The new degree of comfort.™

Rheem *Value Series* Upflow Gas Furnace

RGRS/RGRT- Series

Up to 93.5% A.F.U.E.†
Input Rates 45-120 kBTU

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

- The Rheem *Value Series* High Efficiency line of upflow gas furnaces are designed for utility rooms, closets, or alcoves. Because of the low-profile 34 inch height, this model can be used vertically to satisfy most applications that traditionally call for a horizontal furnace.
- The design is certified by CSA.
- Low profile “34 inch” design is lighter and easier to handle and leaves room for optional accessories.
- Left or right side gas, electric, and condensate drainage connections on upflow models.
- Integrated control board manages all operational functions and provides accessory hookups for an electronic air cleaner.
- A slow-opening gas valve and a specially designed inducer system make it one of the quietest furnaces on the market today.
- Pre-paint galvanized steel cabinet.
- Optional indoor or outdoor combustion air. In addition, combustion air may be piped to either the top or right side of the cabinet on all upflow models. A special molded fitting is provided to ease installation.
- Control board diagnostics.
- A variety of cooling coils and plenums designed to use with the Rheem *Value Series* gas furnaces are available as optional accessories for air conditioning models.

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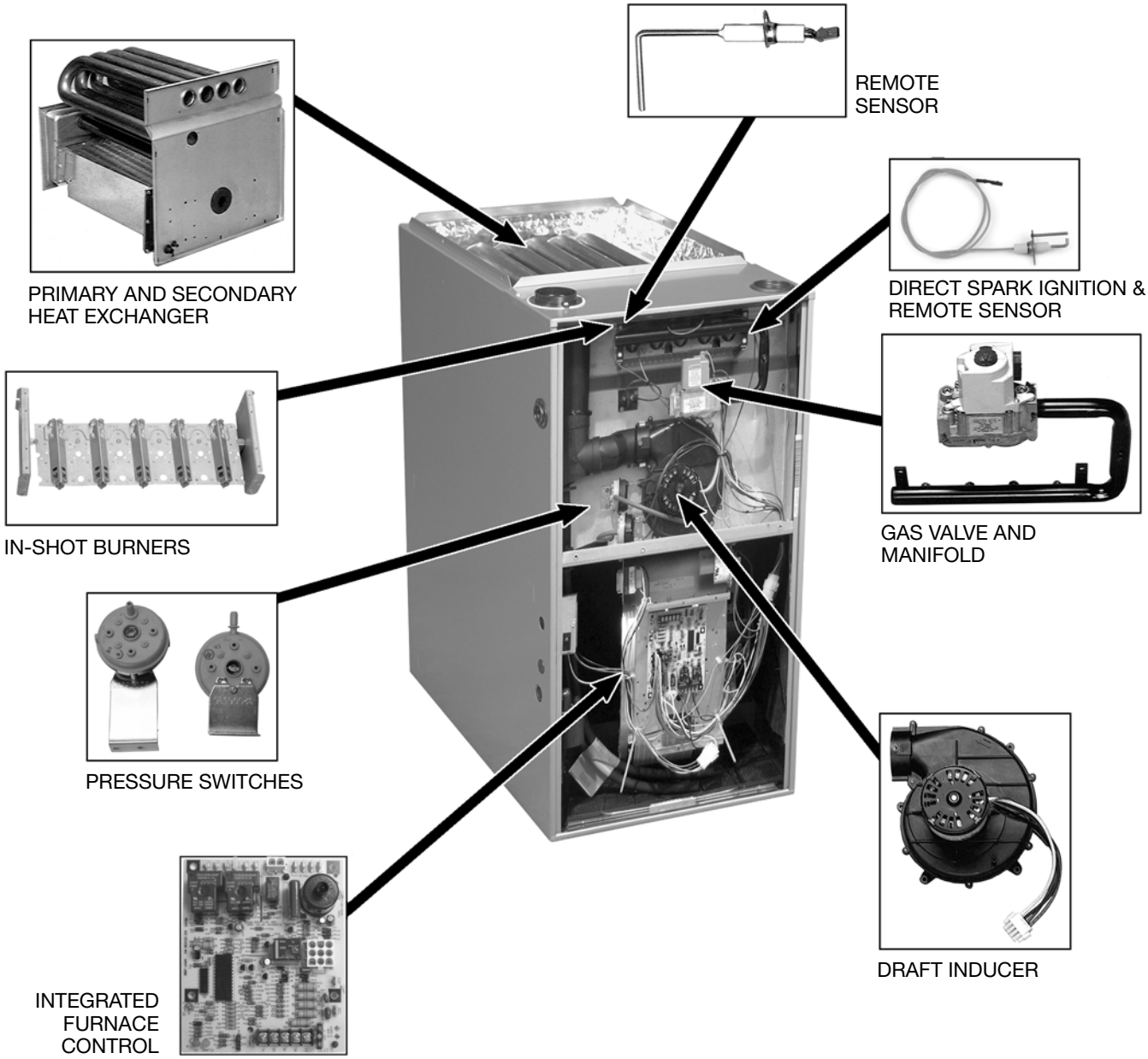


STANDARD EQUIPMENT

Completely assembled and wired; heat exchanger; primary: aluminized steel, secondary: 29-4C stainless steel; induced draft; pressure switches; redundant main gas control; blower compartment door safety switch; solid state time on/off blower control; limit controls; manual shut-off valve; 100% safety lock out; cool fan off delay; field selectable heat fan off delay; one hour automatic retry; self-test diagnostics; flame sense current diagnostics; electronic air cleaner connections; pressure regulator for natural and L.P. (propane) gases; transformer; direct drive, multi-speed blower motor. (Please note: a thermostat is not included as standard equipment.)

OPTIONAL EQUIPMENT

(See Accessory Page)

NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.

All models can be converted by a qualified 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 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

Model Features

- The design is certified by CSA.
- Low profile “34 inch” design is lighter and easier to handle and leaves room for optional accessories.
- Left or right side gas, electric, and condensate drainage connections on upflow models.
- Integrated control board manages all operational functions and provides accessory hookups for an electronic air cleaner.
- A slow-opening gas valve and a specially designed inducer system make it one of the quietest furnaces on the market today.
- Pre-paint galvanized steel cabinet.
- Optional indoor or outdoor combustion air. In addition, combustion air may be piped to either the top or right side of the cabinet on all upflow models. A special molded fitting is provided to ease installation.
- Control board diagnostics.

Physical Data and Specifications—Upflow Models
U.S. and Canadian Models

MODEL NUMBERS RGRS/RGRT- SERIES	RGRS-04EMAES	RGRS-06EMAES	RGRT-07EMAES	RGRT-07EYBGS	RGRS-09EZAGS	RGRS-09EZAJS	RGRS-10EZAJS	RGRS-12ERAJS
Input-BTU/Hr [kW] ①	45,000 [13.19]	60,000 [17.58]	75,000 [21.98]	75,000 [21.98]	90,000 [26.37]	90,000 [26.37]	105,000 [30.77]	120,000 [35.17]
Heating Capacity BTU/Hr [kW]	42,000 [12.31]	56,000 [16.41]	70,000 [20.51]	70,000 [20.51]	84,000 [24.61]	84,000 [24.61]	97,000 [28.43]	113,000 [33.12]
High Altitude Input [kW] ②	40,500 [11.87]	54,000 [15.83]	67,500 [19.78]	67,500 [19.78]	81,000 [23.73]	81,000 [23.73]	94,500 [27.70]	108,000 [31.65]
High Altitude Output Capacity [kW] ②	37,800 [11.07]	50,400 [14.77]	63,000 [18.46]	63,000 [18.46]	76,000 [22.27]	76,000 [22.27]	87,500 [25.64]	100,000 [29.31]
Blower (D x W) [mm]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	12 x 7 [305 x 178]	12 x 11 [305 x 279]	12 x 11 [305 x 279]	12 x 11 [305 x 279]	11 x 10 [279 x 254]
Motor H.P. [W] Speeds-Type	1/2 [373] 4-PSC	1/2 [373] 3-PSC	1/2 [373] 3-PSC	3/4 [559] 3-PSC	1/2 [373] 3-PSC	3/4 [559] 3-PSC	3/4 [559] 3-PSC	3/4 [559] 3-PSC
Motor Full Load Amps	6.8	6.8	6.8	9.5	8.0	9.5	9.5	9.5
Heating Speed	Med-Low	Low	Med	Low	Med	Low	Low	Low
Cooling Speed	High	High	High	High	High	High	High	High
Heat Ext. Static Pressure (In. W.C.) [kPa]	.10 [.025]	.12 [.029]	.12 [.029]	.12 [.029]	.15 [.037]	.15 [.037]	.20 [.049]	.20 [.049]
Rated Ext. Static Pressure (In. W.C.) [kPa]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]
Heating C.F.M. @ .2" [.049 kPa] W.C. E.S.P. [L/s]	885 [417]	845 [398]	1050 [495]	1275 [600]	1465 [691]	1465 [691]	1445 [682]	1580 [745]
Cooling C.F.M. @ .5" [.124 kPa] W.C. E.S.P. [L/s]	1195 [564]	1100 [519]	1110 [524]	1540 [725]	1580 [746]	1910 [901]	1810 [854]	1900 [897]
Temperature Rise Range °F [°C]	30-60 [16.7-33.3]	40-70 [22.2-38.9]	45-75 [25-41.7]	40-70 [22.2-38.9]	35-65 [19.4-36.1]	35-65 [19.4-36.1]	50-80 [27.8-44.4]	50-80 [27.8-44.4]
Return Air Cabinets (Opt.) RXGR- Filter Size [mm]	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) 12" x 20" [305 x 508]	C21B (2) 12" x 16" [305 x 406]	C21B (2) 12" x 16" [305 x 406]	C21B (2) 12" x 16" [305 x 406]	C24B (2) 24" x 16" [609 x 406]
Approx. Shipping Weight (Lbs.) [kg]	111 [50.3]	117 [53.1]	123 [55.8]	123 [55.8]	148 [67.1]	148 [67.1]	152 [68.9]	160 [72.6]
AFUE ③	93.5%	92.5%	92.8%	92.0%	93.5%	93.5%	92.0%	93.5%
California Seasonal Efficiency ③	84.68%	86.44%	87.16%	85.16%	85.96%	85.96%	86.93%	87.57%

NOTES: All models are 115V, 60HZ, 1Ø. Gas connection size for all models is 1/2" [13 mm] N.P.T.
① See Conversion Kit Index Form for high altitude derate.
② Canadian installations only.
③ In accordance with D.O.E. test procedures.

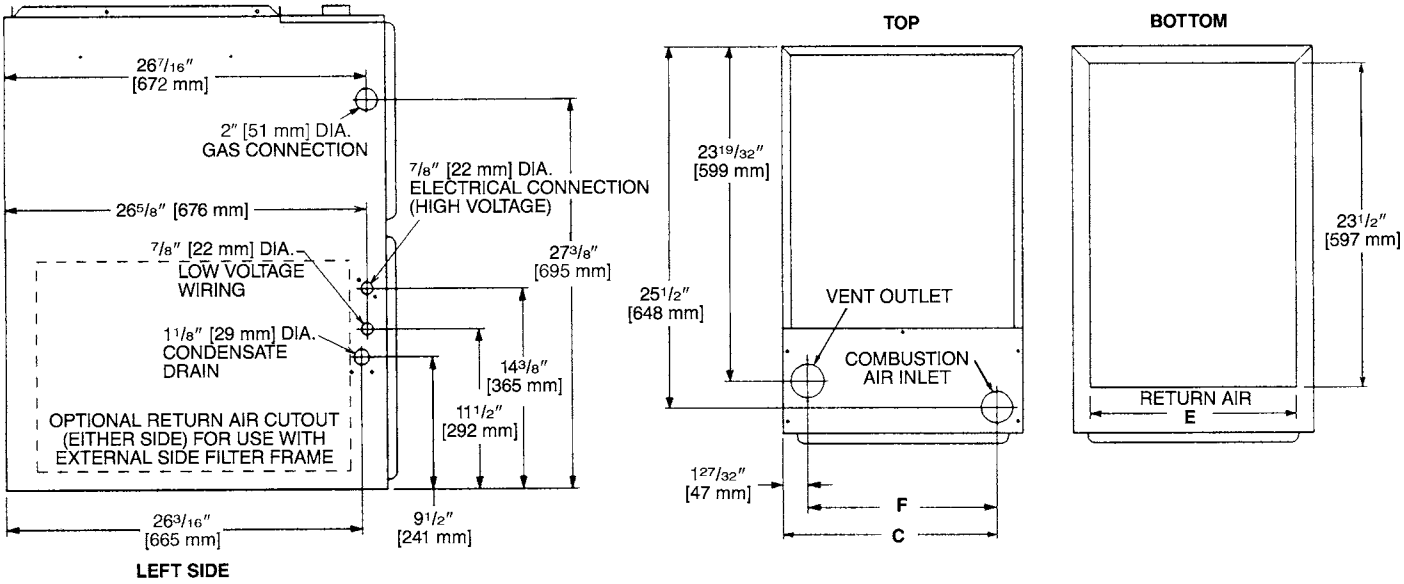
[ ] Designates Metric Conversions

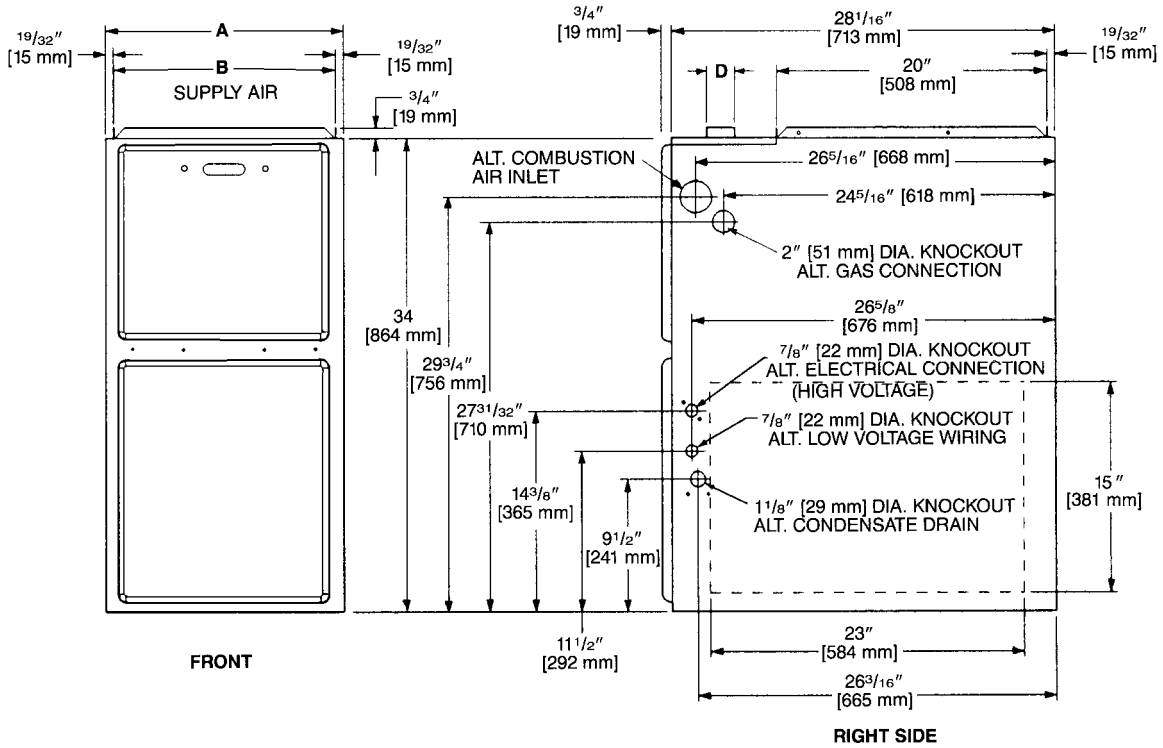
Model Number Identification

R	G	R	S	—	04E	M	A	E	S
R H E E M	Gas Furnace	**R** = Upflow Condensing	Design Series **S** = 3rd Design Series **T** = 4th Design Series	Heating Input Designation Electric Ignition 04E 06E 07E 09E 10E 12E Input BTU/HR [kW] 45,000 [13.1] 60,000 [17.6] 75,000 [21.9] 90,000 [26.4] 105,000 [30.7] 120,000 [35.2]		Blower Designation [mm] **M** = 11 x 7 [279 x 178] **R** = 11 x 10 [279 x 254] **Y** = 12 x 7 [305 x 178] **Z** = 12 x 11 [305 x 279]	Variations **A** = Std. **B** = Wide Cabinet	Heating & Cooling Designation (Nominal) **E** = 1100-1300(3R) **G** = 1500-1700(4R) **J** = 1900-2100(5R)	Fuel Designation **S** = Natural Gas - CSA - United States & Canada (North American)

[ ] Designates Metric Conversions

Upflow Models





MODEL RGRS/RGRT-	A	B	C	D	E	F	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]					SHIP WGTS. [kg]
								RIGHT SIDE	BACK	TOP	FRONT	VENT	
04	17 1/2 [445]	16 11/32 [415]	15 5/8 [397]	2 [51]	15 [422]	13 25/32 [352]	0	0	0	1 [25]	2 [51]	0	111 [50]
06	17 1/2 [445]	16 11/32 [415]	15 5/8 [397]	2 [51]	15 [422]	13 25/32 [352]	0	0	0	1 [25]	2 [51]	0	117 [53]
07EM	17 1/2 [445]	16 11/32 [415]	15 5/8 [397]	2 [51]	15 [422]	13 25/32 [352]	0	0	0	1 [25]	2 [51]	0	123 [56]
07EY	21 [533]	19 27/32 [504]	19 1/8 [487]	2 [51]	18 1/2 [511]	17 9/32 [441]	0	0	0	1 [25]	2 [51]	0	123 [56]
09	21 [533]	19 27/32 [504]	19 1/8 [487]	2 [51]	18 1/2 [511]	17 9/32 [441]	0	0	0	1 [25]	2 [51]	0	148 [67]
10	21 [533]	19 27/32 [504]	19 1/8 [487]	2 [51]	18 1/2 [511]	17 9/32 [441]	0	0	0	1 [25]	2 [51]	0	152 [69]
12	24 1/2 [622]	23 11/32 [593]	22 5/8 [575]	2 [51]	22 [600]	20 25/32 [530]	0	0	0	1 [25]	2 [51]	0	160 [73]

[ ] Designates Metric Conversions

Blower Performance Data—RGRS/RGRT- Models

MODEL NUMBER	BLOWER SIZE [mm]	MOTOR H.P. [W]	BLOWER SPEED	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN [kPa]						
				0.1 [.02]	0.2 [.05]	0.3 [.07]	0.4 [.10]	0.5 [.12]	0.6 [.15]	0.7 [.17]
RGRS-04EMAES	11 x 7 [279 x 178]	1/2 [373]	LOW	805 [380]	780 [368]	760 [358]	720 [340]	685 [323]	645 [304]	605 [285]
			MED-LO	920 [434]	885 [417]	850 [401]	810 [382]	775 [365]	730 [344]	690 [325]
			MED-HI	1140 [538]	1110 [524]	1085 [512]	1045 [493]	1010 [476]	950 [448]	890 [420]
			HIGH	1360 [642]	1320 [623]	1280 [604]	1235 [583]	1195 [564]	1140 [538]	1080 [500]
RGRS-06EMAES	11 x 7 [279 x 178]	1/2 [373]	LOW	880 [415]	845 [398]	815 [384]	790 [373]	760 [358]	715 [337]	670 [316]
			MED	1060 [500]	1025 [483]	990 [467]	960 [453]	925 [436]	880 [415]	835 [394]
			HIGH	1260 [594]	1215 [573]	1175 [554]	1135 [535]	1100 [519]	1040 [491]	985 [465]
RGRT-07EMAES	11 x 7 [279 x 178]	1/2 [373]	LOW	880 [415]	850 [401]	825 [389]	785 [370]	750 [354]	702 [331]	655 [309]
			MED	1090 [514]	1050 [495]	1010 [477]	970 [458]	925 [436]	875 [413]	825 [389]
			HIGH	1300 [613]	1255 [592]	1210 [571]	1160 [547]	1110 [524]	1055 [498]	1005 [474]
RGRT-07EYBGS	12 x 7 [305 x 178]	3/4 [559]	LOW	1290 [609]	1275 [602]	1280 [696]	1220 [576]	1195 [564]	1170 [552]	1140 [538]
			MED	1480 [698]	1435 [677]	1415 [668]	1390 [656]	1370 [647]	1300 [614]	1255 [592]
			HIGH	1705 [805]	1665 [786]	1615 [762]	1570 [741]	1540 [727]	1475 [696]	1400 [661]
RGRS-09EZAGS	12 x 11 [305 x 279]	1/2 [373]	LOW	1235 [582]	1210 [571]	1180 [559]	1150 [543]	1120 [528]	1075 [507]	1035 [488]
			MED	1490 [703]	1465 [691]	1445 [679]	1405 [663]	1375 [649]	1315 [620]	1255 [592]
			HIGH	1720 [811]	1670 [788]	1620 [764]	1600 [755]	1580 [746]	1520 [717]	1460 [689]
RGRS-09EZAJS	12 x 11 [305 x 279]	3/4 [559]	LOW	1490 [703]	1465 [691]	1445 [679]	1405 [663]	1375 [649]	1315 [620]	1255 [592]
			MED	1720 [811]	1670 [788]	1620 [764]	1600 [755]	1580 [746]	1520 [717]	1460 [689]
			HIGH	2100 [991]	2050 [967]	2000 [944]	1955 [923]	1910 [901]	1825 [861]	1745 [823]
RGRS-10EZAJS	12 x 11 [305 x 279]	3/4 [559]	LOW	1490 [703]	1445 [682]	1405 [663]	1375 [649]	1350 [637]	1295 [611]	1240 [585]
			MED	1710 [807]	1665 [786]	1620 [764]	1580 [746]	1540 [727]	1475 [696]	1410 [665]
			HIGH	2010 [949]	1955 [923]	1900 [897]	1855 [875]	1810 [854]	1710 [807]	1610 [859]
RGRS-12ERAJS	11 x 10 [279 x 245]	3/4 [559]	LOW	1610 [760]	1580 [746]	1555 [734]	1515 [715]	1475 [696]	1415 [668]	1355 [639]
			MED	1870 [882]	1820 [860]	1775 [838]	1715 [809]	1660 [783]	1590 [750]	1520 [717]
			HIGH	2115 [998]	2050 [967]	1990 [939]	1945 [917]	1900 [897]	1795 [847]	1690 [795]

[ ] Designates Metric Conversions

UPFLOW ACCESSORIES

VENT TERMINATION KITS CONCENTRIC: HORIZONTAL/VERTICAL =

RXGY-E03A (US & Canadian Installations)

HORIZONTAL TWO PIPE: RXGY-D02, RXGY-D03, RXGY-D04 (US Installations)

RXGY-D02A, RXGY-D03A, RXGY-D04A (Canadian Installations)

RXGY-G02 (US Only)

NEUTRALIZER KIT: RXGY-A01

FOSSIL FUEL KIT: RXPF-F01, RXPF-F02 (TVA)

RETURN AIR PLENUM: RXGR-C17B
RXGR-C21B
RXGR-C24B

EXTERNAL BOTTOM FILTER RACK: RXGF-CB

EXTERNAL SIDE FILTER RACK: RXGF-CA

FILTER RACK FILTER SIZES* INCHES [mm]		
MODEL RGRS/RGRT-	RXGF-CB (BOTTOM)	RXGF-CA (SIDE)
04	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]
06	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]
07EE	15 3/4 x 25 [400 x 635]	15 3/4 x 25 [400 x 635]
07EF	19 1/4 x 25 [489 x 635]	15 3/4 x 25 [400 x 635]
09	19 1/4 x 25 [489 x 635]	15 3/4 x 25 [400 x 635]
10	19 1/4 x 25 [489 x 635]	15 3/4 x 25 [400 x 635]
12	22 3/4 x 25 [578 x 635]	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.

PLENUM DATA FOR "A" COILS

Plenum adapters are required in some instances for use on upflow applications when plenum and furnace size do not match.

FURNACE WIDTH IN. [mm]	PLENUM WIDTH IN. [mm]	PLENUM ADAPTER UPFLOW	COIL PLENUM
14 [356]	16 1/4 [413]	RXAA-C171	RXAL-B16BU
14 [356]	20 1/4 [514]	RXAA-C172	RXAL-B20BU
17 1/2 [445]	16 1/4 [413]	RXAA-C185	RXAL-B16BU
17 1/2 [445]	20 1/4 [514]	RXAA-C173	RXAL-B20BU
17 1/2 [445]	21 5/8 [549]	RXAA-C187	RXAL-B21BU
17 1/2 [445]	25 1/4 [641]	RXAA-C174	RXAL-B25BU
21 [533]	25 1/4 [641]	RXAA-C175	RXAL-B25BU
21 [533]	22 1/4 [565]	RXAA-C176	RXAL-B22BU
21 [533]	21 5/8 [549]	RXAA-C188	RXAL-B21BU
24 1/2 [622]	25 1/4 [641]	RXAA-C177	RXAL-B25BU
24 1/2 [622]	21 5/8 [549]	RXAA-C187	RXAL-B21BU

INTERNAL FILTER RACK FOR BOTTOM OR SIDE RETURN: RXGF-DA*
Each order contains (1) one box of 10 filter racks supplied without filters.

*Filters available through PROSTOCK®.

RXGP-F03

TWINNING KIT—is for use with Rheem *Value Series* 90 Gas Furnaces for parallel operation requirements.

WARNING: IMPORTANT NOTICE

A SOLID METAL BASE PLATE (SEE TABLE) MUST BE IN PLACE WHEN THE FURNACE IS INSTALLED WITH SIDE OR REAR 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. SOLID BOTTOM IS AVAILABLE FACTORY INSTALLED WITH OPTION CODE **263**.

FURNACE WIDTH IN. [mm]	SOLID BOTTOM KIT NO.	BASE PLATE NO.	BASE PLATE SIZE IN. [mm]
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]

FOR HIGH ALTITUDES:

***HIGH ALTITUDE KIT:**
RXGY-F04 (105 KBTU/H)
RXGY-F05 (120 KBTU/H)
RXGY-F06 (45 KBTU/H/60 KBTU/H/90 KBTU/H)
RXGY-F07 (75 KBTU/H)

***For installations over 5000 ft.**

OPTION CODE FOR HIGH ALTITUDE: US & Canada – 278

NOTE: High altitude kits and options do NOT include additional burner orifices. If a burner orifice change is necessary, they must be ordered through PROSTOCK®. See Installation Instructions for more information.

Option – 278 furnaces are shipped with #51 DMS orifices installed. This is one drill size smaller than standard furnaces to account for expected average elevations and heating values typically seen in these areas.

CAUTION: Always follow National Fuel Gas Code (NFGC) guidelines when converting for high altitudes.

For all installations above 2000 ft. (including all option – 278 models), the burner orifice size needs to be recalculated and verified. A burner orifice change may still be required. See Installation Instructions for more information.

NOTE: For Canadian installations only, an optional derate (manifold gas pressure reduction) method may be used to adjust the furnace for altitude. See Installation Instructions for more information. This optional method may **NOT** be used for U.S. installations.

[ ] Designates Metric Conversions

Thermostats

200-Series *
Programmable

300-Series *
Deluxe
Programmable

400-Series *
Special Applications/
Programmable

500-Series *
Communicating/
Programmable

Brand		Descripter (3 Characters)	Series (3 Characters)	System (2 Characters)	Type (2 Characters)
RHC	**-**	**TST**	**213**	**UN**	**MS**
RHC=Rheem		TST=Thermostat	200=Programmable 300=Deluxe Programmable 400=Special Applications/ Programmable 500=Communicating/ 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 T11-001.

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

Heat Exchanger .....Twenty (20) Years
Conditional Parts (Registration Required) .....Ten (10) Years

The new degree of comfort.™

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

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INTEGRATED HOME COMFORT

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