



Ruud Achiever® Series Downflow/ Horizontal Gas Furnace



RGTA- Series

90% A.F.U.E.† or Above
Input Rates 45-120 kBTU



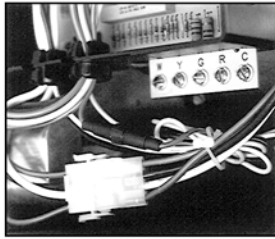
†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

- The Ruud® Achiever® Series High Efficiency line of downflow/horizontal gas furnaces are designed for utility rooms, closets, alcoves, attics or crawl spaces. The RGTA is shipped in the downflow configuration and is easily converted for horizontal left-hand airflow applications.
- The design is certified by CSA.
- 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.
- Top electrical connections, left or right gas and condensate drainage connections on downflow models.
- Condensate drain for horizontal application provided standard.

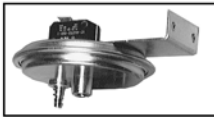
- Integrated control board manages all operational functions and provides hookups for humidifier and electronic air cleaner.
- An insulated blower compartment, a slow-opening gas valve and a specially designed inducer system make it one of the quietest furnaces on the market today.
- Pre-paint galvanized steel cabinet.
- Molded permanent filters.
- Optional indoor or outdoor combustion air.
- Transformer and control fuse protection.
- Control board diagnostics.
- A variety of cooling coils and plenums designed to use with the Achiever® gas furnaces are available as optional accessories for air conditioning models.

TABLE OF CONTENTS

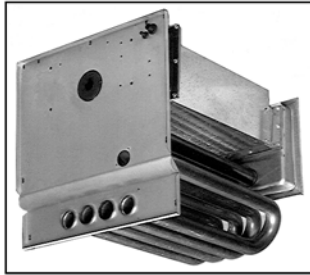
Standard & Optional Equipment	3
Model Features/Physical Data & Specifications.....	4
Model Number Identification	5
Dimensional Data	6-7
Blower Performance Data	8
Accessories.....	9
Limited Warranty	10



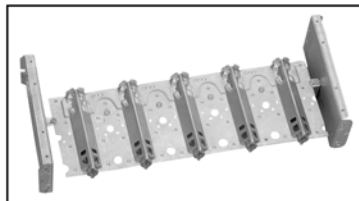
FUSE PROTECTION



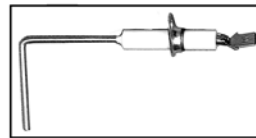
PRESSURE SWITCH



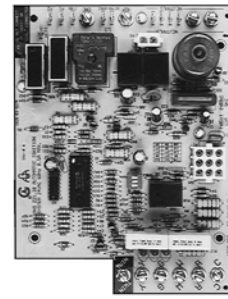
PRIMARY AND SECONDARY
HEAT EXCHANGER



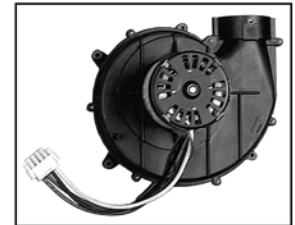
IN-SHOT BURNERS



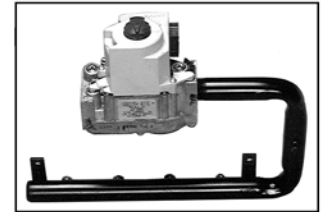
REMOTE SENSOR



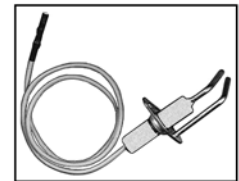
INTEGRATED
FURNACE
CONTROL



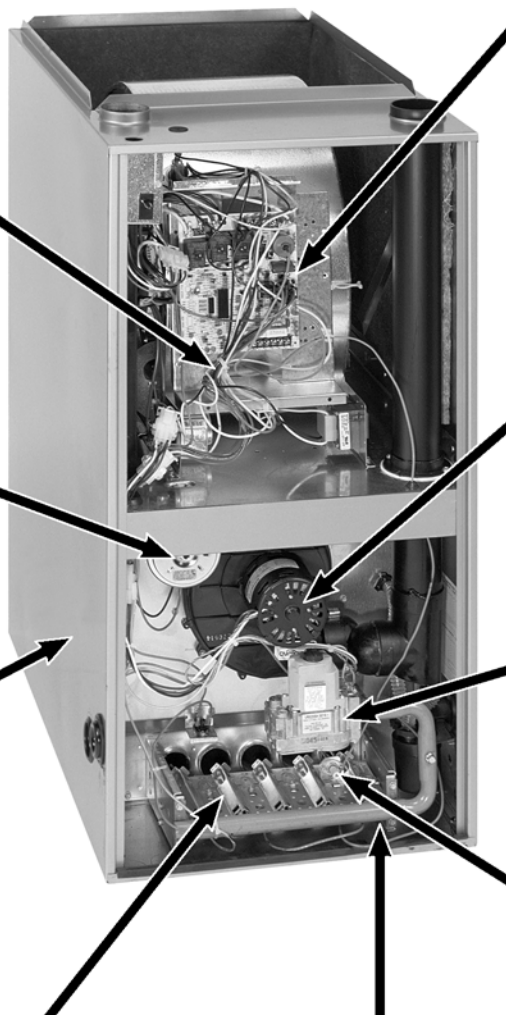
DRAFT INDUCER



GAS VALVE AND
MANIFOLD



DIRECT SPARK IGNITION



STANDARD EQUIPMENT

Completely assembled and wired; heat exchanger; primary: 409 and aluminized 409 stainless steel, secondary: 29-4C stainless steel; induced draft; pressure switch; 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; transformer; direct drive, multi-speed blower motor. (Please note: a thermostat is not included as standard equipment.)

OPTIONAL EQUIPMENT

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.
- 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.
- Top electrical connections, left or right gas and condensate drainage connections on downflow models.
- Condensate drain for horizontal application provided standard.
- 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.
- Pre-paint galvanized steel cabinet.
- Molded permanent filters.
- Optional indoor or outdoor combustion air.
- Transformer and control fuse protection.
- Control board diagnostics.

Physical Data and Specifications—Downflow/Horizontal Models

U.S. and Canadian Models

MODEL NUMBERS	RGTA-04EMAES	RGTA-06EMAES	RGTA-07EMAES	RGTA-07EYBGS	RGTA-09EZAJS	RGTA-10EZAJS	RGTA-12ERAJS
INPUT-BTU/HR [kW] ①	45,000 [13.19]	60,000 [17.58]	75,000 [21.98]	75,000 [21.98]	90,000 [26.38]	105,000 [30.77]	120,000 [35.17]
HEATING CAPACITY BTU/HR [kW]	41,000 [12.02]	56,000 [16.41]	69,000 [20.22]	69,000 [20.22]	84,000 [24.62]	97,000 [28.43]	112,000 [32.82]
HIGH ALTITUDE INPUT [kW] ②	40,500 [11.87]	54,000 [15.83]	67,500 [19.78]	67,500 [19.78]	81,000 [23.74]	94,500 [27.70]	108,000 [31.65]
HIGH ALTITUDE OUTPUT CAPACITY [kW] ②	37,000 [10.84]	50,400 [14.77]	63,000 [18.46]	63,000 [18.46]	75,000 [21.98]	87,500 [25.64]	100,500 [29.45]
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]	11 x 10 [279 x 254]
MOTOR H.P. [W] SPEEDS-TYPE	1/2 [373]-4-PSC	1/2 [373]-4-PSC	1/2 [373]-4-PSC	3/4 [559]-4-PSC	3/4 [559]-4-PSC	3/4 [559]-4-PSC	3/4 [559]-4-PSC
MOTOR FULL LOAD AMPS	6.8	6.8	6.8	9.5	9.5	9.5	9.5
HEATING SPEED	MED-LO	MED-LO	MED-HI	MED-LO	MED-LO	MED-LO	MED-LO
COOLING SPEED	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]	.20 [.049]	.20 [.049]
RATED EXT. STATIC PRESSURE (IN. W.C.) [kPa]	.50 [.124]	.50 [.124]	.50 [.124]	.50 [.124]	.50 [.124]	.50 [.124]	.50 [.124]
HEATING CFM @ .2" W.C. E.S.P. [L/s]	890 [420]	885 [418]	1060 [500]	1375 [649]	1400 [661]	1425 [673]	1565 [739]
COOLING CFM @ .5" W.C. E.S.P. [L/s]	1220 [576]	1180 [557]	1150 [543]	1625 [767]	1850 [873]	1820 [859]	2040 [963]
TEMPERATURE RISE RANGE °F [°C]	30-60 [16.7-33.3]	40-70 [22.2-38.9]	45-75 [25-41.7]	35-65 [19.4-36.1]	35-65 [19.4-36.1]	50-80 [27.8-44.4]	50-80 [27.8-44.4]
STANDARD FILTER [mm]	(2) 12" x 20" [305 x 508]	(2) 12" x 20" [305 x 508]	(2) 12" x 20" [305 x 508]	(2) 12" x 20" [305 x 508]	(2) 12" x 20" [305 x 508]	(2) 12" x 20" [305 x 508]	(2) 14" x 20" [356 x 508]
APPROX. SHIPPING WEIGHT (LBS.) [kg]	111	117	123	123	148	152	160
AFUE ③	92.0%	92.4%	92.0%	92.3%	92.4%	92.0%	92.1%
CALIFORNIA SEASONAL EFFICIENCY ③	84.9%	86.8%	86.4%	85.7%	86.7%	87.0%	87.4%

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.

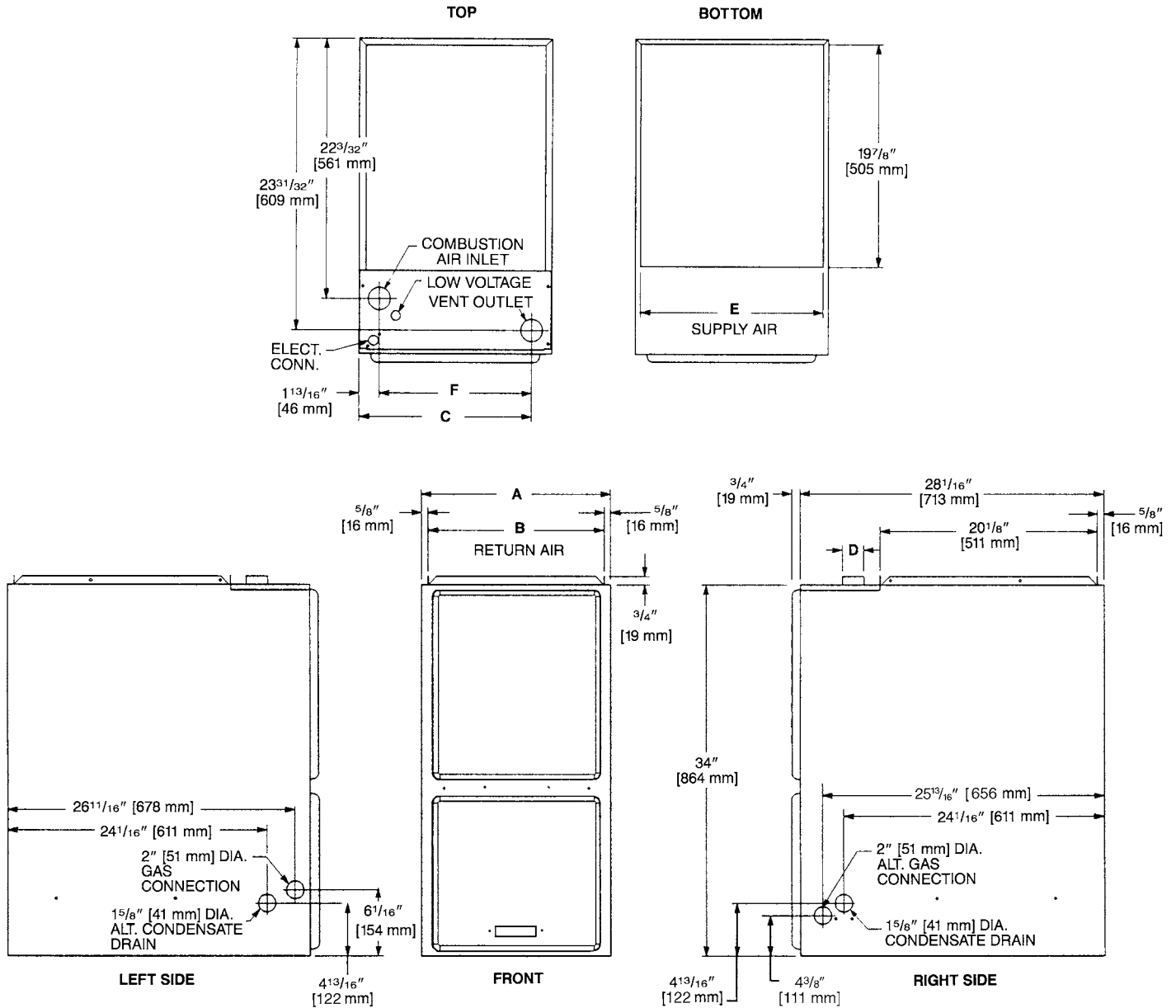
[] Designates Metric Conversions

Model Number Identification

<u>R</u>	<u>G</u>	<u>T</u>	<u>A</u>	<u>—</u>	<u>07E</u>	<u>M</u>	<u>A</u>	<u>E</u>	<u>S</u>
Ruud	Gas Furnace	Downflow/ Horizontal Condensing Gas Furnace	Design Series		Heating Input Designation	Blower Size	Variations	Heat/Cool Designation	Fuel Code
					Electric Ignition	M = 11 x 7 [279 x 178 mm]	A = Std. B = Wide Cabinet	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 Natural Gas
					Input BTU/HR	R = 11 x 10 [279 x 254 mm] Z = 12 x 11 [305 x 279 mm] Y = 12 x 7 [305 x 178 mm]			
					04E 45,000 [13 kW]				
					06E 60,000 [17.6 kW]				
					07E 75,000 [20.5 kW]				
					09E 90,000 [26.4 kW]				
					10E 105,000 [30.7 kW]				
					12E 120,000 [35.2 kW]				

[] Designates Metric Conversions

Downflow Application



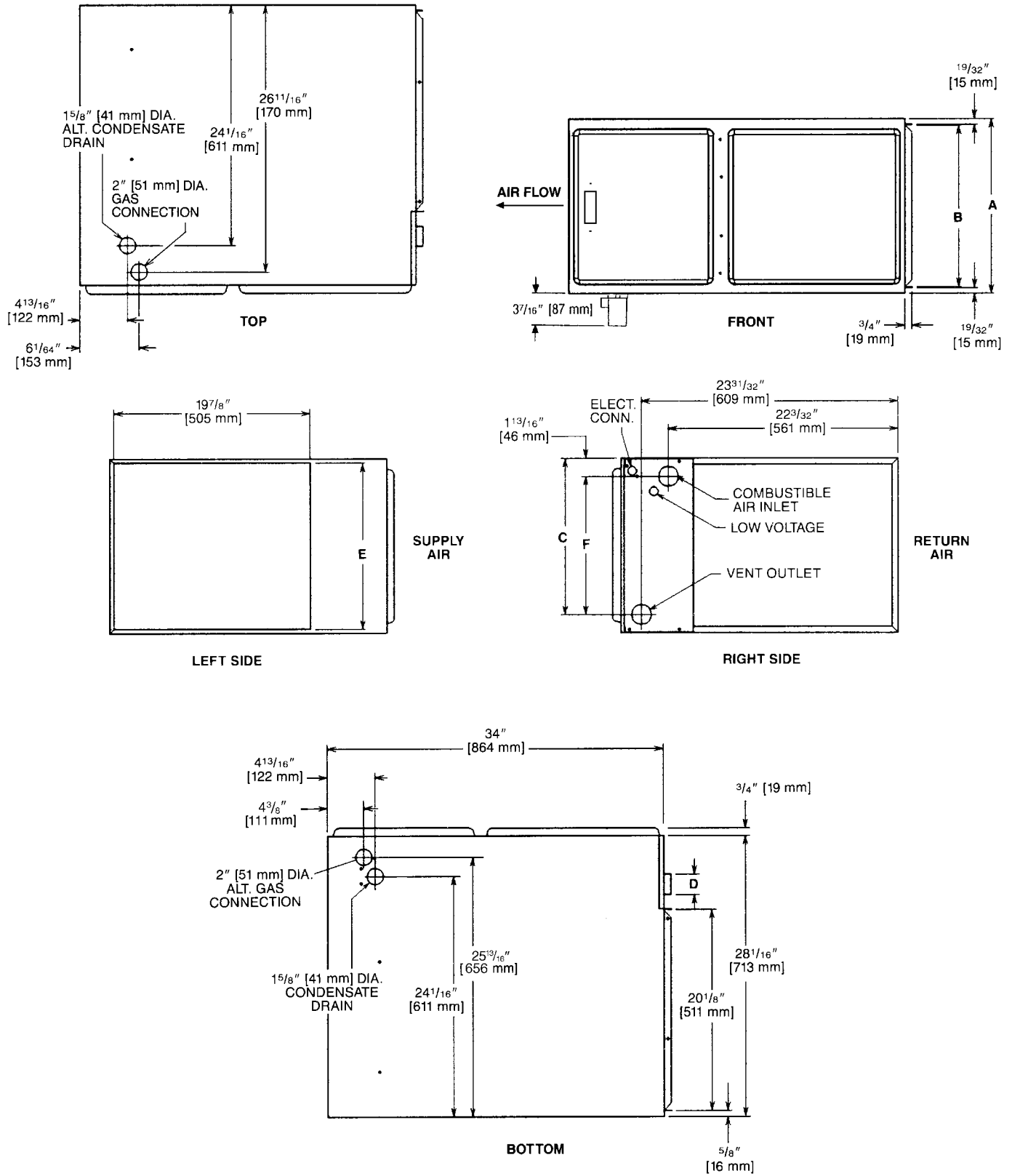
Dimensional Data

MODEL RGTA-	A	B	C	D	E	F	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]					SHIP WGTS. [kg]
								RIGHT SIDE	BACK	TOP	FRONT	VENT	
04	17 $\frac{1}{2}$ [445]	16 $\frac{11}{32}$ [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	111 [50]
06	17 $\frac{1}{2}$ [445]	16 $\frac{11}{32}$ [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	117 [53]
07EM	17 $\frac{1}{2}$ [445]	16 $\frac{11}{32}$ [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]
07EY	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	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	152 [69]
12	24 $\frac{1}{2}$ [622]	23 $\frac{11}{32}$ [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	160 [73]

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.

[] Designates Metric Conversions

Horizontal Application



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.

[] Designates Metric Conversions

Blower Performance Data

MODEL RGTA-	BLOWER SIZE IN. [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]
04	11 x 7 [279 x 178]	1/2 [373]	LOW	820 [387]	790 [373]	760 [359]	725 [342]	690 [326]	650 [306]	610 [288]
			MED-LO	930 [439]	890 [420]	850 [401]	815 [384]	785 [370]	750 [354]	720 [340]
			MED-HI	1150 [543]	1120 [528]	1090 [514]	1045 [493]	1002 [473]	950 [448]	900 [425]
			HIGH	1414 [667]	1365 [644]	1320 [622]	1270 [599]	1220 [576]	1165 [550]	1115 [526]
06	11 x 7 [279 x 178]	1/2 [373]	LOW	795 [375]	760 [359]	730 [344]	695 [328]	660 [311]	615 [290]	570 [269]
			MED-LO	910 [429]	885 [418]	860 [406]	815 [384]	770 [363]	725 [342]	680 [321]
			MED-HI	1115 [526]	1080 [510]	1045 [493]	1005 [474]	965 [455]	920 [434]	875 [413]
			HIGH	1365 [644]	1315 [620]	1270 [600]	1225 [578]	1180 [557]	1125 [531]	1070 [505]
07EM	11 x 7 [279 x 178]	1/2 [373]	LOW	780 [368]	750 [354]	720 [339]	675 [318]	635 [300]	595 [281]	555 [262]
			MED-LO	890 [420]	860 [406]	835 [394]	790 [373]	750 [354]	705 [332]	660 [311]
			MED-HI	1100 [519]	1060 [500]	1025 [484]	980 [462]	940 [443]	890 [420]	845 [399]
			HIGH	1340 [632]	1295 [611]	1250 [590]	1200 [566]	1150 [543]	1090 [514]	1025 [484]
07EY	12 x 7 [305 x 178]	3/4 [559]	LOW	1185 [559]	1160 [547]	1140 [538]	1115 [626]	1095 [517]	1065 [503]	1040 [491]
			MED-LO	1405 [663]	1375 [649]	1350 [637]	1310 [618]	1270 [599]	1235 [583]	1195 [564]
			MED-HI	1595 [753]	1560 [738]	1525 [720]	1480 [698]	1440 [679]	1380 [651]	1325 [625]
			HIGH	1835 [866]	1780 [840]	1730 [816]	1675 [791]	1625 [767]	1555 [734]	1480 [698]
09	12 x 11 [305 x 279]	3/4 [559]	LOW	1155 [545]	1125 [531]	1100 [519]	1080 [510]	1060 [500]	1000 [472]	940 [443]
			MED-LO	1420 [670]	1400 [661]	1380 [651]	1365 [644]	1350 [637]	1260 [594]	1175 [554]
			MED-HI	1605 [757]	1575 [743]	1550 [732]	1560 [736]	1570 [740]	1480 [698]	1390 [656]
			HIGH	2005 [946]	1965 [927]	1930 [910]	1890 [892]	1850 [873]	1765 [833]	1680 [793]
10	12 x 11 [305 x 279]	3/4 [559]	LOW	1180 [557]	1150 [543]	1120 [528]	1100 [519]	1080 [510]	1025 [484]	970 [458]
			MED-LO	1460 [689]	1425 [672]	1390 [656]	1375 [649]	1360 [642]	1280 [604]	1200 [566]
			MED-HI	1680 [793]	1645 [776]	1615 [762]	1585 [748]	1560 [736]	1490 [703]	1420 [670]
			HIGH	2055 [970]	2000 [944]	1940 [915]	1880 [887]	1820 [859]	1745 [823]	1675 [790]
12	11 x 10 [279 x 254]	3/4 [559]	LOW	1285 [606]	1250 [590]	1215 [573]	1235 [582]	1260 [595]	1230 [580]	1200 [566]
			MED-LO	1590 [750]	1565 [738]	1540 [727]	1505 [710]	1475 [696]	1425 [672]	1375 [649]
			MED-HI	1840 [868]	1820 [860]	1800 [850]	1750 [826]	1700 [802]	1645 [776]	1590 [750]
			HIGH	2315 [1093]	2250 [1062]	2185 [1031]	2110 [996]	2040 [963]	1965 [927]	1890 [892]

NOTE: Recommended blower speeds are in bold.

[] Designates Metric Conversions

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

COMBUSTIBLE FLOOR BASE: RXGC-B17
RXGC-B21
RXGC-B24

EXTERNAL FILTER RACK: RXGF-CC

FILTER RACK FILTER SIZES* INCHES [mm]	
MODEL RGTA-	RXGF-CC
04	(2) 12 x 20 [305 x 508]
06	(2) 12 x 20 [305 x 508]
07	(2) 12 x 20 [305 x 508]
09	(2) 12 x 20 [305 x 508]
10	(2) 12 x 20 [305 x 508]
12	(2) 14 x 20 [305 x 508]

*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 downflow applications when plenum and furnace size do not match.

FURNACE WIDTH IN. [mm]	PLENUM WIDTH IN. [mm]	PLENUM ADAPTER DOWNFLOW	COIL PLENUM
17½ [445]	16¼ [413]	RXAA-C186	RXAL-B16BU
17½ [445]	20¼ [514]	RXAA-C173	RXAL-B20BU
17½ [445]	21⅝ [549]	RXAA-C187	RXAL-B21BU
17½ [445]	25¼ [641]	RXAA-C174	RXAL-B25BU
21 [533]	25¼ [641]	RXAA-C175	RXAL-B25BU
21 [533]	22¼ [565]	RXAA-C176	RXAL-B22BU
21 [533]	21⅝ [549]	RXAA-C188	RXAL-B21BU
24½ [622]	25¼ [641]	RXAA-C177	RXAL-B25BU
24½ [622]	21⅝ [549]	RXAA-C187	RXAL-B21BU

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

[] Designates Metric Conversions

FOR HIGH ALTITUDES

***HIGH ALTITUDE KIT:** RXGY-F04-105 KBTU/H
RXGY-F06-45/60/90 KBTU/H
RXGY-F05-120 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 furnaces 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.

FOR LEFT SIDE (ALTERNATE) CONDENSATE DRAIN KIT:

RXGY-H01 (All Models)

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

Conditional Parts* (Registration Required)Ten (10) Years
Heat ExchangerLimited Lifetime



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

Ruud Heating, Cooling & Water Heating • P.O. Box 17010
Fort Smith, Arkansas 72917 • www.ruud.com

Ruud Canada • 125 Edgeware Road, Unit 1
Brampton, Ontario • L6Y 0P5

RELY ON RUUD.™