

GAS FURNACES



CRITERION® II PLUS 2 TWO STAGE 80% A.F.U.E.† UPFLOW/HORIZONTAL GAS FURNACES

The Rheem® Criterion II Plus 2 line of upflow/horizontal gas furnaces are designed for utility rooms, closets, alcoves, or attics. **Because of the Criterion's low-profile 34 inch [864 mm] height, the upflow model can also be used to satisfy most applications that traditionally call for a horizontal furnace.**

The design is certified by CSA International.

Features

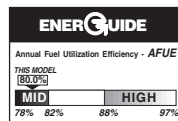
- Patented heat exchanger, constructed of both stainless and aluminized steel for the maximum in corrosion resistance.
- Low profile "34 inch" design is lighter and easier to handle, and leaves room for optional equipment.
- Convertible from upflow to horizontal left or right without field conversion.
- Left or right side gas and electric inlet connections with quick, simple change.
- Direct spark ignition models equipped with remote sense and feature an integrated board with humidifier and electronic air cleaner hookups.
- Insulated blower compartment, a two stage gas valve and a specially designed two speed draft inducer motor make it one of the quietest furnaces on the market today.
- Pre-paint galvanized steel cabinet.
- Molded permanent filter.
- Grab-holes in doors to aid in 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 Criterion II Plus 2 gas furnaces are available as optional accessories.

Furnaces can be installed in an upflow position or laid on either side in a horizontal position. Field conversion not required.

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

RGPK- SERIES
Models with Input Rates from
50,000 to 150,000 BTU/HR
[15 to 44 kW]
(U.S. & Canadian Models)





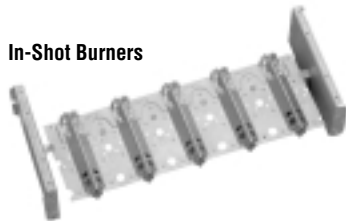
RHEEM CRITERION II PLUS 2 TWO STAGE 80% UPFLOW/HORIZONTAL GAS FURNACE



Two-Speed Draft Inducer Motor



Heat Exchanger



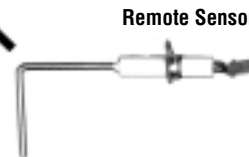
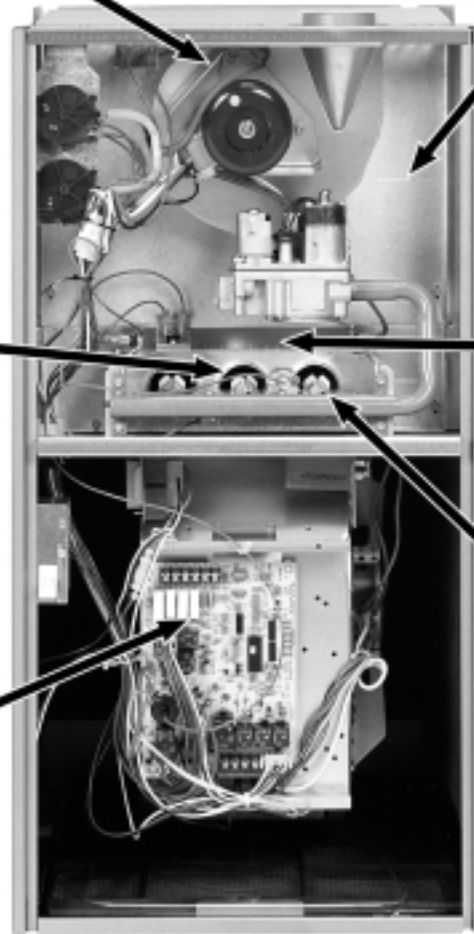
In-Shot Burners



Direct Spark Ignitor



Integrated Furnace Control



Remote Sensor

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; direct drive multi-speed blower motor. Furnaces are equipped with cooling/heating relay and transformer (40VA) ready for air conditioning applications. (Please note: a thermostat is not included as standard equipment.) Flame sensor diagnostics; **Twinning options**; fused-protection (secondary), **3rd speed fan option for continuous fan**; **common heat/cool terminal**.

OPTIONAL EQUIPMENT

Side filter frame assembly. Return air cabinet for all sizes. (See Page 6)
NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.

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 Rheem distributor 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

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

PHYSICAL DATA AND SPECIFICATIONS U.S. AND CANADA MODELS (UPFLOW)

MODEL NUMBERS RGPK- SERIES	05EAUER 05NAUER	07EAMER 07NAMER	07EAMGR 07NAMGR	10EAMER 10NAMER	10EBRJR 10NBRJR	12EARJR 12NARJR	15EARJR 15NARJR
High Input—BTU—BTU/Hr [kW] ②	50,000 [15]	75,000 [22]	75,000 [22]	100,000 [29]	100,000 [29]	125,000 [37]	150,000 [44]
Heating Capacity—BTU/Hr [kW] ①	40,900 [12]	61,280 [18]	61,410 [18]	81,470 [23]	81,340 [23]	101,660 [29]	121,920 [35]
Low Input—BTU/Hr [kW]	35,000 [10]	52,500 [15]	52,500 [15]	70,000 [20]	70,000 [20]	87,500 [25]	105,000 [30]
Heating Capacity—BTU/Hr [kW]	28,000 [8]	41,600 [12]	41,600 [12]	56,000 [16]	56,000 [16]	70,080 [20]	84,000 [24]
Heating—Ext. Static Pressure [kPa]	.10 [.025]	.12 [.029]	.12 [.029]	.15 [.037]	.15 [.037]	.20 [.05]	.20 [.05]
Blower (D x W) [mm]	11 x 6 [279 x 152]	11 x 7 [279 x 178]	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]
Motor H.P.—[W] Speeds—Type	1/2 [373] 4-PSC	1/2 [373] 4-PSC	3/4 [559] 4-PSC	1/2 [373] 4-PSC	3/4 [559] 4-PSC	3/4 [559] 4-PSC	3/4 [559] 4-PSC
Motor Full Load Amps	7.1	7.1	9.5	7.1	9.5	9.5	9.5
Heating Speed—High Fire	MED-LOW	MED-HIGH	MED-LOW	MED-HIGH	MED-HIGH	MED-HIGH	MED-HIGH
Heating Speed—Low Fire	LOW	MED-LOW	LOW	LOW	LOW	LOW	LOW
Cooling Speed	HIGH	HIGH	MED-HIGH	HIGH	HIGH	HIGH	HIGH
Cooling CFM @ .5" [kPa] E.S.P. (Nominal) [L/s]	1200 [566]	1200 [566]	1600 [755]	1200 [566]	2000 [944]	2000 [944]	2000 [944]
Max. E.S.P. (In. W.C.) [kPa]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]
Temperature Rise Range °F [°C]	25-55 [13.9-30.6]	35-65 [19.4-36.1]	25-55 [13.9-30.6]	45-75 [25-41.7]	30-60 [16.7-33.3]	35-65 [19.4-36.1]	50-80 [27.8-44.4]
Max. Outlet Air Temp. °F [°C]	155 [68.3]	165 [73.9]	155 [68.3]	190 [87.7]	170 [76.6]	180 [82.2]	190 [87.7]
Standard Filter—In. [mm]	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	19 ¹ / ₄ x 25 [489 x 635]	22 ³ / ₄ x 25 [578 x 635]	22 ³ / ₄ x 25 [578 x 635]
Approx. Shipping Weight (Lbs.) [kg]	85 [39]	105 [48]	105 [48]	115 [52]	120 [54]	140 [63]	150 [68]
Return Air Cabinets (Opt.) RXGR- Filter Size—In. [mm]	C14B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C21B (2) 20 x 16 [508 x 406]	C24B (2) 24 x 16 [610 x 406]	C24B (2) 24 x 16 [610 x 406]
AFUE ①	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%

NOTES: All models are 115V, 60HZ, 1Ø. Gas connection size for all models is 1/2" [12.7 mm] N.P.T.

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

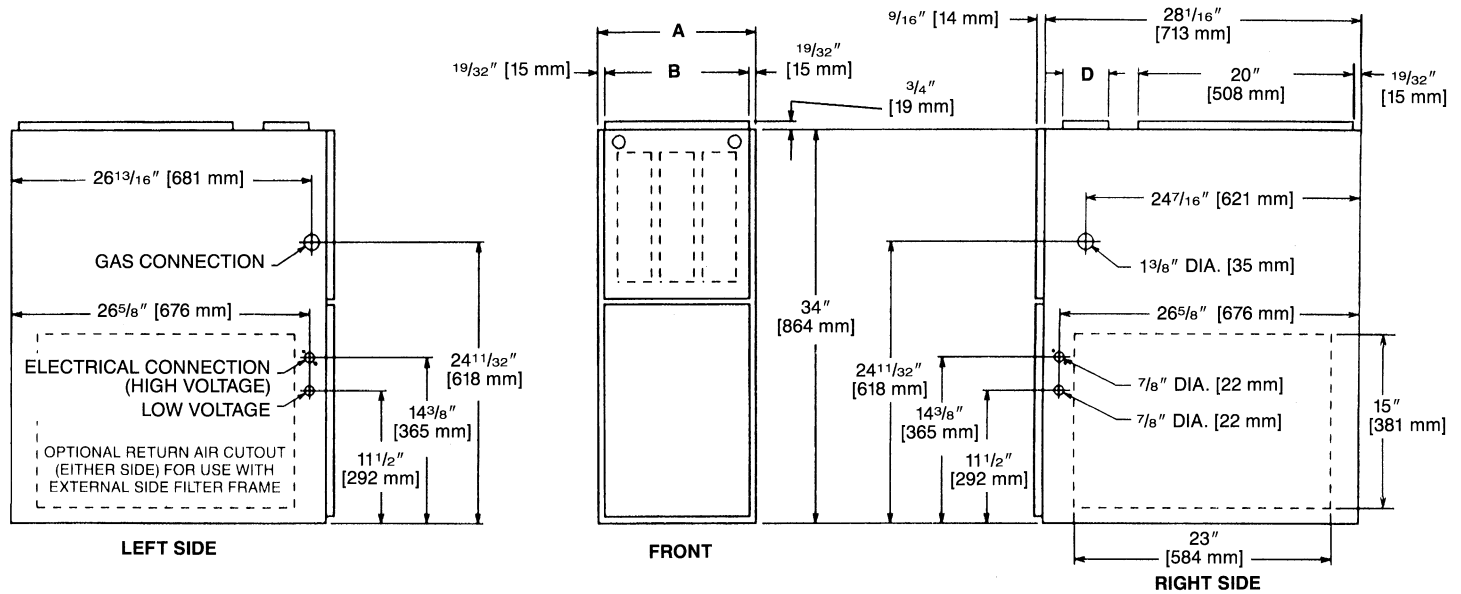
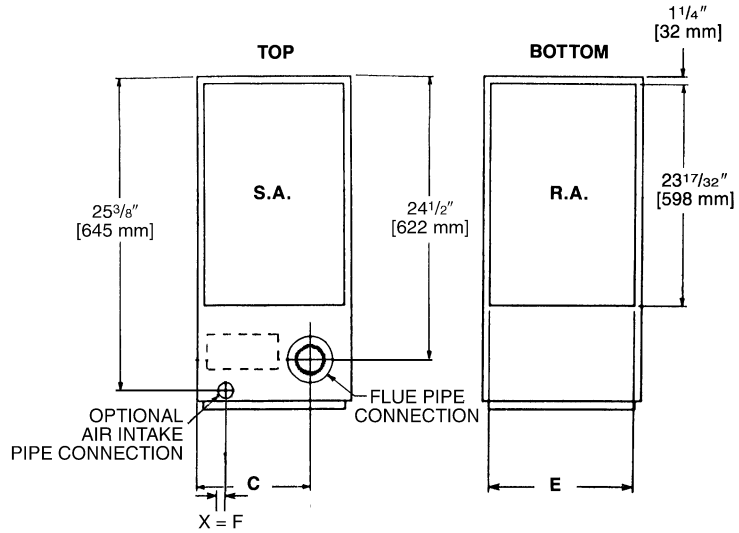
② See Conversion Kit Index Form for high altitude derate in U.S. applications. For Canadian applications, reference the furnace installation instructions.

MODEL IDENTIFICATION—UPFLOW MODELS

R	G	P	K	—	07E	A	M	E	R
Rheem	Gas Furnace	Upflow/ Horizontal	Horizontal Series		Heating Input Designation	Variations	Blower Designation	Heating & Cooling Designation	Fuel Type
					Electric Ignition	A = Std. Cabinet	U = 11 x 6 [279 x 152 mm]	E = 1100-1330 CFM [519-628 L/s]	R = Natural Gas, U.S. and Canadian Standard Furnace
					NOx Models	B = Wide Cabinet	M = 11 x 7 [279 x 178 mm]	G = 1450-1750 CFM [684-826 L/s]	
					Input BTU/HR		R = 11 x 10 [279 x 254 mm]	J = 1800-2075 CFM [850-979 L/s]	
					05E	05N			
					07E	07N			
					10E	10N			
					12E	12N			
					15E	15N			

[] Designates Metric Conversions

UPFLOW DIMENSIONS



UPFLOW DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES) [mm]

MODEL RGPK-	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]						
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGT. (LBS.) [kg]
05	14 [356]	12 ^{27/32} [326]	10 ^{9/8} [263]	Ⓢ	11 1/2 [292]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③	85 [38.6]
07	17 1/2 [445]	16 ^{11/32} [415]	12 ^{1/8} [308]	Ⓢ	15 [381]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
10 (A)	17 1/2 [445]	16 ^{11/32} [415]	12 ^{1/8} [308]	Ⓢ	15 [381]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	115 [52.2]
10 (B)	21 [533]	19 ^{27/32} [504]	13 ^{7/8} [352]	Ⓢ	18 1/2 [470]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	24 1/2 [622]	23 ^{11/32} [593]	15 ^{5/8} [397]	Ⓢ	22 [559]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]
15	24 1/2 [622]	23 ^{11/32} [593]	15 ^{5/8} [397]	Ⓢ	22 [559]	0	0	0	1 [25]	3 [76]	6 [152] ③	150 [68]

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

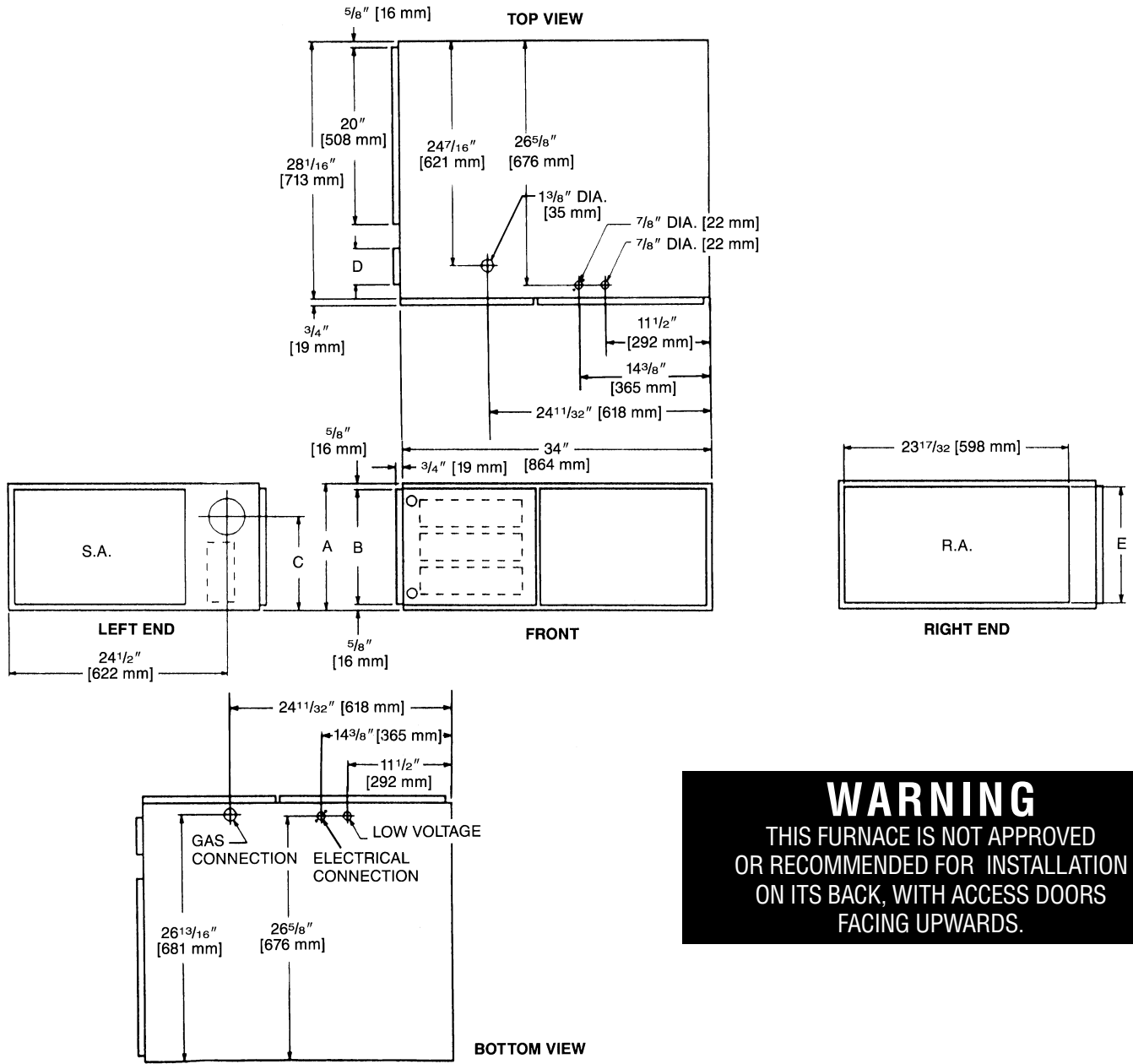
② May be 0" [0 mm] with type B vent.

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

HORIZONTAL DIMENSIONS



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

HORIZONTAL DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES) [mm]

MODEL RGPK-	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]						SHIP. WGTs. (LBS.) [kg]
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	
05	14 [356]	12 ^{27/32} [326]	10 ^{3/8} [263]	Ⓢ	11 1/2 [292]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③	85 [38.6]
07	17 1/2 [445]	16 ^{11/32} [415]	12 ^{1/8} [308]	Ⓢ	15 [381]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
10 (A)	17 1/2 [445]	16 ^{11/32} [415]	12 ^{1/8} [308]	Ⓢ	15 [381]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	115 [52.2]
10 (B)	21 [533]	19 ^{27/32} [504]	13 ^{7/8} [352]	Ⓢ	18 1/2 [470]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	24 1/2 [622]	23 ^{11/32} [593]	15 ^{5/8} [397]	Ⓢ	22 [559]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]
15	24 1/2 [622]	23 ^{11/32} [593]	15 ^{5/8} [397]	Ⓢ	22 [559]	0	0	0	1 [25]	3 [76]	6 [152] ③	150 [68]

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

ACCESSORIES—UPFLOW

EXTERNAL BOTTOM FILTER RACK: RXGF-CB

EXTERNAL SIDE RETURN FILTER RACK: RXGF-CA

FILTER RACK FILTER SIZES† INCHES [mm]	
MODEL RGPK-	RXGF-CA (SIDE)
05, 07, 10*A	15 ³ / ₄ x 25 [400 x 635]
10*BRJ	15 ³ / ₄ x 25 [400 x 635]
12, 15	15 ³ / ₄ x 25 [400 x 635]

†Filter racks are shipped without filters.

Filters shipped with furnace may be used or a suitable 1" [25.4 mm] filter.

*Designates "E" or "N".

OPTION CODE FOR HIGH ALTITUDE:

US-No change required for high altitude

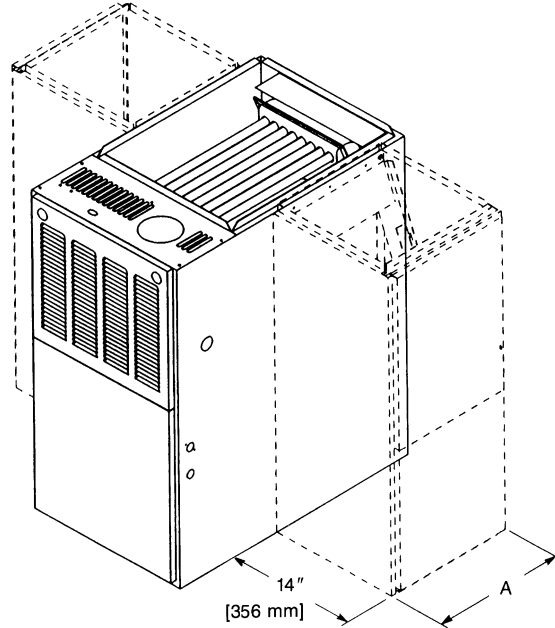
CANADA-For high altitude derate procedure, refer to furnace installation instructions.

RXPF-F01 and F02

FOSSIL FUEL KIT—is for use with Rheem Heat Pumps and Criterion II warm air furnaces. RXPF-F02 meets TVA requirements.

ACCESSORY RETURN AIR CABINETS

Return Air Cabinets may be installed on either side application except RXGR-C24B (side application must be on side opposite gas and electrical connections).



THE RXGR-C24B MUST ONLY BE INSTALLED ON THE SIDE OPPOSITE THE GAS AND ELECTRICAL CONNECTIONS.

RETURN AIR CABINETS	A IN. [mm]	FILTER SIZE IN. [mm]
RXGR-C14B	14 [356]	(2) 12 x 16 [305 x 406]
RXGR-C17B	17 ¹ / ₂ [445]	(2) 12 x 16 [305 x 406]
RXGR-C21B	21 [533]	(2) 20 x 16 [508 x 406]
RXGR-C24B	24 ¹ / ₂ [622]	(2) 24 x 16 [610 x 406]

WARNING: IMPORTANT NOTICE

A SOLID METAL BASE PLATE (SEE TABLE) MUST BE IN PLACE WHEN THE FURNACE IS INSTALLED WITH SIDE AIR RETURN DUCTS. FAILURE TO INSTALL A BASE PLATE COULD CAUSE PRODUCTS OF COMBUSTION TO BE CIRCULATED INTO THE LIVING SPACE AND CREATE POTENTIALLY HAZARDOUS CONDITIONS.

FURNACE WIDTH IN. [mm]	SOLID BOTTOM KIT NO.	BASE PLATE NO.	BASE PLATE SIZE IN. [mm]
14 [356]	RXGB-D14	AE-61874-01	11 ⁵ / ₈ x 23 ⁹ / ₁₆ [295 x 598]
17 ¹ / ₂ [445]	RXGB-D17	AE-61874-02	15 ¹ / ₈ x 23 ⁹ / ₁₆ [384 x 598]
21 [533]	RXGB-D21	AE-61874-03	18 ⁵ / ₈ x 23 ⁹ / ₁₆ [473 x 598]
24 ¹ / ₂ [622]	RXGB-D24	AE-61874-04	25 ⁵ / ₈ x 23 ⁹ / ₁₆ [651 x 598]

[] Designates Metric Conversions

BLOWER PERFORMANCE DATA—UPFLOW/HORIZONTAL MODELS

MODEL NUMBER RGPK-SERIES	BLOWER SIZE [mm]	MOTOR H.P. [W]	BLOWER SPEED	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES [kPa] WATER COLUMN						
				.1 [.02]	.2 [.05]	.3 [.07]	.4 [.10]	.5 [.12]	.6 [.15]	.7 [.17]
				05EAUER	11 x 6 [279 x 152]	1/2 [373]	LOW MED-LO MED-HI HIGH	675 [319] 950 [448] 1115 [526] 1270 [599]	655 [309] 930 [439] 1090 [514] 1250 [590]	635 [300] 905 [427] 1070 [505] 1225 [578]
07EAMER	11 x 7 [279 x 178]	1/2 [373]	LOW MED-LO MED-HI HIGH	921 [435] 1093 [563] 1241 [586] 1393 [657]	897 [423] 1066 [503] 1212 [572] 1359 [642]	872 [411] 1039 [490] 1183 [558] 1326 [626]	845 [399] 1008 [476] 1150 [543] 1293 [610]	818 [386] 977 [461] 1118 [528] 1259 [594]	795 [375] 941 [444] 1076 [508] 1214 [573]	746 [352] 905 [427] 1033 [487] 1169 [552]
07EAMGR	11 x 7 [279 x 178]	3/4 [559]	LOW MED-LO MED-HI HIGH	1245 [588] 1555 [734] 1810 [854] 2050 [967]	1220 [576] 1515 [715] 1755 [828] 1985 [937]	1195 [564] 1475 [696] 1705 [805] 1915 [904]	1165 [550] 1435 [677] 1645 [776] 1845 [871]	1135 [536] 1395 [658] 1585 [748] 1785 [842]	1105 [522] 1350 [637] 1530 [722] 1715 [809]	1065 [503] 1300 [614] 1470 [694] 1655 [781]
10EAMER	11 x 7 [279 x 178]	1/2 [373]	LOW MED-LO MED-HI HIGH	925 [437] 1050 [496] 1220 [576] 1360 [641]	890 [420] 1040 [491] 1195 [564] 1327 [626]	865 [408] 1030 [486] 1160 [547] 1295 [611]	835 [394] 990 [467] 1140 [538] 1263 [596]	810 [382] 960 [453] 1105 [522] 1231 [581]	775 [366] 920 [434] 1065 [503] 1179 [556]	745 [352] 890 [420] 1020 [481] 1128 [532]
10EBRJR	11 x 10 [279 x 254]	3/4 [559]	LOW MED-LO MED-HI HIGH	1295 [611] 1645 [776] 2045 [965] 2320 [1095]	1275 [602] 1615 [762] 2000 [944] 2260 [1067]	1250 [590] 1580 [746] 1955 [923] 2200 [1038]	1225 [578] 1550 [732] 1905 [899] 2130 [1005]	1195 [564] 1510 [713] 1845 [871] 2060 [972]	1165 [550] 1465 [691] 1785 [842] 1985 [937]	1135 [536] 1425 [673] 1720 [812] 1910 [901]
12EARJR	11 x 10 [279 x 254]	3/4 [559]	LOW MED-LO MED-HI HIGH	1280 [604] 1645 [776] 2050 [967] 2365 [1116]	1275 [602] 1635 [772] 2015 [951] 2310 [1090]	1265 [597] 1615 [762] 1960 [925] 2250 [1062]	1245 [588] 1590 [750] 1935 [913] 2185 [1031]	1215 [573] 1560 [736] 1885 [890] 2115 [998]	1185 [559] 1520 [717] 1835 [866] 2035 [960]	1145 [540] 1470 [694] 1775 [838] 1950 [920]
15EARJR	11 x 10 [279 x 254]	3/4 [559]	LOW MED-LO MED-HI HIGH	1270 [599] 1620 [765] 2010 [949] 2340 [1104]	1250 [590] 1595 [753] 1985 [937] 2275 [1074]	1220 [576] 1570 [741] 1960 [925] 2215 [1045]	1195 [564] 1545 [729] 1915 [904] 2145 [1012]	1165 [550] 1515 [715] 1850 [873] 2080 [982]	1135 [536] 1480 [698] 1800 [850] 2010 [949]	1105 [522] 1440 [680] 1730 [816] 1940 [916]

NOTES: Data compiled with factory filters installed.
See Form Number C11-206 for MultiFlex® coil data.

[] Designates Metric Conversions

GENERAL TERMS OF LIMITED WARRANTY

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

For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or Contact the Manufacturer for a Copy.

Gas Heat Exchanger Limited WarrantyTwenty (20) Years
*Any Other Part.....Five (5) Years

*This five year limited warranty is applicable only to single-phase products installed in residential applications on or after January 1, 2001.

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.

**RHEEM
AIR CONDITIONING
DIVISION**

5600 Old Greenwood Road, Fort Smith, Arkansas 72908



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