0



# Ruud Ultra<sup>™</sup> Series Package Gas Electric Unit



### **RGEA16** Series

Nominal Sizes 2-5 Tons [7.0-17.6 kW] Efficiencies up to 16 SEER/12.4 EER



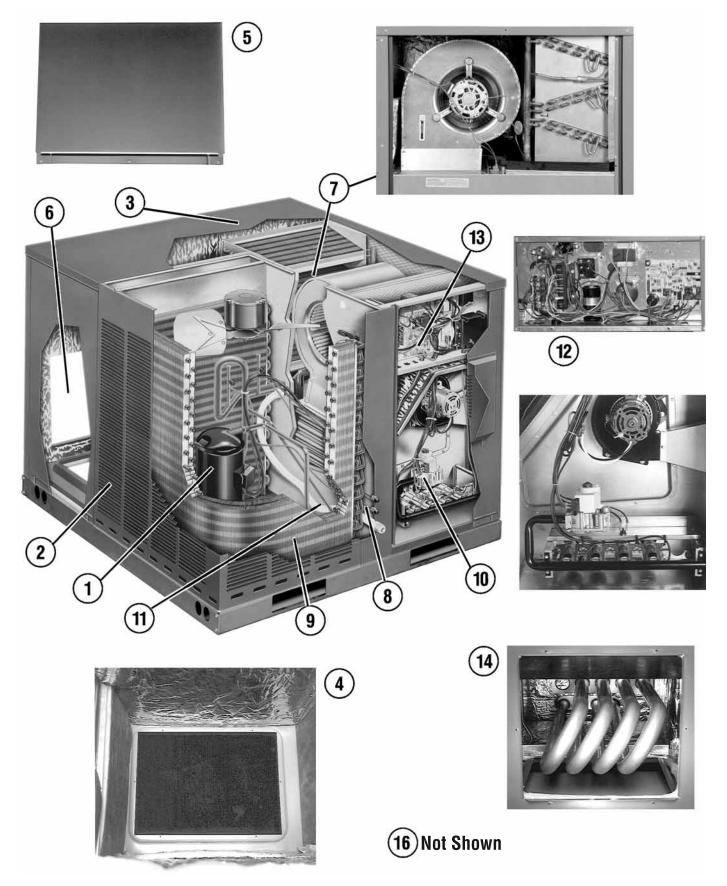
Ø

# TABLE OF CONTENTS

Ø

Unit Features & Benefits	3-4
Model Number Identification	5
Options	6
General Data	
RGEA16 Series	7-11
General Data Notes	12
Gross Systems Performance Data	
RGEA16 Series	13-16
Indoor Airflow Performance	
RGEA16 Series	17-18
Electrical Data	
RGEA16 Series	19
Dimensional Data	20-21
Typical Installations	22
Accessories	23-31
Wiring Diagrams	
Limited Warranty	

# Package Gas Electric Unit Features:





#### RGEA16 Features Below Correspond to Photos on Page 3

- All models feature Scroll<sup>®</sup> compressors for maximum efficiency and quiet operation. All RGEA16 models feature UltraTech<sup>™</sup> Scroll 2-Stage compressors with Comfort Alert<sup>™</sup> diagnostics (see below), high/low pressure switches, and hard start kits.
- 2. Louvered condenser compartment for protecting the coil against yard hazards and/or weather extremes.
- 3. One-piece top with a deep flange to help keep water out of the unit.
- 4. Supply and return air openings feature a one-inch tall flange to prevent water migration into the ductwork.
- 5. Access panels have "weep holes" and channels to further help manage water run-off.
- 6. Side and down discharge options available on all models. All models are shipped ready for horizontal application.
- 7. Easily accessible blower section complete with slide-out blower. The RGEA16 comes standard with variable speed motor with adjustable airflow in heating and cooling. The variable speed motor also comes with a interface that allows for dehumidification when used with a humidistat or an ondemand dehumidification "ODD" capable thermostat. The variable speed system is capable of 1 inch external static.
- 8. Refrigerant connections are conveniently located for easy service diagnostics.
- 9. Condenser and evaporator coils feature enhanced fins for better heat transfer and rifled copper tubing for greater efficiency.

- 10. Inside the easily accessible furnace compartment is the draft inducer motor. This motor is specially designed for quiet reliable operation. In addition to the draft inducer motor, the in-shot gas burners and manifold efficiently regulate the flow of gas for combustion. These new gas/electric units also feature direct-spark ignition and remote flame sensors for added reliability and efficiency.
- 11. All units feature an internal trap on the condensate line eliminating the need for installing an on-site external trap.
- 12. Easily accessible control box.
- 13. Single point wiring simplifies installation.
- 14. Our gas/electric package units feature a tubular heat exchanger design. Tubular heat exchangers are more efficient and durable than older-style clamshell heat exchangers. Stainless Steel Heat Exchanger is a standard feature on the RGEA16 and is backed by a limited lifetime warranty when installed in a residential application, and a 20 year warranty when installed in a commercial application. Two stage gas heat is standard on the RGEA16 models.
- 15. Thermal expansion valve standard on all models for superior superheat control, reliability, and energy efficiency at all operating conditions.
- 16. Filter drier standard on all models (not shown).
- 17. Rugged baserail included for improved installation and handling
- 18. Complete factory charged, wired and run tested.
- 19. Molded compressor plugs.

#### Comfort Alert™ Diagnostics – Faster Service And Improved Accuracy (2-Stage Models Only)

The Comfort Alert<sup>™</sup> diagnostics module is a breakthrough innovation for troubleshooting air conditioning system failures. The module is installed in the control box near the compressor contactor. By monitoring and analyzing data from the Scroll<sup>®</sup> compressor and the thermostat demand, the module can accurately detect the cause of electrical and system related failures without any sensors. A flashing LED indicator communicates the ALERT code and guides the service technician more quickly and accurately to the root cause of a problem.

# NOTE: Module provides compressor protection and will shut down the compressor when compressor damaging conditions are detected.

#### **RGEA16 Models Also Feature:**

- On Demand Dehumidification
- Variable speed motor with adjustable airflow in both heating and cooling to 1.0" SP static capability
- Stainless steel heat exchanger as standard
- Two stage gas heat

R	GE	Α	<u>16</u>	03	<u> 86</u>	A	J	V	10	2	Α	Α	Χ	Χ	Χ	
																— Factory Installed Options (See Next Page)
																—— Minor Series A = 1st Variation
											L					— Control A = Non Communicating
										L						Heat Configuration 2 = Two Stage T = Two Stage Nox
									L							<ul> <li>Heating Capacity (MBH) [kW]</li> <li>06 = 60,000 [17.6]</li> <li>08 = 80,000 [23.4]</li> <li>10 = 100,000 [29.3]</li> </ul>
								L								Drive Package V = ECM Blower Motor
																— Voltage J = 208-230V—1PH—60 Hz C = 208-230V—3PH—60 Hz
																— Major Series A = 1st Variation
				l												<ul> <li>Cooling Capacity (BTUH) [kW]</li> <li>024 = 24,000 [7.03]</li> <li>036 = 36,000 [10.55]</li> <li>048 = 48,000 [14.07]</li> <li>060 = 60,000 [17.59]</li> </ul>
																Series 16 = 16 SEER
																— Cabinet Type A = Residential Package
																—— Unit Type GE = Package Gas Heat / Electric Cool
																— Tradebrand R = Ruud

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

**Note:** Two 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, nothing follows the model number.

**Step 1.** After a basic rooftop model is selected, choose a *two-character* option code from the FACTORY INSTALLED OPTION SELECTION TABLE.

### FACTORY INSTALLED OPTION CODES

Option Code	Stainless Steel Heat Exchanger	Tin Plated Hairpin Coil
AU		Х

"x" indicates factory installed option. Example: No Option RGEA16024AJV062AA

Example: Option with Tinplated Hairpin Coil

RGEA16024AJV062AAAU

Note: Factory installed economizer is not available on these models.

\*AU is the only option available for RGEA16 units because Stainless Steel Heat Exchanger is standard.

#### General Data RGEA16 Series

Model RGEA16 Series	024AJV062AA	024AJV06TAA	036ACV062AA	036ACV082AA
Cooling Performance <sup>1</sup>				
Gross Cooling Capacity (2nd Stage) Btu [kW]	24,200 [7.09]	24,200 [7.09]	36,800 [10.78]	36,800 [10.78]
SEER <sup>2</sup>	16	16	16	16
EER (1st stage / 2nd stage)	13.5/12.4	13.5/12.4	13.4/12.3	13.4/12.3
AHRI Rated CFM (1st / 2nd stage) [L/s]	550/800 [260/378]	550/800 [260/378]	800/1200 [378/566]	800/1200 [378/566]
AHRI Net Cooling Capacity (1st / 2nd stage) Btu [kW]	18,500/23,800 [5.42/6.97]	18,500/23,800 [5.42/6.97]	25,000/36,000 [7.32/10.55]	25,000/36,000 [7.32/10.55]
Net Sensible Capacity (1st / 2nd stage) Btu [kW]	13,380/17,410 [3.92/5.1]	13,380/17,410 [3.92/5.1]	18,470/27,280 [5.41/7.99]	18,470/27,280 [5.41/7.99]
Net Latent Capacity (1st / 2nd stage) Btu [kW]	5,120/6,390 [1.5/1.87]	5,120/6,390 [1.5/1.87]	6,530/8,720 [1.91/2.55]	6,530/8,720 [1.91/2.55]
Net System Power (1st / 2nd stage) [kW]	1.37/1.92	1.37/1.92	1.87/2.94	1.87/2.94
Heating Performance (Gas) <sup>3</sup>				
Heating Input Btu [kW] (1st Stage / 2nd Stage)	46,000/60,000 [13.48/17.58]	46,000/60,000 [13.48/17.58]	46,000/60,000 [13.48/17.58]	61,000/80,000 [17.87/23.44
Heating Output Btu [kW] (1st Stage / 2nd Stage)	37,567/49,000 [11.01/14.36]	37,567/49,000 [11.01/14.36]	37,260/48,600 [10.92/14.24]	49,410/64,800 [14.48/18.99
Temperature Rise Range <sup>e</sup> F [ <sup>e</sup> C]	10-40 [5.6-22.2] /	10-40 [5.6-22.2] /	10-40 [5.6-22.2] /	15-45 [8.3-25] /
(1st Stage / 2nd Stage)	20-50 [11.1-27.8]	20-50 [11.1-27.8]	20-50 [11.1-27.8]	25-55 [13.9-30.6]
AFUE %4	81	81	0	0
Steady State Efficiency (%)	82	82	82	82
No. Burners	3	3	3	4
No. Stages	2	2	2	2
Gas Connection Pipe Size in. [mm]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB) <sup>5</sup>	76	76	76	76
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
MicroChannel Depth in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	10.56 [0.98]	10.56 [0.98]	16.23 [1.51]	16.23 [1.51]
Rows / FPI [FPcm]	1 / 18 [7]	1 / 18 [7]	2 / 22 [9]	2 / 22 [9]
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	5.54 [0.51]	5.54 [0.51]	7.39 [0.69]	7.39 [0.69]
Rows / FPI [FPcm]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]
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]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]
	Direct/1			Direct/1
Drive Type/No. Speeds		Direct/1	Direct/1	
CFM [L/s]	2500 [1180]	2500 [1180]	2700 [1274]	2700 [1274]
No. Motors/HP	1 at 1/6 HP	1 at 1/6 HP	1 at 1/6 HP	1 at 1/6 HP
Motor RPM	850	850	850	850
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	1/2	1/2	1/2	3/4
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter—Type	Field Supplied	Field Supplied	Field Supplied	Field Supplied
Furnished	No	No	No	No
(NO.) Size Recommended in. [mm x mm x mm]	(1)1x20x20 [25x508x508]	(1)1x20x20 [25x508x508]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]
Refrigerant Charge Oz. [g]	97.6 [2767]	97.6 [2767]	155.2 [4400]	155.2 [4400]
Weights				
Net Weight lbs. [kg]	454 [206]	454 [206]	544 [247]	549 [249]
Ship Weight Ibs. [kg]	467 [212]	467 [212]	558 [253]	558 [253]

Model RGEA16 Series	036ACV102AA	036AJV062AA	036AJV06TAA	036AJV082AA
Cooling Performance <sup>1</sup>				
Gross Cooling Capacity (2nd Stage) Btu [kW]	36,800 [10.78]	36,800 [10.78]	36,800 [10.78]	36,800 [10.78]
SEER <sup>2</sup>	16	16	16	16
EER (1st stage / 2nd stage)	13.4/12.3	13.4/12.3	13.4/12.3	13.4/12.3
AHRI Rated CFM (1st / 2nd stage) [L/s]	800/1200 [378/566]	800/1200 [378/566]	800/1200 [378/566]	800/1200 [378/566]
AHRI Net Cooling Capacity (1st / 2nd stage) Btu [kW]	25,000/36,000 [7.32/10.55]	25,000/36,000 [7.32/10.55]	25,000/36,000 [7.32/10.55]	25,000/36,000 [7.32/10.55]
Net Sensible Capacity (1st / 2nd stage) Btu [kW]	18,470/27,280 [5.41/7.99]	18,470/27,280 [5.41/7.99]	18,470/27,280 [5.41/7.99]	18,470/27,280 [5.41/7.99]
Net Latent Capacity (1st / 2nd stage) Btu [kW]	6,530/8,720 [1.91/2.55]	6,530/8,720 [1.91/2.55]	6,530/8,720 [1.91/2.55]	6,530/8,720 [1.91/2.55]
Net System Power (1st / 2nd stage) [kW]	1.87/2.94	1.87/2.94	1.87/2.94	1.87/2.94
Heating Performance (Gas) <sup>3</sup>				
Heating Input Btu [kW] (1st Stage / 2nd Stage)	76,000/100,000 [22.27/29.3]	46,000/60,000 [13.48/17.58]	46,000/60,000 [13.48/17.58]	61,000/80,000 [17.87/23.44
Heating Output Btu [kW] (1st Stage / 2nd Stage)	61,560/81,000 [18.04/23.73]	37,567/49,000 [11.01/14.36]	37,567/49,000 [11.01/14.36]	49,563/65,000 [14.52/19.04
Temperature Rise Range <sup>e</sup> F [ <sup>e</sup> C]	25-55 [13.9-30.6] /	10-40 [5.6-22.2] /	10-40 [5.6-22.2] /	15-45 [8.3-25] /
(1st Stage / 2nd Stage)	35-65 [19.4-36.1]	20-50 [11.1-27.8]	20-50 [11.1-27.8]	25-55 [13.9-30.6]
AFUE %4	0	81	81	81
Steady State Efficiency (%)	82	82	82	82
No. Burners	5	3	3	4
No. Stages	2	2	2	2
Gas Connection Pipe Size in. [mm]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB) <sup>5</sup>	76	76	76	76
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
MicroChannel Depth in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]
Rows / FPI [FPcm]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]
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]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]
Drive Type/No. Speeds	Direct/1	Direct/1		Direct/1
	2700 [1274]	2700 [1274]	Direct/1 2700 [1274]	
CFM [L/s]				2700 [1274] 1 at 1/6 HP
No. Motors/HP	1 at 1/6 HP	1 at 1/6 HP	1 at 1/6 HP	
Motor RPM	850	850	850	850
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	3/4	1/2	1/2	3/4
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter—Type	Field Supplied	Field Supplied	Field Supplied	Field Supplied
Furnished	No	No	No	No
(NO.) Size Recommended in. [mm x mm x mm]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]
Refrigerant Charge Oz. [g]	155.2 [4400]	155.2 [4400]	155.2 [4400]	155.2 [4400]
Weights				
Net Weight Ibs. [kg]	554 [251]	552 [250]	552 [250]	557 [253]
Ship Weight Ibs. [kg]	558 [253]	558 [253]	558 [253]	558 [253]

Model RGEA16 Series	036AJV08TAA	036AJV102AA	036AJV10TAA	048ACV082AA
Cooling Performance <sup>1</sup>				
Gross Cooling Capacity (2nd Stage) Btu [kW]	36,800 [10.78]	36,800 [10.78]	36,800 [10.78]	48,500 [14.21]
SEER <sup>2</sup>	16	16	16	15
EER (1st stage / 2nd stage)	13.4/12.3	13.4/12.3	13.4/12.3	12.7/11.5
AHRI Rated CFM (1st / 2nd stage) [L/s]	800/1200 [378/566]	800/1200 [378/566]	800/1200 [378/566]	1050/1600 [495/755]
AHRI Net Cooling Capacity (1st / 2nd stage) Btu [kW]	25,000/36,000 [7.32/10.55]	25,000/36,000 [7.32/10.55]	25,000/36,000 [7.32/10.55]	34,800/47,000 [10.2/13.77]
Net Sensible Capacity (1st / 2nd stage) Btu [kW]	18,470/27,280 [5.41/7.99]	18,470/27,280 [5.41/7.99]	18,470/27,280 [5.41/7.99]	24,820/34,480 [7.27/10.1]
Net Latent Capacity (1st / 2nd stage) Btu [kW]	6,530/8,720 [1.91/2.55]	6,530/8,720 [1.91/2.55]	6,530/8,720 [1.91/2.55]	9,980/12,520 [2.92/3.67]
Net System Power (1st / 2nd stage) [kW]	1.87/2.94	1.87/2.94	1.87/2.94	2.73/4.1
Heating Performance (Gas) <sup>3</sup>				
Heating Input Btu [kW] (1st Stage / 2nd Stage)	61 000/80 000 [17 87/23 44]	76,000/100,000 [22.27/29.3]	76 000/100 000 [22 27/29 3]	61 000/80 000 [17 87/23 44
Heating Output Btu [kW] (1st Stage / 2nd Stage)	, , , , ,	61,560/81,000 [18.04/23.73]	, , , ,	, , L
Temperature Rise Range <sup>e</sup> F [ <sup>o</sup> C]	15-45 [8.3-25] /	25-55 [13.9-30.6] /	25-55 [13.9-30.6] /	15-45 [8.3-25] /
(1st Stage / 2nd Stage)	25-55 [13.9-30.6]	35-65 [19.4-36.1]	35-65 [19.4-36.1]	25-55 [13.9-30.6]
AFUE %4	81	81	81	0
Steady State Efficiency (%)	82	82	82	82
No. Burners	4	5	5	4
No. Stages	2	2	2	2
Gas Connection Pipe Size in. [mm]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]
Compressor	0.0[12.1]	0.0 [12.1]	0.0 [12.1]	0.0 [12.1]
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB) <sup>5</sup>	76	76	76	78
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
	0.375 [9.5]			0.375 [9.5]
MicroChannel Depth in. [mm]		0.375 [9.5]	0.375 [9.5]	
Face Area sq. ft. [sq. m]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]
Rows / FPI [FPcm]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]
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]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	2700 [1274]	2700 [1274]	2700 [1274]	3300 [1557]
No. Motors/HP	1 at 1/6 HP	1 at 1/6 HP	1 at 1/6 HP	1 at 1/3 HP
Motor RPM	850	850	850	850
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	3/4	3/4	3/4	3/4
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter—Type	Field Supplied	Field Supplied	Field Supplied	Field Supplied
Furnished	No		No	No
		No		
(NO.) Size Recommended in. [mm x mm x mm]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]
Refrigerant Charge Oz. [g]	155.2 [4400]	155.2 [4400]	155.2 [4400]	169.6 [4808]
Weights				
Net Weight Ibs. [kg]	557 [253]	557 [253]	557 [253]	549 [249]
Ship Weight Ibs. [kg]	558 [253]	558 [253]	558 [253]	562 [255]

Model RGEA16 Series	048ACV102AA	048AJV082AA	048AJV08TAA	048AJV102AA
Cooling Performance <sup>1</sup>				
Gross Cooling Capacity (2nd Stage) Btu [kW]	48,500 [14.21]	48,500 [14.21]	48,500 [14.21]	48,500 [14.21]
SEER <sup>2</sup>	15	15	15	15
EER (1st stage / 2nd stage)	12.7/11.5	12.7/11.5	12.7/11.5	12.7/11.5
AHRI Rated CFM (1st / 2nd stage) [L/s]	1050/1600 [495/755]	1050/1600 [495/755]	1050/1600 [495/755]	1050/1600 [495/755]
AHRI Net Cooling Capacity (1st / 2nd stage) Btu [kW]	34,800/47,000 [10.2/13.77]	34,800/47,000 [10.2/13.77]	34,800/47,000 [10.2/13.77]	34,800/47,000 [10.2/13.77]
Net Sensible Capacity (1st / 2nd stage) Btu [kW]	24,820/34,480 [7.27/10.1]	24,820/34,480 [7.27/10.1]	24,820/34,480 [7.27/10.1]	24,820/34,480 [7.27/10.1]
Net Latent Capacity (1st / 2nd stage) Btu [kW]	9,980/12,520 [2.92/3.67]	9,980/12,520 [2.92/3.67]	9,980/12,520 [2.92/3.67]	9,980/12,520 [2.92/3.67]
Net System Power (1st / 2nd stage) [kW]	2.73/4.1	2.73/4.1	2.73/4.1	2.73/4.1
Heating Performance (Gas) <sup>3</sup>				
Heating Input Btu [kW] (1st Stage / 2nd Stage)	76,000/100,000 [22.27/29.3]	61,000/80,000 [17.87/23.44]	61,000/80,000 [17.87/23.44]	76,000/100,000 [22.27/29.3
Heating Output Btu [kW] (1st Stage / 2nd Stage)	61,560/81,000 [18.04/23.73]	49,563/65,000 [14.52/19.04]	49,563/65,000 [14.52/19.04]	61,560/81,000 [18.04/23.73
Temperature Rise Range <sup>e</sup> F [ <sup>e</sup> C]	25-55 [13.9-30.6] /	15-45 [8.3-25] /	15-45 [8.3-25] /	25-55 [13.9-30.6] /
(1st Stage / 2nd Stage)	35-65 [19.4-36.1]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	35-65 [19.4-36.1]
AFUE %4	0	81	81	81
Steady State Efficiency (%)	82	82	82	82
No. Burners	5	4	4	5
No. Stages	2	2	2	2
Gas Connection Pipe Size in. [mm]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB) <sup>5</sup>	78	78	78	78
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
MicroChannel Depth in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]
Rows / FPI [FPcm]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]
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]	1/22 [558.8]	•	1/22 [558.8]	
Drive Type/No. Speeds	Direct/1	1/22 [558.8]		1/22 [558.8] Direct/1
		Direct/1	Direct/1	
CFM [L/s]	3300 [1557]	3300 [1557]	3300 [1557]	3300 [1557]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	850	850	850	850
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]	1/10x9 [254x229]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	3/4	3/4	3/4	3/4
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter—Type	Field Supplied	Field Supplied	Field Supplied	Field Supplied
Furnished	No	No	No	No
(NO.) Size Recommended in. [mm x mm x mm]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]	(1)1x24x24 [25x610x610]
Refrigerant Charge Oz. [g]	169.6 [4808]	169.6 [4808]	169.6 [4808]	169.6 [4808]
Weights				
Net Weight Ibs. [kg]	554 [251]	557 [253]	557 [253]	562 [255]
Ship Weight Ibs. [kg]	562 [255]	562 [255]		562 [255]

Model RGEA16 Series	048AJV10TAA	060ACV102AA	060AJV102AA	060AJV10TAA
Cooling Performance <sup>1</sup>				
Gross Cooling Capacity (2nd Stage) Btu [kW]	48,500 [14.21]	60,500 [17.73]	60,500 [17.73]	60,500 [17.73]
SEER <sup>2</sup>	15	14	14	14
EER (1st stage / 2nd stage)	12.7/11.5	12/10.7	12/10.7	12/10.7
AHRI Rated CFM (1st / 2nd stage) [L/s]	1050/1600 [495/755]	1250/1850 [590/873]	1250/1850 [590/873]	1250/1850 [590/873]
AHRI Net Cooling Capacity (1st / 2nd stage) Btu [kW]	34,800/47,000 [10.2/13.77]	41,800/58,000 [12.25/16.99]	41,800/58,000 [12.25/16.99]	41,800/58,000 [12.25/16.99
Net Sensible Capacity (1st / 2nd stage) Btu [kW]	24,820/34,480 [7.27/10.1]	30,000/42,280 [8.79/12.39]	30,000/42,280 [8.79/12.39]	30,000/42,280 [8.79/12.39]
Net Latent Capacity (1st / 2nd stage) Btu [kW]	9,980/12,520 [2.92/3.67]	11,800/15,720 [3.46/4.61]	11,800/15,720 [3.46/4.61]	11,800/15,720 [3.46/4.61]
Net System Power (1st / 2nd stage) [kW]	2.73/4.1	3.48/5.4	3.48/5.4	3.48/5.4
Heating Performance (Gas) <sup>3</sup>				
Heating Input Btu [kW] (1st Stage / 2nd Stage)	76,000/100,000 [22.27/29.3]	76,000/100,000 [22.27/29.3]	76,000/100,000 [22.27/29.3]	76,000/100,000 [22.27/29.3
Heating Output Btu [kW] (1st Stage / 2nd Stage)			61,560/81,000 [18.04/23.73]	-
Temperature Rise Range <sup>e</sup> F [ <sup>o</sup> C]	25-55 [13.9-30.6] /	25-55 [13.9-30.6] /	25-55 [13.9-30.6] /	22-55 [12.2-30.6] /
(1st Stage / 2nd Stage)	35-65 [19.4-36.1]	35-65 [19.4-36.1]	35-65 [19.4-36.1]	35-65 [19.4-36.1]
AFUE %4	81	0	81	81
Steady State Efficiency (%)	82	82	82	82
No. Burners	5	5	5	5
No. Stages	2	2	2	2
Gas Connection Pipe Size in. [mm]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]	0.5 [12.7]
Compressor				
No./Type	1/Scroll	1/Scroll	1/Scroll	1/Scroll
Outdoor Sound Rating (dB) <sup>5</sup>	78	78	78	78
Outdoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
MicroChannel Depth in. [mm]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]				
	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]	16.23 [1.51]
Rows / FPI [FPcm]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]	2 / 22 [9]
Indoor Coil—Fin Type	Louvered	Louvered	Louvered	Louvered
Tube Type	Rifled	Rifled	Rifled	Rifled
Tube Size in. [mm] OD	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]	0.375 [9.5]
Face Area sq. ft. [sq. m]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]	7.39 [0.69]
Rows / FPI [FPcm]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]	2 / 15 [6]
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]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]	1/22 [558.8]
Drive Type/No. Speeds	Direct/1	Direct/1	Direct/1	Direct/1
CFM [L/s]	3300 [1557]	3300 [1557]	3300 [1557]	3300 [1557]
No. Motors/HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP	1 at 1/3 HP
Motor RPM	850	1075	1075	1075
Indoor Fan—Type	FC Centrifugal	FC Centrifugal	FC Centrifugal	FC Centrifugal
No. Used/Diameter in. [mm]	1/10x9 [254x229]	1/12x9 [305x229]	1/12x9 [305x229]	1/12x9 [305x229]
Drive Type	Direct	Direct	Direct	Direct
No. Speeds	Multiple	Multiple	Multiple	Multiple
No. Motors	1	1	1	1
Motor HP	3/4	1	1	1
Motor RPM	1050	1050	1050	1050
Motor Frame Size	48	48	48	48
Filter—Type	Field Supplied	Field Supplied	Field Supplied	Field Supplied
Furnished	No		No	No
		No		
(NO.) Size Recommended in. [mm x mm x mm]	(1)1x24x24 [25x610x610]	(1)1x24x30 [25x610x762]	(1)1x24x30 [25x610x762]	(1)1x24x30 [25x610x762]
Refrigerant Charge Oz. [g]	169.6 [4808]	165.8 [4700]	165.8 [4700]	165.8 [4700]
Weights	F00 (077)		500 500 5	500 500 1
Net Weight Ibs. [kg]	562 [255]	571 [259]	583 [264]	583 [264]
Ship Weight Ibs. [kg]	562 [255]	594 [269]	594 [269]	594 [269]

### 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 in CFM range shown in airflow tables. Units are certified in accordance with the Unitary Air Conditioner Equipment certification program, which is based on AHRI Standard 210/240 or 360.
- 2. EER and/or SEER are rated at AHRI conditions and in accordance with DOE test procedures.
- 3. Heating Performance limit settings and rating data were established and approved under laboratory test conditions using American National Standard Institute standards. Ratings shown are for elevations up to 2000 feet. For elevations above 2000 feet, ratings should be reduced at the rate of 4% for each 1000 feet above sea level.
- 4. AFUE is rated in accordance with DOE test procedures.
- 5. Outdoor Sound Rating shown is tested in accordance with AHRI Standard 270.

# **GROSS SYSTEMS PERFORMANCE DATA-RGEA16024A**

ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①												
	wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]			
(	CFM [L/s]	880 [415]	800 [378]	720 [340]	880 [415]	800 [378]	720 [340]	880 [415]	800 [378]	720 [340]		
	DR ①	0.18	0.16	0.14	0.18	0.16	0.14	0.18	0.16	0.14		
75 [23.9	Total BTUH [kW] Sens BTUH [kW] Power	29.9 [8.8] 17.5 [5.1] 1.5	29.4 [8.6] 16.7 [4.9] 1.5	28.9 [8.5] 15.9 [4.7] 1.5	28.1 [8.2] 20.8 [6.1] 1.5	27.6 [8.1] 19.9 [5.8] 1.5	27.1 [8.0] 18.9 [5.5] 1.5	27.0 [7.9] 23.6 [6.9] 1.5	26.5 [7.8] 22.6 [6.6] 1.5	26.0 [7.6] 21.5 [6.3] 1.4		
80 [26.7	Total BTUH [kW] Sens BTUH [kW] Power	29.1 [8.5] 16.9 [4.9] 1.6	28.6 [8.4] 16.1 [4.7] 1.6	28.0 [8.2] 15.4 [4.5] 1.6	27.3 [8.0] 20.2 [5.9] 1.6	26.8 [7.9] 19.3 [5.7] 1.6	26.3 [7.7] 18.4 [5.4] 1.6	26.1 [7.6] 23.0 [6.8] 1.5	25.6 [7.5] 22.0 [6.5] 1.5	25.2 [7.4] 21.0 [6.2] 1.5		
U 85 D [29.4	Total BTUH [kW] Sens BTUH [kW] Power	28.2 [8.3] 16.3 [4.8] 1.7	27.7 [8.1] 15.6 [4.6] 1.7	27.2 [8.0] 14.8 [4.4] 1.7	26.4 [7.7] 19.6 [5.8] 1.7	25.9 [7.6] 18.8 [5.5] 1.6	25.5 [7.5] 17.9 [5.2] 1.6	25.2 [7.4] 22.5 [6.6] 1.6	24.8 [7.3] 21.5 [6.3] 1.6	24.3 [7.1] 20.5 [6.0] 1.6		
O R 90 [32.2	Total BTUH [kW] Sens BTUH [kW] Power	27.3 [8.0] 15.8 [4.6] 1.8	26.8 [7.9] 15.1 [4.4] 1.8	26.3 [7.7] 14.4 [4.2] 1.7	25.5 [7.5] 19.1 [5.6] 1.7	25.1 [7.3] 18.3 [5.3] 1.7	24.6 [7.2] 17.4 [5.1] 1.7	24.3 [7.1] 22.0 [6.4] 1.7	23.9 [7.0] 21.0 [6.1] 1.7	23.5 [6.9] 20.0 [5.9] 1.7		
R Y 95 B [35] U	Total BTUH [kW] Sens BTUH [kW] Power	26.4 [7.7] 15.3 [4.5] 1.9	25.9 [7.6] 14.6 [4.3] 1.8	25.5 [7.5] 13.9 [4.1] 1.8	24.6 [7.2] 18.6 [5.5] 1.8	24.2 [7.1] 17.8 [5.2] 1.8	23.7 [7.0] 17.0 [5.0] 1.8	23.4 [6.9] 21.5 [6.3] 1.8	23.0 [6.7] 20.5 [6.0] 1.8	22.6 [6.6] 19.6 [5.7] 1.8		
L B [37.8 T	Total BTUH [kW] Sens BTUH [kW] Power	25.5 [7.5] 14.9 [4.4] 2.0	25.0 [7.3] 14.2 [4.2] 1.9	24.6 [7.2] 13.5 [4.0] 1.9	23.7 [6.9] 18.2 [5.3] 1.9	23.3 [6.8] 17.4 [5.1] 1.9	22.9 [6.7] 16.6 [4.9] 1.9	22.5 [6.6] 21.0 [6.2] 1.9	22.1 [6.5] 20.1 [5.9] 1.9	21.7 [6.4] 19.2 [5.6] 1.8		
E 105 P [40.6	Total BTUH [kW] Sens BTUH [kW] Power	24.6 [7.2] 14.4 [4.2] 2.0	24.2 [7.1] 13.8 [4.0] 2.0	23.7 [6.9] 13.2 [3.9] 2.0	22.8 [6.7] 17.8 [5.2] 2.0	22.4 [6.6] 17.0 [5.0] 2.0	22.0 [6.4] 16.2 [4.7] 2.0	21.6 [6.3] 20.6 [6.0] 2.0	21.2 [6.2] 19.7 [5.8] 2.0	20.8 [6.1] 18.8 [5.5] 1.9		
R A <b>110</b> T [ <b>43.3</b> U	Total BTUH [kW] Sens BTUH [kW] Power	23.7 [6.9] 14.1 [4.1] 2.1	23.2 [6.8] 13.5 [3.9] 2.1	22.8 [6.7] 12.8 [3.8] 2.1	21.9 [6.4] 17.4 [5.1] 2.1	21.5 [6.3] 16.6 [4.9] 2.1	21.1 [6.2] 15.9 [4.6] 2.1	20.7 [6.1] 20.3 [5.9] 2.1	20.3 [6.0] 19.4 [5.7] 2.1	19.9 [5.8] 18.5 [5.4] 2.0		
R E 115 ∘F [46.1	] Total BTUH [kW] Sens BTUH [kW] Power	22.7 [6.7] 13.8 [4.0] 2.3	22.3 [6.5] 13.1 [3.9] 2.2	21.9 [6.4] 12.5 [3.7] 2.2	20.9 [6.1] 17.1 [5.0] 2.2	20.6 [6.0] 16.3 [4.8] 2.2	20.2 [5.9] 15.6 [4.6] 2.2	19.7 [5.8] 19.7 [5.8] 2.2	19.4 [5.7] 19.0 [5.6] 2.2	19.0 [5.6] 18.2 [5.3] 2.1		
120 [48.9	Total BTUH [kW] Sens BTUH [kW] Power	21.8 [6.4] 13.5 [3.9] 2.4	21.4 [6.3] 12.9 [3.8] 2.3	21.0 [6.2] 12.3 [3.6] 2.3	20.0 [5.9] 16.8 [4.9] 2.3	19.6 [5.8] 16.0 [4.7] 2.3	19.3 [5.7] 15.3 [4.5] 2.3	18.8 [5.5] 18.8 [5.5] 2.3	18.5 [5.4] 18.5 [5.4] 2.3	18.1 [5.3] 17.9 [5.2] 2.2		
125 [51.7	Total BTUH [kW] Sens BTUH [kW] Power	20.8 [6.1] 13.2 [3.9] 2.5	20.5 [6.0] 12.6 [3.7] 2.5	20.1 [5.9] 12.0 [3.5] 2.4	19.0 [5.6] 16.5 [4.8] 2.4	18.7 [5.5] 15.8 [4.6] 2.4	18.4 [5.4] 15.1 [4.4] 2.4	17.9 [5.2] 17.9 [5.2] 2.4	17.5 [5.1] 17.5 [5.1] 2.4	17.2 [5.0] 17.2 [5.0] 2.4		

DR —Depression ratio dbE —Entering air dry bulb wbE-Entering air wet bulb Total —Total capacity x 1000 BTUH Sens —Sensible capacity x 1000 BTUH

Power —KW input

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

### **GROSS SYSTEMS PERFORMANCE DATA-RGEA16036A**

	ENTERING INDOOR AIR @ 80°F [26.7°C] dbE ①													
		wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]				
		FM [L/s]	1320 [623]	1200 [566]	1080 [510]	1320 [623]	1200 [566]	1080 [510]	1320 [623]	1200 [566]	1080 [510]			
		DR ①	0.11	0.09	0.07	0.11	0.09	0.07	0.11	0.09	0.07			
	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	45.1 [13.2] 28.0 [8.2] 2.3	44.3 [13.0] 26.7 [7.8] 2.2	43.5 [12.8] 25.5 [7.5] 2.2	42.4 [12.4] 32.2 [9.4] 2.2	41.6 [12.2] 30.7 [9.0] 2.2	40.9 [12.0] 29.3 [8.6] 2.2	39.8 [11.7] 34.6 [10.1] 2.1	39.1 [11.5] 33.0 [9.7] 2.1	38.4 [11.2] 31.5 [9.2] 2.1			
0	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	44.0 [12.9] 27.3 [8.0] 2.4	43.2 [12.7] 26.1 [7.6] 2.4	42.4 [12.4] 24.9 [7.3] 2.3	41.3 [12.1] 31.5 [9.2] 2.3	40.5 [11.9] 30.1 [8.8] 2.3	39.8 [11.7] 28.7 [8.4] 2.3	38.7 [11.3] 33.9 [9.9] 2.2	38.0 [11.1] 32.4 [9.5] 2.2	37.3 [10.9] 30.9 [9.0] 2.2			
U T D O	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	42.8 [12.5] 26.6 [7.8] 2.5	42.1 [12.3] 25.4 [7.4] 2.5	41.3 [12.1] 24.2 [7.1] 2.5	40.1 [11.7] 30.8 [9.0] 2.4	39.4 [11.5] 29.4 [8.6] 2.4	38.7 [11.3] 28.1 [8.2] 2.4	37.5 [11.0] 33.2 [9.7] 2.4	36.8 [10.8] 31.7 [9.3] 2.3	36.1 [10.6] 30.2 [8.9] 2.3			
O R D	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	41.6 [12.2] 25.9 [7.6] 2.7	40.8 [12.0] 24.8 [7.3] 2.6	40.1 [11.7] 23.6 [6.9] 2.6	38.8 [11.4] 30.1 [8.8] 2.6	38.1 [11.2] 28.8 [8.4] 2.6	37.4 [11.0] 27.4 [8.0] 2.5	36.2 [10.6] 32.5 [9.5] 2.5	35.6 [10.4] 31.0 [9.1] 2.5	34.9 [10.2] 29.6 [8.7] 2.5			
R Y B U	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	40.2 [11.8] 25.2 [7.4] 2.8	39.5 [11.6] 24.1 [7.1] 2.8	38.8 [11.4] 23.0 [6.7] 2.8	37.5 [11.0] 29.4 [8.6] 2.7	36.8 [10.8] 28.1 [8.2] 2.7	36.1 [10.6] 26.8 [7.8] 2.7	34.9 [10.2] 31.8 [9.3] 2.7	34.2 [10.0] 30.4 [8.9] 2.6	33.6 [9.9] 28.9 [8.5] 2.6			
L B T	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	38.8 [11.4] 24.5 [7.2] 3.0	38.1 [11.2] 23.4 [6.9] 2.9	37.4 [11.0] 22.3 [6.5] 2.9	36.1 [10.6] 28.7 [8.4] 2.9	35.4 [10.4] 27.4 [8.0] 2.9	34.8 [10.2] 26.1 [7.7] 2.8	33.5 [9.8] 31.1 [9.1] 2.8	32.9 [9.6] 29.7 [8.7] 2.8	32.3 [9.5] 28.3 [8.3] 2.8			
- EMPER	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	37.3 [10.9] 23.8 [7.0] 3.1	36.6 [10.7] 22.7 [6.7] 3.1	36.0 [10.5] 21.6 [6.3] 3.1	34.6 [10.1] 28.0 [8.2] 3.0	34.0 [10.0] 26.7 [7.8] 3.0	33.3 [9.8] 25.5 [7.5] 3.0	32.0 [9.4] 30.3 [8.9] 3.0	31.4 [9.2] 29.0 [8.5] 2.9	30.8 [9.0] 27.6 [8.1] 2.9			
A T U	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	35.8 [10.5] 23.0 [6.8] 3.3	35.1 [10.3] 22.0 [6.5] 3.3	34.5 [10.1] 21.0 [6.1] 3.2	33.0 [9.7] 27.2 [8.0] 3.2	32.4 [9.5] 26.0 [7.6] 3.2	31.8 [9.3] 24.8 [7.3] 3.2	30.4 [8.9] 29.6 [8.7] 3.1	29.9 [8.8] 28.3 [8.3] 3.1	29.3 [8.6] 27.0 [7.9] 3.1			
R E °F [°C]	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	34.1 [10.0] 22.3 [6.5] 3.5	33.5 [9.8] 21.3 [6.2] 3.4	32.9 [9.6] 20.3 [6.0] 3.4	31.4 [9.2] 26.5 [7.8] 3.4	30.8 [9.0] 25.3 [7.4] 3.4	30.3 [8.9] 24.1 [7.1] 3.3	28.8 [8.4] 28.8 [8.4] 3.3	28.3 [8.3] 27.6 [8.1] 3.3	27.8 [8.1] 26.3 [7.7] 3.3			
	120 [48.9]	Total BTUH [kW] Sens BTUH [kW] Power	32.4 [9.5] 21.6 [6.3] 3.6	31.8 [9.3] 20.6 [6.0] 3.6	31.3 [9.2] 19.6 [5.8] 3.6	29.7 [8.7] 25.8 [7.5] 3.6	29.2 [8.5] 24.6 [7.2] 3.5	28.6 [8.4] 23.5 [6.9] 3.5	27.1 [7.9] 27.1 [7.9] 3.5	26.6 [7.8] 26.6 [7.8] 3.5	26.1 [7.7] 25.6 [7.5] 3.4			
	125 [51.7]	Total BTUH [kW] Sens BTUH [kW] Power	30.7 [9.0] 20.8 [6.1] 3.8	30.1 [8.8] 19.9 [5.8] 3.8	29.6 [8.7] 19.0 [5.6] 3.8	27.9 [8.2] 25.0 [7.3] 3.8	27.4 [8.0] 23.9 [7.0] 3.7	26.9 [7.9] 22.8 [6.7] 3.7	25.3 [7.4] 25.3 [7.4] 3.7	24.9 [7.3] 24.9 [7.3] 3.7	24.4 [7.2] 24.4 [7.2] 3.6			

DR —Depression ratio dbE —Entering air dry bulb wbE—Entering air wet bulb Total—Total capacity x 1000 BTUHSens—Sensible capacity x 1000 BTUH Power —KW input

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

# **GROSS SYSTEMS PERFORMANCE DATA-RGEA16048A**

					ITERING INDOC	)R AIR @ 80°F	[26.7°C] dbE (1	)			
		wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]	
		FM [L/s]	1760 [831]	1600 [755]	1440 [680]	1760 [831]	1600 [755]	1440 [680]	1760 [831]	1600 [755]	1440 [680]
		DR 1	0.16	0.14	0.12	0.16	0.14	0.12	0.16	0.14	0.12
	75 [23.9]	Total BTUH [kW] Sens BTUH [kW] Power	59.8 [17.5] 35.3 [10.3] 3.1	58.7 [17.2] 33.7 [9.9] 3.1	57.6 [16.9] 32.1 [9.4] 3.0	55.8 [16.3] 41.0 [12.0] 3.0	54.8 [16.1] 39.1 [11.5] 3.0	53.8 [15.8] 37.3 [10.9] 3.0	52.4 [15.3] 45.3 [13.3] 2.9	51.4 [15.1] 43.3 [12.7] 2.9	50.5 [14.8] 41.2 [12.1] 2.9
0	80 [26.7]	Total BTUH [kW] Sens BTUH [kW] Power	58.3 [17.1] 34.5 [10.1] 3.2	57.3 [16.8] 33.0 [9.7] 3.2	56.2 [16.5] 31.5 [9.2] 3.2	54.3 [15.9] 40.2 [11.8] 3.2	53.3 [15.6] 38.4 [11.3] 3.1	52.4 [15.3] 36.6 [10.7] 3.1	50.9 [14.9] 44.5 [13.0] 3.1	50.0 [14.7] 42.5 [12.5] 3.0	49.1 [14.4] 40.6 [11.9] 3.0
U T D O	85 [29.4]	Total BTUH [kW] Sens BTUH [kW] Power	56.8 [16.6] 33.8 [9.9] 3.4	55.8 [16.3] 32.3 [9.5] 3.4	54.7 [16.0] 30.8 [9.0] 3.3	52.8 [15.5] 39.4 [11.6] 3.3	51.8 [15.2] 37.7 [11.0] 3.3	50.9 [14.9] 35.9 [10.5] 3.2	49.4 [14.5] 43.8 [12.8] 3.2	48.5 [14.2] 41.8 [12.3] 3.2	47.6 [14.0] 39.9 [11.7] 3.2
O R D	90 [32.2]	Total BTUH [kW] Sens BTUH [kW] Power	55.2 [16.2] 33.0 [9.7] 3.6	54.2 [15.9] 31.5 [9.2] 3.5	53.2 [15.6] 30.0 [8.8] 3.5	51.2 [15.0] 38.6 [11.3] 3.5	50.3 [14.7] 36.9 [10.8] 3.4	49.4 [14.5] 35.2 [10.3] 3.4	47.8 [14.0] 43.0 [12.6] 3.4	46.9 [13.8] 41.1 [12.0] 3.4	46.1 [13.5] 39.1 [11.5] 3.3
R Y B U	95 [35]	Total BTUH [kW] Sens BTUH [kW] Power	53.5 [15.7] 32.2 [9.4] 3.7	52.6 [15.4] 30.7 [9.0] 3.7	51.6 [15.1] 29.3 [8.6] 3.7	49.6 [14.5] 37.8 [11.1] 3.6	48.7 [14.3] 36.1 [10.6] 3.6	47.8 [14.0] 34.5 [10.1] 3.6	46.1 [13.5] 42.1 [12.4] 3.6	45.3 [13.3] 40.3 [11.8] 3.5	44.5 [13.0] 38.4 [11.3] 3.5
L B T	100 [37.8]	Total BTUH [kW] Sens BTUH [kW] Power	51.8 [15.2] 31.3 [9.2] 3.9	50.9 [14.9] 29.9 [8.8] 3.9	50.0 [14.6] 28.5 [8.4] 3.8	47.8 [14.0] 37.0 [10.8] 3.8	47.0 [13.8] 35.3 [10.4] 3.8	46.1 [13.5] 33.7 [9.9] 3.8	44.4 [13.0] 41.3 [12.1] 3.7	43.6 [12.8] 39.5 [11.6] 3.7	42.9 [12.6] 37.6 [11.0] 3.7
-EMPER	105 [40.6]	Total BTUH [kW] Sens BTUH [kW] Power	50.1 [14.7] 30.5 [8.9] 4.1	49.2 [14.4] 29.1 [8.5] 4.1	48.3 [14.1] 27.7 [8.1] 4.0	46.1 [13.5] 36.1 [10.6] 4.0	45.3 [13.3] 34.5 [10.1] 4.0	44.4 [13.0] 32.9 [9.6] 3.9	42.7 [12.5] 40.4 [11.9] 3.9	41.9 [12.3] 38.6 [11.3] 3.9	41.2 [12.1] 36.8 [10.8] 3.9
A T U	110 [43.3]	Total BTUH [kW] Sens BTUH [kW] Power	48.2 [14.1] 29.6 [8.7] 4.3	47.4 [13.9] 28.3 [8.3] 4.3	46.5 [13.6] 26.9 [7.9] 4.2	44.3 [13.0] 35.2 [10.3] 4.2	43.5 [12.7] 33.7 [9.9] 4.2	42.7 [12.5] 32.1 [9.4] 4.1	40.9 [12.0] 39.6 [11.6] 4.1	40.1 [11.8] 37.8 [11.1] 4.1	39.4 [11.5] 36.0 [10.6] 4.1
R E °F	115 [46.1]	Total BTUH [kW] Sens BTUH [kW] Power	46.4 [13.6] 28.7 [8.4] 4.5	45.5 [13.3] 27.4 [8.0] 4.5	44.7 [13.1] 26.1 [7.7] 4.4	42.4 [12.4] 34.3 [10.1] 4.4	41.6 [12.2] 32.8 [9.6] 4.4	40.9 [12.0] 31.3 [9.2] 4.4	39.0 [11.4] 38.6 [11.3] 4.3	38.3 [11.2] 36.9 [10.8] 4.3	37.6 [11.0] 35.2 [10.3] 4.3
[°C]	120 [48.9]	Total BTUH [kW] Sens BTUH [kW] Power	44.4 [13.0] 27.7 [8.1] 4.7	43.6 [12.8] 26.5 [7.8] 4.7	42.8 [12.6] 25.3 [7.4] 4.7	40.5 [11.9] 33.4 [9.8] 4.7	39.7 [11.6] 31.9 [9.4] 4.6	39.0 [11.4] 30.4 [8.9] 4.6	37.0 [10.9] 37.0 [10.9] 4.6	36.4 [10.7] 36.0 [10.6] 4.5	35.7 [10.5] 34.4 [10.1] 4.5
	125 [51.7]	Total BTUH [kW] Sens BTUH [kW] Power	42.4 [12.4] 26.8 [7.8] 5.0	41.7 [12.2] 25.6 [7.5] 4.9	40.9 [12.0] 24.4 [7.1] 4.9	38.5 [11.3] 32.4 [9.5] 4.9	37.8 [11.1] 31.0 [9.1] 4.8	37.1 [10.9] 29.5 [8.7] 4.8	35.1 [10.3] 35.1 [10.3] 4.8	34.4 [10.1] 34.4 [10.1] 4.8	33.8 [9.9] 33.5 [9.8] 4.7

DR —Depression ratio dbE —Entering air dry bulb

wbE-Entering air wet bulb

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

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

### **GROSS SYSTEMS PERFORMANCE DATA-RGEA16060A**

				ITERING INDOC	OR AIR @ 80°F	[26.7°C] dbE	)			
	wbE		71°F [21.7°C]			67°F [19.4°C]			63°F [17.2°C]	
	CFM [L/s]	2030 [958]	1850 [873]	1660 [783]	2030 [958]	1850 [873]	1660 [783]	2030 [958]	1850 [873]	1660 [783]
	DR ①	0.11	0.09	0.07	0.11	0.09	0.07	0.11	0.09	0.07
[	75 23.9] Total BTUH [kW] Sens BTUH [kW] Power	73.1 [21.4] 42.8 [12.6] 4.1	71.8 [21.0] 41.0 [12.0] 4.0	70.5 [20.6] 39.0 [11.4] 4.0	68.8 [20.2] 50.1 [14.7] 3.9	67.6 [19.8] 47.9 [14.0] 3.9	66.4 [19.5] 45.6 [13.4] 3.9	65.0 [19.0] 55.4 [16.2] 3.8	63.9 [18.7] 53.0 [15.5] 3.8	62.7 [18.4] 50.4 [14.8] 3.8
]	80 26.7] Total BTUH [kW] Sens BTUH [kW] Power	71.5 [20.9] 42.3 [12.4] 4.3	70.2 [20.6] 40.4 [11.8] 4.2	68.9 [20.2] 38.5 [11.3] 4.2	67.2 [19.7] 49.5 [14.5] 4.1	66.1 [19.4] 47.4 [13.9] 4.1	64.8 [19.0] 45.1 [13.2] 4.1	63.4 [18.6] 54.8 [16.1] 4.0	62.3 [18.3] 52.4 [15.4] 4.0	61.1 [17.9] 49.9 [14.6] 3.9
Ŭ T D [	85 29.4] Total BTUH [kW] Sens BTUH [kW] Power	69.7 [20.4] 41.5 [12.2] 4.4	68.5 [20.1] 39.7 [11.6] 4.4	67.2 [19.7] 37.8 [11.1] 4.4	65.5 [19.2] 48.8 [14.3] 4.3	64.3 [18.9] 46.6 [13.7] 4.3	63.1 [18.5] 44.4 [13.0] 4.2	61.6 [18.1] 54.0 [15.8] 4.2	60.6 [17.7] 51.7 [15.1] 4.2	59.4 [17.4] 49.2 [14.4] 4.1
D	90 32.2] Total BTUH [kW] Sens BTUH [kW] Power	67.8 [19.9] 40.6 [11.9] 4.6	66.6 [19.5] 38.8 [11.4] 4.6	65.4 [19.2] 37.0 [10.8] 4.6	63.6 [18.6] 47.8 [14.0] 4.5	62.5 [18.3] 45.8 [13.4] 4.5	61.3 [18.0] 43.6 [12.8] 4.4	59.7 [17.5] 53.1 [15.6] 4.4	58.7 [17.2] 50.8 [14.9] 4.3	57.6 [16.9] 48.4 [14.2] 4.3
R Y B	95 [35] Total BTUH [kW] Sens BTUH [kW] Power	65.7 [19.3] 39.5 [11.6] 4.9	64.6 [18.9] 37.8 [11.1] 4.8	63.4 [18.6] 36.0 [10.5] 4.8	61.5 [18.0] 46.8 [13.7] 4.7	60.4 [17.7] 44.7 [13.1] 4.7	59.3 [17.4] 42.6 [12.5] 4.6	57.7 [16.9] 52.0 [15.2] 4.6	56.7 [16.6] 49.8 [14.6] 4.6	55.6 [16.3] 47.4 [13.9] 4.5
L B	100 37.8] Total BTUH [kW] Sens BTUH [kW] Power	63.5 [18.6] 38.3 [11.2] 5.1	62.4 [18.3] 36.6 [10.7] 5.0	61.3 [18.0] 34.8 [10.2] 5.0	59.3 [17.4] 45.5 [13.3] 4.9	58.3 [17.1] 43.5 [12.8] 4.9	57.2 [16.8] 41.4 [12.1] 4.9	55.4 [16.2] 50.8 [14.9] 4.8	54.5 [16.0] 48.6 [14.2] 4.8	53.5 [15.7] 46.2 [13.6] 4.7
E M	105 40.6] Total BTUH [kW] Sens BTUH [kW] Power	61.2 [17.9] 36.8 [10.8] 5.3	60.1 [17.6] 35.2 [10.3] 5.3	59.0 [17.3] 33.5 [9.8] 5.2	56.9 [16.7] 44.1 [12.9] 5.2	55.9 [16.4] 42.2 [12.4] 5.1	54.9 [16.1] 40.1 [11.8] 5.1	53.1 [15.6] 49.4 [14.5] 5.1	52.2 [15.3] 47.2 [13.8] 5.0	51.2 [15.0] 44.9 [13.2] 5.0
	110 43.3] Total BTUH [kW] Sens BTUH [kW] Power	58.6 [17.2] 35.2 [10.3] 5.6	57.6 [16.9] 33.7 [9.9] 5.5	56.5 [16.6] 32.1 [9.4] 5.5	54.4 [15.9] 42.5 [12.4] 5.4	53.4 [15.7] 40.6 [11.9] 5.4	52.4 [15.4] 38.7 [11.3] 5.3	50.5 [14.8] 47.8 [14.0] 5.3	49.7 [14.6] 45.7 [13.4] 5.3	48.7 [14.3] 43.5 [12.7] 5.2
	115 46.1] Total BTUH [kW] Sens BTUH [kW] Power	55.9 [16.4] 33.5 [9.8] 5.8	55.0 [16.1] 32.0 [9.4] 5.8	53.9 [15.8] 30.5 [8.9] 5.7	51.7 [15.2] 40.7 [11.9] 5.7	50.8 [14.9] 38.9 [11.4] 5.6	49.9 [14.6] 37.1 [10.9] 5.6	47.9 [14.0] 46.0 [13.5] 5.6	47.0 [13.8] 44.0 [12.9] 5.5	46.2 [13.5] 41.9 [12.3] 5.5
	120 48.9] Total BTUH [kW] Sens BTUH [kW] Power	53.1 [15.6] 31.5 [9.2] 6.1	52.2 [15.3] 30.2 [8.8] 6.0	51.2 [15.0] 28.7 [8.4] 6.0	48.9 [14.3] 38.8 [11.4] 6.0	48.0 [14.1] 37.1 [10.9] 5.9	47.1 [13.8] 35.3 [10.4] 5.8	45.0 [13.2] 44.1 [12.9] 5.8	44.2 [13.0] 42.2 [12.4] 5.8	43.4 [12.7] 40.1 [11.8] 5.7
	125 51.7] Total BTUH [kW] Sens BTUH [kW] Power	50.1 [14.7] 29.4 [8.6] 6.4	49.2 [14.4] 28.2 [8.3] 6.3	48.3 [14.2] 26.8 [7.9] 6.2	45.9 [13.4] 36.7 [10.7] 6.2	45.1 [13.2] 35.1 [10.3] 6.2	44.2 [13.0] 33.4 [9.8] 6.1	42.0 [12.3] 42.0 [12.3] 6.1	41.3 [12.1] 40.1 [11.8] 6.1	40.5 [11.9] 38.2 [11.2] 6.0

DR —Depression ratio dbE —Entering air dry bulb wbE—Entering air wet bulb Total—Total capacity x 1000 BTUHSens—Sensible capacity x 1000 BTUH Power —KW input

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

INDOOR AIRFLOW PERFORMANCE - 208 & 230 VOLTS

Nominal Cooling Canacity	Blower Size/ Motor HP [W] & Motor	Nominal Heating Capacity	Motor Speed					External	External Static Pressure - Inches W.C. [kPa] (Side Discharge-Dry Coil)	re - Inches W rge-Dry Coil)	.C. [kPa]			
Tons [kW]	Type	Btu/hr [kW]			0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5[.12]	0.6 [.15]	0.7 [.17]	0.8 [.20]	0.9[.22]	1.0 [.25]
				CFM [L/s]	1137 [1537]	1156 [1546]	1173 [1554]	1181 [1557]	1192 [1563]	1200 [1566]	1192 [1563]	1190 [1562]	1206 [1569]	1197 [1565]
			Heat	RPM	755	868	929	994	1040	1098	1140	1212	1237	1278
				Watts	177	236	270	307	336	376	404	456	477	508
	10 x 9 Blower		-	CFM [L/s]	548 [1259]	561 [1265]	561 [1265]	551 [1260]	556 [1262]	541 [1255]	530 [1250]	514 [1243]	492 [1232]	477 [1225]
2.0 [17.03]	1/2 HP [1372 W]	60,000 [117.58]	Low Cool (1st Stage)	RPM	488	596	685	762	835	891	955	1010	1051	1101
[00:11]	ECM	[00:11]	(100 0000)	Watts	38	56	72	88	105	123	139	155	168	184
				CFM [L/s]	786 [1371]	805 [1380]	811 [1383]	820 [1387]	825 [1389]	822 [1388]	826 [1390]	824 [1389]	816 [1385]	809 [1382]
			High Cool (2nd Stare)	RPM	573	695	751	838	908	696	1010	1082	1119	1171
				Watts	72	103	120	148	175	199	218	248	265	290
				CFM [L/s]	1109 [1523]	1131 [1534]	1150 [1543]	1169 [1552]	1175 [1555]	1187 [1560]	1190 [1562]	1201 [1567]	1205 [1569]	1203 [1568]
			Heat	RPM	687	706	855	912	961	1009	1057	1135	1152	1212
				Watts	147	157	226	254	287	317	347	397	413	456
	10 x 9 Blower			CFM [L/s]	784 [1370]	801 [1378]	813 [1384]	820 [1387]	827 [1390]	830 [1392]	809 [1382]	806 [1380]	799 [1377]	791 [1373]
	1/2 HP [1372 W]	60,000 [117 58]	Low Cool (1st Stane)	RPM	514	627	704	775	845	916	1014	1046	1097	1138
	ECM	[ 		Watts	58	84	107	127	151	178	217	229	257	276
			-	CFM [L/s]	1124 [1530]	1124 [1530] 1144 [1540]	1167 [1551]	1183 [1558] 1197 [1565]		1204 [1568]	1205 [1569]	1237 [1584] 1231 [1581]	1231 [1581]	1230 [1580]
			High Cool (2nd Stane)	MdA	269	766	998	923	675	697	1085	1110	1165	1211
3.0			(200 200 200 200 200 200 200 200 200 200	Watts	152	185	234	268	298	314	372	391	428	463
[110.55]				CFM [L/s]	1295 [1611]	1309 [1618]	1331 [1628]	1362 [1643]	1353 [1639]	1359 [1641]	1365 [1644]	1358 [1641]	1365 [1644]	1360 [1642]
			Heat	RPM	757	869	806	940	1014	1071	1105	1151	1199	1234
				Watts	209	269	294	316	365	401	417	457	495	518
	10 x 9 Rlower	80,000		CFM [L/s]	797 [1376]	804 [1379]	809 [1382]	810 [1382]	812 [1383]	785 [1370]	778 [1367]	766 [1362]	755 [1356]	737 [1348]
	3/4 HP [1559 W]	8	Low Cool (1st Stane)	RPM	572	650	724	791	856	938	995	1049	1091	1138
	ECM	100,000	(	Watts	77	94	116	133	155	184	203	226	243	264
			C III	CFM [L/s]	1185 [1559]	1185 [1559] 1199 [1566]	1211 [1572] 1229 [1580] 1241 [1586]	1229 [1580]	1241 [1586]	1242 [1586]	1242 [1586] 1254 [1592]	1241 [1586] 1238 [1584] 1236 [1583]	1238 [1584]	1236 [1583]
			(2nd Stage)	RPM	730	798	857	930	995	1032	1099	1141	1173	1202
				Watts	175	206	237	274		336	377		422	441
				CFM [L/s]	1295 [1611]	1309 [1618]	1331 [1628]	1362 [1643]	1353 [1639]	1359 [1641]	1365 [1644]	1358 [1641]	1365 [1644]	1360 [1642]
			Heat	RPM	757	869	908	940	1014	1071	1105	1151	1199	1234
		00000		Watts	209	269	294	316	365	401	417	457	495	518
	10 x 9 Blower	80,000 [123.44]		CFM [L/s]	1032 [1487]	1045 [1493]	1053 [1497]	1058 [1499]	1058 [1499]	1066 [1503]	1068 [1504]	1056 [1498]	1046 [1494]	1037 [1489]
4.0 [114.07]	3/4 HP [1559 W]	8	Low Gool (1st Stage)	RPM	714	775	837	006	946	1006	1059	1087	1135	1187
_	ECM	100,000		Watts	137	160	186	214	235	267	293	309	335	362
				CFM [L/s]	1594 [1752]	1594 [1752] 1609 [1759]	1609 [1759]	1610 [1760] 1612 [1761]		1611 [1760]	1614 [1762]	1613 [1761]	1583 [1747]	1525 [1720]
			(2nd Stage)	RPM	980	1044	1083	1130	1167	1202	1247	1281	1317	1326
				Watts	396	445	477	516	549	580	618	652	665	652
Notes: All air Interface Cor	flows listed (except the antrol and Settion	5 ton high cool) can be n of before making adju	Notes: All airflows listed (except the 5 ton high cool) can be adjusted by +/-10% using the dip switches on the ECM interface board located in the blower section. See ECM Motor Interface Control and Settings Section of before making adjustments. The +10% setting of the 5 ton high cool is not available to prevent water blow-off.	ng the dip sw ting of the 5 t	itches on the I on high cool is	ECM interface s not available	board located to prevent wa	I in the blower ater blow-off.	r section. See	ECM Motor				

Nominal Cooling Canacity	Blower Size/ Motor HP [W] & Motor	Nominal Heating Capacity	Motor Speed					External	Static Pressu (Side Discha	External Static Pressure - Inches W.C. [kPa] (Side Discharge-Dry Coil)	.C. [kPa]			
ons [kW]	Type				0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6[.15]	0.7 [.17]	0.8[.20]	0.9 [.22]	1.0 [.25]
				CFM [L/s]	1295 [1611]	1300 [1614]	1322 [1624]	1325 [1625]	1344 [1634]	1343 [1634]	1295 [1611] 1300 [1614] 1322 [1624] 1325 [1625] 1344 [1634] 1343 [1634] 1343 [1634] 1343 [1638]	1351 [1638]	1349 [1637] 1349 [1637]	1349 [1637
			Heat	RPM	640	751	814	846	890	935	971	1014	1046	1086
				Watts	189	254	299	326	356	393	423	460	484	525
	12 x 9 Rinwer			CFM [L/s]	1258 [1594]	1280 [1604]	1279 [1604]	1297 [1612]	1306 [1616]	1310 [1618]	1258 [1594] 1280 [1604] 1279 [1604] 1297 [1612] 1306 [1616] 1310 [1618] 1312 [1619] 1312 [1619]	1312 [1619]	1313 [1620] 1320 [1623]	1320 [1623
5.0 117 591	1 HP [1746 W]	100,000 [129.3]	Low Cool (1st Stane)	RPM	649	674	795	846	883	939	926	666	1038	1069
	ECM	[0:04-]	100 000 000	Watts	190	209	275	314	340	388	399	435	465	494
				CFM [L/s]	1871 [1883]	1871 [1883] 1871 [1883] 1866 [1881]		1886 [1890]	1908 [1900]	1875 [1885]	1886 [1890] 1908 [1900] 1875 [1885] 1921 [1907] 1907 [1900]	1907 [1900]	1906 [1900] 1909 [1901]	1909 [1901
			High Cool	RPM	907	956	1016	1048	1084	1106	1151	1197	1209	1241
				Watts	563	626	209	750	795	831	897	962	679	1030

Interface Control and Settings Section of before making adjustments. The +10% setting of the 5 ton high cool is not available to prevent water blow-off.

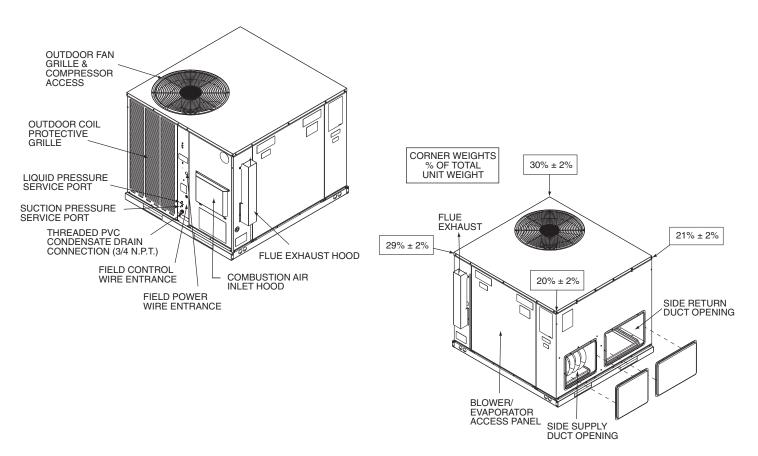
DOWN DISCHARGE PRESSURE DROP (ADD	RE DROP (ADD TO EXTERNAL STATIC PRE	. STATIC PRES	SURE)					
CFM [L/s]	600 [283]	800 [378]	1000 [472]	1200 [566]	1400 [661]	1600 [755]	1800 [849]	2000 [944]
Pressure Drop—Includes W.C. [kPa]	0	.02 [.005]	.05 [.012]	.07 [.017]	.1 [.025]	.12 [.030]	.15 [.037]	.17 [.042]

[ ] Designates Metric Conversions

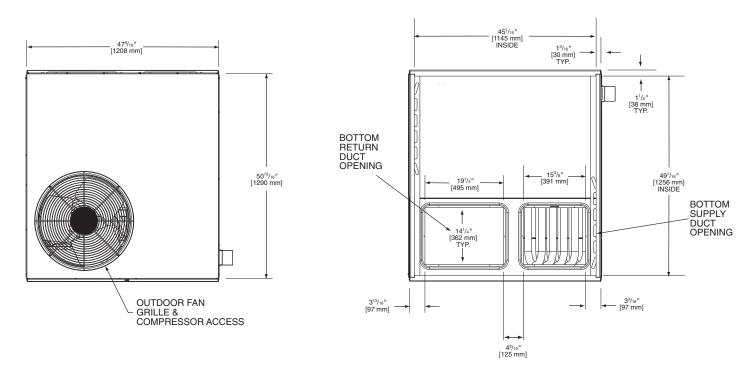
# Indoor Airflow Performance RGEA16 Series

			ELECTRICAL	. DATA – RGE	A16 SERIES			
		024AJV***AA	036ACV***AA	036AJV***AA	048ACV***AA	048AJV***AA	060ACV***AA	060AJV***AA
	Unit Operating Voltage Range	197-253	197-253	197-253	197-253	197-253	197-253	197-253
_	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230
atio	Phase	1	3	1	3	1	3	1
E E	Hz	60	60	60	60	60	60	60
l III	Minimum Circuit Ampacity	18	19	25	22	31	27	40
Unit Information	Minimum Overcurrent Protection Device Size	20	20	30	25	40	30	45
	Maximum Overcurrent Protection Device Size	25	25	40	35	50	40	60
	No.	1	1	1	1	1	1	1
l ā	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230
ž	Phase	1	3	1	3	1	3	1
Compressor Motor	RPM	3450	3450	3450	3450	3450	3450	3450
bre	HP, Compressor 1	2 5/6	4	4	5 1/4	5 1/4	7	6 2/3
5	Amps (RLA), Comp. 1	11.7	11.6	16.7	14	21.2	16.5	27.1
	Amps (LRA), Comp. 1	58.3	73	83	88	104	110	153
-	No.	1	1	1	1	1	1	1
털	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230
erP	Phase	1	1	1	1	1	1	1
Condenser Motor	HP	1/6	1/6	1/6	1/3	1/3	1/3	1/3
pu	Amps (FLA, each)	0.6	0.6	0.6	1.5	1.5	2	2
с С	Amps (LRA, each)	1.5	1.5	1.5	3	3	3.9	3.9
	No.	1	1	1	1	1	1	1
Evaporator Fan	Volts	208/230	208/230	208/230	208/230	208/230	208/230	208/230
l ā	Phase	1	1	1	1	1	1	1
bora	HP	1/2	1/2	1/2	3/4	3/4	1	1
Eval	Amps (FLA, each)	2	2	2	3	3	4	4
	Amps (LRA, each)							

Horsepower Per Compressor.
 Amp Draw Per Motor. Multiply Value By Number of Motors to Determine Total Amps.



**BOTTOM VIEW** 

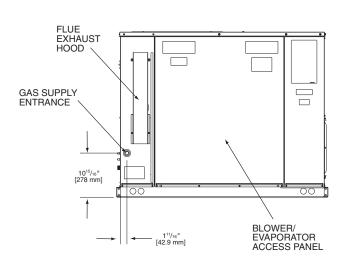


[ ] Designates Metric Conversions

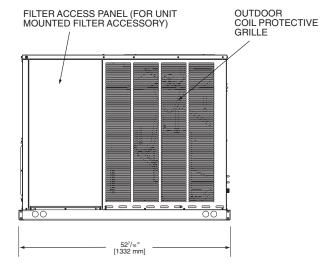
**TOP VIEW** 

### **SIDE VIEW**

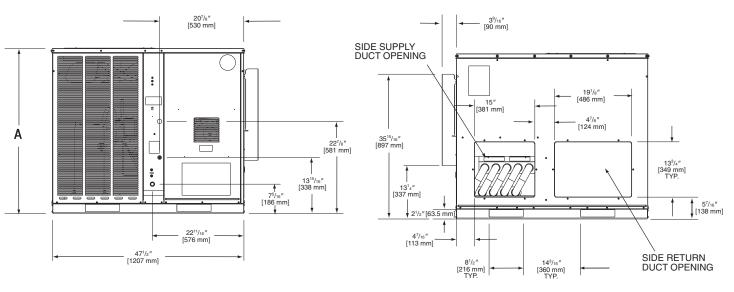
#### **SIDE VIEW**



**FRONT VIEW** 

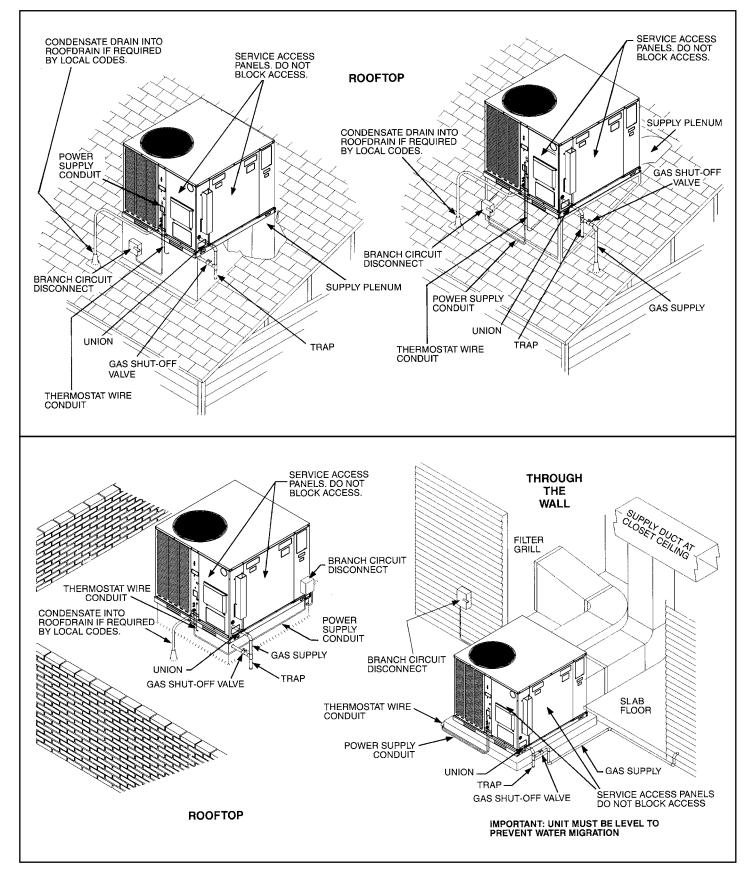


**BACK VIEW** 



SHOWN WITH DUCT COVERS REMOVED.

Model: RGEA16	"A" Height
024	35 <sup>15/</sup> 16"
036, 048, 060	41"



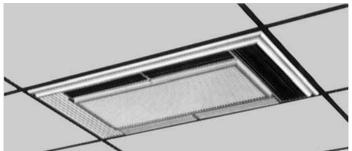
# ACCESSORY EQUIPMENT

Accessory Description	Model Application	Accessory Model No.
Thermostats	RGEA16	See Thermostat Specification Sheet (T22-001)
Roofcurbs	RGEA16	RXSG-AAA08 (8" [203 mm] Height) RXSG-AAA14 (14" [356 mm] Height) RXSG-AAA24 (24" [610 mm] Height)
Supply & Return Diffusers	RGEA16	RXRN-BD15
Economizers (Sideflow Only)	RGEA16	AXRD-CCM10 (Fully Modulating)
Economizers (Downflow Only)	RGEA16	AXRD-CAM10 (Fully Modulating)
Fresh Air Damper	RGEA16	AXRF-FAB1 (Motorized-35%) AXRF-FAA1 (Fixed-35%)
Rectangular to Round Transition (Downflow)	RGEA16	RXMC-CA02 (16" [406 mm] Ducts) RXMC-CA03 (18" [457 mm] Ducts)
Filter Kit	RGEA16	RXRY-B01
Sideflow Rectangular to Round Transition	RGEA16	RXMC-BA01
LP Conversion Kits	RGEA16	RXGJ-FP35
Low Ambient Control	RGEA16	RXRZ-B01
Canadian High Altitude Kit (for Natural Gas only <sup>1</sup> )	RGEA16	RXRX-AH01
Dehumidistat	RGEA16	41-25066-02 (Available through PROSTOCK)

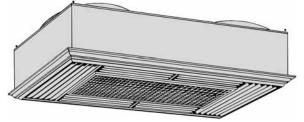
<sup>1</sup> If a particular unit is to be converted to operate on LP (propane) for elevations above 2000 ft. [609.6 m] in Canada, the existing Natural Gas to LP Conversion Kits for the subject models already contain the necessary orifices and instructions to de-rate the input for 2000-4500 ft. [609.6-1371.6 m] Canadian applications.

 $^{\rm 2}$  High and low pressure switches are standard for RGEA16 Models.

### COMMON SUPPLY/RETURN CONCENTRIC AIR DIFFUSER

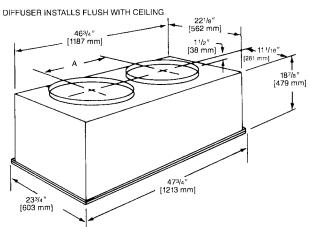


### SUPPLY/RETURN DIFFUSER



Designed to convert a side by side or an over and under arrangement into a concentric distribution of air. The diffuser is flush mounted, completely insulated, assembled, and internally baffled to provide four way supply air distribution with a center return. To make the assembly complete and ready to fit into a 2' [0.61 m] x 4' [1.22 m] suspended ceiling grid, the diffuser includes adjustable supply louvers, hanging rings, anti-sweat gasket, and round flanges for use with flexible ducts.

Model No.	Diameter	Shipping Wt.	Dimension A
RXRN-	Inches [mm]	Lbs. [kg]	Inches [mm]
BD15	16 [406]	90 [40.82]	



**NOTE:** The location of the combination supply and return diffuser should not exceed 10 feet [3.05 m] above the floor level for units @ 1000 CFM [472 L/s] or less and 12 [3.66 m] to 14 feet [4.27 m] above the floor level for units with CFM greater than 1000 [472 L/s]. If the diffuser is installed with a greater distance than recommended above, the supply air may become stratified above the required comfort area causing uncomfortable conditions.

#### AIRFLOW/PRESSURE DROP INFORMATION (INCHES W.C. [kPa])

A	Appr	oximate CFI	M [L/s]-Supp	oly Air
Accessory	1300 [614]	1575 [743]	1800 [850]	2200 [1038]
Plenum & Supply/Return Duct	.07 [.017]	.10 [.024]	.12 [.030]	.17 [.042]
Diffuser	.09 [.022]	.13 [.032]	.16 [.040]	.24 [.060]
Economizer	.06 [.015]	.09 [.022]	.11 [.027]	.17 [.042]

#### SUPPLY AIR/PERFORMANCE

Diffuser Airflow CFM [L/s]	Range of Throw Ft. [m]
800 [378]-1200 [566]	14 [4.27]-16 [4.88]
1600 [755]-2000 [944]	18 [5.49]-28 [8.53]

#### Accessories RGEA16 Series

# THERMOSTATS



200-Series \* Programmable

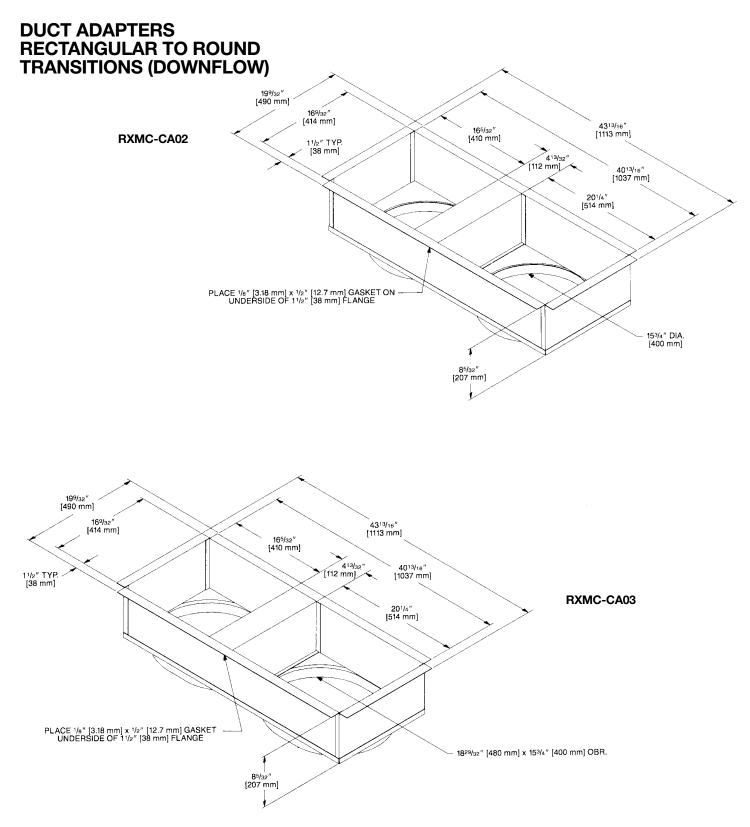


**300-Series** \* Deluxe Programmable

Brand		Descripter (3 Characters)	Series (3 Characters)	System (2 Characters)	Type (2 Characters)
UHC	-	TST	213	UN	MS
UHC=Ruud		TST=Thermostat	200=Programmable 300=Deluxe Programmable	GE=Gas/Electric UN=Universal (AC/HP/GE) MD=Modulating Furnace DF=Dual Fuel CM=Communicating	SS=Single-Stage MS=Multi-Stage

\* Photos are representative. Actual models may vary.

For detailed thermostat match-up information, see specification sheet form number T22-001.



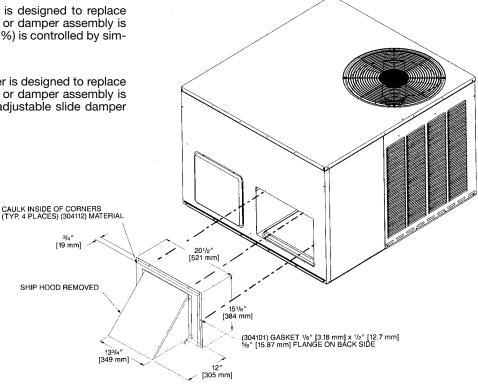
### FRESH AIR DAMPER

#### AXRF-FAA1 (Fixed - 0-35%)

The 0-35% manual outside Air Damper is designed to replace the unit return air duct cover. No drilling or damper assembly is required. The amount of outside air (0-35%) is controlled by simply adjusting the side damper.

#### AXRF-FAB1 (Motorized - 0-35%)

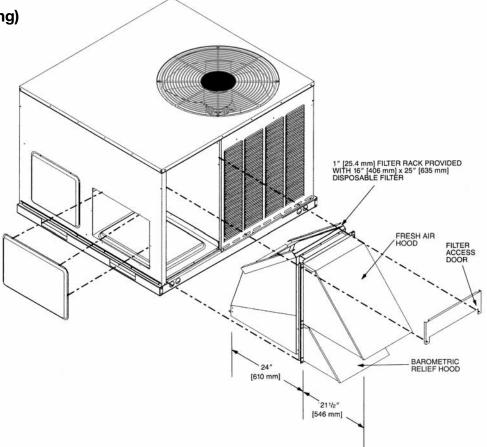
The 0-35% motorized outside Air Damper is designed to replace the unit return air duct cover. No drilling or damper assembly is required. The control motor opens the adjustable slide damper when the unit blower motor is energized.



#### ECONOMIZERS AXRD-CAM10 (Fully Modulating)

#### AXRD-CAM10 (Fully Modulating)

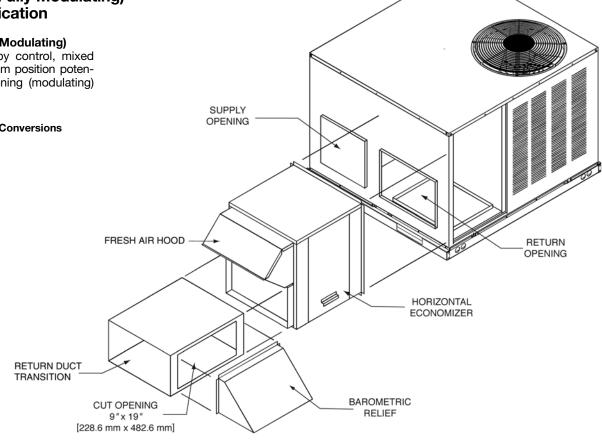
Provided with enthalpy control, mixed air sensor and minimum position potentiometer for proportioning (modulating) the amount of fresh air. **NOTE:** See economizer installation instructions for correct filter access door.



#### **ECONOMIZERS** AXRD-CCM10 (Fully Modulating) Horizontal Application

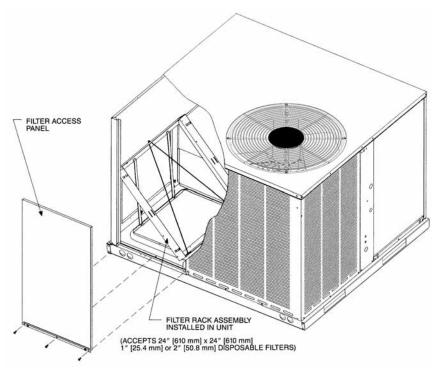
#### AXRD-CCM10 (Fully Modulating)

Provided with enthalpy control, mixed air sensor and minimum position potentiometer for proportioning (modulating) the amount of fresh air.



### FILTER KIT INSTALLATION RXRY-B01

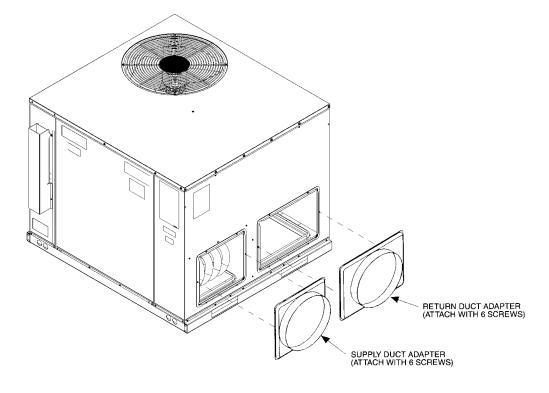
For use in either vertical or horizontal discharge.

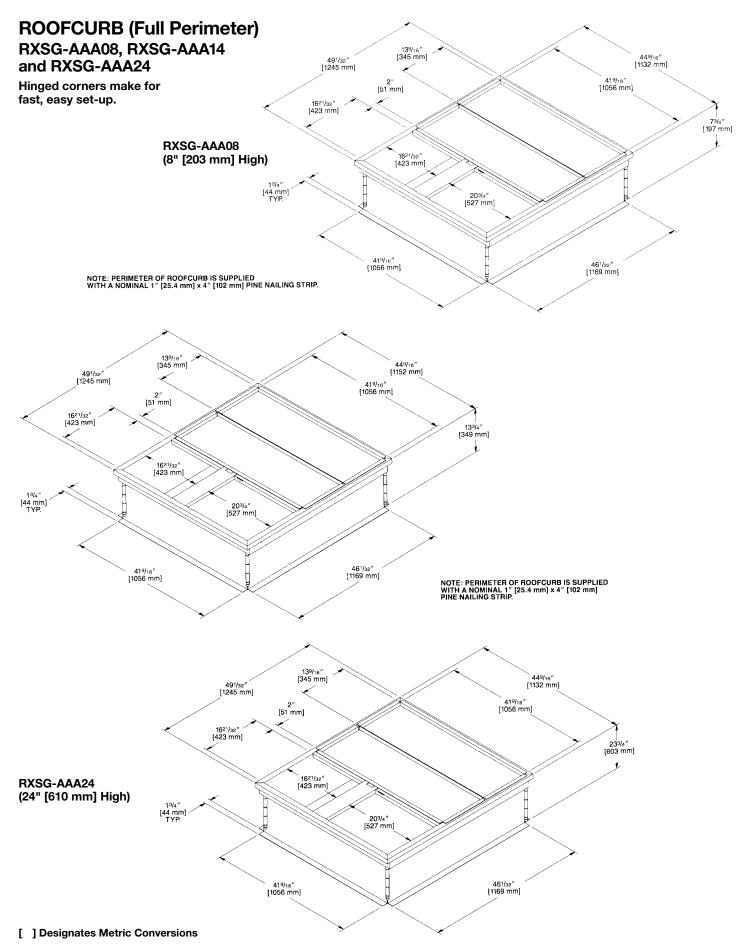


Airflow	Pressure Drop, Inches W.	C. [kPa]
CFM [L/s]	1" Filter	2" Filter
500 [236]	.02 [.0050]	.03 [.0075]
600 [283]	.02 [.0050]	.03 [.0075]
700 [330]	.03 [.0075]	.04 [.0010]
800 [378]	.04 [.0010]	.05 [.0124]
900 [425]	.05 [.0124]	.06 [.0149]
1000 [472]	.07 [.0174]	.08 [.0199]
1100 [519]	.08 [.0199]	.09 [.0224]
1200 [566]	.10 [.0249]	.12 [.0299]
1300 [614]	.13 [.0324]	.15 [.0373]
1400 [661]	.16 [.0398]	.19 [.0473]
1500 [708]	.19 [.0473]	.21 [.0523]
1600 [755]	.20 [.0498]	.23 [.0572]
1700 [802]	.21 [.0523]	.24 [.0598]
1800 [850]	.22 [.0548]	.25 [.0623]
1900 [897]	.24 [.0598]	.27 [.0672]
2000 [944]	.26 [.0647]	.29 [.0722]

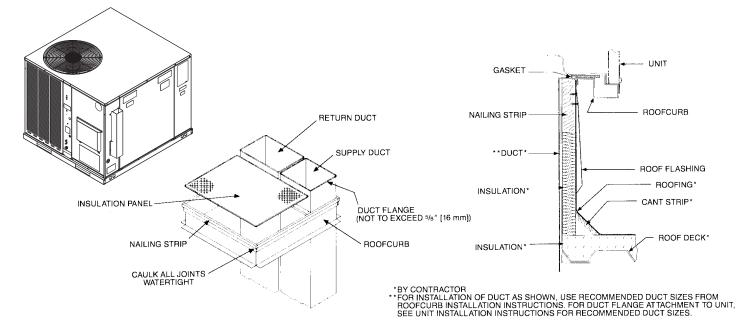
### DUCT ADAPTER SIDEFLOW SQUARE TO ROUND TRANSITION RXMC-A01

Adapts the side rectangular supply and return openings to 14" [356 mm] diameter round openings. Adapters provided with same finish as unit and also provided with thermal insulation.



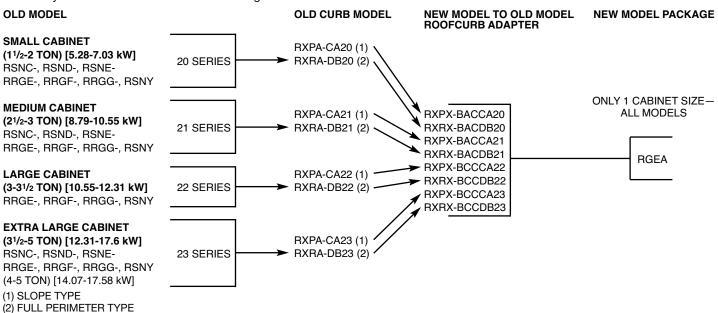


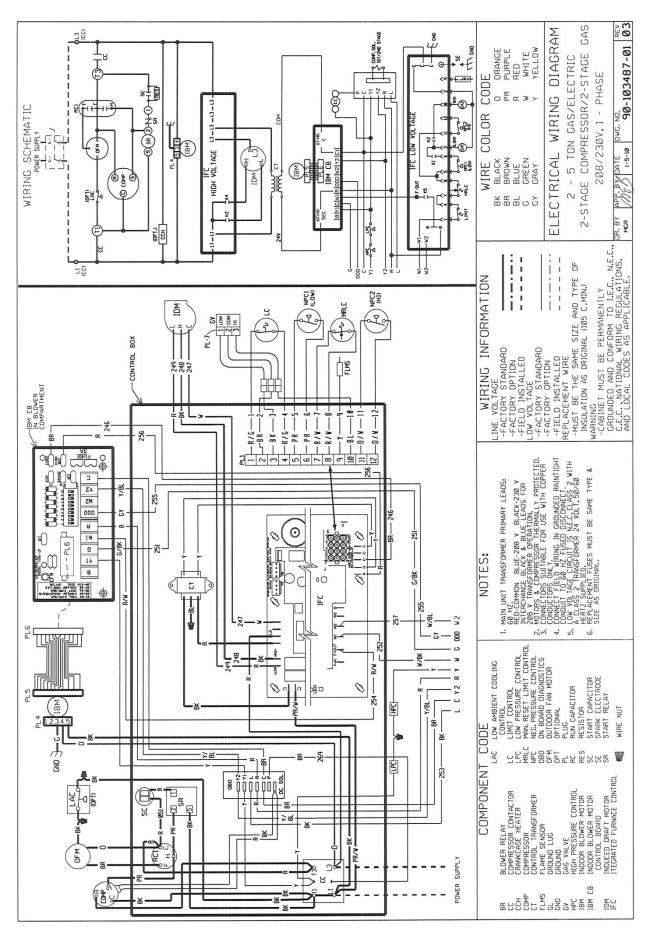
#### PACKAGE AIR CONDITIONERS & PACKAGE GAS/ELECTRIC UNITS ROOFCURB INSTALLATION (Full Perimeter)

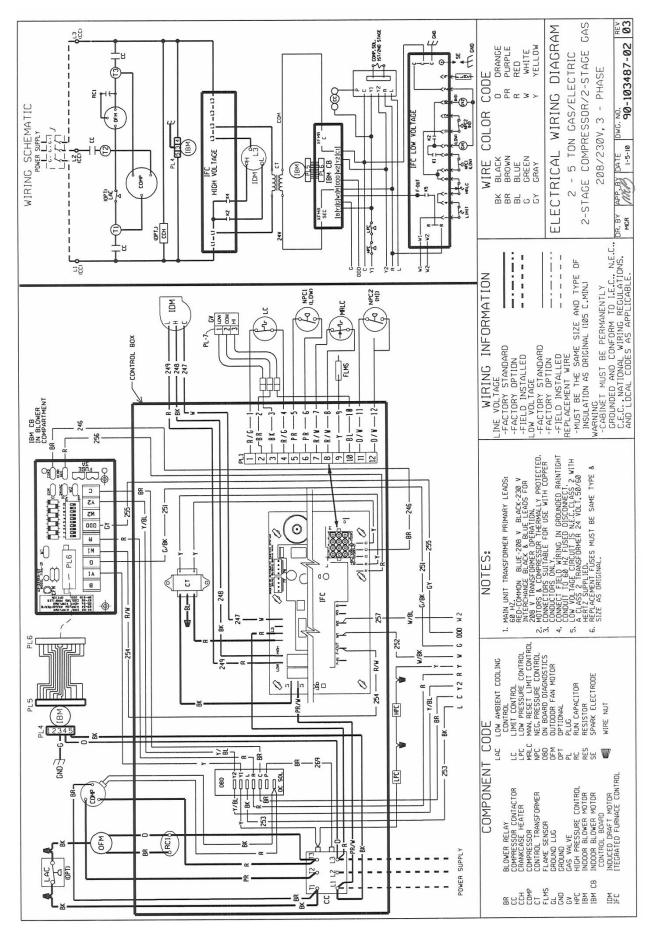


### **ROOFCURB ADAPTERS**

Fabricated from galvanized steel to adapt the New cabinet to the old style curb. All are furnished with a New gasket.







Wiring Diagrams RGEA16 Series Limited Warranty RGEA16 Series

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

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

Ruud 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.

#### Heat Exchanger

- Factory Standard ......Ten (10) Years Stainless Steel/1-Phase & 3-Phase Models Commercial Application .....Twenty (20) Years
- Stainless Steel/1-Phase Models
- Residential Application .....Limited Lifetime

\*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

1 Phase, Residential Applications.....Ten (10) Years 1 & 3 Phase, Commercial Applications ......Five (5) Years

- Parts
  - 1 Phase, Residential Applications .....Ten (10) Years
  - 1 & 3 Phase, Commercial Applications .....One (1) Year

Notes RGEA16 Series



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

Ruud Heating, Cooling & Water Heating • P.O. Box 17010 Fort Smith, Arkansas 72917 • www.ruud.com Ruud Canada • 125 Edgeware Road, Unit 1 Brampton, Ontario • L6Y 0P5

RELY ON RUUD.™