# GAS FURNACES



# **RGLG-SERIES**

Models with Input Rates from 50,000 to 150,000 BTU/HR (U.S. & Canadian Models)









# CRITERION° 78%-80% A.F.U.E.† DOWNFLOW/ HORIZONTAL GAS FURNACES

The Rheem® Criterion® line of downflow/horizontal\*\*\* gas furnaces is designed for installation in closets, alcoves, utility rooms, or attics. The design is certified by the American Gas Association. Canadian models are certified by the Canadian Gas Association.

#### **Features**

- Patented Turbulex® 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.
- Both standing pilot (counterflow only) and hot surface ignition models available.
- Left or right side gas and electric inlet connections with quick, simple change.
- Hot surface ignition models feature an integrated board with humidifier and electronic air cleaner hookups. An accessory kit is available for standing pilot models.
- Insulated blower compartment, a slow-open gas valve and a specially designed draft inducer motor make it one of the quietest furnaces on the market today.
- Downflow/Horizontal series allows this furnace to be installed in either downflow or horizontal configurations.\*\*\*
- Hot surface ignition models may be laid on either side for horizontal installations. (No field converting required.)
- Integrated solid state control board.
- 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 gas furnaces are available as optional accessories for air conditioning models.

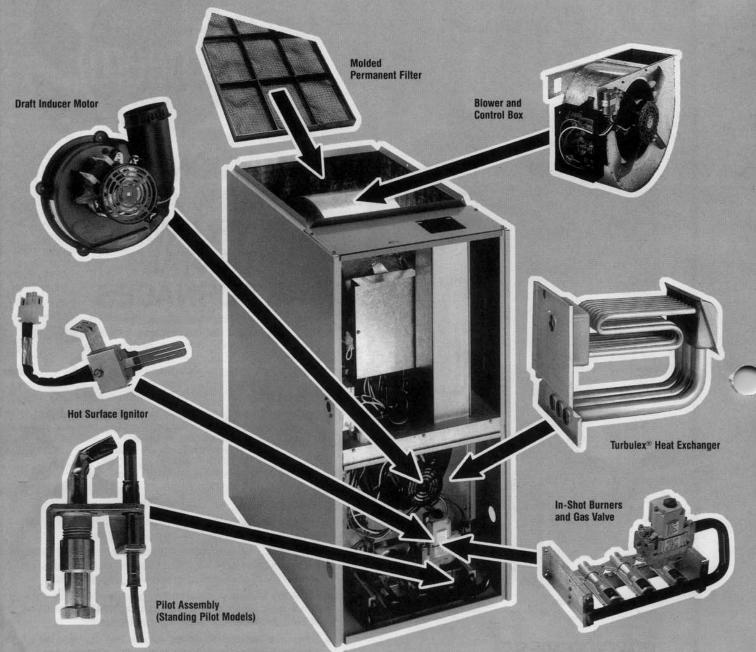
†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures

ment of Energy test procedures.

\*\*\*Horizontal applications require hot surface ignition models



# RHEEM CRITERION 78-80% DOWNFLOW/HORIZONTAL GAS FURNACES



## STANDARD EQUIPMENT

Completely assembled and wired; induced draft; 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.)

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 No. 92-21519-30 for U.S. models and Form No. 92-21519-31 for Canadian models.

NOTE: For natural and L.P. (propane) gas models, standard hot surface ignition is 100% lockout type.

# 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) U.S. MODELS

MODEL NUMBERS	RGLG-050AUER RGLG-05MAUER RGLG-05EAUER RGLG-05NAUER	RGLG-07MAUER RGLG-07EAUER	RGLG-075AMGR RGLG-07MAMGR RGLG-07EAMGR RGLG-07NAMGR		RGLG-100BRJR RGLG-10MBRJR RGLG-10EBRJR RGLG-10NBRJR	RGLG-125ARJR RGLG-12MARJR RGLG-12EARJR RGLG-12NARJR	RGLG-150ARJR RGLG-15MARJR RGLG-15EARJR RGLG-15NARJR
INPUT-BTU/HR ②	50,000	75,000	75,000	100,000	100,000	125,000	150,000
HEATING CAPACITY BTU/HR	41,000	59,500	60,500	80,000	81,000	99,000	119,500
HEAT EXT. STATIC PRESSURE	.10	.12	.12	.15	.15	.20	.20
BLOWER (D x W)	11 x 6	11 x 6	11 x 7	11 x 6 = RGLG-10*AU 11 x 7 = RGLG-10*AM	11 x 10	11 x 10	11 x 10
MOTOR H.P./SPEEDS/TYPE	1/2-4-PSC	1/2-3-PSC	3/4-4-PSC	1/2-3-PSC	3/4-4-PSC	3/4-4-PSC	3/4-4-PSC
MOTOR FULL LOAD AMPS	6.8	6.8	9.5	6.8	9.5	9.5	9.5
HEATING SPEED	MED-LOW	MED	MED-LOW	MED	MED-LOW	MED-LOW	MED-LOW
COOLING SPEED	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
COOLING CFM @ .5" E.S.P. (NOMINAL)	1200	1200	1600	1200	2000	2000	2000
MAX. EXT. STATIC PRESSURE (IN.)	.50	.50	.50	.50	.50	.50	.50
TEMPERATURE RISE RANGE °F	25-55	40-70	25-55	55-85 = RGLG-10*AU 45-75 = RGLG-10*AM	40-70	40-70	50-80
STANDARD FILTER	(1) 14 x 20	(2) 12 x 20	(2) 12 x 20	(2) 12 x 20	(2) 14 x 20	(2) 14 x 20	(2) 14 x 20
APPROX. SHIPPING WEIGHT (LBS.)	85	105	105	115	120	140	150
AFUE-STANDING PILOT MODELS ①	79.3%	78.6%	78.9%	78%	78%	78.1%	78.5%
AFUE-H.S.I. MODELS ①	82.2%	80.5%	80.8%	80.2%	80%	80%	80%
CALIFORNIA SEASONAL EFFICIENCY- H.S.I./NO <sub>x</sub> MODELS	75.9/76.2	74.4/74.9	75.1/75.5	75.2/75.2	74.7/74.7	75.2/75.3	76.0/75.9

NOTES: All models are 115V, 60HZ, 10. Gas connection size for all models is 1/2" N.P.T.

① In accordance with D.O.E. test procedures.

② See Conversion Kit Index Form No. 92-21519-30 for high altitude derate.

# PHYSICAL DATA AND SPECIFICATIONS—(DOWNFLOW/HORIZONTAL) CANADIAN MODELS

MODEL NUMBERS	RGLG-050AUEA RGLG-05EAUEA	RGLG-075AUEA RGLG-07EAUEA	RGLG-075AMGA RGLG-07EAMGA	RGLG-100AUEA RGLG-10EAMEA	RGLG-100BRJA RGLG-10EBRJA	RGLG-125ARJA RGLG-12EARJA	RGLG-150ARJA RGLG-15EARJA
INPUT-BTU/HR ②	50,000	75,000	75,000	100,000	100,000	125,000	150,000
HEATING CAPACITY BTU/HR	41,000	59,500	60,500	80,000	81,000	99,000	119,500
HIGH ALTITUDE INPUT	45,000	67,500	67,500	90,000	90,000	112,500	135,000
HIGH ALTITUDE OUTPUT CAPACITY	36,500	53,500	54,000	72,000	72,500	89,000	107,500
HEAT EXT. STATIC PRESSURE	.10	.12	.12	.15	.15	.20	.20
BLOWER (D x W)	11 x 6	11 x 6	11 x 7	11 x 6 = RGLG-10*AU 11 x 7 = RGLG-10*AM	11 x 10	11 x 10	11 x 10
MOTOR H.P./SPEEDS/TYPE	1/2-4-PSC	1/2-3-PSC	3/4-4-PSC	1/2-3-PSC	3/4-4-PSC	3/4-4-PSC	3/4-4-PSC
MOTOR FULL LOAD AMPS	6.8	6.8	9.5	6.8	9.5	9.5	9.5
HEATING SPEED	MED-LOW	MED	MED-LOW	MED	MED-LOW	MED-LOW	MED-LOW
COOLING SPEED	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
COOLING CFM @ .5" E.S.P. (NOMINAL)	1200	1200	1600	1200	2000	2000	2000
MAX. EXT. STATIC PRESSURE (IN.)	.50	.50	.50	.50	.50	.50	.50
TEMPERATURE RISE RANGE °F	25-55	40-70	25-55	55-85 = RGLG-10*AU 45-75 = RGLG-10*AM	40-70	40-70	50-80
STANDARD FILTER	(1) 14 x 20	(2) 12 x 20	(2) 12 x 20	(2) 12 x 20	(2) 14 x 20	(2) 14 x 20	(2) 14 x 20
APPROX. SHIPPING WEIGHT (LBS.)	85	105	105	115	120	140	150
AFUE-STANDING PILOT MODELS ①	79.3%	78.6%	78.9%	78%	78%	78.1%	78.5%
AFUE-H.S.I. MODELS ①	82.2%	80.5%	80.8%	80.2%	80%	80%	80%

NOTES: All models are 115V, 60HZ, 10. Gas connection size for all models is 1/2" N.P.T.

① In accordance with D.O.E. test procedures. ② See Conversion Kit Index Form No. 92-21519-31 for high altitude derate.

# **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.

Gas Heat Exchanger Warranty ...... Twenty (20) Years Draft Inducer Warranty ...... Five (5) Years

\*For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or Contact the Factory for a Copy.

# MODEL IDENTIFICATION—DOWNFLOW/HORIZONTAL MODELS

_R_	G	L_	<u>G</u> –			07E			Α	U	E	R
Rheem	Gas	Downflow	Design		Heatin	g Input Desig	nation		Variations	Blower	Heating & Cooling	Fuel Type
	Furnace		Series	Standing Pilot	NO <sub>x</sub> Model	Hot Surface Ignition	^	Input BTU/HR	A = Std. Cabinet	Designation U = 11 x 6	Designation E = 1100-1330 CFM	R = Natural Gas, U.S. Standard
				050	05M	05E	05N	50,000	<b>B</b> = Wide	$M = 11 \times 7$	G = 1450-1750  CFM	Furnace
				075	07M	07E	07N	75,000	Cabinet	$R = 11 \times 10$	J = 1800-2075  CFM	A = Natural Gas,
				100	10M	10E	10N	100,000				Canadian
				125	12M	12E	12N	125,000				Standard
				150	15M	15E	15N	150,000				Furnace

WARNING: ALL MODELS TO BE USED IN HORIZONTAL APPLICATIONS MUST BE HOT SURFACE IGNITION MODELS.

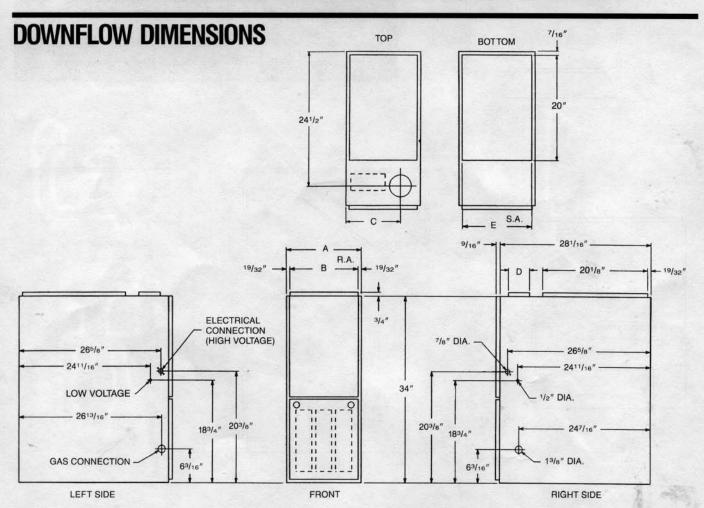


TABLE 1. DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES)

				Name of the		REDUCED CLEARANCES (IN.)						
MODEL		RIGHT SIDE	BACK	ТОР	FRONT	VENT						
RGLG-05	14	1227/32	103/8	(A)	131/8	0	4®	0	1	6	6©	
RGLG-07	171/2	1611/32	121/8	A	165/8	0	3®	0	1	6 .	6©	
RGLG-10(-)A	171/2	1611/32	121/8	A	165/8	0	3®	0	1	6	6©	
RGLG-10(-)B	21	1927/32	137/8	A	201/8	0	0	0	1	6	6©	
RGLG-12	241/2	2311/32	155/8	(A)	235/8	0	0	0	1	6	6©	
RGLG-15	241/2	2311/32	155/8	A	235/8	0	0	0	1	6	6©	

NOTES: (A) Vent connection as shipped from the factory is 3". Certain installations may require a 3" to 4" or 3" to 5" adaptor.

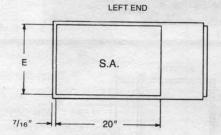
<sup>®</sup> May be 0" with type "B-1" vent.
© May be 1" with type "B-1" vent.

# **HORIZONTAL DIMENSIONS**

# TABLE 1. DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES)

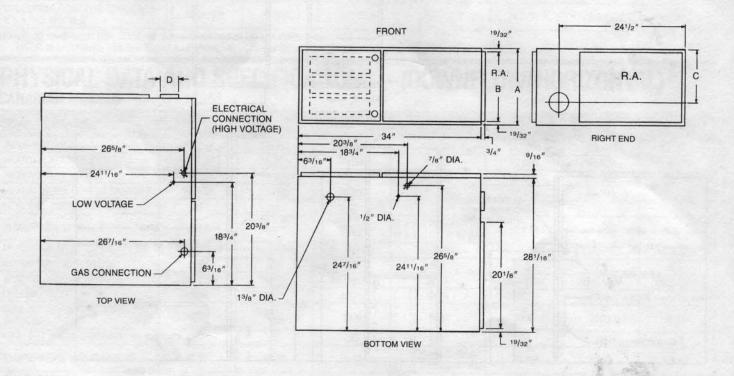
MODEL A	Δ.	R	C	0		REDUCED CLEARANCES (IN.)						
	, , , , , , , , , , , , , , , , , , ,	SIDES	BOTTOM	BACK	TOP	FRONT	VENT					
RGLG-05	14	1227/32	103/8	A	131/8	1	0	0	2	6	6®	
RGLG-07	171/2	1611/32	121/8	A	165/8	1	0	0	2	6	6®	
RGLG-10(-)A	171/2	1611/32	121/8	(A)	165/8	1	0	0	2	6	6®	
RGLG-10(-)B	21	1927/32	137/8	A	201/8	1	0	0	2	6	6®	
RGLG-12	241/2	2311/32	155/8	A	235/8	1	0	0	2	6	6®	
RGLG-15	241/2	2311/32	155/8	A	235/8	1	0	0	2	6	6®	

NOTES: (a) Vent connection as shipped from the factory is 3". Certain installations may require a 3" to 4" or 3" to 5" adaptor.
(b) May be 1" with type "B-1" vent.



# WARNING

THIS FURNACE IS NOT APPROVED OR RECOMMENDED FOR HORIZONTAL APPLICATION OR INSTALLATION ON ITS BACK, WITH ACCESS DOORS FACING UPWARDS.



# **BLOWER PERFORMANCE DATA—DOWNFLOW/HORIZONTAL MODELS**

MODEL NUMBER	BLOWER	MOTOR	BLOWER	Degular.	EXTERN	CFI NAL STATIC PF	M AIR DELIVE RESSURE INC		OLUMN	
MODEL WOMEN	SIZE	H.P.	SPEED	.7	.6	.5	.4	.3	.2	.1
RGLG-050AUE* RGLG-05MAUER RGLG-05EAUE* RGLG-05NAUER	11 x 6	1/2	LOW MED-LO MED-HI HIGH	575 895 1060 1250	605 920 1085 1290	635 940 1105 1320	680 955 1125 1350	695 970 1150 1390	715 980 1170 1440	735 990 1190 —
RGLG-075AUE* RGLG-07MAUER RGLG-07EAUE* RGLG-07NAUER	11 x 6	1/2	LOW MED HIGH	800 995 1160	820 1020 1200	840 1045 1235	855 1060 1265	870 1080 1295	885 1095 1320	900 1115 1345
RGLG-075AMG* RGLG-07MAMGR RGLG-07EAMG* RGLG-07NAMGR	11 x 7	3/4	LOW MED-LO MED-HI HIGH	985 1105 1385 1475	1010 1135 1425 1525	1025 1155 1450 1585	1035 1170 1480 1640	1040 1185 1510 1690	1045 1195 1535 1740	1050 1205 1565 —
RGLG-100AUE* RGLG-10MAUER RGLG-10EAME*	11 x 6 11 x 6 11 x 7	1/2	LOW MED	770 920	795 945	810 970	830 990	845 1010	860 1030	875 1050
RGLG-10NAMER	11 x 7		HIGH	1120	1120	1155	1190	1220	1250	1280
RGLG-100BRJ* RGLG-10MBRJR RGLG-10EBRJ* RGLG-10NBRJR	11 x 10	3/4	LOW MED-LO MED-HI HIGH	1095 1265 1615 1865	1110 1285 1655 1935	1120 1300 1680 2010	1125 1310 1705 2080	1130 1315 1725 2145	1135 1320 1735 2200	1140 1325 1745
RGLG-125ARJ* RGLG-12MARJR RGLG-12EARJ* RGLG-12NARJR	11 x 10	3/4	LOW MED-LO MED-HI HIGH	1130 1300 1665 1895	1140 1315 1710 1975	1150 1330 1740 2050	1160 1340 1760 2120	1170 1350 1775 2195	1175 1355 1780 2285	1360 —
RGLG-150ARJ* RGLG-15MARJR RGLG-15EARJ* RGLG-15NARJR	11 x 10	3/4	LOW MED-LO MED-HI HIGH	1150 1300 1655 1775	1170 1330 1695 1847	1175 1345 1735 1915	1180 1360 1775 1980	1185 1365 1800 2045	1190 1375 1830 2110	1195 1385 1845

NOTES: \*Designates "R" for U.S. models, and "A" for Canadian models.

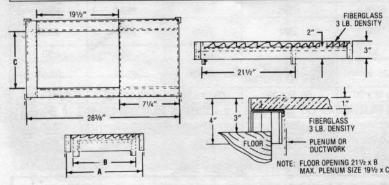
Must use H.S.I. model for horizontal applications.

# ACCESSORIES—DOWNFLOW/HORIZONTAL

DOWNFLOW WARNING: Unit design is certified for installation on non-combustible floor. A special factory supplied combustible floor sub-base is required when installing on a combustible floor. Failure to install the sub-base may result in fire, property damage and personal injury.

## **COMBUSTIBLE FLOOR BASE DIMENSIONS**

COMBUSTIBLE FLOOR BASE	USE WITH FURNACE SIZES	A	В	C
RXGC-B14	RGLG-05	141/2	131/4	111/4
RXGC-B17	RGLG-07, RGLG-10(-)A	18	163/4	143/4
RXGC-B21 RGLG-10(-)B		211/2	201/4	181/4
RXGC-B24	RGLG-12, RGLG-15	25	233/4	213/4



#### **PLENUM DATA**

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

FURNACE PLENUM WIDTH WIDTH					
14	161/4	RXAA-C178	RXAL-B16BU		
14	201/4	RXAA-C179	RXAL-B20BU		
171/2	161/4	RXAA-C185	RXAL-B16BU		
171/2	201/4	RXAA-C180	RXAL-B20BU		
171/2	215/8	RXAA-C189	RXAL-B21BU		
171/2	251/4	RXAA-C181	RXAL-B25BU		
21	221/4	RXAA-C182	RXAL-B22BU		
21	251/4	RXAA-C183	RXAL-B25BU		
241/2	251/4	RXAA-C184	RXAL-B25BU		
241/2	215/8	RXAA-C190	RXAL-B21BU		

#### **RXGW-AAA01**

Humidifier and Electronic Air Cleaner Accessory Board for Robertshaw Control RBC1 and Honeywell ST9101A 1014 Blower Controls.

**NOTE:** Available for standing pilot models only.

#### RXPF-E01

FOSSIL FUEL KIT—is for use with Rheem Heat Pumps and Criterion warm air furnaces.

Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, and Local codes, regulations, and practices.

RHEEM
AIR CONDITIONING
DIVISION

P.O. Box 17010, Fort Smith, Arkansas 72917-7010

