

GAS FURNACES



"Visit www.Ruud.com for complete details."



95% A.F.U.E. WITH *DUAL COMFORT CONTROL™* TWO-STAGE DOWNFLOW/ HORIZONTAL GAS FURNACES

The Ruud *Achiever® Series* 95% A.F.U.E. with *Dual Comfort Control™* line of downflow/horizontal gas furnaces are designed for utility rooms, closets, alcoves, or attics. The RGTM is shipped in the downflow configuration and is easily converted for horizontal **left-hand** air-flow applications.

The design is certified by CSA.

RGTM- SERIES
ECM Equipped
Models with Input Rates
of 60,000, 75,000, 90,000 &
105,000 BTU/HR [17.58, 22,
26.38 & 30.77 kW]

Features

- Two stages of operation to save energy and maintain optimal comfort level.
- Furnace operates at 70% capacity for low-heat and 100% capacity for high-heat.
- Compatible with single or two-stage thermostat. (For optimal performance a two-stage thermostat is recommended.)
- Heat exchanger is constructed of all stainless steel for maximum corrosion resistance and thermal fatigue reliability.
- 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.
- Integrated control board manages all operational functions and provides hookups for humidifier and electronic air cleaner.
- An insulated blower compartment, a slow-opening gas valve and a specially designed inducer system make it one of the quietest furnaces on the market today.
- Variable speed blower motor technology provides ultimate humidity control, quieter sound levels and year-round energy savings.
- Optional indoor or outdoor combustion air. In addition, combustion air may be piped to either the top or side of the cabinet on all downflow models. A special molded fitting is provided to ease installation.
- Solid bottom is standard.
- Control board diagnostics.

A variety of cooling coils and plenums designed to use with the Ruud *Achiever® Series* 95% A.F.U.E. gas furnaces are available as optional accessories for air conditioning models.

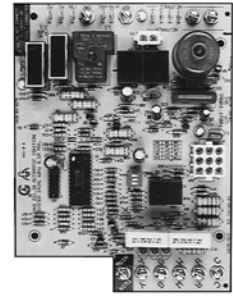
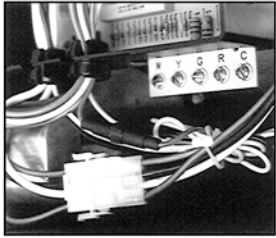
†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.





ACHIEVER® SERIES 90 PLUS HIGH EFFICIENCY DOWNFLOW/HORIZONTAL GAS FURNACE

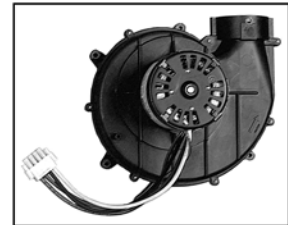
FUSE PROTECTION



INTEGRATED FURNACE CONTROL



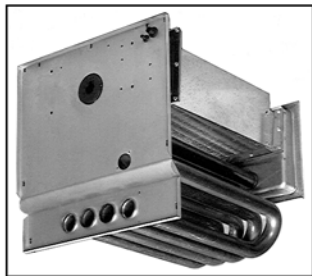
ECM MOTOR



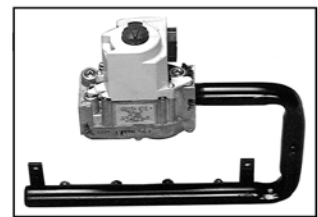
DRAFT INDUCER



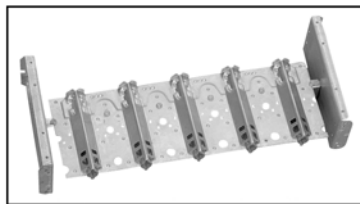
PRESSURE SWITCH



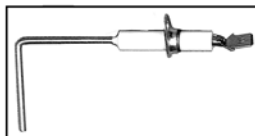
PRIMARY AND SECONDARY HEAT EXCHANGER



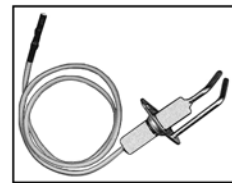
GAS VALVE AND MANIFOLD



IN-SHOT BURNERS



REMOTE SENSOR



DIRECT SPARK IGNITION

STANDARD EQUIPMENT

Completely assembled and wired; heat exchanger; primary: 409 stainless 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; power and self-test diagnostics; flame sense current diagnostics; electronic air cleaner connections; twinning (built-in) features; humidifier connections; humidifier on/off delay; low speed continuous fan option; single speed option for heating and cooling applications; pressure regulator for natural and L.P. (propane) gasses; transformer; direct drive, multi-speed blower motor. (Please note: a thermostat is not included as standard equipment.)

OPTIONAL EQUIPMENT

Side and bottom filter racks; return air cabinet for all sizes.

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

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

PHYSICAL DATA AND SPECIFICATIONS— DOWNFLOW/HORIZONTAL MODELS

U.S. and Canadian Models

MODEL NUMBERS	RGTM-06*MAES	RGTM-07*RBGS	RGTM-09*ZAJ5	RGTM-10*RBJS
HIGH FIRE INPUT BTU/HR [kW] ①	60,000 [17.58]	75,000 [21.98]	90,000 [26.38]	105,000 [30.77]
LOW FIRE INPUT BTU/HR [kW] ②	42,000 [12.31]	52,500 [15.39]	63,000 [18.46]	73,500 [21.54]
HEATING CAPACITY BTU/HR [kW]	56,000 [16.41]	70,000 [20.51]	84,000 [24.62]	97,000 [28.43]
HIGH ALTITUDE INPUT 8000' ②	40,800 [11.96]	51,000 [14.95]	61,200 [17.94]	71,400 [20.93]
HIGH ALTITUDE OUTPUT AT 8000' (HIGH FIRE) [kW] ②	37,944 [11.12]	47,430 [13.90]	56,916 [16.69]	66,402 [19.46]
BLOWER (D x W) [mm]	11 x 7 [279 x 178]	11 x 10 [297 x 254]	12 x 11 [305 x 279]	11 x 10 [297 x 254]
MOTOR H.P. [W]—SPEEDS—TYPE	1/2 [373] VAR. SPEED	3/4 [559] VAR. SPEED	1 [746] VAR. SPEED	1 [746] VAR. SPEED
MOTOR FULL LOAD AMPS	8.7	12	12	12
MINIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa]	.12 [.029]	.12 [.029]	.15 [.037]	.20 [.049]
MAXIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa]	.80 [0.2]	.80 [0.2]	.80 [0.2]	.80 [0.2]
LOW HEATING CFM @ 0.2" [0.049 kPa] W.C. E.S.P. [L/s]*	800 [376]	1100 [517]	1350 [635]	1460 [686]
HIGH HEATING CFM @ 0.2" [0.049 kPa] W.C. E.S.P. [L/s]*	1048 [493]	1408 [662]	1660 [780]	1752 [823]
HIGH COOLING CFM @ .8" [.124 kPa] W.C. E.S.P. [L/s] ④	A = 1200	A = 1600	A = 2000	A = 2000
	B = 1000	B = 1400	B = 1600	B = 1600
	C = 800	C = 1200	C = 1400	C = 1400
	D = 600	D = 1000	D = 1200	D = 1200
LOW COOLING CFM @ .8" [.124 kPa] W.C. E.S.P. [L/s] ④	A = 900	A = 1200	A = 1500	A = 1500
	B = 750	B = 1050	B = 1200	B = 1200
	C = 600	C = 900	C = 1050	C = 1050
	D = 450	D = 750	D = 900	D = 900
TEMPERATURE RISE-HIGH FIRE RANGE IN DEGREES °F [°C]	35-65 [19.4-36.1]	30-60 [16.7-33.3]	30-60 [16.7-33.3]	35-65 [19.4-36.1]
TEMPERATURE RISE-LOW FIRE RANGE IN DEGREES °F [°C]	30-60 [16.7-33.3]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	30-60 [16.7-33.3]
MAX. OUTLET AIR TEMPERATURE	170	170	165	180
RETURN AIR CABINETS (OPT.) RXGR-FILTER SIZE [mm]	C17B (2) 12" x 16" [305 x 406]	C21B (2) 12" x 16" [305 x 406]	C21B (2) 12" x 16" [305 x 406]	C29B (2) 14" x 16" [609 x 406]
STANDARD, HIGH VELOCITY PERMANENT FILTER (IN.)	15 ³ / ₄ x 25 x 1	15 ³ / ₄ x 25 x 1	19 ¹ / ₄ x 25 x 1	22 ³ / ₄ x 25 x 1
APPROX. SHIPPING WEIGHT (LBS.) [kg]	123 [56.0]	139 [63.2]	148 [67.3]	165 [75]
AFUE ③	95.0%	95.0%	95.0%	95.0%

NOTES: All models are 115V, 60HZ, 1 phase. 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.
- ④ CFM is Nominal Value. Positive airflow adjustments will increase the Heating CFM—See Installation Instructions.
- *E=Standard
- *N=NOx Models

WARNING: Some heating airflow values may be higher than those required for cooling. Be sure to size duct systems for highest possible airflow value.

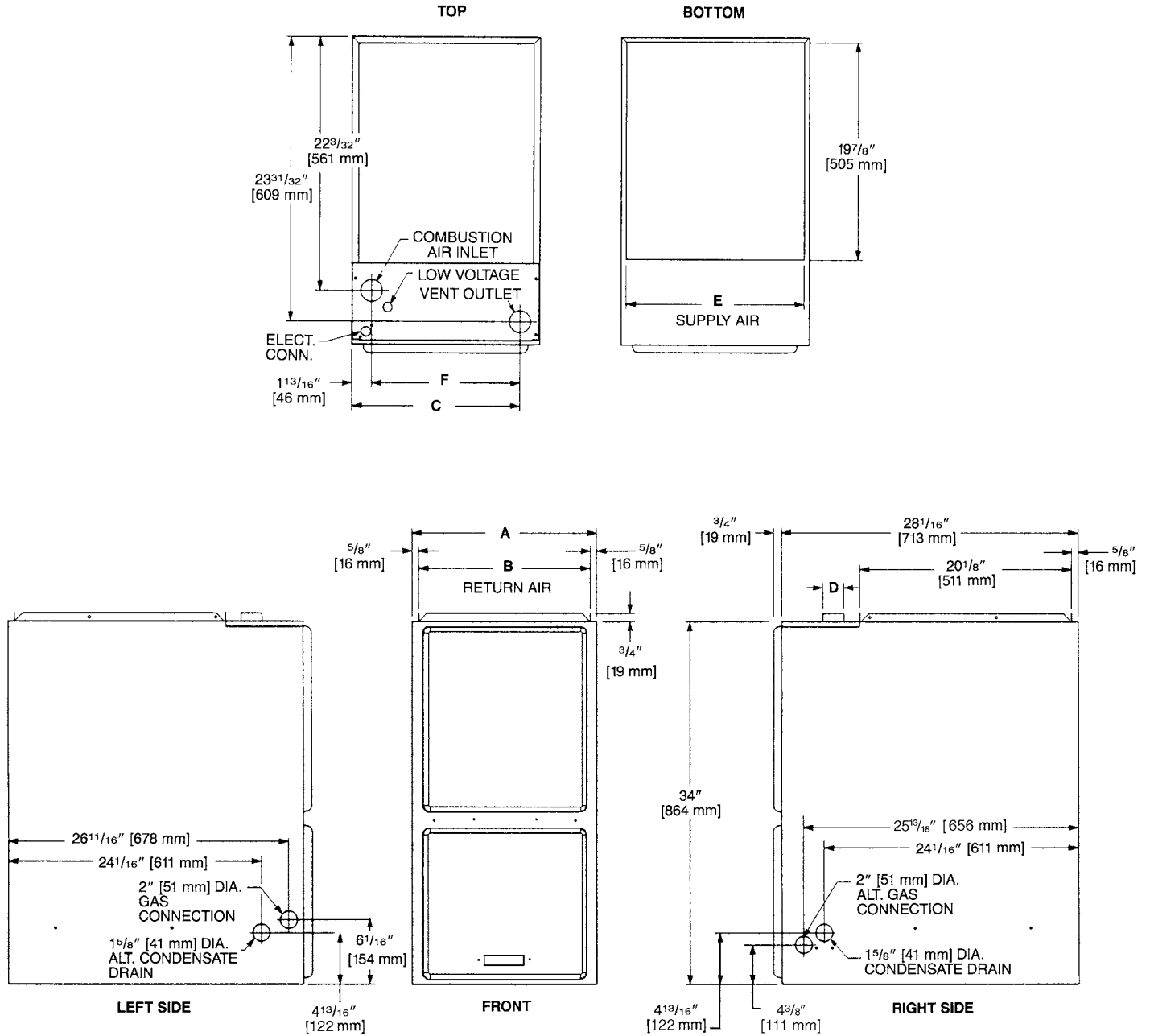
[] Designates Metric Conversions

MODEL IDENTIFICATION

<u>R</u>	<u>G</u>	<u>T</u>	<u>M</u>	—	<u>07E*</u>	<u>R</u>	<u>B</u>	<u>G</u>	<u>S</u>	<u>278</u>
Ruud	Gas Furnace	Downflow/ Horizontal Condensing Gas Furnace	Design Series		Heating Input Designation	Blower Size	Variations	Heat/Cool Designation	Fuel Code	Option Code for High Altitude
					Electric Ignition	Input BTU/HR	M = 11 x 7 [279 x 178 mm] R = 11 x 10 [279 x 254 mm] Z = 12 x 11 [305 x 279 mm]	A = Std. B = Wide E = 1100-1300 CFM [519-613.5 L/s] G = 1500-1700 CFM [707.9-802.3 L/s] J = 1900-2100 CFM [896.7-991.1 L/s]	S = U.S. and Canadian	
					04*	45,000 [13.19 kW]				
					06*	60,000 [17.58 kW]				
					07*	75,000 [22 kW]				
					09*	90,000 [26.38 kW]				
					10*	105,000 [30.77 kW]				
					12*	120,000 [35.17 kW]				
					NOTES: *E = Standard			Available Models:		
					*N = NO _x Models		RGTM-06EMAES RGTM-06NMAES RGTM-06EMAES278 RGTM-07ERBGS	RGTM-07NRBGS RGTM-09EZAJS RGTM-09NZAJS	RGTM-09EZAJS278 RGTM-10ERJS RGTM-10NERJS	

[] Designates Metric Conversions

DOWNFLOW MODELS

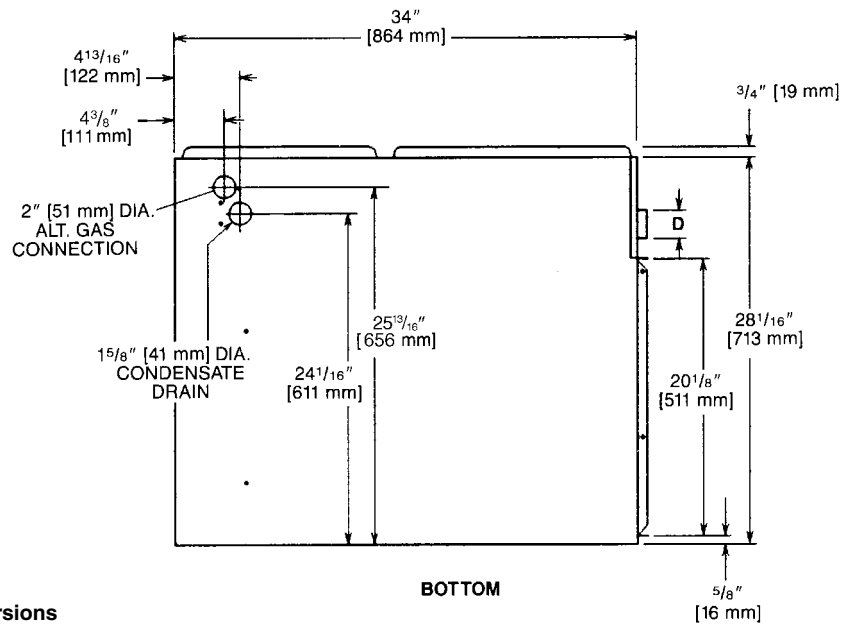
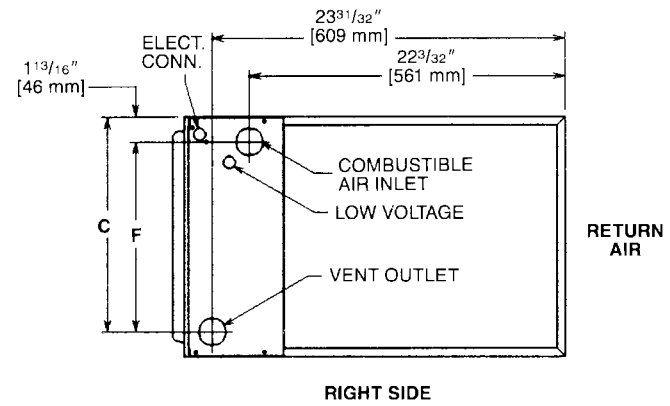
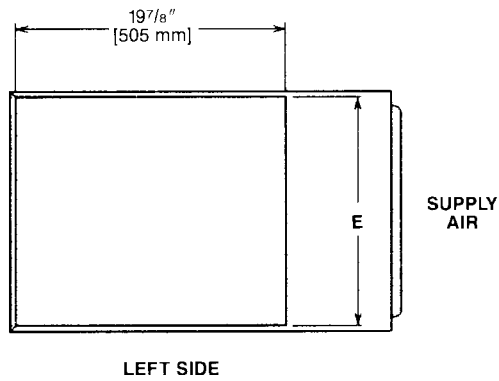
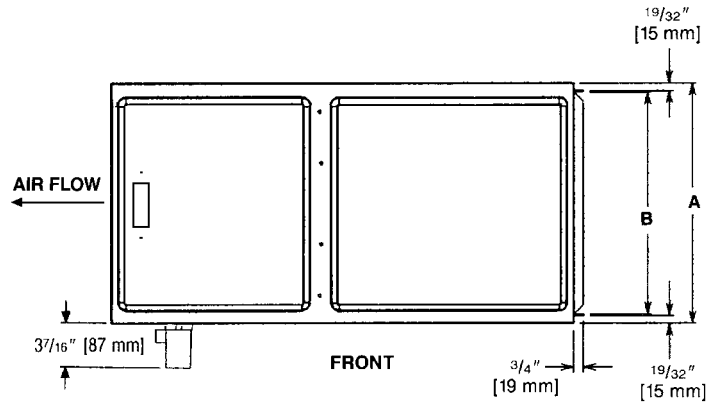
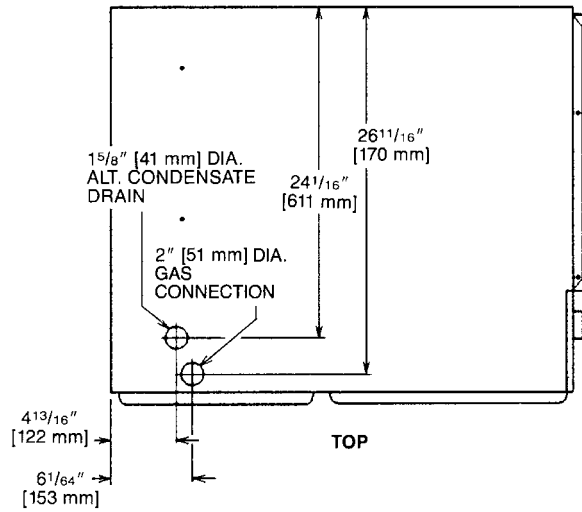


MODEL RGTM-	A	B	C	D	E	F	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]					SHIP WGTS. [kg]
								RIGHT SIDE	BACK	TOP	FRONT	VENT	
06	17 $\frac{1}{2}$ [445]	16 $\frac{1}{32}$ [415]	15 $\frac{5}{8}$ [397]	2 [51]	16 $\frac{5}{8}$ [422]	13 $\frac{7}{8}$ [352]	0	0	0	1 [25]	2 [51]	0	123 [56]
07	21 [533]	19 $\frac{27}{32}$ [504]	19 $\frac{3}{16}$ [486]	2 [51]	20 $\frac{1}{8}$ [511]	17 $\frac{3}{8}$ [441]	0	0	0	1 [25]	2 [51]	0	123 [56]
09	21 [533]	19 $\frac{27}{32}$ [504]	19 $\frac{3}{16}$ [486]	2 [51]	20 $\frac{1}{8}$ [511]	17 $\frac{3}{8}$ [441]	0	0	0	1 [25]	2 [51]	0	148 [67]
10	24 $\frac{1}{2}$ [621]	23 $\frac{1}{32}$ [593]	22 $\frac{5}{8}$ [575]	2 [51]	23 $\frac{5}{8}$ [600]	20 $\frac{7}{8}$ [530]	0	0	0	1 [25]	2 [51]	0	165 [75]

[] Designates Metric Conversions

IMPORTANT NOTE: Horizontal furnace may be installed for horizontal left hand air supply **ONLY**. The condensate trap provided for horizontal application must be installed in the field beneath the unit as directed in the furnace Installation & Operating Instructions.

HORIZONTAL MODELS



[] Designates Metric Conversions

IMPORTANT NOTE: Horizontal furnace may be installed for horizontal left hand air supply **ONLY**. The condensate trap provided for horizontal application must be installed in the field beneath the unit as directed in the furnace Installation & Operating Instructions.

BLOWER PERFORMANCE DATA—RGTM MODELS

MODEL RGTM-	BLOWER SIZE (D x W) IN. [mm]	ECM MOTOR H.P. [W]	BLOWER SPEED	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN [kPa]
				0.1 [.02] – 0.8 [.20]
RGTM-06*M	11 x 7 [279 x 178]	1/2 [373]	HIGH	1200 [566]
			MED-HI	1000 [472]
			MED	800 [378]
			LOW	600 [283]
RGTM-07*R	11 x 10 [279 x 254]	3/4 [559]	HIGH	1600 [755]
			MED-HI	1400 [661]
			MED	1200 [566]
			LOW	1000 [472]
RGTM-09*Z	12 x 11 [305 x 279]	1 [746]	HIGH	2000 [944]
			MED-HI	1600 [755]
			MED	1400 [661]
			LOW	1200 [566]
RGTM-10*R	11 x 10 [279 x 254]	1 [746]	HIGH	2000 [944]
			MED-HI	1600 [755]
			MED	1400 [661]
			LOW	1200 [566]

*E=Standard

*N=NO_x Models

NOTE: CFM values represent furnace-only airflow ratings.

[] Designates Metric Conversions

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 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.

Primary and Secondary Heat Exchanger Limited Lifetime
 Conditional Parts Warranty
 (Registration Required) Ten (10) Years
 Conditional Unit Replacement Warranty
 (Registration Required) Ten (10) Years

ACCESSORIES—DOWNFLOW

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)

CONDENSATE PUMP KIT: RXGY-B01

NEUTRALIZER KIT: RXGY-A01

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

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

FOR HIGH ALTITUDES:

HIGH ALTITUDE KIT: NOT REQUIRED

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

PLENUM DATA FOR “A” COILS

Plenum adapters are required in some instances for use on down-flow 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

Note: See Form Number C22-206 for MultiFlex® coil data.

LP CONVERSION KITS:

U.S./Canadian RXGJ-FP26 or RXGJ-FP21

EXTERNAL BOTTOM FILTER RACK: RXGF-CB

EXTERNAL SIDE FILTER RACK: RXGF-CA

FILTER RACK FILTER SIZES* INCHES [mm]		
MODEL RGTM-	RXGF-CB (BOTTOM)	RXGF-CA (SIDE)
06	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]
07ER 07NR	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	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.

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.

**Ruud Heating,
Cooling and
Water Heating**

P.O. Box 17010, Fort Smith, AR 72917



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