



# FRIEDRICH

1 8 8 3

## Commercial Resolute™ Line F-Series™ Packaged Gas Electric Units



### RGEH Series (15-25 Ton Models)

Cooling Efficiencies up to: 10.8 EER & 14 IEER

Nominal Sizes: 15, 17.5, 20 & 25 Tons [52.8, 61.5, 70.3 & 87.9 kW]

Cooling Capacities: 172.0k Btu/h [50.41 kW] to 24.0k Btu/h [83.23 kW]

Refrigerant Type: R-454B

ASHRAE 90.1 2022 Compliant Models



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## **RGEH STANDARD FEATURES INCLUDE:**

### **Convenience & Serviceability Features**

- Fork-able base rails for easy handling and lifting
- Color-coded and labeled wiring
- Single point electrical connections
- Field convertible airflow—vertical downflow or horizontal sideflow
- Solid-core liquid line filter drier
- Hinged major access doors with heavy-duty gasketing and 1/4 turn latches
- Slide-out indoor fan assembly for added service convenience
- Slide-out, internally sloped condensate drain pan with overflow switch, conforms to ASHRAE 62 standards
- Slide-out filter rack with 2-inch filters
- MERV8 and MERV13 filters available as a factory-installed option
- Factory-installed refrigerant leak detection system

### **Quality Manufacturing Features**

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

### **Performance Features**

- Cooling operation up to 125°F ambient
- Scroll compressors with internal line break overload and high-pressure protection
- Dual stage compressor, 2 stages of cooling
- MicroChannel condenser coil and Tube and Fin evaporator coil
- Blower with variable frequency drive (VFD) control
- High pressure and low pressure/loss of charge protection
- Permanently lubricated gas heat inducer, evaporator and condenser motors
- Internally protected condenser motors with totally enclosed shaft down design

### **Controls Features**

- Standard Modbus interface
- Factory-installed DDC control and sensors, enabling easy connectivity with LonWorks® or BACnet® BAS systems for remote monitoring and control

## FACTORY-INSTALLED OPTIONS:

- Economizer w/Single Enthalpy (Downflow/Vertical)
- Economizer w/Single Enthalpy (Downflow/Vertical) DDC
- Low-Ambient Control Kit
- Freeze Stat Kit
- Electric Heater Kits
- Return/Supply Smoke Detector (Downflow/Vertical)

## FIELD-INSTALLED ACCESSORY EQUIPMENT:

| Accessory                                                                                                          | Model Number  | Factory Installation Available? |
|--------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------|
| <b>Economizers</b>                                                                                                 |               |                                 |
| DDC Economizer with Single Enthalpy (Downflow) <i>RRS Economizer with Honeywell Controller</i>                     | AXRD-01RMDCM3 | Yes                             |
| DDC Economizer with Single Enthalpy (Downflow) <i>RRS Economizer with Honeywell Controller with Smoke Detector</i> | AXRD-01RMDDM3 | Yes                             |
| DDC Economizer with Single Enthalpy (Horizontal) <i>RRS Economizer with Honeywell Controller</i>                   | AXRD-01RMHCM3 | No                              |
| Non-DDC Economizer with Single Enthalpy (Downflow) <i>RRS Economizer with Siemens Controller</i>                   | RXRD-51RHDAM3 | Yes                             |
| Non-DDC Economizer with Single Enthalpy (Horizontal) <i>RRS Economizer with Siemens Controller</i>                 | RXRD-51RHHAM3 | No                              |
| Economizer Universal DDC Interface Kit                                                                             | RXXR-DDC02    | Yes <sup>1</sup>                |

<sup>1</sup>When a factory installed economizer is selected in the unit option codes, this accessory is automatically factory installed if required

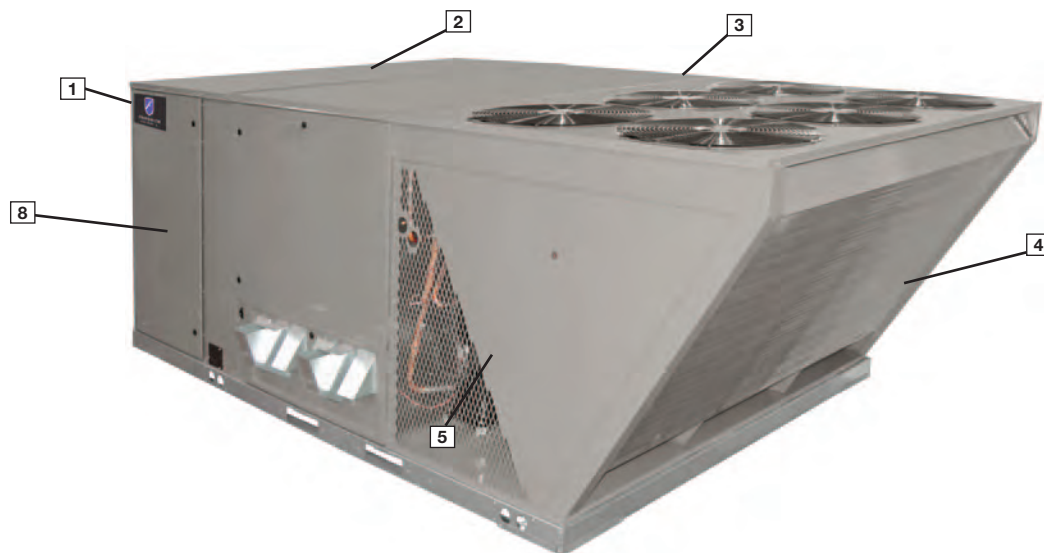
| Accessory                                                            | Model Number | Factory Installation Available? |
|----------------------------------------------------------------------|--------------|---------------------------------|
| Comfort Alert® (1 per Compressor) (DDC)                              | RXXR-AZ01    | Yes                             |
| Communication Card, BACnet                                           | RXXR-AY01    | No                              |
| Communication Card, LonWorks                                         | RXXR-AY02    | No                              |
| Concentric Adapter/Transition (15 & 17.5 ton)                        | RXMC-CJ07    | No                              |
| Concentric Adapter/Transition (20 ton)                               | RXMC-CK08    | No                              |
| Concentric Adapter/Transition (25 ton)                               | RXMC-CL09    | No                              |
| Concentric Flush Mount Diffuser (15 & 17.5 ton)                      | RXRN-AD80    | No                              |
| Concentric Step Down Diffuser (15 & 17.5 ton)                        | RXRN-AD81    | No                              |
| Concentric Step Down Diffuser (20 ton)                               | RXRN-AD86    | No                              |
| Concentric Step Down Diffuser (25 ton)                               | RXRN-AD88    | No                              |
| Convenience Outlet, Non-Powered                                      | RXXR-AN01    | Yes                             |
| Dual Enthalpy, Temperature and Humidity Sensor (for Honeywell DDC)   | RXXR-AV02    | No                              |
| Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Non-DDC) | PD555460     | No                              |
| Fresh Air Damper <sup>2</sup> , Manual                               | AXRF-KFA1    | No                              |

| Accessory                                            | Model Number   | Factory Installation Available? |
|------------------------------------------------------|----------------|---------------------------------|
| Fresh Air Damper, Motorized <sup>2</sup> (DDC)       | RXXR-AW05      | No                              |
| Outdoor Coil Louver Kit (15 Ton)                     | AXRX-AAD01K    | Yes                             |
| Outdoor Coil Louver Kit (17.5-25 Ton)                | AXRX-AAD01L    | Yes                             |
| Low-Ambient Control Kit (1 Per Compressor)           | RXRZ-C02       | Yes                             |
| MERV 8 Filter                                        | RXMF-M08A22520 | Yes                             |
| MERV 13 Filter                                       | RXMF-M13A22520 | Yes                             |
| Power Exhaust (208/230V) Kit, Convertible <i>RRS</i> | RXXR-BGF05C    | No                              |
| Power Exhaust (460V) Kit, Convertible <i>RRS</i>     | RXXR-BGF05D    | No                              |
| Roofcurb, 14"                                        | RXKG-CBH14     | No                              |
| Roofcurb Adapter to RXKG-CAF14                       | RXXR-CJCF14    | No                              |
| Roofcurb Adapter to RXRK-E56                         | RXXR-CJCE56    | No                              |
| Sensor, Carbon Dioxide (Wall Mount)                  | RXXR-AR02      | No                              |
| Sensor, Room Humidity                                | RHC-ZNS4       | No                              |
| Sensor, Room Temperature and Relative Humidity       | RHC-ZNS5       | No                              |
| Unfused Service Disconnect <sup>3</sup>              | RXXR-AP01      | Yes                             |

<sup>2</sup>Motorized Kit and Manual Fresh Air Damper must be combined for a complete Motorized Outside Air Damper Selection

<sup>3</sup>Only available on 15 and 17.5 Ton models





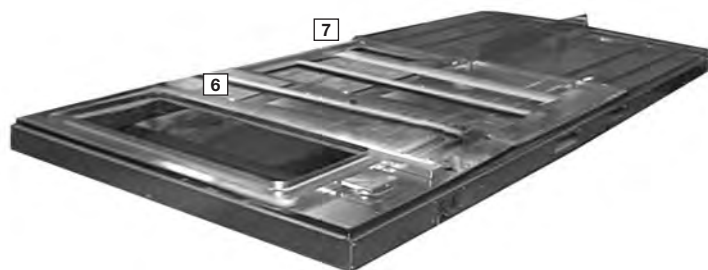
## Cabinet and Foundation

Outwardly, the large Friedrich® Commercial Series label (1) identifies the brand to the customer. The sheet-metal cabinet (2) uses nothing less than 20-gauge material for structural components with an underlying coat of G90. To ensure the leak-proof integrity of these units, the design utilizes a top with a 1/8" drip lip (3), gasket-protected panels and screws. The slanted outdoor coil protects the coil from hail damage (4). Every Friedrich package unit uses the toughest finish in the industry, using electro deposition baked-on enamel tested to withstand a rigorous 1000-hour salt spray test, per ASTM B117.

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

## Base Pan

The base pan is stamped, which forms a 1-1/8" flange around the supply and return opening and has eliminated the worry of water entering the conditioned space (6). The insulation has been placed on the underside of the basepan, removing areas that would allow for potential moisture accumulation, which can facilitate growth of harmful bacteria. All insulation is secured with both adhesive and mechanical fasteners, and all edges are hidden.



## Drain Pan

The drainpan (7) is made of plastic that resists the growth of harmful bacteria and is sloped for the latest IAQ benefits. Furthermore, the drainpan slides out for easy cleaning.

## Test Standards

During development, each unit was tested to U.L. 60335-2-40, ANSI 21.47, AHRI 340-360 and other Friedrich-required reliability tests. Friedrich adheres to stringent ISO 9001:2015 quality procedures, and each unit bears the U.L. and AHRI certification labels located on the unit nameplate. Contractors can rest assured that when a Friedrich package unit arrives at the job, it is ready to go with a factory charge and quality checks. Hinged access is standard for the electrical, blower, compressor and filter compartments.

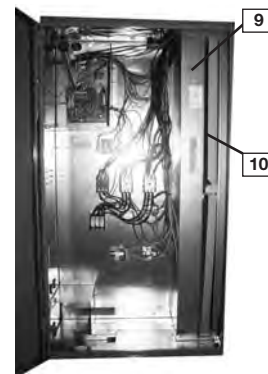
## Easy Access

Access to all major compartments is from the front of the unit, including the filter and electrical compartment (8), blower compartment, furnace section, and outdoor section. Each panel is permanently embossed with the compartment name (control/filter access, blower access and furnace access). Hinged access is standard for the electrical, blower, compressor and filter compartments.

Electrical and filter compartment access is through a large, toolless, hinged-access panel with 1/4 turn latches. On the outside of the panel is the unit nameplate, which contains the model and serial number, electrical data and other important unit information.

## Charging Charts, Wiring Diagrams, & Labels

The unit charging chart is located on the inside of the electrical and filter compartment door. Electrical wiring diagrams are found on the control box cover, which allows contractors to move them to more readable locations. To the right of the control box the model and serial number can be found. Having this information on the inside will assure model identification for the life of the product. The production line quality test assurance label is also placed in this location (9).





### Filter Rack

The tracked filter rack (10) allows for easy change of eight 2" x 20" x 25" standard sized filters.

### Control Box

Inside the control box (11), each electrical component is clearly identified with a label that matches the component to the wire diagram for ease of trouble shooting. All wiring is numbered on each end of the termination and color-coded to match the wiring diagram. The integrated furnace control, used to control furnace operation, incorporates a flashing LED troubleshooting device. Flash codes are clearly outlined on the unit wiring diagram. The control transformer has a low voltage circuit breaker that trips if a low voltage electrical short occurs. There is a blower contactor and compressor contactor for each compressor.



### ClearControl

As part of the ClearControl system which allows real time monitoring and communication between rooftop units, the RGEH Package Gas Electric Unit has a Rooftop Unit Controller (RTU-C) factory mounted and wired in the control panel. The RTU-C is a solid-state microprocessor-based control board that provides flexible control and extensive diagnostics for all unit functions. The RTU-C through proportional/integral control algorithms perform 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 (12). New 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 freezestats to allow measurement of refrigerant suction line temperatures.



The RGEH Package Gas/Electric with ClearControl is specifically designed to be applied in four distinct applications:

- 1. BACnet Communication** — The unit 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. BACnet Communication Module plugs into the unit RTU-C controller and allows communication between ClearControl and the BACnet MSTP or IP 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 unit 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 ClearControl 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 ft. with no repeater. The LonWorks limit of 64 nodes per segment applies to this device.
- 3. 24V Thermostat Compatibility** — The unit 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 unit is compatible with a zone sensor and mechanical or solid state time clock connected to the RTU-C. Extensive unit status and diagnostics are displayed on the LCD screen of the RTU-C.

## Comfort Alert

A factory or field-installed Comfort Alert® module is available for power phase-monitoring protection and additional compressor diagnostics. The alarms can be displayed on the ClearControl 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) comes standard and optimizes energy usage year round by providing a lower speed for first stage cooling operation improving IEER's over the conventional constant fan system. Furthermore, operating in the constant fan mode at the reduced speed can use as little as 1/5<sup>th</sup> of the energy of a conventional constant fan system. Also, by operating at a lower speed on first stage cooling up to 51% more moisture is removed improving comfort during low load operation. The VFD supply fan factory option meet's California Title 24 and ASHRAE 90.1-2022 requirements for multi blower speed control. VFD also ramps up to the desire speed reducing stress on the supply fan components and reducing the noise from 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

For added convenience in the field, a factory-installed convenience outlet and disconnect (13) are available. Low and High voltage can enter either 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 high-voltage terminal block. The suggested mounting for the field-installed disconnect is on the exterior side of the electrical control box.



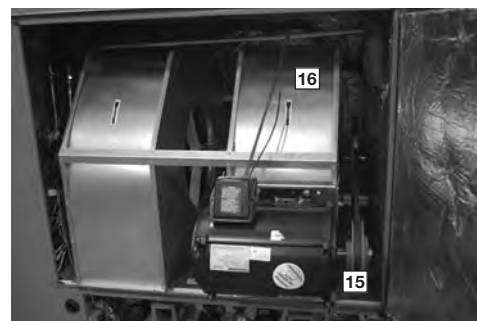
## External Gauge Ports

In the outdoor section are the external gauge ports. (14). With gauge ports mounted externally, an accurate diagnostic of system operation can be performed quickly and easily. To identify the use of A2L class refrigerant R-454B, refrigerant ports are covered with red caps.



## Blower Compartment

The blower compartment is to the right of the control box and can be accessed by 1/4 turn latches. To allow easy maintenance of the blower assembly, the entire assembly easily slides out by removing four #10 screws from the blower assembly. The adjustable motor pulley (15) 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 belt is removed, the motor sheave can be adjusted to the desired number of turns, ranging from 1 to 6 turns open. Where the demands for the job require high static, Friedrich has high-static drives available 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 (16) and blower scroll provide quiet and efficient airflow. The blower sheave is secured by an “H” bushing which firmly secures the pulley to the blower shaft for years of trouble-free operation. The “H” bushing allows for easy removal of the blower pulley from the shaft, as opposed to the use of a set screw, which can score the shaft, creating burrs that make blower-pulley removal difficult.



Also inside the blower compartment are the optional low-ambient controls (17). The low-ambient controls allow for operation of the compressor down to 0 degrees ambient temperature by cycling the outdoor fans on high pressure. Use of polarized plugs and schrader fittings allow for easy field or factory installation. The freeze sensor clips on the suction line near the evaporator outlet. The freeze sensor protects the compressor if the evaporator coil gets too cold (below freezing) due to low airflow and allows monitoring of the suction line temperature on the controller display.

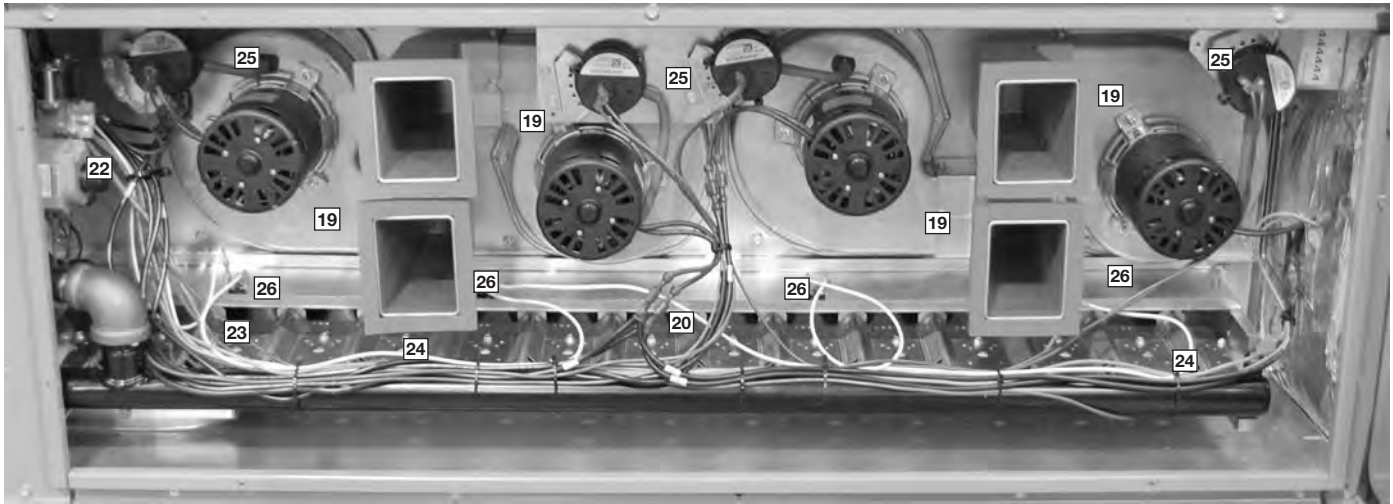


Inside the blower compartment the interlaced evaporator can also be viewed. The evaporator uses enhanced fin technology for maximum heat transfer. The TXV metering device assures even distribution of refrigerant throughout the evaporator.



Wiring throughout the unit is neatly bundled and routed. Where wire harnesses go through the condenser bulkhead or blower deck, a molded wire harness assembly (18) provides an air-tight and water-tight seal, and provides strain relief. Care is also taken to tuck raw edges of insulation behind sheet metal to improve indoor air quality.





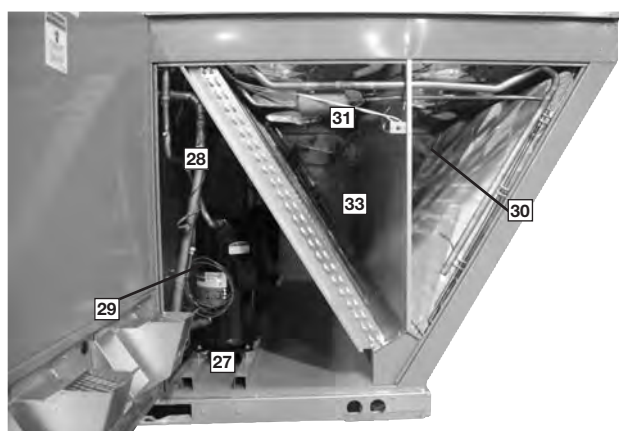
## Furnace & Gas Heat Exchanger

The furnace compartment contains the latest furnace technology on the market. The draft inducers (19) draw the flame from the Friedrich exclusive in-shot burners (20) into the aluminized tubular heat exchanger (21) for clean, efficient gas heat. Stainless steel heat exchangers can be factory-installed for those applications that have high fresh-air requirements, or applications in corrosive environments. Each furnace is equipped with a two-stage gas valve (22), which provides two stages of gas heat input. The first stage operates at 50% of the second stage (full fire). 81% steady state efficiency is maintained on both first and second stage by staging the multiple inducers to optimize the combustion airflow and maintain a near stoichiometric burn at each stage

The direct spark igniter (23) assures reliable ignition in the most adverse conditions. This is coupled with remote flame sense (24) to assure that the flame has 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 assure consistent and reliable operation after ignition:

- Pressures switches (25) to assure adequate combustion airflow before ignition.
- Rollout switches (26) to assure no obstruction or cracks in the heat exchanger.
- A limit device that protects the furnace from over-temperature problems.



## Compressor

The compressor compartment houses the heartbeat of the unit. The scroll compressor (27) is known for its long life, and for reliable, quiet, and efficient operation. The suction and discharge lines are designed with shock loops (28) to absorb the strain and stress that the starting torque, steady state operation, and shut down cycle impose on the refrigerant tubing. Each compressor and circuit is independent for built-in redundancy, and each circuit is clearly marked throughout the system. Each unit has two stages of efficient cooling operation, first stage is approximately 50% of second stage.

## High and Low Pressure Switches & Filter Dryer

The low-pressure switches (29) and high-pressure switches (30) are mounted on the appropriate refrigerant lines in the condenser section. The high-pressure switch will shut off the compressors if pressures exceeding 610 PSIG are detected as may occur if the outdoor fan motor fails. The low-pressure switches shut off the compressors if low pressure is detected due to loss of refrigerant charge. Each factory-installed option is brazed into the appropriate high or low side and wired appropriately. Use of polarized plugs allow for easy field inspection and repair. Each unit comes standard with filter dryer (31).

## Condenser Fans

The condenser fan motor (32) can easily be accessed and maintained by removing the protective fan grille. The polarized plug connection allows the motor to be changed quickly and eliminates the need to snake wires through the unit. The outdoor coil uses the latest enhanced fin design (33) for the most effective method of heat transfer.

## MicroChannel Condenser Coil

The condenser coil uses MicroChannel technology for maximum heat transfer, light weight, fewer manually brazed connections and reduced refrigerant charge (33). The outdoor coil is slanted to protect it from Mother Nature.



## Economizer and Dampers

Each unit is designed for both downflow or horizontal applications (34) for job configuration flexibility. The return air compartment can also contain an economizer (35). Three models exist; two for downflow applications (a downflow economizer with factory-installed smoke detector in the return section is available), and one for horizontal applications. Each unit is pre-wired for the economizer to allow quick plug-in installation. The downflow economizer is also available as a factory-installed option. Power Exhaust is easily field-installed. The economizer, which provides free cooling when outdoor conditions are suitable and also provides fresh air to meet local requirements, comes standard with single enthalpy controls. The controls 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 setpoint, an outdoor-air setpoint, a mix-air setpoint, and a CO<sub>2</sub> setpoint. Barometric relief is standard on all economizers. Power Exhaust is easily field-installed.



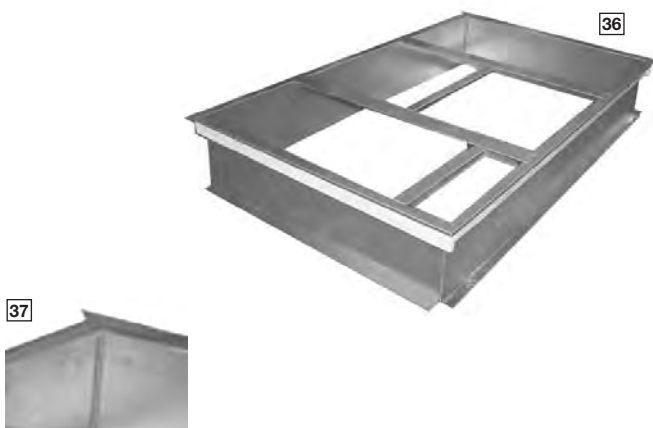
Power Exhaust is easily field-installed. The power exhaust is housed in the barometric relief opening and is easily slipped in with a plug-in assembly. The wire harness to the economizer also has accommodations for a smoke detector.

The damper minimum position, actual damper position, power exhaust on/off setpoint, mixed air temperature limit setpoint and Demand Controlled Ventilation (DCV) setpoint can be read and adjusted at the unit controller display or remotely through a network connection.

The Space CO<sub>2</sub> level, mixed air temperature, and Economizer Status (Free Cooling Available, Single or Dual Enthalpy) can be read at the unit controller display or remotely through a network connection. Economizer Faults will trigger a network Alarm and can be read at the unit controller display or remotely through a network connection.

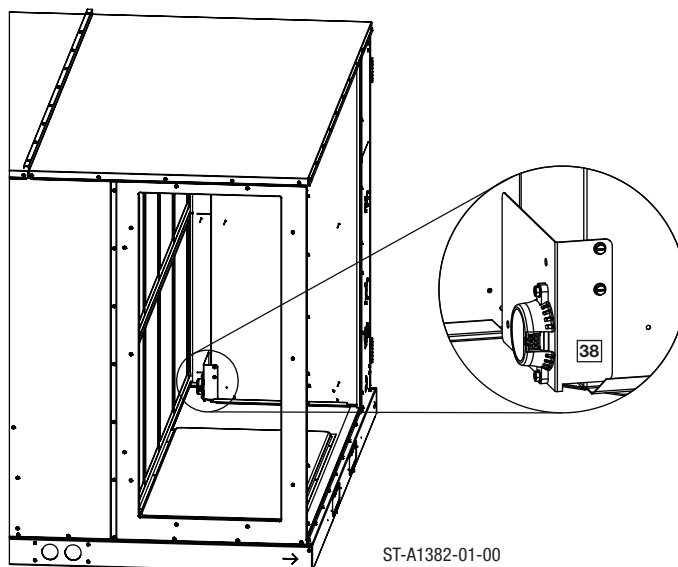
## Roofcurb

The roofcurb (36) is made for toolless assembly at the jobsite by inserting a pin into a hinge in each corner of the adjacent curb sides (37), which makes the assembly process quick and easy.



## Refrigerant Leak Detection

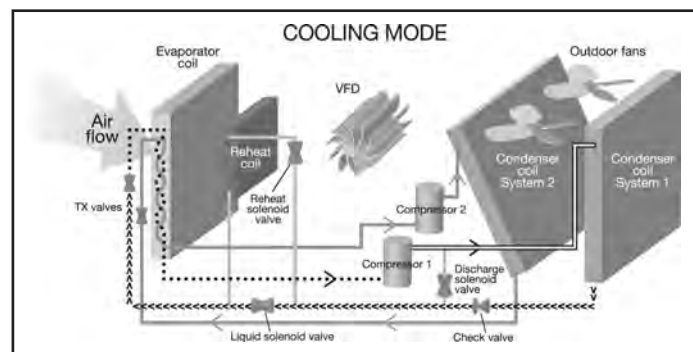
In the event of a detected refrigerant leak, the refrigerant leak detection sensor (38) will trigger the mitigation procedure that shuts off the compressor(s) and turns on the indoor blower motor.



## HUMIDIDRY SYSTEM FEATURES

HumidiDry® is Friedrich's exclusive dehumidification packaged unit solution. It delivers maximum humidity control without compromising desired temperature set point for better occupant comfort. HumidiDry maintains humidity levels at a desired set point when there's little or no demand for air conditioning. Packaged units with HumidiDry hot gas reheat are 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 satisfied but humidity exceeds the humidistat set point, the 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 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 first-stage system runs in the dehumidification cycle, the second-stage system runs in a cooling cycle and the VFD operates on high speed. This provides dry conditioned air.

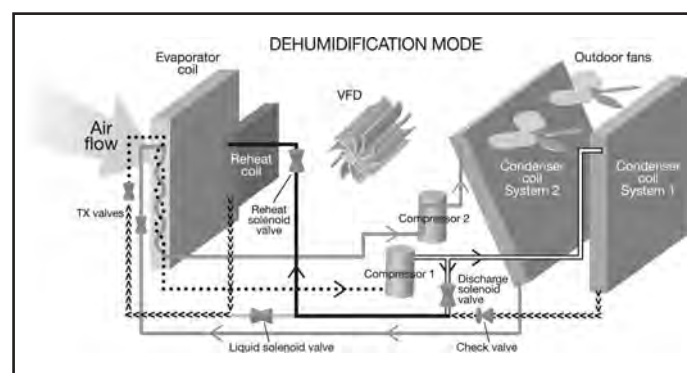
**Figure 1** shows the refrigerant path during the normal cooling mode. The liquid refrigerant leaves the TXV with the sudden pressure drop causing the liquid to expand to a vapor and absorbing the heat from the supply air going through the evaporator coil. The refrigerant vapor then travels to the compressor 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.



HIGH TEMPERATURE VAPOR    TWO PHASE (LIQUID VAPOR MIX)  
 LIQUID    LOW TEMPERATURE VAPOR

**Figure 1**

**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 condenser coil and a bypass circuit where some of the heat is rejected outdoors versus indoors is controlled by an outdoor fan motor controller (OFMC) that monitors the two-phase refrigerant 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.



HIGH TEMPERATURE VAPOR    TWO PHASE (LIQUID VAPOR MIX)  
 LIQUID    LOW TEMPERATURE VAPOR

**Figure 2**

| <u>R</u> | <u>GE</u> | <u>H</u> | <u>Y</u> | <u>B</u> | <u>180</u> | <u>A</u>  | <u>C</u>  | <u>F</u>  | <u>25</u> | <u>2</u>  | <u>C</u>  | <u>A</u>  | <u>***</u> |           |           |           |           |
|----------|-----------|----------|----------|----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|
| <u>1</u> | <u>23</u> | <u>4</u> | <u>5</u> | <u>6</u> | <u>789</u> | <u>10</u> | <u>11</u> | <u>12</u> | <u>13</u> | <u>14</u> | <u>15</u> | <u>16</u> | <u>17</u>  | <u>18</u> | <u>19</u> | <u>20</u> | <u>21</u> |

#### 1—Brand

R = Friedrich

#### 2, 3—Unit Type

GE = Packaged Gas/Electric

#### 4—Cabinet Type

H = Large Commercial

#### 5—Refrigerant

Y = R-454B

#### 6—Efficiency Level

B = Standard Efficiency

#### 7, 8, 9—Capacity

180 = 15 Ton

210 = 17.5 Ton

240 = 20 Ton

300 = 25 Ton

#### 10—Major Series

A = 1st Design

#### 11—Voltage

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

D = 3 PH/460 V/60 Hz

#### 12—Drive

F = Belt Drive – VFD Low

G = Belt Drive – VFD Medium

H = Belt Drive – VFD High

(H-Drive only available Field-Installed on 20 Ton)

#### 13, 14—Heat Capacity

25 = 250,000 Btu/h<sup>1</sup>

30 = 300,000 Btu/h<sup>2</sup>

35 = 350,000 Btu/h<sup>1</sup>

40 = 400,000 Btu/h<sup>2</sup>

#### 15—Number of Stages

2 = 2 Stage

B = 2 Stage Stainless

#### 16—Control

C = ClearControl

D = ClearControl & Comfort Alert

#### 17—Minor Series

A = 1st Design

#### 18, 19, 20, 21—Option Code

See next page

<sup>1</sup>Only available for 15 ton and 17.5 ton models.

<sup>2</sup>Only available for 20 ton and 25 ton models.



## FACTORY-INSTALLED OPTION CODES FOR RGEH (15-25 TON)

| 18                                                  |    |    |    |    | 19                                  |      |    |    |  | 20                         |      |    |  |   | 21                   |          |  |  |  |
|-----------------------------------------------------|----|----|----|----|-------------------------------------|------|----|----|--|----------------------------|------|----|--|---|----------------------|----------|--|--|--|
| LV = Louver protection                              |    |    |    |    | DC = Disconnect <sup>2</sup>        |      |    |    |  | EC = Downflow Economizer   |      |    |  |   | M8 = MERV 8 Filter   |          |  |  |  |
| RH = HumidiDry / HGRH (Hot Gas Reheat) <sup>1</sup> |    |    |    |    | NP = Non-Powered Convenience Outlet |      |    |    |  | RS = Return Smoke Detector |      |    |  |   | M13 = MERV 13 Filter |          |  |  |  |
| HA = Hinged Access (Standard)                       |    |    |    |    | LF = Low Ambient                    |      |    |    |  |                            |      |    |  |   |                      |          |  |  |  |
| CC = Coil Coating                                   |    |    |    |    |                                     |      |    |    |  |                            |      |    |  |   |                      |          |  |  |  |
| OPTION CODE CHARACTER HIGHLIGHTED BELOW             |    |    |    |    |                                     |      |    |    |  |                            |      |    |  |   |                      |          |  |  |  |
| C                                                   | HA |    |    |    | A                                   | None |    |    |  | 0                          | None |    |  |   | A                    | Standard |  |  |  |
| D                                                   | LV | HA |    |    | B                                   | LF   |    |    |  | 1                          | EC   |    |  | D | M8                   |          |  |  |  |
| F                                                   | LV | HA | CC |    | C                                   | NP   |    |    |  | 3                          | EC   | RS |  | G | M13                  |          |  |  |  |
| Q                                                   | RH | HA |    |    | D                                   | LF   | NP |    |  |                            |      |    |  |   |                      |          |  |  |  |
| S                                                   | LV | RH | HA |    | E                                   | DC   |    |    |  |                            |      |    |  |   |                      |          |  |  |  |
| T                                                   | LV | RH | HA | CC | F                                   | LF   | DC |    |  |                            |      |    |  |   |                      |          |  |  |  |
|                                                     |    |    |    |    | H                                   | NP   | DC |    |  |                            |      |    |  |   |                      |          |  |  |  |
|                                                     |    |    |    |    | K                                   | LF   | NP | DC |  |                            |      |    |  |   |                      |          |  |  |  |

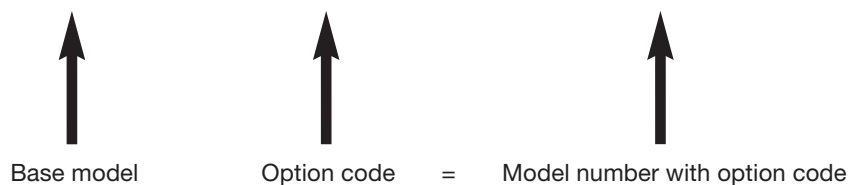
<sup>1</sup>RH not available for 17.5T<sup>2</sup>Only available for 15T and 17.5T

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

**NOTE:** Four 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, "CA0A" 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 "D" has Louver protection and Hot Gas Reheat.
- **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 "B" has Low Ambient Controls.
- **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.
- **Step 4:** In the table above, based on the desired features, choose option code from highlighted options on the left side under the number 21. For example, the option code character "D" has MERV 8 filters.
- The resulting option code from examples above is: "DB3D"
- **Step 5:** Add your option code selection to the end of model number.

◦ Example: RGEHYB180ACF252CA DB3D = RGEHYB180ACF252CADB3D



To select an RGEH 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 – 60 Hz           |
| Total Cooling Capacity—         | 205,000 Btu/h [60.0 kW]              |
| Sensible Cooling Capacity—      | 155,000 Btu/h [45.4 kW]              |
| Heating Capacity—               | 235,000 Btu/h [68.8 kW]              |
| *Condenser Entering Air—        | 95°F [35.0°C] DB                     |
| *Evaporator Mixed Air Entering— | 65°F [18.3°C] WB<br>78°F [25.6°C] DB |
| *Indoor Air Flow (vertical)—    | 7200 CFM [3398 L/s]                  |
| *External Static Pressure—      | 0.70 in. WG [.17 kPa]                |

# 2. SELECT UNIT TO MEET COOLING REQUIREMENTS.

Since total cooling is within the range of a nominal 20 ton [70.3 kW] unit, enter cooling performance table at 95°F [35.0°C] DB condenser inlet air. Interpolate between 63°F [17.2°C] WB and 67°F [19.4°C] to determine total and sensible capacity and power input for 65°F [18.3°C] WB evaporator inlet air at 7725 CFM [3645 L/s] indoor air flow (table basis):

Total Cooling Capacity = 238,250 Btu/h [69.76 kW]  
Sensible Cooling Capacity = 192,550 Btu/h [56.38 kW]  
Power Input (Compressor and Cond. Fans) = 18,200 watts

Use formula in note ① to determine sensible capacity at 78°F [25.6°C] DB evaporator entering air:

$192,550 + (1.10 \times 7,200 \times (1 - 0.11) \times (78 - 80))$   
Sensible Cooling Capacity = 178,452 Btu/h [52.25 kW]

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

Select factors from airflow correction table at 7200 CFM [3398 L/s] and apply to data obtained in step 2 to obtain gross capacity:

Total Capacity =  $238,250 \times 0.99 = 235,868$  Btu/h [69.06 kW]  
Sensible Capacity =  $178,452 \times 0.96 = 171,314$  Btu/h [50.16 kW]  
Power Input =  $18,200 \times 0.99 = 18,018$  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 7200 CFM [3398 L/s]. Total ESP (external static pressure) per the spec of 0.70 in. WG [.17 kPa] includes the system duct and grilles. Add from the table “Component Air Resistance,” 0.01 in. WG [.00 kPa] for wet coil, 0.08 in. WG [.02 kPa] for downflow air flow, for a total selection static pressure of 0.79 (0.8) in. WG [.20 kPa], and determine:

RPM = 739  
WATTS = 2,862  
DRIVE = F (VFD Low)

# 5. CALCULATE INDOOR BLOWER BTU/H HEAT EFFECT FROM MOTOR WATTS, STEP 4.

$2,862 \times 3.412 = 9,765$  Btu/h [2.86 kW]

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

Net Total Capacity =  $235,868 - 9,765 = 226,103$  Btu/h [66.21 kW]  
Net Sensible Capacity =  $171,314 - 9,765 = 161,549$  Btu/h [47.30 kW]

# 7. CALCULATE UNIT INPUT AND JOB EER.

Total Power Input = 18,018 (step 3) + 2,862 (step 4) = 20,880 Watts

$EER = \frac{\text{Net Total Btu/h [kW] (step 6)}}{\text{Power Input, Watts (above)}} = \frac{226,103}{20,880} = 10.83$

# 8. SELECT UNIT HEATING CAPACITY.

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

Heating Capacity = 243,000 Btu/h [71.2 kW]

# 9. CHOOSE MODEL RGEHYB240ACF252CAQA0A.

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

[ ] Designates Metric Conversions

## GENERAL DATA—RGEHYB MODELS—15-25 TON

| Model RGEHYB Series                          | 180                              | 210                              | 240                              | 300                              |
|----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <b>Cooling Performance<sup>A</sup></b>       |                                  |                                  |                                  |                                  |
| Gross Cooling Capacity Btu/h [kW]            | 177,295 [51.9]                   | 209,080 [61.1]                   | 236,290 [69.2]                   | 299,810 [87.8]                   |
| EER                                          | 10.8                             | 10.8                             | 10.8                             | 9.8                              |
| IEER <sup>B</sup>                            | 14                               | 14                               | 14                               | 13                               |
| Nominal CFM/AHRI Rated CFM [L/s]             | 6,000/5,275 [2,832/2,490]        | 7,000/6,800 [3,304/3,209]        | 8,000/6,675 [3,776/3,150]        | 10,000/8,790 [4,719/4,148]       |
| AHRI Net Cooling Capacity Btu/h [kW]         | 172,000 [50.41]                  | 200,000 [58.61]                  | 228,000 [66.82]                  | 284,000 [83.23]                  |
| Net Sensible Capacity Btu/h [kW]             | 129,000 [37.81]                  | 150,000 [43.96]                  | 171,000 [50.12]                  | 213,000 [62.42]                  |
| Net Latent Capacity Btu/h [kW]               | 43,000 [12.6]                    | 50,000 [14.65]                   | 57,000 [16.71]                   | 71,000 [20.81]                   |
| Net System Power kW                          | 15.93                            | 18.52                            | 21.11                            | 28.98                            |
| <b>Compressor</b>                            |                                  |                                  |                                  |                                  |
| No./Type                                     | 2/Scroll                         | 2/Scroll                         | 2/Scroll                         | 2/Scroll                         |
| No. Stages                                   | 2                                | 2                                | 2                                | 2                                |
| <b>Outdoor Sound Rating (dB)<sup>C</sup></b> |                                  |                                  |                                  |                                  |
|                                              | 87                               | 88                               | 92                               | 92                               |
| <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]                    | 1 [25.4]                         | 1 [25.4]                         | 1 [25.4]                         | 1 [25.4]                         |
| Rows / FPI [FPcm]                            | 52.4 [4.87]                      | 52.4 [4.87]                      | 52.4 [4.87]                      | 52.4 [4.87]                      |
|                                              | 2 / 23 [9]                       | 2 / 23 [9]                       | 2 / 23 [9]                       | 2 / 23 [9]                       |
| <b>Indoor Coil - Fin Type</b>                |                                  |                                  |                                  |                                  |
| Tube Type                                    | Louvered                         | Louvered                         | Louvered                         | Louvered                         |
| Tube Size in. [mm]                           | Rifled                           | Rifled                           | Rifled                           | Rifled                           |
| Face Area sq. ft. [sq. m]                    | 0.375 [9.5]                      | 0.375 [9.5]                      | 0.375 [9.5]                      | 0.375 [9.5]                      |
| Rows / FPI [FPcm]                            | 26.7 [2.48]                      | 26.7 [2.48]                      | 26.7 [2.48]                      | 26.7 [2.48]                      |
| Refrigerant Control                          | 2 / 18 [7]                       | 2 / 18 [7]                       | 4 / 15 [7]                       | 4 / 15 [7]                       |
| Drain Connection No./Size in. [mm]           | TX Valves                        | TX Valves                        | TX Valves                        | TX Valves                        |
|                                              | 1/1 [25.4]                       | 1/1 [25.4]                       | 1/1 [25.4]                       | 1/1 [25.4]                       |
| <b>Outdoor Fan - Type</b>                    |                                  |                                  |                                  |                                  |
| No. Used/Diameter in. [mm]                   | Propeller                        | Propeller                        | Propeller                        | Propeller                        |
| Drive Type/No. Speeds                        | 3/24 [609.6]                     | 4/24 [609.6]                     | 6/24 [609.6]                     | 6/24 [609.6]                     |
| CFM [L/s]                                    | Direct/1                         | Direct/1                         | Direct/1                         | Direct/1                         |
| No. Motors at HP                             | 10,000 [4,719]                   | 14,800 [6,984]                   | 19,800 [9,344]                   | 19,800 [9,344]                   |
| Motor RPM                                    | 3 at 1/3 HP                      | 4 at 1/3 HP                      | 6 at 1/3 HP                      | 6 at 1/3 HP                      |
|                                              | 1,075                            | 1,075                            | 1,075                            | 1,075                            |
| <b>Indoor Fan - Type</b>                     |                                  |                                  |                                  |                                  |
| No. Used/Diameter in. [mm]                   | FC Centrifugal                   | FC Centrifugal                   | FC Centrifugal                   | FC Centrifugal                   |
| Drive Type                                   | 2/18 x 9 [457 x 229]             | 2/18 x 9 [457 x 229]             | 2/18 x 9 [457 x 229]             | 2/18 x 9 [457 x 229]             |
| No. Motors                                   | Belt (Adjustable)                | Belt (Adjustable)                | Belt (Adjustable)                | Belt (Adjustable)                |
| Motor RPM                                    | Multiple                         | Multiple                         | Multiple                         | Multiple                         |
| Motor Frame Size (F / G Package)             | 1                                | 1                                | 1                                | 1                                |
|                                              | 1,725                            | 1,725                            | 1,760                            | 1,760                            |
|                                              | 56 / 184                         | 56 / 184                         | 184 / 213                        | 213 / 215                        |
| <b>Filter - Type</b>                         |                                  |                                  |                                  |                                  |
| Furnished                                    | Disposable                       | Disposable                       | Disposable                       | Disposable                       |
| (NO.) Size Recommended in. [mm]              | Yes                              | Yes                              | Yes                              | Yes                              |
|                                              | (8) 2 x 25 x 20 [51 x 635 x 508] | (8) 2 x 25 x 20 [51 x 635 x 508] | (8) 2 x 25 x 20 [51 x 635 x 508] | (8) 2 x 25 x 20 [51 x 635 x 508] |
| <b>Refrigerant Charge Oz. [g]</b>            |                                  |                                  |                                  |                                  |
| Standard Models                              | 144 [4,082] / 148 [4,196]        | 161.6 [4,581] / 168 [4,763]      | 212.8 [6,033] / 206.4 [5,851]    | 228.8 [6,486] / 216 [6,124]      |
| Reheat Models                                | 256 [7,260] / 155.2 [4,400]      | NA                               | 304 [8,620] / 220.8 [6,260]      | 316 [8,620] / 220 [6,240]        |
| <b>Weights</b>                               |                                  |                                  |                                  |                                  |
| Net Weight lbs. [kg]                         | 2,196 [996]                      | 2,509 [1,138]                    | 2,547 [1,155]                    | 2,570 [1,166]                    |
| Ship Weight lbs. [kg]                        | 2,323 [1,054]                    | 2,636 [1,195]                    | 2,674 [1,213]                    | 2,697 [1,223]                    |

**NOTE:** Please look at the rating plates pasted on the side of the unit to understand the model number of your unit. See Page 16 for Notes.

[ ] Designates Metric Conversions

## NOTES:

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

## WEIGHTED SOUND POWER LEVEL (dBA)

| Model     | Standard Rating (dBA) | Frequency (Hz) |      |      |      |      |      |      |      |
|-----------|-----------------------|----------------|------|------|------|------|------|------|------|
|           |                       | 63             | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
| RGEHYB180 | 75.3                  | 57.0           | 62.5 | 66.3 | 70.5 | 70.2 | 66.2 | 60.7 | 53.4 |
| RGEHYB210 | 75.5                  | 55.6           | 62.0 | 66.5 | 71.1 | 70.4 | 66.3 | 60.7 | 53.1 |
| RGEHYB240 | 80.7                  | 56.6           | 65.5 | 71.1 | 76.8 | 75.8 | 71.1 | 65.0 | 57.9 |
| RGEHYB300 | 80.9                  | 58.6           | 64.9 | 71.2 | 76.5 | 76.1 | 72.0 | 66.0 | 56.5 |

HEATING PERFORMANCE DATA

| Model<br>RGEHYB | Heating Input Btu/h (kW)<br>(High-Fire/Low-Fire) | Heating Output Btu/h (kW)<br>(High-Fire/Low-Fire) | High-Fire Rise<br>Range °F [°C] | Low-Fire Rise<br>Range °F [°C] | Main Limit<br>Temp °F | Rollout<br>Temp °F | No.<br>Burners | No.<br>Stages | Rating ESP<br>in. W.C | Maximum<br>ESP in. W.C | Max Outlet Air<br>Temp °F [°C] | Steady State<br>Efficiency (%) |
|-----------------|--------------------------------------------------|---------------------------------------------------|---------------------------------|--------------------------------|-----------------------|--------------------|----------------|---------------|-----------------------|------------------------|--------------------------------|--------------------------------|
| 15 Ton          | 125,000 / 250,000 [36.62 / 73.25]                | 101,250 / 202,500 [29.68 / 59.35]                 | 15-45 [8-25]                    | 15-45 [8-25]                   | 120                   | 350                | 10             | 2             | 0.33                  | 1.8                    | 180 [82.22]                    | 81                             |
|                 | 175,000 / 350,000 [51.27 / 102.55]               | 141,750 / 283,500 [41.58 / 83.08]                 | 30-60 [17-33]                   | 30-60 [17-33]                  | 120                   | 350                | 14             | 2             | 0.38                  | 1.8                    | 180 [82.22]                    | 81                             |
| 17.5 Ton        | 125,000 / 250,000 [36.62 / 73.25]                | 101,250 / 202,500 [29.68 / 59.35]                 | 15-45 [8-25]                    | 15-45 [8-25]                   | 120                   | 350                | 10             | 2             | 0.33                  | 1.8                    | 180 [82.22]                    | 81                             |
|                 | 175,000 / 350,000 [51.27 / 102.55]               | 141,750 / 283,500 [41.58 / 83.08]                 | 30-60 [17-33]                   | 30-60 [17-33]                  | 120                   | 350                | 14             | 2             | 0.38                  | 1.8                    | 180 [82.22]                    | 81                             |
| 20 Ton          | 150,000 / 300,000 [43.95 / 87.9]                 | 121,500 / 243,000 [35.6 / 71.2]                   | 15-45 [8-25]                    | 15-45 [8-25]                   | 130                   | 350                | 12             | 2             | 0.38                  | 2                      | 180 [82.22]                    | 81                             |
|                 | 200,000 / 400,000 [58.6 / 117.2]                 | 162,000 / 324,000 [47.47 / 94.93]                 | 25-55 [13.6-30.6]               | 25-55 [13.6-30.6]              | 130                   | 350                | 14             | 2             | 0.38                  | 2                      | 180 [82.22]                    | 81                             |
| 25 Ton          | 150,000 / 300,000 [43.95 / 87.9]                 | 121,500 / 243,000 [35.6 / 71.2]                   | 15-45 [8-25]                    | 15-45 [8-25]                   | 130                   | 350                | 12             | 2             | 0.38                  | 2                      | 180 [82.22]                    | 81                             |
|                 | 200,000 / 400,000 [58.6 / 117.2]                 | 162,000 / 324,000 [47.47 / 94.93]                 | 25-55 [13.6-30.6]               | 25-55 [13.6-30.6]              | 130                   | 350                | 14             | 2             | 0.38                  | 2                      | 180 [82.22]                    | 81                             |

[ ] Designates Metric Conversions



## GROSS SYSTEMS PERFORMANCE DATA—RGEHYB180

| 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]                                 |               |                   | 7450 [3516]   | 5275 [2490]  | 4975 [2348]  | 7450 [3516]   | 5275 [2490]  | 4975 [2348]  | 7450 [3516]   | 5275 [2490]  | 4975 [2348]  |
| DR ①                                      |               |                   | .05           | .09          | .12          | .05           | .09          | .12          | .05           | .09          | .12          |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 75<br>[23.9]  | Total kBtu/h [kW] | 234.4 [68.7]  | 218.1 [63.9] | 215.8 [63.2] | 220.6 [64.7]  | 205.2 [60.1] | 203.1 [59.5] | 208.0 [61.0]  | 193.5 [56.7] | 191.5 [56.1] |
|                                           |               | Sens kBtu/h [kW]  | 145.2 [42.6]  | 121.8 [35.7] | 118.5 [34.7] | 172.9 [50.7]  | 145.0 [42.5] | 141.1 [41.4] | 196.8 [57.7]  | 165.1 [48.4] | 160.7 [47.1] |
|                                           |               | Power             | 13.5          | 13.0         | 13.0         | 13.4          | 13.0         | 12.9         | 13.3          | 12.8         | 12.7         |
|                                           | 80<br>[26.7]  | Total kBtu/h [kW] | 229.7 [67.3]  | 213.7 [62.6] | 211.5 [62.0] | 215.8 [63.2]  | 200.8 [58.9] | 198.7 [58.2] | 203.3 [59.6]  | 189.1 [55.4] | 187.2 [54.9] |
|                                           |               | Sens kBtu/h [kW]  | 142.8 [41.9]  | 119.8 [35.1] | 116.6 [34.2] | 170.5 [50.0]  | 143.0 [41.9] | 139.2 [40.8] | 194.4 [57.0]  | 163.0 [47.8] | 158.7 [46.5] |
|                                           |               | Power             | 14.3          | 13.8         | 13.7         | 14.2          | 13.7         | 13.6         | 14.0          | 13.5         | 13.5         |
|                                           | 85<br>[29.4]  | Total kBtu/h [kW] | 224.8 [65.9]  | 209.1 [61.3] | 206.9 [60.6] | 210.9 [61.8]  | 196.2 [57.5] | 194.2 [56.9] | 198.4 [58.1]  | 184.6 [54.1] | 182.6 [53.5] |
|                                           |               | Sens kBtu/h [kW]  | 140.3 [41.1]  | 117.6 [34.5] | 114.5 [33.6] | 167.9 [49.2]  | 140.8 [41.3] | 137.1 [40.2] | 191.9 [56.2]  | 160.9 [47.2] | 156.6 [45.9] |
|                                           |               | Power             | 15.0          | 14.5         | 14.4         | 15.0          | 14.4         | 14.4         | 14.8          | 14.3         | 14.2         |
|                                           | 90<br>[32.2]  | Total kBtu/h [kW] | 219.6 [64.4]  | 204.3 [59.9] | 202.2 [59.3] | 205.8 [60.3]  | 191.4 [56.1] | 189.4 [55.5] | 193.2 [56.6]  | 179.8 [52.7] | 177.9 [52.1] |
|                                           |               | Sens kBtu/h [kW]  | 137.6 [40.3]  | 115.4 [33.8] | 112.3 [32.9] | 165.3 [48.4]  | 138.6 [40.6] | 134.9 [39.5] | 189.2 [55.5]  | 158.7 [46.5] | 154.5 [45.3] |
|                                           |               | Power             | 15.8          | 15.2         | 15.1         | 15.7          | 15.2         | 15.1         | 15.5          | 15.0         | 14.9         |
|                                           | 95<br>[35]    | Total kBtu/h [kW] | 214.3 [62.8]  | 199.3 [58.4] | 197.3 [57.8] | 200.4 [58.7]  | 186.4 [54.6] | 184.5 [54.1] | 187.9 [55.1]  | 174.8 [51.2] | 173.0 [50.7] |
|                                           |               | Sens kBtu/h [kW]  | 134.8 [39.5]  | 113.1 [33.1] | 110.1 [32.3] | 162.5 [47.6]  | 136.3 [39.9] | 132.7 [38.9] | 186.5 [54.7]  | 156.4 [45.8] | 152.2 [44.6] |
|                                           |               | Power             | 16.5          | 15.9         | 15.9         | 16.5          | 15.9         | 15.8         | 16.3          | 15.7         | 15.6         |
|                                           | 100<br>[37.8] | Total kBtu/h [kW] | 208.7 [61.2]  | 194.2 [56.9] | 192.1 [56.3] | 194.8 [57.1]  | 181.3 [53.1] | 179.4 [52.6] | 182.3 [53.4]  | 169.6 [49.7] | 167.9 [49.2] |
|                                           |               | Sens kBtu/h [kW]  | 132.0 [38.7]  | 110.7 [32.4] | 107.7 [31.6] | 159.6 [46.8]  | 133.9 [39.2] | 130.3 [38.2] | 182.3 [53.4]  | 153.9 [45.1] | 149.9 [43.9] |
|                                           |               | Power             | 17.3          | 16.7         | 16.6         | 17.2          | 16.6         | 16.5         | 17.1          | 16.5         | 16.4         |
|                                           | 105<br>[40.6] | Total kBtu/h [kW] | 202.9 [59.5]  | 188.8 [55.3] | 186.8 [54.7] | 189.1 [55.4]  | 175.9 [51.6] | 174.1 [51.0] | 176.5 [51.7]  | 164.2 [48.1] | 162.5 [47.6] |
|                                           |               | Sens kBtu/h [kW]  | 128.9 [37.8]  | 108.1 [31.7] | 105.3 [30.9] | 156.6 [45.9]  | 131.3 [38.5] | 127.8 [37.5] | 176.5 [51.7]  | 151.4 [44.4] | 147.4 [43.2] |
|                                           |               | Power             | 18.0          | 17.4         | 17.3         | 18.0          | 17.3         | 17.3         | 17.8          | 17.2         | 17.1         |
|                                           | 110<br>[43.3] | Total kBtu/h [kW] | 196.9 [57.7]  | 183.2 [53.7] | 181.3 [53.1] | 183.1 [53.7]  | 170.3 [49.9] | 168.5 [49.4] | 170.5 [50.0]  | 158.6 [46.5] | 157.0 [46.0] |
|                                           |               | Sens kBtu/h [kW]  | 125.8 [36.9]  | 105.5 [30.9] | 102.7 [30.1] | 153.5 [45.0]  | 128.7 [37.7] | 125.3 [36.7] | 170.5 [50.0]  | 148.8 [43.6] | 144.8 [42.4] |
|                                           |               | Power             | 18.8          | 18.1         | 18.0         | 18.7          | 18.1         | 18.0         | 18.6          | 17.9         | 17.8         |
|                                           | 115<br>[46.1] | Total kBtu/h [kW] | 190.7 [55.9]  | 177.4 [52.0] | 175.6 [51.5] | 176.9 [51.8]  | 164.5 [48.2] | 162.8 [47.7] | 164.3 [48.2]  | 152.9 [44.8] | 151.3 [44.3] |
|                                           |               | Sens kBtu/h [kW]  | 122.5 [35.9]  | 102.8 [30.1] | 100.0 [29.3] | 150.2 [44.0]  | 126.0 [36.9] | 122.6 [35.9] | 164.3 [48.2]  | 146.1 [42.8] | 142.2 [41.7] |
|                                           |               | Power             | 19.5          | 18.9         | 18.8         | 19.5          | 18.8         | 18.7         | 19.3          | 18.6         | 18.6         |
|                                           | 120<br>[48.9] | Total kBtu/h [kW] | 184.3 [54.0]  | 171.4 [50.2] | 169.7 [49.7] | 170.4 [49.9]  | 158.5 [46.5] | 156.9 [46.0] | 157.9 [46.3]  | 146.9 [43.1] | 145.4 [42.6] |
|                                           |               | Sens kBtu/h [kW]  | 119.2 [34.9]  | 99.9 [29.3]  | 97.3 [28.5]  | 146.8 [43.0]  | 123.1 [36.1] | 119.9 [35.1] | 157.9 [46.3]  | 143.2 [42.0] | 139.4 [40.9] |
|                                           |               | Power             | 20.3          | 19.6         | 19.5         | 20.2          | 19.5         | 19.4         | 20.1          | 19.4         | 19.3         |
|                                           | 125<br>[51.7] | Total kBtu/h [kW] | 177.7 [52.1]  | 165.3 [48.4] | 163.6 [47.9] | 163.8 [48.0]  | 152.4 [44.7] | 150.8 [44.2] | 151.3 [44.3]  | 140.7 [41.2] | 139.3 [40.8] |
|                                           |               | Sens kBtu/h [kW]  | 115.7 [33.9]  | 97.0 [28.4]  | 94.4 [27.7]  | 143.3 [42.0]  | 120.2 [35.2] | 117.0 [34.3] | 151.3 [44.3]  | 140.3 [41.1] | 136.6 [40.0] |
|                                           |               | Power             | 21.1          | 20.3         | 20.2         | 21.0          | 20.3         | 20.2         | 20.8          | 20.1         | 20.0         |

DR —Depression ratio  
dbE —Entering air dry bulb

wbE—Entering air wet bulb  
Power —kW input

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

[ ] Designates Metric Conversions

## GROSS SYSTEMS PERFORMANCE DATA—RGEHYB210

| 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]                                 |            |                                                | 8250 [3894]                          | 6800 [3209]                          | 5500 [2596]                          | 8250 [3894]                          | 6800 [3209]                          | 5500 [2596]                          | 8250 [3894]                          | 6800 [3209]                          | 5500 [2596]                          |
| DR ①                                      |            |                                                | .05                                  | .09                                  | .12                                  | .05                                  | .09                                  | .12                                  | .05                                  | .09                                  | .12                                  |
| OUTDOOR DRY BULB TEMPERATURE °F [°C]      | 75 [23.9]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 250.5 [73.4]<br>153.8 [45.1]<br>8.7  | 241.2 [70.7]<br>139.9 [41.0]<br>8.5  | 232.8 [68.2]<br>127.4 [37.3]<br>8.4  | 236.0 [69.2]<br>187.0 [54.8]<br>8.7  | 227.2 [66.6]<br>170.0 [49.8]<br>8.5  | 219.3 [64.3]<br>154.9 [45.4]<br>8.4  | 221.5 [64.9]<br>213.9 [62.7]<br>8.7  | 213.2 [62.5]<br>194.6 [57.0]<br>8.6  | 205.8 [60.3]<br>177.2 [51.9]<br>8.4  |
|                                           | 80 [26.7]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 245.1 [71.8]<br>151.1 [44.3]<br>9.1  | 236.0 [69.2]<br>137.4 [40.3]<br>8.9  | 227.8 [66.8]<br>125.1 [36.7]<br>8.7  | 230.6 [67.6]<br>184.2 [54.0]<br>9.1  | 222.0 [65.1]<br>167.6 [49.1]<br>8.9  | 214.3 [62.8]<br>152.6 [44.7]<br>8.8  | 216.1 [63.3]<br>211.2 [61.9]<br>9.1  | 208.0 [61.0]<br>192.1 [56.3]<br>8.9  | 200.8 [58.9]<br>174.9 [51.3]<br>8.8  |
|                                           | 85 [29.4]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 239.7 [70.3]<br>148.5 [43.5]<br>9.5  | 230.8 [67.6]<br>135.0 [39.6]<br>9.3  | 222.8 [65.3]<br>123.0 [36.0]<br>9.1  | 225.2 [66.0]<br>181.6 [53.2]<br>9.5  | 216.8 [63.5]<br>165.2 [48.4]<br>9.3  | 209.3 [61.3]<br>150.5 [44.1]<br>9.1  | 210.7 [61.8]<br>208.6 [61.1]<br>9.5  | 202.8 [59.4]<br>189.7 [55.6]<br>9.3  | 195.8 [57.4]<br>172.8 [50.6]<br>9.1  |
|                                           | 90 [32.2]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 234.3 [68.7]<br>146.0 [42.8]<br>9.9  | 225.6 [66.1]<br>132.8 [38.9]<br>9.7  | 217.7 [63.8]<br>121.0 [35.5]<br>9.5  | 219.8 [64.4]<br>179.2 [52.5]<br>9.9  | 211.6 [62.0]<br>163.0 [47.8]<br>9.7  | 204.3 [59.9]<br>148.4 [43.5]<br>9.5  | 205.3 [60.2]<br>205.3 [60.2]<br>9.9  | 197.6 [57.9]<br>187.5 [55.0]<br>9.7  | 190.8 [55.9]<br>170.8 [50.1]<br>9.5  |
|                                           | 95 [35]    | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 228.9 [67.1]<br>143.8 [42.1]<br>10.3 | 220.4 [64.6]<br>130.7 [38.3]<br>10.1 | 212.7 [62.3]<br>119.1 [34.9]<br>9.9  | 214.4 [62.8]<br>176.9 [51.8]<br>10.3 | 206.4 [60.5]<br>160.9 [47.2]<br>10.1 | 199.2 [58.4]<br>146.5 [42.9]<br>9.9  | 199.9 [58.6]<br>199.9 [58.6]<br>10.3 | 192.4 [56.4]<br>185.4 [54.3]<br>10.1 | 185.8 [54.5]<br>168.9 [49.5]<br>9.9  |
|                                           | 100 [37.8] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 223.5 [65.5]<br>141.6 [41.5]<br>10.7 | 215.2 [63.1]<br>128.8 [37.7]<br>10.5 | 207.7 [60.9]<br>117.3 [34.4]<br>10.4 | 209.0 [61.3]<br>174.8 [51.2]<br>10.7 | 201.2 [59.0]<br>158.9 [46.6]<br>10.6 | 194.2 [56.9]<br>144.8 [42.4]<br>10.4 | 194.5 [57.0]<br>194.5 [57.0]<br>10.8 | 187.2 [54.9]<br>183.5 [53.8]<br>10.6 | 180.7 [53.0]<br>167.1 [49.0]<br>10.4 |
|                                           | 105 [40.6] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 218.1 [63.9]<br>139.6 [40.9]<br>11.2 | 210.0 [61.5]<br>127.0 [37.2]<br>11   | 202.7 [59.4]<br>115.6 [33.9]<br>10.8 | 203.6 [59.7]<br>172.8 [50.6]<br>11.2 | 196.0 [57.4]<br>157.1 [46.0]<br>11.0 | 189.2 [55.5]<br>143.1 [41.9]<br>10.8 | 189.1 [55.4]<br>189.1 [55.4]<br>11.2 | 182.0 [53.3]<br>181.7 [53.3]<br>11.0 | 175.7 [51.5]<br>165.4 [48.5]<br>10.8 |
|                                           | 110 [43.3] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 212.7 [62.3]<br>137.7 [40.4]<br>11.7 | 204.8 [60.0]<br>125.3 [36.7]<br>11.5 | 197.7 [57.9]<br>114.1 [33.4]<br>11.3 | 198.2 [58.1]<br>170.9 [50.1]<br>11.7 | 190.8 [55.9]<br>155.4 [45.5]<br>11.5 | 184.2 [54.0]<br>141.6 [41.5]<br>11.3 | 183.7 [53.8]<br>183.7 [53.8]<br>11.7 | 176.8 [51.8]<br>176.8 [51.8]<br>11.5 | 170.7 [50.0]<br>163.9 [48.0]<br>11.3 |
|                                           | 115 [46.1] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 207.3 [60.8]<br>136.0 [39.9]<br>12.2 | 199.6 [58.5]<br>123.7 [36.3]<br>12   | 192.7 [56.5]<br>112.7 [33.0]<br>11.8 | 192.8 [56.5]<br>169.2 [49.6]<br>12.2 | 185.6 [54.4]<br>153.9 [45.1]<br>12.0 | 179.2 [52.5]<br>140.1 [41.1]<br>11.8 | 178.3 [52.3]<br>178.3 [52.3]<br>12.2 | 171.6 [50.3]<br>171.6 [50.3]<br>12.0 | 165.7 [48.6]<br>162.5 [47.6]<br>11.8 |
|                                           | 120 [48.9] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 201.9 [59.2]<br>134.5 [39.4]<br>12.7 | 194.4 [57.0]<br>122.3 [35.8]<br>12.5 | 187.6 [55.0]<br>111.4 [32.6]<br>12.3 | 187.4 [54.9]<br>167.6 [49.1]<br>12.7 | 180.4 [52.9]<br>152.5 [44.7]<br>12.5 | 174.1 [51.0]<br>138.8 [40.7]<br>12.3 | 172.9 [50.7]<br>172.9 [50.7]<br>12.7 | 166.4 [48.8]<br>166.4 [48.8]<br>12.5 | 160.7 [47.1]<br>160.7 [47.1]<br>12.3 |
|                                           | 125 [51.7] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 196.5 [57.6]<br>133.0 [39.0]<br>13.3 | 189.2 [55.5]<br>121.0 [35.5]<br>13.0 | 182.6 [53.5]<br>110.2 [32.3]<br>12.8 | 182.0 [53.3]<br>166.2 [48.7]<br>13.3 | 175.2 [51.3]<br>151.2 [44.3]<br>13.0 | 169.1 [49.6]<br>137.7 [40.4]<br>12.8 | 167.5 [49.1]<br>167.5 [49.1]<br>13.3 | 161.2 [47.2]<br>161.2 [47.2]<br>13.0 | 155.6 [45.6]<br>155.6 [45.6]<br>12.8 |

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

[ ] Designates Metric Conversions

## GROSS SYSTEMS PERFORMANCE DATA—RGEHYB240

| 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]                                 |            |                   | 9350 [4413]   | 6675 [3150]  | 6225 [2938]  | 9350 [4413]   | 6675 [3150]  | 6225 [2938]  | 9350 [4413]   | 6675 [3150]  | 6225 [2938]  |
| DR ①                                      |            |                   | .05           | .09          | .12          | .05           | .09          | .12          | .05           | .09          | .12          |
| OUTDOOR DRY BULB TEMPERATURE °F [°C]      | 75 [23.9]  | Total kBtu/h [kW] | 303.8 [89.0]  | 283.2 [83.0] | 279.7 [82.0] | 277.7 [81.4]  | 258.8 [75.8] | 255.6 [74.9] | 264.9 [77.6]  | 246.9 [72.4] | 243.9 [71.5] |
|                                           |            | Sens kBtu/h [kW]  | 181.1 [53.1]  | 152.5 [44.7] | 147.7 [43.3] | 211.7 [62.0]  | 178.4 [52.3] | 172.8 [50.6] | 257.2 [75.4]  | 216.7 [63.5] | 209.9 [61.5] |
|                                           |            | Power             | 17.9          | 17.3         | 17.1         | 17.8          | 17.2         | 17.0         | 17.6          | 17.0         | 16.9         |
|                                           | 80 [26.7]  | Total kBtu/h [kW] | 296.3 [86.8]  | 276.2 [80.9] | 272.8 [80.0] | 270.1 [79.2]  | 251.8 [73.8] | 248.7 [72.9] | 257.4 [75.4]  | 239.9 [70.3] | 237.0 [69.5] |
|                                           |            | Sens kBtu/h [kW]  | 176.4 [51.7]  | 148.6 [43.6] | 143.9 [42.2] | 207.1 [60.7]  | 174.5 [51.1] | 169.0 [49.5] | 252.6 [74.0]  | 212.8 [62.4] | 206.1 [60.4] |
|                                           |            | Power             | 18.8          | 18.1         | 18.0         | 18.7          | 18.0         | 17.9         | 18.6          | 17.9         | 17.8         |
|                                           | 85 [29.4]  | Total kBtu/h [kW] | 289.3 [84.8]  | 269.6 [79.0] | 266.3 [78.0] | 263.1 [77.1]  | 245.3 [71.9] | 242.3 [71.0] | 250.4 [73.4]  | 233.4 [68.4] | 230.5 [67.6] |
|                                           |            | Sens kBtu/h [kW]  | 172.3 [50.5]  | 145.2 [42.6] | 140.6 [41.2] | 203.0 [59.5]  | 171.0 [50.1] | 165.6 [48.5] | 248.5 [72.8]  | 209.3 [61.3] | 202.7 [59.4] |
|                                           |            | Power             | 19.7          | 19.0         | 18.9         | 19.6          | 18.9         | 18.8         | 19.5          | 18.8         | 18.7         |
|                                           | 90 [32.2]  | Total kBtu/h [kW] | 282.8 [82.9]  | 263.6 [77.3] | 260.4 [76.3] | 256.6 [75.2]  | 239.2 [70.1] | 236.3 [69.3] | 243.9 [71.5]  | 227.3 [66.6] | 224.5 [65.8] |
|                                           |            | Sens kBtu/h [kW]  | 168.8 [49.5]  | 142.2 [41.7] | 137.7 [40.4] | 199.5 [58.5]  | 168.0 [49.2] | 162.8 [47.7] | 243.9 [71.5]  | 206.4 [60.5] | 199.9 [58.6] |
|                                           |            | Power             | 20.6          | 19.9         | 19.8         | 20.5          | 19.8         | 19.7         | 20.4          | 19.7         | 19.6         |
|                                           | 95 [35]    | Total kBtu/h [kW] | 276.8 [81.1]  | 258.0 [75.6] | 254.9 [74.7] | 250.7 [73.5]  | 233.6 [68.5] | 230.8 [67.6] | 237.9 [69.7]  | 221.7 [65.0] | 219.0 [64.2] |
|                                           |            | Sens kBtu/h [kW]  | 165.9 [48.6]  | 139.7 [40.9] | 135.3 [39.7] | 196.5 [57.6]  | 165.6 [48.5] | 160.4 [47.0] | 237.9 [69.7]  | 203.9 [59.8] | 197.5 [57.9] |
|                                           |            | Power             | 21.6          | 20.8         | 20.7         | 21.5          | 20.7         | 20.6         | 21.3          | 20.6         | 20.5         |
|                                           | 100 [37.8] | Total kBtu/h [kW] | 271.4 [79.5]  | 252.9 [74.1] | 249.8 [73.2] | 245.2 [71.9]  | 228.6 [67.0] | 225.8 [66.2] | 232.4 [68.1]  | 216.7 [63.5] | 214.0 [62.7] |
|                                           |            | Sens kBtu/h [kW]  | 163.5 [47.9]  | 137.7 [40.4] | 133.4 [39.1] | 194.2 [56.9]  | 163.6 [47.9] | 158.4 [46.4] | 232.4 [68.1]  | 201.9 [59.2] | 195.5 [57.3] |
|                                           |            | Power             | 22.5          | 21.7         | 21.6         | 22.4          | 21.6         | 21.5         | 22.3          | 21.5         | 21.4         |
|                                           | 105 [40.6] | Total kBtu/h [kW] | 266.4 [78.1]  | 248.3 [72.8] | 245.3 [71.9] | 240.3 [70.4]  | 224.0 [65.7] | 221.2 [64.8] | 227.5 [66.7]  | 212.1 [62.2] | 209.5 [61.4] |
|                                           |            | Sens kBtu/h [kW]  | 161.7 [47.4]  | 136.2 [39.9] | 131.9 [38.7] | 192.4 [56.4]  | 162.0 [47.5] | 157.0 [46.0] | 227.5 [66.7]  | 200.4 [58.7] | 194.1 [56.9] |
|                                           |            | Power             | 23.4          | 22.6         | 22.5         | 23.3          | 22.5         | 22.4         | 23.2          | 22.4         | 22.3         |
|                                           | 110 [43.3] | Total kBtu/h [kW] | 262.0 [76.8]  | 244.2 [71.6] | 241.2 [70.7] | 235.8 [69.1]  | 219.8 [64.4] | 217.1 [63.6] | 223.1 [65.4]  | 207.9 [60.9] | 205.4 [60.2] |
|                                           |            | Sens kBtu/h [kW]  | 160.5 [47.0]  | 135.2 [39.6] | 130.9 [38.4] | 191.1 [56.0]  | 161.0 [47.2] | 155.9 [45.7] | 223.1 [65.4]  | 199.3 [58.4] | 193.1 [56.6] |
|                                           |            | Power             | 24.3          | 23.5         | 23.4         | 24.2          | 23.4         | 23.3         | 24.1          | 23.3         | 23.2         |
|                                           | 115 [46.1] | Total kBtu/h [kW] | 258.1 [75.6]  | 240.6 [70.5] | 237.6 [69.6] | 231.9 [68.0]  | 216.2 [63.4] | 213.5 [62.6] | 219.2 [64.2]  | 204.3 [59.9] | 201.8 [59.1] |
|                                           |            | Sens kBtu/h [kW]  | 159.8 [46.8]  | 134.6 [39.4] | 130.4 [38.2] | 190.5 [55.8]  | 160.5 [47.0] | 155.4 [45.5] | 219.2 [64.2]  | 198.8 [58.3] | 192.5 [56.4] |
|                                           |            | Power             | 25.3          | 24.4         | 24.3         | 25.2          | 24.3         | 24.2         | 25.0          | 24.2         | 24.0         |
|                                           | 120 [48.9] | Total kBtu/h [kW] | 254.7 [74.6]  | 237.4 [69.6] | 234.5 [68.7] | 228.6 [67.0]  | 213.0 [62.4] | 210.4 [61.7] | 215.8 [63.2]  | 201.1 [58.9] | 198.7 [58.2] |
|                                           |            | Sens kBtu/h [kW]  | 159.7 [46.8]  | 134.5 [39.4] | 130.3 [38.2] | 190.4 [55.8]  | 160.4 [47.0] | 155.3 [45.5] | 215.8 [63.2]  | 198.7 [58.2] | 192.5 [56.4] |
|                                           |            | Power             | 26.2          | 25.3         | 25.2         | 26.1          | 25.2         | 25.1         | 26.0          | 25.1         | 24.9         |
|                                           | 125 [51.7] | Total kBtu/h [kW] | 251.8 [73.8]  | 234.7 [68.8] | 231.9 [68.0] | 225.7 [66.1]  | 210.4 [61.7] | 207.8 [60.9] | 212.9 [62.4]  | 198.5 [58.2] | 196.0 [57.4] |
|                                           |            | Sens kBtu/h [kW]  | 160.2 [47.0]  | 135.0 [39.6] | 130.7 [38.3] | 190.9 [55.9]  | 160.8 [47.1] | 155.7 [45.6] | 212.9 [62.4]  | 198.5 [58.2] | 192.9 [56.5] |
|                                           |            | Power             | 27.1          | 26.2         | 26.0         | 27.0          | 26.1         | 25.9         | 26.9          | 26.0         | 25.8         |

DR —Depression ratio  
dbE —Entering air dry bulb

wbE—Entering air wet bulb  
Power—kW input

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

[ ] Designates Metric Conversions

## GROSS SYSTEMS PERFORMANCE DATA—RGEHYB300

| 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]                                           |               | 12300 [5805]                                   | 8800 [4153]                           | 8200 [3870]                           | 12300 [5805]                          | 8800 [4153]                           | 8200 [3870]                          | 12300 [5805]                         | 8800 [4153]                           | 8200 [3870]                          |
| DR ①                                                |               | .05                                            | .09                                   | .12                                   | .05                                   | .09                                   | .12                                  | .05                                  | .09                                   | .12                                  |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br>°F<br>[°C] | 75<br>[23.9]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 387.7 [113.6]<br>233.7 [68.5]<br>25.1 | 361.5 [105.9]<br>197.1 [57.8]<br>24.3 | 357.1 [104.7]<br>190.8 [55.9]<br>24.1 | 363.9 [106.7]<br>281.2 [82.4]<br>25.2 | 339.4 [99.5]<br>237.2 [69.5]<br>24.3 | 335.2 [98.2]<br>229.6 [67.3]<br>24.2 | 344.9 [101.1]<br>333.9 [97.9]<br>25.1 | 321.6 [94.3]<br>281.6 [82.5]<br>24.2 |
|                                                     | 80<br>[26.7]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 379.3 [111.2]<br>229.6 [67.3]<br>26.4 | 353.7 [103.7]<br>193.7 [56.8]<br>25.5 | 349.4 [102.4]<br>187.5 [55.0]<br>25.4 | 355.6 [104.2]<br>277.2 [81.2]<br>26.5 | 331.6 [97.2]<br>233.8 [68.5]<br>25.6 | 327.5 [96.0]<br>226.3 [66.3]<br>25.4 | 336.5 [98.6]<br>329.9 [96.7]<br>26.4  | 313.8 [92.0]<br>278.2 [81.5]<br>25.5 |
|                                                     | 85<br>[29.4]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 370.9 [108.7]<br>225.5 [66.1]<br>27.8 | 345.9 [101.4]<br>190.2 [55.7]<br>26.8 | 341.6 [100.1]<br>184.1 [54.0]<br>26.6 | 347.1 [101.7]<br>273.0 [80.0]<br>27.8 | 323.7 [94.9]<br>230.3 [67.5]<br>26.8 | 319.7 [93.7]<br>222.9 [65.3]<br>26.7 | 328.0 [96.1]<br>325.7 [95.5]<br>27.7  | 305.9 [89.7]<br>274.7 [80.5]<br>26.7 |
|                                                     | 90<br>[32.2]  | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 362.3 [106.2]<br>221.2 [64.8]<br>29.1 | 337.9 [99.0]<br>186.6 [54.7]<br>28.1  | 333.7 [97.8]<br>180.7 [53.0]<br>27.9  | 338.6 [99.2]<br>268.8 [78.8]<br>29.1  | 315.7 [92.5]<br>226.7 [66.4]<br>28.1 | 311.8 [91.4]<br>219.5 [64.3]<br>27.9 | 319.5 [93.6]<br>319.5 [93.6]<br>29.0  | 297.9 [87.3]<br>271.1 [79.5]<br>28.0 |
|                                                     | 95<br>[35]    | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 353.7 [103.7]<br>216.9 [63.6]<br>30.4 | 329.8 [96.7]<br>182.9 [53.6]<br>29.3  | 325.7 [95.5]<br>177.1 [51.9]<br>29.2  | 329.9 [96.7]<br>264.4 [77.5]<br>30.4  | 307.7 [90.2]<br>223.0 [65.4]<br>29.4 | 303.9 [89.1]<br>215.9 [63.3]<br>29.2 | 310.8 [91.1]<br>310.8 [91.1]<br>30.3  | 289.9 [85.0]<br>267.5 [78.4]<br>29.3 |
|                                                     | 100<br>[37.8] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 344.9 [101.1]<br>212.4 [62.3]<br>31.7 | 321.7 [94.3]<br>179.2 [52.5]<br>30.6  | 317.7 [93.1]<br>173.5 [50.8]<br>30.4  | 321.2 [94.1]<br>260.0 [76.2]<br>31.7  | 299.5 [87.8]<br>219.3 [64.3]<br>30.6 | 295.8 [86.7]<br>212.3 [62.2]<br>30.4 | 302.1 [88.5]<br>302.1 [88.5]<br>31.6  | 281.7 [82.6]<br>263.7 [77.3]<br>30.5 |
|                                                     | 105<br>[40.6] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 336.1 [98.5]<br>207.9 [60.9]<br>33.0  | 313.4 [91.9]<br>175.3 [51.4]<br>31.9  | 309.5 [90.7]<br>169.7 [49.7]<br>31.7  | 312.3 [91.5]<br>255.4 [74.9]<br>33.0  | 291.3 [85.4]<br>215.4 [63.1]<br>31.9 | 287.7 [84.3]<br>208.6 [61.1]<br>31.7 | 293.3 [86.0]<br>293.3 [86.0]<br>32.9  | 273.5 [80.2]<br>259.9 [76.2]<br>31.8 |
|                                                     | 110<br>[43.3] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 327.1 [95.9]<br>203.2 [59.6]<br>34.3  | 305.1 [89.4]<br>171.4 [50.2]<br>33.1  | 301.3 [88.3]<br>165.9 [48.6]<br>32.9  | 303.4 [88.9]<br>250.7 [73.5]<br>34.3  | 282.9 [82.9]<br>211.5 [62.0]<br>33.2 | 279.4 [81.9]<br>204.7 [60.0]<br>33.0 | 284.3 [83.3]<br>284.3 [83.3]<br>34.2  | 265.1 [77.7]<br>255.9 [75.0]<br>33.1 |
|                                                     | 115<br>[46.1] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 318.1 [93.2]<br>198.4 [58.1]<br>35.6  | 296.6 [86.9]<br>167.3 [49.0]<br>34.4  | 293.0 [85.9]<br>162.0 [47.5]<br>34.2  | 294.4 [86.3]<br>245.9 [72.1]<br>35.6  | 274.5 [80.5]<br>207.4 [60.8]<br>34.4 | 271.1 [79.5]<br>200.8 [58.9]<br>34.2 | 275.3 [80.7]<br>275.3 [80.7]<br>35.5  | 256.7 [75.2]<br>251.9 [73.8]<br>34.3 |
|                                                     | 120<br>[48.9] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 309.0 [90.6]<br>193.5 [56.7]<br>36.9  | 288.1 [84.4]<br>163.2 [47.8]<br>35.7  | 284.6 [83.4]<br>158.0 [46.3]<br>35.4  | 285.2 [83.6]<br>241.1 [70.7]<br>36.9  | 266.0 [78.0]<br>203.3 [59.6]<br>35.7 | 262.7 [77.0]<br>196.9 [57.7]<br>35.5 | 266.1 [78.0]<br>266.1 [78.0]<br>36.8  | 248.2 [72.7]<br>247.8 [72.6]<br>35.6 |
|                                                     | 125<br>[51.7] | Total kBtu/h [kW]<br>Sens kBtu/h [kW]<br>Power | 299.7 [87.8]<br>188.5 [55.2]<br>38.2  | 279.5 [81.9]<br>159.0 [46.6]<br>36.9  | 276.1 [80.9]<br>154.0 [45.1]<br>36.7  | 276.0 [80.9]<br>236.1 [69.2]<br>38.2  | 257.4 [75.4]<br>199.1 [58.4]<br>36.9 | 254.2 [74.5]<br>192.8 [56.5]<br>36.7 | 256.9 [75.3]<br>256.9 [75.3]<br>38.2  | 239.6 [70.2]<br>239.6 [70.2]<br>36.9 |

DR —Depression ratio  
dbE —Entering air dry bulbwbE—Entering air wet bulb  
Power —kW input**NOTES:** ① When the entering air dry bulb is other than 80°F [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].

[ ] Designates Metric Conversions

## GROSS SYSTEMS PERFORMANCE DATA (LOW HUMIDIDRY MODE)—RGEHYB180

| 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]     | 2500 [1180] | 2000 [944]  | 3000 [1416]   | 2500 [1180] | 2000 [944]  | 3000 [1416]     | 2500 [1180] | 2000 [944]  |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br><br>°F [°C] | 60<br>[15.6]      | Total kBtu/h [kW] | 43.7 [12.8]     | 42.1 [12.3] | 40.6 [11.9] | 45.2 [13.2]   | 43.6 [12.8] | 42.0 [12.3] | 39.8 [11.7]     | 38.4 [11.3] | 37.0 [10.9] |
|                                                      |                   | Sens kBtu/h [kW]  | 3.4 [1.0]       | 3.1 [0.9]   | 2.8 [0.8]   | 10.9 [3.2]    | 10.0 [2.9]  | 9.0 [2.7]   | 12.9 [3.8]      | 11.8 [3.4]  | 10.7 [3.1]  |
|                                                      |                   | Power             | 7.5             | 7.4         | 7.3         | 7.5           | 7.4         | 7.2         | 7.5             | 7.4         | 7.2         |
|                                                      | 65<br>[18.3]      | Total kBtu/h [kW] | 40.5 [11.9]     | 39.1 [11.5] | 37.7 [11.0] | 42.0 [12.3]   | 40.5 [11.9] | 39.1 [11.4] | 36.6 [10.7]     | 35.4 [10.4] | 34.1 [10.0] |
|                                                      |                   | Sens kBtu/h [kW]  | 0.8 [0.2]       | 0.7 [0.2]   | 0.6 [0.2]   | 8.3 [2.4]     | 7.6 [2.2]   | 6.9 [2.0]   | 10.2 [3.0]      | 9.4 [2.7]   | 8.5 [2.5]   |
|                                                      |                   | Power             | 7.7             | 7.6         | 7.4         | 7.7           | 7.5         | 7.4         | 7.6             | 7.5         | 7.4         |
|                                                      | 70<br>[21.1]      | Total kBtu/h [kW] | 37.8 [11.1]     | 36.5 [10.7] | 35.1 [10.3] | 39.3 [11.5]   | 37.9 [11.1] | 36.5 [10.7] | 33.9 [9.9]      | 32.7 [9.6]  | 31.6 [9.2]  |
| Sens kBtu/h [kW]                                     |                   | -1.5 [-0.4]       | -1.4 [-0.4]     | -1.2 [-0.4] | 6.1 [1.8]   | 5.5 [1.6]     | 5.0 [1.5]   | 8.0 [2.3]   | 7.3 [2.1]       | 6.6 [1.9]   |             |
| Power                                                |                   | 7.9               | 7.7             | 7.6         | 7.8         | 7.7           | 7.6         | 7.8         | 7.7             | 7.6         |             |
| 75<br>[23.9]                                         | Total kBtu/h [kW] | 35.5 [10.4]       | 34.3 [10.0]     | 33.0 [9.7]  | 37.1 [10.9] | 35.8 [10.5]   | 34.5 [10.1] | 31.7 [9.3]  | 30.6 [9.0]      | 29.5 [8.6]  |             |
|                                                      | Sens kBtu/h [kW]  | -3.3 [-1.0]       | -3.0 [-0.9]     | -2.8 [-0.8] | 4.2 [1.2]   | 3.8 [1.1]     | 3.5 [1.0]   | 6.2 [1.8]   | 5.6 [1.7]       | 5.1 [1.5]   |             |
|                                                      | Power             | 8.1               | 7.9             | 7.8         | 8.0         | 7.9           | 7.8         | 8           | 7.9             | 7.7         |             |
| 80<br>[26.7]                                         | Total kBtu/h [kW] | 33.8 [9.9]        | 32.6 [9.5]      | 31.4 [9.2]  | 35.3 [10.3] | 34.0 [10.0]   | 32.8 [9.6]  | 29.9 [8.8]  | 28.9 [8.5]      | 27.8 [8.2]  |             |
|                                                      | Sens kBtu/h [kW]  | -4.8 [-1.4]       | -4.4 [-1.3]     | -4.0 [-1.2] | 2.7 [0.8]   | 2.5 [0.7]     | 2.3 [0.7]   | 4.7 [1.4]   | 4.3 [1.3]       | 3.9 [1.1]   |             |
|                                                      | Power             | 8.3               | 8.1             | 8           | 8.2         | 8.1           | 7.9         | 8.2         | 8.1             | 7.9         |             |
| 85<br>[29.4]                                         | Total kBtu/h [kW] | 32.5 [9.5]        | 31.3 [9.2]      | 30.2 [8.8]  | 34.0 [10.0] | 32.8 [9.6]    | 31.6 [9.3]  | 28.6 [8.4]  | 27.6 [8.1]      | 26.6 [7.8]  |             |
|                                                      | Sens kBtu/h [kW]  | -5.9 [-1.7]       | -5.4 [-1.6]     | -4.9 [-1.4] | 1.7 [0.5]   | 1.5 [0.4]     | 1.4 [0.4]   | 3.6 [1.1]   | 3.3 [1.0]       | 3.0 [0.9]   |             |
|                                                      | Power             | 8.5               | 8.3             | 8.2         | 8.5         | 8.3           | 8.2         | 8.4         | 8.3             | 8.1         |             |
| 90<br>[32.2]                                         | Total kBtu/h [kW] | 31.6 [9.3]        | 30.5 [8.9]      | 29.4 [8.6]  | 33.1 [9.7]  | 32.0 [9.4]    | 30.8 [9.0]  | 27.8 [8.1]  | 26.8 [7.9]      | 25.8 [7.6]  |             |
|                                                      | Sens kBtu/h [kW]  | -6.6 [-1.9]       | -6.0 [-1.8]     | -5.4 [-1.6] | 1.0 [0.3]   | 0.9 [0.3]     | 0.8 [0.2]   | 2.9 [0.9]   | 2.7 [0.8]       | 2.4 [0.7]   |             |
|                                                      | Power             | 8.7               | 8.6             | 8.4         | 8.7         | 8.5           | 8.4         | 8.7         | 8.5             | 8.4         |             |

## GROSS SYSTEMS PERFORMANCE DATA (HIGH HUMIDIDRY MODE)—RGEHYB180

| 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]                                               |               |                   | 7200 [3398]     | 5275 [2490]  | 4800 [2265]  | 7200 [3398]   | 5275 [2490]  | 4800 [2265]  | 7200 [3398]     | 5275 [2490]    | 4800 [2265]    |
| OUTDOOR<br>DRY<br>BULB<br>TEMPERATURE<br><br>°F<br>[°C] | 60<br>[15.6]  | Total kBtu/h [kW] | 156.3 [45.8]    | 146.6 [43.0] | 144.2 [42.3] | 142.7 [41.8]  | 133.8 [39.2] | 131.7 [38.6] | -271.9 [-79.7]  | -255.0 [-74.7] | -250.8 [-73.5] |
|                                                         |               | Sens kBtu/h [kW]  | 74.5 [21.8]     | 63.6 [18.6]  | 60.9 [17.9]  | 88.5 [25.9]   | 75.6 [22.2]  | 72.4 [21.2]  | -308.6 [-90.4]  | -263.7 [-77.3] | -252.6 [-74.0] |
|                                                         |               | Power             | 16.1            | 15.6         | 15.4         | 15.2          | 14.7         | 14.6         | 11.9            | 11.6           | 11.5           |
|                                                         | 70<br>[21.1]  | Total kBtu/h [kW] | 150.3 [44.0]    | 140.9 [41.3] | 138.6 [40.6] | 136.7 [40.1]  | 128.2 [37.6] | 126.1 [36.9] | -278.0 [-81.5]  | -260.7 [-76.4] | -256.4 [-75.1] |
|                                                         |               | Sens kBtu/h [kW]  | 69.6 [20.4]     | 59.5 [17.4]  | 57.0 [16.7]  | 83.7 [24.5]   | 71.5 [20.9]  | 68.5 [20.1]  | -313.4 [-91.8]  | -267.8 [-78.5] | -256.5 [-75.2] |
|                                                         |               | Power             | 17.4            | 16.9         | 16.7         | 16.5          | 16           | 15.9         | 13.3            | 12.8           | 12.7           |
|                                                         | 80<br>[26.7]  | Total kBtu/h [kW] | 144.0 [42.2]    | 135.0 [39.6] | 132.8 [38.9] | 130.4 [38.2]  | 122.3 [35.8] | 120.3 [35.3] | -284.2 [-83.3]  | -266.6 [-78.1] | -262.2 [-76.8] |
|                                                         |               | Sens kBtu/h [kW]  | 64.7 [19.0]     | 55.3 [16.2]  | 53.0 [15.5]  | 78.8 [23.1]   | 67.3 [19.7]  | 64.5 [18.9]  | -318.3 [-93.3]  | -272.0 [-79.7] | -262.2 [-76.8] |
|                                                         |               | Power             | 18.5            | 17.9         | 17.8         | 17.6          | 17.1         | 17           | 14.4            | 13.9           | 13.8           |
|                                                         | 90<br>[32.2]  | Total kBtu/h [kW] | 137.5 [40.3]    | 128.9 [37.8] | 126.8 [37.2] | 123.9 [36.3]  | 116.2 [34.1] | 114.3 [33.5] | -290.8 [-85.2]  | -272.7 [-79.9] | -268.2 [-78.6] |
|                                                         |               | Sens kBtu/h [kW]  | 59.8 [17.5]     | 51.1 [15.0]  | 48.9 [14.3]  | 73.8 [21.6]   | 63.1 [18.5]  | 60.4 [17.7]  | -323.3 [-94.7]  | -276.2 [-80.9] | -268.2 [-78.6] |
|                                                         |               | Power             | 19.5            | 18.8         | 18.7         | 18.6          | 18.0         | 17.9         | 15.3            | 14.8           | 14.7           |
|                                                         | 100<br>[37.8] | Total kBtu/h [kW] | 130.7 [38.3]    | 122.6 [35.9] | 120.6 [35.3] | 117.2 [34.3]  | 109.9 [32.2] | 108.1 [31.7] | -297.5 [-87.2]  | -279.0 [-81.8] | -274.4 [-80.4] |
|                                                         |               | Sens kBtu/h [kW]  | 54.8 [16.0]     | 46.8 [13.7]  | 44.8 [13.1]  | 68.8 [20.2]   | 58.8 [17.2]  | 56.3 [16.5]  | -328.3 [-96.2]  | -280.5 [-82.2] | -274.4 [-80.4] |
|                                                         |               | Power             | 20.2            | 19.6         | 19.4         | 19.3          | 18.7         | 18.6         | 16              | 15.5           | 15.4           |
|                                                         | 110<br>[43.3] | Total kBtu/h [kW] | 123.7 [36.3]    | 116.0 [34.0] | 114.1 [33.5] | 110.2 [32.3]  | 103.3 [30.3] | 101.6 [29.8] | -304.5 [-89.2]  | -285.6 [-83.7] | -280.9 [-82.3] |
|                                                         |               | Sens kBtu/h [kW]  | 49.7 [14.6]     | 42.4 [12.4]  | 40.7 [11.9]  | 63.7 [18.7]   | 54.4 [15.9]  | 52.1 [15.3]  | -333.4 [-97.7]  | -285.6 [-83.7] | -280.9 [-82.3] |
|                                                         |               | Power             | 20.7            | 20.1         | 19.9         | 19.9          | 19.2         | 19.1         | 16.6            | 16.1           | 15.9           |
|                                                         | 120<br>[48.9] | Total kBtu/h [kW] | 116.5 [34.1]    | 109.3 [32.0] | 107.5 [31.5] | 102.9 [30.2]  | 96.5 [28.3]  | 95.0 [27.8]  | -311.7 [-91.3]  | -292.3 [-85.7] | -287.5 [-84.3] |
|                                                         |               | Sens kBtu/h [kW]  | 44.5 [13.0]     | 38.0 [11.1]  | 36.4 [10.7]  | 58.5 [17.2]   | 50.0 [14.7]  | 47.9 [14.0]  | -338.5 [-99.2]  | -292.3 [-85.7] | -287.5 [-84.3] |
|                                                         |               | Power             | 21.1            | 20.4         | 20.3         | 20.2          | 19.6         | 19.4         | 16.9            | 16.4           | 16.3           |

DR —Depression ratio  
dbE —Entering air dry bulb

wbE—Entering air wet bulb  
Power—kW input

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

[ ] Designates Metric Conversions

**GROSS SYSTEMS PERFORMANCE DATA (LOW HUMIDIDRY MODE)—RGEHYB240**

| 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]                                 |              |                   | 3660 [1727]     | 3050 [1439] | 2440 [1152] | 3660 [1727]   | 3050 [1439] | 2440 [1152] | 3660 [1727]     | 3050 [1439] | 2440 [1152] |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60<br>[15.6] | Total kBtu/h [kW] | 67.9 [19.9]     | 65.5 [19.2] | 63.2 [18.5] | 65.3 [19.1]   | 63.0 [18.5] | 60.7 [17.8] | 62.0 [18.2]     | 59.8 [17.5] | 57.6 [16.9] |
|                                           |              | Sens kBtu/h [kW]  | 4.6 [1.3]       | 4.2 [1.2]   | 3.8 [1.1]   | 9.7 [2.8]     | 8.9 [2.6]   | 8.1 [2.4]   | 16.0 [4.7]      | 14.7 [4.3]  | 13.3 [3.9]  |
|                                           |              | Power             | 9.7             | 9.6         | 9.4         | 9.7           | 9.5         | 9.4         | 9.7             | 9.5         | 9.4         |
|                                           | 65<br>[18.3] | Total kBtu/h [kW] | 66.8 [19.6]     | 64.4 [18.9] | 62.1 [18.2] | 64.1 [18.8]   | 61.9 [18.1] | 59.6 [17.5] | 60.8 [17.8]     | 58.7 [17.2] | 56.6 [16.6] |
|                                           |              | Sens kBtu/h [kW]  | 3.4 [1.0]       | 3.1 [0.9]   | 2.8 [0.8]   | 8.5 [2.5]     | 7.8 [2.3]   | 7.1 [2.1]   | 14.9 [4.4]      | 13.6 [4.0]  | 12.3 [3.6]  |
|                                           |              | Power             | 9.8             | 9.7         | 9.5         | 9.8           | 9.6         | 9.5         | 9.8             | 9.6         | 9.5         |
|                                           | 70<br>[21.1] | Total kBtu/h [kW] | 65.3 [19.2]     | 63.1 [18.5] | 60.8 [17.8] | 62.7 [18.4]   | 60.5 [17.7] | 58.3 [17.1] | 59.4 [17.4]     | 57.3 [16.8] | 55.2 [16.2] |
|                                           |              | Sens kBtu/h [kW]  | 2.1 [0.6]       | 1.9 [0.6]   | 1.7 [0.5]   | 7.2 [2.1]     | 6.6 [1.9]   | 6.0 [1.8]   | 13.5 [4.0]      | 12.4 [3.6]  | 11.2 [3.3]  |
|                                           |              | Power             | 10              | 9.8         | 9.6         | 9.9           | 9.7         | 9.6         | 9.9             | 9.8         | 9.6         |
|                                           | 75<br>[23.9] | Total kBtu/h [kW] | 63.6 [18.6]     | 61.4 [18.0] | 59.1 [17.3] | 60.9 [17.9]   | 58.8 [17.2] | 56.7 [16.6] | 57.6 [16.9]     | 55.6 [16.3] | 53.6 [15.7] |
|                                           |              | Sens kBtu/h [kW]  | 0.6 [0.2]       | 0.5 [0.2]   | 0.5 [0.1]   | 5.7 [1.7]     | 5.3 [1.5]   | 4.8 [1.4]   | 12.1 [3.5]      | 11.0 [3.2]  | 10.0 [2.9]  |
|                                           |              | Power             | 10.1            | 9.9         | 9.8         | 10.1          | 9.9         | 9.7         | 10.1            | 9.9         | 9.7         |
|                                           | 80<br>[26.7] | Total kBtu/h [kW] | 61.6 [18.0]     | 59.4 [17.4] | 57.2 [16.8] | 58.9 [17.3]   | 56.8 [16.7] | 54.8 [16.0] | 55.6 [16.3]     | 53.6 [15.7] | 51.7 [15.1] |
|                                           |              | Sens kBtu/h [kW]  | -1.0 [-0.3]     | -0.9 [-0.3] | -0.9 [-0.3] | 4.1 [1.2]     | 3.8 [1.1]   | 3.4 [1.0]   | 10.4 [3.1]      | 9.5 [2.8]   | 8.7 [2.5]   |
|                                           |              | Power             | 10.3            | 10.1        | 9.9         | 10.2          | 10.1        | 9.9         | 10.2            | 10.1        | 9.9         |
|                                           | 85<br>[29.4] | Total kBtu/h [kW] | 59.2 [17.3]     | 57.1 [16.7] | 55.0 [16.1] | 56.5 [16.6]   | 54.6 [16.0] | 52.6 [15.4] | 53.2 [15.6]     | 51.4 [15.1] | 49.5 [14.5] |
|                                           |              | Sens kBtu/h [kW]  | -2.8 [-0.8]     | -2.6 [-0.8] | -2.3 [-0.7] | 2.3 [0.7]     | 2.1 [0.6]   | 1.9 [0.6]   | 8.7 [2.5]       | 7.9 [2.3]   | 7.2 [2.1]   |
|                                           |              | Power             | 10.5            | 10.3        | 10.1        | 10.4          | 10.2        | 10.1        | 10.4            | 10.3        | 10.1        |
|                                           | 90<br>[32.2] | Total kBtu/h [kW] | 56.5 [16.6]     | 54.6 [16.0] | 52.6 [15.4] | 53.9 [15.8]   | 52.0 [15.2] | 50.1 [14.7] | 50.6 [14.8]     | 48.8 [14.3] | 47.0 [13.8] |
|                                           |              | Sens kBtu/h [kW]  | -4.8 [-1.4]     | -4.4 [-1.3] | -3.9 [-1.2] | 0.4 [0.1]     | 0.4 [0.1]   | 0.3 [0.1]   | 6.7 [2.0]       | 6.1 [1.8]   | 5.6 [1.6]   |
|                                           |              | Power             | 10.7            | 10.5        | 10.3        | 10.6          | 10.5        | 10.3        | 10.7            | 10.5        | 10.3        |

**GROSS SYSTEMS PERFORMANCE DATA (HIGH HUMIDIDRY MODE)—RGEHYB240**

| 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]                                 |               |                   | 9600 [4531]     | 6675 [3150]  | 6400 [3020]  | 9600 [4531]   | 6675 [3150]  | 6400 [3020]  | 9600 [4531]     | 6675 [3150]  | 6400 [3020]  |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60<br>[15.6]  | Total kBtu/h [kW] | 221.7 [65.0]    | 205.3 [60.2] | 203.8 [59.7] | 207.9 [60.9]  | 192.6 [56.4] | 191.1 [56.0] | 204.8 [60.0]    | 189.6 [55.6] | 188.2 [55.2] |
|                                           |               | Sens kBtu/h [kW]  | 98.9 [29.0]     | 82.1 [24.1]  | 80.5 [23.6]  | 117.9 [34.6]  | 97.9 [28.7]  | 96.0 [28.1]  | 136.4 [40.0]    | 113.3 [33.2] | 111.1 [32.5] |
|                                           |               | Power             | 13.5            | 13.0         | 13.0         | 13.9          | 13.3         | 13.3         | 13.7            | 13.2         | 13.1         |
|                                           | 70<br>[21.1]  | Total kBtu/h [kW] | 211.0 [61.8]    | 195.4 [57.3] | 193.9 [56.8] | 197.2 [57.8]  | 182.7 [53.5] | 181.3 [53.1] | 194.1 [56.9]    | 179.8 [52.7] | 178.4 [52.3] |
|                                           |               | Sens kBtu/h [kW]  | 90.0 [26.4]     | 74.7 [21.9]  | 73.3 [21.5]  | 109.0 [32.0]  | 90.5 [26.5]  | 88.8 [26.0]  | 127.5 [37.4]    | 105.9 [31.0] | 103.9 [30.4] |
|                                           |               | Power             | 14.5            | 14.0         | 13.9         | 14.9          | 14.3         | 14.2         | 14.7            | 14.1         | 14.1         |
|                                           | 80<br>[26.7]  | Total kBtu/h [kW] | 199.5 [58.5]    | 184.7 [54.1] | 183.4 [53.7] | 185.7 [54.4]  | 172.0 [50.4] | 170.7 [50.0] | 182.6 [53.5]    | 169.1 [49.6] | 167.8 [49.2] |
|                                           |               | Sens kBtu/h [kW]  | 80.6 [23.6]     | 66.9 [19.6]  | 65.6 [19.2]  | 99.6 [29.2]   | 82.7 [24.2]  | 81.1 [23.8]  | 118.1 [34.6]    | 98.1 [28.7]  | 96.2 [28.2]  |
|                                           |               | Power             | 15.8            | 15.2         | 15.1         | 16.1          | 15.5         | 15.4         | 15.9            | 15.3         | 15.3         |
|                                           | 90<br>[32.2]  | Total kBtu/h [kW] | 187.1 [54.8]    | 173.3 [50.8] | 172.0 [50.4] | 173.4 [50.8]  | 160.6 [47.1] | 159.4 [46.7] | 170.2 [49.9]    | 157.7 [46.2] | 156.5 [45.9] |
|                                           |               | Sens kBtu/h [kW]  | 70.7 [20.7]     | 58.7 [17.2]  | 57.5 [16.9]  | 89.7 [26.3]   | 74.5 [21.8]  | 73.0 [21.4]  | 108.2 [31.7]    | 89.8 [26.3]  | 88.1 [25.8]  |
|                                           |               | Power             | 17.2            | 16.6         | 16.5         | 17.6          | 16.9         | 16.9         | 17.4            | 16.7         | 16.7         |
|                                           | 100<br>[37.8] | Total kBtu/h [kW] | 173.9 [51.0]    | 161.1 [47.2] | 159.9 [46.9] | 160.2 [46.9]  | 148.4 [43.5] | 147.2 [43.1] | 157.0 [46.0]    | 145.4 [42.6] | 144.3 [42.3] |
|                                           |               | Sens kBtu/h [kW]  | 60.2 [17.6]     | 50.0 [14.6]  | 49.0 [14.4]  | 79.2 [23.2]   | 65.8 [19.3]  | 64.5 [18.9]  | 97.7 [28.6]     | 81.1 [23.8]  | 79.6 [23.3]  |
|                                           |               | Power             | 19.0            | 18.3         | 18.2         | 19.3          | 18.6         | 18.5         | 19.1            | 18.4         | 18.3         |
|                                           | 110<br>[43.3] | Total kBtu/h [kW] | 159.9 [46.9]    | 148.1 [43.4] | 147.0 [43.1] | 146.2 [42.8]  | 135.4 [39.7] | 134.4 [39.4] | 143.0 [41.9]    | 132.4 [38.8] | 131.5 [38.5] |
|                                           |               | Sens kBtu/h [kW]  | 49.2 [14.4]     | 40.8 [12.0]  | 40.1 [11.7]  | 68.2 [20.0]   | 56.6 [16.6]  | 55.6 [16.3]  | 86.7 [25.4]     | 72.0 [21.1]  | 70.6 [20.7]  |
|                                           |               | Power             | 20.9            | 20.2         | 20.1         | 21.3          | 20.5         | 20.4         | 21.1            | 20.3         | 20.2         |
|                                           | 120<br>[48.9] | Total kBtu/h [kW] | 145.0 [42.5]    | 134.3 [39.4] | 133.3 [39.1] | 131.3 [38.5]  | 121.6 [35.6] | 120.7 [35.4] | 128.1 [37.5]    | 118.7 [34.8] | 117.8 [34.5] |
|                                           |               | Sens kBtu/h [kW]  | 37.7 [11.0]     | 31.3 [9.2]   | 30.7 [9.0]   | 56.7 [16.6]   | 47.1 [13.8]  | 46.2 [13.5]  | 75.2 [22.0]     | 62.4 [18.3]  | 61.2 [17.9]  |
|                                           |               | Power             | 23.2            | 22.3         | 22.2         | 23.5          | 22.6         | 22.5         | 23.3            | 22.4         | 22.3         |

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

[ ] Designates Metric Conversions



## GROSS SYSTEMS PERFORMANCE DATA (LOW HUMIDIDRY MODE)—RGEHYB300

| 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]                                 |              |                   | 5040 [2379]     | 4200 [1982] | 3360 [1586] | 5040 [2379]   | 4200 [1982] | 3360 [1586] | 5040 [2379]     | 4200 [1982] | 3360 [1586] |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60<br>[15.6] | Total kBtu/h [kW] | 79.2 [23.2]     | 76.4 [22.4] | 73.6 [21.6] | 75.6 [22.1]   | 72.9 [21.4] | 70.3 [20.6] | 70.8 [20.7]     | 68.3 [20.0] | 65.8 [19.3] |
|                                           |              | Sens kBtu/h [kW]  | 8.7 [2.6]       | 8.0 [2.3]   | 7.2 [2.1]   | 14.7 [4.3]    | 13.4 [3.9]  | 12.2 [3.6]  | 21.1 [6.2]      | 19.3 [5.7]  | 17.5 [5.1]  |
|                                           |              | Power             | 10.7            | 10.5        | 10.3        | 10.7          | 10.5        | 10.3        | 10.6            | 10.4        | 10.2        |
|                                           | 65<br>[18.3] | Total kBtu/h [kW] | 76.9 [22.5]     | 74.2 [21.8] | 71.5 [21.0] | 73.3 [21.5]   | 70.7 [20.7] | 68.1 [20.0] | 68.5 [20.1]     | 66.1 [19.4] | 63.7 [18.7] |
|                                           |              | Sens kBtu/h [kW]  | 7.0 [2.0]       | 6.4 [1.9]   | 5.8 [1.7]   | 12.9 [3.8]    | 11.8 [3.5]  | 10.7 [3.1]  | 19.3 [5.7]      | 17.7 [5.2]  | 16.0 [4.7]  |
|                                           |              | Power             | 10.8            | 10.6        | 10.5        | 10.8          | 10.6        | 10.4        | 10.7            | 10.6        | 10.4        |
|                                           | 70<br>[21.1] | Total kBtu/h [kW] | 74.5 [21.8]     | 71.9 [21.1] | 69.3 [20.3] | 70.9 [20.8]   | 68.4 [20]   | 65.9 [19.3] | 66.1 [19.4]     | 63.8 [18.7] | 61.5 [18.0] |
|                                           |              | Sens kBtu/h [kW]  | 5.0 [1.5]       | 4.6 [1.4]   | 4.2 [1.2]   | 11.0 [3.2]    | 10.1 [3.0]  | 9.1 [2.7]   | 17.4 [5.1]      | 15.9 [4.7]  | 14.4 [4.2]  |
|                                           |              | Power             | 11.0            | 10.8        | 10.6        | 11.0          | 10.8        | 10.6        | 10.9            | 10.7        | 10.5        |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 75<br>[23.9] | Total kBtu/h [kW] | 72.0 [21.1]     | 69.5 [20.4] | 66.9 [19.6] | 68.3 [20.0]   | 65.9 [19.3] | 63.5 [18.6] | 63.5 [18.6]     | 61.3 [18]   | 59.1 [17.3] |
|                                           |              | Sens kBtu/h [kW]  | 2.9 [0.9]       | 2.7 [0.8]   | 2.4 [0.7]   | 8.9 [2.6]     | 8.2 [2.4]   | 7.4 [2.2]   | 15.3 [4.5]      | 14.0 [4.1]  | 12.7 [3.7]  |
|                                           |              | Power             | 11.2            | 11.0        | 10.8        | 11.1          | 10.9        | 10.8        | 11.1            | 10.9        | 10.7        |
|                                           | 80<br>[26.7] | Total kBtu/h [kW] | 69.3 [20.3]     | 66.9 [19.6] | 64.4 [18.9] | 65.7 [19.2]   | 63.3 [18.6] | 61.0 [17.9] | 60.9 [17.8]     | 58.7 [17.2] | 56.6 [16.6] |
|                                           |              | Sens kBtu/h [kW]  | 0.7 [0.2]       | 0.6 [0.2]   | 0.6 [0.2]   | 6.6 [1.9]     | 6.1 [1.8]   | 5.5 [1.6]   | 13.0 [3.8]      | 11.9 [3.5]  | 10.8 [3.2]  |
|                                           |              | Power             | 11.4            | 11.2        | 11          | 11.3          | 11.1        | 10.9        | 11.3            | 11.1        | 10.9        |
|                                           | 85<br>[29.4] | Total kBtu/h [kW] | 66.5 [19.5]     | 64.1 [18.8] | 61.8 [18.1] | 62.8 [18.4]   | 60.6 [17.8] | 58.4 [17.1] | 58.0 [17.0]     | 56.0 [16.4] | 54.0 [15.8] |
|                                           |              | Sens kBtu/h [kW]  | -1.8 [-0.5]     | -1.6 [-0.5] | -1.5 [-0.4] | 4.2 [1.2]     | 3.8 [1.1]   | 3.5 [1.0]   | 10.6 [3.1]      | 9.7 [2.8]   | 8.8 [2.6]   |
|                                           |              | Power             | 11.6            | 11.4        | 11.2        | 11.6          | 11.4        | 11.2        | 11.5            | 11.3        | 11.1        |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 90<br>[32.2] | Total kBtu/h [kW] | 63.5 [18.6]     | 61.3 [18.0] | 59.1 [17.3] | 59.9 [17.5]   | 57.8 [16.9] | 55.7 [16.3] | 55.1 [16.1]     | 53.1 [15.6] | 51.2 [15.0] |
|                                           |              | Sens kBtu/h [kW]  | -4.4 [-1.3]     | -4.0 [-1.2] | -3.6 [-1.1] | 1.6 [0.5]     | 1.5 [0.4]   | 1.3 [0.4]   | 8.0 [2.3]       | 7.3 [2.1]   | 6.6 [1.9]   |
|                                           |              | Power             | 11.8            | 11.6        | 11.4        | 11.8          | 11.6        | 11.4        | 11.8            | 11.6        | 11.3        |

## GROSS SYSTEMS PERFORMANCE DATA (HIGH HUMIDIDRY MODE)—RGEHYB300

| 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]                                 |               |                   | 12000 [5663]    | 8790 [4148]  | 8000 [3776]  | 12000 [5663]  | 8790 [4148]  | 8000 [3776]  | 12000 [5663]    | 8790 [4148]  | 8000 [3776]  |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 60<br>[15.6]  | Total kBtu/h [kW] | 268.2 [78.6]    | 251.5 [73.7] | 247.4 [72.5] | 258.5 [75.8]  | 242.4 [71.0] | 238.5 [69.9] | 252.7 [74.0]    | 236.9 [69.4] | 233.1 [68.3] |
|                                           |               | Sens kBtu/h [kW]  | 101.6 [29.8]    | 86.8 [25.4]  | 83.1 [24.4]  | 147.3 [43.2]  | 125.9 [36.9] | 120.6 [35.3] | 167.3 [49.0]    | 142.9 [41.9] | 136.9 [40.1] |
|                                           |               | Power             | 19.0            | 18.4         | 18.3         | 18.8          | 18.2         | 18.1         | 19.0            | 18.4         | 18.3         |
|                                           | 70<br>[21.1]  | Total kBtu/h [kW] | 257.4 [75.4]    | 241.4 [70.7] | 237.5 [69.6] | 247.8 [72.6]  | 232.4 [68.1] | 228.6 [67.0] | 241.9 [70.9]    | 226.9 [66.5] | 223.2 [65.4] |
|                                           |               | Sens kBtu/h [kW]  | 94.3 [27.6]     | 80.5 [23.6]  | 77.2 [22.6]  | 140.0 [41.0]  | 119.6 [35.1] | 114.6 [33.6] | 160.0 [46.9]    | 136.7 [40.1] | 130.9 [38.4] |
|                                           |               | Power             | 20.2            | 19.6         | 19.5         | 20.1          | 19.4         | 19.3         | 20.2            | 19.6         | 19.5         |
|                                           | 80<br>[26.7]  | Total kBtu/h [kW] | 245.7 [72.0]    | 230.4 [67.5] | 226.6 [66.4] | 236.0 [69.2]  | 221.3 [64.9] | 217.7 [63.8] | 230.2 [67.4]    | 215.8 [63.2] | 212.3 [62.2] |
|                                           |               | Sens kBtu/h [kW]  | 86.1 [25.2]     | 73.5 [21.6]  | 70.5 [20.6]  | 131.8 [38.6]  | 112.6 [33.0] | 107.9 [31.6] | 151.8 [44.5]    | 129.7 [38.0] | 124.2 [36.4] |
|                                           |               | Power             | 21.8            | 21.1         | 21.0         | 21.6          | 20.9         | 20.8         | 21.8            | 21.1         | 21           |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 90<br>[32.2]  | Total kBtu/h [kW] | 232.8 [68.2]    | 218.3 [64.0] | 214.8 [62.9] | 223.2 [65.4]  | 209.3 [61.3] | 205.8 [60.3] | 217.3 [63.7]    | 203.8 [59.7] | 200.5 [58.7] |
|                                           |               | Sens kBtu/h [kW]  | 77.0 [22.6]     | 65.8 [19.3]  | 63.0 [18.5]  | 122.7 [36.0]  | 104.9 [30.7] | 100.5 [29.4] | 142.7 [41.8]    | 121.9 [35.7] | 116.8 [34.2] |
|                                           |               | Power             | 23.7            | 23.0         | 22.8         | 23.5          | 22.8         | 22.6         | 23.7            | 23           | 22.8         |
|                                           | 100<br>[37.8] | Total kBtu/h [kW] | 218.9 [64.1]    | 205.3 [60.2] | 201.9 [59.2] | 209.3 [61.3]  | 196.2 [57.5] | 193.0 [56.6] | 203.4 [59.6]    | 190.7 [55.9] | 187.6 [55.0] |
|                                           |               | Sens kBtu/h [kW]  | 67.0 [19.6]     | 57.2 [16.8]  | 54.8 [16.1]  | 112.7 [33.0]  | 96.3 [28.2]  | 92.3 [27.0]  | 132.7 [38.9]    | 113.4 [33.2] | 108.6 [31.8] |
|                                           |               | Power             | 26.0            | 25.2         | 25           | 25.8          | 25           | 24.8         | 26.0            | 25.2         | 25           |
|                                           | 110<br>[43.3] | Total kBtu/h [kW] | 203.9 [59.8]    | 191.3 [56.0] | 188.1 [55.1] | 194.3 [56.9]  | 182.2 [53.4] | 179.2 [52.5] | 188.4 [55.2]    | 176.7 [51.8] | 173.8 [50.9] |
|                                           |               | Sens kBtu/h [kW]  | 56.1 [16.4]     | 47.9 [14.0]  | 45.9 [13.5]  | 101.9 [29.8]  | 87 [25.5]    | 83.4 [24.4]  | 121.8 [35.7]    | 104.1 [30.5] | 99.7 [29.2]  |
|                                           |               | Power             | 28.6            | 27.7         | 27.5         | 28.4          | 27.5         | 27.3         | 28.6            | 27.7         | 27.5         |
| OUTDOOR DRY BULB TEMPERATURE<br>°F [°C]   | 120<br>[48.9] | Total kBtu/h [kW] | 187.9 [55.1]    | 176.2 [51.6] | 173.3 [50.8] | 178.3 [52.2]  | 167.2 [49]   | 164.4 [48.2] | 172.4 [50.5]    | 161.7 [47.4] | 159.0 [46.6] |
|                                           |               | Sens kBtu/h [kW]  | 44.3 [13.0]     | 37.9 [11.1]  | 36.3 [10.6]  | 90.1 [26.4]   | 77 [22.6]    | 73.7 [21.6]  | 110.0 [32.2]    | 94.0 [27.5]  | 90.1 [26.4]  |
|                                           |               | Power             | 31.5            | 30.5         | 30.3         | 31.3          | 30.4         | 30.1         | 31.5            | 30.6         | 30.3         |

DR —Depression ratio  
dbE —Entering air dry bulb

wbE—Entering air wet bulb  
Power—kW input

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

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—15 TON — 60 Hz — DOWNFLOW

| Model RGEHYB180       |   | Voltage 208/230, 460 — 3 phase                 |   |     |   |     |   |     |   |     |   |     |   |            |   |     |   |     |   |     |   |     |   |     |   |
|-----------------------|---|------------------------------------------------|---|-----|---|-----|---|-----|---|-----|---|-----|---|------------|---|-----|---|-----|---|-----|---|-----|---|-----|---|
| Air Flow<br>CFM [L/s] |   | External Static Pressure—Inches of Water [kPa] |   |     |   |     |   |     |   |     |   |     |   |            |   |     |   |     |   |     |   |     |   |     |   |
|                       |   | 0.1 [0.2]                                      |   |     |   |     |   |     |   |     |   |     |   | 0.2 [0.05] |   |     |   |     |   |     |   |     |   |     |   |
|                       |   | RPM                                            | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM        | W | RPM | W | RPM | W | RPM | W | RPM | W | RPM | W |
| 4800 [2265]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 5000 [2359]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 5200 [2454]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 5400 [2548]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 5600 [2643]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 5800 [2737]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 6000 [2831]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 6200 [2926]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 6400 [3020]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 6600 [3114]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 6800 [3209]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 7000 [3303]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |
| 7200 [3398]           | — | —                                              | — | —   | — | —   | — | —   | — | —   | — | —   | — | —          | — | —   | — | —   | — | —   | — | —   | — | —   | — |

NOTE: F-Drive left of bold line, G-Drive right of bold line.

| Drive Package  | F         |     |     |     |     |     |     |     |     |     |     |     | G           |     |     |     |     |     |     |     |     |     |     |     |
|----------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Motor H.P. [W] | 3 [2,237] |     |     |     |     |     |     |     |     |     |     |     | 5 [3,728.5] |     |     |     |     |     |     |     |     |     |     |     |
| Blower Sheave  | BK105H    |     |     |     |     |     |     |     |     |     |     |     | BK105H      |     |     |     |     |     |     |     |     |     |     |     |
| Motor Sheave   | 1VL-44    |     |     |     |     |     |     |     |     |     |     |     | 1VP-56      |     |     |     |     |     |     |     |     |     |     |     |
| Turns Open     | 1         | 2   | 3   | 4   | 5   | 6   | 1   | 2   | 3   | 4   | 5   | 6   | 1           | 2   | 3   | 4   | 5   | 6   | 1   | 2   | 3   | 4   | 5   | 6   |
| RPM            | 702       | 674 | 647 | 616 | 582 | 556 | 917 | 893 | 865 | 833 | 802 | 769 | 917         | 893 | 865 | 833 | 802 | 769 | 917 | 893 | 865 | 833 | 802 | 769 |

- NOTES: 1. Factory sheave settings are shown in bold type.  
2. Do not set motor sheave below minimum turns open shown.  
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure.

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—15 TON — 60 Hz — DOWNFLOW (CONTINUED)

| Airflow     | AIRFLOW CORRECTION FACTORS * |                 |      |            | COMPONENT AIRFLOW RESISTANCE |                                    |                                      |                                                                |               |                |
|-------------|------------------------------|-----------------|------|------------|------------------------------|------------------------------------|--------------------------------------|----------------------------------------------------------------|---------------|----------------|
|             | CFM [L/s]                    | Sensible kBtu/h |      | Power kW   | Wet Coil                     | Downflow Economizer RA Damper Open | Horizontal Economizer RA Damper Open | Concentric Grill RXRN-AD80 or RXRN-AD81 & Transition RXMC-CJ07 | MERV 8 Filter | MERV 13 Filter |
|             |                              | Total kBtu/h    |      |            |                              |                                    |                                      |                                                                |               |                |
| 4800 [2265] | 0.97                         | 0.87            | 0.98 | 0.03 [.01] | 0.09 [.02]                   | 0.00 [.00]                         | 0.21 [.05]                           | 0.07 [.02]                                                     | 0.01 [.00]    |                |
| 5000 [2359] | 0.97                         | 0.90            | 0.98 | 0.04 [.01] | 0.10 [.02]                   | 0.01 [.00]                         | 0.25 [.06]                           | 0.07 [.02]                                                     | 0.02 [.00]    |                |
| 5200 [2454] | 0.98                         | 0.92            | 0.99 | 0.05 [.01] | 0.10 [.02]                   | 0.01 [.00]                         | 0.28 [.07]                           | 0.08 [.02]                                                     | 0.02 [.01]    |                |
| 5400 [2548] | 0.98                         | 0.94            | 0.99 | 0.06 [.01] | 0.11 [.03]                   | 0.02 [.00]                         | 0.32 [.08]                           | 0.08 [.02]                                                     | 0.03 [.01]    |                |
| 5600 [2643] | 0.99                         | 0.97            | 0.99 | 0.06 [.01] | 0.12 [.03]                   | 0.02 [.00]                         | 0.35 [.09]                           | 0.08 [.02]                                                     | 0.03 [.01]    |                |
| 5800 [2737] | 1.00                         | 0.99            | 1.00 | 0.07 [.02] | 0.13 [.03]                   | 0.03 [.01]                         | 0.39 [.10]                           | 0.09 [.02]                                                     | 0.04 [.01]    |                |
| 6000 [2831] | 1.00                         | 1.02            | 1.00 | 0.08 [.02] | 0.13 [.03]                   | 0.03 [.01]                         | 0.43 [.11]                           | 0.09 [.02]                                                     | 0.05 [.01]    |                |
| 6200 [2926] | 1.01                         | 1.04            | 1.00 | 0.09 [.02] | 0.14 [.03]                   | 0.04 [.01]                         | 0.46 [.11]                           | 0.10 [.02]                                                     | 0.05 [.01]    |                |
| 6400 [3020] | 1.02                         | 1.06            | 1.01 | 0.10 [.02] | 0.15 [.04]                   | 0.04 [.01]                         | 0.50 [.12]                           | 0.10 [.02]                                                     | 0.06 [.01]    |                |
| 6600 [3114] | 1.02                         | 1.09            | 1.01 | 0.10 [.02] | 0.16 [.04]                   | 0.05 [.01]                         | 0.54 [.13]                           | 0.10 [.03]                                                     | 0.07 [.02]    |                |
| 6800 [3209] | 1.03                         | 1.11            | 1.01 | 0.11 [.03] | 0.16 [.04]                   | 0.05 [.01]                         | 0.57 [.14]                           | 0.11 [.03]                                                     | 0.07 [.02]    |                |
| 7000 [3303] | 1.03                         | 1.14            | 1.02 | 0.12 [.03] | 0.17 [.04]                   | 0.06 [.01]                         | 0.61 [.15]                           | 0.11 [.03]                                                     | 0.08 [.02]    |                |
| 7200 [3398] | 1.04                         | 1.16            | 1.02 | 0.13 [.03] | 0.18 [.04]                   | 0.06 [.01]                         | 0.64 [.16]                           | 0.12 [.03]                                                     | 0.08 [.02]    |                |

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

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—15 TON — 60 Hz — SIDEFLOW

| Air<br>Flow<br>CFM [L/s] | Model RGEHYB180 Voltage 208/230, 460 — 3 phase |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
|--------------------------|------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|---|
|                          | 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    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |
| 4800 [2265]              | —                                              | —          | —          | —          | 570        | 1312       | 597        | 1435       | 624        | 1564       | 651        | 1699       | 678        | 1839       | 704        | 1985       | 729        | 2137       | 755        | 2295       | 780  | 2458 | 804  | 2628 | 829  | 2803 | 853  | 2993 | 876  | 3170 | 899  | 3362 | 922  | 3560 | —    |      |   |
| 5000 [2359]              | —                                              | —          | —          | —          | 578        | 1395       | 605        | 1520       | 632        | 1651       | 658        | 1787       | 684        | 1929       | 710        | 2077       | 735        | 2231       | 760        | 2390       | 785  | 2555 | 809  | 2726 | 833  | 2903 | 856  | 3085 | 879  | 3273 | 902  | 3467 | 925  | 3667 | —    |      |   |
| 5200 [2454]              | —                                              | —          | —          | —          | 587        | 1487       | 614        | 1613       | 640        | 1746       | 666        | 1894       | 692        | 2028       | 717        | 2177       | 742        | 2333       | 766        | 2494       | 790  | 2660 | 814  | 2833 | 837  | 3011 | 861  | 3195 | 883  | 3385 | 906  | 3581 | 927  | 3782 | —    |      |   |
| 5400 [2548]              | —                                              | —          | —          | —          | 597        | 1464       | 597        | 1586       | 623        | 1715       | 649        | 1849       | 674        | 1989       | 699        | 2134       | 724        | 2285       | 748        | 2442       | 772  | 2605 | 796  | 2774 | 819  | 2848 | 842  | 3128 | 865  | 3314 | 887  | 3505 | 909  | 3702 | 931  | 3905 | — |
| 5600 [2643]              | —                                              | —          | —          | —          | 580        | 1570       | 606        | 1694       | 632        | 1824       | 657        | 1960       | 682        | 2101       | 707        | 2249       | 731        | 2402       | 755        | 2560       | 779  | 2725 | 802  | 2895 | 825  | 3071 | 848  | 3252 | 870  | 3440 | 892  | 3633 | 913  | 3832 | —    |      |   |
| 5800 [2737]              | —                                              | —          | —          | —          | 590        | 1684       | 616        | 1810       | 642        | 1942       | 667        | 2079       | 691        | 2222       | 715        | 2371       | 739        | 2526       | 763        | 2686       | 786  | 2852 | 809  | 3024 | 831  | 3202 | 854  | 3385 | 875  | 3574 | 897  | 3769 | 918  | 3970 | —    |      |   |
| 6000 [2831]              | —                                              | —          | 576        | 1685       | 601        | 1806       | 627        | 1934       | 652        | 2067       | 676        | 2207       | 700        | 2351       | 724        | 2502       | 748        | 2658       | 771        | 2820       | 793  | 2988 | 816  | 3162 | 838  | 3341 | 860  | 3526 | 881  | 3717 | 902  | 3913 | 922  | 4116 | —    |      |   |
| 6200 [2926]              | —                                              | —          | —          | 587        | 1813       | 613        | 1937       | 637        | 2066       | 662        | 2201       | 686        | 2342       | 710        | 2488       | 733        | 2641       | 756        | 2799       | 779        | 2963 | 801  | 3132 | 827  | 3307 | 845  | 3488 | 866  | 3675 | 887  | 3867 | 907  | 4066 | 928  | 4270 | —    |   |
| 6400 [3020]              | —                                              | 574        | 1831       | 599        | 1950       | 624        | 2075       | 648        | 2206       | 673        | 2343       | 696        | 2485       | 720        | 2634       | 743        | 2788       | 765        | 2947       | 787        | 3113 | 809  | 3284 | 831  | 3461 | 852  | 3644 | 873  | 3832 | 893  | 4026 | 913  | 4226 | 933  | 4432 | —    |   |
| 6600 [3114]              | —                                              | —          | 587        | 1974       | 612        | 2095       | 636        | 2227       | 660        | 2355       | 684        | 2493       | 707        | 2637       | 730        | 2787       | 752        | 2943       | 775        | 3104       | 796  | 3271 | 818  | 3444 | 839  | 3623 | 860  | 3807 | 880  | 3997 | 900  | 4193 | 920  | 4394 | —    |      |   |
| 6800 [3209]              | 575                                            | 2008       | 600        | 2125       | 624        | 2248       | 648        | 2377       | 672        | 2511       | 695        | 2651       | 718        | 2797       | 740        | 2948       | 763        | 3106       | 784        | 3269       | 806  | 3438 | 827  | 3612 | 847  | 3792 | 868  | 3978 | 888  | 4170 | 907  | 4368 | 927  | 4571 | —    |      |   |
| 7000 [3303]              | 589                                            | 2166       | 614        | 2284       | 638        | 2409       | 661        | 2539       | 684        | 2675       | 707        | 2817       | 729        | 2965       | 751        | 3118       | 773        | 3277       | 794        | 3442       | 815  | 3612 | 836  | 3788 | 856  | 3970 | 876  | 4158 | 896  | 4352 | 917  | 4558 | —    | —    | —    |      |   |
| 7200 [3398]              | 604                                            | 2332       | 628        | 2452       | 651        | 2578       | 674        | 2710       | 697        | 2848       | 719        | 2991       | 741        | 3141       | 763        | 3296       | 784        | 3456       | 805        | 3623       | 825  | 3795 | 846  | 3973 | 865  | 4156 | 885  | 4346 | 904  | 4541 | 923  | 4742 | —    | —    | —    |      |   |

NOTE: F-Drive left of bold line, G-Drive right of bold line.

| Drive Package  | F           |     |     |     |     |     |     |     |     |     |     |     | G           |     |     |     |     |     |     |     |     |     |     |     |
|----------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Motor H.P. [W] | 3 [2,237.1] |     |     |     |     |     |     |     |     |     |     |     | 5 [3,728.5] |     |     |     |     |     |     |     |     |     |     |     |
| Blower Sheave  | BK105H      |     |     |     |     |     |     |     |     |     |     |     | BK105H      |     |     |     |     |     |     |     |     |     |     |     |
| Motor Sheave   | 1VL-44      |     |     |     |     |     |     |     |     |     |     |     | 1VP-56      |     |     |     |     |     |     |     |     |     |     |     |
| Turns Open     | 1           | 2   | 3   | 4   | 5   | 6   | 1   | 2   | 3   | 4   | 5   | 6   | 1           | 2   | 3   | 4   | 5   | 6   | 1   | 2   | 3   | 4   | 5   | 6   |
| RPM            | 722         | 695 | 665 | 634 | 601 | 569 | 925 | 899 | 868 | 836 | 807 | 775 | 925         | 899 | 868 | 836 | 807 | 775 | 925 | 899 | 868 | 836 | 807 | 775 |

- NOTES: 1. Factory sheave settings are shown in bold type.  
2. Do not set motor sheave below minimum turns open shown.  
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure.

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE— 15 TON — 60 Hz — SIDEFLOW (CONTINUED)

| Airflow                            | AIRFLOW CORRECTION FACTORS * |              |                 |             | COMPONENT AIRFLOW RESISTANCE |                                    |                                      |                                                                |               |                |
|------------------------------------|------------------------------|--------------|-----------------|-------------|------------------------------|------------------------------------|--------------------------------------|----------------------------------------------------------------|---------------|----------------|
|                                    | CFM [L/s]                    | Total kBtu/h | Sensible kBtu/h | Power kW    | Wet Coil                     | Downflow Economizer RA Damper Open | Horizontal Economizer RA Damper Open | Concentric Grill RXRN-AD80 or RXRN-AD81 & Transition RXMC-CJ07 | MERV 8 Filter | MERV 13 Filter |
|                                    |                              |              |                 |             |                              |                                    |                                      |                                                                |               |                |
| Resistance — Inches of Water [kPa] |                              |              |                 |             |                              |                                    |                                      |                                                                |               |                |
| 4800 [2265]                        | 0.97                         | 0.87         | 0.98            | 0.03 [0.01] | 0.09 [0.02]                  | 0.00 [0.00]                        | 0.21 [0.05]                          | 0.07 [0.02]                                                    |               | 0.01 [0.00]    |
| 5000 [2359]                        | 0.97                         | 0.90         | 0.98            | 0.04 [0.01] | 0.10 [0.02]                  | 0.01 [0.00]                        | 0.25 [0.06]                          | 0.07 [0.02]                                                    |               | 0.02 [0.00]    |
| 5200 [2454]                        | 0.98                         | 0.92         | 0.99            | 0.05 [0.01] | 0.10 [0.02]                  | 0.01 [0.00]                        | 0.28 [0.07]                          | 0.08 [0.02]                                                    |               | 0.02 [0.01]    |
| 5400 [2548]                        | 0.98                         | 0.94         | 0.99            | 0.06 [0.01] | 0.11 [0.03]                  | 0.02 [0.00]                        | 0.32 [0.08]                          | 0.08 [0.02]                                                    |               | 0.03 [0.01]    |
| 5600 [2643]                        | 0.99                         | 0.97         | 0.99            | 0.06 [0.01] | 0.12 [0.03]                  | 0.02 [0.00]                        | 0.35 [0.09]                          | 0.08 [0.02]                                                    |               | 0.03 [0.01]    |
| 5800 [2737]                        | 1.00                         | 0.99         | 1.00            | 0.07 [0.02] | 0.13 [0.03]                  | 0.03 [0.01]                        | 0.39 [0.10]                          | 0.09 [0.02]                                                    |               | 0.04 [0.01]    |
| 6000 [2831]                        | 1.00                         | 1.02         | 1.00            | 0.08 [0.02] | 0.13 [0.03]                  | 0.03 [0.01]                        | 0.43 [0.11]                          | 0.09 [0.02]                                                    |               | 0.05 [0.01]    |
| 6200 [2926]                        | 1.01                         | 1.04         | 1.00            | 0.10 [0.02] | 0.14 [0.03]                  | 0.04 [0.01]                        | 0.46 [0.11]                          | 0.10 [0.02]                                                    |               | 0.05 [0.01]    |
| 6400 [3020]                        | 1.02                         | 1.06         | 1.01            | 0.10 [0.02] | 0.15 [0.04]                  | 0.04 [0.01]                        | 0.50 [0.12]                          | 0.10 [0.02]                                                    |               | 0.06 [0.01]    |
| 6600 [3114]                        | 1.02                         | 1.09         | 1.01            | 0.10 [0.02] | 0.16 [0.04]                  | 0.05 [0.01]                        | 0.54 [0.13]                          | 0.10 [0.03]                                                    |               | 0.07 [0.02]    |
| 6800 [3209]                        | 1.03                         | 1.11         | 1.01            | 0.11 [0.03] | 0.16 [0.04]                  | 0.05 [0.01]                        | 0.57 [0.14]                          | 0.11 [0.03]                                                    |               | 0.07 [0.02]    |
| 7000 [3303]                        | 1.03                         | 1.14         | 1.02            | 0.12 [0.03] | 0.17 [0.04]                  | 0.06 [0.01]                        | 0.61 [0.15]                          | 0.11 [0.03]                                                    |               | 0.08 [0.02]    |
| 7200 [3398]                        | 1.04                         | 1.16         | 1.02            | 0.13 [0.03] | 0.18 [0.04]                  | 0.06 [0.01]                        | 0.64 [0.16]                          | 0.12 [0.03]                                                    |               | 0.08 [0.02]    |

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

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—17.5 TON — 60 Hz — DOWNFLOW

| Air Flow<br>CFM (L/s) |     | Model RGEHYB210 |            | Voltage 208/230, 460 — 3 phase |            | 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    |      |      |      |
| 5600 [2643]           | —   | —               | —          | —                              | 603        | 1734                                           | 630        | 1871       | 658        | 2013       | 684        | 2159       | 710        | 2309       | 735        | 2464       | 760        | 2624       | 784        | 2788       | 808        | 2956 | 831  | 3129 | 853  | 3306 | 875  | 3488 | 897  | 3674 | 917  | 3865 | 938  | 4060 |
| 5800 [2737]           | —   | —               | —          | 587                            | 1715       | 615                                            | 1853       | 642        | 1994       | 669        | 2140       | 695        | 2290       | 720        | 2445       | 745        | 2605       | 770        | 2769       | 793        | 2937       | 817  | 3110 | 839  | 3287 | 861  | 3468 | 883  | 3654 | 904  | 3845 | 924  | 4040 |      |
| 6000 [2831]           | —   | —               | —          | 600                            | 1839       | 627                                            | 1980       | 654        | 2126       | 680        | 2276       | 706        | 2431       | 731        | 2590       | 755        | 2754       | 779        | 2922       | 803        | 3095       | 826  | 3272 | 848  | 3453 | 870  | 3639 | 891  | 3830 | 911  | 4025 | 931  | 4224 |      |
| 6200 [2926]           | —   | 585             | 1830       | 612                            | 1971       | 639                                            | 2117       | 666        | 2267       | 692        | 2421       | 717        | 2581       | 742        | 2744       | 766        | 2912       | 789        | 3085       | 812        | 3262       | 835  | 3443 | 857  | 3629 | 878  | 3819 | 899  | 4014 | 919  | 4213 | 939  | 4417 |      |
| 6400 [3020]           | —   | 598             | 1966       | 625                            | 2112       | 652                                            | 2262       | 678        | 2417       | 703        | 2576       | 728        | 2739       | 753        | 2907       | 776        | 3079       | 800        | 3256       | 822        | 3437       | 844  | 3623 | 866  | 3813 | 887  | 4008 | 907  | 4207 | 927  | 4411 | —    | —    |      |
| 6600 [3114]           | 585 | 1967            | 612        | 2112                           | 639        | 2262                                           | 665        | 2416       | 691        | 2575       | 716        | 2739       | 740        | 2906       | 764        | 3079       | 787        | 3255       | 810        | 3437       | 832        | 3622 | 854  | 3812 | 875  | 4007 | 896  | 4206 | 916  | 4409 | 935  | 4617 | —    | —    |
| 6800 [3209]           | 599 | 2117            | 626        | 2267                           | 652        | 2421                                           | 678        | 2580       | 703        | 2743       | 728        | 2911       | 752        | 3083       | 776        | 3259       | 799        | 3440       | 821        | 3626       | 843        | 3816 | 864  | 4010 | 885  | 4209 | 905  | 4412 | 925  | 4620 | —    | —    | —    |      |
| 7000 [3303]           | 614 | 2276            | 640        | 2430                           | 666        | 2589                                           | 692        | 2752       | 716        | 2919       | 741        | 3091       | 764        | 3268       | 788        | 3449       | 810        | 3634       | 832        | 3824       | 854        | 4018 | 875  | 4217 | 895  | 4420 | 915  | 4628 | 934  | 4840 | —    | —    | —    |      |
| 7200 [3398]           | 628 | 2444            | 655        | 2603                           | 680        | 2766                                           | 705        | 2933       | 730        | 3105       | 754        | 3281       | 777        | 3462       | 800        | 3647       | 822        | 3837       | 844        | 4031       | 865        | 4230 | 885  | 4433 | 905  | 4640 | 924  | 4852 | —    | —    | —    | —    |      |      |
| 7400 [3492]           | 644 | 2621            | 669        | 2784                           | 695        | 2951                                           | 719        | 3123       | 743        | 3299       | 767        | 3480       | 790        | 3665       | 812        | 3855       | 834        | 4049       | 855        | 4247       | 876        | 4450 | 896  | 4658 | 916  | 4870 | 935  | 5086 | —    | —    | —    | —    |      |      |
| 7600 [3586]           | 659 | 2807            | 684        | 2974                           | 709        | 3146                                           | 734        | 3322       | 757        | 3503       | 780        | 3688       | 803        | 3877       | 825        | 4071       | 846        | 4269       | 867        | 4472       | 887        | 4680 | 907  | 4891 | 926  | 5108 | —    | —    | —    | —    | —    | —    | —    |      |
| 7800 [3681]           | 675 | 3002            | 700        | 3174                           | 724        | 3350                                           | 748        | 3530       | 771        | 3715       | 794        | 3904       | 816        | 4098       | 838        | 4296       | 859        | 4499       | 879        | 4706       | 899        | 4918 | 919  | 5134 | 937  | 5355 | —    | —    | —    | —    | —    | —    | —    |      |
| 8000 [3775]           | 691 | 3206            | 715        | 3382                           | 739        | 3562                                           | 763        | 3747       | 786        | 3936       | 808        | 4130       | 830        | 4328       | 851        | 4531       | 872        | 4738       | 892        | 4949       | 911        | 5165 | 930  | 5386 | —    | —    | —    | —    | —    | —    | —    | —    | —    |      |
| 8200 [3869]           | 707 | 3419            | 731        | 3599                           | 755        | 3784                                           | 778        | 3973       | 800        | 4166       | 822        | 4364       | 844        | 4567       | 865        | 4774       | 885        | 4985       | 904        | 5201       | 924        | 5421 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    |
| 8400 [3964]           | 723 | 3640            | 747        | 3825                           | 771        | 4014                                           | 793        | 4207       | 815        | 4405       | 837        | 4608       | 858        | 4814       | 878        | 5026       | 898        | 5241       | 917        | 5462       | 936        | 5686 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    |

NOTE: F-Drive left of bold line, G-Drive right of bold line.

| Drive Package  | F             |     |     |     |     |     | G             |     |     |     |     |     |
|----------------|---------------|-----|-----|-----|-----|-----|---------------|-----|-----|-----|-----|-----|
| Motor H.P. [W] | 3.0 [2,237.1] |     |     |     |     |     | 5.0 [3,728.5] |     |     |     |     |     |
| Blower Sheave  | BK100H        |     |     |     |     |     | BK105H        |     |     |     |     |     |
| Motor Sheave   | 1VL-44        |     |     |     |     |     | 1VP-56        |     |     |     |     |     |
| Turns Open     | 1             | 2   | 3   | 4   | 5   | 6   | 1             | 2   | 3   | 4   | 5   | 6   |
| RPM            | 743           | 714 | 684 | 654 | 622 | 589 | 928           | 900 | 868 | 837 | 806 | 776 |

- NOTES: 1. Factory sheave settings are shown in bold type.  
2. Do not set motor sheave below minimum turns open shown.  
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure.

[ ] Designates Metric Conversions



AIRFLOW PERFORMANCE—17.5 TON — 60 Hz — DOWNFLOW (CONTINUED)

| Airflow     | AIRFLOW<br>CORRECTION FACTORS * |                 |      |          | COMPONENT AIRFLOW RESISTANCE |                                          |                                            |                                                                         |                  |                   |
|-------------|---------------------------------|-----------------|------|----------|------------------------------|------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------|------------------|-------------------|
|             | CFM [L/s]                       | Sensible kBtu/h |      | Power kW | Wet Coil                     | Downflow<br>Economizer RA<br>Damper Open | Horizontal<br>Economizer RA<br>Damper Open | Concentric Grill<br>RXRN-AD80 or<br>RXRN-AD81 &<br>Transition RXMC-CJ07 | MERV 8<br>Filter | MERV 13<br>Filter |
|             |                                 | Total kBtu/h    |      |          |                              |                                          |                                            |                                                                         |                  |                   |
| 5600 [2643] | 0.97                            | 0.87            | 0.98 |          | 0.06 [.01]                   | 0.12 [.03]                               | 0.02 [.00]                                 | 0.35 [.09]                                                              | 0.08 [.02]       | 0.03 [.01]        |
| 5800 [2737] | 0.97                            | 0.90            | 0.98 |          | 0.07 [.02]                   | 0.13 [.03]                               | 0.03 [.01]                                 | 0.39 [.10]                                                              | 0.09 [.02]       | 0.04 [.01]        |
| 6000 [2831] | 0.98                            | 0.92            | 0.99 |          | 0.08 [.02]                   | 0.13 [.03]                               | 0.03 [.01]                                 | 0.43 [.11]                                                              | 0.09 [.02]       | 0.05 [.01]        |
| 6200 [2926] | 0.98                            | 0.94            | 0.99 |          | 0.09 [.02]                   | 0.14 [.03]                               | 0.04 [.01]                                 | 0.46 [.11]                                                              | 0.10 [.02]       | 0.05 [.01]        |
| 6400 [3020] | 0.99                            | 0.97            | 0.99 |          | 0.10 [.02]                   | 0.15 [.04]                               | 0.04 [.01]                                 | 0.50 [.12]                                                              | 0.10 [.02]       | 0.06 [.01]        |
| 6600 [3114] | 1.00                            | 0.99            | 1.00 |          | 0.10 [.02]                   | 0.16 [.04]                               | 0.05 [.01]                                 | 0.54 [.13]                                                              | 0.10 [.03]       | 0.07 [.02]        |
| 6800 [3209] | 1.00                            | 1.02            | 1.00 |          | 0.11 [.03]                   | 0.16 [.04]                               | 0.05 [.01]                                 | 0.57 [.14]                                                              | 0.11 [.03]       | 0.07 [.02]        |
| 7000 [3303] | 1.01                            | 1.04            | 1.00 |          | 0.12 [.03]                   | 0.17 [.04]                               | 0.06 [.01]                                 | 0.61 [.15]                                                              | 0.11 [.03]       | 0.08 [.02]        |
| 7200 [3398] | 1.02                            | 1.06            | 1.01 |          | 0.13 [.03]                   | 0.18 [.04]                               | 0.06 [.01]                                 | 0.64 [.16]                                                              | 0.12 [.03]       | 0.08 [.02]        |
| 7400 [3492] | 1.02                            | 1.09            | 1.01 |          | 0.14 [.03]                   | 0.19 [.05]                               | 0.07 [.02]                                 | 0.68 [.17]                                                              | 0.12 [.03]       | 0.09 [.02]        |
| 7600 [3586] | 1.03                            | 1.11            | 1.01 |          | 0.14 [.03]                   | 0.20 [.05]                               | 0.07 [.02]                                 | 0.72 [.18]                                                              | 0.12 [.03]       | 0.10 [.02]        |
| 7800 [3681] | 1.03                            | 1.14            | 1.02 |          | 0.15 [.04]                   | 0.21 [.05]                               | 0.08 [.02]                                 | 0.75 [.19]                                                              | 0.13 [.03]       | 0.10 [.03]        |
| 8000 [3775] | 1.04                            | 1.16            | 1.02 |          | 0.16 [.04]                   | 0.22 [.05]                               | 0.09 [.02]                                 | 0.79 [.20]                                                              | 0.13 [.03]       | 0.11 [.03]        |
| 8200 [3869] | 1.03                            | 1.14            | 1.02 |          | 0.17 [.04]                   | 0.23 [.06]                               | 0.09 [.02]                                 | 0.83 [.21]                                                              | 0.14 [.03]       | 0.11 [.03]        |
| 8400 [3964] | 1.04                            | 1.16            | 1.02 |          | 0.18 [.04]                   | 0.24 [.06]                               | 0.10 [.02]                                 | 0.86 [.21]                                                              | 0.14 [.03]       | 0.12 [.03]        |

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

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE — 17.5 TON — 60 Hz — SIDEFLOW

| Air Flow<br>CFM [L/s] |            | Model RGEHYB210 Voltage 208/230, 460 — 3 phase |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |   |
|-----------------------|------------|------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|---|---|
|                       |            | 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   |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |   |   |
| 5600 [2643]           | —          | —                                              | —          | —          | 588        | 1627       | 613        | 1752       | 638        | 1882       | 663        | 2019       | 688        | 2162       | 712        | 2311       | 736        | 2466       | 760        | 2628 | 783 | 2795 | 806 | 2969 | 829 | 3149 | 852 | 3335 | 874 | 3527 | 896 | 3725 | 918 | 3930 | 939 | 4140 | —   | —    |   |   |
| 5800 [2737]           | —          | —                                              | —          | —          | 598        | 1737       | 623        | 1864       | 648        | 1997       | 672        | 2136       | 697        | 2282       | 720        | 2433       | 744        | 2591       | 767        | 2755 | 790 | 2925 | 813 | 3101 | 836 | 3283 | 858 | 3472 | 880 | 3666 | 901 | 3867 | 923 | 4074 | 944 | 4287 | —   | —    |   |   |
| 6000 [2831]           | —          | —                                              | —          | —          | 609        | 1856       | 633        | 1985       | 658        | 2121       | 682        | 2262       | 706        | 2410       | 729        | 2564       | 752        | 2724       | 775        | 2890 | 798 | 3063 | 820 | 3241 | 843 | 3426 | 864 | 3617 | 886 | 3814 | 907 | 4017 | 928 | 4226 | 949 | 4442 | —   | —    |   |   |
| 6200 [2926]           | —          | —                                              | —          | —          | 595        | 1857       | 619        | 1982       | 644        | 2114       | 668        | 2252       | 692        | 2396       | 715        | 2546       | 738        | 2703       | 761        | 2865 | 784 | 3034 | 806 | 3209 | 828 | 3390 | 850 | 3577 | 871 | 3770 | 892 | 3970 | 913 | 4175 | 934 | 4387 | —   | —    |   |   |
| 6400 [3020]           | —          | —                                              | —          | —          | 606        | 1989       | 631        | 2117       | 655        | 2251       | 678        | 2392       | 702        | 2538       | 725        | 2691       | 747        | 2850       | 770        | 3015 | 792 | 3186 | 814 | 3363 | 836 | 3547 | 857 | 3736 | 878 | 3932 | 899 | 4134 | 919 | 4342 | 939 | 4556 | —   | —    |   |   |
| 6600 [3114]           | —          | —                                              | —          | —          | 594        | 2006       | 618        | 2130       | 642        | 2260       | 666        | 2397       | 689        | 2540       | 712        | 2689       | 735        | 2844       | 757        | 3005 | 779 | 3172 | 801 | 3346 | 822 | 3526 | 844 | 3712 | 865 | 3904 | 885 | 4102 | 906 | 4306 | 926 | 4517 | 946 | 4733 | — | — |
| 6800 [3209]           | —          | —                                              | —          | —          | 607        | 2152       | 630        | 2279       | 654        | 2412       | 677        | 2551       | 700        | 2696       | 723        | 2847       | 745        | 3005       | 767        | 3168 | 789 | 3338 | 810 | 3514 | 831 | 3696 | 852 | 3885 | 873 | 4079 | 893 | 4280 | 913 | 4487 | 933 | 4700 | 952 | 4919 | — | — |
| 7000 [3303]           | 596        | 2184                                           | 620        | 2307       | 643        | 2436       | 666        | 2571       | 689        | 2713       | 711        | 2860       | 733        | 3014       | 755        | 3174       | 777        | 3340       | 798        | 3512 | 819 | 3691 | 840 | 3875 | 861 | 4066 | 881 | 4263 | 901 | 4466 | 920 | 4676 | 940 | 4891 | —   | —    | —   | —    |   |   |
| 7200 [3398]           | 609        | 2344                                           | 633        | 2469       | 656        | 2601       | 678        | 2739       | 701        | 2883       | 723        | 3033       | 745        | 3189       | 766        | 3351       | 788        | 3520       | 809        | 3695 | 829 | 3876 | 850 | 4063 | 870 | 4256 | 890 | 4455 | 909 | 4661 | 928 | 4872 | 947 | 5090 | —   | —    | —   | —    |   |   |
| 7400 [3492]           | 623        | 2513                                           | 646        | 2641       | 669        | 2775       | 691        | 2915       | 713        | 3061       | 735        | 3214       | 756        | 3372       | 777        | 3537       | 798        | 3708       | 819        | 3885 | 839 | 4069 | 859 | 4258 | 879 | 4454 | 898 | 4656 | 918 | 4864 | 936 | 5078 | —   | —    | —   | —    | —   |      |   |   |
| 7600 [3586]           | 637        | 2689                                           | 660        | 2820       | 682        | 2956       | 704        | 3099       | 726        | 3248       | 747        | 3403       | 768        | 3564       | 789        | 3731       | 809        | 3905       | 830        | 4084 | 850 | 4270 | 869 | 4462 | 889 | 4660 | 908 | 4864 | 926 | 5075 | 945 | 5291 | —   | —    | —   | —    | —   |      |   |   |
| 7800 [3681]           | 652        | 2875                                           | 674        | 3007       | 696        | 3146       | 717        | 3291       | 739        | 3443       | 760        | 3600       | 780        | 3764       | 801        | 3933       | 821        | 4109       | 841        | 4291 | 860 | 4479 | 880 | 4674 | 899 | 4874 | 917 | 5081 | 936 | 5294 | —   | —    | —   | —    | —   | —    | —   |      |   |   |
| 8000 [3775]           | 667        | 3068                                           | 688        | 3203       | 710        | 3344       | 731        | 3492       | 752        | 3646       | 773        | 3805       | 793        | 3971       | 813        | 4144       | 833        | 4322       | 852        | 4506 | 871 | 4697 | 890 | 4894 | 909 | 5097 | 927 | 5306 | 945 | 5521 | —   | —    | —   | —    | —   | —    | —   |      |   |   |
| 8200 [3869]           | 682        | 3269                                           | 703        | 3407       | 724        | 3551       | 745        | 3701       | 765        | 3857       | 786        | 4019       | 806        | 4188       | 825        | 4362       | 845        | 4543       | 864        | 4730 | 883 | 4923 | 901 | 5122 | 919 | 5328 | 937 | 5539 | —   | —    | —   | —    | —   | —    | —   | —    | —   | —    |   |   |
| 8400 [3964]           | 697        | 3479                                           | 718        | 3619       | 739        | 3765       | 759        | 3918       | 779        | 4076       | 799        | 4241       | 819        | 4412       | 838        | 4589       | 857        | 4772       | 876        | 4962 | 894 | 5157 | 912 | 5359 | 930 | 5567 | 948 | 5781 | —   | —    | —   | —    | —   | —    | —   | —    | —   | —    |   |   |

NOTE: F- Drive left of bold line, G-Drive right of bold line.

| Drive Package  | F           |     |     |     |     |     |     |     |     |     |     |     | G           |     |     |     |     |     |     |      |      |      |      |      |
|----------------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| Motor H.P. [W] | 3 [2,237.1] |     |     |     |     |     |     |     |     |     |     |     | 5 [3,728.5] |     |     |     |     |     |     |      |      |      |      |      |
| Blower Sheave  | BK100H      |     |     |     |     |     |     |     |     |     |     |     | BK105H      |     |     |     |     |     |     |      |      |      |      |      |
| Motor Sheave   | 1VL-44      |     |     |     |     |     |     |     |     |     |     |     | 1VP-56      |     |     |     |     |     |     |      |      |      |      |      |
| Turns Open     | 1           | 2   | 3   | 4   | 5   | 6   | 588 | 620 | 653 | 684 | 713 | 745 | 776         | 808 | 838 | 868 | 899 | 948 | 998 | 1048 | 1098 | 1148 | 1198 | 1248 |
| RPM            | 745         | 745 | 745 | 745 | 745 | 745 | 588 | 620 | 653 | 684 | 713 | 745 | 776         | 808 | 838 | 868 | 899 | 948 | 998 | 1048 | 1098 | 1148 | 1198 | 1248 |

- NOTES: 1. Factory sheave settings are shown in bold type.  
2. Do not set motor sheave below minimum turns open shown.  
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure.

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—17.5 TON — 60 Hz — SIDEFLOW (CONTINUED)

| Airflow     | AIRFLOW CORRECTION FACTORS * |                 |      |            | COMPONENT AIRFLOW RESISTANCE |                                    |                                      |                                                                |               |                |
|-------------|------------------------------|-----------------|------|------------|------------------------------|------------------------------------|--------------------------------------|----------------------------------------------------------------|---------------|----------------|
|             | CFM [L/s]                    | Sensible kBtu/h |      |            | Wet Coil                     | Downflow Economizer RA Damper Open | Horizontal Economizer RA Damper Open | Concentric Grill RXRN-AD80 or RXRN-AD81 & Transition RXMC-CJ07 | MERV 8 Filter | MERV 13 Filter |
|             |                              | Total kBtu/h    |      | Power kW   |                              |                                    |                                      |                                                                |               |                |
| 5600 [2643] | 0.97                         | 0.87            | 0.98 | 0.06 [.01] | 0.12 [.03]                   | 0.02 [.00]                         | 0.35 [.09]                           | 0.08 [.02]                                                     | 0.03 [.01]    |                |
| 5800 [2737] | 0.97                         | 0.90            | 0.98 | 0.07 [.02] | 0.13 [.03]                   | 0.03 [.01]                         | 0.39 [.10]                           | 0.09 [.02]                                                     | 0.04 [.01]    |                |
| 6000 [2831] | 0.98                         | 0.92            | 0.99 | 0.08 [.02] | 0.13 [.03]                   | 0.03 [.01]                         | 0.43 [.11]                           | 0.09 [.02]                                                     | 0.05 [.01]    |                |
| 6200 [2926] | 0.98                         | 0.94            | 0.99 | 0.09 [.02] | 0.14 [.03]                   | 0.04 [.01]                         | 0.46 [.11]                           | 0.10 [.02]                                                     | 0.05 [.01]    |                |
| 6400 [3020] | 0.99                         | 0.97            | 0.99 | 0.10 [.02] | 0.15 [.04]                   | 0.04 [.01]                         | 0.50 [.12]                           | 0.10 [.02]                                                     | 0.06 [.01]    |                |
| 6600 [3114] | 1.00                         | 0.99            | 1.00 | 0.10 [.02] | 0.16 [.04]                   | 0.05 [.01]                         | 0.54 [.13]                           | 0.10 [.03]                                                     | 0.07 [.02]    |                |
| 6800 [3209] | 1.00                         | 1.02            | 1.00 | 0.11 [.03] | 0.16 [.04]                   | 0.05 [.01]                         | 0.57 [.14]                           | 0.11 [.03]                                                     | 0.07 [.02]    |                |
| 7000 [3303] | 1.01                         | 1.04            | 1.00 | 0.12 [.03] | 0.17 [.04]                   | 0.06 [.01]                         | 0.61 [.15]                           | 0.11 [.03]                                                     | 0.08 [.02]    |                |
| 7200 [3398] | 1.02                         | 1.06            | 1.01 | 0.13 [.03] | 0.18 [.04]                   | 0.06 [.01]                         | 0.64 [.16]                           | 0.12 [.03]                                                     | 0.08 [.02]    |                |
| 7400 [3492] | 1.02                         | 1.09            | 1.01 | 0.14 [.03] | 0.19 [.05]                   | 0.07 [.02]                         | 0.68 [.17]                           | 0.12 [.03]                                                     | 0.09 [.02]    |                |
| 7600 [3586] | 1.03                         | 1.11            | 1.01 | 0.14 [.03] | 0.20 [.05]                   | 0.07 [.02]                         | 0.72 [.18]                           | 0.12 [.03]                                                     | 0.10 [.02]    |                |
| 7800 [3681] | 1.03                         | 1.14            | 1.02 | 0.15 [.04] | 0.21 [.05]                   | 0.08 [.02]                         | 0.75 [.19]                           | 0.13 [.03]                                                     | 0.10 [.03]    |                |
| 8000 [3775] | 1.04                         | 1.16            | 1.02 | 0.16 [.04] | 0.22 [.05]                   | 0.09 [.02]                         | 0.79 [.20]                           | 0.13 [.03]                                                     | 0.11 [.03]    |                |
| 8200 [3869] | 1.03                         | 1.14            | 1.02 | 0.17 [.04] | 0.23 [.06]                   | 0.09 [.02]                         | 0.83 [.21]                           | 0.14 [.03]                                                     | 0.11 [.03]    |                |
| 8400 [3964] | 1.04                         | 1.16            | 1.02 | 0.18 [.04] | 0.24 [.06]                   | 0.10 [.02]                         | 0.86 [.21]                           | 0.14 [.03]                                                     | 0.12 [.03]    |                |

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

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—20 TON — 60 Hz — DOWNFLOW

| Air Flow<br>CFM (L/s) | Model RGEHYB240 Voltage 208/230, 460 — 3 phase |            |            |            |            |            |            |            |            |            | 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    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |   |   |   |
| 6400 [3020]           | —                                              | —          | 638        | 2089       | 665        | 2239       | 691        | 2395       | 717        | 2556       | 742                                            | 2723       | 767        | 2895       | 791        | 3073       | 815        | 3256       | 838        | 3444       | 861  | 3639 | 883  | 3838 | 905  | 4043 | 926  | 4254 | 946  | 4470 | 967  | 4691 | 986  | 4918 | 1006 | 5151 | 1024 | 5388 |   |   |   |
| 6600 [3114]           | —                                              | —          | 651        | 2210       | 678        | 2365       | 703        | 2527       | 729        | 2693       | 754                                            | 2865       | 778        | 3043       | 802        | 3226       | 825        | 3414       | 848        | 3608       | 870  | 3808 | 892  | 4013 | 914  | 4223 | 934  | 4439 | 955  | 4661 | 975  | 4888 | 994  | 5120 | 1013 | 5358 | —    |      |   |   |   |
| 6800 [3209]           | 611                                            | 2035       | 638        | 2185       | 664        | 2341       | 690        | 2502       | 716        | 2668       | 741                                            | 2840       | 765        | 3018       | 789        | 3201       | 813        | 3389       | 836        | 3583       | 858  | 3783 | 880  | 3987 | 902  | 4198 | 923  | 4414 | 943  | 4635 | 963  | 4862 | 982  | 5094 | 1001 | 5332 | 1020 | 5575 | — |   |   |
| 7000 [3303]           | 625                                            | 2165       | 652        | 2321       | 678        | 2482       | 703        | 2648       | 728        | 2820       | 753                                            | 2998       | 777        | 3181       | 801        | 3369       | 824        | 3563       | 846        | 3762       | 868  | 3967 | 900  | 4177 | 911  | 4393 | 932  | 4614 | 952  | 4841 | 971  | 5073 | 990  | 5311 | 1009 | 5554 | —    | —    |   |   |   |
| 7200 [3398]           | 639                                            | 2306       | 665        | 2467       | 691        | 2633       | 716        | 2805       | 741        | 2982       | 765                                            | 3165       | 789        | 3353       | 812        | 3547       | 835        | 3747       | 857        | 3951       | 879  | 4162 | 900  | 4377 | 921  | 4598 | 941  | 4825 | 961  | 5057 | 980  | 5295 | 999  | 5538 | 1017 | 5787 | —    | —    |   |   |   |
| 7400 [3492]           | 653                                            | 2457       | 679        | 2623       | 705        | 2795       | 729        | 2972       | 754        | 3155       | 778                                            | 3343       | 801        | 3537       | 824        | 3736       | 846        | 3941       | 868        | 4151       | 889  | 4366 | 910  | 4588 | 930  | 4814 | 950  | 5046 | 970  | 5284 | 988  | 5527 | 1007 | 5775 | 1025 | 6029 | —    | —    |   |   |   |
| 7600 [3586]           | 668                                            | 2618       | 693        | 2789       | 718        | 2966       | 743        | 3149       | 767        | 3337       | 790                                            | 3531       | 813        | 3730       | 836        | 3935       | 857        | 4145       | 879        | 4360       | 900  | 4581 | 920  | 4808 | 940  | 5040 | 960  | 5278 | 979  | 5521 | 997  | 5769 | 1015 | 6023 | —    | —    | —    | —    |   |   |   |
| 7800 [3681]           | 682                                            | 2789       | 707        | 2966       | 732        | 3148       | 756        | 3337       | 780        | 3530       | 803                                            | 3729       | 825        | 3934       | 847        | 4144       | 869        | 4359       | 890        | 4580       | 911  | 4807 | 931  | 5039 | 950  | 5276 | 969  | 5519 | 988  | 5767 | 1006 | 6021 | 1023 | 6281 | —    | —    | —    | —    |   |   |   |
| 8000 [3775]           | 697                                            | 2970       | 721        | 3153       | 746        | 3341       | 769        | 3534       | 793        | 3733       | 815                                            | 3938       | 837        | 4148       | 859        | 4363       | 880        | 4584       | 901        | 4810       | 921  | 5042 | 941  | 5280 | 960  | 5523 | 979  | 5771 | 997  | 6025 | 1015 | 6284 | —    | —    | —    | —    | —    | —    |   |   |   |
| 8200 [3869]           | 711                                            | 3162       | 736        | 3350       | 759        | 3543       | 783        | 3742       | 806        | 3947       | 828                                            | 4156       | 850        | 4372       | 871        | 4593       | 892        | 4819       | 912        | 5051       | 932  | 5288 | 951  | 5531 | 970  | 5779 | 989  | 6033 | 1006 | 6292 | 1024 | 6557 | —    | —    | —    | —    | —    | —    |   |   |   |
| 8400 [3964]           | 726                                            | 3364       | 750        | 3557       | 773        | 3756       | 796        | 3960       | 819        | 4170       | 841                                            | 4385       | 862        | 4606       | 883        | 4832       | 904        | 5064       | 924        | 5301       | 943  | 5544 | 962  | 5792 | 981  | 6046 | 998  | 6305 | 1016 | 6570 | —    | —    | —    | —    | —    | —    | —    | —    |   |   |   |
| 8600 [4058]           | 741                                            | 3576       | 764        | 3775       | 787        | 3979       | 810        | 4189       | 832        | 4404       | 854                                            | 4625       | 875        | 4851       | 895        | 5082       | 915        | 5320       | 935        | 5562       | 954  | 5810 | 973  | 6064 | 991  | 6323 | 1008 | 6588 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    |   |   |   |
| 8800 [4153]           | 756                                            | 3798       | 779        | 4002       | 802        | 4212       | 824        | 4427       | 846        | 4648       | 867                                            | 4874       | 887        | 5106       | 908        | 5343       | 927        | 5585       | 947        | 5833       | 965  | 6087 | 983  | 6346 | 1001 | 6610 | 1018 | 6880 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    |   |   |   |
| 9000 [4247]           | 771                                            | 4031       | 794        | 4240       | 816        | 4455       | 838        | 4676       | 859        | 4902       | 880                                            | 5134       | 900        | 5371       | 920        | 5613       | 939        | 5861       | 958        | 6115       | 977  | 6373 | 994  | 6638 | 1012 | 6908 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | — | — |   |
| 9200 [4341]           | 786                                            | 4274       | 808        | 4489       | 830        | 4709       | 852        | 4935       | 873        | 5167       | 893                                            | 5403       | 913        | 5646       | 932        | 5894       | 951        | 6147       | 970        | 6406       | 988  | 6670 | 1005 | 6940 | 1022 | 7216 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | — | — |   |
| 9400 [4436]           | 801                                            | 4527       | 823        | 4747       | 845        | 4973       | 866        | 5204       | 886        | 5441       | 906                                            | 5684       | 926        | 5931       | 945        | 6185       | 964        | 6444       | 982        | 6708       | 999  | 6978 | 1016 | 7253 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | — | — | — |
| 9600 [4530]           | 816                                            | 4790       | 838        | 5016       | 859        | 5247       | 880        | 5484       | 900        | 5726       | 920                                            | 5974       | 939        | 6227       | 958        | 6486       | 976        | 6750       | 994        | 7020       | 1011 | 7295 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | — | — | — |

NOTE: F-Drive left of bold line, G-Drive right of bold line.

| Drive Package  | F           |     |     |     |     |     | G             |     |     |     |     |     | H             |     |     |     |     |     |
|----------------|-------------|-----|-----|-----|-----|-----|---------------|-----|-----|-----|-----|-----|---------------|-----|-----|-----|-----|-----|
| Motor H.P. [W] | 5 [3,728.5] |     |     |     |     |     | 7.5 [5,592.7] |     |     |     |     |     | 7.5 [5,592.7] |     |     |     |     |     |
| Blower Sheave  | BK130H      |     |     |     |     |     | BK130H        |     |     |     |     |     | BK120H        |     |     |     |     |     |
| Motor Sheave   | 1VP56       |     |     |     |     |     | 1VP71         |     |     |     |     |     | 1VP71         |     |     |     |     |     |
| Turns Open     | 1           | 2   | 3   | 4   | 5   | 6   | 1             | 2   | 3   | 4   | 5   | 6   | 1             | 2   | 3   | 4   | 5   | 6   |
| RPM            | 755         | 733 | 708 | 682 | 656 | 629 | 942           | 915 | 889 | 848 | 828 | 808 | 1,018         | 990 | 962 | 919 | 898 | 876 |

- NOTES: 1. Factory sheave settings are shown in bold type.  
2. Do not set motor sheave below minimum turns open shown.  
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure.

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—20 TON — 60 Hz — DOWNFLOW (CONTINUED)

| Airflow | AIRFLOW CORRECTION FACTORS * |              |                 |          | COMPONENT AIRFLOW RESISTANCE |                                    |                                      |                                                   |               |                |
|---------|------------------------------|--------------|-----------------|----------|------------------------------|------------------------------------|--------------------------------------|---------------------------------------------------|---------------|----------------|
|         | CFM [L/s]                    | Total kBtu/h | Sensible kBtu/h | Power kW | Wet Coil                     | Downflow Economizer RA Damper Open | Horizontal Economizer RA Damper Open | Concentric Grill RXRN-AD86 & Transition RXMC-CK08 | MERV 8 Filter | MERV 13 Filter |
|         |                              |              |                 |          |                              |                                    |                                      |                                                   |               |                |
|         | 8000 [3775]                  | 0.97         | 0.89            | 0.99     | 0.07 [.02]                   | 0.22 [.05]                         | 0.09 [.02]                           | 0.17 [.04]                                        | 0.10 [.02]    | 0.06 [.01]     |
|         | 8400 [3964]                  | 0.98         | 0.92            | 0.99     | 0.09 [.02]                   | 0.24 [.06]                         | 0.10 [.02]                           | 0.23 [.06]                                        | 0.10 [.03]    | 0.07 [.02]     |
|         | 8800 [4153]                  | 0.99         | 0.95            | 1.00     | 0.10 [.02]                   | 0.26 [.06]                         | 0.11 [.03]                           | 0.30 [.07]                                        | 0.11 [.03]    | 0.07 [.02]     |
|         | 9200 [4341]                  | 0.99         | 0.98            | 1.00     | 0.12 [.03]                   | 0.28 [.07]                         | 0.12 [.03]                           | 0.36 [.09]                                        | 0.11 [.03]    | 0.08 [.02]     |
|         | 9600 [4341]                  | 1.00         | 1.01            | 1.00     | 0.13 [.03]                   | 0.30 [.07]                         | 0.13 [.03]                           | 0.43 [.11]                                        | 0.12 [.03]    | 0.08 [.02]     |
|         | 10000 [4719]                 | 1.01         | 1.04            | 1.01     | 0.15 [.04]                   | 0.32 [.07]                         | 0.14 [.03]                           | 0.50 [.12]                                        | 0.12 [.03]    | 0.09 [.02]     |
|         | 10400 [4908]                 | 1.02         | 1.08            | 1.01     | 0.16 [.04]                   | 0.34 [.08]                         | 0.15 [.04]                           | 0.56 [.14]                                        | 0.12 [.03]    | 0.10 [.02]     |
|         | 10800 [5096]                 | 1.03         | 1.11            | 1.01     | 0.18 [.04]                   | 0.37 [.09]                         | 0.16 [.04]                           | 0.63 [.16]                                        | 0.13 [.03]    | 0.10 [.02]     |
|         | 11200 [5285]                 | 1.03         | 1.14            | 1.02     | 0.19 [.05]                   | 0.39 [.10]                         | 0.17 [.04]                           | 0.69 [.17]                                        | 0.13 [.03]    | 0.11 [.03]     |
|         | 11600 [5474]                 | 1.04         | 1.17            | 1.02     | 0.21 [.05]                   | 0.41 [.10]                         | 0.18 [.04]                           | 0.76 [.19]                                        | 0.14 [.03]    | 0.11 [.03]     |
|         | 12000 [5663]                 | 1.05         | 1.20            | 1.02     | 0.22 [.05]                   | 0.44 [.11]                         | 0.19 [.05]                           | 0.82 [.20]                                        | 0.14 [.03]    | 0.12 [.03]     |
|         | 12400 [5851]                 | 1.06         | 1.23            | 1.03     | 0.24 [.06]                   | 0.46 [.11]                         | 0.20 [.05]                           | 0.89 [.22]                                        | 0.14 [.04]    | 0.13 [.03]     |
|         | 12800 [6040]                 | 1.06         | 1.26            | 1.03     | 0.25 [.06]                   | 0.49 [.12]                         | 0.21 [.05]                           | 0.96 [.24]                                        | 0.15 [.04]    | 0.13 [.03]     |
|         | 13200 [6229]                 | 1.07         | 1.29            | 1.04     | 0.27 [.07]                   | 0.52 [.13]                         | 0.22 [.05]                           | 1.02 [.25]                                        | 0.15 [.04]    | 0.14 [.03]     |
|         | 13600 [6418]                 | 1.08         | 1.32            | 1.04     | 0.28 [.07]                   | 0.54 [.13]                         | 0.23 [.06]                           | 1.09 [.27]                                        | 0.16 [.04]    | 0.15 [.04]     |

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

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—20 TON — 60 Hz — SIDEFLOW

| Model RGEHYB300       |     | Voltage 208/230, 460 — 3 phase                 |   |   |   |   |   |   |   |   |   |   |   |            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
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| Air Flow<br>CFM [L/s] | RPM | External Static Pressure—Inches of Water [kPa] |   |   |   |   |   |   |   |   |   |   |   |            |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|                       |     | 0.1 [0.02]                                     |   |   |   |   |   |   |   |   |   |   |   | 0.2 [0.05] |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
|                       |     | W                                              | W | W | W | W | W | W | W | W | W | W | W | W          | W | W | W | W | W | W | W | W | W | W |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |  |
| 6400 [3020]           | —   | —                                              | — | — | — | — | — | — | — | — | — | — | — | —          | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |  |

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

| Drive Package  | F           |     |     |     |     |     | G             |     |     |     |     |     | H             |     |     |     |     |     |
|----------------|-------------|-----|-----|-----|-----|-----|---------------|-----|-----|-----|-----|-----|---------------|-----|-----|-----|-----|-----|
| Motor H.P. [W] | 5 [3,728.5] |     |     |     |     |     | 7.5 [5,592.7] |     |     |     |     |     | 7.5 [5,592.7] |     |     |     |     |     |
| Blower Sheave  | BK130H      |     |     |     |     |     | BK130H        |     |     |     |     |     | BK120H        |     |     |     |     |     |
| Motor Sheave   | 1VP56       |     |     |     |     |     | 1VP71         |     |     |     |     |     | 1VP71         |     |     |     |     |     |
| Turns Open     | 1           | 2   | 3   | 4   | 5   | 6   | 1             | 2   | 3   | 4   | 5   | 6   | 1             | 2   | 3   | 4   | 5   | 6   |
| RPM            | 754         | 731 | 705 | 679 | 654 | 630 | 938           | 911 | 885 | 844 | 824 | 804 | 1,005         | 979 | 952 | 910 | 890 | 869 |

- NOTES: 1. Factory sheave settings are shown in bold type.  
2. Do not set motor sheave below minimum turns open shown.  
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure.

[ ] Designates Metric Conversions



AIRFLOW PERFORMANCE—20 TON — 60 Hz — SIDEFLOW (CONTINUED)

| Airflow     | AIRFLOW CORRECTION FACTORS * |                 |      |            | COMPONENT AIRFLOW RESISTANCE |                                    |                                      |                                                   |               |                |  |
|-------------|------------------------------|-----------------|------|------------|------------------------------|------------------------------------|--------------------------------------|---------------------------------------------------|---------------|----------------|--|
|             | CFM [L/s]                    | Sensible kBtu/h |      | Power kW   | Wet Coil                     | Downflow Economizer RA Damper Open | Horizontal Economizer RA Damper Open | Concentric Grill RXRN-AD86 & Transition RXMC-CK08 | MERV 8 Filter | MERV 13 Filter |  |
|             |                              | Total kBtu/h    |      |            |                              |                                    |                                      |                                                   |               |                |  |
| 6400 [3020] | 0.94                         | 0.77            | 0.97 | 0.01 [.00] | 0.15 [.04]                   | 0.04 [.01]                         | -0.10 [.02]                          | 0.10 [.02]                                        | 0.06 [.01]    |                |  |
| 6600 [3114] | 0.94                         | 0.79            | 0.97 | 0.02 [.00] | 0.16 [.04]                   | 0.05 [.01]                         | -0.06 [.01]                          | 0.10 [.03]                                        | 0.07 [.02]    |                |  |
| 6800 [3209] | 0.95                         | 0.80            | 0.98 | 0.03 [.01] | 0.16 [.04]                   | 0.05 [.01]                         | -0.03 [.01]                          | 0.11 [.03]                                        | 0.07 [.02]    |                |  |
| 7000 [3303] | 0.95                         | 0.82            | 0.98 | 0.03 [.01] | 0.17 [.04]                   | 0.06 [.01]                         | 0.00 [.00]                           | 0.11 [.03]                                        | 0.08 [.02]    |                |  |
| 7200 [3398] | 0.96                         | 0.83            | 0.98 | 0.04 [.01] | 0.18 [.04]                   | 0.06 [.01]                         | 0.04 [.01]                           | 0.12 [.03]                                        | 0.08 [.02]    |                |  |
| 7400 [3492] | 0.96                         | 0.85            | 0.98 | 0.05 [.01] | 0.19 [.05]                   | 0.07 [.02]                         | 0.07 [.02]                           | 0.12 [.03]                                        | 0.09 [.02]    |                |  |
| 7600 [3586] | 0.96                         | 0.86            | 0.98 | 0.06 [.01] | 0.20 [.05]                   | 0.07 [.02]                         | 0.10 [.02]                           | 0.12 [.03]                                        | 0.10 [.02]    |                |  |
| 7800 [3681] | 0.97                         | 0.88            | 0.99 | 0.06 [.01] | 0.21 [.05]                   | 0.08 [.02]                         | 0.13 [.03]                           | 0.13 [.03]                                        | 0.10 [.02]    |                |  |
| 8000 [3775] | 0.97                         | 0.89            | 0.99 | 0.07 [.02] | 0.22 [.05]                   | 0.09 [.02]                         | 0.17 [.04]                           | 0.13 [.03]                                        | 0.11 [.03]    |                |  |
| 8200 [3869] | 0.98                         | 0.91            | 0.99 | 0.08 [.02] | 0.23 [.06]                   | 0.09 [.02]                         | 0.20 [.05]                           | 0.14 [.03]                                        | 0.11 [.03]    |                |  |
| 8400 [3964] | 0.98                         | 0.92            | 0.99 | 0.09 [.02] | 0.24 [.06]                   | 0.10 [.02]                         | 0.23 [.06]                           | 0.14 [.03]                                        | 0.12 [.03]    |                |  |
| 8600 [4058] | 0.98                         | 0.94            | 0.99 | 0.09 [.02] | 0.25 [.06]                   | 0.10 [.02]                         | 0.27 [.07]                           | 0.14 [.04]                                        | 0.13 [.03]    |                |  |
| 8800 [4153] | 0.99                         | 0.95            | 1.00 | 0.10 [.02] | 0.26 [.06]                   | 0.11 [.03]                         | 0.30 [.07]                           | 0.15 [.04]                                        | 0.13 [.03]    |                |  |
| 9000 [4247] | 0.99                         | 0.97            | 1.00 | 0.11 [.03] | 0.27 [.07]                   | 0.11 [.03]                         | 0.33 [.08]                           | 0.15 [.04]                                        | 0.14 [.03]    |                |  |
| 9200 [4341] | 0.99                         | 0.98            | 1.00 | 0.12 [.03] | 0.28 [.07]                   | 0.12 [.03]                         | 0.36 [.09]                           | 0.16 [.04]                                        | 0.15 [.04]    |                |  |
| 9400 [4463] | 1.00                         | 1.00            | 1.00 | 0.12 [.03] | 0.29 [.07]                   | 0.12 [.03]                         | 0.40 [.10]                           | 0.16 [.04]                                        | 0.15 [.04]    |                |  |
| 9600 [4530] | 1.00                         | 1.01            | 1.00 | 0.13 [.03] | 0.30 [.07]                   | 0.13 [.03]                         | 0.43 [.11]                           | 0.16 [.04]                                        | 0.16 [.04]    |                |  |

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

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE— 25 TON — 60 Hz — DOWNFLOW

| Air Flow<br>CFM [L/s] |          | Model RGEHY8300 Voltage 208/230, 460, 575 — 3 phase |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |            |
|-----------------------|----------|-----------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                       |          | 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          |
| 8000 [3775]           | —        | —                                                   | —          | —          | —          | —          | 819 3995   | 841 4198   | 862 4403   | 882 4610   | 902 4820   | 922 5031   | 941 5245   | 959 5460   | 978 5678   | 996 5898   | 1013 6120  | 1030 6344  | 1047 6570  | 1064 6798  | 1079 7028  |
| 8200 [3869]           | —        | —                                                   | —          | —          | —          | 811 3994   | 832 4201   | 853 4410   | 873 4621   | 894 4834   | 913 5049   | 933 5266   | 952 5486   | 970 5707   | 988 5931   | 1006 6157  | 1023 6384  | 1040 6614  | 1056 6846  | 1072 7080  | —          |
| 8400 [3964]           | —        | —                                                   | —          | —          | —          | 823 4205   | 845 4418   | 865 4632   | 885 4849   | 905 5068   | 925 5290   | 944 5513   | 962 5738   | 981 5966   | 998 6195   | 1016 6427  | 1033 6660  | 1049 6896  | 1065 7134  | —          | —          |
| 8600 [4058]           | —        | —                                                   | —          | —          | —          | 815 4211   | 836 4427   | 857 4646   | 877 4867   | 897 5089   | 917 5314   | 936 5541   | 955 5771   | 973 6002   | 991 6235   | 1009 6470  | 1026 6708  | 1042 6947  | 1059 7189  | 1074 7433  | —          |
| 8800 [4153]           | —        | —                                                   | 807 4218   | 828 4439   | 849 4661   | 870 4886   | 890 5112   | 909 5341   | 929 5572   | 948 5805   | 966 6040   | 984 6277   | 1002 6516  | 1019 6757  | 1036 7000  | 1052 7246  | 1068 7493  | —          | —          | —          | —          |
| 9000 [4247]           | —        | —                                                   | 820 4451   | 841 4678   | 862 4906   | 882 5136   | 902 5369   | 921 5604   | 940 5840   | 959 6079   | 977 6320   | 995 6563   | 1012 6808  | 1029 7055  | 1045 7304  | 1062 7556  | 1077 7809  | —          | —          | —          | —          |
| 9200 [4341]           | —        | —                                                   | 813 4466   | 834 4696   | 855 4928   | 875 5162   | 895 5399   | 914 5637   | 933 5878   | 952 6120   | 970 6365   | 988 6612   | 1006 6860  | 1023 7111  | 1039 7364  | 1055 7619  | 1071 7877  | —          | —          | —          | —          |
| 9400 [4436]           | 805 4482 | 826 4716                                            | 847 4952   | 868 5190   | 888 5430   | 907 5672   | 927 5916   | 945 6163   | 964 6411   | 982 6662   | 999 6914   | 1016 7169  | 1033 7426  | 1049 7685  | 1065 7946  | —          | —          | —          | —          | —          | —          |
| 9600 [4530]           | 819 4738 | 840 4977                                            | 861 5219   | 881 5463   | 901 5709   | 920 5957   | 939 6207   | 957 6459   | 975 6714   | 993 6970   | 1010 7229  | 1027 7489  | 1044 7752  | 1060 8017  | 1075 8284  | —          | —          | —          | —          | —          | —          |
| 9800 [4624]           | 833 5004 | 854 5250                                            | 874 5497   | 894 5747   | 913 5999   | 932 6253   | 951 6509   | 969 6767   | 987 7027   | 1004 7290  | 1021 7554  | 1038 7821  | 1054 8089  | 1070 8360  | —          | —          | —          | —          | —          | —          | —          |
| 10000 [4719]          | 847 5282 | 867 5534                                            | 887 5787   | 907 6043   | 926 6301   | 945 6560   | 963 6822   | 981 7086   | 999 7352   | 1016 7621  | 1032 7891  | 1049 8163  | 1065 8438  | —          | —          | —          | —          | —          | —          | —          | —          |
| 10200 [4813]          | 861 5571 | 881 5829                                            | 901 6088   | 920 6350   | 939 6613   | 957 6879   | 975 7147   | 993 7417   | 1010 7689  | 1027 7963  | 1043 8239  | 1059 8517  | 1075 8798  | —          | —          | —          | —          | —          | —          | —          | —          |
| 10400 [4908]          | 875 5872 | 895 6135                                            | 914 6401   | 933 6668   | 952 6937   | 970 7209   | 988 7483   | 1005 7759  | 1022 8036  | 1038 8316  | 1055 8598  | 1070 8883  | —          | —          | —          | —          | —          | —          | —          | —          | —          |
| 10600 [5002]          | 889 6184 | 909 6453                                            | 928 6724   | 946 6997   | 965 7273   | 982 7550   | 1000 7830  | 1017 8112  | 1034 8395  | 1050 8681  | 1066 8969  | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          |
| 10800 [5096]          | 903 6507 | 922 6782                                            | 941 7059   | 959 7338   | 977 7620   | 995 7903   | 1012 8188  | 1029 8476  | 1045 8765  | 1061 9057  | 1077 9351  | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          |
| 11000 [5191]          | 917 6841 | 936 7122                                            | 954 7405   | 973 7690   | 990 7977   | 1007 8267  | 1024 8558  | 1041 8851  | 1057 9147  | 1073 9445  | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          |
| 11200 [5285]          | 931 7187 | 950 7474                                            | 968 7763   | 986 8054   | 1003 8347  | 1020 8642  | 1037 8939  | 1053 9238  | 1068 9540  | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          |
| 11400 [5379]          | 945 7544 | 963 7837                                            | 981 8132   | 999 8428   | 1016 8727  | 1032 9028  | 1049 9331  | 1065 9637  | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          |
| 11600 [5474]          | 959 7913 | 977 8211                                            | 995 8512   | 1012 8814  | 1029 9119  | 1045 9426  | 1061 9735  | 1077 10046 | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          |
| 11800 [5568]          | 973 8292 | 991 8597                                            | 1008 8903  | 1025 9212  | 1041 9522  | 1057 9835  | 1073 10150 | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          |
| 12000 [5663]          | 987 8683 | 1004 8993                                           | 1021 9306  | 1038 9620  | 1054 9937  | 1070 10255 | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          | —          |

NOTE: F-Drive left of bold line, G-Drive right of bold line.

| Drive Package  | F             |     |            |     |     |     | G            |       |       |            |     |     |
|----------------|---------------|-----|------------|-----|-----|-----|--------------|-------|-------|------------|-----|-----|
| Motor H.P. [W] | 7.5 [5,592.7] |     |            |     |     |     | 10 [7,457.0] |       |       |            |     |     |
| Blower Sheave  | BK130H        |     |            |     |     |     | BK120H       |       |       |            |     |     |
| Motor Sheave   | 1VP71         |     |            |     |     |     | 1VP75        |       |       |            |     |     |
| Turns Open     | 1             | 2   | 3          | 4   | 5   | 6   | 1            | 2     | 3     | 4          | 5   | 6   |
| RPM            | 938           | 912 | <b>886</b> | 859 | 833 | 807 | 1,070        | 1,042 | 1,014 | <b>972</b> | 951 | 931 |

NOTES: 1. Factory sheave settings are shown in bold type.  
2. Do not set motor sheave below minimum turns open shown.  
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure.

[ ] Designates Metric Conversions

AIRFLOW PERFORMANCE—25 TON — 60 Hz — DOWNFLOW (CONTINUED)

| Airflow      | AIRFLOW CORRECTION FACTORS * |              |                 |          | COMPONENT AIRFLOW RESISTANCE |                                    |                                      |                                                   |               |                |                                    |
|--------------|------------------------------|--------------|-----------------|----------|------------------------------|------------------------------------|--------------------------------------|---------------------------------------------------|---------------|----------------|------------------------------------|
|              | CFM [L/s]                    | Total kBtu/h | Sensible kBtu/h | Power kW | Wet Coil                     | Downflow Economizer RA Damper Open | Horizontal Economizer RA Damper Open | Concentric Grill RXRN-AD88 & Transition RXMC-CLO9 | MERV 8 Filter | MERV 13 Filter |                                    |
|              |                              |              |                 |          |                              |                                    |                                      |                                                   |               |                | Resistance — Inches of Water [kPa] |
| 8000 [3775]  | 0.97                         | 0.89         | 0.99            |          | 0.07 [.02]                   | 0.22 [.05]                         | 0.09 [.02]                           | 0.17 [.04]                                        | 0.13 [.03]    | 0.11 [.03]     |                                    |
| 8400 [3964]  | 0.98                         | 0.92         | 0.99            |          | 0.09 [.02]                   | 0.24 [.06]                         | 0.10 [.02]                           | 0.23 [.06]                                        | 0.14 [.03]    | 0.12 [.03]     |                                    |
| 8800 [4153]  | 0.99                         | 0.95         | 1.00            |          | 0.10 [.02]                   | 0.26 [.06]                         | 0.11 [.03]                           | 0.30 [.07]                                        | 0.15 [.04]    | 0.13 [.03]     |                                    |
| 9200 [4341]  | 0.99                         | 0.98         | 1.00            |          | 0.12 [.03]                   | 0.28 [.07]                         | 0.12 [.03]                           | 0.36 [.09]                                        | 0.16 [.04]    | 0.15 [.04]     |                                    |
| 9600 [4341]  | 1.00                         | 1.01         | 1.00            |          | 0.13 [.03]                   | 0.30 [.07]                         | 0.13 [.03]                           | 0.43 [.11]                                        | 0.16 [.04]    | 0.16 [.04]     |                                    |
| 10000 [4719] | 1.01                         | 1.04         | 1.01            |          | 0.15 [.04]                   | 0.32 [.07]                         | 0.14 [.03]                           | 0.50 [.12]                                        | 0.17 [.04]    | 0.17 [.04]     |                                    |
| 10400 [4908] | 1.02                         | 1.08         | 1.01            |          | 0.16 [.04]                   | 0.34 [.08]                         | 0.15 [.04]                           | 0.56 [.14]                                        | 0.18 [.04]    | 0.18 [.05]     |                                    |
| 10800 [5096] | 1.03                         | 1.11         | 1.01            |          | 0.18 [.04]                   | 0.37 [.09]                         | 0.16 [.04]                           | 0.63 [.16]                                        | 0.19 [.05]    | 0.19 [.05]     |                                    |
| 11200 [5285] | 1.03                         | 1.14         | 1.02            |          | 0.19 [.05]                   | 0.39 [.10]                         | 0.17 [.04]                           | 0.69 [.17]                                        | 0.20 [.05]    | 0.21 [.05]     |                                    |
| 11600 [5474] | 1.04                         | 1.17         | 1.02            |          | 0.21 [.05]                   | 0.41 [.10]                         | 0.18 [.04]                           | 0.76 [.19]                                        | 0.20 [.05]    | 0.22 [.05]     |                                    |
| 12000 [5663] | 1.05                         | 1.20         | 1.02            |          | 0.22 [.05]                   | 0.44 [.11]                         | 0.19 [.05]                           | 0.82 [.20]                                        | 0.21 [.05]    | 0.23 [.06]     |                                    |

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

[ ] Designates Metric Conversions

## AIRFLOW PERFORMANCE—25 TON — 60 Hz — SIDEFLOW

| Model RGEHYB3000   |     | Voltage 208/230, 460, 575 — 3 phase |     |            |     |            |     |            |     |            |     | External Static Pressure—Inches of Water [kPa] |     |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |      |            |     |            |      |            |      |            |      |            |      |            |      |      |      |      |      |      |   |   |
|--------------------|-----|-------------------------------------|-----|------------|-----|------------|-----|------------|-----|------------|-----|------------------------------------------------|-----|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|------|------------|-----|------------|------|------------|------|------------|------|------------|------|------------|------|------|------|------|------|------|---|---|
|                    |     | 0.1 [ .02]                          |     | 0.2 [ .05] |     | 0.3 [ .07] |     | 0.4 [ .10] |     | 0.5 [ .12] |     | 0.6 [ .15]                                     |     | 0.7 [ .17] |      | 0.8 [ .20] |      | 0.9 [ .22] |      | 1.0 [ .25] |      | 1.1 [ .27] |      | 1.2 [ .30] |      | 1.3 [ .32] |      | 1.4 [ .35] |      | 1.5 [ .37] |     | 1.6 [ .40] |      | 1.7 [ .42] |      | 1.8 [ .45] |      | 1.9 [ .47] |      | 2.0 [ .50] |      |      |      |      |      |      |   |   |
| Air Flow CFM [L/s] | 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          |      |      |      |      |      |      |   |   |
| 8000 [3775]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 818  | 4060       | 839  | 4264       | 859  | 4474       | 880  | 4689       | 900  | 4911       | 920  | 5138       | 940  | 5371       | 960 | 5609       | 980  | 5853       | 999  | 6103       | 1018 | 6359       | 1037 | 6621       | 1056 | 6888 |      |      |      |      |   |   |
| 8200 [3869]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 806  | 4022       | 827  | 4228       | 847  | 4438       | 868  | 4655       | 888  | 4877       | 908  | 5105       | 928  | 5339       | 948 | 5578       | 968  | 5823       | 987  | 6074       | 1006 | 6331       | 1025 | 6593       | 1044 | 6861 | 1063 | 7135 |      |      |   |   |
| 8400 [3964]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 815  | 4195       | 835  | 4407       | 856  | 4624       | 877  | 4847       | 897  | 5076       | 917  | 5310       | 937  | 5551       | 956 | 5797       | 976  | 6048       | 995  | 6306       | 1014 | 6569       | 1033 | 6838       | 1051 | 7112 | 1070 | 7393 |      |      |   |   |
| 8600 [4058]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 803  | 4166       | 824  | 4378       | 845  | 4597       | 865  | 4821       | 885  | 5050       | 905  | 5286       | 925  | 5527       | 945 | 5774       | 964  | 6026       | 984  | 6284       | 1003 | 6548       | 1022 | 6818       | 1040 | 7094 | 1059 | 7375 |      |      |   |   |
| 8800 [4153]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 812  | 4354       | 833  | 4573       | 854  | 4798       | 874  | 5028       | 894  | 5264       | 914  | 5506       | 934  | 5754       | 953 | 6008       | 973  | 6267       | 992  | 6532       | 1011 | 6802       | 1029 | 7078       | 1048 | 7360 | 1066 | 7648 |      |      |   |   |
| 9000 [4247]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 801  | 4333       | 822  | 4553       | 843  | 4778       | 863  | 5010       | 883  | 5247       | 903  | 5490       | 923  | 5738       | 942 | 5992       | 962  | 6252       | 981  | 6518       | 1000 | 6790       | 1019 | 7067       | 1037 | 7350 | 1056 | 7638 | 1074 | 7933 |   |   |
| 9200 [4341]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 811  | 4536       | 832  | 4762       | 852  | 4995       | 872  | 5233       | 892  | 5476       | 912  | 5726       | 932  | 5981       | 951 | 6242       | 970  | 6508       | 989  | 6781       | 1008 | 7059       | 1027 | 7342       | 1045 | 7632 | 1063 | 7927 |      |      |   |   |
| 9400 [4436]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 821  | 4750       | 842  | 4983       | 862  | 5222       | 882  | 5467       | 902  | 5717       | 921  | 5973       | 941  | 6235       | 959 | 7054       | 1017 | 7339       | 1035 | 7629       | 1053 | 7925       | 1071 | 8227       | —    | —    | —    | —    |      |      |   |   |
| 9600 [4530]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 811  | 4741       | 831  | 4975       | 851  | 5215       | 872  | 5460       | 891  | 5711       | 911  | 5968       | 931  | 6231       | 950 | 6499       | 969  | 6773       | 988  | 7053       | 1017 | 7338       | 1025 | 7630       | 1043 | 7927 | 1062 | 8229 | —    | —    |   |   |
| 9800 [4624]        | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 821  | 4971       | 841  | 5211       | 861  | 5458       | 881  | 5710       | 901  | 5967       | 921  | 6231       | 940  | 6500       | 959 | 6775       | 978  | 7055       | 997  | 7342       | 1017 | 7634       | 1034 | 7932       | 1052 | 8236 | 1070 | 8544 | —    | —    |   |   |
| 10000 [4719]       | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 811  | 4970       | 832  | 5211       | 852  | 5459       | 872  | 5711       | 891  | 5970       | 911  | 6234       | 930  | 6504       | 950 | 6780       | 969  | 7062       | 987  | 7349       | 1006 | 7642       | 1024 | 7940       | 1043 | 8245 | 1061 | 8555 | —    | —    |   |   |
| 10200 [4813]       | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 801  | 4973       | 822  | 5215       | 842  | 5476       | 862  | 5717       | 882  | 5976       | 902  | 6241       | 921  | 6512       | 940 | 6789       | 959  | 7071       | 978  | 7359       | 997  | 7653       | 1015 | 7952       | 1033 | 8258 | 1051 | 8569 | 1069 | 8885 | — | — |
| 10400 [4908]       | —   | —                                   | —   | —          | —   | —          | —   | —          | —   | —          | —   | —                                              | —   | —          | —    | —          | 813  | 5222       | 833  | 5473       | 853  | 5726       | 873  | 5986       | 892  | 6252       | 912  | 6524       | 931  | 6801       | 950 | 7084       | 969  | 7373       | 988  | 7668       | 1006 | 7968       | 1024 | 8274       | 1043 | 8586 | 1060 | 8903 | —    | —    |   |   |
| 10600 [5002]       | 803 | 5233                                | 824 | 5482       | 844 | 5738       | 864 | 5999       | 883 | 6266       | 903 | 6539                                           | 922 | 6817       | 941  | 7101       | 960  | 7291       | 979  | 7686       | 997  | 7987       | 1016 | 8294       | 1034 | 8607       | 1042 | 8825       | 1070 | 9249       | —   | —          | —    | —          | —    | —          | —    | —          | —    | —          | —    | —    | —    |      |      |      |   |   |
| 10800 [5096]       | 815 | 5497                                | 835 | 5754       | 855 | 6016       | 875 | 6284       | 894 | 6557       | 913 | 6836                                           | 933 | 7121       | 952  | 7412       | 970  | 7708       | 989  | 8010       | 1007 | 8318       | 1025 | 8631       | 1043 | 8951       | 1061 | 9276       | —    | —          | —   | —          | —    | —          | —    | —          | —    | —          | —    | —          | —    | —    | —    |      |      |      |   |   |
| 11000 [5191]       | 826 | 5773                                | 846 | 6036       | 866 | 6305       | 886 | 6579       | 905 | 6859       | 924 | 7145                                           | 943 | 7436       | 962  | 7734       | 981  | 8036       | 999  | 8345       | 1017 | 8659       | 1035 | 8980       | 1053 | 9305       | 1071 | 9637       | —    | —          | —   | —          | —    | —          | —    | —          | —    | —          | —    | —          | —    | —    | —    |      |      |      |   |   |
| 11200 [5285]       | 838 | 6060                                | 858 | 6329       | 877 | 6605       | 897 | 6885       | 916 | 7172       | 935 | 7464                                           | 954 | 7763       | 973  | 8066       | 991  | 8376       | 1009 | 8691       | 1027 | 9012       | 1045 | 9339       | 1063 | 9671       | —    | —          | —    | —          | —   | —          | —    | —          | —    | —          | —    | —          | —    | —          | —    | —    | —    |      |      |      |   |   |
| 11400 [5379]       | 850 | 6358                                | 869 | 6634       | 889 | 6915       | 908 | 7203       | 927 | 7496       | 946 | 7795                                           | 985 | 8100       | 983  | 8410       | 1002 | 8726       | 1020 | 9048       | 1038 | 9376       | 1055 | 9709       | 1073 | 10048      | —    | —          | —    | —          | —   | —          | —    | —          | —    | —          | —    | —          | —    | —          | —    | —    | —    | —    |      |      |   |   |
| 11600 [5474]       | 862 | 6666                                | 881 | 6949       | 900 | 7237       | 920 | 7531       | 938 | 7831       | 957 | 8137                                           | 976 | 8448       | 994  | 8765       | 1012 | 9088       | 1030 | 9416       | 1048 | 9750       | 1065 | 10990      | —    | —          | —    | —          | —    | —          | —   | —          | —    | —          | —    | —          | —    | —          | —    | —          | —    | —    | —    | —    | —    |      |   |   |
| 11800 [5568]       | 874 | 6986                                | 893 | 7275       | 910 | 7527       | 931 | 7871       | 950 | 8177       | 968 | 8489                                           | 987 | 8807       | 1005 | 9131       | 1023 | 9460       | 1041 | 9795       | 1058 | 107136     | —    | —          | —    | —          | —    | —          | —    | —          | —   | —          | —    | —          | —    | —          | —    | —          | —    | —          | —    | —    | —    | —    |      |      |   |   |
| 12000 [5663]       | 886 | 7317                                | 905 | 7612       | 924 | 7914       | 943 | 8221       | 961 | 8534       | 980 | 8853                                           | 998 | 9177       | 1016 | 9507       | 1034 | 9843       | 1051 | 10185      | 1069 | 10532      | —    | —          | —    | —          | —    | —          | —    | —          | —   | —          | —    | —          | —    | —          | —    | —          | —    | —          | —    | —    | —    | —    | —    |      |   |   |

**NOTE:** F-Drive left of bold line, G-Drive right of bold line.

| Drive Package  | F             |     |     |     |     |     | G            |       |       |     |     |     |
|----------------|---------------|-----|-----|-----|-----|-----|--------------|-------|-------|-----|-----|-----|
| Motor H.P. [W] | 7.5 [5.592.7] |     |     |     |     |     | 10 [7.457.0] |       |       |     |     |     |
| Blower Sheave  | BK130H        |     |     |     |     |     | BK120H       |       |       |     |     |     |
| Motor Sheave   | 1VP71         |     |     |     |     |     | 1VP75        |       |       |     |     |     |
| Turns Open     | 1             | 2   | 3   | 4   | 5   | 6   | 1            | 2     | 3     | 4   | 5   | 6   |
| RPM            | 935           | 909 | 882 | 857 | 831 | 805 | 1,064        | 1,037 | 1,009 | 968 | 947 | 926 |

**NOTES:** 1. Factory sheave settings are shown in bold type.  
2. Do not set motor sheave below minimum turns open shown.  
3. Re-adjustment of sheave required to achieve rated airflow at AHRI minimum External Static Pressure.

**[ ] Designates Metric Conversions**

AIRFLOW PERFORMANCE—25 TON — 60 Hz — SIDEFLOW (CONTINUED)

| Airflow      | AIRFLOW CORRECTION FACTORS * |              |                 |          | COMPONENT AIRFLOW RESISTANCE |                                    |                                      |                                                   |               |                |
|--------------|------------------------------|--------------|-----------------|----------|------------------------------|------------------------------------|--------------------------------------|---------------------------------------------------|---------------|----------------|
|              | CFM [L/s]                    | Total kBtu/h | Sensible kBtu/h | Power kW | Wet Coil                     | Downflow Economizer RA Damper Open | Horizontal Economizer RA Damper Open | Concentric Grill RXRN-AD88 & Transition RXMC-CL09 | MERV 8 Filter | MERV 13 Filter |
| 8000 [3775]  |                              | 0.97         | 0.89            | 0.99     | 0.07 [.02]                   | 0.22 [.05]                         | 0.09 [.02]                           | 0.17 [.04]                                        | 0.13 [.03]    | 0.11 [.03]     |
| 8400 [3964]  |                              | 0.98         | 0.92            | 0.99     | 0.09 [.02]                   | 0.24 [.06]                         | 0.10 [.02]                           | 0.23 [.06]                                        | 0.14 [.03]    | 0.12 [.03]     |
| 8800 [4153]  |                              | 0.99         | 0.95            | 1.00     | 0.10 [.02]                   | 0.26 [.06]                         | 0.11 [.03]                           | 0.30 [.07]                                        | 0.15 [.04]    | 0.13 [.03]     |
| 9200 [4341]  |                              | 0.99         | 0.98            | 1.00     | 0.12 [.03]                   | 0.28 [.07]                         | 0.12 [.03]                           | 0.36 [.09]                                        | 0.16 [.04]    | 0.15 [.04]     |
| 9600 [4341]  |                              | 1.00         | 1.01            | 1.00     | 0.13 [.03]                   | 0.30 [.07]                         | 0.13 [.03]                           | 0.43 [.11]                                        | 0.16 [.04]    | 0.16 [.04]     |
| 10000 [4719] |                              | 1.01         | 1.04            | 1.01     | 0.15 [.04]                   | 0.32 [.07]                         | 0.14 [.03]                           | 0.50 [.12]                                        | 0.17 [.04]    | 0.17 [.04]     |
| 10400 [4908] |                              | 1.02         | 1.08            | 1.01     | 0.16 [.04]                   | 0.34 [.08]                         | 0.15 [.04]                           | 0.56 [.14]                                        | 0.18 [.04]    | 0.18 [.05]     |
| 10800 [5096] |                              | 1.03         | 1.11            | 1.01     | 0.18 [.04]                   | 0.37 [.09]                         | 0.16 [.04]                           | 0.63 [.16]                                        | 0.19 [.05]    | 0.19 [.05]     |
| 11200 [5285] |                              | 1.03         | 1.14            | 1.02     | 0.19 [.05]                   | 0.39 [.10]                         | 0.17 [.04]                           | 0.69 [.17]                                        | 0.20 [.05]    | 0.21 [.05]     |
| 11600 [5474] |                              | 1.04         | 1.17            | 1.02     | 0.21 [.05]                   | 0.41 [.10]                         | 0.18 [.04]                           | 0.76 [.19]                                        | 0.20 [.05]    | 0.22 [.05]     |
| 12000 [5663] |                              | 1.05         | 1.20            | 1.02     | 0.22 [.05]                   | 0.44 [.11]                         | 0.19 [.05]                           | 0.82 [.20]                                        | 0.21 [.05]    | 0.23 [.06]     |

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

[ ] Designates Metric Conversions

| ELECTRICAL DATA – RGEHYB SERIES |                                                               |                              |                              |                              |                              |
|---------------------------------|---------------------------------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
|                                 |                                                               | <b>180ACF25<br/>180ACF35</b> | <b>180ACG25<br/>180ACG35</b> | <b>180ADF25<br/>180ADF35</b> | <b>180ADG25<br/>180ADG35</b> |
| 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                                      | 79/79                        | 84/84                        | 35                           | 37                           |
|                                 | Minimum Circuit Ampacity with Power Exhaust                   | 89/89                        | 94/94                        | 40                           | 41                           |
|                                 | Minimum Overcurrent Protection Device Size                    | 90/90                        | 100/100                      | 40                           | 40                           |
|                                 | Minimum Overcurrent Protection Device Size with Power Exhaust | 100/100                      | 110/110                      | 45                           | 45                           |
|                                 | Maximum Overcurrent Protection Device Size                    | 100/100                      | 110/110                      | 45                           | 45                           |
|                                 | Maximum Overcurrent Protection Device Size with Power Exhaust | 110/110                      | 110/110                      | 50                           | 50                           |
| Compressor Motor                | No.                                                           | 2                            | 2                            | 2                            | 2                            |
|                                 | Volts                                                         | 208/230                      | 208/230                      | 460                          | 460                          |
|                                 | Phase                                                         | 3                            | 3                            | 3                            | 3                            |
|                                 | Amps (RLA), Comp. 1                                           | 27.7                         | 27.7                         | 11.5                         | 11.5                         |
|                                 | Amps (LRA), Comp. 1                                           | 178.5                        | 178.5                        | 103.0                        | 103.0                        |
|                                 | Amps (RLA), Comp. 2                                           | 27.7                         | 27.7                         | 11.5                         | 11.5                         |
|                                 | Amps (LRA), Comp. 2                                           | 178.5                        | 178.5                        | 103.0                        | 103.0                        |
| Condenser Motor                 | No.                                                           | 3                            | 3                            | 3                            | 3                            |
|                                 | Volts                                                         | 208/230                      | 208/230                      | 460                          | 460                          |
|                                 | Phase                                                         | 1                            | 1                            | 1                            | 1                            |
|                                 | HP                                                            | 1/3                          | 1/3                          | 1/3                          | 1/3                          |
|                                 | Amps (FLA, each)                                              | 2.4                          | 2.4                          | 1.4                          | 1.4                          |
|                                 | Amps (LRA, each)                                              | 4.7                          | 4.7                          | 2.4                          | 2.4                          |
| Evaporator Fan                  | 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)                                              | 9.2                          | 13.6                         | 4.6                          | 6.3                          |
|                                 | Amps (LRA, each)                                              | 74.5                         | 86.0                         | 38.4                         | 47.5                         |



## ELECTRICAL DATA – RGEHYB SERIES

|                         |                                                               | <b>210ACF25<br/>210ACF35</b> | <b>210ACG25<br/>210ACG35</b> | <b>210ADF25<br/>210ADF35</b> | <b>210ADG25<br/>210ADG35</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                                      | 84/84                        | 88/88                        | 39                           | 40                           |
|                         | Minimum Circuit Ampacity with Power Exhaust                   | 94/94                        | 98/98                        | 43                           | 45                           |
|                         | Minimum Overcurrent Protection Device Size                    | 100/100                      | 100/100                      | 45                           | 45                           |
|                         | Minimum Overcurrent Protection Device Size with Power Exhaust | 110/110                      | 110/110                      | 50                           | 50                           |
|                         | Maximum Overcurrent Protection Device Size                    | 110/110                      | 110/110                      | 50                           | 50                           |
|                         | Maximum Overcurrent Protection Device Size with Power Exhaust | 110/110                      | 125/125                      | 50                           | 50                           |
| <b>Compressor Motor</b> | No.                                                           | 2                            | 2                            | 2                            | 2                            |
|                         | Volts                                                         | 208/230                      | 208/230                      | 460                          | 460                          |
|                         | Phase                                                         | 3                            | 3                            | 3                            | 3                            |
|                         | Amps (RLA), Comp. 1                                           | 28.7                         | 28.7                         | 12.4                         | 12.4                         |
|                         | Amps (LRA), Comp. 1                                           | 207.5                        | 207.5                        | 100.2                        | 100.2                        |
|                         | Amps (RLA), Comp. 2                                           | 28.7                         | 28.7                         | 12.4                         | 12.4                         |
|                         | Amps (LRA), Comp. 2                                           | 207.5                        | 207.5                        | 100.2                        | 100.2                        |
| <b>Condenser Motor</b>  | No.                                                           | 4                            | 4                            | 4                            | 4                            |
|                         | Volts                                                         | 208/230                      | 208/230                      | 460                          | 460                          |
|                         | Phase                                                         | 1                            | 1                            | 1                            | 1                            |
|                         | HP                                                            | 1/3                          | 1/3                          | 1/3                          | 1/3                          |
|                         | Amps (FLA, each)                                              | 2.4                          | 2.4                          | 1.4                          | 1.4                          |
|                         | Amps (LRA, each)                                              | 4.7                          | 4.7                          | 2.4                          | 2.4                          |
| <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)                                              | 9.2                          | 13.6                         | 4.6                          | 6.3                          |
|                         | Amps (LRA, each)                                              | 74.5                         | 86.0                         | 38.4                         | 47.5                         |

| ELECTRICAL DATA – RGEHYB SERIES |                                                               |                      |                                              |                      |                                              |
|---------------------------------|---------------------------------------------------------------|----------------------|----------------------------------------------|----------------------|----------------------------------------------|
|                                 |                                                               | 240ACF30<br>240ACF40 | 240ACG30<br>240ACG40<br>240ACH30<br>240ACH40 | 240ADF30<br>240ADF40 | 240ADG30<br>240ADG40<br>240ADH30<br>240ADH40 |
| 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                                      | 99/99                | 106/106                                      | 47                   | 50                                           |
|                                 | Minimum Circuit Ampacity with Power Exhaust                   | 109/109              | 116/116                                      | 51                   | 55                                           |
|                                 | Minimum Overcurrent Protection Device Size                    | 110/110              | 125/125                                      | 60                   | 60                                           |
|                                 | Minimum Overcurrent Protection Device Size with Power Exhaust | 125/125              | 125/125                                      | 60                   | 60                                           |
|                                 | Maximum Overcurrent Protection Device Size                    | 125/125              | 125/125                                      | 60                   | 60                                           |
|                                 | Maximum Overcurrent Protection Device Size with Power Exhaust | 125/125              | 125/125                                      | 60                   | 60                                           |
| Compressor Motor                | No.                                                           | 2                    | 2                                            | 2                    | 2                                            |
|                                 | Volts                                                         | 208/230              | 208/230                                      | 460                  | 460                                          |
|                                 | Phase                                                         | 3                    | 3                                            | 3                    | 3                                            |
|                                 | Amps (RLA), Comp. 1                                           | 33.3                 | 33.3                                         | 15.4                 | 15.4                                         |
|                                 | Amps (LRA), Comp. 1                                           | 255.0                | 255.0                                        | 140.0                | 140.0                                        |
|                                 | Amps (RLA), Comp. 2                                           | 28.7                 | 28.7                                         | 12.4                 | 12.4                                         |
|                                 | Amps (LRA), Comp. 2                                           | 207.5                | 207.5                                        | 100.2                | 100.2                                        |
| Condenser Motor                 | No.                                                           | 6                    | 6                                            | 6                    | 6                                            |
|                                 | Volts                                                         | 208/230              | 208/230                                      | 460                  | 460                                          |
|                                 | Phase                                                         | 1                    | 1                                            | 1                    | 1                                            |
|                                 | HP                                                            | 1/3                  | 1/3                                          | 1/3                  | 1/3                                          |
|                                 | Amps (FLA, each)                                              | 2.4                  | 2.4                                          | 1.4                  | 1.4                                          |
|                                 | Amps (LRA, each)                                              | 4.7                  | 4.7                                          | 2.4                  | 2.4                                          |
| Evaporator Fan                  | No.                                                           | 1                    | 1                                            | 1                    | 1                                            |
|                                 | Volts                                                         | 208/230              | 208/230                                      | 460                  | 460                                          |
|                                 | Phase                                                         | 3                    | 3                                            | 3                    | 3                                            |
|                                 | HP                                                            | 5                    | 7.5                                          | 5                    | 7.5                                          |
|                                 | Amps (FLA, each)                                              | 13.6                 | 21.0                                         | 6.3                  | 9.6                                          |
|                                 | Amps (LRA, each)                                              | 86.0                 | 115.0                                        | 47.5                 | 63.5                                         |

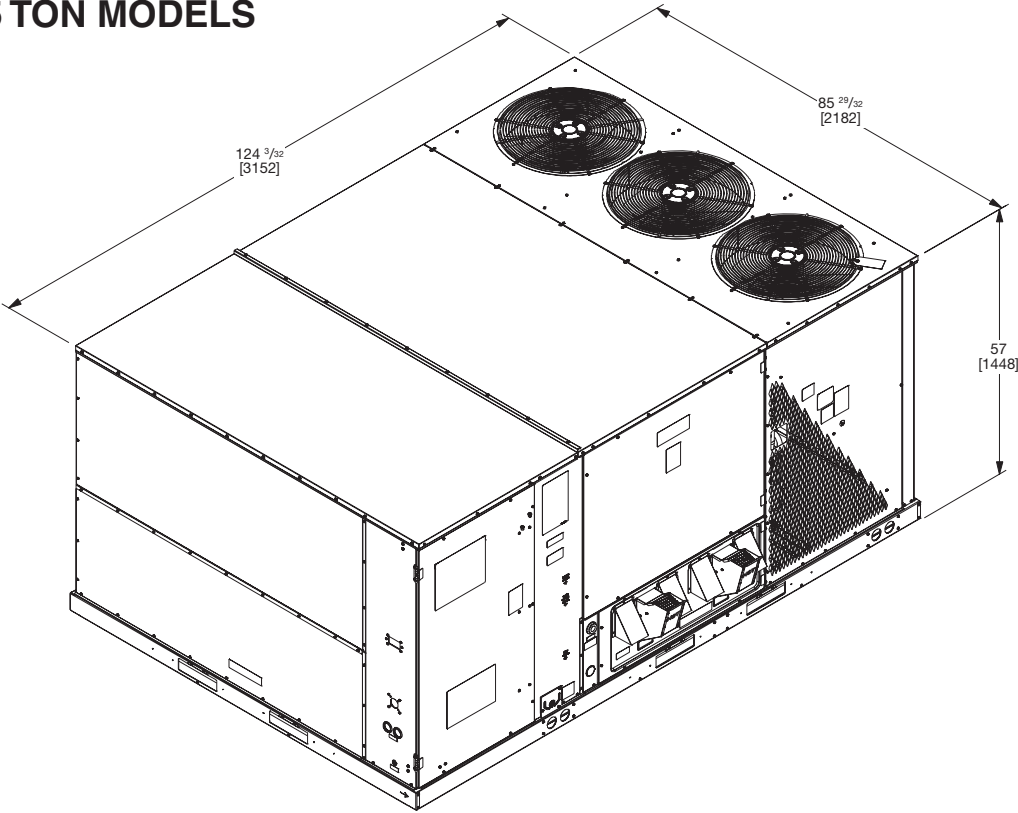
## ELECTRICAL DATA – RGEHYB SERIES

|                  |                                                               | <b>300ACF30<br/>300ACF40</b> | <b>300ACG30<br/>300ACG40</b> | <b>300ADF30<br/>300ADF40</b> | <b>300ADG30<br/>300ADG40</b> |
|------------------|---------------------------------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 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                                      | 128/128                      | 135/135                      | 62                           | 65                           |
|                  | Minimum Circuit Ampacity with Power Exhaust                   | 138/138                      | 145/145                      | 67                           | 69                           |
|                  | Minimum Overcurrent Protection Device Size                    | 150/150                      | 150/150                      | 70                           | 70                           |
|                  | Minimum Overcurrent Protection Device Size with Power Exhaust | 150/150                      | 175/175                      | 80                           | 80                           |
|                  | Maximum Overcurrent Protection Device Size                    | 150/150                      | 150/150                      | 80                           | 80                           |
|                  | Maximum Overcurrent Protection Device Size with Power Exhaust | 175/175                      | 175/175                      | 80                           | 80                           |
| Compressor Motor | No.                                                           | 2                            | 2                            | 2                            | 2                            |
|                  | Volts                                                         | 208/230                      | 208/230                      | 460                          | 460                          |
|                  | Phase                                                         | 3                            | 3                            | 3                            | 3                            |
|                  | Amps (RLA), Comp. 1                                           | 40.8                         | 40.8                         | 19.4                         | 19.4                         |
|                  | Amps (LRA), Comp. 1                                           | 270.0                        | 270.0                        | 147.0                        | 147.0                        |
|                  | Amps (RLA), Comp. 2                                           | 40.8                         | 40.8                         | 19.4                         | 19.4                         |
|                  | Amps (LRA), Comp. 2                                           | 270.0                        | 270.0                        | 147.0                        | 147.0                        |
| Condenser Motor  | No.                                                           | 6                            | 6                            | 6                            | 6                            |
|                  | Volts                                                         | 208/230                      | 208/230                      | 460                          | 460                          |
|                  | Phase                                                         | 1                            | 1                            | 1                            | 1                            |
|                  | HP                                                            | 1/3                          | 1/3                          | 1/3                          | 1/3                          |
|                  | Amps (FLA, each)                                              | 2.4                          | 2.4                          | 1.4                          | 1.4                          |
|                  | Amps (LRA, each)                                              | 4.7                          | 4.7                          | 2.4                          | 2.4                          |
| Evaporator Fan   | No.                                                           | 1                            | 1                            | 1                            | 1                            |
|                  | Volts                                                         | 208/230                      | 208/230                      | 460                          | 460                          |
|                  | Phase                                                         | 3                            | 3                            | 3                            | 3                            |
|                  | HP                                                            | 7.5                          | 10                           | 7.5                          | 10                           |
|                  | Amps (FLA, each)                                              | 21.0                         | 28.0                         | 9.6                          | 12.5                         |
|                  | Amps (LRA, each)                                              | 115.0                        | 149.2                        | 63.5                         | 76.0                         |

## A2L REFRIGERANT INSTALLATION SAFETY DATA

| Model                                                   |                                  | RGEHYB180                                             | RGEHYB210   | RGEHYB240     | RGEHYB300   | RGEHYB180<br>w/HumidiDry | RGEHYB240<br>w/HumidiDry | RGEHYB300<br>w/HumidiDry |
|---------------------------------------------------------|----------------------------------|-------------------------------------------------------|-------------|---------------|-------------|--------------------------|--------------------------|--------------------------|
| Refrigerant Charge Weight<br>Circuit 1 / Circuit 2 (oz) |                                  | 144 / 148                                             | 161.6 / 168 | 212.8 / 206.4 | 228.8 / 216 | 256 / 155.2              | 304 / 220.8              | 316 / 220                |
| Minimum circulation airflow, Qmin (CFM)                 |                                  | 492                                                   | 559         | 708           | 761         | 851                      | 1,011                    | 1,051                    |
| Altitude above<br>Sea Level (Ft.)                       | Altitude<br>Adjustment<br>Factor | Minimum Total Space Area, T <sub>Amin</sub> (Sq. Ft.) |             |               |             |                          |                          |                          |
| 0                                                       | 1.000                            | 273                                                   | 310         | 392           | 422         | 472                      | 560                      | 582                      |
| 1000                                                    | 1.025                            | 280                                                   | 317         | 402           | 432         | 484                      | 574                      | 597                      |
| 2000                                                    | 1.051                            | 287                                                   | 325         | 412           | 443         | 496                      | 589                      | 612                      |
| 3000                                                    | 1.078                            | 294                                                   | 334         | 423           | 455         | 509                      | 604                      | 628                      |
| 4000                                                    | 1.107                            | 302                                                   | 343         | 434           | 467         | 522                      | 620                      | 645                      |
| 5000                                                    | 1.138                            | 310                                                   | 352         | 446           | 480         | 537                      | 638                      | 663                      |
| 6000                                                    | 1.170                            | 319                                                   | 362         | 459           | 493         | 552                      | 656                      | 681                      |
| 6500                                                    | 1.187                            | 324                                                   | 368         | 466           | 501         | 560                      | 665                      | 691                      |

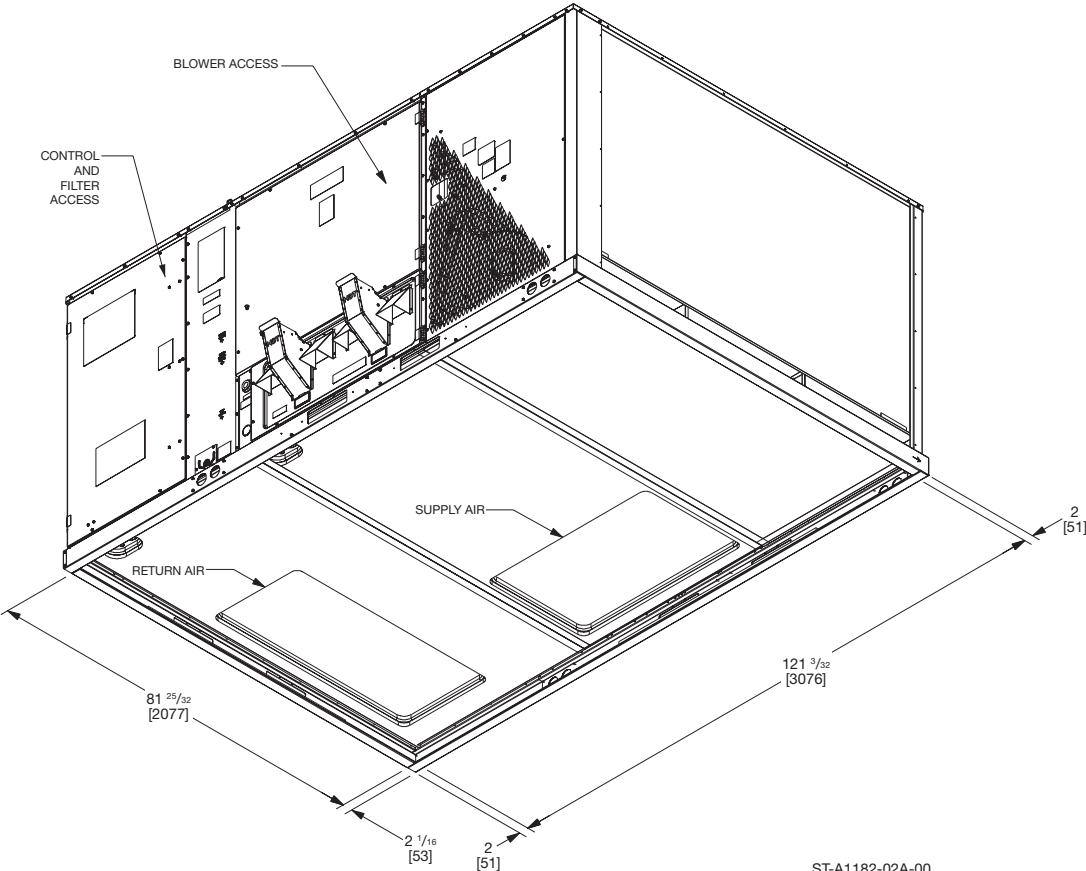
TOP VIEW—15 TON MODELS



NOTE: ALL MEASUREMENTS ARE FORMATTED INCHES [MM].

ST-A1182-01A-01

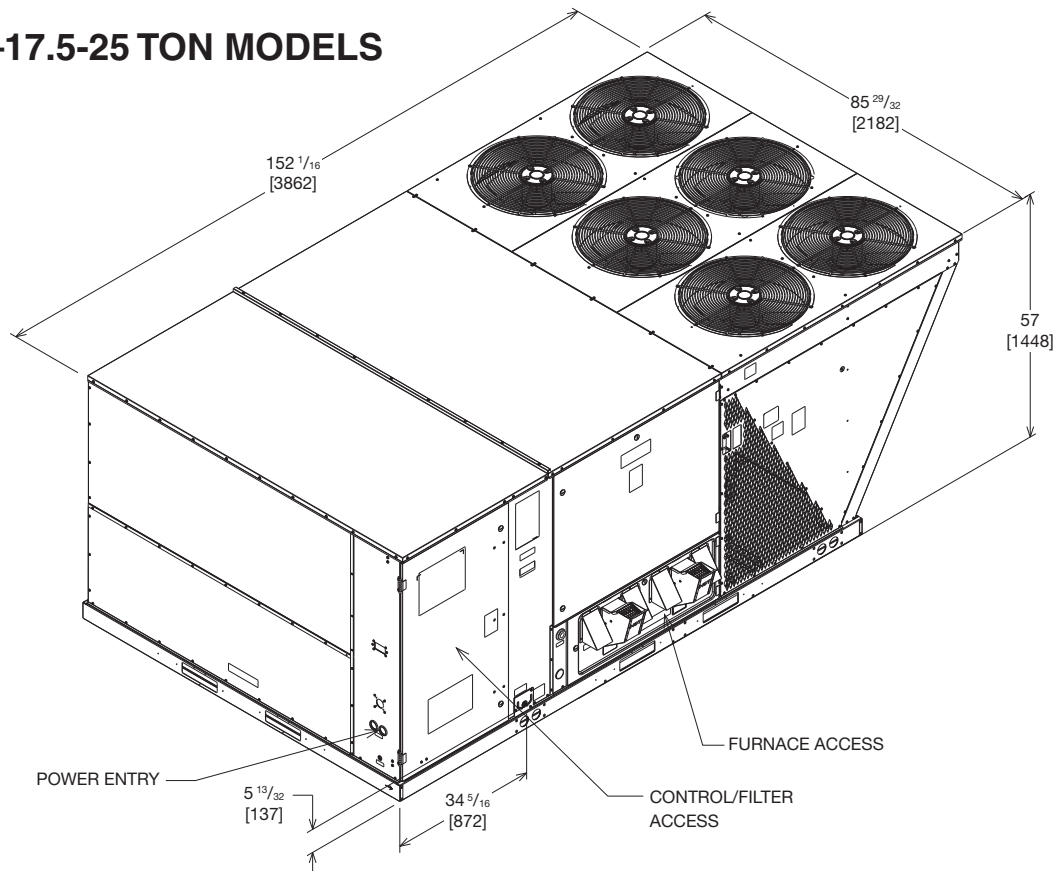
BOTTOM VIEW—15 TON MODELS



NOTE: ALL MEASURES ARE ON A FORMAT OF INCHES [MM].

ST-A1182-02A-00

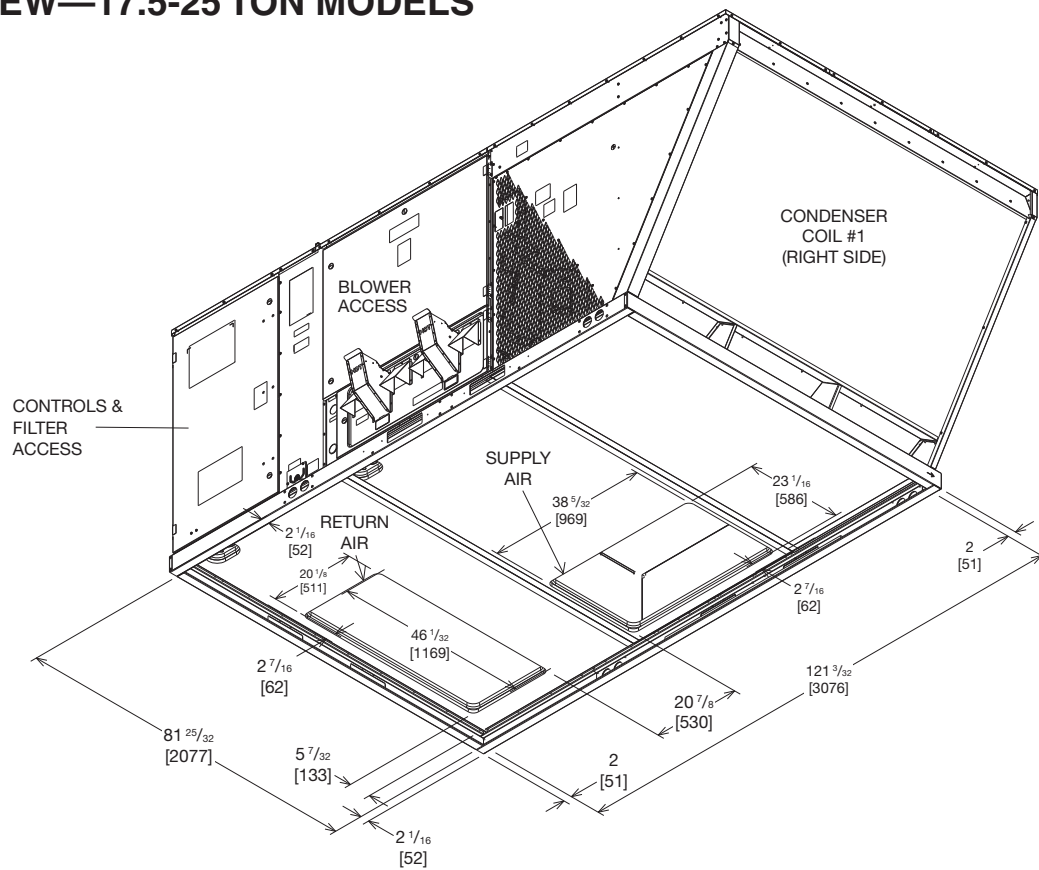
## TOP VIEW—17.5-25 TON MODELS



NOTE: ALL MEASURES ARE ON A FORMAT OF INCHES [MM].

ST-A1125-01A-00

## BOTTOM VIEW—17.5-25 TON MODELS



NOTE: ALL MEASURES ARE ON A FORMAT OF INCHES [MM].

ST-A1125-02A-00

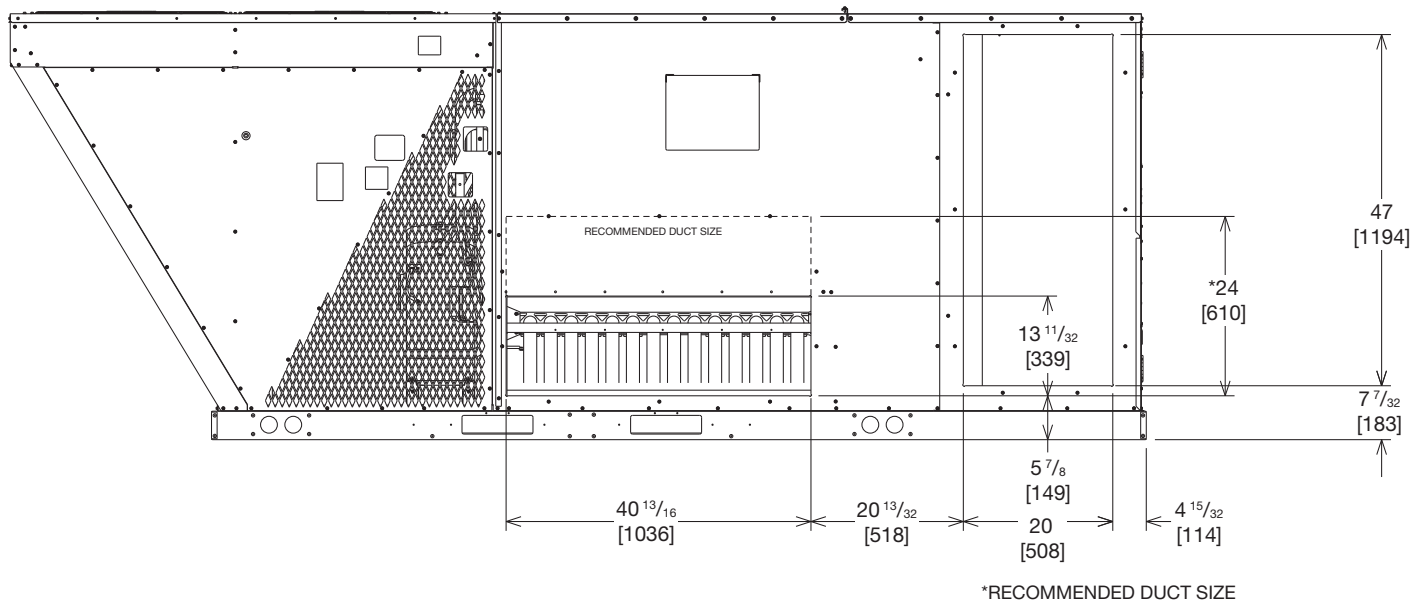


### SUPPLY AND RETURN DIMENSIONS FOR DOWNFLOW APPLICATIONS— 15 TON MODELS (VIEW FROM BOTTOM UP)





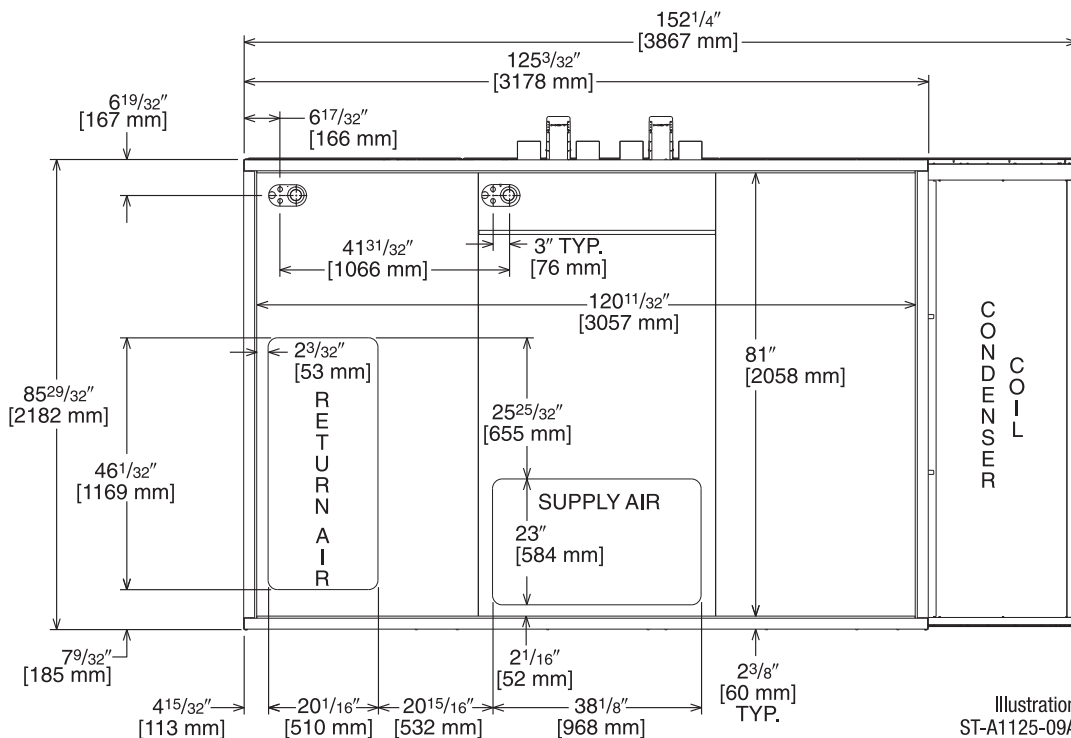
## SUPPLY AND RETURN DIMENSIONS FOR HORIZONTAL APPLICATIONS— 17.5-25 TON MODELS (VIEW FROM REAR DUCT SIDE)



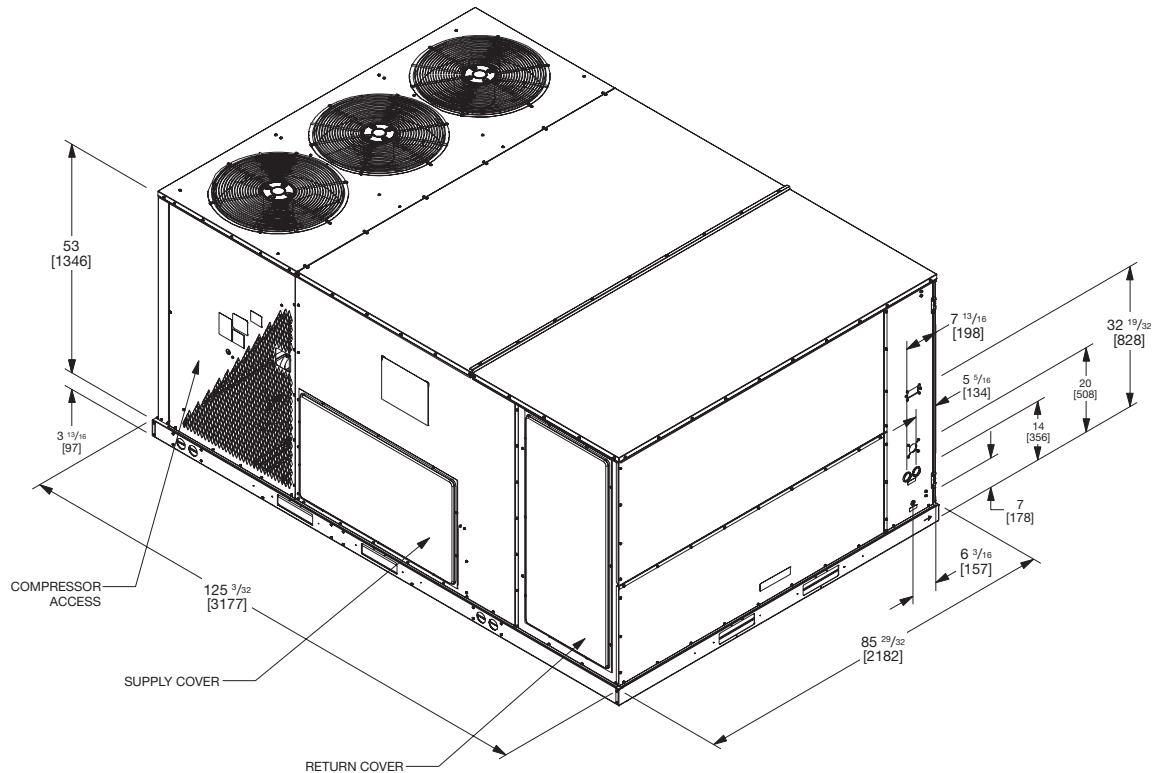
NOTE: ALL MEASURES ARE ON A FORMAT OF INCHES [MM].

ST-A1125-08A-00

## SUPPLY AND RETURN DIMENSIONS FOR DOWNFLOW APPLICATIONS— 17.5-25 TON MODELS (VIEW FROM BOTTOM UP)

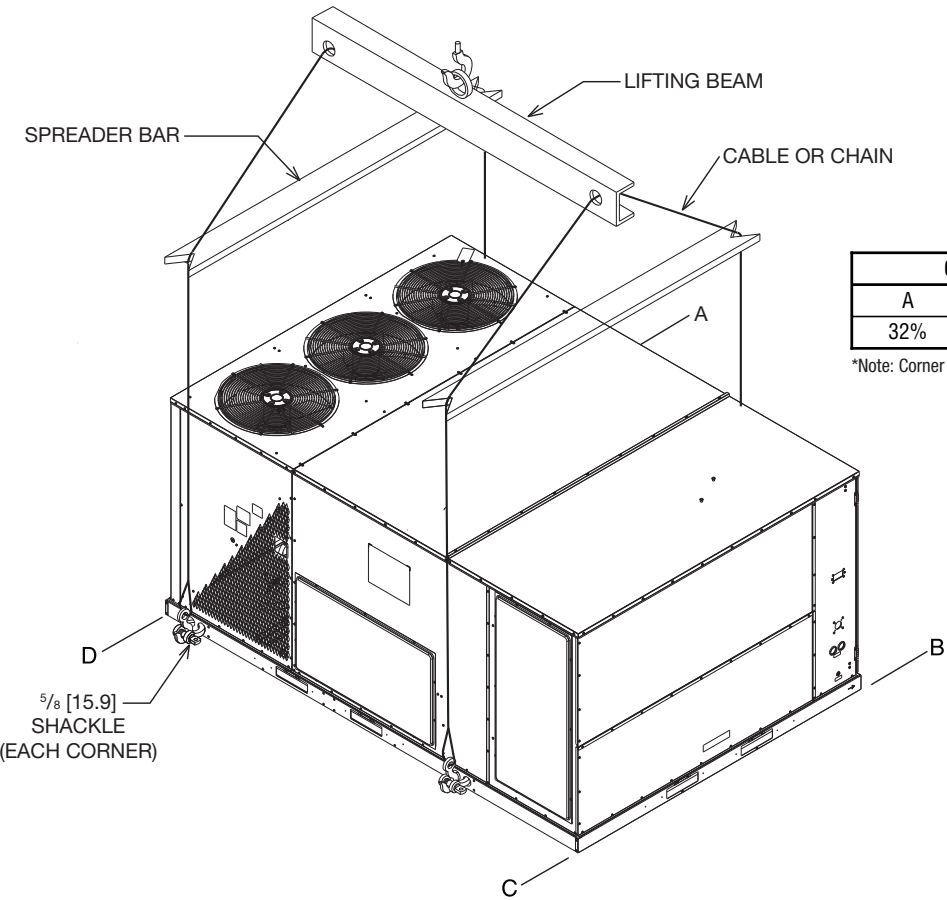


UNIT DIMENSIONS—15 TON MODELS



NOTE: ALL MEASUREMENTS ARE FORMATTED INCHES [MM].

ST-A1182-03-01



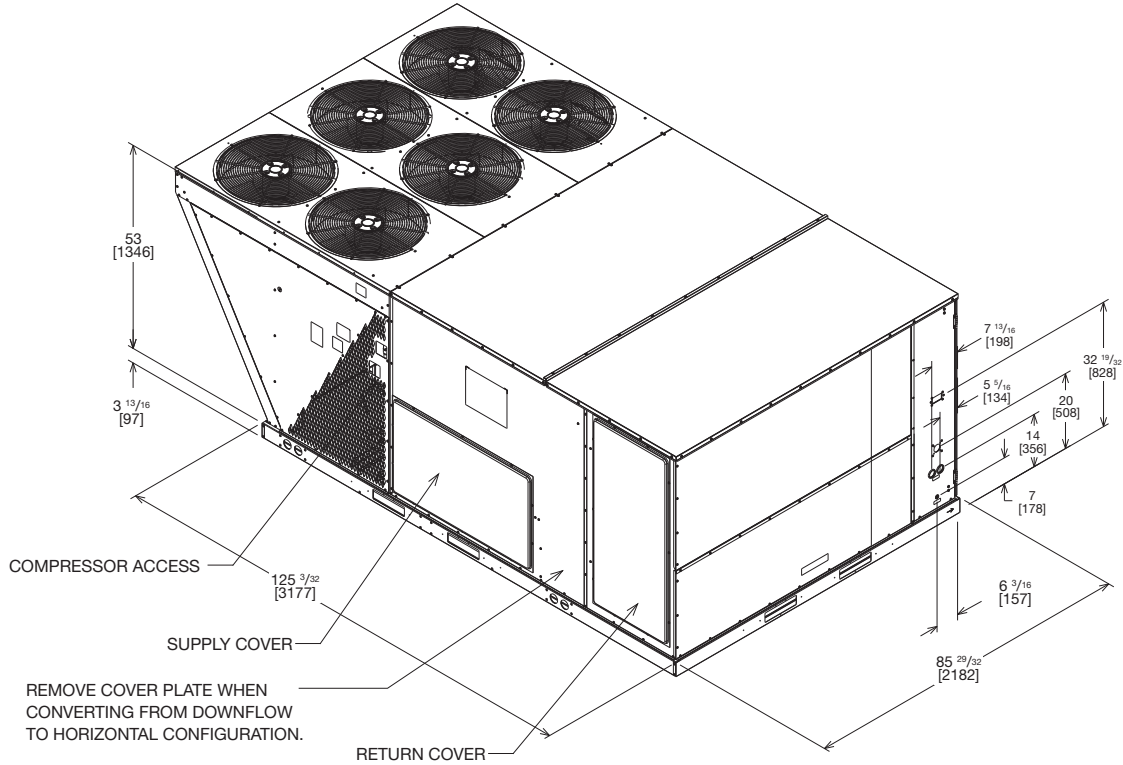
| Corner Weights by Percentage |     |     |     |
|------------------------------|-----|-----|-----|
| A                            | B   | C   | D   |
| 32%                          | 27% | 16% | 24% |

\*Note: Corner weights measured at base of unit.

NOTE: ALL MEASURES ARE ON A FORMAT OF INCHES [MM].

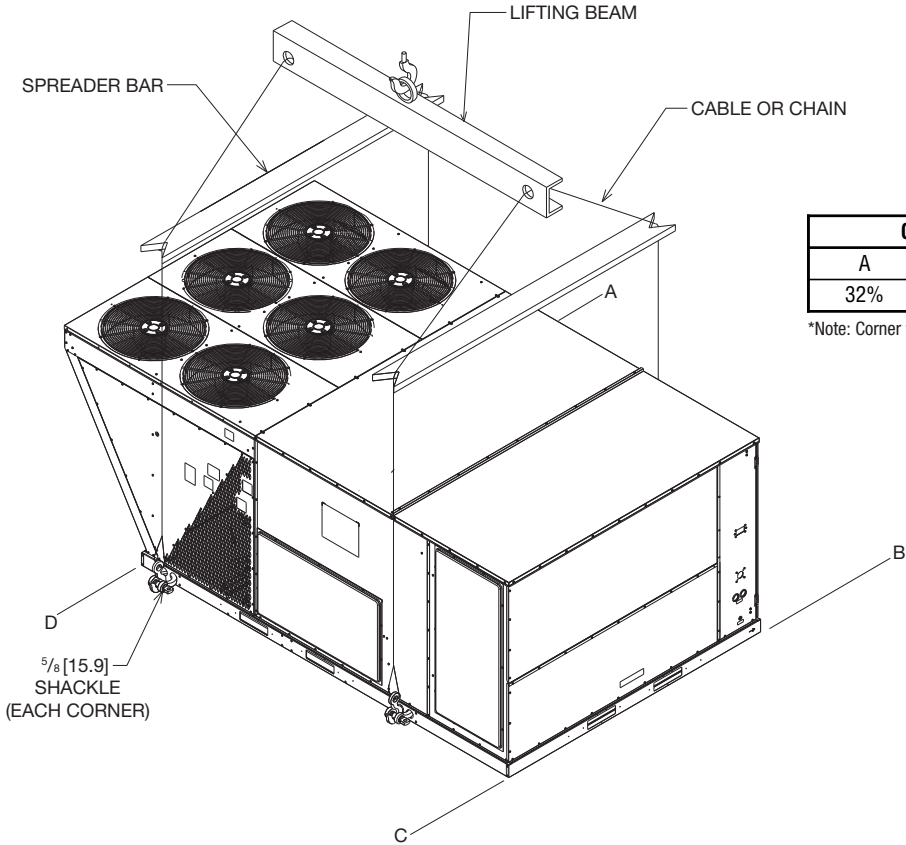
ST-A1182-25-00

# UNIT DIMENSIONS—17.5-25 TON MODELS



NOTE: ALL MEASURES ARE ON A FORMAT OF INCHES [MM].

ST-A1125-03-00



| Corner Weights by Percentage |     |     |     |
|------------------------------|-----|-----|-----|
| A                            | B   | C   | D   |
| 32%                          | 27% | 16% | 24% |

\*Note: Corner weights measured at base of unit.

NOTE: ALL MEASURES ARE ON A FORMAT OF INCHES [MM].

ST-A1125-25-00

SLAB INSTALLATION — 15-25 TON MODELS

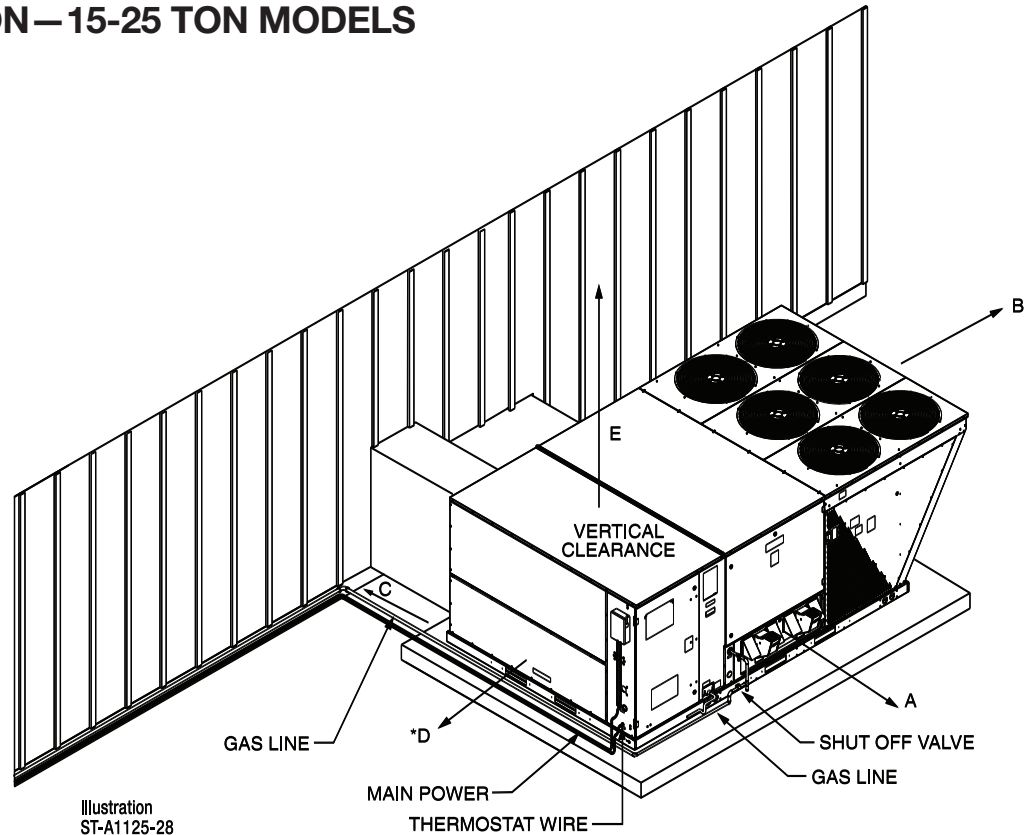


Illustration  
ST-A1125-28

CLEARANCES

The following minimum clearances are recommended for proper unit performance and serviceability.

| Recommended Clearance In. [mm]                                                           | Location            |
|------------------------------------------------------------------------------------------|---------------------|
| 80 [2032]                                                                                | A - Front           |
| 18 [457]                                                                                 | B - Condenser Coil  |
| 18 [457]                                                                                 | +C - Duct Side      |
| 18 [457]                                                                                 | *D - Evaporator End |
| 60 [1524]                                                                                | E - Above           |
| + Without Horizontal Economizer 18" [457 mm]<br>With Horizontal Economizer 42" [1067 mm] |                     |
| * Without Economizer 18" [457 mm]<br>With Economizer 48" [1219 mm]                       |                     |

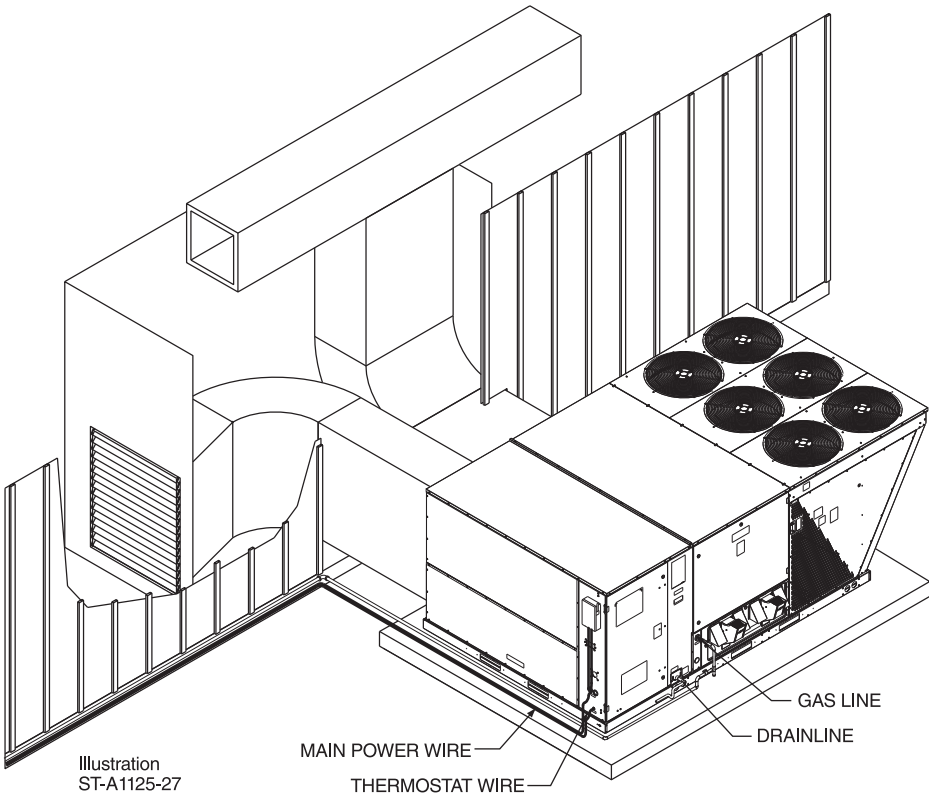


Illustration  
ST-A1125-27

[ ] Designates Metric Conversions

## FIELD-INSTALLED ACCESSORY EQUIPMENT

| Accessory                                                                                                             | Model Number  | Shipping Weight Lbs. [kg] | Installed Weight Lbs. [kg] | Factory Installation Available? |
|-----------------------------------------------------------------------------------------------------------------------|---------------|---------------------------|----------------------------|---------------------------------|
| <b>Economizers</b>                                                                                                    |               |                           |                            |                                 |
| DDC Economizer with Single Enthalpy (Downflow)<br><i>RRS Economizer with Honeywell Controller</i>                     | AXRD-01RMDCM3 | 277 [125.6]               | 168 [76.2]                 | Yes                             |
| DDC Economizer with Single Enthalpy (Downflow)<br><i>RRS Economizer with Honeywell Controller with Smoke Detector</i> | AXRD-01RMDDM3 | 277 [125.6]               | 168 [76.2]                 | Yes                             |
| DDC Economizer with Single Enthalpy (Horizontal)<br><i>RRS Economizer with Honeywell Controller</i>                   | AXRD-01RMHCM3 | 333 [151.0]               | 301 [36.5]                 | No                              |
| Non-DDC Economizer with Single Enthalpy (Downflow)<br><i>RRS Economizer with Siemens Controller</i>                   | RXRD-51RHDAM3 | 277 [125.6]               | 168 [76.2]                 | Yes                             |
| Non-DDC Economizer with Single Enthalpy (Horizontal)<br><i>RRS Economizer with Siemens Controller</i>                 | RXRD-51RHHAM3 | 333 [151.0]               | 301 [36.5]                 | No                              |
| Economizer Universal DDC Interface Kit                                                                                | RXRX-DDC02    | 40 [18.1]                 | 34 [15.4]                  | Yes <sup>1</sup>                |

| Accessory                                                            | Model Number   | Shipping Weight Lbs. [kg] | Installed Weight Lbs. [kg] | Factory Installation Available? |
|----------------------------------------------------------------------|----------------|---------------------------|----------------------------|---------------------------------|
| Comfort Alert (1 per Compressor) (DDC)                               | RXRX-AZ01      | 3 [1.4]                   | 2 [0.9]                    | Yes                             |
| Communication Card, BACnet                                           | RXRX-AY01      | 1 [0.5]                   | 1 [0.5]                    | No                              |
| Communication Card, LonWorks                                         | RXRX-AY02      | 1 [0.5]                   | 1 [0.5]                    | No                              |
| Concentric Adapter/Transition (15 & 17.5 ton)                        | RXMC-CJ07      | 81 [36.7]                 | 74 [33.6]                  | No                              |
| Concentric Adapter/Transition (20 ton)                               | RXMC-CK08      | 81 [36.7]                 | 74 [33.6]                  | No                              |
| Concentric Adapter/Transition (25 ton)                               | RXMC-CL09      | 81 [36.7]                 | 74 [33.6]                  | No                              |
| Concentric Flush Mount Diffuser (15 & 17.5 ton)                      | RXRN-AD80      | 213 [96.6]                | 115 [52.2]                 | No                              |
| Concentric Step Down Diffuser (15 & 17.5 ton)                        | RXRN-AD81      | 310 [140.6]               | 157 [71.2]                 | No                              |
| Concentric Step Down Diffuser (20 ton)                               | RXRN-AD86      | 367 [166.5]               | 212 [96.2]                 | No                              |
| Concentric Step Down Diffuser (25 ton)                               | RXRN-AD88      | 410 [186.0]               | 370 [67.8]                 | No                              |
| Convenience Outlet, Non-Powered                                      | RXRX-AN01      | 2 [0.9]                   | 1.5 [0.7]                  | Yes                             |
| Dual Enthalpy, Temperature and Humidity Sensor (for Honeywell DDC)   | RXRX-AV02      | 1 [0.5]                   | 1 [0.5]                    | No                              |
| Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Non-DDC) | PD555460       | 1 [0.5]                   | 1 [0.5]                    | No                              |
| Fresh Air Damper <sup>2</sup> , Manual                               | AXRF-KFA1      | 61 [27.7]                 | 52 [23.6]                  | No                              |
| Fresh Air Damper <sup>2</sup> , Motorized (DDC)                      | RXRX-AW05      | 45 [20.4]                 | 38 [17.2]                  | No                              |
| Outdoor Coil Louver Kit (15 Ton)                                     | AXRX-AAD01K    | 55 [24.8]                 | 45 [20.3]                  | Yes                             |
| Outdoor Coil Louver Kit (17.5-25 Ton)                                | AXRX-AAD01L    | 55 [24.8]                 | 45 [20.3]                  | Yes                             |
| Low-Ambient Control Kit (1 Per Compressor)                           | RXRZ-C02       | 3 [1.4]                   | 2 [0.9]                    | Yes                             |
| MERV 8 Filter                                                        | RXMF-M08A22520 | 2 [0.9]                   | 1 [0.45]                   | Yes                             |
| MERV 13 Filter                                                       | RXMF-M13A22520 | 2 [0.9]                   | 1 [0.45]                   | Yes                             |
| Power Exhaust (208/230V) Kit, Convertible <i>RRS</i>                 | RXRX-BGF05C    | 119 [54.0]                | 59 [26.8]                  | No                              |
| Power Exhaust (460V) Kit, Convertible <i>RRS</i>                     | RXRX-BGF05D    | 119 [54.0]                | 59 [26.8]                  | No                              |
| Roofcurb, 14"                                                        | RXKG-CBH14     | 184 [83.5]                | 176 [79.8]                 | No                              |
| Roofcurb Adapter to RXKG-CAF14                                       | RXRX-CJCF14    | 555 [251.7]               | 505 [29.1]                 | No                              |
| Roofcurb Adapter to RXRK-E56                                         | RXRX-CJCE56    | 465 [210.9]               | 415 [88.2]                 | No                              |
| Sensor, Carbon Dioxide (Wall Mount)                                  | RXRX-AR02      | 3 [1.4]                   | 2 [1.0]                    | No                              |
| Sensor, Room Humidity                                                | RHC-ZNS4       | 1 [0.5]                   | 1 [0.5]                    | No                              |
| Sensor, Room Temperature and Relative Humidity                       | RHC-ZNS5       | 1 [0.5]                   | 1 [0.5]                    | No                              |
| Unfused Service Disconnect <sup>3</sup>                              | RXRX-AP01      | 10 [4.5]                  | 9 [4.1]                    | Yes                             |

<sup>1</sup>When a factory installed economizer is selected in the unit option codes, this accessory is automatically factory installed if required<sup>2</sup>Motorized and Manual Kit Fresh Air Damper must be combined for a complete Motorized Outside Air Damper selection<sup>3</sup>Only available on 15 and 17.5 ton models

[ ] Designates Metric Conversion

## COMMUNICATION CARDS

### Field-Installed



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

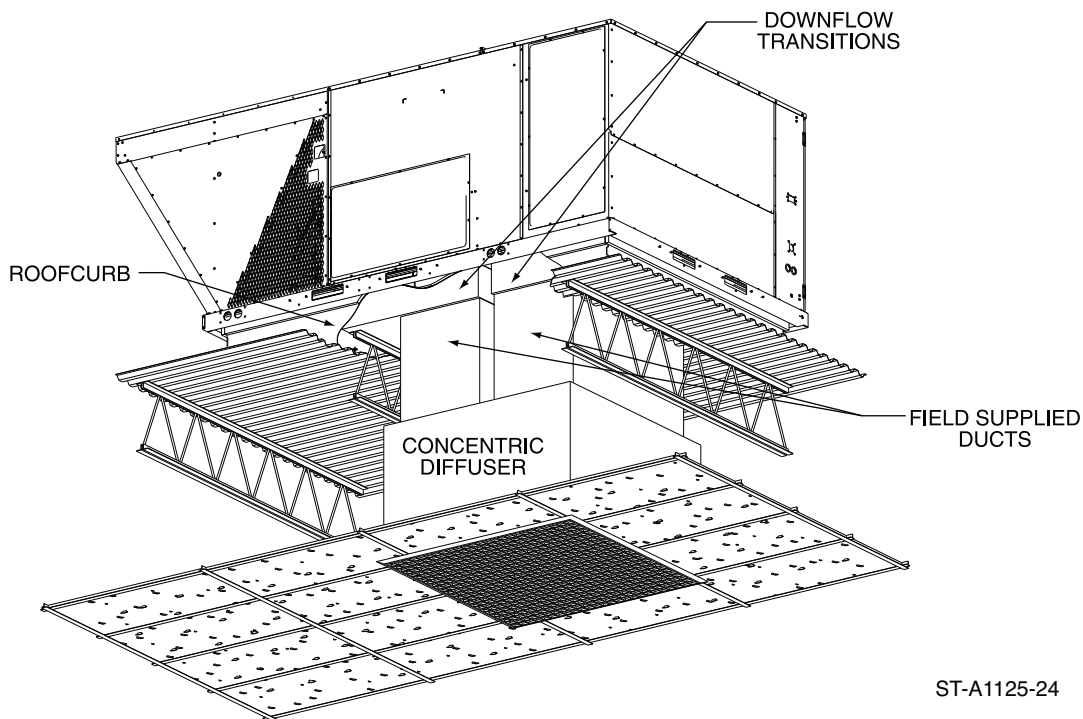
The field-installed BACnet Communication Card allows the RTU-C unit controller to communicate with a third party building management system that supports the BACnet Application Specific Controller device profile. The BACnet Communication Module plugs onto the unit RTU-C controller and allows communication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



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

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

## CONCENTRIC DIFFUSER APPLICATION

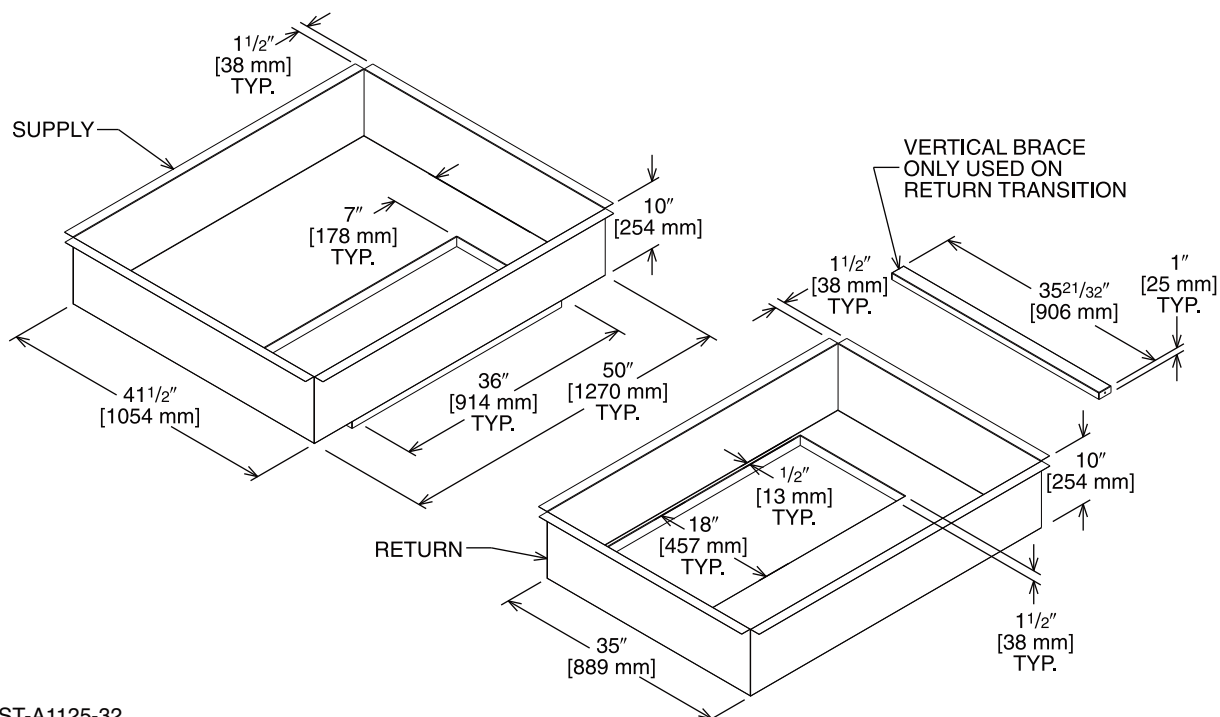


ST-A1125-24

## DOWNFLOW TRANSITION DRAWINGS

### RXMC-CJ07 — Concentric Adapter/Transition (15 & 17.5 Ton)

- Used with RXRN-AD80 and RXRN-AD81 Concentric Diffusers



ST-A1125-32

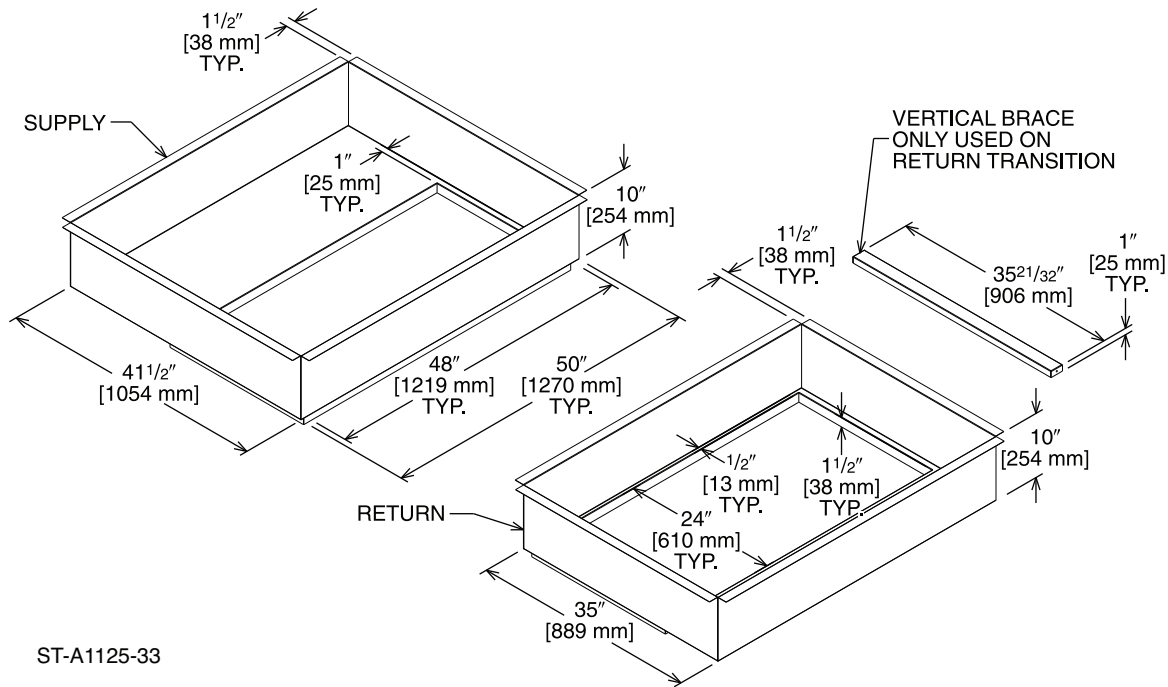
[ ] Designates Metric Conversions



DOWNFLOW TRANSITION DRAWINGS (CONTINUED)

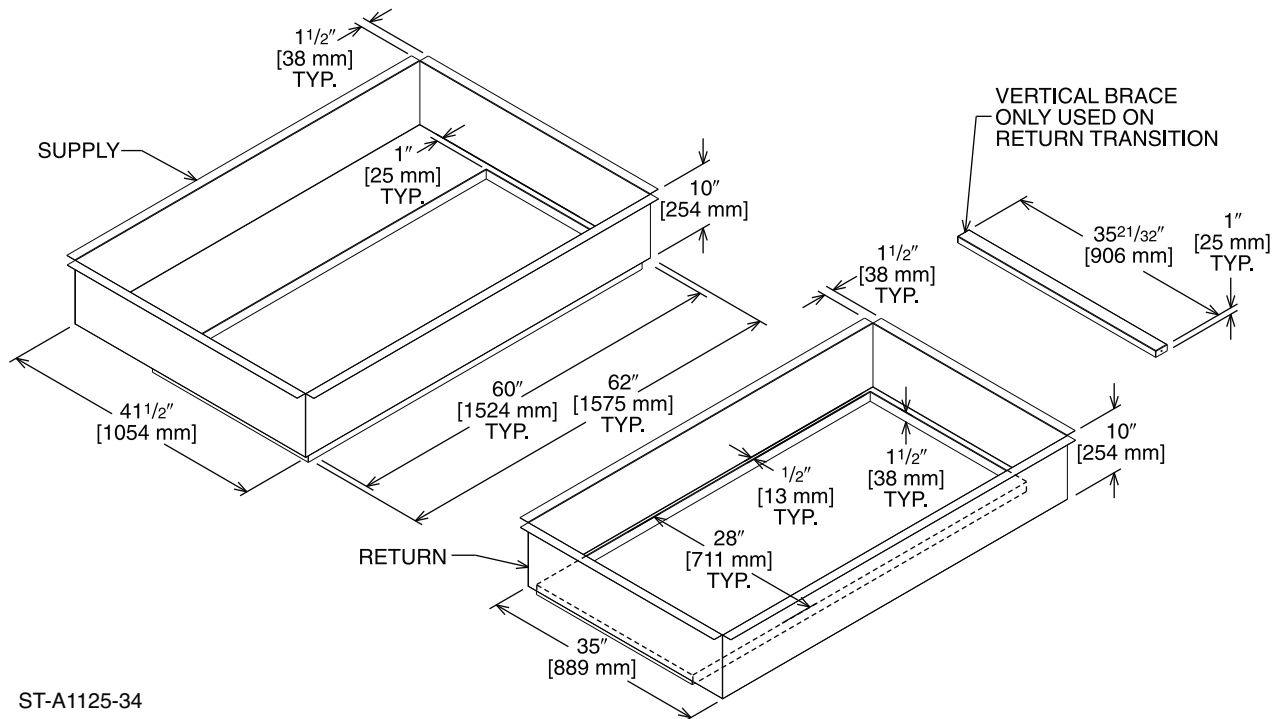
RXMC-CK08—Concentric Adapter/Transition (20 Ton)

- Used with RXRN-AD86 Concentric Diffusers



RXMC-CL09—Concentric Adapter/Transition (25 Ton)

- Used with RXRN-AD88 Concentric Diffusers

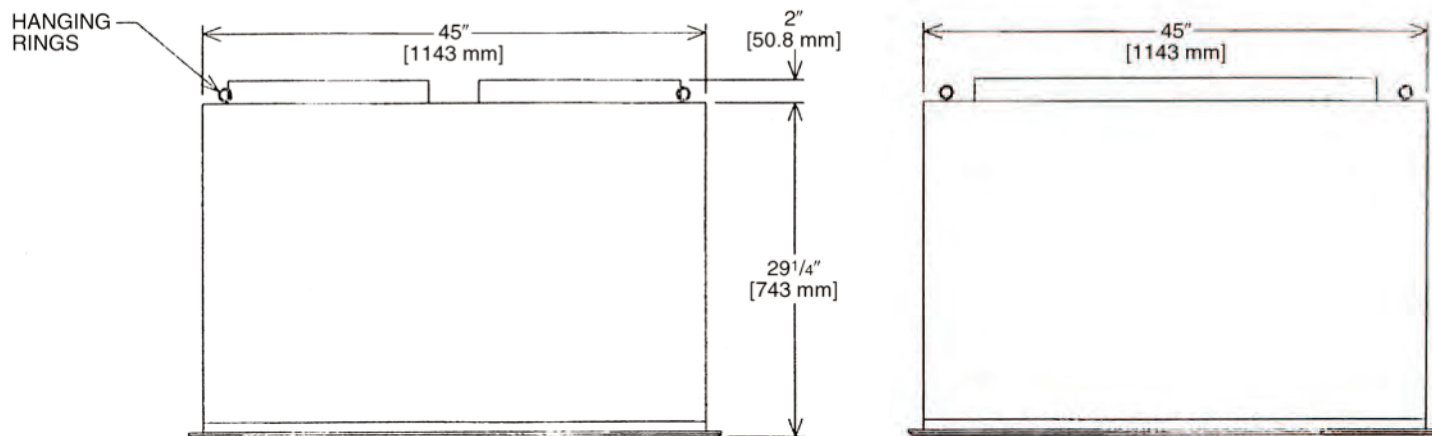
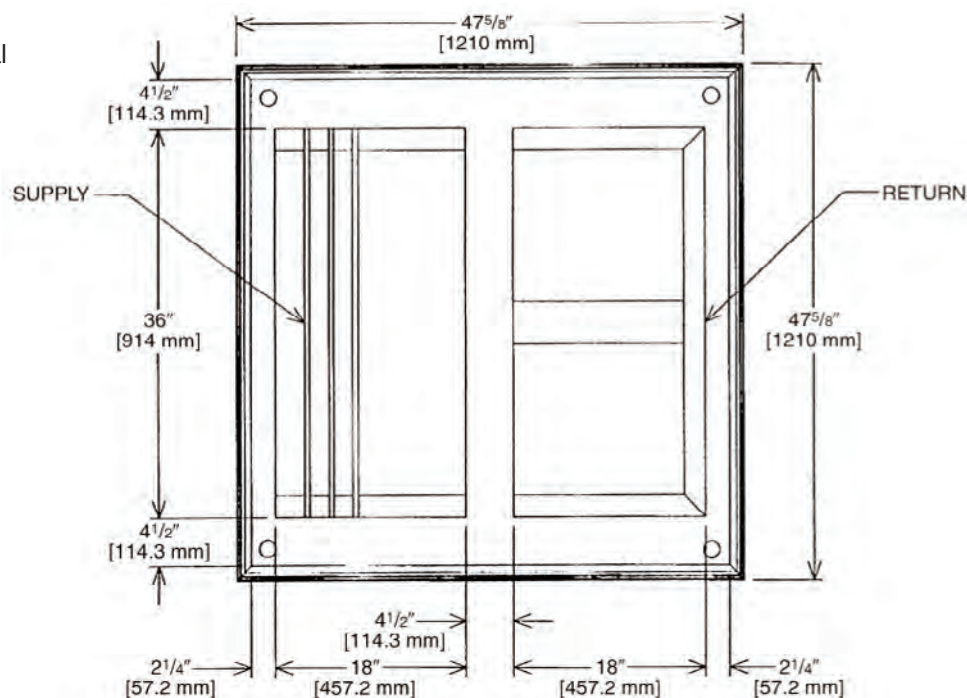


[ ] Designates Metric Conversions

## CONCENTRIC FLUSH MOUNT DIFFUSER (15 & 17.5 TON)

### RXRN-AD80

- 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



## CONCENTRIC DIFFUSER SPECIFICATIONS

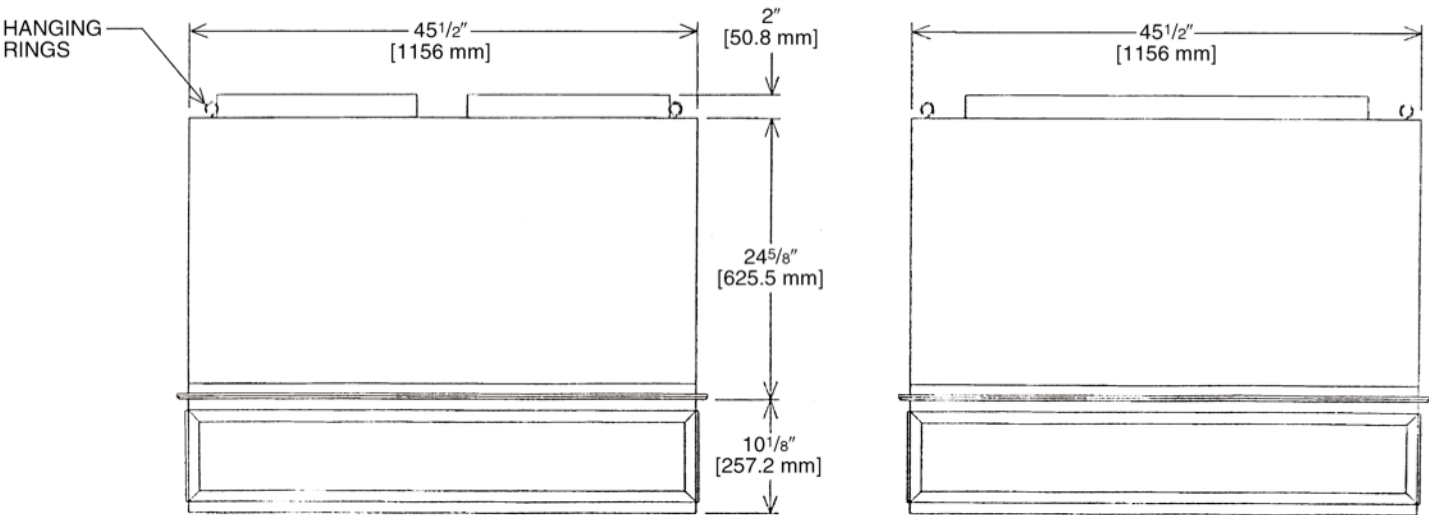
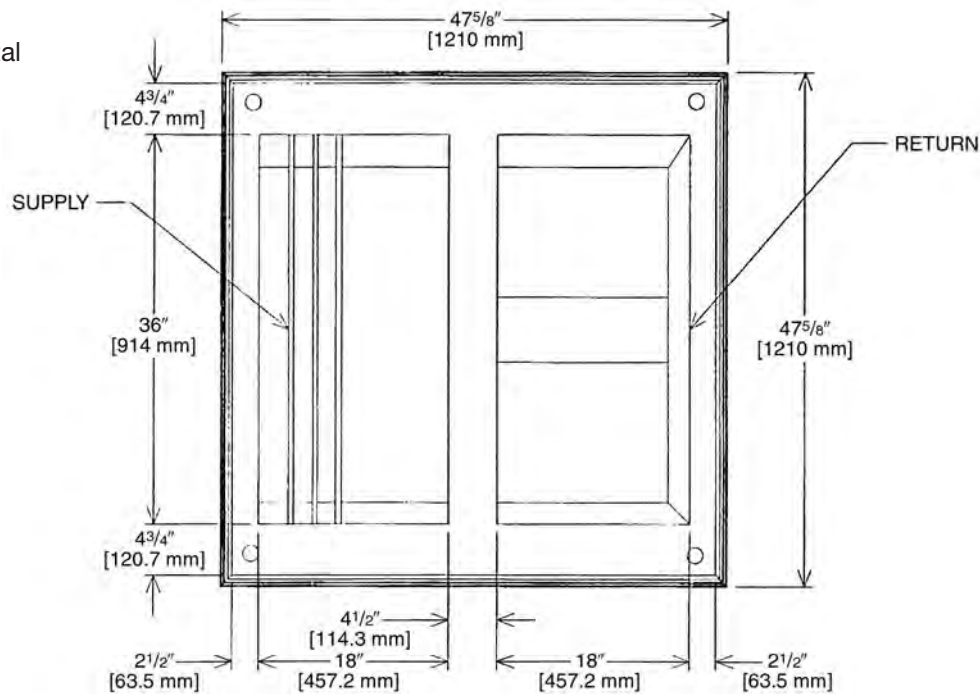
| PART NUMBER | CFM [L/s]   | STATIC PRESSURE | THROW FEET | NECK VELOCITY | JET VELOCITY |
|-------------|-------------|-----------------|------------|---------------|--------------|
| RXRN-AD80   | 5600 [2643] | 0.36            | 28-37      | 1000          | 2082         |
|             | 5800 [2737] | 0.39            | 29-38      | 1036          | 2156         |
|             | 6000 [2832] | 0.42            | 40-50      | 1071          | 2230         |
|             | 6200 [2926] | 0.46            | 42-51      | 1107          | 2308         |
|             | 6400 [3020] | 0.50            | 43-52      | 1143          | 2379         |
|             | 6600 [3115] | 0.54            | 45-56      | 1179          | 2454         |

[ ] Designates Metric Conversions

CONCENTRIC STEP DOWN DIFFUSER (15 & 17.5 TON)

RXRN-AD81

- 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



CONCENTRIC DIFFUSER SPECIFICATIONS

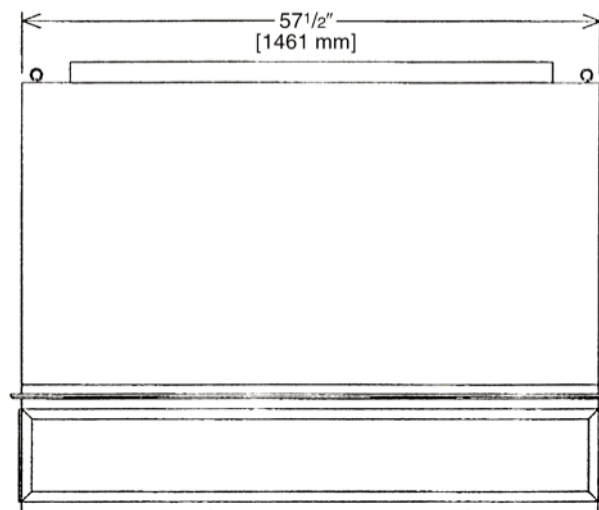
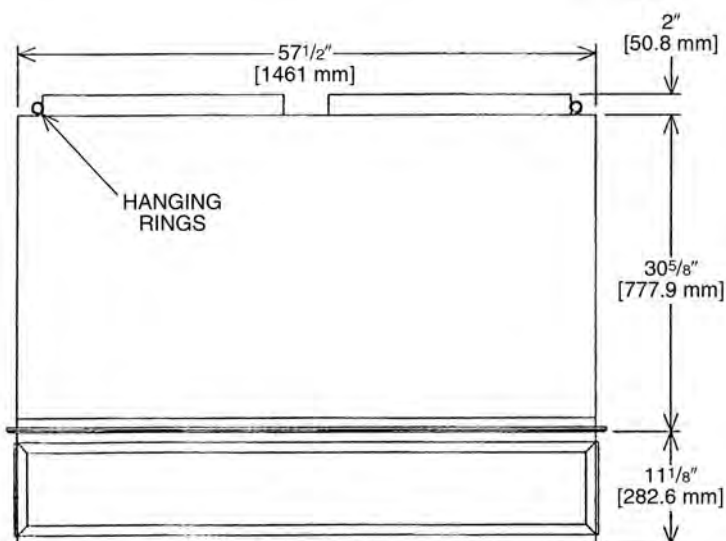
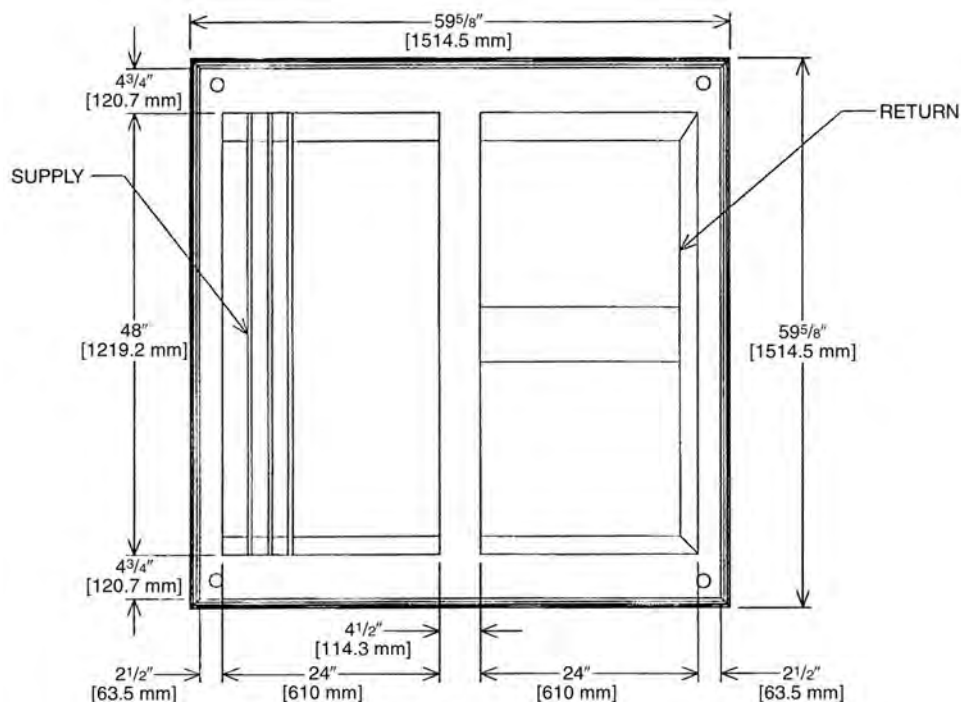
| PART NUMBER | CFM [L/s]   | STATIC PRESSURE | THROW FEET | NECK VELOCITY | JET VELOCITY |
|-------------|-------------|-----------------|------------|---------------|--------------|
| RXRN-AD81   | 5600 [2643] | 0.36            | 39-49      | 920           | 920          |
|             | 5800 [2737] | 0.39            | 42-51      | 954           | 954          |
|             | 6000 [2832] | 0.42            | 44-54      | 1022          | 1022         |
|             | 6200 [2926] | 0.46            | 45-55      | 1056          | 1056         |
|             | 6400 [3020] | 0.50            | 46-55      | 1090          | 1090         |
|             | 6600 [3115] | 0.54            | 47-56      | 1124          | 1124         |

[ ] Designates Metric Conversions

## CONCENTRIC STEP DOWN DIFFUSER (20 TON)

### RXRN-AD86

- 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



## CONCENTRIC DIFFUSER SPECIFICATIONS

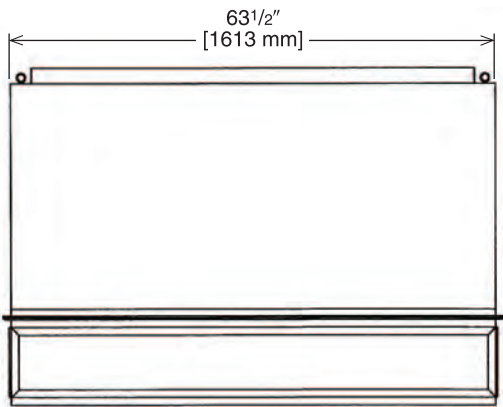
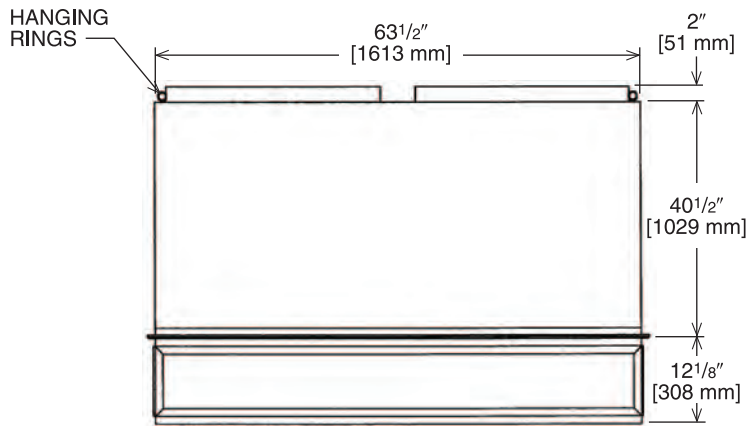
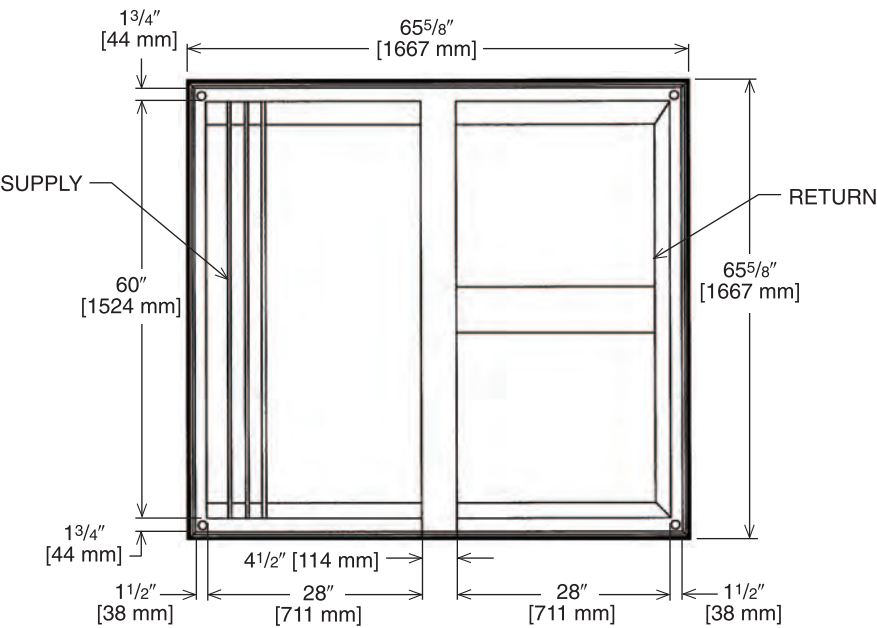
| PART NUMBER | CFM [L/s]   | STATIC PRESSURE | THROW FEET | NECK VELOCITY | JET VELOCITY |
|-------------|-------------|-----------------|------------|---------------|--------------|
| RXRN-AD86   | 7200 [3398] | 0.39            | 33-38      | 827           | 827          |
|             | 7400 [3492] | 0.41            | 35-40      | 850           | 850          |
|             | 7600 [3587] | 0.43            | 36-41      | 873           | 873          |
|             | 7800 [3681] | 0.47            | 38-43      | 896           | 896          |
|             | 8000 [3776] | 0.50            | 39-44      | 918           | 918          |
|             | 8200 [3870] | 0.53            | 41-46      | 941           | 941          |
|             | 8400 [3964] | 0.56            | 43-49      | 964           | 964          |
|             | 8600 [4059] | 0.59            | 44-50      | 987           | 987          |
|             | 8800 [4153] | 0.63            | 47-55      | 1010          | 1010         |

[ ] Designates Metric Conversions

CONCENTRIC STEP DOWN DIFFUSER (25 TON)

RXRN-AD88

- 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



CONCENTRIC DIFFUSER SPECIFICATIONS

| PART NUMBER | CFM [L/s]    | STATIC PRESSURE | THROW FEET | NECK VELOCITY | JET VELOCITY |
|-------------|--------------|-----------------|------------|---------------|--------------|
| RXRN-AD88   | 10000 [4719] | 0.51            | 46-54      | 907           | 907          |
|             | 10500 [4955] | 0.58            | 50-58      | 953           | 953          |
|             | 11000 [5191] | 0.65            | 53-61      | 998           | 998          |
|             | 11500 [5427] | 0.73            | 55-64      | 1043          | 1043         |
|             | 12000 [5663] | 0.82            | 58-67      | 1089          | 1089         |
|             | 12500 [5898] | 0.91            | 61-71      | 1134          | 1134         |
|             | 13000 [6134] | 1.00            | 64-74      | 1179          | 1179         |

[ ] Designates Metric Conversions

## DDC ECONOMIZER WITH SINGLE ENTHALPY (DOWNFLOW) RRS ECONOMIZER WITH HONEYWELL CONTROLLER

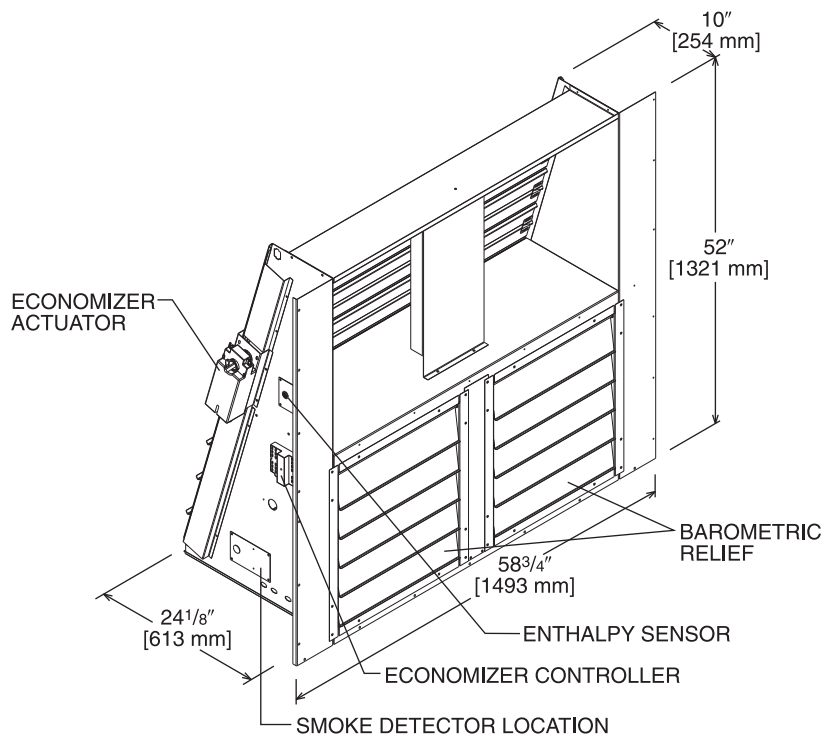
Factory or Field-Installed

AXRD-01RMDCM3

RXXRX-AV02—Dual Enthalpy, Temperature and Humidity Sensor (for Honeywell DDC)

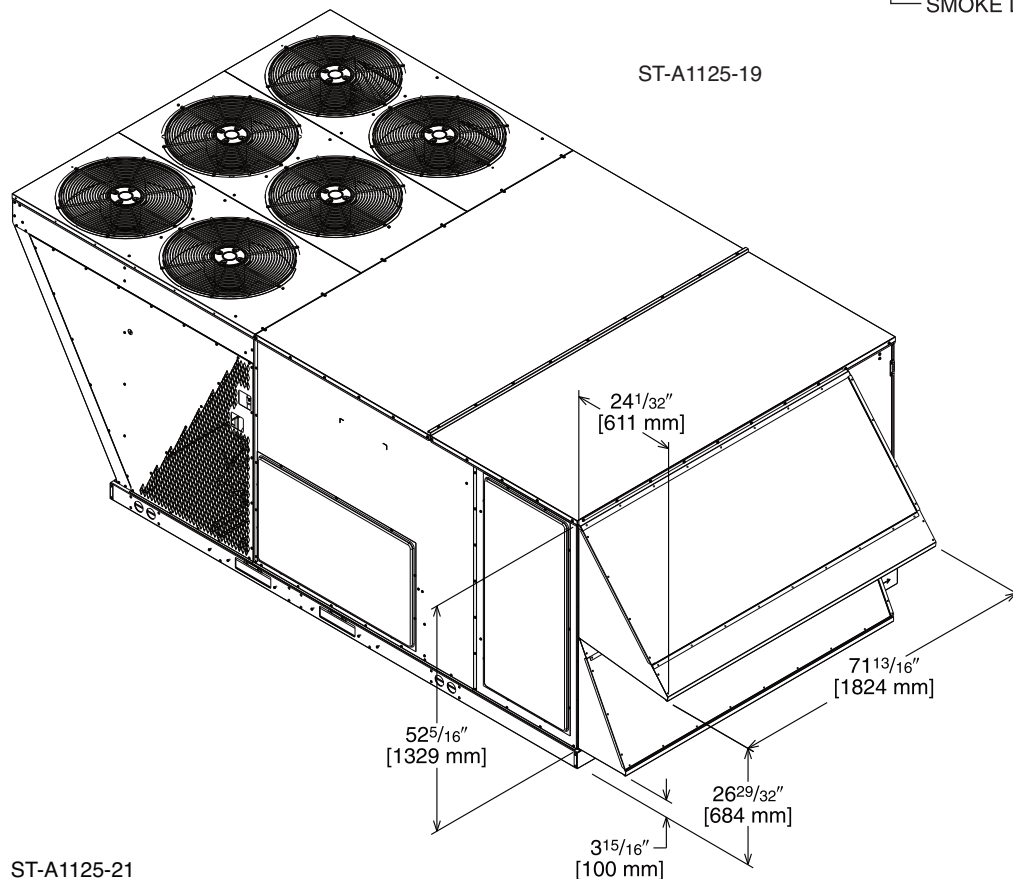
RXXRX-AR02—Sensor, Carbon Dioxide (Wall Mount)

- Features **Honeywell** Controls
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Low Leakage Dampers
- Slip-In Design for Easy Installation
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor 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



TOLERANCE ± .125

ST-A1125-19



ST-A1125-21

[ ] Designates Metric Conversions



## DDC ECONOMIZER WITH SINGLE ENTHALPY (DOWNFLOW) RRS ECONOMIZER WITH HONEYWELL CONTROLLER AND SMOKE DETECTOR

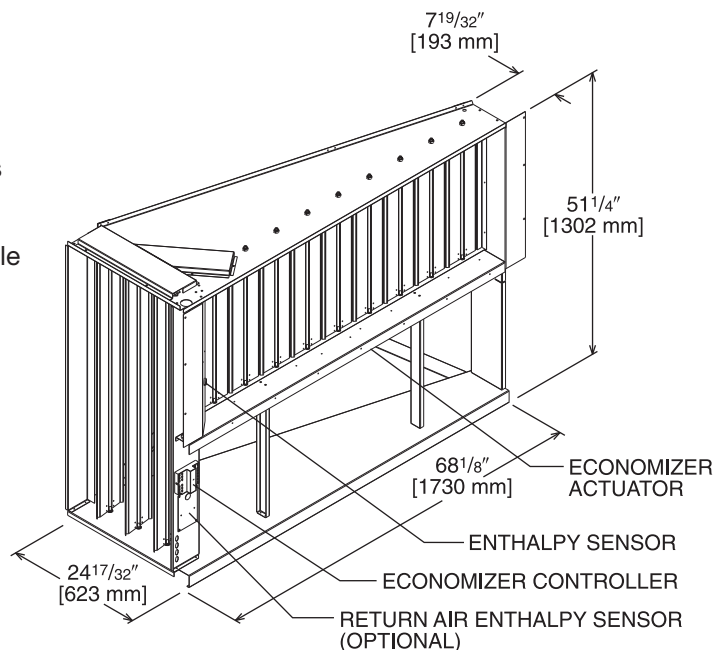
### Factory or Field-Installed

#### AXRD-01RMDDM3

RXXR-AV02—Dual Enthalpy, Temperature and Humidity Sensor (for Honeywell DDC)

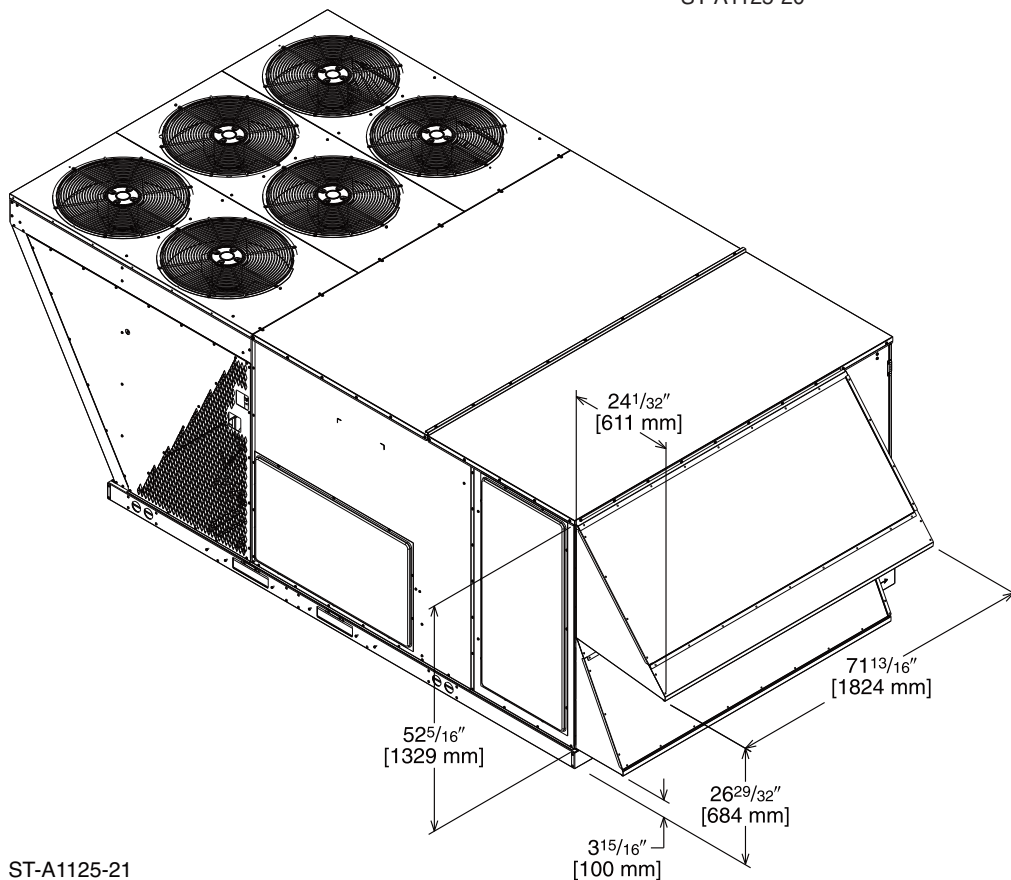
RXXR-AR02—Sensor, Carbon Dioxide (Wall Mount)

- 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
- 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 Character LCD Screen



TOLERANCE  $\pm .125$

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[ ] Designates Metric Conversions



## DDC ECONOMIZER (HORIZONTAL) RRS ECONOMIZER WITH HONEYWELL CONTROLLER

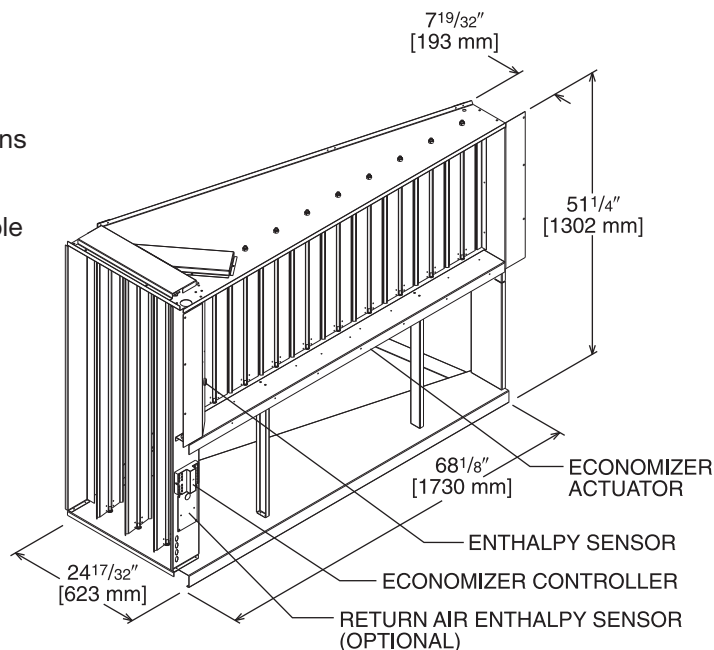
### Field-Installed Only

AXRD-01RMHCM3

RXXR-AV02—Dual Enthalpy, Temperature and Humidity Sensor (for Honeywell DDC)

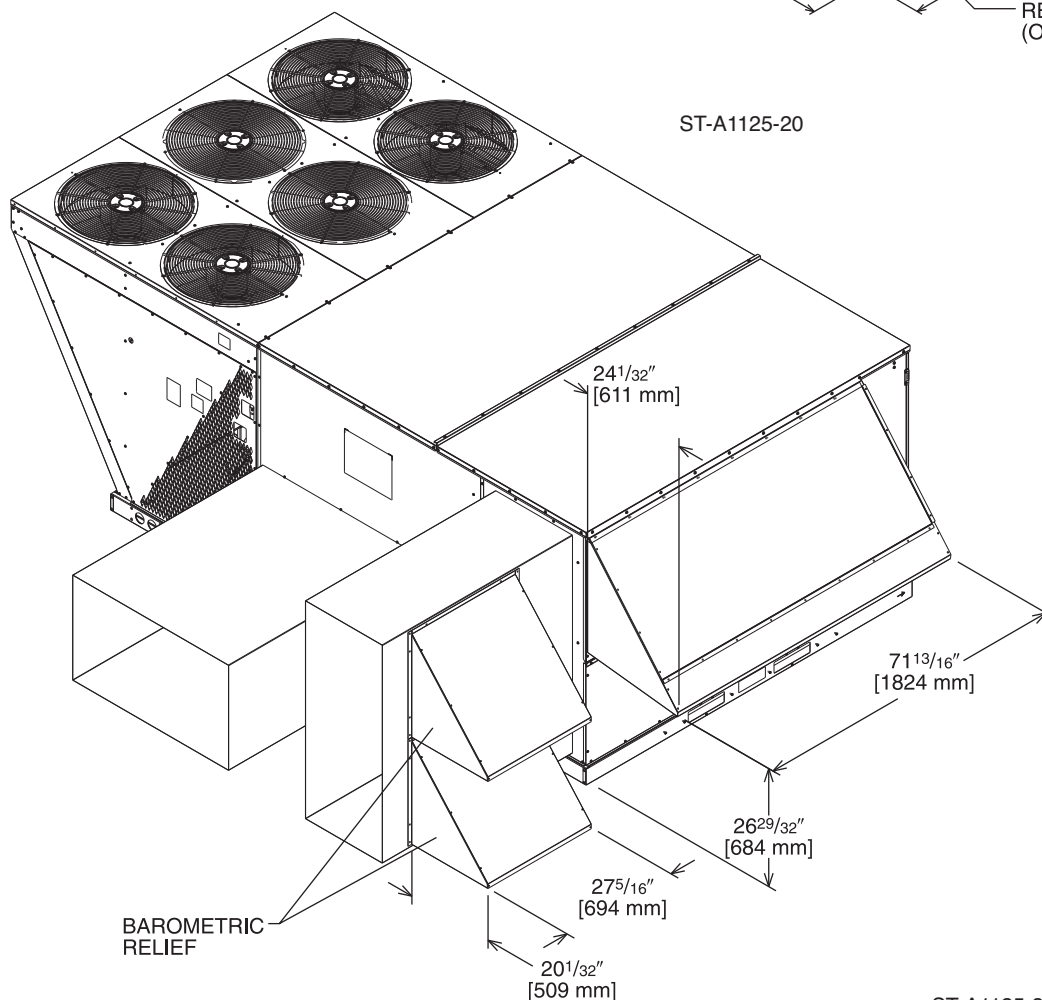
RXXR-AR02—Sensor, Carbon Dioxide (Wall Mount)

- Features **Honeywell** Controls
- Gear Driven Direct Drive Actuator
- 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
- 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



TOLERANCE  $\pm .125$

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[ ] Designates Metric Conversions

ST-A1125-31

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

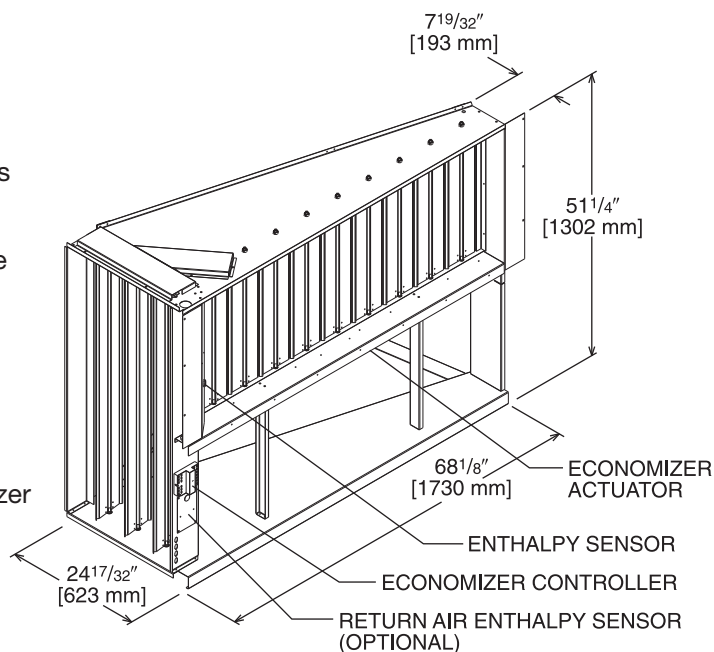
Factory or Field-Installed

**RXRD-51RHDAM3**

**PD555460-Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Non-DDC)**

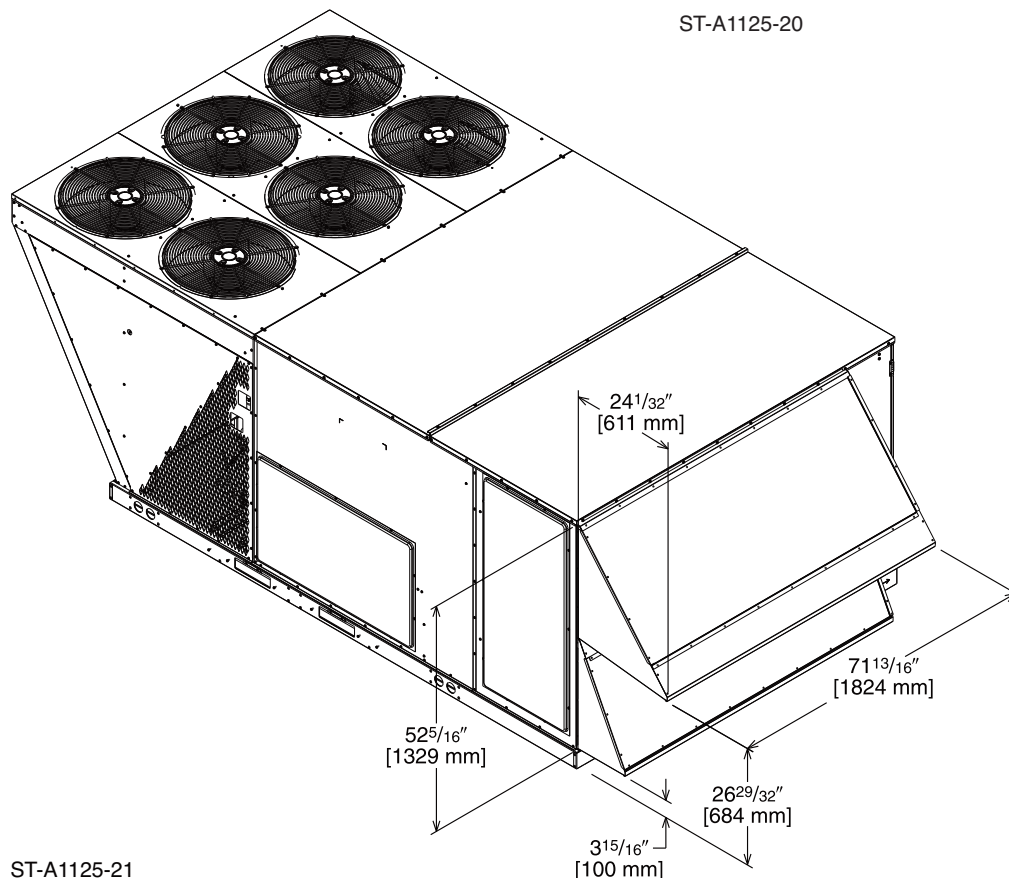
**RXR-AR02—Sensor, Carbon Dioxide (Wall Mount)**

- Features **Siemens** Controls
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Low Leakage Dampers
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin and 4-pin Electrical Connections
- Pre-Configured—No Field Adjustments Necessary
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor Available
- Economizer Ships Complete for Downflow Duct Application
- Field Assembled Hood Ships with Economizer
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2022
- Field-Installed Power Exhaust Available
- Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXR-DDC02)



TOLERANCE  $\pm .125$

ST-A1125-20



ST-A1125-21

[ ] Designates Metric Conversions

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

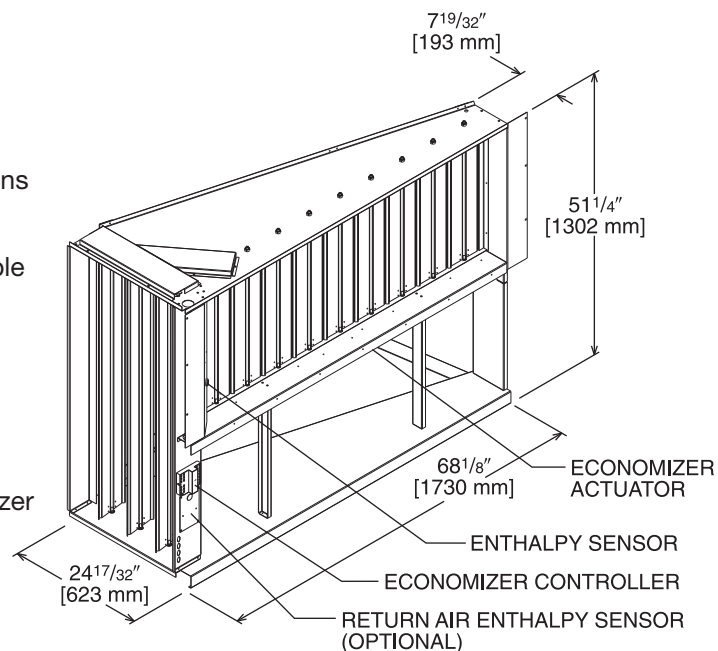
### Field-Installed Only

RXRD-51RHHAM3

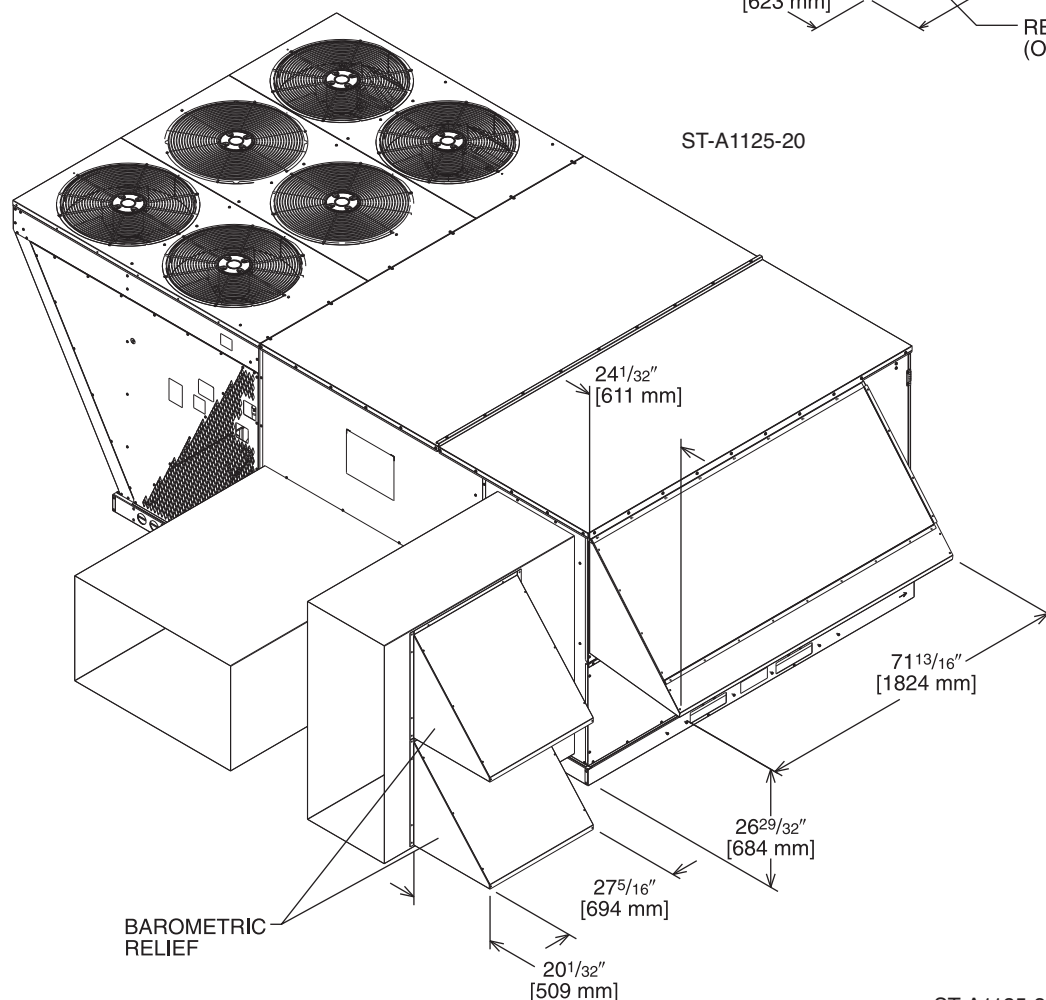
PD555460-Dual Enthalpy, Temperature and Humidity Sensor (for Siemens Non-DDC)

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

- Features **Siemens** Controls
- Available as a Field-Installed Accessory Only
- 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
- 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
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2022
- Field-Installed Power Exhaust Available
- Can be Converted to DDC Operation with the Economizer Universal DDC Interface Kit (RXRX-DDC02)



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[ ] Designates Metric Conversions

ST-A1125-31

## ECONOMIZER UNIVERSAL DDC INTERFACE KIT

### Factory or Field-Installed

#### RXXRX-DDC02

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

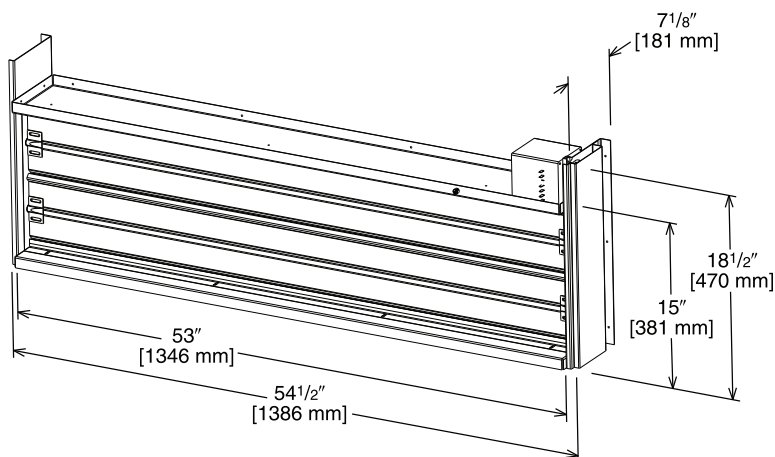
**NOTE:** Older DDC Models, prior to A2L, may require a field update to the ClearControl Software. The minimum version required is 3.15. Models with R-454B refrigerant will come with software version 4.0 or higher.

## FRESH AIR DAMPER

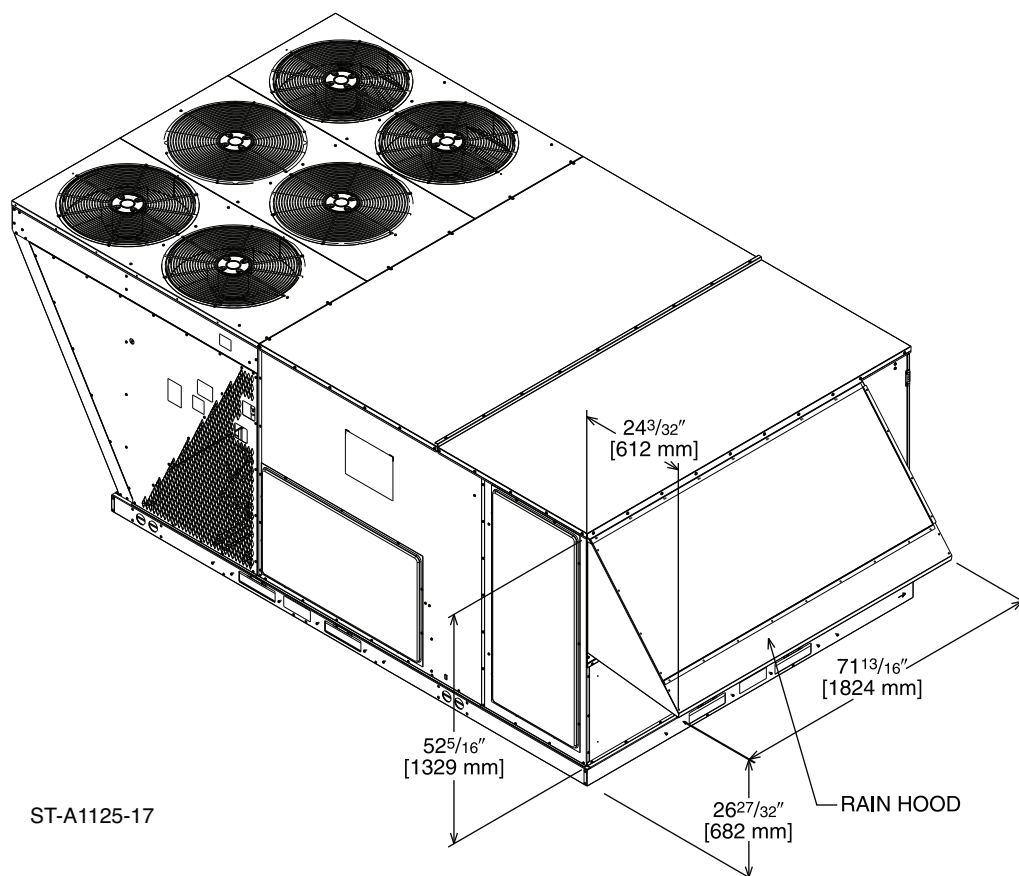
AXRF-KFA1 — Fresh Air Damper, Manual

RXXR-AW05 — Fresh Air Damper, Motorized (DDC)

- 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)
- Optional Remote Minimum Position Potentiometer (270 ohm) (Honeywell #S963B1136) is available from Prostock
- 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 16 characters x 2 rows of text LCD Screen
- If Connected to Thermostat, all Fresh Air Damper Functions can be Viewed on 16 characters x 2 rows of text LCD Screen



ST-A1125-16



ST-A1125-17

[ ] Designates Metric Conversions

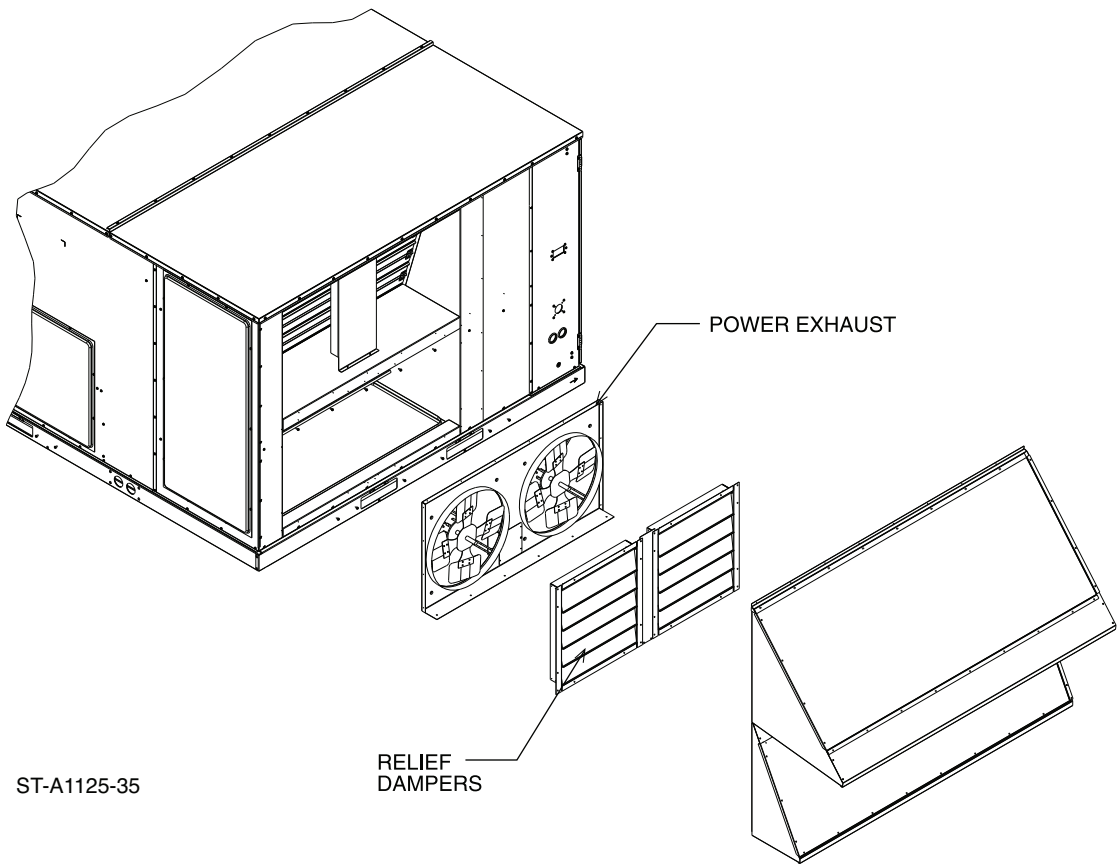
POWER EXHAUST KIT, CONVERTIBLE

RXXR-BGF05\*

\*Voltage Code: C or D

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

NOTE: Vertical Airflow Installation shown



| Model No.   | No. of Fans | Volts   | Phase | HP (ea.) | Low Speed              |     | High Speed <sup>①</sup> |      | FLA (ea.) | LRA (ea.) |
|-------------|-------------|---------|-------|----------|------------------------|-----|-------------------------|------|-----------|-----------|
|             |             |         |       |          | CFM [L/s] <sup>②</sup> | RPM | CFM [L/s] <sup>②</sup>  | RPM  |           |           |
| RXXR-BGF05C | 2           | 208-230 | 1     | 0.75     | 4100 [1935]            | 850 | 5200 [2454]             | 1050 | 5         | 4.97      |
| RXXR-BGF05D | 2           | 460     | 1     | 0.75     | 4100 [1935]            | 850 | 5200 [2454]             | 1050 | 2.2       | 3.4       |

NOTES: ① Power exhaust is factory set on high speed motor tap. [ ] Designates Metric Conversions  
② CFM is per fan at 0" w.c. external static pressure.

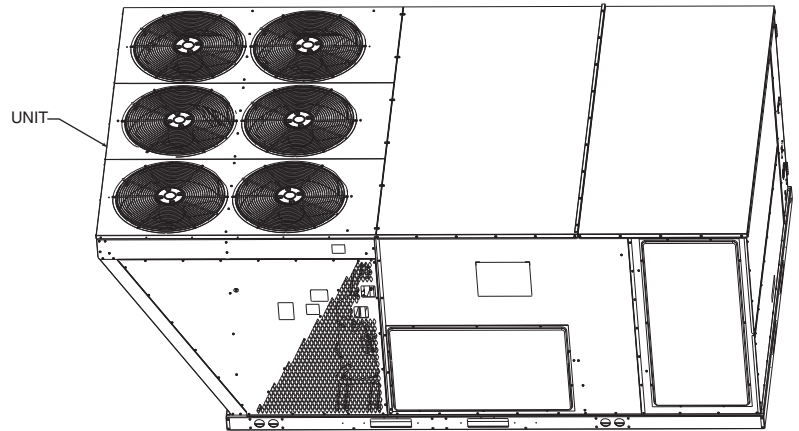


## ROOFCURBS (Full Perimeter)

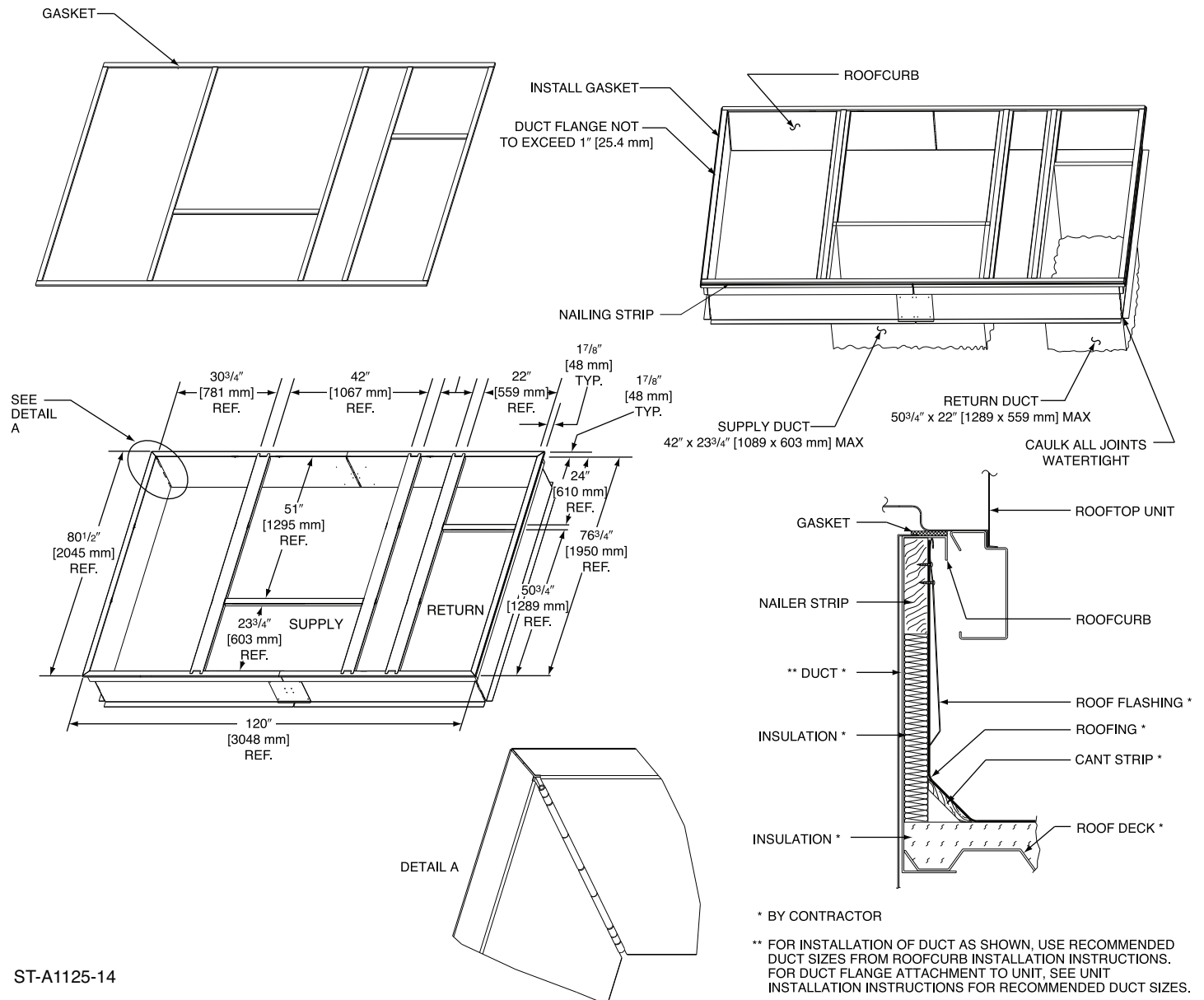
### RXKG-CBH14

- The roofcurb designs can be utilized on 15, 17.5, 20, & 25 Ton RGEH models
- One available height (14" [356 mm])
- Quick assembly corners for simple and fast assembly
- 1" [25.4 mm] x 4" [102 mm] Nailers provided
- Insulating panels not required because of insulated outdoor base pan
- Sealing gasket (28" [711 mm]) provided with Roofcurb
- Packaged for easy field assembly

### TYPICAL INSTALLATION



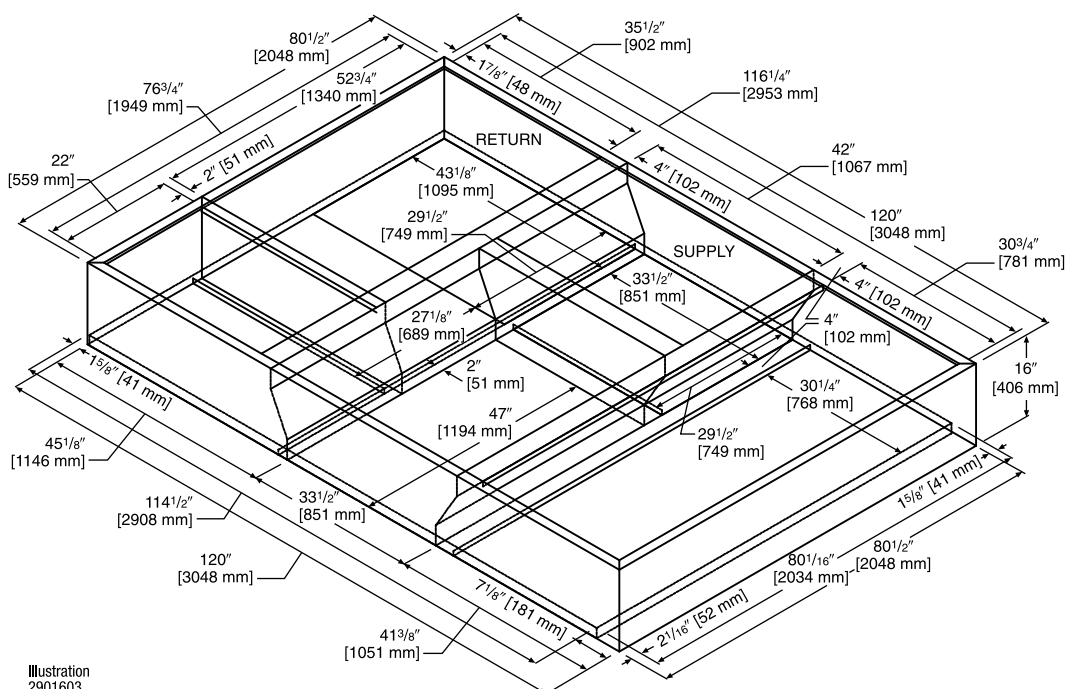
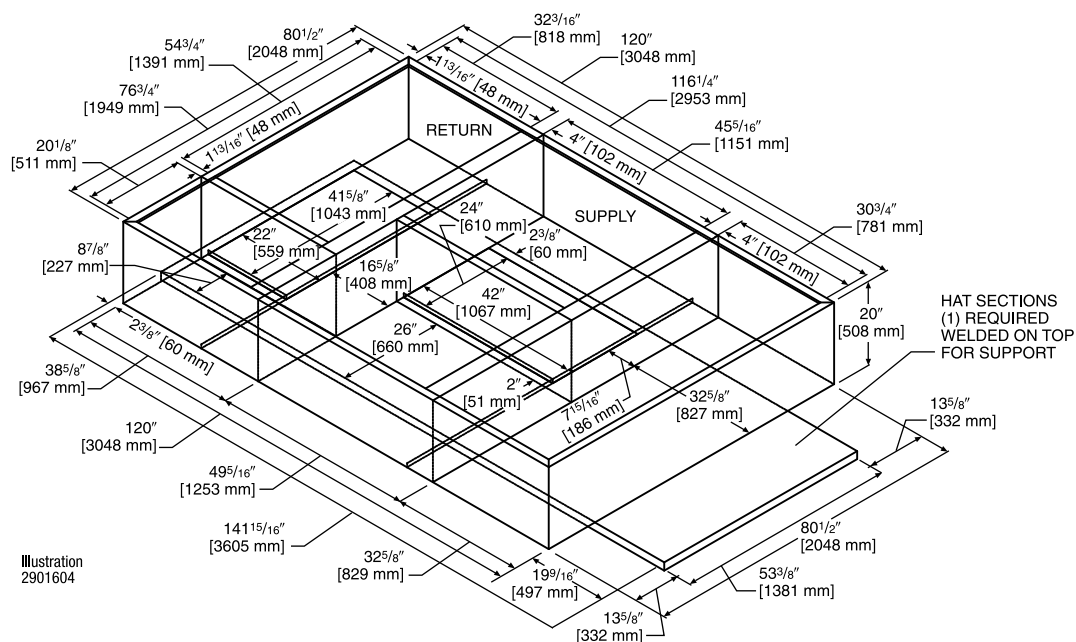
### ROOFCURB ASSEMBLY



[ ] Designates Metric Conversions

\* 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.





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## Guide Specifications RGEH – 180–300

You may copy this document directly into your building specification. This specification is written to comply with the 2004 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: 15 to 25 Nominal Tons

##### 1.00 General:

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

##### 1.01 Quality Assurance:

- A. Unit meets ASHRAE 90.1 2022 minimum efficiency requirements.
- B. Unit shall be rated in accordance with AHRI Standards 340/360.
- C. Unit shall be designed to conform to ASHRAE 15.
- D. Unit shall be UL-tested and certified in accordance with Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
- E. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- F. Unit casing shall be capable of withstanding 500-hour salt spray exposure per ASTM B117 (scribed specimen).
- G. Roof curb shall be designed to conform to NRCA Standards.
- H. Unit shall be subjected to a completely automated run test on the assembly line. The data for each unit will be stored at the factory and must be available upon request.
- I. Unit shall be designed in accordance with UL Standard 60335-2-40 4th Edition. including tested to withstand rain.
- J. Unit shall be constructed to prevent intrusion of snow and tested to prevent snow intrusion into the control box up to 40 mph.

##### 1.02 Manufacturer Qualifications

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

##### 1.03 Installer Qualifications

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

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

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

##### 1.05 Unit Cabinet:

- A. Unit cabinet shall be constructed of galvanized steel and shall be coated with a baked enamel finish on all externally exposed surfaces.
- B. Unit cabinet exterior paint shall be: pre-painted steel with film thickness, (dry) 0.003 inches minimum, gloss (per ASTM D523, 60°F): 60, Hardness: H-2H Pencil hardness.
- C. The sheet-metal cabinet shall be constructed of 18-gauge material for structural components with an underlying coat of G90.
- D. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 340/360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 3/4-in. thick, 1 lb density, flexible fiberglass insulation, foil faced on the air side.
- E. Shall utilize uniform screw sizing.
- F. Base of unit shall have a location for thru-the-base gas and electrical connections standard.

**G. Base Rail:**

- i. Unit shall have base rails on all sides.
- ii. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
- iii. Holes shall be provided in the base rail for moving the rooftop for fork truck.
- iv. Base rail shall be a minimum of 14 gauge thickness.

**H. Condensate pan and connections:**

- i. Shall be a sloped condensate drain pan made of a non-corrosive material and be removable for cleaning.
- ii. Shall comply with ASHRAE Standard 62.
- iii. Shall use a 1" – 11 1/2 NPT drain connection through either side of the drain pan. Connection shall be made per manufacturer's recommendations.
- iv. Shall be able to be easily removed.
- v. Shall be separate from the coil.

**I. Top panel**

- i. Shall be a single piece top panel over indoor section.

**J. Gas Connections:**

- i. All gas piping connecting to unit gas valve shall enter the unit cabinet at a single location on side of unit (horizontal plane).
- ii. Thru-the-base capability:
  - a. Standard unit shall have a thru-the-base gas-line location using a raised, embossed portion of the unit basepan.
  - b. No basepan penetration, other than those authorized by the manufacturer, is permitted.

**K. Electrical Connections:**

- i. All unit power wiring shall enter unit cabinet at a single, factory-prepared, knockout location.
- ii. Thru-the-base capability:
  - a. Standard unit shall have a thru-the-base electrical location(s) using a raised, embossed portion of the unit basepan.
  - b. No basepan penetration, other than those authorized by the manufacturer, is permitted.

**L. Component access panels (standard):**

- i. Cabinet panels shall be easily opened for servicing.
- ii. Stainless steel metal hinges are standard on all doors.
- iii. Panels covering control box, indoor fan, indoor fan motor, and electric or gas heater components (where applicable), shall have 1/4 turn latches.
- iv. 1/4 fasteners shall be permanently attached.

**1.06 Operating Characteristics:**

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

**1.07 Electrical Requirements**

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

**1.08 Evaporator Fan Compartment:**

- A. Interior cabinet surfaces shall be insulated with a minimum 3/4-in. thick, minimum 1 LB density, flexible fiberglass insulation bonded with foil face on the air side.
- B. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- C. Insulation shall also be mechanically fastened with welded pin and retainer washer.

**1.09 Thermostats**

- A. Thermostat must:
  - i. Energize "G" when calling for heat.
  - ii. Have capability to energize 2 different stages of cooling, and 2 different stages of heating.
  - iii. Must include capability for occupancy scheduling.

### 1.10 Electronic Control System for HVAC:

- A. Shall be complete with self-contained low-voltage control circuit protected by a fuse on the 24-V transformer side (090-150 units have a resettable circuit breaker).
- B. Shall utilize color-coded wiring.
- C. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.
- D. Unit control board shall be provided with 7 segment readout via LCD display for status and diagnostics.

#### 1.10.01 Safeties:

- A. Compressor over-temperature, over current.
- B. Standard Low-pressure switch:
  - i. Units shall have low pressure, loss of charge automatic reset device that will shut off compressor when tripped.
  - ii. Low pressure control
    - a. Provides active protection in both heating and cooling modes at all outdoor ambient temperatures. The low pressure control is an automatic reset type and opens at approximately 95 psig and closes at approximately 50 psig. Operation is slightly different between cooling and heating modes.
- C. Standard High-pressure switch:
  - i. Unit shall be equipped with high pressure switch device that will shut off compressor when tripped.
  - ii. High pressure control
    - a. The high pressure control is an automatic reset type and opens at approximately 610 psig and closes at approximately 420 psig. The compressor and fan motor will stop when the high pressure control opens and will start again if the high side pressure drops to approximately 420 psig where the automatic reset high pressure control resets. If the high pressure control opens 3 times within a particular call for heating or cooling operation, the defrost control will lock out compressor and outdoor fan operation.
- D. Automatic reset, motor thermal overload protector is standard on all models except 25 ton G-drive models.
- E. The unit must be permanently grounded.
- F. Components are not compatible between different refrigerants. Do not use R-410A service equipment or components on R-454B equipment. System or part failure could occur.

### 1.11 Standard Filter Section:

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

### 1.12 Coils:

- A. Standard Aluminum/MicroChannel Condenser Coils:
  - i. Standard evaporator and condenser coils shall be aluminum.
  - ii. Evaporator and condenser coils shall be leak tested to 150 psig, pressure tested to 400 psig, and qualified to burst test at 2,200 psi.
- B. Standard Aluminum/Copper Evaporator Coils:
  - i. Standard evaporator and condenser coils shall have aluminum lanced plate fins mechanically bonded to seamless internally grooved copper tubes with all joints brazed.
  - ii. Evaporator and Condenser coils shall be leak tested to 150 psig, pressure tested to 550 psig and qualified to UL 1995 burst test at 2,200 psig.

### 1.13 Refrigerant Components:

- A. Refrigerant circuit shall include the following control, safety, and maintenance features:
  - i. Thermal Expansion Valve (TXV) with orifice type distributor.
  - ii. Refrigerant filter drier.
  - iii. External service gauge connections to unit suction and discharge lines.
  - iv. Pressure gauge access through an access port in the front and rear panel of the unit.
  - v. External gauge ports shall be lockable.
- B. Compressors:
  - i. Unit shall use one fully hermetic, scroll compressor for each independent refrigeration circuit.
  - ii. Compressor motors shall be cooled by refrigerant gas passing through motor windings.

- iii. Compressors shall be internally protected from high discharge temperature conditions. Advanced Scroll Temperature Protection on 240-300 sizes.
- iv. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
- v. Compressor shall be factory mounted on rubber grommets.
- vi. Compressor motors shall have internal line break thermal and current overload protection.
- vii. Crankcase heaters shall not be required for normal operating range.
- viii. Compressor shall have molded electrical plug.

**1.14 Evaporator Fan and Motor:**

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

**1.15 Condenser Fans and Motors:**

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

**1.16 RTU-C Controller:**

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

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

- A. Shall be ASHRAE 62-2001 compliant.
- B. Shall accept 18-30VAC, 50-60Hz, and consumer 15VA or less power.

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

#### 1.18 Adjustable Frequency Drive:

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

#### 1.19 Gas Heat:

- A. Shall have standard two stage gas heat.
- B. Heat exchanger shall be an induced draft design. Positive pressure heat exchanger designs shall not be allowed.
- C. Shall incorporate a direct-spark ignition system and redundant main gas valve.
- D. Heat exchanger design shall allow combustion process condensate to gravity drain; maintenance to drain the gas heat exchanger shall not be required.
- E. Gas supply pressure at the inlet to the rooftop unit gas valve must match that required by the manufacturer.
- F. The heat exchanger shall be controlled by the Core Command microprocessor.
  - i. The Core Command board shall notify users of fault using two 7 segment displays.
- G. Standard Heat Exchanger Construction:
  - i. Heat exchanger shall be of the tubular-section type constructed of a minimum of 20-gauge steel coated with a nominal 1.2 mil aluminum-silicone alloy for corrosion resistance.
  - ii. Burners shall be of the in-shot type constructed of aluminum-coated steel.
  - iii. Burners shall incorporate orifice for rated heat output up to 2,000 ft. (610m) elevation with a gas heating valve of 1050. Alternate orifices may be required depending on local gas heating valves and elevations.
  - iv. Each heat exchanger tube shall contain restrictions similar to dimples for increased heating effectiveness.
- H. Optional Stainless Steel Heat Exchanger Construction:
  - i. Use energy saving, direct-spark ignition system.
  - ii. Use a redundant main gas valve.
  - iii. Burners shall be of the in-shot type constructed of aluminum-coated steel.
  - iv. All gas piping shall enter the unit cabinet at a single location on side of unit (horizontal plane).
  - v. The optional stainless steel heat exchanger shall be of the tubular-section type, constructed of a minimum of 20-gauge type 409 stainless steel.
  - vi. Type 409 stainless steel shall be used in heat exchanger tubes.
  - vii. Complete stainless steel heat exchanger allows for greater application flexibility.
    - a. Induced draft combustion motor and blower
  - i. Shall be a direct-drive, single inlet, forward-curved centrifugal type.



- ii. Shall be made from steel with a corrosion-resistant finish.
- iii. Shall be permanently lubricated sealed bearings.
- iv. Shall have inherent thermal overload protection.
- v. Shall have an automatic reset feature.

## 1.20 Special Features:

### A. Integrated Economizers:

- i. Integrated, gear-driven parallel modulating blade design type capable of simultaneous economizer and compressor operation.
- ii. Independent modules for vertical or horizontal return configurations shall be available. Vertical return modules shall be available as a factory-installed option.
- iii. Damper blades shall be galvanized steel with metal gears. Plastic or composite blades on intake or return shall not be acceptable.
- iv. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
- v. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
- vi. Shall be equipped with low-leakage dampers, not to exceed 2% leakage at 1 in. wg pressure differential.
- vii. Shall be capable of introducing up to 100% outdoor air.
- viii. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air.
- ix. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
- x. Enthalpy sensor shall be provided as standard. Outdoor air sensor set point shall be adjustable and shall range enthalpy equivalent of 63°F @ 50% RH to 73°F @ 50% RH. Additional sensor options shall be available as accessories.
- xi. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 70%, with a range of 0% to 100%.
- xii. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy. A remote potentiometer may be used to override the damper set point.
- xiii. Dampers shall be completely closed when the unit is in the unoccupied mode.
- xiv. Economizer controller shall accept a 2-10Vdc 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.
- xv. Compressor lockout sensor on the unit controller is factory set at 35°F and is adjustable from 30°F (-1°C) to 50°F (10°C) and resets the cooling lockout at 5°F (+2.7°C) above the set point.
- xvi. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
- xvii. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
- xviii. Economizer wire harness will have provision for smoke detector.
- xix. Shall provide fault detection and diagnostics (FDD) system in accordance with local code. Faults shall be communicated out on an alarm signal.

### B. Two-Position Motorized Damper:

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

### C. Manual damper

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

### D. Head Pressure Control Package

- i. Controller shall control coil head pressure by condenser-fan cycling.



- E. Liquid Propane (LP) Conversion Kit
  - i. Package 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.
- F. Condenser Coil Hail Guard Assembly:
  - i. Shall protect against damage from hail.
  - ii. Shall be louvered style.
- G. Unit-Mounted, Non-Fused Disconnect Switch:
  - i. Switch shall be factory-installed, internally mounted.
  - ii. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
  - iii. Shall be accessible from outside the unit.
  - iv. Shall provide local shutdown and lockout capability.
- H. Convenience Outlet:
  - i. Non-Powered convenience outlet.
  - ii. Outlet shall be powered from a separate 115V-120V power source.
  - iii. A transformer shall not be included.
  - iv. Outlet shall be field-installed and internally mounted with easily accessible 115V female receptacle.
  - v. Outlet shall include 15-amp GFI receptacle with independent fuse protection.
  - vi. Outlet shall be accessible from outside the unit.
- I. Fan/Filter Status Switch:
  - i. Switch shall provide status of indoor evaporator fan (ON/OFF) or filter (CLEAN/DIRTY).
  - ii. Status shall be displayed either over communication bus (when used with direct digital controls) or through the controller LCD display inside the unit control box.
- J. Flue Discharge Deflector:
  - i. Flue discharge deflector shall direct unit exhaust vertically instead of horizontally.
  - ii. Deflector shall be defined as a "natural draft" device by the National Fuel and Gas (NFG) code.
- K. Propeller Power Exhaust:
  - i. Power exhaust shall be used in conjunction with an integrated economizer.
  - ii. Independent modules for vertical or horizontal return configurations shall be available.
  - iii. Horizontal power exhaust shall be mounted in return ductwork.
  - iv. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0-100% adjustable setpoint on the economizer control.
  - v. Capable of adjustable but constant volume.
- L. Dehumidification:
  - i. Shall utilize a dual-phase hot gas reheat control sequence.
  - ii. Shall be installed with a thermostat or space temperature sensor and an indoor relative humidity sensor, which shall connect to the Rooftop Unit Controller (RTU-C).
  - iii. Shall provide neutral air to the occupied space.
  - iv. Shall have two modes: Cooling and Dehumidification.
  - v. In cooling mode, the vapor refrigerant shall remove the heat to the outdoor coil, where heat is released outdoor. This allows the refrigerant to condense and become a subcooled liquid and the process shall repeat itself.
  - vi. In dehumidification mode, the refrigerant shall absorb heat via the indoor coil from the cooling area. The heat shall be carried via a parallel path to then release heat back into the cooling area allowing for the dehumidification.
  - vii. Modulate reheat coil refrigerant temperature via outdoor fan motor controller to achieve neutral air.
  - viii. Variable Frequency Drive shall allow the unit to operate with two stages of heat.
- M. Roof Curbs (Vertical):
  - i. Full perimeter roof curb with exhaust capability providing separate air streams for energy recovery from the exhaust air without supply air contamination.
  - ii. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
  - iii. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
- N. High-Static Indoor Fan Motor(s) and Drive(s)
  - i. High-static motor(s) and drive(s) shall be factory-installed to provide additional performance range.

- O. Universal Gas Conversion Kit
  - i. Package shall contain all the necessary hardware and instructions to convert a standard natural gas unit to operate from 2000-7000 ft (610 to 2134m) elevation with natural gas or from 0-7000 ft (90-2134m) elevation with liquefied propane.
- P. Outdoor Air Enthalpy Sensor
  - i. The outdoor air enthalpy sensor shall be used to provide single enthalpy control. When used in conjunction with a return air enthalpy sensor, the unit will provide differential enthalpy control. The sensor allows the unit to determine if outside air is suitable for free cooling.
- Q. Return Air Enthalpy Sensor
  - i. The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
- R. Indoor Air Quality (CO<sub>2</sub>) Sensor:
  - i. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
  - ii. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The set point shall have adjustment capability.
- S. Smoke detectors:
  - i. Shall be a Four-Wire Controller and Detector.
  - ii. Shall be environmentally compensated with differential sensing for reliable, stable, and drift-free sensitivity.
  - iii. Shall use magnet-activated test/reset sensor switches.
  - iv. Shall have a recessed momentary switch for testing and resetting the detector.
  - v. Controller shall include:
    - a. One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel
    - b. Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment
    - c. One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station
    - d. Capable of direct connection to two individual detector modules.
    - e. Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
- T. Barometric relief:
  - i. Shall include damper, seals, hard-ware, and hoods to relieve excess building pressure.
  - ii. Damper shall gravity-close upon shutdown.
  - iii. Only available with an economizer. Barometric relief is not available as a stand-alone accessory
- U. Time Guard:
  - i. Shall prevent compressor short cycling by providing a 5-minute delay ( $\pm 2$  minutes) before restarting a compressor after shutdown for any reason.
  - ii. One device shall be required per compressor.
- V. Standard Factory-Installed Overflow Switch
  - i. Switch shall monitor the condensate level in drain pan and stops compression operation when overflow conditions occur
- W. Access Panels:
  - i. Hinges with ¼ turn fasteners shall be permanently attached.
  - ii. Hinges shall be powder coated and made from stainless steel.
    - a. Electric Heat
  - i. Heating Section:
    - a. Heater element open coil resistance wire, nickel-chrome alloy, strung through ceramic insulators mounted on metal frame. Coil ends are staked and welded to terminal screw slots.
    - b. Heater assemblies are provided with integral fusing for protection of internal heater circuits not exceeding 48 amps each. Auto reset thermostat limit controls, magnetic heater contactors (24V coil) and terminal block all mounted in electric heater control box (minimum 18 gauge galvanized steel) attached to end of heater assembly.
- X. Refrigerant Detection System:
  - i. In the event of a detected refrigerant leak, the refrigerant leak detection sensor(s) will trigger the mitigation procedure that shuts off the compressor(s) and turns on the indoor blower motor.
  - ii. In the event of a detected refrigerant leak, the system will display a fault code on the unitary controller. For DDC systems, "A2L Event" will appear on the LCD module.



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## GENERAL TERMS OF LIMITED WARRANTY\*

Friedrich® 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.

### **Compressor**

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

### **Parts**

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

### **Factory Standard Heat Exchanger**

Commercial Applications .....Ten (10) Years

### **Stainless Steel Heat Exchanger**

Commercial Applications.....Twenty (20) Years

\*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.

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

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