



90 HIGH EFFICIENCY UPFLOW GAS FURNACES



90RJ SERIES
Models with Input Rates
from 45,000 to 120,000 BTU/HR
[13.19 to 35.17 kW]
 (All Models 90% A.F.U.E.† or Above)

The WeatherKing® 90 High Efficiency line of upflow gas furnaces are designed for utility rooms, closets, or alcoves. **Because of the low-profile 34 inch height, the 90RJ model can be used vertically to satisfy most applications that traditionally call for a horizontal furnace.**

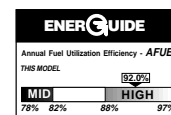
The design is certified by the CSA.

Features

- 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 accessory 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.
- Textured galvanized steel cabinet with painted access doors.
- Optional indoor or outdoor combustion air. In addition, combustion air may be piped to either the top or right side of the cabinet on all upflow models. A special molded fitting is provided to ease installation.
- Control board diagnostics.

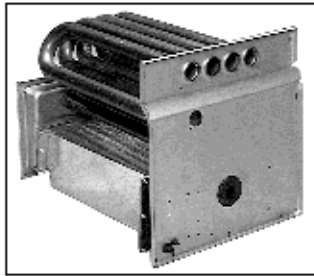
A variety of cooling coils and plenums designed to use with the WeatherKing 90 gas furnaces are available as optional accessories for air conditioning models.

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

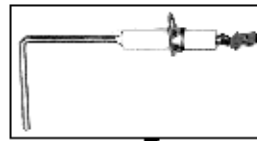




WEATHERKING 90 HIGH EFFICIENCY UPFLOW GAS FURNACE



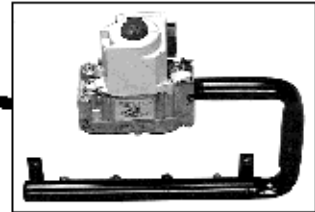
PRIMARY AND SECONDARY HEAT EXCHANGER



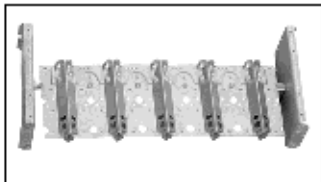
REMOTE SENSOR



HOT SURFACE IGNITOR



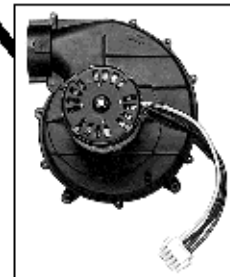
GAS VALVE AND MANIFOLD



IN-SHOT BURNERS



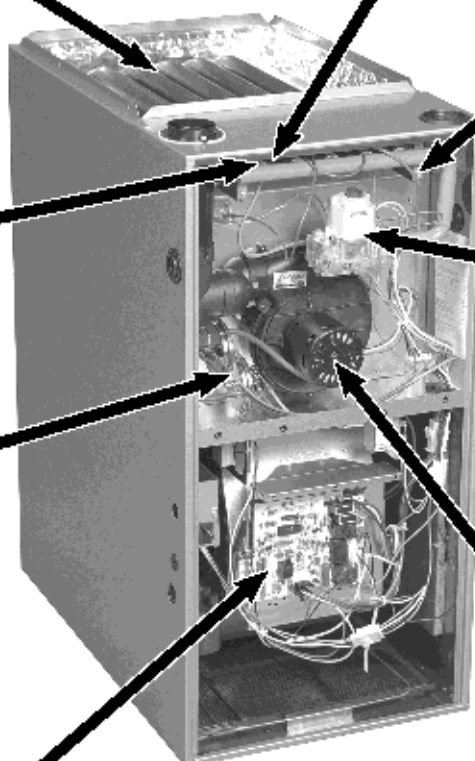
PRESSURE SWITCH



DRAFT INDUCER



INTEGRATED FURNACE CONTROL



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; flame sense current 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)

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

MODEL NUMBERS 90RJ SERIES	90RJ04EES01	90RJ06EES01	90RJ07EFS01	90RJ10EGS01	90RJ12EHS01
Input-BTU/Hr [kW] ①	45,000 [13.19]	60,000 [17.58]	75,000 [21.98]	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]	97,000 [28.43]	113,000 [33.12]
Blower (D x W) [mm]	11 x 7 [279 x 178]	11 x 7 [279 x 178]	12 x 7 [305 x 178]	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	3/4 [559] 3-PSC	3/4 [559] 3-PSC	3/4 [559] 3-PSC
Motor Full Load Amps	6.8	6.8	9.5	9.5	9.5
Heating Speed	Med-Low	Low	Low	Low	Low
Cooling Speed	High	High	High	High	High
Heat Ext. Static Pressure (In. W.C.) [kPa]	.10 [.025]	.12 [.029]	.12 [.029]	.20 [.049]	.20 [.049]
Rated Ext. Static Pressure (In. W.C.) [kPa]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]	.50 [.12]
Heating C.F.M. @ .2" [.049 kPa] W.C. E.S.P. [L/s]	885 [417]	845 [398]	1275 [600]	1445 [682]	1580 [745]
Cooling C.F.M. @ .5" [.124 kPa] W.C. E.S.P. [L/s]	1195 [564]	1100 [519]	1540 [725]	1810 [854]	1900 [897]
Temperature Rise Range °F [°C]	30-60 [16.7-33.3]	40-70 [22.2-38.9]	40-70 [22.2-38.9]	50-80 [27.8-44.4]	50-80 [27.8-44.4]
Approx. Shipping Weight (Lbs.) [kg]	111 [50.3]	117 [53.1]	123 [55.8]	152 [68.9]	160 [72.6]
AFUE ②	93.5%	92.5%	92.0%	92.0%	93.5%
California Seasonal Efficiency ②	84.68%	86.44%	85.16%	86.93%	87.57%

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.

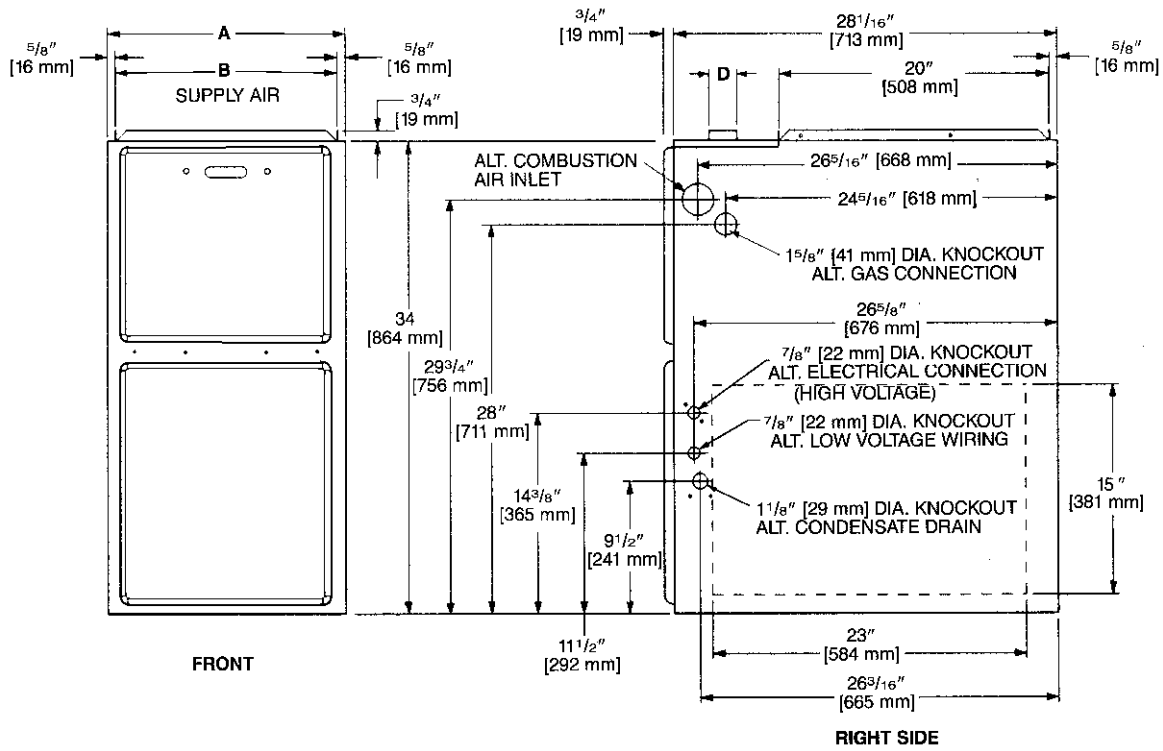
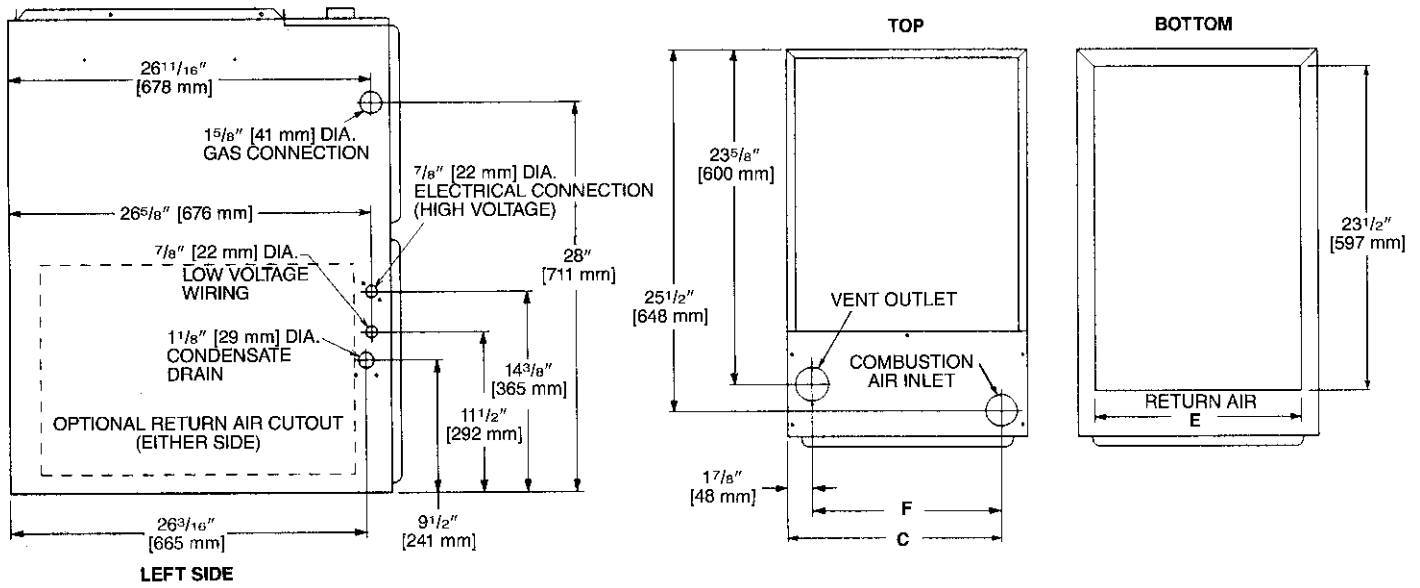
② In accordance with D.O.E. test procedures.

MODEL IDENTIFICATION

<u>90</u>	<u>RJ</u>	<u>04</u>	<u>E</u>	<u>E</u>	<u>S</u>	<u>01</u>
Efficiency 90 = 90 Plus	Model Designation	Heating Input BTU/HR [kW] 04 = 45,000 [13] 06 = 60,000 [18] 07 = 75,000 [22] 10 = 105,000 [31] 12 = 120,000 [35]	Ignition E = Electric Ignition	Variations Blower Designation [mm] Motor H.P. E = Standard Cabinet 11 x 6 [279 x 152] 1/2 H.P. – 4 Speed F = Standard Cabinet 11 x 6 [279 x 152] 3/4 H.P. – 3 Speed G = Standard Cabinet 11 x 6 [279 x 152] 3/4 H.P. – 3 Speed H = Standard Cabinet 11 x 6 [279 x 152] 3/4 H.P. – 3 Speed	Fuel Code S = 90 Plus Natural Gas	W E A T H E R K I N G

[] Designates Metric Conversions

UPFLOW MODELS



MODEL 90RJ	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]	$16\frac{5}{16}$ [414]	$15\frac{5}{8}$ [397]	2 [51]	15 [422]	$13\frac{13}{16}$ [351]	0	0	0	1 [25]	2 [51]	0	111 [50]
06	$17\frac{1}{2}$ [445]	$16\frac{5}{16}$ [414]	$15\frac{5}{8}$ [397]	2 [51]	15 [422]	$13\frac{13}{16}$ [351]	0	0	0	1 [25]	2 [51]	0	117 [53]
07	21 [533]	$19\frac{13}{16}$ [503]	$19\frac{1}{8}$ [487]	2 [51]	$18\frac{1}{2}$ [511]	$17\frac{5}{16}$ [440]	0	0	0	1 [25]	2 [51]	0	123 [56]
10	21 [533]	$19\frac{13}{16}$ [503]	$19\frac{1}{8}$ [487]	2 [51]	$18\frac{1}{2}$ [511]	$17\frac{5}{16}$ [440]	0	0	0	1 [25]	2 [51]	0	152 [69]
12	$24\frac{1}{2}$ [622]	$23\frac{5}{16}$ [592]	$22\frac{5}{8}$ [575]	2 [51]	22 [600]	$20\frac{13}{16}$ [529]	0	0	0	1 [25]	2 [51]	0	160 [73]

[] Designates Metric Conversions

BLOWER PERFORMANCE DATA—90RJ MODELS

MODEL NUMBER 90RJ SERIES	BLOWER SIZE [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]
				04EES01	11 x 7 [279 x 178]	1/2 [373]	LOW MED-LO MED-HI HIGH	805 [380] 920 [434] 1140 [538] 1360 [642]	780 [368] 885 [417] 1110 [524] 1320 [623]	760 [358] 850 [401] 1085 [512] 1280 [604]
06EES01	11 x 7 [279 x 178]	1/2 [373]	LOW MED HIGH	880 [415] 1060 [500] 1260 [594]	845 [398] 1025 [483] 1215 [573]	815 [384] 990 [467] 1175 [554]	790 [373] 960 [453] 1135 [535]	760 [358] 925 [436] 1100 [519]	715 [337] 880 [415] 1040 [491]	670 [316] 835 [394] 985 [465]
07EFS01	12 x 7 [305 x 178]	3/4 [559]	LOW MED HIGH	1405 [668] 1595 [753] 1835 [866]	1375 [649] 1560 [736] 1780 [840]	1350 [637] 1525 [720] 1730 [816]	1310 [618] 1480 [698] 1675 [791]	1270 [599] 1440 [679] 1625 [767]	1235 [583] 1380 [651] 1555 [734]	1195 [564] 1325 [625] 1480 [698]
10EGS01	12 x 11 [305 x 279]	3/4 [559]	LOW MED HIGH	1490 [703] 1710 [807] 2010 [949]	1445 [682] 1665 [786] 1955 [923]	1405 [663] 1620 [764] 1900 [897]	1375 [649] 1580 [746] 1855 [875]	1350 [637] 1540 [727] 1810 [854]	1295 [611] 1475 [696] 1710 [807]	1240 [585] 1410 [665] 1610 [859]
12EHS01	11 x 10 [279 x 245]	3/4 [559]	LOW MED HIGH	1610 [760] 1870 [882] 2115 [998]	1580 [746] 1820 [860] 2050 [967]	1555 [734] 1775 [838] 1990 [939]	1515 [715] 1715 [809] 1945 [917]	1475 [696] 1660 [783] 1900 [897]	1415 [668] 1590 [750] 1795 [847]	1355 [639] 1520 [717] 1690 [795]

[] Designates Metric Conversions

GENERAL TERMS OF LIMITED WARRANTY

WeatherKing 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.

Primary and Secondary Heat Exchanger Twenty (20) Years
Any Other Part Five (5) Years

For Complete Details of the Limited Warranty, Including Applicable Terms and Conditions, See Your Local Installer or visit www.weatherking.com.

ACCESSORIES—UPFLOW

VENT TERMINATION KITS

CONCENTRIC: Vertical/Horizontal = RXGY-E03

HORIZONTAL TWO PIPE: RXGY-D02, RXGY-D03, RXGY-D04

FOSSIL FUEL KIT: RXPf-F01

RXPf-F02 (TVA)

***HIGH ALTITUDE KIT:** RXGY-F04 (105 MBH)
RXGY-F05 (120 MBH)
RXGY-F06 (45 MBH/60 MBH)
RXGY-F07 (75 MBH)

*For installations over 5000 ft.

Includes orifices required on furnaces 8,001 ft. and above.

RXGP-F03

TWINNING KIT—is for use with WeatherKing 90 Gas Furnaces for parallel operation requirements.

WARNING: IMPORTANT NOTICE

A SOLID METAL BASE PLATE (SEE TABLE) MUST BE IN PLACE WHEN THE FURNACE IS INSTALLED WITH SIDE OR REAR AIR RETURN DUCTS. FAILURE TO INSTALL A BASE PLATE COULD CAUSE PRODUCTS OF COMBUSTION TO BE CIRCULATED INTO THE LIVING SPACE AND CREATE POTENTIALLY HAZARDOUS CONDITIONS.

FURNACE WIDTH IN. [mm]	SOLID BOTTOM KIT NO.	BASE PLATE NO.	BASE PLATE SIZE IN. [mm]
17 ¹ / ₂ [445]	RXGB-D17	AE-61874-02	15 ¹ / ₈ x 23 ⁹ / ₁₆ [384 x 598]
21 [533]	RXGB-D21	AE-61874-03	18 ⁵ / ₈ x 23 ⁹ / ₁₆ [473 x 598]
24 ¹ / ₂ [622]	RXGB-D24	AE-61874-04	25 ⁵ / ₈ x 23 ⁹ / ₁₆ [651 x 598]

[] Designates Metric Conversions

NOTES

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.

WEATHERKING L.L.C.

5600 Old Greenwood Road, Fort Smith, Arkansas 72908



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