FORM NO. O11-612 REV. 2
Supersedes Form No. O11-612 Rev. 1

OIL FURNACES



Rheem® Classic® SERIES

PREMIUM CLASS UPFLOW OIL FURNACES

The Rheem *Classic Series*® Premium Class upflow oil furnace is for installation in utility rooms, closets, or alcoves.

- Direct drive blower assemblies for heating and air conditioning applications.
- A crimped design stainless steel heat exchanger for efficient heat transfer.
- Low profile design is lighter, easier to handle, and replaces the old style highboy and lowboy models.
- Removable flue box to easily clean secondary heat exchanger.
- Blower/motor combinations, cooling coil plenums, return air cabinets, and other air conditioning accessories are available for air conditioning applications.
- Factory tested prior to shipment, each furnace is operated and checked by factory quality control to reduce problems at installation.
- Rheem Classic oil furnaces offer a wide selection of models and types for almost any installation.
- All oil furnace models are completely factory assembled with burner mounted ready for operation.
- Adjustable solid state fan cycle control.
- Solid-state microprocessor control.
- Indicator light to monitor the burner flame status for improved troubleshooting.
- Clean-cut solenoid controlled oil pump with pre and post purge to prevent oil dripping before and after burn thereby reducing nuisance odors.

ROBF- SERIES

Heating Capacities
56,000 to 151,200 BTU/HR
[16.41 to 44.30 kW]

Accredited by the RvA
ABS Quality Evaluations, Inc. Management System Certification
ANAB ACCREDITED
ISO 9001:2000
Certificate Number: 30164

ENERGUIDE
Annual Fuel Utilization Efficiency - AFUE
THIS MODEL
80.0%
MID HIGH
78% 82% 88% 97%

C SA® US

member gama



CLASSIC SERIES® PREMIUM CLASS UPFLOW OIL FURNACE

STANDARD EQUIPMENT

Completely assembled and wired; front concealed controls and flue box; pressure atomizing oil burner with single stage fuel pump; continuous duty ignition with lockout feature; removable flue collector box for easy cleaning; direct drive, multi-speed, circulating air blower; adjustable solid state fan timer; limit controls; permanent cleanable filter and frame for left or right side of casing or bottom return; barometric draft control; all models are equipped with controls for air conditioning; solid metal base plate installed standard on all models when bottom return not utilized.

WARNING

THIS FURNACE IS NOT APPROVED
OR RECOMMENDED
FOR USE IN MOBILE HOMES

MODEL IDENTIFICATION—UPFLOW MODELS

R	O	B	F—	067	L	B	E	A
Rheem	Oil Furnace	Upflow	Design Series	Heating Capacity Output	Blower Designation	Variations	Heating & Cooling Designation	Fuel Pump
				Models / Output BTU/HR	**L** = 10 x 7DD [254 x 178 mm]	**B** = 1st Variation	**E**—1100-1330 CFM [519-628 L/s]	**A**—Single Stage (U.S.)
				067: 56,000 [16.41 kW]; 67,200 [19.69 kW]	**Q** = 10 x 10DD [254 x 254 mm]		**G**—1450-1750 CFM [684-826 L/s]	**C**—Single Stage (Canadian)
				112: 84,000 [24.62 kW]; 95,200 [27.90 kW]; 112,000 [32.83 kW]	**R** = 11 x 10DD [279 x 254 mm]		**J**—1800-2075 CFM [850-979 L/s]	
				150: 134,400 [39.38 kW]; 151,200 [44.30 kW]				

THIS FURNACE USES NO. 2 FUEL OIL. FUEL OILS ARE RATED BY THE AMERICAN PETROLEUM INSTITUTE (API).

[ ] Designates Metric Conversions

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

SPECIFICATIONS AND DIMENSIONS—U.S.

Models	067		112			150	
HEATING CAPACITY [BTU/H] [kW]	**56,000 [16.41]**	**67,200 [19.69]**	**84,000 [24.62]**	**95,200 [27.90]**	**112,000 [32.83]**	**134,400 [39.38]**	**151,200 [44.30]**
INPUT—BTU/H [kW]	70,000 [20.51]	84,000 [24.62]	105,000 [30.77]	119,000 [34.88]	140,000 [41.03]	168,000 [49.24]	189,000 [55.40]
FIRING RATE—GPH [Liters/HR]	.50 [1.9]	.65 [2.5]	.75 [2.8]	.85 [3.2]	1.00 [3.8]	1.20 [4.5]	1.35 [5.1]
STD. NOZZLE SIZE	70° x SOLID	70° x SOLID	70° x SOLID	70° x SOLID	70° x SOLID	70° x SOLID	70° x SOLID
BLOWER MOTOR DRIVE	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT
BLOWER—DIA. x WIDTH [mm]	10 x 7 [254 x 178]	10 x 7 [254 x 178]	10 x 10 [254 x 254]	10 x 10 [254 x 254]	10 x 10 [254 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
MOTOR H.P. [W] (NO. OF SPEEDS)	1/4 [186] (4)	1/4 [186] (4)	1/2 [373] (4)	1/2 [373] (4)	1/2 [373] (4)	3/4 [559] (4)	3/4 [559] (4)
HEATING/COOLING SPEED TAPS	MED-LO/HIGH	MED-HI/HIGH	LOW/MED-HI	MED-LO/MED-HI	MED-HI/HIGH	MED-HI/HIGH	MED-HI/HIGH
WIDTH IN. [mm]	21 [533]	21 [533]	24 1/2 [622]	24 1/2 [622]	24 1/2 [622]	28 [711]	28 [711]
DEPTH IN. [mm]	28 3/4 [730]	28 3/4 [730]	28 3/4 [730]	28 3/4 [730]	28 3/4 [730]	28 3/4 [730]	28 3/4 [730]
HEIGHT IN. [mm]	46 [1168]	46 [1168]	46 [1168]	46 [1168]	46 [1168]	49 [1245]	49 [1245]
HEIGHT OF RETURN CONN. IN. [mm]	15 [381]	15 [381]	15 [381]	15 [381]	15 [381]	15 [381]	15 [381]
WIDTH OF RETURN CONN. IN. [mm]	23 [584]	23 [584]	23 [584]	23 [584]	23 [584]	23 [584]	23 [584]
WIDTH OF SUPPLY CONN. IN. [mm]	19 1/2 [495]	19 1/2 [495]	23 [584]	23 [584]	23 [584]	26 1/2 [673]	26 1/2 [673]
LENGTH OF SUPPLY CONN. IN. [mm]	20 [508]	20 [508]	20 [508]	20 [508]	20 [508]	20 [508]	20 [508]
FILTER RACK RXGF-	Z16B	Z16B	Z16B	Z16B	Z16B	Z16B	Z16B
HEATING EXT. STATIC PRESSURE IN. [kPa]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]	.2 [.05]
MAX. EXTERNAL STATIC PRESSURE IN. [kPa]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]	.5 [.12]
TEMPERATURE RISE RANGE °F [°C]	40-70 [22-39]	40-70 [22-39]	50-80 [28-44]	50-80 [28-44]	50-80 [28-44]	60-90 [33-50]	60-90 [33-50]
BLOWER MOTOR FULL LOAD AMPS	5.7	5.7	8.7	8.7	8.7	11.0	11.0
TOTAL CURRENT	7.5	7.5	10.8	10.8	14.1	16.1	16.1
MINIMUM CIRCUIT AMPACITY	11.6	11.6	12.2	12.2	16.3	18.8	18.8
FLUE SIZE—DIA. IN. [mm]	5 [127]	5 [127]	5 [127]	5 [127]	5 [127]	7 [178]	7 [178]
AIR DELIVERY (HEATING/COOLING) ③	795/1140	915/1140	1040/1375	1230/1375	1375/1500	1715/2070	1715/2070
AIR FILTER SIZE (QTY.) IN. [mm]	(1) 16 x 25 x 1 ② [406 x 635 x 25]	(1) 16 x 25 x 1 ② [406 x 635 x 25]	(1) 16 x 25 x 1 ② [406 x 635 x 25]	(1) 16 x 25 x 1 ② [406 x 635 x 25]	(1) 16 x 25 x 1 ② [406 x 635 x 25]	(1) 16 x 25 x 1 ② [406 x 635 x 25]	(1) 16 x 25 x 1 ② [406 x 635 x 25]
APPROX. SHIP WT. (LBS.) [kg]	160 [72.6]	160 [72.6]	198 [89.8]	198 [89.8]	198 [89.8]	207 [93.9]	207 [93.9]
AFUE (ISOLATED COMBUSTION) ①	**82.9%**	**80.8%**	**82.0%**	**81.4%**	**80.0%**	**82.1%**	**81.5%**

① In accordance with D.O.E. test procedures
② Permanent cleanable filter (Rated @ 600 F.P.M. [3 m/s])
③ Heating/cooling C.F.M. @ .5" [.12 kPa] W.C.

[ ] Designates Metric Conversions

BLOWER PERFORMANCE DATA—UPFLOW MODELS

MODEL NUMBER	CONFIGURATION INPUT BONNET CAP [btu]	BLOWER SIZE (IN.) [mm]	MOTOR HP [W]	BLOWER SPEED	CFM [L/s] AIR DELIVERY E.S.P. INCHES [kPa] WATER COLUMN			
					0.5 [.12]	0.4 [.10]	0.3 [.07]	0.2 [.05]
ROBF-067LBE	70,000 [56,000]	10 x 7 [254 x 178]	1/4 [186]	LOW MED-LO* MED-HI HIGH +	600 [283] 795 [375] 915 [432] 1140 [538]	620 [293] 835 [394] 940 [444] 1190 [562]	635 [300] 870 [411] 955 [451] 1230 [580]	645 [304] 885 [418] 970 [458] 1260 [595]
	84,000 [67,200]	10 x 7 [254 x 178]	1/4 [186]	LOW MED-LO MED-HI* HIGH +	600 [283] 795 [375] 915 [432] 1140 [538]	620 [293] 835 [394] 940 [444] 1190 [562]	635 [300] 870 [411] 955 [451] 1230 [580]	645 [304] 885 [418] 970 [458] 1260 [595]
ROBF-112QBG	105,000 [84,000]	10 x 10 [254 x 254]	1/2 [373]	LOW* MED-LO MED-HI + HIGH	1040 [491] 1230 [580] 1375 [649] 1500 [708]	1065 [503] 1260 [595] 1430 [675] 1575 [743]	1080 [510] 1285 [606] 1480 [698] 1645 [776]	1090 [514] 1300 [614] 1530 [722] 1705 [805]
	119,000 [95,200]	10 x 10 [254 x 254]	1/2 [373]	LOW MED-LO* MED-HI + HIGH	1040 [491] 1230 [580] 1375 [649] 1500 [708]	1065 [503] 1260 [595] 1430 [675] 1575 [743]	1080 [510] 1285 [606] 1480 [698] 1645 [776]	1090 [514] 1300 [614] 1530 [722] 1705 [805]
	140,000 [112,000]	10 x 10 [254 x 254]	1/2 [373]	LOW MED-LO MED-HI* HIGH +	1040 [491] 1230 [580] 1375 [649] 1500 [708]	1065 [503] 1260 [595] 1430 [675] 1575 [743]	1080 [510] 1285 [606] 1480 [698] 1645 [776]	1090 [514] 1300 [614] 1530 [722] 1705 [805]
ROBF-150RBJ	168,000 [134,400]	11 x 10 [279 x 254]	3/4 [559]	LOW MED-LO MED-HI* HIGH +	1045 [493] 1375 [649] 1715 [809] 2070 [977]	1055 [498] 1400 [661] 1745 [824] 2110 [996]	1070 [505] 1435 [677] 1760 [831] 2145 [1012]	1090 [514] 1450 [684] 1770 [835] 2175 [1026]
	189,000 [151,200]	11 x 10 [279 x 254]	3/4 [559]	LOW MED-LO MED-HI* HIGH +	1045 [493] 1375 [649] 1715 [809] 2070 [977]	1055 [498] 1400 [661] 1745 [824] 2110 [996]	1070 [505] 1435 [677] 1760 [831] 2145 [1012]	1090 [514] 1450 [684] 1770 [835] 2175 [1026]

NOTES: *HEATING SPEED
+COOLING SPEED

GENERAL TERMS OF LIMITED WARRANTY

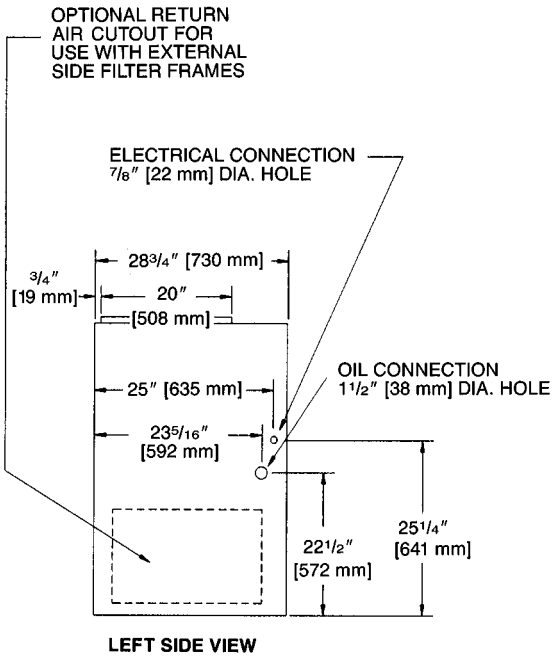
Rheem will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated here, in accordance with the terms of the limited warranty.

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

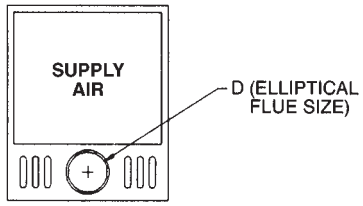
Oil Heat Exchanger .....Limited Lifetime
Any Other Part.....Five (5) Years

[ ] Designates Metric Conversions

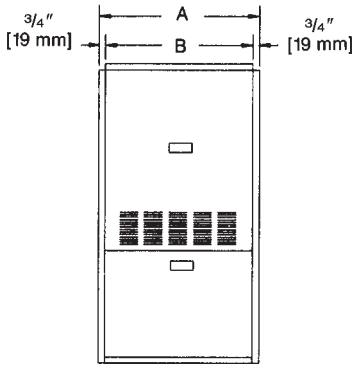
DIMENSIONS AND CLEARANCES TO COMBUSTIBLES



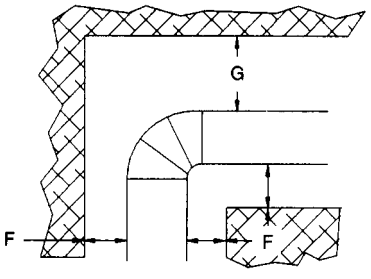
LEFT SIDE VIEW



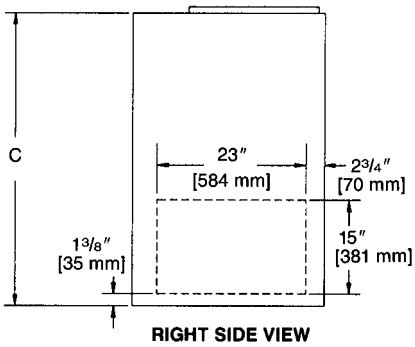
TOP VIEW



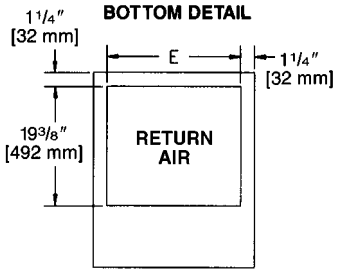
FRONT VIEW



FLUE CLEARANCE DETAIL



RIGHT SIDE VIEW



MODEL	DIMENSIONS (IN.) [mm]					REDUCED CLEARANCES (IN.) [mm]						
	A	B	C	D	E	LEFT SIDE	RIGHT SIDE	BACK	FRONT	TOP	FLUE F	FLUE G
ROBF-067	21 [533]	19 1/2 [495]	46 [1168]	5 [127]	18 1/2 [470]	1 [25]	1 [25]	1 [25]	8 [203]	3 [76]	4 [102]	8 [203]
ROBF-112	24 1/2 [622]	23 [584]	46 [1168]	5 [127]	22 [559]	1 [25]	1 [25]	1 [25]	8 [203]	3 [76]	4 [102]	8 [203]
ROBF-150	28 [711]	26 1/2 [673]	49 [1245]	7 [178]	25 1/2 [648]	1 [25]	1 [25]	1 [25]	8 [203]	3 [76]	4 [102]	8 [203]

NOTE: A SOLID METAL BASE PLATE IS INCLUDED WITH EACH OIL FURNACE.

[ ] Designates Metric Conversions

ACCESSORIES

RXOP-D25 PARALLEL FURNACE KIT

For twinning two upflow oil furnaces.

PLENUM DATA

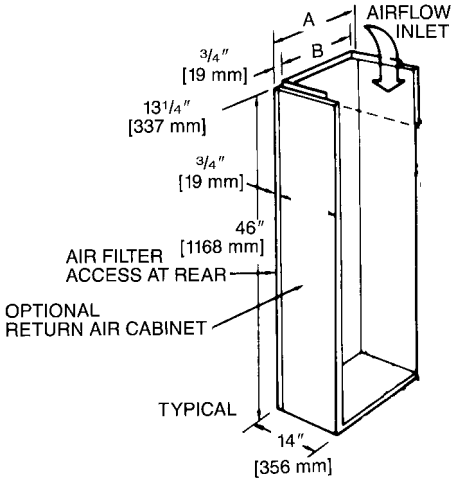
Plenum adapters are required in some instances for use on upflow applications when plenum and furnace size do not match.

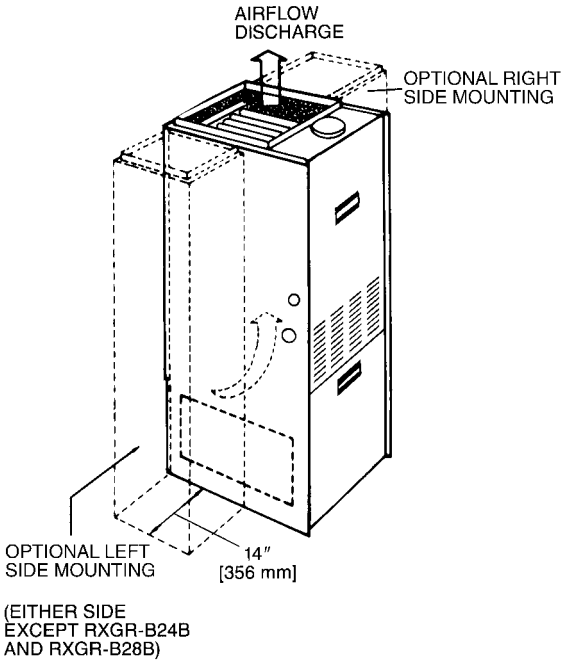
FURNACE WIDTH (IN.) [mm]	PLENUM WIDTH (IN.) [mm]	PLENUM ADAPTER UPFLOW	COIL PLENUM
21 [533]	21 [533]	—	RXBD
24 1/2 [622]	24 1/4 [616]	—	RXBD
28 [711]	24 1/2 [622]	RXBA-AE	RXBD

ACCESSORY RETURN AIR CABINETS

RETURN AIR CABINETS

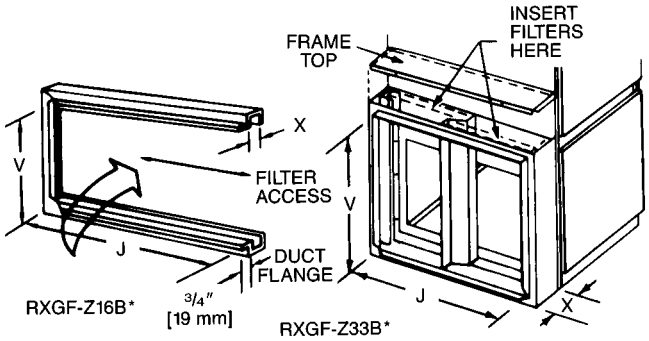
Return Air Cabinets may be installed on either side application except RXGR-B24B & RXGR-B28B. Side application must be on side opposite oil and electrical connections. 1800 CFM & over use side or bottom return only.





RETURN AIR CABINETS	A	B
RXGR-B21B	21 [533]	19 1/2 [495]
RXGR-B24B	24 1/2 [622]	23 [584]
RXGR-B28B	28 [711]	26 1/2 [673]

EXTERNAL SIDE FILTER FRAMES



EXTERNAL SIDE FILTER FRAMES	J	V	X
RXGF-Z16B	23 [584]	14 [356]	1 1/4 [32]
RXGF-Z33B	26 1/2 [673]	23 1/2 [597]	6 [152]

NOTE: J and V are plenum dimensions.
*Filters Supplied With Filter Frame

[ ] Designates Metric Conversions

ACCESSORIES (cont.)

SS1-R SIDEWALL VENT SYSTEM

This furnace is agency approved by CSA for use with the Tjernlund SS1-R Sidewall Vent System (date coded March 2006 or later) when installed in accordance with the installation instructions provided by Tjernlund. Common venting with another appliance is **NOT** an option when using the Tjernlund SS1-R. The use of any other type of power vent system is not approved or recommended by the manufacturer.

TWO-STAGE PUMP

For applications requiring extra lifts, two-stage fuel pumps are available from PROSTOCK®. The pump must have the clean-cut solenoid, or the primary control will lock out and the heat call will not function.

FOSSIL FUEL KITS

RXPF-FO1—Use for standard heat pump applications.

RXPF-FO2—Use for TVA (Tennesee Valley Authority) applications.

COIL SELECTION CHART

CASED COIL MODEL NUMBER	OIL FURNACE MODEL SIZE		
	-067	-112	-150
HEATING CAPACITY [BTU/H] [kW]	**56,000 [16.41 kW] 67,200 [19.69 kW]**	**84,000 [24.62 kW] 95,200 [27.90 kW] 112,000 [32.83 kW]**	**134,400 [39.38 kW] 151,200 [44.30 kW]**
RCFA-/RCFL-/RCBA-24**##21	X		
RCFA-/RCFL-/RCBA-36**##21	X		
RCFA-/RCFL-/RCBA-36**##24		X	
RCFA-/RCFL-/RCBA-48**##24		X	☐
RCFA-/RCFL-/RCBA-60**##24			☐
CABINET WIDTH IN. [mm]	21 [533]	24½ [622]	28 [711]

NOTES: ☐—Requires plenum adapter accessory RXBA-AE (upflow applications only).

[ ] Designates Metric Conversions

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.

RHEEM
AIR CONDITIONING
DIVISION

5600 Old Greenwood Road, Fort Smith, Arkansas 72908

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

PRINTED IN U.S.A. 12-06 DC

FORM NO. O11-612 REV. 2
Supersedes Form No. O11-612 Rev. 1