



MODEL: RGED Packaged Gas Electric Units

FORM NO. RSC-881 REV. 1

Commercial Renaissance™ Line Packaged Gas Electric Units



RGED Series

- Cooling Efficiencies up to: 11 EER & 14.6 IEER
- Nominal Sizes: 7.5, 8.5, 10 & 12.5 Tons [26.4, 29.9, 35.2 & 44.0 kW]
- Cooling Capacities: 88k Btu/h [25.78 kW] to 148k Btu/h [43.36 kW]
- Refrigerant Type: R-454B
- ASHRAE 90.1 2022 Compliant Models



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RGEDYB STANDARD FEATURES INCLUDE:

- Factory charged with R-454B refrigerant
- Wired and run tested
- Scroll compressors with internal line break overload and high pressure protection
- Models have two stages of cooling
- Convertible airflow – vertical down flow or horizontal side flow
- Forkable base rails for easy handling and lifting
- Cooling operation up to 125°F ambient
- Two-stage gas heat input with direct spark ignition system, solid state furnace controls, and optimized induced draft combustion
- MicroChannel evaporator and condenser coil
- ServiceSmart package includes:
 - Qwik-Change Flex-Fit Rack
 - Qwik-Slide Blower Assembly
 - Qwik-Clean Drain Pan
- Overflow condensate sensor
- Diagnostics with Dual 7-Segment LED Display to meet code compliance
- One-piece top cover and base pan with drawn supply and return opening
- Two-piece control door
- ¼ turn fasteners on filter access door
- Color-coded and labeled wiring
- External lockable gauge ports
- TXV refrigerant metering system
- Solid-core liquid line filter drier
- High pressure and low pressure/loss of charge protection with built-in Smart Logic
- Insulation encapsulated throughout entire unit
- High performance belt drive motor with variable pitch pulleys and quick adjust belt system
- Blower with Variable Frequency Drive (VFD) control is standard
- MERV 8 & MERV 13 filters are available as field installed option
- Industry standard footprint and matching connections
- Refrigerant leak detection system



Designing for Sustainability with Low GWP: For 2025, the Environmental Protection Agency (EPA) has set a global warming potential (GWP) limit of 700 for refrigerant used in heating and cooling systems. This new requirement will result in a 78%¹ lower GWP than previous-generation refrigerants — with only minimal changes to system installation. For us, this is another step toward our continued sustainability goal of reducing greenhouse gas emissions, while still delivering an exceptional level of energy efficient, dependable comfort.

¹When comparing the GWP of R-454B to R-410A refrigerant.

FACTORY INSTALLED OPTIONS:

- Louvered panels
- Hinged access doors
- Stainless steel heat exchanger (20 year warranty)
- HumidiDry Dehumidification System
- Low ambient/freeze stat
- Non-powered convenience outlet
- Unfused disconnect
- Vertical Economizer (Title 24 and ASHRAE 90.1 2022 compliant)
- Supply and return smoke detector
- ElectroFin® E-Coat for MicroChannel Condenser Coil Coating
- ClearControl™ Direct Digital Control (DDC)
- Comfort Alert® Phase-monitor Protection

FIELD INSTALLED ACCESSORY EQUIPMENT:

Accessory	Model Number	Factory Installation Available?
Economizers		
DDC Economizer with Single Enthalpy (Downflow) <i>MicroMetl Economizer with Honeywell Controller</i>	RXRD-01MDDBM3	Yes
DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Honeywell Controller</i>	RXRD-01MDHBM3	No
Non-DDC Economizer with No Controls (Downflow) <i>MicroMetl Economizer, Belimo Actuator</i>	RXRD-31MDDAM3	No
Non-DDC Economizer with Single Enthalpy (Downflow) <i>MicroMetl Economizer with Siemens Controls</i>	RXRD-11MDDAM3	Yes
Non-DDC Economizer with Single Enthalpy (Downflow) <i>Ruskin Rooftop Systems Economizer with RRS Basic Controller</i>	RXRD-41MDDAM3	Yes
Non-DDC Economizer with Single Enthalpy (Downflow) <i>Ruskin Rooftop Systems Economizer with Siemens Controller</i>	RXRD-51MDDAM3	Yes
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Siemens Controls</i>	RXRD-11MDHAM3	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>Ruskin Rooftop Systems Economizer with RRS Basic Controller</i>	RXRD-41MDHAM3	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>Ruskin Rooftop Systems Economizer with Siemens Controller</i>	RXRD-51MDHAM3	No
Economizer Universal DDC Interface Kit	RXRX-DDC01	Yes

FIELD INSTALLED ACCESSORIES:

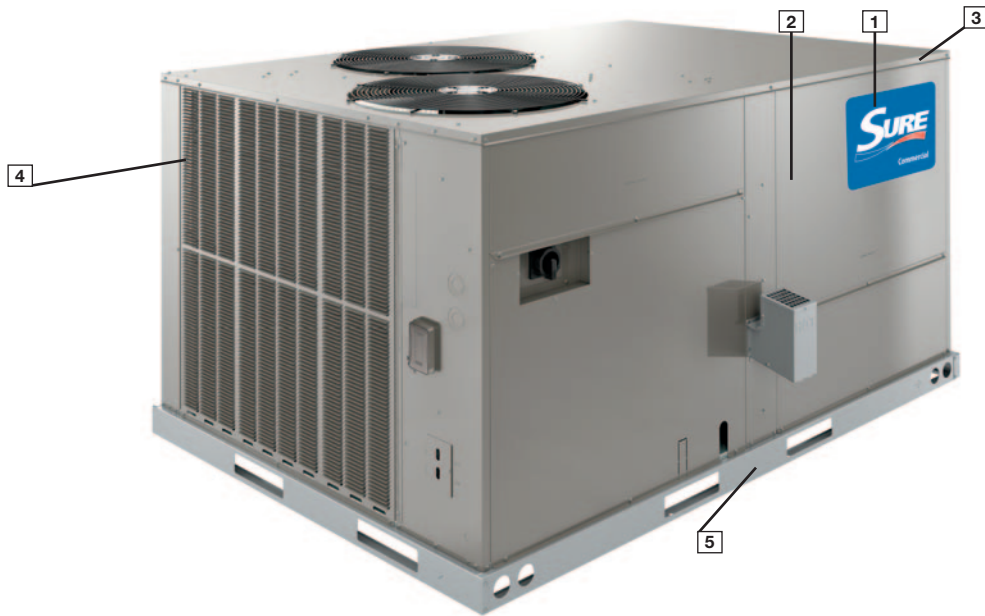
Accessory	Model Number	Factory Installation Available?
Comfort Alert ¹ (3 Phase) DDC	RXXR-AZ01	Yes
Comfort Alert ¹ (3 Phase) Non-DDC	RXXR-AZ02	Yes
Communication Card, BACnet	RXXR-AY01	No
Communication Card, LonWorks	RXXR-AY02	No
Concentric Adapter 7.5/8.5 Ton Drop	RXMC-DD01	No
Concentric Adapter 10 Ton Drop	RXMC-DD02	No
Concentric Adapter 12.5 Ton Drop	RXMC-DD03	No
Concentric Diffuser 7.5/8.5 Ton Drop	RXRN-AED2000	No
Concentric Diffuser 10.0 Ton Drop	RXRN-AED3415	No
Concentric Diffuser 12.5 Ton Drop	RXRN-AED3618	No
Concentric Diffuser 7.5/8.5 Ton Flush	RXRN-AEF2000	No
Concentric Diffuser 10.0 Ton Flush	RXRN-AEF3415	No
Concentric Diffuser 12.5 Ton Flush	RXRN-AEF3618	No
Convenience Outlet, Unwired	RXXR-BN01	Yes
Dual Enthalpy Kit (for Honeywell JADE™)	RXXR-BV01	No
Dual Enthalpy Kit DDC (for Honeywell DDC)	RXXR-BV02	No
Dual Enthalpy, Temperature and Humidity Sensor (for Ruskin Basic Controller)	PD955977	No
Dual Enthalpy, Temperature and Humidity Sensor (for Siemens)	PD555460	No
Flue Diverter	RXXR-DFG04	No
Freeze Stat Kit	RXXR-AM01	Yes
Fresh Air Damper, Manual	RXRF-ADA1	No
Fresh Air Damper, Motorized	RXRF-ADB1	No
Fresh Air Damper, Motorized (DDC)	RXRF-ADC1	No
Low-Ambient Control Kit	RXRZ-A04	Yes
LP Kit ²	RXGJ-FP39	No
MERV 8 Filter 7.5 & 8.5 Ton	RXMF-M08A22020	No
MERV 8 Filter 10 & 12.5 Ton	RXMF-M08A22520	No
MERV 13 Filter 7.5 & 8.5 Ton	RXMF-M13A22020	No

¹One (1) Comfort Alert required per compressor.

²Refer to conversion kit index provided with the LP conversion kit for burner orifice sizing

³Compatible with roofcurbs RXKG-CAE14 or RXKG-CAE24

Accessory	Model Number	Factory Installation Available?
MERV 13 Filter 10 & 12.5 Ton	RXMF-M13A22520	No
Outdoor Coil Louver Kit - 7.5 & 8.5 Ton	RXXR-ADD04A	Yes
Outdoor Coil Louver Kit - 10 & 12.5 Ton	RXXR-ADD04B	Yes
Power Exhaust (230V) Kit, Convertible MicroMetl	RXXR-CDF01C	No
Power Exhaust (460V) Kit, Convertible MicroMetl	RXXR-CDF01D	No
Power Exhaust (230V) Kit for Downflow Economizer (RRS)	RXXR-RDF01C	No
Power Exhaust (460V) Kit for Downflow Economizer (RRS)	RXXR-RDF01D	No
Power Exhaust (575V) Kit for Downflow Economizer (RRS)	RXXR-RDF01Y	No
Power Exhaust (230V) Kit for Horizontal Economizer (RRS)	RXXR-RDF03C	No
Power Exhaust (460V) Kit for Horizontal Economizer (RRS)	RXXR-RDF03D	No
Power Exhaust (575V) Kit for Horizontal Economizer (RRS)	RXXR-RDF03Y	No
Roofcurb Adapter ³	RXXR-DDCAE	No
Roofcurb, 14"	RXKG-DDD14	No
Roofcurb, 14" Welded	RXKG-SD14	No
Roofcurb, 24"	RXKG-DDD24	No
Roofcurb, 24" Welded	RXKG-SD24	No
Sensor, Carbon Dioxide (Wall Mount)	RXXR-AR02	No
Sensor, Room Humidity	RHC-ZNS4	No
Sensor, Room Temperature and Relative Humidity	RHC-ZNS5	No
Smoke Detector Kit, Return	RXXR-BS03	No
Smoke Detector Kit, Return/Supply	RXXR-BS04	No
Unfused Service Disconnect	RXXR-BP01	Yes



Cabinet and Foundation

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

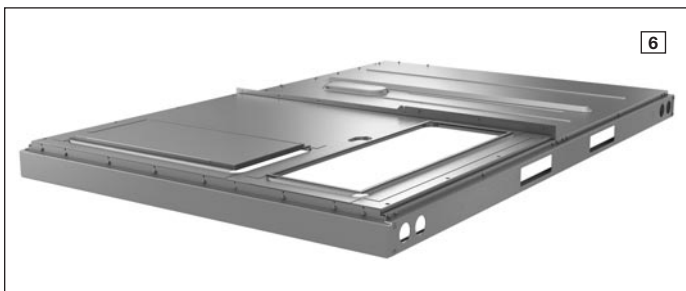
Anything built to last must start with the right foundation. Following that model, the foundation is comprised of 14-gauge, commercial-grade, full perimeter base rails (5) that integrate fork slots and rigging holes to save set-up time on the job site.

Easy Installation

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

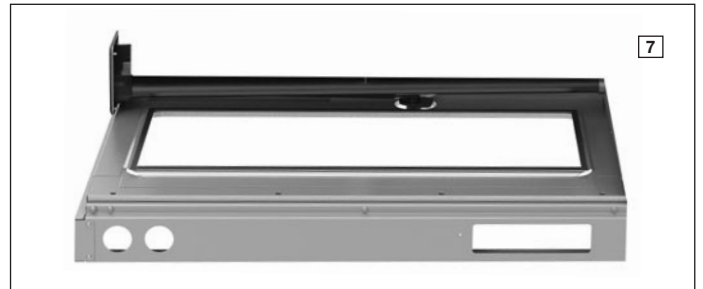
Base Pan

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



Drain Pan

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



Test Standards

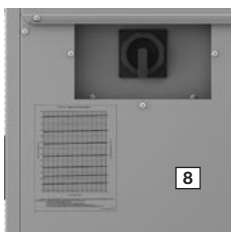
During development, each unit was tested to U.L. 60335-2-40, AHRI 340-360 as well as other Sure Comfort-required reliability tests. Sure Comfort adheres to stringent ISO 9002 quality procedures, and each unit bears the U.L. and AHRI certification labels located on the unit nameplate. Contractors can be assured that when a Sure Comfort packaged unit arrives at the job, it is ready to go with a factory charge and quality checks.

Easy Access

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

Charging Charts, Wiring Diagrams, & Labels

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



Filter Rack

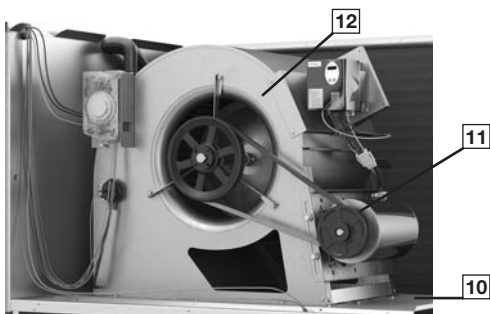
Located within the filter compartment, the Qwik-Change Flex-Fit Rack ([9]) allows easy changeover between 2" and 4" standard size and readily available filters.



Blower Assembly

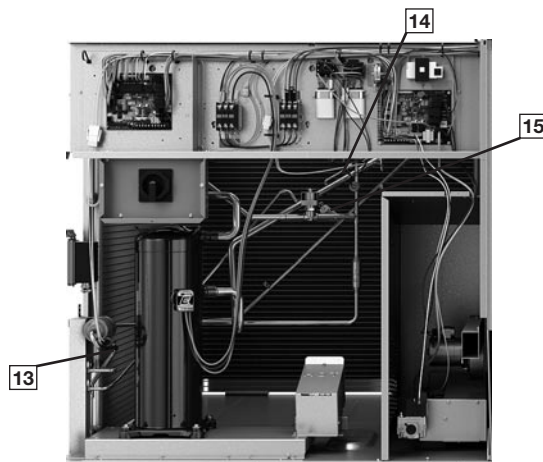
Removing three screws provides full access to the blower compartment. Inside, the Qwik-Slide Blower Assembly ([10]) is incredibly easy to access and remove. This makes servicing internal components such as blower motor, TXV, and microchannel coil much easier. The entire assembly slides out by removing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

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



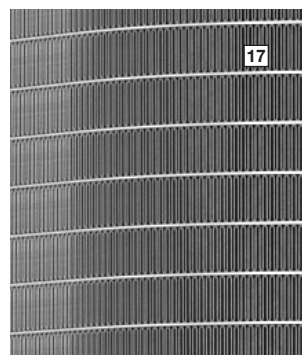
High and Low Pressure Switches & Freeze Stat

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



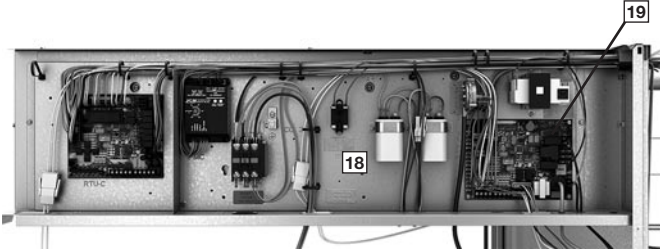
MicroChannel Evaporator & TXV

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



Control Box

Inside the control box (18), each electrical component is clearly labeled; that label matches the component to the wire diagram for ease of trouble shooting. All wiring is numbered on each end of the termination and is color-coded to match the wiring diagram. The integrated furnace control, incorporates the 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. There is a blower contactor and compressor contactor for each compressor.



ClearControl

The optional ClearControl system consisting of a rooftop unit controller, temperature sensors, and pressure sensors, allows real-time monitoring and communication between rooftop units. The Rooftop Unit Controller (RTU-C) that is factory mounted and wired into the control panel. The RTU-C is a solid-state, micro-processor-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.

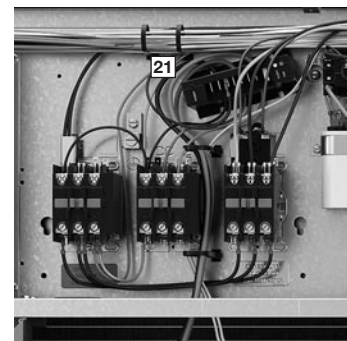


The RGED Gas Electric with the RTU-C is specifically designed to be applied in four distinct applications:

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



Variable Frequency Drive

The supply fan Variable Frequency Drive (VFD) (22) optimizes energy usage year round by providing a lower speed for first stage cooling operation, improving IEER over the conventional constant fan system. Operating in the constant fan mode at the reduced speed can use as little as $\frac{1}{5}$ of the energy of a conventional constant fan system. Also, by operating at a lower speed on first stage cooling, up to 126% more moisture is removed, improving comfort during low load operation. The VFD comes standard. The VFD supply fan factory option meets California Title 24 and ASHRAE 90.1-2022 requirements for multi blower speed control. VFD also ramps up to the desired speed, reducing stress on the supply fan components and noise from a sudden inrush of air. Because the airflow is cut in half during first stage cooling and constant fan operation, noise is lower during these modes of operation.



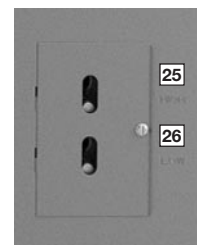
Convenience Outlet & Disconnect

For added convenience in the field, factory-installed options of non-powered convenience outlet (23) and disconnect (24) are available. Low and high voltage can enter from the side or through the base. Low-voltage connections are made through the low-voltage terminal strip. For ease of access, the U.L.-required low voltage barrier can be temporarily removed for low-voltage termination and then reinstalled. The high-voltage connection is terminated at the number 1 compressor contactor. 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

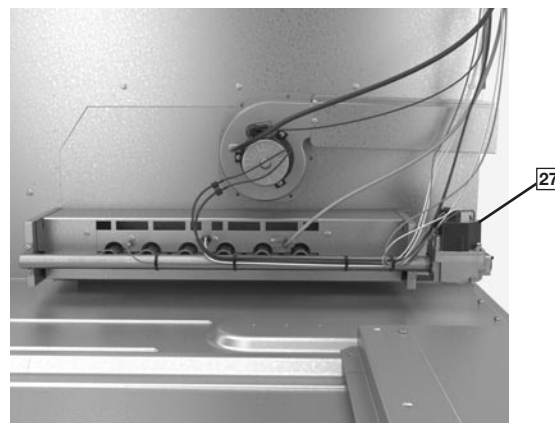
To the right left of the compressor compartment are the externally mounted lockable gauge ports. They are permanently identified by embossed lettering that identifies the compressor circuit, high pressure connection, (25) and low pressure connection (26). Because the gauge ports are mounted externally, an accurate diagnostic of system operation can be performed without removing access panels. Brass caps on the Schrader fitting ensure the gauge parts are leak proof.



Furnace & Gas Heat Exchanger

The furnace compartment contains the latest technology on the market. Each furnace is equipped with a two-stage gas valve (27) to provide two stages of gas heat input. The first stage operates at 70% of the second stage (full fire), 81% steady state efficiency is maintained. Stainless steel heat exchangers can be factory installed for those applications that have high fresh-air requirements or in applications with corrosive environments. The direct spark igniter (28) ensures reliable ignition in the most adverse conditions. This is coupled with remote flame sensor (29) so the flame is carried across the entire length of the burner assembly. Gas supply can be routed from the side or up through the base. Each furnace has the following safety devices to ensure consistent and reliable operation after ignition:

- Stainless steel heat exchanger warranty increases from 10 years to 20 years.
- Pressures switches to ensure adequate combustion airflow before ignition.
- Rollout switches to prevent obstruction or cracks in the heat exchanger.
- A limit device to protect the furnace from over-temperature problems.



Compressor

The compressor compartment houses the heart-beat 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. Units have two stages of efficient cooling operation. Each unit comes standard with a filter dryer.



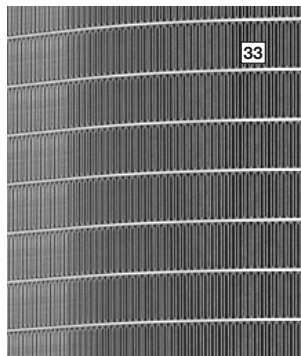
Condenser Fans

The condenser fan motors (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.



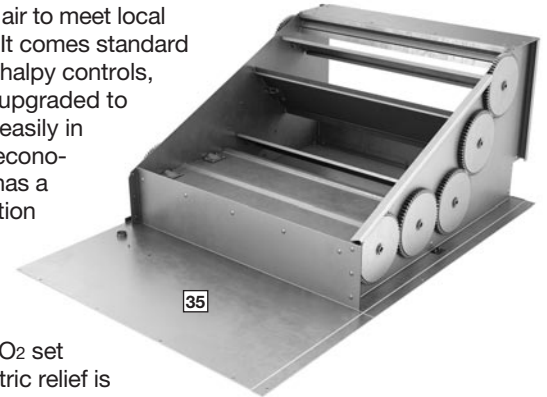
Coil Coating

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 Sure Comfort 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 will trigger the mitigation procedure that shuts off the compressor(s) and turns on the indoor blower motor.

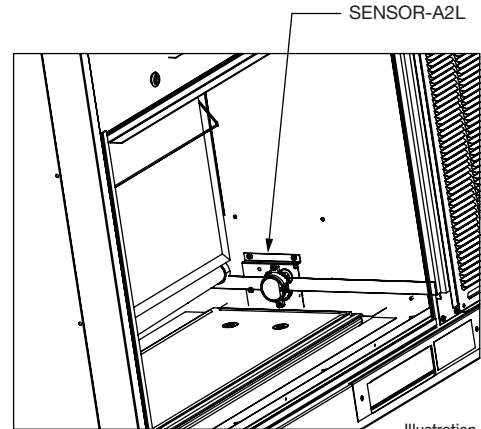
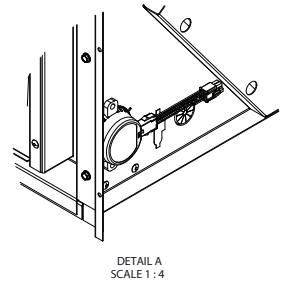
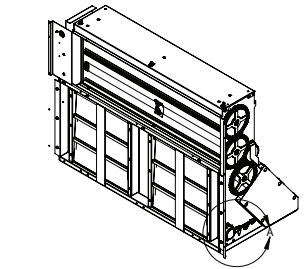
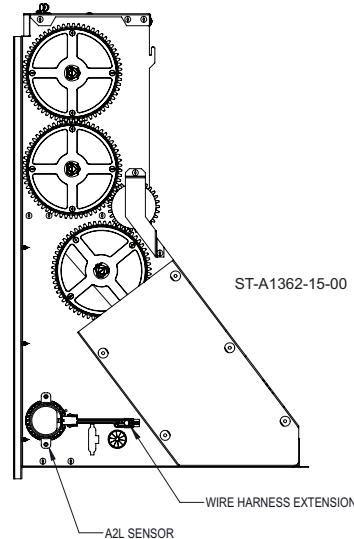


Illustration
ST-A1365-27-00

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



HUMIDIDRY SYSTEM FEATURES

HumidiDry is a Sure Comfort exclusive dehumidification packaged unit solution. It delivers maximum humidity control without compromising desired temperature set point for a high degree of comfort. HumidiDry maintains humidity levels at a desired set point when there's little or no demand for air conditioning. The HumidiDry rooftop unit is controlled by a thermostat and humidistat. The thermostat takes priority on single-stage system. When the thermostat is activated by temperatures that exceed it set point, HumidiDry operates like a standard rooftop unit. It can operate on first stage cooling when demand is low or at full capacity when air conditioning load is high. Unlike other rooftop or reheat units, HumidiDry is uniquely designed so the VFD will operate at a low speed, increasing moisture removal during first-stage cooling operation. This provides initial defense for controlling humidity. When temperature is desirable but humidity exceeds the humidistat set point, the HumidiDry rooftop unit initiates a dehumidification cycle using a combination of hot gas and sub-cooled liquid reheat and the VFD operates at low speed. During this cycle, the HumidiDry rooftop unit delivers dry, neutral air. On a two-stage system, it is possible for both a thermostat and humidistat to register readings above set point. Under this condition, the system runs in the high stage dehumidification cycle, and the VFD operates on high speed. This provides dry conditioned air.

Figure 1 shows the refrigerant path during the normal cooling mode. The liquid refrigerant leaves the TXV with the sudden pressure drop causing the liquid to expand to a vapor and absorbing the heat from the supply air going through the evaporator coil. The refrigerant vapor then travels to the compressor where it is elevated to a higher pressure and temperature. The superheated refrigerant vapor next carries the heat to the outside coil where the heat is then rejected and the refrigerant condenses into a subcooled liquid where the process repeats itself.

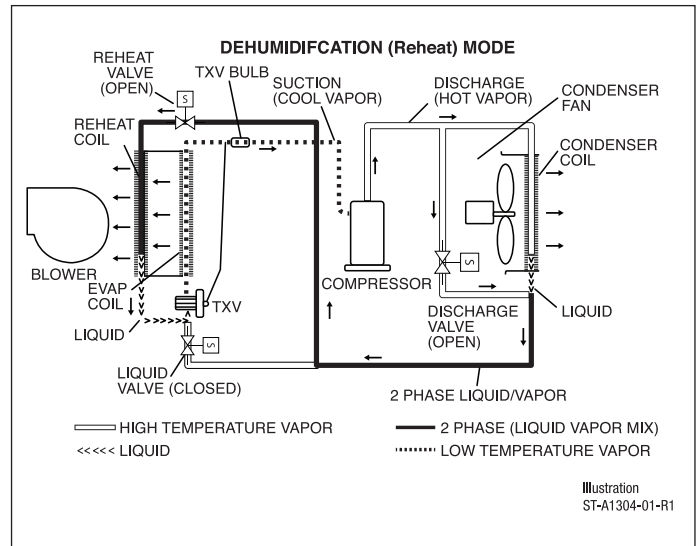
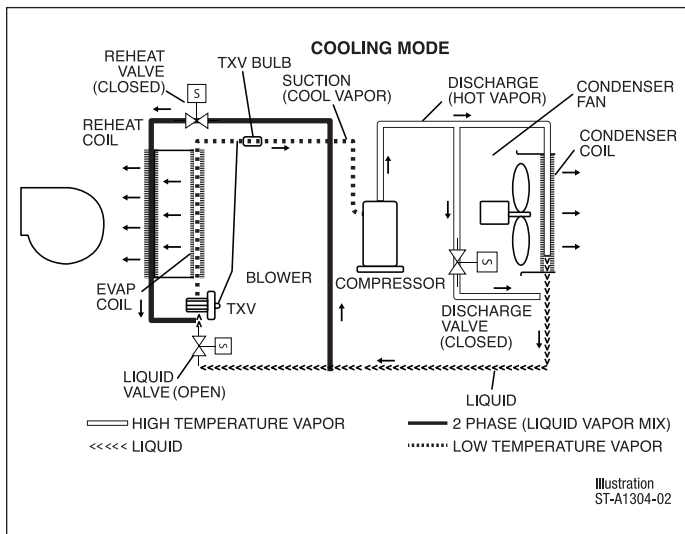


Figure 2 shows the refrigerant path during the reheat mode. When the reheat cycle is energized by the RTU-C, the reheat solenoid valve, upstream of the reheat coil opens. The liquid solenoid valve ahead of the TXV, closes. The discharge solenoid valve, in the compressor discharge line, opens. The liquid refrigerant leaves the TXV with the sudden pressure drop causing the liquid to expand to a vapor and absorbing the heat from the supply air going through the evaporator coil. The refrigerant vapor then travels to the compressor where it is elevated to a higher pressure and temperature. The refrigerant next carries the heat to a parallel path between the outside condenser coil and a bypass circuit. Some of the heat is rejected outdoors. The ratio of heat rejected outdoors versus indoors is controlled by an outdoor fan motor controller (OFMC) that monitors the two-phase temperature and varies the fan speed. This 2-phase refrigerant vapor is then sent to the reheat coil. As the refrigerant travels through the reheat coil it condenses into a subcooled liquid where the process repeats itself.

R	GE	D	Y	B	090	A	C	F	15	2	A	A	***		
1	23	4	5	6	789	10	11	12	13 14	15	16	17	18	19	20
1—Brand R = Sure Comfort						11—Voltage C = 3 phase 208-230V, 60 Hz D = 3 phase 460V, 60 Hz Y = 3 phase 575V, 60 Hz					16—Control A = Core Command™ B = Core Command & Comfort Alert C = Clear Control D = Clear Control & Comfort Alert				
2, 3—Unit Type GE = Packaged Gas Electric						12—Drive F = Belt Drive - VFD Low G = Belt Drive - VFD Medium H = Belt Drive - VFD High					17—Minor series A = 1st Design				
4—Cabinet Type D = Medium Commercial						13, 14—Heat Capacity 15 = 150,000 Btu/h 20 = 205,000 Btu/h ¹ 22 = 225,000 Btu/h ²					18, 19, 20—Option Code See next page				
5—Refrigerant Y = R-454B						15—Heat Configuration 2 = 2 Stage B = 2 Stage Stainless									
6—Efficiency Level B = Standard Efficiency															
7, 8, 9—Capacity 090 = 7.5 ton 102 = 8.5 ton 120 = 10 ton 150 = 12.5 ton															
10—Major series A = 1st Design															

NOTES:

1. 205k heat capacity can only be selected for 7.5 ton models
2. 225k heat capacity can only be selected for 8.5 to 12.5 ton models

FACTORY INSTALLED OPTION CODES FOR RGED (7.5 TO 12.5 TON)

18					19				20			
LV = Louver protection					LF = Low Ambient / Freeze Stat				EC = Economizer			
RH ¹ = HumidiDry/HGRH (Hot Gas Reheat)					NP = Non-powered Convenience Outlet				SS = Supply and Return Smoke Detector			
HA = Hinged Access					DC = Disconnect Switch				RS = Return Smoke Detector			
CC = Coil Coating												
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			E	DC			4	SS	RS	
F	LV	HA	CC		F	LF	DC		5	EC	SS	RS
N	RH				H	NP	DC					
P	LV	RH			K	LF	NP	DC				
Q	RH	HA										
R	LV	RH	CC									
S	LV	RH	HA									
T	LV	RH	HA	CC								

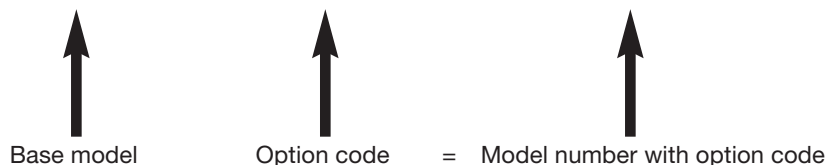
¹Only available with ClearControl.

Instructions for Factory Installed Option(s) Selection

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

- **Step 1:** In the table above, based on the desired features, choose option code character from highlighted options on the left side under the number 18. For example, the option code character "E" has Louver protection and Coil Coating.
- **Step 2:** In the table above, based on the desired features, choose option code character from highlighted options on the left side under the number 19. For example, the option code character "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: RGEDYB090ACF152AA EF3 = RGEDYB090ACF152AAEF3



To select an RGED 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—	208/240V – 3 Phase
Total cooling capacity—	105,000 Btu/h [30.77 kW]
Sensible cooling capacity—	90,000 Btu/h [26.38 kW]
Heating capacity—	159,000 Btu/h [46.60 kW]
*Condenser Entering Air—	95°F [35°C] DB
*Evaporator Mixed Air Entering—	65°F [18°C] WB; 78°F [26°C] DB
*Indoor Air Flow (vertical)—	3750 CFM [1770 L/s]
*External Static Pressure—	.70 in. WG

2. SELECT UNIT TO MEET COOLING REQUIREMENTS.

Since total cooling is within the range of a nominal 10 ton [35.2 kW] unit, enter cooling performance table at 95°F [35°C] DB condenser inlet air. Interpolate between 63°F [2°C] and 67°F [19°C] to determine total and sensible capacity and power input for 65°F [18°C] WB evap inlet air at 3750 CFM [1770 L/s] indoor air flow (table basis):

Total Capacity = 120,060 Btu/h [35.2 kW]
Sensible Capacity = 101,350 Btu/h [29.7 kW]
Power Input (Compressor and Cond. Fans) = 8,950 watts

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

Sensible Capacity = 101,350 Btu/h [29.7 kW]

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

Select factors from airflow correction table at 3700 & 3800 CFM, average data [1746.2 & 1793.4 L/s] and apply to data obtained in step 2 to obtain gross capacity:

Total Capacity, $120,060 \times .99 = 118,859$ Btu/h [33.6 kW]
Sensible Capacity, $101,350 \times .95 = 96,283$ Btu/h [28.2 kW]
Power Input $8,950 \times 1.0 = 8,950$ Watts

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

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

Enter Indoor Blower performance table at 3700 & 3800 CFM, average data [1746.2 & 1793.4 L/s]. Total ESP (external static pressure) per the spec of .70 in. includes the system duct and grilles. Add from the table “Component Air Resistance,” 0.08 for wet coil, for a total selection static pressure of .780 (.8) inches of water, and determine:

RPM = 835
WATTS = 1722
DRIVE = F (Belt Drive, VFD Low Static)

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

$$\text{Btu/h} = 1,722 \times 3.412 = 5,875$$

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

$$\text{Net Total Capacity} = 118,859 \text{ (step 3)} - 5,875 \text{ (step 5)} = 112,984 \text{ Btu/h [33.1 kW]}$$

$$\text{Net Sensible Capacity} = 96,283 \text{ (step 3)} - 5,875 \text{ (step 5)} = 90,408 \text{ Btu/h [26.5 kW]}$$

7. CALCULATE UNIT INPUT AND JOB EER.

$$\text{Total Power Input} = 8,950 \text{ (step 3)} + 5,875 \text{ (step 4)} = 10,672 \text{ Watts}$$

$$\text{EER} = \frac{\text{Net Total Btu/h [kW]} \text{ (step 6)}}{\text{Power Input, Watts (above)}} = \frac{112,984}{10,672} = 10.58$$

8. SELECT UNIT HEATING CAPACITY.

From Physical Data Table read that gas heating output (input rating x efficiency) is:

$$\text{Heating Capacity} = 159,000 \text{ Btu/h [52.45 kW]}$$

Choose Model RGEDYB120ACF222AA

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

[] Designates Metric Conversions

NOM. SIZES 7.5-12.5 TONS [26.4-44.0 kW]

Model RGEDYB Series	090	102	120	150
Cooling Performance^A				
Gross Cooling Capacity Btu/h [kW]	88,000 [25.78]	99,000 [29.01]	118,000 [34.57]	148,000 [43.36]
EER	11	11	11	10.8
IEER ^B	14.6	14.6	14.6	14
Nominal CFM/AHRI Rated CFM [L/s]	3000/3400 [1416/1605]	3400/3300 [1604/1557]	4000/4000 [1888/1888]	5000/4025 [2360/1899]
AHRI Net Cooling Capacity Btu/h [kW]	85,000 [24.9]	96,000 [28.13]	114,000 [33.4]	142,000 [41.61]
Net Sensible Capacity Btu/h [kW]	63,750 [18.68]	72,000 [21.10]	85,500 [25.06]	106,500 [31.21]
Net Latent Capacity Btu/h [kW]	21,250 [6.23]	24,000 [7.03]	28,500 [8.35]	35,500 [10.40]
Net System Power kW	7.73	8.73	10.36	13.15
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	2/Tandem Scroll
No. Stages	2	2	2	2
Outdoor Sound Rating (dB)^C				
	83	81	88	87
Outdoor Coil - Fin Type				
Tube Type	Louvered	Louvered	Louvered	Louvered
MicroChannel Depth in. [mm]	MicroChannel	MicroChannel	MicroChannel	MicroChannel
Face Area sq. ft. [sq. m]	0.71 [18]	0.81 [20.6]	1 [25.4]	1 [25.4]
Rows / FPI [FPcm]	25.4 [2.36]	25.6 [2.38]	31.5 [2.93]	31.5 [2.93]
	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]
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 [25.4]	1.26 [32]	1 [25.4]	1 [25.4]
Rows / FPI [FPcm]	11 [1.02]	10.9 [1.01]	13.8 [1.28]	13.8 [1.28]
Refrigerant Control	1 / 20 [8]	1 / 20 [8]	2 / 18 [7]	2 / 18 [7]
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				
No. Used/Diameter in. [mm]	Propeller	Propeller	Propeller	Propeller
Drive Type/No. Speeds	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]	2/24 [609.6]
CFM [L/s]	Direct/1	Direct/1	Direct/1	Direct/1
No. Motors/HP	8000 [3775]	8000 [3775]	8500 [4011]	9000 [4247]
Motor RPM	2 at 1/5 HP	2 at 1/5 HP	2 at 1/3 HP	2 at 3/4 HP
	820	820	1075	1100
Indoor Fan - Type				
No. Used/Diameter in. [mm]	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
Drive Type	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]	1/15x15 [381x381]
No. Speeds	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)	Belt (Adjustable)
No. Motors	2	2	2	2
Motor RPM	1	1	1	1
Motor Frame Size	1725	1725	1725	1725
	56	56	56	184
Filter - Type				
Furnished	Disposable	Disposable	Disposable	Disposable
(NO.) Size Recommended in. [mm x mm x mm]	Yes	Yes	Yes	Yes
	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x20 [51x508x508]	(4)2x20x25 [51x508x635]
Refrigerant Charge Oz. [g]				
	88 [2495]	114 [3232]	171 [4848]	168 [4763]
Weights				
Net Weight lbs. [kg]				
	868 [394]	894 [406]	999 [454]	1089 [494]
Ship Weight lbs. [kg]				
	907 [412]	933 [424]	1038 [471]	1128 [512]

NOTE: Please look at the rating plates pasted on the side of the unit to understand the model number of your unit.
See Page 17 for Notes.

[] Designates Metric Conversions

NOTES:

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

RGEDYB HEATING PERFORMANCE

Model RGEDYB	Heating Input Btu/h [kW] (1st Stage / 2nd Stage)	Heating Output Btu/h [kW] (1st Stage / 2nd Stage)	Temperature Rise Range °F [°C] (1st Stage / 2nd Stage)	Steady State Efficiency (%)	No. Burners	No. Stages	Gas Connection Pipe Size In. [mm]
090A**15**A	105,000/150,000 [30.76/43.95]	85,050/121,500 [24.92/35.6]	10-40 [5.6-22.2] / 25-55 [13.9-30.6]	81	6	2	0.75 [19]
090A**20**A	143,000/205,000 [42.06/60.06]	116,200/166,050 [34.07/48.66]	20-50 [11.1-27.8] / 35-65 [19.4-36.1]	81	9	2	0.75 [19]
102A**15**A	105,000/150,000 [30.76/43.95]	85,050/121,500 [24.92/35.6]	5-35 [2.8-19.4] / 15-45 [8.3-25]	81	6	2	0.75 [19]
102A**22**A	157,500/225,000 [46.16/65.92]	127,500/182,250 [37.39/53.4]	15-45 [8.3-25] / 35-65 [19.4-36.1]	81	9	2	0.75 [19]
120A**15**A	105,000/150,000 [30.76/43.95]	85,050/121,500 [24.92/35.6]	10-40 [5.6-22.2] / 20-50 [11.1-27.8]	81	6	2	0.75 [19]
120A**22**A	157,500/225,000 [46.16/65.92]	127,500/182,250 [37.39/53.4]	15-45 [8.3-25] / 35-65 [19.4-36.1]	81	9	2	0.75 [19]
150A**15**A	105,000/150,000 [30.76/43.95]	85,050/121,500 [24.92/35.6]	5-35 [2.8-19.4] / 15-45 [8.3-25]	81	6	2	0.75 [19]
150A**22**A	157,500/225,000 [46.16/65.92]	127,500/182,250 [37.39/53.4]	10-40 [5.6-22.2] / 25-55 [13.9-30.6]	81	9	2	0.75 [19]

Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standard Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.

[] Designates Metric Conversions

COOLING PERFORMANCE DATA—RGEDYB090

RGEDYB090 - 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]			3550 [1675]	3400 [1605]	2375 [1121]	3550 [1675]	3400 [1605]	2375 [1121]	3550 [1675]	3400 [1605]	2375 [1121]
DR ①			.05	.09	.12	.05	.09	.12	.05	.09	.12
OUTDOOR TEMPERATURE °F [°C]	75°F [23.9°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	105.0 [30.8] 60.0 [17.6] 6.4	104.1 [30.5] 58.8 [17.2] 6.4	98.4 [28.8] 50.5 [14.8] 6.2	99.4 [29.1] 70.9 [20.8] 6.4	98.6 [28.9] 69.4 [20.3] 6.4	93.2 [27.3] 59.7 [17.5] 6.2	93.8 [27.5] 81.7 [23.9] 6.4	93.0 [27.3] 80.1 [23.5] 6.3	87.9 [25.8] 68.8 [20.2] 6.2
	80°F [26.7°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	102.5 [30.0] 59.0 [17.3] 6.7	101.7 [29.8] 57.8 [16.9] 6.7	96.1 [28.2] 49.7 [14.6] 6.5	96.9 [28.4] 69.9 [20.5] 6.7	96.1 [28.2] 68.5 [20.1] 6.6	90.9 [26.6] 58.8 [17.2] 6.5	91.3 [26.8] 80.7 [23.7] 6.6	90.6 [26.6] 79.1 [23.2] 6.6	85.6 [25.1] 68.0 [19.9] 6.4
	85°F [29.4°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	100.0 [29.3] 58.0 [17.0] 7.0	99.2 [29.1] 56.8 [16.6] 7.0	93.8 [27.5] 48.8 [14.3] 6.8	94.4 [27.7] 68.9 [20.2] 7.0	93.7 [27.5] 67.5 [19.8] 6.9	88.6 [26.0] 58.0 [17.0] 6.7	88.8 [26.0] 79.8 [23.4] 6.9	88.1 [25.8] 78.1 [22.9] 6.9	83.3 [24.4] 67.2 [19.7] 6.7
	90°F [32.2°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	97.6 [28.6] 57.0 [16.7] 7.3	96.8 [28.4] 55.9 [16.4] 7.3	91.5 [26.8] 48.0 [14.1] 7.1	92.0 [27.0] 67.9 [19.9] 7.3	91.3 [26.8] 66.5 [19.5] 7.2	86.2 [25.3] 57.2 [16.8] 7.1	86.4 [25.3] 78.8 [23.1] 7.2	85.7 [25.1] 77.2 [22.6] 7.2	81.0 [23.7] 66.3 [19.4] 7.0
	95°F [35°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	95.1 [27.9] 56.0 [16.4] 7.6	94.4 [27.7] 54.9 [16.1] 7.6	89.2 [26.1] 47.2 [13.8] 7.4	89.5 [26.2] 66.9 [19.6] 7.6	88.8 [26.0] 65.6 [19.2] 7.6	83.9 [24.6] 56.3 [16.5] 7.4	83.9 [24.6] 77.8 [22.8] 7.6	83.3 [24.4] 76.2 [22.3] 7.5	78.7 [23.1] 65.5 [19.2] 7.3
	100°F [37.8°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	92.7 [27.2] 55.1 [16.1] 8.0	91.9 [26.9] 54.0 [15.8] 8.0	86.9 [25.5] 46.4 [13.6] 7.8	87.1 [25.5] 65.9 [19.3] 8.0	86.4 [25.3] 64.6 [18.9] 7.9	81.6 [23.9] 55.5 [16.3] 7.7	81.5 [23.9] 76.8 [22.5] 7.9	80.8 [23.7] 75.3 [22.1] 7.9	76.4 [22.4] 64.7 [19.0] 7.7
	105°F [40.6°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	90.2 [26.4] 54.1 [15.9] 8.4	89.5 [26.2] 53.0 [15.5] 8.4	84.6 [24.8] 45.5 [13.3] 8.1	84.6 [24.8] 65.0 [19.1] 8.3	83.9 [24.6] 63.6 [18.6] 8.3	79.3 [23.2] 54.7 [16.0] 8.1	79.0 [23.2] 75.8 [22.2] 8.3	78.4 [23.0] 74.3 [21.8] 8.3	74.1 [21.7] 63.8 [18.7] 8.1
	110°F [43.3°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	87.8 [25.7] 53.1 [15.6] 8.8	87.1 [25.5] 52.0 [15.2] 8.8	82.3 [24.1] 44.7 [13.1] 8.5	82.2 [24.1] 64.0 [18.8] 8.7	81.5 [23.9] 62.7 [18.4] 8.7	77.0 [22.6] 53.9 [15.8] 8.5	76.6 [22.5] 74.8 [21.9] 8.7	75.9 [22.2] 73.3 [21.5] 8.7	71.8 [21.0] 63.0 [18.5] 8.4
	115°F [46.1°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	85.3 [25.0] 52.1 [15.3] 9.2	84.6 [24.8] 51.1 [15.0] 9.2	80.0 [23.4] 43.9 [12.9] 8.9	79.7 [23.4] 63.0 [18.5] 9.2	79.1 [23.2] 61.7 [18.1] 9.1	74.7 [21.9] 53.0 [15.5] 8.9	74.1 [21.7] 73.9 [21.7] 9.1	73.5 [21.5] 72.4 [21.2] 9.1	69.5 [20.4] 62.2 [18.2] 8.9
	120°F [48.9°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	82.8 [24.3] 51.1 [15.0] 9.7	82.2 [24.1] 50.1 [14.7] 9.6	77.7 [22.8] 43.1 [12.6] 9.4	77.2 [22.6] 62.0 [18.2] 9.6	76.6 [22.5] 60.8 [17.8] 9.6	72.4 [21.2] 52.2 [15.3] 9.3	71.6 [21.0] 71.6 [21.0] 9.6	71.1 [20.8] 71.1 [20.8] 9.5	67.2 [19.7] 61.4 [18.0] 9.3
	125°F [51.7°C]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	80.4 [23.6] 50.1 [14.7] 10.1	79.7 [23.4] 49.1 [14.4] 10.1	75.4 [22.1] 42.2 [12.4] 9.8	74.8 [21.9] 61.0 [17.9] 10.1	74.2 [21.7] 59.8 [17.5] 10.0	70.1 [20.5] 51.4 [15.1] 9.8	69.2 [20.3] 69.2 [20.3] 10.0	68.6 [20.1] 68.6 [20.1] 10.0	64.9 [19.0] 60.5 [17.7] 9.7

DR —Depression ratio

dbE —Entering air dry bulb

wbE—Entering air wet bulb

Total —Total capacity x 1000 Btu/h

Sens —Sensible capacity x 1000 Btu/h

Power —kW input

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

[] Designates Metric Conversions

COOLING PERFORMANCE DATA—RGEDYB102

RGEDYB102 - 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]			3900 [1841]	3300 [1557]	2600 [1227]	3900 [1841]	3300 [1557]	2600 [1227]	3900 [1841]	3300 [1557]	2600 [1227]
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]	119.4 [35.0]	115.6 [33.9]	111.1 [32.6]	112.3 [32.9]	108.7 [31.9]	104.6 [30.7]	106.0 [31.1]	102.6 [30.1]	98.6 [28.9]
		Sens kBtu/h [kW]	69.7 [20.4]	64.3 [18.8]	57.9 [17.0]	83.0 [24.3]	76.5 [22.4]	68.9 [20.2]	95.9 [28.1]	88.4 [25.9]	79.7 [23.4]
	80°F [26.7°C]	Power	7.3	7.2	7.1	7.3	7.2	7.1	7.2	7.1	6.9
		Total kBtu/h [kW]	116.8 [34.2]	113.0 [33.1]	108.7 [31.9]	109.7 [32.2]	106.2 [31.1]	102.1 [29.9]	103.3 [30.3]	100.0 [29.3]	96.2 [28.2]
	85°F [29.4°C]	Sens kBtu/h [kW]	68.4 [20.0]	63.0 [18.5]	56.8 [16.6]	81.6 [23.9]	75.3 [22.1]	67.8 [19.9]	94.6 [27.7]	87.2 [25.6]	78.5 [23.0]
		Power	7.7	7.6	7.5	7.7	7.6	7.4	7.5	7.4	7.3
	90°F [32.2°C]	Total kBtu/h [kW]	114.0 [33.4]	110.3 [32.3]	106.1 [31.1]	106.9 [31.3]	103.5 [30.3]	99.5 [29.2]	100.5 [29.5]	97.3 [28.5]	93.6 [27.4]
		Sens kBtu/h [kW]	66.9 [19.6]	61.7 [18.1]	55.6 [16.3]	80.2 [23.5]	73.9 [21.7]	66.6 [19.5]	93.1 [27.3]	85.8 [25.1]	77.3 [22.7]
	95°F [35°C]	Power	8.1	8.0	7.8	8.1	7.9	7.8	7.9	7.8	7.7
		Total kBtu/h [kW]	111.0 [32.5]	107.5 [31.5]	103.3 [30.3]	103.9 [30.5]	100.6 [29.5]	96.7 [28.3]	97.6 [28.6]	94.5 [27.7]	90.8 [26.6]
100°F [37.8°C]	Sens kBtu/h [kW]	65.4 [19.2]	60.3 [17.7]	54.3 [15.9]	78.6 [23.0]	72.5 [21.2]	65.3 [19.1]	91.6 [26.8]	84.4 [24.7]	76.1 [22.3]	
	Power	8.5	8.3	8.2	8.4	8.3	8.1	8.3	8.2	8.0	
105°F [40.6°C]	Total kBtu/h [kW]	107.9 [31.6]	104.5 [30.6]	100.4 [29.4]	100.8 [29.5]	97.6 [28.6]	93.8 [27.5]	94.5 [27.7]	91.4 [26.8]	87.9 [25.8]	
	Sens kBtu/h [kW]	63.7 [18.7]	58.7 [17.2]	52.9 [15.5]	77.0 [22.6]	71.0 [20.8]	63.9 [18.7]	89.9 [26.3]	82.9 [24.3]	74.7 [21.9]	
110°F [43.3°C]	Power	8.9	8.7	8.6	8.8	8.7	8.5	8.7	8.5	8.4	
	Total kBtu/h [kW]	104.6 [30.7]	101.3 [29.7]	97.4 [28.5]	97.6 [28.6]	94.4 [27.7]	90.8 [26.6]	91.2 [26.7]	88.3 [25.9]	84.9 [24.9]	
115°F [46.1°C]	Sens kBtu/h [kW]	62.0 [18.2]	57.1 [16.7]	51.5 [15.1]	75.2 [22.0]	69.4 [20.3]	62.5 [18.3]	88.2 [25.8]	81.3 [23.8]	73.2 [21.5]	
	Power	9.2	9.1	8.9	9.2	9.0	8.9	9.1	8.9	8.7	
120°F [48.9°C]	Total kBtu/h [kW]	101.2 [29.7]	98.0 [28.7]	94.2 [27.6]	94.1 [27.6]	91.1 [26.7]	87.6 [25.7]	87.8 [25.7]	85.0 [24.9]	81.7 [23.9]	
	Sens kBtu/h [kW]	60.1 [17.6]	55.4 [16.2]	49.9 [14.6]	73.4 [21.5]	67.6 [19.8]	60.9 [17.8]	86.3 [25.3]	79.5 [23.3]	71.7 [21.0]	
125°F [51.7°C]	Power	9.6	9.5	9.3	9.6	9.4	9.2	9.4	9.3	9.1	
	Total kBtu/h [kW]	97.6 [28.6]	94.5 [27.7]	90.9 [26.6]	90.6 [26.6]	87.7 [25.7]	84.3 [24.7]	84.2 [24.7]	81.5 [23.9]	78.4 [23.0]	
	Sens kBtu/h [kW]	58.1 [17.0]	53.6 [15.7]	48.3 [14.2]	71.4 [20.9]	65.8 [19.3]	59.3 [17.4]	84.2 [24.7]	77.7 [22.8]	70 [20.5]	
	Power	10.0	9.8	9.6	9.9	9.8	9.6	9.8	9.7	9.5	
	Total kBtu/h [kW]	93.9 [27.5]	90.9 [26.6]	87.4 [25.6]	86.8 [25.4]	84.1 [24.6]	80.8 [23.7]	80.5 [23.6]	77.9 [22.8]	74.9 [22.0]	
	Sens kBtu/h [kW]	56.1 [16.4]	51.7 [15.2]	46.6 [13.7]	69.3 [20.3]	63.9 [18.7]	57.6 [16.9]	80.5 [23.6]	75.8 [22.2]	68.3 [20.0]	
	Power	10.4	10.2	10.0	10.3	10.2	10.0	10.2	10.0	9.8	
	Total kBtu/h [kW]	90.0 [26.4]	87.2 [25.6]	83.8 [24.6]	83.0 [24.3]	80.3 [23.5]	77.2 [22.6]	76.6 [22.5]	74.1 [21.7]	71.3 [20.9]	
	Sens kBtu/h [kW]	53.9 [15.8]	49.7 [14.6]	44.8 [13.1]	67.2 [19.7]	61.9 [18.1]	55.8 [16.4]	76.6 [22.5]	73.8 [21.6]	66.5 [19.5]	
	Power	10.7	10.6	10.4	10.7	10.5	10.3	10.6	10.4	10.2	
	Total kBtu/h [kW]	86.0 [25.2]	83.2 [24.4]	80.0 [23.4]	78.9 [23.1]	76.4 [22.4]	73.4 [21.5]	72.6 [21.3]	70.2 [20.6]	67.5 [19.8]	
	Sens kBtu/h [kW]	51.6 [15.1]	47.6 [14.0]	42.9 [12.6]	64.9 [19.0]	59.8 [17.5]	53.9 [15.8]	72.6 [21.3]	70.2 [20.6]	64.6 [18.9]	
	Power	11.1	10.9	10.7	11.1	10.9	10.7	10.9	10.8	10.6	

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

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

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

[] Designates Metric Conversions

COOLING PERFORMANCE DATA—RGEDYB120

RGEDYB120 - 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]			4925 [2324]	4000 [1888]	3275 [1546]	4925 [2324]	4000 [1888]	3275 [1546]	4925 [2324]	4000 [1888]	3275 [1546]
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]	151.0 [44.3]	144.9 [42.5]	140.1 [41.1]	141.7 [41.5]	136.0 [39.9]	131.5 [38.5]	134.0 [39.3]	128.5 [37.7]	124.3 [36.4]
		Sens kBtu/h [kW]	89.7 [26.3]	80.9 [23.7]	74.1 [21.7]	109.5 [32.1]	98.8 [29.0]	90.4 [26.5]	130.8 [38.3]	118.1 [34.6]	108.1 [31.7]
		Power	9.3	9.1	9.0	9.2	9.0	8.9	9.1	8.9	8.7
	80°F [26.7°C]	Total kBtu/h [kW]	147.9 [43.3]	141.9 [41.6]	137.3 [40.2]	138.6 [40.6]	133.0 [39.0]	128.6 [37.7]	130.9 [38.4]	125.6 [36.8]	121.4 [35.6]
		Sens kBtu/h [kW]	88.4 [25.9]	79.8 [23.4]	73.0 [21.4]	108.2 [31.7]	97.6 [28.6]	89.4 [26.2]	129.5 [38.0]	116.9 [34.3]	107.0 [31.4]
		Power	9.7	9.5	9.3	9.6	9.4	9.2	9.5	9.3	9.1
	85°F [29.4°C]	Total kBtu/h [kW]	144.6 [42.4]	138.8 [40.7]	134.2 [39.3]	135.3 [39.7]	129.8 [38.0]	125.6 [36.8]	127.6 [37.4]	122.4 [35.9]	118.4 [34.7]
		Sens kBtu/h [kW]	86.9 [25.5]	78.5 [23.0]	71.8 [21.0]	106.7 [31.3]	96.3 [28.2]	88.2 [25.8]	127.6 [37.4]	115.6 [33.9]	105.8 [31.0]
		Power	10.1	9.9	9.7	10.0	9.8	9.6	9.8	9.6	9.5
	90°F [32.2°C]	Total kBtu/h [kW]	141.1 [41.4]	135.4 [39.7]	130.9 [38.4]	131.8 [38.6]	126.5 [37.1]	122.3 [35.8]	124.1 [36.4]	119.1 [34.9]	115.1 [33.7]
		Sens kBtu/h [kW]	85.4 [25.0]	77.0 [22.6]	70.5 [20.7]	105.1 [30.8]	94.9 [27.8]	86.9 [25.5]	124.1 [36.4]	114.2 [33.5]	104.5 [30.6]
		Power	10.4	10.2	10.1	10.4	10.1	10.0	10.2	10.0	9.8
	95°F [35°C]	Total kBtu/h [kW]	137.4 [40.3]	131.8 [38.6]	127.5 [37.4]	128.1 [37.5]	122.9 [36.0]	118.8 [34.8]	120.3 [35.3]	115.5 [33.9]	111.7 [32.7]
		Sens kBtu/h [kW]	83.6 [24.5]	75.5 [22.1]	69.1 [20.3]	103.4 [30.3]	93.3 [27.3]	85.4 [25.0]	120.3 [35.3]	112.6 [33.0]	103.1 [30.2]
		Power	10.8	10.6	10.4	10.7	10.5	10.3	10.6	10.4	10.2
	100°F [37.8°C]	Total kBtu/h [kW]	133.4 [39.1]	128.1 [37.5]	123.8 [36.3]	124.1 [36.4]	119.1 [34.9]	115.2 [33.8]	116.4 [34.1]	111.7 [32.7]	108.0 [31.7]
		Sens kBtu/h [kW]	81.7 [23.9]	73.8 [21.6]	67.5 [19.8]	101.5 [29.7]	91.6 [26.8]	83.9 [24.6]	116.4 [34.1]	110.9 [32.5]	101.5 [29.7]
		Power	11.2	11.0	10.8	11.1	10.9	10.7	11.0	10.8	10.6
	105°F [40.6°C]	Total kBtu/h [kW]	129.3 [37.9]	124.1 [36.4]	120.0 [35.2]	120.0 [35.2]	115.1 [33.7]	111.3 [32.6]	112.3 [32.9]	107.7 [31.6]	104.2 [30.5]
		Sens kBtu/h [kW]	79.7 [23.4]	72.0 [21.1]	65.9 [19.3]	99.5 [29.2]	89.8 [26.3]	82.2 [24.1]	112.3 [32.9]	107.7 [31.6]	99.8 [29.2]
		Power	11.6	11.3	11.2	11.5	11.3	11.1	11.3	11.1	10.9
	110°F [43.3°C]	Total kBtu/h [kW]	124.9 [36.6]	119.9 [35.1]	115.9 [34.0]	115.6 [33.9]	111.0 [32.5]	107.3 [31.4]	107.9 [31.6]	103.5 [30.3]	100.1 [29.3]
		Sens kBtu/h [kW]	77.6 [22.7]	70.0 [20.5]	64.1 [18.8]	97.3 [28.5]	87.9 [25.8]	80.4 [23.6]	107.9 [31.6]	103.5 [30.3]	98.1 [28.8]
		Power	12.0	11.7	11.5	11.9	11.6	11.4	11.7	11.5	11.3
	115°F [46.1°C]	Total kBtu/h [kW]	120.4 [35.3]	115.5 [33.9]	111.7 [32.7]	111.1 [32.6]	106.6 [31.2]	103.1 [30.2]	103.3 [30.3]	99.2 [29.1]	95.9 [28.1]
		Sens kBtu/h [kW]	75.2 [22.0]	67.9 [19.9]	62.2 [18.2]	95.0 [27.8]	85.8 [25.1]	78.5 [23.0]	103.3 [30.3]	99.2 [29.1]	95.9 [28.1]
		Power	12.3	12.1	11.9	12.2	12.0	11.8	12.1	11.9	11.7
	120°F [48.9°C]	Total kBtu/h [kW]	115.6 [33.9]	110.9 [32.5]	107.3 [31.4]	106.3 [31.2]	102.0 [29.9]	98.6 [28.9]	98.5 [28.9]	94.6 [27.7]	91.5 [26.8]
		Sens kBtu/h [kW]	72.8 [21.3]	65.7 [19.3]	60.1 [17.6]	92.6 [27.1]	83.5 [24.5]	76.5 [22.4]	98.5 [28.9]	94.6 [27.7]	91.5 [26.8]
		Power	12.7	12.5	12.3	12.6	12.4	12.2	12.5	12.2	12.0
	125°F [51.7°C]	Total kBtu/h [kW]	110.6 [32.4]	106.1 [31.1]	102.6 [30.1]	101.3 [29.7]	97.2 [28.5]	94.0 [27.5]	93.5 [27.4]	89.8 [26.3]	86.8 [25.4]
		Sens kBtu/h [kW]	70.2 [20.6]	63.3 [18.6]	58.0 [17.0]	90.0 [26.4]	81.2 [23.8]	74.3 [21.8]	93.5 [27.4]	89.8 [26.3]	86.8 [25.4]
		Power	13.1	12.8	12.6	13.0	12.7	12.5	12.9	12.6	12.4

DR —Depression ratio

dbE —Entering air dry bulb

wbE—Entering air wet bulb

Total —Total capacity x 1000 Btu/h

Sens —Sensible capacity x 1000 Btu/h

Power —kW input

NOTES: ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding $[1.10 \times \text{CFM} \times (1 - \text{DR}) \times (\text{dbE} - 80)]$.

[] Designates Metric Conversions

COOLING PERFORMANCE DATA—RGEDYB150

RGEDYB150 - 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]			6000 [2832]	4025 [1900]	4000 [1888]	6000 [2832]	4025 [1900]	4000 [1888]	6000 [2832]	4025 [1900]	4000 [1888]
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]	193.6 [56.7]	177.8 [52.1]	177.6 [52.1]	181.3 [53.1]	166.5 [48.8]	166.3 [48.7]	170.3 [49.9]	156.3 [45.8]	156.1 [45.8]
		Sens kBtu/h [kW]	116.5 [34.1]	94.8 [27.8]	94.5 [27.7]	136.8 [40.1]	111.3 [32.6]	111.0 [32.5]	155.5 [45.6]	126.6 [37.1]	126.2 [37.0]
		Power	7.5	7.2	7.2	7.8	7.5	7.5	7.3	7.0	7.0
	80°F [26.7°C]	Total kBtu/h [kW]	189.3 [55.5]	173.8 [50.9]	173.6 [50.9]	177.0 [51.9]	162.5 [47.6]	162.3 [47.6]	165.9 [48.6]	152.3 [44.6]	152.2 [44.6]
		Sens kBtu/h [kW]	114.1 [33.4]	92.9 [27.2]	92.6 [27.1]	134.4 [39.4]	109.4 [32.1]	109.0 [31.9]	153.2 [44.9]	124.6 [36.5]	124.3 [36.4]
		Power	7.9	7.6	7.6	8.3	7.9	7.9	7.7	7.4	7.4
	85°F [29.4°C]	Total kBtu/h [kW]	184.9 [54.2]	169.8 [49.8]	169.6 [49.7]	172.6 [50.6]	158.5 [46.5]	158.3 [46.4]	161.5 [47.3]	148.3 [43.5]	148.2 [43.4]
		Sens kBtu/h [kW]	111.6 [32.7]	90.8 [26.6]	90.6 [26.6]	131.9 [38.7]	107.3 [31.4]	107.0 [31.4]	150.7 [44.2]	122.6 [35.9]	122.3 [35.8]
		Power	8.4	8.0	8.0	8.7	8.3	8.3	8.2	7.8	7.8
	90°F [32.2°C]	Total kBtu/h [kW]	180.5 [52.9]	165.7 [48.6]	165.5 [48.5]	168.1 [49.3]	154.4 [45.3]	154.2 [45.2]	157.1 [46.0]	144.2 [42.3]	144.1 [42.2]
Sens kBtu/h [kW]		109.1 [32.0]	88.7 [26.0]	88.5 [25.9]	129.3 [37.9]	105.2 [30.8]	104.9 [30.7]	148.1 [43.4]	120.5 [35.3]	120.2 [35.2]	
Power		8.8	8.4	8.4	9.1	8.8	8.8	8.6	8.2	8.2	
95°F [35°C]	Total kBtu/h [kW]	175.9 [51.6]	161.5 [47.3]	161.4 [47.3]	163.6 [47.9]	150.2 [44.0]	150.0 [44.0]	152.6 [44.7]	140.1 [41.1]	139.9 [41.0]	
	Sens kBtu/h [kW]	106.4 [31.2]	86.6 [25.4]	86.3 [25.3]	126.6 [37.1]	103.0 [30.2]	102.8 [30.1]	145.4 [42.6]	118.3 [34.7]	118.0 [34.6]	
	Power	9.2	8.8	8.8	9.6	9.2	9.2	9.0	8.7	8.7	
100°F [37.8°C]	Total kBtu/h [kW]	171.3 [50.2]	157.3 [46.1]	157.1 [46]	159.0 [46.6]	146.0 [42.8]	145.8 [42.7]	148.0 [43.4]	135.8 [39.8]	135.7 [39.8]	
	Sens kBtu/h [kW]	103.6 [30.4]	84.3 [24.7]	84.0 [24.6]	123.8 [36.3]	100.8 [29.5]	100.5 [29.5]	142.6 [41.8]	116.0 [34.0]	115.7 [33.9]	
	Power	9.7	9.3	9.3	10.0	9.6	9.6	9.5	9.1	9.1	
105°F [40.6°C]	Total kBtu/h [kW]	166.7 [48.9]	153.0 [44.8]	152.9 [44.8]	154.4 [45.3]	141.7 [41.5]	141.6 [41.5]	143.3 [42.0]	131.6 [38.6]	131.4 [38.5]	
	Sens kBtu/h [kW]	100.7 [29.5]	81.9 [24.0]	81.7 [23.9]	120.9 [35.4]	98.4 [28.8]	98.1 [28.8]	139.7 [40.9]	113.7 [33.3]	113.3 [33.2]	
	Power	10.1	9.7	9.7	10.4	10.0	10.0	9.9	9.5	9.5	
110°F [43.3°C]	Total kBtu/h [kW]	161.9 [47.5]	148.7 [43.6]	148.5 [43.5]	149.6 [43.8]	137.4 [40.3]	137.2 [40.2]	138.6 [40.6]	127.2 [37.3]	127.1 [37.3]	
	Sens kBtu/h [kW]	97.6 [28.6]	79.4 [23.3]	79.2 [23.2]	117.9 [34.6]	95.9 [28.1]	95.7 [28.0]	136.7 [40.1]	111.2 [32.6]	110.9 [32.5]	
	Power	10.5	10.1	10.1	10.9	10.4	10.4	10.3	9.9	9.9	
115°F [46.1°C]	Total kBtu/h [kW]	157.1 [46.0]	144.3 [42.3]	144.1 [42.2]	144.8 [42.4]	132.9 [39.0]	132.8 [38.9]	133.8 [39.2]	122.8 [36.0]	122.7 [36.0]	
	Sens kBtu/h [kW]	94.5 [27.7]	76.9 [22.5]	76.7 [22.5]	114.8 [33.6]	93.4 [27.4]	93.1 [27.3]	133.5 [39.1]	108.7 [31.9]	108.3 [31.7]	
	Power	11.0	10.5	10.5	11.3	10.8	10.8	10.8	10.3	10.3	
120°F [48.9°C]	Total kBtu/h [kW]	152.3 [44.6]	139.8 [41.0]	139.6 [40.9]	139.9 [41.0]	128.5 [37.7]	128.3 [37.6]	128.9 [37.8]	118.3 [34.7]	118.2 [34.6]	
	Sens kBtu/h [kW]	91.2 [26.7]	74.2 [21.7]	74.0 [21.7]	111.5 [32.7]	90.7 [26.6]	90.5 [26.5]	128.9 [37.8]	106.0 [31.1]	105.7 [31.0]	
	Power	11.4	10.9	10.9	11.7	11.3	11.2	11.2	10.7	10.7	
125°F [51.7°C]	Total kBtu/h [kW]	147.3 [43.2]	135.2 [39.6]	135.1 [39.6]	135.0 [39.6]	123.9 [36.3]	123.8 [36.3]	123.9 [36.3]	113.8 [33.4]	113.7 [33.3]	
	Sens kBtu/h [kW]	87.9 [25.8]	71.5 [21.0]	71.3 [20.9]	108.2 [31.7]	88.0 [25.8]	87.7 [25.7]	123.9 [36.3]	103.3 [30.3]	103.0 [30.2]	
	Power	11.8	11.3	11.3	12.2	11.7	11.7	11.6	11.2	11.2	

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

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

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

[] Designates Metric Conversions

GROSS SYSTEMS PERFORMANCE DATA (LOW HUMIDIDRY MODE)—RGEDYB090

ENTERING INDOOR AIR @ 75°F [23.9°C] dbE ①										
wbE		65.3°F [18.5°C]			64°F [17.8°C]			62.5°F [16.9°C]		
CFM [L/s]		2190 [1034]	1825 [861]	1460 [689]	2190 [1034]	1825 [861]	1460 [689]	2190 [1034]	1825 [861]	1460 [689]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	60 [15.6]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	28.8 [8.4] 3.2 [0.9] 4.5	27.8 [8.1] 2.9 [0.8] 4.4	26.8 [7.8] 2.6 [0.8] 4.4	25.4 [7.4] 3.8 [1.1] 4.5	24.5 [7.2] 3.5 [1.0] 4.4	23.6 [6.9] 3.1 [0.9] 4.4	24.6 [7.2] 7.3 [2.1] 4.5	23.8 [7.0] 6.7 [2.0] 4.4
	65 [18.3]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	28.6 [8.4] 3.1 [0.9] 4.5	27.6 [8.1] 2.9 [0.8] 4.4	26.6 [7.8] 2.6 [0.8] 4.4	25.2 [7.4] 3.8 [1.1] 4.5	24.3 [7.1] 3.4 [1.0] 4.5	23.4 [6.9] 3.1 [0.9] 4.4	24.4 [7.2] 7.3 [2.1] 4.5	23.6 [6.9] 6.7 [2.0] 4.4
	70 [21.1]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	28.3 [8.3] 3.0 [0.9] 4.5	27.3 [8.0] 2.7 [0.8] 4.5	26.3 [7.7] 2.5 [0.7] 4.4	24.8 [7.3] 3.6 [1.1] 4.6	24.0 [7.0] 3.3 [1.0] 4.5	23.1 [6.8] 3.0 [0.9] 4.4	24.1 [7.1] 7.1 [2.1] 4.5	23.3 [6.8] 6.5 [1.9] 4.5
	75 [23.9]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	27.8 [8.2] 2.7 [0.8] 4.6	26.8 [7.9] 2.4 [0.7] 4.5	25.9 [7.6] 2.2 [0.6] 4.4	24.4 [7.1] 3.3 [1.0] 4.6	23.5 [6.9] 3.0 [0.9] 4.5	22.7 [6.6] 2.7 [0.8] 4.4	23.6 [6.9] 6.9 [2.0] 4.6	22.8 [6.7] 6.3 [1.8] 4.5
	80 [26.7]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	27.2 [8.0] 2.3 [0.7] 4.6	26.3 [7.7] 2.1 [0.6] 4.5	25.3 [7.4] 1.9 [0.5] 4.4	23.8 [7.0] 2.9 [0.8] 4.6	23.0 [6.7] 2.6 [0.8] 4.5	22.1 [6.5] 2.4 [0.7] 4.5	23.1 [6.8] 6.4 [1.9] 4.6	22.3 [6.5] 5.9 [1.7] 4.5
	85 [29.4]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	26.5 [7.8] 1.7 [0.5] 4.6	25.6 [7.5] 1.6 [0.5] 4.5	24.6 [7.2] 1.4 [0.4] 4.5	23.1 [6.8] 2.3 [0.7] 4.7	22.3 [6.5] 2.1 [0.6] 4.6	21.5 [6.3] 1.9 [0.6] 4.5	22.3 [6.5] 5.9 [1.7] 4.6	21.6 [6.3] 5.4 [1.6] 4.6
	90 [32.2]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	25.7 [7.5] 1.0 [0.3] 4.7	24.8 [7.3] 0.9 [0.3] 4.6	23.9 [7.0] 0.8 [0.2] 4.5	22.2 [6.5] 1.6 [0.5] 4.7	21.5 [6.3] 1.5 [0.4] 4.6	20.7 [6.1] 1.4 [0.4] 4.5	21.5 [6.3] 5.2 [1.5] 4.7	20.7 [6.1] 4.8 [1.4] 4.6

GROSS SYSTEMS PERFORMANCE DATA (HIGH HUMIDIDRY MODE)—RGEDYB090

ENTERING INDOOR AIR @ 75°F [23.9°C] dbE ①										
wbE		65.3°F [18.5°C]			64°F [17.8°C]			62.5°F [16.9°C]		
CFM [L/s]		3600 [1699]	3150 [1487]	2400 [1133]	3600 [1699]	3150 [1487]	2400 [1133]	3600 [1699]	3150 [1487]	2400 [1133]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	60 [15.6]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	48.5 [14.2] 4.1 [1.2] 7.0	47.3 [13.9] 3.8 [1.1] 6.9	45.3 [13.3] 3.4 [1.0] 6.7	32.0 [9.4] 1.9 [0.5] 6.9	31.2 [9.1] 1.8 [0.5] 6.8	29.9 [8.8] 1.6 [0.5] 6.7	31.1 [9.1] 7.6 [2.2] 7.0	30.3 [8.9] 7.2 [2.1] 6.9
	65 [18.3]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	50.8 [14.9] 6.9 [2.0] 6.9	49.6 [14.5] 6.5 [1.9] 6.8	47.4 [13.9] 5.7 [1.7] 6.6	34.3 [10.1] 4.6 [1.4] 6.8	33.5 [9.8] 4.4 [1.3] 6.7	32.0 [9.4] 3.9 [1.1] 6.6	33.4 [9.8] 10.4 [3.1] 6.9	32.5 [9.5] 9.8 [2.9] 6.8
	70 [21.1]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	51.6 [15.1] 8.0 [2.4] 6.9	50.3 [14.7] 7.5 [2.2] 6.8	48.1 [14.1] 6.7 [2.0] 6.7	35.1 [10.3] 5.8 [1.7] 6.8	34.2 [10.0] 5.4 [1.6] 6.8	32.7 [9.6] 4.8 [1.4] 6.6	34.1 [10.0] 11.6 [3.4] 6.9	33.3 [9.8] 10.9 [3.2] 6.8
	75 [23.9]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	50.8 [14.9] 7.6 [2.2] 7.0	49.6 [14.5] 7.1 [2.1] 6.9	47.4 [13.9] 6.3 [1.8] 6.8	34.3 [10.1] 5.3 [1.6] 7.0	33.5 [9.8] 5.0 [1.5] 6.9	32.0 [9.4] 4.4 [1.3] 6.7	33.4 [9.8] 11.1 [3.3] 7.0	32.5 [9.5] 10.4 [3.1] 6.9
	80 [26.7]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	48.5 [14.2] 5.5 [1.6] 7.2	47.3 [13.9] 5.1 [1.5] 7.1	45.3 [13.3] 4.6 [1.3] 7.0	32.0 [9.4] 3.2 [0.9] 7.2	31.2 [9.1] 3.0 [0.9] 7.1	29.9 [8.7] 2.7 [0.8] 6.9	31.1 [9.1] 9.0 [2.6] 7.2	30.3 [8.9] 8.5 [2.5] 7.1
	85 [29.4]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	44.7 [13.1] 1.8 [0.5] 7.5	43.6 [12.8] 1.6 [0.5] 7.4	41.7 [12.2] 1.5 [0.4] 7.3	28.2 [8.3] -0.5 [-0.1] 7.5	27.5 [8.0] -0.5 [-0.1] 7.4	26.3 [7.7] -0.4 [-0.1] 7.2	27.2 [8.0] 5.3 [1.6] 7.5	26.5 [7.8] 5.0 [1.5] 7.4
	90 [32.2]	Total kBtu/h [kW] Sens kBtu/h [kW] Power	39.3 [11.5] -3.6 [-1.1] 7.9	38.3 [11.2] -3.4 [-1.0] 7.8	36.6 [10.7] -3.0 [-0.9] 7.7	22.8 [6.7] -5.8 [-1.7] 7.9	22.2 [6.5] -5.5 [-1.6] 7.8	21.2 [6.2] -4.9 [-1.4] 7.6	21.8 [6.4] 0.0 [0.0] 7.9	21.3 [6.2] 0.0 [0.0] 7.8

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

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

NOTES: ① When the entering air dry bulb is other than 75°F [23.9°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

GROSS SYSTEMS PERFORMANCE DATA (LOW HUMIDIDRY MODE) — RGEDYB102

ENTERING INDOOR AIR @ 75°F [23.9°C] dbE ①											
wbE			65.3°F [18.5°C]			64°F [17.8°C]			62.5°F [16.9°C]		
CFM [L/s]			2420 [1142]	2015 [951]	1610 [760]	2420 [1142]	2015 [951]	1610 [760]	2420 [1142]	2015 [951]	1610 [760]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	60 [15.6]	Total kBtu/h [kW]	38.5 [11.3]	37.1 [10.9]	35.8 [10.5]	32.6 [9.5]	31.4 [9.2]	30.3 [8.9]	28.3 [8.3]	27.3 [8.0]	26.3 [7.7]
		Sens kBtu/h [kW]	5.2 [1.5]	4.7 [1.4]	4.3 [1.3]	5.1 [1.5]	4.6 [1.4]	4.2 [1.2]	6.9 [2.0]	6.3 [1.8]	5.7 [1.7]
		Power	5.3	5.2	5.1	5.1	5.1	5.0	5.0	4.9	4.8
	65 [18.3]	Total kBtu/h [kW]	37.9 [11.1]	36.5 [10.7]	35.2 [10.3]	31.9 [9.3]	30.8 [9.0]	29.7 [8.7]	27.6 [8.1]	26.7 [7.8]	25.7 [7.5]
		Sens kBtu/h [kW]	4.2 [1.2]	3.8 [1.1]	3.5 [1.0]	4.1 [1.2]	3.7 [1.1]	3.4 [1.0]	5.9 [1.7]	5.4 [1.6]	4.9 [1.4]
		Power	5.4	5.3	5.2	5.2	5.1	5.0	5.0	5.0	4.9
	70 [21.1]	Total kBtu/h [kW]	37.2 [10.9]	35.8 [10.5]	34.5 [10.1]	31.2 [9.1]	30.1 [8.8]	29.0 [8.5]	26.9 [7.9]	26.0 [7.6]	25.0 [7.3]
		Sens kBtu/h [kW]	3.4 [1.0]	3.1 [0.9]	2.8 [0.8]	3.3 [1.0]	3.0 [0.9]	2.7 [0.8]	5.1 [1.5]	4.7 [1.4]	4.2 [1.2]
		Power	5.5	5.4	5.3	5.3	5.2	5.1	5.1	5.0	4.9
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total kBtu/h [kW]	36.4 [10.7]	35.1 [10.3]	33.8 [9.9]	30.5 [8.9]	29.4 [8.6]	28.3 [8.3]	26.2 [7.7]	25.3 [7.4]	24.4 [7.1]
		Sens kBtu/h [kW]	2.9 [0.8]	2.6 [0.8]	2.4 [0.7]	2.7 [0.8]	2.5 [0.7]	2.3 [0.7]	4.5 [1.3]	4.2 [1.2]	3.8 [1.1]
		Power	5.5	5.4	5.3	5.3	5.3	5.2	5.2	5.1	5.0
	80 [26.7]	Total kBtu/h [kW]	35.6 [10.4]	34.4 [10.1]	33.1 [9.7]	29.7 [8.7]	28.6 [8.4]	27.6 [8.1]	25.4 [7.4]	24.5 [7.2]	23.6 [6.9]
		Sens kBtu/h [kW]	2.5 [0.7]	2.3 [0.7]	2.1 [0.6]	2.4 [0.7]	2.2 [0.6]	2.0 [0.6]	4.2 [1.2]	3.8 [1.1]	3.5 [1.0]
		Power	5.5	5.4	5.4	5.4	5.3	5.2	5.2	5.1	5.0
	85 [29.4]	Total kBtu/h [kW]	34.8 [10.2]	33.5 [9.8]	32.3 [9.5]	28.8 [8.4]	27.8 [8.1]	26.8 [7.9]	24.6 [7.2]	23.7 [6.9]	22.8 [6.7]
		Sens kBtu/h [kW]	2.3 [0.7]	2.1 [0.6]	1.9 [0.6]	2.2 [0.6]	2.0 [0.6]	1.8 [0.5]	4.0 [1.2]	3.7 [1.1]	3.3 [1.0]
		Power	5.6	5.5	5.4	5.4	5.3	5.2	5.2	5.1	5.0
OUTDOOR DRY BULB TEMPERATURE °F [°C]	90 [32.2]	Total kBtu/h [kW]	33.9 [9.9]	32.7 [9.6]	31.5 [9.2]	27.9 [8.2]	27.0 [7.9]	26.0 [7.6]	23.7 [6.9]	22.8 [6.7]	22.0 [6.4]
		Sens kBtu/h [kW]	2.3 [0.7]	2.1 [0.6]	1.9 [0.6]	2.2 [0.6]	2.0 [0.6]	1.8 [0.5]	4.0 [1.2]	3.7 [1.1]	3.3 [1.0]
		Power	5.6	5.5	5.4	5.4	5.3	5.2	5.2	5.1	5.1

GROSS SYSTEMS PERFORMANCE DATA (HIGH HUMIDIDRY MODE) — RGEDYB102

ENTERING INDOOR AIR @ 75°F [23.9°C] dbE ①											
wbE			65.3°F [18.5°C]			64°F [17.8°C]			62.5°F [16.9°C]		
CFM [L/s]			4080 [1926]	3375 [1593]	2720 [1284]	4080 [1926]	3375 [1593]	2720 [1284]	4080 [1926]	3375 [1593]	2720 [1284]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	60 [15.6]	Total kBtu/h [kW]	69.8 [20.5]	67.3 [19.7]	64.9 [19.0]	50.2 [14.7]	48.3 [14.2]	46.6 [13.7]	50.1 [14.7]	48.2 [14.1]	46.5 [13.6]
		Sens kBtu/h [kW]	17.7 [5.2]	16.1 [4.7]	14.7 [4.3]	14.6 [4.3]	13.3 [3.9]	12.1 [3.5]	22.7 [6.6]	20.6 [6.0]	18.8 [5.5]
		Power	7.1	6.9	6.8	7.0	6.9	6.8	7.1	6.9	6.8
	65 [18.3]	Total kBtu/h [kW]	64.5 [18.9]	62.1 [18.2]	60.0 [17.6]	44.9 [13.1]	43.2 [12.7]	41.7 [12.2]	44.8 [13.1]	43.1 [12.6]	41.6 [12.2]
		Sens kBtu/h [kW]	12.5 [3.7]	11.4 [3.3]	10.3 [3.0]	9.4 [2.8]	8.6 [2.5]	7.8 [2.3]	17.4 [5.1]	15.9 [4.7]	14.5 [4.2]
		Power	7.1	7.0	6.9	7.1	6.9	6.8	7.1	7.0	6.9
	70 [21.1]	Total kBtu/h [kW]	60.8 [17.8]	58.5 [17.2]	56.5 [16.5]	41.1 [12.1]	39.6 [11.6]	38.2 [11.2]	41.0 [12.0]	39.5 [11.6]	38.1 [11.2]
		Sens kBtu/h [kW]	9.0 [2.6]	8.2 [2.4]	7.4 [2.2]	5.9 [1.7]	5.3 [1.6]	4.9 [1.4]	13.9 [4.1]	12.7 [3.7]	11.5 [3.4]
		Power	7.3	7.1	7.0	7.2	7.1	7.0	7.3	7.2	7.0
OUTDOOR DRY BULB TEMPERATURE °F [°C]	75 [23.9]	Total kBtu/h [kW]	58.6 [17.2]	56.4 [16.5]	54.5 [16.0]	39.0 [11.4]	37.5 [11.0]	36.2 [10.6]	38.9 [11.4]	37.4 [11.0]	36.1 [10.6]
		Sens kBtu/h [kW]	7.1 [2.1]	6.5 [1.9]	5.9 [1.7]	4.0 [1.2]	3.7 [1.1]	3.3 [1.0]	12.1 [3.5]	11.0 [3.2]	10.0 [2.9]
		Power	7.5	7.4	7.3	7.5	7.4	7.2	7.6	7.4	7.3
	80 [26.7]	Total kBtu/h [kW]	58.0 [17.0]	55.9 [16.4]	53.9 [15.8]	38.4 [11.2]	37.0 [10.8]	35.7 [10.4]	38.3 [11.2]	36.9 [10.8]	35.6 [10.4]
		Sens kBtu/h [kW]	7.0 [2.1]	6.4 [1.9]	5.8 [1.7]	3.9 [1.1]	3.6 [1.0]	3.2 [0.9]	12.0 [3.5]	10.9 [3.2]	9.9 [2.9]
		Power	7.9	7.8	7.6	7.9	7.7	7.6	7.9	7.8	7.6
	85 [29.4]	Total kBtu/h [kW]	59.0 [17.3]	56.8 [16.6]	54.8 [16.1]	39.3 [11.5]	37.9 [11.1]	36.6 [10.7]	39.2 [11.5]	37.8 [11.1]	36.5 [10.7]
		Sens kBtu/h [kW]	8.6 [2.5]	7.8 [2.3]	7.1 [2.1]	5.5 [1.6]	5.0 [1.5]	4.5 [1.3]	13.5 [4.0]	12.3 [3.6]	11.2 [3.3]
		Power	8.4	8.2	8.1	8.3	8.2	8.0	8.4	8.2	8.1
OUTDOOR DRY BULB TEMPERATURE °F [°C]	90 [32.2]	Total kBtu/h [kW]	61.5 [18.0]	59.2 [17.4]	57.2 [16.7]	41.9 [12.3]	40.3 [11.8]	38.9 [11.4]	41.8 [12.2]	40.2 [11.8]	38.8 [11.4]
		Sens kBtu/h [kW]	11.8 [3.5]	10.8 [3.2]	9.8 [2.9]	8.7 [2.6]	7.9 [2.3]	7.2 [2.1]	16.8 [4.9]	15.3 [4.5]	13.9 [4.1]
		Power	8.9	8.8	8.6	8.9	8.7	8.6	8.9	8.8	8.6

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

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

NOTES: ① When the entering air dry bulb is other than 75°F [23.9°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

GROSS SYSTEMS PERFORMANCE DATA (LOW HUMIDIDRY MODE)—RGEDYB120

ENTERING INDOOR AIR @ 75°F [23.9°C] dbE ①											
wbE			65.3°F [18.5°C]			64°F [17.8°C]			62.5°F [16.9°C]		
CFM [L/s]			2880 [1359]	2400 [1133]	1920 [906]	2880 [1359]	2400 [1133]	1920 [906]	2880 [1359]	2400 [1133]	1920 [906]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	60 [15.6]	Total kBtu/h [kW]	39.3 [11.5]	37.9 [11.1]	36.6 [10.7]	34.0 [10.0]	32.8 [9.6]	31.6 [9.3]	29.6 [8.7]	28.5 [8.4]	27.5 [8.1]
		Sens kBtu/h [kW]	3.9 [1.1]	3.6 [1.0]	3.2 [0.9]	3.7 [1.1]	3.4 [1.0]	3.0 [0.9]	4.9 [1.4]	4.5 [1.3]	4.1 [1.2]
		Power	4.8	4.7	4.7	4.8	4.8	4.7	4.9	4.8	4.8
	65 [18.3]	Total kBtu/h [kW]	38.2 [11.2]	36.9 [10.8]	35.5 [10.4]	32.9 [9.6]	31.8 [9.3]	30.6 [9.0]	28.4 [8.3]	27.4 [8.0]	26.4 [7.7]
		Sens kBtu/h [kW]	2.5 [0.7]	2.3 [0.7]	2.1 [0.6]	2.3 [0.7]	2.1 [0.6]	1.9 [0.6]	3.5 [1.0]	3.2 [0.9]	2.9 [0.8]
		Power	4.9	4.8	4.7	4.9	4.8	4.7	5	4.9	4.8
	70 [21.1]	Total kBtu/h [kW]	37.5 [11.0]	36.2 [10.6]	34.8 [10.2]	32.2 [9.4]	31.1 [9.1]	29.9 [8.8]	27.7 [8.1]	26.7 [7.8]	25.8 [7.6]
Sens kBtu/h [kW]		1.7 [0.5]	1.6 [0.5]	1.4 [0.4]	1.5 [0.4]	1.3 [0.4]	1.2 [0.4]	2.7 [0.8]	2.5 [0.7]	2.2 [0.7]	
Power		4.9	4.8	4.8	4.9	4.9	4.8	5.0	4.9	4.9	
75 [23.9]	Total kBtu/h [kW]	37.2 [10.9]	35.8 [10.5]	34.5 [10.1]	31.9 [9.3]	30.8 [9.0]	29.6 [8.7]	27.4 [8.0]	26.4 [7.7]	25.5 [7.5]	
	Sens kBtu/h [kW]	1.5 [0.4]	1.4 [0.4]	1.3 [0.4]	1.3 [0.4]	1.2 [0.3]	1.1 [0.3]	2.5 [0.7]	2.3 [0.7]	2.1 [0.6]	
	Power	5.0	4.9	4.8	5.0	4.9	4.9	5.1	5.0	4.9	
80 [26.7]	Total kBtu/h [kW]	37.2 [10.9]	35.9 [10.5]	34.6 [10.1]	31.9 [9.4]	30.8 [9.0]	29.7 [8.7]	27.5 [8.0]	26.5 [7.8]	25.5 [7.5]	
	Sens kBtu/h [kW]	2.0 [0.6]	1.8 [0.5]	1.6 [0.5]	1.8 [0.5]	1.6 [0.5]	1.5 [0.4]	3.0 [0.9]	2.7 [0.8]	2.5 [0.7]	
	Power	5.1	5.0	4.9	5.1	5.0	4.9	5.2	5.1	5.0	
85 [29.4]	Total kBtu/h [kW]	37.7 [11.0]	36.4 [10.7]	35.0 [10.3]	32.4 [9.5]	31.3 [9.2]	30.1 [8.8]	27.9 [8.2]	26.9 [7.9]	26.0 [7.6]	
	Sens kBtu/h [kW]	3.0 [0.9]	2.8 [0.8]	2.5 [0.7]	2.8 [0.8]	2.6 [0.8]	2.3 [0.7]	4.0 [1.2]	3.7 [1.1]	3.4 [1.0]	
	Power	5.2	5.1	5.0	5.2	5.2	5.1	5.3	5.2	5.1	
90 [32.2]	Total kBtu/h [kW]	38.6 [11.3]	37.2 [10.9]	35.8 [10.5]	33.3 [9.7]	32.1 [9.4]	30.9 [9.1]	28.8 [8.4]	27.8 [8.1]	26.8 [7.8]	
	Sens kBtu/h [kW]	4.7 [1.4]	4.3 [1.3]	3.9 [1.2]	4.5 [1.3]	4.1 [1.2]	3.7 [1.1]	5.7 [1.7]	5.2 [1.5]	4.8 [1.4]	
	Power	5.4	5.3	5.2	5.4	5.3	5.2	5.5	5.4	5.3	

GROSS SYSTEMS PERFORMANCE DATA (HIGH HUMIDIDRY MODE)—RGEDYB120

ENTERING INDOOR AIR @ 75°F [23.9°C] dbE ①											
wbE			65.3°F [18.5°C]			64°F [17.8°C]			62.5°F [16.9°C]		
CFM [L/s]			4800 [2265]	3940 [1859]	3200 [1510]	4800 [2265]	3940 [1859]	3200 [1510]	4800 [2265]	3940 [1859]	3200 [1510]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	60 [15.6]	Total kBtu/h [kW]	91.7 [26.9]	88.2 [25.8]	85.2 [25.0]	63.4 [18.6]	61.0 [17.9]	58.9 [17.3]	72.9 [21.4]	70.1 [20.5]	67.7 [19.8]
		Sens kBtu/h [kW]	21.7 [6.4]	19.7 [5.8]	18.0 [5.3]	15.5 [4.5]	14.0 [4.1]	12.8 [3.8]	26.5 [7.8]	24.0 [7.0]	21.9 [6.4]
	Power	7.7	7.6	7.5	7.6	7.5	7.3	7.7	7.6	7.4	
	65 [18.3]	Total kBtu/h [kW]	77.4 [22.7]	74.4 [21.8]	71.9 [21.1]	49.1 [14.4]	47.2 [13.8]	45.6 [13.4]	58.6 [17.2]	56.3 [16.5]	54.4 [15.9]
		Sens kBtu/h [kW]	15.2 [4.5]	13.8 [4.0]	12.6 [3.7]	8.9 [2.6]	8.1 [2.4]	7.4 [2.2]	19.9 [5.8]	18.1 [5.3]	16.5 [4.8]
	Power	7.7	7.6	7.5	7.6	7.4	7.3	7.7	7.5	7.4	
	70 [21.1]	Total kBtu/h [kW]	68.0 [19.9]	65.4 [19.2]	63.1 [18.5]	39.6 [11.6]	38.1 [11.2]	36.8 [10.8]	49.1 [14.4]	47.3 [13.9]	45.7 [13.4]
Sens kBtu/h [kW]		11.2 [3.3]	10.2 [3.0]	9.3 [2.7]	5.0 [1.5]	4.5 [1.3]	4.1 [1.2]	16.0 [4.7]	14.5 [4.2]	13.2 [3.9]	
Power	7.9	7.8	7.6	7.8	7.6	7.5	7.9	7.7	7.6		
75 [23.9]	Total kBtu/h [kW]	63.4 [18.6]	61.0 [17.9]	58.9 [17.3]	35.1 [10.3]	33.7 [9.9]	32.6 [9.5]	44.6 [13.1]	42.9 [12.6]	41.4 [12.1]	
	Sens kBtu/h [kW]	9.8 [2.9]	8.9 [2.6]	8.1 [2.4]	3.6 [1.0]	3.2 [0.9]	2.9 [0.9]	14.5 [4.3]	13.2 [3.9]	12.0 [3.5]	
Power	8.3	8.1	8.0	8.1	8.0	7.9	8.2	8.1	8.0		
80 [26.7]	Total kBtu/h [kW]	63.7 [18.7]	61.3 [17.9]	59.2 [17.3]	35.4 [10.4]	34.0 [10]	32.8 [9.6]	44.9 [13.1]	43.1 [12.6]	41.7 [12.2]	
	Sens kBtu/h [kW]	11.0 [3.2]	9.9 [2.9]	9.1 [2.7]	4.7 [1.4]	4.3 [1.2]	3.9 [1.1]	15.7 [4.6]	14.2 [4.2]	13.0 [3.8]	
Power	8.9	8.7	8.6	8.7	8.6	8.4	8.8	8.7	8.5		
85 [29.4]	Total kBtu/h [kW]	68.8 [20.2]	66.2 [19.4]	63.9 [18.7]	40.5 [11.9]	39.0 [11.4]	37.6 [11.0]	50.0 [14.7]	48.1 [14.1]	46.4 [13.6]	
	Sens kBtu/h [kW]	14.7 [4.3]	13.3 [3.9]	12.1 [3.6]	8.4 [2.5]	7.6 [2.2]	7.0 [2.0]	19.4 [5.7]	17.6 [5.2]	16.1 [4.7]	
Power	9.6	9.5	9.3	9.5	9.3	9.2	9.6	9.4	9.3		
90 [32.2]	Total kBtu/h [kW]	78.8 [23.1]	75.8 [22.2]	73.2 [21.5]	50.5 [14.8]	48.6 [14.2]	46.9 [13.7]	60.0 [17.6]	57.7 [16.9]	55.7 [16.3]	
	Sens kBtu/h [kW]	20.9 [6.1]	19.0 [5.6]	17.3 [5.1]	14.7 [4.3]	13.3 [3.9]	12.1 [3.6]	25.6 [7.5]	23.3 [6.8]	21.2 [6.2]	
Power	10.6	10.4	10.2	10.5	10.3	10.1	10.6	10.4	10.2		

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

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

NOTES: ① When the entering air dry bulb is other than 75°F [23.9°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

GROSS SYSTEMS PERFORMANCE DATA (LOW HUMIDIDRY MODE)—RGEDYB150

ENTERING INDOOR AIR @ 75°F [23.9°C] dbE ①											
wbE			65.3°F [18.5°C]			64°F [17.8°C]			62.5°F [16.9°C]		
CFM [L/s]			3020 [1425]	2515 [1187]	2010 [949]	3020 [1425]	2515 [1187]	2010 [949]	3020 [1425]	2515 [1187]	2010 [949]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	60 [15.6]	Total kBtu/h [kW]	43.9 [12.9]	42.4 [12.4]	40.8 [12.0]	42.2 [12.4]	40.8 [11.9]	39.3 [11.5]	33.9 [9.9]	32.7 [9.6]	31.5 [9.2]
		Sens kBtu/h [kW]	16.0 [4.7]	14.7 [4.3]	13.3 [3.9]	20.3 [5.9]	18.5 [5.4]	16.8 [4.9]	13.2 [3.9]	12.0 [3.5]	10.9 [3.2]
		Power	4.6	4.5	4.4	4.5	4.4	4.4	4.5	4.4	4.4
	65 [18.3]	Total kBtu/h [kW]	38.7 [11.3]	37.3 [10.9]	35.9 [10.5]	37.0 [10.8]	35.7 [10.5]	34.4 [10.1]	28.7 [8.4]	27.7 [8.1]	26.6 [7.8]
		Sens kBtu/h [kW]	6.0 [1.8]	5.5 [1.6]	5.0 [1.5]	10.3 [3.0]	9.4 [2.8]	8.5 [2.5]	3.2 [0.9]	2.9 [0.8]	2.6 [0.8]
		Power	4.4	4.3	4.3	4.4	4.3	4.2	4.4	4.3	4.2
	70 [21.1]	Total kBtu/h [kW]	34.8 [10.2]	33.6 [9.8]	32.4 [9.5]	33.1 [9.7]	32.0 [9.4]	30.8 [9.0]	24.8 [7.3]	24.0 [7.0]	23.1 [6.8]
Sens kBtu/h [kW]		-1.1 [-0.3]	-1.0 [-0.3]	-0.9 [-0.3]	3.2 [0.9]	2.9 [0.8]	2.6 [0.8]	-3.9 [-1.2]	-3.6 [-1.1]	-3.3 [-1.0]	
Power		4.4	4.3	4.2	4.3	4.2	4.1	4.3	4.2	4.2	
75 [23.9]	Total kBtu/h [kW]	32.4 [9.5]	31.3 [9.2]	30.2 [8.8]	30.8 [9.0]	29.7 [8.7]	28.6 [8.4]	22.4 [6.6]	21.6 [6.3]	20.9 [6.1]	
	Sens kBtu/h [kW]	-5.3 [-1.5]	-4.8 [-1.4]	-4.4 [-1.3]	-1.0 [-0.3]	-1.0 [-0.3]	-0.9 [-0.3]	-8.2 [-2.4]	-7.5 [-2.2]	-6.8 [-2.0]	
	Power	4.4	4.3	4.2	4.3	4.2	4.2	4.3	4.3	4.2	
80 [26.7]	Total kBtu/h [kW]	31.5 [9.2]	30.4 [8.9]	29.3 [8.6]	29.8 [8.7]	28.8 [8.4]	27.7 [8.1]	21.5 [6.3]	20.7 [6.1]	20.0 [5.9]	
	Sens kBtu/h [kW]	-6.6 [-1.9]	-6.0 [-1.8]	-5.5 [-1.6]	-2.4 [-0.7]	-2.2 [-0.6]	-2.0 [-0.6]	-9.5 [-2.8]	-8.7 [-2.5]	-7.9 [-2.3]	
	Power	4.5	4.4	4.3	4.4	4.3	4.3	4.4	4.3	4.3	
85 [29.4]	Total kBtu/h [kW]	32.0 [9.4]	30.9 [9.0]	29.7 [8.7]	30.3 [8.9]	29.2 [8.6]	28.2 [8.3]	22.0 [6.4]	21.2 [6.2]	20.4 [6.0]	
	Sens kBtu/h [kW]	-5.0 [-1.5]	-4.6 [-1.3]	-4.2 [-1.2]	-0.8 [-0.2]	-0.7 [-0.2]	-0.7 [-0.2]	-7.9 [-2.3]	-7.2 [-2.1]	-6.5 [-1.9]	
	Power	4.7	4.6	4.5	4.6	4.5	4.4	4.6	4.5	4.4	
90 [32.2]	Total kBtu/h [kW]	33.9 [9.9]	32.7 [9.6]	31.5 [9.2]	32.2 [9.4]	31.1 [9.1]	29.9 [8.8]	23.9 [7.0]	23.1 [6.8]	22.2 [6.5]	
	Sens kBtu/h [kW]	-0.6 [-0.2]	-0.5 [-0.2]	-0.5 [-0.1]	3.7 [1.1]	3.4 [1.0]	3.0 [0.9]	-3.4 [-1.0]	-3.1 [-0.9]	-2.9 [-0.8]	
	Power	4.9	4.8	4.7	4.9	4.8	4.7	4.9	4.8	4.7	

GROSS SYSTEMS PERFORMANCE DATA (HIGH HUMIDIDRY MODE)—RGEDYB150

ENTERING INDOOR AIR @ 75°F [23.9°C] dbE ①											
wbE			65.3°F [18.5°C]			64°F [17.8°C]			62.5°F [16.9°C]		
CFM [L/s]			6000 [2832]	4300 [2029]	4000 [1888]	6000 [2832]	4300 [2029]	4000 [1888]	6000 [2832]	4300 [2029]	4000 [1888]
OUTDOOR DRY BULB TEMPERATURE °F [°C]	60 [15.6]	Total kBtu/h [kW]	86.7 [25.4]	80.9 [23.7]	79.9 [23.4]	85.0 [24.9]	79.3 [23.2]	78.3 [22.9]	76.8 [22.5]	71.7 [21]	70.8 [20.7]
		Sens kBtu/h [kW]	22.2 [6.5]	18.8 [5.5]	18.2 [5.3]	30.1 [8.8]	25.4 [7.4]	24.6 [7.2]	39.8 [11.7]	33.6 [9.9]	32.5 [9.5]
		Power	9.4	9.1	9.1	9.2	8.9	8.8	9.3	9.0	9.0
	65 [18.3]	Total kBtu/h [kW]	82.0 [24.0]	76.5 [22.4]	75.6 [22.1]	80.3 [23.5]	75.0 [22.0]	74.0 [21.7]	72.2 [21.1]	67.3 [19.7]	66.5 [19.5]
		Sens kBtu/h [kW]	11.2 [3.3]	9.4 [2.8]	9.1 [2.7]	19.0 [5.6]	16.1 [4.7]	15.6 [4.6]	28.8 [8.4]	24.3 [7.1]	23.5 [6.9]
		Power	9.7	9.4	9.4	9.5	9.2	9.1	9.7	9.3	9.3
	70 [21.1]	Total kBtu/h [kW]	77.2 [22.6]	72.1 [21.1]	71.1 [20.8]	75.5 [22.1]	70.5 [20.7]	69.6 [20.4]	67.4 [19.7]	62.8 [18.4]	62.1 [18.2]
Sens kBtu/h [kW]		2.1 [0.6]	1.7 [0.5]	1.7 [0.5]	9.9 [2.9]	8.4 [2.5]	8.1 [2.4]	19.7 [5.8]	16.6 [4.9]	16.1 [4.7]	
Power		10.3	9.9	9.8	10.0	9.7	9.6	10.2	9.8	9.8	
75 [23.9]	Total kBtu/h [kW]	72.3 [21.2]	67.4 [19.8]	66.6 [19.5]	70.6 [20.7]	65.9 [19.3]	65.0 [19.1]	62.4 [18.3]	58.2 [17.1]	57.5 [16.8]	
	Sens kBtu/h [kW]	-5.1 [-1.5]	-4.3 [-1.3]	-4.2 [-1.2]	2.8 [0.8]	2.4 [0.7]	2.3 [0.7]	12.5 [3.7]	10.6 [3.1]	10.2 [3.0]	
	Power	11.0	10.6	10.5	10.7	10.4	10.3	10.9	10.5	10.4	
80 [26.7]	Total kBtu/h [kW]	67.2 [19.7]	62.7 [18.4]	61.9 [18.1]	65.5 [19.2]	61.1 [17.9]	60.3 [17.7]	57.3 [16.8]	53.5 [15.7]	52.8 [15.5]	
	Sens kBtu/h [kW]	-10.3 [-3.0]	-8.7 [-2.5]	-8.4 [-2.5]	-2.4 [-0.7]	-2.0 [-0.6]	-1.9 [-0.6]	7.3 [2.2]	6.2 [1.8]	6.0 [1.8]	
	Power	11.9	11.5	11.4	11.7	11.3	11.2	11.8	11.4	11.3	
85 [29.4]	Total kBtu/h [kW]	62.0 [18.2]	57.8 [16.9]	57.1 [16.7]	60.3 [17.7]	56.2 [16.5]	55.5 [16.3]	52.1 [15.3]	48.6 [14.2]	48.0 [14.1]	
	Sens kBtu/h [kW]	-13.5 [-4.0]	-11.4 [-3.3]	-11.0 [-3.2]	-5.6 [-1.6]	-4.7 [-1.4]	-4.6 [-1.3]	4.1 [1.2]	3.5 [1]	3.4 [1.0]	
	Power	13.0	12.6	12.5	12.8	12.3	12.3	12.9	12.5	12.4	
90 [32.2]	Total kBtu/h [kW]	56.6 [16.6]	52.8 [15.5]	52.1 [15.3]	54.9 [16.1]	51.2 [15.0]	50.6 [14.8]	46.7 [13.7]	43.6 [12.8]	43.0 [12.6]	
	Sens kBtu/h [kW]	-14.7 [-4.3]	-12.4 [-3.6]	-12.0 [-3.5]	-6.9 [-2.0]	-5.8 [-1.7]	-5.6 [-1.6]	2.9 [0.8]	2.4 [0.7]	2.3 [0.7]	
	Power	14.3	13.8	13.8	14.1	13.6	13.5	14.2	13.8	13.7	

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

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

NOTES: ① When the entering air dry bulb is other than 75°F [23.9°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

[] Designates Metric Conversions

NOTE: F-Drive left of first bold line, G-Drive between bold lines, H-Drive right of second bold line.

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

2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
4. Drive data shown is for vertical airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

AIRFLOW PERFORMANCE— 7.5 TON [26.4 kW]—60 Hz—DOWNFLOW (CONTINUED)

Airflow		AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE				
CFM [L/s]	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil	Vertical Economizer RA Damper Open	Concentric Diffuser RXRN-AEF2000 & Concentric Adapter RXMC-DD01 (Flush)	Concentric Diffuser RXRN-AED2000 & Concentric Adapter RXMC-DD01 (Drop)	Pressure Drop MERV 8	Pressure Drop MERV 13
Resistance — Inches of Water [kPa]									
2400 [1133]	0.96	0.89	0.98	0.04 [.01]	0.01 [.00]	0.66 [.16]	0.53 [.13]	0.093 [.02]	0.047 [.01]
2500 [1180]	0.96	0.90	0.99	0.05 [.01]	0.02 [.00]	0.71 [.18]	0.57 [.14]	0.098 [.02]	0.055 [.01]
2600 [1227]	0.97	0.92	0.99	0.05 [.01]	0.02 [.01]	0.75 [.19]	0.60 [.15]	0.103 [.02]	0.062 [.01]
2700 [1274]	0.97	0.93	0.99	0.05 [.01]	0.03 [.01]	0.80 [.20]	0.65 [.16]	0.108 [.03]	0.070 [.02]
2800 [1321]	0.98	0.95	0.99	0.06 [.01]	0.04 [.01]	0.85 [.21]	0.69 [.17]	0.113 [.03]	0.078 [.02]
2900 [1368]	0.98	0.96	1.00	0.06 [.02]	0.04 [.01]	0.91 [.23]	0.74 [.18]	0.117 [.03]	0.085 [.02]
3000 [1416]	0.99	0.97	1.00	0.07 [.02]	0.05 [.01]	0.96 [.24]	0.79 [.20]	0.122 [.03]	0.093 [.02]
3100 [1463]	1.00	0.99	1.00	0.07 [.02]	0.06 [.02]	1.02 [.25]	0.86 [.21]	0.127 [.03]	0.100 [.02]
3200 [1510]	1.00	1.00	1.01	0.07 [.02]	0.07 [.02]	1.08 [.27]	0.92 [.23]	0.132 [.03]	0.108 [.03]
3300 [1557]	1.01	1.02	1.01	0.08 [.02]	0.08 [.02]	1.15 [.29]	0.99 [.25]	0.137 [.03]	0.115 [.03]
3400 [1604]	1.01	1.03	1.01	0.08 [.02]	0.09 [.02]	1.21 [.30]	1.05 [.26]	0.142 [.03]	0.123 [.03]
3500 [1652]	1.02	1.05	1.01	0.09 [.02]	0.10 [.02]	1.29 [.32]	1.09 [.27]	0.147 [.04]	0.131 [.03]
3600 [1699]	1.02	1.06	1.02	0.09 [.02]	0.11 [.03]	1.36 [.34]	1.13 [.28]	0.152 [.04]	0.138 [.03]

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

[] Designates Metric Conversions

AIRFLOW PERFORMANCE— 7.5 TON [26.4 kW]—60 Hz—SIDEFLOW

Model RGEDV8090		Voltage 208/230, 460, 575 — 3 phase 60 Hz																							
Air Flow CFM [L/s]	RPM	External Static Pressure—Inches of Water [kPa]																							
		0.1 [0.02]		0.2 [0.05]		0.3 [0.07]		0.4 [0.10]		0.5 [0.12]		0.6 [0.15]		0.7 [0.17]		0.8 [0.20]		0.9 [0.22]		1.0 [0.25]		1.1 [0.27]		1.2 [0.30]	
		W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM
2400 [1133]	—	—	—	—	—	558	822	594	853	629	887	663	925	697	965	730	1009	763	1056	794	1106	826	1159	856	1216
2500 [1180]	—	—	—	—	—	568	848	604	881	638	917	672	956	705	998	738	1044	769	1092	801	1144	831	1199	861	1258
2600 [1227]	—	—	543	846	579	877	613	912	647	950	681	991	713	1035	745	1082	777	1132	807	1186	837	1243	867	1303	895
2700 [1274]	—	—	554	877	589	910	623	946	657	986	689	1029	722	1074	753	1124	784	1176	814	1231	844	1290	872	1352	901
2800 [1321]	—	—	566	911	600	946	634	984	666	1026	699	1070	730	1118	761	1169	792	1223	821	1280	850	1340	878	1404	906
2900 [1368]	543	916	577	949	611	986	644	1026	676	1069	708	1115	739	1164	770	1217	799	1273	828	1332	857	1394	885	1459	912
3000 [1416]	555	955	589	990	622	1029	655	1070	687	1115	718	1163	748	1214	778	1269	807	1326	836	1387	864	1451	891	1518	918
3100 [1463]	568	998	601	1035	634	1075	666	1118	697	1165	728	1215	758	1268	787	1324	816	1383	844	1445	871	1511	898	1580	924
3200 [1510]	581	1044	614	1083	646	1125	677	1170	708	1218	738	1270	768	1324	796	1382	824	1443	852	1507	879	1575	905	1646	931
3300 [1557]	594	1093	626	1134	658	1178	689	1225	719	1275	749	1328	778	1384	806	1444	833	1507	860	1573	887	1642	912	1714	937
3400 [1604]	607	1146	639	1189	670	1234	701	1283	730	1335	759	1390	788	1448	815	1509	843	1574	869	1642	895	1713	920	1787	944
3500 [1652]	621	1203	652	1247	683	1294	713	1344	742	1398	770	1455	798	1515	825	1578	852	1644	878	1714	903	1786	928	1862	952
3600 [1699]	635	1262	666	1308	696	1357	725	1409	754	1465	782	1523	809	1585	836	1650	862	1718	887	1789	912	1864	936	1941	959

NOTE: F-Drive left of first bold line, G-Drive between bold lines, H-Drive right of second bold line.

Drive Package	F					G					H				
Motor H.P. [W]	2 [1491.4]					3 [2237.1]					3 [2237.1]				
Blower Sheave	AK84H					AK84H					AK84H				
Motor Sheave	1VP40					1VP50					1VP56				
Belt	A49					A50					A51				
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5			
RPM	765	720	676	633	589	544	989	949	908	865	823	780	740		

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

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

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

4. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE— 7.5 TON [26.4 kW]—60 Hz—SIDEFLOW (CONTINUED)

Airflow CFM [L/s]	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE					Pressure Drop MERV 8	Pressure Drop MERV 13
	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil	Horizontal Economizer RA Damper Open	Concentric Diffuser RXRN-AEF2000 & Concentric Adapter RXMC-DD01 (Flush)	Concentric Diffuser RXRN-AED2000 & Concentric Adapter RXMC-DD01 (Drop)	Resistance — Inches of Water [kPa]		
2400 [1133]	0.96	0.89	0.98	0.04 [.01]	0.21 [0.05]	0.66 [.16]	0.53 [.13]	0.093 [.02]	0.047 [.01]	
2500 [1180]	0.96	0.90	0.99	0.05 [.01]	0.25 [0.06]	0.71 [.18]	0.57 [.14]	0.098 [.02]	0.055 [.01]	
2600 [1227]	0.97	0.92	0.99	0.05 [.01]	0.28 [0.07]	0.75 [.19]	0.60 [.15]	0.103 [.02]	0.062 [.01]	
2700 [1274]	0.97	0.93	0.99	0.05 [.01]	0.32 [0.08]	0.80 [.20]	0.65 [.16]	0.108 [.03]	0.070 [.02]	
2800 [1321]	0.98	0.95	0.99	0.06 [.01]	0.36 [0.09]	0.85 [.21]	0.69 [.17]	0.113 [.03]	0.078 [.02]	
2900 [1368]	0.98	0.96	1.00	0.06 [.02]	0.39 [0.10]	0.91 [.23]	0.74 [.18]	0.117 [.03]	0.085 [.02]	
3000 [1416]	0.99	0.97	1.00	0.07 [.02]	0.43 [0.11]	0.96 [.24]	0.79 [.20]	0.122 [.03]	0.093 [.02]	
3100 [1463]	1.00	0.99	1.00	0.07 [.02]	0.47 [0.12]	1.02 [.25]	0.86 [.21]	0.127 [.03]	0.100 [.02]	
3200 [1510]	1.00	1.00	1.01	0.07 [.02]	0.51 [0.13]	1.08 [.27]	0.92 [.23]	0.132 [.03]	0.108 [.03]	
3300 [1557]	1.01	1.02	1.01	0.08 [.02]	0.54 [0.14]	1.15 [.29]	0.99 [.25]	0.137 [.03]	0.115 [.03]	
3400 [1604]	1.01	1.03	1.01	0.08 [.02]	0.58 [0.14]	1.21 [.30]	1.05 [.26]	0.142 [.03]	0.123 [.03]	
3500 [1652]	1.02	1.05	1.01	0.09 [.02]	0.62 [0.15]	1.29 [.32]	1.09 [.27]	0.147 [.04]	0.131 [.03]	
3600 [1699]	1.02	1.06	1.02	0.09 [.02]	0.66 [0.16]	1.36 [.34]	1.13 [.28]	0.152 [.04]	0.138 [.03]	

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

[] Designates Metric Conversions

[] Designates Metric Conversions

NOTE: F-Drive left of first bold line, G-Drive between bold lines, H-Drive right of second bold line.

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

2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
4. Drive data shown is for vertical airflow with dry coil. Add component resistance (below) to duct resistance to determine total External Static Pressure.

AIRFLOW PERFORMANCE—8.5 TON [29.9 kW]—60 Hz—DOWNFLOW (CONTINUED)

Airflow CFM [L/s]	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE					Pressure Drop MERV 8	Pressure Drop MERV 13
	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil	Vertical Economizer RA Damper Open	Concentric Diffuser RXRN-AEF2000 & Concentric Adapter RXMC-DD01 (Flush)	Concentric Diffuser RXRN-AED2000 & Concentric Adapter RXMC-DD01 (Drop)	Resistance — Inches of Water [kPa]		
2700 [1274]	0.97	0.93	0.99	0.07 [0.02]	0.03 [0.01]	0.80 [0.20]	0.65 [0.16]	0.07 [0.02]	0.108 [0.03]	0.070 [0.02]
2800 [1321]	0.98	0.94	0.99	0.07 [0.02]	0.03 [0.01]	0.85 [0.21]	0.69 [0.17]	0.07 [0.02]	0.113 [0.03]	0.078 [0.02]
2900 [1368]	0.98	0.96	0.99	0.08 [0.02]	0.04 [0.01]	0.91 [0.23]	0.74 [0.18]	0.08 [0.02]	0.117 [0.03]	0.085 [0.02]
3000 [1416]	0.99	0.97	1.00	0.08 [0.02]	0.05 [0.01]	0.96 [0.24]	0.79 [0.20]	0.08 [0.02]	0.122 [0.03]	0.093 [0.02]
3100 [1463]	0.99	0.99	1.00	0.09 [0.02]	0.06 [0.01]	1.02 [0.25]	0.86 [0.21]	0.09 [0.02]	0.127 [0.03]	0.100 [0.02]
3200 [1510]	1.00	1.00	1.00	0.10 [0.02]	0.07 [0.02]	1.08 [0.27]	0.92 [0.23]	0.10 [0.02]	0.132 [0.03]	0.108 [0.03]
3300 [1557]	1.01	1.01	1.00	0.10 [0.03]	0.08 [0.02]	1.15 [0.29]	0.99 [0.25]	0.10 [0.03]	0.137 [0.03]	0.115 [0.03]
3400 [1604]	1.01	1.03	1.01	0.11 [0.03]	0.09 [0.02]	1.21 [0.30]	1.05 [0.26]	0.11 [0.03]	0.142 [0.03]	0.123 [0.03]
3500 [1652]	1.02	1.04	1.01	0.11 [0.03]	0.10 [0.02]	1.29 [0.32]	1.09 [0.27]	0.11 [0.03]	0.147 [0.04]	0.131 [0.03]
3600 [1699]	1.02	1.06	1.01	0.12 [0.03]	0.11 [0.03]	1.36 [0.34]	1.13 [0.28]	0.12 [0.03]	0.152 [0.04]	0.138 [0.03]
3700 [1746]	1.03	1.07	1.02	0.13 [0.03]	0.12 [0.03]	1.43 [0.36]	1.18 [0.29]	0.13 [0.03]	0.157 [0.04]	0.146 [0.04]
3800 [1793]	1.03	1.09	1.02	0.13 [0.03]	0.13 [0.03]	1.50 [0.37]	1.23 [0.31]	0.13 [0.03]	0.162 [0.04]	0.153 [0.04]
3900 [1840]	1.04	1.10	1.02	0.14 [0.04]	0.15 [0.04]	1.59 [0.40]	1.31 [0.33]	0.14 [0.04]	0.167 [0.04]	0.161 [0.04]
4000 [1888]	1.05	1.12	1.02	0.14 [0.04]	0.16 [0.04]	1.68 [0.42]	1.38 [0.34]	0.14 [0.04]	0.171 [0.04]	0.169 [0.04]
4100 [1935]	1.05	1.13	1.03	0.15 [0.04]	0.17 [0.04]	1.74 [0.43]	1.44 [0.36]	0.15 [0.04]	0.176 [0.04]	0.176 [0.04]

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

[] Designates Metric Conversions

AIRFLOW PERFORMANCE—8.5 TON [29.9 kW]—60 Hz—SIDEFLOW

Model RGEDVB102		Voltage 208/230, 460, 575 — 3 phase 60 Hz																							
Air Flow CFM [L/s]	RPM	External Static Pressure—Inches of Water [kPa]																							
		0.1 [0.02]												0.2 [0.05]											
		W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM
2700 [127.4]	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2800 [132.1]	—	—	—	577	932	611	969	644	1009	677	1032	710	1098	742	1147	774	1199	806	1254	837	1312	868	1373	898	1437
2900 [136.8]	—	—	556	926	589	962	622	1000	655	1042	687	1087	719	1134	751	1185	783	1239	814	1295	844	1355	875	1418	905
3000 [141.6]	—	—	568	958	601	995	633	1036	666	1079	697	1125	729	1174	760	1227	791	1282	821	1340	851	1402	881	1486	911
3100 [146.3]	—	—	580	994	613	1033	645	1074	676	1119	708	1167	738	1218	769	1272	799	1329	829	1389	859	1452	888	1518	917
3200 [151.0]	574	1037	605	1076	636	1118	667	1163	698	1211	728	1262	758	1316	787	1373	816	1434	845	1497	873	1563	902	1632	929
3300 [155.7]	587	1082	618	1122	648	1166	679	1212	709	1262	738	1315	767	1371	796	1430	825	1491	853	1556	881	1624	908	1695	936
3400 [160.4]	600	1130	630	1172	660	1217	690	1266	720	1317	749	1371	777	1429	806	1489	834	1553	861	1619	888	1689	915	1761	942
3500 [165.2]	613	1182	643	1226	672	1273	702	1323	730	1376	759	1432	787	1491	815	1553	842	1618	869	1686	896	1757	922	1831	948
3600 [169.9]	626	1238	656	1283	685	1332	713	1383	741	1438	769	1495	797	1556	824	1620	851	1687	877	1756	904	1829	929	1905	955
3700 [174.6]	640	1297	668	1344	697	1394	725	1447	753	1504	780	1563	807	1625	833	1690	860	1759	886	1830	911	1905	937	1982	961
3800 [179.3]	653	1360	681	1409	709	1460	737	1515	764	1573	790	1634	817	1698	843	1765	869	1835	894	1908	919	1984	944	2063	968
3900 [184.0]	667	1426	694	1477	721	1530	748	1587	775	1646	801	1709	827	1774	852	1843	878	1914	902	1989	927	2067	951	2147	975
4000 [188.8]	680	1496	707	1548	734	1604	760	1662	786	1723	812	1787	837	1854	862	1924	887	1998	911	2074	935	2153	958	2235	981
4100 [193.5]	694	1570	720	1624	746	1681	772	1740	797	1803	822	1869	847	1938	872	2009	896	2084	919	2162	943	2243	965	2327	988

NOTE: F-Drive left of first bold line, G-Drive between bold lines, H-Drive right of second bold line.

Drive Package	F												G												H											
Motor H.P. [W]	2 [1491.4]												3 [2237.1]												3 [2237.1]											
Blower Sheave	AK79H												AK79H												AK79H											
Motor Sheave	1VP40												1VP50												1VP56											
Belt	A49												A50												A51											
Turns Open	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
RPM	802	754	707	662	616	555	500	445	390	335	280	225	170	115	60	5	0	1	1005	960	916	870	827	783	739	695	651	607	563	519	475	431	387	343	300	256

- NOTES: 1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
4. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE—8.5 TON [29.9 kW]—60 Hz—SIDEFLOW (CONTINUED)

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE						
	CFM [L/s]	Total kbtu/h	Sensible kbtu/h	Power kW	Wet Coil	Horizontal Economizer RA Damper Open	Concentric Diffuser RXRN-AEF2000 & Concentric Adapter RXMC-DD01 (Flush)	Concentric Diffuser RXRN-AED2000 & Concentric Adapter RXMC-DD01 (Drop)	Pressure Drop MERV 8	Pressure Drop MERV 13
							Resistance — Inches of Water [kPa]			
2700 [1274]	0.97	0.93		0.99	0.07 [.02]	0.32 [0.08]	0.80 [.20]	0.65 [.16]	0.108 [.03]	0.070 [.02]
2800 [1321]	0.98	0.94		0.99	0.07 [.02]	0.36 [0.09]	0.85 [.21]	0.69 [.17]	0.113 [.03]	0.078 [.02]
2900 [1368]	0.98	0.96		0.99	0.08 [.02]	0.39 [0.10]	0.91 [.23]	0.74 [.18]	0.117 [.03]	0.085 [.02]
3000 [1416]	0.99	0.97		1.00	0.08 [.02]	0.43 [0.11]	0.96 [.24]	0.79 [.20]	0.122 [.03]	0.093 [.02]
3100 [1463]	0.99	0.99		1.00	0.09 [.02]	0.47 [0.12]	1.02 [.25]	0.86 [.21]	0.127 [.03]	0.100 [.02]
3200 [1510]	1.00	1.00		1.00	0.10 [.02]	0.51 [0.13]	1.08 [.27]	0.92 [.23]	0.132 [.03]	0.108 [.03]
3300 [1557]	1.01	1.01		1.00	0.10 [.03]	0.54 [0.14]	1.15 [.29]	0.99 [.25]	0.137 [.03]	0.115 [.03]
3400 [1604]	1.01	1.03		1.01	0.11 [.03]	0.58 [0.14]	1.21 [.30]	1.05 [.26]	0.142 [.03]	0.123 [.03]
3500 [1652]	1.02	1.04		1.01	0.11 [.03]	0.62 [0.15]	1.29 [.32]	1.09 [.27]	0.147 [.04]	0.131 [.03]
3600 [1699]	1.02	1.06		1.01	0.12 [.03]	0.66 [0.16]	1.36 [.34]	1.13 [.28]	0.152 [.04]	0.138 [.03]
3700 [1746]	1.03	1.07		1.02	0.13 [.03]	0.70 [0.17]	1.43 [.36]	1.18 [.29]	0.157 [.04]	0.146 [.04]
3800 [1793]	1.03	1.09		1.02	0.13 [.03]	0.74 [0.18]	1.50 [.37]	1.23 [.31]	0.162 [.04]	0.153 [.04]
3900 [1840]	1.04	1.10		1.02	0.14 [.04]	0.77 [0.19]	1.59 [.40]	1.31 [.33]	0.167 [.04]	0.161 [.04]
4000 [1888]	1.05	1.12		1.02	0.15 [.04]	0.81 [0.20]	1.68 [.42]	1.38 [.34]	0.171 [.04]	0.169 [.04]
4100 [1935]	1.05	1.13		1.03	0.15 [.04]	0.85 [0.21]	1.74 [.43]	1.44 [.36]	0.176 [.04]	0.176 [.04]

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

[] Designates Metric Conversions

AIRFLOW PERFORMANCE— 10 TON [35.1 kW]—60 Hz—DOWNFLOW

Model RGEDVB120		Voltage 208/230, 460, 575 — 3 phase 60 Hz																							
Air Flow CFM [L/s]	RPM	External Static Pressure—Inches of Water [kPa]																							
		0.1 [0.02]												0.2 [0.05]											
		W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM
3200 [1510]	613	890	643	963	672	1036	701	1111	729	1186	757	1262	785	1339	812	1416	838	1494	864	1573	889	1653	914	1734	939
3300 [1557]	626	959	656	1034	685	1110	713	1186	741	1263	768	1341	795	1419	822	1498	848	1579	873	1660	898	1741	922	1824	946
3400 [1604]	640	1033	669	1109	697	1186	725	1265	753	1343	780	1423	806	1503	832	1585	858	1667	882	1750	907	1833	931	1918	954
3500 [1652]	654	1110	682	1188	710	1267	738	1347	765	1428	791	1509	817	1592	843	1675	868	1759	892	1843	916	1929	940	2015	963
3600 [1699]	668	1190	696	1271	723	1352	750	1434	777	1516	803	1600	828	1684	853	1769	878	1854	902	1941	925	2028	948	2117	971
3700 [1746]	682	1275	709	1357	736	1440	763	1524	789	1608	814	1694	840	1780	864	1866	888	1954	912	2043	935	2132	957	2222	980
3800 [1793]	696	1364	723	1448	750	1532	776	1618	801	1704	826	1791	851	1879	875	1968	899	2058	922	2148	945	2239	967	2331	988
3900 [1840]	710	1456	737	1542	763	1628	789	1716	814	1804	839	1893	863	1983	886	2074	910	2165	932	2257	954	2350	976	2444	997
4000 [1888]	725	1552	751	1640	777	1728	802	1818	827	1908	851	1999	875	2090	898	2183	921	2276	943	2370	964	2465	986	2560	1006
4100 [1935]	740	1652	766	1742	791	1832	816	1923	840	2015	863	2108	887	2202	909	2296	932	2391	953	2487	975	2584	995	2681	1016
4200 [1982]	755	1756	780	1847	805	1940	829	2033	853	2127	876	2221	899	2317	921	2413	943	2510	964	2608	985	2706	1005	2805	1025
4300 [2029]	769	1864	795	1957	819	2051	843	2146	866	2242	889	2338	911	2435	933	2534	955	2632	975	2732	996	2833	1016	2934	1035
4400 [2076]	785	1975	810	2070	834	2166	857	2263	880	2361	902	2459	924	2558	945	2658	966	2759	987	2860	1006	2963	1026	3066	1045
4500 [2123]	801	2090	825	2188	848	2285	871	2384	893	2484	915	2584	937	2685	958	2787	978	2889	998	2993	1017	3097	1036	3202	1055
4600 [2171]	817	2210	840	2309	863	2408	885	2509	907	2610	929	2712	950	2815	970	2919	990	3023	1021	3129	1029	3235	1047	3341	1065
4700 [2218]	833	2333	855	2433	878	2535	900	2637	921	2741	942	2845	963	2949	983	3055	1002	3161	1021	3268	1040	3376	1058	3485	1075
4800 [2265]	849	2459	871	2562	893	2666	915	2770	936	2875	956	2981	976	3087	996	3195	1015	3303	1033	3412	1051	3522	1069	3633	1086

NOTE: F-Drive left of first bold line, G-Drive between bold lines, H-Drive right of second bold line.

Drive Package	F	G	H
Motor H.P. [W]	2 [1491.4]	3 [2237.1]	3 [2237.1]
Blower Sheave	AK79H	AK79H	AK79H
Motor Sheave	1VP40	1VP50	1VP56
Belt	A49	A50	A51
Turns Open	0	1	2
RPM	1032	765	722
		681	593
		637	539
		5	5
		4	4
		3	3
		2	2
		1	1
		1032	1146
		722	1068
		681	1031
		593	993
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		4	4
		3	3
		2	2
		1	1
		1032	1146
		722	1068
		681	1031
		593	993
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		1	1
		1032	1146
		722	1068
		681	1031
		593	993
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		1032	1146
		722	1068
		681	1031
		593	993
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		1032	1146
		722	1068
		681	1031
		593	993
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		1032	1146
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		681	1031
		593	993
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		1032	1146
		722	1068
		681	1031
		593	993
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		1032	1146
		722	1068
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		1032	1146
		722	1068
		681	1031
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		1032	1146
		722	1068
		681	1031
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		1032	1146
		722	1068
		681	1031
		593	993
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		3	3
		2	2
		1	1
		1032	1146
		722	1068
		681	1031
		593	993
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AIRFLOW PERFORMANCE— 10 TON [35.1 kW]—60 Hz-DOWNFLOW (CONTINUED)

Airflow	AIRFLOW CORRECTION FACTORS *				COMPONENT AIRFLOW RESISTANCE					
	CFM [L/s]	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil	Vertical Economizer RA Damper Open	Concentric Diffuser RXRN-AEF3415 & Concentric Adapter RXMC-DD02 (Flush)	Concentric Diffuser RXRN-AED3415 & Concentric Adapter RXMC-DD02 (Drop)	Pressure Drop MERV 8	Pressure Drop MERV 13
							Resistance — Inches of Water [kPa]			
3200 [1510]	0.97	0.93	0.99	0.10 [.02]	0.07 [.02]		0.74 [.18]	0.56 [.14]	0.132 [.03]	0.108 [.03]
3300 [1557]	0.98	0.94	0.99	0.10 [.03]	0.08 [.02]		0.79 [.20]	0.59 [.15]	0.137 [.03]	0.115 [.03]
3400 [1604]	0.98	0.96	0.99	0.11 [.03]	0.09 [.02]		0.84 [.21]	0.62 [.15]	0.142 [.03]	0.123 [.03]
3500 [1652]	0.99	0.97	1.00	0.11 [.03]	0.10 [.02]		0.90 [.22]	0.66 [.16]	0.147 [.04]	0.131 [.03]
3600 [1699]	0.99	0.98	1.00	0.12 [.03]	0.11 [.03]		0.95 [.24]	0.69 [.17]	0.152 [.04]	0.138 [.03]
3700 [1746]	1.00	0.99	1.00	0.13 [.03]	0.12 [.03]		1.00 [.25]	0.73 [.18]	0.157 [.04]	0.146 [.04]
3800 [1793]	1.00	1.01	1.00	0.13 [.03]	0.13 [.03]		1.04 [.26]	0.76 [.19]	0.162 [.04]	0.153 [.04]
3900 [1840]	1.01	1.02	1.00	0.14 [.04]	0.15 [.04]		1.09 [.27]	0.80 [.20]	0.167 [.04]	0.161 [.04]
4000 [1888]	1.01	1.03	1.01	0.15 [.04]	0.16 [.04]		1.13 [.28]	0.84 [.21]	0.171 [.04]	0.169 [.04]
4100 [1935]	1.02	1.04	1.01	0.15 [.04]	0.17 [.04]		1.19 [.30]	0.88 [.22]	0.176 [.04]	0.176 [.04]
4200 [1982]	1.02	1.06	1.01	0.16 [.04]	0.19 [.05]		1.24 [.31]	0.92 [.23]	0.181 [.04]	0.184 [.05]
4300 [2029]	1.03	1.07	1.01	0.17 [.04]	0.20 [.05]		1.31 [.33]	0.97 [.24]	0.186 [.05]	0.191 [.05]
4400 [2076]	1.03	1.08	1.01	0.18 [.04]	0.21 [.05]		1.37 [.34]	1.02 [.25]	0.191 [.05]	0.199 [.05]
4500 [2123]	1.04	1.09	1.02	0.19 [.05]	0.23 [.06]		1.43 [.35]	1.07 [.27]	0.196 [.05]	0.207 [.05]
4600 [2171]	1.04	1.11	1.02	0.19 [.05]	0.24 [.06]		1.48 [.37]	1.11 [.28]	0.201 [.05]	0.214 [.05]
4700 [2218]	1.05	1.12	1.02	0.20 [.05]	0.26 [.06]		1.54 [.38]	1.15 [.29]	0.206 [.05]	0.222 [.05]
4800 [2265]	1.05	1.13	1.02	0.21 [.05]	0.28 [.07]		1.59 [.40]	1.19 [.30]	0.211 [.05]	0.229 [.06]

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

[] Designates Metric Conversions

Air Flow CFM (L/s)	Model RGEDY8120										Voltage 208/230, 460, 575 — 3 phase 60 Hz										External Static Pressure—Inches of Water [kPa]																				
	0.1 [0.02]		0.2 [0.05]		0.3 [0.07]		0.4 [0.10]		0.5 [0.12]		0.6 [0.15]		0.7 [0.17]		0.8 [0.20]		0.9 [0.22]		1.0 [0.25]		1.1 [0.27]		1.2 [0.30]		1.3 [0.32]		1.4 [0.35]		1.5 [0.37]		1.6 [0.40]		1.7 [0.42]		1.8 [0.45]		1.9 [0.47]		2.0 [0.50]		
	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	
23200	1510	613	893	642	968	672	1044	700	1120	728	1197	756	1275	783	1353	810	1432	836	1512	861	1593	886	1674	911	1756	935	1838	958	1921	981	2005	1004	2090	1025	2175	1047	2261	1068	2347	1088	2435
33300	1557	625	962	655	1039	684	1116	712	1195	740	1274	767	1354	794	1434	820	1515	845	1597	871	1680	895	1763	919	1847	943	1931	966	2017	988	2103	1010	2189	1032	2276	1053	2364	1073	2453	1093	2543
3400	1604	638	1034	667	1113	696	1193	724	1273	751	1354	778	1436	804	1519	830	1602	855	1686	880	1771	904	1856	928	1942	951	2029	974	2116	996	2204	1018	2293	1039	2382	1059	2472	1079	2563	1099	2654
3500	1652	652	1110	680	1191	708	1273	736	1356	763	1439	789	1523	815	1607	840	1693	865	1779	890	1866	914	1953	937	2041	960	2130	982	2219	1004	2309	1025	2400	1045	2492	1066	2584	1085	2677	1104	2770
3600	1699	665	1190	693	1273	721	1357	748	1442	774	1527	801	1613	826	1707	851	1787	876	1876	899	1964	932	2054	946	2144	968	2235	990	2327	1011	2419	1032	2512	1052	2605	1072	2700	1091	2795	1110	2890
3700	1746	678	1274	706	1359	733	1445	760	1532	786	1620	812	1708	837	1797	862	1886	886	1976	909	2067	932	2159	955	2251	977	2344	998	2438	1019	2532	1040	2627	1060	2723	1079	2819	1098	2916	1116	3014
3800	1793	692	1362	720	1449	746	1537	773	1626	798	1716	824	1808	848	1897	873	1989	898	2081	920	2174	942	2268	964	2362	986	2457	1007	2553	1027	2649	1047	2746	1067	2844	1086	2943	1104	3042	1122	3142
3900	1840	706	1453	733	1543	759	1633	785	1724	811	1816	836	1908	860	2001	884	2095	907	2190	930	2285	952	2380	974	2477	995	2574	1016	2672	1036	2770	1055	2870	1074	2970	1093	3070	1111	3171	1128	3273
4000	1888	720	1549	747	1773	773	1733	798	1826	823	1920	848	2015	872	2110	895	2206	918	2302	940	2399	962	2497	983	2596	1004	2695	1024	2795	1044	2896	1063	2997	1082	3099	1100	3202	1118	3305	1135	3409
4100	1935	734	1649	760	1743	786	1837	811	1932	836	2028	860	2125	883	2222	906	2320	929	2419	951	2518	972	2618	993	2719	1014	2820	1033	2922	1053	3025	1071	3228	1090	3292	1108	3337	1125	3442	1141	3548
4200	1980	749	1743	784	1848	800	1945	824	2042	848	2140	872	2239	895	2338	918	2438	940	2539	961	2640	982	2743	1003	2845	1023	2940	1043	3053	1061	3158	1080	3263	1098	3369	1115	3476	1132	3584	—	—
4300	2029	763	1860	798	1958	813	2057	838	2156	861	2256	885	2357	907	2459	930	2561	951	2663	972	2767	993	2871	1013	2976	1033	3081	1052	3188	1070	3295	1088	3402	1106	3510	1123	3619	1139	3729	—	—
4400	2076	778	1972	803	2072	827	2173	851	2274	874	2376	897	2479	920	2583	941	2687	963	2792	984	2897	1004	3004	1023	3111	1043	3218	1061	3327	1079	3436	1097	3545	1114	3656	1131	3767	—	—	—	—
4500	2123	792	2087	817	2189	841	2292	865	2396	888	2500	910	2605	932	2711	953	2817	974	2924	995	3032	1015	3140	1034	3249	1053	3359	1071	3469	1089	3580	1106	3692	1123	3805	1139	3918	—	—	—	—
4600	2171	807	2207	832	2311	855	2416	878	2522	901	2628	923	2735	945	2843	966	2951	986	3060	1006	3131	1026	3280	1044	3392	1063	3503	1081	3616	1098	3729	1115	3843	1131	3958	—	—	—	—	—	—
4700	2220	823	2330	846	2436	870	2544	892	2651	915	2760	936	2869	957	2979	978	3089	998	3200	1018	3312	1037	3425	1055	3538	1073	3652	1091	3767	1108	3882	1124	3998	1140	4115	—	—	—	—	—	—
4800	2265	838	2457	861	2566	884	2675	906	2785	928	2895	950	3007	970	3119	991	3231	1010	3344	1029	3458	1048	3573	1066	3688	1084	3804	1101	3921	1117	4039	1133	4151	—	—	—	—	—	—	—	—

NOTE: F-Drive left of first bold line, G-Drive between bold lines, H-Drive right of second bold line.

Drive Package	F						G						H					
Motor H.P. [W]	2 [1491.4]						3 [2237.1]						3 [2237.1]					
Blower Sheave	AK79H						AK79H						AK79H					
Motor Sheave	1VP40						1VP50						1VP56					
Belt	A49						A50						A51					
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5	1	2	3	4	5	6
RPM	805	761	719	679	635	588	1028	991	949	910	867	825	1143	1106	1068	1029	991	951

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

1. Factory sheave settings are shown in bold type.
2. Do not set motor sheave below minimum or maximum turns open shown.
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure
4. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE— 10 TON [35.1 kW]—60 Hz—SIDEFLOW (CONTINUED)

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE						
	CFM [L/s]	Total kBtu/h	Sensible kBtu/h	Power kW	Wet Coil	Horizontal Economizer RA Damper Open	Concentric Diffuser RXRN-AEF3415 & Concentric Adapter RXMC-DD02 (Flush)	Concentric Diffuser RXRN-AED3415 & Concentric Adapter RXMC-DD02 (Drop)	Pressure Drop MERV 8	Pressure Drop MERV 13
							Resistance — Inches of Water [kPa]			
3200 [1510]	0.97	0.93		0.99	0.10 [.02]	0.51 [0.13]	0.74 [.18]	0.56 [.14]	0.132 [.03]	0.108 [.03]
3300 [1557]	0.98	0.94		0.99	0.10 [.03]	0.54 [0.14]	0.79 [.20]	0.59 [.15]	0.137 [.03]	0.115 [.03]
3400 [1604]	0.98	0.96		0.99	0.11 [.03]	0.58 [0.14]	0.84 [.21]	0.62 [.15]	0.142 [.03]	0.123 [.03]
3500 [1652]	0.99	0.97		1.00	0.11 [.03]	0.62 [0.15]	0.90 [.22]	0.66 [.16]	0.147 [.04]	0.131 [.03]
3600 [1699]	0.99	0.98		1.00	0.12 [.03]	0.66 [0.16]	0.95 [.24]	0.69 [.17]	0.152 [.04]	0.138 [.03]
3700 [1746]	1.00	0.99		1.00	0.13 [.03]	0.70 [0.17]	1.00 [.25]	0.73 [.18]	0.157 [.04]	0.146 [.04]
3800 [1793]	1.00	1.01		1.00	0.13 [.03]	0.74 [0.18]	1.04 [.26]	0.76 [.19]	0.162 [.04]	0.153 [.04]
3900 [1840]	1.01	1.02		1.00	0.14 [.04]	0.77 [0.19]	1.09 [.27]	0.80 [.20]	0.167 [.04]	0.161 [.04]
4000 [1888]	1.01	1.03		1.01	0.15 [.04]	0.81 [0.20]	1.13 [.28]	0.84 [.21]	0.171 [.04]	0.169 [.04]
4100 [1935]	1.02	1.04		1.01	0.15 [.04]	0.85 [0.21]	1.19 [.30]	0.88 [.22]	0.176 [.04]	0.176 [.04]
4200 [1982]	1.02	1.06		1.01	0.16 [.04]	0.89 [0.22]	1.24 [.31]	0.92 [.23]	0.181 [.04]	0.184 [.05]
4300 [2029]	1.03	1.07		1.01	0.17 [.04]	0.93 [0.23]	1.31 [.33]	0.97 [.24]	0.186 [.05]	0.191 [.05]
4400 [2076]	1.03	1.08		1.01	0.18 [.04]	0.97 [0.24]	1.37 [.34]	1.02 [.25]	0.191 [.05]	0.199 [.05]
4500 [2123]	1.04	1.09		1.02	0.19 [.05]	1.01 [0.25]	1.43 [.35]	1.07 [.27]	0.196 [.05]	0.207 [.05]
4600 [2171]	1.04	1.11		1.02	0.19 [.05]	1.06 [0.26]	1.48 [.37]	1.11 [.28]	0.201 [.05]	0.214 [.05]
4700 [2218]	1.05	1.12		1.02	0.20 [.05]	1.10 [0.27]	1.54 [.38]	1.15 [.29]	0.206 [.05]	0.222 [.05]
4800 [2265]	1.05	1.13		1.02	0.21 [.05]	1.14 [0.28]	1.59 [.40]	1.19 [.30]	0.211 [.05]	0.229 [.06]

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

[] Designates Metric Conversions

AIRFLOW PERFORMANCE— 12.5 TON [43.9 kW]—60 Hz—DOWNFLOW

Air Flow CFM [L/s]		Model RGEDVB150 Voltage 208/230, 460, 575 — 3 phase 60 Hz																																						
		External Static Pressure—Inches of Water [kPa]																																						
		0.1 [0.02]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.20]	0.9 [0.22]	1.0 [0.25]	1.1 [0.27]	1.2 [0.30]	1.3 [0.32]	1.4 [0.35]	1.5 [0.37]	1.6 [0.40]	1.7 [0.42]	1.8 [0.45]	1.9 [0.47]	2.0 [0.50]																			
RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W					
4000 [1888]	766	1776	795	1806	824	1842	851	1883	878	1931	904	1985	929	2044	953	2110	976	2181	998	2259	1019	2342	1040	2431	1059	2526	1078	2627	1096	2734	1113	2847	1129	2966	1144	3091	1158	3221	1171	3358
4100 [1935]	778	1820	807	1856	835	1897	862	1944	888	1997	913	2056	937	2120	961	2191	983	2268	1005	2350	1026	2439	1045	2533	1064	2634	1082	2740	1099	2852	1116	2970	1131	3094	1145	3224	1159	3360	1171	3502
4200 [1982]	792	1875	820	1915	847	1961	873	2014	899	2072	923	2136	947	2206	969	2282	991	2364	1012	2451	1032	2545	1051	2645	1070	2750	1087	2862	1103	2979	1119	3102	1134	3232	1147	3367	1160	3508	1172	3655
4300 [2029]	806	1938	833	1984	859	2036	885	2093	910	2156	934	2226	957	2301	979	2382	1000	2469	1020	2562	1040	2661	1058	2766	1076	2877	1092	2993	1108	3116	1123	3244	1137	3379	1150	3519	1162	3665	1174	3818
4400 [2076]	820	2012	847	2063	873	2119	898	2182	922	2251	945	2325	967	2406	989	2492	1009	2584	1029	2682	1048	2787	1065	2897	1082	3013	1098	3134	1113	3262	1128	3396	1141	3536	1154	3681	1165	3833	1176	3990
4500 [2123]	835	2095	861	2151	886	2213	911	2281	934	2355	957	2434	978	2520	999	2611	1019	2709	1038	2812	1056	2922	1073	3037	1090	3158	1120	3285	1133	3418	1133	3557	1146	3702	1158	3853	1168	4009	1178	4172
4600 [2171]	851	2187	876	2249	901	2316	925	2389	947	2468	969	2553	990	2644	1010	2740	1030	2843	1048	2952	1065	3066	1082	3187	1097	3313	1112	3445	1125	3584	1139	3728	1151	3878	1162	4034	1172	4196	1182	4363
4700 [2218]	867	2290	892	2356	916	2428	939	2507	961	2591	982	2681	1003	2777	1022	2879	1041	2987	1058	3101	1075	3220	1091	3346	1106	3478	1120	3615	1133	3759	1145	3908	1157	4063	1167	4224	1177	4391	1186	4564
4800 [2265]	884	2401	908	2473	932	2551	954	2634	975	2723	996	2819	1016	2920	1034	3027	1052	3140	1069	3259	1085	3384	1101	3515	1115	3652	1128	3795	1141	3943	1153	4098	1163	4258	1173	4425	1182	4597	1190	4775
4900 [2312]	902	2523	925	2599	948	2682	969	2771	990	2866	1010	2966	1029	3073	1047	3185	1065	3303	1081	3427	1097	3558	1111	3694	1125	3836	1138	3984	1149	4137	1160	4297	1170	4463	1180	4634	1188	4812	1195	4995
5000 [2359]	920	2653	943	2736	965	2824	986	2917	1006	3017	1025	3123	1044	3235	1061	3352	1078	3476	1093	3605	1108	3741	1122	3882	1135	4029	1147	4182	1158	4341	1169	4506	1178	4677	1187	4854	1194	5036	1201	5225
5100 [2407]	939	2794	961	2881	982	2974	1003	3073	1022	3179	1041	3289	1058	3406	1075	3529	1091	3658	1106	3792	1120	3933	1134	4079	1146	4232	1158	4390	1168	4554	1178	4725	1187	4901	1194	5083	1201	5270	1208	5464
5200 [2454]	958	2944	980	3036	1000	3135	1020	3239	1039	3349	1057	3465	1074	3588	1090	3716	1105	3849	1120	3989	1133	4135	1146	4287	1158	4444	1168	4608	1178	4777	1187	4953	1196	5134	1203	5321	1209	5514	1215	5713
5300 [2501]	978	3103	999	3201	1019	3305	1038	3414	1056	3530	1074	3651	1090	3778	1106	3912	1120	4051	1134	4196	1147	4347	1159	4504	1170	4666	1180	4835	1189	5010	1198	5190	1205	5377	1212	5569	1217	5767	1222	5972
5400 [2548]	999	3273	1019	3376	1038	3484	1057	3599	1074	3720	1091	3846	1107	3979	1122	4117	1136	4261	1149	4412	1161	4568	1172	4730	1183	4898	1192	5072	1201	5252	1209	5438	1215	5629	1221	5827	1226	6030	—	—
5500 [2595]	1020	3451	1040	3559	1058	3673	1076	3793	1093	3919	1109	4051	1124	4189	1138	4332	1152	4482	1164	4637	1176	4799	1186	4966	1196	5139	1205	5318	1213	5503	1220	5694	1226	5891	—	—	—	—	—	
5600 [2643]	1042	3640	1061	3753	1079	3872	1096	3997	1112	4128	1128	4265	1142	4408	1156	4557	1168	4712	1180	4872	1191	5039	1201	5212	1210	5390	1218	5574	1226	5765	—	—	—	—	—	—	—	—		
5700 [2690]	1064	3838	1083	3956	1100	4080	1117	4211	1132	4347	1147	4489	1161	4637	1174	4791	1186	4951	1197	5117	1207	5289	1216	5467	1225	5650	—	—	—	—	—	—	—	—	—	—	—	—	—	
5800 [2737]	1088	4045	1105	4169	1122	4298	1138	4434	1153	4575	1167	4723	1180	4876	1192	5035	1204	5200	1214	5371	1224	5548	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
5900 [2784]	1111	4262	1128	4391	1144	4526	1160	4666	1174	4813	1187	4966	1200	5124	1211	5289	1222	5459	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6000 [2831]	1136	4489	1152	4623	1167	4763	1182	4909	1196	5061	1208	5218	1220	5382	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

NOTE: F-Drive left of first bold line, G-Drive between bold lines, H-Drive right of second bold line.

Drive Package	F												G											
Motor H.P. [W]	3 [1118.5]												5 [2237.1]											
Blower Sheave	AK71H												AK79H											
Motor Sheave	1VL44												1VP60											
Belt	A48												A52											
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5
RPM	1003	958	912	863	814	764	1220	1171	1127	1085	1039	994	1220	1171	1127	1085	1039	994	1220	1171	1127	1085	1039	994

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

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

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

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

[] Designates Metric Conversions

AIRFLOW PERFORMANCE— 12.5 TON [43.9 kW]—60 Hz—DOWNFLOW (CONTINUED)

Airflow	AIRFLOW CORRECTION FACTORS *				COMPONENT AIRFLOW RESISTANCE					
	CFM [L/s]	Total kBTu/h	Sensible kBTu/h	Power kW	Wet Coil	Vertical Economizer RA Damper Open	Concentric Diffuser RXRN-AEF3618 & Concentric Adapter RXMC-DD03 (Flush)	Concentric Diffuser RXRN-AED3618 & Concentric Adapter RXMC-DD03 (Drop)	Pressure Drop MERV 8	Pressure Drop MERV 13
							Resistance — Inches of Water [kPa]			
	4000 [1888]	1.01	1.03	1.01	0.15 [.04]	0.16 [.04]	0.76 [.19]	0.68 [.17]	0.132 [.03]	0.108 [.03]
	4100 [1935]	1.02	1.04	1.01	0.16 [.04]	0.17 [.04]	0.79 [.20]	0.72 [.18]	0.136 [.03]	0.114 [.03]
	4200 [1982]	1.02	1.06	1.01	0.17 [.04]	0.19 [.05]	0.82 [.20]	0.75 [.19]	0.140 [.03]	0.120 [.03]
	4300 [2029]	1.03	1.07	1.01	0.17 [.04]	0.20 [.05]	0.86 [.21]	0.79 [.20]	0.144 [.03]	0.126 [.03]
	4400 [2076]	1.03	1.08	1.01	0.18 [.05]	0.21 [.05]	0.90 [.22]	0.83 [.21]	0.148 [.04]	0.132 [.03]
	4500 [2123]	1.04	1.09	1.02	0.19 [.05]	0.23 [.06]	0.94 [.23]	0.86 [.21]	0.152 [.04]	0.138 [.03]
	4600 [2171]	1.04	1.11	1.02	0.20 [.05]	0.24 [.06]	0.98 [.24]	0.89 [.22]	0.156 [.04]	0.145 [.04]
	4700 [2218]	1.05	1.12	1.02	0.21 [.05]	0.26 [.06]	1.02 [.25]	0.94 [.23]	0.160 [.04]	0.151 [.04]
	4800 [2265]	1.05	1.13	1.02	0.21 [.05]	0.28 [.07]	1.06 [.26]	0.98 [.24]	0.164 [.04]	0.157 [.04]
	4900 [2312]	1.06	1.14	1.02	0.22 [.06]	0.29 [.07]	1.10 [.27]	1.01 [.25]	0.168 [.04]	0.163 [.04]
	5000 [2359]	1.06	1.16	1.03	0.23 [.06]	0.31 [.08]	1.14 [.28]	1.04 [.26]	0.172 [.04]	0.169 [.04]
	5100 [2407]	1.07	1.17	1.03	0.24 [.06]	0.33 [.08]	1.18 [.29]	1.07 [.27]	0.176 [.04]	0.175 [.04]
	5200 [2454]	1.07	1.18	1.03	0.25 [.06]	0.35 [.09]	1.22 [.30]	1.10 [.27]	0.180 [.04]	0.182 [.04]
	5300 [2501]	1.08	1.19	1.03	0.26 [.06]	0.36 [.09]	1.27 [.32]	1.15 [.29]	0.184 [.05]	0.188 [.05]
	5400 [2548]	1.08	1.21	1.03	0.27 [.07]	0.38 [.09]	1.33 [.33]	1.20 [.30]	0.188 [.05]	0.194 [.05]
	5500 [2595]	1.09	1.22	1.04	0.28 [.07]	0.40 [.10]	1.37 [.34]	1.25 [.31]	0.192 [.05]	0.200 [.05]
	5600 [2643]	1.09	1.23	1.04	0.29 [.07]	0.42 [.10]	1.42 [.35]	1.30 [.32]	0.196 [.05]	0.206 [.05]
	5700 [2690]	1.10	1.24	1.04	0.30 [.07]	0.44 [.11]	1.47 [.37]	1.34 [.33]	0.200 [.05]	0.212 [.05]
	5800 [2737]	1.10	1.26	1.04	0.31 [.08]	0.46 [.11]	1.52 [.38]	1.38 [.34]	0.204 [.05]	0.219 [.05]
	5900 [2784]	1.10	1.27	1.05	0.32 [.08]	0.48 [.12]	1.56 [.39]	1.42 [.35]	0.208 [.05]	0.225 [.05]
	6000 [2831]	1.11	1.28	1.05	0.33 [.08]	0.51 [.13]	1.60 [.40]	1.45 [.36]	0.212 [.05]	0.231 [.06]

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

[] Designates Metric Conversions

AIRFLOW PERFORMANCE— 12.5 TON [43.9 kW]—60 Hz—SIDEFLOW

Air Flow CFM [L/s]		Model RGEDVB150 Voltage 208/230, 460, 575 — 3 phase 60 Hz																External Static Pressure—Inches of Water [kPa]																						
		0.1 [0.02]		0.2 [0.05]		0.3 [0.07]		0.4 [0.10]		0.5 [0.12]		0.6 [0.15]		0.7 [0.17]		0.8 [0.20]		0.9 [0.22]		1.0 [0.25]		1.1 [0.27]		1.2 [0.30]		1.3 [0.32]		1.4 [0.35]		1.5 [0.37]		1.6 [0.40]		1.7 [0.42]		1.8 [0.45]		1.9 [0.47]		2.0 [0.50]
RPM		W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W	RPM	W
4000 [1888]	—	—	791	1757	819	1824	846	1892	872	1961	897	2031	922	2101	946	2173	970	2245	993	2318	1015	2392	1036	2467	1057	2542	1077	2619	1096	2696	1115	2774	1133	2853	1150	2933	1167	3014	1183	3095
4100 [1935]	782	1773	809	1841	836	1911	863	1982	888	2053	913	2125	937	2198	961	2272	984	2346	1006	2422	1027	2498	1048	2576	1068	2654	1088	2733	1106	2812	1124	2893	1142	2975	1158	3057	1174	3140	1189	3224
4200 [1982]	801	1860	828	1932	854	2004	880	2077	905	2150	929	2225	952	2300	975	2377	997	2454	1019	2532	1040	2611	1060	2691	1079	2771	1098	2853	1116	2935	1133	3018	1150	3102	1166	3187	1181	3272	1196	3359
4300 [2029]	819	1954	845	2028	871	2102	896	2177	920	2254	944	2331	967	2409	989	2488	1011	2567	1032	2648	1052	2729	1071	2811	1090	2894	1108	2978	1125	3063	1142	3149	1158	3235	1174	3323	1188	3411	1202	3500
4400 [2076]	837	2053	863	2129	888	2207	912	2284	936	2363	959	2443	981	2523	1003	2605	1024	2687	1044	2770	1064	2854	1082	2938	1101	3024	1118	3110	1135	3197	1151	3286	1166	3375	1181	3464	1195	3555	1208	3646
4500 [2123]	855	2159	880	2237	905	2317	929	2397	952	2479	974	2561	996	2644	1016	2727	1037	2812	1056	2897	1075	2984	1093	3071	1111	3159	1128	3248	1144	3338	1159	3428	1174	3520	1188	3612	1201	3705	1214	3799
4600 [2171]	873	2270	898	2351	921	2453	944	2516	967	2600	988	2684	1009	2770	1030	2856	1049	2943	1068	3031	1086	3120	1104	3210	1121	3300	1137	3392	1152	3484	1167	3577	1181	3671	1195	3766	1207	3861	1219	3958
4700 [2218]	891	2387	914	2471	938	2556	960	2641	982	2727	1003	2814	1023	2902	1043	2991	1062	3080	1080	3171	1097	3262	1114	3354	1130	3447	1146	3541	1161	3636	1175	3732	1188	3828	1201	3925	1213	4023		
4800 [2265]	908	2511	931	2597	954	2684	975	2772	996	2860	1017	2950	1036	3040	1055	3132	1074	3224	1091	3317	1108	3410	1124	3505	1140	3601	1155	3697	1169	3794	1182	3892	1195	3991	1207	4091	1219	4191		
4900 [2312]	925	2640	947	2729	969	2818	990	2908	1011	3000	1031	3092	1050	3184	1068	3278	1086	3373	1102	3468	1119	3565	1134	3662	1149	3760	1163	3859	1177	3958	1190	4059	1202	4160	1213	4262				
5000 [2359]	942	2775	964	2866	985	2958	1005	3051	1025	3145	1044	3239	1062	3335	1080	3431	1097	3528	1113	3626	1129	3725	1144	3824	1158	3925	1172	4026	1185	4128	1197	4231	1208	4335	1219	4440				
5100 [2407]	958	2916	979	3010	1000	3104	1020	3200	1039	3296	1057	3393	1075	3491	1092	3589	1108	3689	1124	3789	1139	3891	1153	3993	1167	4096	1180	4200	1192	4304	1204	4410	1214	4516						
5200 [2454]	975	3063	995	3160	1015	3256	1034	3354	1053	3453	1070	3552	1087	3653	1104	3754	1120	3856	1136	3959	1149	4063	1162	4167	1175	4273	1188	4379	1199	4486	1210	4594	1220	4703						
5300 [2501]	991	3217	1010	3315	1030	3415	1048	3515	1066	3616	1083	3718	1100	3821	1115	3924	1130	4029	1145	4134	1158	4241	1171	4348	1184	4456	1195	4564	1206	4674	1216	4785								
5400 [2548]	1006	3376	1026	3477	1044	3579	1062	3681	1079	3785	1096	3899	1111	3995	1126	4101	1141	4208	1155	4316	1168	4425	1180	4534	1192	4645	1203	4756	1213	4868										
5500 [2595]	1022	3541	1040	3644	1058	3749	1075	3854	1092	3960	1108	4067	1123	4175	1137	4283	1151	4393	1164	4503	1177	4614	1188	4726	1199	4839	1210	4953	1219	5068										
5600 [2643]	1037	3712	1055	3818	1072	3924	1089	4032	1105	4141	1120	4250	1134	4361	1148	4472	1161	4584	1174	4697	1185	4810	1196	4925	1207	5040	1216	5156												
5700 [2690]	1052	3888	1069	3997	1086	4106	1102	4217	1117	4328	1132	4440	1145	4552	1159	4666	1171	4780	1183	4896	1194	5012	1204	5129	1214	5247														
5800 [2737]	1067	4071	1083	4182	1099	4294	1115	4407	1129	4520	1143	4635	1156	4750	1169	4866	1181	4983	1192	5101	1202	5220	1212	5339	1221	5460														
5900 [2784]	1081	4260	1097	4374	1113	4488	1127	4603	1141	4719	1154	4836	1167	4954	1179	5073	1190	5192	1200	5312	1210	5433	1219	5555																
6000 [2831]	1095	4455	1111	4571	1126	4688	1139	4805	1153	4924	1165	5043	1177	5164	1188	5285	1199	5407	1209	5529	1218	5653																		

NOTE: F-Drive left of first bold line, G-Drive between bold lines, H-Drive right of second bold line.

Drive Package	F										G									
Motor H.P. [W]	3 [1118.5]										5 [2237.1]									
Blower Sheave	AK71H										AK79H									
Motor Sheave	1V/L44										1VP60									
Belt	A48										A52									
Turns Open	0	1	2	3	4	5	0	1	2	3	4	5	0	1	2	3	4	5		
RPM	1002	955	909	862	813	765	1208	1171	1127	1084	1038	995	1208	1171	1127	1084	1038	995		

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

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

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

4. Add component resistance (below) to duct resistance to determine total External Static Pressure.

[] Designates Metric Conversions

AIRFLOW PERFORMANCE— 12.5 TON [43.9 kW]—60 Hz—SIDEFLOW (CONTINUED)

Airflow	AIRFLOW CORRECTION FACTORS *			COMPONENT AIRFLOW RESISTANCE						
	CFM [L/s]	Total kBTu/h	Sensible kBTu/h	Power kW	Wet Coil	Vertical Economizer RA Damper Open	Concentric Diffuser RXRN-AEF3618 & Concentric Adapter RXMC-DD03 (Flush)	Concentric Diffuser RXRN-AED3618 & Concentric Adapter RXMC-DD03 (Drop)	Pressure Drop MERV 8	Pressure Drop MERV 13
					Resistance — Inches of Water [kPa]					
4000 [1888]	1.01	1.03	1.01		0.15 [.04]	0.73 [0.18]	0.76 [0.19]	0.68 [0.17]	0.132 [.03]	0.108 [.03]
4100 [1935]	1.02	1.04	1.01		0.16 [.04]	0.78 [0.19]	0.79 [0.20]	0.72 [0.18]	0.136 [.03]	0.114 [.03]
4200 [1982]	1.02	1.06	1.01		0.17 [.04]	0.83 [0.21]	0.82 [0.20]	0.75 [0.19]	0.140 [.03]	0.120 [.03]
4300 [2029]	1.03	1.07	1.01		0.17 [.04]	0.88 [0.22]	0.86 [0.21]	0.79 [0.20]	0.144 [.03]	0.126 [.03]
4400 [2076]	1.03	1.08	1.01		0.18 [.05]	0.93 [0.23]	0.90 [0.22]	0.83 [0.21]	0.148 [.04]	0.132 [.03]
4500 [2123]	1.04	1.09	1.02		0.19 [.05]	0.98 [0.24]	0.94 [0.23]	0.86 [0.21]	0.152 [.04]	0.138 [.03]
4600 [2171]	1.04	1.11	1.02		0.20 [.05]	1.03 [0.26]	0.98 [0.24]	0.89 [0.22]	0.156 [.04]	0.145 [.04]
4700 [2218]	1.05	1.12	1.02		0.21 [.05]	1.07 [0.27]	1.02 [0.25]	0.94 [0.23]	0.160 [.04]	0.151 [.04]
4800 [2265]	1.05	1.13	1.02		0.21 [.05]	1.12 [0.28]	1.06 [0.26]	0.98 [0.24]	0.164 [.04]	0.157 [.04]
4900 [2312]	1.06	1.14	1.02		0.22 [.06]	1.17 [0.29]	1.10 [0.27]	1.01 [0.25]	0.168 [.04]	0.163 [.04]
5000 [2359]	1.06	1.16	1.03		0.23 [.06]	1.21 [0.30]	1.14 [0.28]	1.04 [0.26]	0.172 [.04]	0.169 [.04]
5100 [2407]	1.07	1.17	1.03		0.24 [.06]	1.26 [0.31]	1.18 [0.29]	1.07 [0.27]	0.176 [.04]	0.175 [.04]
5200 [2454]	1.07	1.18	1.03		0.25 [.06]	1.30 [0.32]	1.22 [0.30]	1.10 [0.27]	0.180 [.04]	0.182 [.04]
5300 [2501]	1.08	1.19	1.03		0.26 [.06]	1.35 [0.34]	1.27 [0.32]	1.15 [0.29]	0.184 [.05]	0.188 [.05]
5400 [2548]	1.08	1.21	1.03		0.27 [.07]	1.39 [0.35]	1.33 [0.33]	1.20 [0.30]	0.188 [.05]	0.194 [.05]
5500 [2595]	1.09	1.22	1.04		0.28 [.07]	1.44 [0.36]	1.37 [0.34]	1.25 [0.31]	0.192 [.05]	0.200 [.05]
5600 [2643]	1.09	1.23	1.04		0.29 [.07]	1.48 [0.37]	1.42 [0.35]	1.30 [0.32]	0.196 [.05]	0.206 [.05]
5700 [2690]	1.10	1.24	1.04		0.30 [.07]	1.52 [0.38]	1.47 [0.37]	1.34 [0.33]	0.200 [.05]	0.212 [.05]
5800 [2737]	1.10	1.26	1.04		0.31 [.08]	1.57 [0.39]	1.52 [0.38]	1.38 [0.34]	0.204 [.05]	0.219 [.05]
5900 [2784]	1.10	1.27	1.05		0.32 [.08]	1.61 [0.40]	1.56 [0.39]	1.42 [0.35]	0.208 [.05]	0.225 [.05]
6000 [2831]	1.11	1.28	1.05		0.33 [.08]	1.65 [0.41]	1.60 [0.40]	1.45 [0.36]	0.212 [.05]	0.231 [.06]

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

[] Designates Metric Conversions

ELECTRICAL DATA – RGEDYB SERIES

		090ACF15 090ACF20	090ACG15 090ACG20 090ACH15 090ACH20	090ADF15 090ADF20	090ADG15 090ADG20 090ADH15 090ADH20	090AYF15 090AYF20	090AYG15 090AYG20 090AYH15 090AYH20
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	518-633	518-633
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	Hz	60	60	60	60	60	60
	Minimum Circuit Ampacity	41/41	44/44	18	20	15	16
	Minimum Circuit Ampacity with Power Exhaust	46/46	49/49	21	23	17	18
	Minimum Overcurrent Protection Device Size	50/50	50/50	25	25	20	20
	Minimum Overcurrent Protection Device Size with Power Exhaust	60/60	60/60	25	25	20	20
	Maximum Overcurrent Protection Device Size	60/60	60/60	25	30	20	20
	Maximum Overcurrent Protection Device Size with Power Exhaust	70/70	70/70	30	30	25	25
Compressor Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	Amps (RLA), Comp. 1	25.2	25.2	10.6	10.6	8.6	8.6
	Amps (LRA), Comp. 1	178.5	178.5	79.1	79.1	65.0	65.0
Condenser Motor	No.	2	2	2	2	2	2
	Volts	208/230	208/230	460	460	575	575
	Phase	1	1	1	1	1	1
	HP	1/5	1/5	1/5	1/5	1/5	1/5
	Amps (FLA, each)	1.2	1.2	0.8	0.8	0.6	0.6
	Amps (LRA, each)	2.3	2.3	1.4	1.4	1.1	1.1
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	HP	2	3	2	3	2	3
	Amps (FLA, each)	6.2	9.2	3.0	4.6	2.4	3.5
	Amps (LRA, each)	47.0	74.5	24.0	38.1	19.0	30.0

ELECTRICAL DATA – RGEDYB SERIES

		102ACF15 102ACF22	102ACG15 102ACG22 102ACH15 102ACH22	102ADF15 102ADF22	102ADG15 102ADG22 102ADH15 102ADH22	102AYF15 102AYF22	102AYG15 102AYG22 102AYH15 102AYH22
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	518-633	518-633
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	Hz	60	60	60	60	60	60
	Minimum Circuit Ampacity	43/43	46/46	21	22	16	17
	Minimum Circuit Ampacity with Power Exhaust	48/48	51/51	23	25	18	19
	Minimum Overcurrent Protection Device Size	50/50	60/60	25	25	20	20
	Minimum Overcurrent Protection Device Size with Power Exhaust	60/60	60/60	30	30	20	25
	Maximum Overcurrent Protection Device Size	60/60	70/70	30	30	20	25
	Maximum Overcurrent Protection Device Size with Power Exhaust	70/70	70/70	35	35	25	25
Compressor Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	Amps (RLA), Comp. 1	26.8	26.8	12.5	12.5	9.4	9.4
	Amps (LRA), Comp. 1	190.7	190.7	100.2	100.2	65.0	65.0
Condenser Motor	No.	2	2	2	2	2	2
	Volts	208/230	208/230	460	460	575	575
	Phase	1	1	1	1	1	1
	HP	1/5	1/5	1/5	1/5	1/5	1/5
	Amps (FLA, each)	1.2	1.2	0.8	0.8	0.6	0.6
	Amps (LRA, each)	2.3	2.3	1.4	1.4	1.1	1.1
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	HP	2	3	2	3	2	3
	Amps (FLA, each)	6.2	9.2	3.0	4.6	2.4	3.5
	Amps (LRA, each)	47.0	74.5	24.0	38.1	19.0	30.0

ELECTRICAL DATA – RGEDYB SERIES

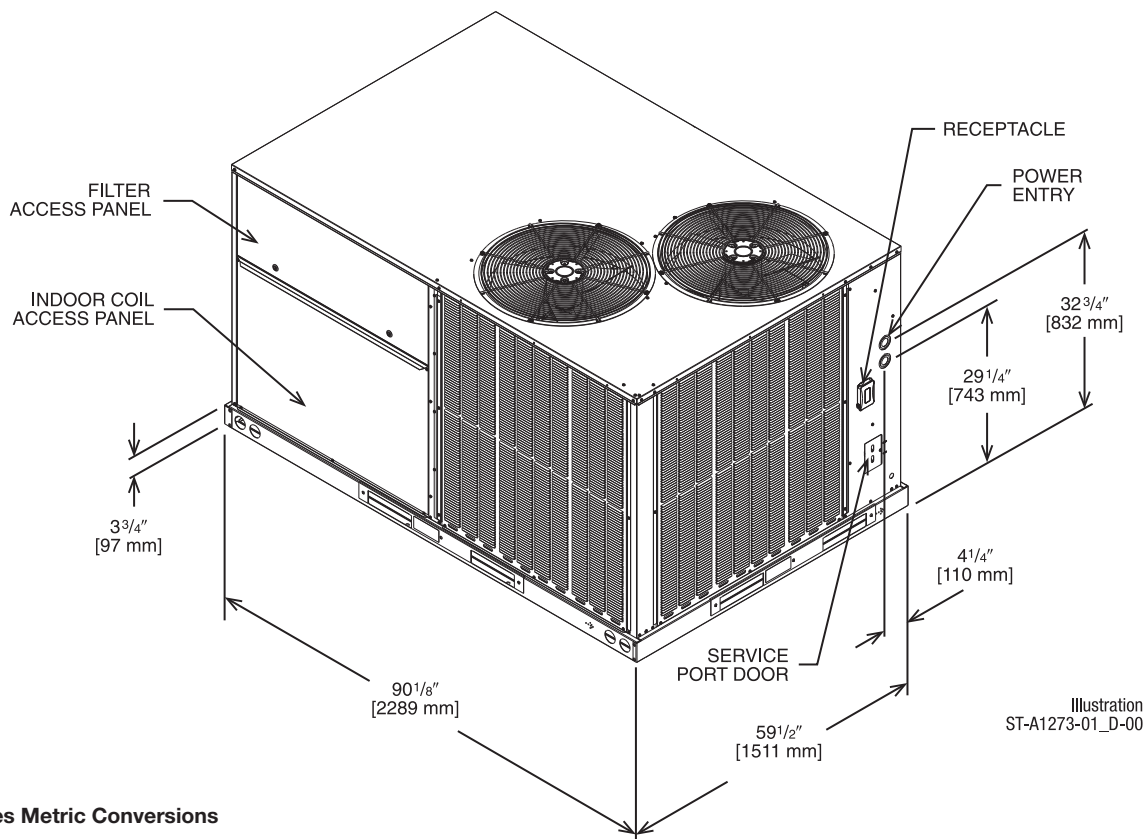
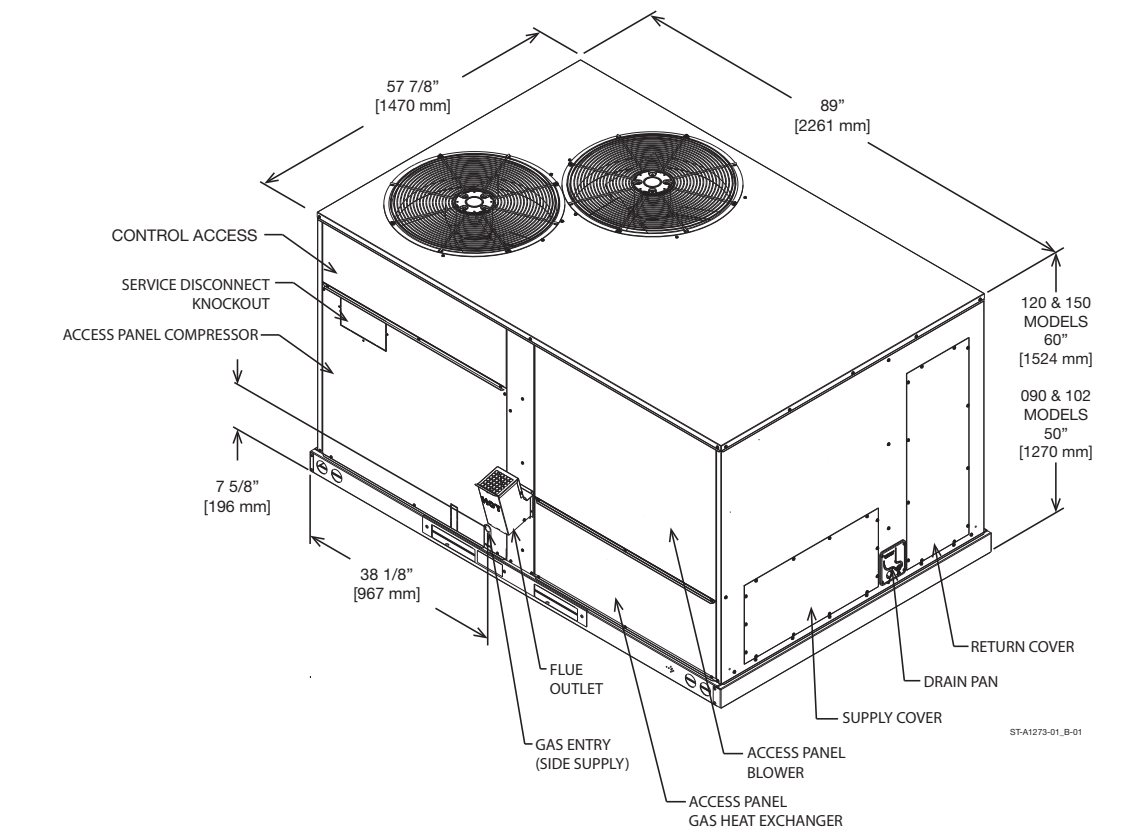
		120ACF15 120ACF22	120ACG15 120ACG22 120ACH15 120ACH22	120ADF15 120ADF22	120ADG15 120ADG22 120ADH15 120ADH22	120AYF15 120AYF22	120AYG15 120AYG22 120AYH15 120AYH22
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	518-633	518-633
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	Hz	60	60	60	60	60	60
	Minimum Circuit Ampacity	45/45	48/48	24	25	19	20
	Minimum Circuit Ampacity with Power Exhaust	50/50	53/53	26	28	21	22
	Minimum Overcurrent Protection Device Size	60/60	60/60	30	30	25	25
	Minimum Overcurrent Protection Device Size with Power Exhaust	60/60	60/60	30	35	25	25
	Maximum Overcurrent Protection Device Size	70/70	70/70	35	35	30	30
	Maximum Overcurrent Protection Device Size with Power Exhaust	70/70	70/70	35	40	30	30
Compressor Motor	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	Amps (RLA), Comp. 1	26.5	26.5	14.0	14.0	11.5	11.5
	Amps (LRA), Comp. 1	255.0	255.0	123.0	123.0	93.7	93.7
Condenser Motor	No.	2	2	2	2	2	2
	Volts	208/230	208/230	460	460	575	575
	Phase	1	1	1	1	1	1
	HP	1/3	1/3	1/3	1/3	1/3	1/3
	Amps (FLA, each)	2.4	2.4	1.4	1.4	1.0	1.0
	Amps (LRA, each)	4.7	4.7	2.4	2.4	4.7	4.7
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	HP	2	3	2	3	2	3
	Amps (FLA, each)	6.2	9.2	3.0	4.6	2.4	3.5
	Amps (LRA, each)	47.0	74.5	24.0	38.1	19.0	30.0

ELECTRICAL DATA – RGEDYB SERIES

		150ACF15 150ACF22	150ACG15 150ACG22	150ADF15 150ADF22	150ADG15 150ADG22	150AYF15 150AYF22	150AYG15 150AYG22
Unit Information	Unit Operating Voltage Range	187-253	187-253	414-506	414-506	518-633	518-633
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	Hz	60	60	60	60	60	60
	Minimum Circuit Ampacity	68/68	75/75	29	31	23	24
	Minimum Circuit Ampacity with Power Exhaust	74/74	80/80	32	34	25	26
	Minimum Overcurrent Protection Device Size	80/80	90/90	35	35	25	30
	Minimum Overcurrent Protection Device Size with Power Exhaust	80/80	90/90	35	40	30	30
	Maximum Overcurrent Protection Device Size	90/90	90/90	35	35	25	30
	Maximum Overcurrent Protection Device Size with Power Exhaust	90/90	100/100	40	40	30	30
Compressor Motor	No.	2	2	2	2	2	2
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	Amps (RLA), Comp. 1	22.4	22.4	8.8	8.8	7.2	7.2
	Amps (LRA), Comp. 1	166.2	166.2	74.6	74.6	54.0	54.0
	Amps (RLA), Comp. 2	22.4	22.4	8.8	8.8	7.2	7.2
	Amps (LRA), Comp. 2	166.2	166.2	74.6	74.6	54.0	54.0
Condenser Motor	No.	2	2	2	2	2	2
	Volts	208/230	208/230	460	460	575	575
	Phase	1	1	1	1	1	1
	HP	3/4	3/4	3/4	3/4	3/4	3/4
	Amps (FLA, each)	4.2	4.2	2.3	2.3	1.2	1.2
	Amps (LRA, each)	11.5	11.5	5.9	5.9	4.2	4.2
Evaporator Fan	No.	1	1	1	1	1	1
	Volts	208/230	208/230	460	460	575	575
	Phase	3	3	3	3	3	3
	HP	3	5	3	5	3	5
	Amps (FLA, each)	9.2	15.7	4.6	6.3	3.5	5.1
	Amps (LRA, each)	74.5	95.0	38.1	47.5	30.0	38.0

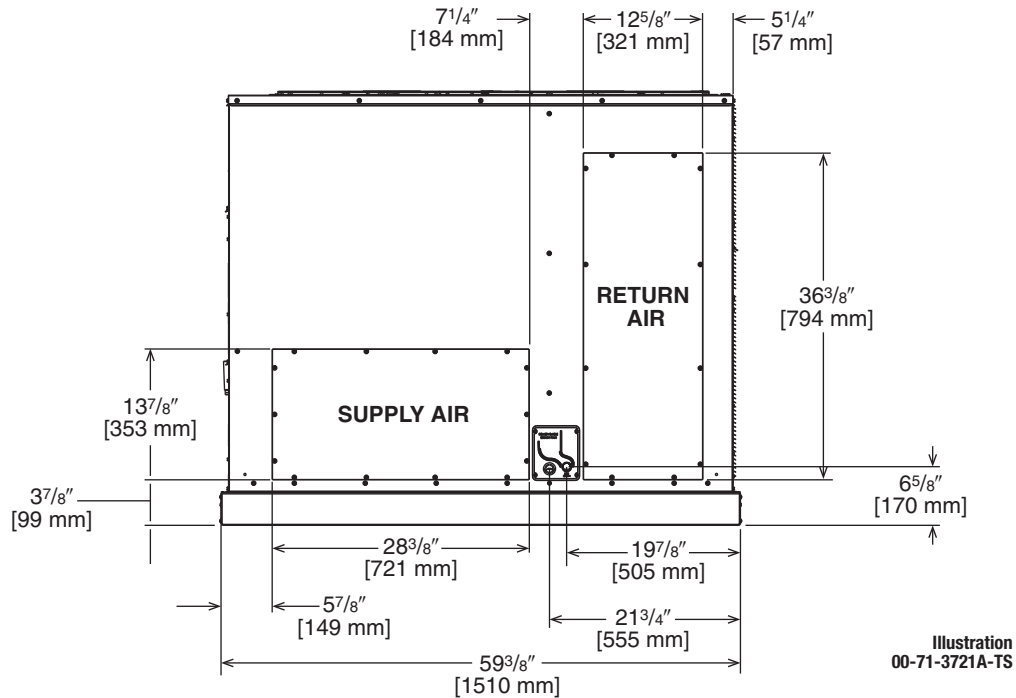
A2L REFRIGERANT INSTALLATION SAFETY DATA

		RGEDYB090	RGEDYB102	RGEDYB120	RGEDYB150	RGEDYB090 w/HumidiDry	RGEDYB102 w/HumidiDry	RGEDYB120 w/HumidiDry	RGEDYB150 w/HumidiDry
Refrigerant Charge		88	113.6	171.2	168	120	152	210.4	214.4
Minimum circulation		293	378	569	559	399	506	700	713
Altitude above Sea Level (ft)	Altitude Adjustment Factor	Minimum Total Space Area, T _{Amin} (Sq. Ft.)							
0	1.000	162	209	316	310	221	280	388	395
1000	1.025	166	215	323	317	227	287	398	405
2000	1.051	170	220	332	325	232	294	408	415
3000	1.078	175	226	340	334	238	302	418	426
4000	1.107	180	232	349	343	245	310	429	437
5000	1.138	185	238	359	352	252	319	441	450
6000	1.170	190	245	369	362	259	328	454	462
6500	1.187	193	249	375	368	263	333	460	469

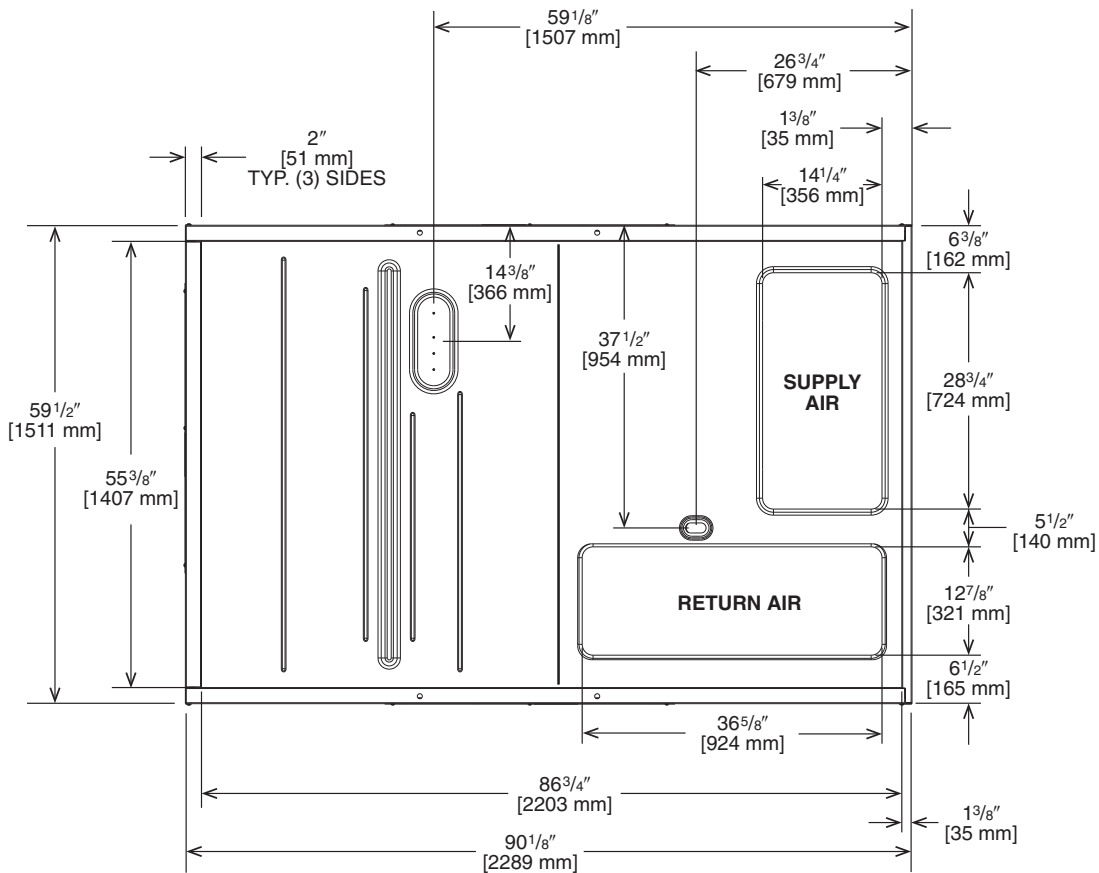


[] Designates Metric Conversions

SUPPLY AND RETURN DIMENSIONS FOR HORIZONTAL APPLICATIONS



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



[] Designates Metric Conversions

WEIGHTS

Capacity Tons [kW]	Corner Weights by Percentage			
	A	B	C	D
7.5-12.5 [21.1-44.0]	26%	34%	17%	23%

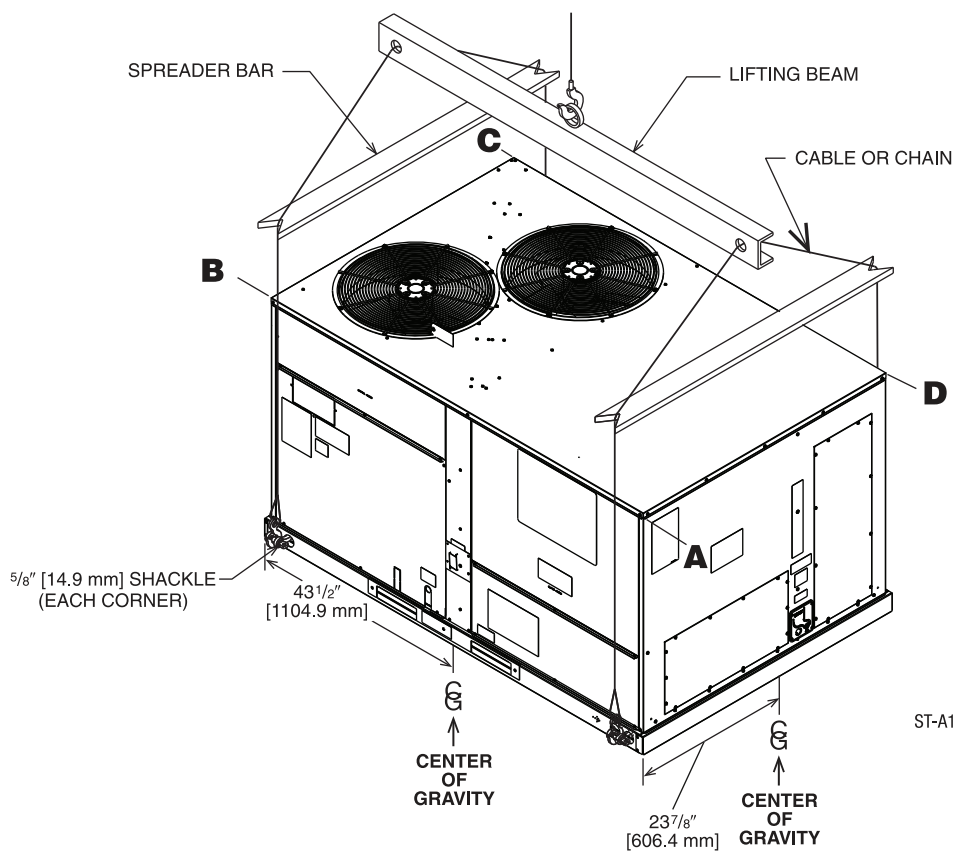


Illustration
ST-A1273-01_J-00

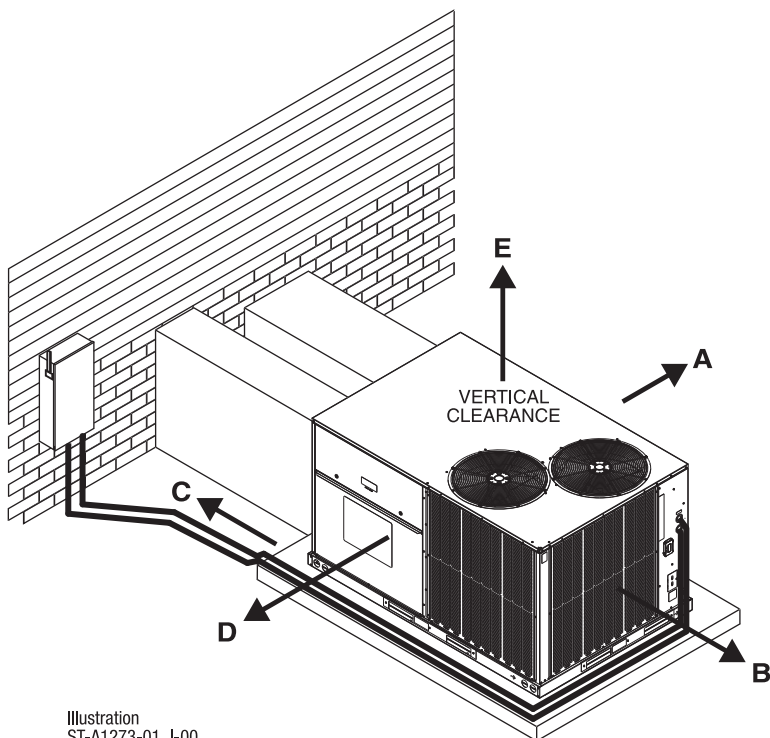


Illustration
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CLEARANCES

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-01MDDBM3	86 [39.0]	57 [25.9]	Yes
DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Honeywell Controller</i>	RXRD-01MDHBM3	84 [38.1]	55 [24.9]	No
Non-DDC Economizer with No Controls (Downflow) <i>MicroMetl Economizer, Belimo Actuator</i>	RXRD-31MDDAM3	86 [39.0]	57 [25.9]	No
Non-DDC Economizer with Single Enthalpy (Downflow) <i>MicroMetl Economizer with Siemens Controls</i>	RXRD-11MDDAM3	86 [39.0]	57 [25.9]	Yes
Non-DDC Economizer with Single Enthalpy (Downflow) <i>Ruskin Rooftop Systems Economizer with RRS Basic Controller</i>	RXRD-41MDDAM3	86 [39.0]	57 [25.9]	Yes
Non-DDC Economizer with Single Enthalpy (Downflow) <i>Ruskin Rooftop Systems Economizer with Siemens Controller</i>	RXRD-51MDDAM3	86 [39.0]	57 [25.9]	Yes
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>MicroMetl Economizer with Siemens Controls</i>	RXRD-11MDHAM3	84 [38.1]	55 [24.9]	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>Ruskin Rooftop Systems Economizer with RRS Basic Controller</i>	RXRD-41MDHAM3	84 [38.1]	55 [24.9]	No
Non-DDC Economizer with Single Enthalpy (Horizontal) <i>Ruskin Rooftop Systems Economizer with Siemens Controller</i>	RXRD-51MDHAM3	84 [38.1]	55 [24.9]	No
Economizer Universal DDC Interface Kit	RXRX-DDC01	40 [18.1]	34 [15.4]	Yes

Accessory	Model Number	Shipping Weight Lbs. [kg]	Installed Weight Lbs. [kg]	Factory Installation Available?
Comfort Alert ¹ (3 Phase) DDC	RXRX-AZ01	3 [1.5]	2 [0.9]	Yes
Comfort Alert ¹ (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 7.5/8.5 Ton Drop	RXMC-DD01	40 [18.1]	34 [15.4]	No
Concentric Adapter 10 Ton Drop	RXMC-DD02	75 [34.0]	65 [29.5]	No
Concentric Adapter 12.5 Ton Drop	RXMC-DD03	75 [34.0]	65 [29.5]	No
Concentric Diffuser 7.5/8.5 Ton Drop	RXRN-AED2000	35 [15.9]	30 [13.6]	No
Concentric Diffuser 10.0 Ton Drop	RXRN-AED3415	170 [77.1]	160 [72.6]	No
Concentric Diffuser 12.5 Ton Drop	RXRN-AED3618	190 [86.2]	180 [81.6]	No
Concentric Diffuser 7.5/8.5 Ton Flush	RXRN-AEF2000	30 [13.6]	25 [11.3]	No
Concentric Diffuser 10.0 Ton Flush	RXRN-AEF3415	140 [113.4]	130 [59.0]	No
Concentric Diffuser 12.5 Ton Flush	RXRN-AEF3618	180 [81.6]	170 [77.1]	No
Convenience Outlet, Unwired	RXRX-BN01	2 [1.0]	1.5 [0.7]	Yes
Dual Enthalpy Kit (for Honeywell JADE™)	RXRX-BV01	1 [0.5]	1 [0.5]	No
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

¹One (1) Comfort Alert required per compressor²Refer to conversion kit index provided with the unit for LP conversion kit.³Compatible with roofcurbs RXKG-CAE14 or RXKG-CAE24.

[] Designates Metric Conversions

FIELD-INSTALLED ACCESSORY EQUIPMENT (CONTINUED)

Accessory	Model Number	Shipping Weight Lbs. [kg]	Installed Weight Lbs. [kg]	Factory Installation Available?
Flue Diverter	RXXR-DFG04	5 [2.3]	4 [1.8]	No
Freeze Stat Kit	RXXR-AM01	2 [1.0]	1.5 [0.7]	Yes
Fresh Air Damper, Manual	RXXRF-ADA1	15 [6.8]	12 [5.4]	No
Fresh Air Damper, Motorized	RXXRF-ADB1	38 [17.2]	31 [14.06]	No
Fresh Air Damper, Motorized (DDC)	RXXRF-ADC1	38 [17.2]	31 [14.06]	No
Low-Ambient Control Kit	RXXRZ-A04	4 [1.8]	3 [1.4]	Yes
LP Kit ²	RXXGJ-FP39	2 [1.0]	1 [0.5]	No
MERV 8 Filter 7.5 & 8.5 Ton	RXXMF-M08A22020	2.0 [0.9]	1 [0.45]	No
MERV 8 Filter 10 & 12.5 Ton	RXXMF-M08A22520	2.0 [0.9]	1 [0.45]	No
MERV 13 Filter 7.5 & 8.5 Ton	RXXMF-M13A22020	2.0 [0.9]	1 [0.45]	No
MERV 13 Filter 10 & 12.5 Ton	RXXMF-M13A22520	2.0 [0.9]	1 [0.45]	No
Outdoor Coil Louver Kit - 7.5 & 8.5 Ton	RXXR-ADD04A	52 [23.6]	47 [21.3]	Yes
Outdoor Coil Louver Kit - 10 & 12.5 Ton	RXXR-ADD04B	43 [19.5]	39 [17.7]	Yes
Power Exhaust (230V) Kit, Convertible MicroMetl	RXXR-CDF01C	104 [47.2]	94 [42.6]	No
Power Exhaust (460V) Kit, Convertible MicroMetl	RXXR-CDF01D	104 [47.2]	94 [42.6]	No
Power Exhaust (230V) Kit for Downflow Economizer (RRS)	RXXR-RDF01C	104 [47.2]	94 [42.6]	No
Power Exhaust (460V) Kit for Downflow Economizer (RRS)	RXXR-RDF01D	104 [47.2]	94 [42.6]	No
Power Exhaust (575V) Kit for Downflow Economizer (RRS)	RXXR-RDF01Y	104 [47.2]	94 [42.6]	No
Power Exhaust (230V) Kit for Horizontal Economizer (RRS)	RXXR-RDF03C	104 [47.2]	94 [42.6]	No
Power Exhaust (460V) Kit for Horizontal Economizer (RRS)	RXXR-RDF03D	104 [47.2]	94 [42.6]	No
Power Exhaust (575V) Kit for Horizontal Economizer (RRS)	RXXR-RDF03Y	104 [47.2]	94 [42.6]	No
Roofcurb Adapter ³	RXXR-DDCAE	235 [106.6]	215 [97.5]	No
Roofcurb, 14"	RXXKG-DDD14	109 [49.4]	104 [47.2]	No
Roofcurb, 14" Welded	RXXKG-SD14	109 [49.4]	105 [47.6]	No
Roofcurb, 24"	RXXKG-DDD24	145 [65.8]	140 [63.5]	No
Roofcurb, 24" Welded	RXXKG-SD24	145 [65.8]	142 [64.4]	No
Sensor, Carbon Dioxide (Wall Mount)	RXXR-AR02	3 [1.4]	2 [1.0]	No
Sensor, Room Humidity	RHC-ZNS4	1 [0.5]	1 [0.5]	No
Sensor, Room Temperature and Relative Humidity	RHC-ZNS5	1 [0.5]	1 [0.5]	No
Smoke Detector Kit, Return	RXXR-BS03	5 [2.7]	3.5 [1.6]	No
Smoke Detector Kit, Return/Supply	RXXR-BS04	7 [3.2]	5 [2.7]	No
Unfused Service Disconnect	RXXR-BP01	10 [4.5]	9 [4.1]	Yes

¹One (1) Comfort Alert required per compressor²Refer to conversion kit index provided with the unit for LP conversion kit.³Compatible with roofcurbs RXXKG-CAE14 or RXXKG-CAE24.

The installer is responsible for verifying all accessory dimensions and weights before unit installation.

[] Designates Metric Conversions

COMMUNICATION CARDS



BACnet COMMUNICATION CARD RXRX-AY01

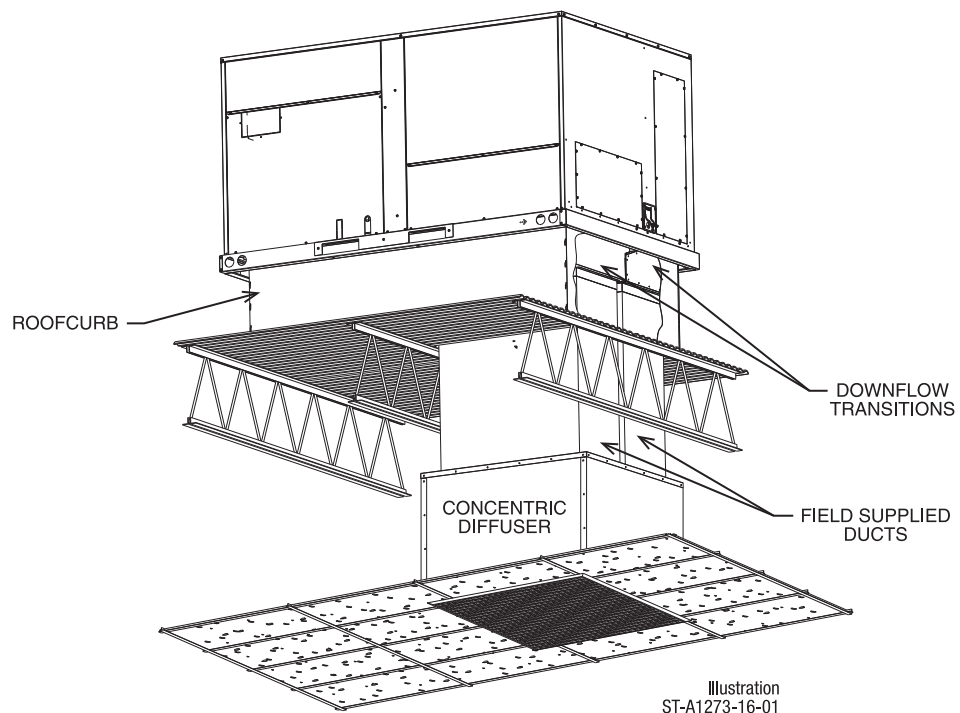
The field installed BACnet Communication Card allows the RTU-C unit controller to communicate with a third party building management system that supports the BACnet Application Specific Controller device profile. The BACnet Communication Module plugs onto the unit RTU-C controller and allows communication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

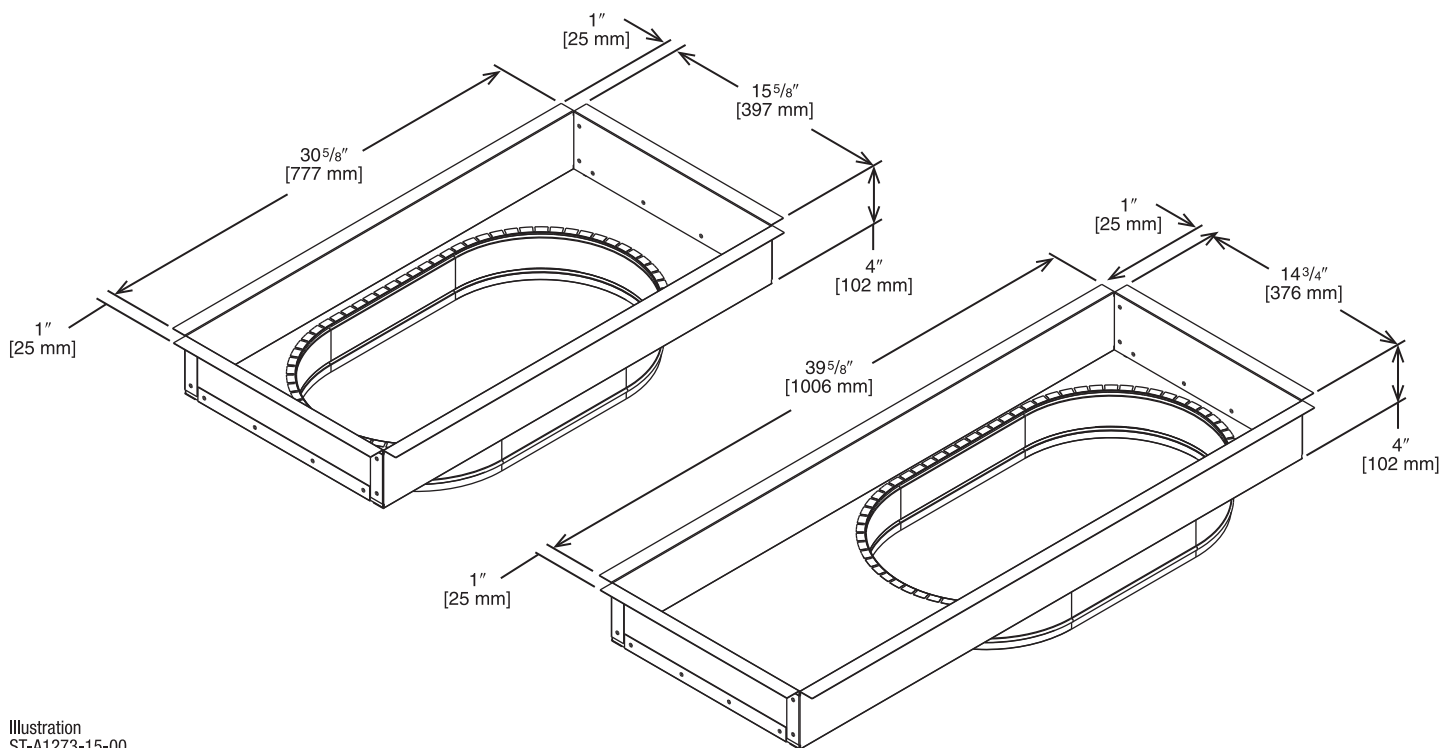
CONCENTRIC DIFFUSER APPLICATION



DOWNFLOW TRANSITION DRAWINGS

RXMC-DD01 — Concentric Adapter 7.5 / 8.5 Ton Drop

- Used with AEF2000 or AED2000 Concentric Diffusers



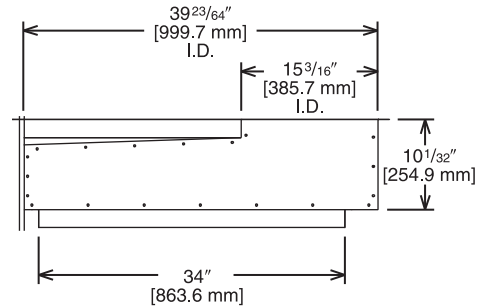
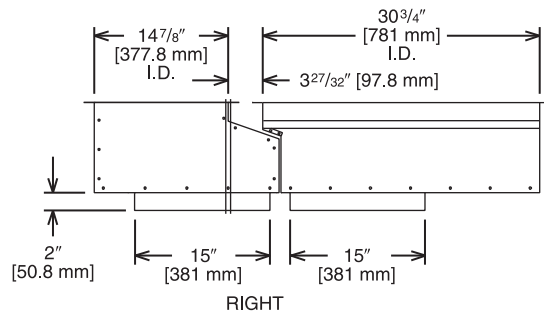
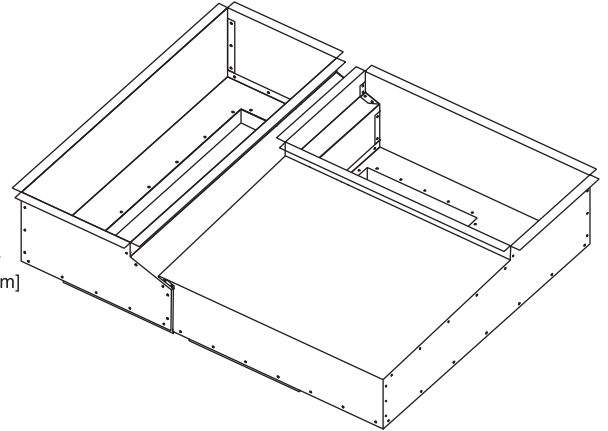
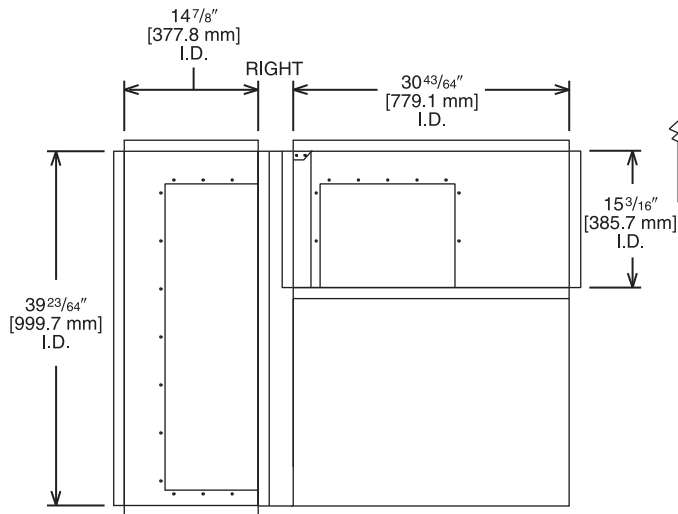
[] Designates Metric Conversions

DOWNFLOW TRANSITION DRAWINGS

RXMC-DD02—Concentric Adapter 10 Ton Drop

- Used with AEF3415 or AED3415 Concentric Diffusers

Illustration
ADS-106193-02



[] Designates Metric Conversions

DOWNFLOW TRANSITION DRAWINGS

RXMC-DD03—Concentric Adapter 12.5 Ton Drop

- Used with AEF3618 or AED3618 Concentric Diffusers

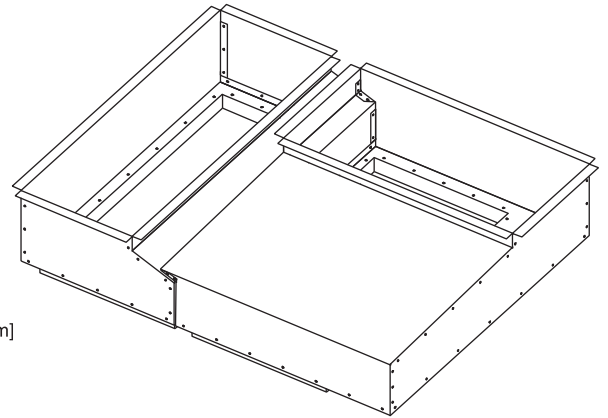
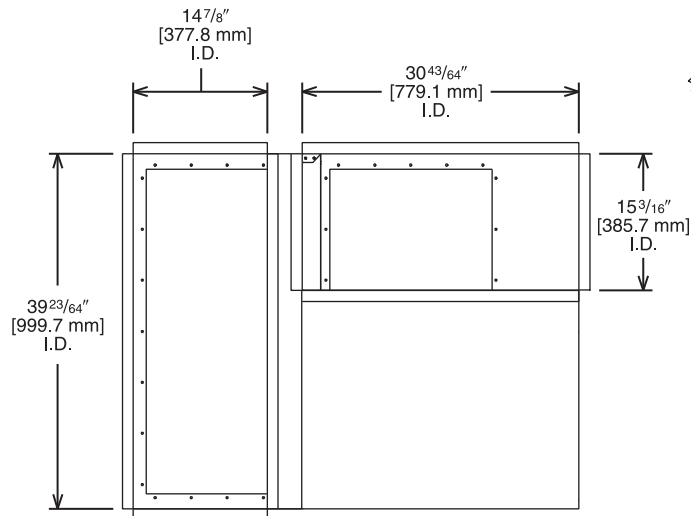
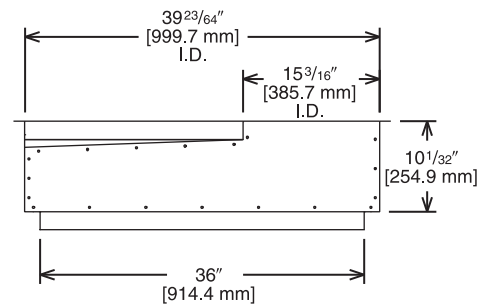
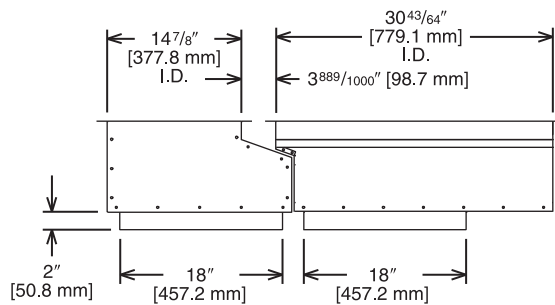


Illustration
ADS-106193-03



[] Designates Metric Conversions

CONCENTRIC DIFFUSER 10.0 TON DROP 15" x 34" [381 x 836 mm]

RXRN-AED3415

For Use With Concentric Adapter (RXMC-DD02)
and 15" x 34" [381 x 836 mm]
Supply and Return Ducts

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

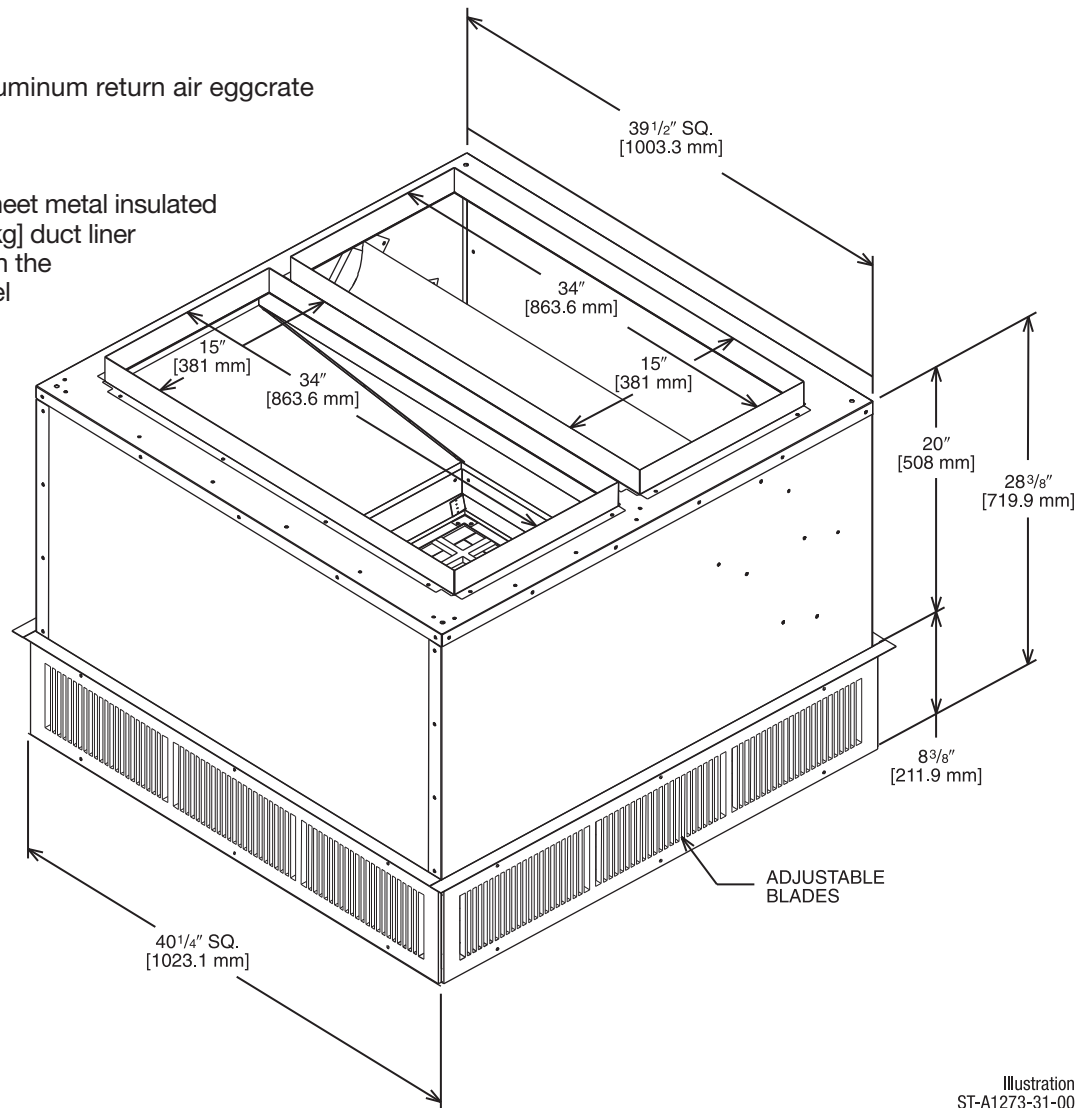


Illustration
ST-A1273-31-00

ENGINEERING DATA^①

Model No.	Flow Rate CFM [L/s]	Throw ^② ^③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (dB(A))
RXRN-AED3415	3600 [1692]	26-53 [7.9-16.2]	851.0 [4.3]	27
	3800 [1786]	27-55 [8.2-16.8]	898.0 [4.5]	29
	4000 [1880]	29-58 [8.8-17.7]	946.0 [4.8]	30
	4200 [1974]	31-61 [9.4-18.6]	993.0 [5.1]	32
	4400 [2068]	32-64 [9.8-19.5]	1040.0 [5.3]	33
	4600 [2162]	34-66 [10.4-20.1]	1087.5 [5.5]	35

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 12.5 TON DROP 18" x 36" [457 x 914 mm]

RXRN-AED3618

**For Use With Concentric Adapter (RXMC-DD03)
and 18" x 36" [457 x 914 mm]
Supply and Return Ducts**

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

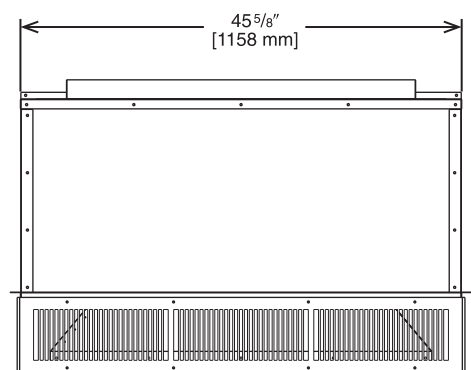
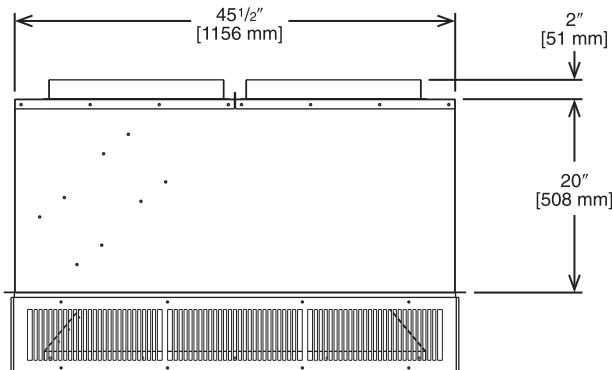
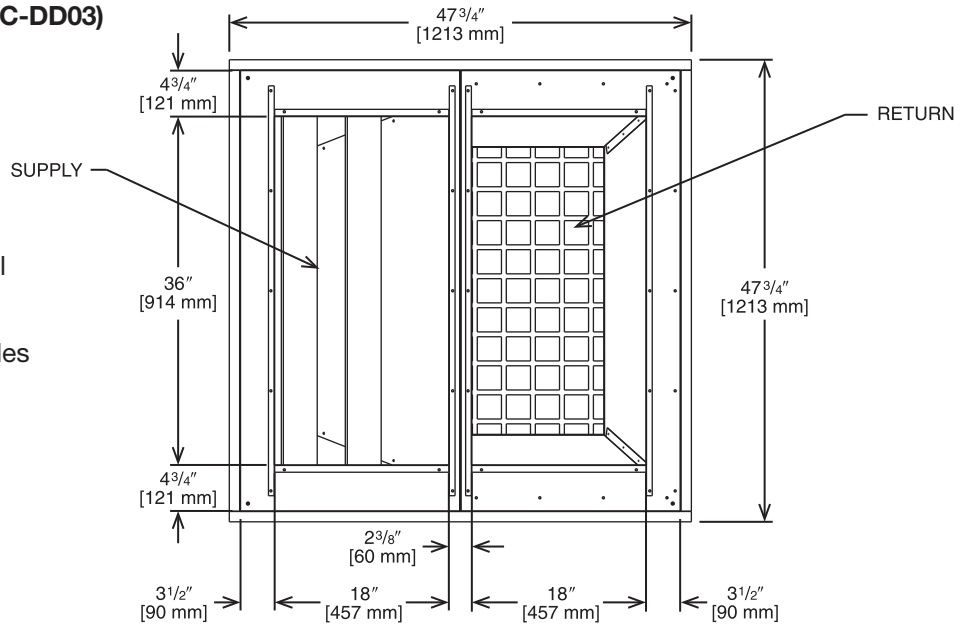


Illustration
ST-A1273-11-00

ENGINEERING DATA^①

Model No.	Flow Rate CFM [L/s]	Throw ^{② ③} Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (dB)
RXRN-AED3618	4400 [2068]	29-55 [8.8-16.8]	841 [4.3]	26
	4600 [2162]	31-57 [9.4-17.4]	875 [4.4]	28
	4800 [2256]	32-60 [9.8-18.3]	915 [4.6]	29
	5000 [2350]	33-62 [10.1-18.9]	951 [4.8]	30
	5200 [2444]	34-65 [10.4-19.8]	988 [5.1]	31
	5400 [2538]	36-67 [10.9-20.4]	1025 [5.2]	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 7.5/8.5 TON FLUSH

RXRN-AEF2000

For Use With Concentric Adapter (RXMC-DD01)
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

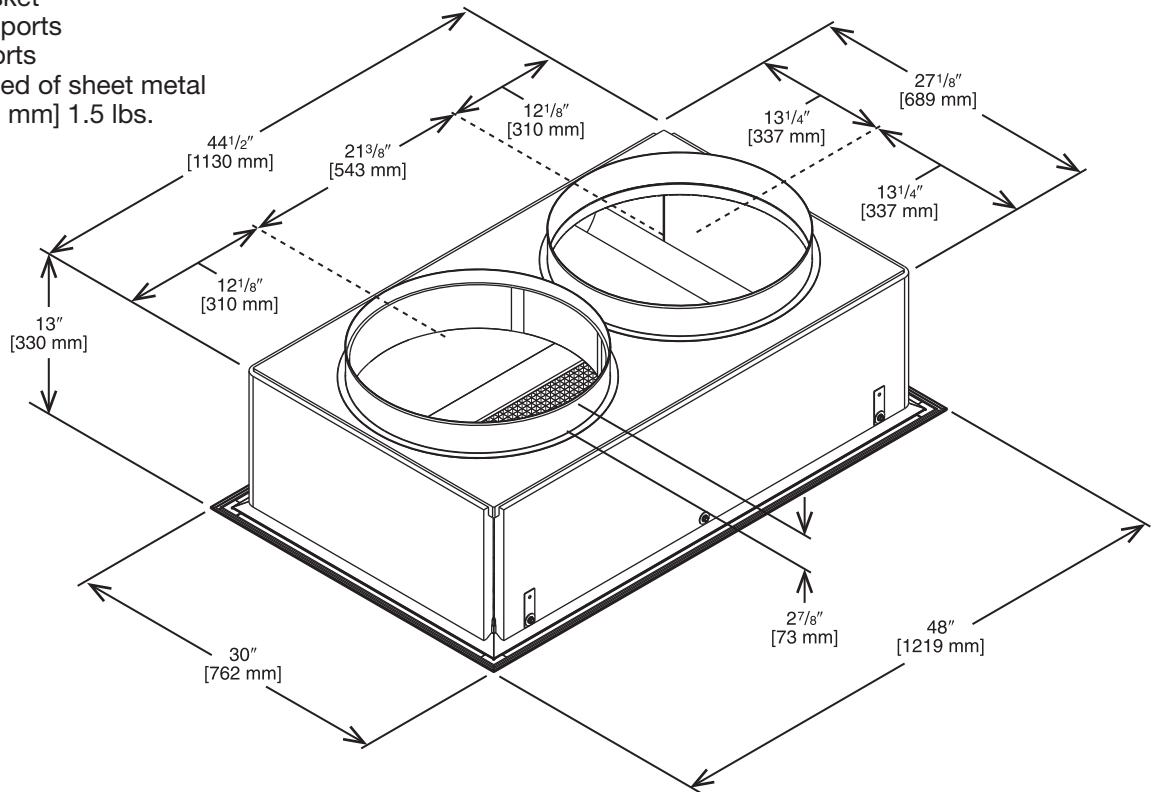


Illustration
ST-A1273-14-00

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
	3600 [1692]	25-38 [7.6-11.6]	918 [4.7]	43
	3800 [1786]	26-39 [7.9-11.9]	969 [4.9]	45
	4000 [1880]	27-40 [8.2-12.2]	1020 [5.2]	48

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

[] Designates Metric Conversions

CONCENTRIC DIFFUSER 10.0 TON FLUSH

18" x 36" [457 x 914 mm]

RXRN-AEF3415

For Use With Concentric Adapter (RXMC-DD02)
18" x 36" [457 x 914 mm]
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

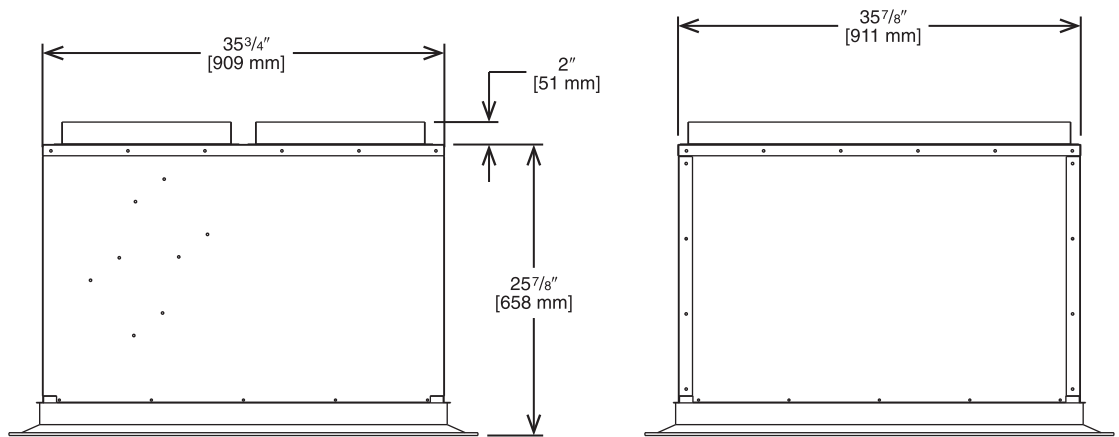
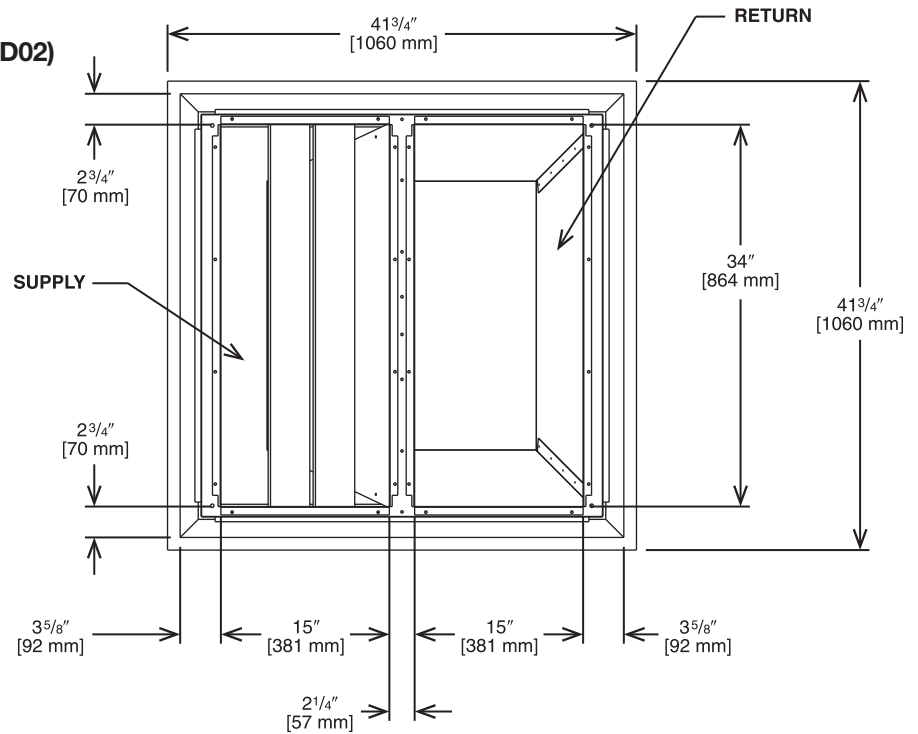


Illustration
ST-A1273-07-00

ENGINEERING DATA^①

Model No.	Flow Rate CFM [L/s]	Throw ^② ^③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ^④ (dB(A))
RXRN-AEF3415	3600 [1692]	14-34 [4.3-10.4]	844 [4.3]	27
	3800 [1786]	15-36 [4.6-11.1]	891 [4.5]	29
	4000 [1880]	16-37 [4.9-11.3]	938 [4.8]	30
	4200 [1974]	17-39 [5.2-11.9]	985 [5.1]	32
	4400 [2068]	18-41 [5.5-12.5]	1032 [5.2]	33
	4600 [2162]	19-43 [5.8-13.1]	1079 [5.5]	35
	4800 [2256]	20-45 [6.1-13.7]	1126 [5.7]	36

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

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

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

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

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

[] Designates Metric Conversions

CONCENTRIC DIFFUSER 12.5 TON FLUSH

18" x 36" [457 x 914 mm]

RXRN-AEF3618

For Use With Concentric Adapter (RXMC-DD03)

18" x 36" [457 x 914 mm]

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

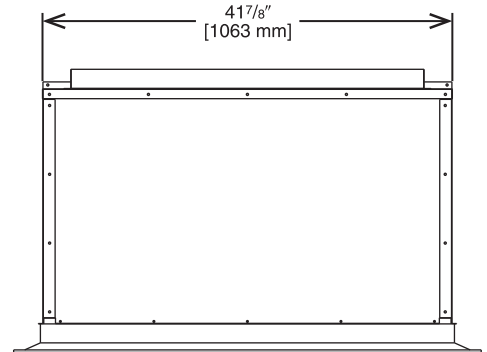
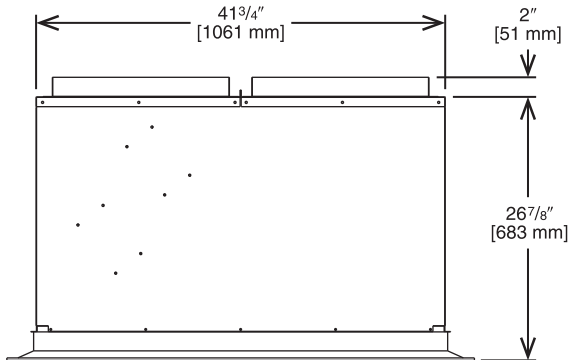
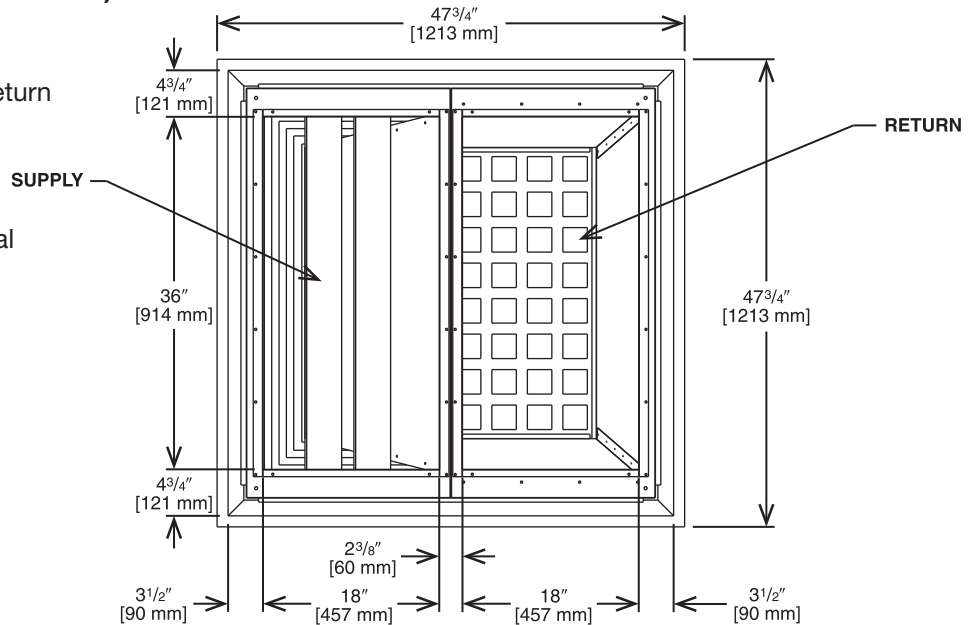


Illustration
ST-A1273-12-00

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-AEF3618	4400 [2068]	13-28 [4.1-8.5]	922 [47]	35
	4600 [2162]	14-30 [4.3-9.1]	962 [4.9]	37
	4800 [2256]	15-31 [4.6-9.4]	1002 [5.1]	39
	5000 [2350]	16-32 [4.9-9.8]	1043 [5.3]	40
	5200 [2444]	17-33 [5.2-10.1]	1083 [5.5]	42
	5400 [2538]	18-35 [5.5-10.7]	1123 [5.7]	43

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

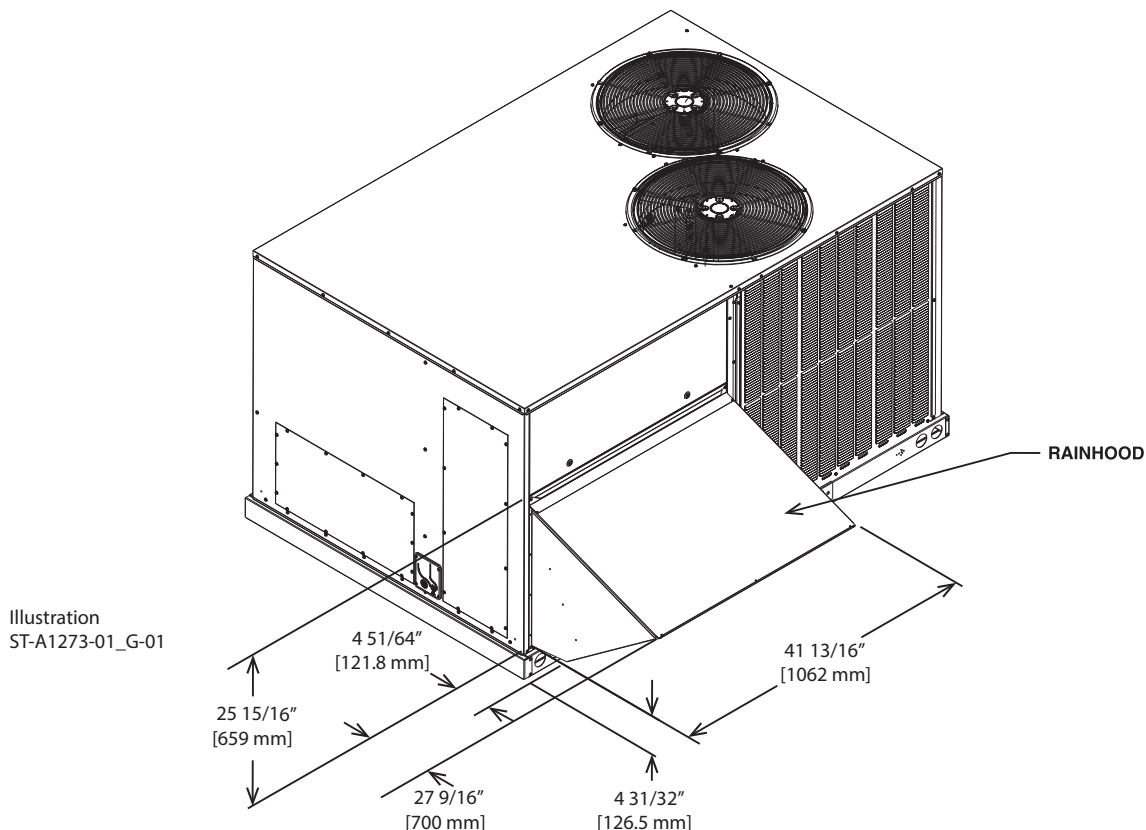
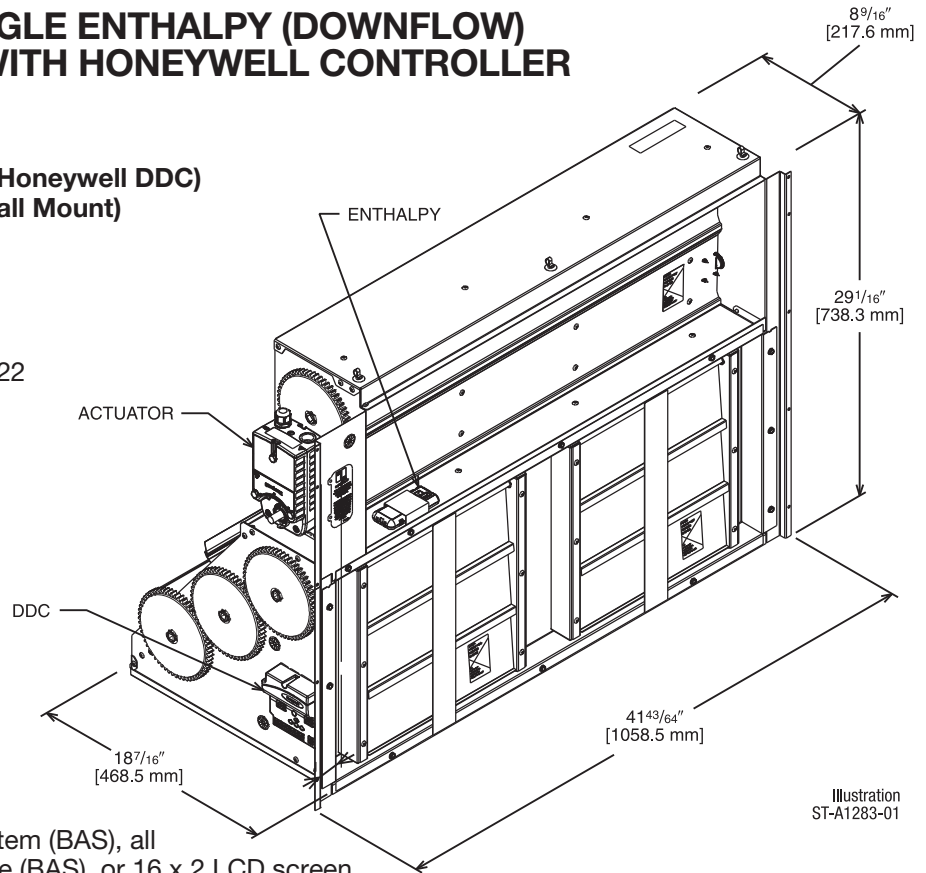
Factory or Field-Installed

RXRD-01MDDBM3

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 Option
- CO₂ Input Sensor Option
- 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 Option
- Prewired for Smoke Detector
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS), or 16 x 2 LCD screen
- If connected to thermostat, all economizer functions can be viewed on 16 x 2 LCD screen



[] Designates Metric Conversions

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

Field-Installed Only

RXRD-01MDHBM3

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 Option
- CO₂ Input Sensor Option
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Horizontal Duct Application
- Optional Remote Minimum Position Potentiometer (270 ohm) (Honeywell #S963B1136) is Option 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 x 2 LCD screen
- If connected to thermostat, all economizer functions can be viewed on 16 x 2 LCD screen

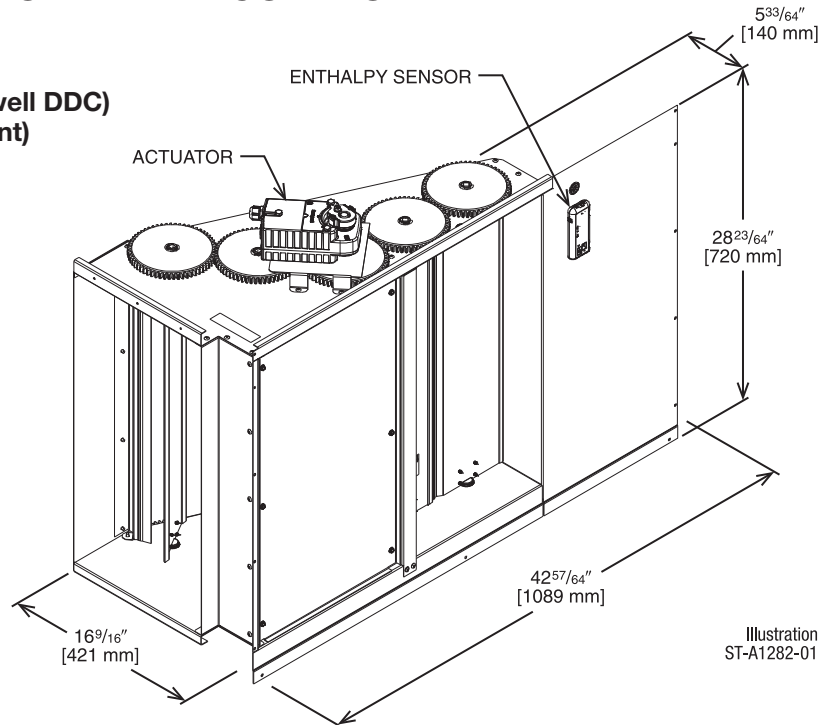


Illustration
ST-A1282-01

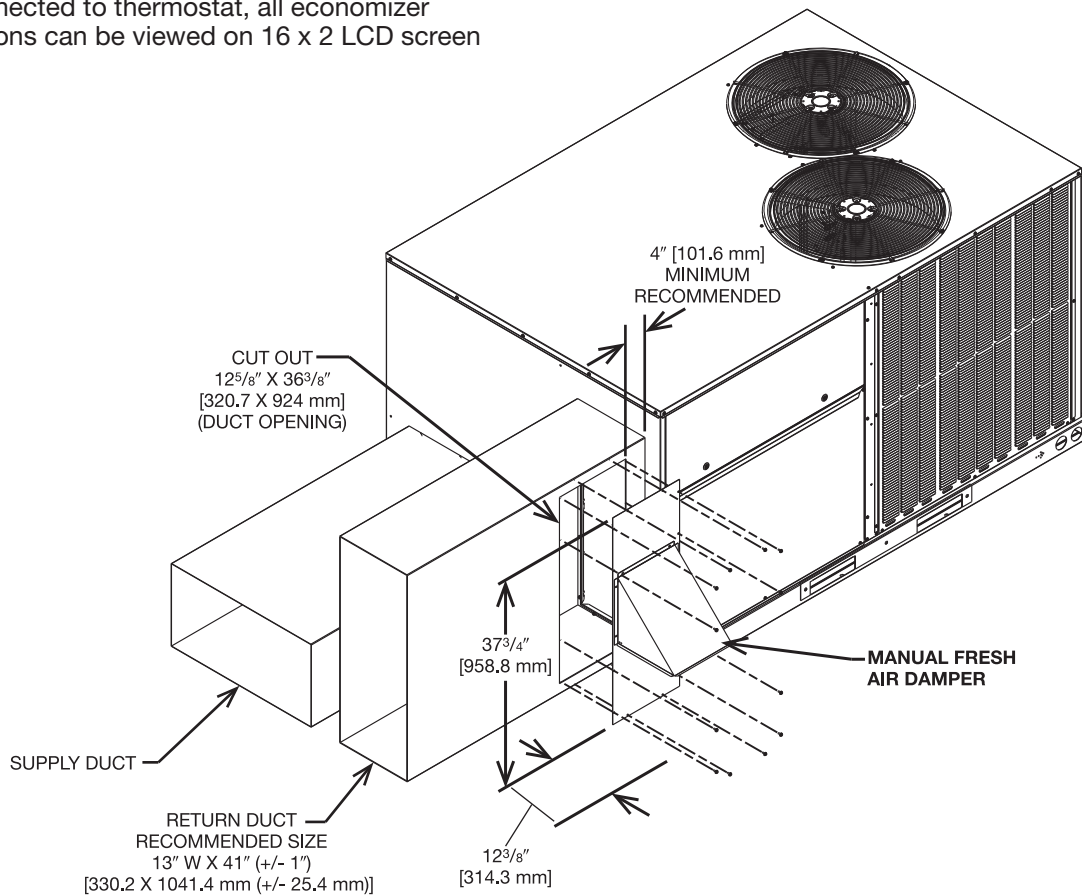


Illustration
ST-A1273-04-01

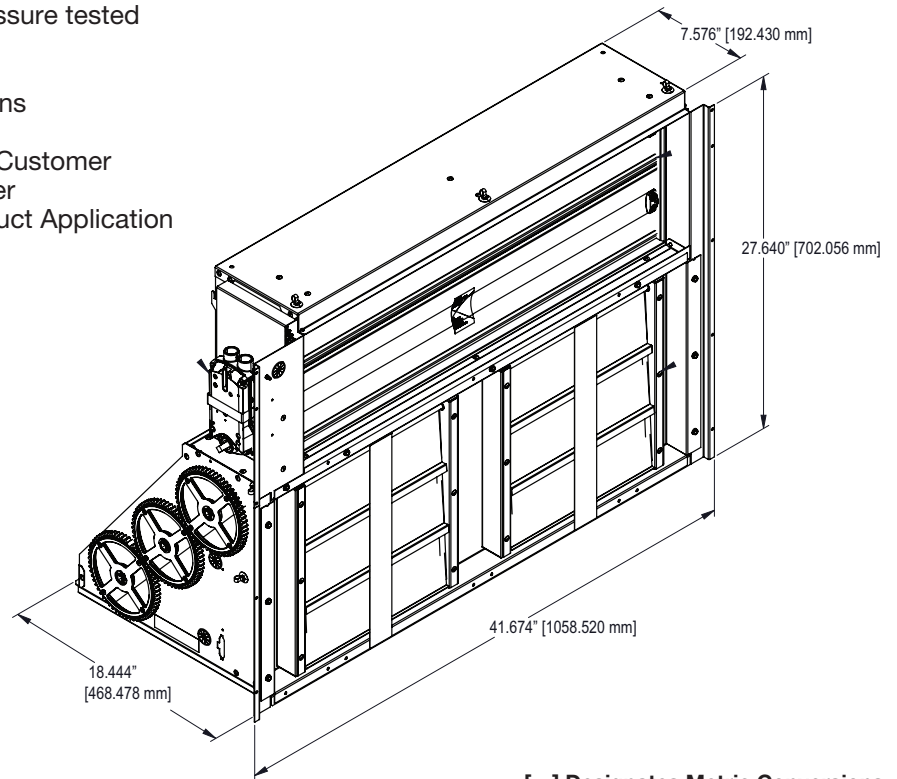
[] Designates Metric Conversions

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

RXRD-31MDDAM3

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

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



[] Designates Metric Conversions

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

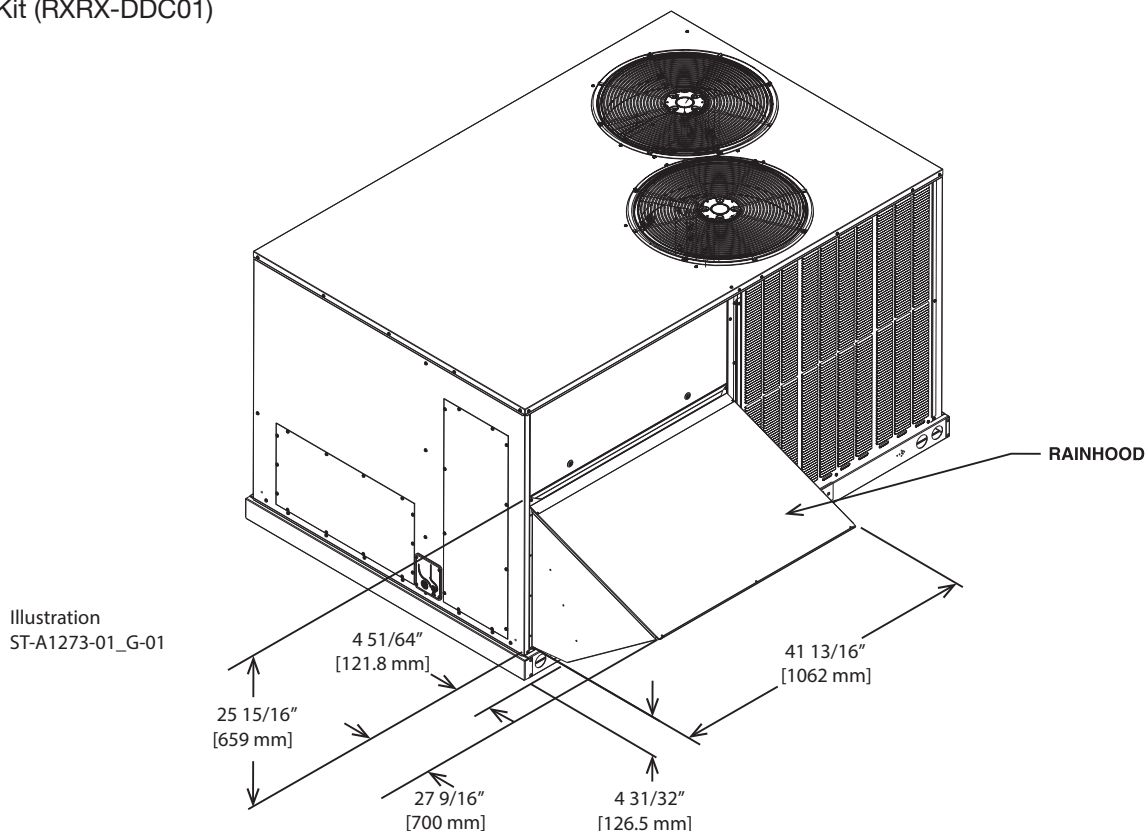
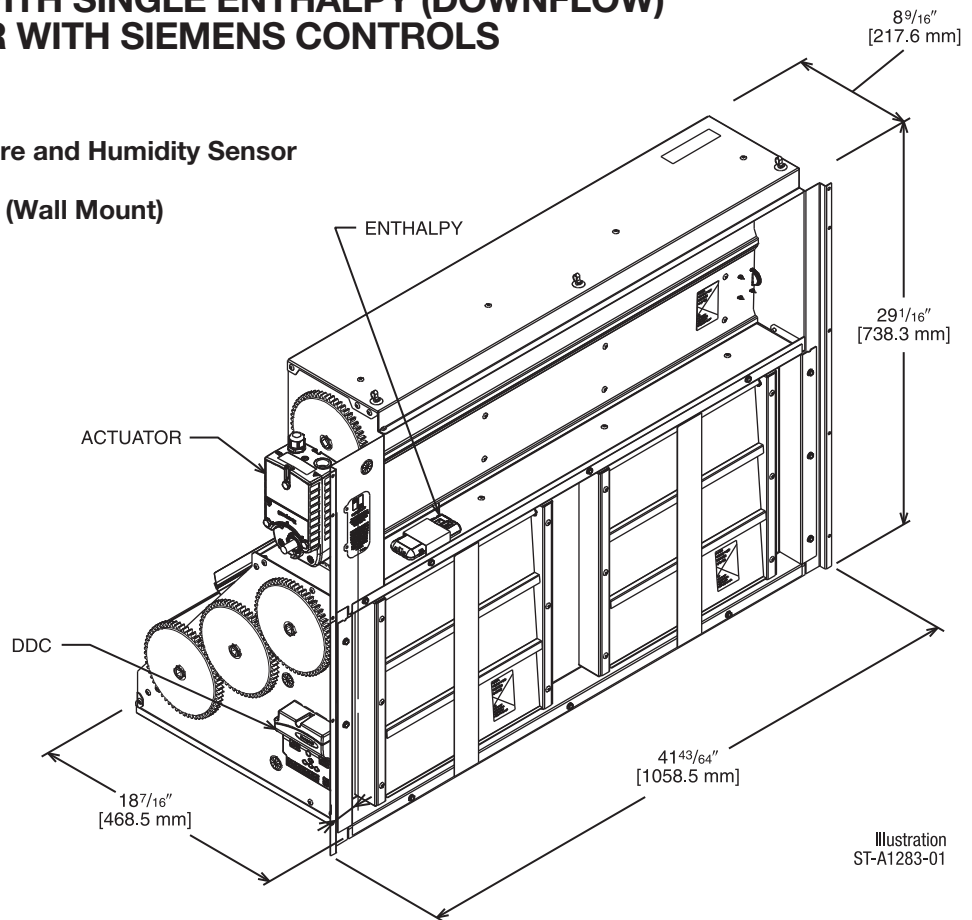
Factory or Field-Installed

RXRD-11MDDAM3

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

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

- Features **Siemens** Controls
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Low Leakage Dampers
- Slip-In Design for Easy Installation
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO₂ Input Sensor Option
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Downflow Duct Application
- Field Installed Power Exhaust Option
- Prewired for Smoke Detector
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS) or 16 x 2 LCD screen
- If connected to thermostat, all economizer functions can be viewed on 16 x 2 LCD screen
- 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) RUSKIN ROOFTOP SYSTEMS ECONOMIZER WITH RRS BASIC CONTROLLER

Factory or Field-Installed

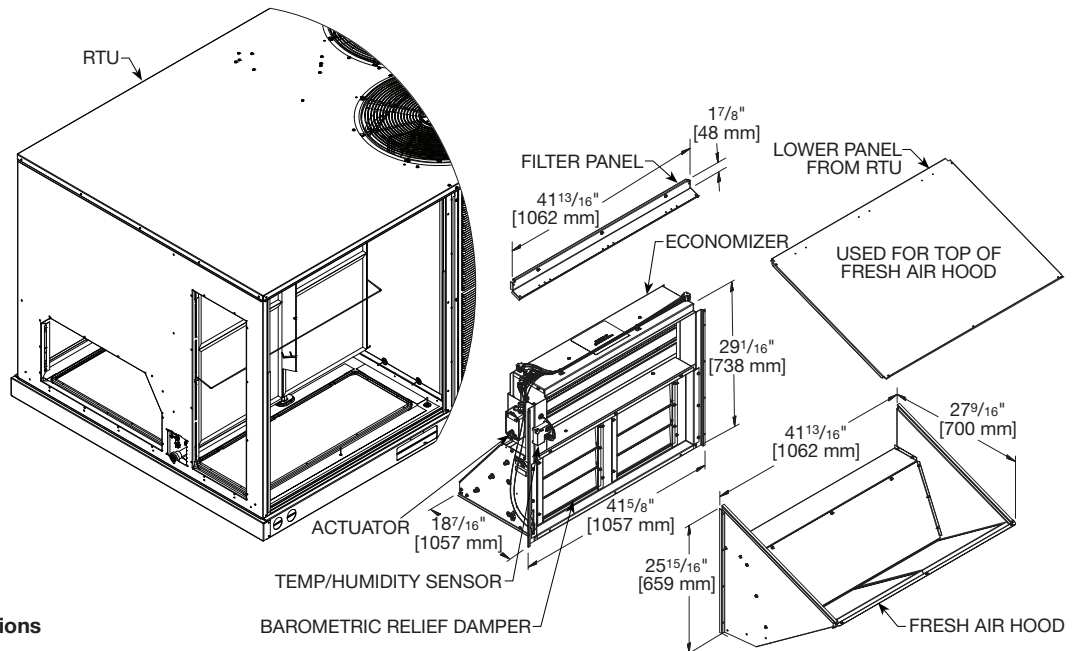
RXRD-41MDDAM3

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

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

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

1. Frame shall be 14 to 24 gauge galvanized steel channel.
2. Damper blades are galvanized steel airfoil shaped, double skin construction of 14 gauge [2.0] equivalent thickness, 6" [152 mm] wide. Parallel action.
3. Blade edge seals shall be Ruskiprene™ type or equivalent suitable for -72°F [-60°C] to +275°F [+135°C] mechanically locked into the blade edge. Adhesive or clip-on type seals are unacceptable.
4. Jamb seals shall be flexible metal, compression type to prevent leakage between blade end and damper frame. Blade end overlapping frame is unacceptable.
5. Bearings shall be stainless steel or nylon bushing.
6. Axles shall be hexagonal positively locked into the damper blade.
7. Drive mechanism shall be concealed out of airstream to reduce pressure drop and noise.
8. Economizer damper is tested and rated based upon AMCA Publication 500-D.
9. 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 (RXXRX-DDC01)



[] Designates Metric Conversions

NON-DDC ECONOMIZER WITH SINGLE ENTHALPY (DOWNFLOW) RUSKIN ROOFTOP SYSTEMS ECONOMIZER WITH SIEMENS CONTROLLER

Factory or Field-Installed

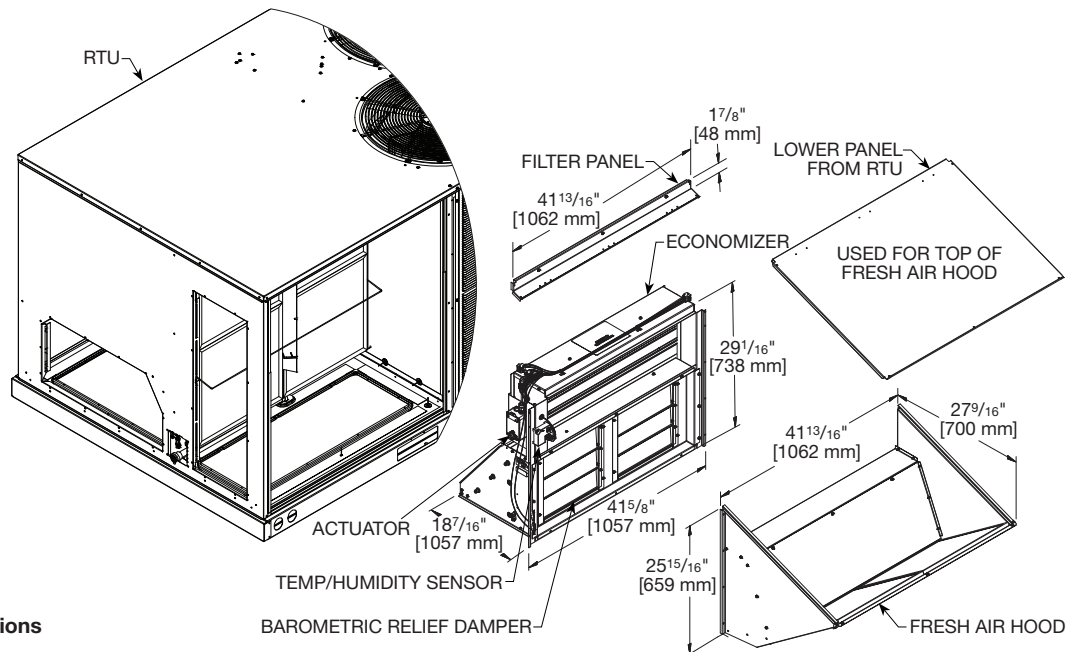
RXRD-51MDDAM3

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

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. Parallel action.
3. Blade edge seals shall be Ruskiprene™ type or equivalent suitable for -72°F [-60°C] to +275°F [+135°C] mechanically locked into the blade edge. Adhesive or clip-on type seals are unacceptable.
4. Jamb seals shall be flexible metal, compression type to prevent leakage between blade end and damper frame. Blade end overlapping frame is unacceptable.
5. Bearings shall be stainless steel or nylon bushing.
6. Axles shall be hexagonal positively locked into the damper blade.
7. Drive mechanism shall be concealed out of airstream to reduce pressure drop and noise.
8. Economizer damper is tested and rated based upon AMCA Publication 500-D.
9. Controls feature the Siemens controller with Siemens 24v actuator. Controls capable of Economizer Fault Detection and Diagnostics for code compliance.
10. Damper shall meet the leakage requirements of the International Energy Conservation Code by leaking less than 3 cfm/sq. ft. at 1" of static pressure and shall be AMCA licensed as a class 1A damper. Complies with reliability and performance requirements as specified by the California Energy Commission's Title 24 Standard and ASHRAE 90.1 2022. Economizer dampers shall be Ruskin Rooftop Systems ECD60 model.
11. Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXXR-DDC-01)



[] Designates Metric Conversions

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

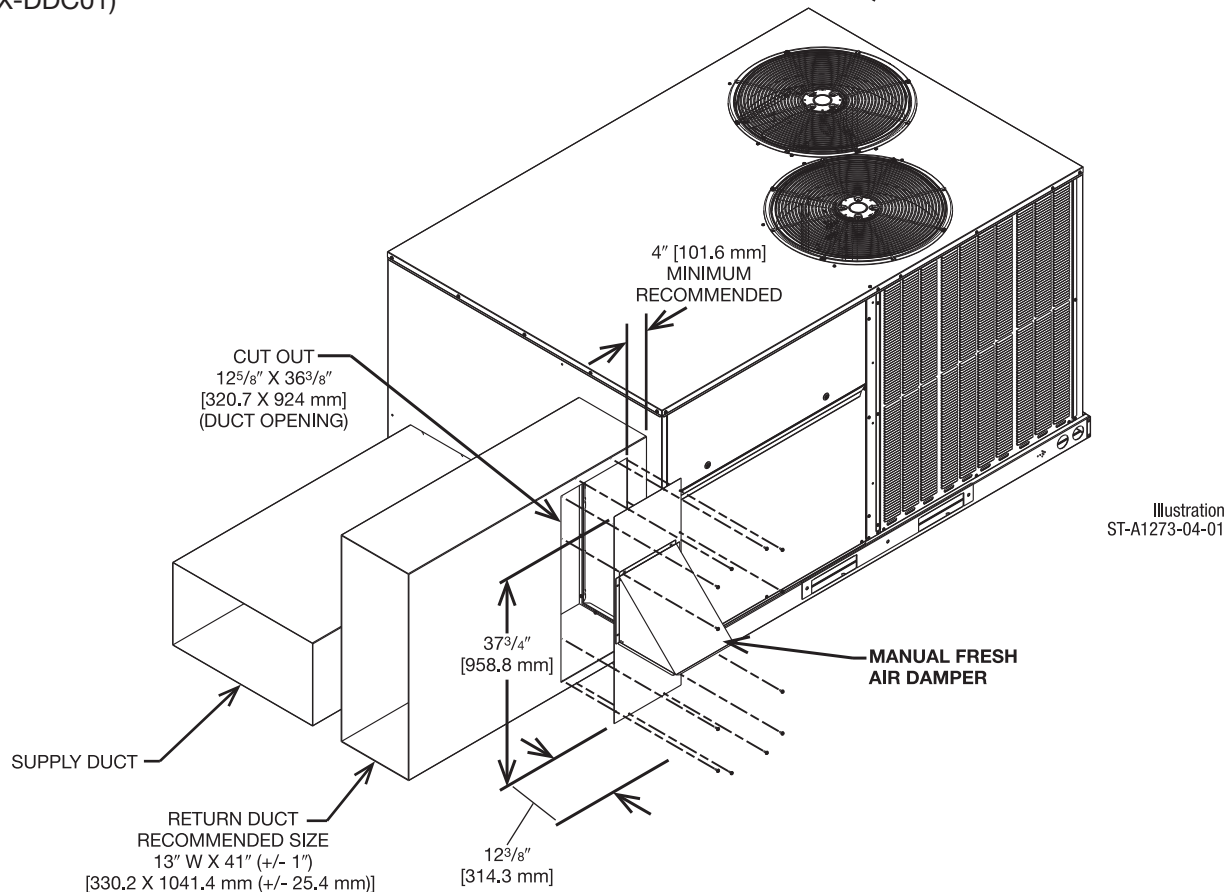
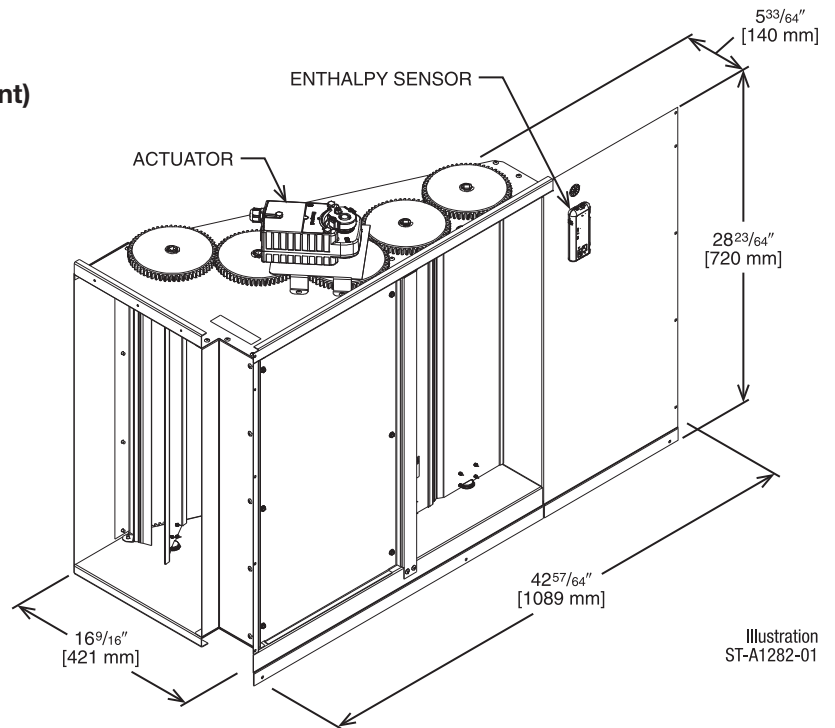
Field-Installed Only

RXRD-11MDHAM3

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

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

- Features **Siemens** Controls
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Low Leakage Dampers
- Slip-In Design for Easy Installation
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO₂ Input Sensor Option
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Horizontal Duct Application
- Field-Installed Power Exhaust Option
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS) or 16 x 2 LCD screen
- If connected to thermostat, all economizer functions can be viewed on 16 x 2 LCD screen
- Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXXR-DDC01)



[] Designates Metric Conversions

NON-DDC ECONOMIZER WITH SINGLE ENTHALPY (HORIZONTAL) RUSKIN ROOFTOP SYSTEMS ECONOMIZER WITH RRS BASIC CONTROLLER Field-Installed Only

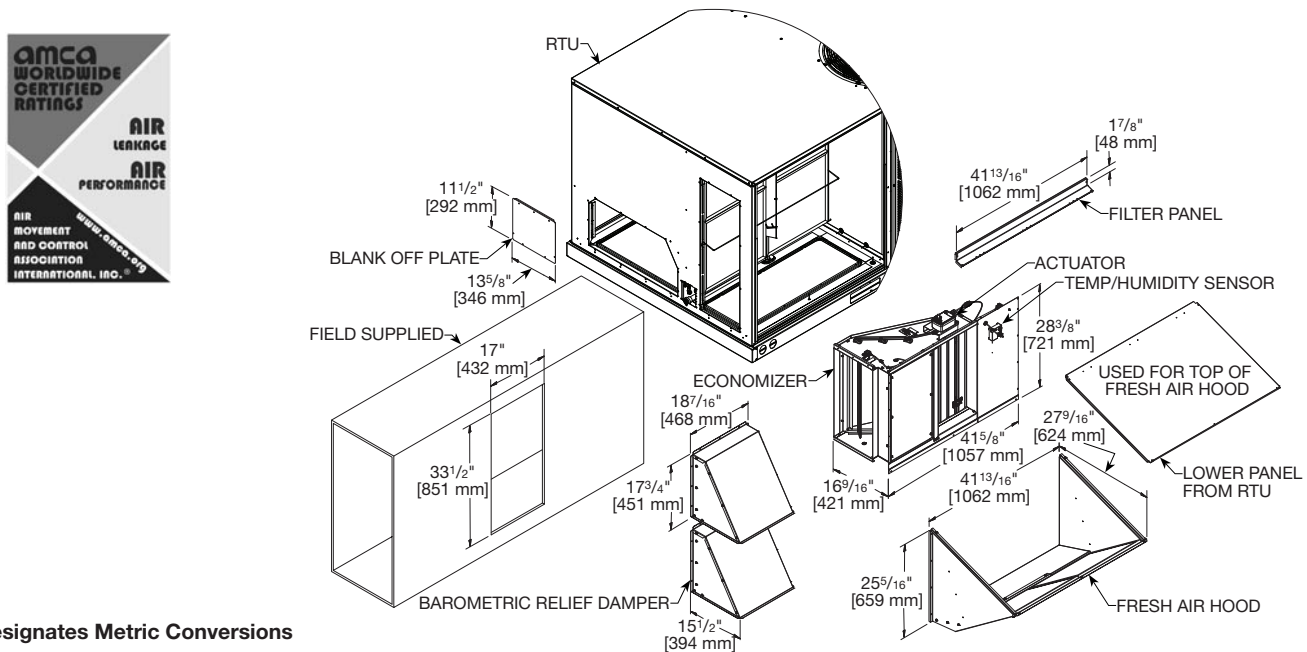
RXRD-41MDHAM3

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

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

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

1. Frame shall be 14 to 24 gauge galvanized steel channel.
2. Damper blades are galvanized steel airfoil shaped, double skin construction of 14 gauge [2.0] equivalent thickness, 6" [152 mm] wide. Parallel action.
3. Blade edge seals shall be Ruskiprene™ type or equivalent suitable for -72°F [-60°C] to +275°F [+135°C] mechanically locked into the blade edge. Adhesive or clip-on type seals are unacceptable.
4. Jamb seals shall be flexible metal, compression type to prevent leakage between blade end and damper frame. Blade end overlapping frame is unacceptable.
5. Bearings shall be stainless steel or nylon bushing.
6. Axles shall be hexagonal positively locked into the damper blade.
7. Drive mechanism shall be concealed out of airstream to reduce pressure drop and noise.
8. Economizer damper is tested and rated based upon AMCA Publication 500-D.
9. 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 W/SINGLE ENTHALPY (HORIZONTAL) RUSKIN ROOFTOP SYSTEMS ECONOMIZER WITH SIEMENS CONTROLLER

Factory or Field-Installed

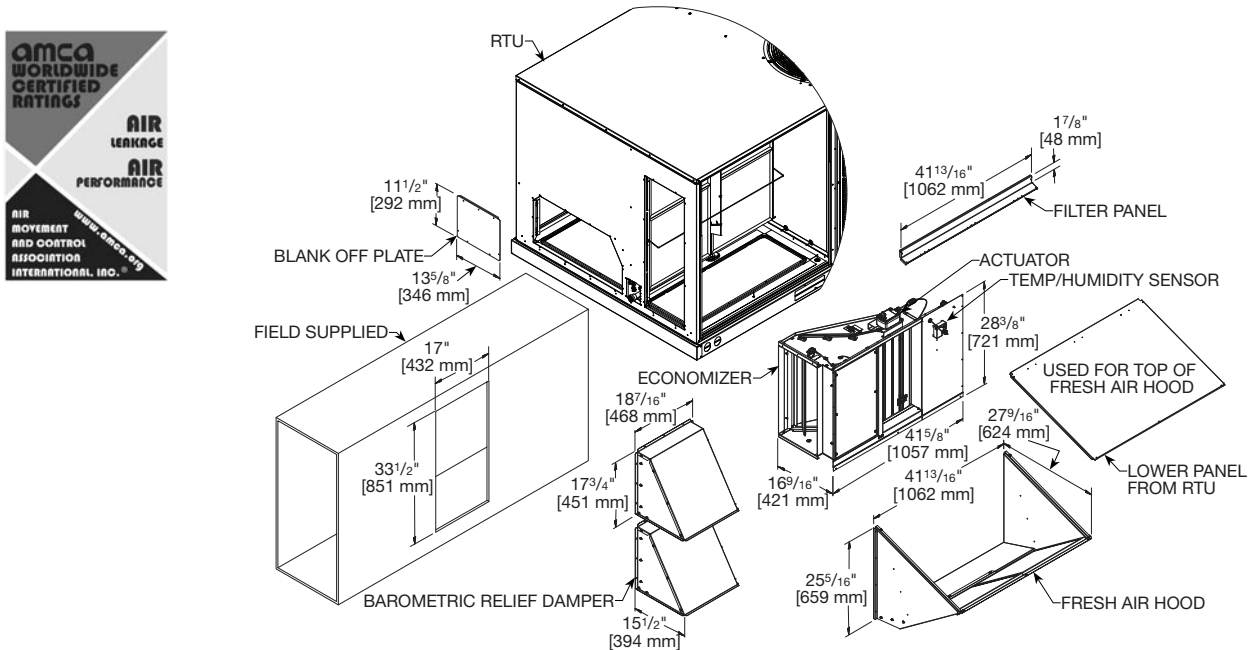
RXRD-51MDHAM3

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

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

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

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



[] Designates Metric Conversions

ECONOMIZER UNIVERSAL DDC INTERFACE KIT

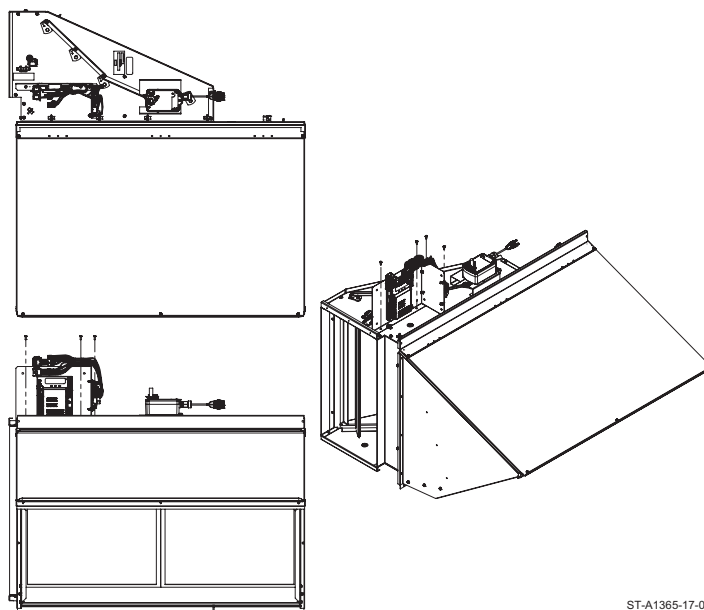
Available Factory or Field-Installed

RXRX-DDC01

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

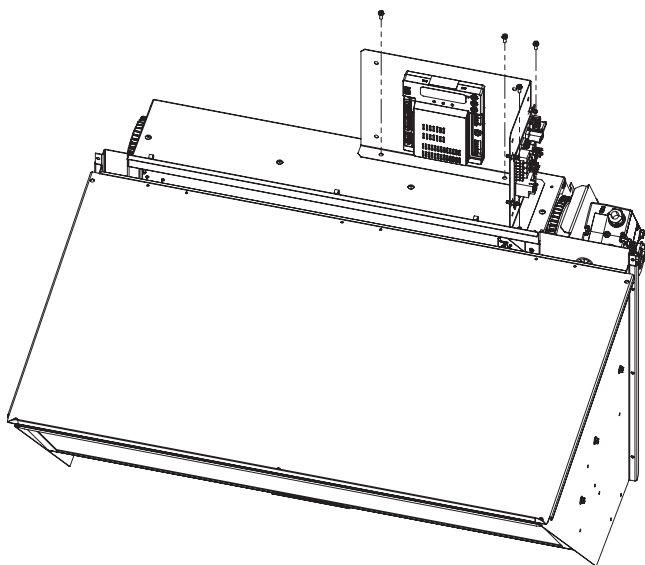
NOTE: Older DDC Models, prior to A2L, may require a field update to the ClearControl Software. The minimum version required is 3.15. A2L Models will come with software version 4.0 or higher.

HORIZONTAL FLOW DDC BRACKET SETUP



ST-A1365-17-00

DOWNFLOW ECONOMIZER DDC BRACKET SETUP

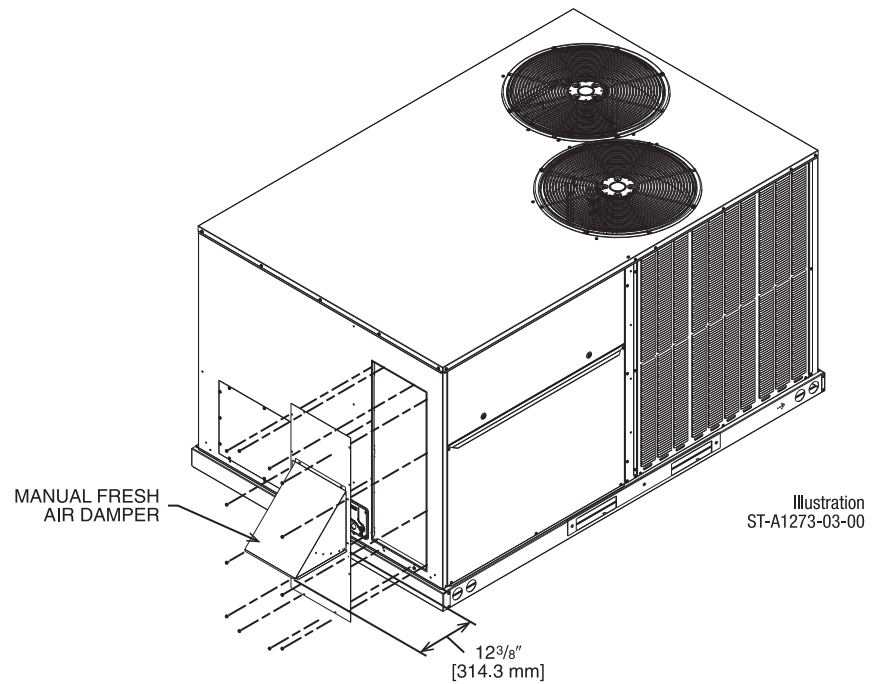


ST-A1365-13-01

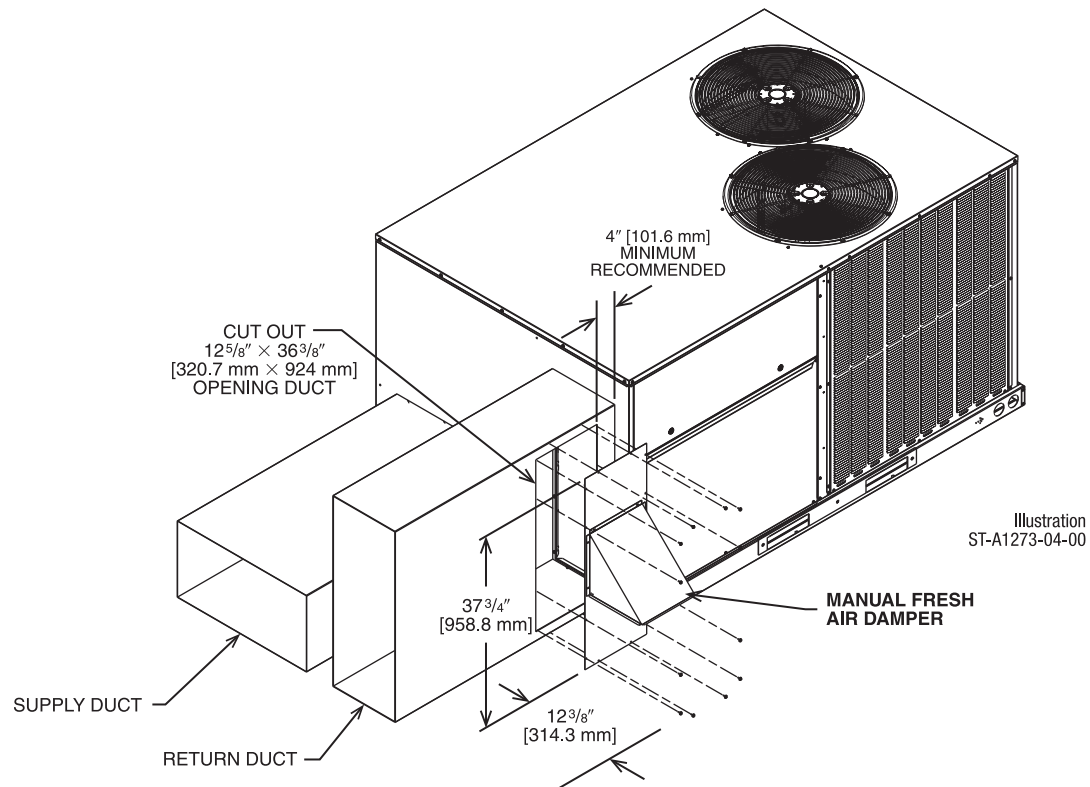
FRESH AIR DAMPER

FRESH AIR DAMPER, MANUAL
RXRF-ADA1

DOWNFLOW APPLICATION



HORIZONTAL APPLICATION



[] Designates Metric Conversions

FRESH AIR DAMPER (CONTINUED)

FRESH AIR DAMPER, MOTORIZED RXRF-ADB1

FRESH AIR DAMPER, MOTORIZED (DDC) RXRF-ADC1 (Modulating Motor Kit with position feedback for DDC Models)

- Features **Honeywell** Controls
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Low Leakage Dampers
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin and 4-pin Electrical Connections
- Pre-Configured—No Field Adjustments Necessary
- Addition of Dual Enthalpy Upgrade Kit allows limited economizer function
- CO₂ Sensor Input Available for Demand Control Ventilation (DCV)
- All fresh air damper functions can be viewed at the RTU-C unit controller display
- If connected to a Building Automation System (BAS), all fresh air damper functions can be viewed on the (BAS), or 16 x 2 LCD screen
- If connected to thermostat, all fresh air damper functions can be viewed on 16 x 2 LCD screen

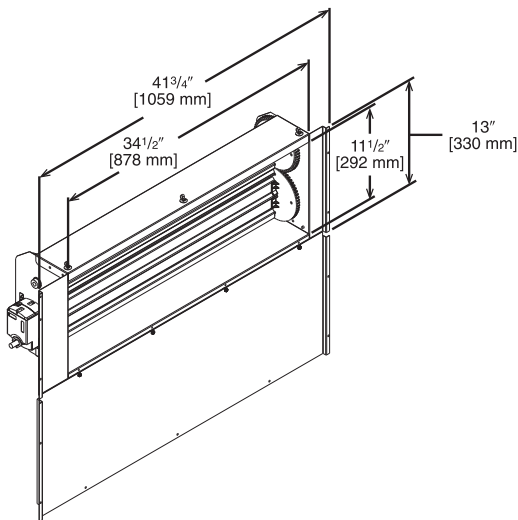


Illustration
ST-A1273-10-00

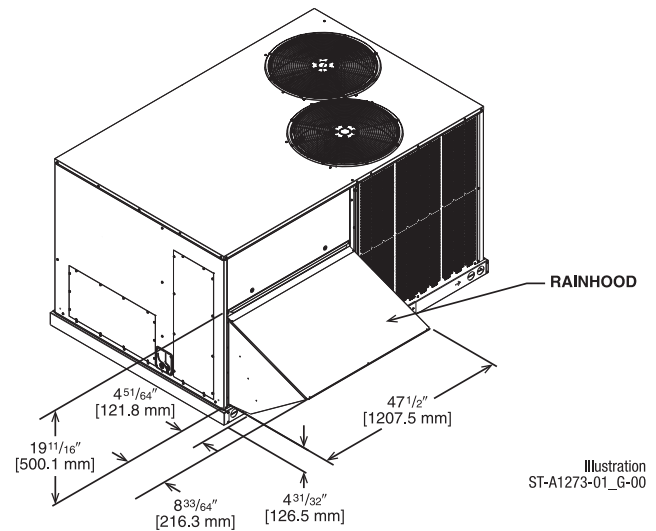


Illustration
ST-A1273-01_G-00

[] Designates Metric Conversions

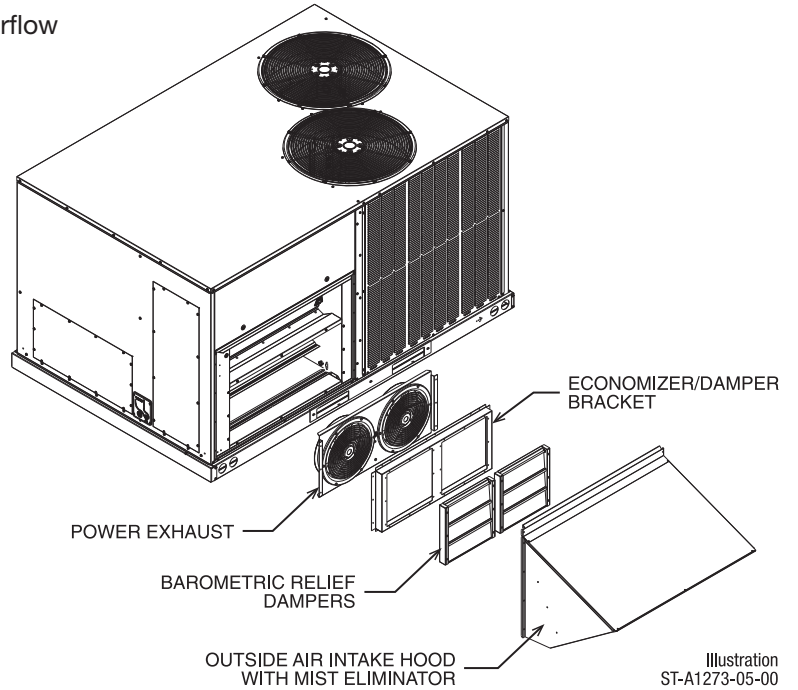
POWER EXHAUST KIT, CONVERTIBLE

RXXR-CDF01*

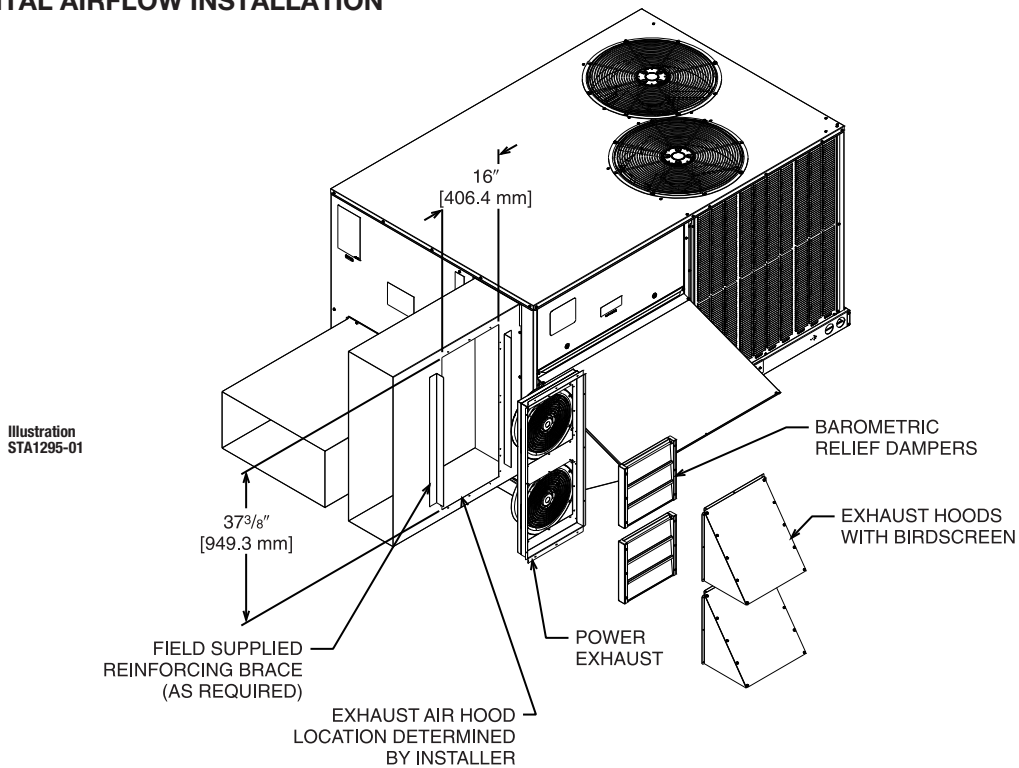
*Voltage Code: C or D

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

VERTICAL AIRFLOW INSTALLATION



HORIZONTAL AIRFLOW INSTALLATION



Model No.	No. of Fans	Volts	Phase	HP (ea.)	CFM [L/s]*	RPM	FLA (ea.)	LRA (ea.)
RXXR-CDF01C	2	208/230	1	0.47	2200	3000	1.55	1.1
RXXR-CDF01D	2	460	3	0.40	1970	2750	0.51	1.9

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

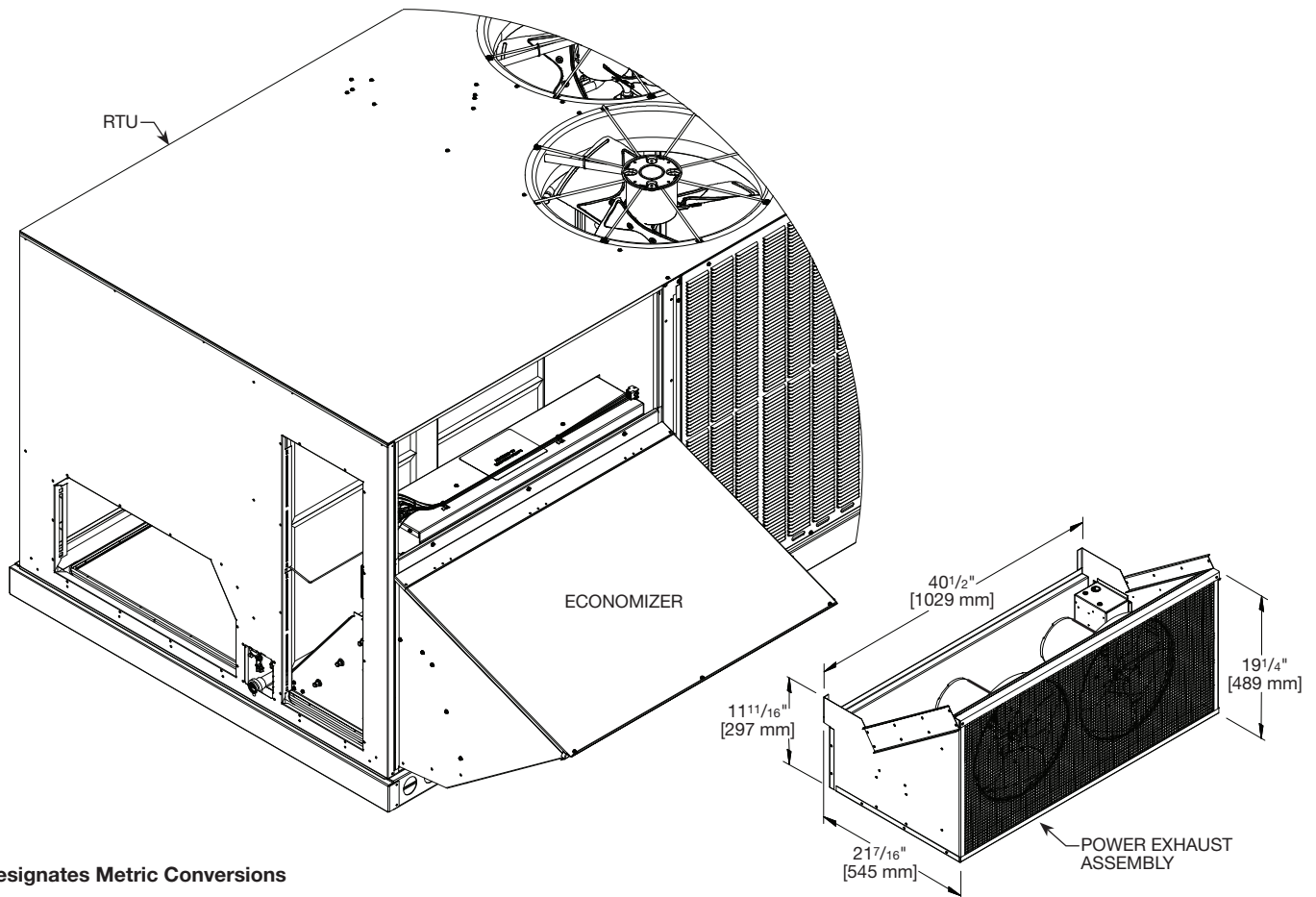
[] Designates Metric Conversions

POWER EXHAUST KIT FOR DOWNFLOW ECONOMIZER

RXXR-RDF01*

*Voltage Code: C, D, or Y

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



[] Designates Metric Conversions

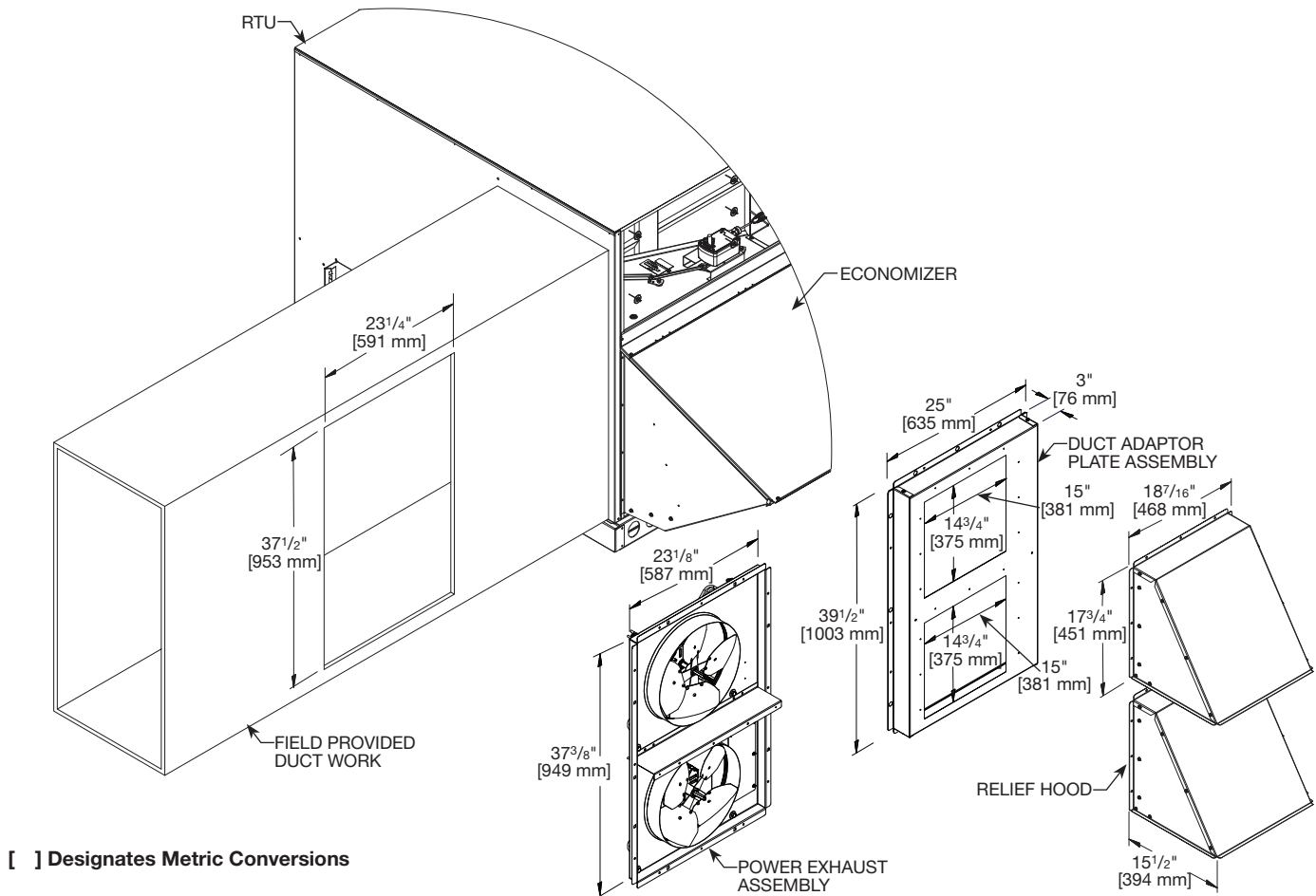
Model No.	Volt	Phase	Motor				Unit				@ 0.1 CFM
			HP	RPM	LRA	Qty.	Cir. Qty.	FLA	MCA	Fuse Size	
RXXR-RDF01C	208/230	1	1/2	1625	5.86	2	1	5.40	6.75	8	4013
RXXR-RDF01D	460				3.33			2.68	3.35	4	
RXXR-RDF01Y	575				2.52			2.12	2.65	3	

POWER EXHAUST KIT FOR HORIZONTAL ECONOMIZER

RXXR-RDF03*

*Voltage Code: C, D, or Y

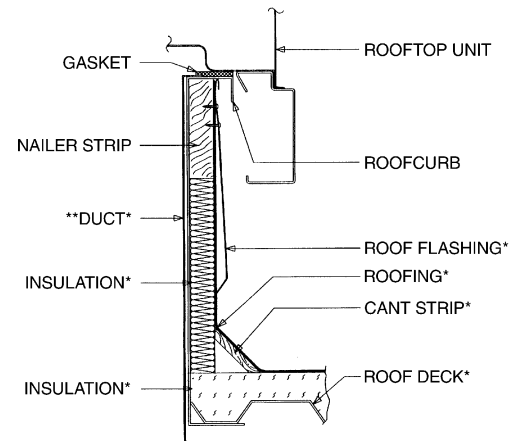
- Shipped completely assembled
- All wiring from control box to economizer is supplied
- Color coordinated with the unit
- Fully insulated with 1" 1.5 lb. fiberglass insulation
- Motors are factory wired and tested
- When using this power exhaust system, clearance between the bottom of the unit and finished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



Model No.	Volt	Phase	Motor				Unit				@ 0.1 CFM
			HP	RPM	LRA	Qty.	Cir. Qty.	FLA	MCA	Fuse Size	
RXXR-RDF03C	208/230	1	1/2	1625	5.86	1	1	2.70	3.38	6	2013
RXXR-RDF03D	460				3.33			1.34	1.68	3	
RXXR-RDF03Y	575				2.52			1.06	1.33	2	

ROOFCURBS (Full Perimeter)

- Sure Comfort's roofcurb design can be utilized on all 7.5-12.5 ton [26.4-44.0 kW] RGED 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] Nailers provided
- Sealing gasket (40' [12.2 m]) provided with Roofcurb
- Packaged for easy field assembly



*BY CONTRACTOR

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

ROOFCURBS

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

Illustration
ST-A0743-02

ROOFCURB INSTALLATION

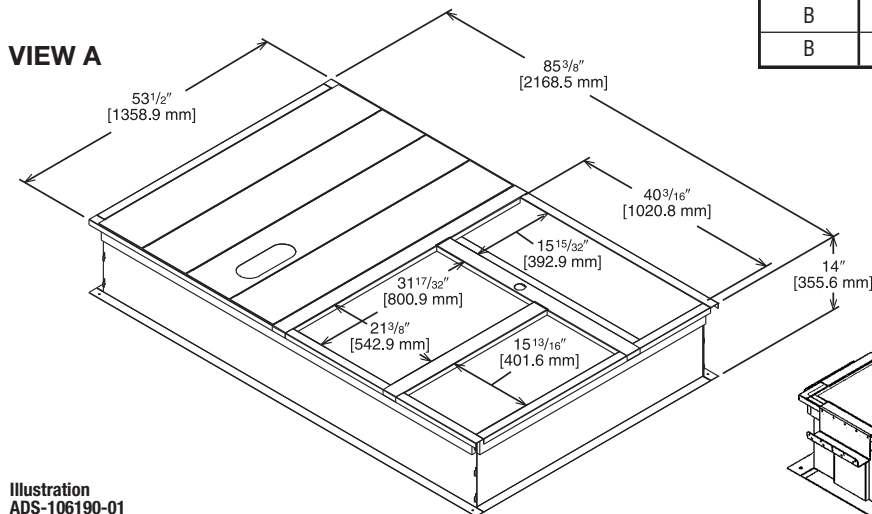
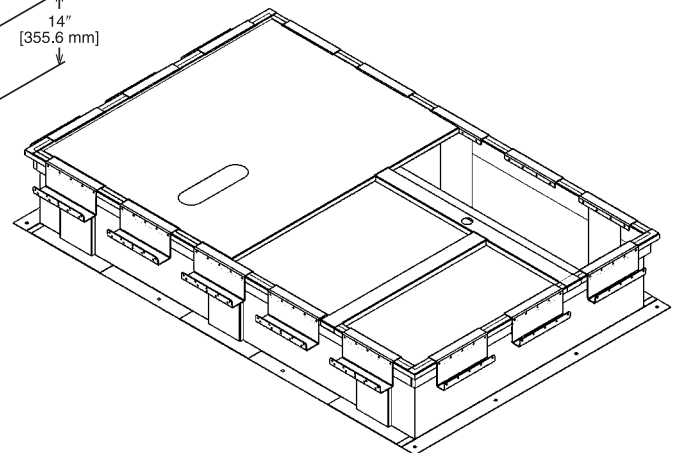


Illustration
ADS-106190-01

WELDED ROOFCURBS

View	Roofcurb Model	Dimensions
B	RXKG-SD14	85.375" x 53.5" x 14.0"
B	RXKG-SD24	85.375" x 53.5" x 24.0"

WELDED ROOFCURB VIEW B



- State of Florida Approved: Approval Number FL 26981.1 for Technical Evaluation Report TER-20-28788 certifies the HVAC Unit and mounting methods for high wind resistance are compliant per Florida Building Code.
- OSHPD Approved: State of California Product Approval Number OSP-06660-TEMP00 for Technical Evaluation Report 1700876-CR-001-RO certifies the HVAC Unit and MicroMetl Welded Roof Curb is earthquake resistance compliant and approved for use per International Code Council – Evaluation Service AC156, IBC, AND CBC building code standards.

[] Designates Metric Conversions

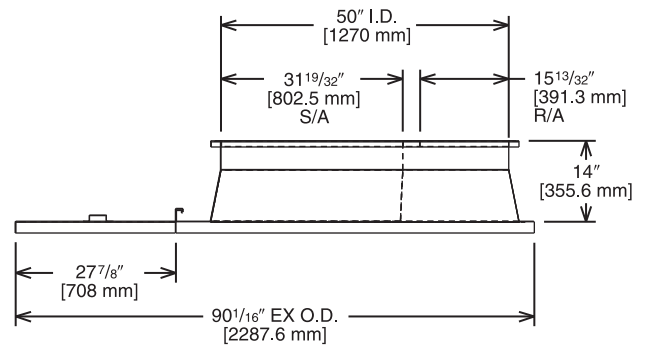
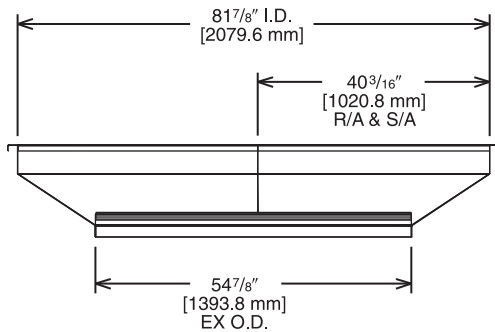
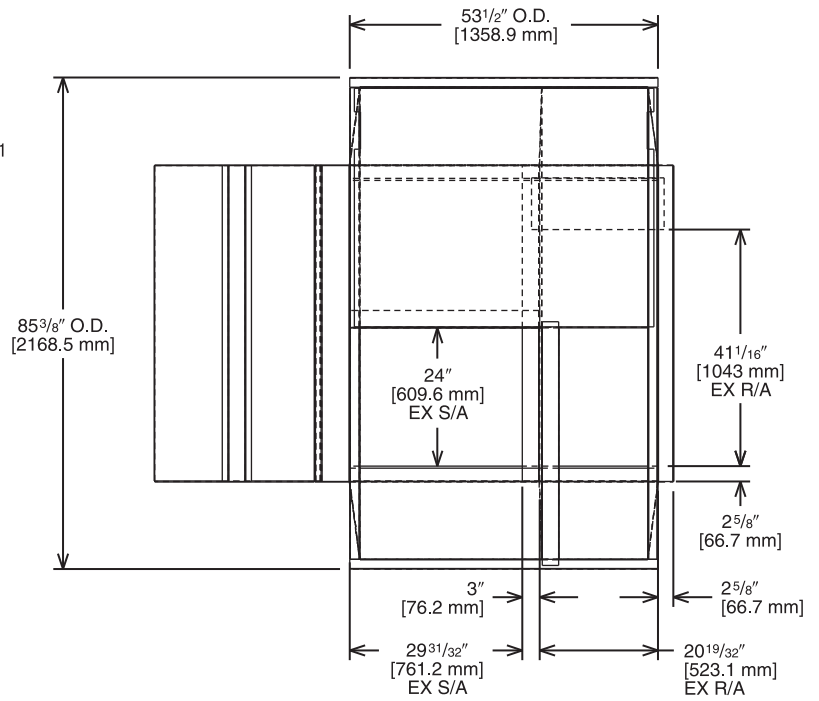
ROOFCURB ADAPTERS

RXRX-DDCAE

Illustration
ADS-106176-01
SHEET 2

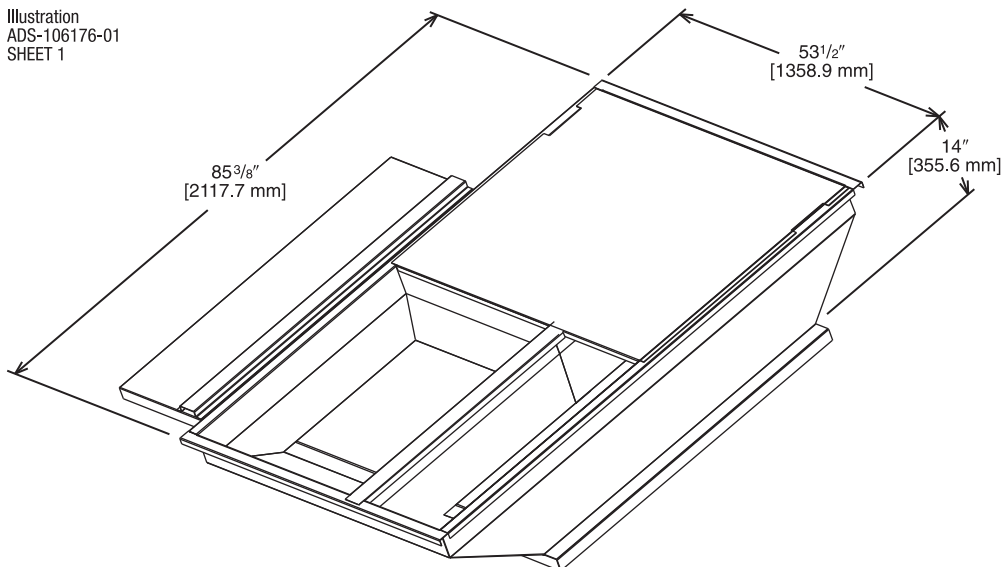
APPROXIMATE STATIC PRESSURE DROP

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



TOP VIEW

Illustration
ADS-106176-01
SHEET 1



[] Designates Metric Conversions

Guide Specifications RGEDYB— 090-150

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.

GAS HEAT PACKAGED ROOFTOP

HVAC Guide Specifications

Size Range: 7 1/2 to 12 1/2 Nominal Tons

- 1.00 General:
 - A. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing a(n) hermetic scroll compressor(s) for cooling duty and heat pump for heating duty.
 - B. Factory assembled, single-piece heating and cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
 - C. Unit shall use environmentally safe, R-454B refrigerant.
 - D. Unit shall be installed in accordance with the manufacturer’s instructions.
 - E. Unit must be selected and installed in compliance with local, state, and federal codes.
 - F. Model and serial data shall be printed inside the control box.
- 1.01 Quality Assurance:
 - A. Unit meets ASHRAE 90.1 2022 minimum efficiency requirements.
 - B. Unit shall be rated in accordance with AHRI Standards 340/360.
 - C. Unit shall be designed to conform to ASHRAE 15.
 - D. Unit shall be UL-tested and certified in accordance with Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
 - E. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
 - F. Unit casing shall be capable of withstanding 1000-hour salt spray exposure per ASTM B117 (scribed specimen).
 - G. Roof curb shall be designed to conform to NRCA Standards.
 - H. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory, and must be available upon request.
 - I. Unit shall be designed in accordance with UL Standard 60335-2-40 4th Edition, including tested to withstand rain.
 - J. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40mph.
- 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. Unit cabinet exterior paint shall be pre-painted steel.
 - C. The sheet-metal cabinet shall be constructed of 18-gauge material for structural components with an underlying coat of G90.
 - D. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 210 or 360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2-in. thick, 1.6 lbs density, flexible fiberglass insulation, foil faced on the air side. Aluminum foil-faced fiberglass insulation shall be used in the gas heat compartment.
 - E. Shall utilize uniform screw sizing.
 - F. Base of unit shall have a location for thru-the-base gas and electrical connections standard.
 - G. Base Rail:
 - i. Unit shall have base rails on a minimum of 4 sides.
 - ii. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
 - iii. Holes shall be provided in the base rail for moving the rooftop for fork truck.
 - iv. Base rail shall be a minimum of 14 gauge thickness.

- H. Condensate pan and connections:
 - i. Shall be a sloped condensate drain pan made of a non-corrosive material and be removable for cleaning.
 - ii. Shall comply with ASHRAE Standard 62.
 - iii. Shall use a 3/4" NPT drain connection, possible either through the bottom or side of the drain pan. Connection shall be made per manufacturer's recommendations.
 - iv. Shall be able to be easily removed.
 - v. Shall be separate from the coil.
 - vi. Standard factory installed condensate overflow sensor.
- I. Top panel
 - i. Shall be a single piece top panel over indoor section.
- J. Gas Connections:
 - i. All gas piping connecting to unit gas valve shall enter the unit cabinet at a single location on side of unit (horizontal plane).
 - ii. Thru-the-base-capability:
 - a. Standard unit shall have a thru-the-base gas-line locations using a continuous raised, flange around opening in the basepan.
 - b. No basepan penetration, other than those authorized by the manufacturer, is permitted.
- K. Electrical Connections:
 - i. All unit power wiring shall enter unit cabinet via 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.
- L. 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 turn 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 340/360 at ± 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.
 - F. Unit shall be capable of mixed operation: vertical supply with horizontal return or horizontal supply with vertical return.
- 1.07 Electrical Requirements
 - A. Main power supply voltage, phase, and frequency must match those required by the manufacturer.
- 1.08 Evaporator fan compartment
 - A. Interior cabinet surfaces shall be insulated with a minimum 1/2-in. thick, minimum 1.6 LB density, flexible fiberglass insulation bonded with foil face on the air side.
 - B. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
 - C. Insulation shall also be mechanically fastened with welded pin and retainer washer.
- 1.09 Thermostats
 - A. Thermostat must:
 - i. Energize both "W" and "G" when calling for heat.
 - ii. Have capability to energize 2 different stages of cooling, and 1 stage of heating.
 - iii. Include capability for occupancy scheduling.

- 1.10 Electronic Control System for HVAC:
 - A. Shall be complete with self-contained low-voltage control circuit protected by a fuse on the 24-V transformer side.
 - B. Shall utilize color-coded wiring.
 - C. The heat exchanger shall be controlled by the Core Command microprocessor. See heat exchanger section of this specification.
 - D. Unit shall include self-contained low-voltage control circuit protected by a fuse on the 24-V transformer side.
 - E. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.
 - F. Unit control board shall be provided with 7 segment readout via LCD display for status and diagnostics.
- 1.10.01 Safeties
 - A. Compressor over-temperature, over current.
 - B. Standard Low-pressure switch:
 - i. Units shall have low pressure, loss of charge automatic reset device that will shut off compressor when tripped.
 - ii. Low pressure control
 - a. Provides active protection in both heating and cooling modes at all outdoor ambient temperatures. The low pressure control is an automatic reset type and opens at approximately 15 psig and closes at approximately 40 psig. Operation is slightly different between cooling and heating modes.
 - C. Standard High-pressure switch:
 - i. Unit shall be equipped with high pressure switch device that will shut off compressor when tripped.
 - ii. High pressure control
 - a. 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 shall use only one filter size. Multiple sizes are not allowed.
 - 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. 090-120 units shall use one fully hermetic, 2-stage scroll compressor
- ii 150 units shall use a tandem set of fully hermetic, single stage compressors.
- iii. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
- iv. Compressors shall be internally protected from high discharge temperature conditions.
- v. Compressors shall be protected from an over-temperature and over-ampereage conditions by an internal, motor overload device.
- vi. Compressor shall be factory mounted on rubber grommets.
- vii. Compressor motors shall have internal line break thermal and current overload protection.
- viii. Crankcase heaters shall not be required for normal operating range.
- ix. Compressor shall have molded electrical plug.

1.14 Evaporator Fan and Motor:

A. Evaporator Fan Motor:

- i. Shall have permanently lubricated bearings.
- ii. Shall have inherent automatic-reset thermal overload protection.
- iii. Shall have a maximum continuous bhp rating for continuous duty operation; no safety factors above that rating shall be required.

B. Direct Drive Evaporator Fan:

- i. Belt drive shall include an adjustable-pitch motor pulley.
- ii. Shall use sealed, permanently lubricated ball-bearing type.
- iii. Blower fan shall be double-inlet type with forward-curved blades.
- iv. Shall be constructed from steel with a corrosion resistant finish and dynamically balanced.

C. Blower Assembly:

- i. Entire assembly shall be able to slide out completely.
- ii. Shall be able to slide-out without the removal of the roof and condenser fan motors.

1.15 Condenser Fans and Motors:

A. Condenser Fan Motors:

- i. Shall be a totally enclosed motor.
- ii. Shall use permanently lubricated bearings.
- iii. Shall have inherent thermal overload protection with an automatic reset feature.
- iv. Shall use a shaft-down design. Shaft-up designs including those with “rain-slinger devices” shall not be allowed.

B. Condenser Fans:

- i. Shall be a direct-driven propeller type fan.
- ii. Shall have blades riveted to corrosion-resistant steel spiders and shall be dynamically balanced.

1.16 RTU-C Controller:

- A. Shall be ASHRAE 62-2001 compliant.
- B. Shall accept 18-32VAC input power.
- C. Shall have an operating temperature range from -40°F (-40°C) to 158°F (70°C), 10%– 95% RH (non-condensing).
- D. Controller shall accept the following inputs: space temperature, setpoint adjustment, outdoor air temperature, indoor air quality, outdoor air enthalpy, fire shutdown, return air enthalpy, fan status, remote time clock/door switch.
- E. Shall accept a 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) and 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 Gas Heat Compartment:
- A. Aluminum foil-faced fiberglass insulation shall be used.
 - B. Insulation and adhesives shall meet NFPA 90A requirements for flame spread and smoke generation.
 - C. Insulation shall also be mechanically fastened with welded pin and retainer washer.
- 1.19 Gas Heat:
- A. Shall have standard two stage gas heat.
 - B. Heat exchanger shall be an induced draft design. Positive pressure heat exchanger designs shall not be allowed.
 - C. Shall incorporate a direct-spark ignition system and redundant main gas valve.
 - D. Heat exchanger design shall allow combustion process condensate to gravity drain; maintenance to drain the gas heat exchanger shall not be required.
 - E. Gas supply pressure at the inlet to the rooftop unit gas valve must match that required by the manufacturer.
 - F. The heat exchanger shall be controlled by the Core Command microprocessor.
 - i. The CoreCommand board shall notify users of fault using two 7 segment displays.
 - G. Standard Heat Exchanger construction:
 - i. Heat exchanger shall be of the tubular-section type constructed of a minimum of 20-gauge steel coated with a nominal 1.2 mil aluminum-silicone alloy for corrosion resistance.
 - ii. Burners shall be of the in-shot type constructed of aluminum-coated steel.
 - iii. Burners shall incorporate orifice for rated heat output up to 2,000 ft. (610m) elevation with a gas heating valve of 1050. Alternate orifices may be required depending on local gas heating valves and elevations.
 - iv. Each heat exchanger tube shall contain restrictions similar to dimples for increased heating effectiveness.
 - H. Optional Stainless Steel Heat Exchanger construction:
 - i. Use energy saving, direct-spark ignition system.
 - ii. Use a redundant main gas valve.
 - iii. Burners shall be of the in-shot type constructed of aluminum-coated steel.
 - iv. All gas piping shall enter the unit cabinet at a single location on side of unit (horizontal plane).
 - v. The optional stainless steel heat exchanger shall be of the tubular-section type, constructed of a minimum of 20-gauge type 409 stainless steel.
 - vi. Type 409 stainless steel shall be used in heat exchanger tubes.
 - vii. Complete stainless steel heat exchanger allows for greater application flexibility.

- I. Induced draft combustion motor and blower:
 - i. Shall be a direct-drive, single inlet, forward-curved centrifugal type.
 - ii. Shall be made from steel with a corrosion-resistant finish.
 - iii. Shall be permanently lubricated sealed bearings.
 - iv. Shall have inherent thermal overload protection.
 - v. Shall have an automatic reset feature.

1.20 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. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
- xvi. Economizer wire harness will have provision for smoke detector available in supply and return options.
- xvii. Shall provide fault detection and diagnostics (FDD) system in accordance with local code. Faults shall be communicated out on an alarm signal.

B. 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. Liquid Propane (LP) Conversion Kit (sold separately)

- i. Kit shall contain all the necessary hardware and instructions to convert a standard natural gas unit for use with liquefied propane, up to 2000 ft (610m) elevation.

D. Condenser Coil Hail Guard Assembly:

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

E. Unit-Mounted, Non-Fused Disconnect Switch

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

E. Convenience Outlet

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

F. Flue

- i. Flue Discharge deflector shall direct unit exhaust vertically install of horizontally.

G. Propeller Power Exhaust

- i. 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 is shall be mounted in return ductwork.
- iv. 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.

H. Dehumidification

- i. Shall utilize a dual-phase hot gas reheat control sequence.
- ii. Shall be installed with a thermostat or space temperature sensor and an indoor relative humidity sensor, which shall connect to the Rooftop Unit Controller (RTU-C).
- iii. Shall provide neutral air to the occupied space.
- iv. Shall have two modes: Cooling and Dehumidification.
- v. In cooling mode, the vapor refrigerant shall remove the heat to the outdoor coil, where heat is released outdoor. This allows the refrigerant to condense and become a subcooled liquid and the process shall repeat itself.
- vi. In dehumidification mode, the refrigerant shall absorb heat via the indoor coil from the cooling area. The heat shall be carried via a parallel path to then release heat back into the cooling area allowing for the dehumidification.
- vii. Modulate reheat coil refrigerant temperature via outdoor fan motor controller to achieve neutral air.
- viii. Variable Frequency Drive shall allow the unit to operate with two stages of heat.

I. 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.

J. 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.

K. 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.

L. 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.

- M. Barometric Relief:
 - i. Shall include damper, seals, hard-ware, and hoods to relieve excess building pressure.
 - ii. Damper shall gravity-close upon shutdown.
- N. 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.
- O. Standard Factory Installed Overflow Switch
 - i. Switch shall monitor the condensate level in drain pan and stops compression operation when overflow conditions occur.
- P. Access Panels:
 - i. Hinges with $\frac{1}{4}$ turn fasteners shall be permanently attached.
 - ii. Hinges shall be powder coated and made from stainless steel.
- Q. Adjustable Frequency Drive:
 - i. Unit shall be supplied with an electronic variable frequency drive for the supply air fan.
 - ii. Drive shall be factory installed in an enclosed cabinet.
 - iii. Drive shall meet UL Standard 95-5V.
 - iv. The completed unit assembly shall be UL listed.
 - v. Drives are to be accessible through a tooled access hinged door assembly.
 - vi. The unit manufacturer shall install all power and control wiring.
 - vii. The supply air fan drive output shall be controlled by the factory installed main unit control system and drive status and operating speed shall be monitored and displayed at the main unit control panel.
 - viii. Drive shall be programmed and factory run tested in the unit.
- R. Refrigerant Detection System
 - i. In the event of a detected refrigerant leak, the refrigerant leak detection sensor(s) will trigger the mitigation procedure that shuts off the compressor(s) and turns on the indoor blower motor.
 - ii. In the event of a detected refrigerant leak, the system will display a fault code on the unitary controller. For DDC systems, 'A2L Event' will appear on the LCD module. For Non-DDC systems, a fault code of 40 will appear on the dual seven segment display

GENERAL TERMS OF LIMITED WARRANTY*

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

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

Compressor	
(Commercial Applications)	Five (5) Years
Aluminized Heat Exchanger	
(Commercial Applications)	Ten (10) Years
Stainless Steel Heat Exchanger	
(Commercial Applications)	Twenty (20) Years
Parts	
(Commercial Applications)	One (1) Year

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In keeping with its policy of continuous progress and product improvement, Sure Comfort reserves the right to make changes without notice.



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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.