



The new degree of comfort.™



Package Gas Electric  
RGED Series

## Commercial Renaissance™ Line Package Gas Electric Units



### RGEDZT Commercial *Prestige*® Series

Nominal Sizes 7.5, 8.5, 10 & 12.5 Tons

Standard VFD and optional HumidiDry™ Technology

ASHRAE 90.1-2019 Compliant Models



INTEGRATED AIR & WATER

FORM NO. R11-872 REV. 8

## TABLE OF CONTENTS

|                                                 |       |
|-------------------------------------------------|-------|
| Unit Features & Benefits .....                  | 3-11  |
| Model Number Identification .....               | 12    |
| Options .....                                   | 13    |
| Selection Procedure .....                       | 14    |
| General Data .....                              | 15    |
| General Data Notes .....                        | 16    |
| Heating Performance Data .....                  | 17    |
| Gross Systems Performance Data .....            | 18-21 |
| HumidiDry™ Gross Systems Performance Data ..... | 22-25 |
| Airflow Performance Data .....                  | 26-41 |
| Electrical Data .....                           | 42-45 |
| Dimensional Data .....                          | 46-48 |
| Field Installed Accessories .....               | 49-69 |
| Guide Specifications .....                      | 70-77 |
| Limited Warranty .....                          | 79    |



## TIER COMPARISON

|                                             | Single-Stage Cooling | Two-Stage Cooling | 2018 DOE Efficiency Standards Compliant | 2023 DOE Efficiency Standards Compliant | VFD Technology | HumidiDry™   |
|---------------------------------------------|----------------------|-------------------|-----------------------------------------|-----------------------------------------|----------------|--------------|
| <i>Commercial Prestige® Series (RGEDZT)</i> |                      | X                 | X                                       | X                                       | X              | X (Optional) |

## RGED STANDARD FEATURES INCLUDE:

- Factory charged with R-410A HFC refrigerant
- Wired and run tested
- Scroll compressors with internal line break overload and high pressure protection
- Models have a two-stage compressor
- 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
- PlusOne® ServiceSmart package includes:  
Qwik-Change Flex-Fit Rack™  
Qwik-Slide Blower Assembly™  
Qwik-Clean Drain Pan™
- Overflow condensate sensor
- PlusOne® 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
- Variable Frequency Drive (VFD) blower is standard
- New product footprint with matching connections
- Improved factory lead times
- MERV 8 & MERV 13 filters are available as an accessory



## FACTORY INSTALLED OPTIONS:

- Louvered panels
- Hinged access doors
- Stainless steel heat exchanger (20 year warranty)
- PlusOne® HumidiDry™ Dehumidification System
- Low ambient/freeze stat
- Powered convenience outlet
- Non-powered convenience outlet
- Unfused disconnect
- Circuit breaker

- Economizer (Title 24 and ASHRAE 90.1 2013 compliant)
- Supply and return smoke detector
- Return smoke detector
- ElectroFin® E-Coat for Microchannel Condenser Coil Coating
- ClearControl™ Direct Digital Control (DDC)
- Comfort Alert Phase-monitor Protection
- Vertical Economizer

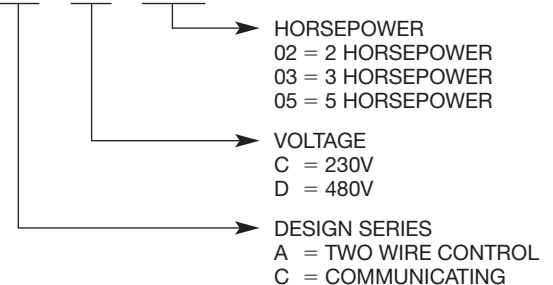
## FIELD INSTALLED ACCESSORIES:

| Accessory                                     | Model Number  | Factory Installation Available? |
|-----------------------------------------------|---------------|---------------------------------|
| Economizer w/Single Enthalpy (Downflow)       | RXRD-01MDDAM3 | Yes                             |
| Economizer w/Single Enthalpy (Horizontal)     | RXRD-01MDHAM3 | No                              |
| Economizer-w/Single Enthalpy (Downflow) DDC   | RXRD-01MDDBM3 | Yes                             |
| Economizer w/Single Enthalpy (Horizontal) DDC | RXRD-01MDHBM3 | No                              |
| Dual Enthalpy Kit                             | RXXR-BV01     | No                              |
| Dual Enthalpy Kit DDC                         | RXXR-BV02     | No                              |
| Carbon Dioxide Sensor (Wall Mount)            | RXXR-AR02     | No                              |
| Power Exhaust                                 | RXXR-CDF01C   | No                              |
| Power Exhaust                                 | RXXR-CDF01D   | No                              |
| Manual Fresh Air Damper                       | RXRF-ADA1     | No                              |
| Motorized Fresh Air Damper                    | RXRF-ADB1     | No                              |
| Motorized Fresh Air Damper (DDC)              | RXRF-ADC1     | No                              |
| Roofcurb, 14"                                 | RXKG-DDD14    | No                              |
| Roofcurb, 24"                                 | RXKG-DDD24    | No                              |
| Roofcurb Adapter                              | RXXR-DDCAE    | No                              |
| Roofcurb, 14" Welded                          | RXKG-SD14     | No                              |
| Roofcurb, 24" Welded                          | RXKG-SD24     | 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                              |
| 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 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                              |
| Outdoor Coil Louver Kit - GED-090/102/120     | RXXR-ADD04A   | Yes                             |

| Accessory                                                           | Model Number   | Factory Installation Available? |
|---------------------------------------------------------------------|----------------|---------------------------------|
| Outdoor Coil Louver Kit - GED-150                                   | RXXR-ADD04B    | Yes                             |
| Unwired Convenience Outlet                                          | RXXR-BN01      | Yes                             |
| Unfused Service Disconnect                                          | RXXR-BP01      | Yes                             |
| Comfort Alert (1 Per Compressor)                                    | RXXR-AZ02      | Yes                             |
| BACnet Communication Card                                           | RXXR-AY01      | No                              |
| LonWorks Communication Card                                         | RXXR-AY02      | No                              |
| Room Humidity Sensor                                                | RHC-ZNS4       | No                              |
| Room Temperature and Relative Humidity Sensor                       | RHC-ZNS5       | No                              |
| Low-Ambient Control Kit                                             | RXRZ-A04       | Yes                             |
| Freeze Stat Kit                                                     | RXXR-AM01      | Yes                             |
| LP Conversion Kit                                                   | RXGJ-FP39      | No                              |
| Flue Diverter                                                       | RXXR-DFG04     | No                              |
| Variable Frequency Drive Kit*<br>*See model number break down below | RXXR-AC02      | No                              |
|                                                                     | RXXR-AC03      | No                              |
|                                                                     | RXXR-AC05      | No                              |
|                                                                     | RXXR-AD02      | No                              |
|                                                                     | RXXR-AD03      | No                              |
|                                                                     | RXXR-AD05      | No                              |
|                                                                     | RXXR-CC02      | No                              |
|                                                                     | RXXR-CC03      | No                              |
|                                                                     | RXXR-CC05      | No                              |
|                                                                     | RXXR-CD02      | No                              |
|                                                                     | RXXR-CD03      | No                              |
|                                                                     | RXXR-CD05      | No                              |
| MERV 8 Filter 7.5-10 Ton                                            | RXMF-M08A22020 | No                              |
| MERV 8 Filter 12.5 Ton                                              | RXMF-M08A22520 | No                              |
| MERV 13 Filter 7.5-10 Ton                                           | RXMF-M13A22020 | No                              |
| MERV 13 Filter 12.5 Ton                                             | RXMF-M13A22520 | No                              |

\*Compatible with 1st generation "B" series units

## RXXR - A C 02





Air

Unit Features & Benefits  
RGED Series

## Cabinet and Foundation

Outwardly, the large *Rheem® Commercial Series* 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 Rheem hail guard (optional) ([4]) sets the standard for coil protection in the industry. Electro deposition, baked-on enamel that is tested to withstand a rigorous 1000-hour salt spray test, per ASTM B117.

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

## Easy Installation

The Renaissance line features a new 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.

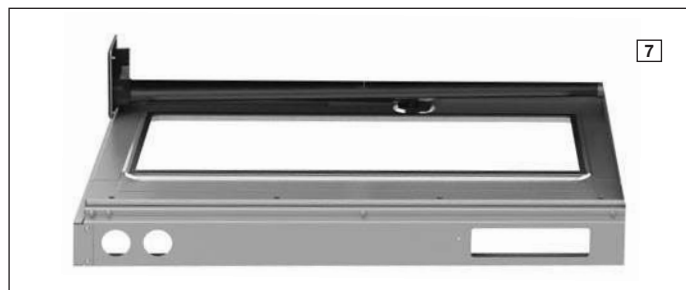
## Base Pan

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. 1995, AHRI 340-360 as well as other Rheem-required reliability tests. Rheem 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 Rheem package unit arrives at the job, it is ready to go with a factory charge and quality checks. Each unit also proudly displays the "Made in the USA" designation.

## 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.

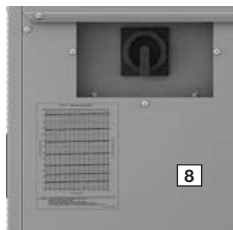


INTEGRATED AIR &amp; WATER



## 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

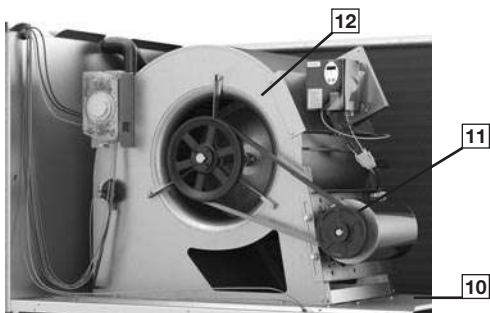
Located within the filter compartment, the Qwik-Change Flex-Fit Rack™ ([9]) allows easy changeover between 2" and 4" standard size and readily available filters.



## Blower Assembly

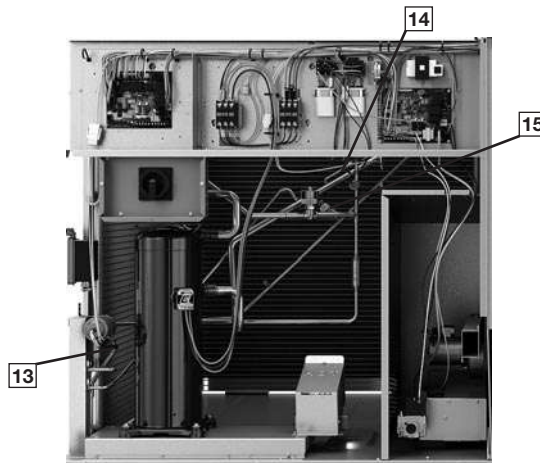
Removing three screws provides full access to the blower compartment. Inside, the Qwik-Slide Blower Assembly™ ([10]) is incredibly easy to access and remove. This makes servicing internal components such as blower motor, TXV, and microchannel coil much easier. The entire assembly slides out by removing 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, Rheem offers drives that deliver nominal airflow up to 2" of static. By referring to the airflow performance tables listed in the installation instructions, proper static pressure and CFM requirements can be dialed in. The scroll housing ([12]) and blower scroll provide quiet and efficient airflow. The blower sheave is secured by an "H" bushing that firmly secures the pulley to the blower shaft, resulting in years of trouble-free operation. The "H" bushing allows for easy removal of the blower pulley from the shaft. This is an improvement from a set screw, which can score the shaft and create burrs that make blower-pulley removal difficult.



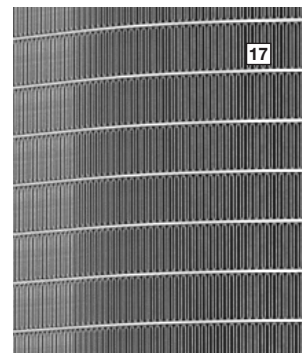
## High and Low Pressure Switches & Freeze Stat

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



## MicroChannel Evaporator & TXV

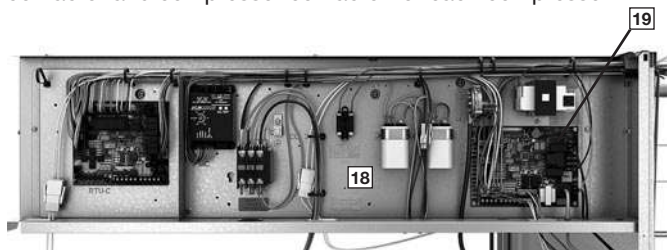
The Microchannel Evaporator ([17]) is accessible through the blower compartment, and through the filter rack, to simplify cleaning. The evaporator uses microchannel technology for maximum heat transfer, light weight, fewer manually brazed connections and reduced refrigerant charge. The TXV metering device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





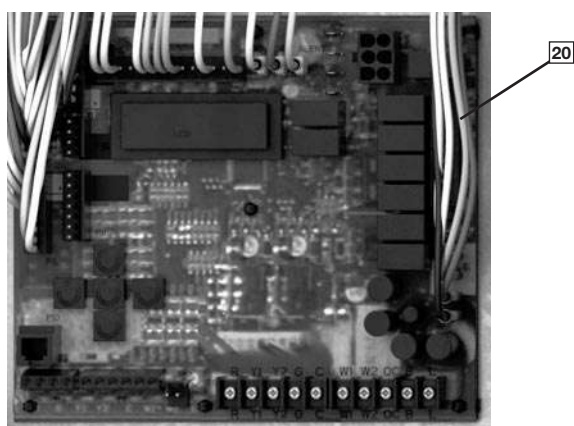
## Control Box

Inside the control box (18), each electrical component is clearly labeled; that label matches the component to the wire diagram for ease of trouble shooting. All wiring is numbered on each end of the termination and is color-coded to match the wiring diagram. The integrated furnace control, incorporates the PlusOne Diagnostics: Dual 7-Segment LED Display (19) with easy-to-understand fault codes. The control transformer has a low voltage circuit breaker that trips if an electrical short occurs. 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.

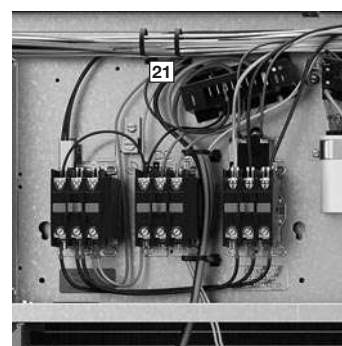


The RGED Gas Electric with the RTU-C is specifically designed to be applied in four distinct applications:

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.

## ComfortAlert®

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.





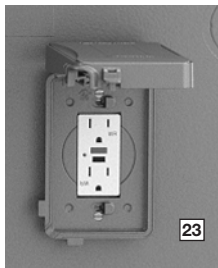
## Variable Frequency Drive

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's over the conventional constant fan system. Operating in the constant fan mode at the reduced speed can use as little as 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. VFD comes standard. The VFD supply fan factory option meets California Title 24 and ASHRAE 90.1-2016 requirements for multi blower speed control. VFD also ramps up to the desired speed, reducing stress on the supply fan components and noise from a sudden inrush of air. Because the airflow is cut in half during first stage cooling and constant fan operation, noise is much less during these modes of operation.



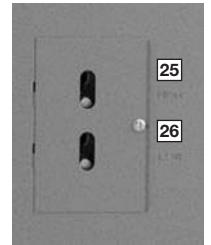
## Convenience Outlet, Disconnect, & Circuit Breaker

For added convenience in the field, factory-installed options of powered and non-powered convenience outlet (23), disconnect (24) and circuit breakers 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 in which the first stage is approximately 50% of second stage. Each unit comes standard with a filter dryer.



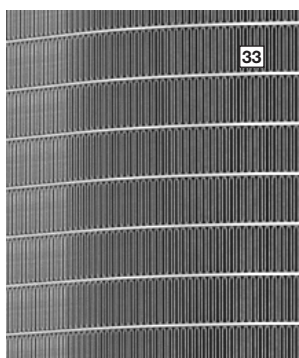
## Condenser Fans

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.



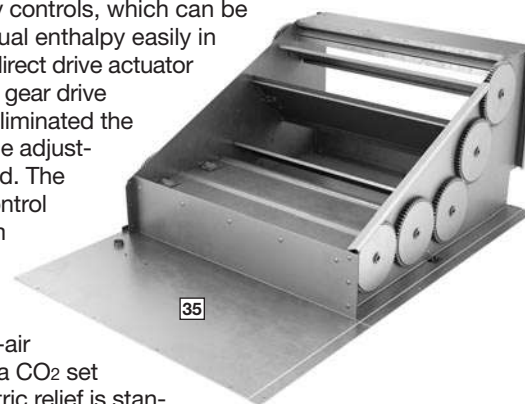
## Coil Coating

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 direct drive actuator combined with gear drive dampers has eliminated the need for linkage adjustment in the field. The economizer control has a minimum position set point, an outdoor-air set point, a mixed-air set point, and a CO<sub>2</sub> set point. Barometric relief is standard on all economizers.



Power Exhaust is easily field-installed. The power exhaust is housed in the barometric relief opening and is easily slipped in with a 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 CO<sub>2</sub> level, mixed air temperature, and Economizer Status (free cooling available, single or dual enthalpy) can be read at the unit controller display or remotely through a network connection. Economizer faults will trigger a network alarm and can be read at the unit controller display or remotely through a network connection.



## Roofcurb

The Rheem 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.



## HUMIDIDRY™ SYSTEM FEATURES

HumidiDry™ is a Rheem exclusive dehumidification package 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 its 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.

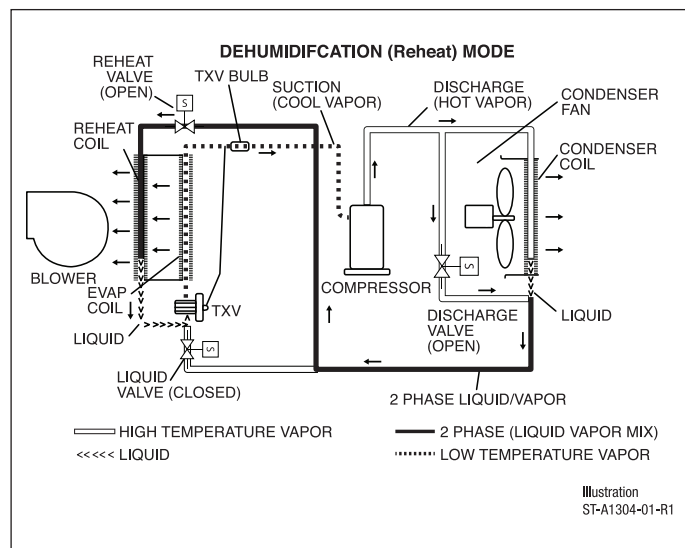
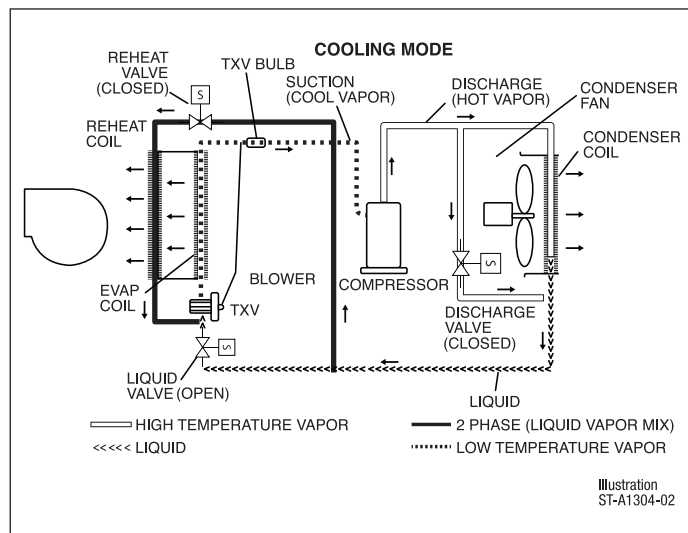


Figure 2 shows the refrigerant path during the reheat mode. When the reheat cycle is energized by the RTU-C, the reheat solenoid valve, upstream of the reheat coil opens. The liquid solenoid valve ahead of the TXV, closes. The discharge solenoid valve, in the compressor discharge line, opens. The liquid 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** **ZT** **090** **A** **C** **A** **15** **2** **A** **A** **\*\*\***  
**1** **23** **4** **56** **789** **10** **11** **12** **13 14** **15** **16** **17** **18 19 20**

#### 1—Brand

R = Rheem

#### 2, 3—Unit Type

GE = Package Gas Electric

#### 4—Cabinet Type

D = Medium Commercial

#### 5, 6—Series

ZT<sup>1</sup> = Tier 1 (*Commercial  
Prestige® Series*)

#### 7, 8, 9—Capacity

090 = 7.5 ton  
102 = 8.5 ton  
120 = 10 ton  
150 = 12.5 ton<sup>4</sup>

#### 10—Major series

A

#### 11—Voltage

C = 3 phase 208-230/60  
D = 3 phase 460/60  
Y = 3 phase 575/60

#### 12—Drive

A = belt low static  
B = belt med static  
C = belt high static  
F = belt VFD low static  
G = belt VFD med static  
H = belt VFD high static

#### 13, 14—Heat Capacity

15 = 150k  
20 = 205k<sup>5</sup>  
22 = 225k<sup>6</sup>

#### 15—Heat Configuration

2 = 2 stage  
B = 2 stage Stainless

#### 16—Control

A = Non communicating  
B = Comfort Alert/Phase Monitor  
C = Clear Control  
D = Clear Control & Comfort Alert

#### 17—Minor series

A

#### 18, 19, 20—Option Code

See next page

#### 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 = Reheat (HumidiDry™) <sup>1</sup>   |      |    |    |    |                                         |      |    |    |  | SS = Supply and Return Smoke Detector   |      |    |    |
| HA = Hinged Access                      |      |    |    |    | NP = Non-powered Convenience Outlet     |      |    |    |  | RS = Return Smoke Detector              |      |    |    |
| CC <sup>2</sup> = Coil Coating          |      |    |    |    | DC = Disconnect Switch                  |      |    |    |  |                                         |      |    |    |
| Option code character highlighted below |      |    |    |    | Option code character highlighted below |      |    |    |  | Option code character highlighted below |      |    |    |
| <b>A</b>                                | None |    |    |    | <b>A</b>                                | None |    |    |  | <b>0</b>                                | None |    |    |
| <b>B</b>                                | LV   |    |    |    | <b>B</b>                                | LF   |    |    |  | <b>1</b>                                | EC   |    |    |
| <b>C</b>                                | HA   |    |    |    | <b>C</b>                                | NP   |    |    |  | <b>2</b>                                | RS   |    |    |
| <b>D</b>                                | LV   | HA |    |    | <b>D</b>                                | LF   | NP |    |  | <b>3</b>                                | EC   | RS |    |
| <b>E</b>                                | LV   | CC |    |    | <b>E</b>                                | DC   |    |    |  | <b>4</b>                                | SS   | RS |    |
| <b>F</b>                                | LV   | HA | CC |    | <b>F</b>                                | LF   | DC |    |  | <b>5</b>                                | EC   | SS | RS |
| <b>N</b>                                | RH   |    |    |    | <b>G</b>                                |      |    |    |  |                                         |      |    |    |
| <b>P</b>                                | LV   | RH |    |    | <b>H</b>                                | NP   | DC |    |  |                                         |      |    |    |
| <b>Q</b>                                | RH   | HA |    |    | <b>J</b>                                |      |    |    |  |                                         |      |    |    |
| <b>R</b>                                | LV   | RH | CC |    | <b>K</b>                                | LF   | NP | DC |  |                                         |      |    |    |
| <b>S</b>                                | LV   | RH | HA |    |                                         |      |    |    |  |                                         |      |    |    |
| <b>T</b>                                | LV   | RH | HA | CC |                                         |      |    |    |  |                                         |      |    |    |
|                                         |      |    |    |    |                                         |      |    |    |  |                                         |      |    |    |
|                                         |      |    |    |    |                                         |      |    |    |  |                                         |      |    |    |
|                                         |      |    |    |    |                                         |      |    |    |  |                                         |      |    |    |
|                                         |      |    |    |    |                                         |      |    |    |  |                                         |      |    |    |

<sup>1</sup>Reheat (HumidiDry™) option only available on units with F, G or H drives (VFD) and “C” or “D” control. Low ambient freeze-stat included on all reheat models; low ambient option is not selectable for this unit.

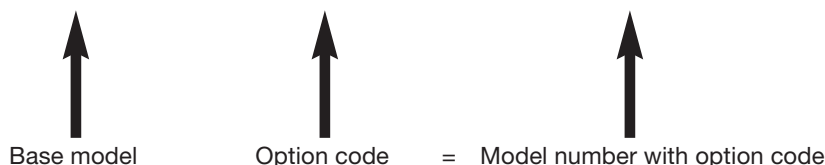
<sup>2</sup>CC-requires LV (louver protection)

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

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

- **Step 1:** In the table above, based on the desired features, choose option code character from highlighted options on the left side under the number 18. For example, the option code character “E” has Louver protection and Coil Coating.
- **Step 2:** In the table above, based on the desired features, choose option code character from highlighted options on the left side under the number 19. For example, the option code character “F” has Low Ambient / Freeze Stat and Disconnect switch.
- **Step 3:** In the table above, based on the desired features, choose option code character from highlighted options on the left side under the number 20. For example, the option code character “3” has Economizer and Return Smoke.
- The resulting option code from examples above is: “EF3”
- **Step 4:** Add your option code selection to the end of model number

◦ Example: RGEDZT090ACC152AA EF3 = RGEDZT090ACC152AAEF3





To select an RGEDZ 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 BTUH [30.77 kW]           |
| Sensible cooling capacity—      | 90,000 BTUH [26.38 kW]            |
| Heating capacity—               | 159,000 BTUH [46.60 kW]           |
| *Condenser Entering Air—        | 95°F [35°C] DB                    |
| *Evaporator Mixed Air Entering— | 65°F [18°C] WB;<br>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 BTUH [35.2 kW]  
Sensible Capacity = 101,350 BTUH [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 BTUH [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,  $120,060 \times .99 = 118,859$  BTUH [33.6 kW]  
Sensible Capacity,  $101,350 \times .95 = 96,283$  BTUH [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 = A (belt drive, low static)

#### 5. CALCULATE INDOOR BLOWER BTUH HEAT EFFECT FROM MOTOR WATTS, STEP 4.

$$\text{BTUH} = 1,722 \times 3.412 = 5,875$$

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

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

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

#### 7. CALCULATE UNIT INPUT AND JOB EER.

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

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

#### 8. SELECT UNIT HEATING CAPACITY.

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

$$\text{Heating Capacity} = 159,000 \text{ BTUH [52.45 kW]}$$

Choose Model RGEDZT120ACA222AA

\*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] ASHRAE 90.1-2007\* COMPLIANT MODELS

| Model RGEDZS - Series                        | ZS090                   | ZS102                   | ZS120A                  | ZS150                   |
|----------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <b>Cooling Performance<sup>A</sup></b>       |                         |                         |                         |                         |
| Gross Cooling Capacity Btu [kW]              | 88,000 [25.78]          | 99,000 [29.01]          | 118,000 [34.57]         | 148,000 [43.36]         |
| EER                                          | 11                      | 11                      | 11                      | 10.8                    |
| IEERB                                        | 14.6                    | 14.6                    | 14.6                    | 14                      |
| Nominal CFM/AHRI Rated CFM [L/s]             | 3000/3175 [1416/1498]   | 3400/3225 [1604/1522]   | 4000/3480 [1888/1642]   | 5000/3750 [2360/1770]   |
| AHRI Net Cooling Capacity Btu [kW]           | 85,000 [24.9]           | 96,000 [28.13]          | 114,000 [33.4]          | 142,000 [41.61]         |
| Net Sensible Capacity Btu [kW]               | 62,700 [18.37]          | 68,300 [20.01]          | 79,600 [23.32]          | 98,600 [28.89]          |
| Net Latent Capacity Btu [kW]                 | 22,300 [6.53]           | 27,700 [8.12]           | 34,400 [10.08]          | 43,400 [12.72]          |
| Net System Power kW                          | 7.35                    | 7.35                    | 9.83                    | 13.69                   |
| <b>Compressor</b>                            |                         |                         |                         |                         |
| No./Type                                     | 1/Scroll                | 1/Scroll                | 1/Scroll                | 2/Tandem Scroll         |
| No. Stages                                   | 2                       | 2                       | 2                       | 2                       |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b> |                         |                         |                         |                         |
|                                              | 88                      | 88                      | 88                      | 88                      |
| <b>Outdoor Coil - Fin Type</b>               |                         |                         |                         |                         |
| 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]             | 25.6 [2.38]             | 31.5 [2.93]             |
|                                              | 1 / 23 [9]              | 1 / 23 [9]              | 1 / 23 [9]              | 1 / 23 [9]              |
| <b>Indoor Coil - Fin Type</b>                |                         |                         |                         |                         |
| 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]               | 1.26 [32]               | 1 [25.4]                |
| Rows / FPI [FPcm]                            | 11 [1.02]               | 10.9 [1.01]             | 10.9 [1.01]             | 13.8 [1.28]             |
|                                              | 1 / 20 [8]              | 1 / 20 [8]              | 1 / 20 [8]              | 2 / 18 [7]              |
| Refrigerant Control                          | TX Valves               | TX Valves               | TX Valves               | TX Valves               |
| Drain Connection No./Size in. [mm]           | 1/0.75 [19.05]          | 1/0.75 [19.05]          | 1/0.75 [19.05]          | 1/0.75 [19.05]          |
| <b>Outdoor Fan - Type</b>                    |                         |                         |                         |                         |
| 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                    |
| <b>Indoor Fan - Type</b>                     |                         |                         |                         |                         |
| 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                                   | Single                  | Single                  | Single                  | Single                  |
| Motor RPM                                    | 1                       | 1                       | 1                       | 1                       |
| Motor Frame Size                             | 1725                    | 1725                    | 1725                    | 1725                    |
|                                              | 56                      | 56                      | 56                      | 184                     |
| <b>Filter - Type</b>                         |                         |                         |                         |                         |
| 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] |
| <b>Refrigerant Charge Oz. [g]</b>            |                         |                         |                         |                         |
|                                              | 100 [2835]              | 117 [3317]              | 136 [3856]              | 186 [5273]              |
| <b>Weights</b>                               |                         |                         |                         |                         |
| Net Weight lbs. [kg]                         |                         |                         |                         |                         |
|                                              | 839 [381]               | 868 [394]               | 896 [406]               | 1094 [496]              |
| Ship Weight lbs. [kg]                        |                         |                         |                         |                         |
|                                              | 878 [398]               | 907 [411]               | 935 [424]               | 1133 [514]              |

See Page 15 for Notes.

[ ] Designates Metric Conversions



## NOTES:

- A. Cooling Performance is rated at 95° F ambient, 80° F entering dry bulb, 67° F entering wet bulb. Gross capacity does not include the effect of fan motor heat. AHRI capacity is net and includes the effect of fan motor heat. Units are suitable for operation to  $\pm 20\%$  of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 340/360.
- B. EER and/or SEER are 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.

**RGED\*\* HEATING PERFORMANCE**

| Model<br>RGED**    | Heating Input<br>BTU [kW]<br>(1 <sup>st</sup> Stage /<br>2 <sup>nd</sup> Stage) | Heating Output<br>BTU [kW]<br>(1 <sup>st</sup> Stage /<br>2 <sup>nd</sup> Stage) | Temperature Rise<br>Range °F [°C]<br>(1 <sup>st</sup> Stage /<br>2 <sup>nd</sup> Stage) | Steady<br>State<br>Efficiency<br>(%) | No.<br>Burners | No.<br>Stages | Gas<br>Connection<br>Pipe Size in.<br>[mm] |
|--------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|--------------------------------------|----------------|---------------|--------------------------------------------|
| <b>090A**15**A</b> | 105,000/150,000<br>[30.76/43.95]                                                | 85,050/121,500<br>[24.92/35.6]                                                   | 10-40 [5.6-22.2] /<br>25-55 [13.9-30.6]                                                 | 81                                   | 6              | 2             | 0.75 [19]                                  |
| <b>090A**20**A</b> | 143,000/205,000<br>[42.06/60.06]                                                | 116,200/166,050<br>[34.07/48.66]                                                 | 20-50 [11.1-27.8] /<br>35-65 [19.4-36.1]                                                | 81                                   | 9              | 2             | 0.75 [19]                                  |
| <b>102A**15**A</b> | 105,000/150,000<br>[30.76/43.95]                                                | 85,050/121,500<br>[24.92/35.6]                                                   | 5-35 [2.8-19.4] /<br>15-45 [8.3-25]                                                     | 81                                   | 6              | 2             | 0.75 [19]                                  |
| <b>102A**22**A</b> | 157,500/225,000<br>[46.16/65.92]                                                | 127,500/182,250<br>[37.39/53.4]                                                  | 15-45 [8.3-25] /<br>35-65 [19.4-36.1]                                                   | 81                                   | 9              | 2             | 0.75 [19]                                  |
| <b>120A**15**A</b> | 105,000/150,000<br>[30.76/43.95]                                                | 85,050/121,500<br>[24.92/35.6]                                                   | 10-40 [5.6-22.2] /<br>20-50 [11.1-27.8]                                                 | 81                                   | 6              | 2             | 0.75 [19]                                  |
| <b>120A**22**A</b> | 157,500/225,000<br>[46.16/65.92]                                                | 127,500/182,250<br>[37.39/53.4]                                                  | 15-45 [8.3-25] /<br>35-65 [19.4-36.1]                                                   | 81                                   | 9              | 2             | 0.75 [19]                                  |
| <b>150A**15**A</b> | 105,000/150,000<br>[30.76/43.95]                                                | 85,050/121,500<br>[24.92/35.6]                                                   | 5-35 [2.8-19.4] /<br>15-45 [8.3-25]                                                     | 81                                   | 6              | 2             | 0.75 [19]                                  |
| <b>150A**22**A</b> | 157,500/225,000<br>[46.16/65.92]                                                | 127,500/182,250<br>[37.39/53.4]                                                  | 10-40 [5.6-22.2] /<br>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 — RGEDZT090A

|               |                 | ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ① |              |              |              |               |              |              |              |               |              |             |             |               |              |             |             |               |              |             |             |  |  |  |  |
|---------------|-----------------|-------------------------------------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|-------------|-------------|---------------|--------------|-------------|-------------|---------------|--------------|-------------|-------------|--|--|--|--|
|               |                 | 71°F [21.7°C]                             |              |              |              | 67°F [19.4°C] |              |              |              | 63°F [17.2°C] |              |             |             | 61°F [16.1°C] |              |             |             | 59°F [15.0°C] |              |             |             |  |  |  |  |
| wBE           |                 | 3600 [1699]                               | 2775 [1310]  | 2400 [1133]  | 2400 [1133]  | 3600 [1699]   | 2775 [1310]  | 2400 [1133]  | 2400 [1133]  | 3600 [1699]   | 2775 [1310]  | 2400 [1133] | 2400 [1133] | 3600 [1699]   | 2775 [1310]  | 2400 [1133] | 2400 [1133] | 3600 [1699]   | 2775 [1310]  | 2400 [1133] | 2400 [1133] |  |  |  |  |
| CFM [L/s]     |                 | 0.17                                      | 0.13         | 0.11         | 0.11         | 0.17          | 0.13         | 0.11         | 0.11         | 0.17          | 0.13         | 0.11        | 0.11        | 0.17          | 0.13         | 0.11        | 0.11        | 0.17          | 0.13         | 0.11        | 0.11        |  |  |  |  |
| 75<br>[23.9]  | Total BTUH [kW] | 119.6 [35.0]                              | 113.5 [33.2] | 110.7 [32.4] | 110.7 [32.4] | 112.7 [33.0]  | 107.0 [31.3] | 104.3 [30.6] | 104.3 [30.6] | 107.8 [31.6]  | 102.3 [30.0] | 99.8 [29.2] | 98.4 [28.8] | 106.4 [31.2]  | 100.9 [29.6] | 98.4 [28.8] | 98.4 [28.8] | 105.8 [31.0]  | 100.4 [29.4] | 97.9 [28.7] | 97.9 [28.7] |  |  |  |  |
|               | Sens BTUH [kW]  | 70.3 [20.6]                               | 61.8 [18.1]  | 57.9 [17.0]  | 57.9 [17.0]  | 83.3 [24.4]   | 73.2 [21.4]  | 68.5 [20.1]  | 68.5 [20.1]  | 96.0 [28.1]   | 84.3 [24.7]  | 79.0 [23.2] | 79.0 [23.2] | 102.2 [29.9]  | 89.7 [26.3]  | 84.1 [24.6] | 84.1 [24.6] | 105.8 [31.0]  | 94.9 [27.8]  | 88.9 [26.1] | 88.9 [26.1] |  |  |  |  |
| 80<br>[26.7]  | Total BTUH [kW] | 116.1 [34.0]                              | 110.1 [32.3] | 107.4 [31.5] | 107.4 [31.5] | 109.2 [32.0]  | 103.6 [30.4] | 101.1 [29.6] | 101.1 [29.6] | 104.3 [30.6]  | 99.0 [29.0]  | 96.5 [28.3] | 95.2 [27.9] | 102.9 [30.1]  | 97.6 [28.6]  | 95.2 [27.9] | 95.2 [27.9] | 102.3 [30.0]  | 97.1 [28.4]  | 94.7 [27.7] | 94.7 [27.7] |  |  |  |  |
|               | Sens BTUH [kW]  | 68.4 [20.1]                               | 60.1 [17.6]  | 56.3 [16.5]  | 56.3 [16.5]  | 81.4 [23.9]   | 71.5 [20.9]  | 67.0 [19.6]  | 67.0 [19.6]  | 94.1 [27.6]   | 82.7 [24.2]  | 77.4 [22.7] | 77.4 [22.7] | 100.3 [29.4]  | 88.1 [25.8]  | 82.5 [24.2] | 82.5 [24.2] | 102.3 [30.0]  | 93.2 [27.3]  | 87.4 [25.6] | 87.4 [25.6] |  |  |  |  |
| 85<br>[29.4]  | Total BTUH [kW] | 112.6 [33.0]                              | 106.8 [31.3] | 104.2 [30.5] | 104.2 [30.5] | 105.7 [31.0]  | 100.3 [29.4] | 97.8 [28.7]  | 97.8 [28.7]  | 100.8 [29.5]  | 95.6 [28.0]  | 93.3 [27.3] | 93.3 [27.3] | 99.3 [29.1]   | 94.2 [27.6]  | 91.9 [26.9] | 91.9 [26.9] | 98.8 [28.9]   | 93.7 [27.5]  | 91.4 [26.8] | 91.4 [26.8] |  |  |  |  |
|               | Sens BTUH [kW]  | 66.6 [19.5]                               | 58.5 [17.1]  | 54.8 [16.0]  | 54.8 [16.0]  | 79.5 [23.3]   | 69.8 [20.5]  | 65.4 [19.2]  | 65.4 [19.2]  | 92.3 [27.0]   | 81.0 [23.7]  | 75.9 [22.2] | 75.9 [22.2] | 98.4 [28.8]   | 86.4 [25.3]  | 81.0 [23.7] | 81.0 [23.7] | 98.8 [28.9]   | 91.6 [26.8]  | 85.8 [25.1] | 85.8 [25.1] |  |  |  |  |
| 90<br>[32.2]  | Total BTUH [kW] | 109.0 [31.9]                              | 103.4 [30.3] | 100.9 [29.6] | 100.9 [29.6] | 102.1 [29.9]  | 96.9 [28.4]  | 94.5 [27.7]  | 94.5 [27.7]  | 97.2 [28.5]   | 92.2 [27.0]  | 89.8 [26.4] | 88.5 [26.0] | 95.8 [28.1]   | 90.9 [26.6]  | 88.6 [26.0] | 88.6 [26.0] | 95.2 [27.9]   | 90.3 [26.5]  | 88.1 [25.8] | 88.1 [25.8] |  |  |  |  |
|               | Sens BTUH [kW]  | 64.7 [19.0]                               | 56.8 [16.7]  | 53.2 [15.6]  | 53.2 [15.6]  | 77.7 [22.8]   | 68.2 [20.0]  | 63.9 [18.7]  | 63.9 [18.7]  | 90.4 [26.5]   | 79.4 [23.3]  | 74.4 [21.8] | 74.4 [21.8] | 92.2 [27.0]   | 84.8 [24.8]  | 79.4 [23.3] | 79.4 [23.3] | 95.2 [27.9]   | 90.0 [26.4]  | 84.3 [24.7] | 84.3 [24.7] |  |  |  |  |
| 95<br>[35]    | Total BTUH [kW] | 105.4 [30.9]                              | 100.0 [29.3] | 97.5 [28.6]  | 97.5 [28.6]  | 98.5 [28.9]   | 93.5 [27.4]  | 91.2 [26.7]  | 91.2 [26.7]  | 93.6 [27.4]   | 88.8 [26.0]  | 86.6 [25.4] | 86.6 [25.4] | 92.2 [27.0]   | 87.4 [25.6]  | 85.3 [25.0] | 85.3 [25.0] | 91.6 [26.8]   | 86.9 [25.5]  | 84.8 [24.8] | 84.8 [24.8] |  |  |  |  |
|               | Sens BTUH [kW]  | 62.9 [18.4]                               | 55.2 [16.2]  | 51.7 [15.2]  | 51.7 [15.2]  | 75.8 [22.2]   | 66.6 [19.5]  | 62.4 [18.3]  | 62.4 [18.3]  | 88.6 [26.0]   | 77.8 [22.8]  | 72.9 [21.4] | 72.9 [21.4] | 92.2 [27.0]   | 83.2 [24.4]  | 77.9 [22.8] | 77.9 [22.8] | 91.6 [26.8]   | 86.9 [25.5]  | 82.8 [24.3] | 82.8 [24.3] |  |  |  |  |
| 100<br>[37.8] | Total BTUH [kW] | 101.7 [29.8]                              | 96.5 [28.3]  | 94.2 [27.6]  | 94.2 [27.6]  | 94.9 [27.8]   | 90.0 [26.4]  | 87.8 [25.7]  | 87.8 [25.7]  | 90.0 [26.4]   | 85.4 [25.0]  | 83.3 [24.4] | 83.3 [24.4] | 88.5 [25.9]   | 84.0 [23.9]  | 81.9 [23.8] | 81.9 [23.8] | 88.0 [25.8]   | 83.4 [24.5]  | 81.4 [23.9] | 81.4 [23.9] |  |  |  |  |
|               | Sens BTUH [kW]  | 61.0 [17.9]                               | 53.6 [15.7]  | 50.2 [14.7]  | 50.2 [14.7]  | 74.0 [21.7]   | 65.0 [19.0]  | 60.9 [17.8]  | 60.9 [17.8]  | 86.7 [25.4]   | 76.2 [22.3]  | 71.4 [20.9] | 71.4 [20.9] | 88.5 [25.9]   | 81.6 [23.9]  | 76.4 [22.4] | 76.4 [22.4] | 88.0 [25.8]   | 83.4 [24.5]  | 81.3 [23.8] | 81.3 [23.8] |  |  |  |  |
| 105<br>[40.6] | Total BTUH [kW] | 98.1 [28.7]                               | 93.0 [27.3]  | 90.7 [26.6]  | 90.7 [26.6]  | 91.2 [26.7]   | 86.5 [25.4]  | 84.4 [24.7]  | 84.4 [24.7]  | 86.3 [25.3]   | 81.9 [24.0]  | 79.8 [23.4] | 79.8 [23.4] | 84.8 [24.9]   | 80.5 [23.6]  | 78.5 [23.0] | 78.5 [23.0] | 84.3 [24.7]   | 79.9 [23.4]  | 78.0 [22.9] | 78.0 [22.9] |  |  |  |  |
|               | Sens BTUH [kW]  | 59.3 [17.4]                               | 52.0 [15.2]  | 48.8 [14.3]  | 48.8 [14.3]  | 72.2 [21.2]   | 63.4 [18.6]  | 59.4 [17.4]  | 59.4 [17.4]  | 84.9 [24.9]   | 74.6 [21.9]  | 69.9 [20.5] | 69.9 [20.5] | 84.8 [24.9]   | 80.0 [23.4]  | 74.9 [22.0] | 74.9 [22.0] | 84.3 [24.7]   | 79.9 [23.4]  | 78.0 [22.9] | 78.0 [22.9] |  |  |  |  |
| 110<br>[43.3] | Total BTUH [kW] | 94.3 [27.6]                               | 89.5 [26.2]  | 87.3 [25.6]  | 87.3 [25.6]  | 87.5 [25.6]   | 83.0 [24.3]  | 81.0 [23.7]  | 81.0 [23.7]  | 82.6 [24.2]   | 78.3 [23.0]  | 76.4 [22.4] | 76.4 [22.4] | 81.1 [23.8]   | 76.9 [22.5]  | 75.1 [22.0] | 75.1 [22.0] | 80.5 [23.6]   | 76.4 [22.4]  | 74.5 [21.8] | 74.5 [21.8] |  |  |  |  |
|               | Sens BTUH [kW]  | 57.5 [16.8]                               | 50.5 [14.8]  | 47.3 [13.9]  | 47.3 [13.9]  | 70.4 [20.6]   | 61.9 [18.1]  | 57.9 [17.0]  | 57.9 [17.0]  | 82.6 [24.2]   | 73.0 [21.4]  | 68.4 [20.1] | 68.4 [20.1] | 81.1 [23.8]   | 76.9 [22.5]  | 73.5 [21.5] | 73.5 [21.5] | 80.5 [23.6]   | 76.4 [22.4]  | 74.5 [21.8] | 74.5 [21.8] |  |  |  |  |
| 115<br>[46.1] | Total BTUH [kW] | 90.6 [26.5]                               | 85.9 [25.2]  | 83.8 [24.6]  | 83.8 [24.6]  | 83.7 [24.5]   | 79.4 [23.3]  | 77.5 [22.7]  | 77.5 [22.7]  | 78.8 [23.1]   | 74.8 [21.9]  | 72.9 [21.4] | 72.9 [21.4] | 77.3 [22.7]   | 73.4 [21.5]  | 71.6 [21.0] | 71.6 [21.0] | 76.8 [22.5]   | 72.8 [21.3]  | 71.1 [20.8] | 71.1 [20.8] |  |  |  |  |
|               | Sens BTUH [kW]  | 55.7 [16.3]                               | 48.9 [14.3]  | 45.8 [13.4]  | 45.8 [13.4]  | 68.7 [20.1]   | 60.3 [17.7]  | 56.5 [16.6]  | 56.5 [16.6]  | 78.8 [23.1]   | 71.5 [20.9]  | 67.0 [19.6] | 67.0 [19.6] | 77.3 [22.7]   | 73.4 [21.5]  | 71.6 [21.0] | 71.6 [21.0] | 76.8 [22.5]   | 72.8 [21.3]  | 71.1 [20.8] | 71.1 [20.8] |  |  |  |  |
| 120<br>[48.9] | Total BTUH [kW] | 86.8 [25.4]                               | 82.3 [24.1]  | 80.3 [23.5]  | 80.3 [23.5]  | 79.9 [23.4]   | 75.8 [22.2]  | 74.0 [21.7]  | 74.0 [21.7]  | 75.0 [22.0]   | 71.1 [20.8]  | 69.4 [20.3] | 69.4 [20.3] | 73.5 [21.6]   | 69.8 [20.4]  | 68.1 [19.9] | 68.1 [19.9] | 73.0 [21.4]   | 69.2 [20.3]  | 67.5 [19.8] | 67.5 [19.8] |  |  |  |  |
|               | Sens BTUH [kW]  | 54.0 [15.8]                               | 47.4 [13.9]  | 44.4 [13.0]  | 44.4 [13.0]  | 66.9 [19.6]   | 58.8 [17.2]  | 55.1 [16.1]  | 55.1 [16.1]  | 75.0 [22.0]   | 70.0 [20.5]  | 65.5 [19.2] | 65.5 [19.2] | 73.5 [21.6]   | 69.8 [20.4]  | 68.1 [19.9] | 68.1 [19.9] | 73.0 [21.4]   | 69.2 [20.3]  | 67.5 [19.8] | 67.5 [19.8] |  |  |  |  |
| 125<br>[51.7] | Total BTUH [kW] | 82.9 [24.3]                               | 78.7 [23.1]  | 76.8 [22.5]  | 76.8 [22.5]  | 76.1 [22.3]   | 72.2 [21.2]  | 70.4 [20.6]  | 70.4 [20.6]  | 71.2 [20.9]   | 67.5 [19.8]  | 65.8 [19.3] | 65.8 [19.3] | 69.7 [20.4]   | 66.1 [19.4]  | 64.5 [18.9] | 64.5 [18.9] | 69.1 [20.3]   | 65.6 [19.2]  | 64.0 [18.8] | 64.0 [18.8] |  |  |  |  |
|               | Sens BTUH [kW]  | 52.3 [15.3]                               | 45.9 [13.4]  | 43.0 [12.6]  | 43.0 [12.6]  | 65.2 [19.1]   | 57.3 [16.8]  | 53.7 [15.7]  | 53.7 [15.7]  | 71.2 [20.9]   | 67.5 [19.8]  | 64.1 [18.8] | 64.1 [18.8] | 69.7 [20.4]   | 66.1 [19.4]  | 64.5 [18.9] | 64.5 [18.9] | 69.1 [20.3]   | 65.6 [19.2]  | 64.0 [18.8] | 64.0 [18.8] |  |  |  |  |
| Power         |                 | 12.6                                      | 12.3         | 12.1         | 12.1         | 12.5          | 12.2         | 12.1         | 12.1         | 12.5          | 12.1         | 12.0        | 12.0        | 12.4          | 12.1         | 12.0        | 12.0        | 12.4          | 12.1         | 11.9        | 11.9        |  |  |  |  |

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

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 – RGEDZT102A

| wBE                                  |                 | ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ① |              |              |              |               |              |              |              |               |              |              |              |               |              |              |              |               |              |              |      |  |
|--------------------------------------|-----------------|-------------------------------------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|------|--|
|                                      |                 | 71°F [21.7°C]                             |              |              |              | 67°F [19.4°C] |              |              |              | 63°F [17.2°C] |              |              |              | 61°F [16.1°C] |              |              |              | 59°F [15.0°C] |              |              |      |  |
|                                      |                 | 4100 [1935]                               | 3200 [1510]  | 2700 [1274]  | 0.01         | 4100 [1935]   | 3200 [1510]  | 2700 [1274]  | 0.05         | 4100 [1935]   | 3200 [1510]  | 2700 [1274]  | 0.01         | 4100 [1935]   | 3200 [1510]  | 2700 [1274]  | 0.05         | 4100 [1935]   | 3200 [1510]  | 2700 [1274]  | 0.01 |  |
| CFM [L/s]                            | DR ①            |                                           |              |              |              |               |              |              |              |               |              |              |              |               |              |              |              |               |              |              |      |  |
| 75<br>[23.9]                         | Total BTUH [kW] | 129.9 [38.1]                              | 123.6 [36.2] | 120.1 [35.2] | 122.7 [36.0] | 116.7 [34.2]  | 113.4 [33.2] | 118.3 [34.7] | 111.8 [32.3] | 110.1 [32.3]  | 112.5 [33.0] | 109.3 [32.0] | 108.6 [31.8] | 111.8 [34.4]  | 111.8 [32.8] | 108.6 [31.8] | 112.2 [32.9] | 118.0 [34.6]  | 112.2 [32.9] | 109.0 [32.0] | 0.01 |  |
|                                      | Sens BTUH [kW]  | 81.3 [23.8]                               | 71.9 [21.1]  | 66.6 [19.5]  | 96.4 [28.2]  | 85.2 [25.0]   | 79.0 [23.1]  | 110.1 [32.3] | 110.1 [32.3] | 110.1 [32.3]  | 97.3 [28.5]  | 90.2 [26.4]  | 95.2 [27.9]  | 116.1 [34.0]  | 102.6 [30.1] | 95.2 [27.9]  | 118.0 [34.6] | 118.0 [34.6]  | 107.3 [31.5] | 99.5 [29.2]  | 0.01 |  |
| 80<br>[26.7]                         | Power           | 6.2                                       | 6.1          | 6.0          | 6.1          | 6.0           | 5.9          | 6.1          | 6.1          | 6.1           | 5.9          | 5.8          | 5.8          | 6.0           | 5.9          | 5.8          | 6.0          | 6.0           | 5.9          | 5.8          | 0.01 |  |
|                                      | Total BTUH [kW] | 125.7 [36.8]                              | 119.5 [35.0] | 116.1 [34.0] | 118.5 [34.7] | 112.7 [33.0]  | 109.5 [32.1] | 114.0 [33.4] | 111.4 [32.3] | 108.0 [31.6]  | 108.5 [31.8] | 105.4 [30.9] | 104.7 [30.7] | 113.3 [33.2]  | 107.8 [31.6] | 104.7 [30.7] | 113.7 [33.3] | 113.7 [33.3]  | 108.2 [31.7] | 105.1 [30.8] | 0.01 |  |
| 85<br>[29.4]                         | Sens BTUH [kW]  | 79.2 [23.2]                               | 70.0 [20.5]  | 64.9 [19.0]  | 94.3 [27.6]  | 83.3 [24.4]   | 77.2 [22.6]  | 108.0 [31.6] | 108.0 [31.6] | 108.0 [31.6]  | 95.4 [28.0]  | 88.5 [25.9]  | 93.4 [27.4]  | 113.3 [33.2]  | 100.8 [29.5] | 93.4 [27.4]  | 113.7 [33.3] | 113.7 [33.3]  | 105.5 [30.9] | 97.8 [28.7]  | 0.01 |  |
|                                      | Power           | 6.6                                       | 6.4          | 6.3          | 6.5          | 6.3           | 6.2          | 6.4          | 6.4          | 6.4           | 6.3          | 6.2          | 6.2          | 6.4           | 6.2          | 6.2          | 6.4          | 6.4           | 6.2          | 6.1          | 0.01 |  |
| 85<br>[29.4]                         | Total BTUH [kW] | 121.4 [35.6]                              | 115.5 [33.8] | 112.2 [32.9] | 114.2 [33.5] | 108.7 [31.8]  | 105.6 [30.9] | 109.8 [32.2] | 105.8 [31.0] | 103.6 [30.4]  | 104.4 [30.6] | 101.5 [29.7] | 100.8 [29.5] | 109.0 [31.9]  | 103.7 [30.4] | 100.8 [29.5] | 109.5 [32.1] | 109.5 [32.1]  | 104.2 [30.5] | 101.2 [29.7] | 0.01 |  |
|                                      | Sens BTUH [kW]  | 77.0 [22.6]                               | 68.1 [20.0]  | 63.1 [18.5]  | 92.1 [27.0]  | 81.4 [23.9]   | 75.5 [22.1]  | 105.8 [31.0] | 105.8 [31.0] | 105.8 [31.0]  | 93.5 [27.4]  | 86.7 [25.4]  | 91.7 [26.9]  | 109.0 [31.9]  | 98.9 [29.0]  | 91.7 [26.9]  | 109.5 [32.1] | 109.5 [32.1]  | 103.6 [30.4] | 96.0 [28.1]  | 0.01 |  |
| 90<br>[32.2]                         | Power           | 6.9                                       | 6.8          | 6.7          | 6.9          | 6.7           | 6.6          | 6.8          | 6.8          | 6.8           | 6.6          | 6.6          | 6.5          | 6.8           | 6.6          | 6.5          | 6.7          | 6.7           | 6.6          | 6.5          | 0.01 |  |
|                                      | Total BTUH [kW] | 117.1 [34.3]                              | 111.4 [32.7] | 108.3 [31.7] | 110.0 [32.2] | 104.6 [30.7]  | 101.6 [29.8] | 105.5 [30.9] | 103.6 [30.4] | 103.6 [30.4]  | 100.4 [29.4] | 97.5 [28.6]  | 96.8 [28.4]  | 104.8 [30.7]  | 99.7 [29.2]  | 96.8 [28.4]  | 105.2 [30.8] | 105.2 [30.8]  | 100.1 [29.3] | 97.3 [28.5]  | 0.01 |  |
| 90<br>[32.2]                         | Sens BTUH [kW]  | 74.9 [21.9]                               | 66.2 [19.4]  | 61.4 [18.0]  | 89.9 [26.4]  | 79.5 [23.3]   | 73.7 [21.6]  | 103.6 [30.4] | 103.6 [30.4] | 103.6 [30.4]  | 91.6 [26.8]  | 84.9 [24.9]  | 88.9 [26.3]  | 104.8 [30.7]  | 97.0 [28.4]  | 88.9 [26.3]  | 105.2 [30.8] | 105.2 [30.8]  | 100.1 [29.3] | 94.3 [27.6]  | 0.01 |  |
|                                      | Power           | 7.4                                       | 7.2          | 7.1          | 7.3          | 7.1           | 7.0          | 7.2          | 7.2          | 7.2           | 7.1          | 7.0          | 7.0          | 7.2           | 7.0          | 6.9          | 7.2          | 7.2           | 7.0          | 6.9          | 0.01 |  |
| 95<br>[35]                           | Total BTUH [kW] | 112.9 [33.1]                              | 107.4 [31.5] | 104.3 [30.6] | 105.7 [31.0] | 100.5 [29.5]  | 97.7 [28.6]  | 101.2 [29.7] | 101.2 [29.7] | 101.2 [29.7]  | 96.3 [28.2]  | 93.6 [27.4]  | 92.9 [27.2]  | 100.9 [29.6]  | 95.6 [28.0]  | 92.9 [27.2]  | 100.9 [29.6] | 100.9 [29.6]  | 96.0 [28.1]  | 93.3 [27.3]  | 0.01 |  |
|                                      | Sens BTUH [kW]  | 72.6 [21.3]                               | 64.2 [18.8]  | 59.5 [17.4]  | 87.7 [25.7]  | 77.5 [22.7]   | 71.9 [21.1]  | 101.2 [29.7] | 101.2 [29.7] | 101.2 [29.7]  | 89.7 [26.3]  | 83.1 [24.4]  | 88.1 [25.8]  | 100.9 [29.6]  | 95.0 [27.8]  | 88.1 [25.8]  | 100.9 [29.6] | 100.9 [29.6]  | 96.0 [28.1]  | 92.4 [27.1]  | 0.01 |  |
| 100<br>[37.8]                        | Power           | 7.8                                       | 7.6          | 7.5          | 7.7          | 7.6           | 7.4          | 7.7          | 7.7          | 7.7           | 7.5          | 7.4          | 7.4          | 7.6           | 7.5          | 7.4          | 7.6          | 7.6           | 7.4          | 7.3          | 0.01 |  |
|                                      | Total BTUH [kW] | 108.6 [31.8]                              | 103.3 [30.3] | 100.4 [29.4] | 101.4 [29.7] | 96.5 [28.3]   | 93.7 [27.5]  | 97.0 [28.4]  | 97.0 [28.4]  | 97.0 [28.4]   | 92.2 [27.0]  | 89.6 [26.3]  | 88.9 [26.1]  | 96.7 [28.3]   | 91.5 [26.8]  | 88.9 [26.1]  | 96.7 [28.3]  | 96.7 [28.3]   | 92.0 [26.9]  | 89.3 [26.2]  | 0.01 |  |
| 100<br>[37.8]                        | Sens BTUH [kW]  | 70.4 [20.6]                               | 62.2 [18.2]  | 57.7 [16.9]  | 85.5 [25.0]  | 75.5 [22.1]   | 70.0 [20.5]  | 97.0 [28.4]  | 97.0 [28.4]  | 97.0 [28.4]   | 87.7 [25.7]  | 81.3 [23.8]  | 86.2 [25.3]  | 96.7 [28.3]   | 91.5 [26.8]  | 86.2 [25.3]  | 96.7 [28.3]  | 96.7 [28.3]   | 92.0 [26.9]  | 89.3 [26.2]  | 0.01 |  |
|                                      | Power           | 8.3                                       | 8.1          | 8.0          | 8.2          | 8.0           | 7.9          | 8.2          | 8.2          | 8.2           | 8.0          | 7.8          | 7.8          | 8.1           | 7.9          | 7.8          | 8.1          | 8.1           | 7.9          | 7.8          | 0.01 |  |
| 105<br>[40.6]                        | Total BTUH [kW] | 104.3 [30.6]                              | 99.2 [29.1]  | 96.4 [28.2]  | 97.1 [28.4]  | 92.4 [27.1]   | 89.7 [26.3]  | 92.7 [27.2]  | 92.7 [27.2]  | 92.7 [27.2]   | 88.1 [25.8]  | 85.6 [25.1]  | 84.9 [24.9]  | 92.4 [27.1]   | 87.4 [25.6]  | 84.9 [24.9]  | 92.4 [27.1]  | 92.4 [27.1]   | 87.9 [25.7]  | 85.4 [25.0]  | 0.01 |  |
|                                      | Sens BTUH [kW]  | 68.1 [20.0]                               | 60.2 [17.6]  | 55.8 [16.4]  | 83.2 [24.4]  | 73.5 [21.5]   | 68.1 [20.0]  | 92.7 [27.2]  | 92.7 [27.2]  | 92.7 [27.2]   | 85.6 [25.1]  | 79.4 [23.3]  | 84.3 [24.7]  | 100.9 [29.6]  | 87.4 [25.6]  | 84.3 [24.7]  | 92.4 [27.1]  | 92.4 [27.1]   | 87.9 [25.7]  | 85.4 [25.0]  | 0.01 |  |
| 105<br>[40.6]                        | Power           | 8.8                                       | 8.6          | 8.5          | 8.7          | 8.5           | 8.4          | 8.7          | 8.7          | 8.7           | 8.5          | 8.3          | 8.3          | 8.6           | 8.4          | 8.3          | 8.6          | 8.6           | 8.4          | 8.3          | 0.01 |  |
|                                      | Total BTUH [kW] | 99.9 [29.3]                               | 95.1 [27.9]  | 92.4 [27.1]  | 92.8 [27.2]  | 88.2 [25.9]   | 85.7 [25.1]  | 88.3 [25.9]  | 88.3 [25.9]  | 88.3 [25.9]   | 84.0 [24.6]  | 81.6 [23.9]  | 80.9 [23.7]  | 87.6 [25.7]   | 83.3 [24.4]  | 80.9 [23.7]  | 88.0 [25.8]  | 88.0 [25.8]   | 83.7 [24.5]  | 81.4 [23.8]  | 0.01 |  |
| 110<br>[43.3]                        | Sens BTUH [kW]  | 65.8 [19.3]                               | 58.1 [17.0]  | 53.9 [15.8]  | 80.8 [23.7]  | 71.4 [20.9]   | 66.2 [19.4]  | 88.3 [25.9]  | 88.3 [25.9]  | 88.3 [25.9]   | 83.6 [24.5]  | 77.5 [22.7]  | 80.9 [23.7]  | 87.6 [25.7]   | 83.3 [24.4]  | 80.9 [23.7]  | 88.0 [25.8]  | 88.0 [25.8]   | 83.7 [24.5]  | 81.4 [23.8]  | 0.01 |  |
|                                      | Power           | 9.3                                       | 9.1          | 9.0          | 9.3          | 9.0           | 8.9          | 9.2          | 9.2          | 9.2           | 9.0          | 8.9          | 8.9          | 9.2           | 9.0          | 8.8          | 9.1          | 9.1           | 8.9          | 8.8          | 0.01 |  |
| 115<br>[46.1]                        | Total BTUH [kW] | 95.6 [28.0]                               | 91.0 [26.7]  | 88.4 [25.9]  | 88.4 [25.9]  | 84.1 [24.7]   | 81.7 [24.0]  | 84.0 [24.6]  | 84.0 [24.6]  | 84.0 [24.6]   | 79.9 [23.4]  | 77.6 [22.8]  | 76.9 [22.5]  | 83.2 [24.4]   | 79.2 [23.2]  | 76.9 [22.5]  | 83.7 [24.5]  | 83.7 [24.5]   | 79.6 [23.3]  | 77.4 [22.7]  | 0.01 |  |
|                                      | Sens BTUH [kW]  | 63.4 [18.6]                               | 56.0 [16.4]  | 51.9 [15.2]  | 78.4 [23.0]  | 69.3 [20.3]   | 64.3 [18.8]  | 84.0 [24.6]  | 84.0 [24.6]  | 84.0 [24.6]   | 79.9 [23.4]  | 75.5 [22.1]  | 76.9 [22.5]  | 83.2 [24.4]   | 79.2 [23.2]  | 76.9 [22.5]  | 83.7 [24.5]  | 83.7 [24.5]   | 79.6 [23.3]  | 77.4 [22.7]  | 0.01 |  |
| 115<br>[46.1]                        | Power           | 9.9                                       | 9.7          | 9.5          | 9.8          | 9.6           | 9.5          | 9.8          | 9.8          | 9.8           | 9.5          | 9.4          | 9.4          | 9.7           | 9.5          | 9.4          | 9.7          | 9.7           | 9.5          | 9.4          | 0.01 |  |
|                                      | Total BTUH [kW] | 91.3 [26.7]                               | 86.8 [25.4]  | 84.4 [24.7]  | 84.1 [24.6]  | 80.0 [23.4]   | 77.7 [22.8]  | 79.6 [23.3]  | 79.6 [23.3]  | 79.6 [23.3]   | 75.8 [22.2]  | 73.6 [21.6]  | 72.9 [21.4]  | 78.9 [23.1]   | 75.0 [22.0]  | 72.9 [21.4]  | 79.3 [23.3]  | 79.3 [23.3]   | 75.5 [22.1]  | 73.3 [21.5]  | 0.01 |  |
| 120<br>[48.9]                        | Sens BTUH [kW]  | 61.0 [17.9]                               | 53.9 [15.8]  | 50.0 [14.6]  | 76.0 [22.3]  | 67.2 [19.7]   | 62.3 [18.3]  | 79.6 [23.3]  | 79.6 [23.3]  | 79.6 [23.3]   | 75.8 [22.2]  | 73.5 [21.6]  | 72.9 [21.4]  | 78.9 [23.1]   | 75.0 [22.0]  | 72.9 [21.4]  | 79.3 [23.3]  | 79.3 [23.3]   | 75.5 [22.1]  | 73.3 [21.5]  | 0.01 |  |
|                                      | Power           | 10.5                                      | 10.3         | 10.1         | 10.5         | 10.2          | 10.1         | 10.4         | 10.4         | 10.4          | 10.1         | 10.0         | 10.0         | 10.4          | 10.1         | 10.0         | 10.3         | 10.3          | 10.1         | 9.9          | 0.01 |  |
| 125<br>[51.7]                        | Total BTUH [kW] | 86.9 [25.5]                               | 82.7 [24.2]  | 80.3 [23.5]  | 79.7 [23.4]  | 75.8 [22.2]   | 73.7 [21.6]  | 75.3 [22.1]  | 75.3 [22.1]  | 75.3 [22.1]   | 71.6 [21.0]  | 69.6 [20.4]  | 68.9 [20.2]  | 74.5 [21.8]   | 70.9 [20.8]  | 68.9 [20.2]  | 75.0 [22.0]  | 75.0 [22.0]   | 71.3 [20.9]  | 69.3 [20.3]  | 0.01 |  |
|                                      | Sens BTUH [kW]  | 58.5 [17.1]                               | 51.7 [15.2]  | 48.0 [14.1]  | 73.6 [21.6]  | 65.0 [19.1]   | 60.3 [17.7]  | 75.3 [22.1]  | 75.3 [22.1]  | 75.3 [22.1]   | 71.6 [21.0]  | 69.6 [20.4]  | 68.9 [20.2]  | 74.5 [21.8]   | 70.9 [20.8]  | 68.9 [20.2]  | 75.0 [22.0]  | 75.0 [22.0]   | 71.3 [20.9]  | 69.3 [20.3]  | 0.01 |  |
| 125<br>[51.7]                        | Power           | 11.2                                      | 10.9         | 10.7         | 11.1         | 10.8          | 10.7         | 11.0         | 11.0         | 11.0          | 10.8         | 10.6         | 10.6         | 11.0          | 10.7         | 10.6         | 11.0         | 11.0          | 10.7         | 10.5         | 0.01 |  |
|                                      | Power           | 11.2                                      | 10.9         | 10.7         | 11.1         | 10.8          | 10.7         | 11.0         | 11.0         | 11.0          | 10.8         | 10.6         | 10.6         | 11.0          | 10.7         | 10.6         | 11.0         | 11.0          | 10.7         | 10.5         | 0.01 |  |
| OUTDOOR DRY BULB TEMPERATURE °F [°C] |                 |                                           |              |              |              |               |              |              |              |               |              |              |              |               |              |              |              |               |              |              |      |  |

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

[ ] Designates Metric Conversions



Air

Gross Systems Performance Data

RGED Series

## COOLING PERFORMANCE DATA — RGEDZT120A

| ENTERING INDOOR AIR @ 80°F (26.7°C) dbE ① |                 |               |              |              |             |               |              |              |              |               |              |              |              |               |              |              |      |               |  |  |  |
|-------------------------------------------|-----------------|---------------|--------------|--------------|-------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|------|---------------|--|--|--|
| whE                                       |                 | 71°F (21.7°C) |              |              |             | 67°F (19.4°C) |              |              |              | 63°F (17.2°C) |              |              |              | 61°F (16.1°C) |              |              |      | 59°F (15.0°C) |  |  |  |
| CFM [L/s]                                 |                 | 4800 [2265]   | 3750 [1770]  | 3200 [1510]  | 0           | 4800 [2265]   | 3750 [1770]  | 3200 [1510]  | 0            | 4800 [2265]   | 3750 [1770]  | 3200 [1510]  | 0            | 4800 [2265]   | 3750 [1770]  | 3200 [1510]  | 0    |               |  |  |  |
| 75<br>[23.9]                              | Total BTUH [kW] | 155.3 [45.5]  | 147.8 [43.3] | 143.8 [42.2] | 80.2 [23.5] | 147.8 [43.3]  | 140.7 [41.2] | 136.9 [40.1] | 132.2 [38.7] | 142.8 [41.8]  | 135.8 [39.8] | 132.2 [38.7] | 131.1 [38.4] | 141.4 [41.4]  | 134.5 [39.4] | 130.9 [38.4] | 0    |               |  |  |  |
|                                           | Sens BTUH [kW]  | 97.3 [28.5]   | 86.1 [25.2]  | 80.2 [23.5]  | 7.2         | 115.8 [33.9]  | 102.4 [30.0] | 95.4 [28.0]  | 7.1          | 132.9 [38.9]  | 117.5 [34.4] | 109.5 [32.1] | 7.0          | 141.4 [41.4]  | 130.4 [38.2] | 121.4 [35.6] | 6.9  |               |  |  |  |
| 80<br>[26.7]                              | Total BTUH [kW] | 150.6 [44.1]  | 143.4 [42.0] | 139.5 [40.9] | 78.2 [22.9] | 143.2 [42.0]  | 136.2 [39.9] | 132.6 [38.9] | 138.1 [40.5] | 131.4 [38.5]  | 127.9 [37.5] | 126.8 [37.1] | 126.6 [37.1] | 136.7 [40.1]  | 130.1 [38.1] | 126.6 [37.1] | 7.3  |               |  |  |  |
|                                           | Sens BTUH [kW]  | 94.9 [27.8]   | 84.0 [24.6]  | 78.2 [22.9]  | 7.6         | 113.5 [33.2]  | 100.3 [29.4] | 93.5 [27.4]  | 7.5          | 130.5 [38.2]  | 115.4 [33.8] | 107.5 [31.5] | 7.4          | 136.7 [40.1]  | 128.3 [37.6] | 119.5 [35.0] | 7.3  |               |  |  |  |
| 85<br>[29.4]                              | Total BTUH [kW] | 146.0 [42.8]  | 138.9 [40.7] | 135.2 [39.6] | 76.2 [22.3] | 138.5 [40.6]  | 131.8 [38.6] | 128.3 [37.6] | 133.5 [39.1] | 127.0 [37.2]  | 123.6 [36.2] | 123.6 [36.2] | 122.5 [35.9] | 132.1 [38.7]  | 125.7 [36.8] | 122.3 [35.9] | 7.8  |               |  |  |  |
|                                           | Sens BTUH [kW]  | 92.5 [27.1]   | 81.8 [24.0]  | 76.2 [22.3]  | 8.0         | 111.0 [32.5]  | 98.2 [28.8]  | 91.5 [26.8]  | 8.2          | 128.1 [37.5]  | 113.3 [33.2] | 105.5 [30.9] | 7.9          | 132.1 [38.7]  | 125.7 [36.8] | 117.5 [34.4] | 7.8  |               |  |  |  |
| 90<br>[32.2]                              | Total BTUH [kW] | 141.4 [41.4]  | 134.5 [39.4] | 131.0 [38.4] | 74.2 [21.7] | 138.6 [40.6]  | 131.8 [38.6] | 128.3 [37.6] | 133.5 [39.1] | 127.0 [37.2]  | 123.6 [36.2] | 123.6 [36.2] | 122.5 [35.9] | 132.1 [38.7]  | 125.7 [36.8] | 122.3 [35.9] | 7.8  |               |  |  |  |
|                                           | Sens BTUH [kW]  | 90.1 [26.4]   | 79.7 [23.3]  | 74.2 [21.7]  | 8.5         | 108.6 [31.8]  | 96.0 [28.1]  | 89.5 [26.2]  | 8.4          | 125.6 [36.8]  | 111.1 [32.6] | 103.5 [30.3] | 8.3          | 127.5 [37.4]  | 121.3 [35.5] | 115.5 [33.8] | 8.2  |               |  |  |  |
| 95<br>[35]                                | Total BTUH [kW] | 136.8 [40.1]  | 130.2 [38.1] | 126.7 [37.1] | 72.2 [21.1] | 129.3 [37.9]  | 123.0 [36.1] | 119.7 [35.1] | 124.2 [36.4] | 122.6 [35.9]  | 119.3 [35.0] | 119.3 [35.0] | 118.2 [34.6] | 127.5 [37.4]  | 121.3 [35.5] | 118.1 [34.6] | 8.7  |               |  |  |  |
|                                           | Sens BTUH [kW]  | 87.6 [25.7]   | 77.5 [22.7]  | 72.2 [21.1]  | 9.0         | 106.1 [31.1]  | 93.8 [27.5]  | 87.4 [25.6]  | 9.1          | 108.9 [31.9]  | 101.5 [29.7] | 101.5 [29.7] | 8.8          | 122.9 [36.0]  | 116.9 [34.3] | 113.4 [33.3] | 8.7  |               |  |  |  |
| 100<br>[37.8]                             | Total BTUH [kW] | 132.2 [38.7]  | 125.8 [36.9] | 122.4 [35.9] | 70.1 [20.5] | 124.7 [36.5]  | 118.7 [34.8] | 115.5 [33.8] | 119.6 [35.1] | 118.2 [34.6]  | 115.1 [33.7] | 115.1 [33.7] | 114.0 [32.6] | 122.9 [36.0]  | 116.9 [34.3] | 113.4 [33.3] | 8.7  |               |  |  |  |
|                                           | Sens BTUH [kW]  | 85.1 [24.9]   | 75.2 [22.0]  | 70.1 [20.5]  | 9.5         | 103.6 [30.3]  | 91.6 [26.8]  | 85.3 [25.0]  | 9.4          | 106.7 [31.3]  | 99.4 [29.3]  | 99.4 [29.3]  | 9.3          | 118.3 [34.7]  | 112.5 [33.0] | 109.5 [32.1] | 9.2  |               |  |  |  |
| 105<br>[40.6]                             | Total BTUH [kW] | 127.6 [37.4]  | 121.4 [35.6] | 118.2 [34.6] | 68.0 [19.9] | 120.1 [35.2]  | 114.3 [33.5] | 111.2 [32.6] | 115.1 [33.7] | 109.5 [32.1]  | 106.6 [31.2] | 106.6 [31.2] | 105.4 [30.9] | 113.7 [33.3]  | 108.2 [31.7] | 105.3 [30.9] | 9.8  |               |  |  |  |
|                                           | Sens BTUH [kW]  | 82.5 [24.2]   | 73.0 [21.4]  | 68.0 [19.9]  | 10.1        | 101.0 [29.6]  | 89.3 [26.2]  | 83.2 [24.4]  | 10.3         | 104.4 [30.6]  | 97.3 [28.5]  | 97.3 [28.5]  | 9.9          | 113.7 [33.3]  | 108.2 [31.7] | 105.3 [30.9] | 9.8  |               |  |  |  |
| 110<br>[43.3]                             | Total BTUH [kW] | 123.0 [36.1]  | 117.1 [34.3] | 114.0 [33.4] | 65.8 [19.3] | 115.5 [33.9]  | 109.9 [32.2] | 107.0 [31.4] | 110.5 [32.4] | 105.1 [30.8]  | 102.3 [30.0] | 102.3 [30.0] | 101.2 [29.7] | 109.1 [32.0]  | 103.8 [30.4] | 101.1 [29.6] | 10.4 |               |  |  |  |
|                                           | Sens BTUH [kW]  | 79.9 [23.4]   | 70.6 [20.7]  | 65.8 [19.3]  | 10.7        | 98.4 [28.8]   | 87.0 [25.5]  | 81.1 [23.8]  | 10.9         | 102.1 [29.9]  | 95.1 [27.9]  | 95.1 [27.9]  | 10.5         | 109.1 [32.0]  | 103.8 [30.4] | 101.1 [29.6] | 10.4 |               |  |  |  |
| 115<br>[46.1]                             | Total BTUH [kW] | 118.5 [34.7]  | 112.7 [33.0] | 109.7 [32.2] | 63.6 [18.6] | 111.0 [32.5]  | 105.6 [31.0] | 102.8 [30.1] | 105.9 [31.0] | 100.8 [29.5]  | 98.1 [28.8]  | 98.1 [28.8]  | 97.0 [28.4]  | 104.6 [30.6]  | 99.5 [29.2]  | 96.8 [28.4]  | 11.0 |               |  |  |  |
|                                           | Sens BTUH [kW]  | 77.2 [22.6]   | 68.3 [20.0]  | 63.6 [18.6]  | 11.3        | 95.7 [28.1]   | 84.7 [24.8]  | 78.9 [23.1]  | 11.5         | 99.8 [29.2]   | 92.9 [27.2]  | 92.9 [27.2]  | 11.1         | 104.6 [30.6]  | 99.5 [29.2]  | 96.8 [28.4]  | 11.0 |               |  |  |  |
| 120<br>[48.9]                             | Total BTUH [kW] | 113.9 [33.4]  | 108.4 [31.8] | 105.5 [30.9] | 61.4 [18.0] | 106.5 [31.2]  | 101.3 [29.7] | 98.6 [28.9]  | 101.4 [29.7] | 96.5 [28.3]   | 93.9 [27.5]  | 92.8 [27.2]  | 100.0 [29.3] | 100.0 [29.3]  | 95.2 [27.9]  | 92.6 [27.1]  | 11.7 |               |  |  |  |
|                                           | Sens BTUH [kW]  | 74.5 [21.8]   | 65.9 [19.3]  | 61.4 [18.0]  | 11.9        | 93.0 [27.3]   | 82.3 [24.1]  | 76.7 [22.5]  | 12.2         | 96.5 [28.3]   | 90.7 [26.6]  | 90.7 [26.6]  | 11.7         | 100.0 [29.3]  | 95.2 [27.9]  | 92.6 [27.1]  | 11.7 |               |  |  |  |
| 125<br>[51.7]                             | Total BTUH [kW] | 109.4 [32.1]  | 104.1 [30.5] | 101.3 [29.7] | 59.2 [17.3] | 101.9 [29.9]  | 97.0 [28.4]  | 94.4 [27.7]  | 96.9 [28.4]  | 92.2 [27.0]   | 89.7 [26.3]  | 88.6 [26.0]  | 95.5 [28.0]  | 95.5 [28.0]   | 90.9 [26.6]  | 88.5 [25.9]  | 12.3 |               |  |  |  |
|                                           | Sens BTUH [kW]  | 71.8 [21.0]   | 63.5 [18.6]  | 59.2 [17.3]  | 12.6        | 90.3 [26.5]   | 79.9 [23.4]  | 74.4 [21.8]  | 12.5         | 92.2 [27.0]   | 88.5 [25.9]  | 88.5 [25.9]  | 12.4         | 95.5 [28.0]   | 90.9 [26.6]  | 88.5 [25.9]  | 12.3 |               |  |  |  |
| Power                                     |                 | 13.1          | 12.8         | 12.6         | 12.7        | 13.0          | 12.7         | 12.5         | 12.9         | 12.6          | 12.4         | 12.4         | 12.5         | 12.8          | 12.5         | 12.3         | 12.3 |               |  |  |  |

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

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

Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
Power —KW input





## COOLING PERFORMANCE DATA—RGEDZT150A

| 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]                                 |            | 4500 [2124]     | 3750 [1770]  | 3000 [1416]  | 4500 [2124]   | 3750 [1770]  | 3000 [1416]  | 4500 [2124]   | 3750 [1770]  | 3000 [1416]  |
| DR ①                                      |            | 0               | 0.01         | 0.09         | 0             | 0.01         | 0.09         | 0             | 0.01         | 0.09         |
| OUTDOOR DRY BULB TEMPERATURE °F [°C]      | 75 [23.9]  | Total BTUH [kW] | 179.6 [52.6] | 173.3 [50.8] | 167.0 [48.9]  | 172.2 [50.5] | 166.2 [48.7] | 160.2 [46.9]  | 167.3 [49.0] | 161.4 [47.3] |
|                                           |            | Sens BTUH [kW]  | 113.4 [33.2] | 97.4 [28.5]  | 82.6 [24.2]   | 131.0 [38.4] | 113.8 [33.3] | 97.7 [28.6]   | 147.4 [43.2] | 128.9 [37.8] |
|                                           |            | Power           | 10.2         | 10.0         | 9.9           | 10.1         | 9.9          | 9.8           | 10.0         | 9.9          |
|                                           | 80 [26.7]  | Total BTUH [kW] | 175.0 [51.3] | 168.9 [49.5] | 162.8 [47.7]  | 167.6 [49.1] | 161.8 [47.4] | 155.9 [45.7]  | 162.7 [47.7] | 157.0 [46.0] |
|                                           |            | Sens BTUH [kW]  | 110.9 [32.5] | 95.3 [27.9]  | 80.9 [23.7]   | 128.5 [37.7] | 111.7 [32.7] | 95.9 [28.1]   | 144.9 [42.5] | 126.8 [37.2] |
|                                           |            | Power           | 10.6         | 10.4         | 10.3          | 10.5         | 10.4         | 10.2          | 10.4         | 10.3         |
|                                           | 85 [29.4]  | Total BTUH [kW] | 170.5 [50.0] | 164.5 [48.2] | 158.5 [46.4]  | 163.1 [47.8] | 157.4 [46.1] | 151.6 [44.4]  | 158.1 [46.3] | 152.5 [44.7] |
|                                           |            | Sens BTUH [kW]  | 108.5 [31.8] | 93.2 [27.3]  | 79.1 [23.2]   | 126.1 [36.9] | 109.6 [32.1] | 94.1 [27.6]   | 142.4 [41.7] | 124.6 [36.5] |
|                                           |            | Power           | 11.1         | 10.9         | 10.7          | 11.0         | 10.8         | 10.6          | 10.9         | 10.7         |
|                                           | 90 [32.2]  | Total BTUH [kW] | 165.9 [48.6] | 160.1 [46.9] | 154.3 [45.2]  | 158.5 [46.4] | 153.0 [44.8] | 147.4 [43.2]  | 153.5 [45.0] | 148.1 [43.4] |
|                                           |            | Sens BTUH [kW]  | 105.8 [31.0] | 91.0 [26.7]  | 77.2 [22.6]   | 123.4 [36.2] | 107.4 [31.5] | 92.3 [27.0]   | 139.7 [40.9] | 122.4 [35.9] |
|                                           |            | Power           | 11.6         | 11.4         | 11.2          | 11.5         | 11.3         | 11.1          | 11.4         | 11.2         |
|                                           | 95 [35]    | Total BTUH [kW] | 161.4 [47.3] | 155.7 [45.6] | 150.0 [43.9]  | 154.0 [45.1] | 148.6 [43.5] | 143.2 [42.0]  | 149.0 [43.7] | 143.8 [42.1] |
|                                           |            | Sens BTUH [kW]  | 103.3 [30.3] | 88.8 [26.0]  | 75.3 [22.1]   | 120.9 [35.4] | 105.2 [30.8] | 90.5 [26.5]   | 137.2 [40.2] | 120.3 [35.2] |
|                                           |            | Power           | 12.1         | 11.9         | 11.6          | 12.0         | 11.8         | 11.6          | 11.9         | 11.7         |
|                                           | 100 [37.8] | Total BTUH [kW] | 156.8 [45.9] | 151.3 [44.3] | 145.8 [42.7]  | 149.4 [43.8] | 144.2 [42.3] | 139.0 [40.7]  | 144.5 [42.3] | 139.4 [40.8] |
|                                           |            | Sens BTUH [kW]  | 100.6 [29.5] | 86.5 [25.3]  | 73.4 [21.5]   | 118.2 [34.6] | 102.9 [30.1] | 88.6 [26.0]   | 134.6 [39.4] | 118.0 [34.6] |
|                                           |            | Power           | 12.6         | 12.4         | 12.2          | 12.5         | 12.3         | 12.1          | 12.4         | 12.2         |
|                                           | 105 [40.6] | Total BTUH [kW] | 152.3 [44.6] | 147.0 [43.1] | 141.6 [41.5]  | 144.9 [42.5] | 139.8 [41.0] | 134.8 [39.5]  | 139.9 [41.0] | 135.0 [39.6] |
|                                           |            | Sens BTUH [kW]  | 98.0 [28.7]  | 84.3 [24.7]  | 71.5 [20.9]   | 115.6 [33.9] | 100.6 [29.5] | 86.7 [25.4]   | 131.9 [38.6] | 115.7 [33.9] |
|                                           |            | Power           | 13.2         | 13.0         | 12.7          | 13.1         | 12.9         | 12.6          | 13.0         | 12.8         |
|                                           | 110 [43.3] | Total BTUH [kW] | 147.8 [43.3] | 142.6 [41.8] | 137.4 [40.3]  | 140.4 [41.1] | 135.5 [39.7] | 130.6 [38.3]  | 135.4 [39.7] | 130.7 [38.3] |
|                                           |            | Sens BTUH [kW]  | 95.3 [27.9]  | 82.0 [24.0]  | 69.6 [20.4]   | 112.9 [33.1] | 98.4 [28.8]  | 84.8 [24.8]   | 129.2 [37.9] | 113.5 [33.3] |
|                                           |            | Power           | 13.8         | 13.5         | 13.3          | 13.7         | 13.5         | 13.2          | 13.6         | 13.4         |
|                                           | 115 [46.1] | Total BTUH [kW] | 143.3 [42.0] | 138.3 [40.5] | 133.3 [39.1]  | 135.9 [39.8] | 131.2 [38.4] | 126.4 [37.0]  | 130.9 [38.4] | 126.4 [37.0] |
|                                           |            | Sens BTUH [kW]  | 92.6 [27.1]  | 79.7 [23.4]  | 67.7 [19.8]   | 110.1 [32.3] | 96.0 [28.1]  | 82.7 [24.2]   | 126.4 [37.0] | 111.1 [32.6] |
|                                           |            | Power           | 14.4         | 14.2         | 13.9          | 14.3         | 14.1         | 13.8          | 14.2         | 14.0         |

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

Total —Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
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 REHEAT MODE)—RGEDZT090

| 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]                                            |                 |                 | 1800 [850]      | 1700 [802]  | 1200 [566] | 1800 [850]    | 1700 [802] | 1200 [566] | 1800 [850]      | 1700 [802] | 1200 [566] |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br><br>°F [°C] | 60<br>[15.6]    | Total BTUH [kW] | 29.7 [8.7]      | 29.4 [8.6]  | 27.9 [8.2] | 27.0 [7.9]    | 26.7 [7.8] | 25.3 [7.4] | 26.6 [7.8]      | 26.4 [7.7] | 24.9 [7.3] |
|                                                      |                 | Sens BTUH [kW]  | 6.5 [1.9]       | 6.3 [1.8]   | 5.4 [1.6]  | 9.0 [2.6]     | 8.7 [2.6]  | 7.5 [2.2]  | 11.4 [3.4]      | 11.1 [3.3] | 9.6 [2.8]  |
|                                                      |                 | Power           | 3.2             | 3.1         | 3.1        | 3.2           | 3.2        | 3.1        | 3.2             | 3.2        | 3.1        |
|                                                      | 65<br>[18.3]    | Total BTUH [kW] | 29.5 [8.6]      | 29.2 [8.5]  | 27.6 [8.1] | 26.7 [7.8]    | 26.4 [7.7] | 25.0 [7.3] | 26.4 [7.7]      | 26.1 [7.6] | 24.7 [7.2] |
|                                                      |                 | Sens BTUH [kW]  | 5.0 [1.5]       | 4.9 [1.4]   | 4.2 [1.2]  | 7.6 [2.2]     | 7.4 [2.2]  | 6.3 [1.9]  | 10.0 [2.9]      | 9.7 [2.9]  | 8.4 [2.5]  |
|                                                      |                 | Power           | 3.2             | 3.2         | 3.1        | 3.3           | 3.2        | 3.2        | 3.2             | 3.2        | 3.1        |
|                                                      | 70<br>[21.1]    | Total BTUH [kW] | 28.8 [8.4]      | 28.5 [8.4]  | 27.0 [7.9] | 26.0 [7.6]    | 25.8 [7.6] | 24.4 [7.1] | 25.7 [7.5]      | 25.4 [7.5] | 24.1 [7.1] |
| Sens BTUH [kW]                                       |                 | 3.7 [1.1]       | 3.6 [1.0]       | 3.1 [0.9]   | 6.2 [1.8]  | 6.0 [1.8]     | 5.2 [1.5]  | 8.6 [2.5]  | 8.4 [2.5]       | 7.2 [2.1]  |            |
| Power                                                |                 | 3.2             | 3.2             | 3.1         | 3.3        | 3.3           | 3.2        | 3.3        | 3.3             | 3.2        |            |
| 75<br>[23.9]                                         | Total BTUH [kW] | 27.8 [8.1]      | 27.5 [8.1]      | 26.0 [7.6]  | 25.0 [7.3] | 24.7 [7.2]    | 23.4 [6.9] | 24.7 [7.2] | 24.4 [7.2]      | 23.1 [6.8] |            |
|                                                      | Sens BTUH [kW]  | 2.3 [0.7]       | 2.3 [0.7]       | 2.0 [0.6]   | 4.9 [1.4]  | 4.7 [1.4]     | 4.1 [1.2]  | 7.3 [2.1]  | 7.1 [2.1]       | 6.1 [1.8]  |            |
|                                                      | Power           | 3.3             | 3.3             | 3.2         | 3.4        | 3.4           | 3.3        | 3.4        | 3.4             | 3.3        |            |
| 80<br>[26.7]                                         | Total BTUH [kW] | 26.3 [7.7]      | 26.0 [7.6]      | 24.6 [7.2]  | 23.5 [6.9] | 23.3 [6.8]    | 22.1 [6.5] | 23.2 [6.8] | 23.0 [6.7]      | 21.7 [6.4] |            |
|                                                      | Sens BTUH [kW]  | 1.1 [0.3]       | 1.0 [0.3]       | 0.9 [0.3]   | 3.6 [1.0]  | 3.5 [1.0]     | 3.0 [0.9]  | 6.0 [1.8]  | 5.9 [1.7]       | 5.1 [1.5]  |            |
|                                                      | Power           | 3.4             | 3.4             | 3.3         | 3.5        | 3.5           | 3.4        | 3.5        | 3.5             | 3.4        |            |
| 85<br>[29.4]                                         | Total BTUH [kW] | 24.5 [7.2]      | 24.2 [7.1]      | 22.9 [6.7]  | 21.7 [6.4] | 21.5 [6.3]    | 20.3 [6.0] | 21.4 [6.3] | 21.1 [6.2]      | 20.0 [5.9] |            |
|                                                      | Sens BTUH [kW]  | -0.2 [-0.1]     | -0.2 [0.0]      | -0.1 [0.0]  | 2.4 [0.7]  | 2.3 [0.7]     | 2.0 [0.6]  | 4.8 [1.4]  | 4.7 [1.4]       | 4.0 [1.2]  |            |
|                                                      | Power           | 3.6             | 3.6             | 3.5         | 3.7        | 3.6           | 3.6        | 3.6        | 3.6             | 3.5        |            |
| 90<br>[32.2]                                         | Total BTUH [kW] | 22.2 [6.5]      | 22.0 [6.4]      | 20.8 [6.1]  | 19.5 [5.7] | 19.3 [5.6]    | 18.2 [5.3] | 19.1 [5.6] | 18.9 [5.5]      | 17.9 [5.3] |            |
|                                                      | Sens BTUH [kW]  | -1.3 [-0.4]     | -1.3 [-0.4]     | -1.1 [-0.3] | 1.2 [0.3]  | 1.1 [0.3]     | 1.0 [0.3]  | 3.6 [1.1]  | 3.5 [1.0]       | 3.0 [0.9]  |            |
|                                                      | Power           | 3.8             | 3.7             | 3.6         | 3.8        | 3.8           | 3.7        | 3.8        | 3.8             | 3.7        |            |

## GROSS SYSTEMS PERFORMANCE DATA (HIGH REHEAT MODE)—RGEDZT090

| 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]     | 2900 [1369]  | 2400 [1133]  | 3600 [1699]   | 2900 [1369]  | 2400 [1133]  | 3600 [1699]     | 2900 [1369]  | 2400 [1133] |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br><br>°F<br>[°C] | 60<br>[15.6]    | Total BTUH [kW] | 41.7 [12.2]     | 39.9 [11.7]  | 38.7 [11.3]  | 40.1 [11.8]   | 38.4 [11.3]  | 37.2 [10.9]  | 40.0 [11.7]     | 38.3 [11.2]  | 37.1 [10.9] |
|                                                         |                 | Sens BTUH [kW]  | 8.9 [2.6]       | 8.0 [2.4]    | 7.4 [2.2]    | 12.8 [3.7]    | 11.5 [3.4]   | 10.5 [3.1]   | 18.5 [5.4]      | 16.7 [4.9]   | 15.3 [4.5]  |
|                                                         |                 | Power           | 5.0             | 4.9          | 4.8          | 4.9           | 4.8          | 4.8          | 4.9             | 4.8          | 4.8         |
|                                                         | 70<br>[21.1]    | Total BTUH [kW] | 39.8 [11.7]     | 38.1 [11.2]  | 36.9 [10.8]  | 38.3 [11.2]   | 36.7 [10.7]  | 35.5 [10.4]  | 38.1 [11.2]     | 36.5 [10.7]  | 35.4 [10.4] |
|                                                         |                 | Sens BTUH [kW]  | 5.9 [1.7]       | 5.3 [1.6]    | 4.9 [1.4]    | 9.8 [2.9]     | 8.8 [2.6]    | 8.1 [2.4]    | 15.5 [4.6]      | 14.0 [4.1]   | 12.8 [3.8]  |
|                                                         |                 | Power           | 5.1             | 5.0          | 4.9          | 5.1           | 5.0          | 4.9          | 5.0             | 4.9          | 4.9         |
|                                                         | 80<br>[26.7]    | Total BTUH [kW] | 36.7 [10.7]     | 35.1 [10.3]  | 34.0 [10.0]  | 35.1 [10.3]   | 33.7 [9.9]   | 32.6 [9.6]   | 35.0 [10.3]     | 33.5 [9.8]   | 32.5 [9.5]  |
| Sens BTUH [kW]                                          |                 | 2.1 [0.6]       | 1.9 [0.5]       | 1.7 [0.5]    | 5.9 [1.7]    | 5.3 [1.6]     | 4.9 [1.4]    | 11.7 [3.4]   | 10.5 [3.1]      | 9.6 [2.8]    |             |
| Power                                                   |                 | 5.4             | 5.3             | 5.2          | 5.3          | 5.2           | 5.1          | 5.3          | 5.2             | 5.1          |             |
| 90<br>[32.2]                                            | Total BTUH [kW] | 32.3 [9.5]      | 30.9 [9.1]      | 30.0 [8.8]   | 30.8 [9.0]   | 29.5 [8.6]    | 28.5 [8.4]   | 30.6 [9.0]   | 29.3 [8.6]      | 28.4 [8.3]   |             |
|                                                         | Sens BTUH [kW]  | -2.7 [-0.8]     | -2.4 [-0.7]     | -2.2 [-0.6]  | 1.2 [0.3]    | 1.0 [0.3]     | 1.0 [0.3]    | 6.9 [2.0]    | 6.2 [1.8]       | 5.7 [1.7]    |             |
|                                                         | Power           | 5.8             | 5.6             | 5.6          | 5.7          | 5.6           | 5.5          | 5.7          | 5.6             | 5.5          |             |
| 100<br>[37.8]                                           | Total BTUH [kW] | 26.7 [7.8]      | 25.5 [7.5]      | 24.7 [7.3]   | 25.1 [7.4]   | 24.1 [7.1]    | 23.3 [6.8]   | 25.0 [7.3]   | 23.9 [7.0]      | 23.2 [6.8]   |             |
|                                                         | Sens BTUH [kW]  | -8.3 [-2.4]     | -7.4 [-2.2]     | -6.8 [-2.0]  | -4.4 [-1.3]  | -4.0 [-1.2]   | -3.7 [-1.1]  | 1.3 [0.4]    | 1.2 [0.4]       | 1.1 [0.3]    |             |
|                                                         | Power           | 6.3             | 6.2             | 6.1          | 6.2          | 6.1           | 6.0          | 6.2          | 6.1             | 6.0          |             |
| 110<br>[43.3]                                           | Total BTUH [kW] | 19.8 [5.8]      | 19.0 [5.6]      | 18.4 [5.4]   | 18.3 [5.4]   | 17.5 [5.1]    | 17.0 [5.0]   | 18.1 [5.3]   | 17.4 [5.1]      | 16.8 [4.9]   |             |
|                                                         | Sens BTUH [kW]  | -14.7 [-4.3]    | -13.2 [-3.9]    | -12.2 [-3.6] | -10.9 [-3.2] | -9.8 [-2.9]   | -9.0 [-2.6]  | -5.1 [-1.5]  | -4.6 [-1.4]     | -4.2 [-1.2]  |             |
|                                                         | Power           | 6.9             | 6.8             | 6.7          | 6.9          | 6.7           | 6.6          | 6.9          | 6.7             | 6.6          |             |
| 120<br>[48.9]                                           | Total BTUH [kW] | 11.7 [3.4]      | 11.2 [3.3]      | 10.8 [3.2]   | 10.1 [3.0]   | 9.7 [2.8]     | 9.4 [2.8]    | 10.0 [2.9]   | 9.6 [2.8]       | 9.3 [2.7]    |             |
|                                                         | Sens BTUH [kW]  | -22.1 [-6.5]    | -19.8 [-5.8]    | -18.2 [-5.3] | -18.2 [-5.3] | -16.4 [-4.8]  | -15.1 [-4.4] | -12.5 [-3.7] | -11.2 [-3.3]    | -10.3 [-3.0] |             |
|                                                         | Power           | 7.8             | 7.6             | 7.5          | 7.7          | 7.5           | 7.4          | 7.7          | 7.5             | 7.4          |             |

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

Total —Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
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 REHEAT MODE)–RGEDZT102

| 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]                                 |           |                 | 2100 [991]      | 1700 [802]  | 1400 [661]  | 2100 [991]    | 1700 [802]  | 1400 [661]  | 2100 [991]      | 1700 [802] | 1400 [661] |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60 [15.6] | Total BTUH [kW] | 36.6 [10.7]     | 35.1 [10.3] | 33.9 [9.9]  | 34.5 [10.1]   | 33.1 [9.7]  | 32.1 [9.4]  | 31.9 [9.3]      | 30.6 [9.0] | 29.6 [8.7] |
|                                           |           | Sens BTUH [kW]  | 7.1 [2.1]       | 6.4 [1.9]   | 5.9 [1.7]   | 9.0 [2.6]     | 8.1 [2.4]   | 7.4 [2.2]   | 10.7 [3.1]      | 9.7 [2.8]  | 8.9 [2.6]  |
|                                           |           | Power           | 3.9             | 3.8         | 3.7         | 3.8           | 3.8         | 3.7         | 3.8             | 3.8        | 3.7        |
|                                           | 65 [18.3] | Total BTUH [kW] | 35.5 [10.4]     | 34.0 [10.0] | 32.9 [9.6]  | 33.4 [9.8]    | 32.1 [9.4]  | 31.0 [9.1]  | 30.8 [9.0]      | 29.5 [8.6] | 28.6 [8.4] |
|                                           |           | Sens BTUH [kW]  | 6.1 [1.8]       | 5.5 [1.6]   | 5.0 [1.5]   | 8.0 [2.3]     | 7.2 [2.1]   | 6.6 [1.9]   | 9.7 [2.8]       | 8.7 [2.6]  | 8.0 [2.4]  |
|                                           |           | Power           | 3.9             | 3.8         | 3.8         | 3.9           | 3.8         | 3.8         | 3.9             | 3.8        | 3.8        |
|                                           | 70 [21.1] | Total BTUH [kW] | 34.1 [10.0]     | 32.7 [9.6]  | 31.7 [9.3]  | 32.1 [9.4]    | 30.8 [9.0]  | 29.8 [8.7]  | 29.5 [8.6]      | 28.3 [8.3] | 27.4 [8.0] |
|                                           |           | Sens BTUH [kW]  | 4.8 [1.4]       | 4.3 [1.3]   | 4.0 [1.2]   | 6.7 [2.0]     | 6.0 [1.8]   | 5.5 [1.6]   | 8.5 [2.5]       | 7.6 [2.2]  | 7.0 [2.0]  |
|                                           |           | Power           | 4.0             | 3.9         | 3.9         | 4.0           | 3.9         | 3.9         | 4.0             | 3.9        | 3.9        |
|                                           | 75 [23.9] | Total BTUH [kW] | 32.7 [9.6]      | 31.3 [9.2]  | 30.3 [8.9]  | 30.6 [9.0]    | 29.4 [8.6]  | 28.4 [8.3]  | 28.0 [8.2]      | 26.8 [7.9] | 26.0 [7.6] |
|                                           |           | Sens BTUH [kW]  | 3.3 [1.0]       | 3.0 [0.9]   | 2.8 [0.8]   | 5.2 [1.5]     | 4.7 [1.4]   | 4.3 [1.3]   | 7.0 [2.0]       | 6.3 [1.8]  | 5.8 [1.7]  |
|                                           |           | Power           | 4.1             | 4.0         | 4.0         | 4.1           | 4.0         | 4.0         | 4.1             | 4.0        | 4.0        |
|                                           | 80 [26.7] | Total BTUH [kW] | 31.0 [9.1]      | 29.7 [8.7]  | 28.8 [8.4]  | 29.0 [8.5]    | 27.8 [8.1]  | 26.9 [7.9]  | 26.3 [7.7]      | 25.2 [7.4] | 24.4 [7.2] |
|                                           |           | Sens BTUH [kW]  | 1.7 [0.5]       | 1.5 [0.4]   | 1.4 [0.4]   | 3.6 [1.0]     | 3.2 [0.9]   | 2.9 [0.9]   | 5.3 [1.6]       | 4.8 [1.4]  | 4.4 [1.3]  |
|                                           |           | Power           | 4.3             | 4.2         | 4.1         | 4.3           | 4.2         | 4.1         | 4.3             | 4.2        | 4.1        |
|                                           | 85 [29.4] | Total BTUH [kW] | 29.1 [8.5]      | 27.9 [8.2]  | 27.0 [7.9]  | 27.1 [7.9]    | 26.0 [7.6]  | 25.1 [7.4]  | 24.4 [7.2]      | 23.4 [6.9] | 22.7 [6.6] |
|                                           |           | Sens BTUH [kW]  | -0.2 [-0.1]     | -0.2 [-0.1] | -0.2 [-0.1] | 1.7 [0.5]     | 1.5 [0.4]   | 1.4 [0.4]   | 3.4 [1.0]       | 3.1 [0.9]  | 2.8 [0.8]  |
|                                           |           | Power           | 4.4             | 4.3         | 4.3         | 4.4           | 4.3         | 4.3         | 4.4             | 4.3        | 4.3        |
|                                           | 90 [32.2] | Total BTUH [kW] | 27.1 [7.9]      | 26.0 [7.6]  | 25.1 [7.4]  | 25.0 [7.3]    | 24.0 [7.0]  | 23.2 [6.8]  | 22.4 [6.6]      | 21.5 [6.3] | 20.8 [6.1] |
|                                           |           | Sens BTUH [kW]  | -2.3 [-0.7]     | -2.1 [-0.6] | -1.9 [-0.6] | -0.4 [-0.1]   | -0.4 [-0.1] | -0.4 [-0.1] | 1.3 [0.4]       | 1.2 [0.3]  | 1.1 [0.3]  |
|                                           |           | Power           | 4.6             | 4.5         | 4.4         | 4.6           | 4.5         | 4.4         | 4.6             | 4.5        | 4.4        |

## GROSS SYSTEMS PERFORMANCE DATA (HIGH REHEAT MODE)–RGEDZT102

| 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]                                 |            |                 | 4100 [1935]     | 2900 [1369]  | 2700 [1274]  | 4100 [1935]   | 2900 [1369]  | 2700 [1274]  | 4100 [1935]     | 2900 [1369]  | 2700 [1274]  |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60 [15.6]  | Total BTUH [kW] | 57.6 [16.9]     | 53.6 [15.7]  | 52.9 [15.5]  | 45.7 [13.4]   | 42.5 [12.5]  | 42.0 [12.3]  | 51.3 [15.0]     | 47.7 [14.0]  | 47.1 [13.8]  |
|                                           |            | Sens BTUH [kW]  | 12.7 [3.7]      | 10.7 [3.1]   | 10.3 [3.0]   | 14.6 [4.3]    | 12.2 [3.6]   | 11.8 [3.5]   | 20.5 [6.0]      | 17.2 [5.0]   | 16.6 [4.9]   |
|                                           |            | Power           | 6.6             | 6.4          | 6.3          | 5.2           | 5.0          | 5.0          | 6.3             | 6.1          | 6.0          |
|                                           | 70 [21.1]  | Total BTUH [kW] | 52.7 [15.5]     | 49.1 [14.4]  | 48.4 [14.2]  | 40.9 [12.0]   | 38.0 [11.1]  | 37.5 [11.0]  | 46.4 [13.6]     | 43.2 [12.7]  | 42.6 [12.5]  |
|                                           |            | Sens BTUH [kW]  | 10.1 [3.0]      | 8.5 [2.5]    | 8.2 [2.4]    | 11.9 [3.5]    | 10.0 [2.9]   | 9.7 [2.8]    | 17.9 [5.2]      | 15.0 [4.4]   | 14.5 [4.2]   |
|                                           |            | Power           | 6.4             | 6.1          | 6.1          | 5.0           | 4.8          | 4.8          | 6.0             | 5.8          | 5.8          |
|                                           | 80 [26.7]  | Total BTUH [kW] | 46.3 [13.6]     | 43.1 [12.6]  | 42.6 [12.5]  | 34.5 [10.1]   | 32.1 [9.4]   | 31.6 [9.3]   | 40.0 [11.7]     | 37.2 [10.9]  | 36.7 [10.8]  |
|                                           |            | Sens BTUH [kW]  | 5.6 [1.6]       | 4.7 [1.4]    | 4.5 [1.3]    | 7.4 [2.2]     | 6.2 [1.8]    | 6.0 [1.8]    | 13.3 [3.9]      | 11.2 [3.3]   | 10.8 [3.2]   |
|                                           |            | Power           | 6.4             | 6.1          | 6.1          | 5.0           | 4.8          | 4.8          | 6.1             | 5.8          | 5.8          |
|                                           | 90 [32.2]  | Total BTUH [kW] | 38.4 [11.2]     | 35.7 [10.5]  | 35.2 [10.3]  | 26.5 [7.8]    | 24.7 [7.2]   | 24.3 [7.1]   | 32.1 [9.4]      | 29.8 [8.7]   | 29.4 [8.6]   |
|                                           |            | Sens BTUH [kW]  | -0.9 [-0.3]     | -0.7 [-0.2]  | -0.7 [-0.2]  | 0.9 [0.3]     | 0.8 [0.2]    | 0.8 [0.2]    | 6.9 [2.0]       | 5.8 [1.7]    | 5.6 [1.6]    |
|                                           |            | Power           | 6.6             | 6.4          | 6.4          | 5.2           | 5.1          | 5.0          | 6.3             | 6.1          | 6.1          |
|                                           | 100 [37.8] | Total BTUH [kW] | 28.9 [8.5]      | 26.9 [7.9]   | 26.5 [7.8]   | 17.0 [5.0]    | 15.8 [4.6]   | 15.6 [4.6]   | 22.6 [6.6]      | 21.0 [6.1]   | 20.7 [6.1]   |
|                                           |            | Sens BTUH [kW]  | -9.2 [-2.7]     | -7.7 [-2.3]  | -7.5 [-2.2]  | -7.4 [-2.2]   | -6.2 [-1.8]  | -6.0 [-1.8]  | -1.5 [-0.4]     | -1.2 [-0.4]  | -1.2 [-0.4]  |
|                                           |            | Power           | 7.2             | 6.9          | 6.9          | 5.8           | 5.6          | 5.5          | 6.8             | 6.6          | 6.6          |
|                                           | 110 [43.3] | Total BTUH [kW] | 17.9 [5.2]      | 16.6 [4.9]   | 16.4 [4.8]   | 6.0 [1.8]     | 5.6 [1.6]    | 5.5 [1.6]    | 11.5 [3.4]      | 10.7 [3.1]   | 10.6 [3.1]   |
|                                           |            | Sens BTUH [kW]  | -19.5 [-5.7]    | -16.3 [-4.8] | -15.8 [-4.6] | -17.7 [-5.2]  | -14.8 [-4.3] | -14.3 [-4.2] | -11.7 [-3.4]    | -9.8 [-2.9]  | -9.5 [-2.8]  |
|                                           |            | Power           | 7.9             | 7.7          | 7.6          | 6.5           | 6.3          | 6.3          | 7.6             | 7.4          | 7.3          |
|                                           | 120 [48.9] | Total BTUH [kW] | 5.3 [1.5]       | 4.9 [1.4]    | 4.9 [1.4]    | -6.6 [-1.9]   | -6.1 [-1.8]  | -6.0 [-1.8]  | -1.0 [-0.3]     | -1.0 [-0.3]  | -1.0 [-0.3]  |
|                                           |            | Sens BTUH [kW]  | -31.6 [-9.3]    | -26.5 [-7.8] | -25.7 [-7.5] | -29.8 [-8.7]  | -25.0 [-7.3] | -24.2 [-7.1] | -23.9 [-7.0]    | -20.0 [-5.9] | -19.4 [-5.7] |
|                                           |            | Power           | 9.0             | 8.7          | 8.6          | 7.6           | 7.3          | 7.3          | 8.7             | 8.4          | 8.3          |

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

Total —Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
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 REHEAT MODE)—RGEDZT120

| 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]                                 |              |                 | 3000 [1416]     | 2400 [1133] | 2000 [944]  | 3000 [1416]   | 2400 [1133] | 2000 [944]  | 3000 [1416]     | 2400 [1133] | 2000 [944]  |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60<br>[15.6] | Total BTUH [kW] | 46.5 [13.6]     | 44.4 [13.0] | 43.1 [12.6] | 43.1 [12.6]   | 41.2 [12.1] | 40.0 [11.7] | 40.3 [11.8]     | 38.6 [11.3] | 37.4 [11.0] |
|                                           |              | Sens BTUH [kW]  | 12.9 [3.8]      | 11.6 [3.4]  | 10.7 [3.1]  | 13.8 [4.0]    | 12.3 [3.6]  | 11.4 [3.3]  | 18.5 [5.4]      | 16.5 [4.8]  | 15.3 [4.5]  |
|                                           |              | Power           | 4.6             | 4.5         | 4.4         | 4.5           | 4.4         | 4.3         | 4.5             | 4.4         | 4.3         |
|                                           | 65<br>[18.3] | Total BTUH [kW] | 45.7 [13.4]     | 43.7 [12.8] | 42.4 [12.4] | 42.3 [12.4]   | 40.5 [11.9] | 39.3 [11.5] | 39.6 [11.6]     | 37.8 [11.1] | 36.7 [10.8] |
|                                           |              | Sens BTUH [kW]  | 10.5 [3.1]      | 9.4 [2.8]   | 8.7 [2.5]   | 11.4 [3.3]    | 10.2 [3.0]  | 9.4 [2.8]   | 16.1 [4.7]      | 14.4 [4.2]  | 13.3 [3.9]  |
|                                           |              | Power           | 4.6             | 4.5         | 4.5         | 4.6           | 4.5         | 4.4         | 4.5             | 4.4         | 4.4         |
|                                           | 70<br>[21.1] | Total BTUH [kW] | 44.7 [13.1]     | 42.7 [12.5] | 41.4 [12.1] | 41.3 [12.1]   | 39.5 [11.6] | 38.3 [11.2] | 38.5 [11.3]     | 36.9 [10.8] | 35.7 [10.5] |
|                                           |              | Sens BTUH [kW]  | 8.3 [2.4]       | 7.4 [2.2]   | 6.9 [2.0]   | 9.2 [2.7]     | 8.2 [2.4]   | 7.6 [2.2]   | 13.9 [4.1]      | 12.4 [3.6]  | 11.4 [3.4]  |
|                                           |              | Power           | 4.7             | 4.6         | 4.6         | 4.7           | 4.6         | 4.5         | 4.6             | 4.5         | 4.5         |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 75<br>[23.9] | Total BTUH [kW] | 43.4 [12.7]     | 41.5 [12.2] | 40.2 [11.8] | 40.0 [11.7]   | 38.3 [11.2] | 37.1 [10.9] | 37.2 [10.9]     | 35.6 [10.4] | 34.5 [10.1] |
|                                           |              | Sens BTUH [kW]  | 6.3 [1.8]       | 5.6 [1.7]   | 5.2 [1.5]   | 7.2 [2.1]     | 6.4 [1.9]   | 5.9 [1.7]   | 11.9 [3.5]      | 10.6 [3.1]  | 9.8 [2.9]   |
|                                           |              | Power           | 4.9             | 4.8         | 4.7         | 4.8           | 4.7         | 4.7         | 4.8             | 4.7         | 4.6         |
|                                           | 80<br>[26.7] | Total BTUH [kW] | 41.8 [12.2]     | 40.0 [11.7] | 38.8 [11.4] | 38.4 [11.3]   | 36.8 [10.8] | 35.6 [10.4] | 35.7 [10.5]     | 34.1 [10.0] | 33.1 [9.7]  |
|                                           |              | Sens BTUH [kW]  | 4.5 [1.3]       | 4.0 [1.2]   | 3.7 [1.1]   | 5.4 [1.6]     | 4.8 [1.4]   | 4.4 [1.3]   | 10.1 [2.9]      | 9.0 [2.6]   | 8.3 [2.4]   |
|                                           |              | Power           | 5.1             | 5.0         | 4.9         | 5.0           | 4.9         | 4.9         | 5.0             | 4.9         | 4.8         |
|                                           | 85<br>[29.4] | Total BTUH [kW] | 40.0 [11.7]     | 38.2 [11.2] | 37.1 [10.9] | 36.6 [10.7]   | 35.0 [10.3] | 33.9 [9.9]  | 33.8 [9.9]      | 32.4 [9.5]  | 31.4 [9.2]  |
|                                           |              | Sens BTUH [kW]  | 2.9 [0.8]       | 2.6 [0.8]   | 2.4 [0.7]   | 3.8 [1.1]     | 3.4 [1.0]   | 3.1 [0.9]   | 8.5 [2.5]       | 7.6 [2.2]   | 7.0 [2.0]   |
|                                           |              | Power           | 5.4             | 5.3         | 5.2         | 5.3           | 5.2         | 5.1         | 5.3             | 5.2         | 5.1         |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 90<br>[32.2] | Total BTUH [kW] | 37.9 [11.1]     | 36.2 [10.6] | 35.1 [10.3] | 34.5 [10.1]   | 33.0 [9.7]  | 32.0 [9.4]  | 31.7 [9.3]      | 30.4 [8.9]  | 29.4 [8.6]  |
|                                           |              | Sens BTUH [kW]  | 1.5 [0.4]       | 1.3 [0.4]   | 1.2 [0.4]   | 2.4 [0.7]     | 2.1 [0.6]   | 2.0 [0.6]   | 7.1 [2.1]       | 6.3 [1.9]   | 5.8 [1.7]   |
|                                           |              | Power           | 5.7             | 5.6         | 5.5         | 5.6           | 5.5         | 5.4         | 5.6             | 5.5         | 5.4         |

## GROSS SYSTEMS PERFORMANCE DATA (HIGH REHEAT MODE)—RGEDZT120

| 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]     | 3800 [1793]  | 3200 [1510]  | 4800 [2265]   | 3800 [1793]  | 3200 [1510]  | 4800 [2265]     | 3800 [1793]  | 3200 [1510]  |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60<br>[15.6]  | Total BTUH [kW] | 58.1 [17.0]     | 55.4 [16.2]  | 53.9 [15.8]  | 55.5 [16.3]   | 53.0 [15.5]  | 51.4 [15.1]  | 53.1 [15.6]     | 50.7 [14.9]  | 49.2 [14.4]  |
|                                           |               | Sens BTUH [kW]  | 10.5 [3.1]      | 9.3 [2.7]    | 8.6 [2.5]    | 15.6 [4.6]    | 13.9 [4.1]   | 12.9 [3.8]   | 19.9 [5.8]      | 17.7 [5.2]   | 16.4 [4.8]   |
|                                           |               | Power           | 7.0             | 6.9          | 6.8          | 6.9           | 6.8          | 6.7          | 6.9             | 6.8          | 6.7          |
|                                           | 70<br>[21.1]  | Total BTUH [kW] | 53.4 [15.7]     | 51.0 [14.9]  | 49.5 [14.5]  | 50.8 [14.9]   | 48.5 [14.2]  | 47.1 [13.8]  | 48.4 [14.2]     | 46.2 [13.5]  | 44.9 [13.2]  |
|                                           |               | Sens BTUH [kW]  | 8.3 [2.4]       | 7.4 [2.2]    | 6.8 [2.0]    | 13.4 [3.9]    | 12.0 [3.5]   | 11.1 [3.2]   | 17.7 [5.2]      | 15.8 [4.6]   | 14.6 [4.3]   |
|                                           |               | Power           | 7.1             | 7.0          | 6.9          | 7.0           | 6.9          | 6.8          | 7.0             | 6.9          | 6.8          |
|                                           | 80<br>[26.7]  | Total BTUH [kW] | 48.4 [14.2]     | 46.2 [13.5]  | 44.9 [13.2]  | 45.8 [13.4]   | 43.7 [12.8]  | 42.5 [12.4]  | 43.4 [12.7]     | 41.5 [12.1]  | 40.3 [11.8]  |
|                                           |               | Sens BTUH [kW]  | 4.5 [1.3]       | 4.0 [1.2]    | 3.7 [1.1]    | 9.7 [2.8]     | 8.6 [2.5]    | 8.0 [2.3]    | 14.0 [4.1]      | 12.5 [3.6]   | 11.5 [3.4]   |
|                                           |               | Power           | 7.4             | 7.3          | 7.2          | 7.3           | 7.2          | 7.1          | 7.3             | 7.2          | 7.1          |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 90<br>[32.2]  | Total BTUH [kW] | 43.1 [12.6]     | 41.1 [12.0]  | 39.9 [11.7]  | 40.5 [11.9]   | 38.6 [11.3]  | 37.5 [11.0]  | 38.1 [11.2]     | 36.3 [10.6]  | 35.3 [10.3]  |
|                                           |               | Sens BTUH [kW]  | -0.8 [-0.2]     | -0.7 [-0.2]  | -0.6 [-0.2]  | 4.4 [1.3]     | 3.9 [1.1]    | 3.6 [1.1]    | 8.7 [2.5]       | 7.7 [2.3]    | 7.2 [2.1]    |
|                                           |               | Power           | 7.9             | 7.7          | 7.6          | 7.8           | 7.7          | 7.5          | 7.8             | 7.6          | 7.5          |
|                                           | 100<br>[37.8] | Total BTUH [kW] | 37.4 [11.0]     | 35.7 [10.5]  | 34.6 [10.2]  | 34.8 [10.2]   | 33.2 [9.7]   | 32.2 [9.4]   | 32.4 [9.5]      | 30.9 [9.1]   | 30.0 [8.8]   |
|                                           |               | Sens BTUH [kW]  | -7.6 [-2.2]     | -6.8 [-2.0]  | -6.3 [-1.8]  | -2.5 [-0.7]   | -2.2 [-0.6]  | -2.0 [-0.6]  | 1.8 [0.5]       | 1.6 [0.5]    | 1.5 [0.4]    |
|                                           |               | Power           | 8.6             | 8.4          | 8.3          | 8.5           | 8.3          | 8.2          | 8.5             | 8.3          | 8.2          |
|                                           | 110<br>[43.3] | Total BTUH [kW] | 31.3 [9.2]      | 29.9 [8.8]   | 29.0 [8.5]   | 28.7 [8.4]    | 27.4 [8.0]   | 26.6 [7.8]   | 26.3 [7.7]      | 25.1 [7.4]   | 24.4 [7.1]   |
|                                           |               | Sens BTUH [kW]  | -16.0 [-4.7]    | -14.3 [-4.2] | -13.2 [-3.9] | -10.9 [-3.2]  | -9.7 [-2.8]  | -9.0 [-2.6]  | -6.6 [-1.9]     | -5.9 [-1.7]  | -5.5 [-1.6]  |
|                                           |               | Power           | 9.5             | 9.3          | 9.2          | 9.4           | 9.2          | 9.1          | 9.4             | 9.2          | 9.0          |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 120<br>[48.9] | Total BTUH [kW] | 24.9 [7.3]      | 23.8 [7.0]   | 23.1 [6.8]   | 22.3 [6.5]    | 21.3 [6.2]   | 20.7 [6.1]   | 19.9 [5.8]      | 19.0 [5.6]   | 18.5 [5.4]   |
|                                           |               | Sens BTUH [kW]  | -26.0 [-7.6]    | -23.2 [-6.8] | -21.5 [-6.3] | -20.9 [-6.1]  | -18.6 [-5.5] | -17.2 [-5.0] | -16.6 [-4.9]    | -14.8 [-4.3] | -13.7 [-4.0] |
|                                           |               | Power           | 10.6            | 10.3         | 10.2         | 10.5          | 10.2         | 10.1         | 10.5            | 10.2         | 10.1         |

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

Total —Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
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 REHEAT MODE)—RGEDZT150

| 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]                                 |           |                 | 3000 [1416]     | 2400 [1133] | 2000 [944]  | 3000 [1416]   | 2400 [1133] | 2000 [944]  | 3000 [1416]     | 2400 [1133] | 2000 [944]  |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60 [15.6] | Total BTUH [kW] | 46.5 [13.6]     | 44.4 [13.0] | 43.1 [12.6] | 43.1 [12.6]   | 41.2 [12.1] | 40.0 [11.7] | 40.3 [11.8]     | 38.6 [11.3] | 37.4 [11.0] |
|                                           |           | Sens BTUH [kW]  | 12.9 [3.8]      | 11.6 [3.4]  | 10.7 [3.1]  | 13.8 [4.0]    | 12.3 [3.6]  | 11.4 [3.3]  | 18.5 [5.4]      | 16.5 [4.8]  | 15.3 [4.5]  |
|                                           |           | Power           | 4.6             | 4.5         | 4.4         | 4.5           | 4.4         | 4.3         | 4.5             | 4.4         | 4.3         |
|                                           | 65 [18.3] | Total BTUH [kW] | 45.7 [13.4]     | 43.7 [12.8] | 42.4 [12.4] | 42.3 [12.4]   | 40.5 [11.9] | 39.3 [11.5] | 39.6 [11.6]     | 37.8 [11.1] | 36.7 [10.8] |
|                                           |           | Sens BTUH [kW]  | 10.5 [3.1]      | 9.4 [2.8]   | 8.7 [2.5]   | 11.4 [3.3]    | 10.2 [3.0]  | 9.4 [2.8]   | 16.1 [4.7]      | 14.4 [4.2]  | 13.3 [3.9]  |
|                                           |           | Power           | 4.6             | 4.5         | 4.5         | 4.6           | 4.5         | 4.4         | 4.5             | 4.4         | 4.4         |
|                                           | 70 [21.1] | Total BTUH [kW] | 44.7 [13.1]     | 42.7 [12.5] | 41.4 [12.1] | 41.3 [12.1]   | 39.5 [11.6] | 38.3 [11.2] | 38.5 [11.3]     | 36.9 [10.8] | 35.7 [10.5] |
|                                           |           | Sens BTUH [kW]  | 8.3 [2.4]       | 7.4 [2.2]   | 6.9 [2.0]   | 9.2 [2.7]     | 8.2 [2.4]   | 7.6 [2.2]   | 13.9 [4.1]      | 12.4 [3.6]  | 11.4 [3.4]  |
|                                           |           | Power           | 4.7             | 4.6         | 4.6         | 4.7           | 4.6         | 4.5         | 4.6             | 4.5         | 4.5         |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 75 [23.9] | Total BTUH [kW] | 43.4 [12.7]     | 41.5 [12.2] | 40.2 [11.8] | 40.0 [11.7]   | 38.3 [11.2] | 37.1 [10.9] | 37.2 [10.9]     | 35.6 [10.4] | 34.5 [10.1] |
|                                           |           | Sens BTUH [kW]  | 6.3 [1.8]       | 5.6 [1.7]   | 5.2 [1.5]   | 7.2 [2.1]     | 6.4 [1.9]   | 5.9 [1.7]   | 11.9 [3.5]      | 10.6 [3.1]  | 9.8 [2.9]   |
|                                           |           | Power           | 4.9             | 4.8         | 4.7         | 4.8           | 4.7         | 4.7         | 4.8             | 4.7         | 4.6         |
|                                           | 80 [26.7] | Total BTUH [kW] | 41.8 [12.2]     | 40.0 [11.7] | 38.8 [11.4] | 38.4 [11.3]   | 36.8 [10.8] | 35.6 [10.4] | 35.7 [10.5]     | 34.1 [10.0] | 33.1 [9.7]  |
|                                           |           | Sens BTUH [kW]  | 4.5 [1.3]       | 4.0 [1.2]   | 3.7 [1.1]   | 5.4 [1.6]     | 4.8 [1.4]   | 4.4 [1.3]   | 10.1 [2.9]      | 9.0 [2.6]   | 8.3 [2.4]   |
|                                           |           | Power           | 5.1             | 5.0         | 4.9         | 5.0           | 4.9         | 4.9         | 5.0             | 4.9         | 4.8         |
|                                           | 85 [29.4] | Total BTUH [kW] | 40.0 [11.7]     | 38.2 [11.2] | 37.1 [10.9] | 36.6 [10.7]   | 35.0 [10.3] | 33.9 [9.9]  | 33.8 [9.9]      | 32.4 [9.5]  | 31.4 [9.2]  |
|                                           |           | Sens BTUH [kW]  | 2.9 [0.8]       | 2.6 [0.8]   | 2.4 [0.7]   | 3.8 [1.1]     | 3.4 [1.0]   | 3.1 [0.9]   | 8.5 [2.5]       | 7.6 [2.2]   | 7.0 [2.0]   |
|                                           |           | Power           | 5.4             | 5.3         | 5.2         | 5.3           | 5.2         | 5.1         | 5.3             | 5.2         | 5.1         |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 90 [32.2] | Total BTUH [kW] | 37.9 [11.1]     | 36.2 [10.6] | 35.1 [10.3] | 34.5 [10.1]   | 33.0 [9.7]  | 32.0 [9.4]  | 31.7 [9.3]      | 30.4 [8.9]  | 29.4 [8.6]  |
|                                           |           | Sens BTUH [kW]  | 1.5 [0.4]       | 1.3 [0.4]   | 1.2 [0.4]   | 2.4 [0.7]     | 2.1 [0.6]   | 2.0 [0.6]   | 7.1 [2.1]       | 6.3 [1.9]   | 5.8 [1.7]   |
|                                           |           | Power           | 5.7             | 5.6         | 5.5         | 5.6           | 5.5         | 5.4         | 5.6             | 5.5         | 5.4         |

## GROSS SYSTEMS PERFORMANCE DATA (HIGH REHEAT MODE)—RGEDZT150

| 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]     | 4100 [1935]  | 4000 [1888]  | 6000 [2832]   | 4100 [1935] | 4000 [1888] | 6000 [2832]     | 4100 [1935] | 4000 [1888] |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60°F [15.6]  | Total BTUH [kW] | 99.3 [29.1]     | 91.5 [26.8]  | 91.1 [26.7]  | 101.6 [29.8]  | 93.7 [27.4] | 93.2 [27.3] | 92.7 [27.2]     | 85.5 [25.1] | 85.2 [25.0] |
|                                           |              | Sens BTUH [kW]  | 33.3 [9.7]      | 27.4 [8.0]   | 27.0 [7.9]   | 40.1 [11.8]   | 33.0 [9.7]  | 32.6 [9.6]  | 46.4 [13.6]     | 38.1 [11.2] | 37.7 [11.0] |
|                                           |              | Power           | 9.5             | 9.1          | 9.1          | 9.3           | 8.9         | 8.9         | 9.3             | 8.9         | 8.9         |
|                                           | 70°F [21.1]  | Total BTUH [kW] | 94.4 [27.7]     | 87.1 [25.5]  | 86.7 [25.4]  | 96.7 [28.3]   | 89.2 [26.1] | 88.8 [26.0] | 87.9 [25.8]     | 81.1 [23.8] | 80.7 [23.7] |
|                                           |              | Sens BTUH [kW]  | 27.0 [7.9]      | 22.2 [6.5]   | 21.9 [6.4]   | 33.9 [9.9]    | 27.9 [8.2]  | 27.5 [8.1]  | 40.1 [11.7]     | 33.0 [9.7]  | 32.6 [9.5]  |
|                                           |              | Power           | 9.7             | 9.3          | 9.3          | 9.5           | 9.2         | 9.2         | 9.5             | 9.2         | 9.1         |
|                                           | 80°F [26.7]  | Total BTUH [kW] | 87.6 [25.7]     | 80.8 [23.7]  | 80.4 [23.6]  | 89.9 [26.3]   | 82.9 [24.3] | 82.5 [24.2] | 81.1 [23.8]     | 74.8 [21.9] | 74.4 [21.8] |
|                                           |              | Sens BTUH [kW]  | 20.1 [5.9]      | 16.5 [4.8]   | 16.3 [4.8]   | 27.0 [7.9]    | 22.2 [6.5]  | 21.9 [6.4]  | 33.2 [9.7]      | 27.3 [8.0]  | 27.0 [7.9]  |
|                                           |              | Power           | 10.2            | 9.8          | 9.8          | 10.0          | 9.6         | 9.6         | 10.0            | 9.6         | 9.6         |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 90°F [32.2]  | Total BTUH [kW] | 78.7 [23.1]     | 72.6 [21.3]  | 72.3 [21.2]  | 81.0 [23.7]   | 74.7 [21.9] | 74.4 [21.8] | 72.2 [21.2]     | 66.6 [19.5] | 66.3 [19.4] |
|                                           |              | Sens BTUH [kW]  | 12.5 [3.7]      | 10.3 [3.0]   | 10.2 [3.0]   | 19.4 [5.7]    | 15.9 [4.7]  | 15.8 [4.6]  | 25.6 [7.5]      | 21.0 [6.2]  | 20.8 [6.1]  |
|                                           |              | Power           | 11.0            | 10.5         | 10.5         | 10.8          | 10.4        | 10.3        | 10.8            | 10.3        | 10.3        |
|                                           | 100°F [37.8] | Total BTUH [kW] | 67.8 [19.9]     | 62.5 [18.3]  | 62.3 [18.2]  | 70.1 [20.5]   | 64.7 [18.9] | 64.4 [18.9] | 61.3 [18.0]     | 56.5 [16.6] | 56.3 [16.5] |
|                                           |              | Sens BTUH [kW]  | 4.3 [1.3]       | 3.5 [1.0]    | 3.5 [1.0]    | 11.2 [3.3]    | 9.2 [2.7]   | 9.1 [2.7]   | 17.4 [5.1]      | 14.3 [4.2]  | 14.1 [4.1]  |
|                                           |              | Power           | 11.9            | 11.5         | 11.4         | 11.8          | 11.3        | 11.3        | 11.8            | 11.3        | 11.3        |
|                                           | 110 [43.3]   | Total BTUH [kW] | 54.9 [16.1]     | 50.6 [14.8]  | 50.4 [14.8]  | 57.2 [16.8]   | 52.7 [15.5] | 52.5 [15.4] | 48.4 [14.2]     | 44.6 [13.1] | 44.4 [13.0] |
|                                           |              | Sens BTUH [kW]  | -4.6 [-1.3]     | -3.8 [-1.1]  | -3.7 [-1.1]  | 2.3 [0.7]     | 1.9 [0.5]   | 1.9 [0.5]   | 8.5 [2.5]       | 7.0 [2.0]   | 6.9 [2.0]   |
|                                           |              | Power           | 13.2            | 12.6         | 12.6         | 13.0          | 12.5        | 12.4        | 13.0            | 12.5        | 12.4        |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 120 [48.9]   | Total BTUH [kW] | 40.0 [11.7]     | 36.8 [10.8]  | 36.7 [10.8]  | 42.3 [12.4]   | 39.0 [11.4] | 38.8 [11.4] | 33.4 [9.8]      | 30.8 [9.0]  | 30.7 [9.0]  |
|                                           |              | Sens BTUH [kW]  | -14.1 [-4.1]    | -11.6 [-3.4] | -11.5 [-3.4] | -7.2 [-2.1]   | -6.0 [-1.7] | -5.9 [-1.7] | -1.0 [-0.3]     | -0.9 [-0.2] | -0.8 [-0.2] |
|                                           |              | Power           | 14.6            | 14.1         | 14.0         | 14.5          | 13.9        | 13.9        | 14.4            | 13.9        | 13.8        |

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

Total —Total capacity x 1000 BTUH  
Sens —Sensible capacity x 1000 BTUH  
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 x CFM x (1 - DR) x (dbE - 80)].

[ ] Designates Metric Conversions



## AIRFLOW PERFORMANCE— 7.5 TON [26.4 kW] — 60 Hz — DOWNFLOW

| Air<br>Flow<br>CFM [L/s] | Model RGEDZ*090*    Voltage 208/230, 460, 575 — 3 phase 60 Hz |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|---------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          | External Static Pressure—Inches of Water [kPa]                |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                          | 0.1 [0.02]                                                    | 0.2 [0.05] | 0.3 [0.07] | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | 1.1 [0.27] | 1.2 [0.30] | 1.3 [0.32] | 1.4 [0.35] | 1.5 [0.37] | 1.6 [0.40] | 1.7 [0.42] | 1.8 [0.45] | 1.9 [0.47] | 2.0 [0.50] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RPM                      | W                                                             | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2400 [1133]              | —                                                             | 551        | 782        | 585        | 814        | 619        | 848        | 652        | 885        | 684        | 926        | 717        | 969        | 748        | 1016       | 780        | 1065       | 810        | 1118       | 841        | 1174 | 870  | 1233 | 900  | 1294 | 929  | 1359 | 957  | 1427 | 985  | 1498 | 1012 | 1572 | 1039 | 1649 | 1065 | 1729 | 1091 | 1813 |      |
| 2500 [1180]              | —                                                             | 562        | 816        | 596        | 848        | 629        | 884        | 661        | 923        | 693        | 964        | 725        | 1009       | 756        | 1057       | 787        | 1108       | 817        | 1162       | 846        | 1219 | 876  | 1279 | 904  | 1343 | 933  | 1409 | 960  | 1478 | 987  | 1550 | 1014 | 1626 | 1040 | 1704 | 1066 | 1786 | 1092 | 1870 |      |
| 2600 [1227]              | —                                                             | 574        | 851        | 607        | 885        | 639        | 922        | 671        | 962        | 702        | 1006       | 733        | 1052       | 764        | 1101       | 794        | 1153       | 823        | 1209       | 858        | 1267 | 881  | 1329 | 909  | 1393 | 937  | 1461 | 964  | 1531 | 990  | 1605 | 1016 | 1682 | 1042 | 1762 | 1067 | 1844 | 1092 | 1930 |      |
| 2700 [1274]              | 553                                                           | 857        | 585        | 889        | 618        | 925        | 650        | 963        | 681        | 1004       | 712        | 1049       | 742        | 1096       | 772        | 1147       | 801        | 1201       | 830        | 1258       | 858  | 1317 | 886  | 1380 | 914  | 1446 | 941  | 1515 | 967  | 1587 | 993  | 1662 | 1019 | 1740 | 1044 | 1821 | 1068 | 1905 | 1092 | 1993 |
| 2800 [1321]              | 565                                                           | 896        | 597        | 930        | 629        | 966        | 660        | 1006       | 691        | 1049       | 721        | 1095       | 751        | 1144       | 780        | 1196       | 808        | 1251       | 837        | 1309       | 864  | 1370 | 892  | 1434 | 919  | 1501 | 945  | 1572 | 971  | 1645 | 996  | 1721 | 1021 | 1801 | 1045 | 1883 | 1069 | 1969 | 1093 | 2057 |
| 2900 [1368]              | 577                                                           | 937        | 609        | 972        | 640        | 1010       | 670        | 1051       | 701        | 1096       | 730        | 1143       | 759        | 1193       | 788        | 1246       | 816        | 1303       | 843        | 1362       | 871  | 1425 | 897  | 1490 | 923  | 1559 | 949  | 1630 | 974  | 1705 | 999  | 1783 | 1023 | 1864 | 1047 | 1948 | 1070 | 2035 | 1093 | 2124 |
| 3000 [1416]              | 590                                                           | 981        | 621        | 1017       | 651        | 1057       | 681        | 1099       | 710        | 1145       | 739        | 1193       | 768        | 1245       | 796        | 1300       | 823        | 1357       | 850        | 1418       | 877  | 1482 | 903  | 1549 | 928  | 1619 | 953  | 1692 | 978  | 1768 | 1002 | 1847 | 1026 | 1929 | 1049 | 2014 | 1072 | 2103 | 1094 | 2194 |
| 3100 [1463]              | 615                                                           | 1075       | 645        | 1114       | 674        | 1157       | 702        | 1202       | 731        | 1250       | 758        | 1301       | 785        | 1356       | 812        | 1413       | 838        | 1473       | 864        | 1537       | 889  | 1603 | 914  | 1673 | 938  | 1746 | 962  | 1821 | 986  | 1900 | 1008 | 1982 | 1031 | 2067 | 1053 | 2155 | 1074 | 2246 | 1095 | 2340 |
| 3200 [1510]              | 628                                                           | 1126       | 657        | 1166       | 685        | 1210       | 713        | 1256       | 741        | 1306       | 768        | 1359       | 794        | 1414       | 820        | 1473       | 846        | 1535       | 871        | 1600       | 896  | 1668 | 920  | 1739 | 944  | 1813 | 967  | 1890 | 989  | 1970 | 1012 | 2053 | 1033 | 2139 | 1055 | 2229 | 1075 | 2321 | 1096 | 2416 |
| 3300 [1557]              | 640                                                           | 1179       | 669        | 1221       | 697        | 1266       | 724        | 1314       | 751        | 1365       | 777        | 1419       | 803        | 1476       | 829        | 1536       | 854        | 1599       | 878        | 1665       | 902  | 1734 | 926  | 1807 | 949  | 1882 | 971  | 1960 | 993  | 2042 | 1015 | 2126 | 1036 | 2214 | 1057 | 2305 | 1077 | 2398 | 1097 | 2495 |
| 3400 [1604]              | 653                                                           | 1235       | 681        | 1278       | 708        | 1324       | 735        | 1373       | 761        | 1425       | 787        | 1481       | 812        | 1539       | 837        | 1601       | 861        | 1665       | 885        | 1733       | 909  | 1803 | 932  | 1877 | 954  | 1954 | 976  | 2034 | 997  | 2116 | 1018 | 2202 | 1039 | 2291 | 1059 | 2383 | 1078 | 2478 | 1097 | 2576 |
| 3500 [1652]              | 666                                                           | 1292       | 693        | 1337       | 720        | 1384       | 746        | 1435       | 771        | 1489       | 797        | 1545       | 821        | 1605       | 845        | 1668       | 869        | 1734       | 892        | 1803       | 915  | 1875 | 938  | 1950 | 959  | 2028 | 981  | 2109 | 1001 | 2193 | 1022 | 2280 | 1042 | 2371 | 1061 | 2464 | 1080 | 2560 | 1098 | 2660 |

NOTE: A/F—Drive left of the bold line, B/G—Drive right of bold line.

| Drive Package  | A/F        |     |     |     |     | B/G        |     |     |     |     | C/H        |     |     |     |     |     |      |      |     |     |     |     |     |     |
|----------------|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|-----|
| Motor H.P. [W] | 2 [1491.4] |     |     |     |     | 3 [2237.1] |     |     |     |     | 3 [2237.1] |     |     |     |     |     |      |      |     |     |     |     |     |     |
| Blower Sheave  | AK84H      |     |     |     |     | AK84H      |     |     |     |     | AK84H      |     |     |     |     |     |      |      |     |     |     |     |     |     |
| Motor Sheave   | 1VL40*7/8  |     |     |     |     | 1VP50*7/8  |     |     |     |     | 1VP56*7/8  |     |     |     |     |     |      |      |     |     |     |     |     |     |
| Belt           | A49        |     |     |     |     | A50        |     |     |     |     | A51        |     |     |     |     |     |      |      |     |     |     |     |     |     |
| Turns Open     | 0          | 1   | 2   | 3   | 4   | 5          | 0   | 1   | 2   | 3   | 4          | 5   |     |     |     |     |      |      |     |     |     |     |     |     |
| RPM            | 767        | 721 | 678 | 635 | 590 | 548        | 992 | 949 | 908 | 866 | 823        | 782 | 740 | 697 | 654 | 611 | 1067 | 1029 | 987 | 946 | 905 | 864 | 822 | 780 |

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 — 7.5 TON [26.4 kW] — 60 Hz — DOWNFLOW (con't.)

| Airflow                            |           | AIRFLOW CORRECTION<br>FACTORS * |          |            |                                       | COMPONENT AIRFLOW RESISTANCE                                                     |                                                                                 |                         |                          |  |
|------------------------------------|-----------|---------------------------------|----------|------------|---------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|--|
| CFM [L/s]                          | Total MBH | Sensible MBH                    | Power kW | Wet Coil   | Vertical Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF2000 &<br>Concentric Adapter<br>RXMC-DD01 (Flush) | Concentric Diffuser<br>RXRN-AED2000 &<br>Concentric Adapter<br>RXMC-DD01 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |  |
| Resistance — Inches of Water [kPa] |           |                                 |          |            |                                       |                                                                                  |                                                                                 |                         |                          |  |
| 2400 [1133]                        | 0.96      | 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



Air



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

| Air<br>Flow<br>CFM [L/s] | Model RGEDZ*090*    Voltage 208/230, 460, 575 — 3 phase 60 Hz |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|---------------------------------------------------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------------------|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          | External Static Pressure—Inches of Water [kPa]                |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |                  |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                          | 0.1 [.02]<br>RPM                                              | 0.2 [.05]<br>W | 0.3 [.07]<br>RPM | 0.4 [.10]<br>W | 0.5 [.12]<br>RPM | 0.6 [.15]<br>W | 0.7 [.17]<br>RPM | 0.8 [.20]<br>W | 0.9 [.22]<br>RPM | 1.0 [.25]<br>W | 1.1 [.27]<br>RPM | 1.2 [.30]<br>W | 1.3 [.32]<br>RPM | 1.4 [.35]<br>W | 1.5 [.37]<br>RPM | 1.6 [.40]<br>W | 1.7 [.42]<br>RPM | 1.8 [.45]<br>W | 1.9 [.47]<br>RPM | 2.0 [.50]<br>W | 2.1 [.53]<br>RPM | 2.2 [.56]<br>W | 2.3 [.59]<br>RPM | 2.4 [.62]<br>W |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2400 [1133]              | —                                                             | —              | —                | 558            | 822              | 594            | 853              | 629            | 887              | 663            | 925              | 697            | 965              | 730            | 1009             | 763            | 1056             | 794            | 1106             | 826            | 1159             | 856            | 1216             | 886            | 1275 | 915  | 1338 | 943  | 1404 | 971  | 1474 | 998  | 1546 | 1025 | 1622 | 1051 | 1700 | 1076 | 1782 |      |      |      |
| 2500 [1180]              | —                                                             | —              | —                | 568            | 848              | 604            | 881              | 638            | 917              | 672            | 956              | 705            | 998              | 738            | 1044             | 769            | 1092             | 801            | 1144             | 831            | 1199             | 861            | 1258             | 890            | 1319 | 919  | 1384 | 947  | 1452 | 974  | 1523 | 1001 | 1597 | 1027 | 1674 | 1052 | 1755 | 1077 | 1838 |      |      |      |
| 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  | 1366 | 923  | 1433 | 951  | 1502 | 978  | 1575 | 1004 | 1651 | 1029 | 1730 | 1054 | 1812 | 1078 | 1898 |      |      |
| 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  | 1417 | 928  | 1485 | 955  | 1556 | 981  | 1631 | 1007 | 1708 | 1032 | 1789 | 1056 | 1873 | 1079 | 1961 |      |      |
| 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  | 1470 | 933  | 1540 | 959  | 1613 | 985  | 1690 | 1010 | 1769 | 1034 | 1852 | 1058 | 1938 | 1081 | 2027 |      |      |
| 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  | 1528 | 938  | 1588 | 944  | 1662 | 969  | 1738 | 994  | 1818 | 1017 | 1901 | 1041 | 1987 | 1063 | 2077 | 1085 | 2169 |
| 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  | 1588 | 944  | 1662 | 969  | 1738 | 994  | 1818 | 1017 | 1901 | 1041 | 1987 | 1063 | 2077 | 1085 | 2169 |      |      |
| 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  | 1652 | 949  | 1727 | 974  | 1806 | 998  | 1887 | 1022 | 1972 | 1044 | 2060 | 1066 | 2151 | 1088 | 2245 |      |      |
| 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  | 1719 | 955  | 1796 | 980  | 1876 | 1003 | 1960 | 1026 | 2046 | 1048 | 2136 | 1070 | 2229 | 1091 | 2325 |      |      |
| 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  | 1790 | 962  | 1869 | 985  | 1951 | 1008 | 2036 | 1031 | 2124 | 1052 | 2216 | 1073 | 2310 | 1094 | 2408 |      |      |
| 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  | 1864 | 968  | 1945 | 991  | 2028 | 1014 | 2115 | 1036 | 2205 | 1057 | 2298 | 1077 | 2395 | 1097 | 2494 |      |      |
| 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  | 1941 | 975  | 2024 | 997  | 2109 | 1019 | 2198 | 1041 | 2290 | 1061 | 2385 | 1081 | 2483 | 1101 | 2584 |      |      |
| 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  | 2022 | 982  | 2106 | 1004 | 2194 | 1025 | 2284 | 1046 | 2378 | 1066 | 2474 | 1086 | 2574 | 1104 | 2677 |      |      |

NOTE: AF-Drive left of the bold line, B/G-Drive right of bold lines.

| Drive Package  | A/F        |     |     |     |     |     |     |     |     |     |     |     | B/G        |     |     |     |     |     |     |     |     |     |     |     | C/H        |     |     |     |    |    |   |   |   |   |   |   |   |   |
|----------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------------|-----|-----|-----|----|----|---|---|---|---|---|---|---|---|
| Motor H.P. [W] | 2 [1491.4] |     |     |     |     |     |     |     |     |     |     |     | 3 [2237.1] |     |     |     |     |     |     |     |     |     |     |     | 3 [2237.1] |     |     |     |    |    |   |   |   |   |   |   |   |   |
| Blower Sheave  | AK84H      |     |     |     |     |     |     |     |     |     |     |     | AK84H      |     |     |     |     |     |     |     |     |     |     |     | AK84H      |     |     |     |    |    |   |   |   |   |   |   |   |   |
| Motor Sheave   | 1VL40*7/8  |     |     |     |     |     |     |     |     |     |     |     | 1VP50*7/8  |     |     |     |     |     |     |     |     |     |     |     | 1VP56*7/8  |     |     |     |    |    |   |   |   |   |   |   |   |   |
| Belt           | A49        |     |     |     |     |     |     |     |     |     |     |     | A50        |     |     |     |     |     |     |     |     |     |     |     | A51        |     |     |     |    |    |   |   |   |   |   |   |   |   |
| 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   | 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        | 699 | 658 | 617 | 576 | 535 | 494 | 453 | 412 | 371 | 330 | 289 | 248        | 207 | 166 | 125 | 84 | 43 | 2 | 1 | 0 | 1 | 2 | 3 | 4 | 5 |

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 (con't.)

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



Air

Airflow Performance Data  
RGED Series



INTEGRATED AIR & WATER

## AIRFLOW PERFORMANCE—8.5 TON [29.9 kW] — 60 Hz — DOWNFLOW

| Air<br>Flow<br>CFM [L/s] | Model RGEDZ*102*      Voltage 208/230, 460, 575 — 3 phase 60 Hz |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|-----------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          | External Static Pressure—Inches of Water [kPa]                  |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                          | 0.1 [0.02]                                                      | 0.2 [0.05] | 0.3 [0.07] | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | 1.1 [0.27] | 1.2 [0.30] | 1.3 [0.32] | 1.4 [0.35] | 1.5 [0.37] | 1.6 [0.40] | 1.7 [0.42] | 1.8 [0.45] | 1.9 [0.47] | 2.0 [0.50] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RPM                      | W                                                               | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2700 [1274]              | —                                                               | 561        | 894        | 596        | 934        | 631        | 975        | 665        | 1018       | 698        | 1062       | 730        | 1108       | 762        | 1155       | 793        | 1203       | 823        | 1253       | 853        | 1304 | 882  | 1357 | 910  | 1411 | 937  | 1467 | 964  | 1524 | 990  | 1583 | 1015 | 1643 | 1039 | 1704 | 1063 | 1767 | 1086 | 1832 |      |
| 2800 [1321]              | —                                                               | 573        | 927        | 608        | 969        | 642        | 1013       | 676        | 1058       | 708        | 1104       | 740        | 1152       | 771        | 1201       | 802        | 1252       | 832        | 1304       | 861        | 1358 | 889  | 1413 | 917  | 1470 | 943  | 1528 | 970  | 1587 | 995  | 1648 | 1020 | 1711 | 1044 | 1775 | 1067 | 1840 | 1090 | 1907 |      |
| 2900 [1368]              | —                                                               | 586        | 964        | 620        | 1008       | 654        | 1054       | 687        | 1101       | 719        | 1150       | 750        | 1200       | 781        | 1252       | 811        | 1305       | 840        | 1360       | 869        | 1416 | 897  | 1473 | 924  | 1532 | 950  | 1593 | 976  | 1654 | 1001 | 1718 | 1025 | 1782 | 1048 | 1848 | 1071 | 1916 | 1093 | 1985 |      |
| 3000 [1416]              | 564                                                             | 959        | 599        | 1040       | 633        | 1051       | 666        | 1099       | 698        | 1149       | 730        | 1200       | 761        | 1253       | 791        | 1307       | 820        | 1362       | 849        | 1419       | 877  | 1477 | 904  | 1537 | 931  | 1598 | 957  | 1661 | 982  | 1725 | 1006 | 1791 | 1030 | 1858 | 1053 | 1926 | 1075 | 1996 | 1097 | 2067 |
| 3100 [1463]              | 578                                                             | 1001       | 612        | 1048       | 645        | 1098       | 678        | 1148       | 710        | 1200       | 741        | 1254       | 771        | 1308       | 801        | 1365       | 830        | 1423       | 858        | 1482       | 886  | 1542 | 912  | 1605 | 939  | 1668 | 964  | 1733 | 989  | 1800 | 1012 | 1868 | 1036 | 1937 | 1058 | 2008 | 1080 | 2080 | 1101 | 2154 |
| 3200 [1510]              | 592                                                             | 1046       | 625        | 1096       | 658        | 1148       | 690        | 1201       | 721        | 1255       | 752        | 1311       | 782        | 1368       | 811        | 1427       | 840        | 1487       | 867        | 1548       | 894  | 1611 | 921  | 1676 | 946  | 1742 | 971  | 1809 | 995  | 1878 | 1019 | 1948 | 1041 | 2020 | 1063 | 2093 | 1085 | 2168 | 1105 | 2244 |
| 3300 [1557]              | 605                                                             | 1096       | 638        | 1148       | 671        | 1202       | 702        | 1257       | 733        | 1314       | 763        | 1372       | 793        | 1432       | 821        | 1493       | 849        | 1555       | 877        | 1619       | 903  | 1684 | 929  | 1751 | 954  | 1819 | 979  | 1889 | 1002 | 1960 | 1025 | 2033 | 1047 | 2107 | 1069 | 2182 | 1090 | 2259 | 1110 | 2337 |
| 3400 [1604]              | 619                                                             | 1149       | 652        | 1204       | 684        | 1260       | 715        | 1317       | 745        | 1376       | 775        | 1437       | 804        | 1499       | 832        | 1562       | 860        | 1627       | 886        | 1693       | 912  | 1761 | 938  | 1830 | 962  | 1900 | 986  | 1972 | 1009 | 2046 | 1032 | 2121 | 1053 | 2197 | 1074 | 2275 | 1095 | 2354 | 1114 | 2435 |
| 3500 [1652]              | 634                                                             | 1206       | 666        | 1263       | 697        | 1322       | 728        | 1382       | 758        | 1443       | 787        | 1506       | 815        | 1570       | 843        | 1635       | 870        | 1702       | 896        | 1771       | 922  | 1841 | 946  | 1912 | 970  | 1985 | 994  | 2060 | 1017 | 2135 | 1038 | 2213 | 1060 | 2291 | 1080 | 2371 | 1100 | 2453 | 1119 | 2536 |
| 3600 [1699]              | 648                                                             | 1267       | 680        | 1326       | 711        | 1387       | 741        | 1449       | 770        | 1513       | 799        | 1578       | 827        | 1645       | 854        | 1713       | 880        | 1782       | 906        | 1853       | 931  | 1925 | 955  | 1999 | 979  | 2074 | 1002 | 2151 | 1024 | 2229 | 1045 | 2308 | 1066 | 2389 | 1086 | 2472 | 1105 | 2556 | 1124 | 2641 |
| 3700 [1746]              | 663                                                             | 1332       | 694        | 1393       | 724        | 1456       | 754        | 1521       | 783        | 1587       | 811        | 1654       | 838        | 1723       | 865        | 1793       | 891        | 1865       | 916        | 1938       | 941  | 2013 | 965  | 2089 | 988  | 2167 | 1010 | 2246 | 1032 | 2326 | 1053 | 2408 | 1073 | 2491 | 1092 | 2576 | 1111 | 2662 | 1129 | 2750 |
| 3800 [1793]              | 678                                                             | 1400       | 708        | 1464       | 738        | 1529       | 767        | 1596       | 795        | 1665       | 823        | 1734       | 850        | 1805       | 876        | 1878       | 902        | 1952       | 926        | 2028       | 951  | 2105 | 974  | 2183 | 996  | 2263 | 1018 | 2344 | 1039 | 2427 | 1060 | 2511 | 1080 | 2597 | 1099 | 2684 | 1117 | 2772 | 1134 | 2862 |
| 3900 [1840]              | 693                                                             | 1472       | 723        | 1538       | 752        | 1606       | 781        | 1675       | 808        | 1746       | 836        | 1818       | 862        | 1892       | 888        | 1966       | 913        | 2043       | 937        | 2121       | 961  | 2200 | 983  | 2281 | 1005 | 2363 | 1027 | 2447 | 1048 | 2532 | 1067 | 2618 | 1087 | 2706 | 1105 | 2796 | 1123 | 2886 | 1140 | 2979 |
| 4000 [1888]              | 708                                                             | 1548       | 737        | 1617       | 766        | 1687       | 794        | 1758       | 822        | 1831       | 848        | 1906       | 874        | 1981       | 900        | 2059       | 924        | 2137       | 948        | 2218       | 971  | 2299 | 993  | 2382 | 1015 | 2467 | 1036 | 2553 | 1056 | 2640 | 1075 | 2729 | 1094 | 2819 | 1112 | 2911 | 1129 | 3004 | 1146 | 3099 |
| 4100 [1935]              | 723                                                             | 1628       | 752        | 1699       | 781        | 1771       | 808        | 1845       | 835        | 1920       | 861        | 1997       | 887        | 2075       | 911        | 2155       | 935        | 2236       | 959        | 2318       | 981  | 2402 | 1003 | 2488 | 1024 | 2574 | 1045 | 2663 | 1064 | 2752 | 1083 | 2844 | 1101 | 2936 | 1119 | 3030 | 1136 | 3126 | 1152 | 3223 |

NOTE: A/F—Drive left of the bold line, B/G—Drive right of bold lines.

| Drive Package  | A/F        |     |     |     |     | B/G        |      |      |     |     | C/H        |     |      |      |      |      |      |     |
|----------------|------------|-----|-----|-----|-----|------------|------|------|-----|-----|------------|-----|------|------|------|------|------|-----|
| Motor H.P. [W] | 2 [1491.4] |     |     |     |     | 3 [2237.1] |      |      |     |     | 3 [2237.1] |     |      |      |      |      |      |     |
| Blower Sheave  | AK79H      |     |     |     |     | AK79H      |      |      |     |     | AK79H      |     |      |      |      |      |      |     |
| Motor Sheave   | 1VL40*7/8  |     |     |     |     | 1VP50*7/8  |      |      |     |     | 1VP56*7/8  |     |      |      |      |      |      |     |
| Belt           | A49        |     |     |     |     | A50        |      |      |     |     | A51        |     |      |      |      |      |      |     |
| Turns Open     | 0          | 1   | 2   | 3   | 4   | 5          | 0    | 1    | 2   | 3   | 4          | 5   |      |      |      |      |      |     |
| RPM            | 804        | 758 | 710 | 661 | 616 | 559        | 1048 | 1003 | 959 | 914 | 872        | 826 | 1168 | 1128 | 1087 | 1044 | 1002 | 957 |

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 — 8.5 TON [29.9 kW] — 60 Hz — DOWNFLOW (con't.)

| Airflow                            |           | AIRFLOW CORRECTION FACTORS * |          |            |                                       | COMPONENT AIRFLOW RESISTANCE                                                     |                                                                                 |                         |                          |  |
|------------------------------------|-----------|------------------------------|----------|------------|---------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|--|
| CFM [L/s]                          | Total MBH | Sensible MBH                 | Power kW | Wet Coil   | Vertical Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF2000 &<br>Concentric Adapter<br>RXMC-DD01 (Flush) | Concentric Diffuser<br>RXRN-AED2000 &<br>Concentric Adapter<br>RXMC-DD01 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |  |
| Resistance — Inches of Water [kPa] |           |                              |          |            |                                       |                                                                                  |                                                                                 |                         |                          |  |
| 2700 [1274]                        | 0.97      | 0.93                         | 0.99     | 0.07 [.02] | 0.03 [.01]                            | 0.80 [.20]                                                                       | 0.65 [.16]                                                                      | 0.108 [.03]             | 0.070 [.02]              |  |
| 2800 [1321]                        | 0.98      | 0.94                         | 0.99     | 0.07 [.02] | 0.03 [.01]                            | 0.85 [.21]                                                                       | 0.69 [.17]                                                                      | 0.113 [.03]             | 0.078 [.02]              |  |
| 2900 [1368]                        | 0.98      | 0.96                         | 0.99     | 0.08 [.02] | 0.04 [.01]                            | 0.91 [.23]                                                                       | 0.74 [.18]                                                                      | 0.117 [.03]             | 0.085 [.02]              |  |
| 3000 [1416]                        | 0.99      | 0.97                         | 1.00     | 0.08 [.02] | 0.05 [.01]                            | 0.96 [.24]                                                                       | 0.79 [.20]                                                                      | 0.122 [.03]             | 0.093 [.02]              |  |
| 3100 [1463]                        | 0.99      | 0.99                         | 1.00     | 0.09 [.02] | 0.06 [.01]                            | 1.02 [.25]                                                                       | 0.86 [.21]                                                                      | 0.127 [.03]             | 0.100 [.02]              |  |
| 3200 [1510]                        | 1.00      | 1.00                         | 1.00     | 0.10 [.02] | 0.07 [.02]                            | 1.08 [.27]                                                                       | 0.92 [.23]                                                                      | 0.132 [.03]             | 0.108 [.03]              |  |
| 3300 [1557]                        | 1.01      | 1.01                         | 1.00     | 0.10 [.03] | 0.08 [.02]                            | 1.15 [.29]                                                                       | 0.99 [.25]                                                                      | 0.137 [.03]             | 0.115 [.03]              |  |
| 3400 [1604]                        | 1.01      | 1.03                         | 1.01     | 0.11 [.03] | 0.09 [.02]                            | 1.21 [.30]                                                                       | 1.05 [.26]                                                                      | 0.142 [.03]             | 0.123 [.03]              |  |
| 3500 [1652]                        | 1.02      | 1.04                         | 1.01     | 0.11 [.03] | 0.10 [.02]                            | 1.29 [.32]                                                                       | 1.09 [.27]                                                                      | 0.147 [.04]             | 0.131 [.03]              |  |
| 3600 [1699]                        | 1.02      | 1.06                         | 1.01     | 0.12 [.03] | 0.11 [.03]                            | 1.36 [.34]                                                                       | 1.13 [.28]                                                                      | 0.152 [.04]             | 0.138 [.03]              |  |
| 3700 [1746]                        | 1.03      | 1.07                         | 1.02     | 0.13 [.03] | 0.12 [.03]                            | 1.43 [.36]                                                                       | 1.18 [.29]                                                                      | 0.157 [.04]             | 0.146 [.04]              |  |
| 3800 [1793]                        | 1.03      | 1.09                         | 1.02     | 0.13 [.03] | 0.13 [.03]                            | 1.50 [.37]                                                                       | 1.23 [.31]                                                                      | 0.162 [.04]             | 0.153 [.04]              |  |
| 3900 [1840]                        | 1.04      | 1.10                         | 1.02     | 0.14 [.04] | 0.15 [.04]                            | 1.59 [.40]                                                                       | 1.31 [.33]                                                                      | 0.167 [.04]             | 0.161 [.04]              |  |
| 4000 [1888]                        | 1.05      | 1.12                         | 1.02     | 0.14 [.04] | 0.16 [.04]                            | 1.68 [.42]                                                                       | 1.38 [.34]                                                                      | 0.171 [.04]             | 0.169 [.04]              |  |
| 4100 [1935]                        | 1.05      | 1.13                         | 1.03     | 0.15 [.04] | 0.17 [.04]                            | 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



Air

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

| Air Flow<br>CFM [L/s] | Model RGEDZ*102* Voltage 208/230, 460, 575 — 3 phase 60 Hz |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |
|-----------------------|------------------------------------------------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
|                       | External Static Pressure—Inches of Water [kPa]             |                 |                   |                 |                   |                 |                   |                 |                   |                 |                   |                 |
|                       | 0.1 [0.02]<br>RPM                                          | 0.2 [0.05]<br>W | 0.3 [0.07]<br>RPM | 0.4 [0.10]<br>W | 0.5 [0.12]<br>RPM | 0.6 [0.15]<br>W | 0.7 [0.17]<br>RPM | 0.8 [0.20]<br>W | 0.9 [0.22]<br>RPM | 1.0 [0.25]<br>W | 1.1 [0.27]<br>RPM | 1.2 [0.30]<br>W |
| 2700 [1274]           | —                                                          | —               | 577               | 932             | 611               | 969             | 644               | 1009            | 677               | 1052            | 710               | 1098            |
| 2800 [1321]           | —                                                          | 556             | 926               | 589             | 962               | 622             | 1000              | 655             | 1042              | 687             | 1087              | 719             |
| 2900 [1368]           | —                                                          | 568             | 958               | 601             | 995               | 633             | 1036              | 666             | 1079              | 697             | 1125              | 729             |
| 3000 [1416]           | —                                                          | 580             | 994               | 613             | 1033              | 645             | 1074              | 676             | 1119              | 708             | 1167              | 738             |
| 3100 [1463]           | 561                                                        | 996             | 593               | 1033            | 624               | 1073            | 656               | 1117            | 687               | 1163            | 718               | 1213            |
| 3200 [1510]           | 574                                                        | 1037            | 605               | 1076            | 636               | 1118            | 667               | 1163            | 698               | 1211            | 728               | 1262            |
| 3300 [1557]           | 587                                                        | 1082            | 618               | 1122            | 648               | 1166            | 679               | 1212            | 709               | 1262            | 738               | 1315            |
| 3400 [1604]           | 600                                                        | 1130            | 630               | 1172            | 660               | 1217            | 690               | 1266            | 720               | 1317            | 749               | 1371            |
| 3500 [1652]           | 613                                                        | 1182            | 643               | 1226            | 672               | 1273            | 702               | 1323            | 730               | 1376            | 759               | 1432            |
| 3600 [1699]           | 626                                                        | 1238            | 656               | 1283            | 685               | 1332            | 713               | 1383            | 741               | 1438            | 769               | 1495            |
| 3700 [1746]           | 640                                                        | 1297            | 668               | 1344            | 697               | 1394            | 725               | 1447            | 753               | 1504            | 780               | 1563            |
| 3800 [1793]           | 653                                                        | 1360            | 681               | 1409            | 709               | 1460            | 737               | 1515            | 764               | 1573            | 790               | 1634            |
| 3900 [1840]           | 667                                                        | 1426            | 694               | 1477            | 721               | 1530            | 748               | 1587            | 775               | 1646            | 801               | 1709            |
| 4000 [1888]           | 680                                                        | 1496            | 707               | 1548            | 734               | 1604            | 760               | 1662            | 786               | 1723            | 812               | 1787            |
| 4100 [1935]           | 694                                                        | 1570            | 720               | 1624            | 746               | 1681            | 772               | 1740            | 797               | 1803            | 822               | 1869            |

NOTE: A/F—Drive left of the bold line, B/G—Drive right of bold lines.

| Drive Package  | A/F        |     |            |     | B/G        |     |      |      | C/H        |     |     |     |
|----------------|------------|-----|------------|-----|------------|-----|------|------|------------|-----|-----|-----|
| Motor H.P. [W] | 2 [1491.4] |     |            |     | 3 [2237.1] |     |      |      | 3 [2237.1] |     |     |     |
| Blower Sheave  | AK79H      |     |            |     | AK79H      |     |      |      | AK79H      |     |     |     |
| Motor Sheave   | 1VL40*7/8  |     |            |     | 1VP50*7/8  |     |      |      | 1VP56*7/8  |     |     |     |
| Belt           | A49        |     |            |     | A50        |     |      |      | A51        |     |     |     |
| Turns Open     | 0          | 1   | 2          | 3   | 4          | 5   | 0    | 1    | 2          | 3   | 4   | 5   |
| RPM            | 802        | 754 | <b>707</b> | 662 | 616        | 555 | 1048 | 1005 | 960        | 916 | 870 | 827 |

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 (con't.)**

| Airflow     | AIRFLOW CORRECTION FACTORS * |           |              |          | COMPONENT AIRFLOW RESISTANCE |                                         |                                                                                  |                                                                                 |                         |                          |
|-------------|------------------------------|-----------|--------------|----------|------------------------------|-----------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|
|             | CFM [L/s]                    | Total MBH | Sensible MBH | Power kW | Wet Coil                     | Horizontal Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF2000 &<br>Concentric Adapter<br>RXMC-DD01 (Flush) | Concentric Diffuser<br>RXRN-AED2000 &<br>Concentric Adapter<br>RXMC-DD01 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |
| 2700 [1274] | 0.97                         | 0.93      |              | 0.99     | 0.07 [0.02]                  | 0.32 [0.08]                             | 0.80 [0.20]                                                                      | 0.65 [0.16]                                                                     | 0.108 [0.03]            | 0.070 [0.02]             |
| 2800 [1321] | 0.98                         | 0.94      |              | 0.99     | 0.07 [0.02]                  | 0.36 [0.09]                             | 0.85 [0.21]                                                                      | 0.69 [0.17]                                                                     | 0.113 [0.03]            | 0.078 [0.02]             |
| 2900 [1368] | 0.98                         | 0.96      |              | 0.99     | 0.08 [0.02]                  | 0.39 [0.10]                             | 0.91 [0.23]                                                                      | 0.74 [0.18]                                                                     | 0.117 [0.03]            | 0.085 [0.02]             |
| 3000 [1416] | 0.99                         | 0.97      |              | 1.00     | 0.08 [0.02]                  | 0.43 [0.11]                             | 0.96 [0.24]                                                                      | 0.79 [0.20]                                                                     | 0.122 [0.03]            | 0.093 [0.02]             |
| 3100 [1463] | 0.99                         | 0.99      |              | 1.00     | 0.09 [0.02]                  | 0.47 [0.12]                             | 1.02 [0.25]                                                                      | 0.86 [0.21]                                                                     | 0.127 [0.03]            | 0.100 [0.02]             |
| 3200 [1510] | 1.00                         | 1.00      |              | 1.00     | 0.10 [0.02]                  | 0.51 [0.13]                             | 1.08 [0.27]                                                                      | 0.92 [0.23]                                                                     | 0.132 [0.03]            | 0.108 [0.03]             |
| 3300 [1557] | 1.01                         | 1.01      |              | 1.00     | 0.10 [0.03]                  | 0.54 [0.14]                             | 1.15 [0.29]                                                                      | 0.99 [0.25]                                                                     | 0.137 [0.03]            | 0.115 [0.03]             |
| 3400 [1604] | 1.01                         | 1.03      |              | 1.01     | 0.11 [0.03]                  | 0.58 [0.14]                             | 1.21 [0.30]                                                                      | 1.05 [0.26]                                                                     | 0.142 [0.03]            | 0.123 [0.03]             |
| 3500 [1652] | 1.02                         | 1.04      |              | 1.01     | 0.11 [0.03]                  | 0.62 [0.15]                             | 1.29 [0.32]                                                                      | 1.09 [0.27]                                                                     | 0.147 [0.04]            | 0.131 [0.03]             |
| 3600 [1699] | 1.02                         | 1.06      |              | 1.01     | 0.12 [0.03]                  | 0.66 [0.16]                             | 1.36 [0.34]                                                                      | 1.13 [0.28]                                                                     | 0.152 [0.04]            | 0.138 [0.03]             |
| 3700 [1746] | 1.03                         | 1.07      |              | 1.02     | 0.13 [0.03]                  | 0.70 [0.17]                             | 1.43 [0.36]                                                                      | 1.18 [0.29]                                                                     | 0.157 [0.04]            | 0.146 [0.04]             |
| 3800 [1793] | 1.03                         | 1.09      |              | 1.02     | 0.13 [0.03]                  | 0.74 [0.18]                             | 1.50 [0.37]                                                                      | 1.23 [0.31]                                                                     | 0.162 [0.04]            | 0.153 [0.04]             |
| 3900 [1840] | 1.04                         | 1.10      |              | 1.02     | 0.14 [0.04]                  | 0.77 [0.19]                             | 1.59 [0.40]                                                                      | 1.31 [0.33]                                                                     | 0.167 [0.04]            | 0.161 [0.04]             |
| 4000 [1888] | 1.05                         | 1.12      |              | 1.02     | 0.15 [0.04]                  | 0.81 [0.20]                             | 1.68 [0.42]                                                                      | 1.38 [0.34]                                                                     | 0.171 [0.04]            | 0.169 [0.04]             |
| 4100 [1935] | 1.05                         | 1.13      |              | 1.03     | 0.15 [0.04]                  | 0.85 [0.21]                             | 1.74 [0.43]                                                                      | 1.44 [0.36]                                                                     | 0.176 [0.04]            | 0.176 [0.04]             |

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

[ ] Designates Metric Conversions

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

| Air Flow<br>CFM [L/s] | Model RGEDZ*120* 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      | RPM W      |  |  |  |  |
| 3200 [1510]           | 597 1046                                                   | 629 1092   | 661 1141   | 692 1191   | 723 1242   | 753 1296   | 782 1351   | 811 1409   | 839 1468   | 867 1528   | 893 1591   | 920 1655   | 945 1722   | 970 1790   | 994 1859   | 1018 1931  | 1041 2004  | 1064 2080  | 1085 2157  | 1107 2236  |  |  |  |  |
| 3300 [1557]           | 610 1092                                                   | 642 1141   | 674 1192   | 705 1244   | 735 1299   | 764 1355   | 793 1413   | 822 1473   | 849 1535   | 876 1599   | 903 1664   | 928 1731   | 954 1800   | 978 1871   | 1002 1943  | 1025 2018  | 1048 2094  | 1070 2172  | 1091 2251  | 1112 2333  |  |  |  |  |
| 3400 [1604]           | 624 1142                                                   | 655 1194   | 686 1247   | 717 1303   | 747 1360   | 776 1419   | 804 1480   | 832 1542   | 859 1607   | 886 1673   | 912 1741   | 937 1811   | 962 1883   | 986 1956   | 1010 2031  | 1032 2108  | 1055 2187  | 1076 2268  | 1097 2350  | 1117 2435  |  |  |  |  |
| 3500 [1652]           | 638 1196                                                   | 669 1251   | 699 1307   | 729 1365   | 759 1425   | 787 1487   | 815 1550   | 843 1616   | 870 1683   | 896 1752   | 921 1823   | 946 1895   | 971 1969   | 994 2046   | 1017 2124  | 1040 2203  | 1061 2285  | 1083 2368  | 1103 2454  | 1123 2541  |  |  |  |  |
| 3600 [1699]           | 651 1255                                                   | 682 1312   | 712 1371   | 742 1432   | 771 1494   | 799 1559   | 827 1625   | 854 1693   | 880 1763   | 906 1835   | 931 1908   | 955 1984   | 979 2061   | 1003 2140  | 1025 2220  | 1047 2303  | 1068 2387  | 1089 2473  | 1109 2561  | 1129 2651  |  |  |  |  |
| 3700 [1746]           | 665 1317                                                   | 696 1377   | 725 1439   | 755 1503   | 783 1568   | 811 1635   | 838 1704   | 865 1775   | 891 1848   | 916 1922   | 941 1998   | 965 2076   | 988 2156   | 1011 2238  | 1033 2321  | 1055 2406  | 1075 2493  | 1096 2582  | 1115 2673  | 1134 2765  |  |  |  |  |
| 3800 [1793]           | 679 1385                                                   | 709 1447   | 739 1512   | 767 1578   | 795 1646   | 823 1717   | 850 1788   | 876 1861   | 901 1937   | 926 2014   | 950 2093   | 974 2173   | 997 2256   | 1019 2340  | 1041 2426  | 1062 2514  | 1083 2604  | 1102 2696  | 1122 2789  | 1140 2884  |  |  |  |  |
| 3900 [1840]           | 693 1456                                                   | 723 1521   | 752 1589   | 780 1658   | 808 1728   | 835 1801   | 861 1875   | 887 1952   | 912 2030   | 936 2110   | 960 2191   | 983 2275   | 1006 2360  | 1028 2447  | 1049 2536  | 1070 2627  | 1090 2719  | 1109 2813  | 1128 2909  | 1146 3007  |  |  |  |  |
| 4000 [1888]           | 708 1532                                                   | 737 1600   | 765 1670   | 793 1741   | 820 1815   | 847 1890   | 873 1967   | 898 2046   | 923 2127   | 947 2210   | 970 2294   | 993 2380   | 1015 2468  | 1036 2558  | 1057 2650  | 1077 2743  | 1097 2838  | 1116 2935  | 1134 3034  | 1152 3135  |  |  |  |  |
| 4100 [1935]           | 722 1612                                                   | 751 1682   | 779 1755   | 806 1830   | 833 1906   | 859 1984   | 884 2064   | 909 2145   | 933 2229   | 957 2314   | 980 2401   | 1002 2490  | 1024 2581  | 1045 2673  | 1065 2768  | 1085 2864  | 1104 2962  | 1123 3061  | 1141 3163  | 1158 3266  |  |  |  |  |
| 4200 [1982]           | 736 1696                                                   | 765 1769   | 792 1845   | 819 1922   | 845 2001   | 871 2082   | 896 2164   | 921 2249   | 944 2335   | 968 2423   | 990 2513   | 1012 2604  | 1033 2698  | 1054 2793  | 1074 2890  | 1093 2989  | 1112 3090  | 1130 3192  | 1147 3296  | 1164 3402  |  |  |  |  |
| 4300 [2029]           | 751 1784                                                   | 779 1861   | 806 1939   | 832 2019   | 858 2100   | 883 2184   | 908 2269   | 932 2356   | 955 2445   | 978 2536   | 1000 2629  | 1022 2723  | 1043 2819  | 1063 2917  | 1082 3017  | 1101 3118  | 1119 3222  | 1137 3327  | 1154 3434  | —          |  |  |  |  |
| 4400 [2076]           | 765 1877                                                   | 793 1956   | 820 2037   | 846 2120   | 871 2204   | 896 2290   | 920 2378   | 944 2468   | 967 2560   | 989 2653   | 1010 2749  | 1032 2846  | 1052 2945  | 1072 3045  | 1091 3148  | 1109 3252  | 1127 3358  | 1144 3466  | 1161 3576  | —          |  |  |  |  |
| 4500 [2123]           | 780 1974                                                   | 807 2056   | 833 2140   | 859 2225   | 884 2312   | 908 2401   | 932 2492   | 955 2584   | 978 2679   | 1000 2775  | 1021 2873  | 1041 2973  | 1061 3074  | 1081 3178  | 1099 3283  | 1117 3390  | 1135 3499  | 1152 3609  | 1168 3722  | —          |  |  |  |  |
| 4600 [2171]           | 795 2076                                                   | 821 2160   | 847 2246   | 872 2335   | 897 2424   | 921 2516   | 944 2610   | 967 2705   | 989 2802   | 1010 2901  | 1031 3002  | 1051 3104  | 1071 3208  | 1090 3314  | 1108 3422  | 1126 3532  | 1143 3644  | 1159 3757  | —          | —          |  |  |  |  |
| 4700 [2218]           | 810 2181                                                   | 836 2269   | 861 2358   | 886 2448   | 910 2541   | 934 2635   | 957 2732   | 979 2830   | 1000 2929  | 1021 3031  | 1042 3134  | 1062 3240  | 1081 3347  | 1099 3455  | 1117 3566  | 1134 3679  | 1151 3793  | 1167 3909  | —          | —          |  |  |  |  |
| 4800 [2265]           | 825 2291                                                   | 850 2381   | 875 2473   | 900 2567   | 923 2662   | 946 2759   | 969 2858   | 991 2959   | 1012 3061  | 1033 3165  | 1052 3272  | 1072 3380  | 1090 3489  | 1108 3601  | 1126 3714  | 1143 3829  | 1159 3946  | —          | —          | —          |  |  |  |  |

NOTE: A/F—Drive left of the bold line, B/G—Drive right of bold lines.

| Drive Package  | A/F        |     |     |     |     | B/G        |      |     |     |     | C/H        |     |      |      |      |      |     |     |
|----------------|------------|-----|-----|-----|-----|------------|------|-----|-----|-----|------------|-----|------|------|------|------|-----|-----|
| Motor H.P. [W] | 2 [1491.4] |     |     |     |     | 3 [2237.1] |      |     |     |     | 3 [2237.1] |     |      |      |      |      |     |     |
| Blower Sheave  | AK79H      |     |     |     |     | AK79H      |      |     |     |     | AK79H      |     |      |      |      |      |     |     |
| Motor Sheave   | 1VL40*7/8  |     |     |     |     | 1VP50*7/8  |      |     |     |     | 1VP56*7/8  |     |      |      |      |      |     |     |
| Belt           | A49        |     |     |     |     | A50        |      |     |     |     | A51        |     |      |      |      |      |     |     |
| Turns Open     | 0          | 1   | 2   | 3   | 4   | 5          | 0    | 1   | 2   | 3   | 4          | 5   |      |      |      |      |     |     |
| RPM            | 802        | 758 | 710 | 661 | 616 | 559        | 1040 | 999 | 955 | 911 | 868        | 824 | 1155 | 1120 | 1080 | 1039 | 996 | 953 |

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— 10 TON [35.1 kW] — 60 Hz — DOWNFLOW (con't.)



Air

Airflow Performance Data  
RGED Series

| Airflow     | AIRFLOW CORRECTION FACTORS * |           |              |            | COMPONENT AIRFLOW RESISTANCE |                                       |                                                                        |                                                                       |                         |                          |
|-------------|------------------------------|-----------|--------------|------------|------------------------------|---------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------|--------------------------|
|             | CFM [L/s]                    | Total MBH | Sensible MBH | Power kW   | Wet Coil                     | Vertical Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF3415 &<br>Diffuser<br>RXMC-DD02 (Flush) | Concentric Diffuser<br>RXRN-AED3415 &<br>Diffuser<br>RXMC-DD02 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>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



INTEGRATED AIR & WATER

## AIRFLOW PERFORMANCE — 10 TON [35.1 kW] — 60 Hz — SIDEFLOW

| Air<br>Flow<br>CFM [L/s] | Model RGEDZ*120* Voltage 208/230, 460, 575 — 3 phase 60 Hz |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|------------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                          | External Static Pressure—Inches of Water [kPa]             |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|                          | 0.1 [0.02]                                                 | 0.2 [0.05] | 0.3 [0.07] | 0.4 [0.10] | 0.5 [0.12] | 0.6 [0.15] | 0.7 [0.17] | 0.8 [0.20] | 0.9 [0.22] | 1.0 [0.25] | 1.1 [0.27] | 1.2 [0.30] | 1.3 [0.32] | 1.4 [0.35] | 1.5 [0.37] | 1.6 [0.40] | 1.7 [0.42] | 1.8 [0.45] | 1.9 [0.47] | 2.0 [0.50] |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| RPM                      | W                                                          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W          | RPM        | W    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 3200 [1510]              | 575                                                        | 1018       | 607        | 1057       | 637        | 1099       | 667        | 1143       | 697        | 1191       | 727        | 1240       | 756        | 1293       | 785        | 1348       | 814        | 1406       | 842        | 1466       | 870  | 1529 | 897  | 1595 | 924  | 1664 | 951  | 1735 | 978  | 1809 | 1004 | 1885 | 1030 | 1965 | 1055 | 2047 | 1080 | 2131 | 1105 | 2219 |
| 3300 [1557]              | 588                                                        | 1060       | 618        | 1101       | 649        | 1146       | 679        | 1192       | 708        | 1242       | 737        | 1294       | 766        | 1349       | 795        | 1406       | 823        | 1466       | 850        | 1529       | 878  | 1595 | 905  | 1663 | 932  | 1734 | 958  | 1808 | 984  | 1884 | 1010 | 1963 | 1035 | 2045 | 1060 | 2129 | 1085 | 2216 | 1109 | 2306 |
| 3400 [1604]              | 600                                                        | 1106       | 630        | 1150       | 660        | 1196       | 690        | 1245       | 719        | 1297       | 748        | 1352       | 776        | 1409       | 804        | 1469       | 832        | 1531       | 859        | 1597       | 886  | 1664 | 913  | 1735 | 939  | 1808 | 965  | 1884 | 990  | 1963 | 1016 | 2044 | 1040 | 2128 | 1065 | 2215 | 1089 | 2305 | 1113 | 2397 |
| 3500 [1652]              | 613                                                        | 1156       | 643        | 1202       | 672        | 1251       | 701        | 1302       | 730        | 1357       | 758        | 1413       | 786        | 1473       | 814        | 1535       | 841        | 1600       | 868        | 1668       | 894  | 1738 | 920  | 1811 | 946  | 1887 | 972  | 1965 | 997  | 2046 | 1022 | 2130 | 1046 | 2217 | 1070 | 2306 | 1094 | 2397 | 1117 | 2492 |
| 3600 [1699]              | 626                                                        | 1210       | 655        | 1258       | 684        | 1310       | 713        | 1364       | 741        | 1420       | 769        | 1479       | 796        | 1541       | 823        | 1606       | 850        | 1673       | 877        | 1743       | 903  | 1816 | 929  | 1892 | 954  | 1970 | 979  | 2050 | 1004 | 2134 | 1028 | 2220 | 1052 | 2309 | 1076 | 2400 | 1099 | 2494 | 1122 | 2591 |
| 3700 [1746]              | 639                                                        | 1268       | 668        | 1319       | 696        | 1373       | 724        | 1429       | 752        | 1488       | 779        | 1550       | 806        | 1614       | 833        | 1681       | 860        | 1751       | 886        | 1823       | 911  | 1898 | 937  | 1976 | 962  | 2056 | 986  | 2140 | 1011 | 2225 | 1035 | 2314 | 1058 | 2405 | 1081 | 2499 | 1104 | 2596 | 1127 | 2695 |
| 3800 [1793]              | 652                                                        | 1330       | 680        | 1384       | 708        | 1440       | 736        | 1498       | 763        | 1560       | 790        | 1624       | 817        | 1690       | 843        | 1760       | 869        | 1832       | 895        | 1907       | 920  | 1984 | 945  | 2064 | 970  | 2147 | 994  | 2233 | 1018 | 2321 | 1041 | 2412 | 1064 | 2505 | 1087 | 2602 | 1110 | 2701 | 1132 | 2802 |
| 3900 [1840]              | 665                                                        | 1397       | 693        | 1452       | 721        | 1511       | 748        | 1572       | 775        | 1636       | 801        | 1702       | 828        | 1771       | 854        | 1843       | 879        | 1917       | 904        | 1995       | 929  | 2075 | 954  | 2157 | 978  | 2242 | 1001 | 2330 | 1025 | 2421 | 1048 | 2514 | 1071 | 2610 | 1093 | 2709 | 1115 | 2810 | 1137 | 2914 |
| 4000 [1888]              | 678                                                        | 1467       | 706        | 1525       | 733        | 1586       | 760        | 1650       | 787        | 1716       | 813        | 1785       | 839        | 1856       | 864        | 1930       | 889        | 2007       | 914        | 2087       | 938  | 2169 | 962  | 2254 | 986  | 2341 | 1009 | 2432 | 1032 | 2525 | 1055 | 2620 | 1077 | 2719 | 1099 | 2820 | 1121 | 2923 | 1142 | 3030 |
| 4100 [1935]              | 692                                                        | 1542       | 719        | 1602       | 746        | 1666       | 772        | 1731       | 798        | 1800       | 824        | 1871       | 850        | 1945       | 875        | 2022       | 899        | 2101       | 923        | 2183       | 947  | 2267 | 971  | 2355 | 994  | 2445 | 1017 | 2537 | 1040 | 2633 | 1062 | 2731 | 1084 | 2831 | 1105 | 2935 | 1126 | 3041 | 1147 | 3150 |
| 4200 [1982]              | 706                                                        | 1621       | 732        | 1684       | 759        | 1749       | 785        | 1817       | 810        | 1888       | 836        | 1962       | 861        | 2038       | 885        | 2117       | 909        | 2199       | 933        | 2283       | 957  | 2370 | 980  | 2460 | 1003 | 2552 | 1025 | 2647 | 1047 | 2745 | 1069 | 2845 | 1091 | 2948 | 1112 | 3054 | 1132 | 3163 | 1153 | 3274 |
| 4300 [2029]              | 720                                                        | 1704       | 746        | 1769       | 772        | 1837       | 797        | 1907       | 823        | 1981       | 847        | 2057       | 872        | 2135       | 896        | 2217       | 920        | 2301       | 943        | 2387       | 966  | 2477 | 989  | 2569 | 1012 | 2664 | 1034 | 2761 | 1055 | 2861 | 1077 | 2964 | 1098 | 3069 | 1118 | 3178 | 1139 | 3288 | 1158 | 3402 |
| 4400 [2076]              | 734                                                        | 1791       | 760        | 1858       | 785        | 1928       | 810        | 2001       | 835        | 2077       | 859        | 2155       | 883        | 2237       | 907        | 2320       | 931        | 2407       | 954        | 2496       | 976  | 2587 | 999  | 2682 | 1020 | 2779 | 1042 | 2879 | 1063 | 2981 | 1084 | 3087 | 1105 | 3195 | 1125 | 3305 | 1145 | 3418 | —    | —    |
| 4500 [2123]              | 748                                                        | 1882       | 773        | 1952       | 798        | 2024       | 823        | 2100       | 847        | 2178       | 871        | 2259       | 895        | 2342       | 918        | 2428       | 941        | 2517       | 964        | 2608       | 986  | 2702 | 1008 | 2799 | 1030 | 2899 | 1051 | 3001 | 1071 | 3106 | 1092 | 3214 | 1112 | 3324 | 1132 | 3437 | 1151 | 3552 | —    | —    |
| 4600 [2171]              | 762                                                        | 1977       | 787        | 2049       | 812        | 2124       | 836        | 2202       | 860        | 2283       | 884        | 2366       | 907        | 2451       | 930        | 2540       | 952        | 2631       | 974        | 2725       | 996  | 2822 | 1018 | 2921 | 1039 | 3023 | 1059 | 3127 | 1080 | 3235 | 1100 | 3345 | 1120 | 3457 | 1139 | 3573 | 1158 | 3691 | —    | —    |
| 4700 [2218]              | 777                                                        | 2076       | 801        | 2151       | 826        | 2228       | 849        | 2309       | 873        | 2391       | 896        | 2477       | 919        | 2565       | 941        | 2656       | 963        | 2750       | 985        | 2846       | 1006 | 2945 | 1027 | 3046 | 1048 | 3151 | 1068 | 3258 | 1088 | 3367 | 1108 | 3480 | 1127 | 3595 | 1146 | 3712 | —    | —    | —    | —    |
| 4800 [2265]              | 792                                                        | 2180       | 816        | 2257       | 840        | 2337       | 863        | 2419       | 886        | 2504       | 909        | 2592       | 931        | 2683       | 953        | 2776       | 975        | 2872       | 996        | 2971       | 1017 | 3072 | 1037 | 3176 | 1058 | 3283 | 1077 | 3392 | 1097 | 3504 | 1116 | 3619 | 1135 | 3736 | 1153 | 3856 | —    | —    | —    | —    |

NOTE: A/F—Drive left of the bold line, B/G—Drive right of bold lines.

| Drive Package  | A/F        |     |     |     |     |     |      |     |     |     | B/G        |     |      |      |      |      |     |     |  |  | C/H        |  |  |  |  |  |  |  |  |  |
|----------------|------------|-----|-----|-----|-----|-----|------|-----|-----|-----|------------|-----|------|------|------|------|-----|-----|--|--|------------|--|--|--|--|--|--|--|--|--|
| Motor H.P. [W] | 2 [1491.4] |     |     |     |     |     |      |     |     |     | 3 [2237.1] |     |      |      |      |      |     |     |  |  | 3 [2237.1] |  |  |  |  |  |  |  |  |  |
| Blower Sheave  | AK79H      |     |     |     |     |     |      |     |     |     | AK79H      |     |      |      |      |      |     |     |  |  | AK79H      |  |  |  |  |  |  |  |  |  |
| Motor Sheave   | 1VL40**7/8 |     |     |     |     |     |      |     |     |     | 1VP50**7/8 |     |      |      |      |      |     |     |  |  | 1VP56**7/8 |  |  |  |  |  |  |  |  |  |
| Belt           | A49        |     |     |     |     |     |      |     |     |     | A50        |     |      |      |      |      |     |     |  |  | A51        |  |  |  |  |  |  |  |  |  |
| Turns Open     | 0          | 1   | 2   | 3   | 4   | 5   | 0    | 1   | 2   | 3   | 4          | 5   | 0    | 1    | 2    | 3    | 4   | 5   |  |  |            |  |  |  |  |  |  |  |  |  |
| RPM            | 798        | 753 | 707 | 663 | 616 | 556 | 1041 | 998 | 955 | 912 | 867        | 824 | 1155 | 1119 | 1078 | 1037 | 994 | 951 |  |  |            |  |  |  |  |  |  |  |  |  |

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—10 TON [35.1 kW] — 60 Hz — SIDEFLOW (con't.)



Air

Airflow Performance Data  
RGED Series

| Airflow     |           | AIRFLOW CORRECTION FACTORS * |          |            |                                         | COMPONENT AIRFLOW RESISTANCE                                           |                                                                       |                         |                          |  |
|-------------|-----------|------------------------------|----------|------------|-----------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------|--------------------------|--|
| CFM [L/s]   | Total MBH | Sensible MBH                 | Power kW | Wet Coil   | Horizontal Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF3415 &<br>Diffuser<br>RXMC-DD02 (Flush) | Concentric Diffuser<br>RXRN-AED3415 &<br>Diffuser<br>RXMC-DD02 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |  |
| 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



INTEGRATED AIR & WATER

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

| Air Flow<br>CFM [L/s] | Voltage 208/230, 460, 575 — 3 phase 60 Hz |      |            |      |            |      |            |      |            |      | External Static Pressure—Inches of Water [kPa] |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |  |  |
|-----------------------|-------------------------------------------|------|------------|------|------------|------|------------|------|------------|------|------------------------------------------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|--|--|
|                       | Model RGEDZ*150*                          |      | 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]           | 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 | 1105       | 3285 | 1119       | 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 | 1126       | 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: A/F-Drive left of the bold line, B/G-Drive right of bold lines.

| Drive Package  | A          |     |            |     |     | B           |      |      |      |            |
|----------------|------------|-----|------------|-----|-----|-------------|------|------|------|------------|
| Motor H.P. [W] | 3 [1118.5] |     |            |     |     | 5 [2237.1]  |      |      |      |            |
| Blower Sheave  | AK71H      |     |            |     |     | AK79H       |      |      |      |            |
| Motor Sheave   | 1VL44*7/8  |     |            |     |     | 1VP60*1x1/8 |      |      |      |            |
| Belt           | A48        |     |            |     |     | A52         |      |      |      |            |
| Turns Open     | 0          | 1   | 2          | 3   | 4   | 5           | 0    | 1    | 2    | 3          |
| RPM            | 1003       | 958 | <b>912</b> | 863 | 814 | 764         | 1220 | 1171 | 1127 | 1085       |
|                |            |     |            |     |     |             |      |      |      | <b>994</b> |

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 (con't.)

| Airflow     | AIRFLOW CORRECTION FACTORS * |           |              |          | COMPONENT AIRFLOW RESISTANCE |                                       |                                                                                  |                                                                                 |                         |                          |
|-------------|------------------------------|-----------|--------------|----------|------------------------------|---------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|
|             | CFM [L/s]                    | Total MBH | Sensible MBH | Power kW | Wet Coil                     | Vertical Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF3618 &<br>Concentric Adapter<br>RXMC-DD03 (Flush) | Concentric Diffuser<br>RXRN-AED3618 &<br>Concentric Adapter<br>RXMC-DD03 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |
|             |                              |           |              |          |                              |                                       | Resistance — Inches of Water [kPa]                                               |                                                                                 |                         |                          |
|             |                              |           |              |          |                              |                                       |                                                                                  |                                                                                 |                         |                          |
| 4000 [1888] | 1.01                         | 1.03      | 1.01         | 1.01     | 0.15 [0.04]                  | 0.16 [0.04]                           | 0.76 [0.19]                                                                      | 0.68 [0.17]                                                                     | 0.132 [0.03]            | 0.108 [0.03]             |
| 4100 [1935] | 1.02                         | 1.04      | 1.01         | 1.01     | 0.16 [0.04]                  | 0.17 [0.04]                           | 0.79 [0.20]                                                                      | 0.72 [0.18]                                                                     | 0.136 [0.03]            | 0.114 [0.03]             |
| 4200 [1982] | 1.02                         | 1.06      | 1.01         | 1.01     | 0.17 [0.04]                  | 0.19 [0.05]                           | 0.82 [0.20]                                                                      | 0.75 [0.19]                                                                     | 0.140 [0.03]            | 0.120 [0.03]             |
| 4300 [2029] | 1.03                         | 1.07      | 1.01         | 1.01     | 0.17 [0.04]                  | 0.20 [0.05]                           | 0.86 [0.21]                                                                      | 0.79 [0.20]                                                                     | 0.144 [0.03]            | 0.126 [0.03]             |
| 4400 [2076] | 1.03                         | 1.08      | 1.01         | 1.01     | 0.18 [0.05]                  | 0.21 [0.05]                           | 0.90 [0.22]                                                                      | 0.83 [0.21]                                                                     | 0.148 [0.04]            | 0.132 [0.03]             |
| 4500 [2123] | 1.04                         | 1.09      | 1.02         | 1.02     | 0.19 [0.05]                  | 0.23 [0.06]                           | 0.94 [0.23]                                                                      | 0.86 [0.21]                                                                     | 0.152 [0.04]            | 0.138 [0.03]             |
| 4600 [2171] | 1.04                         | 1.11      | 1.02         | 1.02     | 0.20 [0.05]                  | 0.24 [0.06]                           | 0.98 [0.24]                                                                      | 0.89 [0.22]                                                                     | 0.156 [0.04]            | 0.145 [0.04]             |
| 4700 [2218] | 1.05                         | 1.12      | 1.02         | 1.02     | 0.21 [0.05]                  | 0.26 [0.06]                           | 1.02 [0.25]                                                                      | 0.94 [0.23]                                                                     | 0.160 [0.04]            | 0.151 [0.04]             |
| 4800 [2265] | 1.05                         | 1.13      | 1.02         | 1.02     | 0.21 [0.05]                  | 0.28 [0.07]                           | 1.06 [0.26]                                                                      | 0.98 [0.24]                                                                     | 0.164 [0.04]            | 0.157 [0.04]             |
| 4900 [2312] | 1.06                         | 1.14      | 1.02         | 1.02     | 0.22 [0.06]                  | 0.29 [0.07]                           | 1.10 [0.27]                                                                      | 1.01 [0.25]                                                                     | 0.168 [0.04]            | 0.163 [0.04]             |
| 5000 [2359] | 1.06                         | 1.16      | 1.03         | 1.03     | 0.23 [0.06]                  | 0.31 [0.08]                           | 1.14 [0.28]                                                                      | 1.04 [0.26]                                                                     | 0.172 [0.04]            | 0.169 [0.04]             |
| 5100 [2407] | 1.07                         | 1.17      | 1.03         | 1.03     | 0.24 [0.06]                  | 0.33 [0.08]                           | 1.18 [0.29]                                                                      | 1.07 [0.27]                                                                     | 0.176 [0.04]            | 0.175 [0.04]             |
| 5200 [2454] | 1.07                         | 1.18      | 1.03         | 1.03     | 0.25 [0.06]                  | 0.35 [0.09]                           | 1.22 [0.30]                                                                      | 1.10 [0.27]                                                                     | 0.180 [0.04]            | 0.182 [0.04]             |
| 5300 [2501] | 1.08                         | 1.19      | 1.03         | 1.03     | 0.26 [0.06]                  | 0.36 [0.09]                           | 1.27 [0.32]                                                                      | 1.15 [0.29]                                                                     | 0.184 [0.05]            | 0.188 [0.05]             |
| 5400 [2548] | 1.08                         | 1.21      | 1.03         | 1.03     | 0.27 [0.07]                  | 0.38 [0.09]                           | 1.33 [0.33]                                                                      | 1.20 [0.30]                                                                     | 0.188 [0.05]            | 0.194 [0.05]             |
| 5500 [2595] | 1.09                         | 1.22      | 1.04         | 1.04     | 0.28 [0.07]                  | 0.40 [0.10]                           | 1.37 [0.34]                                                                      | 1.25 [0.31]                                                                     | 0.192 [0.05]            | 0.200 [0.05]             |
| 5600 [2643] | 1.09                         | 1.23      | 1.04         | 1.04     | 0.29 [0.07]                  | 0.42 [0.10]                           | 1.42 [0.35]                                                                      | 1.30 [0.32]                                                                     | 0.196 [0.05]            | 0.206 [0.05]             |
| 5700 [2690] | 1.10                         | 1.24      | 1.04         | 1.04     | 0.30 [0.07]                  | 0.44 [0.11]                           | 1.47 [0.37]                                                                      | 1.34 [0.33]                                                                     | 0.200 [0.05]            | 0.212 [0.05]             |
| 5800 [2737] | 1.10                         | 1.26      | 1.04         | 1.04     | 0.31 [0.08]                  | 0.46 [0.11]                           | 1.52 [0.38]                                                                      | 1.38 [0.34]                                                                     | 0.204 [0.05]            | 0.219 [0.05]             |
| 5900 [2784] | 1.10                         | 1.27      | 1.05         | 1.05     | 0.32 [0.08]                  | 0.48 [0.12]                           | 1.56 [0.39]                                                                      | 1.42 [0.35]                                                                     | 0.208 [0.05]            | 0.225 [0.05]             |
| 6000 [2831] | 1.11                         | 1.28      | 1.05         | 1.05     | 0.33 [0.08]                  | 0.51 [0.13]                           | 1.60 [0.40]                                                                      | 1.45 [0.36]                                                                     | 0.212 [0.05]            | 0.231 [0.06]             |

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

[ ] Designates Metric Conversions



Air

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

| Air Flow<br>CFM [L/s] | Voltage 208/230, 460, 575 — 3 phase 60 Hz |      |            |      |            |      |            |      |            |      | External Static Pressure—Inches of Water [kPa] |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |      |      |   |   |   |
|-----------------------|-------------------------------------------|------|------------|------|------------|------|------------|------|------------|------|------------------------------------------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------|------|---|---|---|
|                       | Model RGEDZ*150*                          |      | 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    |      |      |   |   |   |
| 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       | 2538 | 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        | 2433 | 944        | 2516 | 967        | 2600 | 988                                            | 2684 | 1009       | 2770 | 1030       | 2856 | 1049       | 2943 | 1068       | 3031 | 1086       | 3120 | 1104       | 3210 | 1121       | 3340 | 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 | 1135       | 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                                           | 3889 | 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: A/F-Drive left of the bold line, B/G-Drive right of bold lines.

| Drive Package  | A          |     |            |     |     | B           |      |      |      |             |
|----------------|------------|-----|------------|-----|-----|-------------|------|------|------|-------------|
| Motor H.P. [W] | 3 [2237.1] |     |            |     |     | 5 [3728.5]  |      |      |      |             |
| Blower Sheave  | AK71H      |     |            |     |     | AK79H       |      |      |      |             |
| Motor Sheave   | 1VL44*7/8  |     |            |     |     | 1VP60*1x1/8 |      |      |      |             |
| Belt           | A48        |     |            |     |     | A52         |      |      |      |             |
| Turns Open     | 0          | 1   | 2          | 3   | 4   | 5           | 0    | 1    | 2    | 3           |
| RPM            | 1002       | 955 | <b>909</b> | 862 | 813 | 765         | 1208 | 1171 | 1127 | 1084        |
|                |            |     |            |     |     |             |      |      |      | <b>1038</b> |
|                |            |     |            |     |     |             |      |      |      | <b>995</b>  |

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 (con't.)



Air

Airflow Performance Data  
RGED Series

| Airflow     | AIRFLOW CORRECTION FACTORS * |           |              |          | COMPONENT AIRFLOW RESISTANCE |                                       |                                                                                  |                                                                                 |                         |                          |
|-------------|------------------------------|-----------|--------------|----------|------------------------------|---------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------|--------------------------|
|             | CFM [L/s]                    | Total MBH | Sensible MBH | Power KW | Wet Coil                     | Vertical Economizer<br>RA Damper Open | Concentric Diffuser<br>RXRN-AEF3618 &<br>Concentric Adapter<br>RXMC-DD03 (Flush) | Concentric Diffuser<br>RXRN-AED3618 &<br>Concentric Adapter<br>RXMC-DD03 (Drop) | Pressure Drop<br>MERV 8 | Pressure Drop<br>MERV 13 |
|             |                              |           |              |          |                              |                                       | Resistance — Inches of Water [kPa]                                               |                                                                                 |                         |                          |
| 4000 [1888] | 1.01                         | 1.03      | 1.01         | 1.01     | 0.15 [.04]                   | 0.73 [0.18]                           | 0.76 [.19]                                                                       | 0.68 [.17]                                                                      | 0.132 [.03]             | 0.108 [.03]              |
| 4100 [1935] | 1.02                         | 1.04      | 1.01         | 1.01     | 0.16 [.04]                   | 0.78 [0.19]                           | 0.79 [.20]                                                                       | 0.72 [.18]                                                                      | 0.136 [.03]             | 0.114 [.03]              |
| 4200 [1982] | 1.02                         | 1.06      | 1.01         | 1.01     | 0.17 [.04]                   | 0.83 [0.21]                           | 0.82 [.20]                                                                       | 0.75 [.19]                                                                      | 0.140 [.03]             | 0.120 [.03]              |
| 4300 [2029] | 1.03                         | 1.07      | 1.01         | 1.01     | 0.17 [.04]                   | 0.88 [0.22]                           | 0.86 [.21]                                                                       | 0.79 [.20]                                                                      | 0.144 [.03]             | 0.126 [.03]              |
| 4400 [2076] | 1.03                         | 1.08      | 1.01         | 1.01     | 0.18 [.05]                   | 0.93 [0.23]                           | 0.90 [.22]                                                                       | 0.83 [.21]                                                                      | 0.148 [.04]             | 0.132 [.03]              |
| 4500 [2123] | 1.04                         | 1.09      | 1.02         | 1.02     | 0.19 [.05]                   | 0.98 [0.24]                           | 0.94 [.23]                                                                       | 0.86 [.21]                                                                      | 0.152 [.04]             | 0.138 [.03]              |
| 4600 [2171] | 1.04                         | 1.11      | 1.02         | 1.02     | 0.20 [.05]                   | 1.03 [0.26]                           | 0.98 [.24]                                                                       | 0.89 [.22]                                                                      | 0.156 [.04]             | 0.145 [.04]              |
| 4700 [2218] | 1.05                         | 1.12      | 1.02         | 1.02     | 0.21 [.05]                   | 1.07 [0.27]                           | 1.02 [.25]                                                                       | 0.94 [.23]                                                                      | 0.160 [.04]             | 0.151 [.04]              |
| 4800 [2265] | 1.05                         | 1.13      | 1.02         | 1.02     | 0.21 [.05]                   | 1.12 [0.28]                           | 1.06 [.26]                                                                       | 0.98 [.24]                                                                      | 0.164 [.04]             | 0.157 [.04]              |
| 4900 [2312] | 1.06                         | 1.14      | 1.02         | 1.02     | 0.22 [.06]                   | 1.17 [0.29]                           | 1.10 [.27]                                                                       | 1.01 [.25]                                                                      | 0.168 [.04]             | 0.163 [.04]              |
| 5000 [2359] | 1.06                         | 1.16      | 1.03         | 1.03     | 0.23 [.06]                   | 1.21 [0.30]                           | 1.14 [.28]                                                                       | 1.04 [.26]                                                                      | 0.172 [.04]             | 0.169 [.04]              |
| 5100 [2407] | 1.07                         | 1.17      | 1.03         | 1.03     | 0.24 [.06]                   | 1.26 [0.31]                           | 1.18 [.29]                                                                       | 1.07 [.27]                                                                      | 0.176 [.04]             | 0.175 [.04]              |
| 5200 [2454] | 1.07                         | 1.18      | 1.03         | 1.03     | 0.25 [.06]                   | 1.30 [0.32]                           | 1.22 [.30]                                                                       | 1.10 [.27]                                                                      | 0.180 [.04]             | 0.182 [.04]              |
| 5300 [2501] | 1.08                         | 1.19      | 1.03         | 1.03     | 0.26 [.06]                   | 1.35 [0.34]                           | 1.27 [.32]                                                                       | 1.15 [.29]                                                                      | 0.184 [.05]             | 0.188 [.05]              |
| 5400 [2548] | 1.08                         | 1.21      | 1.03         | 1.03     | 0.27 [.07]                   | 1.39 [0.35]                           | 1.33 [.33]                                                                       | 1.20 [.30]                                                                      | 0.188 [.05]             | 0.194 [.05]              |
| 5500 [2595] | 1.09                         | 1.22      | 1.04         | 1.04     | 0.28 [.07]                   | 1.44 [0.36]                           | 1.37 [.34]                                                                       | 1.25 [.31]                                                                      | 0.192 [.05]             | 0.200 [.05]              |
| 5600 [2643] | 1.09                         | 1.23      | 1.04         | 1.04     | 0.29 [.07]                   | 1.48 [0.37]                           | 1.42 [.35]                                                                       | 1.30 [.32]                                                                      | 0.196 [.05]             | 0.206 [.05]              |
| 5700 [2690] | 1.10                         | 1.24      | 1.04         | 1.04     | 0.30 [.07]                   | 1.52 [0.38]                           | 1.47 [.37]                                                                       | 1.34 [.33]                                                                      | 0.200 [.05]             | 0.212 [.05]              |
| 5800 [2737] | 1.10                         | 1.26      | 1.04         | 1.04     | 0.31 [.08]                   | 1.57 [0.39]                           | 1.52 [.38]                                                                       | 1.38 [.34]                                                                      | 0.204 [.05]             | 0.219 [.05]              |
| 5900 [2784] | 1.10                         | 1.27      | 1.05         | 1.05     | 0.32 [.08]                   | 1.61 [0.40]                           | 1.56 [.39]                                                                       | 1.42 [.35]                                                                      | 0.208 [.05]             | 0.225 [.05]              |
| 6000 [2831] | 1.11                         | 1.28      | 1.05         | 1.05     | 0.33 [.08]                   | 1.65 [0.41]                           | 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



INTEGRATED AIR & WATER

## ELECTRICAL DATA – RGEDZT SERIES

|                  |                                            | 090ACF15<br>090ACF20 | 090ACG15<br>090ACG20<br>090ACH15<br>090ACH20 | 090ADF15<br>090ADF20 | 090ADG15<br>090ADG20<br>090ADH15<br>090ADH20 |
|------------------|--------------------------------------------|----------------------|----------------------------------------------|----------------------|----------------------------------------------|
| Unit Information | Unit Operating Voltage Range               | 187-253              | 187-253                                      | 414-506              | 414-506                                      |
|                  | Volts                                      | 208/230              | 208/230                                      | 460                  | 460                                          |
|                  | Phase                                      | 3                    | 3                                            | 3                    | 3                                            |
|                  | Hz                                         | 60                   | 60                                           | 60                   | 60                                           |
|                  | Minimum Circuit Ampacity                   | 41                   | 44                                           | 17                   | 19                                           |
|                  | Minimum Overcurrent Protection Device Size | 50                   | 50                                           | 20                   | 25                                           |
|                  | Maximum Overcurrent Protection Device Size | 60                   | 60                                           | 25                   | 25                                           |
| Compressor Motor | No.                                        | 1                    | 1                                            | 1                    | 1                                            |
|                  | Volts                                      | 208/230              | 208/230                                      | 460                  | 460                                          |
|                  | Phase                                      | 3                    | 3                                            | 3                    | 3                                            |
|                  | RPM                                        | 3450                 | 3450                                         | 3450                 | 3450                                         |
|                  | HP, Compressor 1                           | 7                    | 7                                            | 7                    | 7                                            |
|                  | Amps (RLA), Comp. 1                        | 25.3                 | 25.3                                         | 9.6                  | 9.6                                          |
|                  | Amps (LRA), Comp. 1                        | 184                  | 184                                          | 84                   | 84                                           |
| Condenser Motor  | No.                                        | 2                    | 2                                            | 2                    | 2                                            |
|                  | Volts                                      | 208/230              | 208/230                                      | 460                  | 460                                          |
|                  | Phase                                      | 1                    | 1                                            | 1                    | 1                                            |
|                  | HP                                         | 1/5                  | 1/5                                          | 1/5                  | 1/5                                          |
|                  | Amps (FLA, each)                           | 1.2                  | 1.2                                          | 0.8                  | 0.8                                          |
|                  | Amps (LRA, each)                           | 2.3                  | 2.3                                          | 1.4                  | 1.4                                          |
| Evaporator Fan   | No.                                        | 1                    | 1                                            | 1                    | 1                                            |
|                  | Volts                                      | 208/230              | 208/230                                      | 460                  | 460                                          |
|                  | Phase                                      | 3                    | 3                                            | 3                    | 3                                            |
|                  | HP                                         | 2                    | 3                                            | 2                    | 3                                            |
|                  | Amps (FLA, each)                           | 6.6                  | 9.1                                          | 3.2                  | 4.6                                          |
|                  | Amps (LRA, each)                           | 22.5                 | 74.5                                         | 22.5                 | 38.1                                         |

## ELECTRICAL DATA – RGEDZT SERIES

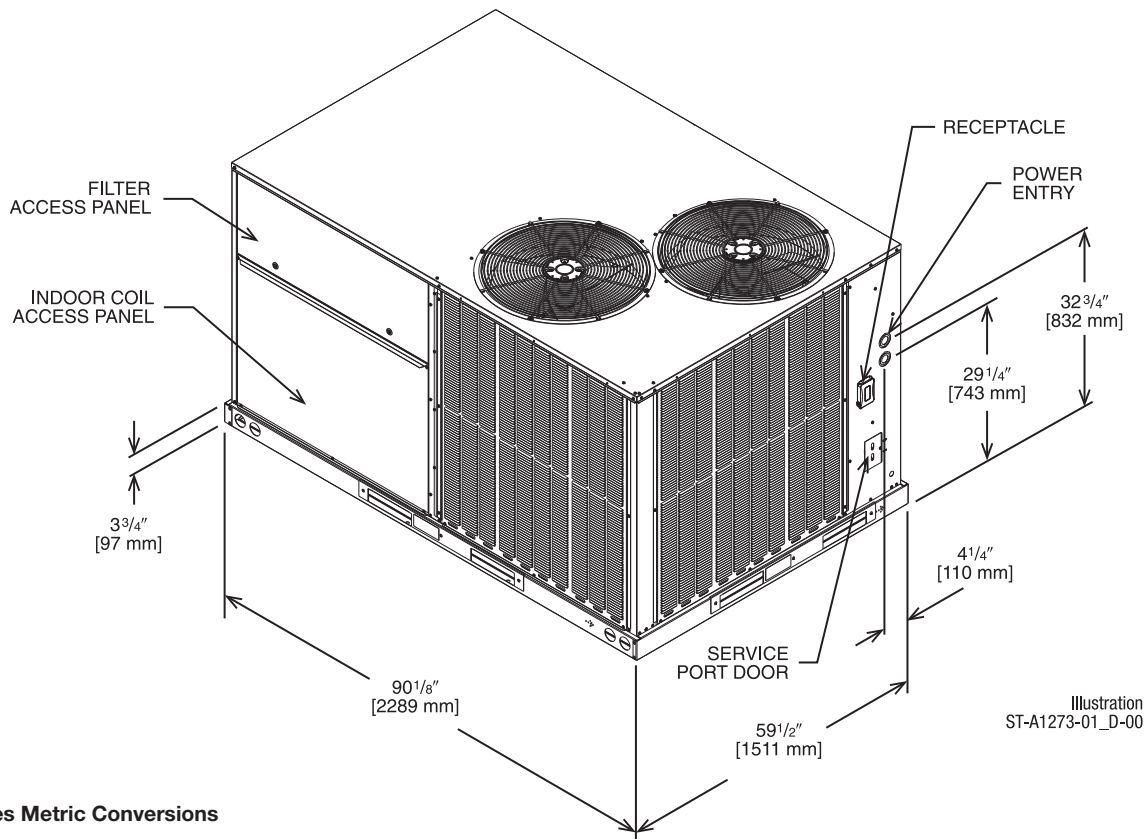
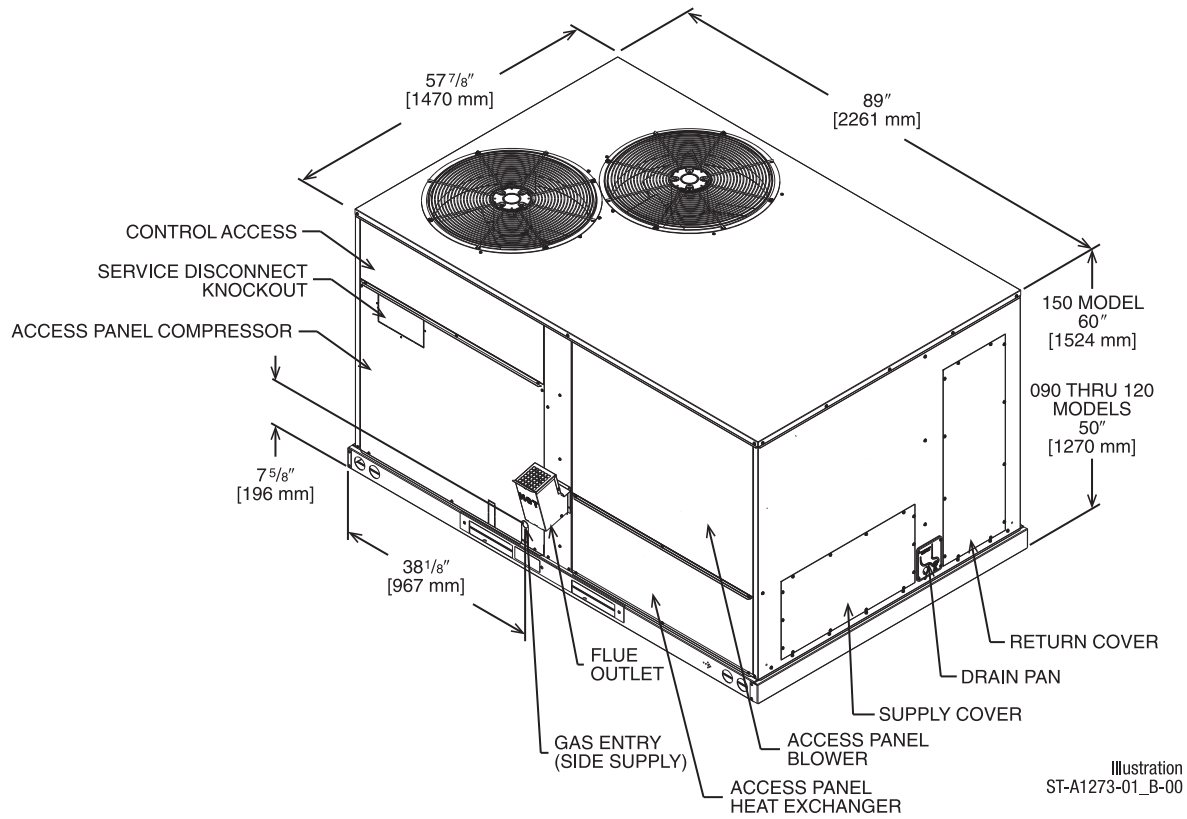
|                         |                                            | <b>102ACF15<br/>102ACF22</b> | <b>102ACG15<br/>102ACG22</b> | <b>102ACH15<br/>102ACH22</b> | <b>102ADF15<br/>102ADF22</b> | <b>102ADG15<br/>102ADG22</b> | <b>102ADH15<br/>102ADH22</b> |
|-------------------------|--------------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <b>Unit Information</b> | Unit Operating Voltage Range               | 187-253                      | 187-253                      | 187-253                      | 414-506                      | 414-506                      | 414-506                      |
|                         | Volts                                      | 208/230                      | 208/230                      | 208/230                      | 460                          | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            | 3                            | 3                            |
|                         | Hz                                         | 60                           | 60                           | 60                           | 60                           | 60                           | 60                           |
|                         | Minimum Circuit Ampacity                   | 46                           | 48                           | 51                           | 21                           | 22                           | 24                           |
|                         | Minimum Overcurrent Protection Device Size | 60                           | 60                           | 60                           | 25                           | 25                           | 30                           |
|                         | Maximum Overcurrent Protection Device Size | 70                           | 70                           | 70                           | 30                           | 30                           | 35                           |
| <b>Compressor Motor</b> | No.                                        | 1                            | 1                            | 1                            | 1                            | 1                            | 1                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 208/230                      | 460                          | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            | 3                            | 3                            |
|                         | RPM                                        | 3450                         | 3450                         | 3450                         | 3450                         | 3450                         | 3450                         |
|                         | HP, Compressor 1                           | 7 1/2                        | 7 1/2                        | 7 1/2                        | 7 1/2                        | 7 1/2                        | 7 1/2                        |
|                         | Amps (RLA), Comp. 1                        | 28.8                         | 28.8                         | 28.8                         | 12.5                         | 12.5                         | 12.5                         |
|                         | Amps (LRA), Comp. 1                        | 191                          | 191                          | 191                          | 100                          | 100                          | 100                          |
| <b>Condenser Motor</b>  | No.                                        | 2                            | 2                            | 2                            | 2                            | 2                            | 2                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 208/230                      | 460                          | 460                          | 460                          |
|                         | 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                          | 1.2                          | 0.8                          | 0.8                          | 0.8                          |
|                         | Amps (LRA, each)                           | 2.3                          | 2.3                          | 2.3                          | 1.4                          | 1.4                          | 1.4                          |
| <b>Evaporator Fan</b>   | No.                                        | 1                            | 1                            | 1                            | 1                            | 1                            | 1                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 208/230                      | 460                          | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            | 3                            | 3                            |
|                         | HP                                         | 2                            | 3                            | 3                            | 2                            | 3                            | 3                            |
|                         | Amps (FLA, each)                           | 7                            | 9.1                          | 12                           | 3.5                          | 4.6                          | 6                            |
|                         | Amps (LRA, each)                           | 45                           | 74.5                         | 74.5                         | 22.5                         | 38.1                         | 38.1                         |

## ELECTRICAL DATA – RGEDZT SERIES

|                         |                                            | <b>120ACF15<br/>120ACF22</b> | <b>120ACG15<br/>120ACG22</b> | <b>120ACH15<br/>120ACH22</b> | <b>120ADF15<br/>120ADF22</b> | <b>120ADG15<br/>120ADG22</b> | <b>120ADH15<br/>120ADH22</b> |
|-------------------------|--------------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <b>Unit Information</b> | Unit Operating Voltage Range               | 187-253                      | 187-253                      | 187-253                      | 414-506                      | 414-506                      | 414-506                      |
|                         | Volts                                      | 208/230                      | 208/230                      | 208/230                      | 460                          | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            | 3                            | 3                            |
|                         | Hz                                         | 60                           | 60                           | 60                           | 60                           | 60                           | 60                           |
|                         | Minimum Circuit Ampacity                   | 54                           | 56                           | 58                           | 26                           | 27                           | 28                           |
|                         | Minimum Overcurrent Protection Device Size | 70                           | 70                           | 70                           | 30                           | 30                           | 35                           |
|                         | Maximum Overcurrent Protection Device Size | 80                           | 80                           | 90                           | 40                           | 40                           | 30                           |
| <b>Compressor Motor</b> | No.                                        | 1                            | 1                            | 1                            | 1                            | 1                            | 1                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 208/230                      | 460                          | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            | 3                            | 3                            |
|                         | RPM                                        | 3450                         | 3450                         | 3450                         | 3450                         | 3450                         | 3450                         |
|                         | HP, Compressor 1                           | 10                           | 10                           | 10                           | 10                           | 10                           | 10                           |
|                         | Amps (RLA), Comp. 1                        | 32.6                         | 32.6                         | 32.6                         | 14.8                         | 14.8                         | 14.8                         |
|                         | Amps (LRA), Comp. 1                        | 240                          | 240                          | 240                          | 130                          | 130                          | 130                          |
| <b>Condenser Motor</b>  | No.                                        | 2                            | 2                            | 2                            | 2                            | 2                            | 2                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 208/230                      | 460                          | 460                          | 460                          |
|                         | 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                          | 2.4                          | 1.4                          | 1.4                          | 1.4                          |
|                         | Amps (LRA, each)                           | 4.7                          | 4.7                          | 4.7                          | 2.4                          | 2.4                          | 2.4                          |
| <b>Evaporator Fan</b>   | No.                                        | 1                            | 1                            | 1                            | 1                            | 1                            | 1                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 208/230                      | 460                          | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            | 3                            | 3                            |
|                         | HP                                         | 2                            | 2                            | 2                            | 2                            | 3                            | 3                            |
|                         | Amps (FLA, each)                           | 7.9                          | 10.1                         | 12                           | 3.9                          | 5.1                          | 6                            |
|                         | Amps (LRA, each)                           | 45                           | 74.5                         | 74.5                         | 22.5                         | 38.1                         | 38.1                         |

## ELECTRICAL DATA – RGEDZT SERIES

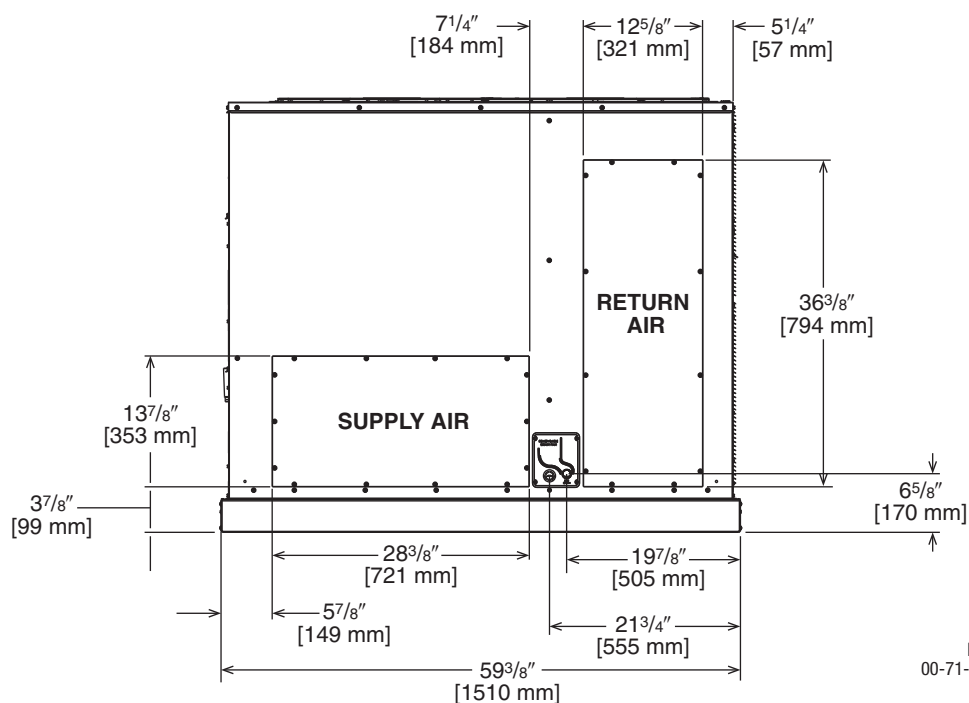
|                         |                                            | <b>150ACF15<br/>150ACF22</b> | <b>150ACG15<br/>150ACG22</b> | <b>150ADF15<br/>150ADF22</b> | <b>150ADG15<br/>150ADG22</b> |
|-------------------------|--------------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| <b>Unit Information</b> | Unit Operating Voltage Range               | 187-253                      | 187-253                      | 414-506                      | 414-506                      |
|                         | Volts                                      | 208/230                      | 208/230                      | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            |
|                         | Hz                                         | 60                           | 60                           | 60                           | 60                           |
|                         | Minimum Circuit Ampacity                   | 70                           | 75                           | 34                           | 37                           |
|                         | Minimum Overcurrent Protection Device Size | 80                           | 90                           | 40                           | 40                           |
|                         | Maximum Overcurrent Protection Device Size | 90                           | 90                           | 40                           | 45                           |
| <b>Compressor Motor</b> | No.                                        | 2                            | 2                            | 2                            | 2                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            |
|                         | RPM                                        | 3450                         | 3450                         | 3450                         | 3450                         |
|                         | HP, Compressor 1                           | 6                            | 6                            | 6                            | 6                            |
|                         | Amps (RLA), Comp. 1                        | 22.4                         | 22.4                         | 10.6                         | 10.6                         |
|                         | Amps (LRA), Comp. 1                        | 164                          | 164                          | 100                          | 100                          |
|                         | HP, Compressor 2                           | 6                            | 6                            | 6                            | 6                            |
|                         | Amps (RLA), Comp. 2                        | 22.4                         | 22.4                         | 10.6                         | 10.6                         |
|                         | Amps (LRA), Comp. 2                        | 164                          | 164                          | 100                          | 100                          |
| <b>Condenser Motor</b>  | No.                                        | 2                            | 2                            | 2                            | 2                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 460                          | 460                          |
|                         | Phase                                      | 1                            | 1                            | 1                            | 1                            |
|                         | HP                                         | 3/4                          | 3/4                          | 3/4                          | 3/4                          |
|                         | Amps (FLA, each)                           | 4.2                          | 4.2                          | 2.3                          | 2.3                          |
|                         | Amps (LRA, each)                           | 10.1                         | 10.1                         | 4.9                          | 4.9                          |
|                         |                                            |                              |                              |                              |                              |
| <b>Evaporator Fan</b>   | No.                                        | 1                            | 1                            | 1                            | 1                            |
|                         | Volts                                      | 208/230                      | 208/230                      | 460                          | 460                          |
|                         | Phase                                      | 3                            | 3                            | 3                            | 3                            |
|                         | HP                                         | 3                            | 5                            | 3                            | 5                            |
|                         | Amps (FLA, each)                           | 10.4                         | 16                           | 5.2                          | 8                            |
|                         | Amps (LRA, each)                           | 74.5                         | 82                           | 38.1                         | 41                           |
|                         |                                            |                              |                              |                              |                              |



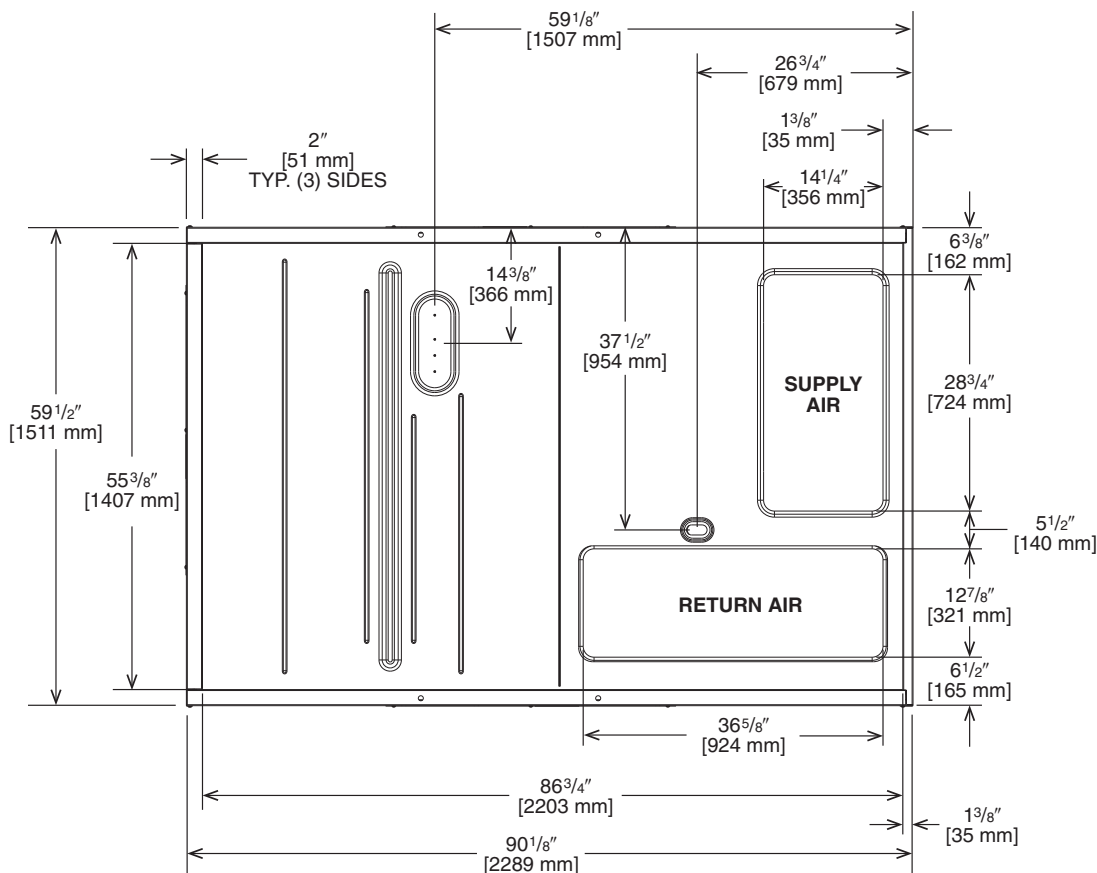
[ ] Designates Metric Conversions



## SUPPLY AND RETURN DIMENSIONS FOR HORIZONTAL APPLICATIONS

Illustration  
00-71-3721A-TS

## SUPPLY AND RETURN DIMENSIONS FOR DOWNFLOW APPLICATIONS

Illustration  
ST-A1273-01\_A

[ ] 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% |

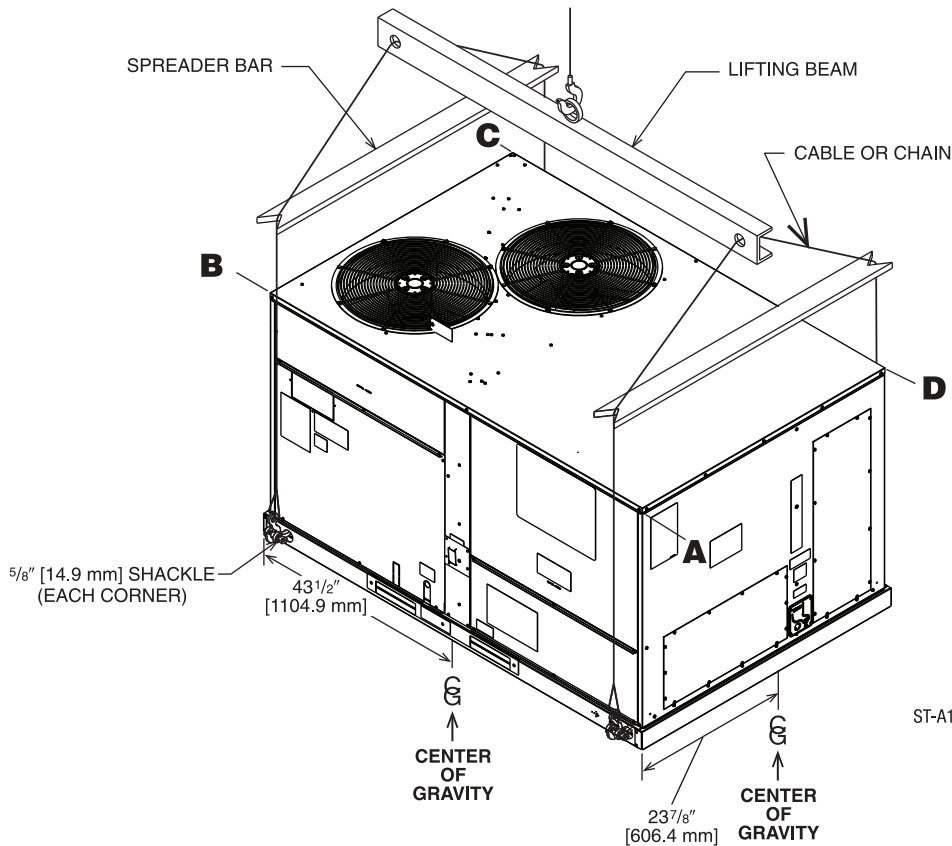


Illustration  
ST-A1273-01\_J-00

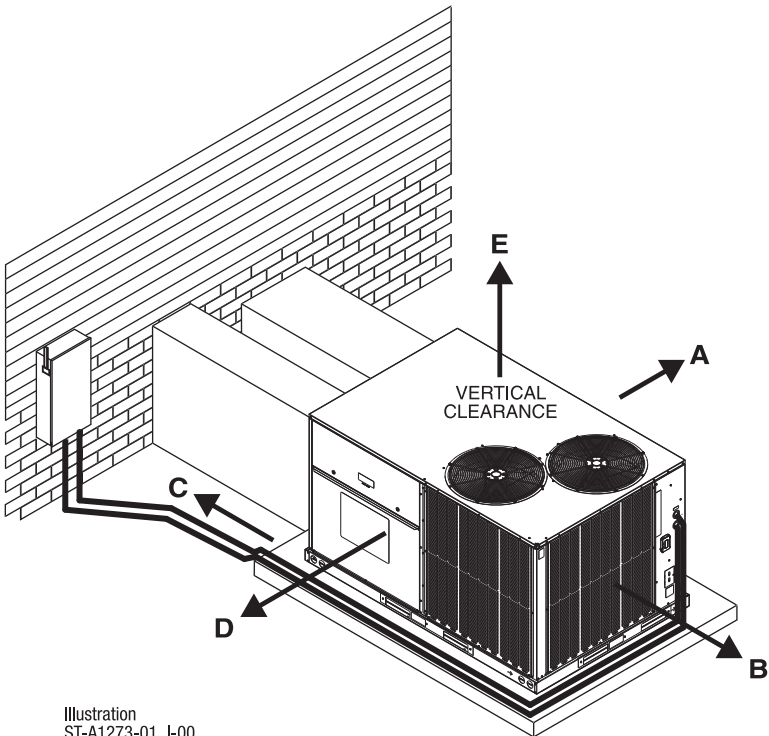


Illustration  
ST-A1273-01\_I-00

## CLEARANCES

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

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

① 18" [457 mm] MINIMUM IF DRAINPAN WILL NOT BE REMOVED.

② 48" [1219 MM] MINIMUM IF ECONOMIZER IS INSTALLED.

[ ] Designates Metric Conversions



Air

Field-Installed Accessories  
RGED Series

## FIELD-INSTALLED ACCESSORY EQUIPMENT

| Accessory Description                         | Model Number   | Shipping Weight<br>Lbs. [kg] | Installed Weight<br>Lbs. [kg] | Factory Installation Available? |
|-----------------------------------------------|----------------|------------------------------|-------------------------------|---------------------------------|
| Economizer w/Single Enthalpy (Downflow)       | RXRD-01MDDAM3  | 86 [39.0]                    | 57 [25.9]                     | Yes                             |
| Economizer w/Single Enthalpy (Horizontal)     | RXRD-01MDHAM3  | 84 [38.1]                    | 55 [24.9]                     | No                              |
| Economizer-w/Single Enthalpy (Downflow) DDC   | RXRD-01MDDBM3  | 86 [39.0]                    | 57 [25.9]                     | Yes                             |
| Economizer w/Single Enthalpy (Horizontal) DDC | RXRD-01MDHBM3  | 84 [38.1]                    | 55 [24.9]                     | No                              |
| Dual Enthalpy Kit                             | RXRX-BV01      | 1 [.5]                       | 1 [.5]                        | No                              |
| Dual Enthalpy Kit DDC                         | RXRX-BV02      | 1 [.5]                       | 1 [.5]                        | No                              |
| Carbon Dioxide Sensor (Wall Mount)            | RXRX-AR02      | 3 [1.4]                      | 2 [1.0]                       | No                              |
| Power Exhaust                                 | RXRX-CDF01C    | 58 [26.3]                    | 48 [21.8]                     | No                              |
| Power Exhaust                                 | RXRX-CDF01D    | 50 [22.7]                    | 44 [20.0]                     | No                              |
| Manual Fresh Air Damper                       | RXRF-ADA1      | 15 [6.8]                     | 12 [5.4]                      | No                              |
| Motorized Fresh Air Damper                    | RXRF-ADB1      | 38 [17.2]                    | 31 [14.06]                    | No                              |
| Motorized Fresh Air Damper (DDC)              | RXRF-ADC1      | 38 [17.2]                    | 31 [14.06]                    | No                              |
| Roofcurb, 14"                                 | RXKG-DDD14     | 109 [49.4]                   | 104 [47.2]                    | No                              |
| Roofcurb, 24"                                 | RXKG-DDD24     | 145 [65.8]                   | 140 [63.5]                    | No                              |
| Roofcurb Adapter*                             | RXRX-DDCAE     | 235 [106.6]                  | 215 [97.5]                    | 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   | 250 [113.4]                  | 130 [59]                      | No                              |
| Concentric Diffuser 12.5 Ton Flush            | RXRN-AEF3618   | 275 [124.7]                  | 170 [77.1]                    | 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   | 270 [122.5]                  | 160 [72.6]                    | No                              |
| Concentric Diffuser 12.5 Ton Drop             | RXRN-AED3618   | 300 [136.1]                  | 180 [81.6]                    | No                              |
| Concentric Adapter 7.5/8.5 Ton Drop           | RXMC-DD01      | 25 [11.3]                    | 20 [9.1]                      | No                              |
| Concentric Adapter 10 Ton Drop                | RXMC-DD02      | 75 [34]                      | 65 [29.5]                     | No                              |
| Concentric Adapter 12.5 Ton Drop              | RXMC-DD03      | 75 [34]                      | 65 [29.5]                     | No                              |
| Outdoor Coil Louver Kit - GED-090/102/120     | RXRX-ADD04A    | 52 [23.6]                    | 47 [21.3]                     | Yes                             |
| Outdoor Coil Louver Kit - GED-150             | RXRX-ADD04B    | 43 [19.5]                    | 39 [17.7]                     | Yes                             |
| Unwired Convenience Outlet                    | RXRX-BN01      | 2 [1.0]                      | 1.5 [.7]                      | Yes                             |
| Unfused Service Disconnect                    | RXRX-BP01      | 10 [4.5]                     | 9 [4.1]                       | Yes                             |
| Comfort Alert (1 Per Compressor)              | RXRX-AZ02      | 3 [1.5]                      | 2 [0.9]                       | Yes                             |
| BACnet Communication Card                     | RXRX-AY01      | 1 [0.5]                      | 1 [0.5]                       | No                              |
| LonWorks Communication Card                   | RXRX-AY02      | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Room Humidity Sensor                          | RHC-ZNS4       | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Room Temperature and Relative Humidity Sensor | RHC-ZNS5       | 1 [0.5]                      | 1 [0.5]                       | No                              |
| Low-Ambient Control Kit                       | RXRZ-A04       | 4 [1.8]                      | 3 [1.4]                       | Yes                             |
| Freeze Stat Kit                               | RXRX-AM01      | 2 [1.0]                      | 1.5 [.7]                      | Yes                             |
| LP Kit                                        | RXGJ-FP39      | 2 [1.0]                      | 0 [.0]                        | No                              |
| Flue Diverter                                 | RXRX-DFG04     | 5 [2.3]                      | 4 [1.8]                       | No                              |
| Variable Frequency Drive Kit                  | RXRX-AC02      | 9.1 [4.1]                    | 7.6 [3.4]                     | No                              |
|                                               | RXRX-AC03      | 11.7 [5.3]                   | 10.2 [4.6]                    | No                              |
|                                               | RXRX-AC05      | 11.7 [5.3]                   | 10.2 [4.6]                    | No                              |
|                                               | RXRX-AD02      | 9.4 [4.3]                    | 7.9 [3.6]                     | No                              |
|                                               | RXRX-AD03      | 12.3 [5.6]                   | 10.8 [4.9]                    | No                              |
|                                               | RXRX-AD05      | 12.3 [5.6]                   | 10.8 [4.9]                    | No                              |
|                                               | RXRX-CC02      | 9.1 [4.1]                    | 7.6 [3.4]                     | No                              |
|                                               | RXRX-CC03      | 11.7 [5.3]                   | 10.2 [4.6]                    | No                              |
|                                               | RXRX-CC05      | 11.7 [5.3]                   | 10.2 [4.6]                    | No                              |
|                                               | RXRX-CD02      | 9.4 [4.3]                    | 7.9 [3.6]                     | No                              |
|                                               | RXRX-CD03      | 12.3 [5.6]                   | 10.8 [4.9]                    | No                              |
|                                               | RXRX-CD05      | 12.3 [5.6]                   | 10.8 [4.9]                    | No                              |
| MERV 8 Filter 7.5 - 10 Ton                    | RXMF-M08A22020 | 2.0 [0.9]                    | 1 [0.45]                      | No                              |
| MERV 8 Filter 12.5 Ton                        | RXMF-M08A22520 | 2.0 [0.9]                    | 1 [0.45]                      | No                              |
| MERV 13 Filter 7.5 - 10 Ton                   | RXMF-M13A22020 | 2.0 [0.9]                    | 1 [0.45]                      | No                              |
| MERV 13 Filter 12.5 Ton                       | RXMF-M13A22520 | 2.0 [0.9]                    | 1 [0.45]                      | No                              |

NOTICE: Please refer to conversion kit index provided with the unit for LP conversion kit.

\*This adapter converts to "B" series units 1st generation.

[ ] Designates Metric Conversions





## FLUSH MOUNT ROOM TEMPERATURE SENSORS FOR NETWORKED DDC APPLICATIONS



### ROOM TEMPERATURE SENSOR with TIMED OVERRIDE BUTTON

**RHC-ZNS1**

10k $\Omega$  room temperature sensor transmits room temperature to DDC system. Timed override button allows tenant to change from unoccupied temperature setpoint to occupied temperature setpoint for a preset time.



### ROOM TEMPERATURE SENSOR with TIMED OVERRIDE BUTTON and STATUS INDICATOR

**RHC-ZNS2**

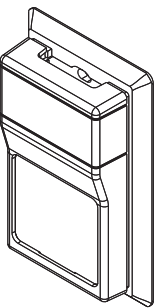
10k $\Omega$  room temperature sensor transmits room temperature to DDC system. Timed override button allows tenant to change from unoccupied temperature setpoint to occupied temperature setpoint for a preset time. Status Indicator Light transmits ALARM flash code to occupied space.



### ROOM TEMPERATURE SENSOR with SETPOINT ADJUSTMENT and TIMED OVERRIDE BUTTON

**RHC-ZNS3**

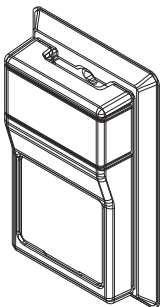
10k $\Omega$  room temperature sensor with setpoint adjustment transmits room temperature to DDC system along with desired occupied room temperature setpoint. Timed override button allows tenant to change from unoccupied temperature setpoint to occupied temperature setpoint for a preset time.



### ROOM HUMIDITY SENSOR

**RHC-ZNS4**

Transmits room relative humidity to DDC System.



### ROOM TEMPERATURE AND RELATIVE HUMIDITY SENSOR

**RHC-ZNS5**

Transmits room temperature and relative humidity to DDC System.

## 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.



## NON—DDC ECONOMIZER FOR DOWNFLOW DUCT INSTALLATION

### Use to Select Field-Installed Options Only

RXRD-01MDDAM3—Single Enthalpy (Outdoor)

RXRX-BV01—Dual Enthalpy Upgrade Kit

RXRX-AR02—Optional Wall-Mounted CO<sub>2</sub> Sensor

- Features **Honeywell JADE™** Digital Controls
- Available Factory Installed or Field Accessory
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2013
- AMCA 511 Certified Class 1A Leakage—1" WG of differential pressure tested to AMCA Standard 500-D
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin Electrical Connections
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Down-flow Duct Application
- Field Installed Power Exhaust Available
- Fault detections and diagnostics

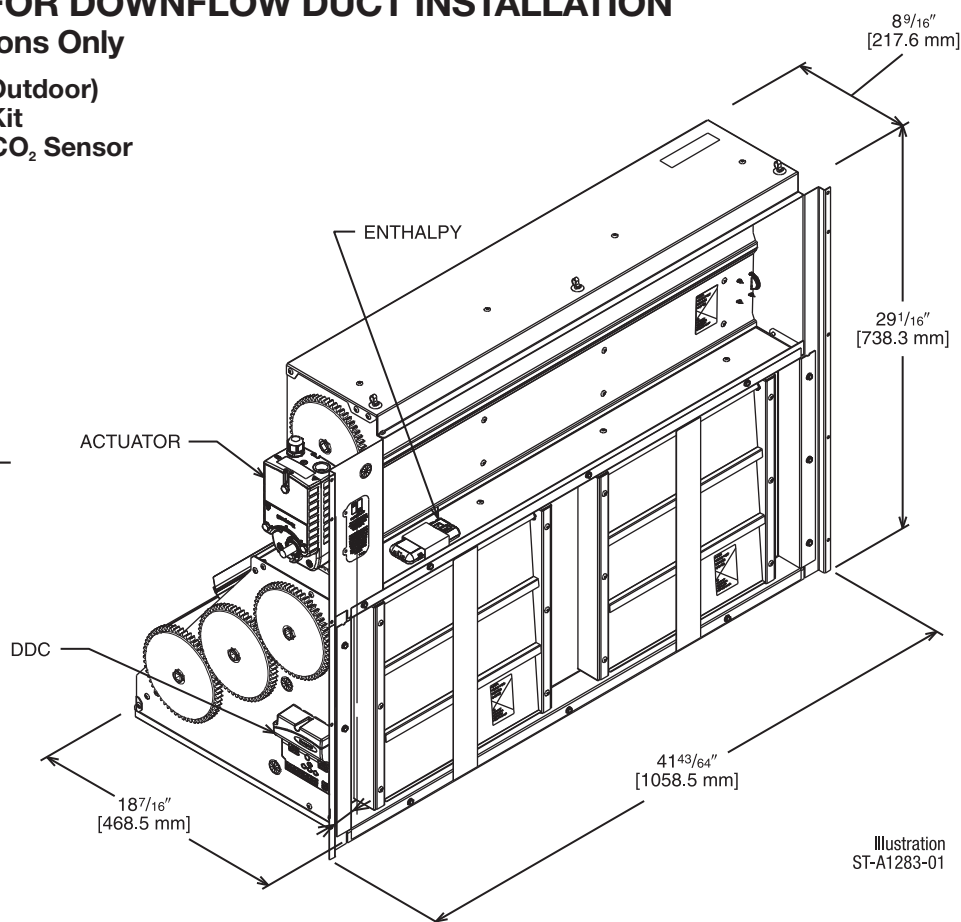


Illustration  
ST-A1283-01

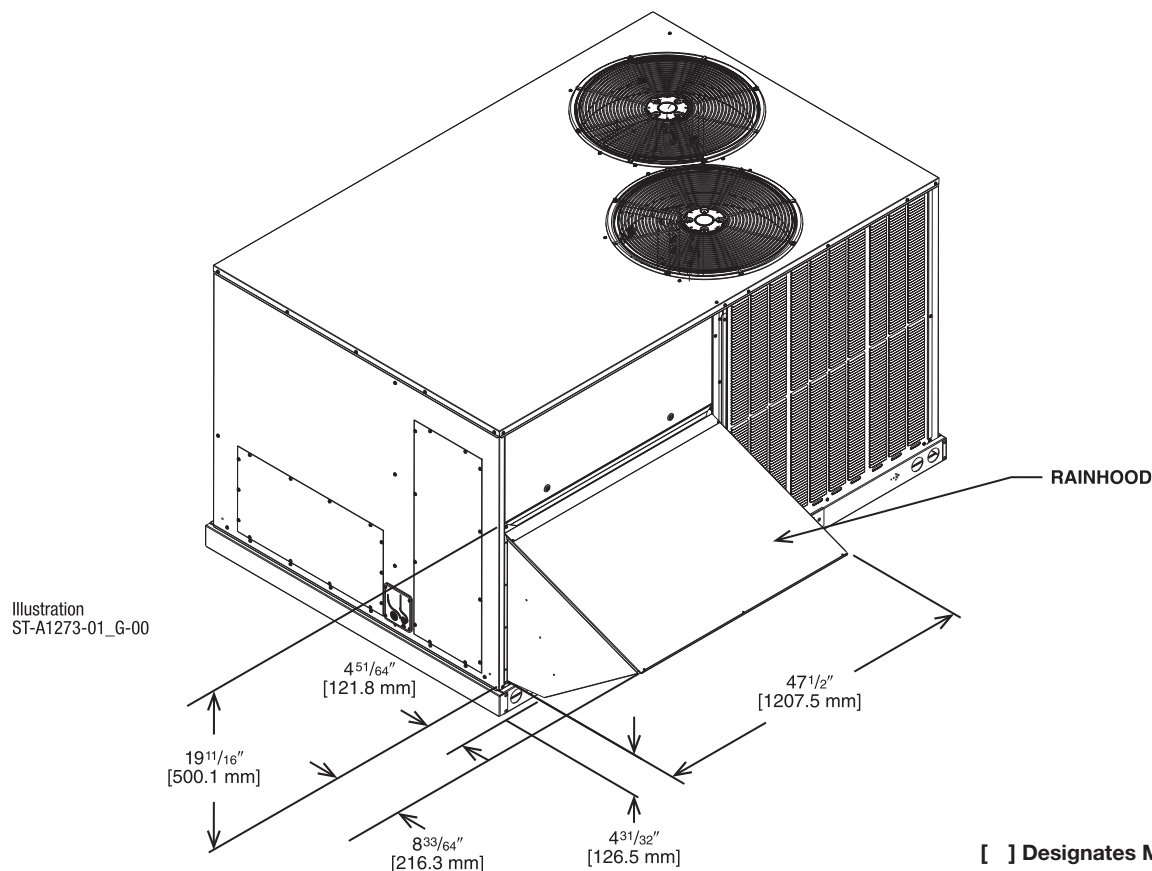


Illustration  
ST-A1273-01\_G-00

[ ] Designates Metric Conversions



## NON—DDC ECONOMIZER FOR HORIZONTAL DUCT INSTALLATION

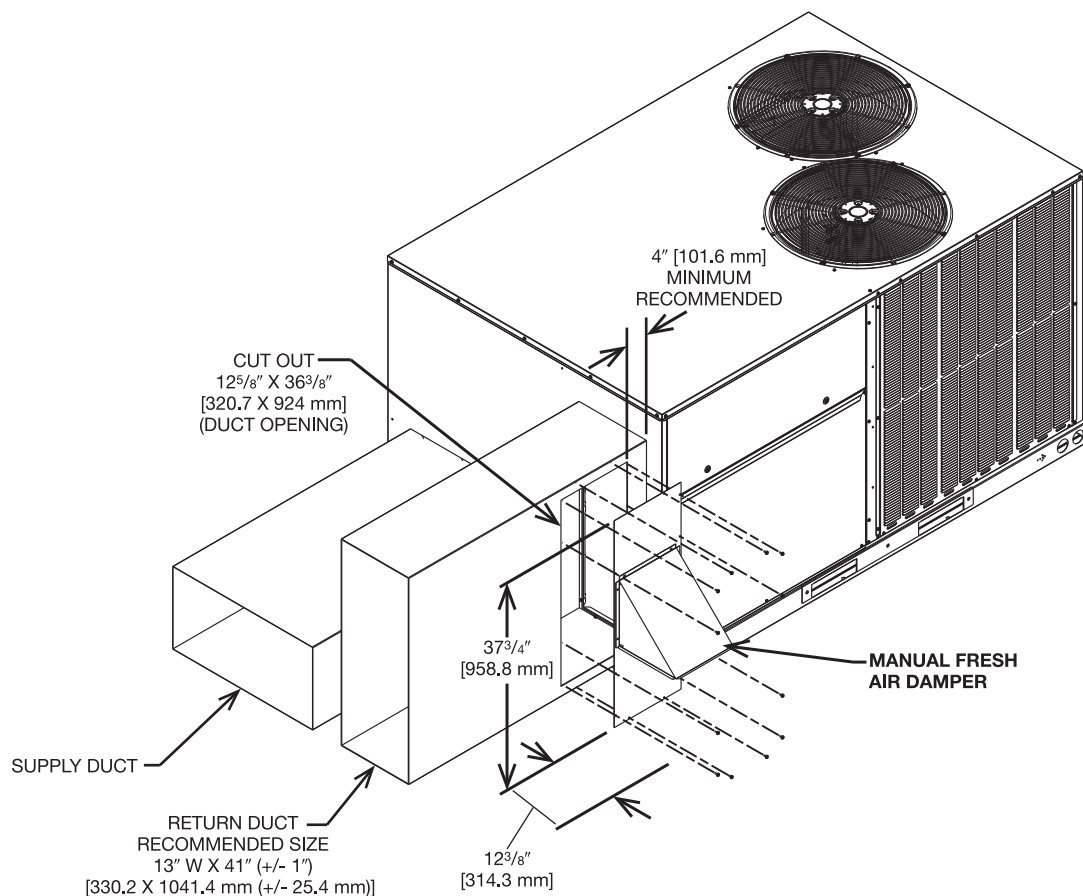
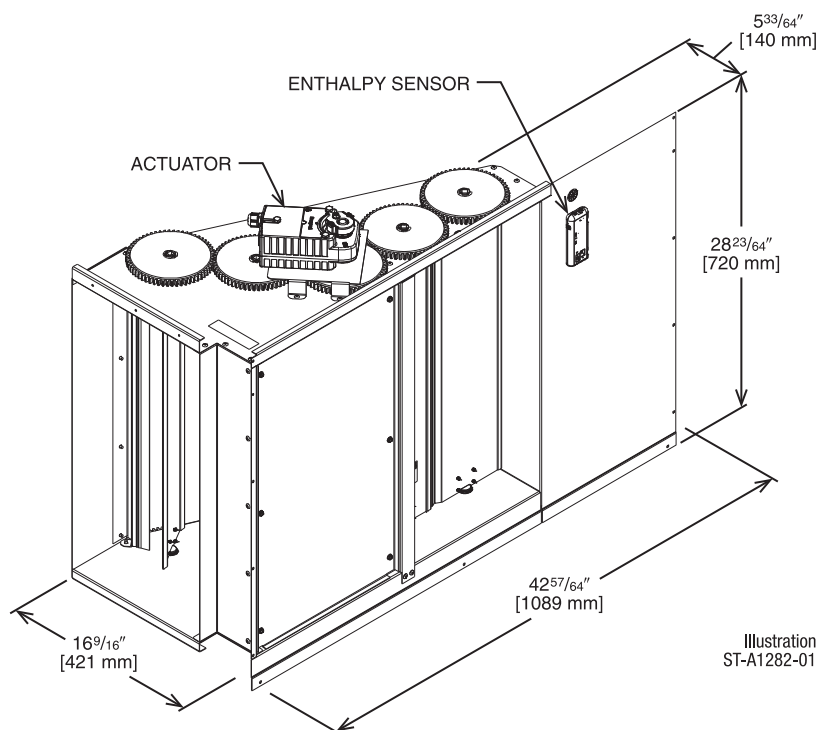
### Field Installed Only

RXRD-01MDHAM3—Single Enthalpy (Outdoor)

RXXR-BV01—Dual Enthalpy Upgrade Kit

RXXR-AR02—Wall-mounted CO<sub>2</sub> Sensor

- Features **Honeywell JADE™** Digital Controls
- Available as a Field Installed Accessory Only
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2013
- Slip-In Design for Easy Installation
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Horizontal Duct Application
- Field Installed Power Exhaust Available



[ ] Designates Metric Conversions



## DDC—ECONOMIZER FOR DOWNFLOW DUCT INSTALLATION

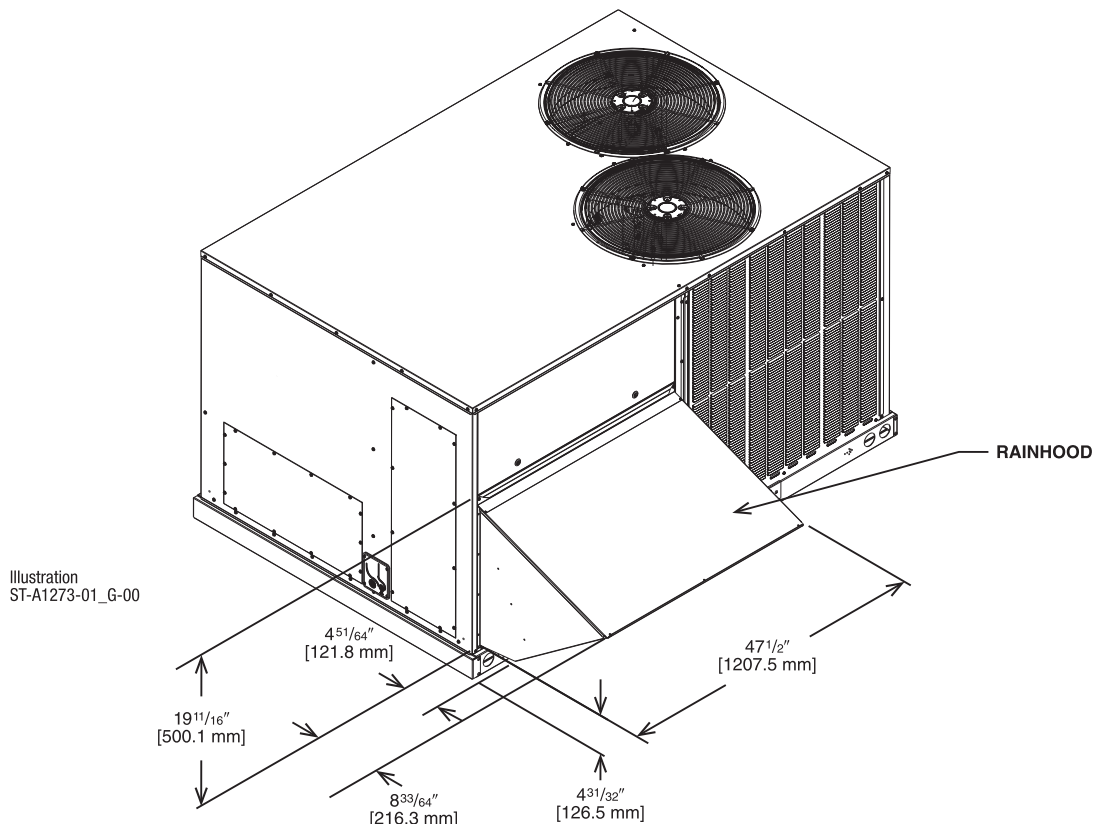
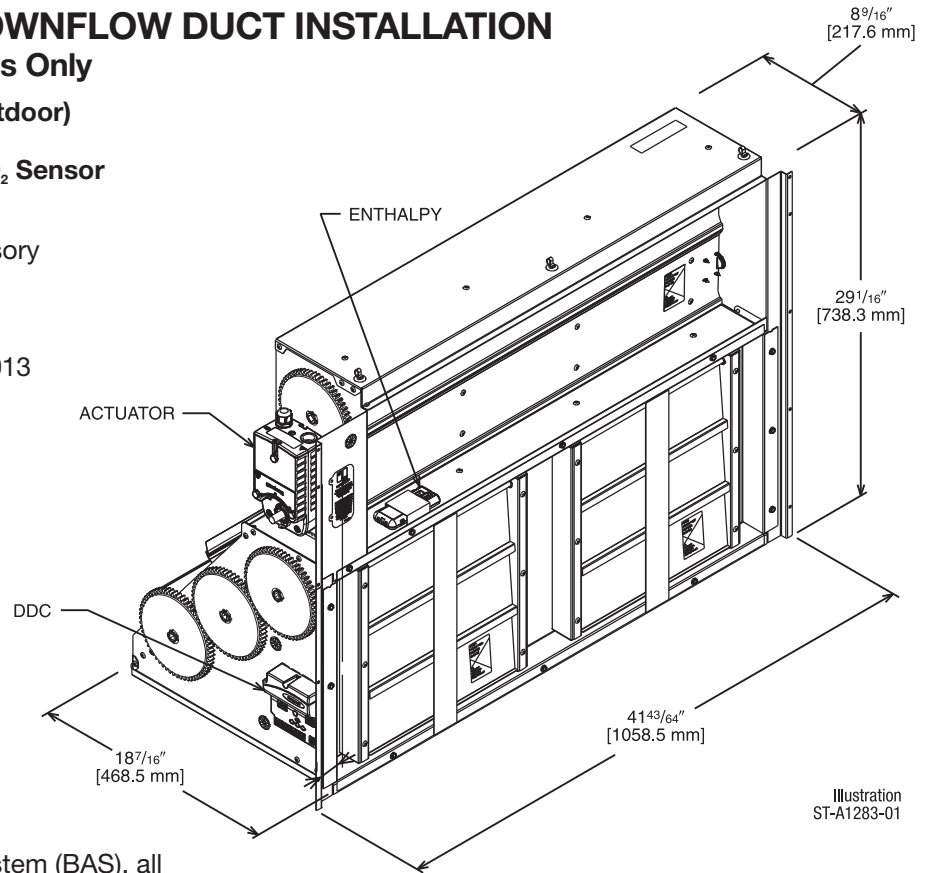
### Use to Select Field Installed Options Only

RXRD-01MDDBM3—Single Enthalpy (Outdoor)

RXRX-BV02—Dual Enthalpy Upgrade Kit

RXRX-AR02—Optional Wall-Mounted CO<sub>2</sub> Sensor

- Features **Honeywell** Controls
- Available Factory Installed or Field Accessory
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2013
- Slip-In Design for Easy Installation
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Downflow Duct Application
- Optional Remote Minimum Position Potentiometer (270 ohm) (Honeywell #S963B1136) is Available from Prostock
- Field Installed Power Exhaust Available
- Prewired for Smoke Detector
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS), or 16 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 FOR HORIZONTAL DUCT INSTALLATION

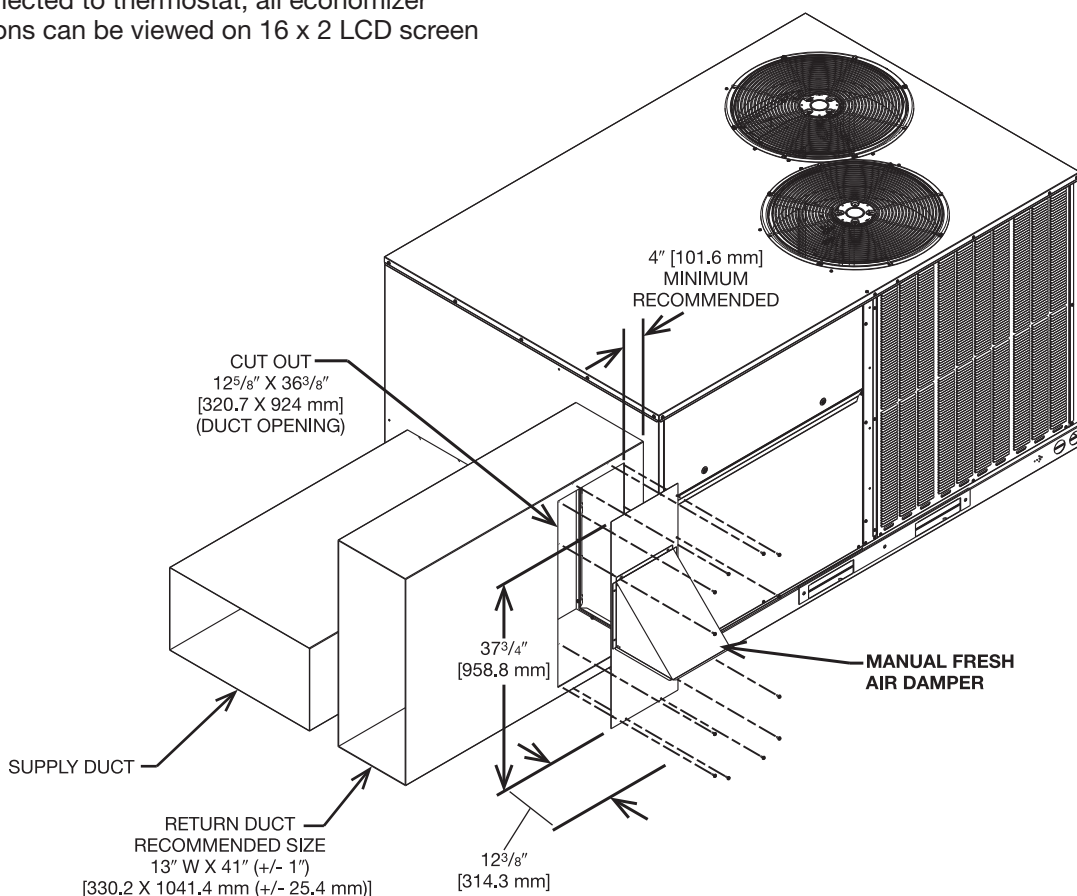
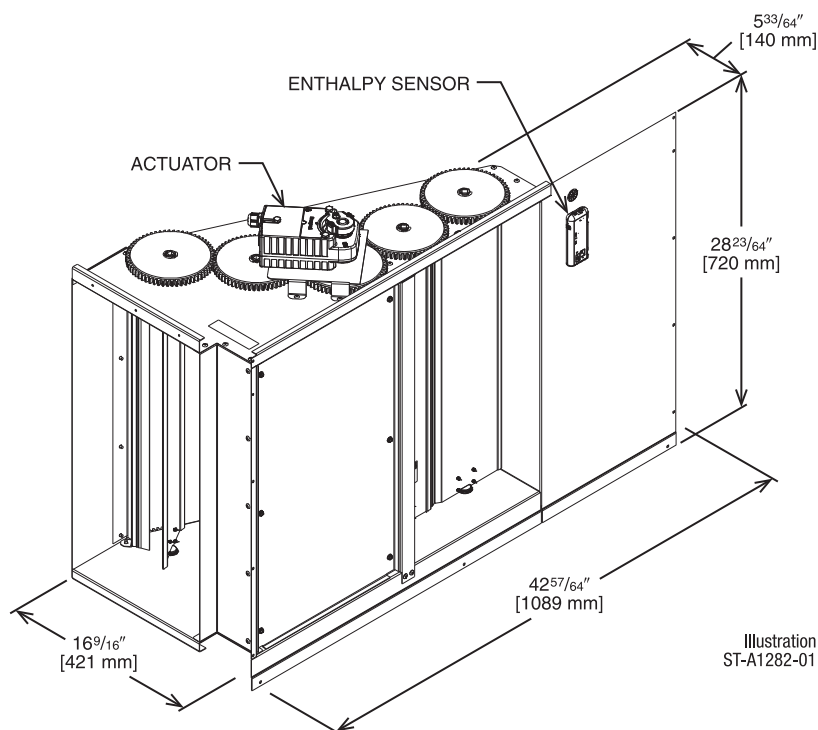
### Field Installed Only

**RXRD-01MDHBM3—Single Enthalpy (Outdoor)**

**RXXR-BV02—Dual Enthalpy Upgrade Kit**

**RXXR-AR02—Wall-mounted CO<sub>2</sub> Sensor**

- Features **Honeywell** Controls
- Available as a Field Installed Accessory Only
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2013
- Slip-In Design for Easy Installation
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor Available
- Field Assembled Hood Ships with Economizer
- Economizer Ships Complete for Horizontal Duct Application
- Optional Remote Minimum Position Potentiometer (270 ohm) (Honeywell #S963B1136) is Available from Prostock
- Field Installed Power Exhaust Available
- If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS), or 16 x 2 LCD screen
- If connected to thermostat, all economizer functions can be viewed on 16 x 2 LCD screen



[ ] Designates Metric Conversions

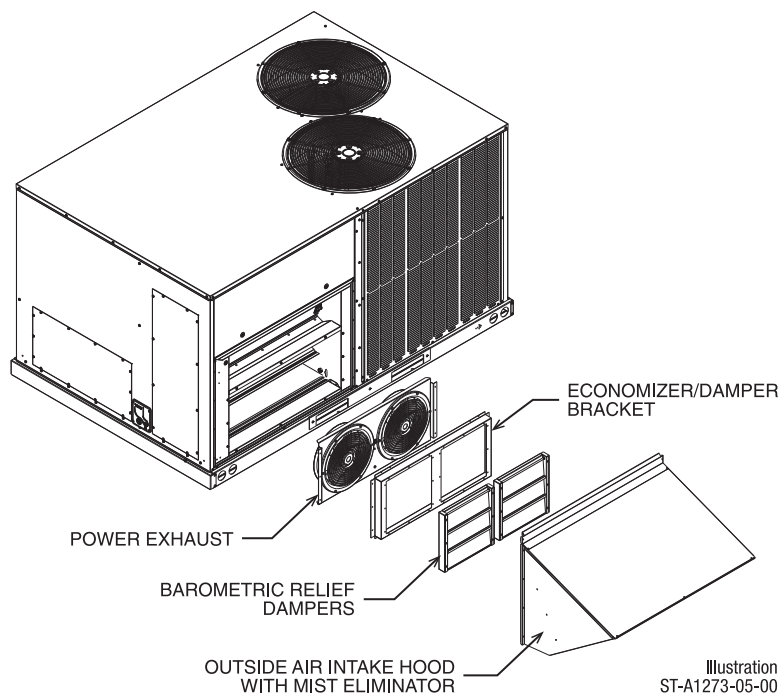


## POWER EXHAUST KIT FOR RXRD-01MDDAM3, RXRD-01MDDBM3, RXRD-01MDHAM3, RXRD-01MDHBM3 ECONOMIZERS

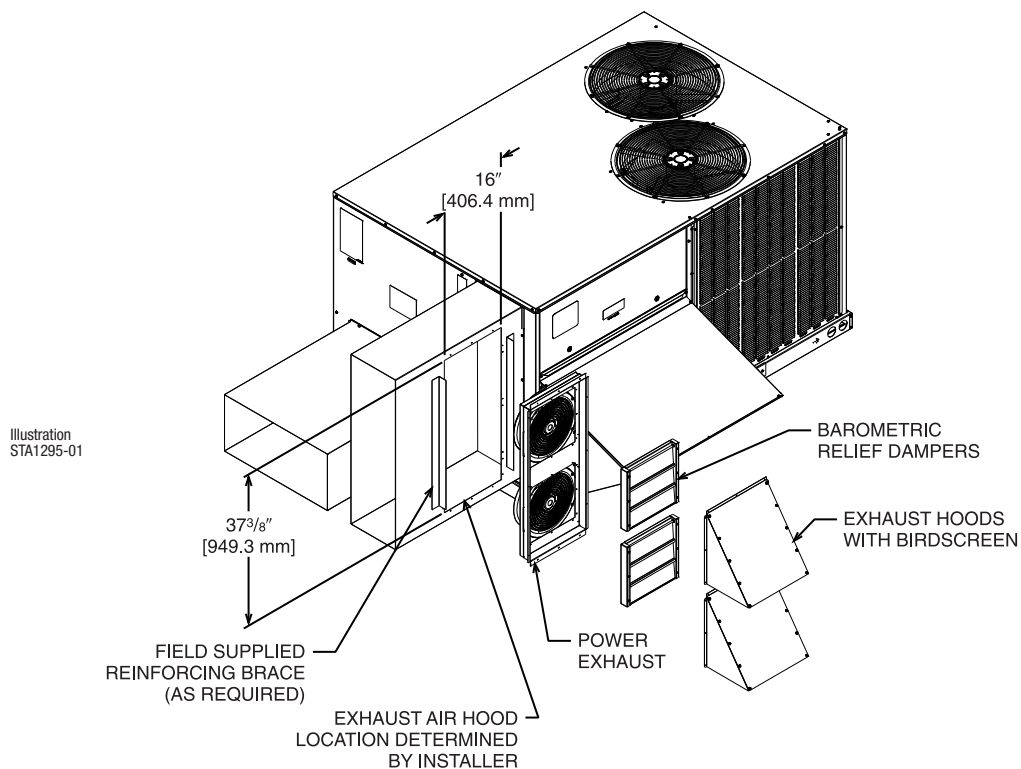
RXXR-CDF01 (C, D, or Y\*)

\*Voltage Code

### VERTICAL AIRFLOW



### HORIZONTAL AIRFLOW



| 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



## FRESH AIR DAMPER

### MOTORIZED DAMPER KIT RXRF-ADB1

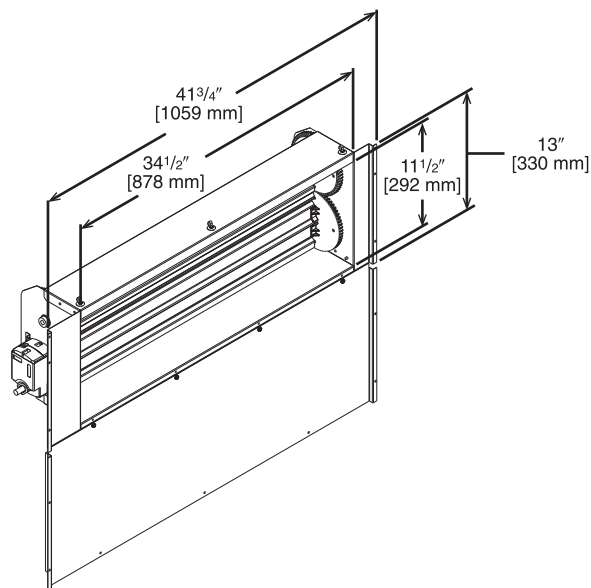


Illustration  
ST-A1273-10-00

### MOTORIZED DAMPER KIT RXRX-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
- CO<sub>2</sub> 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

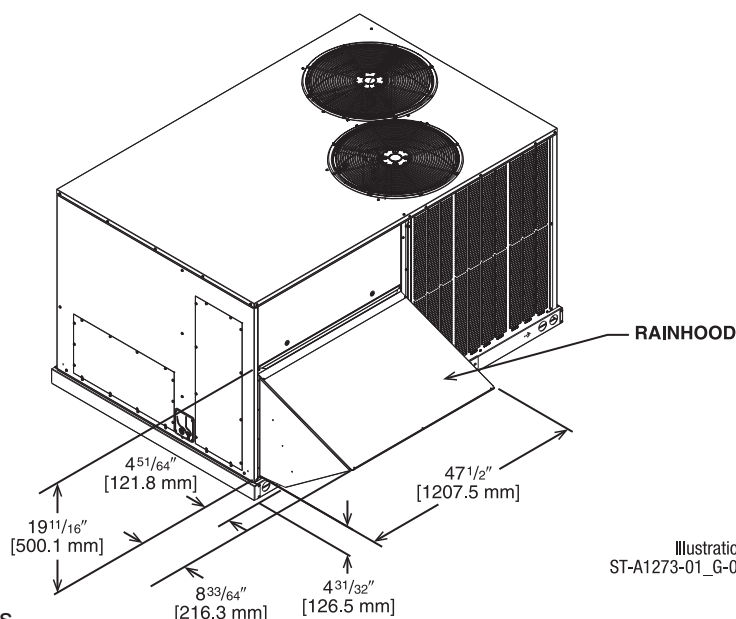


Illustration  
ST-A1273-01\_G-00

[ ] Designates Metric Conversions



## FRESH AIR DAMPER (Cont.)

AXRF-ADA1

### DOWNFLOW APPLICATION

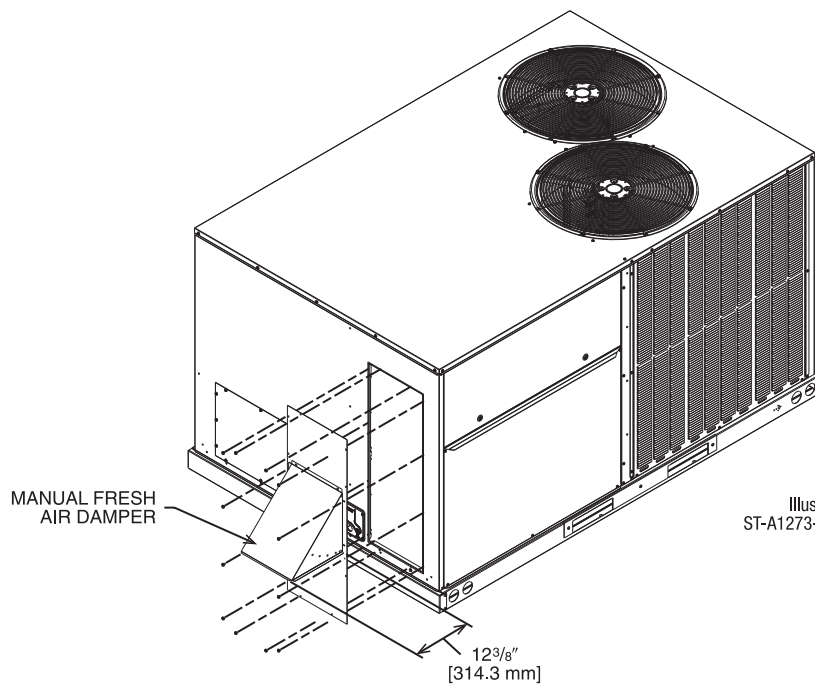


Illustration  
ST-A1273-03-00

### HORIZONTAL APPLICATION

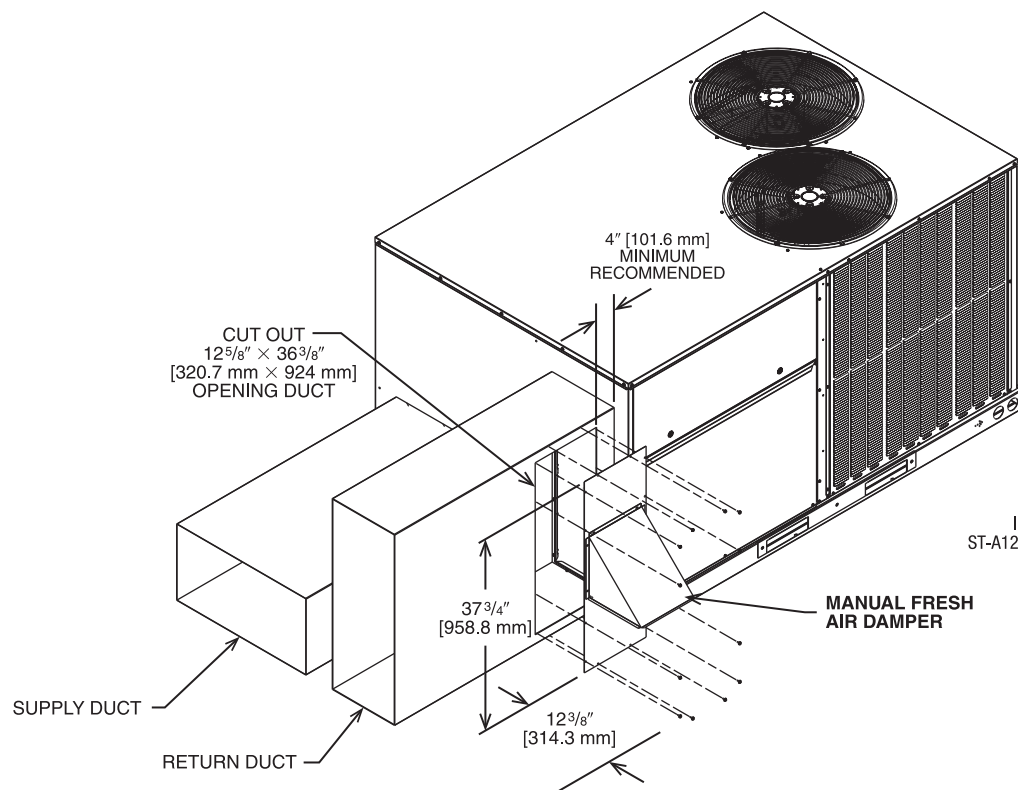


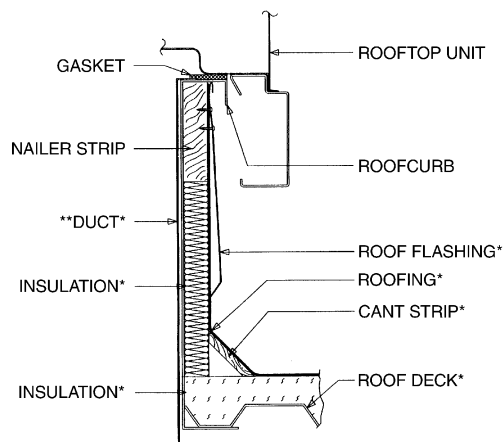
Illustration  
ST-A1273-04-00

[ ] Designates Metric Conversions



## ROOFCURBS (Full Perimeter)

- Rheem'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] Nailer 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.

Illustration  
ST-A0743-02

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

## ROOFCURB INSTALLATION

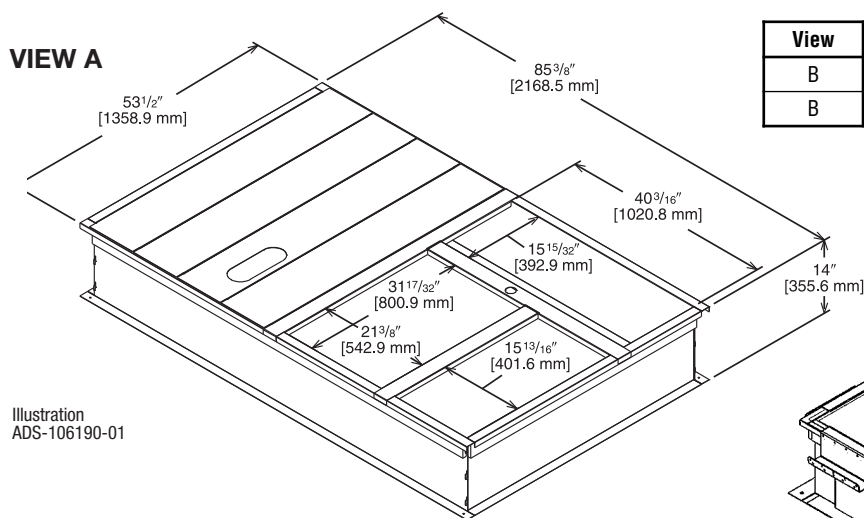
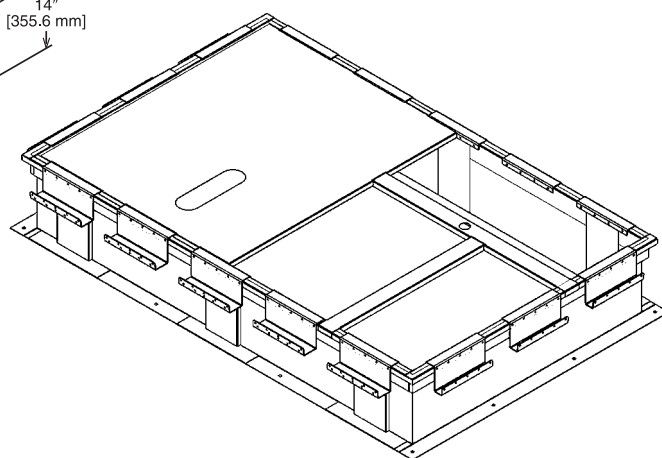


Illustration  
ADS-106190-01

| View | Roofcurb Model | Dimensions              |
|------|----------------|-------------------------|
| B    | RKKG-SD14      | 85.375" x 53.5" x 14.0" |
| B    | RKKG-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.
- QSHPD Approved: State of California Product Approval Number OSP-06660-TEMPOO for Technical Evaluation Report 1700876-CR-001-RO certifies the HVAC Unit and Mircrometl 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



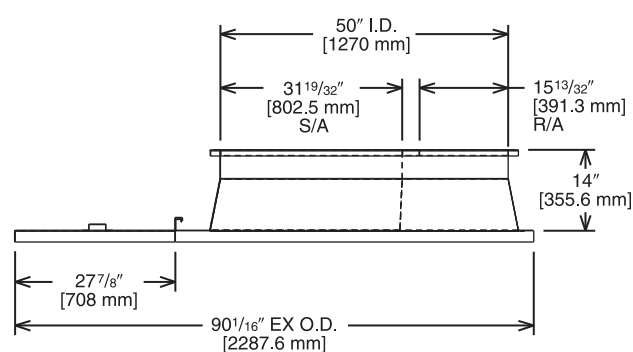
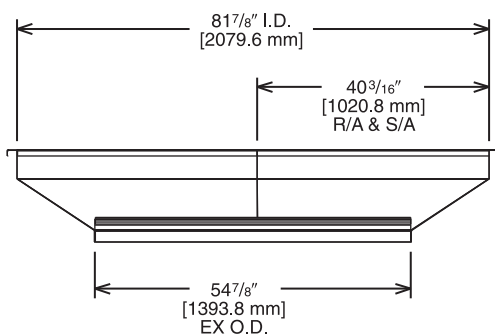
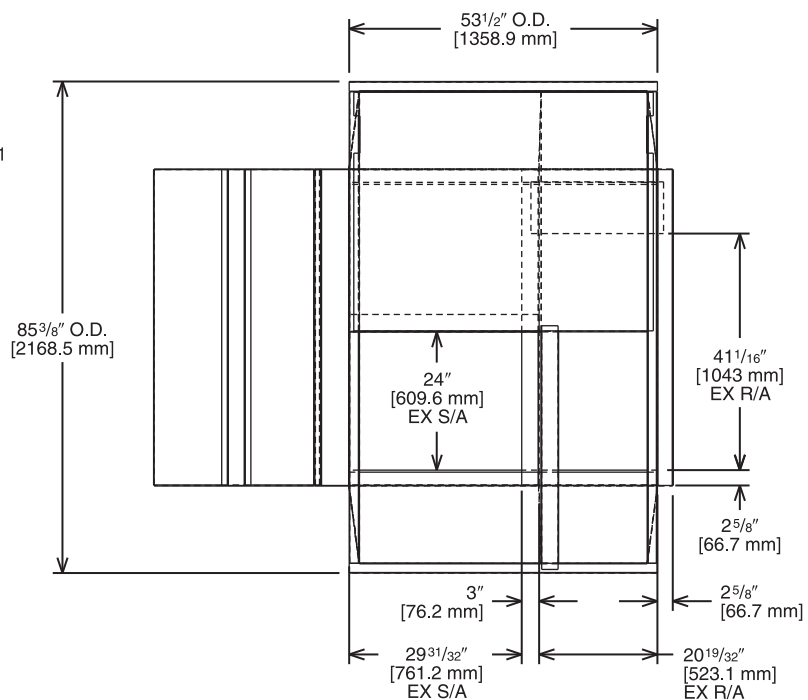
## ROOFCURB ADAPTERS (Cont.)

RXRX-DDCAE

Illustration  
ADS-106176-01  
SHEET 2

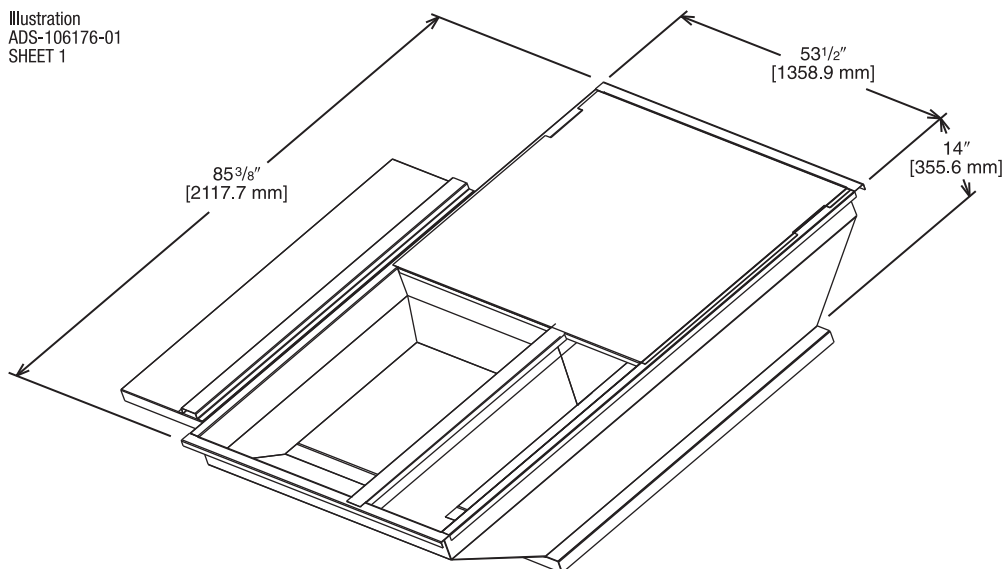
### APPROXIMATE STATIC PRESSURE DROP

|                     |
|---------------------|
| @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

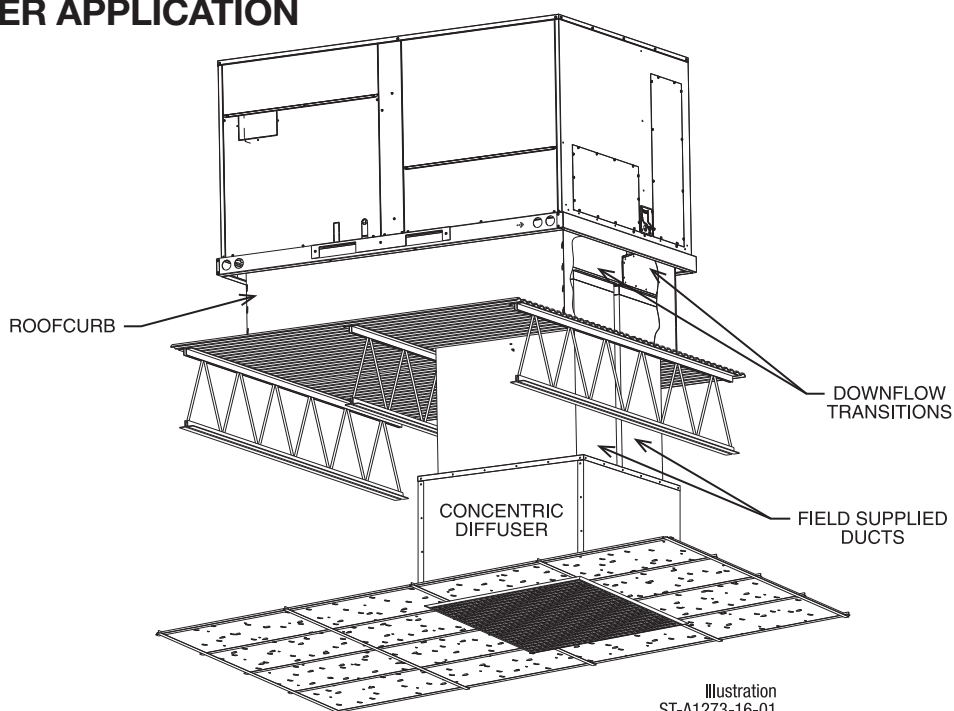
Illustration  
ADS-106176-01  
SHEET 1



[ ] Designates Metric Conversions



## CONCENTRIC DIFFUSER APPLICATION



## DOWNFLOW TRANSITION DRAWINGS

### RXMC-DDO2

- Used with AEF3415 or AED3415 Concentric Diffusers.

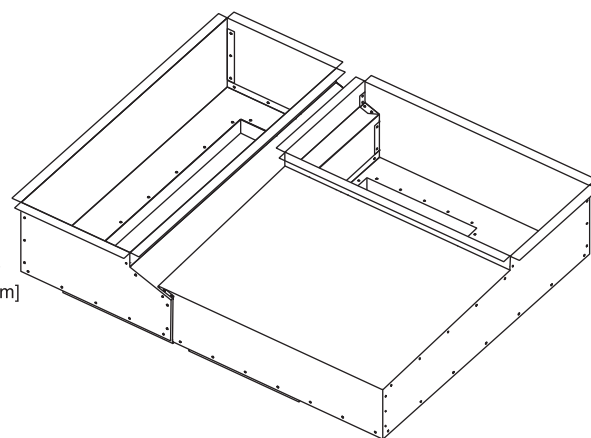
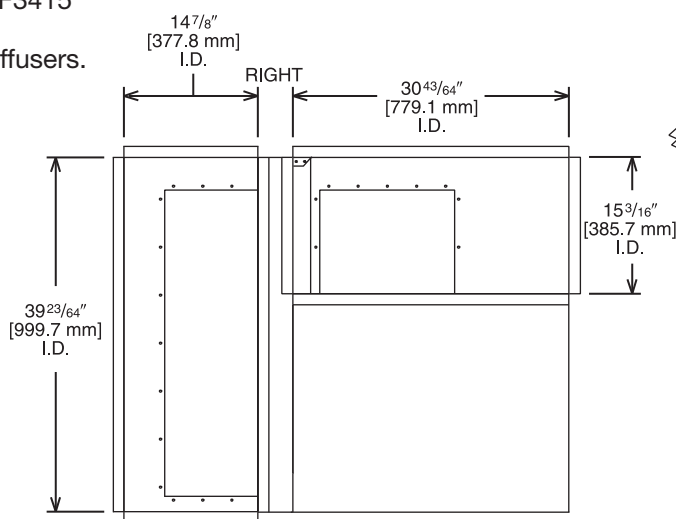
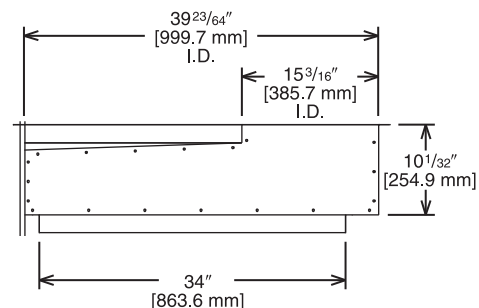
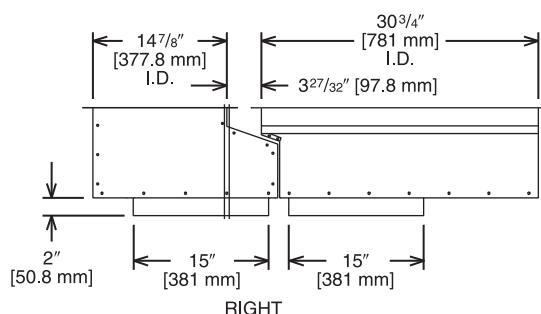


Illustration  
ADS-106193-02



[ ] Designates Metric Conversions



## DOWNFLOW TRANSITION DRAWINGS

### RXMC-DD03

- Used with AEF3618  
or AED3618  
Concentric Diffusers.

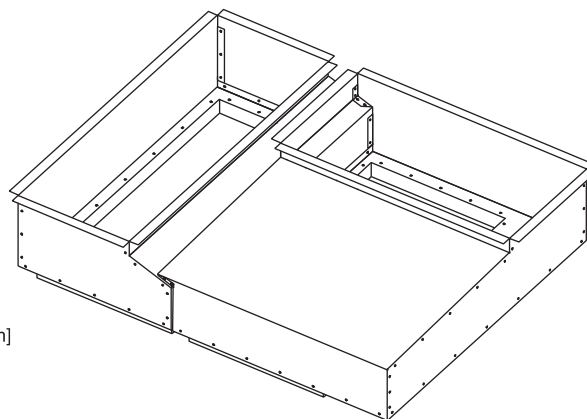
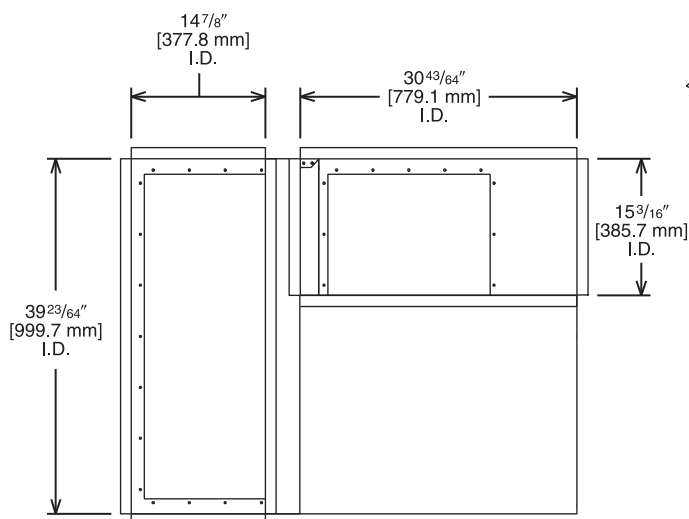
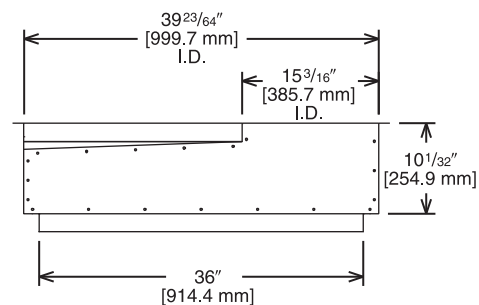
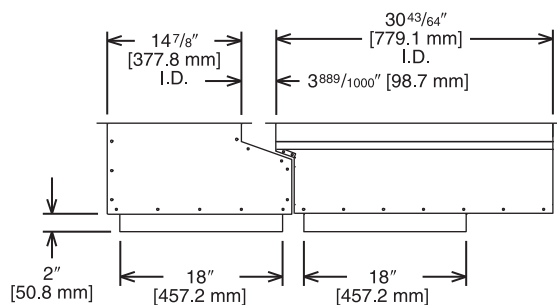


Illustration  
ADS-106193-03



[ ] Designates Metric Conversions

## DOWNFLOW TRANSITION DRAWINGS

### RXMC-DD01

- Used with AEF2000  
or AED2000  
Concentric Diffusers.

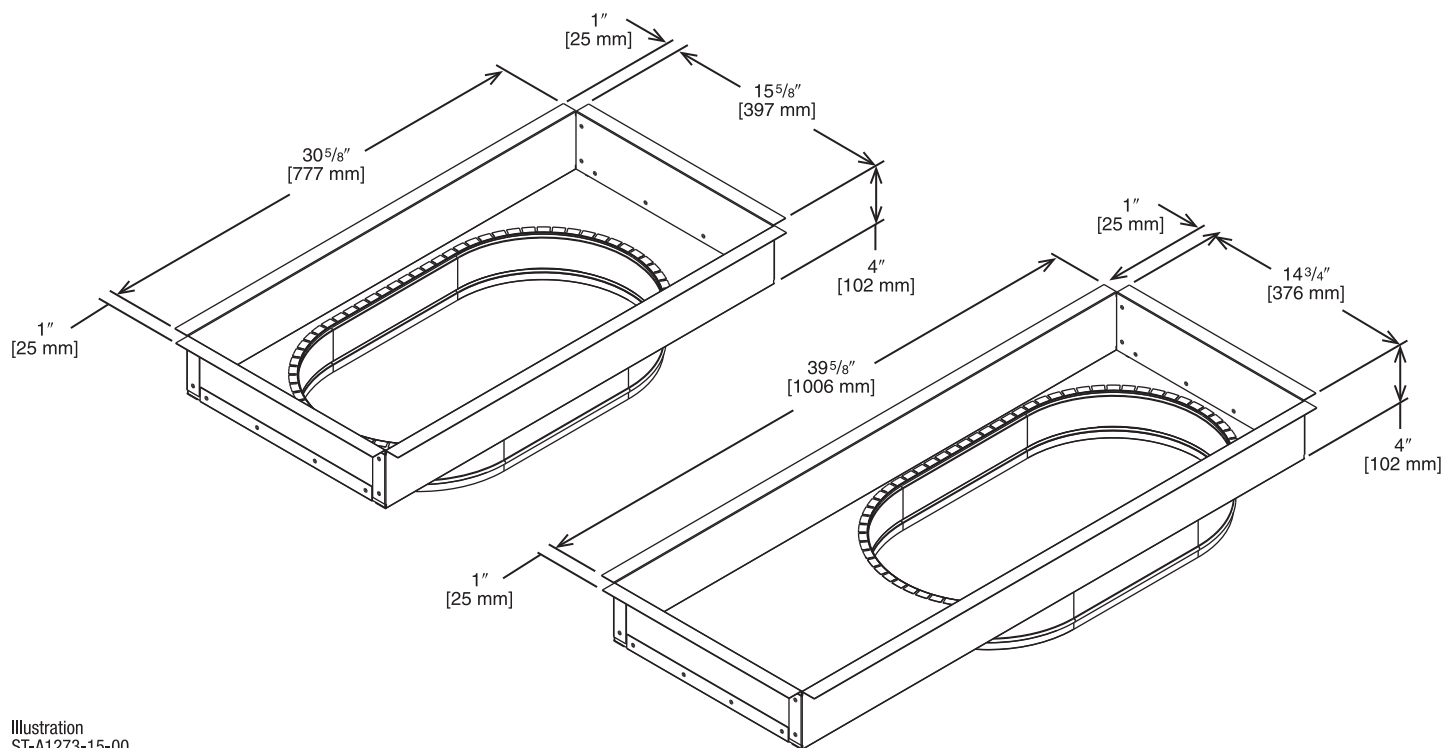


Illustration  
ST-A1273-15-00

[ ] Designates Metric Conversions

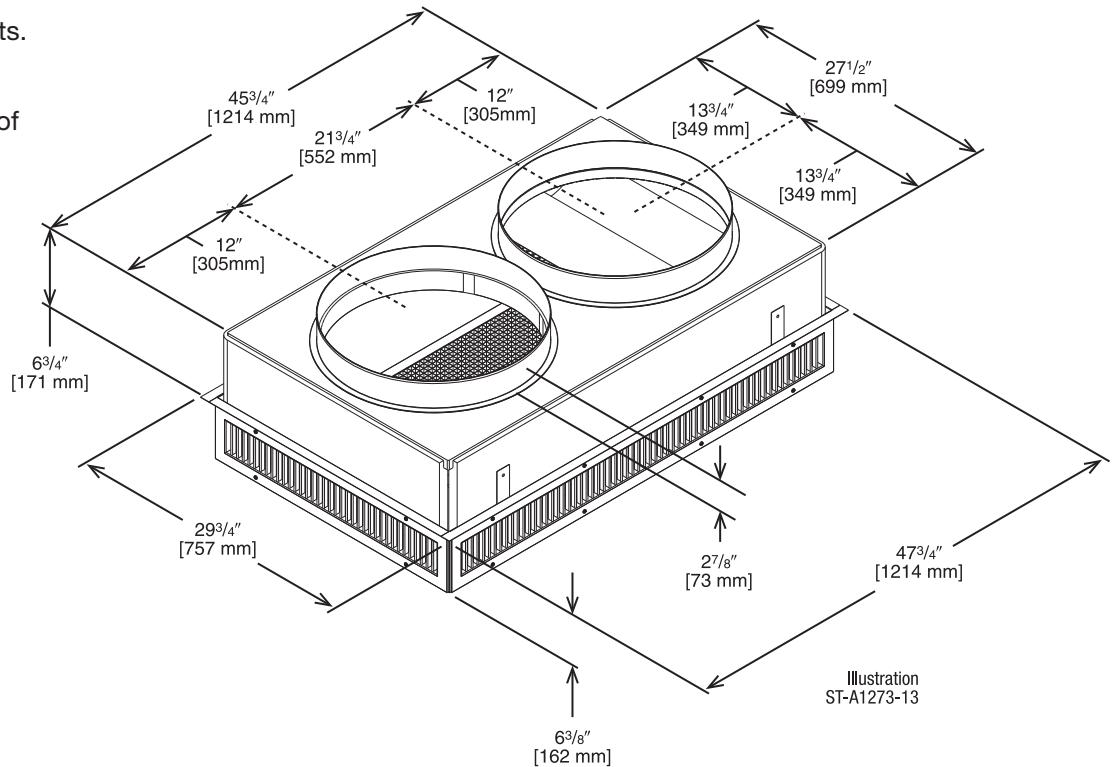


## CONCENTRIC DIFFUSER—STEP DOWN

RXRN-AED2000 (7.5 & 8.5 Ton [26.4 & 29.9 kW] Models)

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

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



## ENGINEERING DATA<sup>①</sup>

| Model No.    | Flow Rate<br>CFM [L/s] | Throw <sup>②</sup> <sup>③</sup><br>Feet [m] | Neck Velocity<br>fpm [m/s] | Noise Level <sup>④</sup><br>(dbA) |
|--------------|------------------------|---------------------------------------------|----------------------------|-----------------------------------|
| RXRN-AED2000 | 2600 [1222]            | 22-39 [6.7-11.9]                            | 669 [3.4]                  | 32                                |
|              | 2800 [1316]            | 23-40 [7.1-12.2]                            | 720 [3.7]                  | 38                                |
|              | 3000 [1410]            | 25-42 [7.6-12.8]                            | 772 [3.9]                  | 40                                |
|              | 3200 [1504]            | 26-43 [7.9-13.1]                            | 823 [4.2]                  | 41                                |
|              | 3400 [1598]            | 27-45 [8.2-13.7]                            | 874 [4.4]                  | 42                                |
|              | 3600 [1692]            | 30-50 [9.1-15.2]                            | 925.5 [4.7]                | 45                                |
|              | 3800 [1786]            | 32-53 [9.8-16.2]                            | 976.8 [4.9]                | 48                                |
|              | 4000 [1880]            | 34-56 [10.4-17.1]                           | 1028.1 [5.2]               | 50                                |

- NOTES: 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—STEP DOWN 15" x 34" [381 x 836 mm]

RXRN-AED3415 (8.5 & 10 Ton [29.9 kW & 35.2] Models)

**For Use With Downflow Transition (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 sheetmetal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner.
- Double deflection diffuser with the blades secured by spring steel.

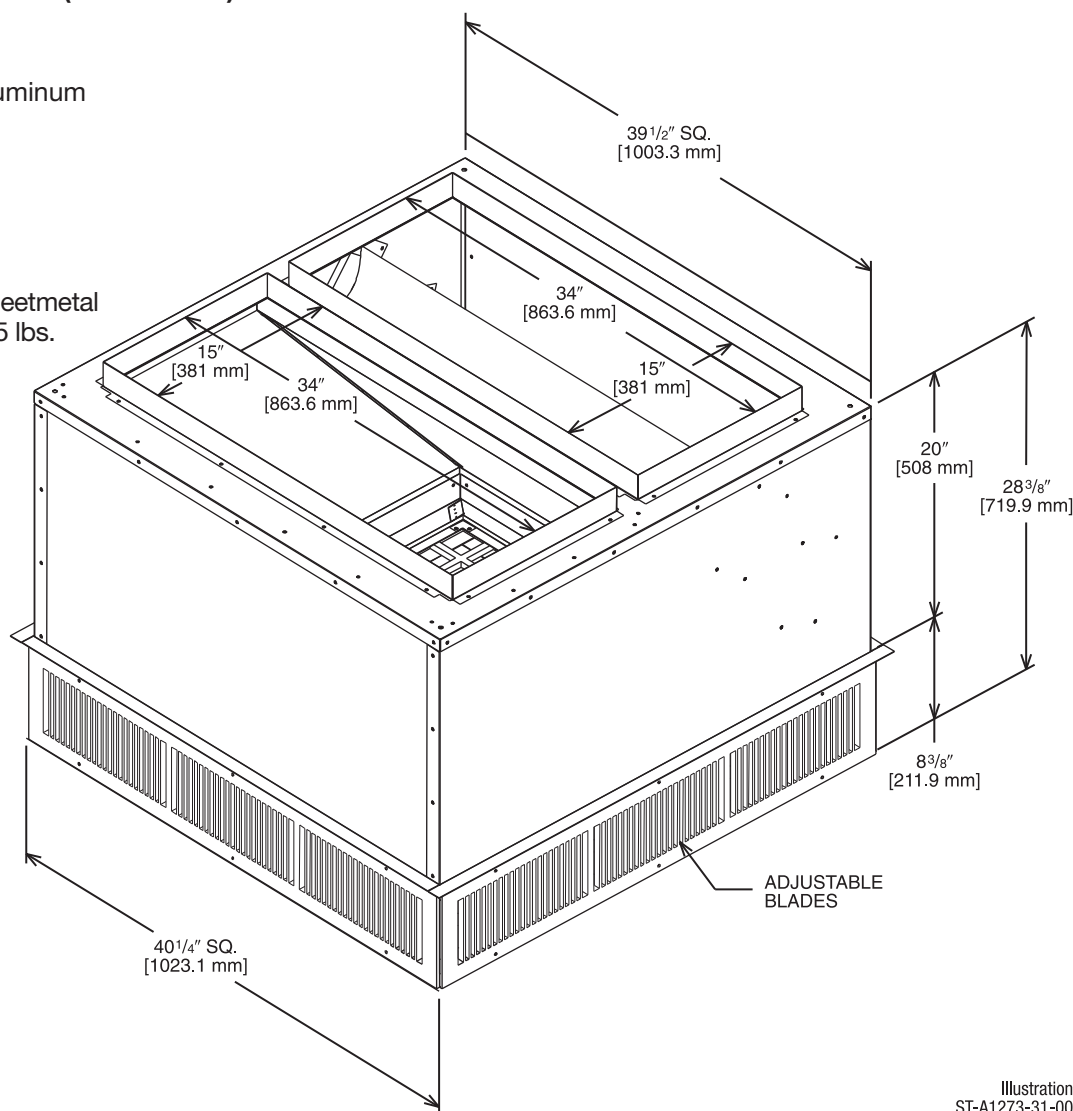


Illustration  
ST-A1273-31-00

## ENGINEERING DATA<sup>①</sup>

| Model No.    | Flow Rate<br>CFM [L/s] | Throw <sup>② ③</sup><br>Feet [m] | Neck Velocity<br>fpm [m/s] | Noise Level <sup>④</sup><br>(dB(A)) |
|--------------|------------------------|----------------------------------|----------------------------|-------------------------------------|
| RXRN-AED3415 | 3600 [1692]            | 26-53 [7.9-16.2]                 | 851 [4.3]                  | 27                                  |
|              | 3800 [1786]            | 27-55 [8.2-16.8]                 | 898 [4.5]                  | 29                                  |
|              | 4000 [1880]            | 29-58 [8.8-17.7]                 | 946 [4.8]                  | 30                                  |
|              | 4200 [1974]            | 31-61 [9.4-18.6]                 | 993 [5.1]                  | 32                                  |
|              | 4400 [2068]            | 32-64 [9.8-19.5]                 | 1040 [5.3]                 | 33                                  |
|              | 4600 [2162]            | 34-66 [10.4-20.1]                | 1087.5 [5.5]               | 35                                  |

NOTES: 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

**RXRN-AED3618 (12.5 & 15 Ton [44.0 & 52.8 kW] Models)**

- 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.

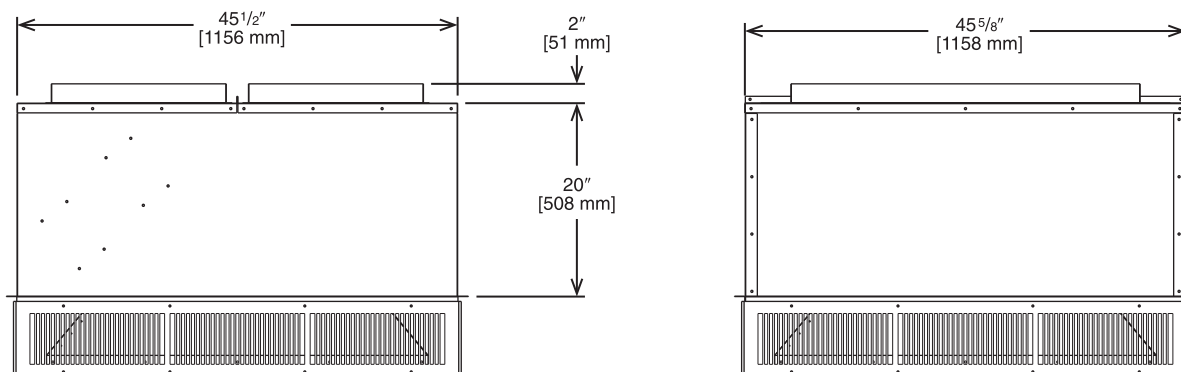
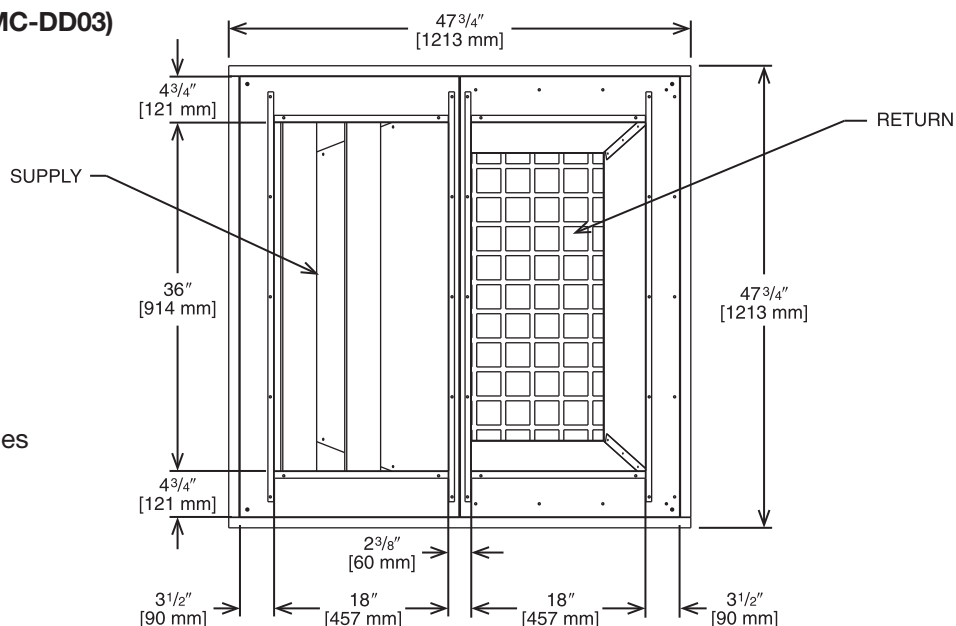


Illustration  
ST-A1273-11-00

| Model No.    | Flow Rate<br>CFM [L/s] | Throw ② ③<br>Feet [m] | Neck Velocity<br>fpm [m/s] | Noise Level ④<br>(dbA) |
|--------------|------------------------|-----------------------|----------------------------|------------------------|
| 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**

**RXXR-AEF2000 (7.5 & 8.5 Ton [26.4 & 29.9 kW] Models)**

- All aluminum diffuser with aluminum return air eggcrate.

- Built-in anti-sweat gasket.
- Molded fiberglass supports.
- Built-in hanging supports.
- Diffuser box constructed of sheetmetal insulated with 1" [25.4 mm] 1.5 lbs. [7 kg] duct liner.

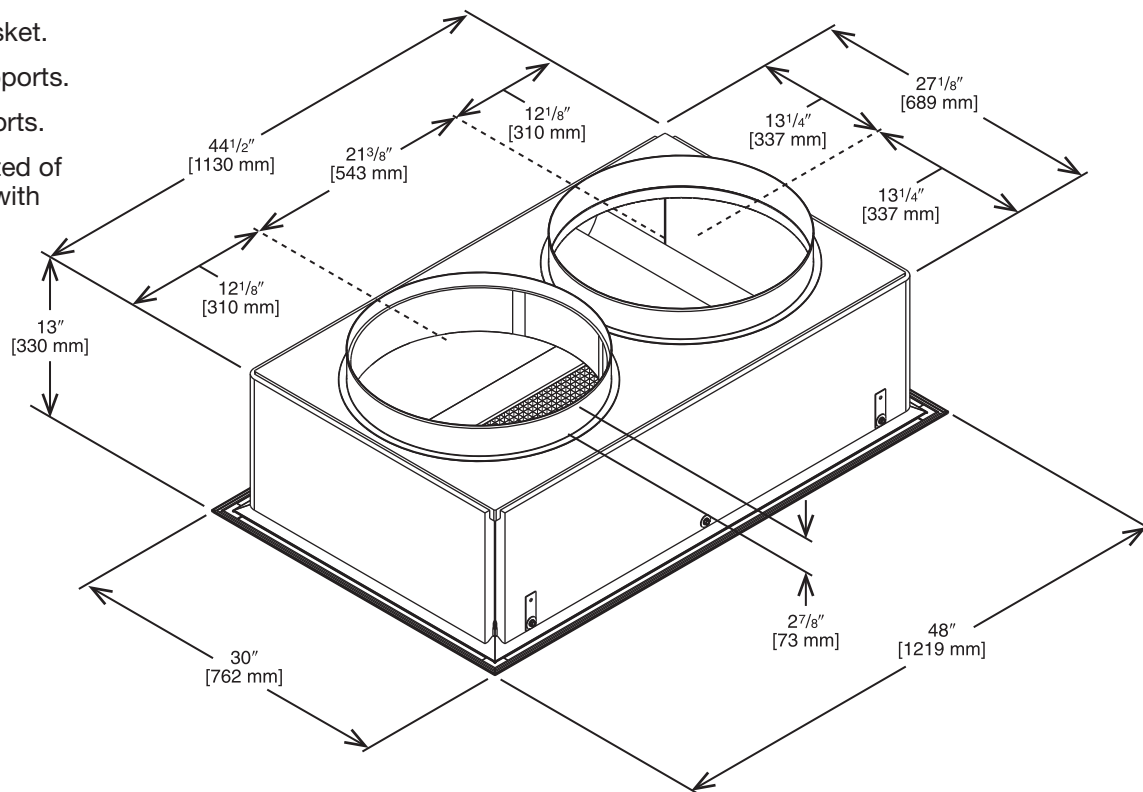


Illustration  
ST-A1273-14-00

| Model No.    | Flow Rate<br>CFM [L/s] | Throw ② ③<br>Feet [m] | Neck Velocity<br>fpm [m/s] | Noise Level ④<br>(dBa) |
|--------------|------------------------|-----------------------|----------------------------|------------------------|
| RXRN-AEF2000 | 2600 [1222]            | 17-24 [5.2-7.3]       | 663 [3.4]                  | 30                     |
|              | 2800 [1316]            | 18-28 [5.5-8.5]       | 714 [3.6]                  | 35                     |
|              | 3000 [1410]            | 20-30 [6.1-9.1]       | 765 [3.9]                  | 35                     |
|              | 3200 [1504]            | 22-33 [6.7-10.1]      | 816 [4.1]                  | 40                     |
|              | 3400 [1598]            | 23-37 [7-11.3]        | 867 [4.4]                  | 40                     |
|              | 3600 [1692]            | 25-38 [7.6-11.6]      | 918 [4.7]                  | 43                     |
|              | 3800 [1786]            | 26-39 [7.9-11.9]      | 969 [4.9]                  | 45                     |
|              | 4000 [1880]            | 27-40 [8.2-12.2]      | 1020 [5.2]                 | 48                     |

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

**[ ] Designates Metric Conversions**



## CONCENTRIC DIFFUSER—FLUSH 18" x 36" [457 x 914 mm]

RXRN-AEF3415 (8.5 & 10 Ton [29.9 & 35.2] Models)

For Use With Downflow Transition (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 sheetmetal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner.

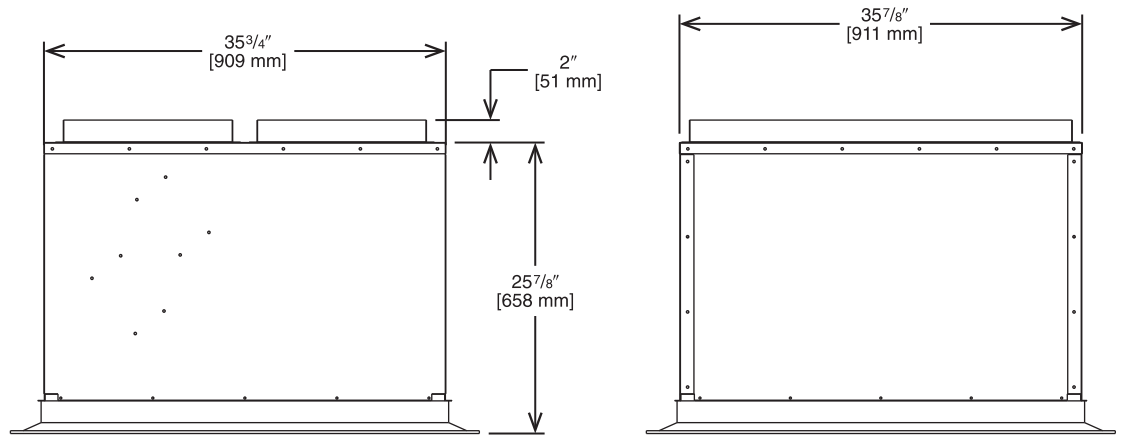
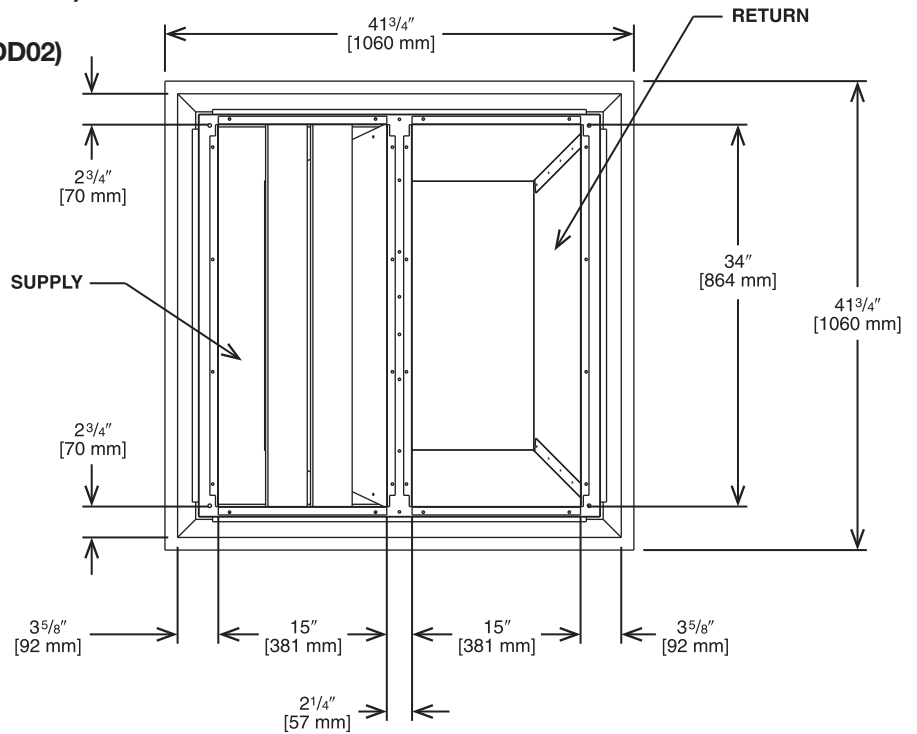


Illustration  
ST-A1273-07-00

## ENGINEERING DATA<sup>①</sup>

| Model No.    | Flow Rate<br>CFM [L/s] | Throw <sup>②</sup> <sup>③</sup><br>Feet [m] | Neck Velocity<br>fpm [m/s] | Noise Level <sup>④</sup><br>(dbA) |
|--------------|------------------------|---------------------------------------------|----------------------------|-----------------------------------|
| RXRN-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: <sup>①</sup> All data is based on the air diffusion council guidelines.

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

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

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

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

[ ] Designates Metric Conversions



## CONCENTRIC DIFFUSER – FLUSH 18" x 36" [457 x 914 mm]

RXRN-AEF3618 (12.5 & 15 Ton [44.0 & 52.8 kW] Models)

For Use With Downflow Transition (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 sheetmetal insulated with 1" [25.4 mm] 1.5 lbs. [.7 kg] duct liner.

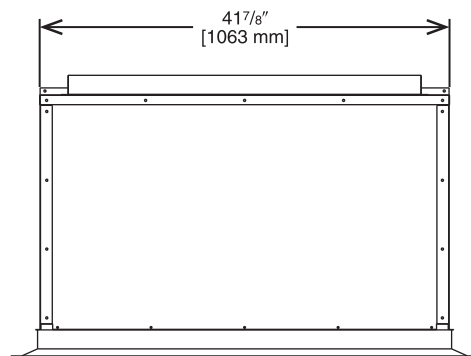
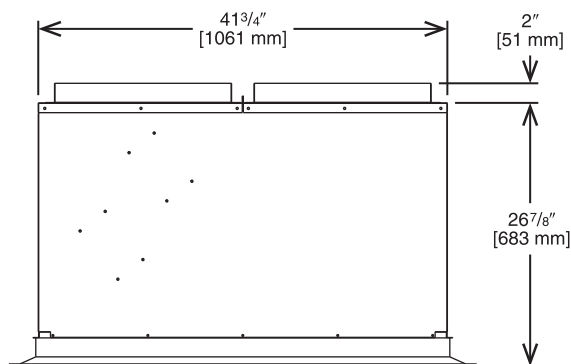
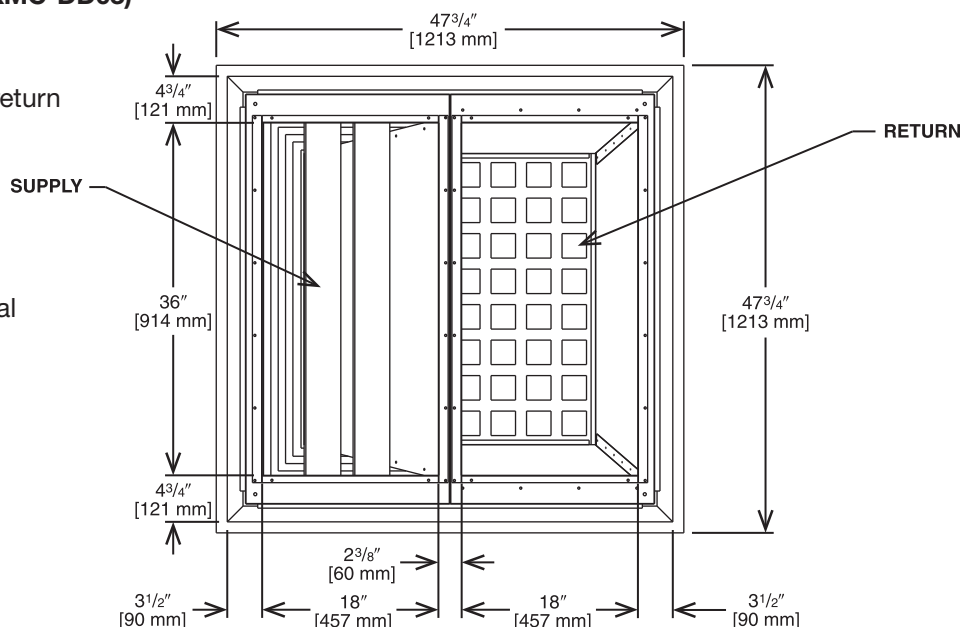


Illustration  
ST-A1273-12-00

## ENGINEERING DATA<sup>①</sup>

| Model No.    | Flow Rate<br>CFM [L/s] | Throw <sup>② ③</sup><br>Feet [m] | Neck Velocity<br>fpm [m/s] | Noise Level <sup>④</sup><br>(dbA) |
|--------------|------------------------|----------------------------------|----------------------------|-----------------------------------|
| RXRN-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

## Guide Specifications RGED – 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](http://www.csinet.org).

### GAS HEAT PACKAGED ROOFTOP

#### HVAC Guide Specifications

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

| Section | Description |
|---------|-------------|
|---------|-------------|

|                 |                                                   |
|-----------------|---------------------------------------------------|
| <b>23 06 80</b> | <b>Schedules for Decentralized HVAC Equipment</b> |
|-----------------|---------------------------------------------------|

|                    |                                                      |
|--------------------|------------------------------------------------------|
| <b>23 06 80.13</b> | <b>Decentralized Unitary HVAC Equipment Schedule</b> |
|--------------------|------------------------------------------------------|

|                |                       |
|----------------|-----------------------|
| 23 06 80.13.A. | Rooftop unit schedule |
|----------------|-----------------------|

1. Schedule is per the project specification requirements.

|                 |                                  |
|-----------------|----------------------------------|
| <b>23 07 16</b> | <b>HVAC Equipment Insulation</b> |
|-----------------|----------------------------------|

|                |                             |
|----------------|-----------------------------|
| 23 07 16.00.A. | Evaporator fan compartment: |
|----------------|-----------------------------|

1. 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.
2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
3. Insulation shall also be mechanically fastened with welded pin and retainer washer.

|                |                       |
|----------------|-----------------------|
| 23 07 16.00.B. | Gas heat compartment: |
|----------------|-----------------------|

1. Aluminum foil-faced fiberglass insulation shall be used.
2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
3. Insulation shall also be mechanically fastened with welded pin and retainer washer.

|                 |                                                     |
|-----------------|-----------------------------------------------------|
| <b>23 09 13</b> | <b>Instrumentation and Control Devices for HVAC</b> |
|-----------------|-----------------------------------------------------|

|                    |                                  |
|--------------------|----------------------------------|
| <b>23 09 13.23</b> | <b>Sensors and Transmitters:</b> |
|--------------------|----------------------------------|

|                |             |
|----------------|-------------|
| 23 09 13.23.A. | Thermostats |
|----------------|-------------|

1. Thermostat must
  - a. energize both “W” and “G” when calling for heat.
  - b. have capability to energize 2 different stages of cooling, and 2 different stages of heating.
  - c. must include capability for occupancy scheduling.

|                 |                                               |
|-----------------|-----------------------------------------------|
| <b>23 09 33</b> | <b>Direct-Digital Control System for HVAC</b> |
|-----------------|-----------------------------------------------|

|                |                  |
|----------------|------------------|
| 23 09 33.00.A. | RTU-C controller |
|----------------|------------------|

1. Shall be ASHRAE 62-2001 compliant.
2. Shall accept 18-32VAC input power.
3. Shall have an operating temperature range from -40°F (-40°C) to 158°F (70°C), 10%– 95% RH (non-condensing).
4. 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.
5. Shall accept a CO<sub>2</sub> sensor in the conditioned space, and be Demand Control Ventilation (DCV) ready.
6. Shall provide the following outputs: Economizer, fan, cooling stage 1, cooling stage 2, heat stage 1, heat stage 2, exhaust, occupied.
7. Unit shall provide surge protection for the controller through a circuit breaker.
8. Shall have a field installed communication card allowing the unit to be able to communicate at a Baud rate of 19.2K or faster.
9. Shall have an LED display independently showing the status of activity on the communication bus, and processor operation.
10. 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.
11. Software upgrades will be accomplished by local download. Software upgrades through chip replacements are not allowed.
12. Shall be shock resistant in all planes to 5G peak, 11ms during operation, and 100G peak, 11ms during storage.
13. Shall be vibration resistant in all planes to 1.5G @ 20-300 Hz.
14. Shall support a bus length of 4000 ft max, 60 devices per 1000 ft section, and 1 RS-485 repeater per 1000 ft sections.

|                |                                           |
|----------------|-------------------------------------------|
| 24 09 33.00.B. | Open protocol, direct digital controller: |
|----------------|-------------------------------------------|

1. Shall be ASHRAE 62-2001 compliant.
2. Shall accept 18-30VAC, 50-60Hz, and consumer 15VA or less power.
3. Shall have an operating temperature range from -40°F (-40°C) to 130°F (54°C), 10% - 90% RH (non-condensing).
4. 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.

5. The BACnet® plug in communication card shall include built-in protocol for BACNET (MS/TP and PTP modes)
6. The LonWorks™ plug in communication card shall include the Echelon processor required for all Lon applications.
7. Shall allow access of up to 62 network variables (SNVT). Shall be compatible with all open controllers
8. Baud rate Controller shall be selectable through the EIA-485 protocol communication port.
9. Shall have an LED display independently showing the status of serial communication, running, errors, power, all digital outputs, and all analog inputs.
10. 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.
11. Shall provide the following outputs: economizer, fan, cooling stage 1, cooling stage 2, heat stage 1, heat stage 2, exhaust.
12. Software upgrades will be accomplished by either local or remote download. No software upgrades through chip replacements are allowed.
13. Shall be natively equipped with Modbus

### **23 09 33 Electric and Electronic Control System for HVAC**

#### **23 09 33.00.A. General:**

1. Shall be complete with self-contained low-voltage control circuit protected by a fuse on the 24-V transformer side (090-150 units have a resettable circuit breaker).
2. Shall utilize color-coded wiring.
3. The heat exchanger shall be controlled by the Core Command microprocessor. See heat exchanger section of this specification.
4. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.
5. Unit control board shall be provided with 7 segment readout via LCD display for status and diagnostics.

#### **23 09 33.00.A. Safeties:**

1. Compressor over-temperature, over current.
2. Standard Low-pressure switch.
  - a. Units shall have low pressure, loss of charge automatic reset device that will shut off compressor when tripped.
  - b. Low pressure control:
    - Provides active protection in both heating and cooling modes at all outdoor ambient temperatures. The low pressure control is an automatic reset type and opens at approximately 15 psig and closes at approximately 40 psig. Operation is slightly different between cooling and heating modes.
3. Standard High-pressure switch.
  - a. Unit shall be equipped with high pressure switch device that will shut off compressor when tripped.
  - b. High Pressure control:
    - The high pressure control is an automatic reset type and opens at approximately 610 psig and closes at approximately 420 psig. The compressor and fan motor will stop when the high pressure control opens and will start again if the high side pressure drops to approximately 420 psig where the automatic reset high pressure control resets. If the high pressure control opens 3 times within a particular call for heating or cooling operation, the defrost control will lock out compressor and outdoor fan operation.
4. Automatic reset, motor thermal overload protector.
5. Heating section shall be provided with the following minimum protections:
  - a. High-temperature limit switches.
  - b. Induced draft motor pressure switch.
  - c. Flame rollout switch.
  - d. Flame proving controls.

### **23 09 93 Sequence of Operations for HVAC Controls**

#### **23 09 93.00 INSERT SEQUENCE OF OPERATION**

### **23 40 13 Panel Air Filters**

#### **23 41 13.00.A. Standard filter section shall**

1. Shall consist of factory-installed, low velocity, throwaway 2-in. thick fiberglass filters of commercially available sizes.
2. Unit shall use only one filter size. Multiple sizes are not acceptable.
3. Filter face velocity shall not exceed 365 fpm at nominal airflows.
4. Filters shall be accessible through an access panel with “no-tool” removal as described in the unit cabinet section of the specification (23 81 19.13.H).

**23 81 19 Self-Contained Air Conditioners****23 81 19.13 Small Capacity Self-Contained Air Conditioners****23 81 19.13.A. General**

1. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing a(n) hermetic scroll compressor(s) for cooling duty and gas combustion for heating duty.
2. 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.
3. Unit shall use environmentally safe, R410A refrigerant.
4. Unit shall be installed in accordance with the manufacturer's instructions.
5. Unit must be selected and installed in compliance with local, state, and federal codes.
6. Model and serial data shall be reprinted inside the control box.

**23 81 19.13.B. Quality Assurance**

1. Unit meets ASHRAE 90.1-2019 minimum efficiency requirements.
2. Unit shall be rated in accordance with AHRI Standards 340/360.
3. Unit shall be designed to conform to ASHRAE 15.
4. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
5. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
6. Unit casing shall be capable of withstanding 1000-hour salt spray exposure per ASTM B117 (scribed specimen).
7. Unit shall be designed in accordance with ISO 9001:2015, and shall be manufactured in a facility registered by ISO 9001:2015.
8. Roof curb shall be designed to conform to NRCA Standards.
9. 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.
10. Unit shall be designed in accordance with UL Standard 1995, Fifth Ed. including tested to withstand rain.
11. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.
12. Five (5) years warranty for 3 phase, commercial applications compressor
13. Ten (10) years warranty for 3 phase, commercial applications aluminized heat exchanger
14. Twenty (20) years for 3 phase, commercial applications stainless steel heat exchanger
15. One (1) year warranty for 3 phase, commercial application parts

**23 81 19.13.C. Delivery, Storage, and Handling**

1. Unit shall be stored and handled per manufacturer's recommendations.
2. Lifted by crane requires either shipping top panel or spreader bars.
3. Unit shall only be stored or positioned in the upright position. 23 81 19.13.E.

**23 81 19.13.E. Project Conditions**

1. As specified in the contract.

**23 81 19.13.F. Operating Characteristics**

1. Unit shall be capable of starting and running at 115°F (46°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 360 at  $\pm 10\%$  voltage.
2. 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).
3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
4. Unit shall be factory configured for vertical supply & return configurations.
5. Unit shall be field convertible from vertical to horizontal configuration.
6. Unit shall be capable of mixed operation: vertical supply with horizontal return or horizontal supply with vertical return.

**23 81 19.13.G. Electrical Requirements**

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

## 23 81 19.13.H. Unit Cabinet

1. Unit cabinet shall be constructed of galvanized steel.
2. Unit cabinet exterior paint shall be pre-painted steel.
3. The sheet-metal cabinet shall be constructed of 18-gauge material for structural components with an underlying coat of G90.
4. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2-in. thick, 1.6 lb. density, flexible fiberglass insulation, foil faced on the air side. Aluminum foil-faced fiberglass insulation shall be used in the gas heat compartment.
5. Shall utilize uniform screw sizing.
6. Base of unit shall have a location for thru-the-base gas and electrical connections standard.
7. Base Rail
  - a. Unit shall have base rails on a minimum of 4 sides.
  - b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
  - c. Holes shall be provided in the base rail for moving the rooftop for fork truck.
  - d. Base rail shall be a minimum of 14 gauge thickness.
8. Condensate pan and connections:
  - a. Shall be a sloped condensate drain pan made of a non-corrosive material and be removable for cleaning.
  - b. Shall comply with ASHRAE Standard 62.
  - c. 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.
  - d. Shall be able to slide out completely.
  - e. Shall be separate from the coil.
9. Standard factory installed condensate overflow sensor
10. Top panel:
  - a. Shall be a single piece top panel over indoor section.
11. Gas Connections:
  - a. All gas piping connecting to unit gas valve shall enter the unit cabinet at a single location on side of unit (horizontal plane).
  - b. Thru-the-base capability
    - i. Standard unit shall have a thru-the-base gas-line location using a continuous raised, flange around opening in the basepan.
    - ii. No basepan penetration, other than those authorized by the manufacturer, is permitted.
12. Electrical Connections
  - a. All unit power wiring shall enter unit cabinet a single, factory-prepared, continuous raised flange opening in the basepan.
  - b. Thru-the-base capability
    - i. Standard unit shall have a thru-the-base electrical location(s) using a raised, continuous raised flange opening in the basepan.
    - ii. No basepan penetration, other than those authorized by the manufacturer, is permitted.
13. Component access panels (standard)
  - a. Cabinet panels shall be easily opened for servicing.
  - b. Panels covering filters shall have hinges with 1/4 turn fasteners.

## 23 81 19.13.I. Gas Heat

1. General
  - 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.
2. The heat exchanger shall be controlled by the Core Command microcompressor.
  - a. The Core Command board shall notify users of fault using two 7 segment displays.
3. Standard Heat Exchanger construction
  - a. 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.

- b. Burners shall be of the in-shot type constructed of aluminum-coated steel
- c. 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.
- d. Each heat exchanger tube shall contain tubulators for increased heating effectiveness.
- 4. Optional Stainless Steel Heat Exchanger construction
  - a. Use energy saving, direct-spark ignition system.
  - b. Use a redundant main gas valve.
  - c. Burners shall be of the in-shot type constructed of aluminum-coated steel.
  - d. All gas piping shall enter the unit cabinet at a single location on side of unit (horizontal plane).
  - e. The optional stainless steel heat exchanger shall be of the tubular-section type, constructed of a minimum of 20-gauge type 409 stainless steel.
  - f. Type 409 stainless steel shall be used in heat exchanger tubes.
  - g. Complete stainless steel heat exchanger allows for greater application flexibility.
- 5. Induced draft combustion motor and blower
  - a. Shall be a direct-drive, single inlet, forward-curved centrifugal type.
  - b. Shall be made from steel with a corrosion-resistant finish.
  - c. Shall be permanently lubricated sealed bearings.
  - d. Shall have inherent thermal overload protection.
  - e. Shall have an automatic reset feature.

**23 81 19.13.J. Coils**

- 1. Standard Aluminum/MicroChannel Coils:
  - a. Standard evaporator and condenser coils shall be aluminum.
  - b. Evaporator and condenser coils shall be leak tested to 150 psig, pressure tested to 400 psig, and qualified to UL 1995 burst test at 2,200 psi.

**23 81 19.13.K. Refrigerant Components**

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

**23 81 19.13.L. Filter Section**

- 1. Filters access is specified in the unit cabinet section of this specification.
- 2. Filters shall be held in place by filter tray, facilitating easy removal and installation.
- 3. Shall consist of factory-installed, low velocity, throw-away 2-in. thick fiberglass filters.
- 4. Filter face velocity shall not exceed 320 fpm at nominal airflows.
- 5. Filters shall be standard, commercially available sizes.
- 6. Only one size filter per unit is allowed.

## 23 81 19.13.M. Evaporator Fan and Motor

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

## 23 81 19.13.N. Condenser Fans and Motors

1. Condenser fan motors:
  - a. Shall be a totally enclosed motor.
  - b. Shall use permanently lubricated bearings.
  - c. Shall have inherent thermal overload protection with an automatic reset feature.
  - d. Shall use a shaft-down design. Shaft-up designs including those with “rain-slinger devices” shall not be allowed.
2. Condenser Fans shall:
  - a. Shall be a direct-driven propeller type fan.
  - b. Shall have aluminum blades riveted to corrosion-resistant steel spiders and shall be dynamically balanced.

## 23 81 19.13.O. Special Features

1. Integrated Economizers:
  - a. Integrated, gear-driven parallel modulating blade design type capable of simultaneous economizer and compressor operation.
  - b. Independent modules for vertical or horizontal return configurations shall be available. Vertical return modules shall be available as a factory installed option.
  - c. Damper blades shall be galvanized steel with metal gears. Plastic or composite blades on intake or return shall not be acceptable.
  - d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
  - e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
  - f. Shall be equipped with low-leakage dampers, not to exceed 2% leakage at 1 in. wg pressure differential.
  - g. Shall be capable of introducing up to 100% outdoor air.
  - h. Shall be equipped with a barometric relief damper capable of relieving up to 35% return air, depending on the airflow.
  - i. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
  - j. 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.
  - k. 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%.
  - l. 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.
  - m. Dampers shall be completely closed when the unit is in the unoccupied mode.
  - n. Economizer controller shall accept a 2-10Vdc CO<sub>2</sub> sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor-air damper to provide ventilation based on the sensor input.
  - o. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
  - p. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
  - q. Economizer wire harness will have provision for smoke detector available in supply and return options.
  - r. Shall provide fault detection and diagnostics (FDD) system in accordance with local code. Faults shall be communicated out on an alarm signal.

2. Manual damper
  - a. 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.
3. Liquid Propane (LP) Conversion Kit (sold separately)
  - a. 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.
4. Condenser Coil Hail Guard Assembly
  - a. Shall protect against damage from hail.
  - b. Shall be louvered style.
5. Unit-Mounted, Non-Fused Disconnect Switch:
  - a. Switch shall be factory or field installed.
  - b. Switch shall be internally mounted with external access.
  - c. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
  - d. Shall be accessible from outside the unit.
  - e. Shall provide local shutdown and lockout capability.
6. Convenience Outlet:
  - a. Non-Powered convenience outlet.
  - b. Outlet shall be powered from a separate 115-120v power source.
  - c. A transformer shall not be included.
  - d. Outlet shall be field-installed and internally mounted with easily accessible 115-v female receptacle.
  - e. Outlet shall include 15 amp GFI receptacle with independent fuse protection.
  - f. Outlet shall be accessible from outside the unit.
7. Flue Hood:
  - a. Flue discharge deflector shall direct unit exhaust vertically instead of horizontally.
8. Propeller Power Exhaust:
  - a. Power exhaust shall be used in conjunction with an integrated economizer.
  - b. Independent modules for vertical or horizontal return configurations shall be available.
  - c. Horizontal power exhaust is shall be mounted in return ductwork.
  - d. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0-100% adjustable setpoint on the economizer control.
  - e. Capable of adjustable but constant volume.
9. Dehumidification
  - a. Shall utilize a dual-phase hot gas reheat control sequence.
  - b. 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).
  - c. Shall provide neutral air to the occupied space.
  - d. Shall have two modes: Cooling and Dehumidification.
  - e. 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.
  - f. 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.
  - g. Modulate reheat coil refrigerant temperature via outdoor fan motor controller to achieve neutral air.
  - h. Variable Frequency Drive shall allow the unit to operate with two stages of heat.
10. Roof Curbs (Vertical):
  - a. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
  - b. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
11. Return Air Enthalpy Sensor:
  - a. The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
12. Indoor Air Quality (CO<sub>2</sub>) Sensor:
  - a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
  - b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The set point shall have adjustment capability.

13. Smoke detectors:
  - a. Shall be a Four-Wire Controller and Detector.
  - b. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
  - c. Shall use magnet-activated test/reset sensor switches.
  - d. Shall have tool-less connection terminal access.
  - e. Shall have a recessed momentary switch for testing and resetting the detector.
  - f. Controller shall include:
    - One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel
    - Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment
    - One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station
    - Capable of direct connection to two individual detector modules.
    - Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
14. Barometric relief
  - a. Shall include damper, seals, hard-ware, and hoods to relieve excess building pressure.
  - b. Damper shall gravity-close upon shutdown.
15. Time Guard
  - a. Shall prevent compressor short cycling by providing a 5-minute delay ( $\pm 2$  minutes) before restarting a compressor after shutdown for any reason.
  - b. One device shall be required per compressor.
16. Standard Factory installed Overflow Switch
  - a. Switch shall monitor the condensate level in drain pan and stops compression operation when overflow conditions occur.
17. Access Panels
  - a. Hinges with 1/4 turn fasteners shall be permanently attached.
  - b. Hinges shall be powder coated and made from stainless steel.
- 26 29 23.12.P Adjustable Frequency Drive
  1. Unit shall be supplied with an electronic variable frequency drive for the supply air fan.
  2. Drive shall be factory installed in an enclosed cabinet.
  3. Drive shall meet UL Standard 95-5V.
  4. The completed unit assembly shall be UL listed.
  5. Drives are to be accessible through a tooled access hinged door assembly.
  6. The unit manufacturer shall install all power and control wiring.
  7. 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.
  8. Drive shall be programmed and factory run tested in the unit.



**BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.**

## GENERAL TERMS OF LIMITED WARRANTY\*

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

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

### Compressor

3 Phase, Commercial Applications.....Five (5) Years

### Aluminized Heat Exchanger

3 Phase, Commercial Applications.....Ten (10) Years

### Stainless Steel Heat Exchanger

3 Phase, Commercial Applications .....Twenty (20) Years

### Parts

3 Phase, Commercial Applications.....One (1) Year



The new degree of comfort.™

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

Rheem Heating, Cooling & Water Heating • 5600 Old Greenwood Road  
Fort Smith, Arkansas 72908 • [www.rheem.com](http://www.rheem.com)

Rheem Canada Ltd./Ltée • 125 Edgeware Road, Unit 1  
Brampton, Ontario • L6Y 0P5



INTEGRATED HOME COMFORT

PRINTED IN U.S.A. 4/22 QG FORM NO. R11-872 REV. 8