

# MODEL: RGEC Package Gas Electric Units

FORM NO. RSC-873

Sure Comfort<sup>®</sup> RGEC Package Gas Electric Units



### RGECZR

- Nominal Sizes 3, 4 & 5 Tons
- ASHRAE 90.1-2007 Compliant Models



# **Table of Contents**

Unit Features & Benefits	3-9
Model Number Identification	10
Options	11
General Data	
ZR series	12-15
Weighted Sound Power	
Heating Performance Data	17
Gross Systems Performance Data	
ZR series	
Airflow Performance Data	21-28
Electrical Data	
ZR series	
Dimensional Data	
Field Installed Accessories	
Guide Specifications	
Limited Warranty	61



# **RGEC STANDARD FEATURES INCLUDE:**

- Factory charged with R-410A HFC refrigerant
- Wired and run tested
- Scroll compressors with internal line break overload and high
   pressure protection
- Model RGECZR has a single-stage compressor
- Convertible airflow vertical down flow or horizontal side flow
- Forkable base rails for easy handling and lifting
- Cooling operation up to 125°F ambient
- Two-stage gas heat input with direct spark ignition system, solid state furnace controls, and optimized induced draft combustion
- MicroChannel evaporator and condenser coil
- ServiceSmart package includes: Qwik-Change Flex-Fit Rack™ Qwik-Slide Blower Assembly™ Qwik-Clean Drain Pan™

- Over-flow condensate sensor
- Diagnostics with Dual 7-Segment LED Display to meet code compliance
- One-piece top cover and base pan with drawn supply and return opening
- Two-piece control door
- 1/4 turn fasteners on filter access door
- · Color-coded and labeled wiring
- External lockable gauge ports
- TXV refrigerant metering system
- Solid-core liquid line filter drier
- High pressure and low pressure/loss of charge protection with built-in Smart Logic
- · Insulation encapsulated throughout entire unit
- New product footprint with matching connections
- Improved factory lead times

# FACTORY INSTALLED OPTIONS:

- Louvered panels
- Hinged access doors (Available Q4 2019)
- Stainless steel heat exchanger (20 year warranty)
- Low ambient/freeze stat
- Powered convenience outlet
- Non-powered convenience outlet
- Unfused disconnect
- Circuit breaker

# FIELD INSTALLED ACCESSORIES:

Accessory	Model Number	Factory Installation Available?
Economizer w/Single Enthalpy (Downflow/Vertical)	RXRD-01MCDAM3	Yes
Economizer w/Single Enthalpy (Horizontal)	RXRD-01MCHAM3	No
Economizer-w/Single Enthalpy (Downflow/Vertical) DDC	RXRD-01MCDBM3	Yes
Economizer w/Single Enthalpy (Horizontal) DDC	RXRD-01MCHBM3	No
Dual Enthalpy Kit	RXRX-BV01	No
Dual Enthalpy Kit DDC	RXRX-BV02	No
Power Exhaust (230V) Vertical	RXRX-CCF02C	No
Power Exhaust (460V) Vertical	RXRX-CCF02D	No
Power Exhaust (230V) Horizontal	RXRX-CCF03C	No
Power Exhaust (460V) Horizontal	RXRX-CCF03D	No
Manual Fresh Air Damper	RXRF-ACA1	No
Motorized Fresh Air Damper	RXRF-ACB1	No
Roofcurb, 14"	RXKG-DCC14	No
Roofcurb, 24"	RXKG-DCC24	No
Roofcurb Adapter	RXRX-DCCAE	No
Concentric Diffuser 3-4 Ton Flush	RXRN-AEF1800	No
Concentric Diffuser 5-6 Ton Flush	RXRN-AEF2000	No
Concentric Diffuser 3-4 Ton Drop	RXRN-AED1800	No

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

Accessory	Model Number	Factory Installation Available?
Concentric Diffuser 5-6 Ton Drop	RXRN-AED2000	No
Concentric Adapter 3-4 Ton Drop	RXMC-DC01	No
Concentric Adapter 5-6 Ton Drop	RXMC-DC02	No
Outdoor Coil Louver Kit	RXRX-ADD04C	Yes
Nonpowered Convenience Outlet	RXRX-BN01	Yes
Unfused Service Disconnect	RXRX-BP01	Yes
Comfort Alert (1 Phase) DDC	RXRX-AZ03	Yes
Comfort Alert (1 Phase) Non-DDC	RXRX-AZ04	Yes
Comfort Alert (3 Phase) DDC	RXRX-AZ01	Yes
Comfort Alert (3 Phase) Non-DDC	RXRX-AZ02	Yes
Carbon Dioxide Sensor (Wall Mount)	RXRX-AR02	No
BACnet Communication Card	RXRX-AY01	No
LonWorks Communication Card	RXRX-AY02	No
Room Humidity Sensor	RHC-ZNS4	No
Room Temperature and Relative Humidity	RHC-ZNS5	No
Low-Ambient Control Kit	RXRZ-A04	Yes
Freeze Stat Kit	RXRX-AM05	Yes
Return Smoke Detector (Field kit)	RXRX-BS01	No
Return/ Supply Smoke Detector (Field kit)	RXRX-BS02	No



### **Cabinet and Foundation**

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

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

### **Easy Installation**

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

### **Base Pan**

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



### **Drain Pan**

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



### **Test Standards**

During development, each unit was tested to U.L. 60335-2-40, AHRI 210-240, ANSI Z21.47 as well as other required reliability tests. Sure Comfort adheres to stringent ISO 9001 quality procedures, and each unit bears the U.L. and AHRI certification labels located on the unit nameplate. Contractors can be assured that when a Sure Comfort package unit arrives at the job, it is ready to go with a factory charge and quality checks. Each unit also proudly displays the "Made in the USA" designation.

### **Easy Access**

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

### Charging Charts, Wiring Diagrams, & Labels

The unit charging chart is located on the outside of the compressor access panel. Electrical wiring diagrams are found on the control box cover, which allows contractors to move them to more readable locations. The model and serial numbers are located on the right of the control box. Having this information on the inside means easier



9

model identification for the life of the product. The production line guality test assurance label is also placed in this location (8).

### **Filter Rack**

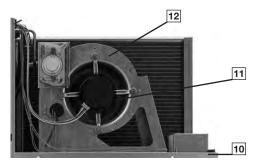
Located within the filter compartment, the Qwik-Change Flex-Fit Rack<sup>™</sup> (9) allows easy changeover between 2" and 4" standard size and readily available filters.

### **Blower Assembly**

Removing three screws provides full access to the blower compartment. Inside, the Qwik-Slide Blower Assembly<sup>™</sup> (10) is incredibly easy to access and remove. This makes servicing internal components such

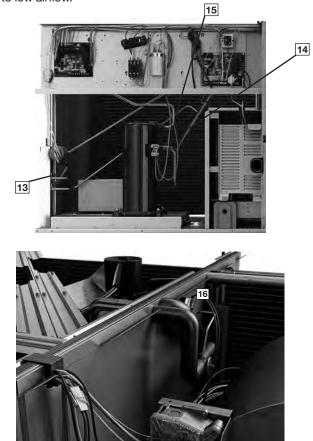
as blower motor, TXV, and microchannel coil much easier. The entire assembly slides out by removing the 3/8" screws from the blower retention bracket.

Where the demands for the job require high static, Sure Comfort offers drives that deliver nominal airflow up to 1.5" of static. By referring to the airflow performance tables listed in the installation instructions, proper static pressure and CFM requirements can be dialed in. The scroll housing (12) and blower scroll provide quiet and efficient airflow.



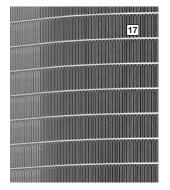
### **High and Low Pressure Switches & Freeze Stat**

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



### MicroChannel Evaporator & TXV

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



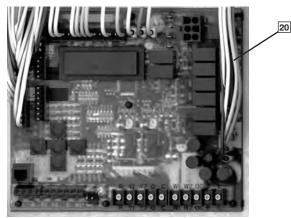
### **Control Box**

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



### **Direct Digital Control**

The optional Direct Digital Control system consisting of a rooftop unit controller, temperature sensors, and pressure sensors, allows real-time monitoring and communication between rooftop units. The Rooftop Unit Controller (RTU-C) that is factory mounted and wired into the control panel. The RTU-C is a solid-state, microprocessor-based control board that provides flexible control and extensive diagnostics for all unit functions. The RTU-C, using proportional/integral control algorithms, performs specific unit functions that govern unit operation in response to zone conditions, system temperatures, system pressures, ambient conditions, and electrical inputs. The RTU-C features a 16 x 2 character LCD display and a five-button keypad for local configuration and direct diagnosis of the system (20). Features include a clogged filter switch (CFS), fan proving switch (FPS), return air temperature sensor (RAT), discharge air temperature sensor (DAT), and outdoor air temperature sensor (OAT). Freeze sensors (FS) are used in place of freeze stats to allow measurement of refrigerant suction line temperatures.

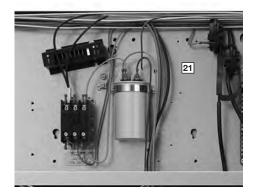


The RGEC Gas Electric with the RTU-C is specifically designed to be applied in four distinct applications:

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

### **ComfortAlert**®

A factory or field installed Comfort Alert<sup>®</sup> ([21]) module is available for power phase-monitoring protection and additional compressor diagnostics. The alarms can be displayed on the RTU-C display, through the (BAS) network, or connected to the "L-Terminal" of a thermostat for notification.



### **Convenience Outlet, Disconnect, & Circuit Breaker**

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





### **External Lockable Gauge Ports**

To the right left of the compressor compartment are the externally mounted lockable gauge ports. They are permanently identified

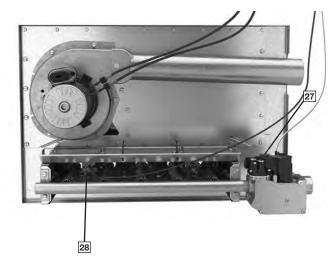
by embossed lettering that identifies the compressor circuit, high pressure connection, (25) and low pressure connection (26). Because the gauge ports are mounted externally, an accurate diagnostic of system operation can be performed without removing access panels. Brass caps on the Schrader fitting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



### Furnace & Gas Heat Exchanger

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

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



### Compressor

The compressor compartment houses the heartbeat of the unit. The scroll compressor (30) is known for its long life and for reliable, quiet, and efficient operation. The suction and discharge lines are designed with shock loops (31) to absorb the strain and stress that the starting torque, steady state operation, and shut-down cycle impose on the refrigerant tubing.



### **Condenser Fans**

The condenser fan motor (32) can easily

be accessed and maintained through the top of the unit. A downmount fan provides corrosion protection and easy removal. The polarized plug connection allows the motor to be changed quickly and eliminates the need to snake wires through the unit.

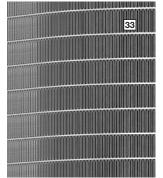


### **MicroChannel Condenser Technology**

The outdoor coil uses the latest microchannel technology (33) for the most effective method of heat transfer. The outdoor coil is protected by optional louvered panels, which allow unobstructed airflow while protecting the unit from both the environment and vandalism.

### **Coil Coating**

Every unit offers the option of factory-applied ElectroFin® E-Coat condenser coating (34) that delivers superior corrosion resistance for outdoor coils to operate in the harshest of environments.





### **Economizer and Dampers**

Each unit is designed for both down flow or horizontal applications (35) for iob configuration flexibility. The return air compartment can also contain an economizer. Each unit is pre-wired for the economizer to allow quick, plug-in installation. Available as a factory-installed option, the

economizer provides free cooling when outdoor conditions are suitable and also provides fresh air to meet local requirements. It comes standard with single enthalpy controls, which can be upgraded to dual enthalpy



drive actuator combined with gear drive dampers has eliminated the need for linkage adjustment in the field. The economizer control has a minimum position set point, an outdoor-air set point, a mixed-air set point, and a CO2 set point. Barometric relief is standard on all economizers.

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

The damper minimum position, actual damper position, power exhaust on/off set point, mixed air temperature limit set point, and Demand Controlled Ventilation (DCV) set point can be read and adjusted at the unit controller display or remotely through a network connection. The Space 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 tool-less assembly at the jobsite by engaging tabs in slots of adjacent curb sides, which makes the assembly process quick and easy.



### $\frac{10}{13}$ $\frac{2}{15}$ \*\*\* C R GE C ZR 036 Α Т Α Α 12 11 16 10 17 1 23 Δ 56 789 18 19 20

### 1-Brand

R = Sure Comfort

### 2, 3—Unit Type

GE = Package Gas Electric

### 4-Cabinet Type

C = Small Commercial

### 5, 6-Series

ZR = Tier 3 (Commercial Classic<sup>®</sup> Series)

### 7, 8, 9-Capacity

036 = 3 Ton 048 = 4 Ton 060 = 5 Ton

### 10-Major series

А

### 11-Voltage

- J = 1 phase 208-230/60
- C = 3 phase 208-230/60
- D = 3 phase 460/60
- Y = 3 phase 575/60

### 12–Drive

T = Direct Drive Standard Static Constant TorqueU = Direct Drive High Static Constant Torque

### 13, 14—Heat Capacity

- 07 = 75k
- 10 = 100k
- 12 = 125k

### 15—Heat Configuration

- 2 = 2 stage
- B = 2 stage Stainless

### 16-Control

A = Non communicating

- B = Comfort Alert/Phase Monitor
- C = Clear Control
- D = Clear Control & Comfort Alert

### 17-Minor series

А

**18, 19, 20—Option Code** See next page

# FACTORY INSTALLED OPTION CODES FOR RGEC (3 TO 5 TON)

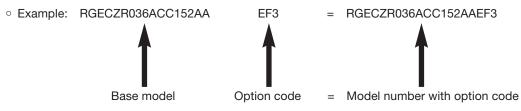
		18					19				2	20	
LV =	Louver p	rotection	ı		LF = l	_ow Amb	ient / Fre	eze Stat		EC = Ec	onomizer		
										SS = Su	pply and R	eturn Smok	e Detector
HA =	Hinged A	Access (C	24, 2019)		NP = 1	Von-pow	ered Con	venience	Outlet	RS = Re	turn Smoke	e Detector	
CC <sup>2</sup> =	Coil Coa	ting			DC = [	Disconne	ct Switch	1					
Optior	n code ch	aracter h	ighlighteo	d below	Option	code ch	aracter hi	ighlighteo	d below	Option c	ode charac	ter highligh	ted below
Α		No	one		Α		Nc	one		0		None	
В	LV				В	LF				1	EC		
С	HA				С	NP				2	RS		
D	LV	HA			D	LF	NP			3	EC	RS	
E	LV	CC			E	DC				4	SS	RS	
F	LV	HA	СС		F	LF	DC			5	EC	SS	RS
G	RH				G		Futur	e Use					
н	LV	RH			н	NP	NP DC						
J	RH	HA			J	Future Use							
к	LV	RH	CC		К	LF	NP	DC					
L	LV	RH	HA		L	СВ	СВ						
М	LV	RH	HA	СС	М	LF	СВ						
					N	PC	СВ						
					Р	NP	СВ						
					Q	LF	PC	СВ					
					R	LF	NP	СВ					

<sup>1</sup>Reheat (HumidiDry<sup>™</sup>) option only available on units with F, G or H drives (VFD) and "C" or "D" control <sup>2</sup>CC-requires LV (louver protection)

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

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

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



# NOM. SIZES 3-6 TONS [10.6-21.1 kW] ASHRAE 90.1-2007 COMPLIANT MODELS

Model RGECZR Series	036ACT 036ADT 036AJT	036ACU 036ADU	036AYT	036AYU
Cooling Performance <sup>1</sup>				CONTINUED
Gross Cooling Capacity Btu [kW]	36,000 [10.55]	36,000 [10.55]	36,000 [10.55]	36,000 [10.55]
EER/SEER <sup>2</sup>	11.2/14	11.2/14	11.2/14	11.2/14
Nominal CFM/AHRI Rated CFM [L/s]	1200/1300 [566/613]	1200/1300 [566/613]	1200/1300 [566/613]	1200/1300 [566/613]
AHRI Net Cooling Capacity Btu [kW]	35,400 [10.37]	35,400 [10.37]	35,400 [10.37]	35,400 [10.37]
Net Sensible Capacity Btu [kW]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]	27,000 [7.91]
Net Latent Capacity Btu [kW]	8,400 [2.46]	8,400 [2.46]	8,400 [2.46]	8,400 [2.46]
Net System Power kW	3.16	3.16	3.16	3.16
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Dutdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	0.71 [18]	0.71 [18]	0.71 [18]	0.71 [18]
Face Area sq. ft. [sq. m]	16.48 [1.53]	16.48 [1.53]	16.48 [1.53]	16.48 [1.53]
Rows / FPI [FPcm]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]
ndoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	7.52 [0.7]	7.52 [0.7]	7.52 [0.7]	7.52 [0.7]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Outdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	4600 [2171]	4600 [2171]	4600 [2171]	4600 [2171]
No. Motors/HP	1 at 1/5 HP	1 at 1/5 HP	1 at 1/5 HP	1 at 1/5 HP
Motor RPM	820	820	820	820
ndoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11x11 [279x279]	1/11x11 [279x279]	1/11x11 [279x279]	1/11x11 [279x279]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	3/4	3/4	1	1
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406
Refrigerant Charge Oz. [g]	68 [1928]	68 [1928]	68 [1928]	68 [1928]
Weights				
Net Weight Ibs. [kg]	557 [253]	557 [253]	607 [275]	607 [275]
Ship Weight Ibs. [kg]	595 [270]	595 [270]	645 [293]	645 [293]

See Page 15 for Notes.

# NOM. 3-6 TONS [10.6-21.1 kW] ASHRAE 90.1-2007\* COMPLIANT MODELS

Model RGECZR Series	048ACT 048ADT 048AJT	048ACU 048ADU	048AYT	048AYU
Cooling Performance <sup>1</sup>				CONTINUED
Gross Cooling Capacity Btu [kW]	49,000 [14.36]	49,000 [14.36]	49,000 [14.36]	49,000 [14.36]
EER/SEER <sup>2</sup>	11.2/14	11.2/14	11.2/14	11.2/14
Nominal CFM/AHRI Rated CFM [L/s]	1600/1730 [755/816]	1600/1730 [755/816]	1600/1730 [755/816]	1600/1730 [755/816]
AHRI Net Cooling Capacity Btu [kW]	47,500 [13.92]	47,500 [13.92]	47,500 [13.92]	47,500 [13.92]
Net Sensible Capacity Btu [kW]	35,100 [10.28]	35,100 [10.28]	35,100 [10.28]	35,100 [10.28]
Net Latent Capacity Btu [kW]	12,400 [3.63]	12,400 [3.63]	12,400 [3.63]	12,400 [3.63]
Net System Power kW	4.24	4.24	4.24	4.24
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	0.71 [18]	0.71 [18]	0.71 [18]	0.71 [18]
Face Area sq. ft. [sq. m]	16.52 [1.53]	16.52 [1.53]	16.48 [1.53]	16.48 [1.53]
Rows / FPI [FPcm]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]
Indoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	7.52 [0.7]	7.52 [0.7]	7.52 [0.7]	7.52 [0.7]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Dutdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	5900 [2784]	5900 [2784]	5900 [2784]	5900 [2784]
No. Motors/HP	1 at 1/2 HP	1 at 1/2 HP	1 at 1/2 HP	1 at 1/2 HP
Motor RPM	1075	1075	1075	1075
Indoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11x11 [279x279]	1/11x11 [279x279]	1/11x11 [279x279]	1/11x11 [279x279]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	3/4	3/4	1 1/2	1 1/2
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406
Refrigerant Charge Oz. [g]	90 [2552]	90 [2552]	90 [2552]	90 [2552]
Weights				
Net Weight Ibs. [kg]	580 [263]	580 [263]	630 [286]	630 [286]
Ship Weight Ibs. [kg]	618 [280]	618 [280]	668 [303]	668 [303]

See Page 15 for Notes.

# NOM. SIZES 3-6 TONS [10.6-21.1 kW] ASHRAE 90.1-2013 COMPLIANT MODELS

Model RGECZR Series	060ACT 060ADT 060AJT	060ACU 060ADU	060AYT	060AYU
Cooling Performance <sup>1</sup>				
Gross Cooling Capacity Btu [kW]	59,500 [17.43]	59,500 [17.43]	59,500 [17.43]	59,500 [17.43]
EER/SEER <sup>2</sup>	11.2/14	11.2/14	11.2/14	11.2/14
Nominal CFM/AHRI Rated CFM [L/s]	2000/1950 [944/920]	2000/1950 [944/920]	2000/1950 [944/920]	2000/1950 [944/920]
AHRI Net Cooling Capacity Btu [kW]	57,500 [16.85]	57,500 [16.85]	57,500 [16.85]	57,500 [16.85]
Net Sensible Capacity Btu [kW]	41,000 [12.01]	41,000 [12.01]	41,000 [12.01]	41,000 [12.01]
Net Latent Capacity Btu [kW]	16,500 [4.83]	16,500 [4.83]	16,500 [4.83]	16,500 [4.83]
Net System Power kW	5.13	5.13	5.13	5.13
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	0.71 [18]	0.71 [18]	0.71 [18]	0.71 [18]
Face Area sq. ft. [sq. m]	16.52 [1.53]	16.52 [1.53]	16.52 [1.53]	16.52 [1.53]
Rows / FPI [FPcm]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]	1 / 23 [9]
ndoor Coil - Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	MicroChannel	MicroChannel	MicroChannel	MicroChannel
MicroChannel Depth in. [mm]	1 [25.4]	1 [25.4]	1 [25.4]	1 [25.4]
Face Area sq. ft. [sq. m]	7.52 [0.7]	7.52 [0.7]	7.52 [0.7]	7.52 [0.7]
Rows / FPI [FPcm]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]	1 / 20 [8]
Refrigerant Control	TX Valves	TX Valves	TX Valves	TX Valves
Drain Connection No./Size in. [mm]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]	1/0.75 [19.05]
Dutdoor Fan - Type	Propeller	Propeller	Propeller	Propeller
No. Used/Diameter in. [mm]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]	1/26 [660.4]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	5900 [2784]	5900 [2784]	5900 [2784]	5900 [2784]
No. Motors/HP	1 at 1/2 HP	1 at 1/2 HP	1 at 1/2 HP	1 at 1/2 HP
Motor RPM	1075	1075	1075	1075
ndoor Fan - Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/11x11 [279x279]	1/11x11 [279x279]	1/11x11 [279x279]	1/11x11 [279x279]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	1 1/2	1 1/2	1 1/2	1 1/2
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter - Type	Disposable	Disposable	Disposable	Disposable
Furnished	Yes	Yes	Yes	Yes
(NO.) Size Recommended in. [mm x mm x mm]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406]	(4)2x16x16 [51x406x406
Refrigerant Charge Oz. [g]	88 [2495]	88 [2495]	88 [2495]	88 [2495]
Weights				
Net Weight Ibs. [kg]	583 [264]	583 [264]	633 [287]	633 [287]
Ship Weight Ibs. [kg]	621 [282]	621 [282]	671 [304]	671 [304]

See Page 15 for Notes.

# NOTES:

- 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 ±20% of nominal cfm. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240.
- 2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.

# WEIGHTED SOUND POWER LEVEL (dBA)

Unit Size – Series	Standard		TYPICA	L OCTAVE BA	ND SPECTRU	JM (dBA with	out tone adju	stment)	
	Rating (dBA)	63	125	250	500	1000	2000	4000	8000
RGECZR036	78.6	55	61.9	63.4	66.8	67.7	65.4	60.0	55.3
RGECZR048	83.8	55	62.7	75.7	72.6	72.9	70.4	66.5	61
RGECZR060	83.3	63	61.7	71.6	72.4	73.1	70.5	66.4	62.5
RGECZR072	—	_	_	_	_	_	_	—	—

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

# **RGEC\*\* HEATING PERFORMANCE**

		208-230V & 575V	1			
Tonnage	3-	Ton	4-1	<b>Fon</b>	5-	Ton
Heating Input DTH [HM] (High Fire (Low Fire))	75,000/52,500	100,000/70,000	75,000/52,500	120,000/84,000	75,000/52,500	120,000/84,000
Heating Input BTU [kW] (High-Fire / Low-Fire)	[21.98/115.39]	[29.31/20.52]	[21.98/115.39]	[35.17/24.62]	[21.98/115.39]	[35.17/24.62]
Heating Output PTU [WW] (High Fire (Low Fire)	60,750/42,525	81,000/56,700	60,750/42,525	97,200/68,040	60,750/42,525	97,200/68,040
Heating Output BTU [kW] (High-Fire / Low-Fire)	[17.80/12.46]	[23.74/16.62]	[17.80/12.46]	[28.49/19.94]	[17.80/12.46]	[28.49/19.94]
Lligh Fire Dias Dange %F [90]	25-55	35-65	25-55	40-70	25-55	35-65
High-Fire Rise Range °F [°C]	[13.9-30.6]	[19.4-36.1]	[13.9-30.6]	[22.2-38.9]	[13.9-30.6]	[22.2-38.9]
	20-50	25-55	20-50	30-60	20-50	25-55
Low-Fire Rise Range °F [°C]	[11.1-27.8]	[13.9-30.6]	[11.1-27.8]	[16-33]	[11.1-27.8]	[13.9-30.6]
Main Limit Temp °F	145	125	145	125	145	125
Rollout Temp. °F	250	250	250	250	250	250
Rating ESP In. W.C.	0.33	0.28	0.33	0.28	0.33	0.28
Maximum ESP In. W.C.	0.80	0.80	0.80	0.80	0.80	0.80
Max Outlet Air Temp °F [°C]	180 [82.2]	190 [87.8]	180 [82.2]	180 [82.2]	180 [82.2]	180 [82.2]
% AFUE	81.0	81.0	81.0	81.0	81.0	81.0
% Steady State Efficiency	81.0	81.0	81.0	81.0	81.0	81.0
	•	460V				•
Tonnage	3-	Ton	4-1	<b>Fon</b>	5-	Ton
Heating Input BTU [kW] (High-Fire / Low-Fire)	75,000/52,500	100,000/70,000	75,000/52,500	120,000/84,000	75,000/52,500	120,000/84,000
Heating input BTO [KW] (High-File / LOW-File)	[21.98/115.39]	[29.31/20.52]	[21.98/115.39]	[35.17/24.62]	[21.98/115.39]	[35.17/24.62]
Heating Output PTH [k]//] (High Fire / Low Fire)	60,750/42,525	81,000/56,700	60,750/42,525	97,200/68,040	60,750/42,525	97,200/68,040
Heating Output BTU [kW] (High-Fire / Low-Fire)	[17.80/12.46]	[23.74/16.62]	[17.80/12.46]	[28.49/19.94]	[17.80/12.46]	[28.49/19.94]
High Fire Dice Dange %F [%C]	30-60	35-65	30-60	40-70	30-60	35-65
High-Fire Rise Range °F [°C]	[16.7-33.3]	[19.4-36.1]	[16.7-33.3]	[22.2-38.9]	[16.7-33.3]	[19.4-36.1]
Low-Fire Rise Range °F [°C]	25-55	30-60	20-50	35-65	20-50	30-60
Low-File Rise Range F[ 6]	[13.9-30.6]	[16.7-33.3]	[11.1-27.8]	[19.4-36.1]	[11.1-27.8]	[16.7-33.3]
Main Limit Temp °F	145	125	145	125	145	125
Rollout Temp. °F	250	250	250	250	250	250
Rating ESP In. W.C.	0.33	0.28	0.33	0.28	0.33	0.28
Maximum ESP In. W.C.	0.80	0.80	0.80	0.80	0.80	0.80
Max Outlet Air Temp °F [°C]	180 [82.2]	190 [87.8]	180 [82.2]	180 [82.2]	180 [82.2]	180 [82.2]
% Steady State Efficiency	81.0	81.0	81.0	81.0	81.0	81.0
Gas Valve Connection Pipe Size In. [mm] .50 [12.7]	· · · · · · · · · · · · · · · · · · ·					1

# COOLING PERFORMANCE DATA-RGECZR036A

							ENTE	ENTERING INDOOR AIR @ 80°F [26.7°C]	4IR @ 80°F [2(	<b>:6.7°C] dbE</b> ①							
		wbE		71°F [21.7°C]		1 1	67°F [19.4°C]			63°F [17.2°C]			61°F [16.1°C]			59°F [15.0°C]	
	5	CFM [L/s]	1350 [637]	1300 [614]	1050 [496]	1350 [637]	1300 [614]	1050 [496]	1350 [637]	1300 [614]	1050 [496]	1350 [637]	1300 [614]	1050 [496]	1350 [637]	1300 [614]	ļ
		DR ①	0.21	0.2	0.15	0.21	0.2	0.15	0.21	0.2	0.15	0.21	0.2	0.15	0.21	0.2	0.15
	7505	Total BTUH [kW]	43.5 [12.8]	43.2 [12.7]	41.7 [12.2]	40.4 [11.9]	40.2 [11.8]	38.8 [11.4]	38.4 [11.2]	38.1 [11.2]	36.8 [10.8]	37.8 [11.1]	37.6 [11.0]	36.3 [10.6]	37.7 [11.1]	37.5 [11.0]	36.2 [10.6]
2	123 0°C1		25.7 [7.5]	25.3 [7.4]	23.0 [6.7]	_	29.4 [8.6]	$\infty$	4 [9	32.9 [9.6]	<u>8</u> 6	35.1 [10.3]	34.5 [10.1]	31.4 [9.2]	36.8 [10.8]	36.1 [10.6]	<u>6</u> 6
-	[n c.n.]	Power	2.4	2.4	2.3	2.4	2.4	2.3	2.4	2.4	2.3	2.4	2.4	2.3	2.4	2.4	2.3
	000	Total BTUH [kW]	42.2 [12.4]	41.9 [12.3]	40.4 [11.8]	[	38.8 [11.4]	37.5 [11.0]	37.0 [10.8]	36.8 [10.8]	5 [10.	36.5 [10.7]	36.2 [10.6]	0 [10	36.4 [10.7]	36.2 [10.6]	10.
2	100	Sens BTUH [kW]	25.0 [7.3]	24.5 [7.2]	22.3 [6.5]	29.2 [8.6]	28.7 [8.4]	26.1 [7.7]	32.7 [9.6]	32.1 [9.4]	29.3 [8.6]	34.4 [10.1]	33.8 [9.9]	30.7 [9.0]	36.0 [10.6]	35.4 [10.4]	$\sim$
_	[20.7°U]		2.5	2.5	2.4		2.5	2.4	2.5	2.5	2.4	2.5	2.5	2.4	2.5	2.5	2.4
∟_ ⊃=		Total BTUH [kW]	40.8 [12:0]	40.6 [11.9]	39.1 [11.5]	37.8 [11.1]	37.5 [11.0]	36.2 [10.6]	35.7 [10.5]	35.4 [10.4]	34.2 [10.0]	2 [10]	34.9 [10.2]	33.7 [9.9]	35.1 [10.3]	34.8 [10.2]	6 9
	85°F		24.3 [7.1]	23.8 [7.0]	21.7 [6.4]	28.5 [8.3]	28.0 [8.2]	25.5 [7.5]	32.0 [9.4]	31.4 [9.2]	28.6 [8.4]	33.6 [9.9]	33.1 [9.7]	30.1 [8.8]	35.1 [10.3]	34.7 [10.2]	31.6 [9.3]
	[29.4°C]		2.6	2.6	2.6	2.6	2.6	2.6	2.6 2.6	2.6	2.5	2.6	2.6	2.5	2.6	2.6	2.5
	1000	Total BTUH [kW]	39.5 [11.6]	-	37.9 [11.1]	36.4 [10.7]	36.2 [10.6]	34.9 [10.2]	34.3 [10.1]	34.1 [10.0]	32.9 [9.6]	6.	33.6 [9.8]	32.4 [9.5]	33.7 [9.9]	33.5 [9.8]	32.3 [9.
	90°F		23.6 [6.9]	_		27.8 [8.1]	27.3 [8.0]	24.9 [7.3]	31.3 [9.2]	30.8 [9.0]	28.0 [8.2]	33.0 [9.7]	32.4 [9.5]	29.5 [8.6]	33.7 [9.9]	33.5 [9.8]	31.0 [9.
	[32.2 <sup>°</sup> C]		2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
ـــــــــــــــــــــــــــــــــــــ	Long	Total BTUH [kW]	38.2 [11.2]	37.9 [11.1]	36.6 [10.7]		34.9 [10.2]	33.6 [9.9]	33.0 [9.7]	32.8 [9.6]	31.6 [9.3]	5 [9.	32.3 [9.5]	31.1 [9.1]	32.4 [9.	2 [9	31.0 [9.
	1.06	Sens BTUH [kW]	22.9 [6.7]	22.5 [6.6]	20.5 [6.0]	. 0	26.7 [7.8]	24.3 [7.1]	30.6 [9.0]	30.1 [8.8]	27.4 [8.0]	32.3 [9.5]	31.7 [9.3]	28.9 [8.5]		32.2 [9.4]	30.4
	[35°C]	Power	2.9	2.9	2.8	-	2.9	2.8	5.6 .2	2.9	2.8	5.6	2.8	2.8	2.9	2 8 1 8	2.8
⊥_ ⊃-		Total RTIIH [kW]	36.8.[10.8]	36.6.110.71	35.3 [10.3]	-	33.5 [0.8]	32.3 [9.5]	317 [93]	314 [92]	30.3 [8.9]	311 [01]	30.0 [0.1]	29.8 [8.7]	e.	6	20.8 [8
	100°F		22.3 [6.5]	21 9 [6 4]	10 0 [5 8]	26.5 [2.3]	26.0 [7.6]	23.7 [6.9]	30.0 [8.8]	295 [86]	26.8 [7 9]	311 [91]	30.9 [9.1]	28.3 [8.3]	311 [91]	2 6	20.02
_	[37.8°C]	_	3.0	3.0	3.0		3.0	3.0	3.0	3.0	2.9	3.0	3.0	2.9	3.0		2.9
		-	35.5[10.4]	35.2 [10.3]	34.0 [10] 0	-	32.2 [9.4]	311 [91]	30.3 [8.9]	30.1 [8.8]	29.1 [8.5]	29.8 [8.7]	29.6 [8.7]	28.6 [8.4]	29.7 [8.7]	0	28.5 [8
	105°F		21.7 [6.3]	21.3 [6.2]			25.4 [7.4]	23.1 [6.8]	29.4 [8.6]	28.9 [8.5]	26.3 [7.7]	29.8 [8.7]	29.6 [8.7]	27.7 [8.1]	29.7 [8.7]	29.5 [8.6]	28.5 [8.3]
<u>а</u> п	[40.6°C]		3.2	3.2		3.2	3.2	3.1	3.2	3.2	3.1	3.2	з <del>.</del> 1	3.1	3.2	 1	ы. Т.
	10011	Total BTUH [kW]	34.1 [10.0]	-		-	30.8 [9.0]	29.8 [8.7]	0 [8.	28.8 [8.4]	27.8 [8.1]	28.4 [8.3]	3 [8.	27.3 [8.0]	4 [8.	2 [8	27.2 [8.
	110°F [43 2°C]		21.1 [6.2]	20.	18.8 [5.5]	25.3 [7.4]	24.8 [7.3]	22.6 [6.6]	28.8 [8.4]	28.3 [8.3]	25.7 [7.5]	28.4 [8.3]	28.3 [8.3]	27.2 [8.0]	28.4 [8.3]	28.2 [8.3]	27.2 [8.0]
	[n c·c+]	Power	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.2
	115°E		32.8 [9.6]	32.6 [9.5]	31.4 [9.2]	29.7 [8.7]	29.5 [8.6]	28.5 [8.3]	27.6 [8.1]	27.4 [8.0]	26.5 [7.8]	27.1 [7.9]	26.9 [7.9]	26.0 [7.6]	27.0 [7.9]	26.8 [7.9]	
	[46.1°C]	Sens BTUH [kW]	20.5 [6.0] 3.5			24.7 [7.2] 3.5	24.2 [7.1] 3.5	22.1 [6.5] 3.4	27.6 [8.1] 3.5	27.4 [8.0] 3.5	25.2 [7.4] 3.4	27.1 [7.9] 3.5	9 [7.	0 [7 3.4	0 [7	8 35 7	9 [7. 34
р Г		-	31 4 [0.2]	-	30.1 [8.8]	_	28.2 [8.3]	97.9 [R UI	6	96.1 [7.6]	95.9 [7.4]	95.8 [7.5]	ی ا	1071 7 10	95.7 [7.5]	2	- 12 9
2	120°F [48 o°C]		19.9 [5.8]	19.0	17.8 [5.2]	24.1 [7.1]	23.7 [6.9]	21.6 [6.3]	26.3 [7.7]	26.1 [7.6]	24.7 [7.2]	25.8 [7.5]	25.6 [7.5]	24.7 [7.2]	25.7 [7.5]	25.5 [7.5]	24.6 [7.2]
-		Power	3.7	3.7	3.6	_	3.7	3.6	3.7	3.7	3.6	3.7	3.7	3.6	3.7	3.7	
	105°E		30.1 [8.8]	29.9 [8.8]	28.8 [8.5]	27.0 [7.9]	26.8 [7.9]	25.9 [7.6]	24.9 [7.3]	24.8 [7.3]	23.9 [7.0]	24.4 [7.2]	24.2 [7.1]	23.4 [6.9]	24.3 [7.1]		23.3
	[51.7°C]	Sens BTUH [KW] Power	19.4 [5.7] 3.9			23.6 [6.9] 3.9	23.2 [6.8] 3.9	21.1 [6.2] 3.8	24.9 [7.3] 3.9	8 3.9	23.9 [7.0] 3.8	4 [7 3.9	24.2 [7.1] 3.9	4 [6. 3.8	24.3 [7.1] 3.9	24.2 [7.1] 3.8	23.3 [6. 3.8
2	Danrae	Danraccion ratio	Total	-	Total canacity v 1000 BTIIH		NOTEC	1 Mhod the c	ab sis oir da		1 100 and 1	Š	the concide				
 = 出	-Enterin	dbE —Entering air dry bulb	Sens		-Sensible capacity x 1000 BTUH	) BTUH	NULES	-)	intering an un im the table b	y adding [1.1	when the entering an only build is obtained $\Gamma [z^{\prime} - v]$ , capacity from the table by adding [1.10 x CFM x (1 – DR)	1 – DR) x (dbE	l, aujust ure serisible l) x (dbE – 80)].				
  2	-Enterin	wbEEntering air wet bulb	Power	Power —KW input							1 Decion	1 Designates Metric Conversions	Conversi	ano			
										-			· · · · · · · · · · · · · · · · · · ·	25			

# Sure Comfort<sup>®</sup> RGEC Package Gas Electric Units

COOLING PERFORMANCE DATA-RGECZR048A

							ENTE	ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①	AIR @ 80°F [2(	6.7°C] dbE ①							
	M	wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			61°F [16.1°C]			59°F [15.0°C]	
	CFM	CFM [L/s]	1800 [850]	1730 [816]	1400 [661]	1800 [850]	1730 [816]	1400 [661]	1800 [850]	1730 [816]	1400 [661]	1800 [850]	1730 [816]	1400 [661]	1800 [850]	1730 [816]	1400 [661]
	DR	DR ①	0.23	0.22	0.18	0.23	0.22	0.18	0.23	0.22	0.18	0.23	0.22	0.18	0.23	0.22	0.18
2	75°F	Total BTUH [KW] Sons PTILL [KW]	57.9 [17.0]	57.5 [16.8]	55.5 [16.3]	53.8 [15.8] 20.1 [11.6]	53.4 [15.6]	51.5 [15.1] 25.0 [10.2]	50.6 [14.8]	50.2 [14.7]	48.5 [14.2] 20.7 [11.6]	49.5 [14.5] 46.5 [12.6]	49.2 [14.4] 45.7 [12.4]	47.5 [13.9]	48.9 [14.3]	48.5 [14.2]	46.9 [13.7]
23	[23.9°C]	Power	32./ [3.0] 3.1	32.1 [3.4] 3.1	23.3 [0.0] 3.0	33.1 3.1	30.4 [11.3] 3.0	3.0 3.0	44.4 [13.0] 3.0	43.0 [ 12.0] 3.0	3.0 3.0	40.0 [ 10.0 ] 3.0	4.0./ [10.4] 3.0	41.0 [12.2] 3.0	40.1 [ 14.1 ] 3.0	4/.2 [13.0] 3.0	43.0 [12.0] 3.0
	80°F 5 [26.7°C] P	Total BTUH [kW] Sens BTUH [kW] Power	56.3 [16.5] 31.9 [9.4] 3.2	55.9 [16.4] 31.3 [9.2] 3.2	54.0 [15.8] 28.5 [8.4] 3.1	52.2 [15.3] 38.3 [11.2] 3.2	51.8 [15.2] 37.6 [11.0] 3.2	50.0 [14.7] 34.2 [10] 3.1	49.0 [14.4] 43.6 [12.8] 3.2	48.7 [14.3] 42.8 [12.5] 3.2	4.07 [13.8] 39.0 [11.4] 3.1	47.9 [14.1] 45.7 [13.4] 3.2	47.6 [13.9] 44.8 [13.1] 3.2	45.9 [13.5] 40.8 [12.0] 3.1	47.3 [13.9] 47.2 [13.8] 3.2	47.0 [13.8] 46.4 [13.6] 3.2	45.3 [13.3] 42.2 [12.4] 3.1
°62 ⊃⊢⊐⊂	85°F T 85°F S [29.4°C] P	Total BTUH [kW] Sens BTUH [kW] Power	54.7 [16.0] 31.0 [9.1] 3.4	54.3 [15.9] 30.5 [8.9] 3.3	52.4 [15.4] 27.8 [8.1] 3.3	50.6 [14.8] 37.4 [11.0] 3.4	50.2 [14.7] 36.7 [10.8] 3.3	48.5 [14.2] 33.5 [9.8] 3.3	47.4 [13.9] 42.7 [12.5] 3.3	47.1 [13.8] 42.0 [12.3] 3.3	45.4 [13.3] 38.2 [11.2] 3.3	46.3 [13.6] 44.8 [13.1] 3.3	46.0 [13.5] 44.0 [12.9] 3.3	44.4 [13.0] 40.1 [11.7] 3.3	45.7 [13.4] 45.7 [13.4] 3.3	45.3 [13.3] 45.3 [13.3] 3.3	43.8 [12.8] 41.5 [12.2] 3.3
	90°F T	Total BTUH [kW] Sens BTUH [kW] Power	53.0 [15.5] 30.2 [8.8] 3.5	52.6 [15.4] 29.6 [8.7] 3.5	50.8 [14.9] 27.0 [7.9] 3.5	48.9 [14.3] 36.5 [10.7] 3.5	48.5 [14.2] 35.9 [10.5] 3.5	46.9 [13.7] 32.7 [9.6] 3.4	45.7 [13.4] 41.9 [12.3] 3.5	45.4 [13.3] 41.1 [12.0] 3.5	43.8 [12.8] 37.4 [11.0] 3.4	44.6 [13.1] 43.9 [12.9] 3.5	44.3 [13.0] 43.1 [12.6] 3.5	42.8 [12.5] 39.3 [11.5] 3.4	44.0 [12.9] 44.0 [12.9] 3.5	43.7 [12.8] 43.7 [12.8] 3.5	42.2 [12.4] 40.7 [11.9] 3.4
	95°F T	Total BTUH [kW] Sens BTUH [kW] Power	51.3 [15.0] 29.2 [8.6] 3.7	50.9 [14.9] 28.7 [8.4] 3.7	49.1 [14.4] 26.1 [7.7] 3.6	47.2 [13.8] 35.6 [10.4] 3.7	46.8 [13.7] 35.0 [10.2] 3.7	45.2 [13.2] 31.8 [9.3] 3.6	44.0 [12.9] 40.9 [12.0] 3.7	43.7 [12.8] 40.2 [11.8] 3.7	42.2 [12.4] 36.6 [10.7] 3.6	42.9 [12.6] 42.9 [12.6] 3.7	42.6 [12.5] 42.2 [12.4] 3.7	41.1 [12.0] 38.5 [11.3] 3.6	42.3 [12.4] 42.3 [12.4] 3.7	42.0 [12.3] 42.0 [12.3] 3.7	40.5 [11.9] 39.9 [11.7] 3.6
	100°F S [37.8°C] P	Total BTUH [kW] Sens BTUH [kW] Power	49.5 [14.5] 28.3 [8.3] 3.9	49.1 [14.4] 27.8 [8.1] 3.9	47.4 [13.9] 25.3 [7.4] 3.8	45.4 [13.3] 34.7 [10.2] 3.9	45.1 [13.2] 34.0 [10.0] 3.9	43.5 [12.7] 31.0 [9.1] 3.8	42.2 [12.4] 40.0 [11.7] 3.9	41.9 [12.3] 39.3 [11.5] 3.9	40.5 [11.9] 35.8 [10.5] 3.8	41.1 [12.1] 41.1 [12.1] 3.9	40.8 [12.0] 40.8 [12.0] 3.9	39.4 [11.6] 37.6 [11.0] 3.8	40.5 [11.9] 40.5 [11.9] 3.9	40.2 [11.8] 40.2 [11.8] 3.9	38.8 [11.4] 38.8 [11.4] 3.8
- m ≥ ⊂ m 5 6	105°F S [40.6°C] P	Total BTUH [kW] Sens BTUH [kW] Power	47.7 [14.0] 27.3 [8.0] 4.1	47.3 [13.9] 26.8 [7.9] 4.1	45.7 [13.4] 24.4 [7.2] 4.0	43.6 [12.8] 33.7 [9.9] 4.1	43.3 [12.7] 33.1 [9.7] 4.1	41.8 [12.2] 30.1 [8.8] 4.0	40.4 [11.8] 39.0 [11.4] 4.1	40.1 [11.8] 38.3 [11.2] 4.1	38.7 [11.3] 34.9 [10.2] 4.0	39.3 [11.5] 39.3 [11.5] 4.1	39.0 [11.4] 39.0 [11.4] 4.1	37.7 [11.0] 36.8 [10.8] 4.0	38.7 [11.3] 38.7 [11.3] 4.1	38.4 [11.3] 38.4 [11.3] 4.1	37.1 [10.9] 37.1 [10.9] 4.0
	110°F S [43.3°C] P	Total BTUH [kW] Sens BTUH [kW] Power	45.8 [13.4] 26.3 [7.7] 4.3	45.5 [13.3] 25.9 [7.6] 4.3	43.9 [12.9] 23.6 [6.9] 4.2	41.7 [12.2] 32.7 [9.6] 4.3	41.4 [12.1] 32.1 [9.4] 4.3	40.0 [11.7] 29.2 [8.6] 4.2	38.5 [11.3] 38.0 [11.1] 4.3	38.3 [11.2] 37.3 [10.9] 4.3	36.9 [10.8] 34.0 [10.0] 4.2	37.5 [11.0] 37.5 [11.0] 4.3	37.2 [10.9] 37.2 [10.9] 4.3	35.9 [10.5] 35.9 [10.5] 4.2	36.8 [10.8] 36.8 [10.8] 4.3	36.5 [10.7] 36.5 [10.7] 4.3	35.3 [10.3] 35.3 [10.3] 4.2
-	115°F T 115°F S [46.1°C] P	Total BTUH [kW] Sens BTUH [kW] Power	43.9 [12.9] 25.3 [7.4] 4.5	43.6 [12.8] 24.8 [7.3] 4.5	42.1 [12.3] 22.6 [6.6] 4.5	39.8 [11.7] 31.7 [9.3] 4.5	39.5 [11.6] 31.1 [9.1] 4.5	38.1 [11.2] 28.3 [8.3] 4.4	36.6 [10.7] 36.6 [10.7] 4.5	36.4 [10.7] 36.3 [10.6] 4.5	35.1 [10.3] 33.1 [9.7] 4.4	35.5 [10.4] 35.5 [10.4] 4.5	35.3 [10.3] 35.3 [10.3] 4.5	34.1 [10.0] 34.1 [10.0] 4.4	34.9 [10.2] 34.9 [10.2] 4.5	34.6 [10.2] 34.6 [10.2] 4.5	33.4 [9.8] 33.4 [9.8] 4.4
	120°F S [48.9°C] P	Total BTUH [kW] Sens BTUH [kW] Power	42.0 [12.3] 24.3 [7.1] 4.8	41.6 [12.2] 23.8 [7.0] 4.8	40.2 [11.8] 21.7 [6.4] 4.7	37.8 [11.1] 3 30.6 [9.0] 3 4.8	37.6 [11.0] 30.1 [8.8] 4.8	36.3 [10.6] 27.4 [8.0] 4.7	34.7 [10.2] 34.7 [10.2] 4.8	34.4 [10.1] 34.4 [10.1] 4.7	33.2 [9.7] 32.2 [9.4] 4.7	33.6 [9.8] 33.6 [9.8] 4.8	33.3 [9.8] 33.3 [9.8] 4.7	32.2 [9.4] 32.2 [9.4] 4.7	32.9 [9.7] 32.9 [9.7] 4.8	32.7 [9.6] 32.7 [9.6] 4.7	31.6 [9.3] 31.6 [9.3] 4.7
1: [51	125°F [51.7°C] P	Total BTUH [kW] Sens BTUH [kW] Power	39.9 [11.7] 23.2 [6.8] 5.0	39.7 [11.6] 22.8 [6.7] 5.0	38.3 [11.2] 20.7 [6.1] 4.9	35.8 [10.5] 3 29.6 [8.7] 2 5.0	35.6 [10.4] 29.0 [8.5] 5.0	34.3 [10.1] 26.4 [7.7] 4.9	32.7 [9.6]   32.7 [9.6] 5.0	32.4 [9.5] 32.4 [9.5] 5.0	31.3 [9.2] 31.2 [9.1] 4.9	31.6 [9.3] 31.6 [9.3] 5.0	31.4 [9.2] 31.4 [9.2] 5.0	30.3 [8.9] 30.3 [8.9] 4.9	30.9 [9.1] 30.9 [9.1] 5.0	30.7 [9.0] 30.7 [9.0] 5.0	29.7 [8.7] 29.7 [8.7] 4.9
DR — D dbE — Er wbE — Er	Jepressi Intering Intering	DR — Depression ratio dbE — Entering air dry bulb wbE — Entering air wet bulb	Total Sens	Total —Total capac Sens —Sensible co Power —KW input	— Total capacity x 1000 BTUH — Sensible capacity x 1000 BTUH —KW input	-UH D BTUH		<ul> <li>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)].</li> <li>I Designates Metric Converses in the converse of the sensitive converses in the sensitive converse in the sensitive converses in the sensitive converse in the sensitint converse in the sensitive converse in the sensitive conver</li></ul>	entering air dr om the table t	y bulb is othe y adding [1.1 <b>[</b>	When the entering air dry bulb is other than $80^\circ$ F [27°C], adjust the sel capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)]. [ ] Designates Metric Cor	:7°C], adjust 1 - DR) x (dbE - <b>ates Metric</b>	han 80°F [27°C], adjust the sensible x CFM x (1 – DR) x (dbE – 80)]. <b>] Designates Metric Conversions</b>	suo			

٦
õ
ő
Ľ.
3
Щ
5
ī
Å
F
0
Ш
2
A
È
R
Ö
R
Щ
Ž
Ξ
ō
Ő

							ENTE	ERING INDOOR	ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①	26.7°C] dbE ①							
	wbE			• F	- H	1	67°F [19.4°C]		100011 0100	- H	_+	100011 0100	61°F [16.1°C]	10001 0111	100011 0100	59°F [15.0°C]	2010111
	CFM [L/S] DR ①	/s]	2250 [1 U62]	0.18 0.18	0.16 0.16	2250 [1062] 0.21	1950 [920] 0.18	1 /30 [826] 0.16	[20UT] UC22 0.21	0.18 0.18	1 /5U [826] 0.16	2250U[] U62]	0.18 0.18	0.16	[20U I] UC22 0.21	0.18	0.16
<u> </u>	75°F Tota 75°F Sen [23.9°C] Pow	Total BTUH [kW] Sens BTUH [kW] Power	72.9 [21.4] 41.9 [12.3] 4.0	70.9 [20.8] 39.1 [11.5] 4.0	69.6 [20.4] 37.2 [10.9] 4.0	68.5 [20.1] 49.9 [14.6] 3.5	66.7 [19.5] 46.6 [13.6] 3.5	65.4 [19.2] 44.4 [13.0] 3.5	64.6 [18.9] 56.8 [16.7] 3.0	62.9 [18.4] 53.0 [15.5] 3.0	61.7 [18.1] 50.5 [14.8] 3.0	62.9 [18.4] 59.7 [17.5] 2.8	61.2 [17.9] 55.7 [16.3] 2.8	60.1 [17.6] 53.0 [15.5] 2.7	61.5 [18.0] 61.5 [18.0] 2.5	59.9 [17.5] 57.8 [16.9] 2.5	58.7 [17.2] 55.0 [16.1] 2.5
	80°F Total B 80°F Sens B [26.7°C] Power	Total BTUH [kW] Sens BTUH [kW] Power	71.0 [20.8] 41.0 [12.0] 4.2	69.1 [20.2] 38.2 [11.2] 4.1	67.8 [19.9] 36.4 [10.7] 4.1	66.6 [19.5] 49.0 [14.4] 3.7	64.8 [19.0] 45.7 [13.4] 3.6	63.6 [18.6] 43.5 [12.8] 3.6	62.7 [18.4] 55.9 [16.4] 3.2	61.0 [17.9] 52.2 [15.3] 3.1	59.9 [17.5] 49.7 [14.6] 3.1	61.0 [17.9] 58.8 [17.2] 2.9	59.4 [17.4] 54.8 [16.1] 2.9	58.3 [17.1] 52.2 [15.3] 2.8	59.6 [17.5] 59.6 [17.5] 2.7	58.0 [17.0] 56.9 [16.7] 2.6	56.9 [16.7] 54.2 [15.9] 2.6
	85°F Tota 29.4°C Pow	Total BTUH [kW] Sens BTUH [kW] Power	69.0 [20.2] 40.0 [11.7] 4.4	67.1 [19.7] 37.3 [10.9] 4.3	65.9 [19.3] 35.5 [10.4] 4.3	64.6 [18.9] 48.0 [14.1] 3.9	62.9 [18.4] 44.8 [13.1] 3.8	61.7 [18.1] 42.7 [12.5] 3.8	60.7 [17.8] 54.9 [16.1] 3.4	59.1 [17.3] 51.3 [15.0] 3.3	58.0 [17.0] 48.8 [14.3] 3.3	59.0 [17.3] 57.8 [16.9] 3.1	57.4 [16.8] 53.9 [15.8] 3.1	56.4 [16.5] 51.3 [15.0] 3.1	57.6 [16.9] 57.6 [16.9] 2.9	56.0 [16.4] 56.0 [16.4] 2.8	55.0 [16.1] 53.3 [15.6] 2.8
	90°F Tota [32.2°C] Pow	Total BTUH [kW] Sens BTUH [kW] Power	67.0 [19.6] 39.0 [11.4] 4.7	65.2 [19.1] 36.4 [10.7] 4.6	63.9 [18.7] 34.6 [10.1] 4.6	62.6 [18.3] 47.0 [13.8] 4.2	60.9 [17.8] 43.9 [12.9] 4.1	59.7 [17.5] 41.8 [12.2] 4.1	58.7 [17.2] 53.9 [15.8] 3.7	57.1 [16.7] 50.3 [14.7] 3.6	56.0 [16.4] 47.9 [14.0] 3.6	57.0 [16.7] 56.7 [16.6] 3.4	55.4 [16.2] 52.9 [15.5] 3.4	54.4 [15.9] 50.4 [14.8] 3.4	55.6 [16.3] 55.6 [16.3] 3.2	54.1 [15.8] 54.1 [15.8] 3.2	53.1 [15.5] 52.4 [15.4] 3.1
س≻ m:	95°F Total B [35°C] Power	Total BTUH [kW] Sens BTUH [kW] Power	64.9 [19.0] 37.9 [11.1] 5.1	63.1 [18.5] 35.3 [10.4] 5.0	61.9 [18.1] 33.6 [9.9] 5.0	60.5 [17.7] 45.9 [13.5] 4.6	58.8 [17.2] 42.8 [12.6] 4.6	57.7 [16.9] 40.8 [11.9] 4.5	56.6 [16.6] 52.8 [15.5] 4.1	55.0 [16.1] 49.3 [14.4] 4.1	54.0 [15.8] 46.9 [13.7] 4	54.9 [16.1] 54.9 [16.1] 3.9	53.4 [15.6] 51.9 [15.2] 3.8	52.4 [15.4] 49.4 [14.5] 3.8	53.5 [15.7] 53.5 [15.7] 3.6	52.0 [15.2] 52.0 [15.2] 3.6	51.0 [15.0] 51.0 [15.0] 3.5
	100°F Tota [37.8°C] Pow	Total BTUH [kW] Sens BTUH [kW] Power	62.7 [18.4] 36.7 [10.8] 5.6	61.0 [17.9] 34.3 [10.0] 5.6	59.9 [17.5] 32.6 [9.6] 5.5	58.3 [17.1] 44.7 [13.1] 5.1	56.7 [16.6] 41.7 [12.2] 5.1	55.7 [16.3] 39.7 [11.6] 5.0	54.4 [15.9] 51.7 [15.1] 4.6	52.9 [15.5] 48.2 [14.1] 4.6	51.9 [15.2] 45.9 [13.4] 4.5	52.7 [15.5] 52.7 [15.5] 4.4	51.3 [15.0] 50.8 [14.9] 4.3	50.3 [14.8] 48.4 [14.2] 4.3	51.3 [15.0] 51.3 [15.0] 4.1	49.9 [14.6] 49.9 [14.6] 4.1	49.0 [14.4] 49.0 [14.4] 4
 -ш∑⊾ш	105°F Tota [40.6°C] Pow	Total BTUH [kW] Sens BTUH [kW] Power	60.5 [17.7] 35.5 [10.4] 6.3	58.9 [17.2] 33.1 [9.7] 6.2	57.8 [16.9] 31.5 [9.2] 6.1	56.1 [16.4] 43.5 [12.8] 5.8	54.6 [16.0] 40.6 [11.9] 5.7	53.6 [15.7] 38.7 [11.3] 5.6	52.2 [15.3] 50.4 [14.8] 5.3	50.8 [14.9] 47.1 [13.8] 5.2	49.8 [14.6] 44.8 [13.1] 5.1	50.5 [14.8] 50.5 [14.8] 5.0	49.1 [14.4] 49.1 [14.4] 4.9	48.2 [14.1] 47.3 [13.9] 4.9	49.1 [14.4] 49.1 [14.4] 4.8	47.8 [14.0] 47.8 [14.0] 4.7	46.9 [13.7] 46.9 [13.7] 4.7
	110°F Tota [43.3°C] Pow	Total BTUH [kW] Sens BTUH [kW] Power	58.2 [17.1] 34.2 [10.0] 7.0	56.6 [16.6] 31.9 [9.4] 6.9	55.6 [16.3] 30.4 [8.9] 6.8	53.8 [15.8] 42.2 [12.4] 6.5	52.4 [15.3] 39.4 [11.5] 6.4	51.4 [15.1] 37.5 [11.0] 6.3	49.9 [14.6] 49.2 [14.4] 6.0	48.6 [14.2] 45.9 [13.4] 5.9	47.7 [14.0] 43.7 [12.8] 5.9	48.2 [14.1] 48.2 [14.1] 5.7	46.9 [13.8] 46.9 [13.8] 5.7	46.1 [13.5] 46.1 [13.5] 5.6	46.8 [13.7] 46.8 [13.7] 5.5	45.6 [13.3] 45.6 [13.3] 5.4	44.7 [13.1] 44.7 [13.1] 5.4
-	115°F Total B [46.1°C] Power	Total BTUH [kW] Sens BTUH [kW] Power	55.9 [16.4] 32.9 [9.6] 7.8	54.4 [15.9] 30.7 [9.0] 7.7	53.4 [15.6] 29.2 [8.6] 7.6	51.5 [15.1] 40.9 [12.0] 7.3	50.1 [14.7] 38.2 [11.2] 7.2	49.2 [14.4] 36.3 [10.6] 7.1	47.6 [13.9] 47.6 [13.9] 6.8	46.3 [13.6] 44.6 [13.1] 6.7	45.4 [13.3] 42.5 [12.4] 6.7	45.9 [13.5] 45.9 [13.5] 6.6	44.7 [13.1] 44.7 [13.1] 6.5	43.8 [12.8] 43.8 [12.8] 6.4	44.5 [13.0] 44.5 [13.0] 6.3	43.3 [12.7] 43.3 [12.7] 6.2	42.5 [12.4] 42.5 [12.4] 6.2
	120°F Total B [48.9°C] Power	Total BTUH [kW] Sens BTUH [kW] Power	53.5 [15.7] 31.5 [9.2] 8.7	52.1 [15.3] 29.4 [8.6] 8.6	51.1 [15.0] 28.0 [8.2] 8.5	49.1 [14.4] 39.5 [11.6] 8.2	47.8 [14.0] 36.8 [10.8] 8.1	46.9 [13.7] 35.1 [10.3] 8.1	45.2 [13.2] 45.2 [13.2] 7.7	44.0 [12.9] 43.3 [12.7] 7.6	43.2 [12.6] 41.2 [12.1] 7.6	43.5 [12.8] 43.5 [12.8] 7.5	42.3 [12.4] 42.3 [12.4] 7.4	41.6 [12.2] 41.6 [12.2] 7.3	42.1 [12.3] 42.1 [12.3] 7.2	41.0 [12.0] 41.0 [12.0] 7.1	40.2 [11.8] 40.2 [11.8] 7.1
	125°F Total B [51.7°C] Power	Total BTUH [kW] Sens BTUH [kW] Power	51.1 [15.0] 30.0 [8.8] 9.8	49.7 [14.6] 28.0 [8.2] 9.6	48.7 [14.3] 26.6 [7.8] 9.6	46.7 [13.7] 38.0 [11.1] 9.3	45.4 [13.3] 35.5 [10.4] 9.1	44.6 [13.1] 33.8 [9.9] 9.1	42.8 [12.5] 42.8 [12.5] 8.8	41.6 [12.2] 41.6 [12.2] 8.7	40.8 [12.0] 39.9 [11.7] 8.6	41.1 [12.0] 41.1 [12.0] 8.5	40.0 [11.7] 40.0 [11.7] 8.4	39.2 [11.5] 39.2 [11.5] 8.3	39.7 [11.6] 39.7 [11.6] 8.3	38.6 [11.3] 38.6 [11.3] 8.2	37.9 [11.1] 37.9 [11.1] 37.9 [11.1] 8.1
dbE WbE WbE	DR — Depression ratio dbE — Entering air dry bulb wbE — Entering air wet bulb	r ratio r dry bulb r wet bulb	Total Sens Power	Total — Total capac Sens — Sensible ca Power — KW input	<ul> <li>Total capacity x 1000 BTUH</li> <li>Sensible capacity x 1000 BTUH</li> <li>KW input</li> </ul>	0 BTUH	NOTES:	<ol> <li>When the t capacity fr</li> </ol>	entering air dr om the table t	ry bulb is oth∈ by adding [1.∶	<b>NOTES:</b> (1) When the entering air dry bulb is other than $80^{\circ}F$ [27°C], adjust the sensible capacity from the table by adding [1.10 x CFM x (1 – DR) x (dbE – 80)].	27°C], adjust - DR) x (dbE	than 80°F [27°C], adjust the sensible x CFM x (1 – DR) x (dbE – 80)].				

# 3-5T-HIGH STATIC-LOW GAS HEAT OPTION-SIDEFLOW (208-230V/575V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range	Motor HP [W]	Motor Speed	CFM/ WATTS		E	xternal St	atic Pressu	re - Inches	s W.C. [kPa	a]	
(	(Min/Max) CFM				0.8 [.2]	0.9 [.22]	1 [.25]	1.1 [.27]	1.2 [.3]	1.3 [.32]	1.4 [.35]	1.5 [.37]
		1 HP [745]	Fan -	CFM	945	921	853	763	761	709	654	634
			Tap 1*	WATTS	269	272	281	288	293	299	307	324
		1 HP [745]	Low Stage Heat -	CFM	991	962	895	809	802	750	694	673
			Tap 2*	WATTS	286	290	299	307	312	318	327	343
RGECZR036 (3T) -	1050/1350	1 HP [745]	High Stage Heat -	CFM	1610	1506	1464	1431	1348	1297	1232	1190
75K Gas Heat Option	1030/1030		Tap 3*	WATTS	514	530	543	555	568	581	592	602
		1 HP [745]	Cooling -	CFM	945	921	853	763	761	709	654	634
			Tap 4	WATTS	269	272	281	288	293	299	307	324
		1 HP [745]	High Speed -	CFM	1485	1396	1349	1306	1238	1186	1123	1085
			Tap 5*	WATTS	468	482	494	505	516	527	539	550
		1 HP [745]	Fan -	CFM	1196	1140	1109	1079	1029	1035	972	964
			Tap 1*	WATTS	308	317	323	331	337	343	354	364
		1 HP [745]	Low Stage Heat -	CFM	1163	1106	1076	1047	997	1006	941	935
		[]	Tap 2*	WATTS	287	296	301	309	314	320	331	341
RGECZR048 (4T) -	1400/1800	1 HP [745]	High Stage Heat -	CFM	1462	1411	1376	1337	1291	1275	1220	1197
75K Gas Heat Option		[]	Tap 3*	WATTS	476	487	498	510	520	529	542	553
		1 HP [745]	Cooling -	CFM	1421	1369	1334	1297	1250	1238	1181	1161
		[]	Tap 4	WATTS	450	461	471	482	492	501	513	524
		1 HP [745]	High Speed -	CFM	1802	1757	1717	1667	1626	1581	1537	1495
		[]	Tap 5*	WATTS	690	705	721	737	754	767	782	794
		1 HP [745]	Fan -	CFM	1631	1584	1565	1520	1492	1445	1469	1421
			Tap 1*	WATTS	546	559	574	591	611	627	661	693
		1 HP [745]	Low Stage Heat -	CFM	1311	1258	1256	1208	1184	1133	1206	1152
			Tap 2*	WATTS	274	284	298	316	336	350	399	441
RGECZR060 (5T) -	1750/2250	1 HP [745]	High Stage Heat -	CFM	1540	1492	1478	1432	1405	1357	1395	1345
75K Gas Heat Option			Tap 3*	WATTS	469	481	496	514	533	549	587	622
		1 HP [745]	Cooling -	CFM	1670	1624	1603	1559	1530	1483	1502	1454
			Tap 4	WATTS	580	593	608	625	645	661	693	724
		1 HP [745]	High Speed -	CFM	2086	2047	2006	1965	1930	1889	1845	1803
			Tap 5*	WATTS	934	950	968	983	1002	1020	1035	1052

NOTES: 1. For 575V units, add 30W (transformer wattage) to the watt values mentioned in the table.

2. Factory tap settings are marked with an asterisk \*.

3. Pressure drops across the 3-5T CFM range (1050 - 2250)

Wet coil: ~0.09 Inches W.C.

Downflow: ~0.1 Inches W.C.

Reheat coil: ~0.09 Inches W.C.

# 3-5T-HIGH STATIC-HIGH GAS HEAT OPTION-SIDEFLOW (208-230V/575V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range	Motor HP [W]	Motor Speed	CFM/ WATTS		E	xternal St	atic Pressu	re - Inches	s W.C. [kPa	a]	
(	(Min/Max) CFM				0.8 [.2]	0.9 [.22]	1 [.25]	1.1 [.27]	1.2 [.3]	1.3 [.32]	1.4 [.35]	1.5 [.37]
		1 HP [745]	Fan -	CFM	945	921	853	763	761	709	654	634
		T HP [745]	Tap 1*	WATTS	269	272	281	288	293	299	307	324
		1 HP [745]	Low Stage Heat -	CFM	1482	1393	1346	1302	1235	1183	1120	1083
		1 11 [743]	Tap 2*	WATTS	467	480	493	503	515	526	537	549
RGECZR036 (3T) -	1050/1350	1 HP [745]	High Stage Heat -	CFM	1784	1659	1625	1607	1502	1451	1384	1336
100K Gas Heat Option	1050/1550	1 11 [743]	Tap 3*	WATTS	578	598	612	625	641	654	667	676
		1 HP [745]	Cooling -	CFM	945	921	853	763	761	709	654	634
		1116 [743]	Tap 4	WATTS	269	272	281	288	293	299	307	324
		1 HP [745]	High Speed -	CFM	1485	1396	1349	1306	1238	1186	1123	1085
			Tap 5*	WATTS	468	482	494	505	516	527	539	550
		1 HP [745]	Fan -	CFM	1421	1369	1334	1297	1250	1238	1181	1161
		1116 [743]	Tap 1*	WATTS	450	461	471	482	492	501	513	524
		1 HP [745]	Low Stage Heat -	CFM	1717	1671	1632	1585	1543	1505	1458	1421
		1118 [743]	Tap 2*	WATTS	637	651	666	681	696	708	722	734
RGECZR048 (4T) -	1400/1800	1 HP [745]	High Stage Heat -	CFM	1777	1732	1692	1643	1602	1558	1514	1473
120K Gas Heat Option	1400/1000		Tap 3*	WATTS	675	689	705	721	737	750	764	776
		1 HP [745]	Cooling -	CFM	1421	1369	1334	1297	1250	1238	1181	1161
			Tap 4	WATTS	450	461	471	482	492	501	513	524
		1 HP [745]	High Speed -	CFM	1802	1757	1717	1667	1626	1581	1537	1495
			Tap 5*	WATTS	690	705	721	737	754	767	782	794
		1 HP [745]	Fan -	CFM	1631	1584	1565	1520	1492	1445	1469	1421
			Tap 1*	WATTS	546	559	574	591	611	627	661	693
		1 HP [745]	Low Stage Heat -	CFM	1631	1584	1565	1520	1492	1445	1469	1421
			Tap 2*	WATTS	546	559	574	591	611	627	661	693
RGECZR060 (5T) -	1750/2250	1 HP [745]	High Stage Heat -	CFM	1920	1878	1845	1803	1770	1727	1708	1663
120K Gas Heat Option	1100/2200		Tap 3*	WATTS	792	807	824	840	860	877	899	921
		1 HP [745]	Cooling -	CFM	1670	1624	1603	1559	1530	1483	1502	1454
			Tap 4	WATTS	580	593	608	625	645	661	693	724
		1 HP [745]	High Speed -	CFM	2086	2047	2006	1965	1930	1889	1845	1803
			Tap 5*	WATTS	934	950	968	983	1002	1020	1035	1052

NOTES: 1. For 575V units, add 30W (transformer wattage) to the watt values mentioned in the table.

2. Factory tap settings are marked with an asterisk \*.

3. Pressure drops across the 3-5T CFM range (1050 - 2250)

Wet coil: ~0.09 Inches W.C.

Downflow: ~0.1 Inches W.C.

Reheat coil: ~0.09 Inches W.C.

# 3-5T-LOW STATIC-LOW GAS HEAT OPTION-SIDEFLOW (208-230V/575V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range	Motor HP [W]	Motor Speed	CFM/ WATTS		E	xternal Sta	ntic Pressu	re - Inches	W.C. [kPa	a]	
( 3 - )	(Min/Max) CFM				0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]
		3/4 HP	Fan -	CFM	1124	888	839	796	725	688	634	590
		[559]	Tap 1*	WATTS	118	90	92	96	102	103	109	108
		3/4 HP	Low Stage Heat -	CFM	1249	1127	1061	1005	936	891	836	787
		[559]	Tap 2*	WATTS	152	157	164	171	179	184	191	194
RGECZR036 (3T) -	1050/1350	3/4 HP	High Stage Heat -	CFM	1458	1524	1432	1354	1288	1231	1173	1115
75K Gas Heat Option	1030/1030	[559]	Tap 3*	WATTS	209	267	283	296	308	318	328	338
		3/4 HP	Cooling -	CFM	1343	1305	1228	1162	1095	1044	987	935
		[559]	Tap 4	WATTS	178	206	218	227	237	244	253	259
		3/4 HP	High Speed -	CFM	1594	1782	1673	1580	1517	1451	1392	1328
		[559]	Tap 5*	WATTS	246	339	361	377	392	405	418	431
		3/4 HP	Fan -	CFM	1100	1023	975	931	885	854	821	753
		[559]	Tap 1*	WATTS	79	65	65	60	64	60	55	60
		3/4 HP	Low Stage Heat -	CFM	1264	1190	1138	1089	1041	1005	968	903
		[559]	Tap 2*	WATTS	150	141	144	144	150	150	148	155
RGECZR048 (4T) -	1400/1800	3/4 HP	High Stage Heat -	CFM	1589	1522	1463	1403	1350	1304	1261	1203
75K Gas Heat Option	1400/1000	[559]	Tap 3*	WATTS	291	291	302	311	321	328	333	343
		3/4 HP	Cooling -	CFM	1759	1695	1632	1568	1513	1460	1414	1360
		[559]	Tap 4	WATTS	365	370	385	398	411	421	430	441
		3/4 HP	High Speed -	CFM	2157	2100	2028	1952	1891	1825	1772	1726
		[559]	Tap 5*	WATTS	537	553	577	602	619	638	655	671
		1 HP [745]	Fan -	CFM	1399	1352	1323	1265	1226	1196	1141	1139
			Tap 1*	WATTS	102	106	99	101	107	109	107	100
		1 HP [745]	Low Stage Heat -	CFM	1439	1391	1361	1303	1263	1233	1178	1174
		1 111 [7 10]	Tap 2*	WATTS	129	134	128	131	138	140	139	133
RGECZR060 (5T) -	1750/2250	1 HP [745]	High Stage Heat -	CFM	1739	1686	1645	1592	1546	1511	1458	1439
75K Gas Heat Option	1100,2200	[7.10]	Tap 3*	WATTS	333	345	350	359	369	376	382	384
		1 HP [745]	Cooling -	CFM	2092	2033	1980	1931	1879	1837	1787	1751
		· · · · [/ +0]	Tap 4	WATTS	573	593	611	626	642	654	668	679
		1 HP [745]	High Speed -	CFM	2471	2405	2340	2296	2237	2188	2141	2087
		[/+3]	Tap 5*	WATTS	832	860	891	914	934	953	976	996

NOTES: 1. For 575V units, add 30W (transformer wattage) to the watt values mentioned in the table.

Factory tap settings are marked with an asterisk \*.
 Pressure drops across the 3-5T CFM range (1050 - 2250)

Wet coil: ~0.09 Inches W.C.

Downflow: ~0.1 Inches W.C.

Reheat coil: ~0.09 Inches W.C.

# 3-5T-LOW STATIC-HIGH GAS HEAT OPTION-SIDEFLOW (208-230V/575V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range	Motor HP [W]	Motor Speed	CFM/ WATTS		E	External Sta	atic Pressu	re - Inches	s W.C. [kPa	a]	
(	(Min/Max) CFM				0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]
		3/4 HP	Fan -	CFM	1124	888	839	796	725	688	634	590
		[559]	Tap 1*	WATTS	118	90	92	96	102	103	109	108
		3/4 HP	Low Stage Heat -	CFM	1359	1335	1256	1188	1121	1070	1013	959
		[559]	Tap 2*	WATTS	182	215	227	237	247	254	263	269
RGECZR036 (3T) -	1050/1350	3/4 HP	High Stage Heat -	CFM	1503	1609	1512	1429	1364	1304	1245	1185
100K Gas Heat Option	1030/1330	[559]	Tap 3*	WATTS	221	291	309	323	336	347	358	369
		3/4 HP	Cooling -	CFM	1343	1305	1228	1162	1095	1044	987	935
		[559]	Tap 4	WATTS	178	206	218	227	237	244	253	259
		3/4 HP	High Speed -	CFM	1594	1782	1673	1580	1517	1451	1392	1328
		[559]	Tap 5*	WATTS	246	339	361	377	392	405	418	431
		3/4 HP	Fan -	CFM	1100	1023	975	931	885	854	821	753
		[559]	Tap 1*	WATTS	79	65	65	60	64	60	55	60
		3/4 HP	Low Stage Heat -	CFM	1523	1454	1397	1339	1287	1243	1201	1142
		[559]	Tap 2*	WATTS	262	260	270	277	286	291	295	305
RGECZR048 (4T) -	1400/1800	3/4 HP	High Stage Heat -	CFM	1823	1760	1696	1629	1573	1518	1471	1418
120K Gas Heat Option	1100/1000	[559]	Tap 3*	WATTS	392	399	415	431	444	456	466	478
		3/4 HP	Cooling -	CFM	1759	1695	1632	1568	1513	1460	1414	1360
		[559]	Tap 4	WATTS	365	370	385	398	411	421	430	441
		3/4 HP	High Speed -	CFM	2157	2100	2028	1952	1891	1825	1772	1726
		[559]	Tap 5*	WATTS	537	553	577	602	619	638	655	671
		1 HP [745]	Fan -	CFM	1399	1352	1323	1265	1226	1196	1141	1139
			Tap 1*	WATTS	102	106	99	101	107	109	107	100
		1 HP [745]	Low Stage Heat -	CFM	1712	1660	1620	1566	1522	1486	1433	1416
			Tap 2*	WATTS	315	326	330	339	349	356	361	362
RGECZR060 (5T) -	1750/2250	1 HP [745]	High Stage Heat -	CFM	1986	1929	1880	1830	1780	1740	1688	1658
120K Gas Heat Option	100,2200		Tap 3*	WATTS	502	519	533	546	560	571	583	591
		1 HP [745]	Cooling -	CFM	2092	2033	1980	1931	1879	1837	1787	1751
			Tap 4	WATTS	573	593	611	626	642	654	668	679
		1 HP [745]	High Speed -	CFM	2471	2405	2340	2296	2237	2188	2141	2087
			Tap 5*	WATTS	832	860	891	914	934	953	976	996

NOTES: 1. For 575V units, add 30W (transformer wattage) to the watt values mentioned in the table.

Factory tap settings are marked with an asterisk \*.
 Pressure drops across the 3-5T CFM range (1050 - 2250)

Wet coil: ~0.09 Inches W.C.

Downflow: ~0.1 Inches W.C.

Reheat coil: ~0.09 Inches W.C.

# 3-5T-HIGH STATIC-LOW GAS HEAT OPTION-SIDEFLOW (460V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range	Motor HP [W]	Motor Speed	CFM/ WATTS		E	xternal St	atic Pressu	re - Inches	s W.C. [kPa	a]	
, <i>,</i> ,	(Min/Max) CFM				0.8 [.2]	0.9 [.22]	1 [.25]	1.1 [.27]	1.2 [.3]	1.3 [.32]	1.4 [.35]	1.5 [.37]
		1 HP [745]	Fan -	CFM	1043	997	922	875	817	775	712	672
		T HF [745]	Tap 1*	WATTS	303	310	320	328	335	340	344	347
		1 HP [745]	Low Stage Heat -	CFM	831	791	711	666	613	577	514	479
		1116 [743]	Tap 2*	WATTS	216	221	229	236	239	241	242	241
RGECZR036 (3T) -	1050/1350	1 HP [745]	High Stage Heat -	CFM	1410	1356	1290	1237	1171	1120	1057	1008
100K Gas Heat Option	1030/1030		Tap 3*	WATTS	454	465	478	488	501	511	521	529
		1 HP [745]	Cooling -	CFM	1046	1001	925	878	820	778	715	675
			Tap 4	WATTS	304	312	321	329	336	341	345	348
		1 HP [745]	High Speed -	CFM	1580	1520	1459	1403	1334	1278	1216	1163
			Tap 5*	WATTS	524	536	550	562	578	590	603	613
		1 HP [745]	Fan -	CFM	1135	1102	1049	1019	941	911	840	772
			Tap 1*	WATTS	282	282	294	292	311	313	329	348
		1 HP [745]	Low Stage Heat -	CFM	1146	1113	1061	1030	953	923	853	784
			Tap 2*	WATTS	290	290	302	301	319	322	337	356
RGECZR048 (4T) -	1400/1800	1 HP [745]	High Stage Heat -	CFM	1517	1477	1431	1392	1339	1297	1241	1183
120K Gas Heat Option	1100/1000		Tap 3*	WATTS	531	540	551	559	573	582	596	613
		1 HP [745]	Cooling -	CFM	1500	1459	1414	1375	1321	1279	1222	1164
			Tap 4	WATTS	520	528	539	546	561	570	584	601
		1 HP [745]	High Speed -	CFM	1803	1757	1717	1671	1636	1585	1540	1490
			Tap 5*	WATTS	717	732	743	758	769	784	796	811
		1 HP [745]	Fan -	CFM	1063	1000	909	849	796	743	695	644
			Tap 1*	WATTS	311	319	331	341	355	365	375	384
		1 HP [745]	Low Stage Heat -	CFM	1063	1000	909	849	796	743	695	644
			Tap 2*	WATTS	311	319	331	341	355	365	375	384
RGECZR060 (5T) -	1750/2250	1 HP [745]	High Stage Heat -	CFM	1035	1090	1161	1220	1279	1335	1390	1444
120K Gas Heat Option	1100,2200	[/ .0]	Tap 3*	WATTS	521	513	514	505	499	488	487	468
		1 HP [745]	Cooling -	CFM	1540	1590	1636	1674	1714	1754	1795	1826
			Tap 4	WATTS	799	787	774	757	738	720	700	681
		1 HP [745]	High Speed -	CFM	1871	1894	1930	1966	2000	2045	2076	2127
			Tap 5*	WATTS	1049	1021	1008	977	958	941	924	906

NOTES: 1. For 575V units, add 30W (transformer wattage) to the watt values mentioned in the table.

Factory tap settings are marked with an asterisk \*.
 Pressure drops across the 3-5T CFM range (1050 - 2250)

Wet coil: ~0.09 Inches W.C. Downflow: ~0.1 Inches W.C.

Reheat coil: ~0.09 Inches W.C.

# 3-5T-HIGH STATIC-HIGH GAS HEAT OPTION-SIDEFLOW (460V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range	Motor HP [W]	Motor Speed	CFM/ WATTS		E	xternal Sta	atic Pressu	re - Inches	s W.C. [kPa	a]	
( 5 - )	(Min/Max) CFM				0.8 [.2]	0.9 [.22]	1 [.25]	1.1 [.27]	1.2 [.3]	1.3 [.32]	1.4 [.35]	1.5 [.37]
			Fan -	CFM	912	871	792	746	692	653	590	553
		1 HP [745]	Tap 1*	WATTS	249	256	264	271	276	279	281	282
		1 HP [745]	Low Stage Heat -	CFM	912	871	792	746	692	653	590	553
		1 ПР [740]	Tap 2*	WATTS	249	256	264	271	276	279	281	282
RGECZR036 (3T) -	1050/1350	1 HP [745]	High Stage Heat -	CFM	1749	1685	1628	1570	1498	1437	1374	1318
100K Gas Heat Option	1050/1350		Tap 3*	WATTS	594	607	623	636	655	669	684	698
		1 HP [745]	Cooling -	CFM	1046	1001	925	878	820	778	715	675
		1 11 [743]	Tap 4	WATTS	304	312	321	329	336	341	345	348
		1 HP [745]	High Speed -	CFM	1580	1520	1459	1403	1334	1278	1216	1163
		1111 [743]	Tap 5*	WATTS	524	536	550	562	578	590	603	613
		1 HP [745]	Fan -	CFM	1135	1102	1049	1019	941	911	840	772
		1117 [743]	Tap 1*	WATTS	282	282	294	292	311	313	329	348
		1 HP [745]	Low Stage Heat -	CFM	1510	1470	1424	1385	1331	1289	1233	1175
		1111 [743]	Tap 2*	WATTS	527	535	546	554	568	577	591	608
RGECZR048 (4T) -	1400/1800	1 HP [745]	High Stage Heat -	CFM	1691	1647	1605	1561	1519	1472	1422	1369
120K Gas Heat Option	1400/1000		Tap 3*	WATTS	644	657	667	679	692	704	717	733
		1 HP [745]	Cooling -	CFM	1500	1459	1414	1375	1321	1279	1222	1164
			Tap 4	WATTS	520	528	539	546	561	570	584	601
		1 HP [745]	High Speed -	CFM	1803	1757	1717	1671	1636	1585	1540	1490
		1111 [743]	Tap 5*	WATTS	717	732	743	758	769	784	796	811
		1 HP [745]	Fan -	CFM	1063	1000	909	849	796	743	695	644
			Tap 1*	WATTS	311	319	331	341	355	365	375	384
		1 HP [745]	Low Stage Heat -	CFM	1063	1000	909	849	796	743	695	644
			Tap 2*	WATTS	311	319	331	341	355	365	375	384
RGECZR060 (5T) -	1750/2250	1 HP [745]	High Stage Heat -	CFM	1035	1090	1161	1220	1279	1335	1390	1444
120K Gas Heat Option	1100/2200	[/+3]	Tap 3*	WATTS	521	513	514	505	499	488	487	468
		1 HP [745]	Cooling -	CFM	1540	1590	1636	1674	1714	1754	1795	1826
			Tap 4	WATTS	799	787	774	757	738	720	700	681
		1 HP [745]	High Speed -	CFM	1871	1894	1930	1966	2000	2045	2076	2127
			Tap 5*	WATTS	1049	1021	1008	977	958	941	924	906

NOTES: 1. For 575V units, add 30W (transformer wattage) to the watt values mentioned in the table.

Factory tap settings are marked with an asterisk \*.
 Pressure drops across the 3-5T CFM range (1050 - 2250)

Wet coil: ~0.09 Inches W.C.

Downflow: ~0.1 Inches W.C.

Reheat coil: ~0.09 Inches W.C.

# 3-5T-LOW STATIC-LOW GAS HEAT OPTION-SIDEFLOW (460V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range	Motor HP [W]	Motor Speed	CFM/ WATTS		E	xternal Sta	atic Pressu	re - Inches	W.C. [kPa	a]	
( 3 - )	(Min/Max) CFM				0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]
		3/4 HP	Fan -	CFM	1124	888	839	796	725	688	634	590
		[559]	Tap 1*	WATTS	118	90	92	96	102	103	109	108
		3/4 HP	Low Stage Heat -	CFM	1126	892	842	799	728	691	637	593
		[559]	Tap 2*	WATTS	119	91	93	97	103	105	110	109
RGECZR036 (3T) -	1050/1350	3/4 HP	High Stage Heat -	CFM	1392	1398	1314	1243	1177	1123	1066	1011
75K Gas Heat Option	1030/1330	[559]	Tap 3*	WATTS	191	232	245	256	267	275	285	292
		3/4 HP	Cooling -	CFM	1343	1305	1228	1162	1095	1044	987	935
		[559]	Tap 4	WATTS	178	206	218	227	237	244	253	259
		3/4 HP	High Speed -	CFM	1594	1782	1673	1580	1517	1451	1392	1328
		[559]	Tap 5*	WATTS	246	339	361	377	392	405	418	431
		3/4 HP	Fan -	CFM	1100	1023	975	931	885	854	821	753
		[559]	Tap 1*	WATTS	79	65	65	60	64	60	55	60
		3/4 HP	Low Stage Heat -	CFM	1250	1177	1125	1076	1028	992	956	891
		[559]	Tap 2*	WATTS	144	135	138	137	143	142	141	147
RGECZR048 (4T) -	1400/1800	3/4 HP	High Stage Heat -	CFM	1476	1406	1350	1294	1243	1199	1159	1099
75K Gas Heat Option	1400/1000	[559]	Tap 3*	WATTS	242	239	247	253	261	266	269	277
		3/4 HP	Cooling -	CFM	1759	1695	1632	1567	1512	1460	1414	1360
		[559]	Tap 4	WATTS	365	369	384	398	410	421	429	441
		3/4 HP	High Speed -	CFM	2157	2100	2028	1952	1891	1825	1772	1726
		[559]	Tap 5*	WATTS	537	553	577	602	619	638	655	671
		1 HP [745]	Fan -	CFM	1399	1352	1323	1265	1226	1196	1141	1139
			Tap 1*	WATTS	102	106	99	101	107	109	107	100
		1 HP [745]	Low Stage Heat -	CFM	1399	1352	1323	1265	1226	1196	1141	1139
			Tap 2*	WATTS	102	106	99	101	107	109	107	100
RGECZR060 (5T) -	1750/2250	1 HP [745]	High Stage Heat -	CFM	1630	1579	1542	1487	1444	1410	1356	1343
75K Gas Heat Option	1100/2200		Tap 3*	WATTS	259	268	270	276	285	291	294	293
		1 HP [745]	Cooling -	CFM	2092	2033	1980	1931	1879	1837	1787	1751
			Tap 4	WATTS	573	593	611	626	642	654	668	679
		1 HP [745]	High Speed -	CFM	2471	2405	2340	2296	2237	2188	2141	2087
			Tap 5*	WATTS	832	860	891	914	934	953	976	996

NOTES: 1. For 575V units, add 30W (transformer wattage) to the watt values mentioned in the table.

Factory tap settings are marked with an asterisk \*.
 Pressure drops across the 3-5T CFM range (1050 - 2250)

Wet coil: ~0.09 Inches W.C. Downflow: ~0.1 Inches W.C.

Reheat coil: ~0.09 Inches W.C.

# 3-5T-LOW STATIC-HIGH GAS HEAT OPTION-SIDEFLOW (460V)

Unit Model (Tonnage)	Manufacturer Recommended Airflow Range	Motor HP [W]	Motor Speed	CFM/ WATTS		E	external Sta	atic Pressu	re - Inches	s W.C. [kPa	a]	
, J,	(Min/Max) CFM				0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]
		3/4 HP	Fan -	CFM	1124	888	839	796	725	688	634	590
		[559]	Tap 1*	WATTS	118	90	92	96	102	103	109	108
		3/4 HP	Low Stage Heat -	CFM	1237	1104	1039	985	916	872	816	768
		[559]	Tap 2*	WATTS	149	150	157	163	172	176	183	186
RGECZR036 (3T) -	1050/1350	3/4 HP	High Stage Heat -	CFM	1521	1643	1543	1458	1394	1332	1274	1213
100K Gas Heat Option	1030/1330	[559]	Tap 3*	WATTS	226	301	319	334	347	358	370	381
		3/4 HP	Cooling -	CFM	1343	1305	1228	1162	1095	1044	987	935
		[559]	Tap 4	WATTS	178	206	218	227	237	244	253	259
		3/4 HP	High Speed -	CFM	1594	1782	1673	1580	1517	1451	1392	1328
		[559]	Tap 5*	WATTS	246	339	361	377	392	405	418	431
		3/4 HP	Fan -	CFM	1100	1023	975	931	885	854	821	753
		[559]	Tap 1*	WATTS	79	65	65	60	64	60	55	60
		3/4 HP	Low Stage Heat -	CFM	1347	1275	1221	1169	1120	1081	1043	980
		[559]	Tap 2*	WATTS	186	179	185	187	194	195	195	203
RGECZR048 (4T) -	1400/1800	3/4 HP	High Stage Heat -	CFM	1776	1713	1649	1584	1529	1476	1429	1376
120K Gas Heat Option	1100/1000	[559]	Tap 3*	WATTS	372	377	393	407	419	430	439	451
		3/4 HP	Cooling -	CFM	1759	1695	1632	1567	1512	1460	1414	1360
		[559]	Tap 4	WATTS	365	369	384	398	410	421	429	441
		3/4 HP	High Speed -	CFM	2157	2100	2028	1952	1891	1825	1772	1726
		[559]	Tap 5*	WATTS	537	553	577	602	619	638	655	671
		1 HP [745]	Fan -	CFM	1399	1352	1323	1265	1226	1196	1141	1139
			Tap 1*	WATTS	102	106	99	101	107	109	107	100
		1 HP [745]	Low Stage Heat -	CFM	1502	1454	1421	1364	1323	1292	1237	1230
			Tap 2*	WATTS	172	178	175	179	187	190	190	186
RGECZR060 (5T) -	1750/2250	1 HP [745]	High Stage Heat -	CFM	2020	1962	1912	1862	1811	1770	1720	1688
120K Gas Heat Option		[0]	Tap 3*	WATTS	524	542	557	571	586	597	610	619
		1 HP [745]	Cooling -	CFM	2092	2033	1980	1931	1879	1837	1787	1751
		[, 10]	Tap 4	WATTS	573	593	611	626	642	654	668	679
		1 HP [745]	High Speed -	CFM	2471	2405	2340	2296	2237	2188	2141	2087
			Tap 5*	WATTS	832	860	891	914	934	953	976	996

NOTES: 1. For 575V units, add 30W (transformer wattage) to the watt values mentioned in the table.

Factory tap settings are marked with an asterisk \*.
 Pressure drops across the 3-5T CFM range (1050 - 2250)

Wet coil: ~0.09 Inches W.C.

Downflow: ~0.1 Inches W.C.

Reheat coil: ~0.09 Inches W.C.

			ELE			EPTK PER	IES			
		036ACT07 036ACT10	036ACU07 036ACU10	036ADT07 036ADT10	036ADU07 036ADU10	036AJT07 036AJT10	036AYT07 036AYT10	036AYU07 036AYU10	048ACT07 048ACT12	048ACU07 048ACU12
	Unit Operating Voltage Range	187-253	187-253	418-506	418-506	187-253	523-632	523-632	187-253	187-253
_	Volts	208/230	208/230	460	460	208/230	575	575	208/230	208/230
ation	Phase	3	3	3	3	1	3	3	3	3
Ĩ	Hz	60	60	60	60	60	60	60	60	60
Unit Information	Minimum Circuit Ampacity	19	25	11	10	25	12	19	25	31
Unit	Minimum Overcurrent Protection Device Size	25	25	15	15	30	15	15	30	30
	Maximum Overcurrent Protection Device Size	25	35	15	15	35	15	30	35	40
	No.	1	1	1	1	1	1	1	1	1
tor	Volts	208/230	208/230	480	480	208/230	575	575	208/230	208/230
Compressor Motor	Phase	3	3	3	3	1	3	3	3	3
SSO	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
npre	HP, Compressor	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	3 1/2	3 1/2
S	Amps (RLA), Comp.	10	10	6.3	6.3	15.7	4.2	4.2	14.6	14.6
	Amps (LRA), Comp.	71	71	38	38	77	36.5	36.5	83.1	83.1
-	No.	1	1	1	1	1	1	1	1	1
Condenser Motor	Volts	208/230	208/230	480	480	208/230	575	575	208/230	208/230
er N	Phase	1	1	1	1	1	1	1	1	1
lens	HP	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/2	1/2
Sonc	Amps (FLA, each)	1.2	1.2	0.8	0.8	1.2	0.55	0.55	2.5	2.5
)	Amps (LRA, each)	2.3	2.3	1.4	1.4	2.3	1.1	1.1	5.6	5.6
	No.	1	1	1	1	1	1	1	1	1
Fan	Volts	208/230	208/230	460	460	208/230	208/230	208/230	208/230	208/230
Evaporator Fan	Phase	1	1	1	1	1	1	1	1	1
pora	HP	3/4	1 1/2	3/4	1	3/4	3/4	1 1/2	3/4	1 1/2
Eva	Amps (FLA, each)	6	11.5	3.2	2.1	6	6	11.5	6	11
	Amps (LRA, each)									

# **ELECTRICAL DATA – RGECZR SERIES**

L

			ELE	CIRICAL	DAIA – KG	ECZR SER	IES			
		048ADT07 048ADT12	048ADU07 048ADU12	048AJT07 048AJT12	048AYT07 048AYT12	048AYU07 048AYU12	060ACT07 060ACT12	060ACU07 060ACU12	060ADT07 060ADT12	060ADU07 060ADU12
	Unit Operating Voltage Range	418-506	418-506	187-253	523-632	523-632	187-253	187-253	418-506	418-506
_	Volts	460	460	208/230	575	575	208/230	208/230	460	460
atior	Phase	3	3	1	3	3	3	3	3	3
Jrm	Hz	60	60	60	60	60	60	60	60	60
Unit Information	Minimum Circuit Ampacity	13	12	34	13	20	34	34	15	15
Unit	Minimum Overcurrent Protection Device Size	15	15	40	15	15	35	35	20	20
	Maximum Overcurrent Protection Device Size	15	15	50	15	30	45	45	20	20
	No.	1	1	1	1	1	1	1	1	1
ţ	Volts	460	460	208/230	575	575	208/230	208/230	460	460
Compressor Motor	Phase	3	3	1	3	3	3	3	3	3
SSOI	RPM	3450	3450	3450	3450	3450	3450	3450	3450	3450
Jpre	HP, Compressor	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2	4	4	4	4
Con	Amps (RLA), Comp.	6.8	6.8	22.1	4.9	4.9	17.7	17.7	7.9	7.9
	Amps (LRA), Comp.	41	41	109	33	33	110	110	52	52
	No.	1	1	1	1	1	1	1	1	1
Condenser Motor	Volts	460	460	208/230	575	575	208/230	208/230	460	460
er N	Phase	1	1	1	1	1	1	1	1	1
ensi	HP	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
bno	Amps (FLA, each)	1.5	1.5	2.5	1.1	1.1	2.5	2.5	1.5	1.5
0	Amps (LRA, each)	3.1	3.1	5.6	2.5	2.5	5.6	5.6	3.1	3.1
	No.	1	1	1	1	1	1	1	1	1
Fan	Volts	460	460	208/230	208/230	208/230	208/230	208/230	460	460
Evaporator Fan	Phase	1	1	1	1	1	1	1	1	1
pora	HP	3/4	1	3/4	3/4	1 1/2	1 1/2	1 1/2	1	1
Eva	Amps (FLA, each)	3.2	2.1	6	6	11.5	11.5	11.5	4	4
	Amps (LRA, each)									

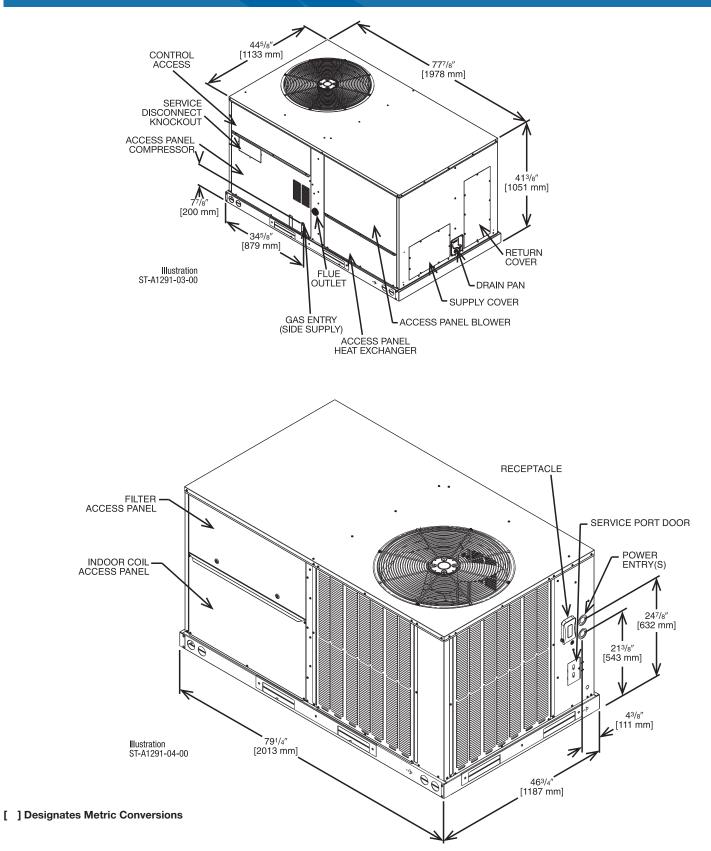
# **ELECTRICAL DATA – RGECZR SERIES**

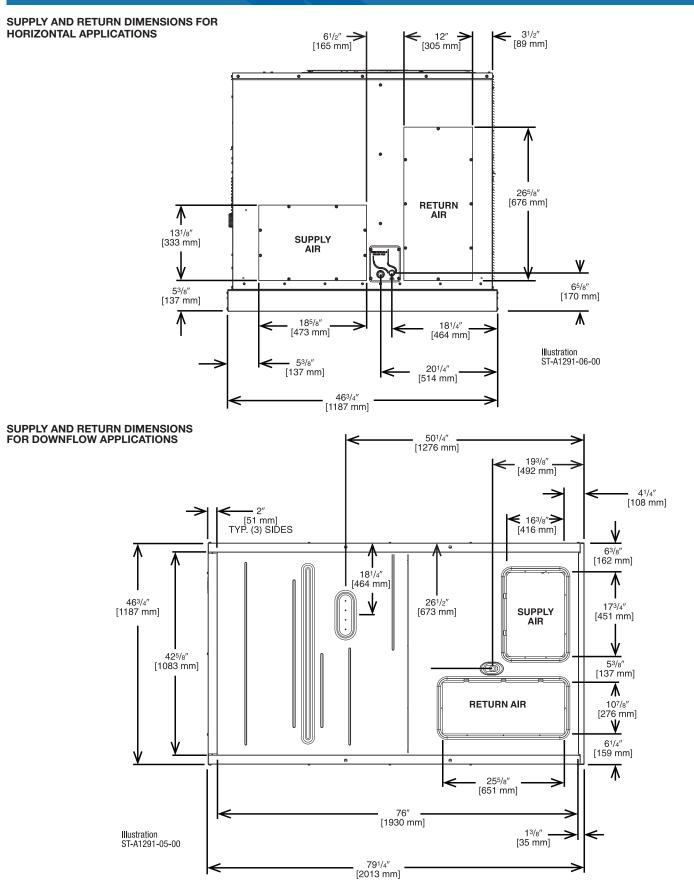
I

Γ

### 060AJT07 060AJT12 060AYT07 060AYT12 060AYU07 060AYU12 Unit Operating Voltage Range 187-253 523-632 523-632 Volts 208/230 575 575 Unit Information Phase 1 3 3 Hz 60 60 60 Minimum Circuit Ampacity 46 19 19 Minimum Overcurrent Protection Device Size 50 15 15 Maximum Overcurrent Protection Device Size 70 30 30 No. 1 1 1 Volts 208/230 **Compressor Motor** 575 575 Phase 1 3 3 3450 RPM 3450 3450 4 HP, Compressor 4 4 Amps (RLA), Comp. 25 5.7 5.7 Amps (LRA), Comp. 134 39.5 39.5 1 1 1 No. **Condenser Motor** 208/230 Volts 575 575 Phase 1 1 1 HP 1/2 1/2 1/2 Amps (FLA, each) 2.5 1.1 1.1 Amps (LRA, each) 2.5 5.6 2.5 No. 1 1 1 **Evaporator Fan** Volts 208/230 208/230 208/230 Phase 1 1 1 ΗP 1 1/2 1 1/2 1 1/2 Amps (FLA, each) 11.5 11.5 11.5 Amps (LRA, each)

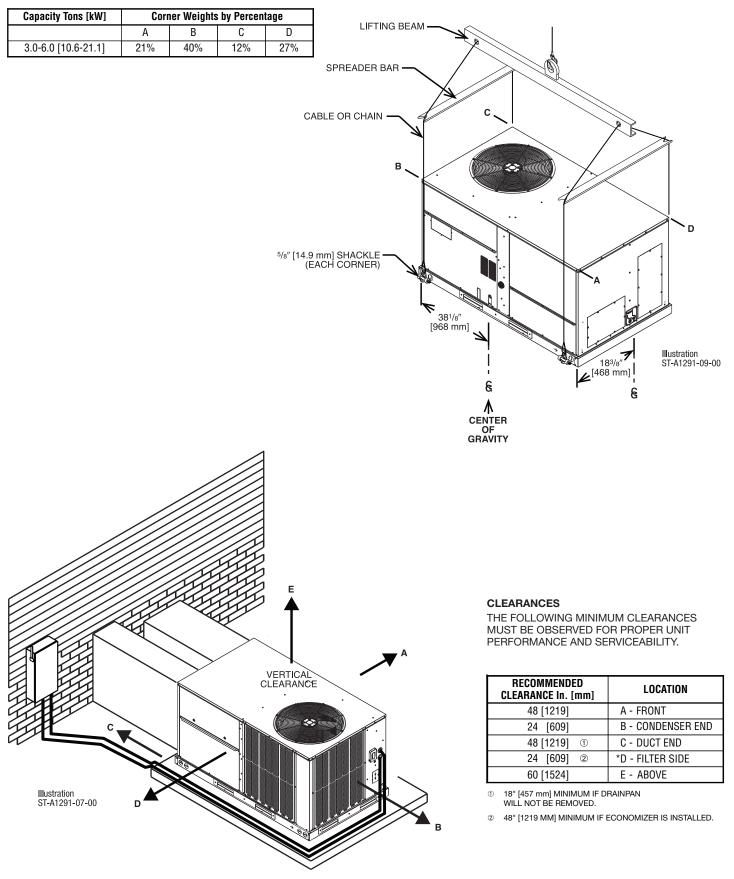
### **ELECTRICAL DATA – RGECZR SERIES**





<sup>[ ]</sup> Designates Metric Conversions

# **WEIGHTS**



# FIELD-INSTALLED ACCESSORY EQUIPMENT

Accessory	Model Number	Shipping Weight Lbs. [kg]	Installed Weight Lbs. [kg]	Factory Installation Available?
Economizer w/Single Enthalpy (Downflow/Vertical)	RXRD-01MCDAM3	100 [45.4]	66 [29.9]	Yes
Economizer w/Single Enthalpy (Horizontal)	RXRD-01MCHAM3	72 [32.7]	69 [31.3]	No
Economizer-w/Single Enthalpy (Downflow/Vertical) DDC	RXRD-01MCDBM3	100 [45.4]	66 [29.9]	Yes
Economizer w/Single Enthalpy (Horizontal) DDC	RXRD-01MCHBM3	72 [32.7]	69 [31.3]	No
Dual Enthalpy Kit	RXRX-BV01	1 [0.5]	1 [0.5]	No
Dual Enthalpy Kit DDC	RXRX-BV02	1 [0.5]	1 [0.5]	No
Power Exhaust (230V) Vertical	RXRX-CCF02C	24 [10.9]	21 [9.5]	No
Power Exhaust (460V) Vertical	RXRX-CCF02D	20 [9.1]	17 [7.7]	No
Power Exhaust (230V) Horizontal	RXRX-CCF03C	42 [19.1]	39 [17.7]	No
Power Exhaust (460V) Horizontal	RXRX-CCF03D	42 [19.1]	39 [17.7]	No
Manual Fresh Air Damper	RXRF-ACA1	22 [10.0]	18 [8.2]	No
Motorized Fresh Air Damper	RXRF-ACB1	53 [24.0]	43 [19.5]	No
Roofcurb, 14"	RXKG-DCC14	94 [42.6]	90 [40.8]	No
Roofcurb, 24"	RXKG-DCC24	124 [56.2]	120 [54.4]	No
Roofcurb Adapter	RXRX-DCCAE	159 [72.1]	145 [65.8]	No
Concentric Diffuser 3-4 Ton Flush	RXRN-AEF1800	30 [13.6]	25 [11.3]	No
Concentric Diffuser 5-6 Ton Flush	RXRN-AEF2000	30 [13.6]	25 [11.3]	No
Concentric Diffuser 3-4 Ton Drop	RXRN-AED1800	35 [15.9]	30 [13.6]	No
Concentric Diffuser 5-6 Ton Drop	RXRN-AED2000	35 [15.9]	30 [13.6]	No
Concentric Adapter 3-4 Ton Drop	RXMC-DC01	35 [15.9]	30 [13.6]	No
Concentric Adapter 5-6 Ton Drop	RXMC-DC02	40 [18.2]	35 [15.9]	No
Outdoor Coil Louver Kit	RXRX-ADD04C	30 [13.6]	25 [11.3]	Yes
Nonpowered Convenience Outlet	RXRX-BN01	2 [1.0]	1.5 [0.7]	Yes
Unfused Service Disconnect	RXRX-BP01	10 [4.5]	9 [4.1]	Yes
Comfort Alert (1 Phase) DDC	RXRX-AZ03	3 [1.5]	2 [0.9]	Yes
Comfort Alert (1 Phase) Non-DDC	RXRX-AZ04	3 [1.5]	2 [0.9]	Yes
Comfort Alert (3 Phase) DDC	RXRX-AZ01	3 [1.5]	2 [0.9]	Yes
Comfort Alert (3 Phase) Non-DDC	RXRX-AZ02	3 [1.5]	2 [0.9]	Yes
Carbon Dioxide Sensor (Wall Mount)	RXRX-AR02	1 [0.5]	1 [0.5]	No
BACnet Communication Card	RXRX-AY01	1 [0.5]	1 [0.5]	No
LonWorks Communication Card	RXRX-AY02	1 [0.5]	1 [0.5]	No
Room Humidity Sensor	RHC-ZNS4	1 [0.5]	1 [0.5]	No
Room Temperature and Relative Humidity Sensor	RHC-ZNS5	1 [0.5]	1 [0.5]	No
Low-Ambient Control Kit	RXRZ-A04	4 [1.8]	3 [1.4]	Yes
Freeze Stat Kit	RXRX-AM05	2 [1.0]	1.5 [0.7]	Yes
Return Smoke Detector (Field kit)	RXRX-BS01	7 [3.2]	6 [2.7]	No
Return/ Supply Smoke Detector (Field kit)	RXRX-BS02	5 [2.3]	4 [1.8]	No
LP Kit ((-)GEC 75K, 120K)	RXGJ-FP40	2 [1.0]	1 [0.5]	No
LP Kit ((-)GEC 100K)	RXGJ-FP41	2 [1.0]	1 [0.5]	No

# FLUSH MOUNT ROOM TEMPERATURE SENSORS FOR NETWORKED DDC APPLICATIONS



# ROOM TEMPERATURE SENSOR with TIMED OVERRIDE BUTTON

RHC-ZNS1

**RHC-ZNS2** 

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



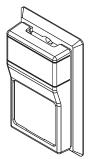
### ROOM TEMPERATURE SENSOR with TIMED OVERRIDE BUTTON and STATUS INDICATOR

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



# ROOM TEMPERATURE SENSOR RHC-ZNS3 with SETPOINT ADJUSTMENT and TIMED OVERRIDE BUTTON

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



### ROOM HUMIDITY SENSOR

Transmits room relative humidity to DDC System.

RHC-ZNS4



**ROOM TEMPERATURE AND RELATIVE HUMIDITY SENSORRHC-ZNS5**Transmits room temperature and relative humidity to DDC System.

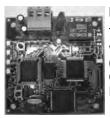
### **COMMUNICATION CARDS**



### BACnet<sup>®</sup> COMMUNICATION CARD

RXRX-AY01

The field installed BACnet<sup>®</sup> 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<sup>®</sup> Communication Module plugs onto the unit RTU-C controller and allows communication between the RTU-C and the BACnet MSTP network.



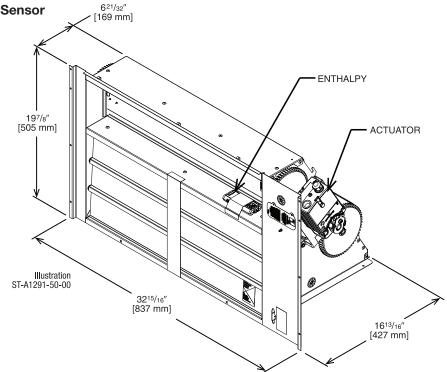
### LonWorks® COMMUNICATION CARD RXRX-AY02

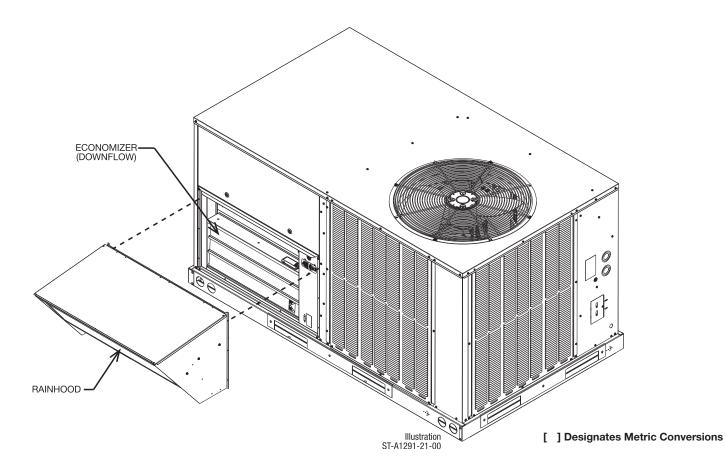
The field installed LonWorks<sup>®</sup> Communication Card allows the RTU-C unit controller to communicate with a third party building management system that supports the LonMark Space Comfort Controller (SCC) functional profile or LonMark Discharge Air Controller (DAC) functional profile. The LonMark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

### NON-DDC ECONOMIZER FOR DOWNFLOW DUCT INSTALLATION Use to Select Field-Installed Options Only

RXRD-01MCDAM3—Single Enthalpy (Outdoor) RXRX-BV01—Dual Enthalpy Upgrade Kit

- RXRX-AR02–Optional Wall-Mounted CO, Sensor
- Features Honeywell JADE<sup>™</sup> Digital Controls
- Available Factory Installed or Field Accessory
- Gear Driven Direct Drive Actuator
- Fully Modulating (0-100%)
- Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2013
- AMCA 511 Certified Class 1A Leakage— 1" WG of differential pressure tested to AMCA Standard 500-D
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin Electrical Connections
- Standard Barometric Relief Damper
- Single Enthalpy with Dual Enthalpy Upgrade Kit Available
- CO<sub>2</sub> Input Sensor Available
- Field Assembled Hood Ships with
- EconomizerEconomizer Ships Complete for Downflow Duct Application.
- Field Installed Power Exhaust Available
- Fault detections and diagnostics





### NON-DDC ECONOMIZER FOR HORIZONTAL DUCT INSTALLATION Field Installed Only

## 7 11/32' RXRD-01MCDAM3—Single Enthalpy (Outdoor) [187 mm] RXRX-BV01 – Dual Enthalpy Upgrade Kit RXRX-AR02 – Wall-mounted CO<sub>2</sub> Sensor ■ Features Honeywell JADE<sup>TM</sup> Digital Controls Available as a Field Installed Accessory Only Gear Driven Direct Drive Actuator Fully Modulating (0-100%) Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2013 Slip-In Design for Easy Installation Standard Barometric Relief Damper Single Enthalpy with Dual Enthalpy Upgrade Kit Available CO<sub>2</sub> Input Sensor Available Field Assembled Hood Ships with Economizer Economizer Ships Complete for Horizontal Duct Application 197/8″ [505 mm] Field Installed Power Exhaust Available 35' [889 mm] : Illustration ST-A1291-38-00 ECONOMIZER (HORIZONTAL) O/A DAMPER (HORIZONTAL)

RAINHOOD -

[ ] Designates Metric Conversions

Illustration ST-A1291-52-00

### DDC-ECONOMIZER FOR DOWNFLOW DUCT INSTALLATION

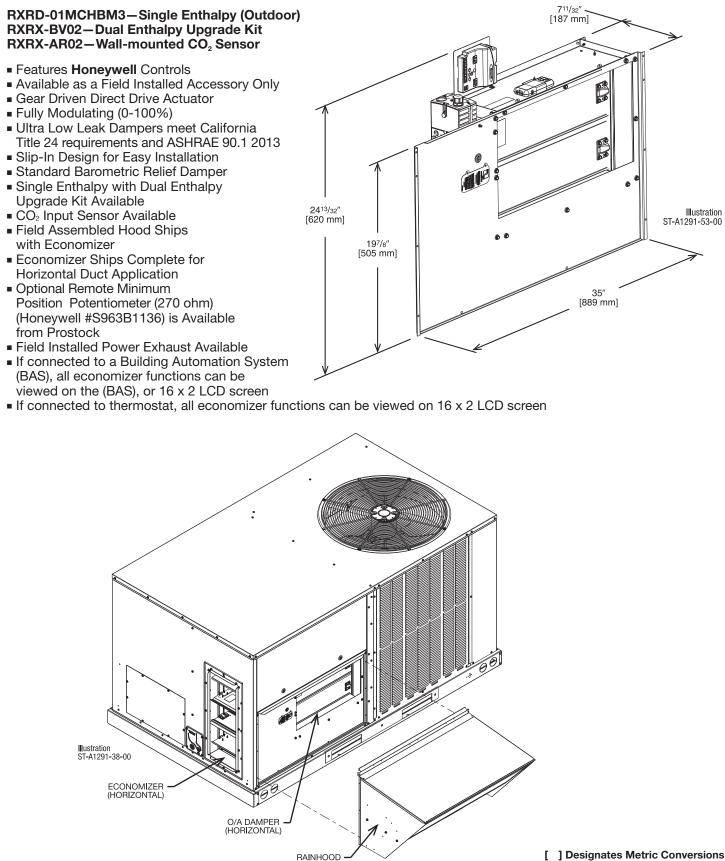
### Use to Select Field Installed Options Only

711/32" [187 mm] RXRD-01MDDBM3-Single Enthalpy (Outdoor) RXRX-BV02—Dual Enthalpy Upgrade Kit RXRX-AR02—Optional Wall-Mounted CO, Sensor **RXRD-01MCDBM3** Features Honeywell Controls Available Factory Installed or Field Accessory Gear Driven Direct Drive Actuator Fully Modulating (0-100%) Ultra Low Leak Dampers meet California Title 24 requirements and ASHRAE 90.1 2013 Slip-In Design for Easy Installation Standard Barometric Relief Damper Single Enthalpy with Dual Enthalpy 2413/32" Illustration [620 mm] Upgrade Kit Available ST-A1291-53-00 CO<sub>2</sub> Input Sensor Available 197/8" Field Assembled Hood Ships [505 mm] with Economizer Economizer Ships Complete for 35 Downflow Duct Application. [889 mm] Optional Remote Minimum Position Potentiometer (270 ohm) (Honeywell #S963B1136) is Available from Prostock. Field Installed Power Exhaust Available Prewired for Smoke Detector If connected to a Building Automation System (BAS), all economizer functions can be viewed on the (BAS), or 16 x 2 LCD screen If connected to thermostat, all economizer functions can be viewed on 16 x 2 LCD screen ECONOMIZER (DOWNFLOW) RAINHOOD

> Illustration ST-A1291-21-00

### DDC-ECONOMIZER FOR HORIZONTAL DUCT INSTALLATION

### Field Installed Only

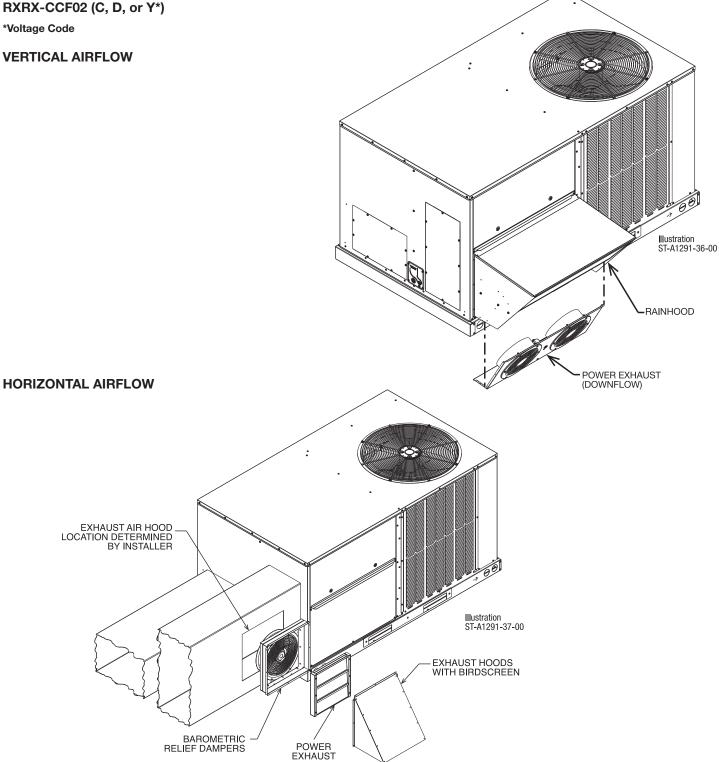


### POWER EXHAUST KIT FOR RXRD-01MCDAM3, RXRD-01MCDBM3, RXRD-01MCHAM3, RXRD-01MCHBM3 ECONOMIZERS

RXRX-CCF02 (C, D, or Y\*)

\*Voltage Code

**VERTICAL AIRFLOW** 

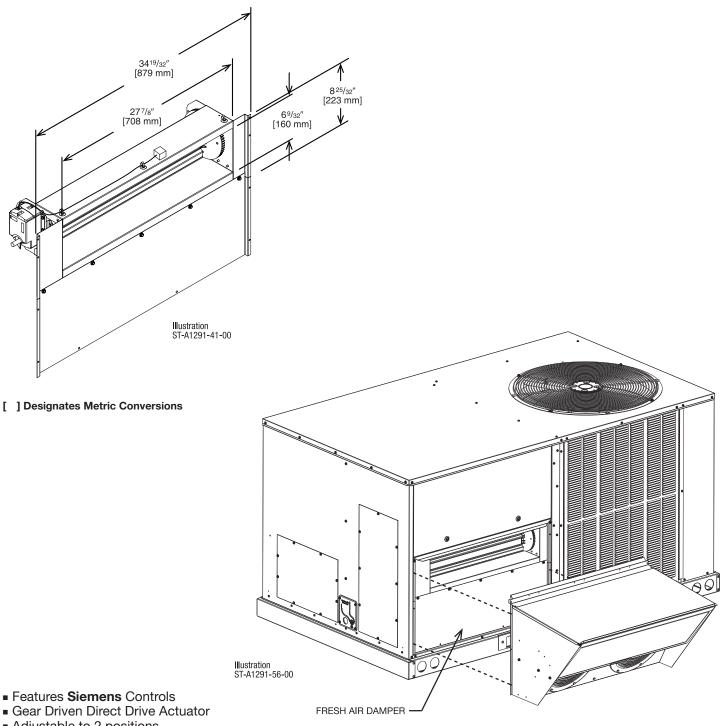


Model No.	No. of Fans	Volts	Phase	HP (ea.)	CFM [L/s]*	RPM	FLA (ea.)	LRA (ea.)
RXRX-CCF02C	2	208-230	1	0.47	2200	3000	1.55	1.1
RXRX-CCF02D	2	460	3	0.40	1970	2750	0.51	1.9

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

### **FRESH AIR DAMPER**

### **MOTORIZED DAMPER KIT RXRF-ACB1**

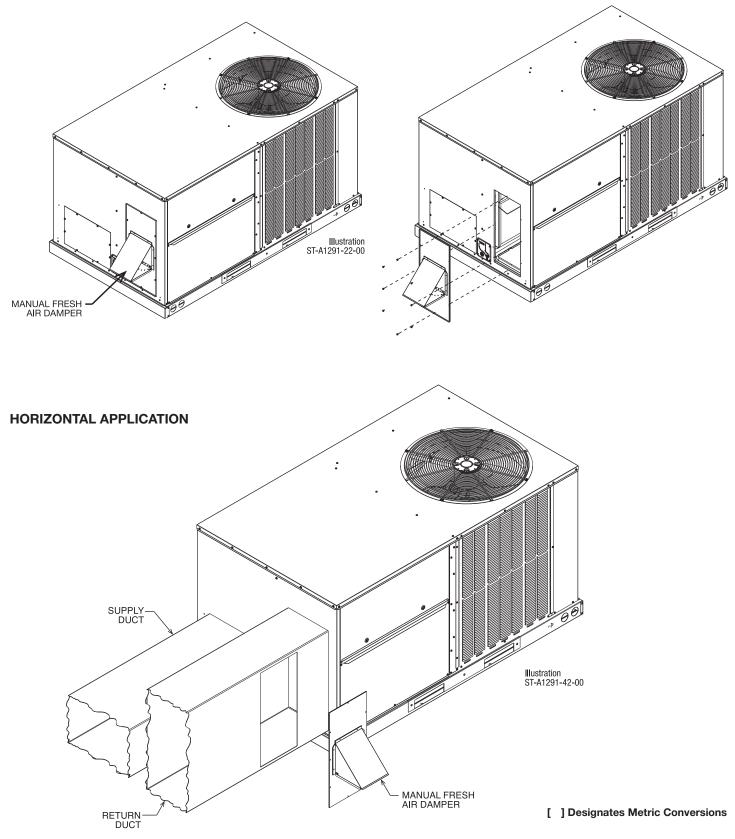


- Adjustable to 2 positions
- Slip-In Design for Easy Installation
- Plug-In Polarized 12-pin and 4-pin Electrical Connections
   Pre-Configured—No Field Adjustments Necessary

### FRESH AIR DAMPER (Cont.)

RXRF-ACA1

### **DOWNFLOW APPLICATION**



### **ROOFCURBS (Full Perimeter)**

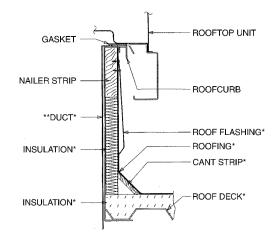
- Sure Comfort's roofcurb design can be utilized on all 3-5 ton [10.6-17.6 kW] RGEC- models.
- Two available heights (14" [356 mm] and 24" [610 mm]) for ALL models.
- Quick assembly corners for simple and fast assembly.

**Height of Curb** 

14" [356 mm]

24" [610 mm]

- Opening provided in bottom pan to match the "Thru the Curb" electrical, gas piping, condensate, connection opening provided on the unit base pan.
- 1" [25 mm] x 4" [102 mm] Nailer provided.
- Sealing gasket (40' [12.2 m]) provided with Roofcurb.
- Packaged for easy field assembly.



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

> Illustration ST-A0743-02

[ ] Designates Metric Conversions

### ROOFCURB INSTALLATION

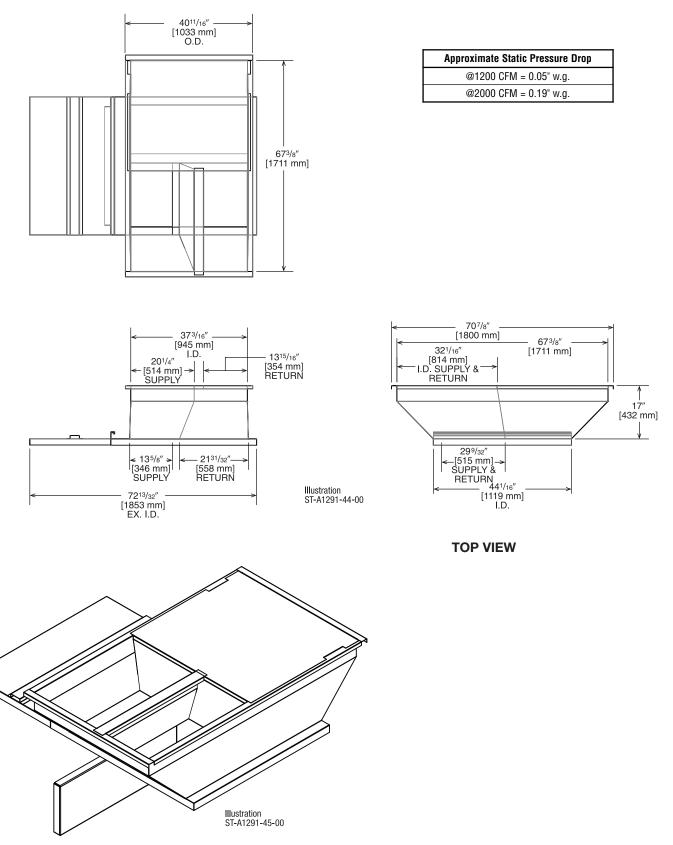
**Roofcurb Model** 

RXKG-DCC14

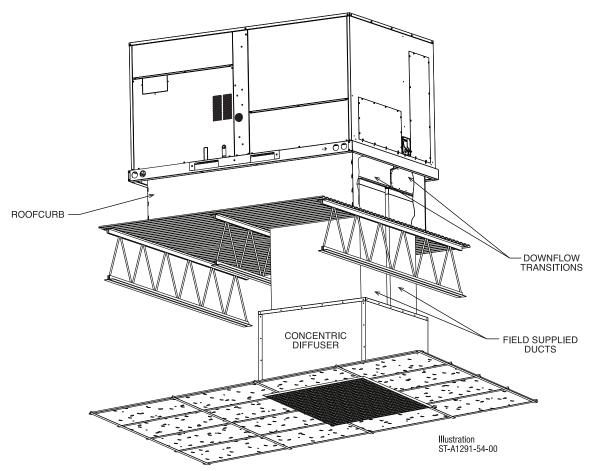
RXKG-DCC24

## **ROOFCURB ADAPTERS (Cont.)**

### RXRX-DCCAE



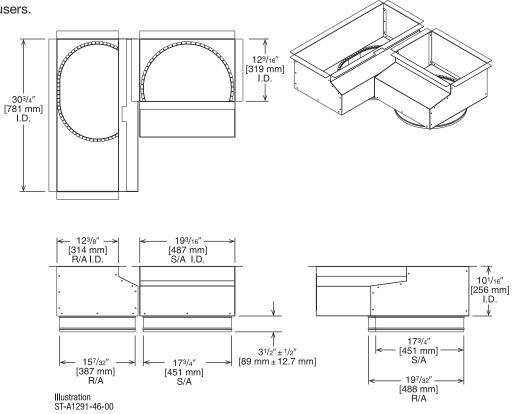
### **CONCENTRIC DIFFUSER APPLICATION**



### **DOWNFLOW TRANSITION DRAWINGS**

### RXMC-DC01

 Used with AEF1800 or AED1800 Concentric Diffusers.



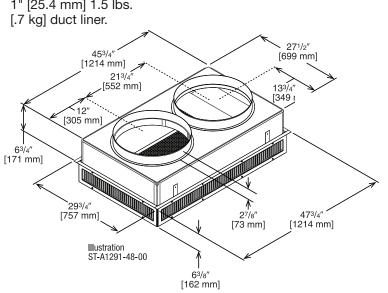
[ ] Designates Metric Conversions

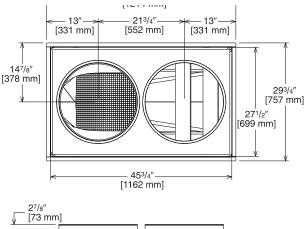
### **CONCENTRIC DIFFUSER-STEP DOWN**

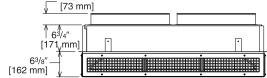
RXRN-AED1800 (3 and 4 Ton [10.6 and 14.1 kW] Models)

# For Use With Downflow Transition (RXMC-DC01) and 18" [457 mm] Round Supply and Return Ducts

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







### **ENGINEERING DATA**<sup>®</sup>

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

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

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

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

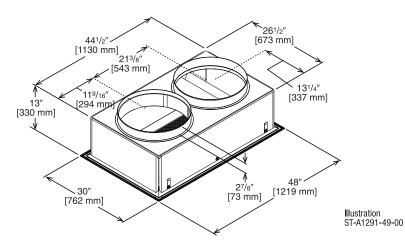
④ Actual noise levels may vary due to duct design and do not include transmitted unit noise. Adequate duct attenuation must be provided to reduce sound output from the unit.

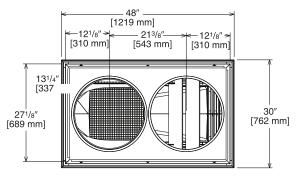
### FLUSH MOUNT CONCENTRIC DIFFUSER-FLUSH

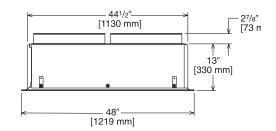
RXRN-AEF1800 (3 and 4 Ton [10.6 and 14.1 kW])

## For Use With Downflow Transition (RXMC-DC01) 18" [457 mm] Round Supply and Return Ducts

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







### **ENGINEERING DATA**<sup>®</sup>

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

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

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

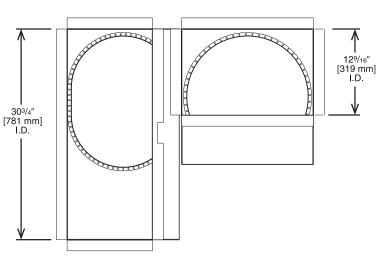
③ Throw is based on diffuser blades being directed in a straight pattern.

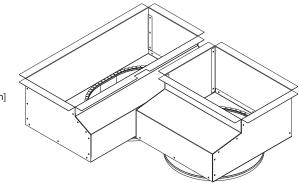
④ Actual noise levels may vary due to duct design and do not include transmitted unit noise. Adequate duct attenuation must be provided to reduce sound output from the unit.

### **DOWNFLOW TRANSITION DRAWINGS**

### RXMC-DC02

Used with AEF2000 or AED2000 Concentric Diffusers.





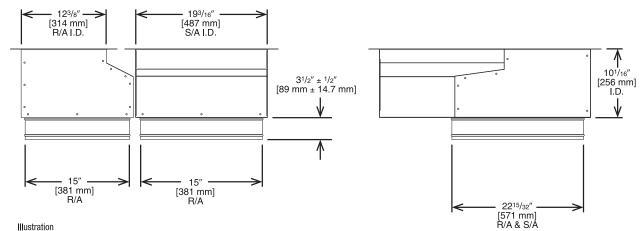


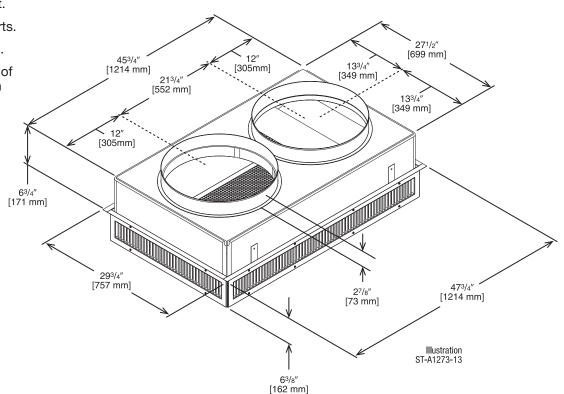
Illustration ST-A1291-47-00

### **CONCENTRIC DIFFUSER-STEP DOWN**

### RXRN-AED2000 (5 Ton [17.6 kW] Models)

# For Use With Downflow Transition (RXMC-DC02) and 20" [508 mm] Round Supply and Return Ducts

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



### **ENGINEERING DATA**<sup>®</sup>

Model No.	Flow Rate CFM [L/s]	Throw ② ③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ④ (dbA)
	2600 [1222]	22-39 [6.7-11.9]	669 [3.4]	32
RXRN-AED2000	2800 [1316]	23-40 [7.1-12.2]	720 [3.7]	38
	3000 [1410]	25-42 [7.6-12.8]	772 [3.9]	40
	3200 [1504]	26-43 [7.9-13.1]	823 [4.2]	41
	3400 [1598]	27-45 [8.2-13.7]	874 [4.4]	42

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

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

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

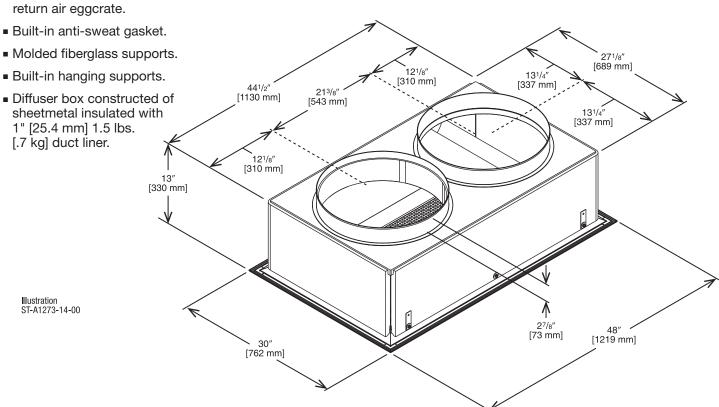
④ Actual noise levels may vary due to duct design and do not include transmitted unit noise. Adequate duct attenuation must be provided to reduce sound output from the unit.

### FLUSH MOUNT CONCENTRIC DIFFUSER-FLUSH

### RXRN-AEF2000 (5 Ton [17.6 kW])

### For Use With Downflow Transition (RXMC-DC02) 20" [508 mm] Round Supply and Return Ducts

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



### **ENGINEERING DATA**<sup>①</sup>

Model No.	Flow Rate CFM [L/s]	Throw ② ③ Feet [m]	Neck Velocity fpm [m/s]	Noise Level ④ (dbA)
	2600 [1222]	17-24 [5.2-7.3]	663 [3.4]	30
RXRN-AEF2000	2800 [1316]	18-28 [5.5-8.5]	714 [3.6]	35
	3000 [1410]	20-30 [6.1-9.1]	765 [3.9]	35
	3200 [1504]	22-33 [6.7-10.1]	816 [4.1]	40
	3400 [1598]	23-37 [7-11.3]	867 [4.4]	40

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

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

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

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

### Guide Specifications RGEC – 036 - 060

You may copy this document directly into your building specification. This specification is written to comply with the 2016 version of the "master format" as published by the Construction Specification Institute. www.csinet.org.

### GAS HEAT PACKAGED ROOFTOP

#### **HVAC Guide Specifications**

Size Range: 3 to 6 Nominal Tons

#### Section Description

#### 23 06 80 Schedules for Decentralized HVAC Equipment

#### 23 06 80.13 Decentralized Unitary HVAC Equipment Schedule

23 06 80.13.A. Rooftop unit schedule

1. Schedule is per the project specification requirements.

#### 23 07 16 HVAC Equipment Insulation

23 07 16.00.A. Evaporator fan compartment:

- 1. Interior cabinet surfaces shall be insulated with a minimum 1/2-in. thick, minimum 1.6 LB density, flexible fiberglass insulation bonded with foil face on the air side.
- 2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
- 3. Insulation shall also be mechanically fastened with welded pin and retainer washer.
- 23 07 16.00.B. Gas heat compartment:
  - 1. Aluminum foil-faced fiberglass insulation shall be used.
  - 2. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
  - 3. Insulation shall also be mechanically fastened with welded pin and retainer washer.

#### 23 09 13 Instrumentation and Control Devices for HVAC

#### 23 09 13.23 Sensors and Transmitters:

- 23 09 13.23.A. Thermostats
  - 1. Thermostat must
    - a. energize both "W" and "G" when calling for heat.
    - b. have capability to energize 1 stage of cooling, and at least 1 stage of heating.
  - c. must include capability for occupancy scheduling.

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

- 23 09 33.00.A. General:
  - 1. Shall be complete with self-contained low-voltage control circuit protected by a fuse on the 24-V transformer side.
  - 2. Shall utilize color-coded wiring.
  - 3. Unit shall be include self-contained low-voltage control circuit protected by a fuse on the 24-V transformer side.
  - 4. The heat exchanger shall be controlled by an integrated furnace controller (IFC) microprocessor. See heat exchanger section of this specification.
  - 5. Unit shall include a minimum of one 8-pin screw terminal connection board for connection of control wiring.

#### 23 09 33.00.B. Safeties:

- 1. Compressor over-temperature, over current.
- 2. Low-pressure switch.
  - a. Units shall have low pressure, loss of charge automatic reset device that will shut off compressor when tripped.
- 3. High-pressure switch.
  - a. Unit shall be equipped with high pressure switch device that will shut off compressor when tripped.
- 4. Automatic reset, motor thermal overload protector.
- 5. Heating section shall be provided with the following minimum protections:
  - a. High-temperature limit switches.
  - b. Induced draft motor pressure switch.
  - c. Flame rollout switch.
  - d. Flame proving controls.

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

#### 23 09 93.00 INSERT SEQUENCE OF OPERATION

#### 23 41 13 Panel Air Filters

- 23 41 13.00.A. Standard filter section shall
  - 1. Shall consist of factory-installed, low velocity, throwaway 2-in. thick fiberglass filters of commercially available sizes.
  - 2. Unit will accept both 2-in. and 4-in. filters.
  - 3. Filter face velocity shall not exceed 365 fpm at nominal airflows.
  - 4. Filters shall be accessible through an access panel with "no-tool" removal as described in the unit cabinet section of the specification (23 81 19.13.H).

#### 23 81 19 Self-Contained Air Conditioners

#### 23 81 19.13 Small Capacity Self-Contained Air Conditioners

#### 23 81 19.13.A. General

- 1. Outdoor, rooftop mounted, electrically controlled, heating and cooling unit utilizing a(n) hermetic scroll compressor(s) for cooling duty and gas combustion for heating duty.
- 2. Factory assembled, single-piece heating and cooling rooftop unit. Contained within the unit enclosure shall be all factory wiring, piping, controls, and special features required prior to field start-up.
- 3. Unit shall use environmentally safe, R410A refrigerant.
- 4. Unit shall be installed in accordance with the manufacturer's instructions.
- 5. Unit must be selected and installed in compliance with local, state, and federal codes.
- 23 81 19.13.B. Quality Assurance
  - 1. Unit meets ASHRAE 90.1-2007 and 2013 minimum efficiency requirements.
  - 2. 3 phase units are Energy Star qualified.
  - 3. Unit shall be rated in accordance with AHRI Standards 210/240 or 340/360 and 10 CFR appendix M1 to subpart B or part 430.
  - 4. Unit shall be designed to conform to ASHRAE 15.
  - 5. Unit shall be UL-tested and certified in accordance with ANSI Z21.47 Standards and UL-listed and certified under Canadian standards as a total package for safety requirements.
  - 6. Insulation and adhesive shall meet NFPA 90A requirements for flame spread and smoke generation.
  - 7. Unit casing shall be capable of withstanding 1000-hour salt spray exposure per ASTM B117 (scribed specimen).
  - 8. Unit shall be designed in accordance with ISO 9001:2015, and shall be manufactured in a facility registered by ISO 9001:2015.
  - 9. Roof curb shall be designed to conform to NRCA Standards.
  - 10. 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.
  - 11. Unit shall be designed in accordance with UL Standard 1995, Fifth Ed. or 60335-2-40 including tested to withstand rain.
- 23 81 19.13.C. Delivery, Storage, and Handling
  - 1. Unit shall be stored and handled per manufacturer's recommendations.
  - 2. Lifted by crane requires either shipping top panel or spreader bars.
  - 3. Unit shall only be stored or positioned in the upright position.
- 23 81 19.13.E. Project Conditions
  - 1. As specified in the contract.
- 23 81 19.13.F. Operating Characteristics
  - 1. Unit shall be capable of starting and running at 115°F (46°C) ambient outdoor temperature, meeting maximum load criteria of AHRI Standard 210/240 or 340/360 at ± 10% voltage.
  - Compressor with standard controls shall be capable of operation down to 50°F (10°C), ambient outdoor temperatures. Low ambient accessory kit is necessary if mechanically cooling at ambient temperatures to 0°F (-17.7°C).
  - 3. Unit shall discharge supply air vertically or horizontally as shown on contract drawings.
  - 4. Unit shall be factory configured for vertical supply & return configurations.
  - 5. Unit shall be field convertible from vertical to horizontal configuration.

### Sure Comfort<sup>®</sup> RGEC Package Gas Electric Units

#### 23 81 19.13.G. Electrical Requirements

- 1. Main power supply voltage, phase, and frequency must match those required by the manufacturer.
- 23 81 19.13.H. Unit Cabinet
  - 1. Unit cabinet shall be constructed of galvanized steel.
  - 2. Unit cabinet exterior paint shall be: pre-painted steel.
  - 3. Evaporator fan compartment interior cabinet insulation shall conform to AHRI Standards 210 or 360 minimum exterior sweat criteria. Interior surfaces shall be insulated with a minimum 1/2-in. thick, 1.6 lb density, flexible fiberglass insulation, foil faced on the air side. Aluminum foil-faced fiberglass insulation shall be used in the gas heat compartment.
  - 4. Base of unit shall have a location for thru-the-base gas and electrical connections standard.
  - 5. Base Rail
    - a. Unit shall have base rails on a minimum of 4 sides.
    - b. Holes shall be provided in the base rails for rigging shackles to facilitate maneuvering and overhead rigging.
    - c. Holes shall be provided in the base rail for moving the rooftop for fork truck.
    - d. Base rail shall be a minimum of 14 gauge thickness.
  - 6. Condensate pan and connections:
    - a. Shall be a sloped condensate drain pan made of a non-corrosive material and be removable for cleaning.
    - b. Shall comply with ASHRAE Standard 62.
    - c. Shall use a 3/4" NPT drain connection, possible either through the bottom or side of the drain pan. Connection shall be made per manufacturer's recommendations.
    - d. Shall be able to be easily removed.
  - 7. Top panel:
    - a. Shall be a single piece top panel over indoor section.
  - 8. Gas Connections:
    - a. All gas piping connecting to unit gas valve shall enter the unit cabinet at a single location on side of unit (horizontal plane).
    - b. Thru-the-base capability
      - i. Standard unit shall have a thru-the-base gas-line location using a continuous raised, flange around opening in the basepan.
      - ii. No basepan penetration, other than those authorized by the manufacturer, is permitted.
  - 9. Electrical Connections
    - a. All unit power wiring shall enter unit cabinet a a single, factory-prepared, continuous raised flange opening in the basepan.
    - b. Thru-the-base capability
      - i. Standard unit shall have a thru-the-base electrical location(s) using a raised, continuous raised flange opening in the basepan.
      - ii. No basepan penetration, other than those authorized by the manufacturer, is permitted.
  - 10. Component access panels (standard)
    - a. Cabinet panels shall be easily opened for servicing.
    - b. Panels covering control box, indoor fan, indoor fan motor, gas components (where applicable), and filters shall have hinges with 1/4 turn fasteners on units with factory-installed hinged option.
    - c. 1/4 fasteners shall be permanently attached.
- 23 81 19.13.I. Gas Heat
  - 1. General
    - a. Heat exchanger shall be an induced draft design. Positive pressure heat exchanger designs shall not be allowed.
    - b. Shall incorporate a direct-spark ignition system and redundant main gas valve.
    - c. Heat exchanger design shall allow combustion process condensate to gravity drain; maintenance to drain the gas heat exchanger shall not be required.
    - d. Gas supply pressure at the inlet to the rooftop unit gas valve must match that required by the manufacturer.
  - 2. The heat exchanger shall be controlled by an integrated furnace controller (IFC) microprocessor.
    - a. IFC board shall notify users of fault using two 7 segment displays.

- 3. Standard Heat Exchanger construction
  - a. Heat exchanger shall be of the tubular-section type constructed of a minimum of 20-gauge steel coated with a nominal 1.2 mil aluminum-silicone alloy for corrosion resistance.
  - b. Burners shall be of the in-shot type constructed of aluminum-coated steel.
  - c. Burners shall incorporate orifice for rated heat output up to 2,000 ft. (610m) elevation with a gas heating valve of 1050. Alternate orifices may be required depending on local gas heating valves and elevations.
  - d. Each heat exchanger tube shall contain restrictions similar to dimples for increased heating effectiveness.
- 4. Optional Stainless Steel Heat Exchanger construction
  - a. Use energy saving, direct-spark ignition system.
  - b. Use a redundant main gas valve.
  - c. Burners shall be of the in-shot type constructed of aluminum-coated steel.
  - d. All gas piping shall enter the unit cabinet at a single location on side of unit (horizontal plane).
  - e. The optional stainless steel heat exchanger shall be of the tubular-section type, constructed of a minimum of 20-gauge type 409 stainless steel.
  - f. Type 409 stainless steel shall be used in heat exchanger tubes.
- 5. Induced draft combustion motor and blower
  - a. Shall be a direct-drive, single inlet, forward-curved centrifugal type.
  - b. Shall be made from steel with a corrosion-resistant finish.
  - c. Shall be permanently lubricated sealed bearings.
  - d. Shall have inherent thermal overload protection.
  - e. Shall have an automatic reset feature.
- 23 81 19.13.J. Coils
  - 1. Standard Aluminum/MicroChannel Coils:
    - a. Standard evaporator and condenser coils shall be aluminum.
    - b. Evaporator and condenser coils shall be leak tested to 150 psig, pressure tested to 400 psig, and qualified to UL 60335-2-40 burst test at 2,200 psi.
- 23 81 19.13.K. Refrigerant Components
  - 1. Refrigerant circuit shall include the following control, safety, and maintenance features:
    - a. TXV metering system shall prevent mal-distribution of two-phase refrigerant.
    - b. Refrigerant filter drier.
    - c. Service gauge connections on suction and discharge lines.
    - d. External pressure gauge ports access shall be located in front exterior of cabinet.
  - 2. Compressors
    - a. Unit shall use one fully hermetic, single-stage scroll compressor.
    - b. Compressor motors shall be cooled by refrigerant gas passing through motor windings.
    - c. Compressors shall be internally protected from high discharge temperature conditions.
    - d. Compressors shall be protected from an over-temperature and over-amperage conditions by an internal, motor overload device.
    - e. Compressor shall be factory mounted on rubber grommets.
    - f. Compressor motors shall have internal line break thermal and current overload protection.
    - g. Crankcase heaters shall not be required for normal operating range.
    - h. Compressor shall have molded electrical plug.

#### 23 81 19.13.L. Filter Section

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

### Sure Comfort<sup>®</sup> RGEC Package Gas Electric Units

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

- 1. Evaporator fan motor:
  - a. Shall have permanently lubricated bearings
  - b. Shall have inherent automatic-reset thermal overload protection.
- 2. Direct Drive Evaporator Fan:
  - a. Direct drive ECM technology with (5) dedicated speed selections as follows: fan, low gas heat, high gas heat, AC low static, AC high static.
  - b. Blower fan shall be double-inlet type with forward-curved blades.
  - c. Shall be constructed from steel with a corrosion resistant finish and dynamically balanced.
- 23 81 19.13.N. Condenser Fans and Motors
  - 1. Condenser fan motors:
    - a. Shall be a totally enclosed motor.
    - b. Shall use permanently lubricated bearings.
    - c. Shall have inherent thermal overload protection with an automatic reset feature.
    - d. Shall use a shaft-down design. Shaft-up designs including those with "rain-slinger devices" shall not be allowed.
  - 2. Condenser Fans shall:
    - a. Shall be a direct-driven propeller type fan
    - b. Shall have blades riveted to corrosion-resistant steel spiders and shall be dynamically balanced.
- 23 81 19.13.O. Special Features
  - 1. Integrated Economizers:
    - a. Integrated, gear-driven parallel modulating blade design type capable of simultaneous economizer and compressor operation.
    - b. Independent modules for vertical or horizontal return configurations shall be available. Vertical return modules shall be available as a factory installed option.
    - c. Damper blades shall be galvanized steel with metal gears. Plastic or composite blades on intake or return shall not be acceptable.
    - d. Shall include all hardware and controls to provide free cooling with outdoor air when temperature and/or humidity are below setpoints.
    - e. Shall be equipped with gear driven dampers for both the outdoor ventilation air and the return air for positive air stream control.
    - f. Shall be equipped with low-leakage dampers, not to exceed 2% leakage at 1 in. wg pressure differential.
    - g. Shall be capable of introducing up to 100% outdoor air.
    - h. Shall be equipped with a barometric relief damper capable of relieving up to 100% return air.
    - i. Shall be designed to close damper(s) during loss-of-power situations with spring return built into motor.
    - j. Enthalpy sensor shall be provided as standard. Outdoor air sensor set point shall be adjustable and shall range from 40 to 100°F / 4 to 38°C. Additional sensor options shall be available as accessories.
    - k. The economizer controller shall also provide control of an accessory power exhaust unit function. Factory set at 70%, with a range of 0% to 100%.
    - I. The economizer shall maintain minimum airflow into the building during occupied period and provide design ventilation rate for full occupancy. A remote potentiometer may be used to override the damper set point.
    - m. Dampers shall be completely closed when the unit is in the unoccupied mode.
    - n. Economizer controller shall accept a 2-10Vdc CO2 sensor input for IAQ/DCV control. In this mode, dampers shall modulate the outdoor-air damper to provide ventilation based on the sensor input.
    - o. Actuator shall be direct coupled to economizer gear. No linkage arms or control rods shall be acceptable.
    - p. Economizer controller shall provide indications when in free cooling mode, in the DCV mode, or the exhaust fan contact is closed.
    - q. Economizer wire harness will have provision for smoke detector.
  - 2. Manual damper
    - a. Manual damper package shall consist of damper, air inlet screen, and rain hood which can be preset to admit up to 50% outdoor air for year round ventilation.

- 3. Liquid Propane (LP) Conversion Kit (sold separately)
  - a. Kit shall contain all the necessary hardware and instructions to convert a standard natural gas unit for use with liquefied propane, up to 2000 ft (610m) elevation.
- 4. Condenser Coil Hail Guard Assembly
  - a. Shall protect against damage from hail.
  - b. Shall be louvered style.
- 5. Unit-Mounted, Non-Fused Disconnect Switch:
  - a. Switch shall be factory-installed, internally mounted.
  - b. National Electric Code (NEC) and UL approved non-fused switch shall provide unit power shutoff.
  - c. Shall be accessible from outside the unit.
  - d. Shall provide local shutdown and lockout capability.
- 6. Convenience Outlet:
  - a. Powered convenience outlet.
  - b. Outlet shall be powered from main line power to the rooftop unit.
  - c. Outlet shall be powered from line side or load side of disconnect by installing contractor, as required by code. If outlet is powered from load side of disconnect, unit electrical ratings shall be UL certified and rated for additional outlet amperage.
  - d. Outlet shall be factory-installed and internally mounted with easily accessible 115-v female receptacle.
  - e. Outlet shall include 15 amp GFI receptacles with independent fuse protection.
  - f. Voltage required to operate convenience outlet shall be provided by a factory-installed step-down transformer.
  - g. Outlet shall be accessible from outside the unit.
  - h. Non-Powered convenience outlet.
  - i. Outlet shall be powered from a separate 115-120v power source.
  - j. A transformer shall not be included.
  - k. Outlet shall be field-installed and internally mounted with easily accessible 115-v female receptacle.
  - I. Outlet shall include 15 amp GFI receptacle with independent fuse protection.
  - m. Outlet shall be accessible from outside the unit.
- 7. Flue:
  - a. Flue discharge shall direct unit exhaust horizontally and have the capability of being directed vertically.
- 8. Propeller Power Exhaust:
  - a. Power exhaust shall be used in conjunction with an integrated economizer.
  - b. Independent modules for vertical or horizontal return configurations shall be available.
  - c. Horizontal power exhaust is shall be mounted in return ductwork.
  - d. Power exhaust shall be controlled by economizer controller operation. Exhaust fans shall be energized when dampers open past the 0-100% adjustable setpoint on the economizer control.
- 9. Roof Curbs (Vertical):
  - a. Formed galvanized steel with wood nailer strip and shall be capable of supporting entire unit weight.
  - b. Permits installation and securing of ductwork to curb prior to mounting unit on the curb.
- 10. Return Air Enthalpy Sensor:
  - a. The return air enthalpy sensor shall be used in conjunction with an outdoor air enthalpy sensor to provide differential enthalpy control.
- 11. Indoor Air Quality (CO2) Sensor:
  - a. Shall be able to provide demand ventilation indoor air quality (IAQ) control.
  - b. The IAQ sensor shall be available in duct mount, wall mount, or wall mount with LED display. The set point shall have adjustment capability.

### Sure Comfort<sup>®</sup> RGEC Package Gas Electric Units

- 12. Smoke detectors:
  - a. Shall be a Four-Wire Controller and Detector.
  - b. Shall be environmental compensated with differential sensing for reliable, stable, and drift-free sensitivity.
  - c. Shall use magnet-activated test/reset sensor switches.
  - d. Shall have tool-less connection terminal access.
  - e. Shall have a recessed momentary switch for testing and resetting the detector.
  - f. Controller shall include:
    - i. One set of normally open alarm initiation contacts for connection to an initiating device circuit on a fire alarm control panel
    - ii. Two Form-C auxiliary alarm relays for interface with rooftop unit or other equipment
    - iii. One Form-C supervision (trouble) relay to control the operation of the Trouble LED on a remote test/reset station
    - iv. Capable of direct connection to two individual detector modules.
    - v. Can be wired to up to 14 other duct smoke detectors for multiple fan shutdown applications.
- 13. Barometric relief
  - a. Shall include damper, seals, hard-ware, and hoods to relieve excess building pressure.
  - b. Damper shall gravity-close upon shutdown.
- 14. Time Guard
  - a. Shall prevent compressor short cycling by providing a 5-minute delay (±2 minutes) before restarting a compressor after shutdown for any reason.
  - b. One device shall be required per compressor.

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

### **GENERAL TERMS OF LIMITED WARRANTY\***

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

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

Compressor
3 Phase, Commercial ApplicationsFive (5) Years
Aluminized Heat Exchanger
3 Phase, Commercial ApplicationsTen (10) Years
Stainless Steel Heat Exchanger
3 Phase, Commercial ApplicationsTwenty (20) Years
Parts
3 Phase, Commercial ApplicationsOne (1) Year



## Sure Comfort<sup>®</sup>

5600 Old Greenwood Road, Fort Smith, AR 72908

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.