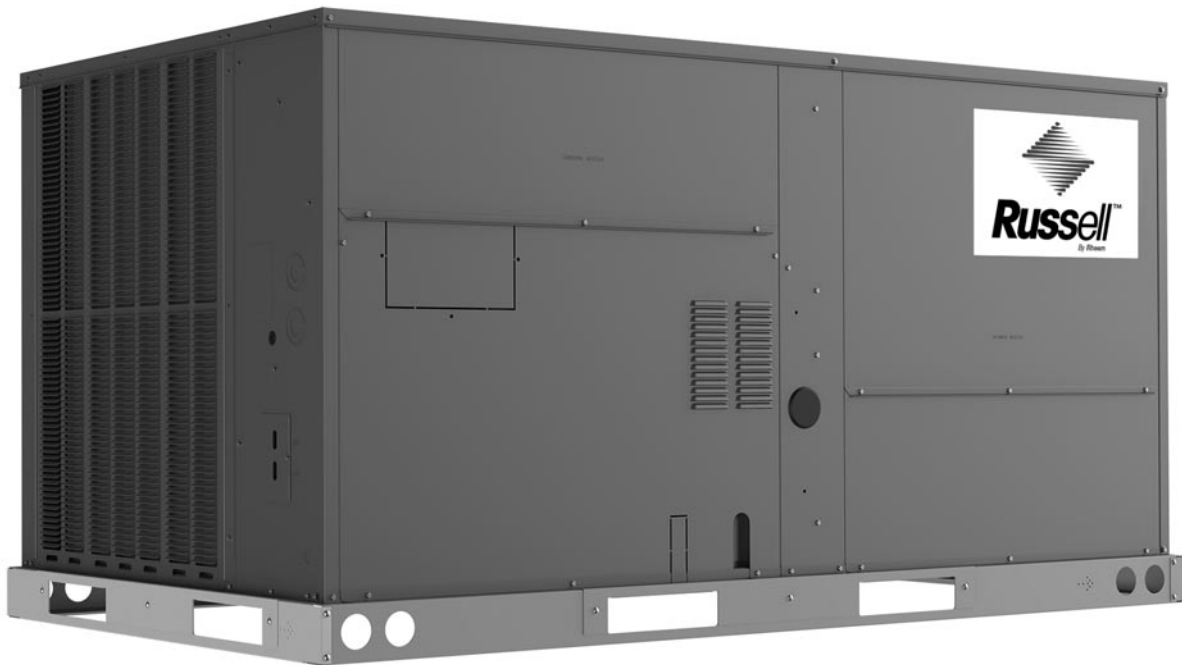




Commercial Renaissance® Line Packaged Heat Pumps



RHPCYB Series

Cooling Efficiencies up to:

3-5 Tons: 13.4 SEER2 / 10.6 EER2

6 Tons: 14.1 IEER / 11.0 EER

Nominal Sizes: 3, 4, 5 & 6 Tons

[10.6, 14.0, 17.6 & 21.1 kW]

Cooling Capacities: 34.2k Btu/h [10.02 kW] to 68.5k Btu/h [20.08 kW]

Refrigerant Type: R-454B

ASHRAE 90.1 2022 Compliant Models



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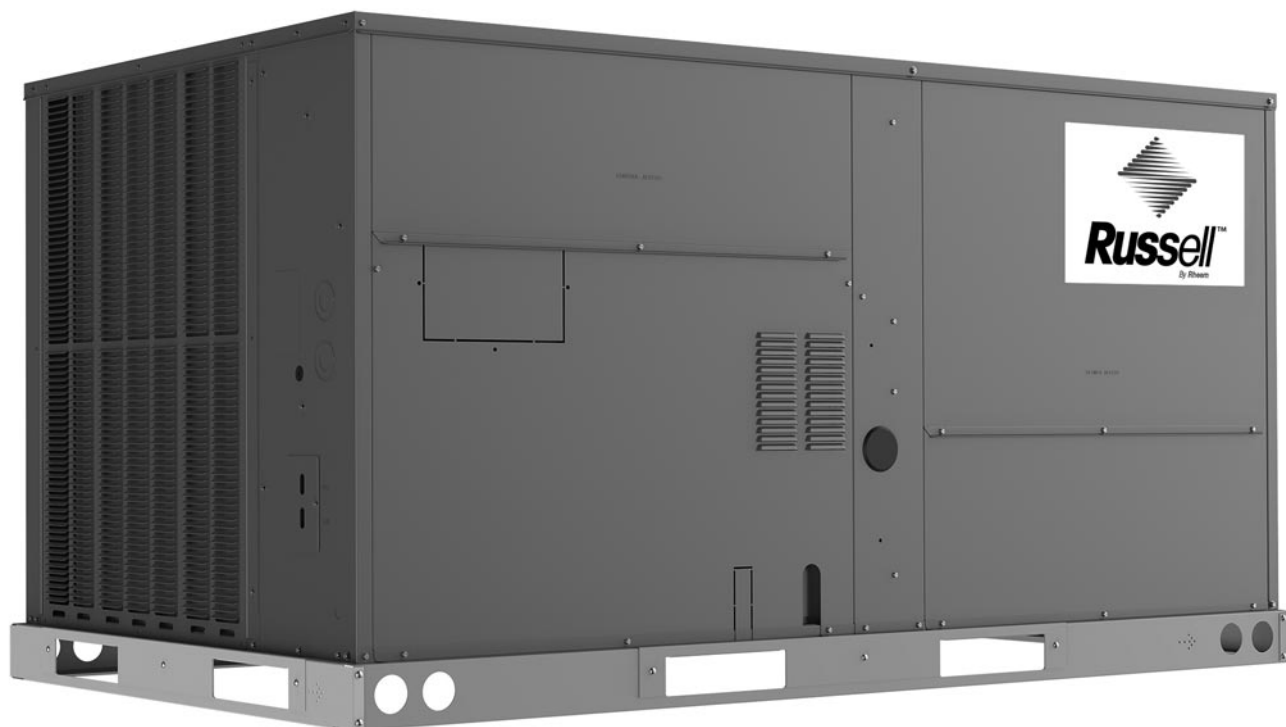
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RHPC STANDARD FEATURES INCLUDE:

Quality Manufacturing 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.
- SEET tested for reliable performance in a variety of operating conditions
- 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
- MicroChannel evaporator and condenser coil
- 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
- 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, 1/4 turn latches, and flexible-fit filter rack for easy filter size changes, up to MERV8 or MERV13
- Slide-out indoor fan assembly for added service convenience
- Slide-out, internally sloped condensate drain pan with overflow switch, conforms to ASHRAE 62 standards
- Factory-installed refrigerant leak detection system
- Standard Modbus interface

FACTORY-INSTALLED OPTIONS:

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

FIELD-INSTALLED ACCESSORIES:

Accessory	Model Number	Factory Installation Available?
Economizers		
DDC Economizer with Single Enthalpy (Downflow) <i>MicroMetl Economizer with Honeywell Controller</i>	RXRD-01MCDAM3	No
DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Honeywell Controller</i>	RXRD-01MCHAM3	No
Non-DDC Economizer with No Controls (Downflow) <i>MicroMetl Economizer, Belimo Actuator</i>	RXRD-31MCDAM3	No
Non-DDC Economizer with Single Enthalpy (Downflow) <i>MicroMetl Economizer with Siemens Controls</i>	RXRD-11MCDAM3	Yes
Non-DDC Economizer with Single Enthalpy (Downflow) <i>RRS Economizer with RRS Basic Controller</i>	RXRD-41MCDAM3	No
Non-DDC Economizer with Single Enthalpy (Downflow) <i>RRS Economizer with Siemens Controls</i>	RXRD-51MCDAM3	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Siemens Controls</i>	RXRD-11MCHAM3	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>RRS Economizer with RRS Basic Controller</i>	RXRD-41MCHAM3	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>RRS Economizer with Siemens Controls</i>	RXRD-51MCHAM3	No
Economizer Universal DDC Interface Kit	RXRX-DDC01	Yes ¹

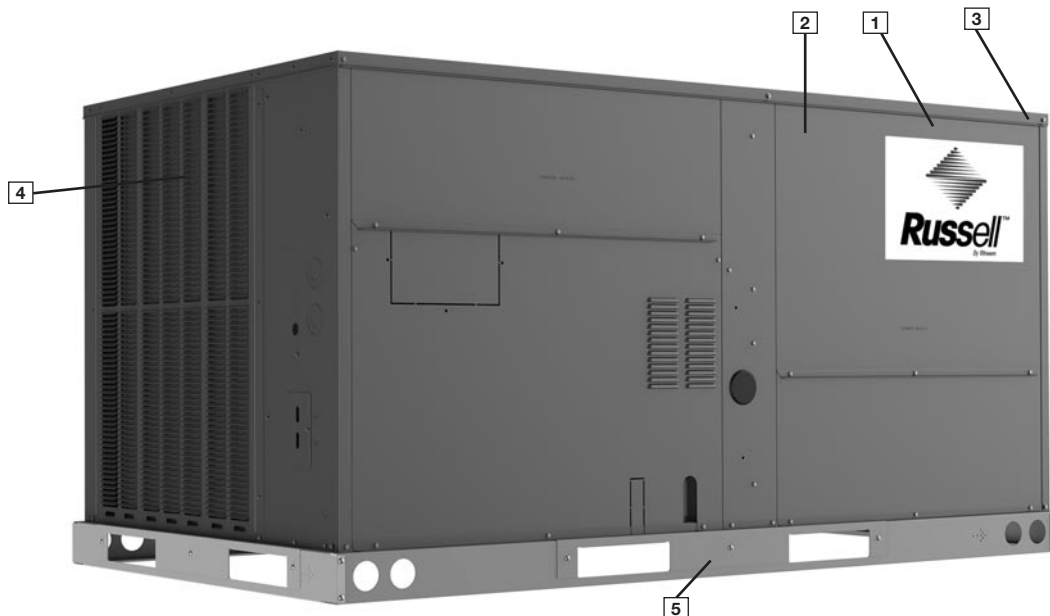
¹When a factory installed economizer is selected in the unit option codes, this accessory is automatically factory installed if required.

FIELD-INSTALLED ACCESSORIES (CONTINUED)

Accessory	Model Number	Factory Installation Available?
Comfort Alert (1 Phase) DDC	RXXR-AZ03	Yes
Comfort Alert (1 Phase) Non-DDC	RXXR-AZ04	Yes
Comfort Alert (3 Phase) DDC	RXXR-AZ01	Yes
Comfort Alert (3 Phase) Non-DDC	RXXR-AZ02	Yes
Communication Card, BACnet	RXXR-AY01	No
Communication Card, LonWorks	RXXR-AY02	No
Concentric Adapter 3-4 Ton Drop	RXMC-DC01	No
Concentric Adapter 5-6 Ton Drop	RXMC-DC02	No
Concentric Diffuser 3-4 Ton Drop	RXRN-AED1800	No
Concentric Diffuser 5-6 Ton Drop	RXRN-AED2000	No
Concentric Diffuser 3-4 Ton Flush	RXRN-AEF1800	No
Concentric Diffuser 5-6 Ton Flush	RXRN-AEF2000	No
Convenience Outlet, Nonpowered	RXXR-BN01	Yes
Dual Enthalpy Kit DDC (for Honeywell DDC)	RXXR-BV02	No
Dual Enthalpy, Temperature and Humidity Sensor (for RRS Basic Controller)	PD955977	No
Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Controller)	PD555460	No
Electric Heater Kits ²	RXJJ-DC10JT	Yes
	RXJJ-DC15JT	Yes
	RXJJ-DC20JT	Yes
	RXJJ-DC10CP	Yes
	RXJJ-DC15CP	Yes
	RXJJ-DC20CP	Yes
	RXJJ-DC24CP	Yes
	RXJJ-DC10DNV	Yes
	RXJJ-DC15DNV	Yes
	RXJJ-DC20DNV	Yes
Freeze Stat Kit	RXXR-AM05	Yes
Fresh Air Damper, Manual	RXRF-ACA1	No
Fresh Air Damper, Motorized	RXRF-ACB1	No

Accessory	Model Number	Factory Installation Available?
Low-Ambient Control Kit	RXRZ-A04	Yes
MERV 8 Filter	RXMF-M08A21616	No
MERV 13 Filter	RXMF-M13A21616	No
Outdoor Coil Louver Kit	RXXR-ADD04C	Yes
Power Exhaust (230V) Horizontal <i>MicroMetl</i>	RXXR-CCF03C	No
Power Exhaust (460V) Horizontal <i>MicroMetl</i>	RXXR-CCF03D	No
Power Exhaust (230V) Horizontal <i>RRS</i>	RXXR-RCF03C	No
Power Exhaust (460V) Horizontal <i>RRS</i>	RXXR-RCF03D	No
Power Exhaust (230V) Vertical <i>MicroMetl</i>	RXXR-CCF02C	No
Power Exhaust (460V) Vertical <i>MicroMetl</i>	RXXR-CCF02D	No
Power Exhaust (230V) Vertical <i>RRS</i>	RXXR-RCF02C	No
Power Exhaust (460V) Vertical <i>RRS</i>	RXXR-RCF02D	No
Roofcurb, 14"	RXKG-DCC14	No
Roofcurb, 14" Welded	RXKG-DC14	No
Roofcurb, 24"	RXKG-DCC24	No
Roofcurb, 24" Welded	RXKG-DC24	No
Roofcurb Adapter	RXXR-DCCAE	No
Sensor, Carbon Dioxide (Wall Mount)	RXXR-AR02	No
Sensor, Room Humidity	RHC-ZNS4	No
Sensor, Room Temperature and Relative Humidity	RHC-ZNS5	No
Single Point Wiring Kits	RXJX-AJ0601 (Single Phase)	No
	RXJX-AZ0601 (Three Phase)	No
Smoke Detector, Return (Field kit)	RXXR-BS01	No
Smoke Detector, Return/Supply (Field kit)	RXXR-BS02	No
Unfused Service Disconnect	RXXR-BP01	Yes
UV-C Kit 208V/230V	RXXR-UVC22C	No
UV-C Transformer 460V/575V	RXXR-UVCTC	No

²10kW options not available on 6 Ton models. 24kW options not available on 3-5 Ton models.



Cabinet and Foundation

Outwardly, the large Russell® By Rheem label (1) identifies the brand to the customer. The sheet-metal cabinet (2) uses 18-gauge material for structural components with an under 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 is designed to simplify the installation and replacement process with a footprint that matches existing airflow inlets, outlets and electrical connections to commonly used curb configurations in the market today.

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

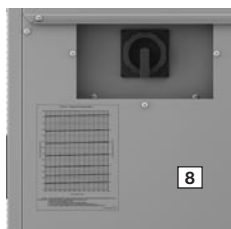
During development, each unit was tested to U.L. 60335-2-40, AHRI 210/240 (3-5 ton) or AHRI 340/360 (6 ton), as well as other Russell® By Rheem-required reliability tests. Russell® By Rheem adheres to stringent ISO 9001 quality procedures, and each unit bears the U.L. and AHRI certification labels located 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

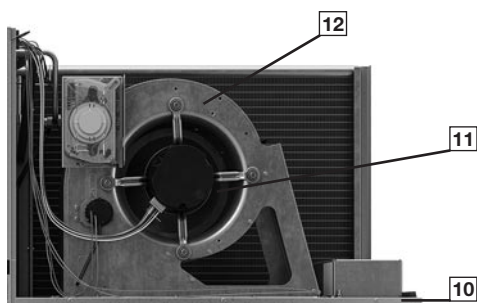
Located within the filter compartment, the Qwik-Change Flex-Fit Rack ([9]) allows easy changeover between 2" and 4" standard size and readily available filters.



Blower Assembly

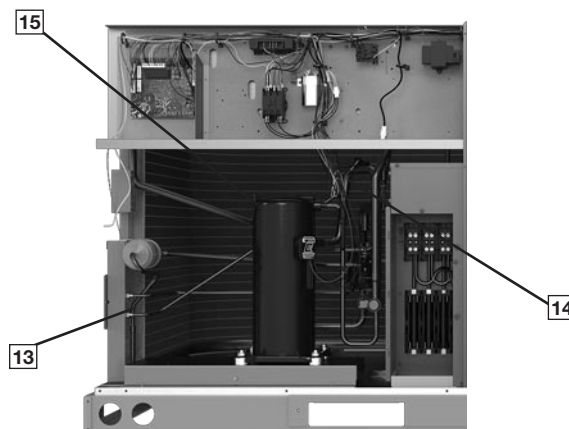
Removing three screws provides full access to the blower compartment. Inside, the Qwik-Slide Blower Assembly ([10]) is incredibly easy to access and remove. This makes servicing internal components such as blower motor, TXV, and MicroChannel coil much easier. The entire assembly slides out by removing the 3/8" screws from the blower retention bracket.

Where the demands for the job require high static, Russell® By Rheem offers drives ([11]) that deliver nominal airflow up to 1.5" 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.



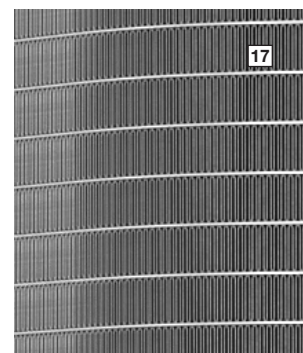
High and Low Pressure Switches & Freeze Stat

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.



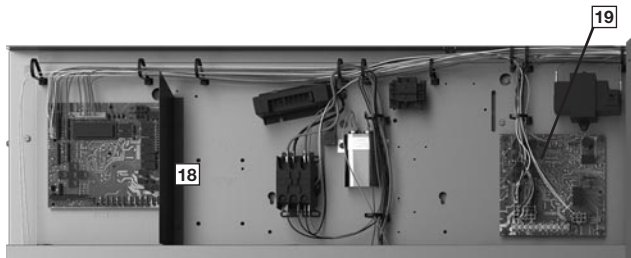
MicroChannel Evaporator & TXV

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.



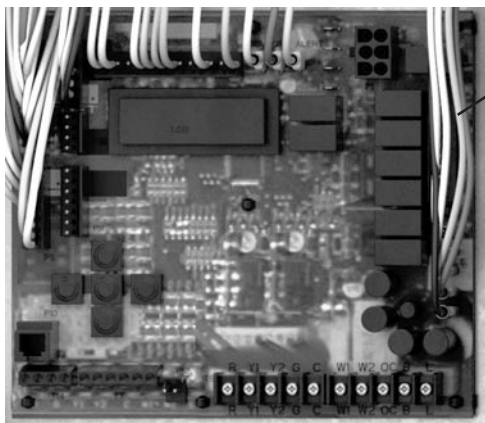
Control Box

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 CoreCommand, incorporates the PlusOne Diagnostics: Dual 7-Segment LED Display ([19]) with easy-to-understand fault codes. The control transformer has a low voltage circuit breaker that trips if an electrical short occurs.



ClearControl DDC System

The optional ClearControl Direct Digital Control (DDC) 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 ([20]). 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.

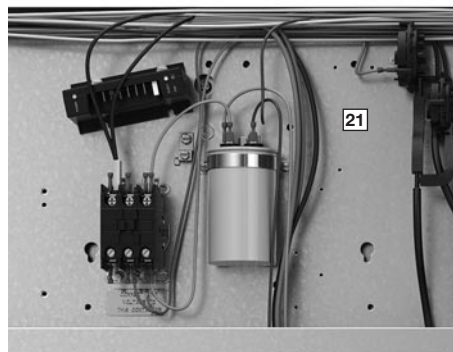


The RHPC Cooling only with the RTU-C is specifically designed to be applied in four distinct applications:

- 1. BACnet Communication** — The RHPC 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 RHPC 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 RHPC 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 RHPC 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.

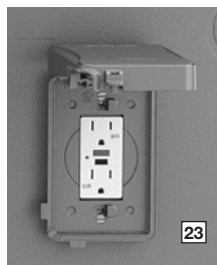
Comfort Alert

A factory or field-installed Comfort Alert ([21]) 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.



Convenience Outlet, Disconnect, & Circuit Breaker

The convenience outlet option comes non-powered from the factory (23). 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. The suggested mounting for the field-installed disconnect or circuit breaker is on the exterior side of the electrical control box.



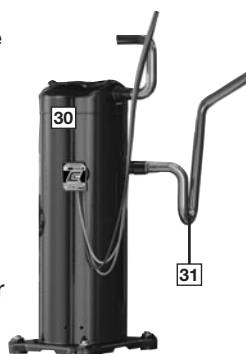
External Lockable Gauge Ports

The unit's refrigerant gauge ports are mounted externally and include several features that enhance accessibility and serviceability. Accessed through a large, lockable door (25) so technicians have plenty of space to connect to the ports if needed, the external position allows for an accurate diagnostic of system operation without removing access panels which can affect unit performance. They are permanently identified by embossed lettering that identifies the high pressure connection and low pressure connection. The red plastic caps on the refrigerant ports (26) indicate unit is charged with A2L refrigerant.



Compressor

The compressor compartment houses the heartbeat of the unit. The scroll compressor (30) is known for its long life and for reliable, quiet, and efficient operation. The suction and discharge lines are designed with shock loops (31) to absorb the strain and stress that the starting torque, steady state operation, and shut-down cycle impose on the refrigerant tubing. 6-Ton model includes 2-Stage scroll compressor as standard, 3-5 ton models include one single-stage compressor.



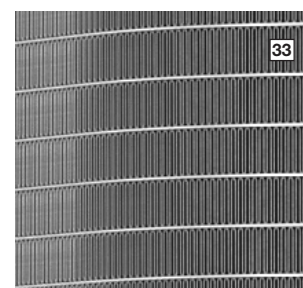
Condenser Fans

The condenser fan motor (32) 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 (33) 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 ElectroFin E-Coat condenser coating (34) 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 (35) 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 CO₂ 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 plugin 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 CO₂ 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 (36) 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 (37) will trigger mitigation procedure that shuts off the compressor(s) and turns on the indoor blower motor.

The sensor is installed on the bracket facing the filter rack. From the outside of the unit, the sensor is not visible.

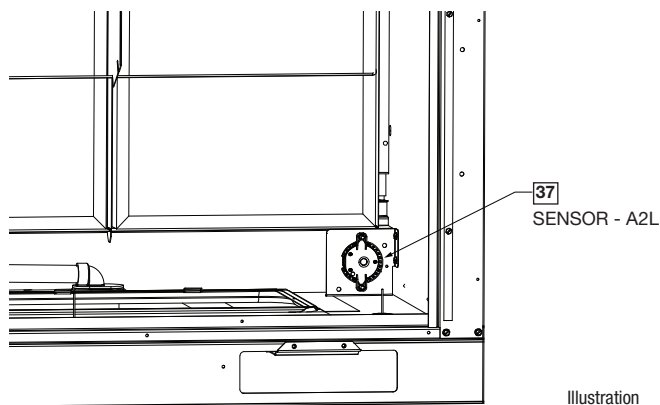


Illustration
ST-A1291-21-00

<u>R</u>	<u>HP</u>	<u>C</u>	<u>Y</u>	<u>B</u>	<u>036</u>	<u>A</u>	<u>C</u>	<u>T</u>	<u>10</u>	<u>2</u>	<u>A</u>	<u>A</u>	<u>***</u>			
<u>1</u>	<u>23</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>789</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>
1—Brand R = Russell® By Rheem						11—Voltage J = 1 PH, 208-230 V, 60 Hz ¹ C = 3 PH, 208-230 V, 60 Hz D = 3 PH, 460 V, 60 Hz						16—Control A = CoreCommand™ (Non-Communicating) B = CoreCommand & Comfort Alert C = ClearControl™ (DDC) D = ClearControl (DDC) & Comfort Alert				
2, 3—Unit Type HP = Packaged HP						12—Drive T = Direct Drive Standard Static Constant Torque U = Direct Drive High Static Constant Torque ²						17—Minor Series A = 1st Design				
4—Cabinet Type C = Small Commercial						13, 14—Heat Capacity 00 = No Heat 10 = 10 kW ³ 15 = 15 kW 20 = 20 kW 24 = 24 kW ⁴						18, 19, 20—Option Code See next page				
5—Refrigerant Y = R-454B						15—Heat Configuration 0 = No stages 1 = 1-stage 2 = 2-stage										
6—Efficiency Level B = Standard Efficiency																
7, 8, 9—Capacity 036 = 3 Ton 048 = 4 Ton 060 = 5 Ton 072 = 6 Ton																
10—Major Series A = 1st Design																

NOTES:

1. J voltage is not available for 24 kW heat capacity or on 6 ton models
2. U drive is not available with J voltage
3. 10 kW heat is not available with 6 ton models
4. 24 kW heat is not available with 3-5 ton models

FACTORY-INSTALLED OPTION CODES FOR RHPC (3-6 TON)

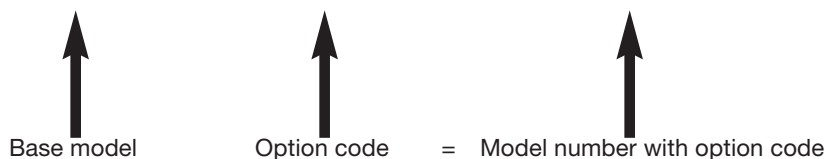
18				19			20			
LV = Louver protection				LF = Low Ambient / Freeze Stat			EC = Downflow Economizer			
HA = Hinged Access				NP = Non-powered Convenience Outlet			SS = Supply Smoke Detector			
CC = Coil Coating							RS = Return Smoke Detector			
OPTION CODE CHARACTER HIGHLIGHTED BELOW										
A	None			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, “AAO” 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 “F” has Low Ambient / Freeze Stat and Disconnect switch.
- **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 Economizer and Return Smoke.
- The resulting option code from examples above is: “EF3”
- **Step 4:** Add your option code selection to the end of model number

◦ Example: RHPCYB036ACT000AA EF3 = RHPCYB036ACT000AAEF3



To select an RHPC 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—	47,000 Btu/h [13.8 kW]
Sensible Cooling Capacity—	36,000 Btu/h [10.6 kW]
Heating Capacity—	40,000 Btu/h [10 kW]
*Condenser Entering Air—	95°F [35.0°C] DB
*Evaporator Mixed Air Entering—	67°F [19.4°C] WB
	78°F [25.6°C] DB
*Indoor Air Flow (vertical)—	1600 CFM [755 L/s]
*External Static Pressure—	0.6 in. WG [1.5 kPa]

2. SELECT UNIT TO MEET COOLING REQUIREMENTS.

Since total cooling is within range of a nominal 4-ton unit, use the cooling performance table at 95°F DB condenser inlet air. Interpolate between 1730 CFM [816 L/s] and 1400 CFM [660 L/s] to determine total and sensible capacity and Depression Ratio for inlet air at 1600CFM [755 L/s] indoor airflow (table basis)

Interpolation Formula:

$$k\text{Btu/h}_1 + \left[(\text{CFM} - \text{CFM}_1) \times \left(\frac{k\text{Btu/h}_2 - k\text{Btu/h}_1}{\text{CFM}_2 - \text{CFM}_1} \right) \right] = k\text{Btu/h}$$

Total Cooling Capacity:

$$46,800 + \left[(1,600 - 1,730) \times \left(\frac{45,200 - 46,800}{1,400 - 1,730} \right) \right] = 46,170 \text{ Btu/h}$$

Total Cooling Capacity = 46,170 Btu/h [13.5 kW]

Sensible Cooling Capacity = 33,7400 Btu/h [9.9 kW]

DR = 0.2

When the entering dry bulb temperature (dbE) is not 80°F [26.7°C], the sensible capacity needs to be adjusted.

Note: total capacity is unaffected

Sensible Capacity Depression Formula:

$$\text{Cap}_{\text{sensible}} + [1.10 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$$

$$= 33,740 + [1.10 \times 1,600 \times (1 - 0.2) \times (78 - 80)]$$

$$\text{Sensible Cooling Capacity} = 30,924 \text{ Btu/h [9.1 kW]}$$

3. DETERMINE BLOWER SPEED AND BHP TO MEET SYSTEM DESIGN.

Total ESP (external static pressure) per the spec of 0.6 in WG [1.5 kPa] includes the system duct and grilles. Add from the table “Component Air Resistance,” 0.13 in. WG [0.04 kPa] for wet coil. Using the “Airflow Performance Table”, at the specified 1,600 CFM and 0.7 in. WG [0.17 kPa] ESP, determine blower wattage.

CFM = 1564

Watts = 440

Tap = 5

4. CALCULATE INDOOR BLOWER BTU/H HEAT EFFECT FROM MOTOR BHP IN STEP 3.

Assuming an average of 85% motor efficiency, determine the amount of heat generated by the blower motor at the specified CFM and ESP by dividing the watts used by the motor efficiency and solving for the difference. Convert this value from watts to Btu/h, multiplying by 3.41 Btu/h/Watt

Watts = 440

Avg. Motor Efficiency = 85%

$$\text{Indoor Blower Motor Heat} = \left[\left(\frac{\text{Watts}}{0.85} \right) - \text{Watts} \right] \times 3.41$$

$$= [(440/0.85) - 440] \times 3.41 = 77.6 \text{ Btu/h [0.02 kW]}$$

5. CALCULATE THE NET COOLING CAPACITIES

Net cooling capacities can be calculated by subtracting the motor heat from the gross cooling capacities.

Net Total Capacity = Gross Total Capacity – Indoor Blower Motor Heat

$$= 46,170 - 77 = 46,093 \text{ Btu/h [13.5 kW]}$$

Net Sensible Capacity = Gross Sensible Capacity – Indoor Blower Motor Heat

$$= 30,924 - 77 = 30,847 \text{ Btu/h [9.0 kW]}$$

6. CHOOSE MODEL RHPCYB048ACT

[] Designates Metric Conversions

GENERAL DATA—RHPCYB MODELS—3-6 TON

Model RHPCYB Series	036ACT 036ADT 036AJT	036ACU	036ADU
Cooling Performance^A			CONTINUED →
Nominal Cooling Capacity Btu/h [kW]	36,000 [10.55]	36,000 [10.55]	36,000 [10.55]
EER ^{2B}	10.6	10.6	10.6
SEER ^{2B}	13.4	13.4	13.4
Nominal CFM [L/s]	1,200 [566]	1,200 [566]	1,200 [566]
AHRI Rated CFM [L/s]	1,175 [555]	1,175 [555]	1,175 [555]
AHRI Net Cooling Capacity Btu/h [kW]	34,200 [10.02]	34,200 [10.02]	34,200 [10.02]
Net Sensible Capacity Btu/h [kW]	25,600 [7.5]	25,600 [7.5]	25,600 [7.5]
Net Latent Capacity Btu/h [kW]	8,600 [2.52]	8,600 [2.52]	8,600 [2.52]
Net System Power kW	3.2	3.2	3.2
Heating Performance (Heat Pumps)			
High Temp. Btu/h [kW] Rating @ 47°F	34,200 [10.02]	34,200 [10.02]	34,200 [10.02]
System Power kW/COP @ 47°F	2.64/3.8	2.64/3.8	2.64/3.8
Low Temp. Btu/h [kW] Rating @ 17°F	21,600 [6.33]	21,600 [6.33]	21,600 [6.33]
System Power kW/COP @ 17°F	2.53/2.5	2.53/2.5	2.53/2.5
HSPF2 (Btu/Watts-hr)	6.7	6.7	6.7
Compressor			
No./Type	1/Scroll	1/Scroll	1/Scroll
Number of Stages	1	1	1
Outdoor Sound Rating (dB)^D	78	78	78
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	0.63 [16]	0.63 [16]	0.63 [16]
Face Area sq. ft. [sq. m]	15.75 [1.46]	15.75 [1.46]	15.75 [1.46]
Rows/FPI [FPcm]	1/16 [6]	1/16 [6]	1/16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.00 [25.4]	1.00 [25.4]	1.00 [25.4]
Face Area sq. ft. [sq. m]	7.48 [0.7]	7.48 [0.7]	7.48 [0.7]
Rows/FPI [FPcm]	1/20 [8]	1/20 [8]	1/20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
CFM [L/s]	5,100 [2,407]	5,100 [2,407]	5,100 [2,407]
No. Motors	1	1	1
Motor HP	1/5	1/5	1/5
Motor RPM	850	850	850
Indoor Fan - Type	532	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]
Drive Type	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple
No. Motors	1	1	1
Motor HP	3/4	1-1/2	1
Motor RPM	1,050	1,050	1,050
Motor Frame Size	48	48	48
Filter - Type	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes
(NO.) Size Recommended in. [mm]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]
Refrigerant Charge Oz. [g]	84 [2,381]	84 [2,381]	84 [2,381]
Weights			
Net Weight lbs. [kg]	532 [232]	538 [235]	538 [235]
Ship Weight lbs. [kg]	570 [249]	576 [251]	576 [251]

See Page 18 for Notes.

[] Designates Metric Conversions

GENERAL DATA—RHPCYB MODELS—3-6 TON

Model RHPCYB Series	048ACT 048ADT 048AJT	048ACU	048ADU
			CONTINUED →
Cooling Performance^A			
Nominal Cooling Capacity Btu/h [kW]	48,000 [14.07]	48,000 [14.07]	48,000 [14.07]
EER ^{2B}	10.6	10.6	10.6
SEER ^{2B}	13.4	13.4	13.4
Nominal CFM [L/s]	1,600 [755]	1,600 [755]	1,600 [755]
AHRI Rated CFM [L/s]	1,460 [689]	1,460 [689]	1,460 [689]
AHRI Net Cooling Capacity Btu/h [kW]	45,500 [13.34]	45,500 [13.34]	45,500 [13.34]
Net Sensible Capacity Btu/h [kW]	34,200 [10.02]	34,200 [10.02]	34,200 [10.02]
Net Latent Capacity Btu/h [kW]	11,300 [3.31]	11,300 [3.31]	11,300 [3.31]
Net System Power kW	4.3	4.3	4.3
Heating Performance (Heat Pumps)			
High Temp. Btu/h [kW] Rating @ 47°F	45,500 [13.34]	45,500 [13.34]	45,500 [13.34]
System Power kW/COP @ 47°F	3.92/3.4	3.92/3.4	3.92/3.4
Low Temp. Btu/h [kW] Rating @ 17°F	26,600 [7.8]	26,600 [7.8]	26,600 [7.8]
System Power kW/COP @ 17°F	3.54/2.2	3.54/2.2	3.54/2.2
HSPF2 (Btu/Watts-hr)	6.7	6.7	6.7
Compressor			
No./Type	1/Scroll	1/Scroll	1/Scroll
Number of Stages	1	1	1
Outdoor Sound Rating (dB)^D			
	86	86	86
Outdoor Coil - Fin Type			
Tube Type	Louvered	Louvered	Louvered
MicroChannel Depth in. [mm]	MicroChannel	MicroChannel	MicroChannel
Face Area sq. ft. [sq. m]	1.26 [32]	1.26 [32]	1.26 [32]
Rows/FPI [FPcm]	15.52 [1.44]	15.52 [1.44]	15.52 [1.44]
Refrigerant Control	1/16 [6]	1/16 [6]	1/16 [6]
	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type			
Tube Type	Louvered	Louvered	Louvered
MicroChannel Depth in. [mm]	MicroChannel	MicroChannel	MicroChannel
Face Area sq. ft. [sq. m]	1.26 [32]	1.26 [32]	1.26 [32]
Rows/FPI [FPcm]	7.13 [0.7]	7.13 [0.7]	7.13 [0.7]
Refrigerant Control	1/20 [8]	1/20 [8]	1/20 [8]
	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	TX Valves	TX Valves	TX Valves
	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type			
Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
CFM [L/s]	5,900 [2,784]	5,900 [2,784]	5,900 [2,784]
No. Motors	1	1	1
Motor HP	1/2	1/2	1/2
Motor RPM	1,075	1,075	1,075
Indoor Fan - Type			
FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]
Drive Type	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple
No. Motors	1	1	1
Motor HP	3/4	1-1/2	1
Motor RPM	1,050	1,050	1,050
Motor Frame Size	48	48	48
Filter - Type			
Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes
(NO.) Size Recommended in. [mm]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]
Refrigerant Charge Oz. [g]			
	143 [4,054]	143 [4,054]	143 [4,054]
Weights			
Net Weight lbs. [kg]	559 [244]	565 [246]	565 [246]
Ship Weight lbs. [kg]	597 [260]	603 [263]	603 [263]

See Page 18 for Notes.

[] Designates Metric Conversions

GENERAL DATA—RHPCYB MODELS—3-6 TON

Model RHPCYB Series	060ACT 060ADT 060AJT	060ACU	060ADU
Cooling Performance^A			CONTINUED →
Nominal Cooling Capacity Btu/h [kW]	60,000 [17.58]	60,000 [17.58]	60,000 [17.58]
EER ^{2B}	10.6	10.6	10.6
SEER ^{2B}	13.4	13.4	13.4
Nominal CFM [L/s]	2,000 [944]	2,000 [944]	2,000 [944]
AHRI Rated CFM [L/s]	1,925 [908]	1,925 [908]	1,925 [908]
AHRI Net Cooling Capacity Btu/h [kW]	57,000 [16.71]	57,000 [16.71]	57,000 [16.71]
Net Sensible Capacity Btu/h [kW]	43,000 [12.6]	43,000 [12.6]	43,000 [12.6]
Net Latent Capacity Btu/h [kW]	14,000 [4.1]	14,000 [4.1]	14,000 [4.1]
Net System Power kW	5.4	5.4	5.4
Heating Performance (Heat Pumps)			
High Temp. Btu/h [kW] Rating @ 47°F	57,000 [16.71]	57,000 [16.71]	57,000 [16.71]
System Power kW/COP @ 47°F	4.4/3.8	4.4/3.8	4.4/3.8
Low Temp. Btu/h [kW] Rating @ 17°F	26,200 [7.68]	26,200 [7.68]	26,200 [7.68]
System Power kW/COP @ 17°F	3.34/2.3	3.34/2.3	3.34/2.3
HSPF2 (Btu/Watts-hr)	6.7	6.7	6.7
Compressor			
No./Type	1/Scroll	1/Scroll	1/Scroll
Number of Stages	1	1	1
Outdoor Sound Rating (dB)^D	84	84	84
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	15.52 [1.44]	15.52 [1.44]	15.52 [1.44]
Rows/FPI [FPcm]	1/16 [6]	1/16 [6]	1/16 [6]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1.26 [32]	1.26 [32]	1.26 [32]
Face Area sq. ft. [sq. m]	7.13 [0.7]	7.13 [0.7]	7.13 [0.7]
Rows/FPI [FPcm]	1/20 [8]	1/20 [8]	1/20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1
CFM [L/s]	5,900 [2,784]	5,900 [2,784]	5,900 [2,784]
No. Motors	1	1	1
Motor HP	1/2	1/2	1/2
Motor RPM	1,075	1,075	1,075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]
Drive Type	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple
No. Motors	1	1	1
Motor HP	1	1-1/2	1-1/5
Motor RPM	1,050	1,050	1,050
Motor Frame Size	48	48	48
Filter - Type	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes
(NO.) Size Recommended in. [mm]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]
Refrigerant Charge Oz. [g]	146 [4,139]	146 [4,139]	146 [4,139]
Weights			
Net Weight lbs. [kg]	562 [245]	568 [248]	568 [248]
Ship Weight lbs. [kg]	600 [262]	606 [264]	606 [264]

See Page 18 for Notes.

[] Designates Metric Conversions

GENERAL DATA—RHPCYB MODELS—3-6 TON

Model RHPCYB Series	072ACT	072ACU	072ADT	072ADU
Cooling Performance^A				
Nominal Cooling Capacity Btu/h [kW]	72,000 [21.10]	72,000 [21.10]	72,000 [21.10]	72,000 [21.10]
EER ^B	11	11	11	11
IEER ^C	14.1	14.1	14.1	14.1
Nominal CFM [L/s]	2,400 [1133]	2,400 [1133]	2,400 [1133]	2,400 [1133]
AHRI Rated CFM [L/s]	2,360 [1114]	2,360 [1114]	2,360 [1114]	2,360 [1114]
AHRI Net Cooling Capacity Btu/h [kW]	68,500 [20.08]	68,500 [20.08]	68,500 [20.08]	68,500 [20.08]
Net Sensible Capacity Btu/h [kW]	51,500 [15.09]	51,500 [15.09]	51,500 [15.09]	51,500 [15.09]
Net Latent Capacity Btu/h [kW]	17,000 [4.98]	17,000 [4.98]	17,000 [4.98]	17,000 [4.98]
Net System Power kW	6.18/6.18	6.18/6.18	6.18/6.18	6.18/6.18
Heating Performance (Heat Pumps)				
High Temp. Btu/h [kW] Rating @ 47°F	68,000 [19.93]	68,000 [19.93]	68,000 [19.93]	68,000 [19.93]
System Power kW/COP @ 47°F	5.86/3.4	5.86/3.4	5.86/3.4	5.86/3.4
Low Temp. Btu/h [kW] Rating @ 17°F	38,500 [11.28]	38,500 [11.28]	38,500 [11.28]	38,500 [11.28]
System Power kW/COP	5.01/2.25	5.01/2.25	5.01/2.25	5.01/2.25
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Number of Stages	2	2	2	2
Outdoor Sound Rating (dB)^D				
	84	84	84	84
Outdoor Coil - Fin Type				
Tube Type	Louvered	Louvered	Louvered	Louvered
MicroChannel Depth in. [mm]	MicroChannel	MicroChannel	MicroChannel	MicroChannel
Face Area sq. ft. [sq. m]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Rows/FPI [FPcm]	15.52 [1.44]	15.52 [1.44]	15.52 [1.44]	15.52 [1.44]
Refrigerant Control	1/16 [6]	1/16 [6]	1/16 [6]	1/16 [6]
	TX Valves	TX Valves	TX Valves	TX Valves
Indoor Coil - Fin Type				
Tube Type	Louvered	Louvered	Louvered	Louvered
MicroChannel Depth in. [mm]	MicroChannel	MicroChannel	MicroChannel	MicroChannel
Face Area sq. ft. [sq. m]	1.26 [32]	1.26 [32]	1.26 [32]	1.26 [32]
Rows/FPI [FPcm]	7.52 [0.7]	7.52 [0.7]	7.52 [0.7]	7.52 [0.7]
Refrigerant Control	1/20 [8]	1/20 [8]	1/20 [8]	1/20 [8]
	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	TX Valves	TX Valves	TX Valves	TX Valves
	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type				
Propeller	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	5,900 [2,784]	5,900 [2,784]	5,900 [2,784]	5,900 [2,784]
No. Motors	1	1	1	1
Motor HP	1/2	1/2	1/2	1/2
Motor RPM	1,075	1,075	1,075	1,075
Indoor Fan - Type				
FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]	1/11 x 11 [279 x 279]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	1-1/5	1-1/5	1-1/5	1-1/5
Motor RPM	1,300	1,300	1,300	1,300
Motor Frame Size	48	48	48	48
Filter - Type				
Disposable	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]	(4) 2 x 16 x 16 [51 x 406 x 406]
Refrigerant Charge Oz. [g]				
	142 [4,026]	142 [4,026]	142 [4,026]	142 [4,026]
Weights				
Net Weight lbs. [kg]	583 [264]	583 [264]	583 [264]	583 [264]
Ship Weight lbs. [kg]	621 [282]	621 [282]	621 [282]	621 [282]

See Page 18 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 210/240.
- B. EER/EER2 and/or SEER2 are rated at AHRI conditions in accordance with DOE test procedures.
- C. Integrated Energy Efficiency Ratio (IEER) is rated in accordance with AHRI Standard 340/360.
- D. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

WEIGHTED SOUND POWER LEVEL (dBA)

Unit Size – Series	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)							
		63	125	250	500	1000	2000	4000	8000
RHPCYB036	78	55.2	58.2	64.0	68.4	69.3	65.7	61.0	56.3
RHPCYB048	86	61.0	66.8	76.2	75.6	75.2	71.9	67.9	60.8
RHPCYB060	84	57.1	65.9	71.5	73.1	74.8	70.4	66.7	60.2
RHPCYB072	84	56.5	59.6	71.9	73.1	75.0	71.2	66.8	60.0

Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

COOLING PERFORMANCE DATA—RHPCYB036

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]			1425 [673]	1175 [555]	1025 [484]	1425 [673]	1175 [555]	1025 [484]	1425 [673]	1175 [555]	1025 [484]
DR ①			.05	.09	.12	.05	.09	.12	.05	.09	.12
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75°F [23.9°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	46.7 [13.7] 27.7 [8.1] 2.3	45.0 [13.2] 25.2 [7.4] 2.2	44.0 [12.9] 23.7 [6.9] 2.2	44.5 [13.0] 32.4 [9.5] 2.3	42.8 [12.5] 29.4 [8.6] 2.2	41.8 [12.3] 27.7 [8.1] 2.2	42.2 [12.4] 37.0 [10.8] 2.3	40.7 [11.9] 33.6 [9.8] 2.2	39.7 [11.6] 31.6 [9.3] 2.2
	80°F [26.7°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	45.5 [13.3] 27.3 [8.0] 2.4	43.8 [12.8] 24.8 [7.3] 2.4	42.8 [12.5] 23.4 [6.9] 2.3	43.3 [12.7] 31.9 [9.3] 2.4	41.7 [12.2] 29.0 [8.5] 2.4	40.7 [11.9] 27.3 [8.0] 2.3	41.0 [12.0] 36.5 [10.7] 2.4	39.5 [11.6] 33.2 [9.7] 2.4	38.6 [11.3] 31.2 [9.1] 2.3
	85°F [29.4°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	44.3 [13.0] 26.9 [7.9] 2.5	42.6 [12.5] 24.4 [7.2] 2.5	41.7 [12.2] 23.0 [6.7] 2.5	42.1 [12.3] 31.5 [9.2] 2.5	40.5 [11.9] 28.6 [8.4] 2.5	39.5 [11.6] 26.9 [7.9] 2.5	39.8 [11.7] 36.1 [10.6] 2.5	38.3 [11.2] 32.8 [9.6] 2.5	37.4 [11.0] 30.9 [9.1] 2.5
	90°F [32.2°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	43.1 [12.6] 26.4 [7.7] 2.7	41.5 [12.2] 24.0 [7.0] 2.6	40.5 [11.9] 22.6 [6.6] 2.6	40.8 [12.0] 31.0 [9.1] 2.7	39.3 [11.5] 28.2 [8.3] 2.6	38.4 [11.3] 26.6 [7.8] 2.6	38.6 [11.3] 35.7 [10.5] 2.7	37.2 [10.9] 32.4 [9.5] 2.6	36.3 [10.6] 30.5 [8.9] 2.6
	95°F [35°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	41.9 [12.3] 26.0 [7.6] 2.9	40.3 [11.8] 23.6 [6.9] 2.8	39.4 [11.5] 22.2 [6.5] 2.8	39.6 [11.6] 30.6 [9.0] 2.9	38.1 [11.2] 27.8 [8.1] 2.8	37.3 [10.9] 26.2 [7.7] 2.8	37.4 [11.0] 35.2 [10.3] 2.8	36.0 [10.6] 32.0 [9.4] 2.8	35.1 [10.3] 30.1 [8.8] 2.8
	100°F [37.8°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	40.6 [11.9] 25.6 [7.5] 3.0	39.1 [11.5] 23.2 [6.8] 3.0	38.2 [11.2] 21.9 [6.4] 2.9	38.4 [11.3] 30.2 [8.9] 3.0	37.0 [10.8] 27.4 [8.0] 3.0	36.1 [10.6] 25.8 [7.6] 2.9	36.1 [10.6] 34.8 [10.2] 3.0	34.8 [10.2] 31.6 [9.3] 3.0	34.0 [10.0] 29.8 [8.7] 2.9
	105°F [40.6°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	39.4 [11.5] 25.1 [7.4] 3.2	38.0 [11.1] 22.8 [6.7] 3.2	37.1 [10.9] 21.5 [6.3] 3.1	37.2 [10.9] 29.7 [8.7] 3.2	35.8 [10.5] 27.0 [7.9] 3.2	35.0 [10.3] 25.4 [7.4] 3.1	34.9 [10.2] 34.3 [10.1] 3.2	33.6 [9.8] 31.2 [9.1] 3.2	32.8 [9.6] 29.4 [8.6] 3.1
	110°F [43.3°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	38.2 [11.2] 24.7 [7.2] 3.4	38.2 [11.2] 24.7 [7.2] 3.4	35.9 [10.5] 21.1 [6.2] 3.3	36.0 [10.6] 29.3 [8.6] 3.4	34.6 [10.1] 26.6 [7.8] 3.4	33.8 [9.9] 25.1 [7.4] 3.3	33.7 [9.9] 33.7 [9.9] 3.4	32.5 [9.5] 30.8 [9.0] 3.4	31.7 [9.3] 29.0 [8.5] 3.3
	115°F [46.1°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	37.0 [10.8] 24.2 [7.1] 3.6	35.6 [10.4] 22.0 [6.4] 3.6	34.8 [10.2] 20.7 [6.1] 3.5	34.7 [10.2] 28.9 [8.5] 3.6	33.4 [9.8] 26.2 [7.7] 3.6	32.7 [9.6] 24.7 [7.2] 3.5	32.5 [9.5] 32.5 [9.5] 3.6	31.3 [9.2] 30.4 [8.9] 3.6	30.6 [9.0] 28.6 [8.4] 3.5
	120°F [48.9°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	35.8 [10.5] 23.8 [7.0] 3.9	34.4 [10.1] 21.7 [6.4] 3.8	33.6 [9.8] 20.4 [6.0] 3.7	33.5 [9.8] 28.4 [8.3] 3.9	32.3 [9.5] 25.8 [7.6] 3.8	31.5 [9.2] 24.3 [7.1] 3.7	31.3 [9.2] 31.3 [9.2] 3.9	30.1 [8.8] 30.0 [8.8] 3.8	29.4 [8.6] 28.3 [8.3] 3.7
	125°F [51.7°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	34.5 [10.1] 23.4 [6.9] 4.1	33.3 [9.8] 21.3 [6.2] 4.0	32.5 [9.5] 20.0 [5.9] 4.0	32.3 [9.5] 28.0 [8.2] 4.1	31.1 [9.1] 25.4 [7.4] 4.0	30.4 [8.9] 23.9 [7.0] 4.0	30.0 [8.8] 30.0 [8.8] 4.1	28.9 [8.5] 28.9 [8.5] 4.0	28.3 [8.3] 27.9 [8.2] 4.0

DR —Depression ratio
dbE —Entering air dry bulb

wbE—Entering air wet bulb
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—RHPCYB036

IDB			60°F [15.6°C]			70°F [21.1°C]			80°F [26.7°C]		
CFM [L/s]			1350 [637]	1175 [555]	975 [460]	1350 [637]	1175 [555]	975 [460]	1350 [637]	1175 [555]	975 [460]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	0°F [-17.8°C]	Total kBtu/h [kW] Power	14.6 [4.3] 2.0	14.4 [4.2] 2.1	14.2 [4.2] 2.1	14.1 [4.1] 2.3	14.0 [4.1] 2.4	13.8 [4.0] 2.4	13.7 [4.0] 2.6	13.6 [4.0] 2.7	13.4 [3.9] 2.7
	5°F [-15.0°C]	Total kBtu/h [kW] Power	16.9 [5.0] 2.1	16.7 [4.9] 2.1	16.5 [4.8] 2.1	16.5 [4.8] 2.3	16.3 [4.8] 2.4	16.1 [4.7] 2.4	16.1 [4.7] 2.6	15.9 [4.7] 2.7	15.7 [4.6] 2.7
	10°F [-12.2°C]	Total kBtu/h [kW] Power	19.3 [5.7] 2.1	19.0 [5.6] 2.1	18.8 [5.5] 2.2	18.8 [5.5] 2.4	18.6 [5.5] 2.4	18.4 [5.4] 2.5	18.4 [5.4] 2.7	18.2 [5.3] 2.7	18.0 [5.3] 2.8
	15°F [-9.4°C]	Total kBtu/h [kW] Power	21.6 [6.3] 2.1	21.4 [6.3] 2.1	21.1v [6.2] 2.2	21.2 [6.2] 2.4	21.0 [6.2] 2.4	20.7 [6.1] 2.5	20.8 [6.1] 2.7	20.5 [6.0] 2.7	20.3 [5.9] 2.8
	20°F [-6.7°C]	Total kBtu/h [kW] Power	23.9 [7.0] 2.1	23.7 [6.9] 2.2	23.4 [6.9] 2.2	23.5 [6.9] 2.4	23.3 [6.8] 2.5	23.0 [6.7] 2.5	23.1 [6.8] 2.7	22.9 [6.7] 2.8	22.6 [6.6] 2.8
	25°F [-3.9°C]	Total kBtu/h [kW] Power	26.3 [7.7] 2.2	26.0 [7.6] 2.2	25.7 [7.5] 2.2	25.9 [7.6] 2.4	25.6 [7.5] 2.5	25.3 [7.4] 2.5	25.5 [7.5] 2.7	25.2 [7.4] 2.8	24.9 [7.3] 2.8
	30°F [-1.1°C]	Total kBtu/h [kW] Power	28.6 [8.4] 2.2	28.3 [8.3] 2.2	28.0 [8.2] 2.3	28.2 [8.3] 2.5	27.9 [8.2] 2.5	27.6 [8.1] 2.6	27.8 [8.1] 2.8	27.5 [8.1] 2.8	27.2 [8.0] 2.9
	35°F [1.7°C]	Total kBtu/h [kW] Power	31.0 [9.1] 2.2	30.7 [9.0] 2.2	30.3 [8.9] 2.3	30.6 [9.0] 2.5	30.3 [8.9] 2.5	29.9 [8.8] 2.6	30.2 [8.9] 2.8	29.8 [8.7] 2.8	29.5 [8.6] 2.9
	40°F [4.4°C]	Total kBtu/h [kW] Power	33.3 [9.8] 2.2	33.0 [9.7] 2.3	32.6 [9.6] 2.3	32.9 [9.6] 2.5	32.6 [9.6] 2.6	32.2 [9.4] 2.6	32.5 [9.5] 2.8	32.2 [9.4] 2.9	31.8 [9.3] 2.9
	45°F [7.2°C]	Total kBtu/h [kW] Power	35.7 [10.5] 2.2	35.3 [10.3] 2.3	34.9 [10.2] 2.3	35.3 [10.3] 2.5	34.9 [10.2] 2.6	34.5 [10.1] 2.6	34.9 [10.2] 2.8	34.5 [10.1] 2.9	34.1 [10.0] 2.9
	50°F [10.0°C]	Total kBtu/h [kW] Power	38.0 [11.1] 2.3	37.6 [11.0] 2.3	37.2 [10.9] 2.4	37.6 [11.0] 2.6	37.2 [10.9] 2.6	36.8 [10.8] 2.7	37.2 [10.9] 2.9	36.8 [10.8] 2.9	36.4 [10.7] 3.0

IDB—Indoor air dry bulb

[] Designates Metric Conversions

COOLING PERFORMANCE DATA—RHPCYB048

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]			1900 [897]	1450 [684]	1375 [649]	1900 [897]	1450 [684]	1375 [649]	1900 [897]	1450 [684]	1375 [649]
DR ①			.05	.09	.12	.05	.09	.12	.05	.09	.12
OUTDOOR 											

DR —Depression ratio
dbE —Entering air dry bulb

wbE—Entering air wet bulb
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—RHPCYB048

IDB			60°F [15.6°C]			70°F [21.1°C]			80°F [26.7°C]		
CFM [L/s]			1725 [814]	1450 [684]	1250 [590]	1725 [814]	1450 [684]	1250 [590]	1725 [814]	1450 [684]	1250 [590]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	0°F [-17.8°C]	Total kBtu/h [kW] Power	21.3 [6.2] 3.0	21.0 [6.2] 3.1	20.8 [6.1] 3.1	20.1 [5.9] 3.4	19.8 [5.8] 3.5	19.6 [5.7] 3.5	18.8 [5.5] 3.7	18.6 [5.5] 3.8	18.4 [5.4] 3.9
	5°F [-15.0°C]	Total kBtu/h [kW] Power	24.1 [7.1] 3.1	23.8 [7.0] 3.1	23.6 [6.9] 3.2	22.9 [6.7] 3.4	22.6 [6.6] 3.5	22.4 [6.6] 3.6	21.6 [6.3] 3.8	21.4 [6.3] 3.9	21.1 [6.2] 3.9
	10°F [-12.2°C]	Total kBtu/h [kW] Power	26.9 [7.9] 3.1	26.6 [7.8] 3.2	26.3 [7.7] 3.2	25.7 [7.5] 3.5	25.4 [7.4] 3.5	25.1 [7.4] 3.6	24.5 [7.2] 3.8	24.1 [7.1] 3.9	23.9 [7.0] 4.0
	15°F [-9.4°C]	Total kBtu/h [kW] Power	29.7 [8.7] 3.1	29.3 [8.6] 3.2	29.1 [8.5] 3.3	28.5 [8.4] 3.5	28.1 [8.2] 3.6	27.9 [8.2] 3.7	27.3 [8.0] 3.9	26.9 [7.9] 4.0	26.6 [7.8] 4.0
	20°F [-6.7°C]	Total kBtu/h [kW] Power	32.6 [9.6] 3.2	32.1 [9.4] 3.3	31.8 [9.3] 3.3	31.3 [9.2] 3.6	30.9 [9.1] 3.6	30.6 [9.0] 3.7	30.1 [8.8] 3.9	29.7 [8.7] 4.0	29.4 [8.6] 4.1
	25°F [-3.9°C]	Total kBtu/h [kW] Power	35.4 [10.4] 3.2	34.9 [10.2] 3.3	34.6 [10.1] 3.4	34.1 [10.0] 3.6	33.7 [9.9] 3.7	33.4 [9.8] 3.7	32.9 [9.6] 4.0	32.5 [9.5] 4.1	32.1 [9.4] 4.1
	30°F [-1.1°C]	Total kBtu/h [kW] Power	38.2 [11.2] 3.3	37.7 [11.0] 3.4	37.3 [10.9] 3.4	37.0 [10.8] 3.6	36.5 [10.7] 3.7	36.1 [10.6] 3.8	35.7 [10.5] 4.0	35.2 [10.3] 4.1	34.9 [10.2] 4.2
	35°F [1.7°C]	Total kBtu/h [kW] Power	41.0 [12.0] 3.3	40.5 [11.9] 3.4	40.1 [11.8] 3.5	39.8 [11.7] 3.7	39.2 [11.5] 3.8	38.9 [11.4] 3.8	38.5 [11.3] 4.1	38.0 [11.1] 4.2	37.6 [11] 4.2
	40°F [4.4°C]	Total kBtu/h [kW] Power	43.8 [12.8] 3.4	43.2 [12.7] 3.5	42.8 [12.5] 3.5	42.6 [12.5] 3.7	42.0 [12.3] 3.8	41.6 [12.2] 3.9	41.3 [12.1] 4.1	40.8 [12.0] 4.2	40.4 [11.8] 4.3
	45°F [7.2°C]	Total kBtu/h [kW] Power	46.6 [13.7] 3.4	46.0 [13.5] 3.5	45.6 [13.4] 3.6	45.4 [13.3] 3.8	44.8 [13.1] 3.9	44.3 [13.0] 3.9	44.2 [13.0] 4.2	43.6 [12.8] 4.3	43.1 [12.6] 4.3
	50°F [10.0°C]	Total kBtu/h [kW] Power	49.4 [14.5] 3.5	48.8 [14.3] 3.6	48.3 [14.2] 3.6	48.2 [14.1] 3.8	47.6 [14.0] 3.9	47.1 [13.8] 4.0	47.0 [13.8] 4.2	46.3 [13.6] 4.3	45.9 [13.5] 4.4

IDB—Indoor air dry bulb

[] Designates Metric Conversions

COOLING PERFORMANCE DATA—RHPCYB060

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]			2250 [1062]	1925 [908]	1625 [767]	2250 [1062]	1925 [908]	1625 [767]	2250 [1062]	1925 [908]	1625 [767]
DR ①			.05	.09	.12	.05	.09	.12	.05	.09	.12
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75°F [23.9°C]	Total kBtu/h [kW]	73.7 [21.6]	71.5 [21.0]	69.5 [20.4]	70.0 [20.5]	67.9 [19.9]	66.0 [19.3]	66.2 [19.4]	64.2 [18.8]	62.4 [18.3]
		Sens kBtu/h [kW]	42.3 [12.4]	39.2 [11.5]	36.3 [10.6]	50.7 [14.9]	47.0 [13.8]	43.6 [12.8]	59.1 [17.3]	54.8 [16.1]	50.8 [14.9]
		Power	3.8	3.8	3.7	3.9	3.8	3.8	3.9	3.8	3.7
	80°F [26.7°C]	Total kBtu/h [kW]	71.7 [21.0]	69.6 [20.4]	67.6 [19.8]	67.9 [19.9]	65.9 [19.3]	64.0 [18.8]	64.2 [18.8]	62.3 [18.3]	60.5 [17.7]
		Sens kBtu/h [kW]	41.3 [12.1]	38.2 [11.2]	35.5 [10.4]	49.7 [14.6]	46.0 [13.5]	42.7 [12.5]	58.1 [17.0]	53.8 [15.8]	49.9 [14.6]
		Power	4.1	4.1	4.0	4.1	4.1	4.0	4.1	4.1	4.0
	85°F [29.4°C]	Total kBtu/h [kW]	69.7 [20.4]	67.6 [19.8]	65.7 [19.3]	65.9 [19.3]	63.9 [18.7]	62.1 [18.2]	62.1 [18.2]	60.3 [17.7]	58.6 [17.2]
		Sens kBtu/h [kW]	40.2 [11.8]	37.3 [10.9]	34.6 [10.1]	48.6 [14.2]	45.1 [13.2]	41.8 [12.3]	57.1 [16.7]	52.9 [15.5]	49.0 [14.4]
		Power	4.4	4.3	4.3	4.4	4.4	4.3	4.4	4.3	4.3
	90°F [32.2°C]	Total kBtu/h [kW]	67.6 [19.8]	65.6 [19.2]	63.8 [18.7]	63.9 [18.7]	62.0 [18.2]	60.2 [17.6]	60.1 [17.6]	58.3 [17.1]	56.6 [16.6]
		Sens kBtu/h [kW]	39.2 [11.5]	36.3 [10.6]	33.7 [9.9]	47.6 [14.0]	44.1 [12.9]	40.9 [12.0]	56.0 [16.4]	51.9 [15.2]	48.2 [14.1]
		Power	4.7	4.6	4.5	4.7	4.6	4.6	4.7	4.6	4.6
95°F [35°C]	Total kBtu/h [kW]	65.6 [19.2]	63.6 [18.6]	61.8 [18.1]	61.8 [18.1]	60.0 [17.6]	58.3 [17.1]	58.1 [17.0]	56.3 [16.5]	54.7 [16.0]	
	Sens kBtu/h [kW]	38.2 [11.2]	35.4 [10.4]	32.8 [9.6]	46.6 [13.7]	43.2 [12.7]	40.0 [11.7]	55.0 [16.1]	51.0 [14.9]	47.3 [13.9]	
	Power	5.0	4.9	4.8	5.0	4.9	4.8	5.0	4.9	4.8	
100°F [37.8°C]	Total kBtu/h [kW]	63.5 [18.6]	61.7 [18.1]	59.9 [17.6]	59.8 [17.5]	58.0 [17.0]	56.4 [16.5]	56.0 [16.4]	54.3 [15.9]	52.8 [15.5]	
	Sens kBtu/h [kW]	37.1 [10.9]	34.4 [10.1]	31.9 [9.3]	45.6 [13.4]	42.2 [12.4]	39.2 [11.5]	54.0 [15.8]	50.0 [14.7]	46.4 [13.6]	
	Power	5.2	5.2	5.1	5.2	5.2	5.1	5.2	5.2	5.1	
105°F [40.6°C]	Total kBtu/h [kW]	61.5 [18.0]	59.7 [17.5]	58.0 [17.0]	57.7 [16.9]	56.0 [16.4]	54.4 [15.9]	54.0 [15.8]	52.4 [15.4]	50.9 [14.9]	
	Sens kBtu/h [kW]	36.1 [10.6]	33.5 [9.8]	31.0 [9.1]	44.5 [13.0]	41.3 [12.1]	38.3 [11.2]	52.9 [15.5]	49.1 [14.4]	45.5 [13.3]	
	Power	5.5	5.4	5.4	5.5	5.4	5.4	5.5	5.4	5.4	
110°F [43.3°C]	Total kBtu/h [kW]	59.5 [17.4]	57.7 [16.9]	56.1 [16.4]	55.7 [16.3]	54.0 [15.8]	52.5 [15.4]	51.9 [15.2]	50.4 [14.8]	49.0 [14.4]	
	Sens kBtu/h [kW]	35.1 [10.3]	32.5 [9.5]	30.2 [8.9]	43.5 [12.7]	40.3 [11.8]	37.4 [11.0]	51.9 [15.2]	48.1 [14.1]	44.6 [13.1]	
	Power	5.8	5.7	5.6	5.8	5.7	5.6	5.8	5.7	5.6	
115°F [46.1°C]	Total kBtu/h [kW]	57.4 [16.8]	55.7 [16.3]	54.1 [15.9]	53.7 [15.7]	52.1 [15.3]	50.6 [14.8]	49.9 [14.6]	48.4 [14.2]	47.0 [13.8]	
	Sens kBtu/h [kW]	34.1 [10.0]	31.6 [9.3]	29.3 [8.6]	42.5 [12.5]	39.4 [11.5]	36.5 [10.7]	49.9 [14.6]	47.2 [13.8]	43.7 [12.8]	
	Power	6.1	6.0	5.9	6.1	6.0	5.9	6.1	6.0	5.9	
120°F [48.9°C]	Total kBtu/h [kW]	55.4 [16.2]	53.7 [15.7]	52.2 [15.3]	51.6 [15.1]	50.1 [14.7]	48.7 [14.3]	47.9 [14.0]	46.4 [13.6]	45.1 [13.2]	
	Sens kBtu/h [kW]	33.0 [9.7]	30.6 [9.0]	28.4 [8.3]	41.4 [12.1]	38.4 [11.3]	35.6 [10.4]	47.9 [14.0]	46.2 [13.5]	42.9 [12.6]	
	Power	6.3	6.2	6.2	6.4	6.3	6.2	6.3	6.3	6.2	
125°F [51.7°C]	Total kBtu/h [kW]	53.4 [15.7]	51.8 [15.2]	50.3 [14.7]	49.6 [14.5]	48.1 [14.1]	46.8 [13.7]	45.8 [13.4]	44.5 [13.0]	43.2 [12.7]	
	Sens kBtu/h [kW]	32.0 [9.4]	29.7 [8.7]	27.5 [8.1]	40.4 [11.8]	37.5 [11.0]	34.7 [10.2]	45.8 [13.4]	44.5 [13.0]	42.0 [12.3]	
	Power	6.6	6.5	6.4	6.6	6.5	6.4	6.6	6.5	6.4	

DR —Depression ratio
dbE —Entering air dry bulb

wbE—Entering air wet bulb
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 $[1.10 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$.

[] Designates Metric Conversions

HEATING PERFORMANCE DATA—RHPCYB060

IDB			60°F [15.6°C]			70°F [21.1°C]			80°F [26.7°C]		
CFM [L/s]			2000 [944]	1925 [908]	1450 [684]	2000 [944]	1925 [908]	1450 [684]	2000 [944]	1925 [908]	1450 [684]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	0°F [-17.8°C]	Total kBtu/h [kW] Power	17.0 [5.0] 3.4	17.0 [5.0] 3.5	16.7 [4.9] 3.6	20.7 [6.1] 4.0	20.6 [6.0] 4.0	20.3 [5.9] 4.2	24.4 [7.2] 4.6	24.3 [7.1] 4.6	23.9 [7.0] 4.7
	5°F [-15.0°C]	Total kBtu/h [kW] Power	20.5 [6.0] 3.5	20.4 [6.0] 3.5	20.1 [5.9] 3.6	24.2 [7.1] 4.1	24.1 [7.1] 4.1	23.7 [6.9] 4.2	27.8 [8.1] 4.6	27.7 [8.1] 4.6	27.3 [8.0] 4.8
	10°F [-12.2°C]	Total kBtu/h [kW] Power	24.0 [7.0] 3.5	23.9 [7.0] 3.5	23.5 [6.9] 3.6	27.6 [8.1] 4.1	27.6 [8.1] 4.1	27.1 [7.9] 4.2	31.3 [9.2] 4.6	31.2 [9.1] 4.6	30.7 [9.0] 4.8
	15°F [-9.4°C]	Total kBtu/h [kW] Power	27.4 [8.0] 3.6	27.4 [8.0] 3.6	26.9 [7.9] 3.7	31.1 [9.1] 4.1	31.0 [9.1] 4.1	30.5 [8.9] 4.3	34.8 [10.2] 4.7	34.7 [10.2] 4.7	34.1 [10.0] 4.8
	20°F [-6.7°C]	Total kBtu/h [kW] Power	30.9 [9.1] 3.6	30.8 [9.0] 3.6	30.3 [8.9] 3.7	34.6 [10.1] 4.2	34.5 [10.1] 4.2	33.9 [9.9] 4.3	38.2 [11.2] 4.7	38.1 [11.2] 4.7	37.4 [11.0] 4.9
	25°F [-3.9°C]	Total kBtu/h [kW] Power	34.4 [10.1] 3.6	34.3 [10.1] 3.6	33.7 [9.9] 3.8	38.0 [11.1] 4.2	37.9 [11.1] 4.2	37.3 [10.9] 4.4	41.7 [12.2] 4.7	41.6 [12.2] 4.8	40.8 [12.0] 4.9
	30°F [-1.1°C]	Total kBtu/h [kW] Power	37.8 [11.1] 3.7	37.7 [11.0] 3.7	37.1 [10.9] 3.8	41.5 [12.2] 4.2	41.4 [12.1] 4.3	40.7 [11.9] 4.4	45.2 [13.2] 4.8	45.0 [13.2] 4.8	44.2 [13.0] 4.9
	35°F [1.7°C]	Total kBtu/h [kW] Power	41.3 [12.1] 3.7	41.2 [12.1] 3.7	40.5 [11.9] 3.8	45.0 [13.2] 4.3	44.8 [13.1] 4.3	44.1 [12.9] 4.4	48.6 [14.2] 4.8	48.5 [14.2] 4.8	47.6 [14.0] 5.0
	40°F [4.4°C]	Total kBtu/h [kW] Power	44.8 [13.1] 3.7	44.7 [13.1] 3.8	43.9 [12.9] 3.9	48.4 [14.2] 4.3	48.3 [14.2] 4.3	47.5 [13.9] 4.5	52.1 [15.3] 4.8	52.0 [15.2] 4.9	51.0 [14.9] 5.0
	45°F [7.2°C]	Total kBtu/h [kW] Power	48.2 [14.1] 3.8	48.1 [14.1] 3.8	47.3 [13.9] 3.9	51.9 [15.2] 4.3	51.8 [15.2] 4.4	50.9 [14.9] 4.5	55.6 [16.3] 4.9	55.4 [16.2] 4.9	54.4 [15.9] 5.1
	50°F [10.0°C]	Total kBtu/h [kW] Power	51.7 [15.2] 3.8	51.6 [15.1] 3.8	50.7 [14.9] 4.0	55.4 [16.2] 4.4	55.2 [16.2] 4.4	54.2 [15.9] 4.5	59.0 [17.3] 4.9	58.9 [17.3] 4.9	57.8 [16.9] 5.1

IDB—Indoor air dry bulb

[] Designates Metric Conversions

COOLING PERFORMANCE DATA—RHPCYB072

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]			2850 [1345]	2350 [1109]	2050 [967]	2850 [1345]	2350 [1109]	2050 [967]	2850 [1345]	2350 [1109]	2050 [967]
DR ①			.05	.09	.12	.05	.09	.12	.05	.09	.12
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75°F [23.9°C]	Total kBtu/h [kW]	81.9 [24.0]	78.9 [23.1]	77.1 [22.6]	78.7 [23.1]	75.7 [22.2]	74.0 [21.7]	75.4 [22.1]	72.6 [21.3]	70.9 [20.8]
		Sens kBtu/h [kW]	48.0 [14.1]	43.6 [12.8]	41.0 [12.0]	57.9 [17.0]	52.7 [15.4]	49.5 [14.5]	62.7 [18.4]	57.0 [16.7]	53.6 [15.7]
		Power	4.3	4.3	4.2	4.2	4.1	4.1	4.3	4.2	4.2
	80°F [26.7°C]	Total kBtu/h [kW]	82.3 [24.1]	79.2 [23.2]	77.4 [22.7]	79.0 [23.2]	76.1 [22.3]	74.3 [21.8]	75.8 [22.2]	73.0 [21.4]	71.3 [20.9]
		Sens kBtu/h [kW]	48.8 [14.3]	44.4 [13.0]	41.8 [12.3]	58.8 [17.2]	53.5 [15.7]	50.3 [14.7]	63.6 [18.6]	57.8 [16.9]	54.4 [15.9]
		Power	4.7	4.6	4.6	4.6	4.5	4.4	4.7	4.6	4.5
	85°F [29.4°C]	Total kBtu/h [kW]	82.5 [24.2]	79.4 [23.3]	77.6 [22.7]	79.2 [23.2]	76.3 [22.4]	74.5 [21.8]	76.0 [22.3]	73.2 [21.5]	71.5 [21.0]
		Sens kBtu/h [kW]	49.5 [14.5]	45.1 [13.2]	42.4 [12.4]	59.5 [17.4]	54.1 [15.9]	50.9 [14.9]	64.3 [18.8]	58.5 [17.1]	55.0 [16.1]
		Power	5.1	5.0	5.0	5.0	4.9	4.8	5.1	5.0	4.9
	90°F [32.2°C]	Total kBtu/h [kW]	82.5 [24.2]	79.4 [23.3]	77.6 [22.7]	79.2 [23.2]	76.3 [22.4]	74.5 [21.8]	76.0 [22.3]	73.2 [21.5]	71.5 [21.0]
		Sens kBtu/h [kW]	50.1 [14.7]	45.5 [13.3]	42.8 [12.5]	60.0 [17.6]	54.6 [16.0]	51.3 [15.0]	64.8 [19.0]	58.9 [17.3]	55.4 [16.2]
		Power	5.5	5.4	5.3	5.3	5.2	5.2	5.4	5.3	5.3
°F [°C]	95°F [35°C]	Total kBtu/h [kW]	82.3 [24.1]	79.3 [23.2]	77.4 [22.7]	79.1 [23.2]	76.1 [22.3]	74.3 [21.8]	75.8 [22.2]	73.0 [21.4]	71.3 [20.9]
		Sens kBtu/h [kW]	50.4 [14.8]	45.8 [13.4]	43.1 [12.6]	60.3 [17.7]	54.9 [16.1]	51.6 [15.1]	65.1 [19.1]	59.2 [17.4]	55.7 [16.3]
		Power	5.9	5.8	5.7	5.7	5.6	5.6	5.8	5.7	5.7
	100°F [37.8°C]	Total kBtu/h [kW]	82.0 [24.0]	78.9 [23.1]	77.1 [22.6]	78.7 [23.1]	75.8 [22.2]	74.0 [21.7]	75.5 [22.1]	72.7 [21.3]	71.0 [20.8]
		Sens kBtu/h [kW]	50.5 [14.8]	46.0 [13.5]	43.2 [12.7]	60.5 [17.7]	55.0 [16.1]	51.7 [15.2]	65.3 [19.1]	59.4 [17.4]	55.8 [16.4]
		Power	6.3	6.1	6.1	6.1	6.0	5.9	6.2	6.1	6.0
	105°F [40.6°C]	Total kBtu/h [kW]	81.5 [23.9]	78.4 [23.0]	76.6 [22.5]	78.2 [22.9]	75.3 [22.1]	73.5 [21.5]	75.0 [22.0]	72.2 [21.2]	70.5 [20.7]
		Sens kBtu/h [kW]	50.5 [14.8]	46.0 [13.5]	43.2 [12.7]	60.4 [17.7]	55.0 [16.1]	51.7 [15.2]	65.2 [19.1]	59.3 [17.4]	55.8 [16.4]
		Power	6.6	6.5	6.4	6.5	6.4	6.3	6.6	6.5	6.4
	110°F [43.3°C]	Total kBtu/h [kW]	80.8 [23.7]	77.7 [22.8]	75.9 [22.2]	77.5 [22.7]	74.6 [21.9]	72.9 [21.4]	74.3 [21.8]	71.5 [21.0]	69.8 [20.5]
		Sens kBtu/h [kW]	50.3 [14.7]	45.8 [13.4]	43.0 [12.6]	60.2 [17.6]	54.8 [16.1]	51.5 [15.1]	65.0 [19.1]	59.1 [17.3]	55.6 [16.3]
		Power	7.0	6.9	6.8	6.9	6.7	6.7	7.0	6.8	6.8
115°F [46.1°C]	Total kBtu/h [kW]	79.9 [23.4]	76.9 [22.5]	75.1 [22.0]	76.6 [22.5]	73.7 [21.6]	72.0 [21.1]	73.4 [21.5]	70.6 [20.7]	69.0 [20.2]	
	Sens kBtu/h [kW]	49.9 [14.6]	45.4 [13.3]	42.7 [12.5]	59.8 [17.5]	54.4 [15.9]	51.2 [15.0]	64.6 [18.9]	58.8 [17.2]	55.3 [16.2]	
	Power	7.4	7.3	7.2	7.2	7.1	7.0	7.3	7.2	7.1	
120°F [48.9°C]	Total kBtu/h [kW]	78.8 [23.1]	75.9 [22.2]	74.1 [21.7]	75.5 [22.1]	72.7 [21.3]	71.0 [20.8]	72.3 [21.2]	69.6 [20.4]	68.0 [19.9]	
	Sens kBtu/h [kW]	49.3 [14.4]	44.8 [13.1]	42.2 [12.4]	59.2 [17.4]	53.9 [15.8]	50.7 [14.9]	64.0 [18.8]	58.2 [17.1]	54.8 [16.1]	
	Power	7.8	7.6	7.6	7.6	7.5	7.4	7.7	7.6	7.5	
125°F [51.7°C]	Total kBtu/h [kW]	77.6 [22.7]	74.7 [21.9]	73.0 [21.4]	74.3 [21.8]	71.5 [21.0]	69.9 [20.5]	71.1 [20.8]	68.4 [20.0]	66.8 [19.6]	
	Sens kBtu/h [kW]	48.5 [14.2]	44.1 [12.9]	41.5 [12.2]	58.5 [17.1]	53.2 [15.6]	50.0 [14.7]	63.2 [18.5]	57.5 [16.9]	54.1 [15.9]	
	Power	8.2	8.0	7.9	8.0	7.9	7.8	8.1	8.0	7.9	

DR —Depression ratio
dbE —Entering air dry bulb

wbE—Entering air wet bulb
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—RHPCYB072

IDB			60°F [15.6°C]			70°F [21.1°C]			80°F [26.7°C]		
CFM [L/s]			2700 [1274]	2350 [1109]	1950 [920]	2700 [1274]	2350 [1109]	1950 [920]	2700 [1274]	2350 [1109]	1950 [920]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	0°F [-17.8°C]	Total kBtu/h [kW] Power	34.9 [10.2] 3.9	34.6 [10.1] 4.0	34.2 [10.0] 4.1	27.5 [8.1] 4.3	27.2 [8.0] 4.4	26.9 [7.9] 4.5	20.1 [5.9] 4.6	19.9 [5.8] 4.7	19.7 [5.8] 4.8
	5°F [-15.0°C]	Total kBtu/h [kW] Power	39.7 [11.6] 4.0	39.3 [11.5] 4.1	38.8 [11.4] 4.2	32.3 [9.5] 4.4	32.0 [9.4] 4.4	31.6 [9.3] 4.5	24.9 [7.3] 4.7	24.7 [7.2] 4.8	24.4 [7.2] 4.9
	10°F [-12.2°C]	Total kBtu/h [kW] Power	44.5 [13.0] 4.1	44.0 [12.9] 4.2	43.5 [12.7] 4.3	37.1 [10.9] 4.4	36.7 [10.8] 4.5	36.3 [10.6] 4.6	29.7 [8.7] 4.8	29.4 [8.6] 4.9	29.0 [8.5] 5.0
	15°F [-9.4°C]	Total kBtu/h [kW] Power	49.3 [14.4] 4.2	48.8 [14.3] 4.3	48.2 [14.1] 4.3	41.9 [12.3] 4.5	41.4 [12.1] 4.6	40.9 [12.0] 4.7	34.5 [10.1] 4.9	34.1 [10.0] 5.0	33.7 [9.9] 5.1
	20°F [-6.7°C]	Total kBtu/h [kW] Power	54.1 [15.9] 4.3	53.5 [15.7] 4.3	52.9 [15.5] 4.4	46.7 [13.7] 4.6	46.2 [13.5] 4.7	45.6 [13.4] 4.8	39.3 [11.5] 5.0	38.9 [11.4] 5.1	38.4 [11.3] 5.2
	25°F [-3.9°C]	Total kBtu/h [kW] Power	58.9 [17.3] 4.3	58.2 [17.1] 4.4	57.5 [16.9] 4.5	51.5 [15.1] 4.7	50.9 [14.9] 4.8	50.3 [14.7] 4.9	44.0 [12.9] 5.1	43.6 [12.8] 5.2	43.1 [12.6] 5.3
	30°F [-1.1°C]	Total kBtu/h [kW] Power	63.6 [18.6] 4.4	63.0 [18.5] 4.5	62.2 [18.2] 4.6	56.2 [16.5] 4.8	55.6 [16.3] 4.9	55.0 [16.1] 5.0	48.8 [14.3] 5.1	48.3 [14.2] 5.2	47.7 [14.0] 5.4
	35°F [1.7°C]	Total kBtu/h [kW] Power	68.4 [20.0] 4.5	67.7 [19.8] 4.6	66.9 [19.6] 4.7	61.0 [17.9] 4.9	60.4 [17.7] 5.0	59.6 [17.5] 5.1	53.6 [15.7] 5.2	53.1 [15.6] 5.3	52.4 [15.4] 5.4
	40°F [4.4°C]	Total kBtu/h [kW] Power	73.2 [21.5] 4.6	72.4 [21.2] 4.7	71.6 [21.0] 4.8	65.8 [19.3] 5.0	65.1 [19.1] 5.1	64.3 [18.8] 5.2	58.4 [17.1] 5.3	57.8 [16.9] 5.4	57.1 [16.7] 5.5
	45°F [7.2°C]	Total kBtu/h [kW] Power	78.0 [22.9] 4.7	77.2 [22.6] 4.8	76.2 [22.3] 4.9	70.6 [20.7] 5.0	69.8 [20.5] 5.1	69.0 [20.2] 5.2	63.2 [18.5] 5.4	62.5 [18.3] 5.5	61.8 [18.1] 5.6
	50°F [10.0°C]	Total kBtu/h [kW] Power	82.8 [24.3] 4.8	81.9 [24.0] 4.9	80.9 [23.7] 5.0	75.4 [22.1] 5.1	74.6 [21.9] 5.2	73.7 [21.6] 5.3	68.0 [19.9] 5.5	67.2 [19.7] 5.6	66.4 [19.5] 5.7

IDB—Indoor air dry bulb

[] Designates Metric Conversions

3-6T—LOW STATIC—SIDEFLOW (208/230V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range (Min/Max) CFM	Motor HP [W]	Motor Speed	CFM/ WATTS	External Static Pressure - Inches W.C. [kPa]							
					0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]
RHPCYB036 (3T)	1050/1350	3/4 HP [559]	Fan Only - Tap 1	CFM	1339	1044	830	747	656	554	481	408
				WATTS	152	116	104	112	119	126	131	138
		3/4 HP [559]	Low Heat - Tap 2	CFM	1627	1542	1469	1399	1315	1254	1186	1127
				WATTS	233	246	260	272	285	297	309	320
		3/4 HP [559]	High Heat - Tap 3	CFM	1887	1817	1731	1673	1611	1533	1476	1422
				WATTS	338	354	367	380	395	412	424	440
		3/4 HP [559]	Rated Cool - Tap 4*	CFM	1520	1440	1361	1273	1200	1130	1060	997
				WATTS	199	210	223	236	247	258	268	278
		3/4 HP [559]	Max Speed - Tap 5	CFM	1787	1704	1632	1568	1494	1424	1371	1306
				WATTS	295	308	322	337	353	366	378	391
RHPCYB048 (4T)	1400/1800	3/4 HP [559]	Fan Only - Tap 1	CFM	1160	1080	966	887	811	690	580	517
				WATTS	106	116	128	136	144	154	160	166
		3/4 HP [559]	Low Heat - Tap 2	CFM	1880	1822	1759	1699	1645	1568	1497	1437
				WATTS	329	345	363	379	394	413	429	443
		3/4 HP [559]	High Heat - Tap 3	CFM	1943	1886	1826	1769	1715	1651	1576	1511
				WATTS	361	379	396	414	429	447	464	479
		3/4 HP [559]	Rated Cool - Tap 4*	CFM	1818	1753	1686	1623	1566	1485	1413	1357
				WATTS	303	318	336	351	365	383	396	409
		3/4 HP [559]	Max Speed - Tap 5	CFM	2128	2073	2020	1961	1901	1850	1808	1734
				WATTS	460	479	497	517	537	555	570	593
RHPCYB060 (5T)	1750/2250	1 HP [745]	Fan Only - Tap 1	CFM	1361	1146	1040	955	880	795	698	620
				WATTS	155	132	144	152	161	171	180	187
		1 HP [745]	Low Heat - Tap 2	CFM	1772	1704	1642	1592	1533	1441	1376	1320
				WATTS	288	303	318	332	347	364	377	391
		1 HP [745]	High Heat - Tap 3	CFM	1984	1923	1873	1821	1765	1718	1644	1571
				WATTS	390	407	423	439	456	471	491	508
		1 HP [745]	Rated Cool - Tap 4*	CFM	2298	2237	2192	2143	2092	2047	2004	1960
				WATTS	571	592	611	631	651	670	690	709
		1 HP [745]	Max Speed - Tap 5	CFM	2416	2360	2320	2263	2223	2172	2138	2088
				WATTS	668	689	709	730	750	771	789	811
RHPCYB072 (6T)	2100/2700	1.2 HP [895]	Fan/Low Heat - Tap 1	CFM	1476	1410	1341	1266	1169	1105	1040	979
				WATTS	169	180	191	204	216	227	237	245
		1.2 HP [895]	High Heat - Tap 2	CFM	2017	1967	1915	1861	1809	1756	1705	1639
				WATTS	362	377	393	408	423	439	454	473
		1.2 HP [895]	Low Cool - Tap 3	CFM	1654	1592	1531	1470	1401	1311	1250	1191
				WATTS	221	233	246	259	273	287	299	310
		1.2 HP [895]	High Cool - Tap 4*	CFM	2410	2370	2332	2290	2248	2205	2163	2120
				WATTS	584	602	621	640	659	678	697	716
		1.2 HP [895]	Max Speed - Tap 5	CFM	2497	2459	2417	2377	2334	2294	2253	2212
				WATTS	642	662	682	701	721	741	760	781

NOTES: *Tap 4 - Factory Cooling Tap
Pressure drops across the 3-6T CFM range (1050 - 2700)
Wet coil: ~0.09 Inches W.C.
Downflow: ~0.1 Inches W.C.
Reheat coil: ~0.09 Inches W.C.

[] Designates Metric Conversions

3-6T—HIGH STATIC—SIDEFLOW (208/230V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range (Min/Max) CFM	Motor HP [W]	Motor Speed	CFM/ WATTS	External Static Pressure - Inches W.C. [kPa]							
					0.8 [.2]	0.9 [.22]	1.0 [.25]	1.1 [.27]	1.2 [.3]	1.3 [.32]	1.4 [.35]	1.5 [.37]
RHPCYB036 (3T)	1050/1350	1.5 HP [1119]	Fan Only - Tap 1	CFM	953	882	806	734	658	605	531	480
				WATTS	264	274	283	291	301	301	312	318
		1.5 HP [1119]	Low Heat - Tap 2	CFM	1506	1445	1388	1339	1288	1231	1179	1127
				WATTS	476	490	504	516	529	538	550	562
		1.5 HP [1119]	High Heat - Tap 3	CFM	1803	1749	1697	1643	1593	1521	1480	1438
				WATTS	641	656	672	688	703	704	719	735
		1.5 HP [1119]	Rated Cool - Tap 4*	CFM	1391	1335	1277	1230	1166	1114	1050	977
				WATTS	426	438	451	463	472	481	493	504
		1.5 HP [1119]	Max Speed - Tap 5	CFM	1660	1611	1556	1503	1454	1413	1364	1317
				WATTS	563	577	592	606	621	633	648	662
RHPCYB048 (4T)	1400/1800	1.5 HP [1119]	Fan Only - Tap 1	CFM	1093	1033	962	881	810	737	669	595
				WATTS	304	315	326	337	346	353	361	362
		1.5 HP [1119]	Low Heat - Tap 2	CFM	1834	1784	1738	1690	1646	1600	1554	1511
				WATTS	655	672	689	705	721	739	756	772
		1.5 HP [1119]	High Heat - Tap 3	CFM	1910	1855	1814	1765	1717	1677	1627	1582
				WATTS	704	721	737	755	772	787	805	821
		1.5 HP [1119]	Rated Cool - Tap 4*	CFM	1763	1714	1663	1617	1569	1517	1469	1423
				WATTS	614	629	644	660	675	690	705	721
		1.5 HP [1119]	Max Speed - Tap 5	CFM	1816	1833	1868	1965	1925	1887	1849	1809
				WATTS	844	865	884	905	924	944	964	983
RHPCYB060 (5T)	1750/2250	1.5 HP [1119]	Fan Only - Tap 1	CFM	1152	1097	1047	951	884	809	743	680
				WATTS	325	336	350	359	367	376	384	390
		1.5 HP [1119]	Low Heat - Tap 2	CFM	1710	1667	1618	1570	1525	1477	1427	1384
				WATTS	585	599	615	631	647	663	679	694
		1.5 HP [1119]	High Heat - Tap 3	CFM	1933	1879	1836	1792	1744	1703	1659	1615
				WATTS	723	740	757	775	793	810	826	843
		1.5 HP [1119]	Rated Cool - Tap 4*	CFM	2383	2349	2310	2254	2211	2166	2134	2094
				WATTS	1100	1118	1138	1165	1187	1210	1230	1251
		1.5 HP [1119]	Max Speed - Tap 5	CFM	2259	2219	2163	2113	2073	2036	2000	1960
				WATTS	971	991	1014	1036	1056	1077	1097	1118
RHPCYB072 (6T)	2100/2700	1.2 HP [895]	Fan/Low Heat - Tap 1	CFM	1384	1332	1277	1225	1170	1111	1032	962
				WATTS	379	392	404	416	427	439	450	460
		1.2 HP [895]	High Heat - Tap 2	CFM	2036	1991	1943	1888	1831	1781	1741	1706
				WATTS	668	686	708	732	754	777	796	817
		1.2 HP [895]	Low Cool - Tap 3	CFM	1674	1596	1548	1501	1455	1410	1361	1315
				WATTS	487	505	521	537	552	566	581	594
		1.2 HP [895]	High Cool - Tap 4*	CFM	2395	2356	2317	2279	2240	2208	2172	2138
				WATTS	916	939	961	986	1014	1041	1078	1115
		1.2 HP [895]	Max Speed - Tap 5	CFM	2480	2443	2407	2371	2337	2302	2275	2246
				WATTS	984	1009	1034	1062	1090	1121	1156	1195

NOTES: *Tap 4 - Factory Cooling Tap
Pressure drops across the 3-6T CFM range (1050 - 2700)
Wet coil: ~0.09 Inches W.C.
Downflow: ~0.1 Inches W.C.
Reheat coil: ~0.09 Inches W.C.

[] Designates Metric Conversions

3-6T—LOW STATIC—SIDEFLOW (460V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range (Min/Max) CFM	Motor HP [W]	Motor Speed	CFM/ WATTS	External Static Pressure - Inches W.C. [kPa]							
					0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]
RHPCYB036 (3T)	1050/1350	3/4 HP [559]	Fan Only - Tap 1	CFM	1008	892	801	707	614	512	393	323
				WATTS	108	117	124	132	139	145	153	157
		3/4 HP [559]	Low Heat - Tap 2	CFM	1245	1160	1068	988	913	827	740	655
				WATTS	157	166	176	186	194	205	214	222
		3/4 HP [559]	High Heat - Tap 3	CFM	1848	1779	1712	1646	1584	1516	1456	1398
				WATTS	357	373	388	403	416	431	445	459
		3/4 HP [559]	Rated Cool - Tap 4*	CFM	1495	1413	1332	1245	1172	1103	1032	964
				WATTS	219	231	243	254	264	275	286	294
		3/4 HP [559]	Max Speed - Tap 5	CFM	1755	1673	1611	1540	1472	1405	1346	1282
				WATTS	314	328	340	356	368	381	396	409
RHPCYB048 (4T)	1400/1800	3/4 HP [559]	Fan Only - Tap 1	CFM	1125	1045	944	866	794	716	618	541
				WATTS	103	113	123	132	141	150	159	166
		3/4 HP [559]	Low Heat - Tap 2	CFM	1421	1351	1286	1196	1126	1060	999	939
				WATTS	176	189	201	214	225	237	247	256
		3/4 HP [559]	High Heat - Tap 3	CFM	1878	1824	1758	1698	1652	1583	1519	1464
				WATTS	351	367	385	402	416	435	451	466
		3/4 HP [559]	Rated Cool - Tap 4*	CFM	1753	1694	1632	1573	1519	1442	1391	1338
				WATTS	296	310	326	342	357	373	388	403
		3/4 HP [559]	Max Speed - Tap 5	CFM	2045	1995	1929	1879	1826	1784	1733	1659
				WATTS	442	462	483	501	517	535	552	573
RHPCYB060 (5T)	1750/2250	1 HP [745]	Fan Only - Tap 1	CFM	1169	1084	986	905	823	725	630	527
				WATTS	114	124	133	142	149	159	166	174
		1 HP [745]	Low Heat - Tap 2	CFM	1332	1251	1166	1088	1007	931	847	760
				WATTS	150	160	172	182	192	201	213	221
		1 HP [745]	High Heat - Tap 3	CFM	1964	1905	1850	1799	1741	1681	1619	1567
				WATTS	395	412	428	443	458	475	491	505
		1 HP [745]	Rated Cool - Tap 4*	CFM	2262	2211	2159	2110	2059	2023	1974	1907
				WATTS	578	597	617	635	653	671	689	711
		1 HP [745]	Max Speed - Tap 5	CFM	2406	2358	2303	2256	2212	2165	2125	2078
				WATTS	681	702	725	745	764	783	801	820
RHPCYB072 (6T)	2100/2700	1.2 HP [895]	Fan/Low Heat - Tap 1	CFM	1479	1403	1318	1232	1156	1095	1026	945
				WATTS	167	178	190	202	211	222	231	241
		1.2 HP [895]	High Heat - Tap 2	CFM	2075	2022	1960	1904	1843	1785	1716	1652
				WATTS	387	401	414	427	442	458	472	485
		1.2 HP [895]	Low Cool - Tap 3	CFM	1685	1617	1556	1484	1403	1333	1272	1221
				WATTS	228	241	254	268	280	290	302	316
		1.2 HP [895]	High Cool - Tap 4*	CFM	2493	2448	2408	2356	2310	2262	2213	2160
				WATTS	629	646	666	679	694	714	733	750
		1.2 HP [895]	Max Speed - Tap 5	CFM	2574	2529	2487	2438	2397	2348	2302	2249
				WATTS	689	706	721	735	755	773	791	808

NOTES: *Tap 4 - Factory Cooling Tap
Pressure drops across the 3-6T CFM range (1050 - 2700)
Wet coil: ~0.09 Inches W.C.
Downflow: ~0.1 Inches W.C.
Reheat coil: ~0.09 Inches W.C.

[] Designates Metric Conversions

3-6T—HIGH STATIC—SIDEFLOW (460V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range (Min/Max) CFM	Motor HP [W]	Motor Speed	CFM/ WATTS	External Static Pressure - Inches W.C. [kPa]							
					0.8 [.2]	0.9 [.22]	1.0 [.25]	1.1 [.27]	1.2 [.3]	1.3 [.32]	1.4 [.35]	1.5 [.37]
RHPCYB036 (3T)	1050/1350	1 HP [745]	Fan Only - Tap 1	CFM	910	845	762	694	632	584	522	471
				WATTS	282	290	299	307	316	323	332	340
		1 HP [745]	Low Heat - Tap 2	CFM	1171	1114	1052	989	924	858	788	739
				WATTS	367	379	390	400	410	419	431	438
		1 HP [745]	High Heat - Tap 3	CFM	1790	1736	1684	1625	1575	1519	1474	1436
				WATTS	672	690	704	720	735	750	766	779
		1 HP [745]	Rated Cool - Tap 4*	CFM	1387	1341	1268	1216	1164	1104	1043	981
				WATTS	457	466	482	494	507	519	531	541
		1 HP [745]	Max Speed - Tap 5	CFM	1720	1667	1615	1561	1474	1415	1364	1321
				WATTS	623	641	658	677	672	681	696	710
RHPCYB048 (4T)	1400/1800	1 HP [745]	Fan Only - Tap 1	CFM	871	798	721	644	567	490	413	336
				WATTS	249	259	270	281	292	302	313	324
		1 HP [745]	Low Heat - Tap 2	CFM	1344	1292	1239	1192	1138	1084	1007	953
				WATTS	458	470	481	490	500	510	525	534
		1 HP [745]	High Heat - Tap 3	CFM	1907	1867	1819	1770	1721	1673	1624	1575
				WATTS	711	728	746	765	784	802	821	840
		1 HP [745]	Rated Cool - Tap 4*	CFM	1567	1510	1453	1396	1339	1282	1225	1169
				WATTS	505	522	537	553	569	584	600	616
		1 HP [745]	Max Speed - Tap 5	CFM	2078	2027	1981	1934	1887	1840	1793	1747
				WATTS	820	841	861	881	900	920	940	960
RHPCYB060 (5T)	1750/2250	1.2 HP [895]	Fan Only - Tap 1	CFM	1127	1073	1018	932	841	775	720	678
				WATTS	303	311	321	335	345	354	360	367
		1.2 HP [895]	Low Heat - Tap 2	CFM	1242	1192	1140	1088	1021	926	853	803
				WATTS	345	354	366	376	388	400	410	419
		1.2 HP [895]	High Heat - Tap 3	CFM	1917	1844	1778	1732	1681	1639	1595	1553
				WATTS	653	670	687	704	716	729	741	754
		1.2 HP [895]	Rated Cool - Tap 4*	CFM	2236	2192	2123	2062	2009	1950	1903	1861
				WATTS	845	869	893	918	940	950	966	979
		1.2 HP [895]	Max Speed - Tap 5	CFM	2378	2313	2257	2196	2133	2077	2028	1974
				WATTS	942	968	990	1017	1041	1055	1073	1082
RHPCYB072 (6T)	2100/2700	1.2 HP [895]	Fan/Low Heat - Tap 1	CFM	1388	1335	1283	1222	1153	1075	999	911
				WATTS	379	390	403	414	423	434	446	456
		1.2 HP [895]	High Heat - Tap 2	CFM	2081	2025	1966	1908	1857	1810	1763	1719
				WATTS	703	721	735	751	766	783	798	812
		1.2 HP [895]	Low Cool - Tap 3	CFM	1638	1583	1529	1478	1422	1362	1303	1239
				WATTS	482	495	508	519	530	540	551	565
		1.2 HP [895]	High Cool - Tap 4*	CFM	2517	2468	2420	2374	2317	2268	2220	2164
				WATTS	1011	1030	1051	1071	1086	1104	1124	1140
		1.2 HP [895]	Max Speed - Tap 5	CFM	2676	2630	2592	2533	2487	2417	2344	2271
				WATTS	1154	1174	1203	1217	1238	1239	1238	1234

NOTES: *Tap 4 - Factory Cooling Tap
Pressure drops across the 3-6T CFM range (1050 - 2700)
Wet coil: ~0.09 Inches W.C.
Downflow: ~0.1 Inches W.C.
Reheat coil: ~0.09 Inches W.C.

[] Designates Metric Conversions

ELECTRICAL DATA – RHPCYB SERIES WITHOUT POWERED EXHAUST						
		036ACT	036ACU	036ADT	036ADU	036AJT
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	187-253
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Hz	60	60	60	60	60
	Minimum Circuit Ampacity	23	28	11	12	29
	Minimum Overcurrent Protection Device Size	30	35	15	15	35
Compressor Motor	Maximum Overcurrent Protection Device Size	30	40	15	15	40
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Amps (RLA)	12.2	12.2	5.8	5.8	16.7
Condenser Motor	Amps (LRA)	97.5	97.5	44.3	44.3	93.5
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	1/5	1/5	1/5	1/5	1/5
	Amps (FLA, each)	1.2	1.2	0.8	0.8	1.2
Evaporator Fan	Amps (LRA, each)	2.3	2.3	1.4	1.4	2.3
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	3/4	1-1/2	3/4	1	3/4
	Amps (FLA, each)	6	11.5	2.7	3.5	6

ELECTRICAL DATA – RHPCYB SERIES WITH POWERED EXHAUST						
		036ACT	036ACU	036ADT	036ADU	036AJT
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	187-253
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Hz	60	60	60	60	60
	Minimum Circuit Ampacity	26	32	13	14	32
	Minimum Overcurrent Protection Device Size	30	35	15	20	40
	Maximum Overcurrent Protection Device Size	35	40	15	20	45
Compressor Motor	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Amps (RLA)	12.2	12.2	5.8	5.8	16.7
	Amps (LRA)	97.5	97.5	44.3	44.3	93.5
Condenser Motor	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	1/5	1/5	1/5	1/5	1/5
	Amps (FLA, each)	1.2	1.2	0.8	0.8	1.2
	Amps (LRA, each)	2.3	2.3	1.4	1.4	2.3
Evaporator Fan	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	3/4	1-1/2	3/4	1	3/4
	Amps (FLA, each)	6	11.5	2.7	3.5	6

ELECTRICAL DATA – RHPCYB SERIES WITHOUT POWERED EXHAUST						
		048ACT	048ACU	048ADT	048ADU	048AJT
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	187-253
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Hz	60	60	60	60	60
	Minimum Circuit Ampacity	25	30	12	13	37
	Minimum Overcurrent Protection Device Size	30	35	15	15	45
Compressor Motor	Maximum Overcurrent Protection Device Size	35	40	15	15	50
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Amps (RLA)	12.8	12.8	6	6	22.4
Condenser Motor	Amps (LRA)	120.4	120.4	49.4	49.4	126
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.3	2.3	1.5	1.5	2.3
Evaporator Fan	Amps (LRA, each)	5.1	5.1	3.1	3.1	5.1
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	3/4	1-1/2	3/4	1	3/4
	Amps (FLA, each)	6	11.5	2.7	3.5	6

ELECTRICAL DATA – RHPCYB SERIES WITH POWERED EXHAUST						
		048ACT	048ACU	048ADT	048ADU	048AJT
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	187-253
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Hz	60	60	60	60	60
	Minimum Circuit Ampacity	28	33	14	15	40
	Minimum Overcurrent Protection Device Size	35	40	20	20	45
	Maximum Overcurrent Protection Device Size	40	45	20	20	60
Compressor Motor	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Amps (RLA)	12.8	12.8	6	6	22.4
	Amps (LRA)	120.4	120.4	49.4	49.4	126
Condenser Motor	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	2.3	2.3	1.5	1.5	2.3
	Amps (LRA, each)	5.1	5.1	3.1	3.1	5.1
Evaporator Fan	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	3/4	1-1/2	3/4	1	3/4
	Amps (FLA, each)	6	11.5	2.7	3.5	6

ELECTRICAL DATA – RHPCYB SERIES WITHOUT POWERED EXHAUST						
		060ACT	060ACU	060ADT	060ADU	060AJT
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	187-253
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Hz	60	60	60	60	60
	Minimum Circuit Ampacity	33	37	15	15	43
	Minimum Overcurrent Protection Device Size	40	45	20	20	50
Compressor Motor	Maximum Overcurrent Protection Device Size	45	50	20	20	60
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Amps (RLA)	16	16	7.1	7.1	23.7
Condenser Motor	Amps (LRA)	156.4	156.4	58.1	58.1	157
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2
Evaporator Fan	Amps (FLA, each)	5.3	5.3	2.3	2.3	5.3
	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	1	1-1/2	1	1-1/5	1
	Amps (FLA, each)	7.6	11.5	3.5	3.7	7.6

ELECTRICAL DATA – RHPCYB SERIES WITH POWERED EXHAUST						
		060ACT	060ACU	060ADT	060ADU	060AJT
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	187-253
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Hz	60	60	60	60	60
	Minimum Circuit Ampacity	36	40	17	17	46
	Minimum Overcurrent Protection Device Size	40	45	20	20	60
	Maximum Overcurrent Protection Device Size	50	50	20	20	60
Compressor Motor	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	3	3	3	3	1
	Amps (RLA)	16	16	7.1	7.1	23.7
	Amps (LRA)	156.4	156.4	58.1	58.1	157
Condenser Motor	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	1/2	1/2	1/2	1/2	1/2
	Amps (FLA, each)	5.3	5.3	2.3	2.3	5.3
Evaporator Fan	No.	1	1	1	1	1
	Volts	208/230	208/230	460	460	208/230
	Phase	1	1	1	1	1
	HP	1	1-1/2	1	1-1/5	1
	Amps (FLA, each)	7.6	11.5	3.5	3.7	7.6

ELECTRICAL DATA – RHPCYB SERIES WITHOUT POWERED EXHAUST					
		072ACT	072ACU	072ADT	072ADU
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506
	Volts	208/230	208/230	460	460
	Phase	3	3	3	3
	Hz	60	60	60	60
	Minimum Circuit Ampacity	38	38	18	18
	Minimum Overcurrent Protection Device Size	45	45	20	20
	Maximum Overcurrent Protection Device Size	50	50	25	25
Compressor Motor	No.	1	1	1	1
	Volts	208/230	208/230	460	460
	Phase	3	3	3	3
	Amps (RLA)	19.2	19.2	9.1	9.1
	Amps (LRA)	162	162	70.8	70.8
Condenser Motor	No.	1	1	1	1
	Volts	208/230	208/230	460	460
	Phase	1	1	1	1
	HP	1/2	1/2	1/2	1/2
	Amps (FLA, each)	5.3	5.3	2.3	2.3
Evaporator Fan	No.	1	1	1	1
	Volts	208/230	208/230	460	460
	Phase	1	1	1	1
	HP	1-1/5	1-1/5	1-1/5	1-1/5
	Amps (FLA, each)	8.5	8.5	3.7	3.7

ELECTRICAL DATA – RHPCYB SERIES WITH POWERED EXHAUST					
		072ACT	072ACU	072ADT	072ADU
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506
	Volts	208/230	208/230	460	460
	Phase	3	3	3	3
	Hz	60	60	60	60
	Minimum Circuit Ampacity	41	41	20	20
	Minimum Overcurrent Protection Device Size	50	50	25	25
	Maximum Overcurrent Protection Device Size	60	60	25	25
Compressor Motor	No.	1	1	1	1
	Volts	208/230	208/230	460	460
	Phase	3	3	3	3
	Amps (RLA)	19.2	19.2	9.1	9.1
	Amps (LRA)	162	162	70.8	70.8
Condenser Motor	No.	1	1	1	1
	Volts	208/230	208/230	460	460
	Phase	1	1	1	1
	HP	1/2	1/2	1/2	1/2
	Amps (FLA, each)	5.3	5.3	2.3	2.3
Evaporator Fan	No.	1	1	1	1
	Volts	208/230	208/230	460	460
	Phase	1	1	1	1
	HP	1-1/5	1-1/5	1-1/5	1-1/5
	Amps (FLA, each)	8.5	8.5	3.7	3.7

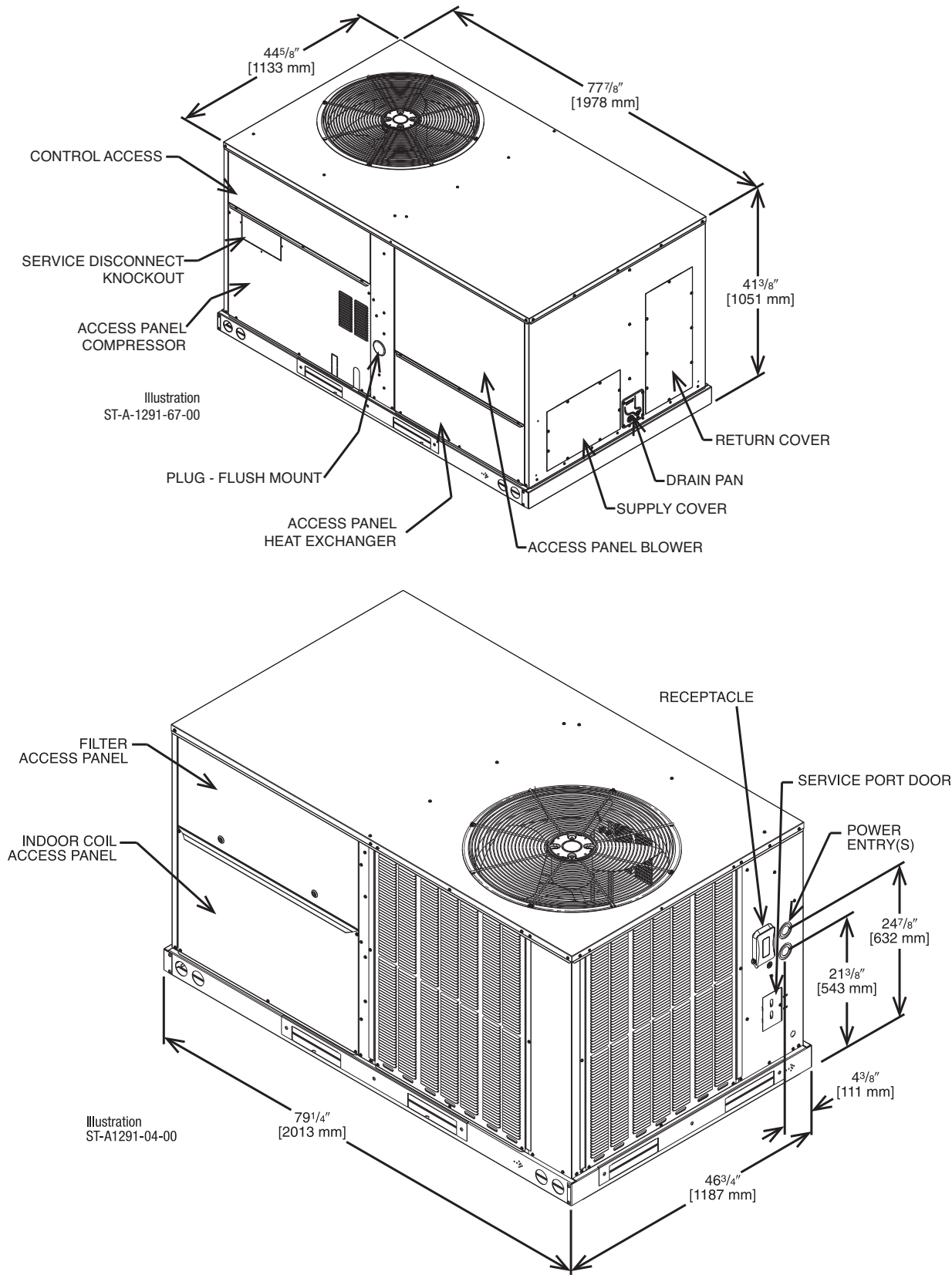
208/230V, Three Phase, 60 Hz, Auxiliary Electric Heater Kit Characteristics and Application													
Single Power Supply for Both Unit and Heater Kit							Separate Power Supply for Both Unit and Heater Kit						
Unit Model Number RHPCYB	Heater Kit			Air Conditioner			Heater Kit			Air Conditioner			
	Model No. RXJJ-	Rated Heater kW @ 208/230V	FLA	Unit Min. Ckt. Ampacity	Unit Min. Ckt. Ampacity With Optional Powered Exhaust	Max. Fuse or Ckt. Size	Max. Fuse or Ckt. Size	Max. Fuse or Ckt. Size	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse or Ckt. Size	Air Cond. Min. Ckt. Ampacity With Optional Powered Exhaust	Air Cond. Max. Fuse or Ckt. Size	Air Cond. Max. Fuse or Ckt. Bkr. Size With Optional Powered Exhaust
036ACT	NONE*	—/—	—/—	23/23	26/26	30/30	35/35	—	—	—	23/23	30/30	35/35
	DC10CP	7.5/10.0	20.9/24.1	49/53	52/56	50/60	60/60	27/31	30/35	30/35	23/23	30/30	35/35
	DC15CP	11.3/15.0	31.4/36.2	62/68	65/71	70/70	70/80	40/46	40/50	40/50	23/23	30/30	35/35
	DC20CP	15.0/20.0	41.7/48.1	75/83	78/86	80/90	80/90	53/61	60/70	60/70	23/23	30/30	35/35
036ACU	NONE*	—/—	—/—	28/28	32/32	40/40	40/40	—	—	—	28/28	40/40	40/40
	DC10CP	7.5/10.0	20.9/24.1	55/59	58/62	60/60	60/60	27/31	30/35	30/35	28/28	40/40	40/40
	DC15CP	11.3/15.0	31.4/36.2	68/74	71/77	70/80	80/80	40/46	40/50	40/50	28/28	40/40	40/40
	DC20CP	15.0/20.0	41.7/48.1	81/89	84/92	90/90	90/100	53/61	60/70	60/70	28/28	40/40	40/40
048ACT	NONE*	—/—	—/—	25/25	28/28	35/35	40/40	—	—	—	25/25	35/35	40/40
	DC10CP	7.5/10.0	20.9/24.1	51/55	54/58	60/60	60/60	27/31	30/35	30/35	25/25	35/35	40/40
	DC15CP	11.3/15.0	31.4/36.2	64/70	67/73	70/70	70/80	40/46	40/50	40/50	25/25	35/35	40/40
	DC20CP	15.0/20.0	41.7/48.1	77/85	80/88	80/90	80/90	53/61	60/70	60/70	25/25	35/35	40/40
048ACU	NONE*	—/—	—/—	30/30	33/33	40/40	45/45	—	—	—	30/30	40/40	45/45
	DC10CP	7.5/10.0	20.9/24.1	56/60	60/64	60/60	60/70	27/31	30/35	30/35	30/30	40/40	45/45
	DC15CP	11.3/15.0	31.4/36.2	70/76	73/79	70/80	80/80	40/46	40/50	40/50	30/30	40/40	45/45
	DC20CP	15.0/20.0	41.7/48.1	82/90	86/94	90/90	90/100	53/61	60/70	60/70	30/30	40/40	45/45
060ACT	NONE*	—/—	—/—	33/33	36/36	45/45	50/50	—	—	—	33/33	45/45	50/50
	DC10CP	7.5/10.0	20.9/24.1	60/64	63/67	60/70	70/70	27/31	30/35	30/35	33/33	45/45	50/50
	DC15CP	11.3/15.0	31.4/36.2	73/79	76/82	80/80	80/90	40/46	40/50	40/50	33/33	45/45	50/50
	DC20CP	15.0/20.0	41.7/48.1	86/94	89/97	90/100	90/100	53/61	60/70	60/70	33/33	45/45	50/50
060ACU	NONE*	—/—	—/—	37/37	40/40	50/50	50/50	—	—	—	37/37	50/50	50/50
	DC10CP	7.5/10.0	20.9/24.1	63/67	67/71	70/70	70/80	27/31	30/35	30/35	37/37	50/50	50/50
	DC15CP	11.3/15.0	31.4/36.2	77/83	80/86	80/90	80/90	40/46	40/50	40/50	37/37	50/50	50/50
	DC20CP	15.0/20.0	41.7/48.1	89/97	93/101	90/100	100/110	53/61	60/70	60/70	37/37	50/50	50/50
072ACT	NONE*	—/—	—/—	38/38	41/41	50/50	60/60	—	—	—	38/38	50/50	60/60
	DC15CP	11.3/15.0	31.4/36.2	78/84	81/87	80/90	90/90	40/46	40/50	40/50	38/38	50/50	60/60
	DC20CP	15.0/20.0	41.7/48.1	90/98	94/102	90/100	100/110	53/61	60/70	60/70	38/38	50/50	60/60
	DC24CP	18.0/24.0	50.0/57.7	101/110	104/114	110/110	110/125	63/73	70/80	70/80	38/38	50/50	60/60
072ACU	NONE*	—/—	—/—	38/38	41/41	50/50	60/60	—	—	—	38/38	50/50	60/60
	DC15CP	11.3/15.0	31.4/36.2	78/84	81/87	80/90	90/90	40/46	40/50	40/50	38/38	50/50	60/60
	DC20CP	15.0/20.0	41.7/48.1	90/98	94/102	90/100	100/110	53/61	60/70	60/70	38/38	50/50	60/60
	DC24CP	18.0/24.0	50.0/57.7	101/110	104/114	110/110	110/125	63/73	70/80	70/80	38/38	50/50	60/60

460V, Three Phase, 60 Hz, Auxiliary Electric Heater Kit Characteristics and Application													
Single Power Supply for Both Unit and Heater Kit				Separate Power Supply for Both Unit and Heater Kit									
Unit Model Number RHPCYB	Heater Kit			Air Conditioner			Heater Kit			Air Conditioner			
	Model No. RXJJ-	Rated kW @ 460V	FLA	Unit Min. Ckt. Ampacity	Unit Min. Ckt. Ampacity With Optional Powered Exhaust	Max. Fuse or Ckt. Bkr. Size	Max. Fuse or Ckt. Bkr. Size With Optional Powered Exhaust	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse or Ckt. Bkr. Size	Air Cond. Min. Ckt. Ampacity With Optional Powered Exhaust	Air Cond. Max. Fuse or Ckt. Bkr. Size	Air Cond. Max. Fuse or Ckt. Bkr. Size With Optional Powered Exhaust	
036ADT	NONE*	—	—	11	13	15	15	—	—	11	15	15	15
	DC10DNV	10.0	12.0	26	28	30	30	15	15	11	15	15	15
	DC15DNV	15.0	18.1	34	36	35	40	23	25	11	15	15	15
	DC20DNV	20.0	24.1	41	43	45	45	31	35	11	15	15	15
036ADU	NONE*	—	—	12	14	15	20	—	—	12	15	15	15
	DC10DNV	10.0	12.0	27	29	30	30	15	15	12	15	15	15
	DC15DNV	15.0	18.1	35	37	35	40	23	25	12	15	15	15
	DC20DNV	20.0	24.1	42	44	45	45	31	35	12	15	15	15
048ADT	NONE*	—	—	12	14	15	20	—	—	12	15	15	15
	DC10DNV	10.0	12.0	27	29	30	30	15	15	12	15	15	15
	DC15DNV	15.0	18.1	35	37	35	40	23	25	12	15	15	15
	DC20DNV	20.0	24.1	42	44	45	45	31	35	12	15	15	15
048ADU	NONE*	—	—	13	15	15	20	—	—	13	15	20	20
	DC10DNV	10.0	12.0	28	30	30	30	15	15	13	15	20	20
	DC15DNV	15.0	18.1	36	38	40	40	23	25	13	15	20	20
	DC20DNV	20.0	24.1	43	45	45	45	31	35	13	15	20	20
060ADT	NONE*	—	—	15	17	20	20	—	—	15	20	20	20
	DC10DNV	10.0	12.0	30	32	30	35	15	15	15	20	20	20
	DC15DNV	15.0	18.1	38	40	40	40	23	25	15	20	20	20
	DC20DNV	20.0	24.1	45	47	45	50	31	35	15	20	20	20
060ADU	NONE*	—	—	15	17	20	20	—	—	15	20	20	20
	DC10DNV	10.0	12.0	30	32	30	35	15	15	15	20	20	20
	DC15DNV	15.0	18.1	38	40	40	40	23	25	15	20	20	20
	DC20DNV	20.0	24.1	45	47	45	50	31	35	15	20	20	20
072ADT	NONE*	—	—	18	20	25	25	—	—	18	25	25	25
	DC15DNV	15.0	18.1	40	43	40	45	23	25	18	25	25	25
	DC20DNV	20.0	24.1	48	50	50	50	31	35	18	25	25	25
	DC24DNV	24.0	28.9	54	56	60	60	37	40	18	25	25	25
072ADU	NONE*	—	—	18	20	25	25	—	—	18	25	25	25
	DC15DNV	15.0	18.1	40	43	40	45	23	25	18	25	25	25
	DC20DNV	20.0	24.1	48	50	50	50	31	35	18	25	25	25
	DC24DNV	24.0	28.9	54	56	60	60	37	40	18	25	25	25

208/230V Single Phase, 60 Hz, Auxiliary Electric Heater Kit Characteristics and Application													
Single Power Supply for Both Unit and Heater Kit							Separate Power Supply for Both Unit and Heater Kit						
Unit Model Number RHPCYB	Heater Kit			Air Conditioner			Heater Kit			Air Conditioner			
	Model No. RXJJ-	Rated Heater kW @ 208/230V	FLA	Unit Min. Ckt. Ampacity	Unit Min. Ckt. Ampacity With Optional Powered Exhaust	Max. Fuse or Ckt. Bkr. Size	Max. Fuse or Ckt. Bkr. Size With Optional Powered Exhaust	Heater Kit Min. Ckt. Ampacity	Heater Kit Max. Fuse or Ckt. Bkr. Size	Air Cond. Min. Ckt. Ampacity	Air Cond. Min. Ckt. Ampacity With Optional Powered Exhaust	Air Cond. Max. Fuse or Ckt. Bkr. Size	Air Cond. Max. Fuse or Ckt. Bkr. Size With Optional Powered Exhaust
036AJT	NONE*	—/—	—/—	29/29	32/32	40/40	45/45	—	—	29/29	32/32	40/40	45/45
	DC10JT	7.5/10.0	36.2/41.7	74/81	77/84	80/90	80/90	46/53	50/60	29/29	32/32	40/40	45/45
	DC15JT	11.3/15.0	54.3/62.7	96/107	100/110	100/110	100/110	68/79	70/80	29/29	32/32	40/40	45/45
	DC20JT	15.0/20.0	72.2/83.3	119/133	122/136	125/150	125/150	91/105	100/110	29/29	32/32	40/40	45/45
048AJT	NONE*	—/—	—/—	37/37	40/40	50/50	60/60	—	—	37/37	40/40	50/50	60/60
	DC10JT	7.5/10.0	36.2/41.7	82/89	85/92	90/100	90/100	46/53	50/60	37/37	40/40	50/50	60/60
	DC15JT	11.3/15.0	54.3/62.7	105/115	108/118	110/125	110/125	68/79	70/80	37/37	40/40	50/50	60/60
	DC20JT	15.0/20.0	72.2/83.3	127/141	130/144	150/150	150/150	91/105	100/110	37/37	40/40	50/50	60/60
060AJT	NONE*	—/—	—/—	43/43	46/46	60/60	60/60	—	—	43/43	46/46	60/60	60/60
	DC10JT	7.5/10.0	36.2/41.7	88/95	91/98	100/100	100/110	46/53	50/60	43/43	46/46	60/60	60/60
	DC15JT	11.3/15.0	54.3/62.7	111/121	114/124	125/125	125/125	68/79	70/80	43/43	46/46	60/60	60/60
	DC20JT	15.0/20.0	72.2/83.3	133/147	136/150	150/150	150/150	91/105	100/110	43/43	46/46	60/60	60/60

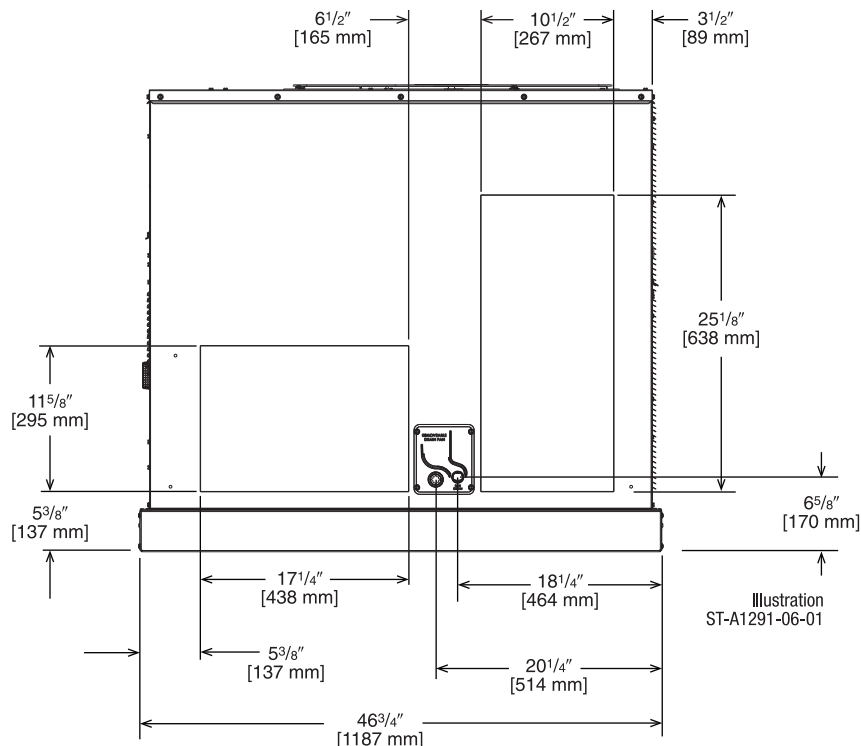
A2L REFRIGERANT INSTALLATION SAFETY DATA

		RHPCYB036	RHPCYB048	RHPCYB060	RHPCYB072
Refrigerant Charge Weight (oz)		84	143	146	142
Minimum Circulation Airflow, Qmin (CFM)		279	476	486	472
Altitude Above Sea Level (Ft.)	Altitude Adjustment Factor	Minimum Total Conditioned Room Area, TAmin (Sq. Ft.)			
0	1.000	155	264	269	262
1000	1.025	159	270	276	268
2000	1.051	163	277	283	275
3000	1.078	167	284	290	282
4000	1.107	171	292	298	290
5000	1.138	176	300	306	298
6000	1.170	181	308	315	306
6500	1.187	184	313	319	311

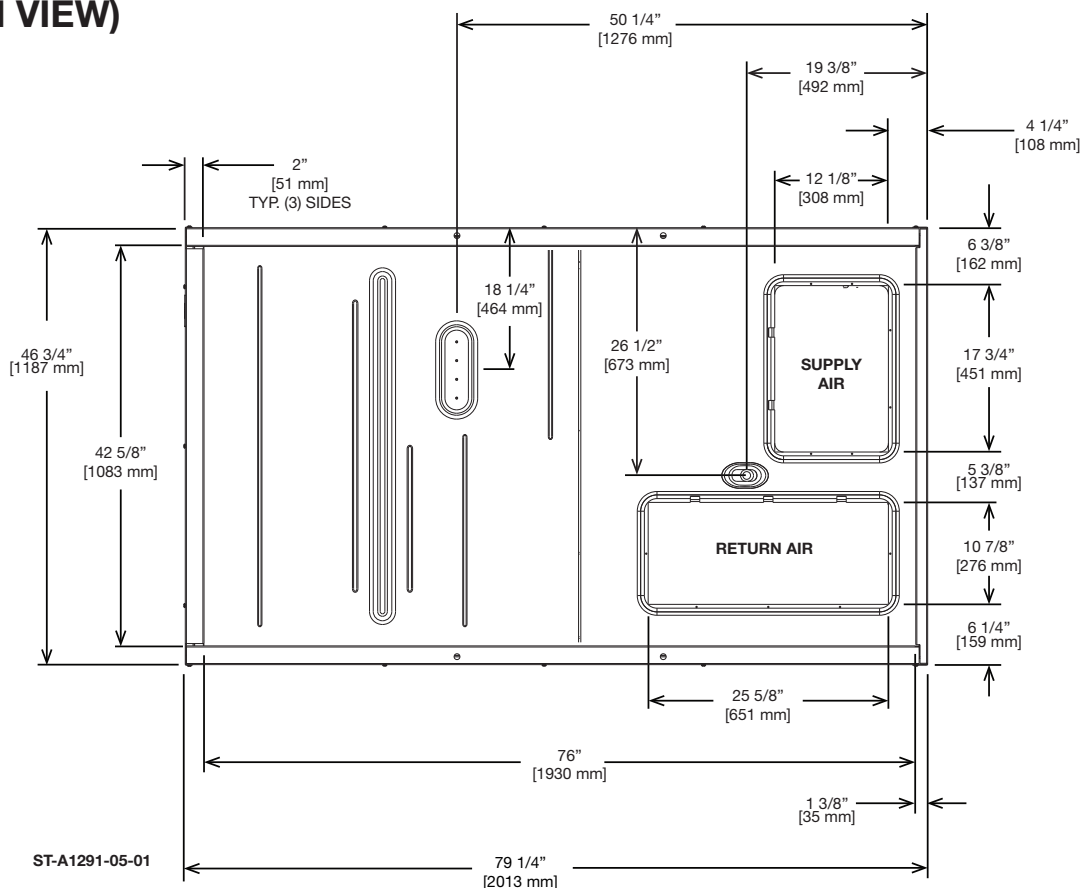


[] Designates Metric Conversions

SUPPLY AND RETURN DIMENSIONS FOR HORIZONTAL APPLICATIONS (SIDE VIEW)



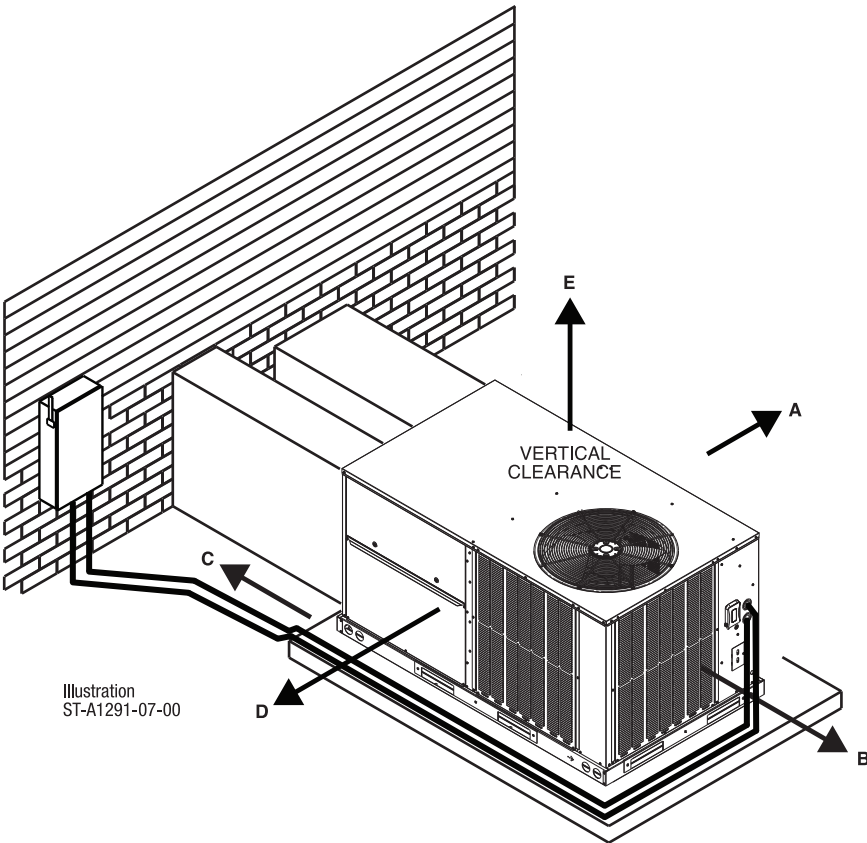
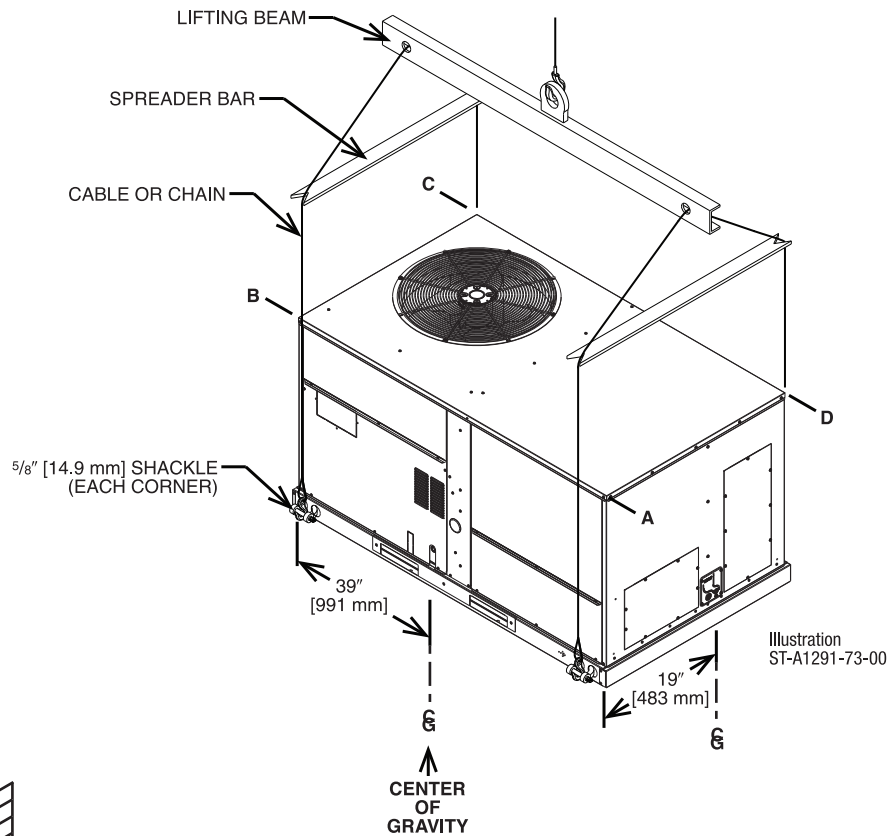
SUPPLY AND RETURN DIMENSIONS FOR DOWNFLOW APPLICATIONS (BOTTOM VIEW)



[] Designates Metric Conversions

WEIGHTS

Capacity Tons [kW]	Corner Weights by Percentage			
	A	B	C	D
3.0-6.0 [10.6-21.1]	18%	40%	19%	23%



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.

[] Designates Metric Conversions

FIELD-INSTALLED ACCESSORY EQUIPMENT

Accessory	Model Number	Shipping Weight Lbs. [kg]	Installed Weight Lbs. [kg]	Factory Installation Available?
Economizers				
DDC Economizer with Single Enthalpy (Downflow) <i>MicroMetl Economizer with Honeywell Controller</i>	RXRD-01MCDBM3	100 [45.4]	66 [29.9]	No
DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Honeywell Controller</i>	RXRD-01MCHBM3	72 [32.7]	69 [31.3]	No
Non-DDC Economizer with No Controls (Downflow) <i>MicroMetl Economizer, Belimo Actuator</i>	RXRD-31MCDAM3	100 [45.4]	66 [29.9]	No
Non-DDC Economizer with Single Enthalpy (Downflow) <i>MicroMetl Economizer with Siemens Controls</i>	RXRD-11MCDAM3	100 [45.4]	66 [29.9]	Yes
Non-DDC Economizer with Single Enthalpy (Downflow) <i>RRS Economizer with RRS Basic Controller</i>	RXRD-41MCDAM3	100 [45.4]	66 [29.9]	No
Non-DDC Economizer with Single Enthalpy (Downflow) <i>RRS Economizer with Siemens Controls</i>	RXRD-51MCDAM3	100 [45.4]	66 [29.9]	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Siemens Controls</i>	RXRD-11MCHAM3	72 [32.7]	69 [31.3]	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>RRS Economizer with RRS Basic Controller</i>	RXRD-41MCHAM3	72 [32.7]	69 [31.3]	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>RRS Economizer with Siemens Controls</i>	RXRD-51MCHAM3	72 [32.7]	69 [31.3]	No
Economizer Universal DDC Interface Kit	RXRX-DDC01	5 [2.7]	3.5 [1.6]	Yes ¹

Accessory	Model Number	Shipping Weight Lbs. [kg]	Installed Weight Lbs. [kg]	Factory Installation Available?
Comfort Alert (1 Phase) DDC	RXRX-AZ03	3 [1.5]	2 [0.9]	Yes
Comfort Alert (1 Phase) Non-DDC	RXRX-AZ04	3 [1.5]	2 [0.9]	Yes
Comfort Alert (3 Phase) DDC	RXRX-AZ01	3 [1.5]	2 [0.9]	Yes
Comfort Alert (3 Phase) 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
Concentric Adapter 3-4 Ton Drop	RXMC-DC01	35 [15.9]	30 [13.6]	No
Concentric Adapter 5-6 Ton Drop	RXMC-DC02	40 [18.2]	35 [15.9]	No
Concentric Diffuser 3-4 Ton Drop	RXRN-AED1800	35 [15.9]	30 [13.6]	No
Concentric Diffuser 5-6 Ton Drop	RXRN-AED2000	35 [15.9]	30 [13.6]	No
Concentric Diffuser 3-4 Ton Flush	RXRN-AEF1800	30 [13.6]	25 [11.3]	No
Concentric Diffuser 5-6 Ton Flush	RXRN-AEF2000	30 [13.6]	25 [11.3]	No
Convenience Outlet, Non-Powered	RXRX-BN01	2 [1.0]	1.5 [0.7]	Yes
Dual Enthalpy Kit DDC (for Honeywell DDC)	RXRX-BV02	1 [0.5]	1 [0.5]	No
Dual Enthalpy, Temperature and Humidity Sensor (for Ruskin Basic Controller)	PD955977	1 [0.5]	1 [0.5]	No
Dual Enthalpy, Temperature and Humidity Sensor (for Siemens)	PD555460	1 [0.5]	1 [0.5]	No

¹When a factory installed economizer is selected in the unit option codes, this accessory is automatically factory installed if required.

[] Designates Metric Conversions

FIELD-INSTALLED ACCESSORY EQUIPMENT (CONTINUED)

Accessory	Model Number	Shipping Weight Lbs. [kg]	Installed Weight Lbs. [kg]	Factory Installation Available?
Electric Heater Kits ²	RXJJ-DC10JT	10 [4.5]	8 [3.6]	Yes
	RXJJ-DC15JT	13 [5.9]	11 [5.0]	Yes
	RXJJ-DC20JT	14 [6.4]	12 [5.4]	Yes
	RXJJ-DC10CP	10 [4.5]	8 [3.6]	Yes
	RXJJ-DC15CP	13 [5.9]	11 [5.0]	Yes
	RXJJ-DC20CP	14 [6.4]	12 [5.4]	Yes
	RXJJ-DC24CP	14 [6.4]	12 [5.4]	Yes
	RXJJ-DC10DNV	10 [4.5]	8 [3.6]	Yes
	RXJJ-DC15DNV	13 [5.9]	11 [5.0]	Yes
	RXJJ-DC20DNV	14 [6.4]	12 [5.4]	Yes
	RXJJ-DC24DNV	14 [6.4]	12 [5.4]	Yes
Freeze Stat Kit	RXR-AM05	2 [1.0]	1.5 [0.7]	Yes
Fresh Air Damper, Manual	RXRF-ACA1	22 [10.0]	18 [8.2]	No
Fresh Air Damper, Motorized	RXRF-ACB1	53 [24.0]	43 [19.5]	No
Low-Ambient Control Kit	RXRZ-A04	4 [1.8]	3 [1.4]	Yes
MERV 8 Filter	RXMF-M08A21616	2 [.90]	1 [.45]	No
MERV 13 Filter	RXMF-M13A21616	2 [.90]	1 [.45]	No
Outdoor Coil Louver Kit	RXR-ADD04C	30 [13.6]	25 [11.3]	Yes
Power Exhaust (230V) Vertical <i>MicroMetl</i>	RXR-CCF02C	24 [10.9]	21 [9.5]	No
Power Exhaust (460V) Vertical <i>MicroMetl</i>	RXR-CCF02D	20 [9.1]	17 [7.7]	No
Power Exhaust (230V) Vertical <i>RRS</i>	RXR-RCF02C	24 [10.9]	21 [9.5]	No
Power Exhaust (460V) Vertical <i>RRS</i>	RXR-RCF02D	20 [9.1]	17 [7.7]	No
Power Exhaust (230V) Horizontal <i>MicroMetl</i>	RXR-CCF03C	42 [19.1]	39 [17.7]	No
Power Exhaust (460V) Horizontal <i>MicroMetl</i>	RXR-CCF03D	42 [19.1]	39 [17.7]	No
Power Exhaust (230V) Horizontal <i>RRS</i>	RXR-RCF03C	42 [19.1]	39 [17.7]	No
Power Exhaust (460V) Horizontal <i>RRS</i>	RXR-RCF03D	42 [19.1]	39 [17.7]	No
Roofcurb, 14"	RXKG-DCC14	94 [42.6]	90 [40.8]	No
Roofcurb, 14" Welded	RXKG-DC14	94 [42.6]	90 [40.8]	No
Roofcurb, 24"	RXKG-DCC24	124 [56.2]	120 [54.4]	No
Roofcurb, 24" Welded	RXKG-DC24	124 [56.2]	120 [54.4]	No
Roofcurb Adapter	RXR-DCCAE	159 [72.1]	145 [65.8]	No
Sensor, Carbon Dioxide (Wall Mount)	RXR-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
Single Point Wiring Kits	RXJX-AJ0601 (Single Phase)	20 [9.1]	17 [7.7]	No
	RXJX-AZ0601 (Three Phase)	23 [10.4]	20 [9.1]	No
Smoke Detector, Return (Field kit)	RXR-BS01	7 [3.2]	6 [2.7]	No
Smoke Detector, Return/Supply (Field kit)	RXR-BS02	5 [2.3]	4 [1.8]	No
Unfused Service Disconnect	RXR-BP01	10 [4.5]	9 [4.1]	Yes
UV-C Kit 208V/230V	RXR-UV22C	8 [3.6]	6 [2.7]	No
UV-C Transformer 460V/575V	RXR-UVCTC	12 [5.4]	11 [5.0]	No

²10kW options not available on 6 Ton models. 24kW options not available on 3-5 Ton models

[] Designates Metric Conversions

COMMUNICATION CARDS



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.

ELECTRIC HEAT AND SINGLE POINT WIRING

The field or factory electric heater kits are available in 10, 15 and 20 kW heating inputs, and for both single and 3-phase applications. The single point wiring kit is only available as a field installation accessory for units using electric heat.

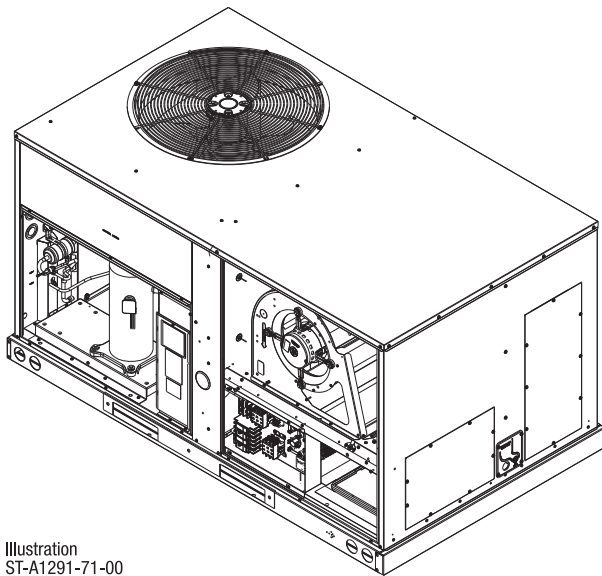
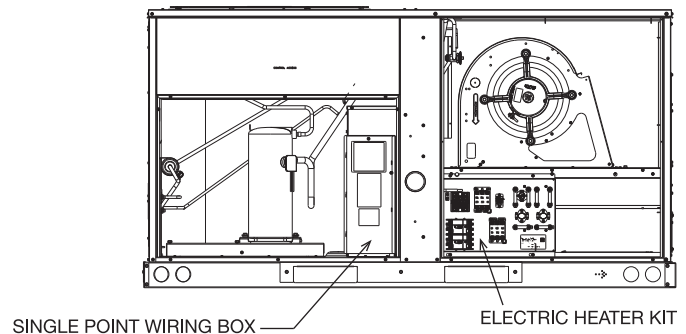
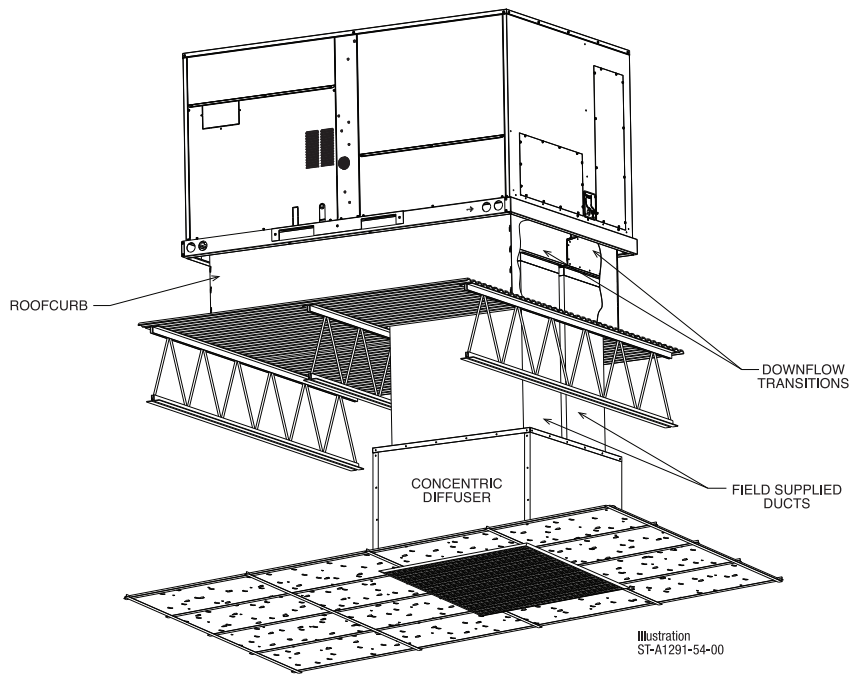


Illustration
ST-A1291-71-00



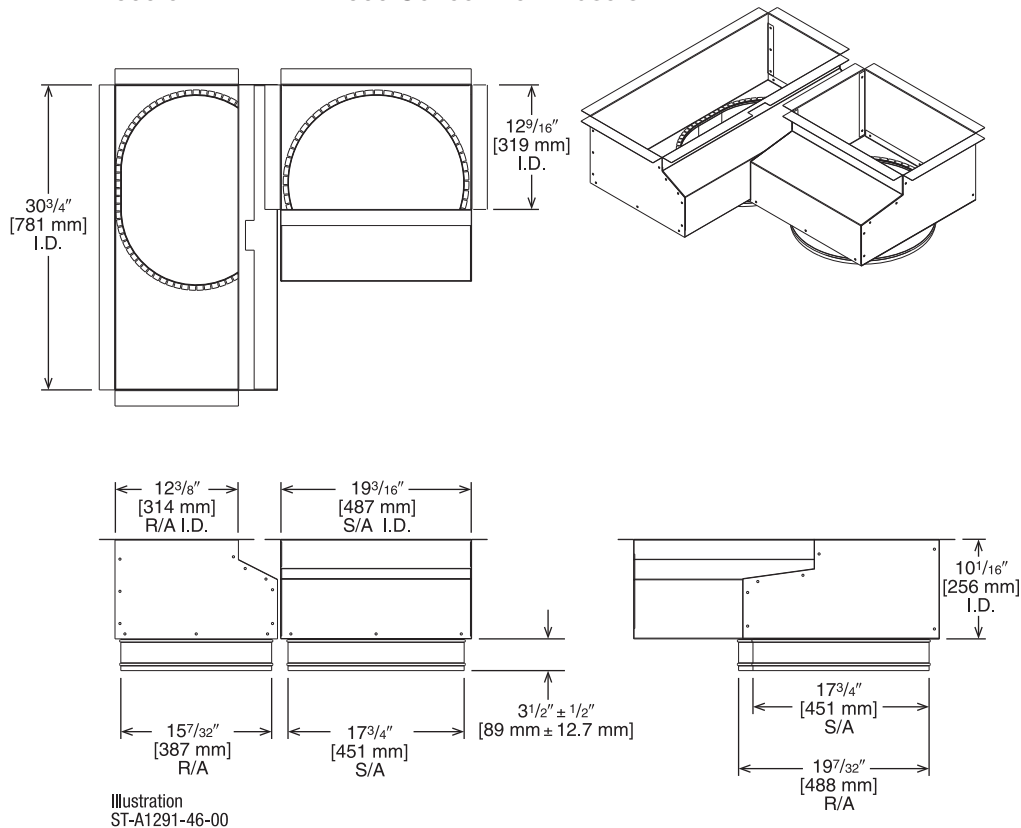
CONCENTRIC DIFFUSER APPLICATION



DOWNFLOW TRANSITION DRAWINGS

RXMC-DC01 Concentric Adapter 3 & 4 Ton Drop

- Used with RXRN-AEF1800 or RXRN-AED1800 Concentric Diffusers



[] Designates Metric Conversions

DOWNFLOW TRANSITION DRAWINGS

RXMC-DC02—Concentric Adapter 5 & 6 Ton Drop

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

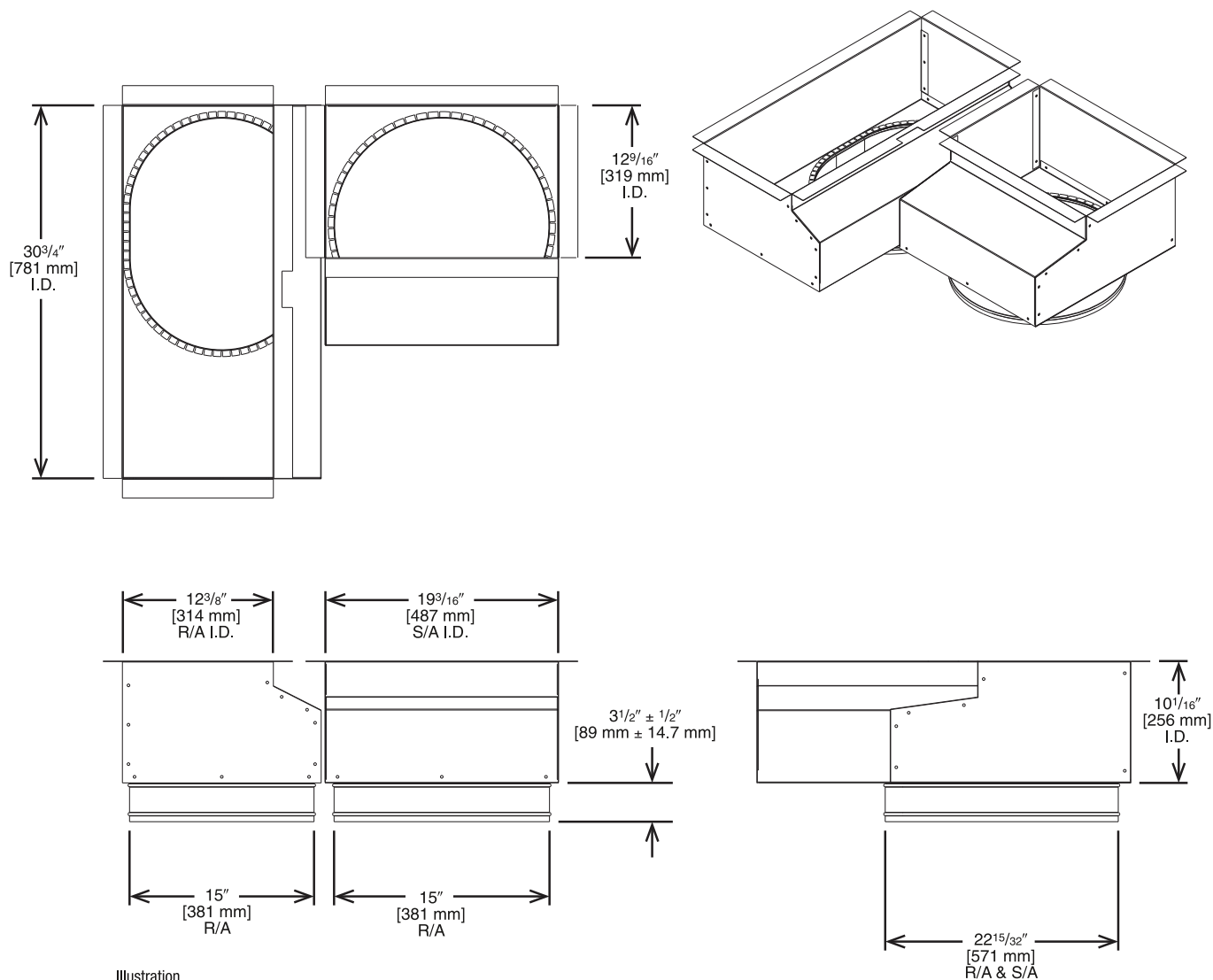


Illustration
ST-A1291-47-00

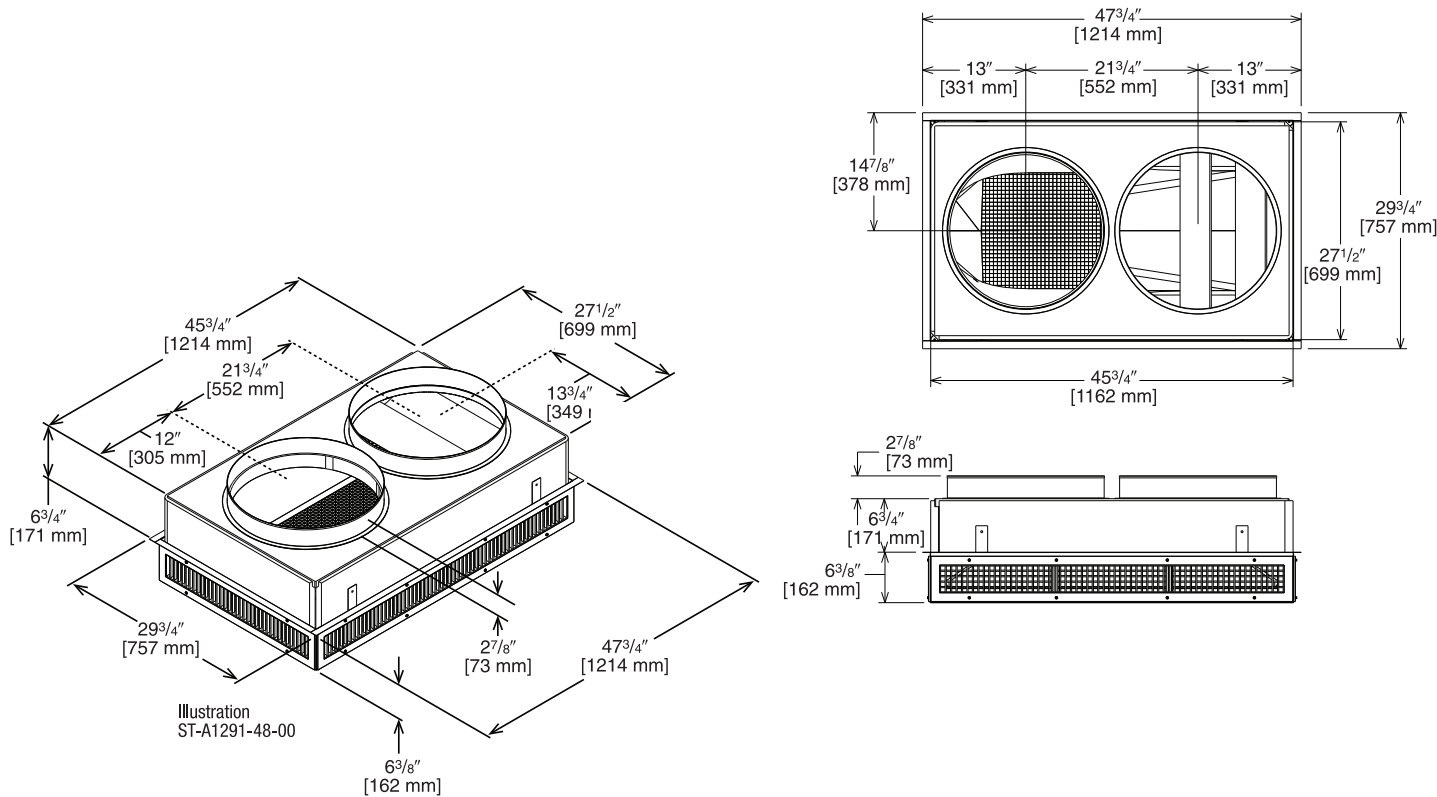
[] Designates Metric Conversions

CONCENTRIC DIFFUSER 3 & 4 TON DROP

RXRN-AED1800

For Use With Downflow Transition (RXMC-DC01)
and 18" [457 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^①

Model No.	Flow Rate CFM [L/s]	Throw ^② ^③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (dbA)
RXRN-AED1800	1000 [472]	9-23 [2.7-7.0]	391 [2.0]	12
	1200 [566]	10-24 [3.0-7.3]	469 [2.4]	15
	1400 [661]	12-26 [3.7-7.9]	547 [2.8]	19
	1600 [755]	13-28 [4.0-8.5]	625 [3.2]	21
	1800 [849]	15-30 [4.6-9.1]	703 [3.6]	26
	2000 [944]	17-32 [5.2-9.8]	781 [4.0]	30
	2400 [1133]	19-34 [5.8-10.4]	859 [5.8]	32

- 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.

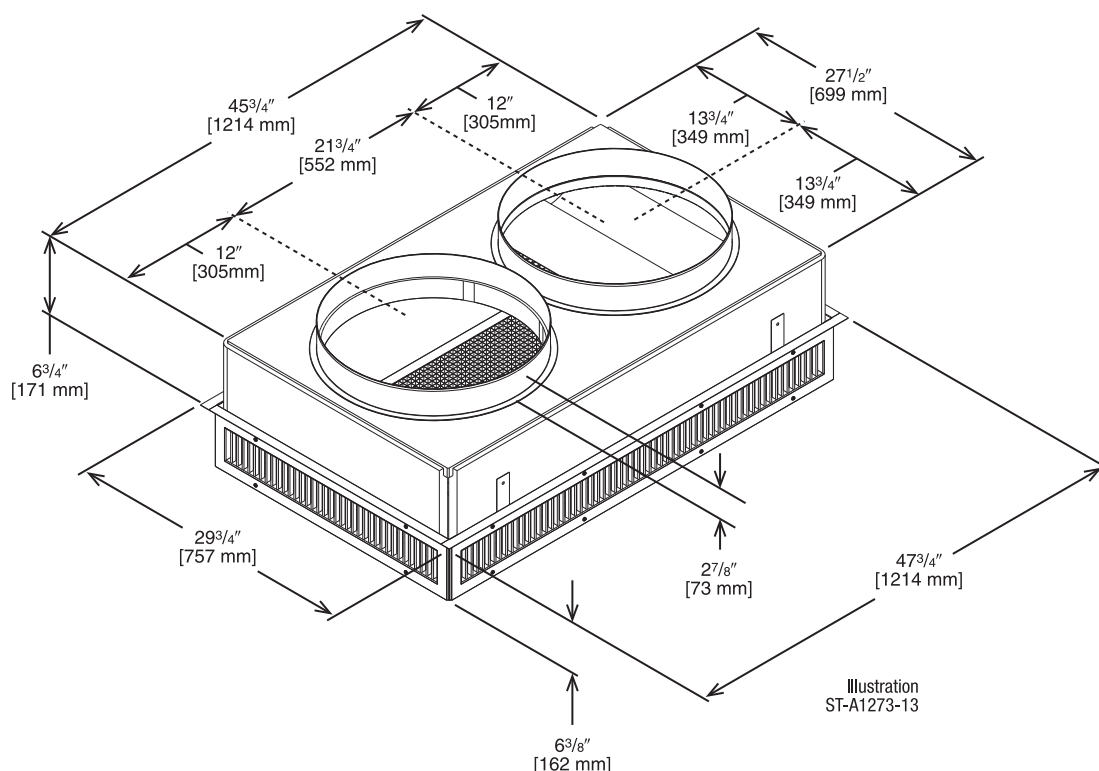
[] Designates Metric Conversions

CONCENTRIC DIFFUSER 5 & 6 TON DROP

RXRN-AED2000

For Use With Downflow Transition (RXMC-DC02)
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^①

Model No.	Flow Rate CFM [L/s]	Throw ^② ^③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (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

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.

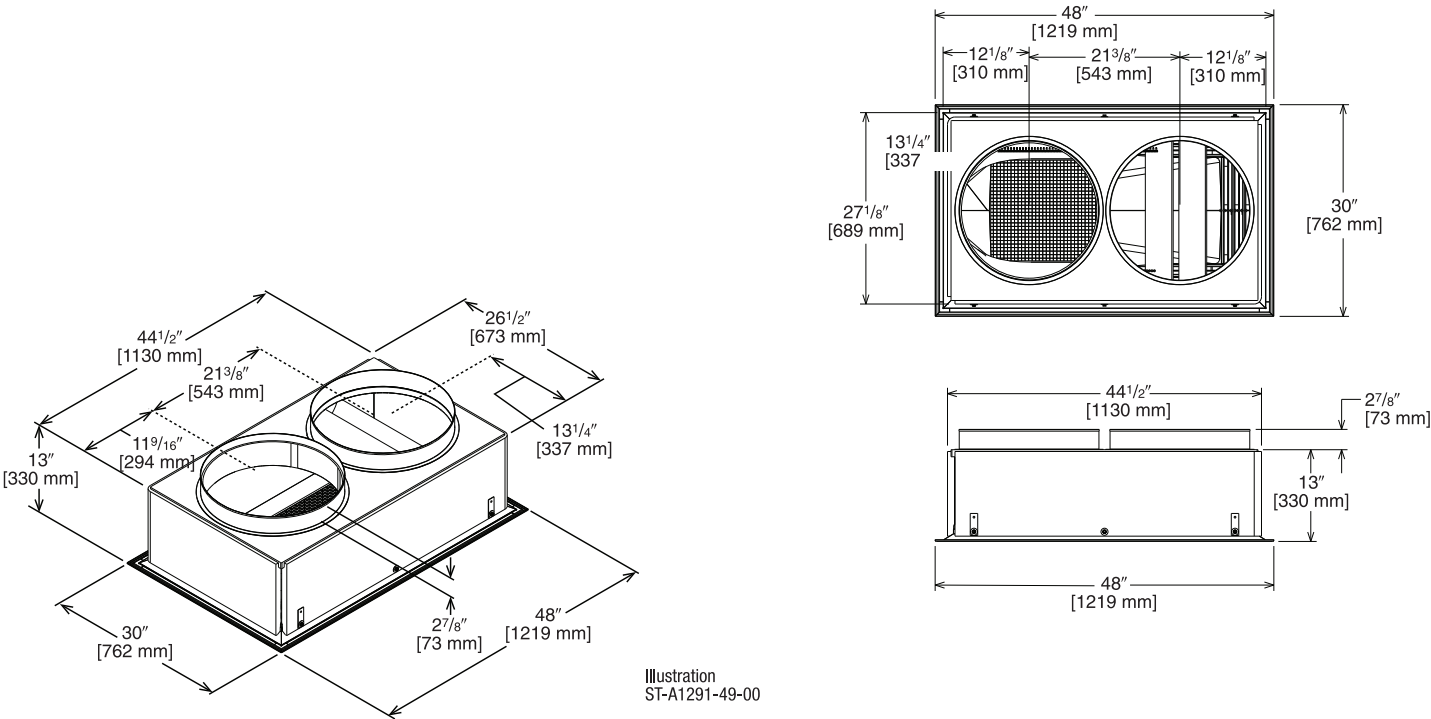
[] Designates Metric Conversions

CONCENTRIC DIFFUSER 3 & 4 TON FLUSH

RXRN-AEF1800

For Use With Downflow Transition (RXMC-DC01)
18" [457 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^①

Model No.	Flow Rate CFM [L/s]	Throw ② ③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ④ (dbA)
RXRN-AEF1800	1000 [472]	9-12 [2.7-3.7]	663 [3.4]	20
	1200 [566]	12-16 [3.7-4.9]	714 [3.6]	25
	1400 [661]	15-20 [4.6-6.1]	765 [3.9]	30
	1600 [755]	17-23 [5.2-7]	816 [4.1]	30
	1800 [849]	20-26 [6.1-7.9]	867 [4.4]	35
	2000 [944]	22-29 [6.7-8.8]	918 [4.7]	40
	2400 [1133]	25-32 [7.6-9.8]	969 [4.9]	45

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 5 & 6 TON FLUSH

RXRN-AEF2000

For Use With Downflow Transition (RXMC-DC02)
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

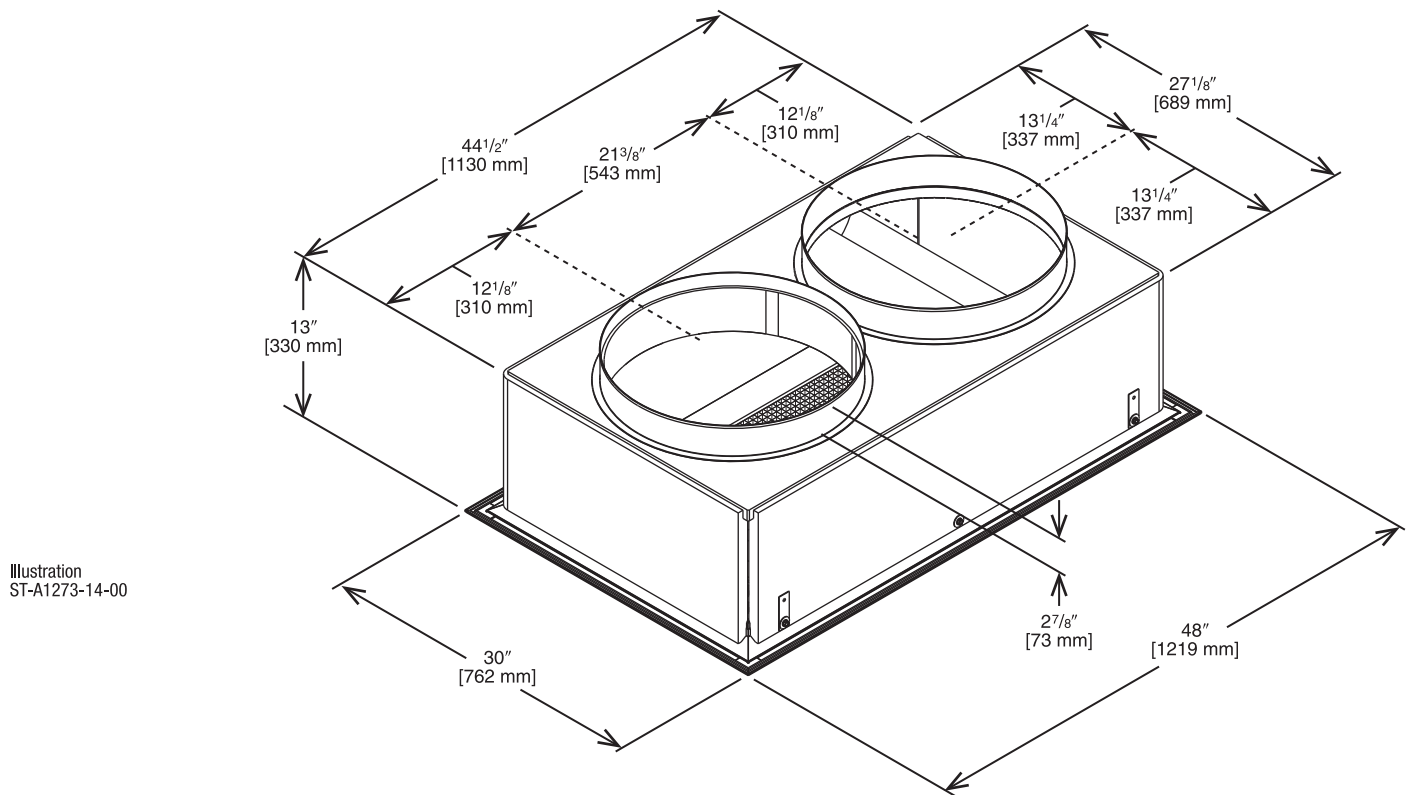


Illustration
ST-A1273-14-00

ENGINEERING DATA^①

Model No.	Flow Rate CFM [L/s]	Throw ^② ^③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (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

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

DDC ECONOMIZER WITH SINGLE ENTHALPY (DOWNFLOW) MICROMETL ECONOMIZER WITH HONEYWELL CONTROLLER

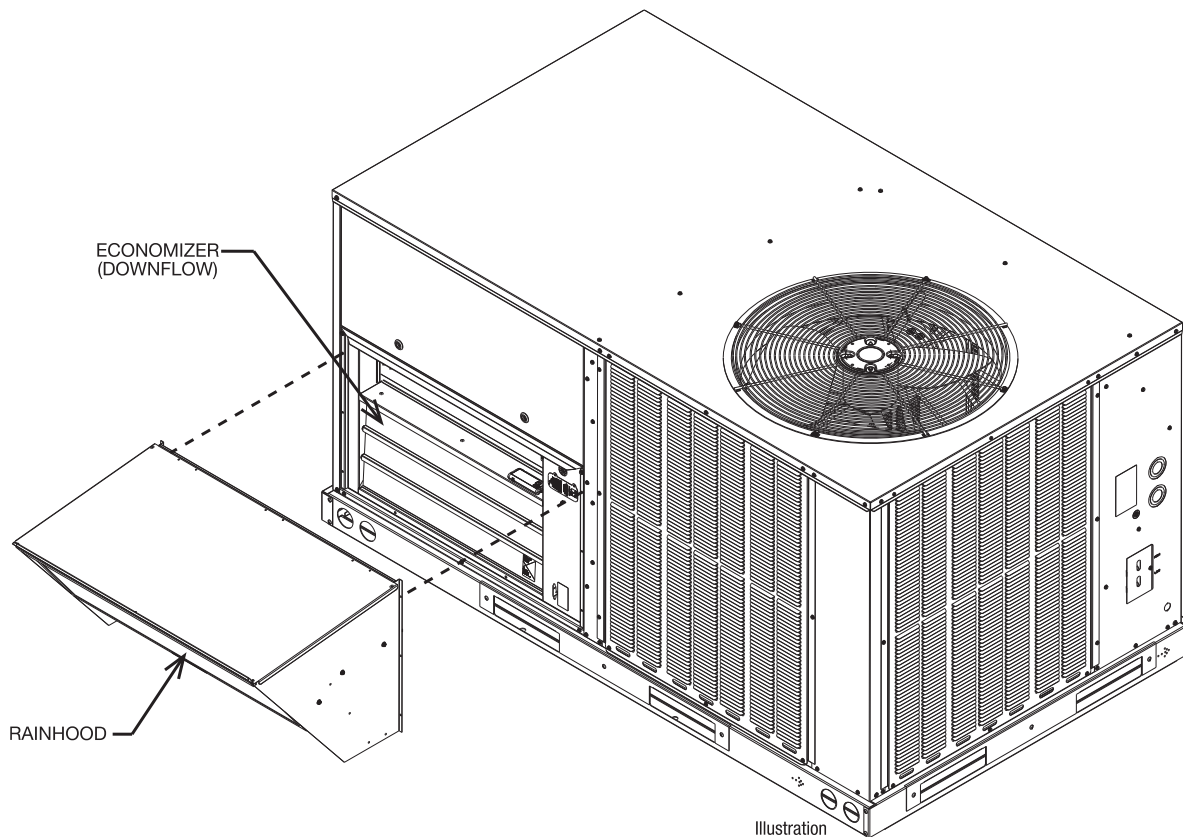
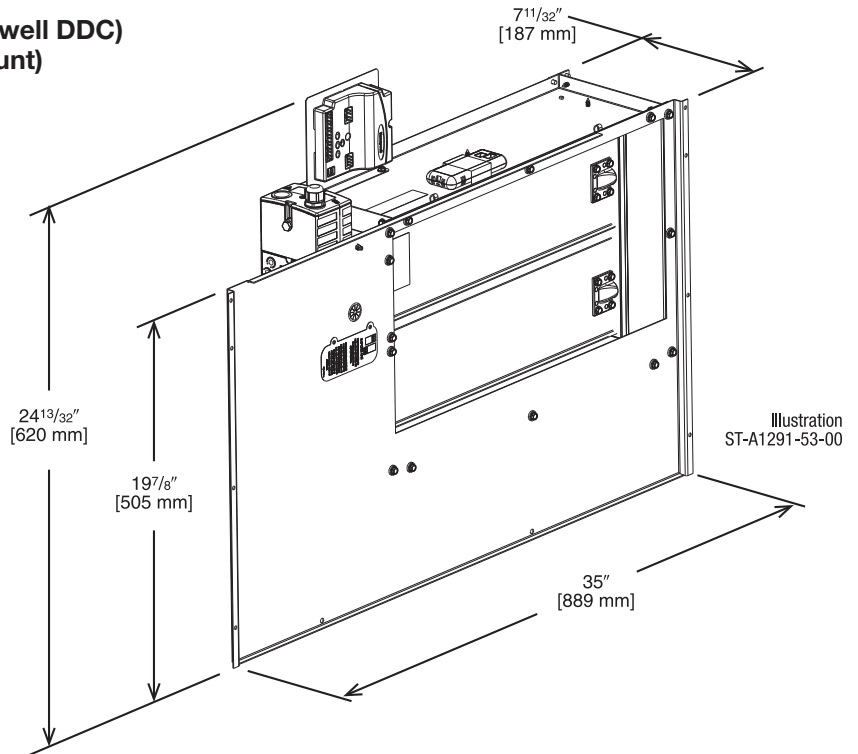
Field-Installed Only

RXRD-01MCDBM3

RXXR-BV02—Dual Enthalpy Kit DDC (for Honeywell DDC)

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

- Features **Honeywell** Controls
- 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
- CO₂ Input Sensor Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Downflow Duct Application
- Optional Remote Minimum Position Potentiometer (270 ohm) (Honeywell #S963B1136) is Available from Prostock.
- Field-Installed Power Exhaust Available
- Prewired for Smoke Detector
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS), or 16 characters x 2 rows of text LCD screen
- If connected to thermostat, all economizer functions can be viewed on 16 characters x 2 rows of text LCD screen



[] Designates Metric Conversions

DDC ECONOMIZER WITH SINGLE ENTHALPY (HORIZONTAL) MICROMETL ECONOMIZER WITH HONEYWELL CONTROLLER

Field-Installed Only

RXRD-01MCHBM3

RXXRX-BV02—Dual Enthalpy Kit DDC (for Honeywell DDC)

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

- Features **Honeywell** Controls
- 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
- CO₂ Input Sensor Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Horizontal Duct Application
- Optional Remote Minimum Position Potentiometer (270 ohm) (Honeywell #S963B1136) is Available from Prostock
- Field-Installed Power Exhaust Available
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS), or 16 characters x 2 rows of text LCD screen
- If connected to a thermostat, all economizer functions can be viewed on 16 characters x 2 rows of text LCD screen

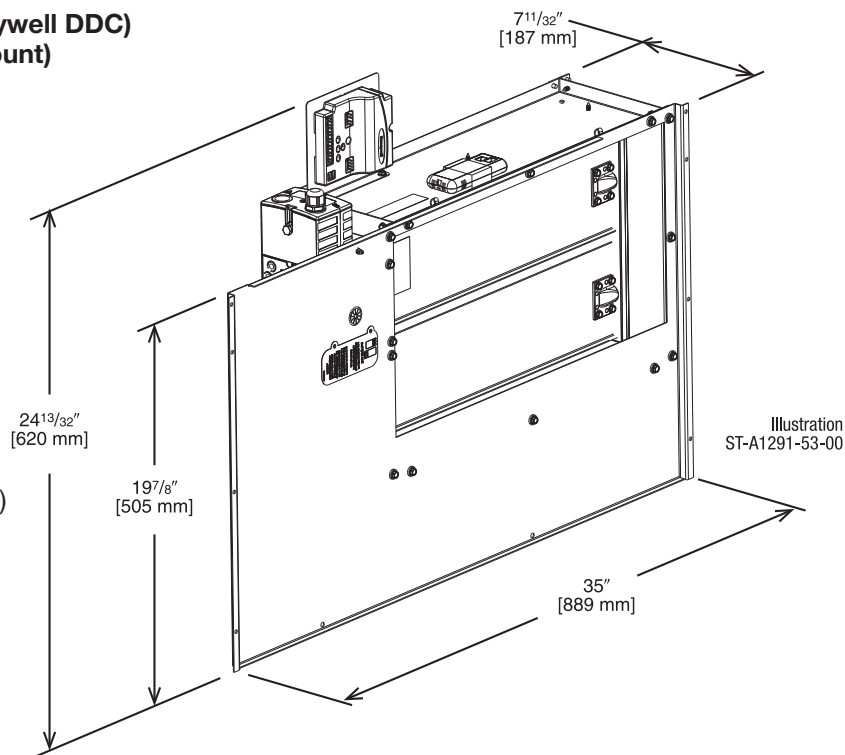
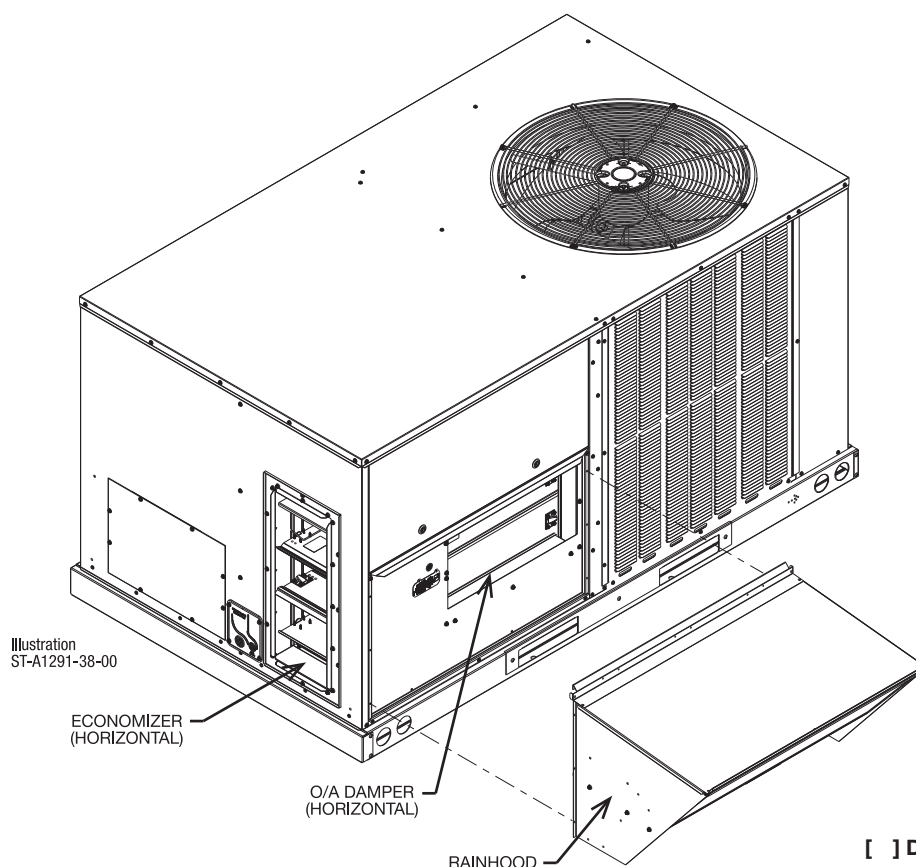


Illustration
ST-A1291-53-00



[] Designates Metric Conversions

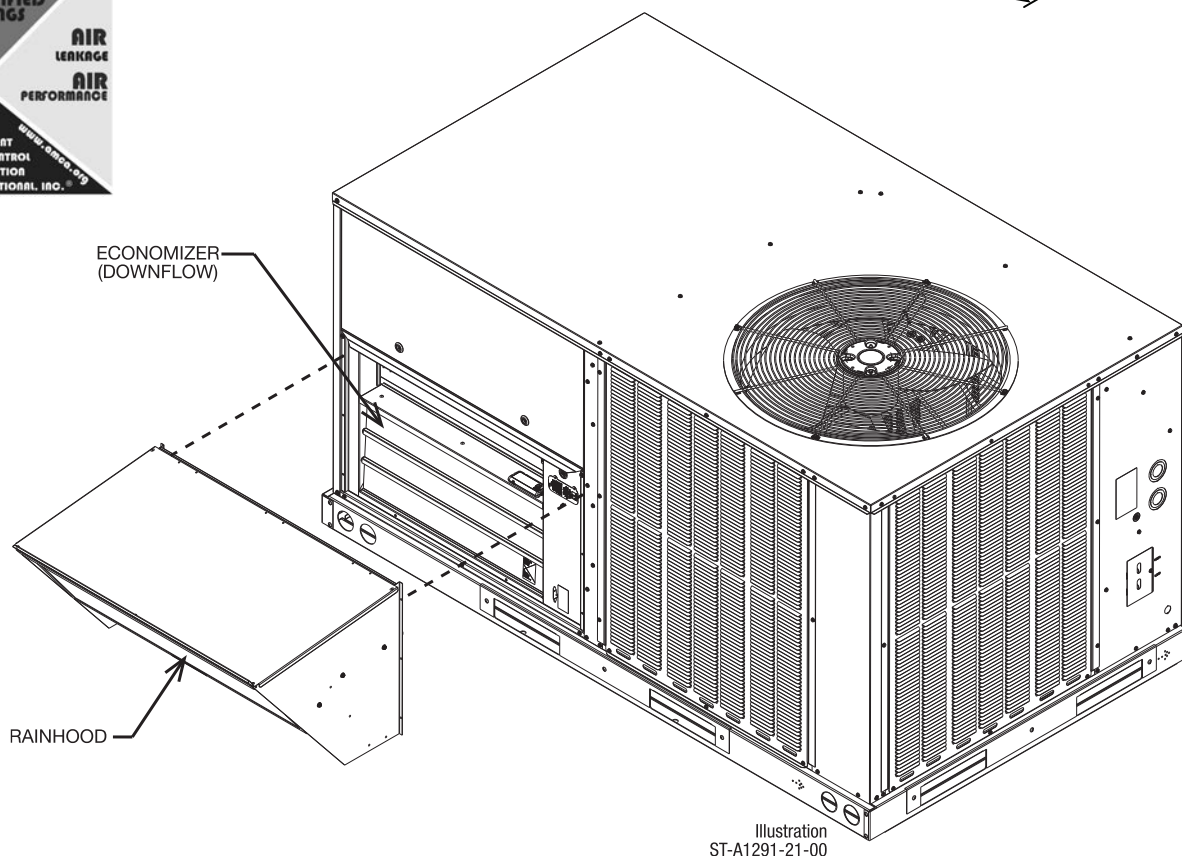
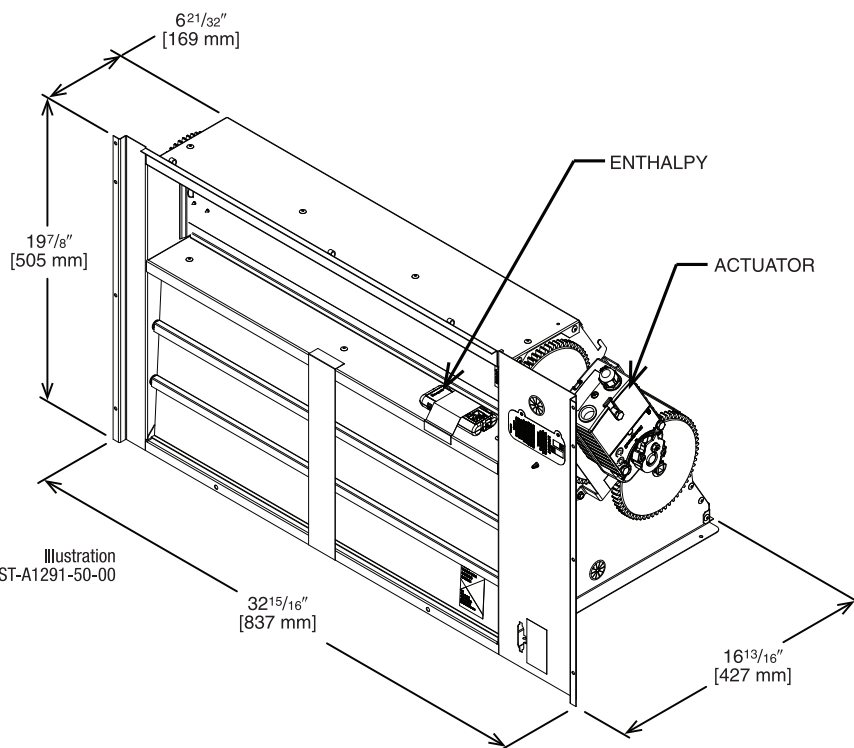
NON-DDC ECONOMIZER WITH NO CONTROLS (DOWNFLOW) MICROMETL ECONOMIZER, BELIMO ACTUATOR

Field-Installed Only

RXRD-31MCDAM3

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
- Can be converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXRX-DDC01).



[] Designates Metric Conversions

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

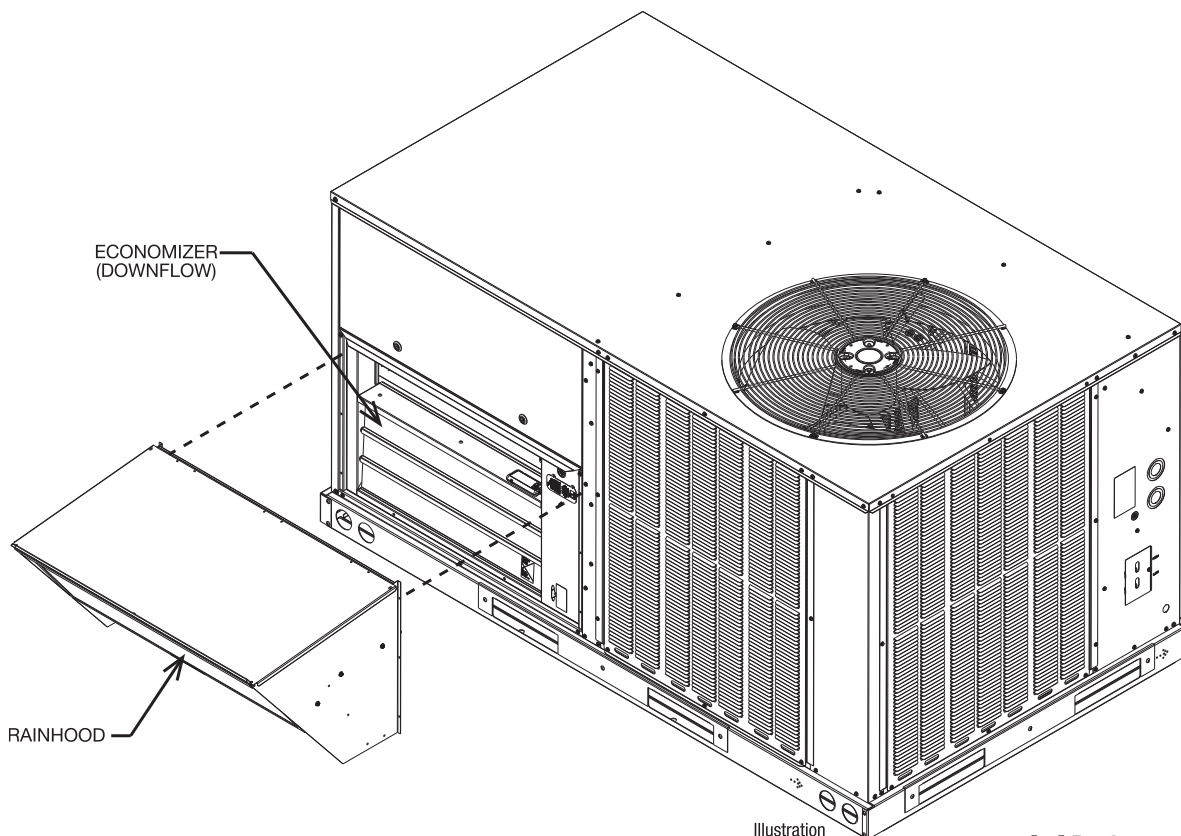
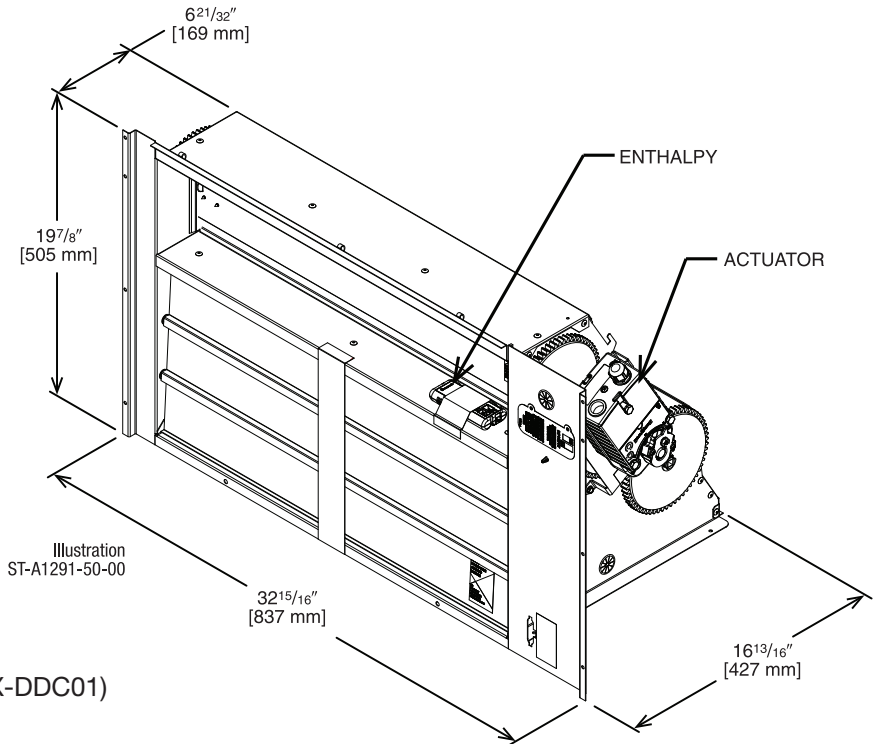
Factory or Field-Installed

RXRD-11MCDAM3

PD555460—Sensor, Carbon Dioxide (Wall Mount)

RXRX-AR02—Temperature and Humidity Sensor for Dual Enthalpy (for Siemens Controllers Only)

- Features **Siemens** Climatix ECO® Economizer Controller
- 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
- Single Enthalpy or Dry Bulb with Return Air Enthalpy Option
- CO₂ Input Sensor Option Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Downflow Duct Application
- Field-Installed Power Exhaust Option Available
- Fault Detection and Diagnostics
- Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXRX-DDC01)



[] Designates Metric Conversions

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

Field-Installed Only

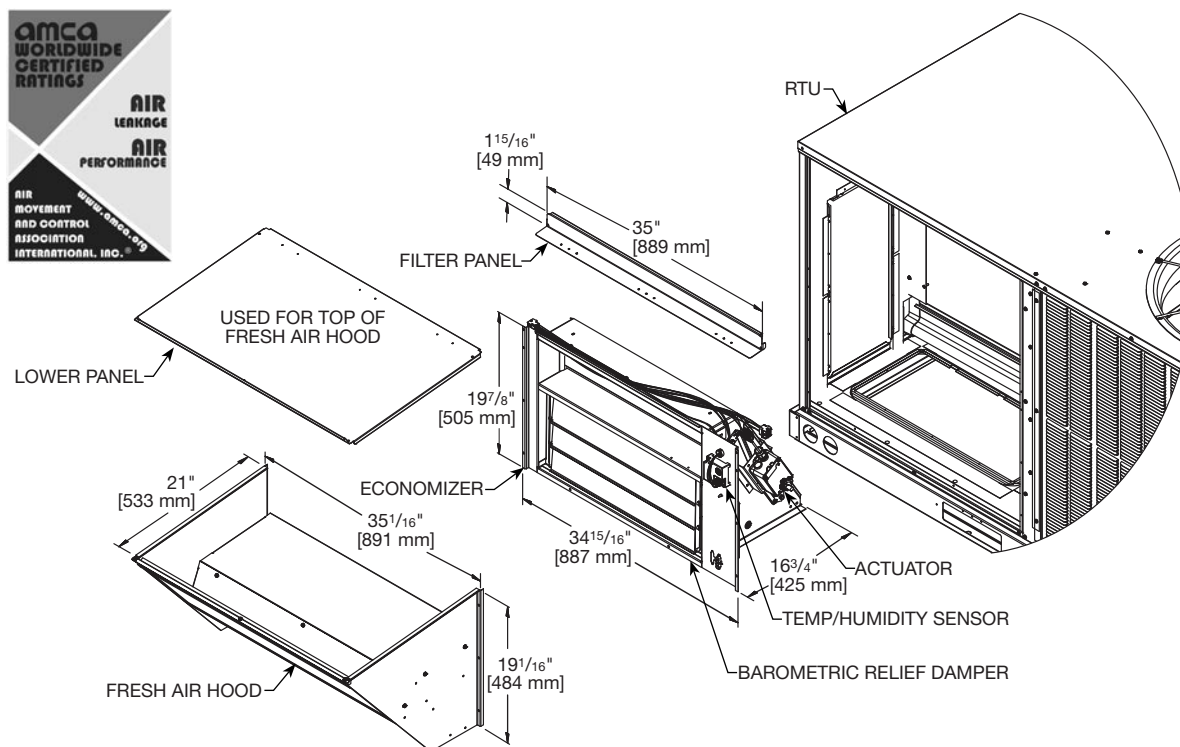
RXRD-41MCDAM3

PD955977 – Temperature and Humidity Sensor for Dual Enthalpy (for Ruskin Basic Controller Only)

RXXR-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.
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. RRS controls feature the Basic economizer controller with 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 (RXXR-DDC01).



[] Designates Metric Conversions

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

Field-Installed Only

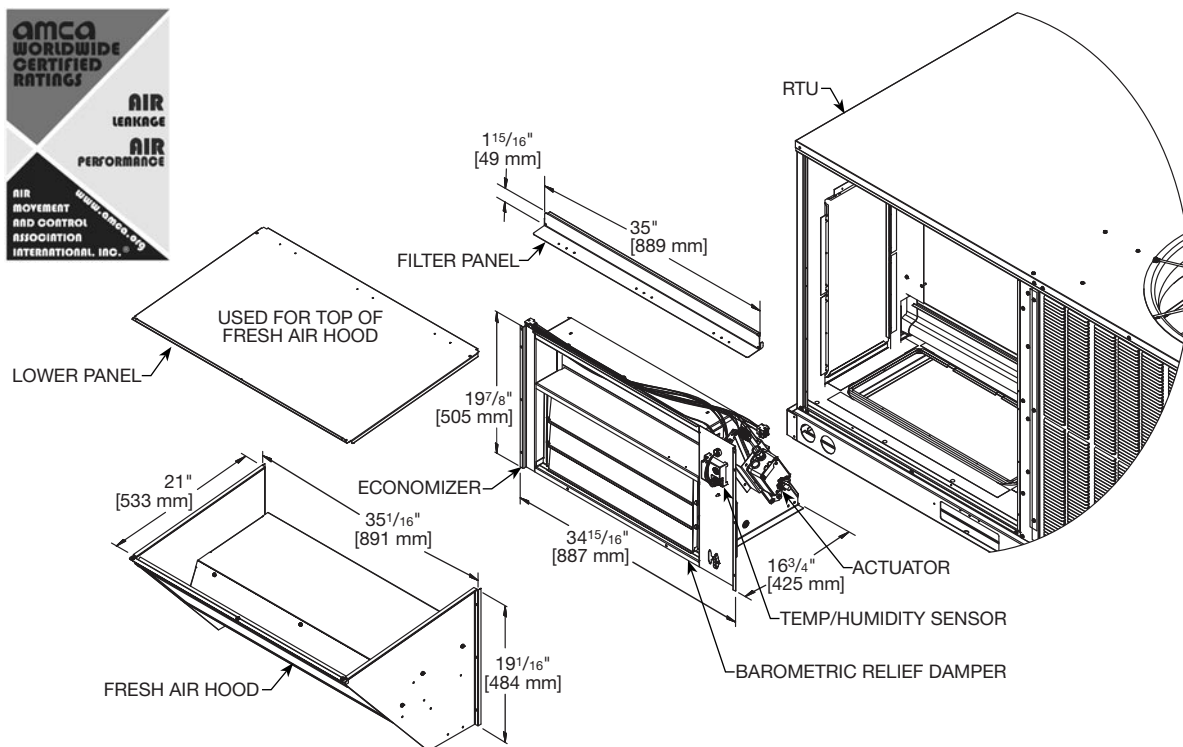
RXRD-51MCDAM3

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

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.
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 and 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

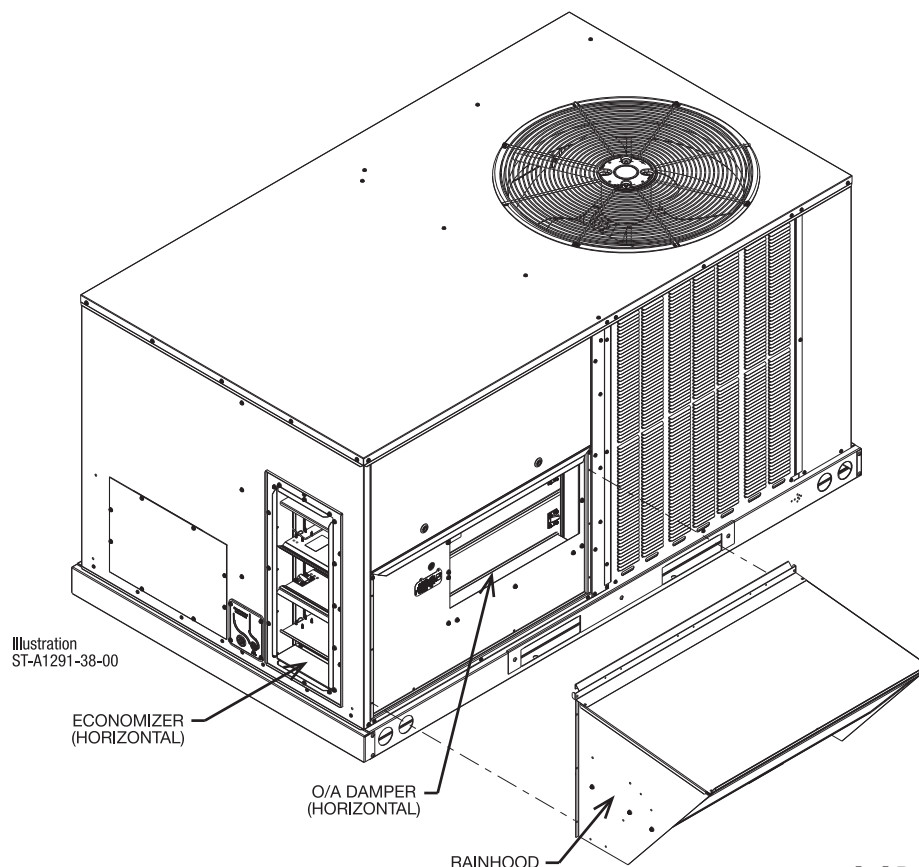
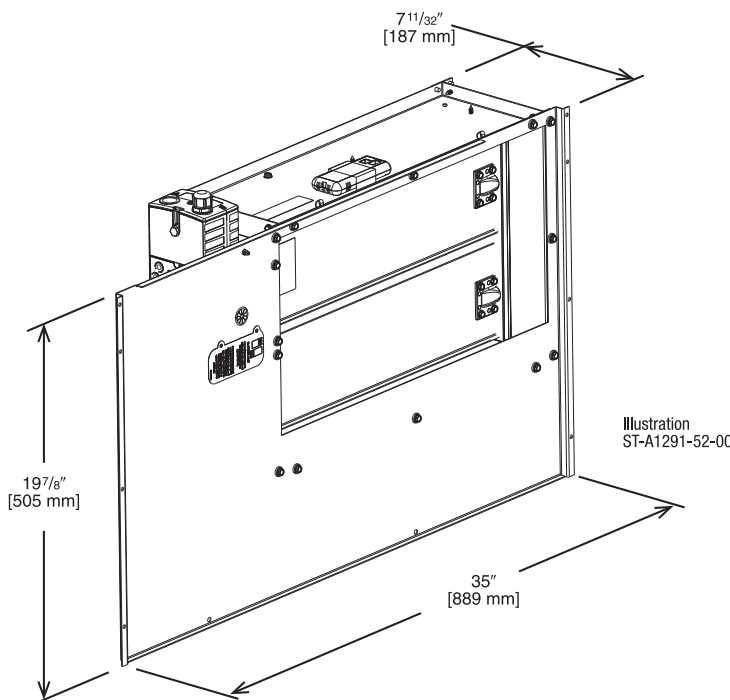
Field-Installed Only

RXRD-11MCHAM3

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

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

- Features **Siemens** Climatix ECO Economizer Controller
- 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
- CO₂ Input Sensor Option Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Horizontal Duct Application
- Field-Installed Power Exhaust Option Available
- Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXXR-DDC01).



[] Designates Metric Conversions

NON-DDC ECONOMIZER WITH SINGLE ENTHALPY (HORIZONTAL) RRS ECONOMIZER WITH RRS BASIC CONTROLLER

Field-Installed Only

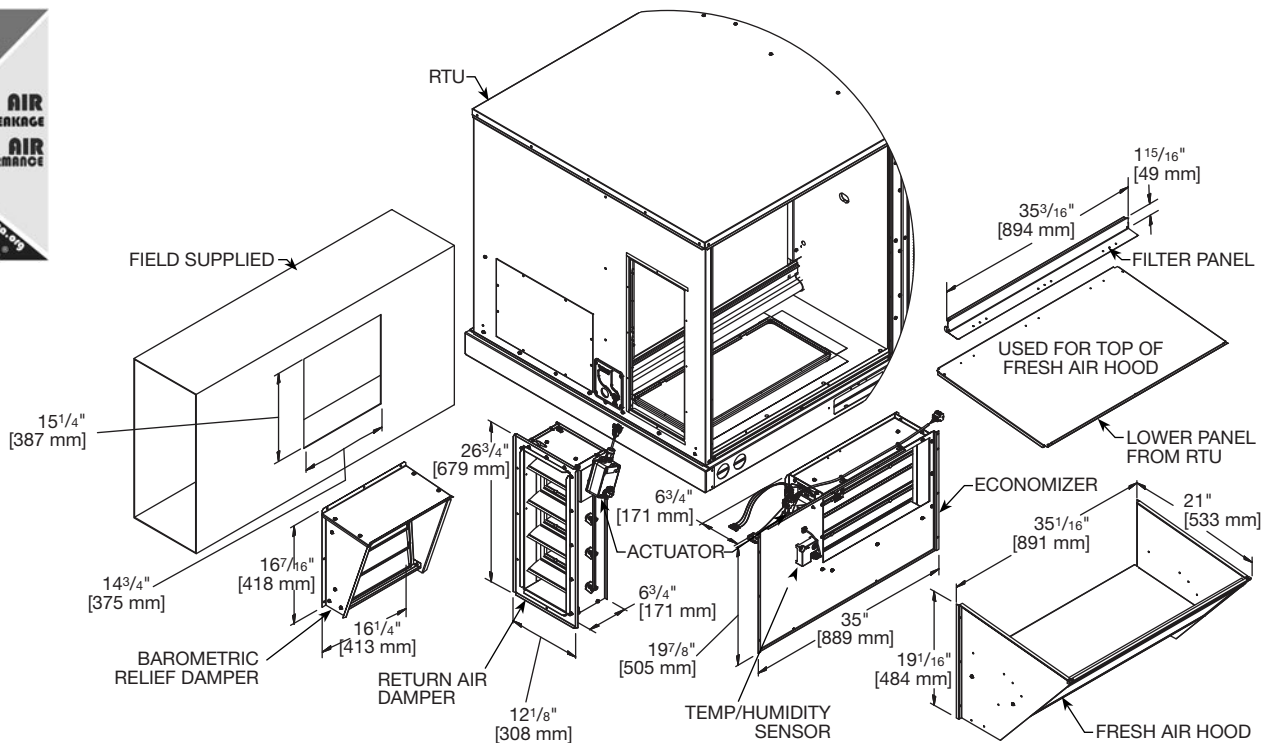
RXRD-41MCHAM3

PD955977—Temperature and Humidity Sensor for Dual Enthalpy (for Ruskin Basic Controller Only)

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.
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. RRS controls feature the Basic economizer controller with 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) RRS ECONOMIZER WITH SIEMENS CONTROLS

Field-Installed Only

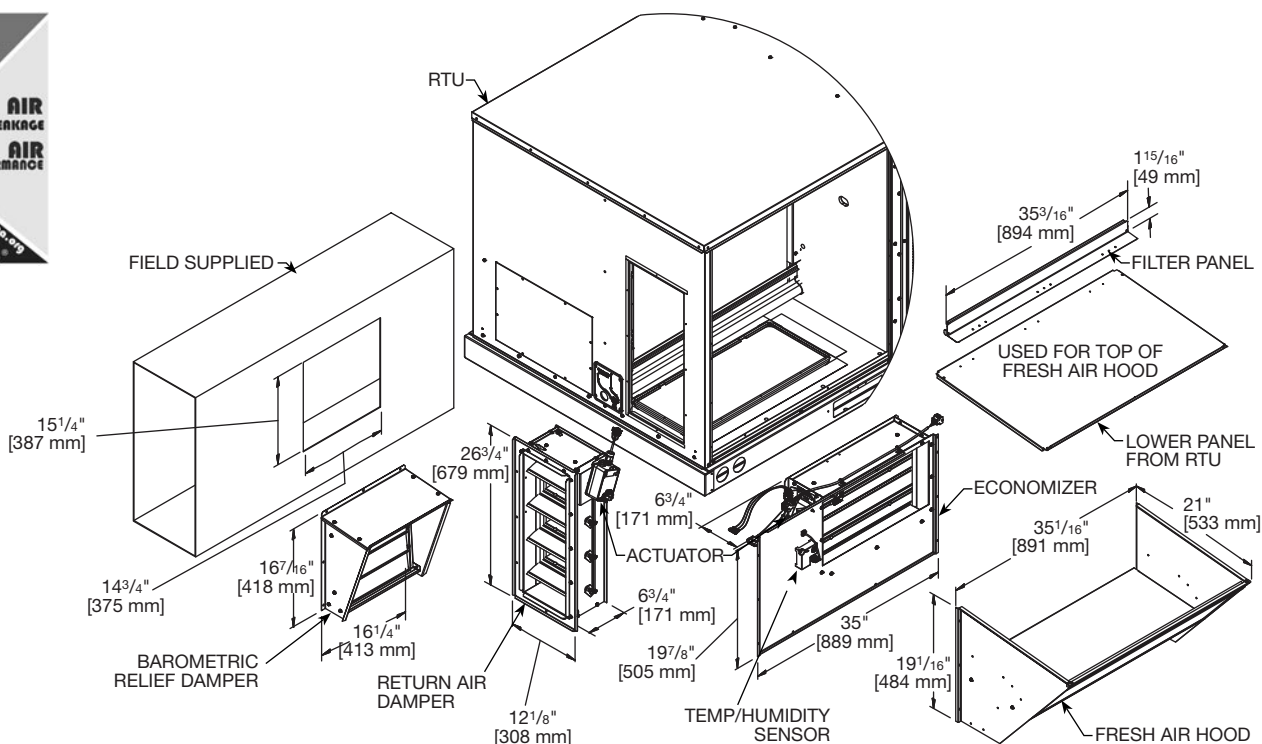
RXRD-51MCHAM3

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

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.
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 and 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

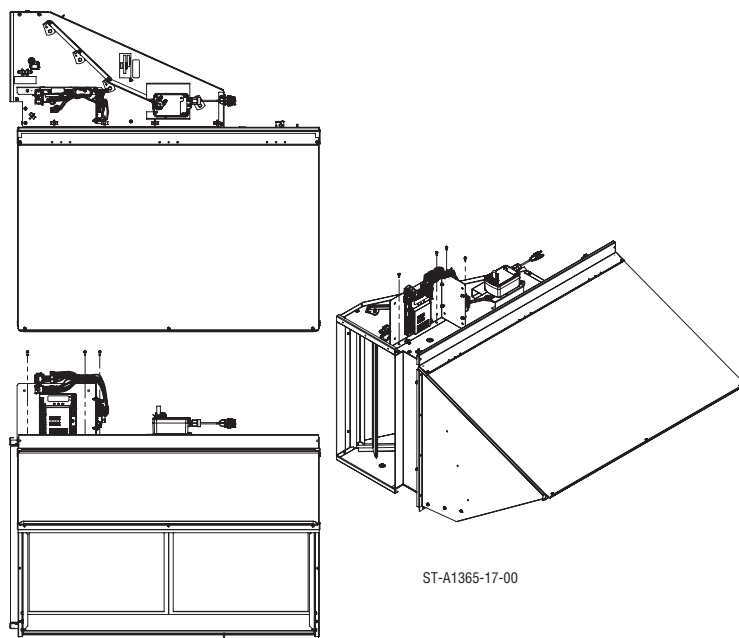
Factory or Field-Installed

RXXR-DDC01

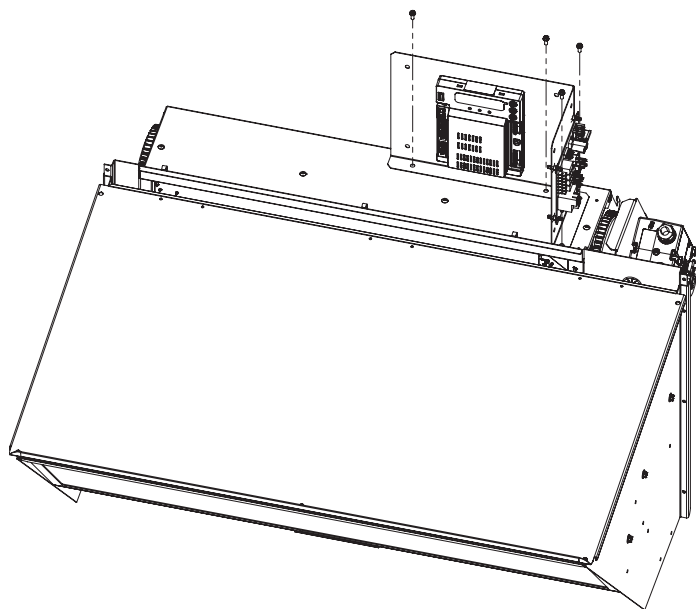
- Allows any Non-DDC Economizer to be used with a ClearControl DDC model.
- Mounts on the Economizer
- Provides Mounting location for Economizer Controller
- Provides wire management for excess wire

NOTE: Older DDC Models, Prior to A2L, may require a field update to the ClearControl Software. The minimum version required is 3.15. Models with R-454B refrigerant will come with software version 4.0 or higher

HORIZONTAL FLOW DDC BRACKET SETUP



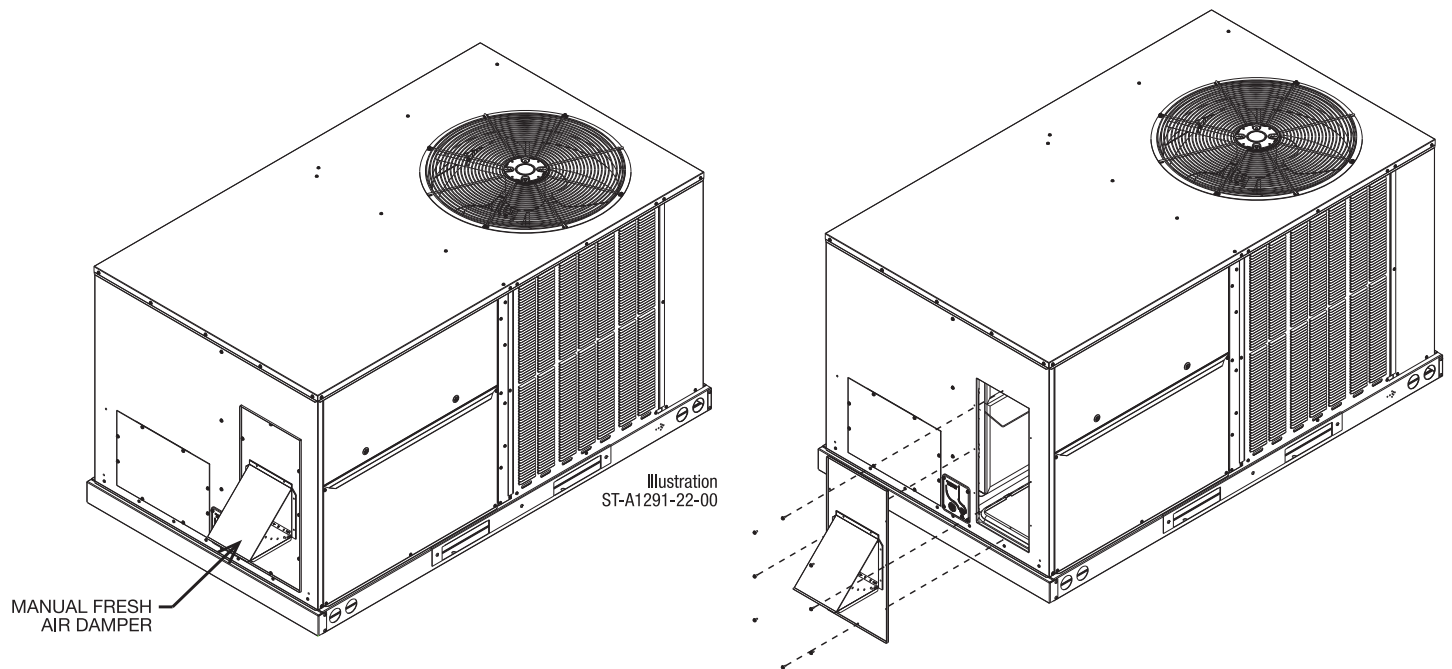
DOWNFLOW DDC BRACKET SETUP



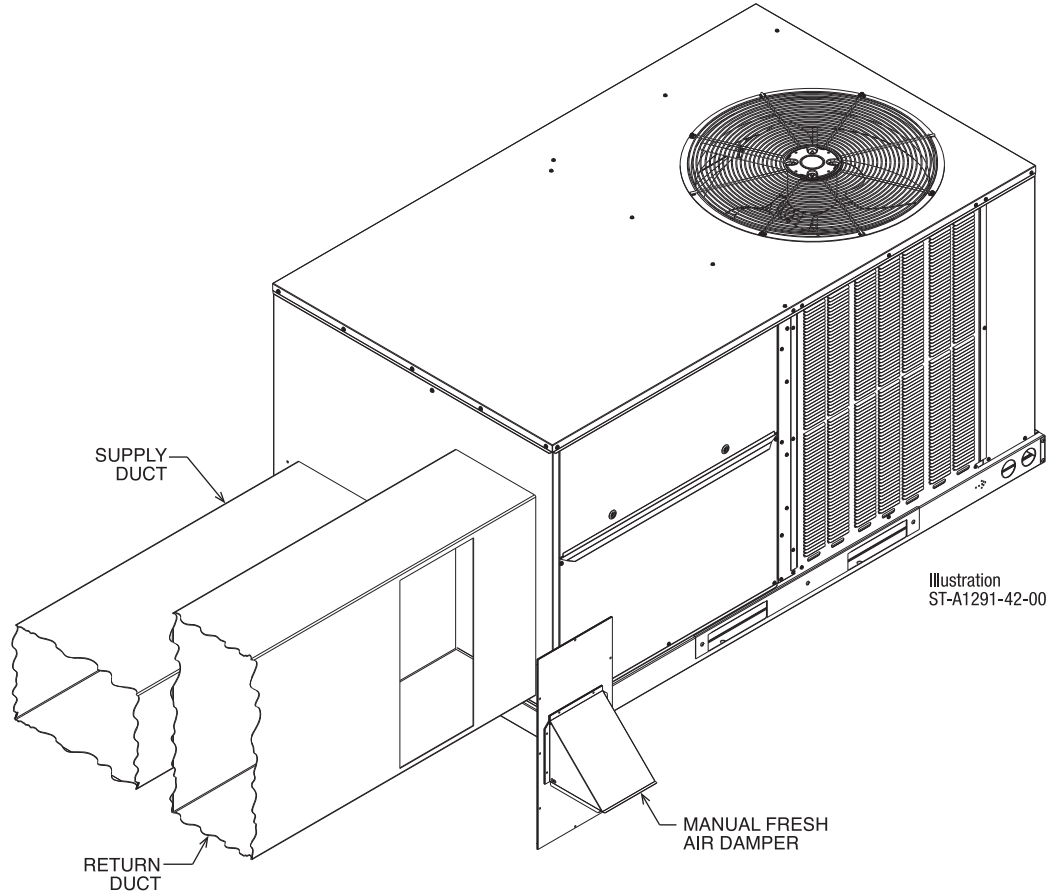
FRESH AIR DAMPER

RXRF-ACA1 — Manual Damper Kit

DOWNFLOW APPLICATION



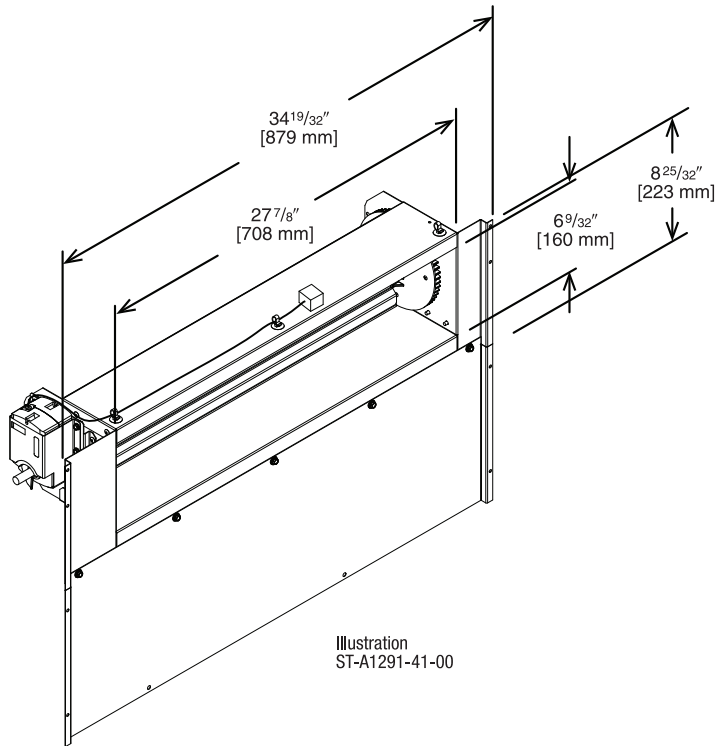
HORIZONTAL APPLICATION



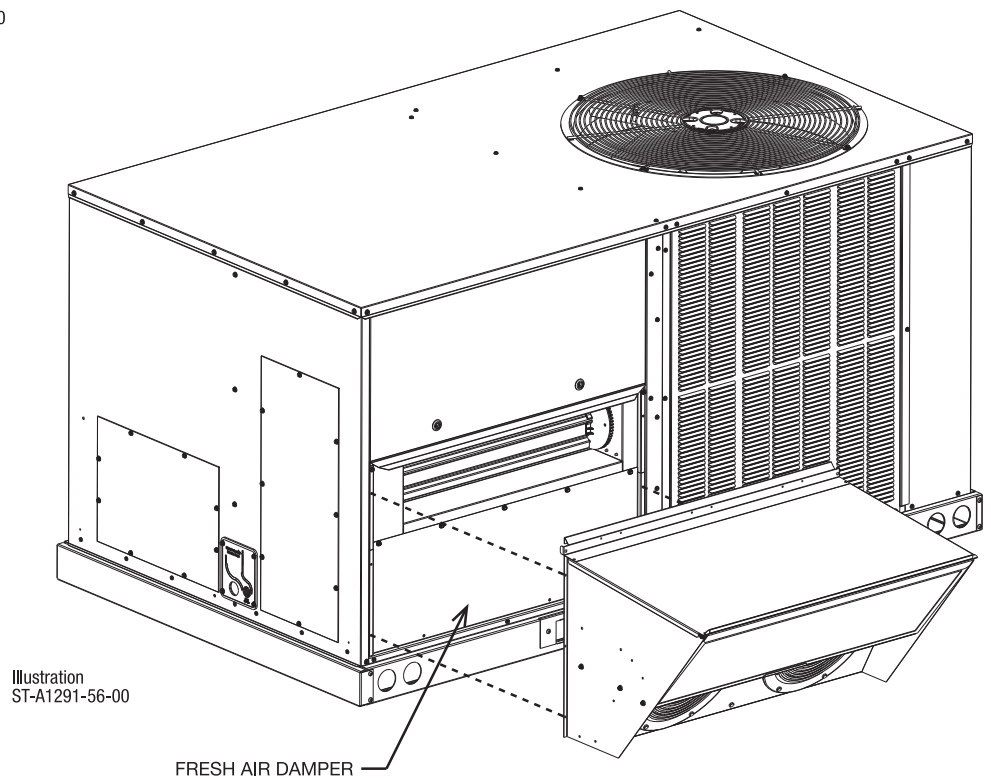
FRESH AIR DAMPER

RXRF-ACB1 — Motorized Damper Kit

- Features **Siemens** Actuator
- Gear Driven Direct Drive Actuator
- Adjustable to 2 positions
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin and 4-pin Electrical Connections
- Pre-Configured — No Field Adjustments Necessary



[] Designates Metric Conversions

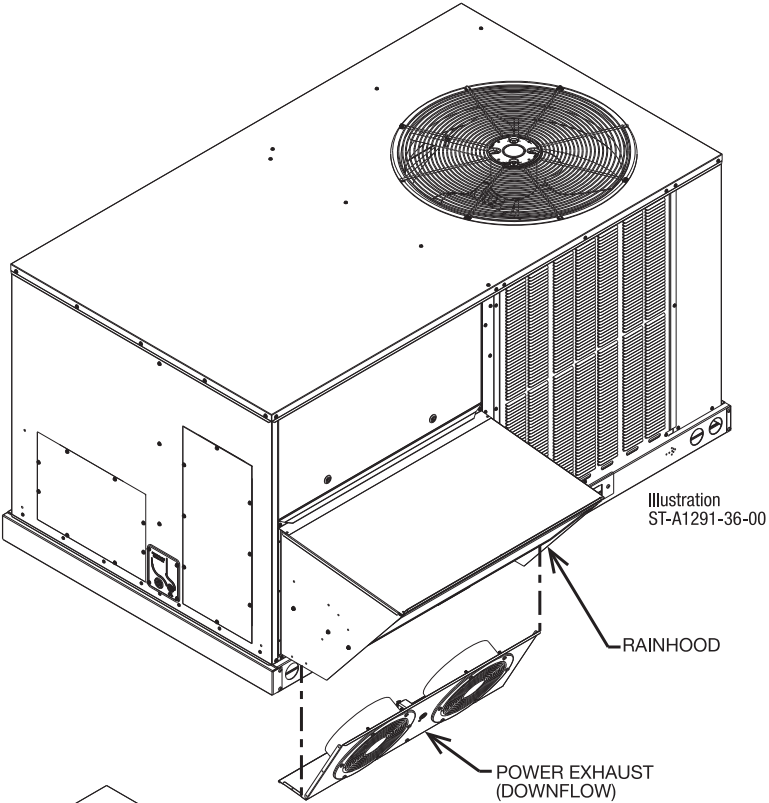


POWER EXHAUST KIT

RXXR-CCF02*

*Voltage Code: C or D

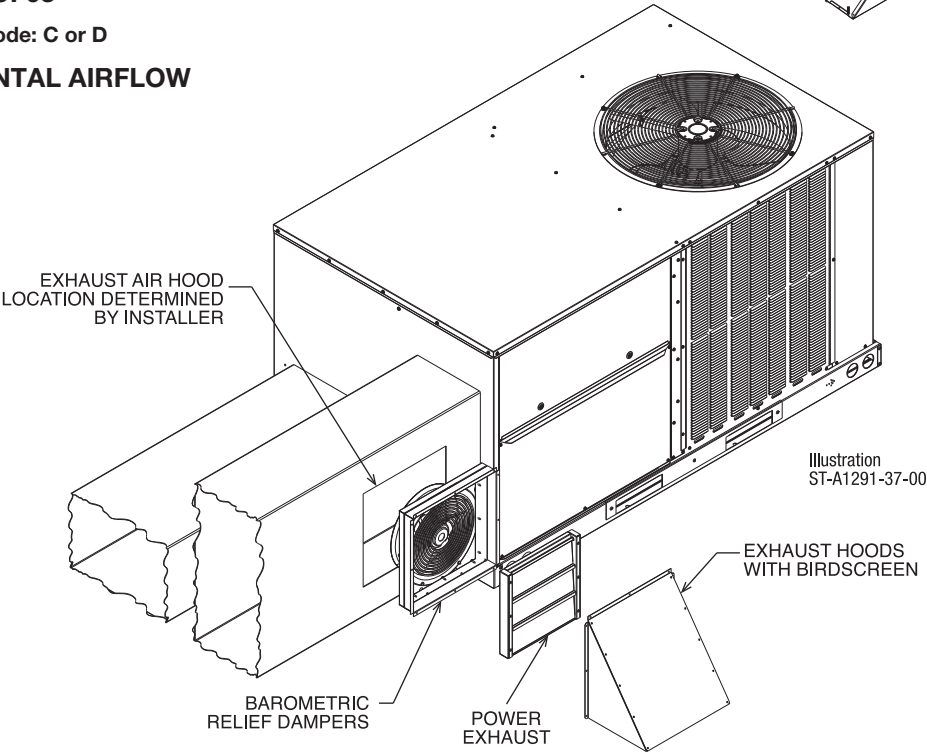
VERTICAL AIRFLOW



RXXR-CCF03*

*Voltage Code: C or D

HORIZONTAL AIRFLOW



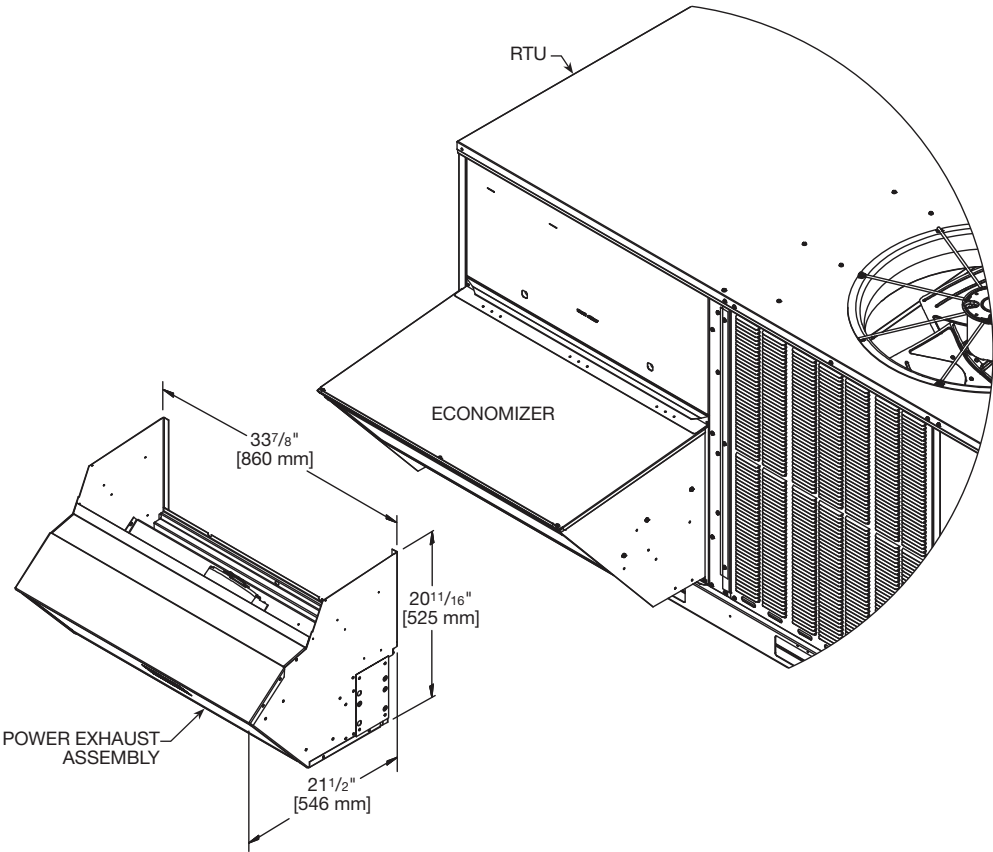
Model No.	No. of Fans	Volts	Phase	HP (ea.)	CFM [L/s]*	RPM	FLA (ea.)	LRA (ea.)
RXXR-CCF0*C	2	208/230	1	0.47	2200	3000	1.55	1.1
RXXR-CCF0*D	2	460	3	0.40	1970	2750	0.51	1.9

POWER EXHAUST KIT FOR DOWNFLOW ECONOMIZERS

RXXRX-RCF02*

*Voltage Code: C or D

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



[] Designates Metric Conversions

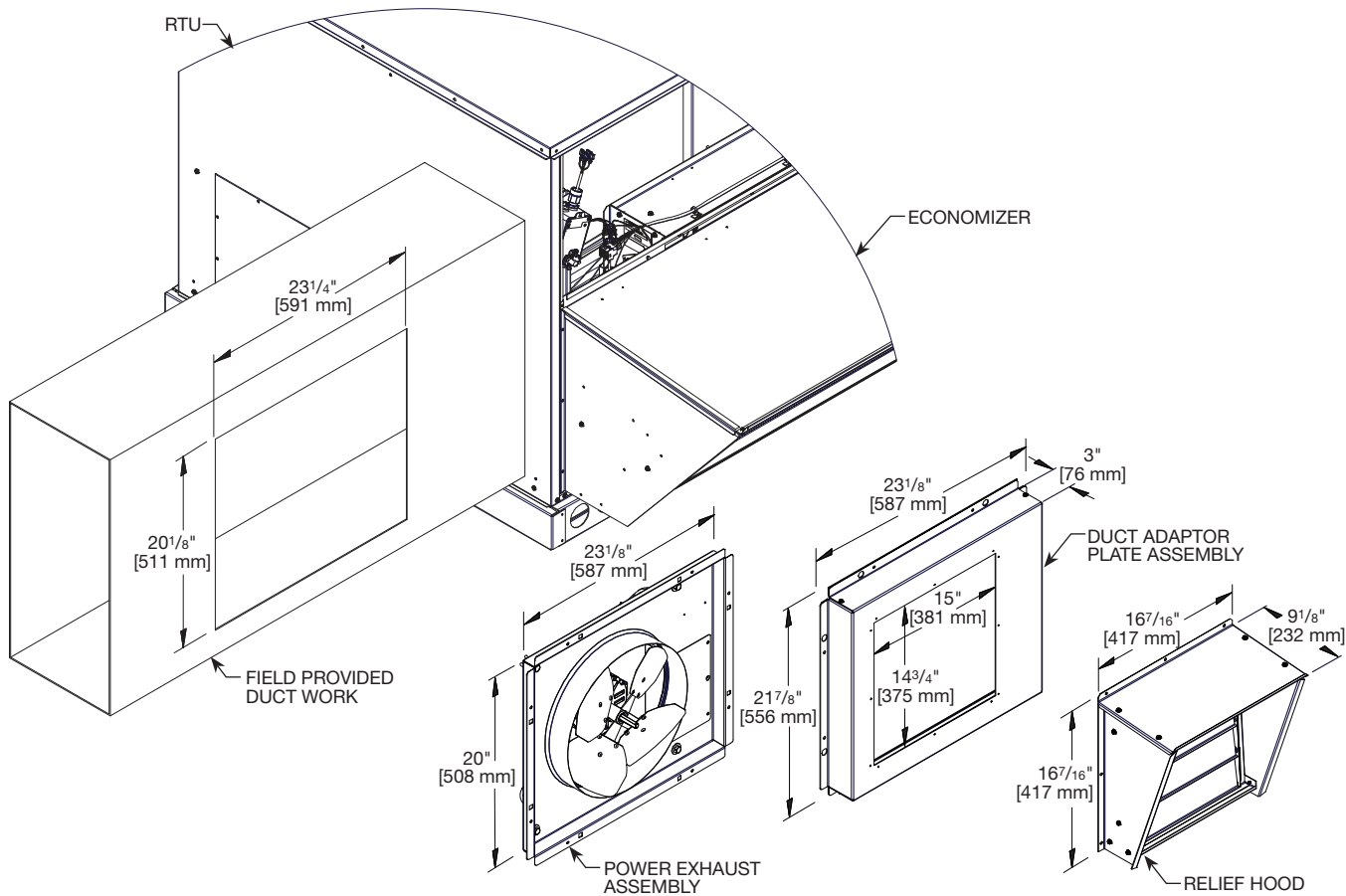
Model No.	Volt	Phase	Motor				Unit				@ 0.1 CFM
			HP	RPM	LRA	Qty.	Cir. Qty.	FLA	MCA	Fuse Size	
RXXRX-RCF02C	208/230	1	1/2	1625	5.86	1	1	2.70	3.38	6	1989
RXXRX-RCF02D	460				3.33			1.34	1.68	3	

POWER EXHAUST KIT FOR HORIZONTAL ECONOMIZERS

RXXR-RCF03*

*Voltage Code: C or D

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

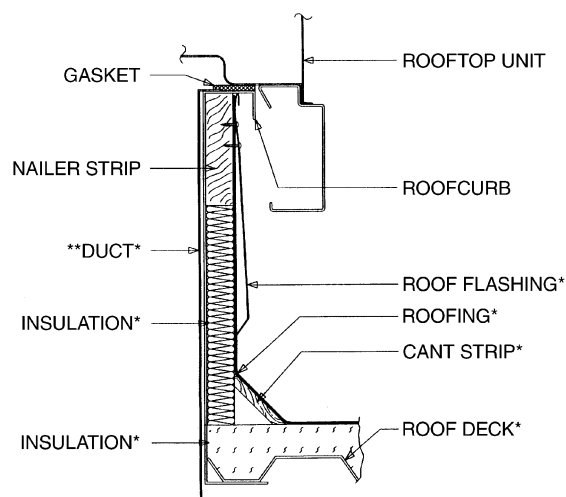


[] Designates Metric Conversions

Model No.	Volt	Phase	Motor				Unit				@ 0.1 CFM
			HP	RPM	LRA	Qty.	Cir. Qty.	FLA	MCA	Fuse Size	
RXXR-RCF03C	208/230	1	1/2	1625	5.86	1	1	2.70	3.38	6	2013
RXXR-RCF03D	460				3.33			1.34	1.68	3	

ROOFCURBS (Full Perimeter)

- The roofcurb design can be utilized on all 3-6 Ton RHPC- 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, gas piping, condensate, connection opening provided on the unit base pan
- 1" [25 mm] x 4" [102 mm] Nailer provided
- Sealing gasket (40' [12.2 m]) provided with Roofcurb
- Packaged for easy field assembly



ROOFCURB INSTALLATION

VIEW A

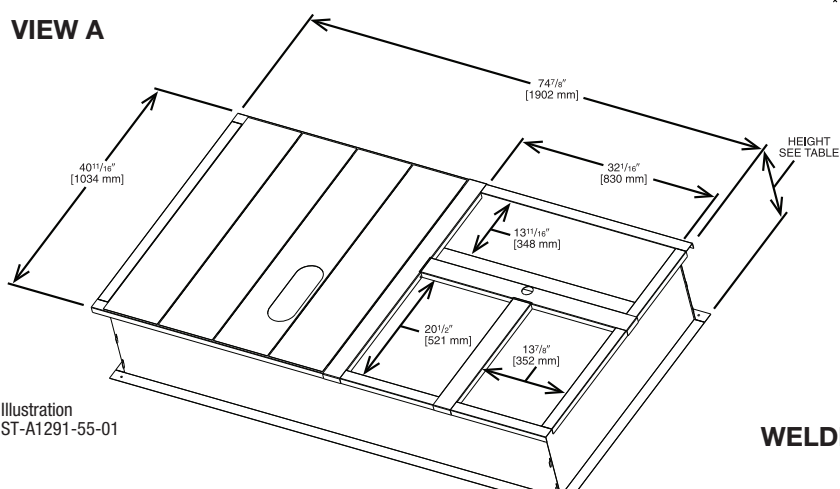


Illustration
ST-A1291-55-01

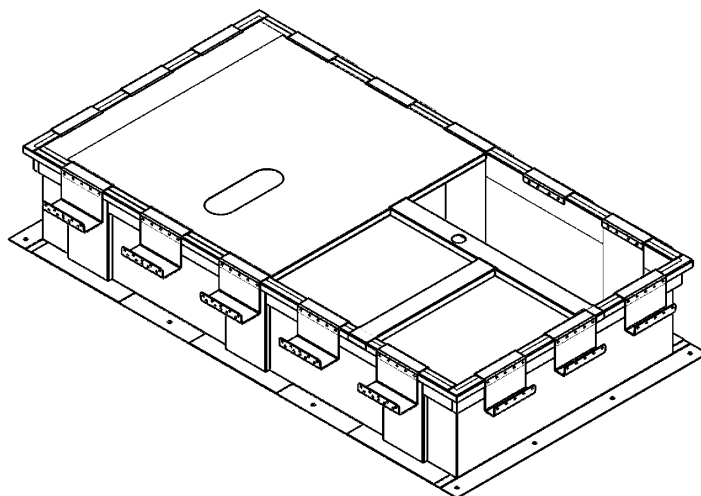
*BY CONTRACTOR

**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.

Illustration
ST-A0743-02

View	Roofcurb Model	Height of Curb
A	RXKG-DCC14	14" [356 mm]
A	RXKG-DCC24	24" [610 mm]

WELDED ROOFCURB VIEW B



View	Roofcurb Model	Dimensions
B	RXKG-DC14	74.875" x 40.688" x 14.0"
B	RXKG-DC24	74.875" x 40.688" x 24.0"

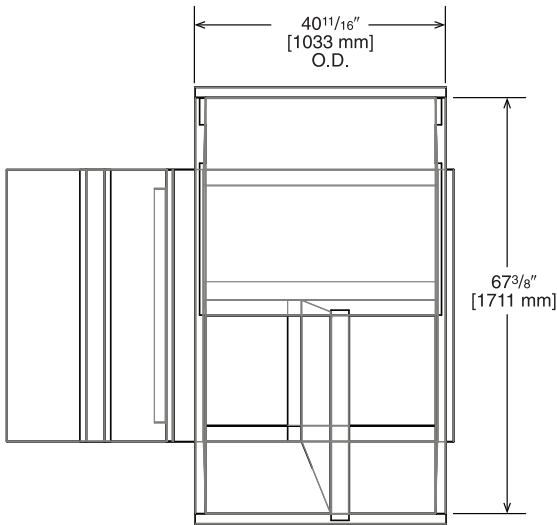
[] Designates Metric Conversions

• State of Florida Approved: Approval Number FL 26981 for Technical Evaluation Report TER-20-28788 certifies the HVAC Unit and mounting methods for high wind resistance are compliant per Florida Building Code.

ROOFCURB ADAPTERS (CONTINUED)

RXRX-DCCAE

- This roofcurb adapter fits the previous generation footprint (for example, RKNL, RLRL, RJNL series)



Approximate Static Pressure Drop
@1200 CFM = 0.05" w.g.
@2000 CFM = 0.19" w.g.

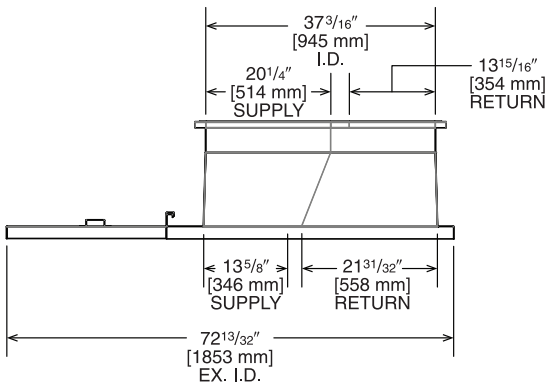
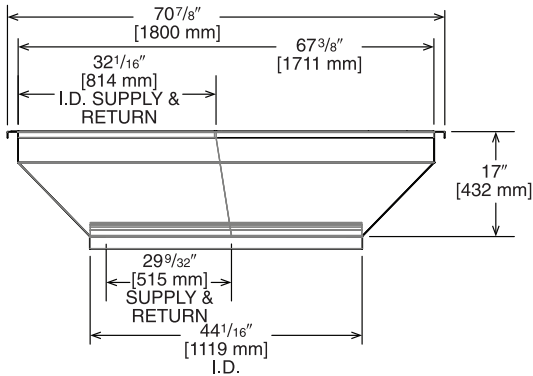


Illustration
ST-A1291-44-00



TOP VIEW

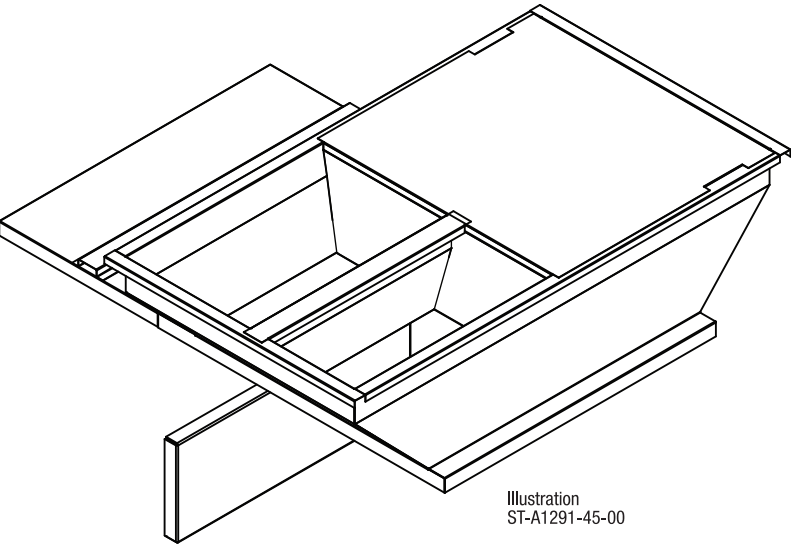


Illustration
ST-A1291-45-00

[] Designates Metric Conversions

Guide Specifications RHPC-036— 072

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.

ELECTRIC HEAT PACKAGED ROOFTOP

HVAC Guide Specifications

Size Range: 3 to 6 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 210/240 or 340/360 and 10 CFR appendix M1 to subpart B or part 430.
- 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.

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. 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. Shall be constructed of galvanized steel.
- B. 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 lb density, flexible fiberglass insulation, foil faced on the air side. Aluminum foil-faced fiberglass insulation shall be used in the gas heat compartment.
- E. Base of unit shall have a location for thru-the-base gas and electrical connections standard.
- F. 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.

- G. 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.
- H. Standard factory-installed condensate overflow sensor.
- I. Top panel
 - i. Shall be a single piece top panel over indoor section.
- J. Electrical Connections:
 - i. All unit power wiring shall enter unit cabinet a single, factory-prepared, continuous raised flange opening in the basepan.
 - 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.
- K. Component access panels (standard):
 - i. Cabinet panels shall be easily opened for servicing.
 - ii. Panels covering control box, indoor fan, indoor fan motor, gas components (where applicable), and filters shall have hinges with 1/4 turn fasteners on units with factory-installed hinged option.
 - iii. 1/4 fasteners shall be permanently attached.

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 210/240 or 340/360 at $\pm 10\%$ voltage.
- B. Compressor with standard controls shall be capable of operation down to 50°F (10°C), ambient outdoor temperatures. Low ambient accessory kit is necessary if mechanically cooling at ambient temperatures to 0°F (-17.7°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.

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 lbs. 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. Energize both "W" and "G" when calling for heat.
- B. Have capability to energize 1 stage of cooling, and at least 1 stage of heating.
- C. In 6 ton units, shall have the capability to energize to 2 stages.
- D. 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.
- B. Shall utilize color-coded wiring.
- C. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.

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:
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:
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.
 - iii. Flame rollout switch.
 - iv. Flame proving controls.

1.11 Standard Filter Section:

- A. 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 scroll compressor.
 - ii. 3-5 ton YB units include one single-stage compressor.
 - iii. 6 ton YB units include one two-stage compressor.
 - iv. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
 - v. Compressors shall be internally protected from high discharge temperature conditions.
 - vi. Compressors shall be protected from an over-temperature and over-ampereage conditions by an internal, motor overload device.
 - vii. Compressor shall be factory mounted on rubber grommets.

- viii. Compressor motors shall have internal line break thermal and current overload protection.
- ix. Crankcase heaters shall not be required for normal operating range.
- x. 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.
- B. Direct Drive Evaporator Fan:
 - i. Direct drive ECM technology with (5) dedicated speed selections as follows: fan, low, high, AC low static, AC high static.
 - ii. Blower fan shall be double-inlet type with forward-curved blades.
 - iii. 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 Motor:
 - 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 Fan:
 - 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 CO₂ 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 **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 driven 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.
 - viii. 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. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
 - xvi. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
 - xvii. Economizer wire harness will have provision for smoke detector available in supply and return options.
 - xviii. Shall provide fault detection and diagnostics (FDD) system in accordance with local code. Faults shall be communicated out on an alarm signal.
- B. 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.
- C. Condenser Coil Hail Guard Assembly:
 - i. Shall protect against damage from hail.
 - ii. Shall be louvered style.
- D. 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.

- E. 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.
- F. 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 open past the 0-100% adjustable setpoint on the economizer control.
 - v. Capable of adjustable but constant volume.
- G. 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.
- H. 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.
- I. 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.
- J. 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.
- K. Barometric Relief:
 - i. Shall include damper, seals, hardware and hoods to relieve excess building pressure.
 - ii. Damper shall gravity-close upon shutdown.
- L. Time Guard:
 - i. Shall prevent compressor short cycling by providing a 5-minute delay (± 2 minutes) before restarting a compressor after shutdown for any reason.
 - ii. One device shall be required per compressor.
- M. Standard Factory-Installed Overflow Switch
 - i. Switch shall monitor the condensate level in drain pan and stops compression operation when overflow conditions occur.
- M. 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 ApplicationsFive (5) Years
Residential Applications
[3 to 5 ton models only]Ten (10) Years

Parts

Commercial ApplicationsOne (1) Year
Residential Applications (Registration Required)
[3 to 5 ton models only]Ten (10) Years

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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