



The new degree of comfort.™

Rheem *Prestige Series*™ Two-Stage Upflow/Horizontal Gas Furnace equipped with The *Comfort Control*² System™

RGPE- Series

80% A.F.U.E.†

Input Rates 50-125 kBTU



†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.



- The Rheem *Prestige Series*™ Two-Stage line of upflow/horizontal gas furnaces are designed for utility rooms, closets, alcoves, or attics. Because of the furnace's low-profile 34 inch [864 mm] height, the upflow model installed vertically can also be used to satisfy most applications that traditionally call for a horizontal furnace.
- The design is certified by CSA International.
- The *Comfort Control*² System™ provides over 28 on-board diagnostics and fault history codes by detecting system and electrical problems. "Call for Service" alert notification is sent to the thermostat to alert the homeowner of required service.
- Serial Communication Enhanced – When installed with a Serial Communicating Condensing Unit and user interface control (RHC-TST550CMMS) 500 Series thermostat this unit offers 4 or 2 wire installation, auto-configuration, and diagnostic messaging with full communicating capability.
- Patented heat exchanger, constructed of aluminized steel for the maximum in corrosion resistance and thermal fatigue reliability.
- Low profile "34 inch" [864 mm] design is lighter and easier to handle, and leaves room for optional equipment.
- Energy efficient and quiet ECM 2+ communicating motor.
- Improves cooling efficiency when matched with rated condensing unit and coil.
- Constant CFM.
- Seven segment LED for system diagnostics.
- Diagnostic history for troubleshooting.
- Dip switch settings for selectable cooling airflow.
- On-demand dehumidification terminal for improved comfort in cooling mode.
- Convertible from upflow to horizontal left or right.
- Left or right side gas and electric inlet connections.
- All models equipped with flame sensor feature, an integrated board with humidifier and electronic air cleaner hookups.
- Insulated blower compartment, a slow-open gas valve, a specially designed draft inducer motor and blower motor make it one of the quietest furnaces on the market today.
- Pre-paint galvanized steel cabinet.
- Molded permanent filter.
- Easy door removal and replacement.
- Compatible with single or two-stage thermostat. (For optimal performance, two-stage thermostat recommended.)
- A variety of cooling coils and plenums designed to use with Rheem *Prestige Series*™ Two-Stage gas furnaces are available as optional accessories.



TABLE OF CONTENTS

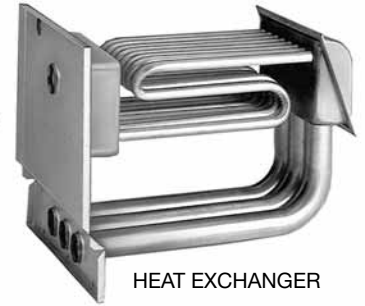
Standard & Optional Equipment	3
Model Features	4
Physical Data & Specifications	5
Model Number Identification	6
Dimensional Data.....	7
Blower Performance Data.....	8
Accessories.....	9
Limited Warranty	10



TWO-SPEED DRAFT
INDUCER MOTOR



HEAT EXCHANGER



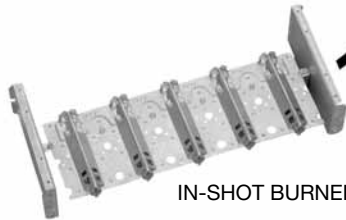
PRESSURE
SWITCH



DIRECT SPARK IGNITOR



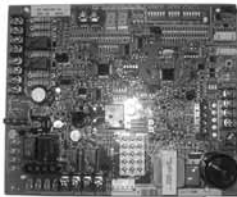
IN-SHOT BURNERS



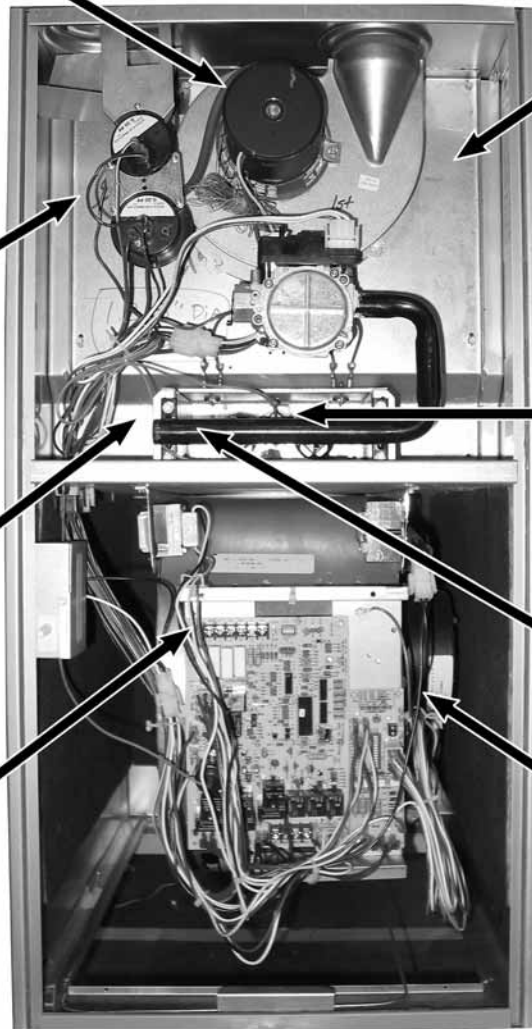
FLAME SENSOR



IFC
INTEGRATED FURNACE
CONTROL



ECM MOTOR



STANDARD EQUIPMENT

Completely assembled and wired; 2 speed draft inducer; high and low pressure switches; redundant 2 stage main gas control; blower compartment door safety switch; solid state time on/time off blower control; limit control; transformer; ECM blower motor. Furnaces are equipped with cooling/heating relay and transformer (50VA) ready for air conditioning applications. (Please note: a thermostat is not included as standard equipment.) Flame sensor diagnostics; fused protection (secondary).

OPTIONAL EQUIPMENT

The complete terms of limited and other warranties are available at our sales office, or through local installer.

All models can be converted by a qualified HVAC professional or local service dealer to use L.P. (propane) gas without changing burners. Factory approved kits must be used to convert from natural to L.P. (propane) gas and may be ordered as optional accessories from a Rheem parts distributor.

For L.P. (propane) operation, refer to Conversion Kit Index Form.

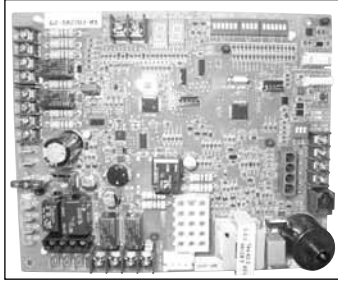
WARNING

THIS FURNACE IS NOT APPROVED
OR RECOMMENDED
FOR USE IN MOBILE HOMES

The *Comfort Control² SystemTM* Features:

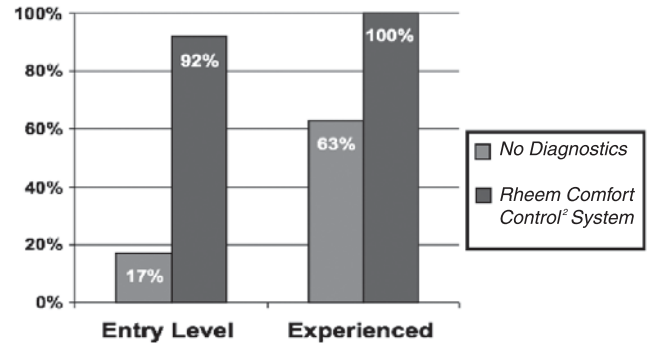
- The Rheem Dual 7-Segment LED Display easily shows system operating status codes and diagnostic codes.

- The Status Indication System Diagnostics feature thermostat communication capability and built-in diagnostics. The thermostat communication capability alerts the homeowner to any necessary service requirements. Faster, more accurate service is provided by the built-in diagnostics, by providing the HVAC professional with dependable information.



- The fault recall feature will allow for the last six fault-codes to be displayed, and will retain these codes even if power failure occurs.
- In order to save time and money, replacement automotive style fuses can be utilized instead of replacing the entire control board.

Problem-Solving Accuracy



Features of the RGPE Series:

- The *Comfort Control² SystemTM* provides over 28 on-board diagnostics and fault history codes by detecting system and electrical problems. "Call for Service" alert notification is sent to the thermostat to alert the homeowner of required service.
- Serial Communication Enhanced – When installed with a Serial Communicating Condensing Unit and user interface control (RHC-TST550CMMS) 500 Series thermostat this unit offers 4 or 2 wire installation, auto-configuration, and diagnostic messaging with full communicating capability.
- Patented heat exchanger, constructed of aluminized steel for the maximum in corrosion resistance and thermal fatigue reliability.
- Low profile "34 inch" [864 mm] design is lighter and easier to handle, and leaves room for optional equipment.
- Energy efficient and quiet ECM 2+ communicating motor.
- Improves cooling efficiency when matched with rated condensing unit and coil.
- Constant CFM.
- Seven segment LED for system diagnostics.
- Diagnostic history for troubleshooting.
- Dip switch settings for selectable cooling airflow.
- On-demand dehumidification terminal for improved comfort in cooling mode.
- Convertible from upflow to horizontal left or right.
- Left or right side gas and electric inlet connections.
- All models equipped with flame sensor feature, an integrated board with humidifier and electronic air cleaner hookups.
- Insulated blower compartment, a slow-open gas valve, a specially designed draft inducer motor and blower motor make it one of the quietest furnaces on the market today.
- Pre-paint galvanized steel cabinet.
- Molded permanent filter.
- Easy door removal and replacement.
- Compatible with single or two-stage thermostat. (For optimal performance, two-stage thermostat recommended.)

Physical Data and Specifications—Upflow Models

U.S. and Canadian Models

MODEL NUMBERS RGPE- SERIES	05EBMKR 05NBMKR	07EAMKR 07NAMKR	07EBRQR 07NBRQR	10EBRMR 10NBRMR	12EARMR 12NARMR
100% High Input–BTU/Hr [kW] ②	50,000 [15]	75,000 [22]	75,000 [22]	100,000 [29]	125,000 [37]
High Heating Capacity–BTU/Hr [kW] ①	40,000 [12]	60,000 [18]	60,000 [18]	80,000 [23]	100,000 [29]
70% Low Input–BTU/Hr [kW]	35,000 [10]	52,500 [15]	52,500 [15]	70,000 [20]	87,500 [25]
Low Heating Capacity–BTU/Hr [kW]	28,000 [8]	42,000 [12]	42,000 [12]	56,000 [16]	70,000 [20]
Heating–Ext. Static Pressure [kPa]	.10 [.025]	.15 [.037]	.15 [.037]	.20 [.05]	.20 [.05]
Blower (D x W) [mm]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
ECM Motor H.P. [W]	3/4 [559]	1/2 [373]	3/4 [559]	1 [746]	1 [746]
Motor Full Load Amps.	9.6	7.7	9.6	12.8	12.8
Unit Amps	8.7	8.7	12.0	12.0	12.0
Maximum Overcurrent Protection	15	15	15	15	15
Factory Heating Speed CFM–High Fire [L/s]	850 [401]	1176 [555]	1305 [616]	1600 [753]	1832 [865]
Factory Heating Speed CFM–Low Fire [L/s]	625 [295]	980 [462]	1125 [533]	1300 [615]	1420 [670]
Cooling CFM @ .5" [kPa] E.S.P. (Nominal) [L/s] (Range)	600-1200 [283]-[566]	600-1200 [283]-[566]	1000-1600 [472]-[755]	1200-2000 [566]-[944]	1200-2000 [566]-[944]
Max. E.S.P. (In. W.C.) [kPa]	0.8 [.2]	0.8 [.2]	0.8 [.2]	0.8 [.2]	0.8 [.2]
Temperature Rise Range °F [°C]	High Input	25-55 [13.9-30.6]	30-60 [17-33]	25-55 [13.9-30.6]	30-60 [17-33]
	Low Input	20-50 [11.1-27.8]	20-50 [11.1-27.8]	20-50 [11.1-27.8]	25-55 [13.9-30.6]
Max. Outlet Air Temp. °F [°C]	155 [68.3]	165 [73.8]	165 [73.8]	170 [76.6]	180 [82.2]
Standard Filter Size–Inches [mm]	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]	19 1/4 x 25 [489 x 635]	19 1/4 x 25 [489 x 635]	22 3/4 x 25 [578 x 635]
Approx. Shipping Weight (Lbs.) [kg]	110 [50]	115 [52]	115 [52]	120 [54]	140 [63]
Return Air Cabinets (Opt.) RXGR- Filter Size [mm]	C17B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C21B (2) 20 x 16 [508 x 406]	C21B (2) 20 x 16 [508 x 406]	C24B (2) 24 x 16 [610 x 406]
AFUE ①	80%	80%	80%	80%	80%

① In accordance with D.O.E. test procedures.

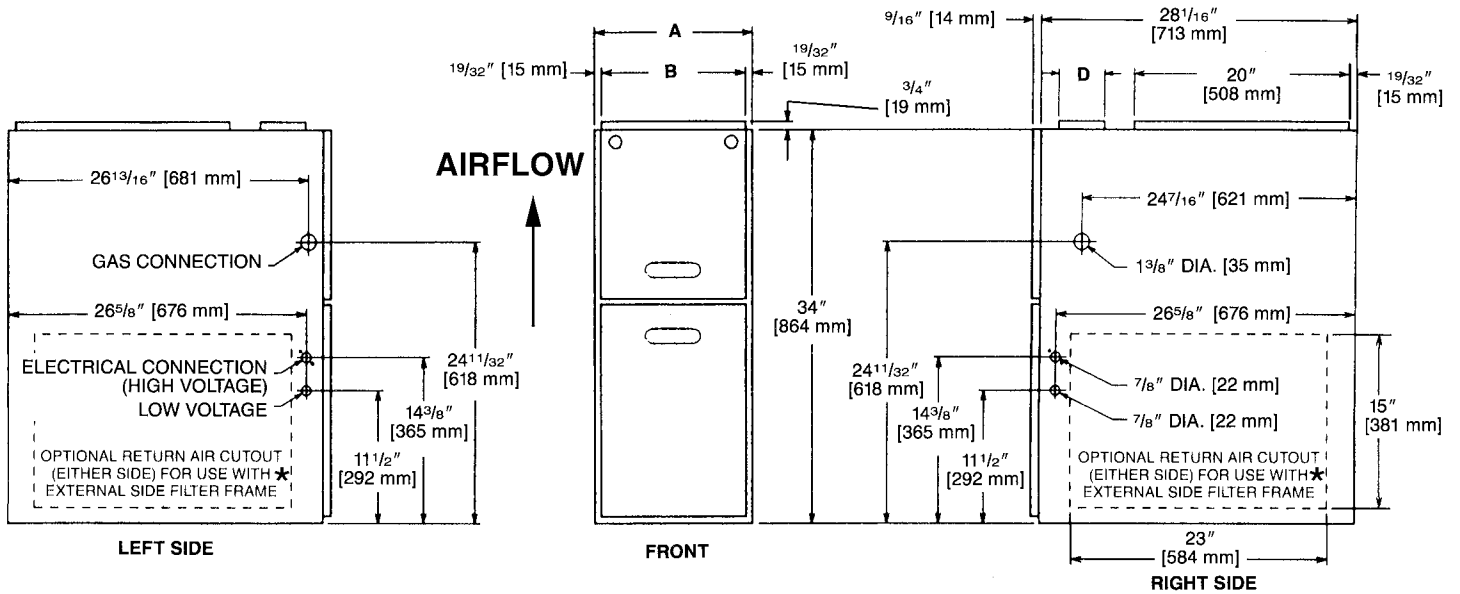
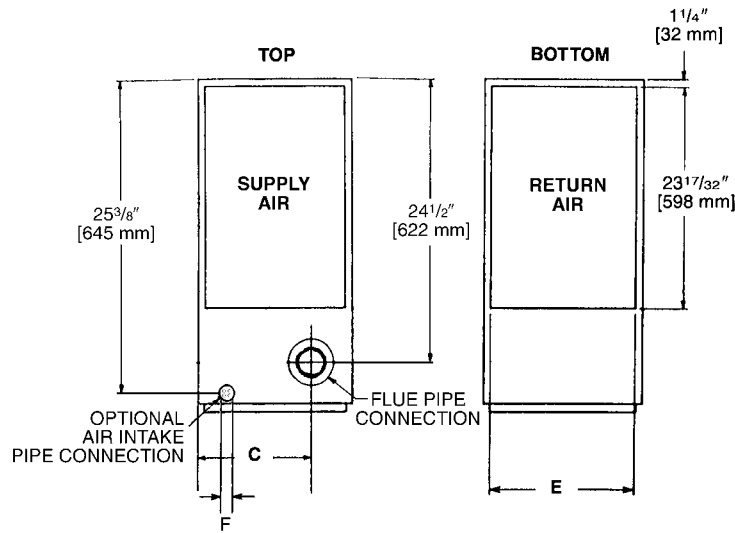
② See Conversion Kit Index Form for high altitude derate.

[] Designates Metric Conversions

Model Number Identification—Upflow Models

<u>R</u>	<u>G</u>	<u>P</u>	<u>E</u>	<u>07E</u>			<u>A</u>	<u>M</u>	<u>K</u>	<u>R</u>
Rheem	Gas Furnace	Upflow/ Horizontal	Design Series E = Communicating	Heating Input Designation			Variations	Blower Designation	Heating & Cooling Designation	Fuel Type
				Electric Ignition	NO _x Model	Input BTU/HR	A = Std. Cabinet	M = 11 x 7 [279 x 178 mm]	K = 600-1200 CFM [283-566 L/s]	R = Natural Gas, U.S. and Canadian Standard Furnace
				05E	05N	50,000 [15 kW]	B = Wide Cabinet	R = 11 x 10 [279 x 254 mm]	M = 1200-2000 CFM [566-944 L/s]	
				07E	07N	75,000 [22 kW]			Q = 1000-1600 CFM [566-944 L/s]	
				10E	10N	100,000 [29 kW]				
				12E	12N	125,000 [37 kW]				

[] Designates Metric Conversions



*Both sides for 1800 CFM & above

Upflow Dimensions and Clearance to Combustible Material (inches) [mm]

MODEL RGPE-	A	B	C	D	E	F	REDUCED CLEARANCES (IN.) [mm]						
							LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGTs. (LBS.) [Kg]
05, 07A	17 1/2 [445]	16 11/32 [415]	12 3/8 [314]	①	15 [381]	2 1/2 [64]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
07B, 10	21 [533]	19 27/32 [504]	14 1/8 [359]	①	18 1/2 [470]	2 1/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	24 1/2 [622]	23 11/32 [593]	15 7/8 [403]	①	22 [559]	2 1/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.

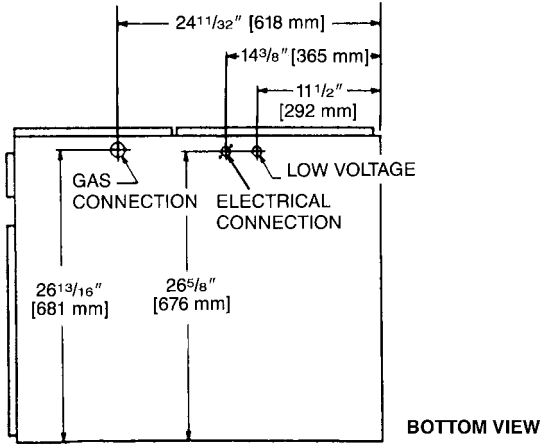
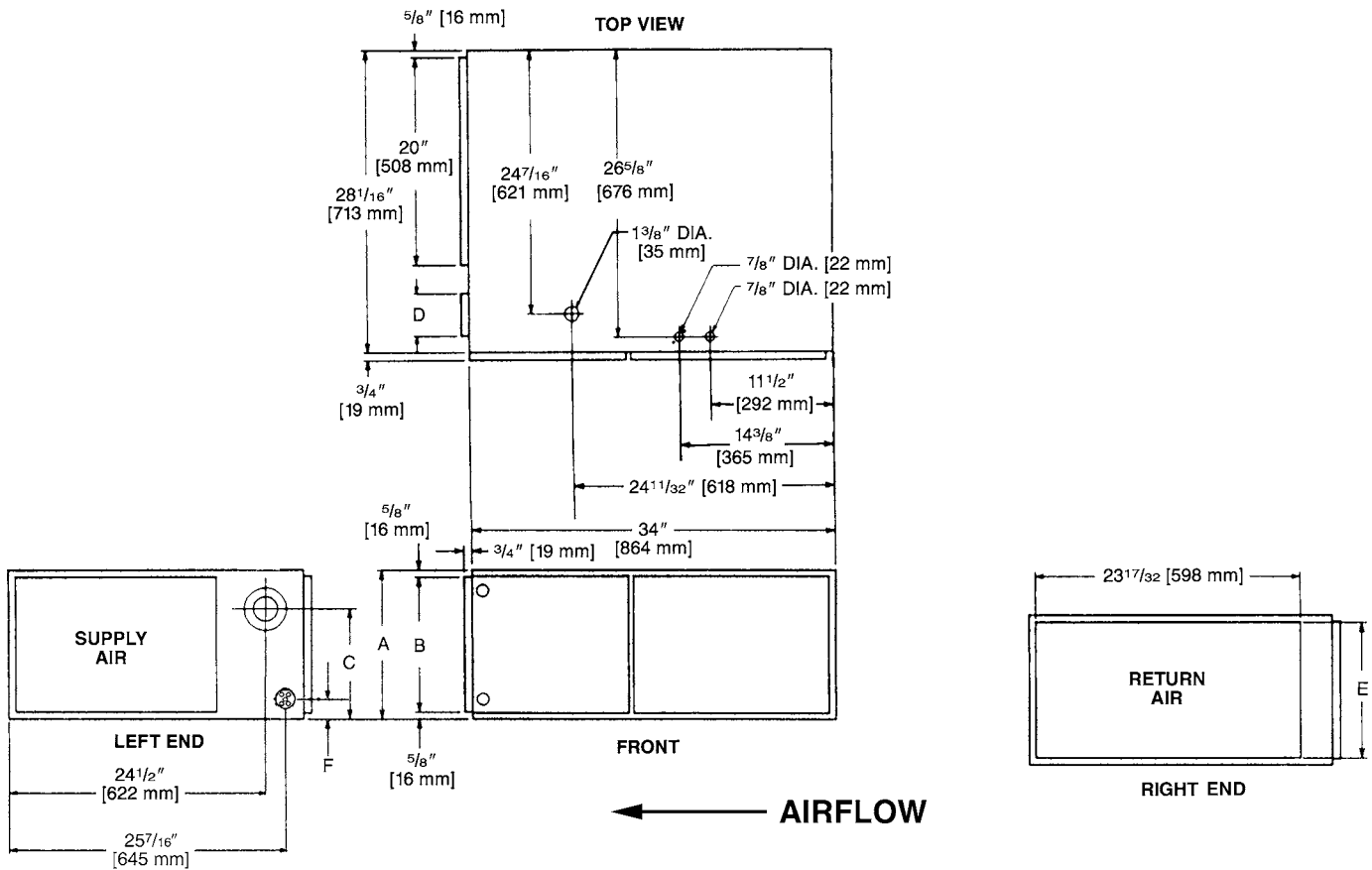
② May be 0" [0 mm] with type B vent.

③ May be 1" [25 mm] with type B vent.

Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and/or Can/CGA-B149 Installation Codes and in accordance with local codes.

[] Designates Metric Conversions





WARNING
THIS FURNACE IS NOT APPROVED OR RECOMMENDED FOR INSTALLATION ON ITS BACK, WITH ACCESS DOORS FACING UPWARDS.

NOTE: In horizontal configuration, return air cutout is not permitted.

Horizontal Dimensions and Clearance to Combustible Material (inches) [mm]

MODEL RGPE-	A	B	C	D	E	F	REDUCED CLEARANCES (IN.) [mm]						
							LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGTS. (LBS.) [Kg]
05, 07A	17 1/2 [445]	16 11/32 [415]	12 3/8 [314]	Ⓚ	15 [381]	2 1/2 [64]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	110 [49.9]
07B, 10	21 [533]	19 27/32 [504]	14 1/8 [359]	Ⓚ	18 1/2 [470]	2 1/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	24 1/2 [622]	23 11/32 [593]	15 7/8 [403]	Ⓚ	22 [559]	2 1/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.

② May be 0" [0 mm] with type B vent.

③ May be 1" [25 mm] with type B vent.

Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and/or Can/CGA-B149 Installation Codes and in accordance with local codes.

[] Designates Metric Conversions