_I-00

CLEARANCES

The following minimum clearances must be observed for proper unit performance and serviceability.

| RECOMMENDED CLEARANCE In. [mm] | LOCATION          |
|--------------------------------|-------------------|
| 48 [1219]                      | A - FRONT         |
| 24 [609]                       | B - CONDENSER END |
| 48 [1219] ①                    | C - DUCT END      |
| 24 [609] ②                     | D - FILTER SIDE   |
| 60 [1524]                      | E - ABOVE         |

① 18" [457 mm] MINIMUM IF DRAINPAN WILL NOT BE REMOVED.  
② 48" [1219 mm] MINIMUM IF ECONOMIZER IS INSTALLED.

## FIELD-INSTALLED ACCESSORY EQUIPMENT

| Accessory                                                                                                 | Model Number  | Shipping Weight<br>Lbs. [kg] | Installed Weight<br>Lbs. [kg] | Factory Installation<br>Available? |
|-----------------------------------------------------------------------------------------------------------|---------------|------------------------------|-------------------------------|------------------------------------|
| <b>Economizers</b>                                                                                        |               |                              |                               |                                    |
| Non-DDC Economizer with No Controls (Downflow)<br><i>MicroMetl Economizer, Belimo Actuator</i>            | RXRD-31MDDAM3 | 86 [39.0]                    | 57 [25.9]                     | No                                 |
| Non-DDC Economizer with Single Enthalpy (Downflow)<br><i>MicroMetl Economizer with Siemens Controls</i>   | RXRD-11MDDAM3 | 86 [39.0]                    | 57 [25.9]                     | Yes                                |
| Non-DDC Economizer with Single Enthalpy (Downflow)<br><i>RRS Economizer with Siemens Controller</i>       | RXRD-51MDDAM3 | 86 [39.0]                    | 57 [25.9]                     | No                                 |
| Non-DDC Economizer with Single Enthalpy (Horizontal)<br><i>MicroMetl Economizer with Siemens Controls</i> | RXRD-11MDHAM3 | 84 [38.1]                    | 55 [24.9]                     | No                                 |
| Non-DDC Economizer with Single Enthalpy (Horizontal)<br><i>RRS Economizer with Siemens Controller</i>     | RXRD-51MDHAM3 | 84 [38.1]                    | 55 [24.9]                     | No                                 |
| Economizer Universal DDC Interface Kit <sup>1</sup>                                                       | RXXR-DDC01    | 5 [2.7]                      | 3.5 [1.6]                     | Yes                                |

<sup>1</sup>Does not have to be selected individually. This accessory will be included with the factory-installed economizer for a DDC unit if required.

| Accessory                                                        | Model Number | Shipping Weight<br>Lbs. [kg] | Installed Weight<br>Lbs. [kg] | Factory Installation<br>Available? |
|------------------------------------------------------------------|--------------|------------------------------|-------------------------------|------------------------------------|
| Power Exhaust (230V) Kit for Downflow Economizer <i>RRS</i>      | RXXR-RDF01C  | 104 [47.2]                   | 94 [42.6]                     | No                                 |
| Power Exhaust (230V) Kit for Horizontal Economizer <i>RRS</i>    | RXXR-RDF03C  | 104 [47.2]                   | 94 [42.6]                     | No                                 |
| Power Exhaust (230V) Kit, Convertible <i>MicroMetl</i>           | RXXR-CDF01C  | 104 [47.2]                   | 94 [42.6]                     | No                                 |
| Power Exhaust (460V) Kit for Downflow Economizer <i>RRS</i>      | RXXR-RDF01D  | 104 [47.2]                   | 94 [42.6]                     | No                                 |
| Power Exhaust (460V) Kit for Horizontal Economizer <i>RRS</i>    | RXXR-RDF03D  | 104 [47.2]                   | 94 [42.6]                     | No                                 |
| Power Exhaust (460V) Kit, Convertible <i>MicroMetl</i>           | RXXR-CDF01D  | 104 [47.2]                   | 94 [42.6]                     | No                                 |
| Power Exhaust (575V) Kit for Downflow Economizer <i>RRS</i>      | RXXR-RDF01Y  | 104 [47.2]                   | 94 [42.6]                     | No                                 |
| No Power Exhaust (575V) Kit for Horizontal Economizer <i>RRS</i> | RXXR-RDF03Y  | 104 [47.2]                   | 94 [42.6]                     | No                                 |
| Concentric Adapter 7.5 & 8.5 Ton Drop                            | RXMC-DD01    | 40 [18.1]                    | 34 [15.4]                     | No                                 |
| Concentric Adapter 10 Ton Drop                                   | RXMC-DD02    | 75 [34.0]                    | 65 [29.5]                     | No                                 |
| Concentric Diffuser 7.5 & 8.5 Ton Drop                           | RXRN-AED2000 | 35 [15.9]                    | 30 [13.6]                     | No                                 |
| Concentric Diffuser 10.0 Ton Drop                                | RXRN-AED3415 | 170 [77.1]                   | 160 [72.6]                    | No                                 |
| Concentric Diffuser 7.5 & 8.5 Ton Flush                          | RXRN-AEF2000 | 30 [13.6]                    | 25 [11.3]                     | No                                 |
| Concentric Diffuser 10.0 Ton Flush                               | RXRN-AEF3415 | 140 [113.4]                  | 130 [59.0]                    | No                                 |
| Convenience Outlet, Non-Powered                                  | RXXR-BN01    | 2 [1.0]                      | 1.5 [0.7]                     | Yes                                |

[ ] Designates Metric Conversions

## FIELD-INSTALLED ACCESSORY EQUIPMENT (CONTINUED)

| Accessory                                                    | Model Number   | Shipping Weight<br>Lbs. [kg] | Installed Weight<br>Lbs. [kg] | Factory Installation Available? |
|--------------------------------------------------------------|----------------|------------------------------|-------------------------------|---------------------------------|
| Electric Heater Kit   208/230V, 3ph, 10kW                    | RXJJ-DD10CP    | 30 [13.6]                    | 27.5 [12.5]                   | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 15kW                    | RXJJ-DD15CP    | 32 [14.5]                    | 29.5 [13.4]                   | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 20kW                    | RXJJ-DD20CP    | 34 [15.4]                    | 31.5 [14.3]                   | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 30kW                    | RXJJ-DD30CP    | 37 [16.8]                    | 34.5 [15.6]                   | Yes                             |
| Electric Heater Kit   208/230V, 3ph, 40kW                    | RXJJ-DD40CP    | 40 [18.1]                    | 37.5 [17.0]                   | Yes                             |
| Electric Heater Kit   460V, 3ph, 10kW                        | RXJJ-DD10DNV   | 30 [13.6]                    | 27.5 [12.5]                   | Yes                             |
| Electric Heater Kit   460V, 3ph, 15kW                        | RXJJ-DD15DNV   | 32 [14.5]                    | 29.5 [13.4]                   | Yes                             |
| Electric Heater Kit   460V, 3ph, 20kW                        | RXJJ-DD20DNV   | 34 [15.4]                    | 31.5 [14.3]                   | Yes                             |
| Electric Heater Kit   460V, 3ph, 30kW                        | RXJJ-DD30DNV   | 37 [16.8]                    | 34.5 [15.6]                   | Yes                             |
| Electric Heater Kit   460V, 3ph, 40kW                        | RXJJ-DD40DNV   | 40 [18.1]                    | 37.5 [17.0]                   | Yes                             |
| Electric Heater Kit   575V, 3ph, 10kW                        | RXJJ-DD10Y     | 30 [13.6]                    | 27.5 [12.5]                   | No                              |
| Electric Heater Kit   575V, 3ph, 15kW                        | RXJJ-DD15Y     | 32 [14.5]                    | 29.5 [13.4]                   | No                              |
| Electric Heater Kit   575V, 3ph, 20kW                        | RXJJ-DD20Y     | 34 [15.4]                    | 31.5 [14.3]                   | No                              |
| Electric Heater Kit   575V, 3ph, 30kW                        | RXJJ-DD30Y     | 37 [16.8]                    | 34.5 [15.6]                   | No                              |
| Electric Heater Kit   575V, 3ph, 40kW                        | RXJJ-DD40Y     | 40 [18.1]                    | 37.5 [17.0]                   | No                              |
| Fresh Air Damper, Manual                                     | RXRF-ADA1      | 15 [6.8]                     | 12 [5.4]                      | No                              |
| Fresh Air Damper, Motorized                                  | RXRF-ADB1      | 38 [17.2]                    | 31 [14.06]                    | No                              |
| MERV 8 Filter 7.5 & 8.5 Ton                                  | RXMF-M08A22020 | 2 [0.9]                      | 1 [0.45]                      | No                              |
| MERV 8 Filter 10 Ton                                         | RXMF-M08A22520 | 2 [0.9]                      | 1 [0.45]                      | No                              |
| MERV 13 Filter 7.5 & 8.5 Ton                                 | RXMF-M13A22020 | 2 [0.9]                      | 1 [0.45]                      | No                              |
| MERV 13 Filter 10 Ton                                        | RXMF-M13A22520 | 2 [0.9]                      | 1 [0.45]                      | No                              |
| Outdoor Coil Louver Kit - 7.5 & 8.5 Ton                      | RXRX-ADD04A    | 52 [23.6]                    | 47 [21.3]                     | Yes                             |
| Outdoor Coil Louver Kit - 10 Ton                             | RXRX-ADD04B    | 43 [19.5]                    | 39 [17.7]                     | Yes                             |
| Roofcurb Adapter                                             | RXRX-DDCAE     | 235 [106.6]                  | 215 [97.5]                    | No                              |
| Roofcurb, 14"                                                | RXKG-DDD14     | 109 [49.4]                   | 104 [47.2]                    | No                              |
| Roofcurb, 24"                                                | RXKG-DDD24     | 145 [65.8]                   | 140 [63.5]                    | No                              |
| Single Point Wiring Kit   208/230V, 60A, 7.5 Ton             | RXJX-AC0605    | 23 [10.4]                    | 25 [11.3]                     | No                              |
| Single Point Wiring Kit   208/230V, 80A, 7.5 Ton             | RXJX-AC0805    | 24 [10.9]                    | 26 [11.8]                     | No                              |
| Single Point Wiring Kit   208/230V, 90A, 8.5 & 10 Ton        | RXJX-AC0909    | 26 [11.8]                    | 28 [12.7]                     | No                              |
| Single Point Wiring Kit   460V, 40A, 7.5 Ton                 | RXJX-AD0405    | 25 [11.3]                    | 27 [12.2]                     | No                              |
| Single Point Wiring Kit   460V, 40A, 8.5 & 10 Ton            | RXJX-AD0409    | 25 [11.3]                    | 27 [12.2]                     | No                              |
| Single Point Wiring Kit   460V, 60A, 7.5 Ton                 | RXJX-AD0605    | 25 [11.3]                    | 27 [12.2]                     | No                              |
| Single Point Wiring Kit   460V, 60A, 8.5 & 10 Ton            | RXJX-AD0609    | 25 [11.3]                    | 27 [12.2]                     | No                              |
| Unfused Service Disconnect                                   | RXRX-BP01      | 10 [4.5]                     | 9 [4.1]                       | Yes                             |
| UV-C Light Kit 208/230V                                      | RXRX-UVC34D    | 8 [3.6]                      | 6 [2.7]                       | No                              |
| UV-C Light Kit Transformer 460V & 575V                       | RXRX-UVCTD     | 12 [5.4]                     | 11 [5.0]                      | No                              |
| Comfort Alert (1 Per Compressor)   3ph, DDC                  | RXRX-AZ01      | 3 [1.5]                      | 2 [0.9]                       | Yes                             |
| Comfort Alert (1 Per Compressor)   3ph, Non-DDC              | RXRX-AZ02      | 3 [1.5]                      | 2 [0.9]                       | Yes                             |
| Communication Card, BACnet                                   | RXRX-AY01      | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Communication Card, LonWorks                                 | RXRX-AY02      | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Dual Enthalpy, Temperature and Humidity Sensor (for Siemens) | PD555460       | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Freeze Stat Kit                                              | RXRX-AM01      | 2 [1.0]                      | 1.5 [0.7]                     | Yes                             |
| Low-Ambient Control Kit                                      | RXRZ-A04       | 4 [1.8]                      | 3 [1.4]                       | Yes                             |
| Sensor, Carbon Dioxide (Wall Mount)                          | RXRX-AR02      | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Sensor, Room Humidity                                        | RHC-ZNS4       | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Sensor, Room Temperature and Relative Humidity               | RHC-ZNS5       | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Smoke Detector Kit, Return                                   | RXRX-BS03      | 5 [2.7]                      | 3.5 [1.6]                     | No                              |
| Smoke Detector Kit, Return/Supply                            | RXRX-BS04      | 7 [3.2]                      | 5 [2.7]                       | No                              |

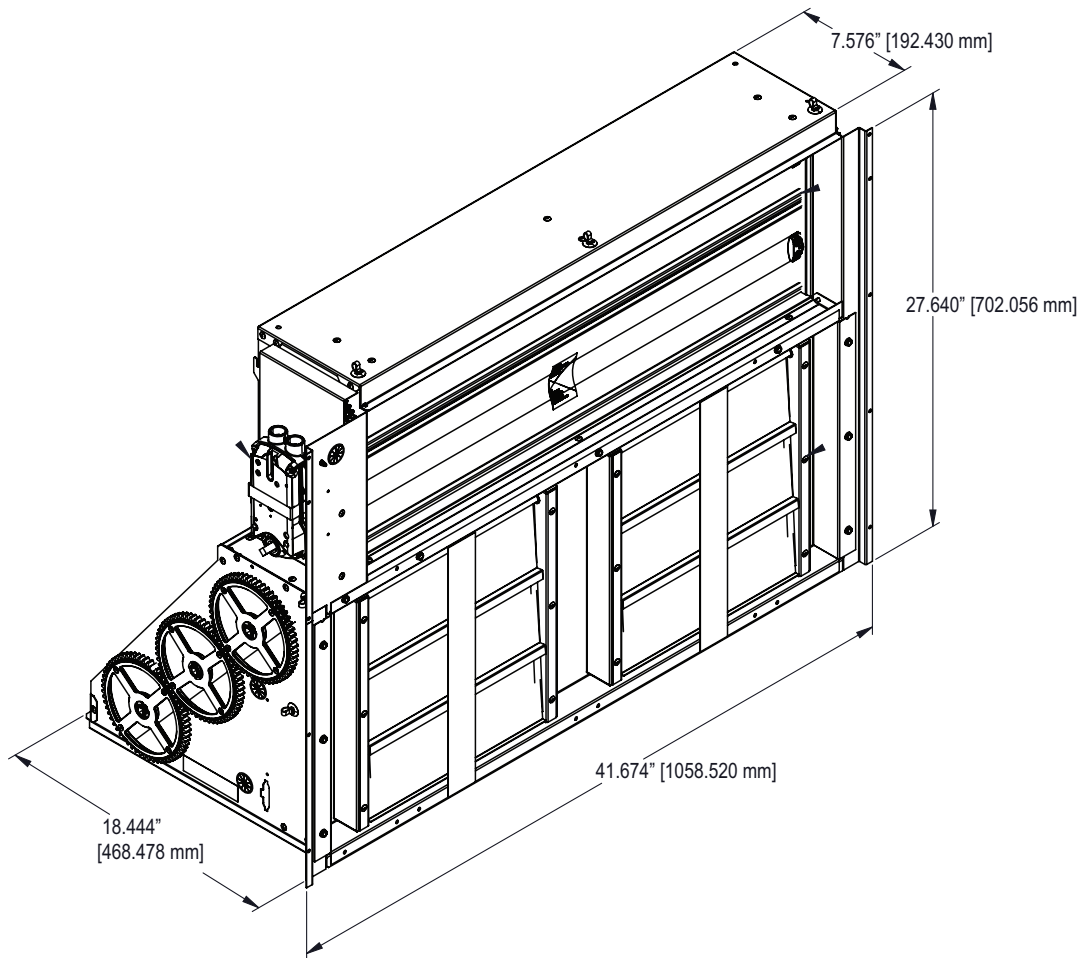
[ ] Designates Metric Conversions

## NON-DDC ECONOMIZER WITH NO CONTROLS (DOWNFLOW) MICROMETL ECONOMIZER, BELIMO ACTUATOR Field-Installed Only

RXRD-31MDDAM3

RXRX-ACD01 — Wire Harness for Non-DDC Generic Economizers

- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2022  
AMCA 511 Certified Class 1A Leakage—1" WG of differential pressure tested to AMCA® Standard 500-D
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin Electrical Connections
- Standard Barometric Relief Damper
- Controller and Sensors to be determined by Customer
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Downflow Duct Application
- Field-Installed Power Exhaust Option



[ ] Designates Metric Conversions

## NON-DDC ECONOMIZER WITH SINGLE ENTHALPY (DOWNFLOW) MICROMETL ECONOMIZER WITH SIEMENS CONTROLS

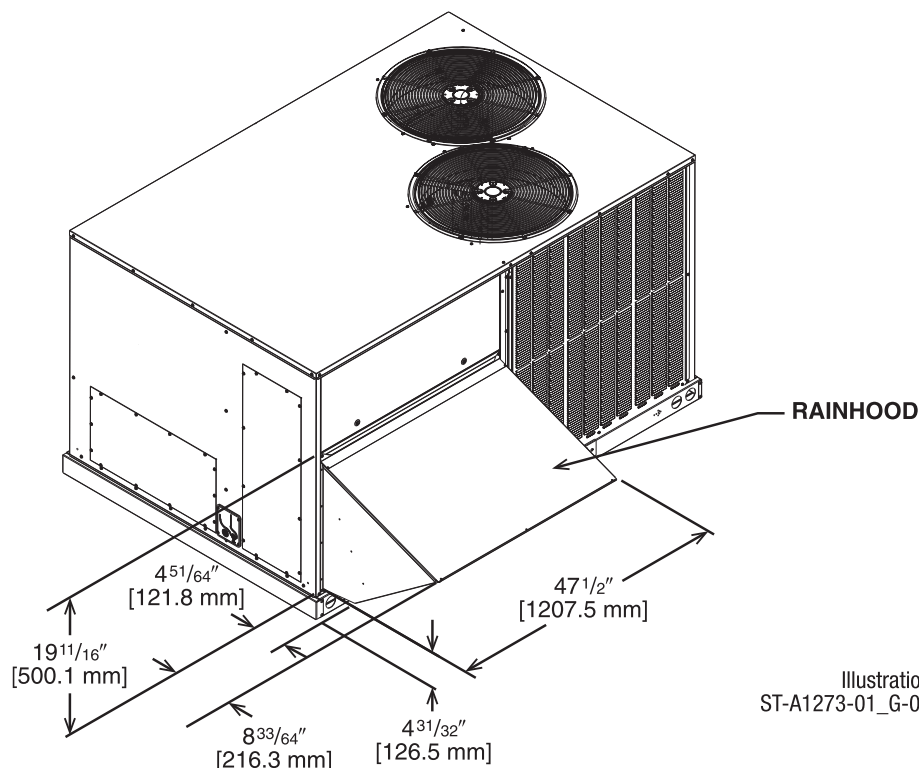
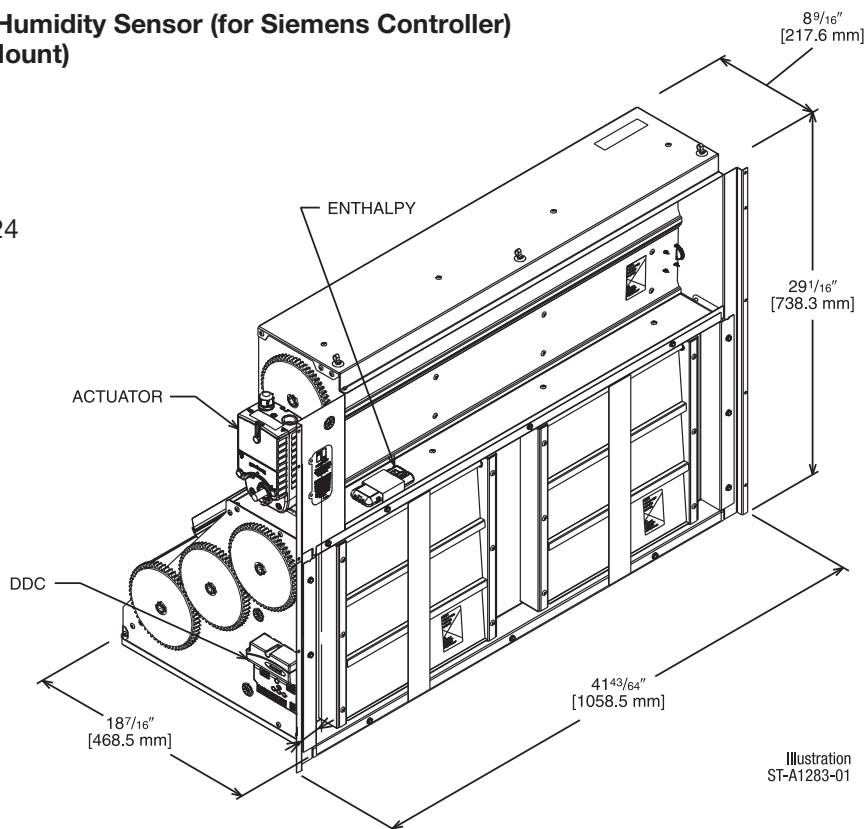
### Factory or Field-Installed

RXRD-11MDDAM3

PD555460—Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Controller)

RRX-AR02—Sensor, Carbon Dioxide (Wall Mount)

- Features **Siemens** Controls
- Available Factory-Installed or Field Accessory
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2022
- Slip-In Design for Easy Installation
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor Option
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Downflow Duct Application
- Field-Installed Power Exhaust Option
- Prewired for Smoke Detector
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS) or 16 x 2 LCD screen
- If connected to thermostat, all economizer functions can be viewed on 16 x 2 LCD screen



[ ] Designates Metric Conversions

## NON-DDC ECONOMIZER WITH SINGLE ENTHALPY (DOWNFLOW) RRS ECONOMIZER WITH SIEMENS CONTROLLER

### Field-Installed Only

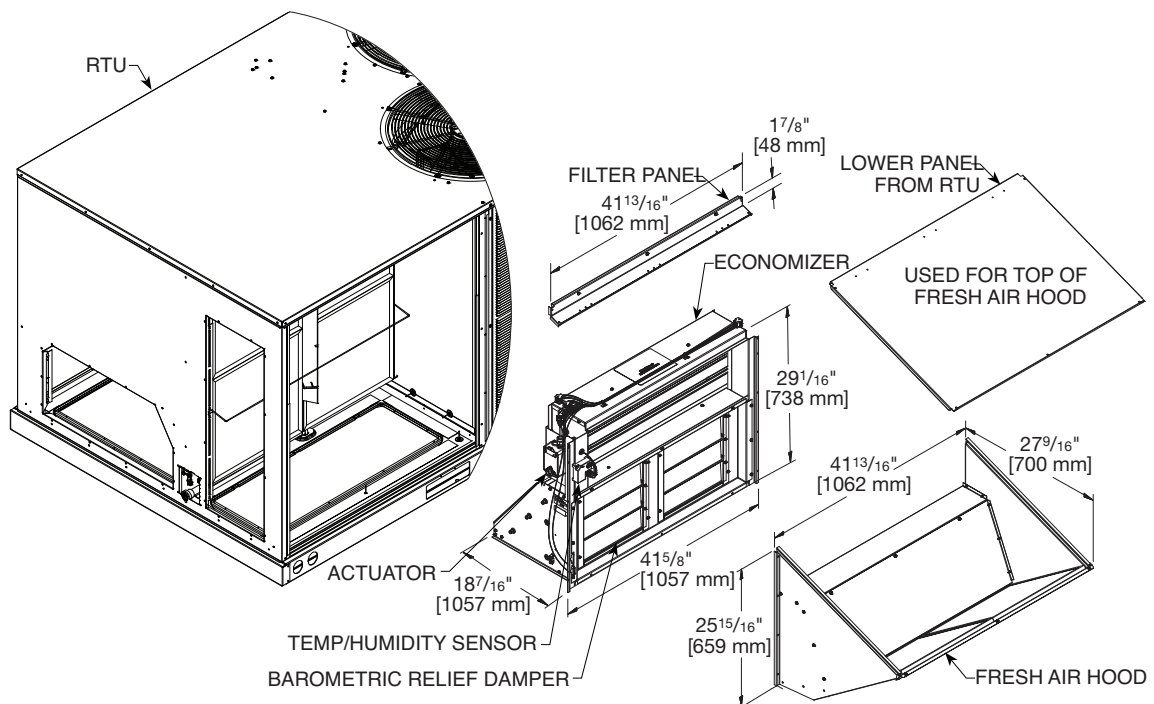
RXRD-51MDDAM3

PD555460—Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Controller)

RXRX-AR02—Sensor, Carbon Dioxide (Wall Mount)

These ultra-low leak economizer dampers meet the following minimum construction standards:

1. Frame shall be 14 to 24 gauge galvanized steel channel.
2. Damper blades are galvanized steel airfoil shaped, double skin construction of 14 gauge [2.0] equivalent thickness, 6" [152 mm] wide. Parallel action.
3. Blade edge seals shall be Ruskiprene™ type or equivalent suitable for -72°F [-60°C] to +275°F [+135°C] mechanically locked into the blade edge. Adhesive or clip-on type seals are unacceptable.
4. Jamb seals shall be flexible metal, compression type to prevent leakage between blade end and damper frame. Blade end overlapping frame is unacceptable.
5. Bearings shall be stainless steel or nylon bushing.
6. Axles shall be hexagonal positively locked into the damper blade.
7. Drive mechanism shall be concealed out of airstream to reduce pressure drop and noise.
8. Economizer damper is tested and rated based upon AMCA Publication 500-D.
9. Controls feature the Siemens controller with Siemens 24V actuator. Controls capable of Economizer Fault Detection and Diagnostics for code compliance.
10. Damper shall meet the leakage requirements of the International Energy Conservation Code by leaking less than 3 cfm/sq. ft. at 1" of static pressure and shall be AMCA licensed as a class 1A damper. Complies with reliability and performance requirements as specified by the California Energy Commission's Title 24 Standard and ASHRAE 90.1 2022. Economizer dampers shall be Ruskin Rooftop Systems ECD60 model.
11. Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXRX-DDC01).



[ ] Designates Metric Conversions

## NON-DDC ECONOMIZER WITH SINGLE ENTHALPY (HORIZONTAL) MICROMETL ECONOMIZER WITH SIEMENS CONTROLS

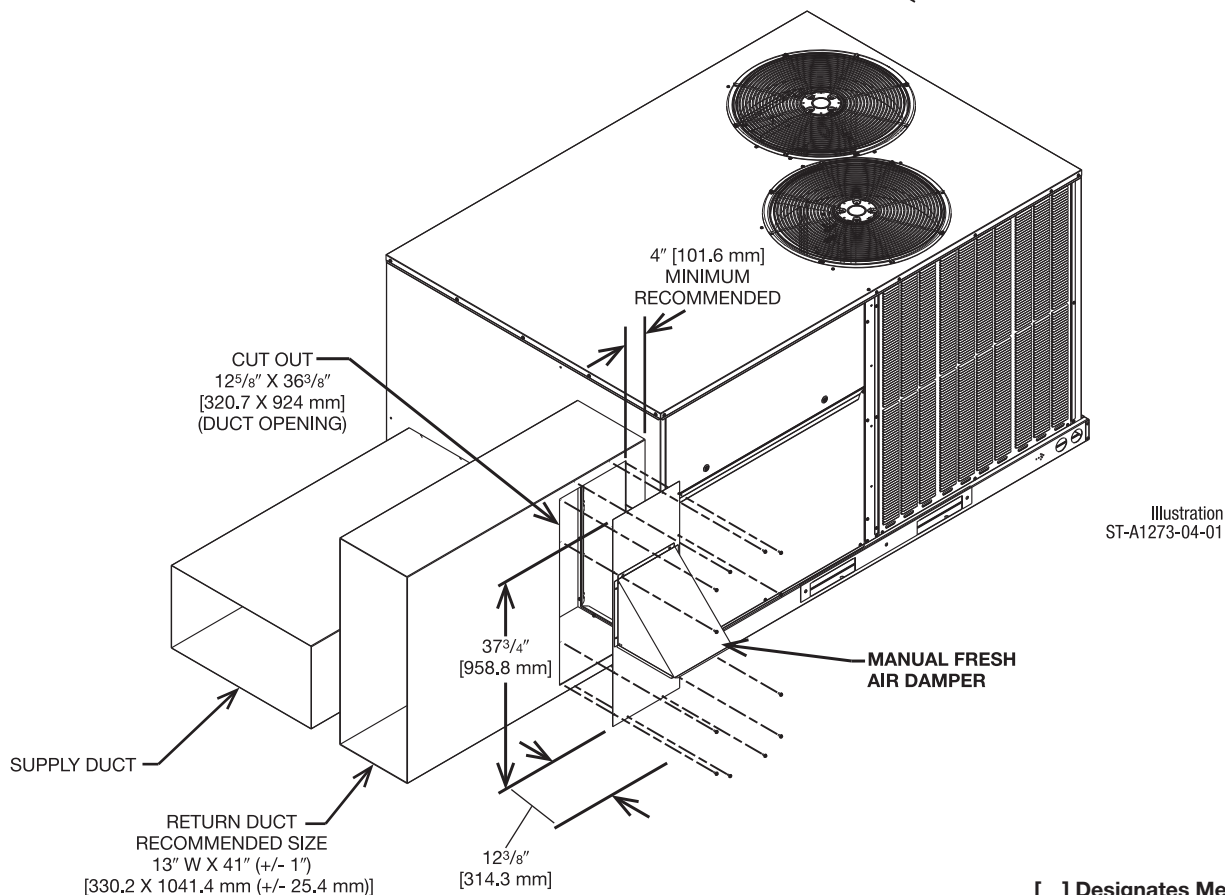
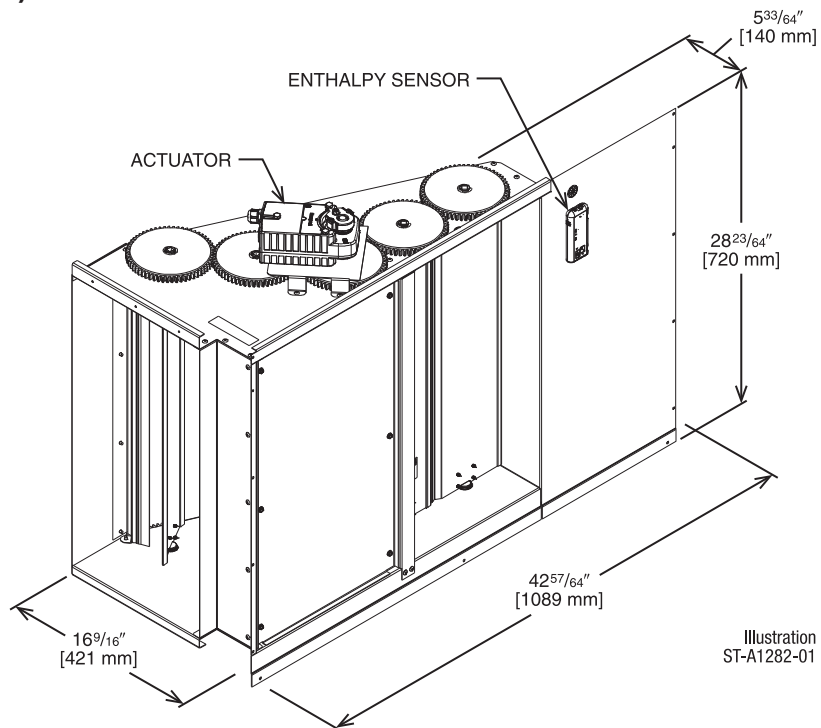
### Field-Installed Only

**RXRD-11MDHAM3**

**PD555460—Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Controller)**

**RXRX-AR02—Sensor, Carbon Dioxide (Wall Mount)**

- Features **Siemens** Controls
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Low Leakage Dampers
- Slip-In Design for Easy Installation
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor Option
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Horizontal Duct Application
- Field-Installed Power Exhaust Option
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS) or 16 x 2 LCD screen
- If connected to thermostat, all economizer functions can be viewed on 16 x 2 LCD screen
- Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXRX-DDC01)



[ ] Designates Metric Conversions

## NON-DDC ECONOMIZER W/SINGLE ENTHALPY (HORIZONTAL) RRS ECONOMIZER WITH SIEMENS CONTROLLER

### Field-Installed Only

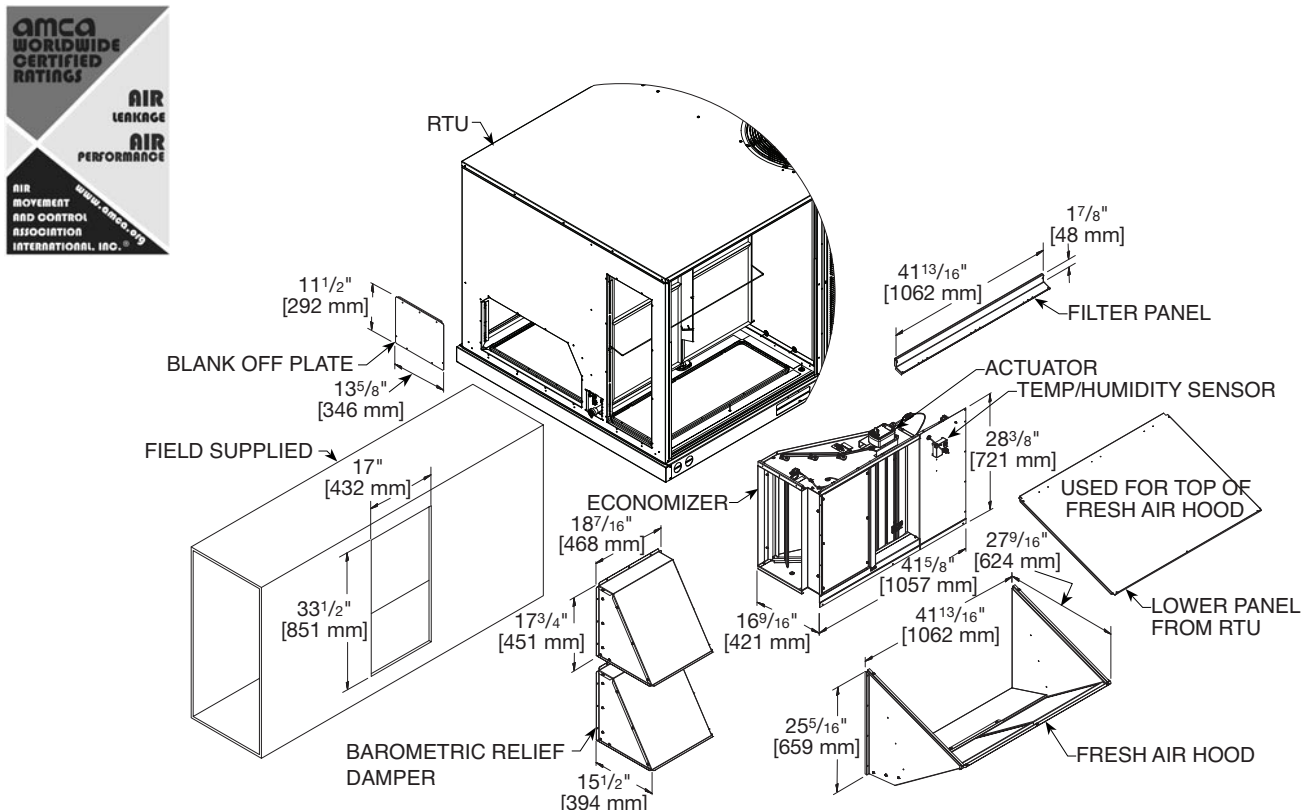
RXRD-51MDHAM3

PD555460—Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Controller)

RXRX-AR02—Sensor, Carbon Dioxide (Wall Mount)

These ultra-low leak economizer dampers meet the following minimum construction standards:

1. Frame shall be 14 to 24 gauge galvanized steel channel.
2. Damper blades are galvanized steel airfoil shaped, double skin construction of 14 gauge [2.0] equivalent thickness, 6" [152 mm] wide. Parallel action.
3. Blade edge seals shall be Ruskiprene™ type or equivalent suitable for -72°F [-60°C] to +275°F [+135°C] mechanically locked into the blade edge. Adhesive or clip-on type seals are unacceptable.
4. Jamb seals shall be flexible metal, compression type to prevent leakage between blade end and damper frame. Blade end overlapping frame is unacceptable.
5. Bearings shall be stainless steel or nylon bushing.
6. Axles shall be hexagonal positively locked into the damper blade.
7. Drive mechanism shall be concealed out of airstream to reduce pressure drop and noise.
8. Economizer damper is tested and rated based upon AMCA Publication 500-D.
9. Controls feature the Siemens controller with Siemens 24V actuator. Controls capable of Economizer Fault Detection and Diagnostics for code compliance.
10. Damper shall meet the leakage requirements of the International Energy Conservation Code by leaking less than 3 cfm/sq. ft. at 1" of static pressure and shall be AMCA licensed as a class 1A damper. Complies with reliability and performance requirements as specified by the California Energy Commission's Title 24 Standard and ASHRAE 90.1 2022. Economizer dampers shall be Ruskin Rooftop Systems ECD60 model.
11. Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXRX-DDC01).



[ ] Designates Metric Conversions

## ECONOMIZER UNIVERSAL DDC INTERFACE KIT

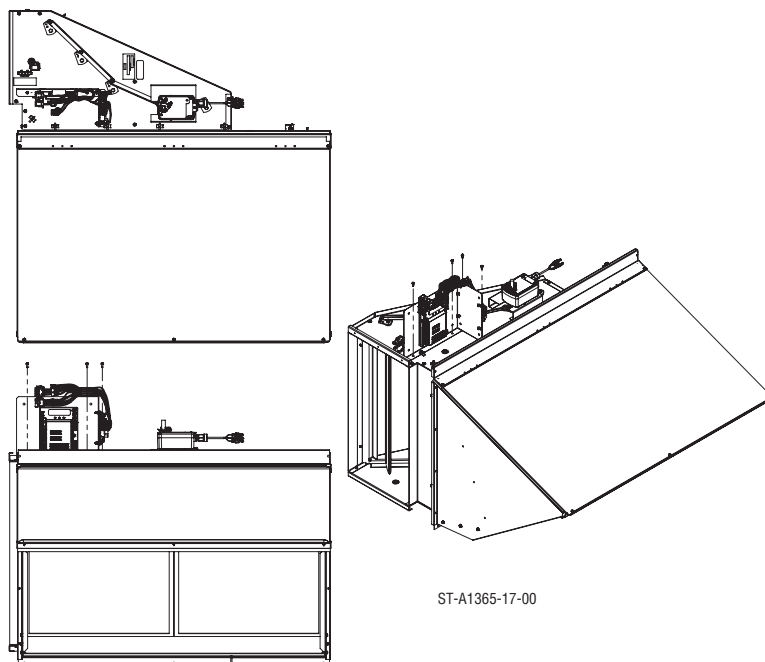
Available Factory or Field-Installed

### RXRX-DDC01

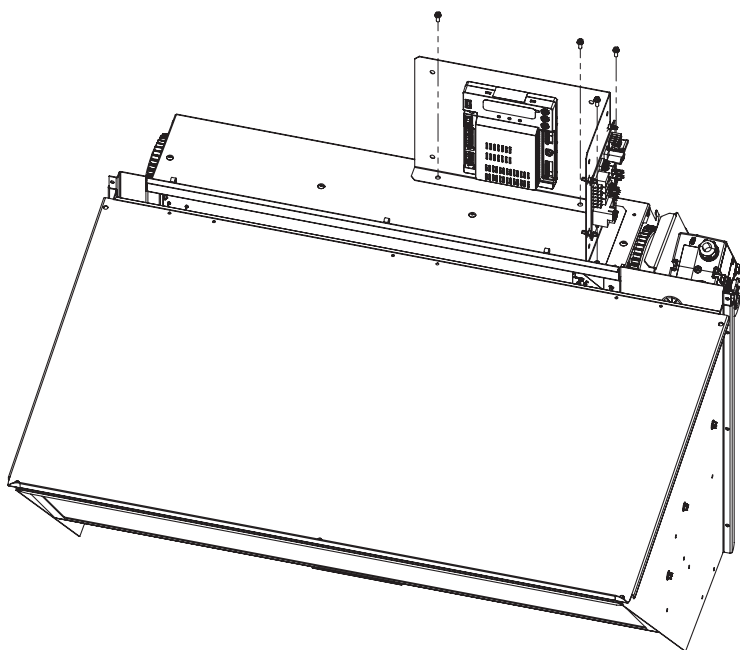
- Allows any Non-DDC Economizer to be used with a ClearControl DDC model
- Mounts on the Economizer
- Provides Mounting location for Economizer Controller
- Provides wire management for excess wire

**NOTE:** Older DDC Models, prior to R-454B refrigerant models, may require a field update to the ClearControl software. The minimum version required is 3.15. Models using R-454B refrigerant will come with software version 4.0 or higher.

### HORIZONTAL FLOW DDC BRACKET SETUP



### DOWNFLOW ECONOMIZER DDC BRACKET SETUP



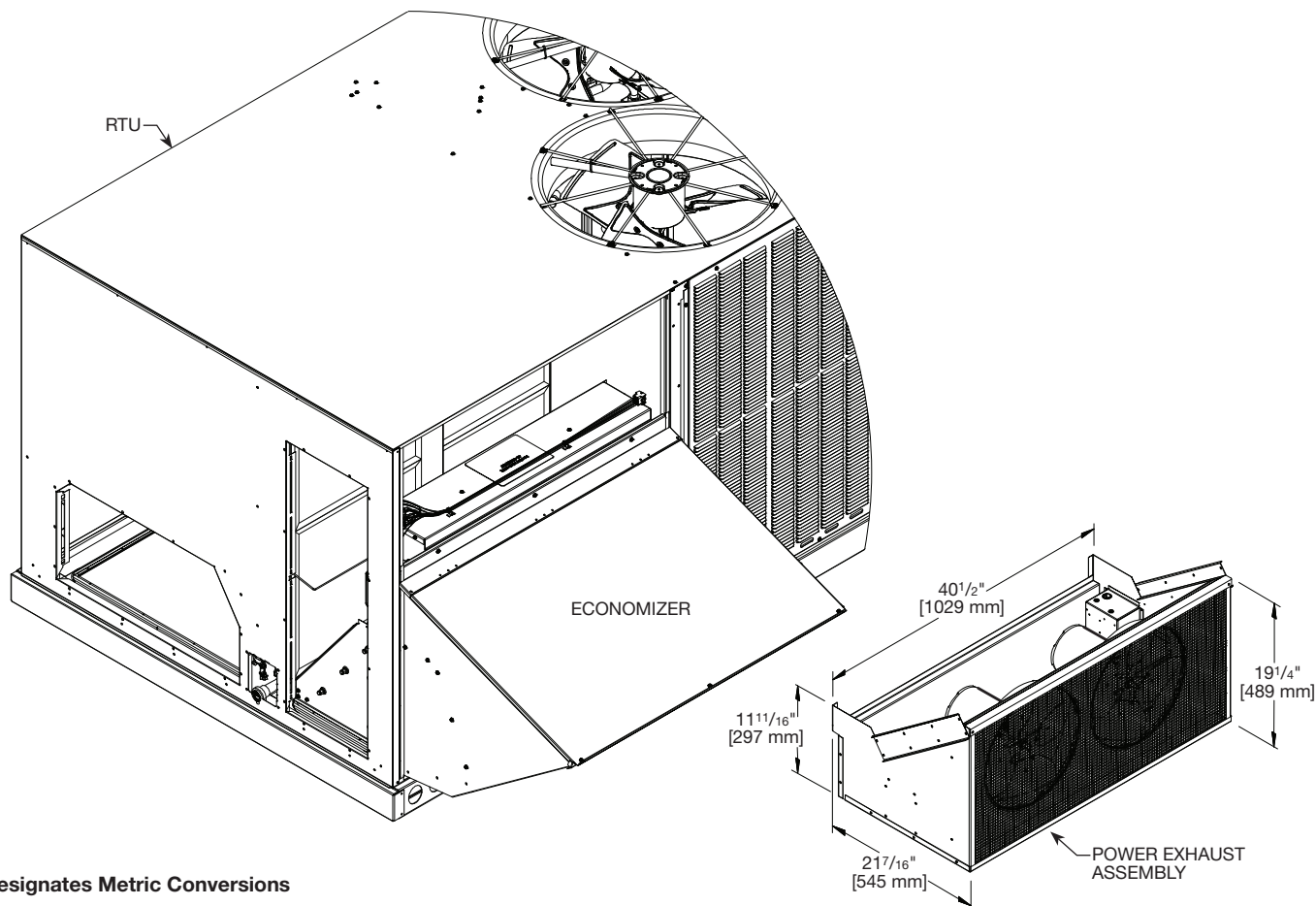
ST-A1365-13-01

## POWER EXHAUST KIT FOR DOWNFLOW ECONOMIZER

RXXR-RDF01\*

\*Voltage Code: C, D or Y

- Shipped completely assembled
- All wiring from control box to economizer is supplied
- Color coordinated with the unit
- Fully insulated with 1" 1.5 lb. fiberglass insulation
- Motors are factory wired and tested
- When using this power exhaust system, clearance between the bottom of the unit and finished roof deck should be a minimum of 10 inches. Some applications may require a taller roof curb for proper installation
- **Economizer Sold Separately**



[ ] Designates Metric Conversions

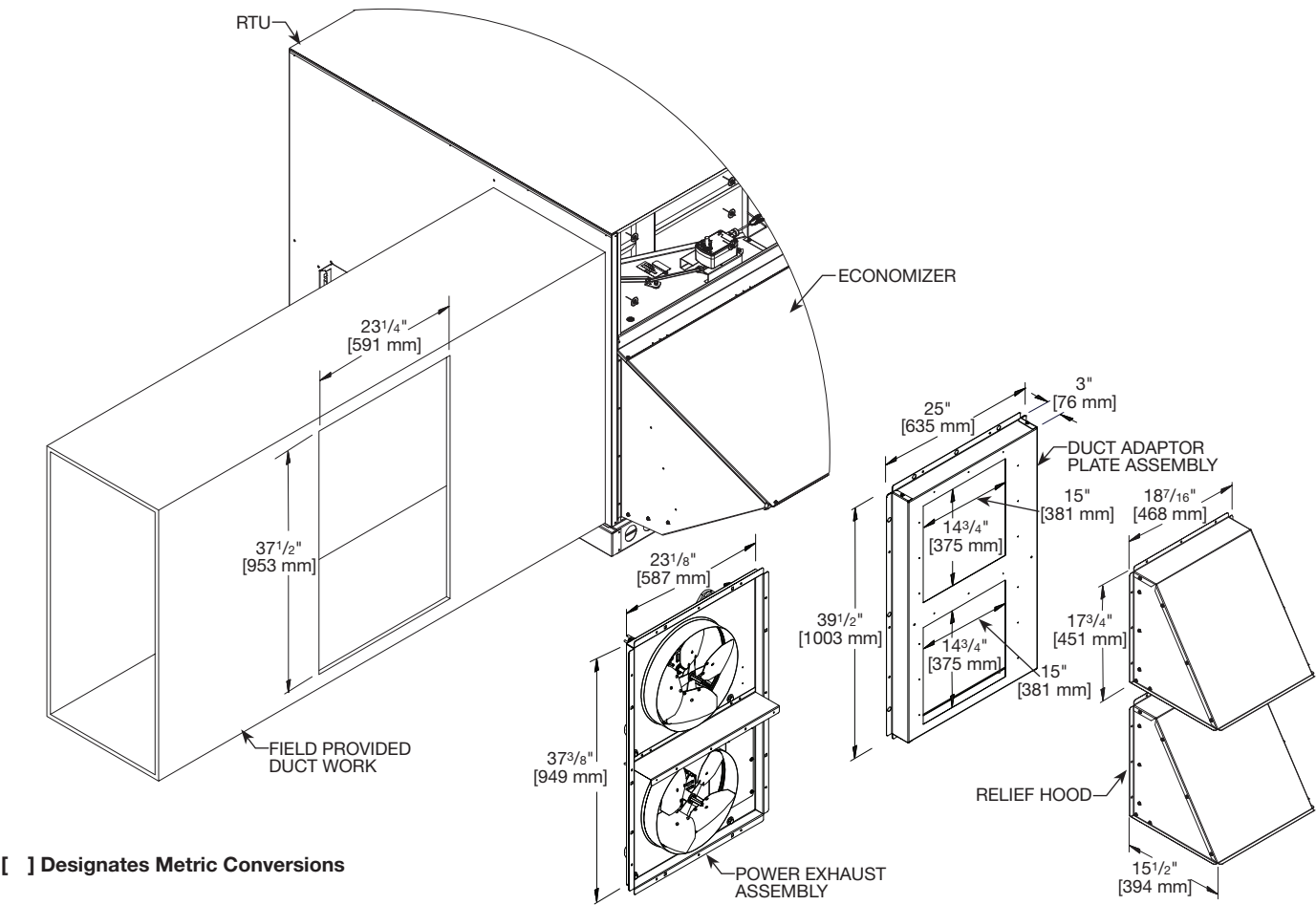
| MODEL NO.   | VOLT    | PHASE | MOTOR |      |      |      | UNIT      |      |      |           | @ 0.1<br>CFM |
|-------------|---------|-------|-------|------|------|------|-----------|------|------|-----------|--------------|
|             |         |       | HP    | RPM  | LRA  | QTY. | CIR. QTY. | FLA  | MCA  | FUSE SIZE |              |
| RXXR-RDF01C | 208/230 | 1     | 1/2   | 1625 | 5.86 | 2    | 1         | 5.40 | 6.75 | 8         | 4013         |
| RXXR-RDF01D | 460     |       |       |      | 3.33 |      |           | 2.68 | 3.35 | 4         |              |
| RXXR-RDF01Y | 575     |       |       |      | 2.52 |      |           | 2.12 | 2.65 | 3         |              |

POWER EXHAUST KIT FOR HORIZONTAL ECONOMIZER

RXXR-RDF03\*

\*Voltage Code: C, D or Y

- Shipped completely assembled
- All wiring from control box to economizer is supplied
- Color coordinated with the unit
- Fully insulated with 1" 1.5 lb. fiberglass insulation
- Motors are factory wired and tested
- When using this power exhaust system, clearance between the bottom of the unit and finished roof deck should be a minimum of 10 inches. Some applications may require a taller roof curb for proper installation
- Economizer with Relief Hood Sold Separately



[ ] Designates Metric Conversions

| MODEL NO.   | VOLT    | PHASE | MOTOR |      |      |      | UNIT      |      |      |           | @ 0.1 CFM |
|-------------|---------|-------|-------|------|------|------|-----------|------|------|-----------|-----------|
|             |         |       | HP    | RPM  | LRA  | QTY. | CIR. QTY. | FLA  | MCA  | FUSE SIZE |           |
| RXXR-RDF03C | 208/230 | 1     | 1/2   | 1625 | 5.86 | 2    | 1         | 2.70 | 3.38 | 6         | 2013      |
| RXXR-RDF03D | 460     |       |       |      | 3.33 |      |           | 1.34 | 1.68 | 3         |           |
| RXXR-RDF03Y | 575     |       |       |      | 2.52 |      |           | 1.06 | 1.33 | 2         |           |

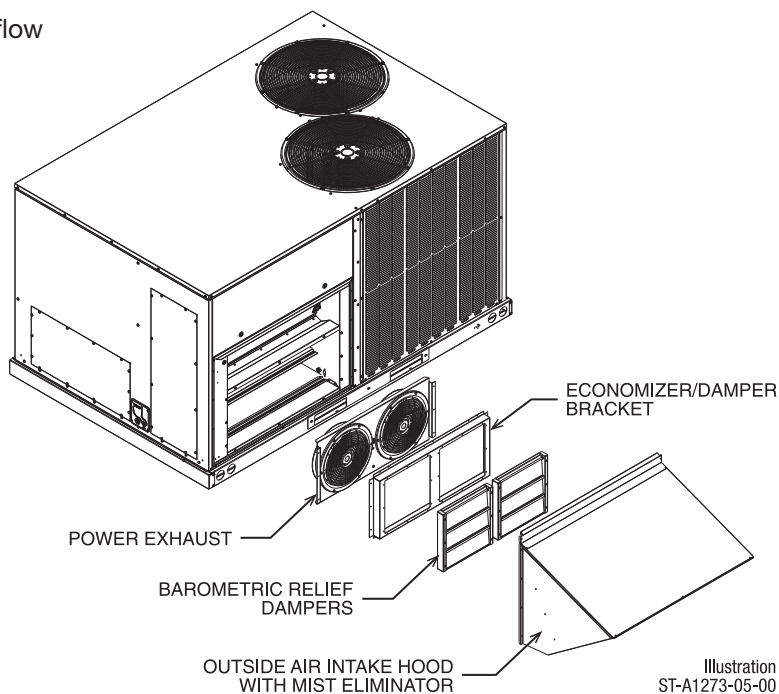
## POWER EXHAUST KIT, CONVERTIBLE

RXXRX-CDF01\*

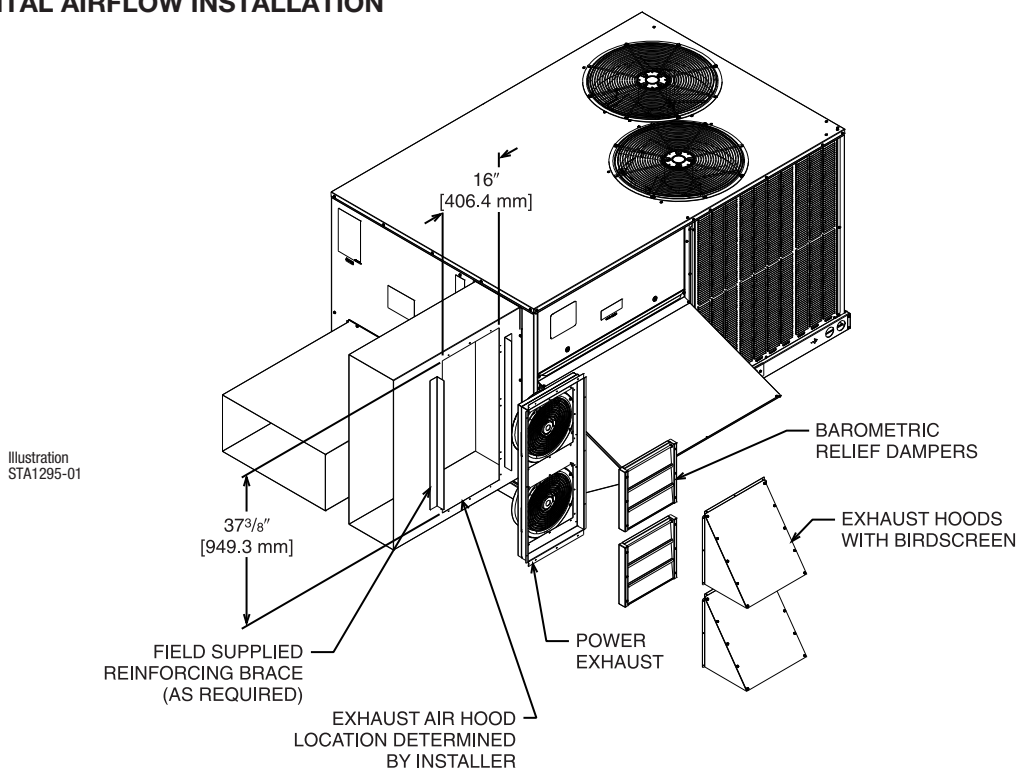
\*Voltage Code: C or D

- Convertible between vertical airflow and horizontal airflow
- Compatible with all D-cabinet economizers
- Economizer sold separately

### VERTICAL AIRFLOW INSTALLATION



### HORIZONTAL AIRFLOW INSTALLATION

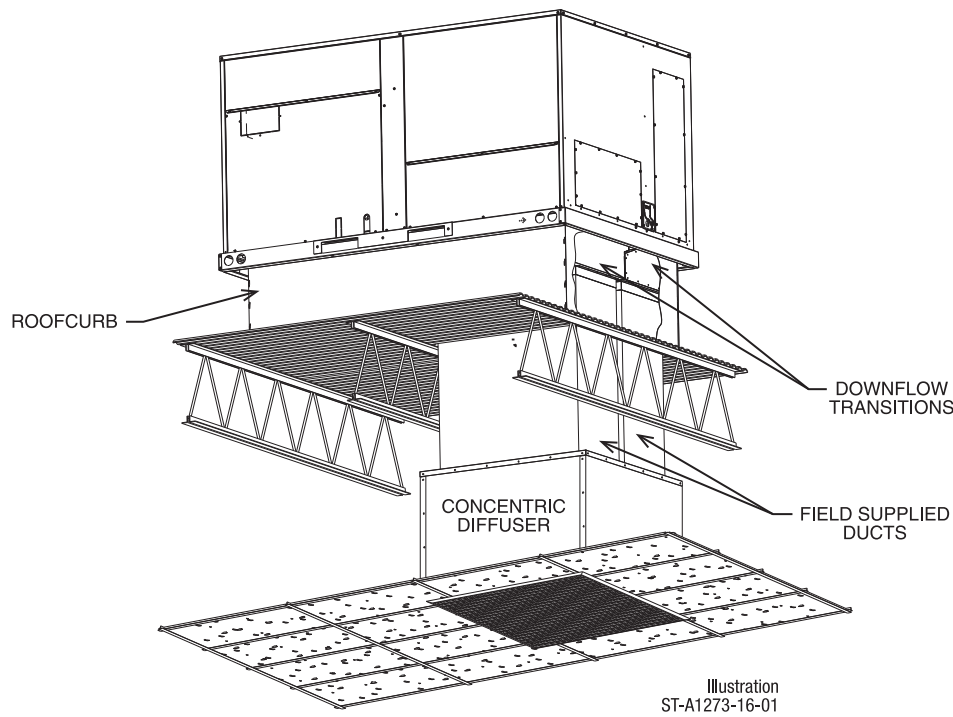


| MODEL NO.    | NO. OF FANS | VOLTS   | PHASE | HP (ea.) | CFM [L/s]* | RPM  | FLA (ea.) | LRA (ea.) |
|--------------|-------------|---------|-------|----------|------------|------|-----------|-----------|
| RXXRX-CDF01C | 2           | 208-230 | 1     | 0.47     | 2200       | 3000 | 1.55      | 1.1       |
| RXXRX-CDF01D | 2           | 460     | 3     | 0.40     | 1970       | 2750 | 0.51      | 1.9       |

\*CFM is per fan at 0" w.c. external static pressure.

[ ] Designates Metric Conversions

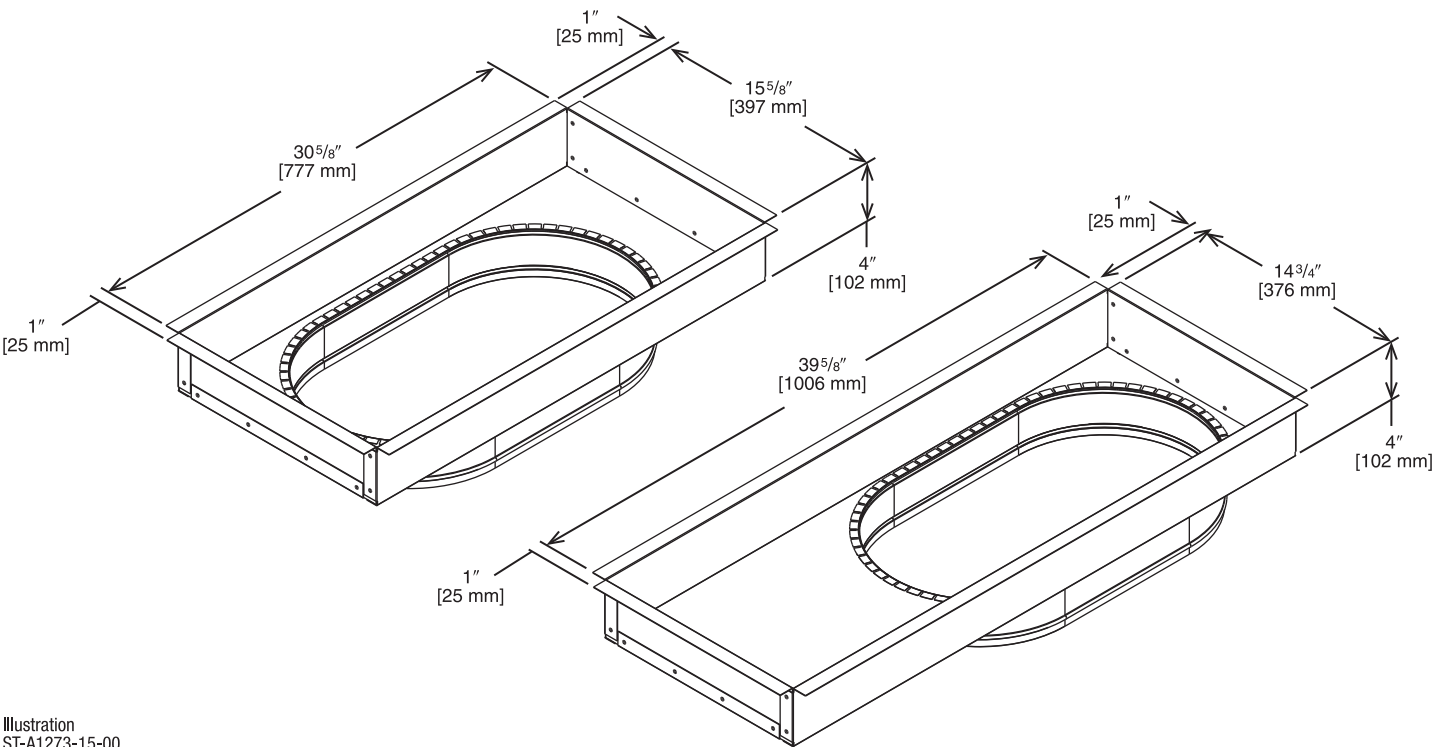
CONCENTRIC DIFFUSER APPLICATION



DOWNFLOW TRANSITION DRAWINGS

RXMC-DD01 – Concentric Adapter 7.5 / 8.5 Ton Drop

- Used with RXRN-AEF2000 or RXRN-AED2000 Concentric Diffusers



[ ] Designates Metric Conversions

## DOWNFLOW TRANSITION DRAWINGS

### RXMC-DD02—Concentric Adapter 10 Ton Drop

- Used with RXRN-AEF3415 or RXRN-AED3415 Concentric Diffusers

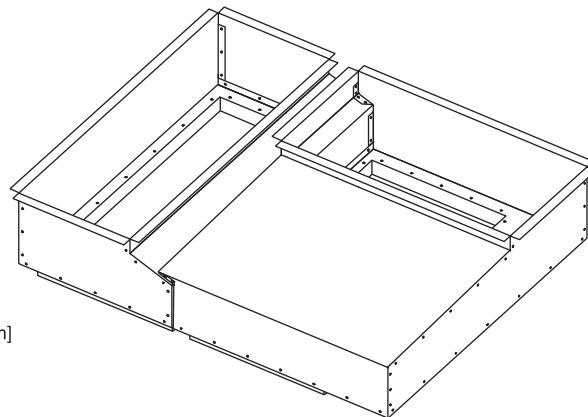
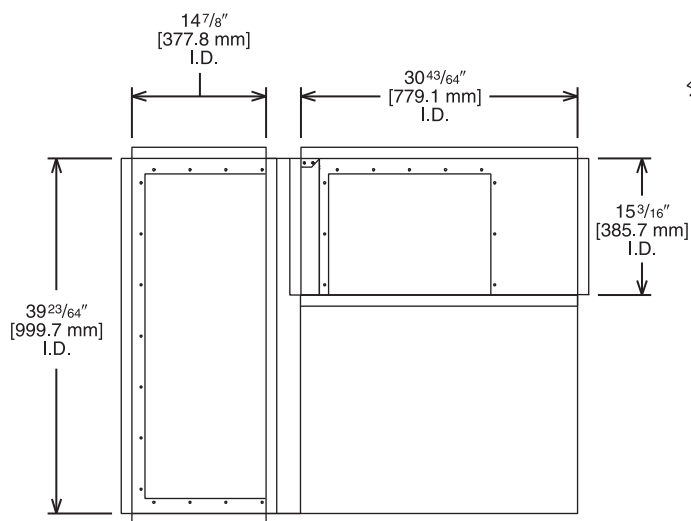
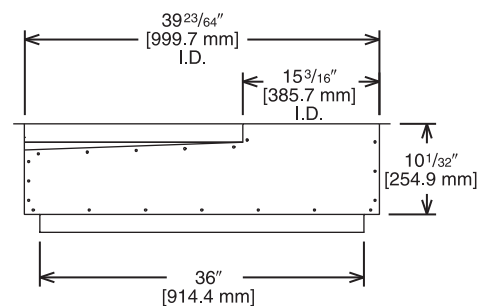
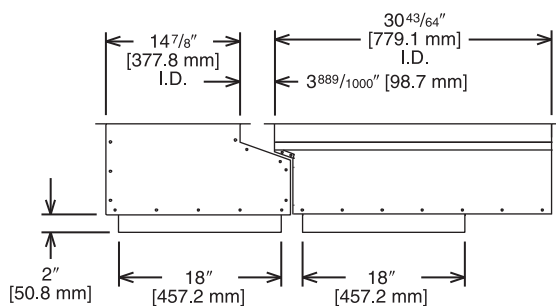


Illustration  
ADS-106193-03

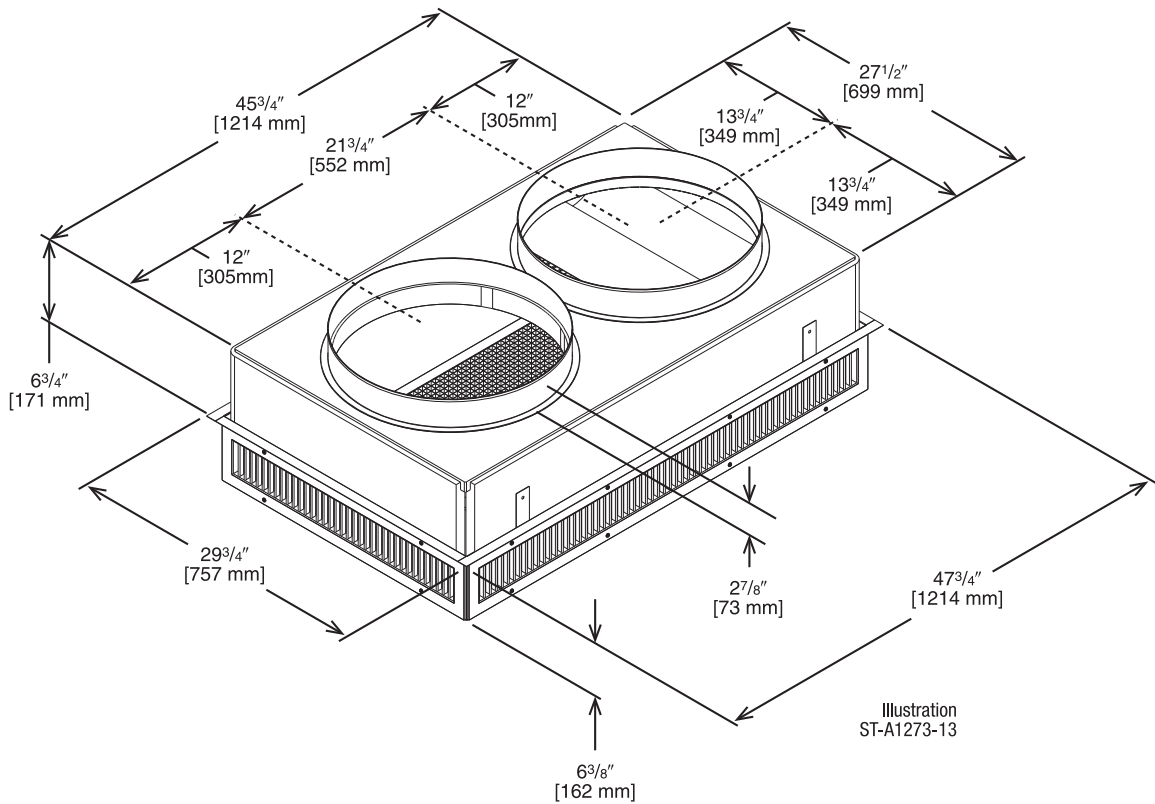


CONCENTRIC DIFFUSER 7.5 / 8.5 TON DROP

RXRN-AED2000

For Use With Downflow Transition (RXMC-DD01) and 20" [508 mm] Round Supply and Return Ducts

- All aluminum diffuser with aluminum return air eggcrate
- Built-in anti-sweat gasket
- Molded fiberglass supports
- Built-in hanging supports
- Diffuser box constructed of sheet metal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner



ENGINEERING DATA<sup>①</sup>

| MODEL NO.    | FLOW RATE<br>CFM [L/s] | THROW <sup>②</sup> <sup>③</sup><br>FEET [m] | NECK VELOCITY<br>FPM [m/s] | NOISE LEVEL <sup>④</sup><br>(dba) |
|--------------|------------------------|---------------------------------------------|----------------------------|-----------------------------------|
| RXRN-AED2000 | 2600 [1222]            | 22-39 [6.7-11.9]                            | 669 [3.4]                  | 32                                |
|              | 2800 [1316]            | 23-40 [7.1-12.2]                            | 720 [3.7]                  | 38                                |
|              | 3000 [1410]            | 25-42 [7.6-12.8]                            | 772 [3.9]                  | 40                                |
|              | 3200 [1504]            | 26-43 [7.9-13.1]                            | 823 [4.2]                  | 41                                |
|              | 3400 [1598]            | 27-45 [8.2-13.7]                            | 874 [4.4]                  | 42                                |
|              | 3600 [1692]            | 30-50 [9.1-15.2]                            | 925.5 [4.7]                | 45                                |
|              | 3800 [1786]            | 32-53 [9.8-16.2]                            | 976.8 [4.9]                | 48                                |
|              | 4000 [1880]            | 34-56 [10.4-17.1]                           | 1028.1 [5.2]               | 50                                |

NOTES: <sup>①</sup> All data is based on the air diffusion council guidelines.  
<sup>②</sup> Throw data is based on 75 FPM Terminal Velocities using isothermal air.  
<sup>③</sup> Throw is based on diffuser blades being directed in a straight pattern.  
<sup>④</sup> Actual noise levels may vary due to duct design and do not include transmitted unit noise.  
Adequate duct attenuation must be provided to reduce sound output from the unit.

[ ] Designates Metric Conversions

## CONCENTRIC DIFFUSER 10.0 TON DROP

RXRN-AED3415

For Use With Downflow Transition (RXMC-DD02) and 15" x 34" Supply and Return Ducts

- All aluminum diffuser with aluminum return air eggcrate
- Built-in anti-sweat gasket
- Molded fiberglass supports
- Built-in hanging supports
- Diffuser box constructed of sheet metal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner
- Double deflection diffuser with the blades secured by spring steel

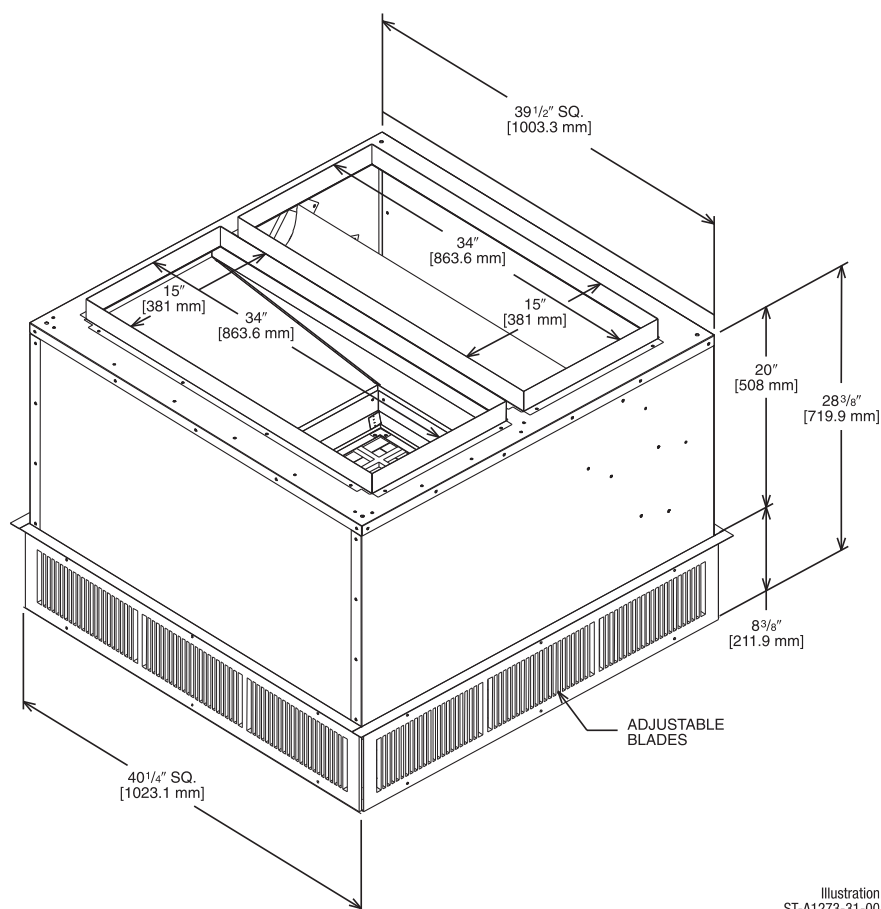


Illustration  
ST-A1273-31-00

## ENGINEERING DATA<sup>①</sup>

| MODEL NO.    | FLOW RATE<br>CFM [L/s] | THROW <sup>②</sup> <sup>③</sup><br>FEET [m] | NECK VELOCITY<br>FPM [m/s] | NOISE LEVEL <sup>④</sup><br>(dba) |
|--------------|------------------------|---------------------------------------------|----------------------------|-----------------------------------|
| RXRN-AED3415 | 3600 [1692]            | 26-53 [7.9-16.2]                            | 851 [4.3]                  | 27                                |
|              | 3800 [1786]            | 27-55 [8.2-16.8]                            | 898 [4.5]                  | 29                                |
|              | 4000 [1880]            | 29-58 [8.8-17.7]                            | 946 [4.8]                  | 30                                |
|              | 4200 [1974]            | 31-61 [9.4-18.6]                            | 993 [5.1]                  | 32                                |
|              | 4400 [2068]            | 32-64 [9.8-19.5]                            | 1040 [5.3]                 | 33                                |
|              | 4600 [2162]            | 34-66 [10.4-20.1]                           | 1087.5 [5.5]               | 35                                |

**NOTES:** <sup>①</sup> All data is based on the air diffusion council guidelines.

<sup>②</sup> Throw data is based on 75 FPM Terminal Velocities using isothermal air.

<sup>③</sup> Throw is based on diffuser blades being directed in a straight pattern.

<sup>④</sup> Actual noise levels may vary due to duct design and do not include transmitted unit noise.  
Adequate duct attenuation must be provided to reduce sound output from the unit.

[ ] Designates Metric Conversions

CONCENTRIC DIFFUSER 7.5 / 8.5 TON FLUSH

RXRN-AEF2000

For Use With Downflow Transition (RXMC-DD01) 20" Round Supply and Return Ducts

- All aluminum diffuser with aluminum return air eggcrate
- Built-in anti-sweat gasket
- Molded fiberglass supports
- Built-in hanging supports
- Diffuser box constructed of sheet metal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner

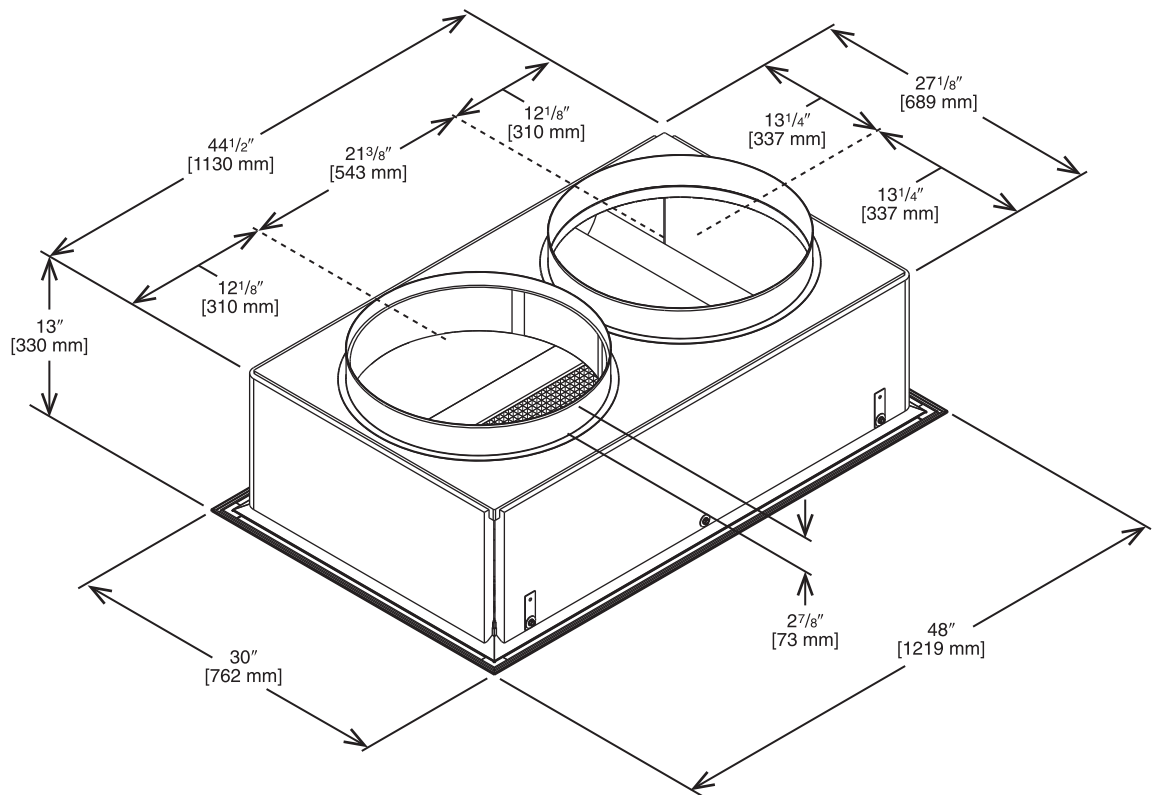


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ST-A1273-14-00

ENGINEERING DATA<sup>①</sup>

| MODEL NO.    | FLOW RATE<br>CFM [L/s] | THROW <sup>②</sup> <sup>③</sup><br>FEET [m] | NECK VELOCITY<br>FPM [m/s] | NOISE LEVEL <sup>④</sup><br>(dbA) |
|--------------|------------------------|---------------------------------------------|----------------------------|-----------------------------------|
| RXRN-AEF2000 | 2600 [1222]            | 17-24 [5.2-7.3]                             | 663 [3.4]                  | 30                                |
|              | 2800 [1316]            | 18-28 [5.5-8.5]                             | 714 [3.6]                  | 35                                |
|              | 3000 [1410]            | 20-30 [6.1-9.1]                             | 765 [3.9]                  | 35                                |
|              | 3200 [1504]            | 22-33 [6.7-10.1]                            | 816 [4.1]                  | 40                                |
|              | 3400 [1598]            | 23-37 [7-11.3]                              | 867 [4.4]                  | 40                                |
|              | 3600 [1692]            | 25-38 [7.6-11.6]                            | 918 [4.7]                  | 43                                |
|              | 3800 [1786]            | 26-39 [7.9-11.9]                            | 969 [4.9]                  | 45                                |
|              | 4000 [1880]            | 27-40 [8.2-12.2]                            | 1020 [5.2]                 | 48                                |

NOTES: ① All data is based on the air diffusion council guidelines.  
② Throw data is based on 75 FPM Terminal Velocities using isothermal air.  
③ Throw is based on diffuser blades being directed in a straight pattern.  
④ Actual noise levels may vary due to duct design and do not include transmitted unit noise.  
Adequate duct attenuation must be provided to reduce sound output from the unit.

[ ] Designates Metric Conversions

## CONCENTRIC DIFFUSER 10.0 TON FLUSH

RXRN-AEF3415

For Use With Downflow Transition (RXMC-DD02) 15" x 34" Supply and Return Ducts

- All aluminum diffuser with aluminum return air eggcrate
- Built-in anti-sweat gasket
- Molded fiberglass supports
- Built-in hanging supports
- Diffuser box constructed of sheet metal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner

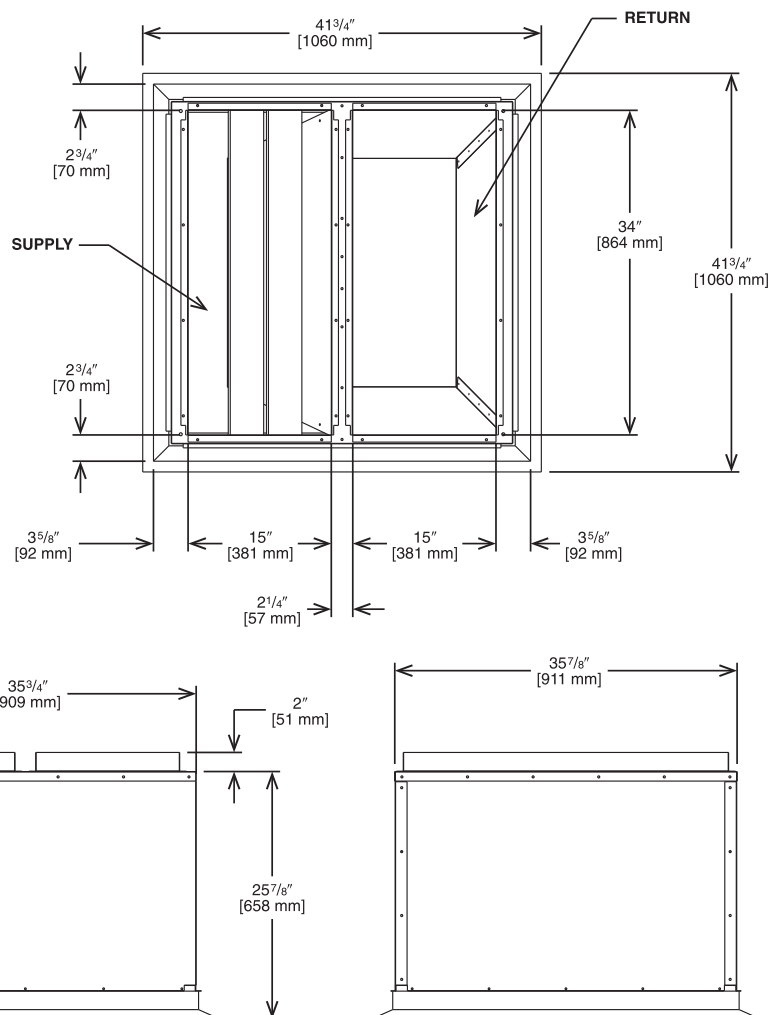


Illustration  
SI-A1273-07-00

## ENGINEERING DATA<sup>①</sup>

| MODEL NO.    | FLOW RATE<br>CFM [L/s] | THROW <sup>② ③</sup><br>FEET [m] | NECK VELOCITY<br>FPM [m/s] | NOISE LEVEL <sup>④</sup><br>(dba) |
|--------------|------------------------|----------------------------------|----------------------------|-----------------------------------|
| RXRN-AEF3415 | 3600 [1692]            | 14-34 [4.3-10.4]                 | 844 [4.3]                  | 27                                |
|              | 3800 [1786]            | 15-36 [4.6-11.1]                 | 891 [4.5]                  | 29                                |
|              | 4000 [1880]            | 16-37 [4.9-11.3]                 | 938 [4.8]                  | 30                                |
|              | 4200 [1974]            | 17-39 [5.2-11.9]                 | 985 [5.1]                  | 32                                |
|              | 4400 [2068]            | 18-41 [5.5-12.5]                 | 1032 [5.2]                 | 33                                |
|              | 4600 [2162]            | 19-43 [5.8-13.1]                 | 1079 [5.5]                 | 35                                |
|              | 4800 [2256]            | 20-45 [6.1-13.7]                 | 1126 [5.7]                 | 36                                |

**NOTES:** ① All data is based on the air diffusion council guidelines.

② Throw data is based on 75 FPM Terminal Velocities using isothermal air.

③ Throw is based on diffuser blades being directed in a straight pattern.

④ Actual noise levels may vary due to duct design and do not include transmitted unit noise.

Adequate duct attenuation must be provided to reduce sound output from the unit.

[ ] Designates Metric Conversions

FRESH AIR DAMPER

RXRF-ADA1 – Fresh Air Damper, Manual

DOWNFLOW APPLICATION

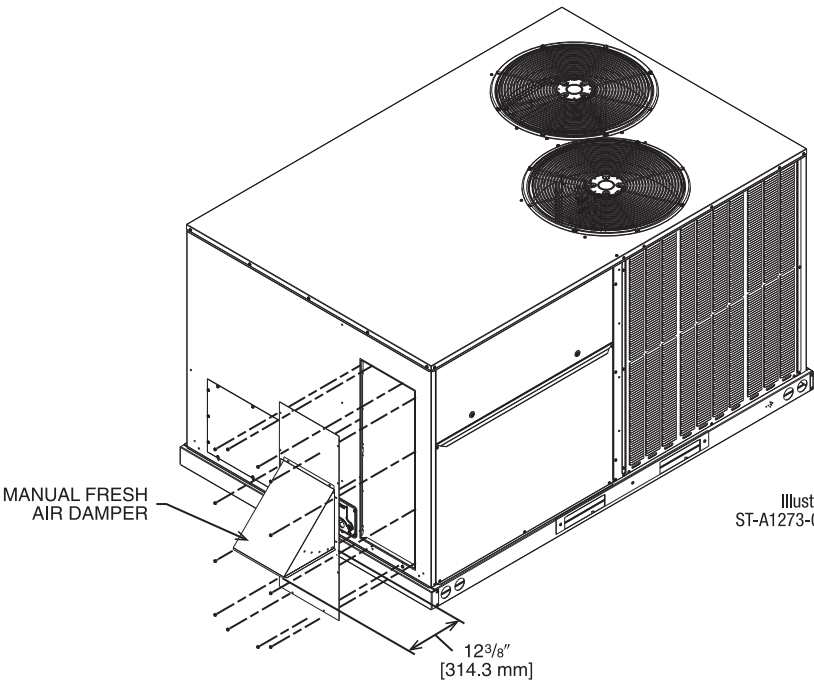


Illustration  
ST-A1273-03-00

HORIZONTAL APPLICATION

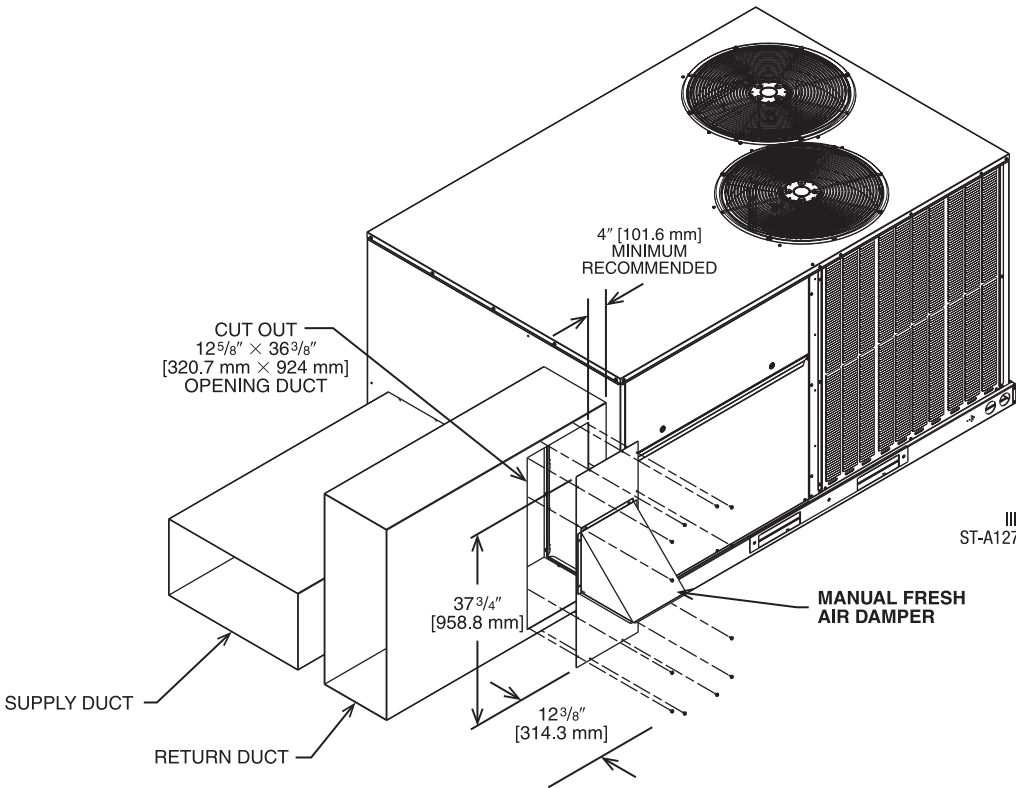


Illustration  
ST-A1273-04-00

[ ] Designates Metric Conversions

## FRESH AIR DAMPER (CONTINUED)

### RXRF-ADB1 – Fresh Air Damper, Motorized

- Gear Driven Direct Drive Actuator
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin

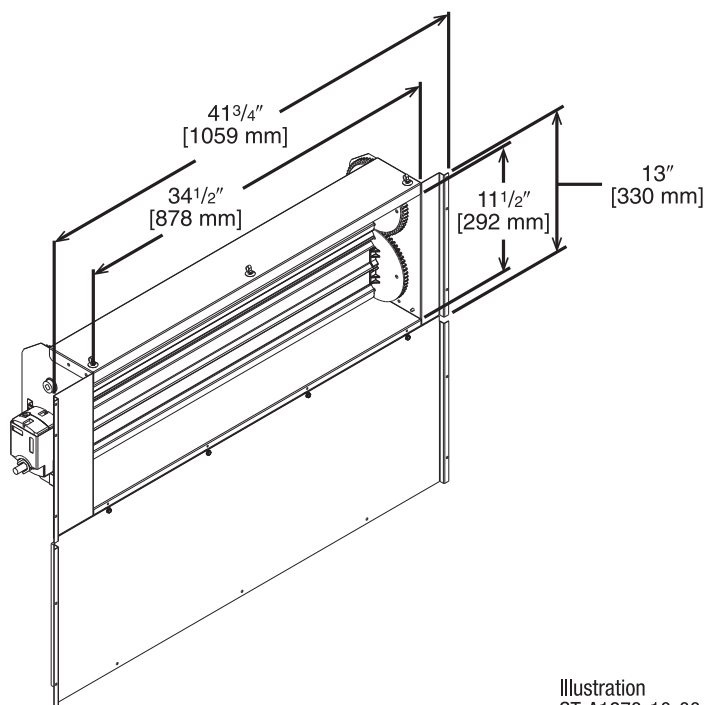


Illustration  
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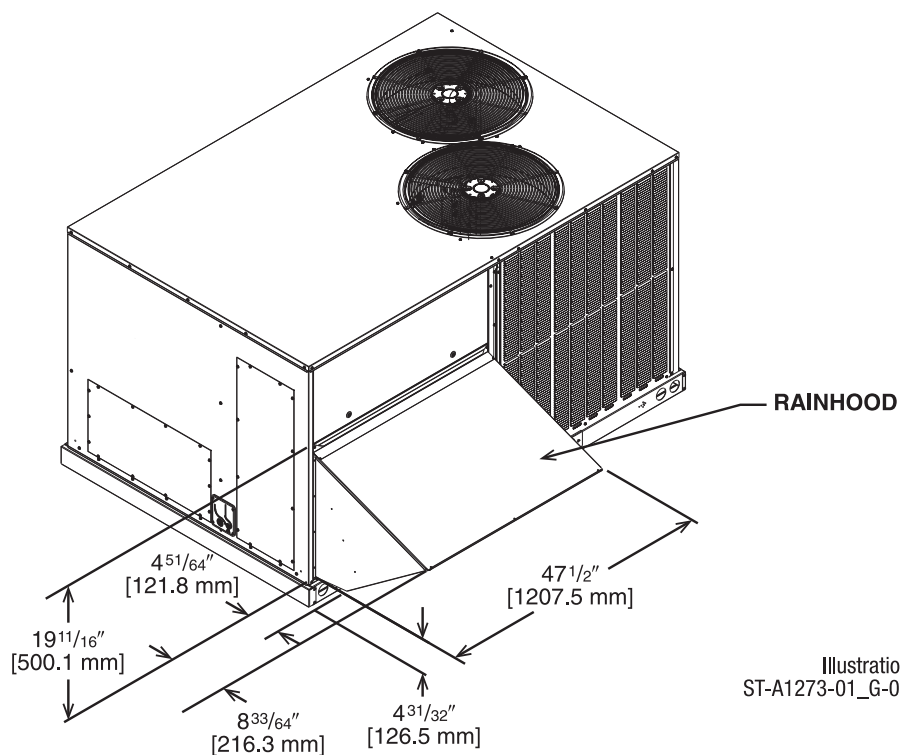


Illustration  
ST-A1273-01\_G-00

[ ] Designates Metric Conversions

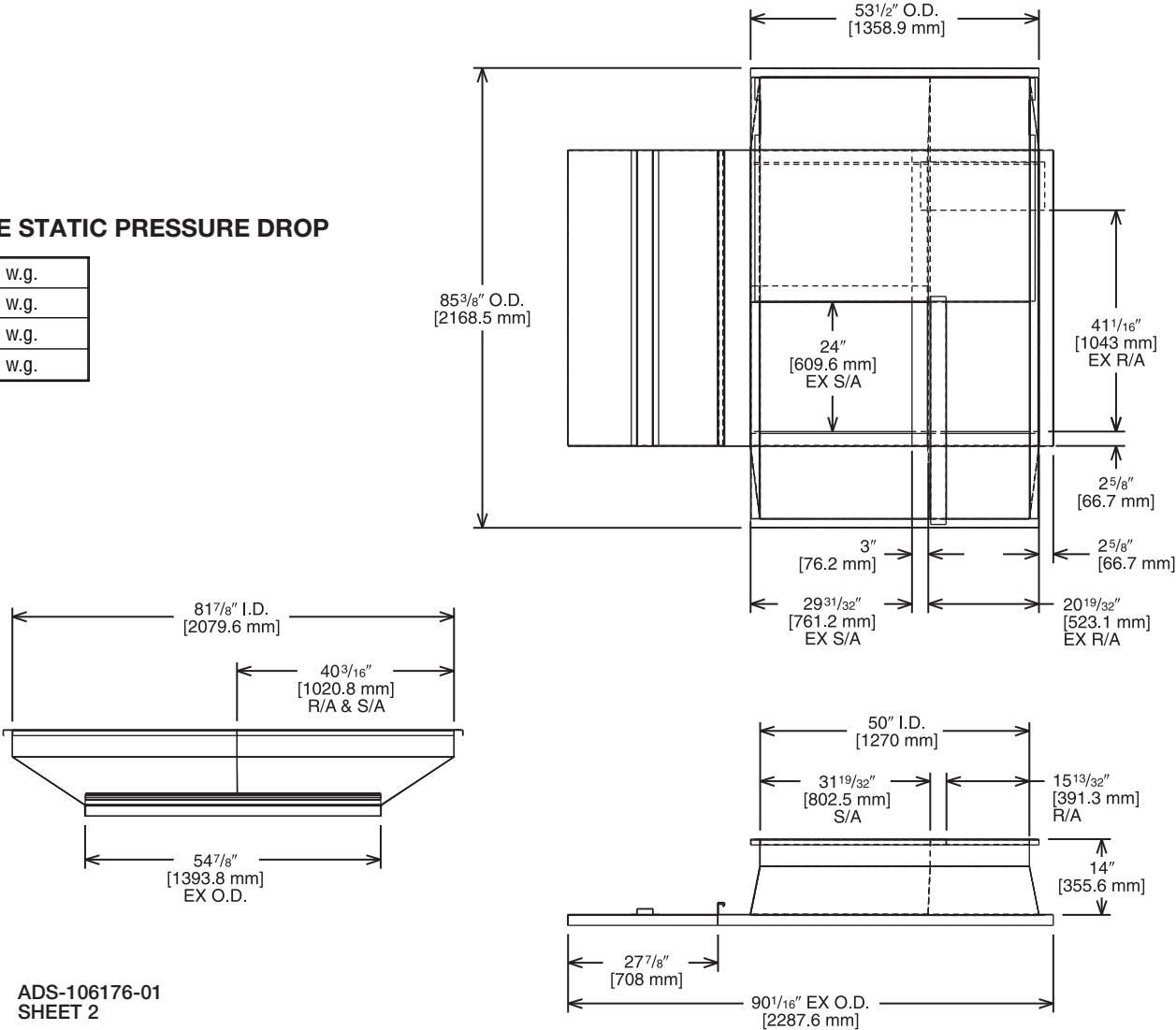
ROOFCURB ADAPTERS

RXXRX-DDCAE

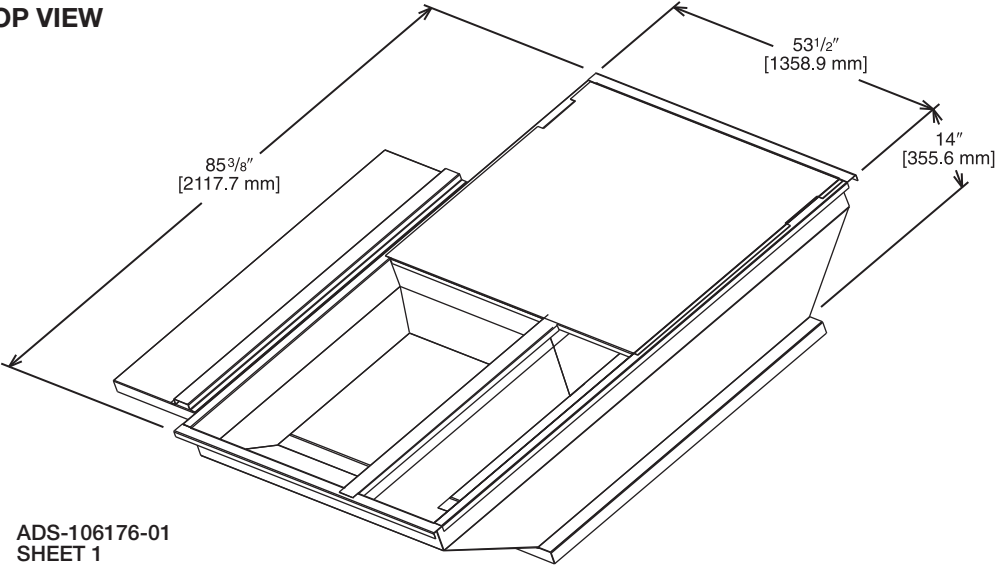
SIDE VIEW

APPROXIMATE STATIC PRESSURE DROP

|                     |
|---------------------|
| @2,000 = 0.06" w.g. |
| @3,000 = 0.12" w.g. |
| @4,000 = 0.22" w.g. |
| @5,000 = 0.36" w.g. |



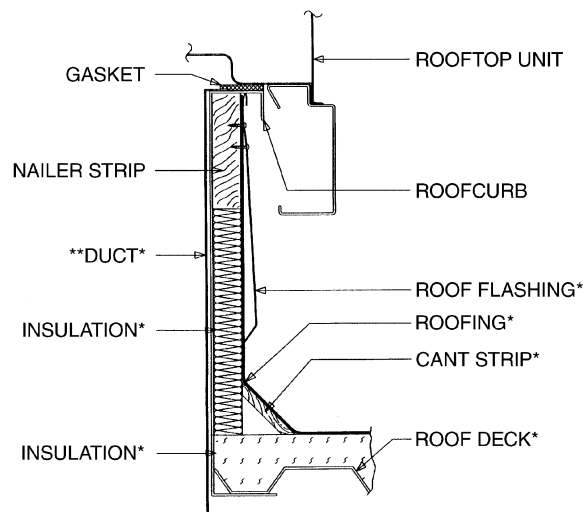
TOP VIEW



[ ] Designates Metric Conversions

## ROOFCURBS (Full Perimeter)

- The roofcurb design can be utilized on all 7.5-10 ton models
- Two available heights (14" [356 mm] and 24" [610 mm]) for ALL models
- Quick assembly corners for simple and fast assembly
- Opening provided in bottom pan to match the "Thru the Curb" electrical connection opening provided on the unit base pan
- 1" [25 mm] x 4" [102 mm] Nailers provided
- Insulating panels not required because of insulated outdoor base pan
- Sealing gasket (40' [12.2 m]) provided with Roofcurb
- Packaged for easy field assembly

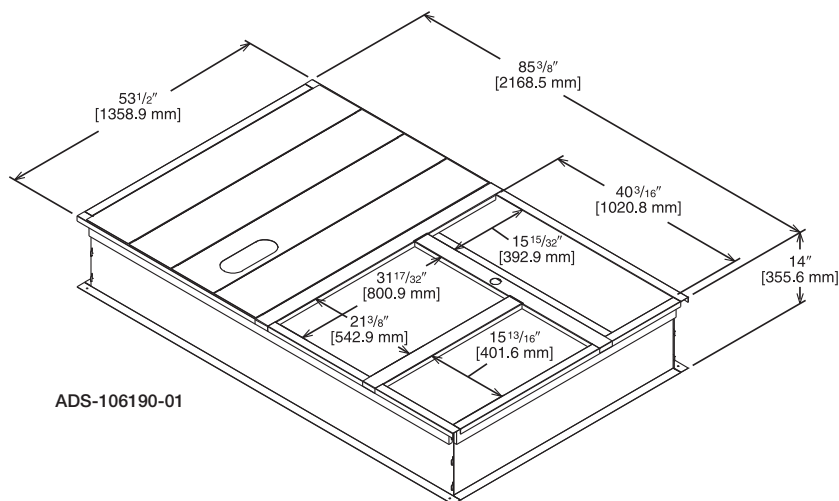


\*BY CONTRACTOR

\*\*FOR INSTALLATION OF DUCT AS SHOWN, USE RECOMMENDED DUCT SIZES FROM ROOFCURB INSTALLATION INSTRUCTIONS. FOR DUCT FLANGE ATTACHMENT TO UNIT, SEE UNIT INSTALLATION INSTRUCTIONS FOR RECOMMENDED DUCT SIZES.

ST-A0743-02

## ROOFCURB INSTALLATION—VIEW A



| View | Roofcurb Model | Height of Curb |
|------|----------------|----------------|
| A    | RXKG-DDD14     | 14" [356 mm]   |
| A    | RXKG-DDD24     | 24" [610 mm]   |

[ ] Designates Metric Conversions

• **State of Florida Approved:** Florida approval #26981 and corresponding Technical Evaluation Report (TER) number are available under separate copy. Unit and mounting methods are for high wind resistance and are compliant per Florida Building Code.

## **COMMUNICATION CARDS**

### **Field-Installed**



#### **BACnet COMMUNICATION CARD      RXRX-AY01**

The field-installed BACnet Communication Card allows the RTU-C unit controller to communicate with a third party building management system that supports the BACnet Application Specific Controller device profile. The BACnet Communication Module plugs onto the unit RTU-C controller and allows communication between the RTU-C and the BACnet MSTP network.



#### **LonWorks COMMUNICATION CARD      RXRX-AY02**

The field-installed LonWorks Communication Card allows the RTU-C unit controller to communicate with a third party building management system that supports the LonMark Space Comfort Controller (SCC) functional profile or LonMark Discharge Air Controller (DAC) functional profile. The LonMark Communication Module plugs onto the RTU-C controller and allows communication between the RTU-C and a LonWorks Network.

## GUIDE SPECIFICATIONS — RHPDYB – 090-120

You may copy this document directly into your building specification. This specification is written to comply with the 2016 version of the “master format” as published by the Construction Specification Institute. [www.csinet.org](http://www.csinet.org).

### ELECTRIC HEAT PUMP PACKAGED ROOFTOP

#### HVAC Guide Specifications

Size Range: 7.5 to 10 Nominal Tons

#### 1.00 General:

- A. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing a(n) hermetic scroll compressor(s) for cooling duty and heat pump for heating duty.
- B. Factory assembled, single-piece heating and cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
- C. Unit shall use environmentally safe, R-454B refrigerant.
- D. Unit shall be installed in accordance with the manufacturer’s instructions.
- E. Unit must be selected and installed in compliance with local, state, and federal codes.
- F. Model and serial data shall be printed inside the control box.

#### 1.01 Quality Assurance:

- A. Unit meets ASHRAE 90.1 2022 minimum efficiency requirements.
- B. Unit shall be rated in accordance with AHRI Standards 340/360.
- C. Unit shall be designed to conform to ASHRAE 15.
- D. Unit shall be UL-tested and certified in accordance with Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
- E. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- F. Unit casing shall be capable of withstanding 1000-hour salt spray exposure per ASTM® B117 (scribed specimen).
- G. Roof curb shall be designed to conform to NRCA Standards.
- H. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.
- I. Unit shall be designed in accordance with UL Standard 60335-2-40 4th Edition. including tested to withstand rain.
- J. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.

#### 1.02 Manufacturer Qualifications

- A. Unit shall be designed in accordance with ISO 9001:2015, and shall be manufactured in a facility registered by ISO 9001:2015.

#### 1.03 Installer Qualifications

- A. The installer shall be trained to install and service equipment with A2L refrigerants.

#### 1.04 Delivery, Storage, and Handling:

- A. Unit shall be stored and handled per manufacturer’s recommendations.
- B. Unit lifted by crane requires either shipping top panel or spreader bars.
- C. Unit shall only be stored or positioned in the upright position.

#### 1.05 Unit Cabinet:

- A. Unit cabinet shall be constructed of galvanized steel.
- B. Unit cabinet exterior paint shall be pre-painted steel.
- C. The sheet-metal cabinet shall be constructed of 18-gauge material for structural components with an underlying coat of G90.
- D. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 210 or 360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2-in. thick, 1.6 lbs density, flexible fiberglass insulation, foil faced on the air side. Aluminum foil-faced fiberglass insulation shall be used in the gas heat compartment.
- E. Shall utilize uniform screw sizing.
- F. Base of unit shall have a location for thru-the-base gas and electrical connections standard.
- G. Base Rail:
  - i. Unit shall have base rails on a minimum of 4 sides.
  - ii. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
  - iii. Holes shall be provided in the base rail for moving the rooftop for fork truck.
  - iv. Base rail shall be a minimum of 14 gauge thickness.
- H. Condensate pan and connections:
  - i. Shall be a sloped condensate drain pan made of a non-corrosive material and be removable for cleaning.
  - ii. Shall comply with ASHRAE Standard 62.
  - iii. Shall use a 3/4" NPT drain connection, possible either through the bottom or side of the drain pan.  
Connection shall be made per manufacturer’s recommendations.
  - iv. Shall be able to be easily removed.
  - v. Shall be separate from the coil.

- I. Standard factory-installed condensate overflow sensor.
- J. Top panel
  - i. Shall be a single piece top panel over indoor section.
- K. Electrical Connections:
  - i. All unit power wiring shall enter unit cabinet via a single, factory-prepared, continuous raised flange opening in the
  - ii. Thru-the-base capability:
    - a. Standard unit shall have a thru-the-base electrical location(s) using a raised, continuous raised flange opening in the basepan.
    - b. No basepan penetration, other than those authorized by the manufacturer, is permitted.
- L. Component access panels (standard):
  - i. Cabinet panels shall be easily opened for servicing.
  - ii. Stainless steel metal hinges are standard on all doors
  - iii. Panels covering control box, indoor fan, indoor fan motor, and electric or gas heater components (where applicable), shall have 1/4 turn latches.

**1.06 Operating Characteristics:**

- A. Unit shall be capable of starting and running at 115°F (46°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 340/360 at  $\pm 10\%$  voltage.
- B. Compressor with standard controls shall be capable of operation down to 40°F (4°C), ambient outdoor temperatures. Low ambient accessory kit is necessary if mechanically cooling at ambient temperatures to 40°F (4°C).
- C. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
- D. Unit shall be factory configured for vertical supply & return configurations.
- E. Unit shall be field convertible from vertical to horizontal configuration.
- F. Unit shall be capable of mixed operation: vertical supply with horizontal return or horizontal supply with vertical return.

**1.07 Electrical Requirements**

- A. Main power supply voltage, phase, and frequency must match those required by the manufacturer.

**1.08 Evaporator Fan Compartment:**

- A. Interior cabinet surfaces shall be insulated with a minimum 1/2-in. thick, minimum 1.6 LB density, flexible fiberglass insulation bonded with foil face on the air side.
- B. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- C. Insulation shall also be mechanically fastened with welded pin and retainer washer.

**1.09 Thermostats**

- A. Thermostat must:
  - i. Energize both "W" and "G" when calling for heat.
  - ii. Have capability to energize 1 stage of cooling, and at least 1 stage of heating.
  - iii. Include capability for occupancy scheduling.

**1.10 Electronic Control System for HVAC:**

- A. Shall be complete with self-contained low-voltage control circuit protected by a fuse on the 24-V transformer side (090-150 units have a resettable circuit breaker).
- B. Shall utilize color-coded wiring.
- C. Shall include a central control terminal board to conveniently and safely provide connection points for vital control functions such as: smoke detectors, phase monitor, economizer, thermostat, DDC control options, loss of charge, freeze sensor, high-pressure switches.
- D. Unit shall include a minimum of one 10-pin screw terminal connection board for connection of control wiring.
- E. Unit control board shall be provided with 7 segment readout via LCD display for status and diagnostics.

**1.10.01 Safeties:**

- A. Compressor over-temperature, over current.
- B. Standard Low-pressure switch:
  - i. Units shall have low-pressure, loss of charge automatic reset device that will shut off compressor when tripped.
  - ii. Low-pressure control
    - a. Provides active protection in both heating and cooling modes at all outdoor ambient temperatures. The low-pressure control is an automatic reset type and opens at approximately 15 PSIG and closes at approximately 40 PSIG. Operation is slightly different between cooling and heating modes.
- C. Standard High-pressure switch:
  - i. Unit shall be equipped with high-pressure switch device that will shut off compressor when tripped.
  - ii. High-pressure control.
  - iii. The high-pressure control is an automatic reset type and opens at approximately 610 PSIG and closes at approximately 420 PSIG. The compressor and fan motor will stop when the high-pressure control opens and will start again if the high side pressure drops to approximately 420 PSIG where the automatic reset high-pressure control resets. If the high-pressure control opens 3 times within a particular call for heating or cooling operation, the defrost control will lock out compressor and outdoor fan operation.

- D. Automatic reset, motor thermal overload protector.
- E. The unit must be permanently grounded.
- F. Components are not compatible between different refrigerants. Do not use R-410A service equipment or components on R-454B equipment. System or part failure could occur.
- G. Heating section shall be provided with the following minimum protections:
  - i. High-temperature limit switches.
  - ii. Induced draft motor pressure switch.

**1.11 Standard Filter Section:**

- A. Filters shall consist of factory-installed, low velocity, throwaway 2-in. thick fiberglass filters of commercially available sizes.
- B. Unit will accept both 2-in. and 4-in. filters.
- C. Filter face velocity shall not exceed 365 fpm at nominal airflows.
- D. Filters shall be accessible through an access panel with "no-tool" removal as described in the unit cabinet section of the specification.
- E. Filters access is specified in the unit cabinet section of this specification.
- F. Filters shall be held in place by metal rods, facilitating easy removal and installation.

**1.12 Coils**

- A. Standard Aluminum/MicroChannel Coils:
  - i. Standard evaporator and condenser coils shall be aluminum.
  - ii. Evaporator and condenser coils shall be leak tested to 150 PSIG, pressure tested to 400 PSIG, and qualified to burst test at 2,200 psi.

**1.13 Refrigerant Components:**

- A. Refrigerant circuit shall include the following control, safety, and maintenance features:
  - i. TXV metering system shall prevent mal-distribution of two-phase refrigerant.
  - ii. Refrigerant filter drier.
  - iii. Service gauge connections on suction and discharge lines.
  - iv. External pressure gauge ports access shall be located in front exterior of cabinet.
  - v. External gauge ports shall be lockable.
- B. Compressors:
  - i. Unit shall use one fully hermetic, 2-stage scroll compressor for each independent refrigeration circuit.
  - ii. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
  - iii. Compressors shall be internally protected from high discharge temperature conditions.
  - iv. Compressors shall be protected from an over-temperature and over-ampereage conditions by an internal, motor overload device.
  - v. Compressor shall be factory mounted on rubber grommets.
  - vi. Compressor motors shall have internal line break thermal and current overload protection.
  - vii. Crankcase heaters shall not be required for normal operating range.
  - viii. Compressor shall have molded electrical plug.

**1.14 Evaporator Fan and Motor:**

- A. Evaporator Fan Motor:
  - i. Shall have permanently lubricated bearings.
  - ii. Shall have inherent automatic-reset thermal overload protection.
  - iii. Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating shall be required.
- B. Direct Drive Evaporator Fan:
  - i. Belt drive shall include an adjustable-pitch motor pulley.
  - ii. Shall use sealed, permanently lubricated ball-bearing type.
  - iii. Blower fan shall be double-inlet type with forward-curved blades.
  - iv. Shall be constructed from steel with a corrosion resistant finish and dynamically balanced.
- C. Blower Assembly:
  - i. Entire assembly shall be able to slide out completely.
  - ii. Shall be able to slide-out without the removal of the roof and condenser fan motors.

**1.15 Condenser Fans and Motors:**

- A. Condenser Fan Motors:
  - i. Shall be a totally enclosed motor.
  - ii. Shall use permanently lubricated bearings.
  - iii. Shall have inherent thermal overload protection with an automatic reset feature.
  - iv. Shall use a shaft-down design. Shaft-up designs including those with "rain-slinger devices" shall not be allowed.
- B. Condenser Fans:
  - i. Shall be a direct-driven propeller type fan.
  - ii. Shall have blades riveted to corrosion-resistant steel spiders and shall be dynamically balanced.

**1.16 RTU-C Controller:**

- A. Shall be ASHRAE 62-2001 compliant.
- B. Shall accept 18-32VAC input power.
- C. Shall have an operating temperature range from -40°F (-40°C) to 158°F (70°C), 10%–95% RH (non-condensing).
- D. Controller shall accept the following inputs: space temperature, setpoint adjustment, outdoor air temperature, indoor air quality, outdoor air enthalpy, fire shutdown, return air enthalpy, fan status, remote time clock/door switch.
- E. Shall accept a CO<sub>2</sub> sensor in the conditioned space, and be Demand Control Ventilation (DCV) ready.
- F. Shall provide the following outputs: Economizer, fan, cooling stage 1, cooling stage 2, heat stage 1, heat stage 2, exhaust, occupied.
- G. Unit shall provide surge protection for the controller through a circuit breaker.
- H. Shall have a field-installed communication card allowing the unit to be able to communicate at a Baud rate of 19.2K or faster.
- I. Shall have an LED display independently showing the status of activity on the communication bus, and processor operation.
- J. Optional field-installed BACnet plug-in communication card which includes an EIA-485 protocol communication port, or an optional field-installed LonWorks plug-in communications card.
- K. Software upgrades will be accomplished by local download. Software upgrades through chip replacements are not allowed.
- L. Shall be shock resistant in all planes to 5G peak, 11ms during operation, and 100G peak, 11ms during storage.
- M. Shall be vibration resistant in all planes to 1.5G @ 20-300 Hz.
- N. Shall support a bus length of 4000 ft max, 60 devices per 1000 ft section, and 1 RS-485 repeater per 1000 ft sections.

**1.17 Open Protocol, Direct Digital Controller:**

- A. Shall be ASHRAE 62-2001 compliant.
- B. Shall accept 18-30VAC, 50-60Hz, and consumer 15VA or less power.
- C. Shall have an operating temperature range from -40°F (-40°C) to 130°F (54°C), 10% - 90% RH (non-condensing).
- D. Shall have either a field-installed BACnet plug-in communication card which includes an EIA-485 protocol communication port, or a field-installed LonWorks plug-in communications card.
- E. The BACnet plug-in communication card shall include built-in protocol for BACnet (MS/TP and PTP modes).
- F. The LonWorks plug-in communication card shall include the Echelon processor required for all Lon applications.
- G. Shall allow access of up to 62 network variables (SNVT). Shall be compatible with all open controllers.
- H. Baud rate Controller shall be selectable through the EIA-485 protocol communication port.
- I. Shall have an LED display independently showing the status of serial communication, running, errors, power, all digital outputs, and all analog inputs.
- J. Shall accept the following inputs: space temperature, setpoint adjustment, outdoor air temperature, indoor air quality, outdoor air enthalpy, compressor lock-out, fire shutdown, enthalpy switch, and fan status/filter status/humidity/remote occupancy.
- K. Shall provide the following outputs: economizer, fan, cooling stage 1, cooling stage 2, heat stage 1, heat stage 2, exhaust.
- L. Software upgrades will be accomplished by either local or remote download. No software upgrades through chip replacements are allowed.
- M. Shall be natively equipped with Modbus® communication protocol.

**1.18 Adjustable Frequency Drive:**

- A. Unit shall be supplied with an electronic variable frequency drive for the supply air fan.
- B. Drive shall be factory-installed in an enclosed cabinet.
- C. Drive shall meet UL Standard 60335-2-40 4th Edition.
- D. The completed unit assembly shall be UL listed.
- E. Drives are to be accessible through a tooled access hinged door assembly.
- F. The unit manufacturer shall install all power and control wiring.
- G. The supply air fan drive output shall be controlled by the factory-installed main unit control system and drive status and operating speed shall be monitored and displayed at the main unit control panel.
- H. Drive shall be programmed and factory run tested in the unit.

## 1.19 Special Features:

### A. Integrated Economizers:

- i. Integrated, parallel modulating blade design type capable of simultaneous economizer and compressor operation.
- ii. Independent modules for vertical or horizontal return configurations shall be available. Vertical return modules shall be available as a factory-installed option.
- iii. Damper blades shall be galvanized steel. Plastic or composite blades on intake or return shall not be acceptable.
- iv. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
- v. Shall be equipped with dampers for both the outdoor ventilation air and the return air for positive air stream control.
- vi. Shall be equipped with low-leakage dampers, not to exceed 2% leakage at 1 in. wg pressure differential.
- vii. Shall be capable of introducing up to 100% outdoor air.
- vii. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air.
- ix. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
- x. Enthalpy sensor shall be provided as standard. Outdoor air sensor set point shall be adjustable and shall range from 40 to 100°F / 4 to 38°C. Additional sensor options shall be available as accessories.
- xi. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 70%, with a range of 0% to 100%.
- xii. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy. A remote potentiometer may be used to override the damper set point.
- xiii. Dampers shall be completely closed when the unit is in the unoccupied mode.
- xiv. Economizer controller shall accept a 2-10Vdc CO2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor-air damper to provide ventilation based on the sensor input.
- xv. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
- xvi. Economizer wire harness will have provision for smoke detector available in supply and return options.
- xvii. Shall provide fault detection and diagnostics (FDD) system in accordance with local code. Faults shall be communicated out on an alarm signal.

### B. Two-Position Motorized Damper:

- i. Damper shall be a Two-Position Motorized Damper. Damper travel shall be from the full closed position to the field adjustable %-open setpoint.
- ii. Damper shall include adjustable damper travel from 25% to 100% (full open).
- iii. Damper shall include single or dual blade, gear driven dampers and actuator motor.
- iv. Actuator shall be direct coupled to damper gear. No linkage arms or control rods shall be acceptable.
- v. Damper will admit up to 100% outdoor air for applicable rooftop units.
- vi. Damper shall close upon indoor (evaporator) fan shutoff and/or loss of power.
- vii. The damper actuator shall plug into the rooftop unit's wiring harness plug. No hard wiring shall be required.
- viii. Outside air hood shall include aluminum water entrainment filter

### C. Manual Damper

- i. Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 50% outdoor air for year-round ventilation.

### D. Condenser Coil Hail Guard Assembly:

- i. Shall protect against damage from hail.
- ii. Shall be louvered style.

### E. Unit-Mounted, Non-Fused Disconnect Switch:

- i. Switch shall be factory-installed, internally mounted.
- ii. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
- iii. Shall be accessible from outside the unit.
- iv. Shall provide local shutdown and lockout capability.

### F. Convenience Outlet:

- i. Non-Powered convenience outlet.
- ii. Outlet shall be powered from a separate 115-120v power source.
- iii. A transformer shall not be included.
- iv. Outlet shall be field-installed and internally mounted with easily accessible 115-v female receptacle.
- v. Outlet shall include 15 amp GFI receptacle with independent fuse protection.
- vi. Outlet shall be accessible from outside the unit.

- G. Propeller Power Exhaust:
  - i. Power exhaust shall be used in conjunction with an integrated economizer.
  - ii. Independent modules for vertical or horizontal return configurations shall be available.
  - iii. Horizontal power exhaust shall be mounted in return ductwork.
  - iv. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers are open.
  - v. Capable of adjustable but constant volume.
- H. Roof Curbs (Vertical):
  - i. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
  - ii. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
- I. Return Air Enthalpy Sensor
  - i. The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
- J. Indoor Air Quality (CO2) Sensor:
  - i. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
  - ii. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The set point shall have adjustment capability.
- K. Smoke detectors:
  - i. Shall be a Four-Wire Controller and Detector.
  - ii. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
  - iii. Shall use magnet-activated test/reset sensor switches.
  - iv. Shall have tool-less connection terminal access.
  - v. Shall have a recessed momentary switch for testing and resetting the detector.
  - vi. Controller shall include:
    - a. One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel
    - b. Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment
    - c. One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station
    - d. Capable of direct connection to two individual detector modules.
    - e. Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
- L. Barometric Relief:
  - i. Shall include damper, seals, hardware, and hoods to relieve excess building pressure.
  - ii. Damper shall gravity-close upon shutdown.
- M. Time Guard:
  - i. Shall prevent compressor short cycling by providing a 5-minute delay ( $\pm 2$  minutes) before restarting a compressor after shutdown for any reason.
  - ii. One device shall be required per compressor.
- N. Standard Factory-Installed Overflow Switch
  - i. Switch shall monitor the condensate level in drain pan and stops compression operation when overflow conditions occur.
- O. Access Panels:
  - i. Hinges with  $\frac{1}{4}$  turn fasteners shall be permanently attached.
  - ii. Hinges shall be powder coated and made from stainless steel.
- P. Head Pressure Control Package
  - i. Controller shall control coil head pressure by condenser-fan cycling.
- Q. Fan/Filter Status Switch:
  - i. Switch shall provide status of indoor evaporator fan (ON/OFF) or filter (CLEAN/DIRTY).
  - ii. Status shall be displayed either over communication bus (when used with direct digital controls) or through the controller LCD display inside the unit control box.
- R. Refrigerant Leak Detection System:
  - i. Shall be standard and factory-installed in every unit.
  - ii. Shall trigger a fault code to the unit controller and initiate mitigation procedures.



## GENERAL TERMS OF LIMITED WARRANTY\*

Russell® By Rheem will furnish a replacement for any part of this product which fails in normal use and service within the applicable periods 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.**

### **Compressor**

Commercial Applications .....Five (5) Years

### **Parts**

Commercial Applications .....One (1) Year

**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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