



The new degree of comfort.™

Rheem Value Series Downflow/Horizontal Gas Furnace

RGTS- Series

Up to 92.4% 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 90 High Efficiency line of downflow/horizontal gas furnaces are designed for utility rooms, closets, alcoves, attics or crawl spaces. The RGTS is shipped in the downflow configuration and is easily converted for horizontal **left-hand** airflow applications.
- The design is certified by CSA.
- 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 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.
- Galvanized steel cabinet.
- Optional indoor or outdoor combustion air.
- Control board diagnostics.
- A variety of cooling coils and plenums designed to use with the Rheem Value Series 90 gas furnaces are available as optional accessories for air conditioning models.

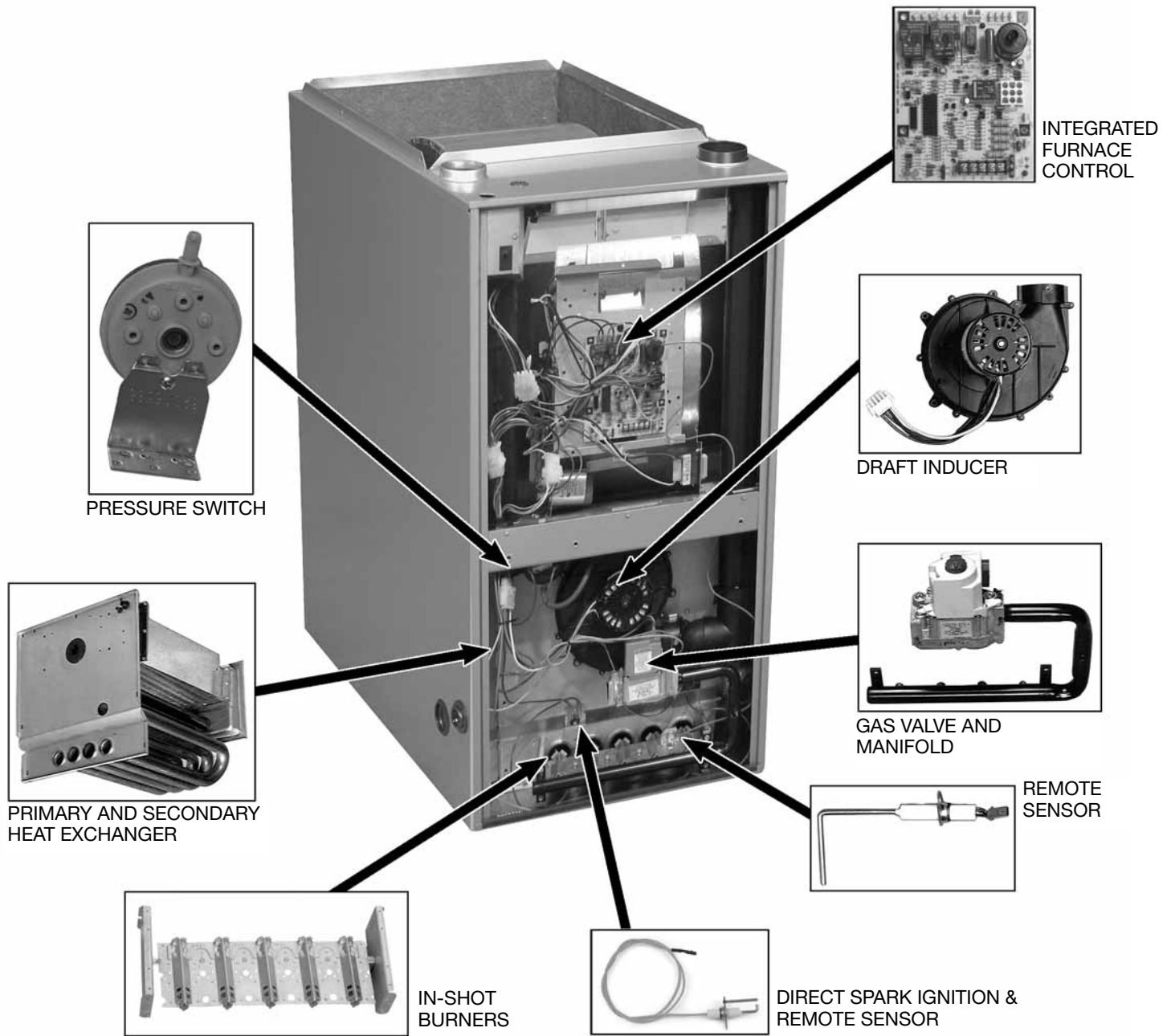
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Air

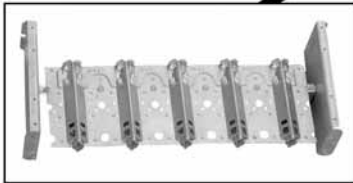
Standard & Optional Equipment
RGTS Series



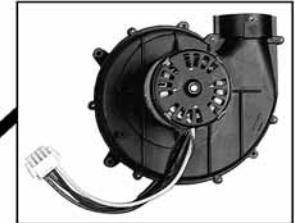
PRESSURE SWITCH



PRIMARY AND SECONDARY HEAT EXCHANGER



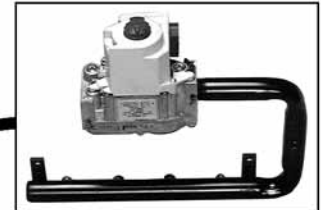
IN-SHOT BURNERS



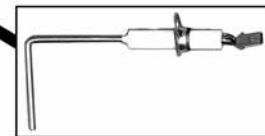
DRAFT INDUCER



INTEGRATED FURNACE CONTROL



GAS VALVE AND MANIFOLD



REMOTE SENSOR



DIRECT SPARK IGNITION & REMOTE SENSOR

STANDARD EQUIPMENT

Completely assembled and wired; heat exchanger; primary: aluminized 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; self-test diagnostics; control 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)

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



Physical Data and Specifications—Downflow/Horizontal Models U.S. and Canadian Models

MODEL NUMBERS RGTS- SERIES	04EMAES	06EMAES	07EMAES	07EYBGS	09EZAGS	09EZAJS	10EZAJS	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" W.C. E.S.P. [L/s]	890 [420]	885 [418]	1060 [500]	1275 [602]	1400 [661]	1400 [661]	1425 [673]	1565 [739]
COOLING C.F.M. @ .5" W.C. E.S.P. [L/s]	1220 [576]	1180 [557]	1150 [543]	1625 [767]	1570 [740]	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]	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) 12" x 20" [305 x 508]	(2) 14" x 20" [609 x 508]
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	92.0%	92.4%	92.0%	92.3%	92.4%	92.4%	92.0%	92.1%
CALIFORNIA SEASONAL EFFICIENCY ③	84.35%	86.46%	89.96%	85.00%	86.40%	86.40%	87.02%	87.37%

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



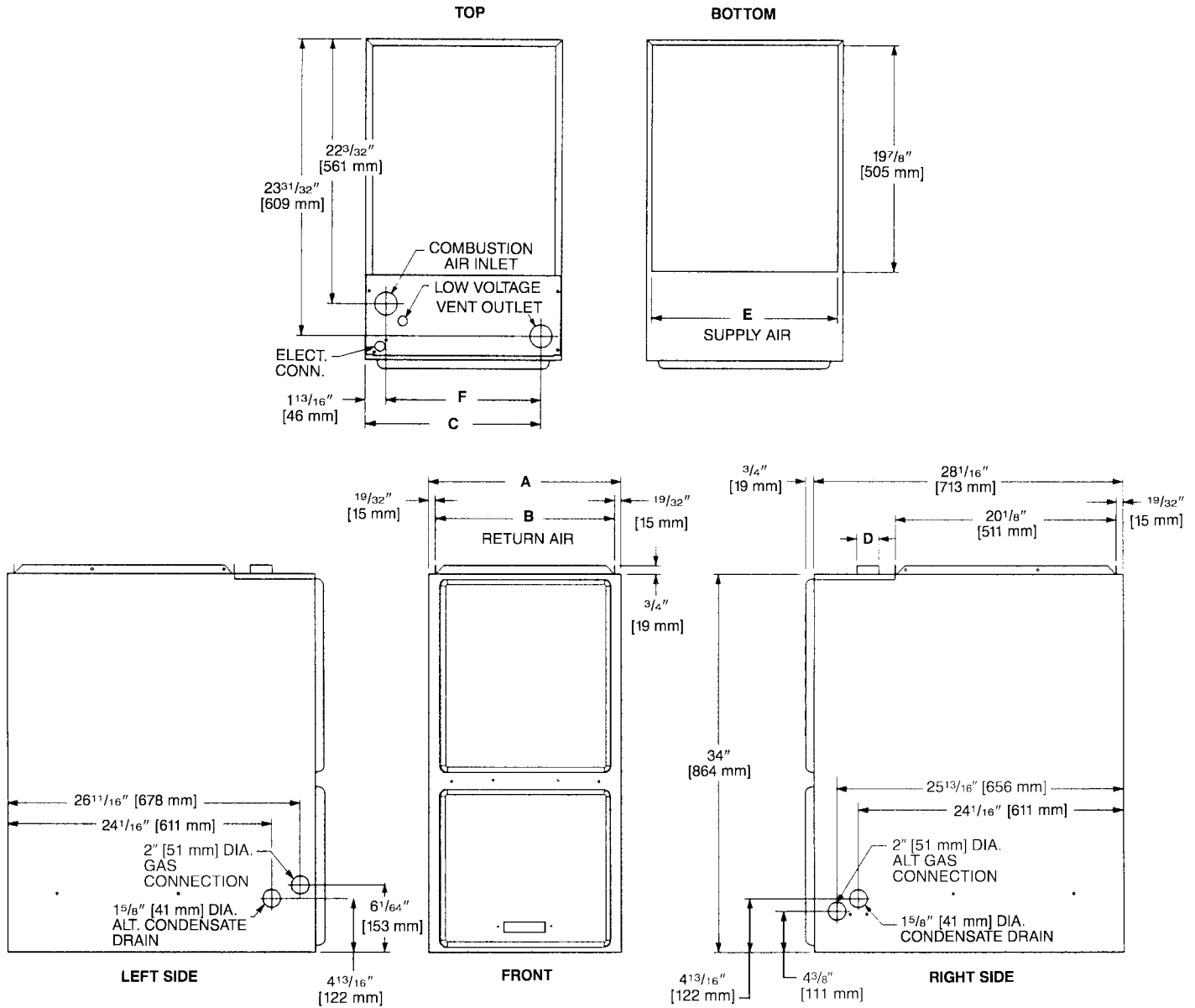
Model Number Identification

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

[] Designates Metric Conversions



Downflow Models

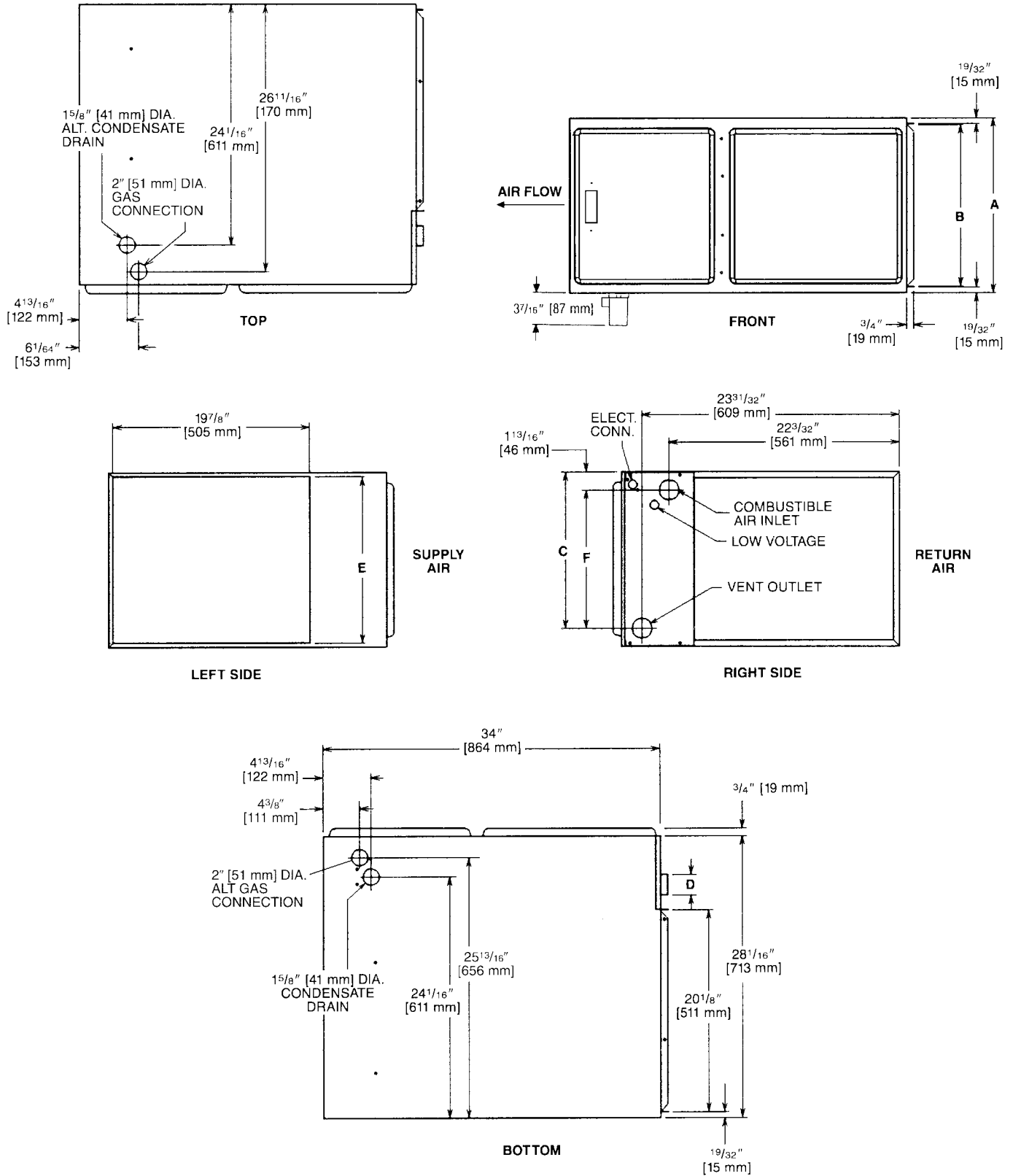


MODEL RGTS-	A	B	C	D	E	F	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]					SHIP WGTS. [kg]
								RIGHT SIDE	BACK	TOP	FRONT	VENT	
04	17 ¹ / ₂ [445]	16 ¹¹ / ₃₂ [415]	15 ⁵ / ₈ [397]	2 [51]	16 ⁵ / ₈ [422]	13 ⁷ / ₈ [352]	0	0	0	1 [25]	2 [51]	0	111 [50]
06	17 ¹ / ₂ [445]	16 ¹¹ / ₃₂ [415]	15 ⁵ / ₈ [397]	2 [51]	16 ⁵ / ₈ [422]	13 ⁷ / ₈ [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]	16 ⁵ / ₈ [422]	13 ⁷ / ₈ [352]	0	0	0	1 [25]	2 [51]	0	123 [56]
07EY	21 [533]	19 ²⁷ / ₃₂ [504]	19 ³ / ₁₆ [486]	2 [51]	20 ¹ / ₈ [511]	17 ³ / ₈ [441]	0	0	0	1 [25]	2 [51]	0	123 [56]
09	21 [533]	19 ²⁷ / ₃₂ [504]	19 ³ / ₁₆ [486]	2 [51]	20 ¹ / ₈ [511]	17 ³ / ₈ [441]	0	0	0	1 [25]	2 [51]	0	148 [67]
10	21 [533]	19 ²⁷ / ₃₂ [504]	19 ³ / ₁₆ [486]	2 [51]	20 ¹ / ₈ [511]	17 ³ / ₈ [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]	23 ⁵ / ₈ [600]	20 ⁷ / ₈ [530]	0	0	0	1 [25]	2 [51]	0	160 [73]

IMPORTANT NOTE: Horizontal furnace maybe 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 Models



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—RGTS Models

MODEL RGTS-	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]
04EMAES	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]
06EMAES	11 x 7 [279 x 178]	1/2 [373]	LOW	910 [429]	885 [418]	860 [406]	815 [384]	770 [363]	725 [342]	680 [321]
			MED	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 [491]	1070 [505]
			LOW	890 [420]	860 [406]	835 [394]	790 [373]	750 [354]	705 [332]	660 [311]
07EMAES	11 x 7 [279 x 178]	1/2 [373]	MED	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]
			LOW	1405 [668]	1375 [649]	1350 [637]	1310 [618]	1270 [599]	1235 [583]	1195 [564]
			MED	1595 [753]	1560 [736]	1525 [720]	1480 [698]	1440 [679]	1380 [651]	1325 [625]
07EYBGS	12 x 7 [305 x 178]	3/4 [559]	HIGH	1835 [866]	1780 [840]	1730 [816]	1675 [791]	1625 [767]	1555 [734]	1480 [698]
			LOW	1155 [545]	1125 [531]	1100 [519]	1080 [510]	1060 [500]	1000 [472]	940 [443]
			MED	1420 [670]	1400 [661]	1380 [651]	1365 [644]	1350 [637]	1260 [594]	1175 [554]
			HIGH	1605 [757]	1575 [743]	1550 [732]	1560 [736]	1570 [740]	1480 [698]	1395 [656]
09EZAGS	12 x 11 [305 x 279]	1/2 [373]	LOW	1420 [670]	1400 [661]	1380 [651]	1365 [644]	1350 [637]	1260 [594]	1175 [554]
			MED	1605 [757]	1575 [743]	1550 [732]	1560 [736]	1570 [740]	1480 [698]	1395 [656]
			HIGH	2005 [946]	1965 [927]	1930 [910]	1890 [892]	1850 [873]	1765 [833]	1680 [793]
			LOW	1460 [689]	1425 [672]	1390 [656]	1375 [649]	1360 [642]	1280 [604]	1200 [566]
09EZAJS	12 x 11 [305 x 279]	3/4 [559]	MED	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]
			LOW	1590 [750]	1565 [738]	1540 [727]	1505 [710]	1475 [696]	1425 [672]	1375 [649]
			MED	1840 [868]	1820 [860]	1800 [850]	1750 [826]	1700 [802]	1645 [776]	1590 [750]
12ERAJS	11 x 10 [279 x 245]	3/4 [559]	HIGH	2315 [1093]	2250 [1062]	2185 [1031]	2110 [996]	2040 [963]	1965 [927]	1890 [892]

NOTE: Recommended blower speeds are in bold.

NOTE: CFM values represent furnace-only airflow ratings.

[] 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 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 ExchangerTwenty (20) 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

PRINTED IN U.S.A 04/12 QG FORM NO. G11-535