

GAS FURNACES



CRITERION® II 80.0%–81.4% A.F.U.E.† UPFLOW/ HORIZONTAL GAS FURNACES

The Rheem® Criterion II 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

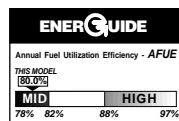
- Patented Heat Exchanger, constructed of both stainless and aluminized steel for the maximum in corrosion resistance.
- Low profile "34 inch" design is lighter and easier to handle, and leaves room for optional equipment.
- Convertible from upflow to horizontal left or right without field conversion.
- Left or right side gas and electric inlet connections with quick, simple change.
- Direct spark ignition models utilize remote sense and feature an integrated board with humidifier and electronic air cleaner hookups.
- Insulated blower compartment helps to reduce jacket loss and noise.
- Pre-paint galvanized steel cabinet.
- Molded permanent filter.
- Grab-holes in doors to aid in easy door removal and replacement.

A variety of cooling coils and plenums designed to use with Rheem Criterion II gas furnaces are available as optional accessories.

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

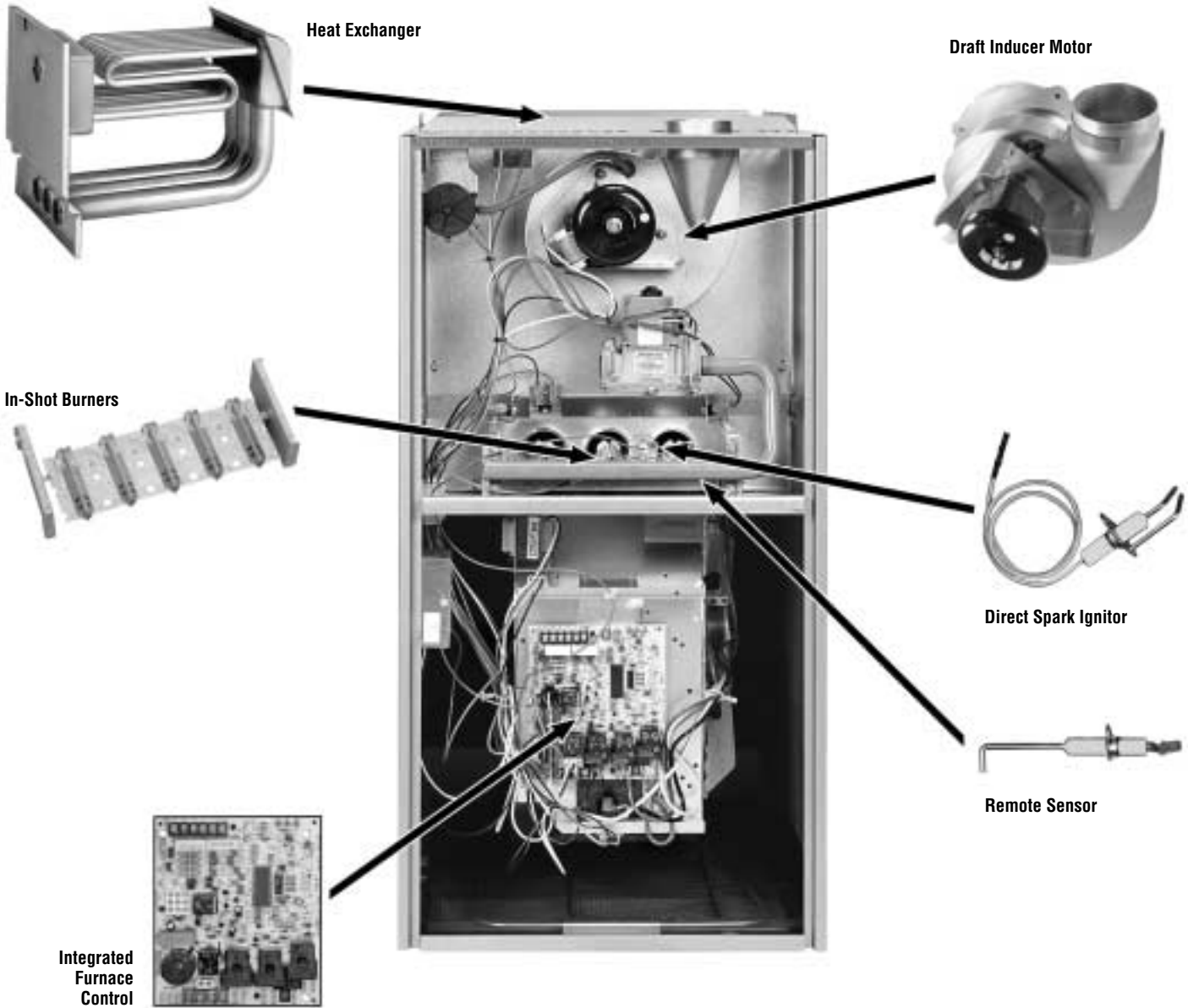
†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

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





RHEEM CRITERION II 80% UPFLOW/HORIZONTAL GAS FURNACE



STANDARD EQUIPMENT

Completely assembled and wired; induced draft blower; pressure switch; redundant main gas control; blower compartment door safety switch; solid state time on/time off blower control; limit control; manual shut-off valve, pressure regulator for natural and L.P. (propane) gas; 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; **on-board twinning options**; fused transformer (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/HORIZONTAL)

MODEL NUMBERS RGPH- SERIES	05EAUER 05NAUER	07EAUER 07NAUER	07EAMGR 07NAMGR	10EAMER 10NAMER	10EBRJR 10NBRJR	12EARJR 12NARJR	15EARJR 15NARJR
Input-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	41,000 [12]	60,000 [18]	60,000 [18]	80,000 [23.4]	81,000 [23.7]	99,000 [29]	119,000 [35]
High Altitude Input [kW]*	45,000 [13]	67,500 [20]	67,500 [20]	90,000 [26]	90,000 [26]	112,500 [33]	135,000 [39.6]
High Altitude Output Capacity [kW]*	36,500 [11]	53,500 [16]	54,000 [16]	72,000 [21]	72,500 [21]	89,000 [26.1]	107,500 [31.5]
Heat 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 6 [279 x 152]	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.–Speeds–PSC Type [W]	1/2-4-PSC [373]	1/2-4-PSC [373]	3/4-4-PSC [559]	1/2-4-PSC [373]	3/4-4-PSC [559]	3/4-4-PSC [559]	3/4-4-PSC [559]
Motor Full Load Amps	6.8	7.1	9.5	7.1	9.5	9.5	9.5
Heating Speed	MED-LOW	MED-HIGH	MED-LOW	MED-HIGH	MED-LOW	MED-LOW	MED-LOW
Cooling Speed	HIGH	HIGH	MED-HIGH	HIGH	MED-HIGH	MED-HIGH	MED-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]
Rated E.S.P. (In. W.C.) [kPa]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]
Temperature Rise Range °F [°C]	25-55 [13.9-30.6]	40-70 [22.2-38.9]	25-55 [13.9-30.6]	50-80 [27.8-44.4]	40-70 [22.2-38.9]	35-65 [19.4-36.1]	50-80 [27.8-44.4]
Max. Outlet Air Temp. °F [°C]	155 [68.3]	165 [73.8]	155 [68.3]	190 [87.7]	170 [76.6]	180 [82.2]	190 [87.7]
Standard Filter–In. [mm]	15¾ x 25 [400 x 635]	15¾ x 25 [400 x 635]	15¾ x 25 [400 x 635]	15¾ x 25 [400 x 635]	19¼ x 25 [489 x 635]	22¾ x 25 [578 x 635]	22¾ 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 [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–Electric Ignition Models ①	81.4%	80.6%	80.5%	80.0%	80.0%	80.0%	80.0%
California Seasonal Efficiency–Electric Ignition/NO _x Models	74.9/75.4	74.9/75.4	74.7/75.3	75.4/75.4	73.9/74.5	74.2/74.2	74.7/74.7

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.

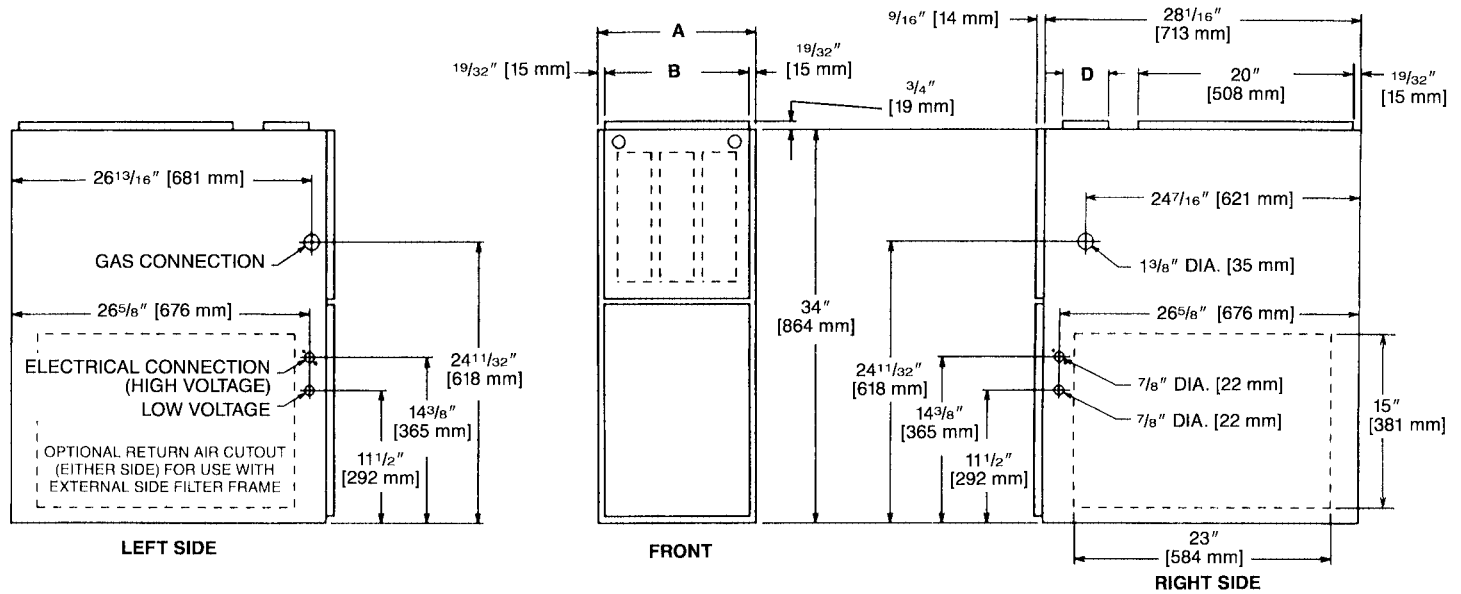
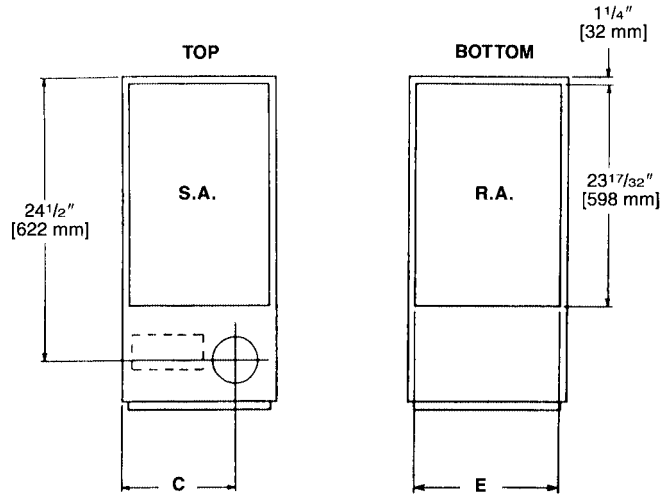
* Data references Canadian applications only.

MODEL IDENTIFICATION—UPFLOW MODELS

R	G	P	H	—	07E	A	U	E	R		
Rheem	Gas Furnace	Upflow/Horizontal	Design Series		Heating Input Designation		Variations	Blower Designation	Heating & Cooling Designation	Fuel Type	
					Electric Ignition	NO _x Model	Input BTU/HR	A = Std. Cabinet B = Wide Cabinet	U = 11 x 6 [279 x 152 mm] M = 11 x 7 [279 x 178 mm] R = 11 x 10 [279 x 254 mm]	S = 500-1200 CFM [236-566 L/s] E = 1100-1330 CFM [519-628 L/s] G = 1450-1750 CFM [684-826 L/s] J = 1800-2075 CFM [850-979 L/s]	R = Natural Gas, U.S. and Canadian Standard Furnace
					05E	05N	50,000 [15 kW]				
					07E	07N	75,000 [22 kW]				
					10E	10N	100,000 [29 kW]				
					12E	12N	125,000 [37 kW]				
					15E	15N	150,000 [44 kW]				

[] Designates Metric Conversions

UPFLOW DIMENSIONS



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

MODEL RGPH-	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]						
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGTS. (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.

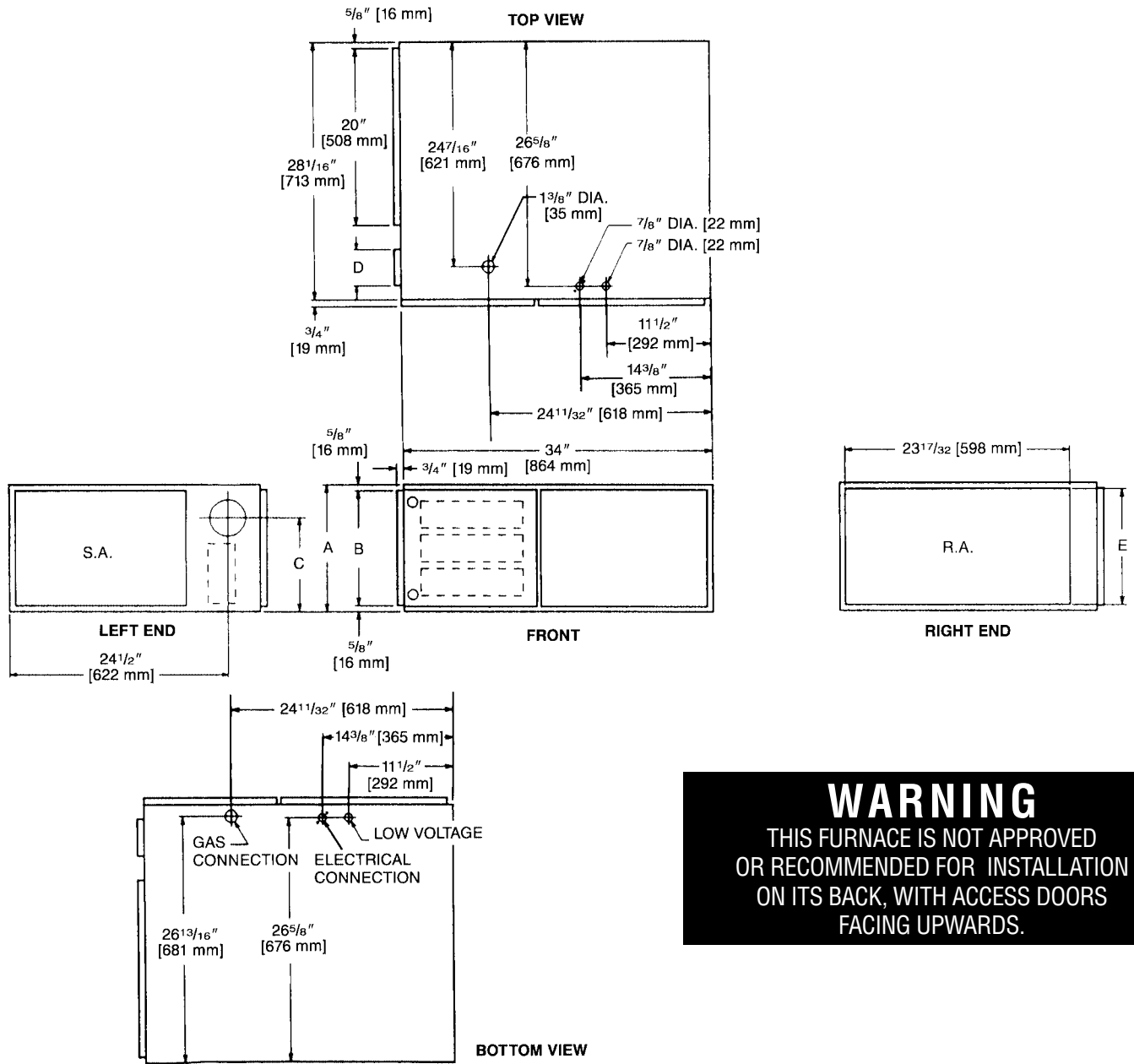
② May be 0" [0 mm] with type B vent.

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.

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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 RGPH-	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]						
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGTs. (LBS.) [kg]
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 3/8 [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 3/8 [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

OPTION CODE FOR HIGH ALTITUDE:

US—277

Canada—For high altitude derate procedure, refer to the furnace installation instructions.

(U.S. Models—Kit packaged with furnace.
Requires field installation.)

EXTERNAL BOTTOM FILTER RACK: RXGF-CB

FILTER RACK FILTER SIZES† INCHES [mm]	
MODEL RGPB-	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.

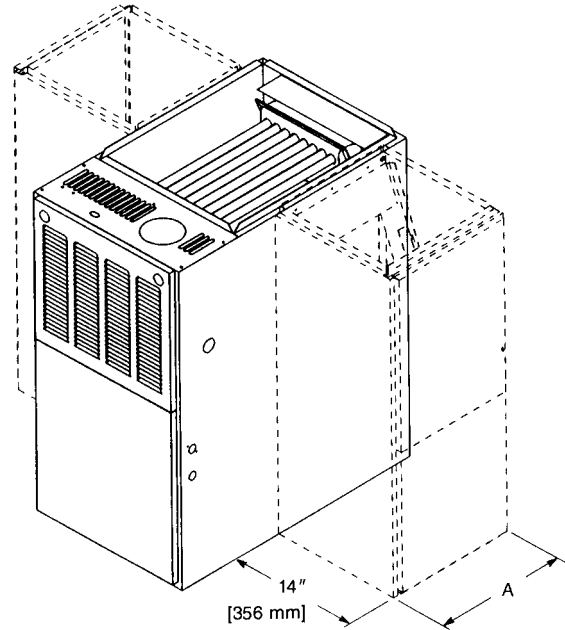
*Designates "E" or "N".

RXPF-F01 and F02

FOSSIL FUEL KITS are for use with Rheem Heat Pumps and Criterion II warm air furnaces. The 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]

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BLOWER PERFORMANCE DATA—UPFLOW/HORIZONTAL MODELS

MODEL NUMBER RGPH-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 05NAUER	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]
07EAUER 07NAUER	11 x 6 [279 x 152]	1/2 [373]	LOW MED-LO MED-HI HIGH	820 [387] 970 [458] 1110 [524] 1265 [597]	800 [378] 955 [451] 1090 [514] 1240 [585]	780 [368] 940 [444] 1070 [505] 1210 [571]	755 [356] 910 [429] 1040 [491] 1175 [555]	730 [345] 880 [415] 1010 [477] 1140 [538]	705 [333] 845 [399] 975 [460] 1100 [519]	675 [319] 805 [380] 935 [441] 1055 [498]
07EAMGR 07NAMGR	11 x 7 [279 x 178]	3/4 [559]	LOW MED-LO MED-HI HIGH	1245 [588] 1810 [854] 1555 [734] 2050 [967]	1220 [576] 1755 [828] 1515 [715] 1985 [937]	1195 [564] 1705 [805] 1475 [696] 1915 [904]	1165 [550] 1645 [776] 1435 [677] 1845 [871]	1135 [536] 1585 [748] 1395 [658] 1785 [842]	1105 [522] 1530 [722] 1350 [637] 1715 [809]	1065 [503] 1470 [694] 1300 [614] 1655 [781]
* 10EAMER 10NAMR	* 11 x 7 [279 x 178]	* 1/2 [373]	LOW MED-LO MED-HI HIGH	925 [437]* 1050 [496] 1220 [576] 1410 [665]	890 [420]* 1040 [491] 1195 [564] 1380 [651]	865 [408]* 1030 [486] 1160 [547] 1345 [635]	835 [394]* 990 [467] 1140 [538] 1300 [614]	810 [382]* 960 [453] 1105 [522] 1255 [592]	775 [366]* 920 [434] 1065 [503] 1205 [569]	745 [352]* 890 [420] 1020 [481] 1150 [543]
10EBRJR 10NBRJR	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 12NARJR	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 15NARJR	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: *Not to be used as a heating speed.
Data compiled with factory filters installed.
Recommended blower speeds are in bold.
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."