



80 PLUS A.F.U.E.† UPFLOW/HORIZONTAL GAS FURNACES

Features

- The WeatherKing® line of upflow/horizontal gas furnaces are designed for utility rooms, closets, alcoves or attics.
- Textured galvanized steel cabinet with painted access doors.
- The design is certified by the CSA.
- Patented heat exchanger, constructed of both stainless and aluminized steel for the maximum in corrosion resistance.
- Low profile "34 inch" design is light and easy to handle, and leaves room for optional equipment.
- Convertible from upflow to horizontal left or right without field conversion.
- Left or right side gas and electric inlet connections with quick, simple change.
- Features hot surface ignition equipped with remote sense, and an integrated board with electronic air cleaner hookups.
- A slow-open gas valve and a specially designed draft inducer motor.
- Grab-holes in doors to aid in easy door removal and replacement.

A variety of cooling coils and plenums designed to use with WeatherKing gas furnaces are available as optional accessories.

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

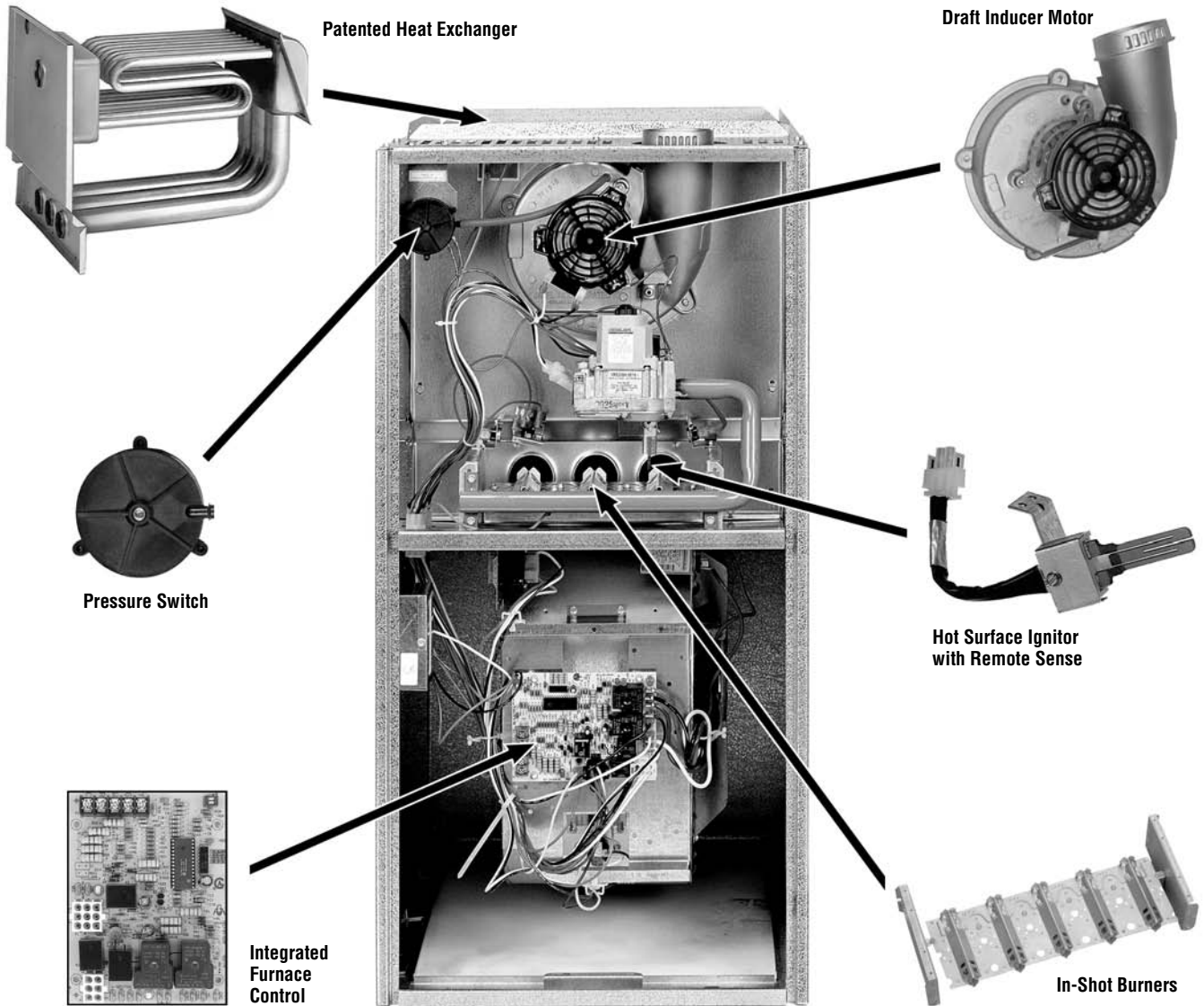


80PJ SERIES
Models with Input Rates from
50,000 to 150,000 BTU/HR
[15 to 44 kW]





WEATHERKING 80 PLUS UPFLOW GAS FURNACE



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.) Control diagnostics.

OPTIONAL EQUIPMENT

Twinning Kit Fossil Fuel Kit

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 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.

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

MODEL NUMBERS 80PJ- SERIES	80PJ05EAR01 80PJ05NAR01	80PJ07EAR01 80PJ07NAR01	80PJ07EBR01 80PJ07NBR01	80PJ10ECR01	80PJ10EDR01 80PJ10NDR01	80PJ12EDR01 80PJ12NDR01	80PJ15EDR01 80PJ15NDR01
Input-BTU/Hr [kW] ②	50,000 [15]	75,000 [22]	75,000 [22]	100,000 [29]	100,000 [29]	125,000 [37]	150,000 [44]
Heating Capacity BTU/Hr [kW] ①	41,000 [12]	60,000 [18]	60,000 [18]	80,000 [23]	80,000 [23]	99,000 [29]	119,000 [35]
Heat Ext. Static Pressure [kPa]	.10 [.025]	.12 [.029]	.12 [.029]	.15 [.037]	.15 [.037]	.20 [.05]	.20 [.05]
High Altitude Input [kW]	45,000 [13]	67,500 [20]	67,500 [20]	90,000 [26]	90,000 [26]	112,500 [33]	135,000 [40]
High Altitude Output Capacity [kW]	36,500 [11]	53,500 [16]	54,000 [16]	72,000 [21]	72,000 [21]	89,000 [26]	107,500 [31.5]
Blower (D x W) [mm]	11 x 6 [279 x 152]	11 x 6 [279 x 152]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Motor H.P.—Speed— PSC Type [W]	1/2-4-PSC [373]	1/2-3-PSC [373]	1/2-3-PSC [373]	1/2-3-PSC [373]	3/4-3-PSC [560]	3/4-3-PSC [560]	3/4-3-PSC [560]
Motor Full Load Amps	6.8	5.8	7.9	7.9	9.5	9.5	9.5
Heating Speed	Med-Low	Med	Med	Med	Low	Low	Low
Cooling Speed	High	High	High	High	Med	Med	Med
Cooling CFM @ .5" E.S.P. (Nominal) [L/s]	1200 [566]	1200 [566]	1600 [755]	1845 [871]	2060 [922]	2115 [998]	2080 [982]
Max. E.S.P. (In. W.C.) [kPa]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]	0.5 [.12]
Temperature Rise Range °F [°C]	25-55 [13.9-30.6]	40-70 [22.2-38.9]	25-55 [13.9-30.6]	40-70 [22.2-38.9]	40-70 [22.2-38.9]	35-65 [19.4-36.1]	50-80 [27.8-44.4]
Max. Outlet Air Temp. °F [°C]	155 [68.3]	165 [73.8]	155 [68.3]	170 [76.6]	170 [76.6]	180 [82.2]	190 [87.7]
Approx. Shipping Weight (Lbs.) [kg]	85 [39]	105 [48]	105 [48]	120 [54]	120 [54]	140 [63]	150 [68]
Standard Filter (In.) [mm]	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	19 ¹ / ₄ x 25 [489 x 635]	19 ¹ / ₄ x 25 [489 x 635]	22 ³ / ₄ x 25 [578 x 635]	22 ³ / ₄ x 25 [578 x 635]
Return Air Cabinets (Opt.) RXGR- Filter Size [mm]	C14B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C17B (2) 12 x 16 [305 x 406]	C21B (2) 20 x 16 [508 x 406]	C21B (2) 20 x 16 [508 x 406]	C24B (2) 24 x 16 [610 x 406]	C24B (2) 24 x 16 [610 x 406]
AFUE—H.S.I. Models ①	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
California Seasonal Efficiency— H.S.I./No _x Models ①	74.9/75.4	74.9/75.4	74.7/75.3	73.9/74.5	73.9/74.5	74.2/74.2	74.7/74.7

NOTES: All models are 115V, 60HZ, 1 Ph. Gas connection size for all models is 1/2" [12 mm] N.P.T.

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

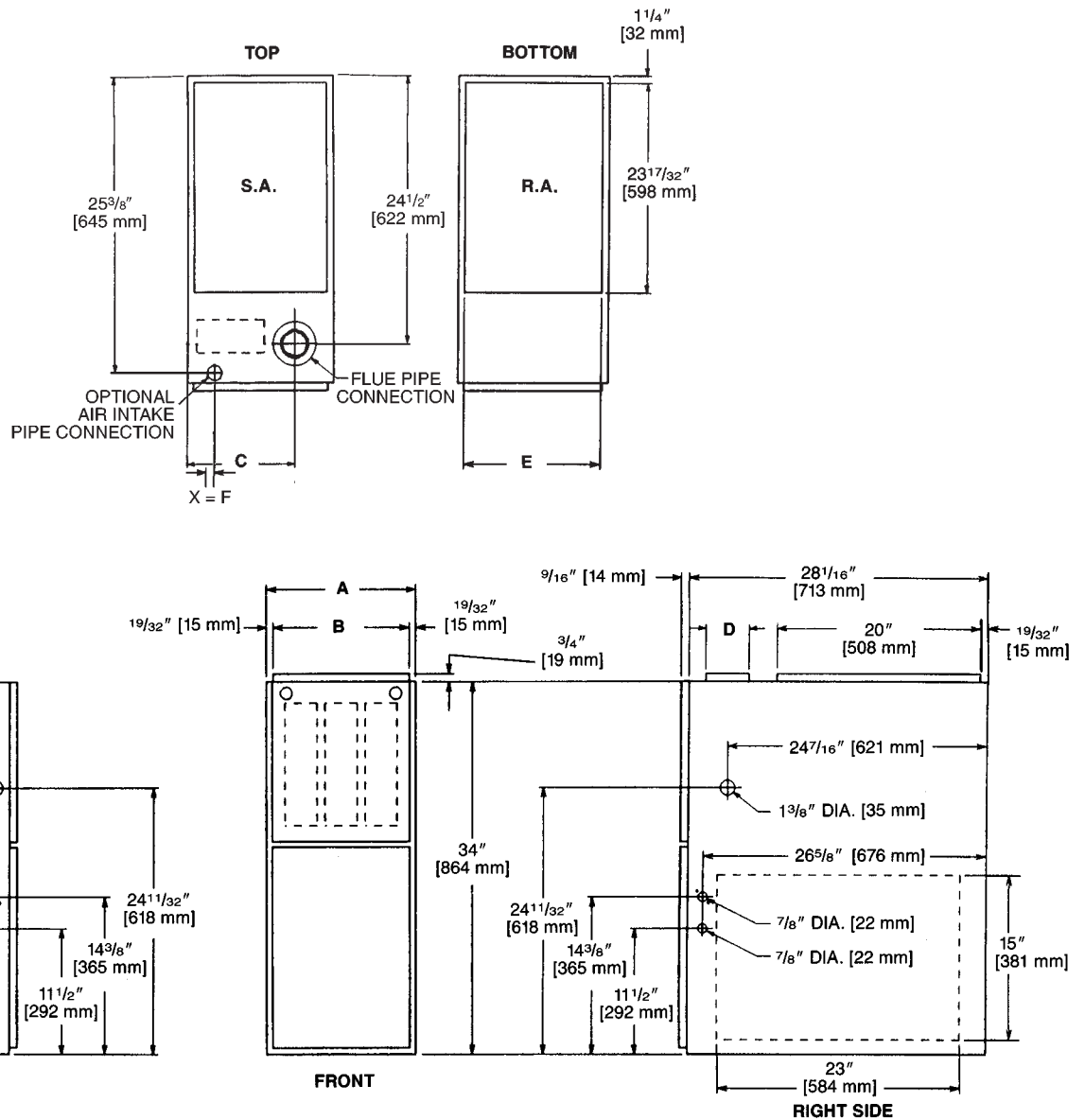
② See Conversion Kit Index Form for high altitude derate.

MODEL IDENTIFICATION—UPFLOW/HORIZONTAL MODELS

<u>80</u>	<u>PJ</u>	<u>05</u>	—	<u>E</u>	<u>A</u>	<u>R</u>	<u>01</u>
Efficiency 80 = 80 Plus	Model Designation	Heating Input BTU/HR [kW] 05 = 50,000 [15] 07 = 75,000 [22] 10 = 100,000 [29] 12 = 125,000 [37] 15 = 150,000 [44]		Ignition E = Electric Ignition N = Electric Ignition NOx	Variations Blower Designation [mm] Motor H.P. A = Standard Cabinet 11 x 6 [279 x 152] 1/2 H.P. – 4 Speed B = Standard Cabinet 11 x 7 [279 x 178] 1/2 H.P. – 3 Speed C = Standard Cabinet 11 x 10 [279 x 254] 1/2 H.P. – 3 Speed D = Standard Cabinet 11 x 10 [279 x 254] 3/4 H.P. – 3 Speed	Fuel Code R = 80 Plus Natural Gas	W E A T H E R K I N G

[] Designates Metric Conversions

UPFLOW DIMENSIONS



DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES) [mm]

MODEL 80PJ	A	B	C	D	E	REDUCED CLEARANCE (IN.) [mm]					SHIP. WGT. (LBS.) [Kg]	
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT		VENT
05	14 [356]	$12\frac{27}{32}$ [326]	$10\frac{3}{8}$ [263]	①	$11\frac{1}{2}$ [292]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③	85 [38.6]
07	$17\frac{1}{2}$ [445]	$16\frac{11}{32}$ [415]	$12\frac{1}{8}$ [308]	①	15 [381]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
10	21 [533]	$19\frac{27}{32}$ [504]	$13\frac{7}{8}$ [352]	①	$18\frac{1}{2}$ [470]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	$24\frac{1}{2}$ [622]	$23\frac{11}{32}$ [593]	$15\frac{5}{8}$ [397]	①	22 [559]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]
15	$24\frac{1}{2}$ [622]	$23\frac{11}{32}$ [593]	$15\frac{5}{8}$ [397]	①	22 [559]	0	0	0	1 [25]	3 [76]	6 [152] ③	150 [68]

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.

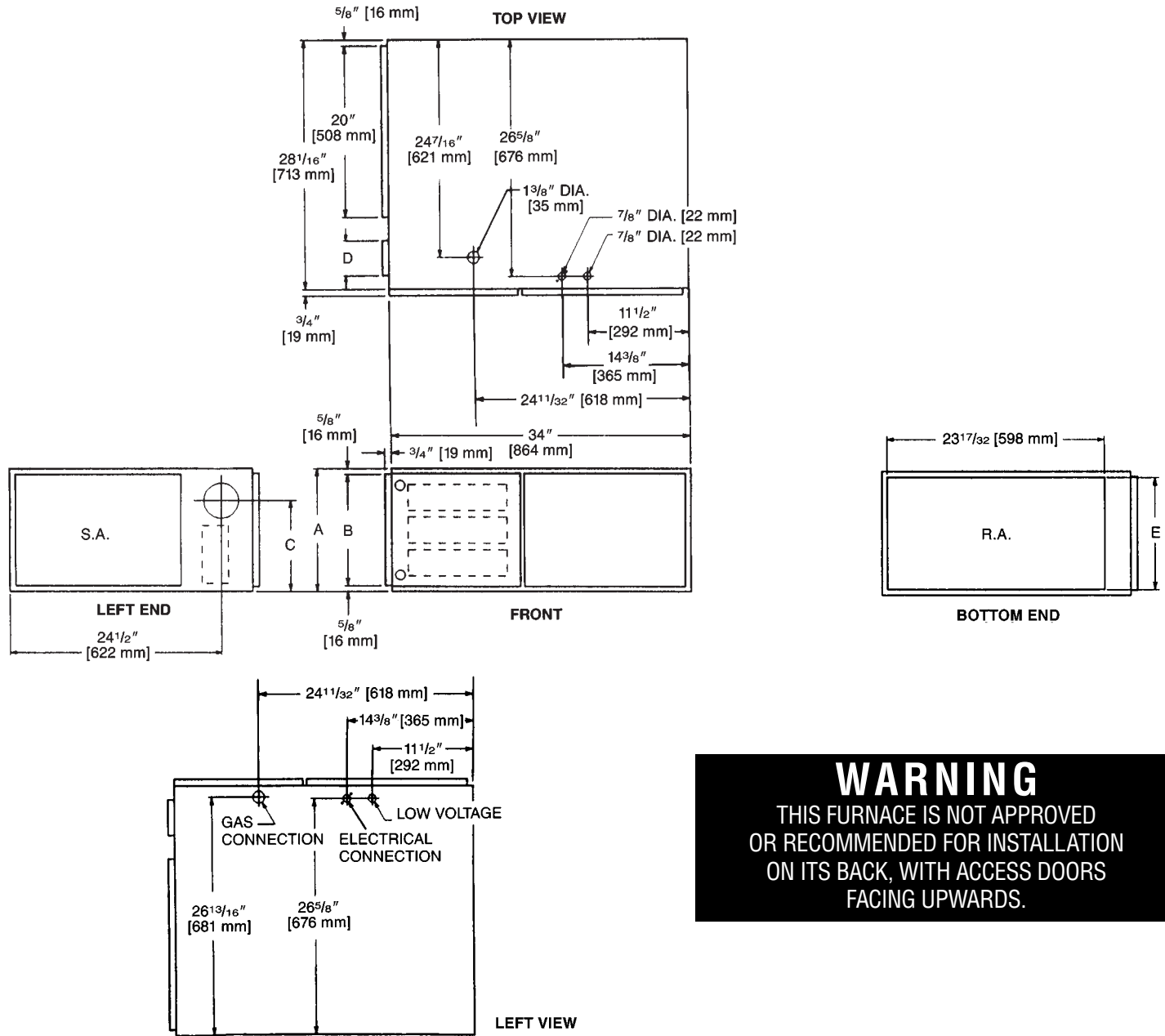
② May be 0" [0 mm] with type B vent.

③ May be 1" [25 mm] with type B vent.

Furnaces must be vented in accordance with ANSI Z21.47-latest edition venting table guidelines and in accordance with local codes.

[] Designates Metric Conversions

HORIZONTAL DIMENSIONS



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

DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES) [mm]

MODEL 80PJ	A	B	C	D	E	REDUCED CLEARANCE (IN.) [mm]						SHIP. WGTS. (LBS.) [Kg]
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	
05	14 [356]	12 ²⁷ / ₃₂ [326]	10 ³ / ₈ [263]	Ⓢ	11 ¹ / ₂ [292]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③	85 [38.6]
07	17 ¹ / ₂ [445]	16 ¹¹ / ₃₂ [415]	12 ¹ / ₈ [308]	Ⓢ	15 [381]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	105 [47.6]
10	21 [533]	19 ²⁷ / ₃₂ [504]	13 ⁷ / ₈ [352]	Ⓢ	18 ¹ / ₂ [470]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	24 ¹ / ₂ [622]	23 ¹¹ / ₃₂ [593]	15 ⁵ / ₈ [397]	Ⓢ	22 [559]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [63.5]
15	24 ¹ / ₂ [622]	23 ¹¹ / ₃₂ [593]	15 ⁵ / ₈ [397]	Ⓢ	22 [559]	0	0	0	1 [25]	3 [76]	6 [152] ③	150 [68]

NOTES: ① May require a 3" [76 mm] to 4" [102 mm] or 3" [76 mm] to 5" [127 mm] adapter.

② May be 0" [0 mm] with type B vent.

③ May be 1" [25 mm] with type B vent.

Furnaces must be vented in accordance with ANSI Z21.47-latest edition venting table guidelines and in accordance with local codes.

[] Designates Metric Conversions

ACCESSORIES—UPFLOW/HORIZONTAL

RXPF-F01 and F02

FOSSIL FUEL KIT—is for use with WeatherKing Heat Pumps and warm air furnaces. RXPF-F02 meets TVA requirements.

RXGP-F03

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

FOR HIGH ALTITUDES:

OPTION CODE FOR HIGH ALTITUDE: US & Canada – None required for these models.

HIGH ALTITUDE CONVERSION KITS: US & Canada – None required for these models.

CAUTION: Always follow National Fuel Gas Code (NFGC) guidelines when converting for high altitudes.

High altitude option codes are not required for these models. However, the burner orifice size needs to be recalculated and verified at elevations above 2000 ft. 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.

[] Designates Metric Conversions

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]
14 [356]	RXGB-D14	AE-61874-01	11 ⁵ / ₈ x 23 ⁹ / ₁₆ [295 x 598]
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]

GENERAL TERMS OF LIMITED WARRANTY

ICECOSM 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 Warranty, Including Applicable Terms and Conditions, See Your Local Installer or visit www.ICECOhvac.com.

Gas Heat Exchanger Limited WarrantyTwenty (20) Years
Any Other PartFive (5) Years

BLOWER PERFORMANCE DATA—UPFLOW MODELS

MODEL NUMBER 80PJ SERIES	BLOWER SIZE [mm]	MOTOR H.P. [W]	BLOWER SPEED	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES [kPa] WATER COLUMN						
				.1 [.02]	.2 [.05]	.3 [.07]	.4 [.10]	.5 [.12]	.6 [.15]	.7 [.17]
80PJ05EAR01 80PJ05NAR01	11 x 6 [279 x 152]	1/2 [373]	LOW	675 [319]	655 [309]	635 [300]	610 [288]	585 [276]	555 [262]	520 [245]
			MED-LO	950 [448]	930 [439]	905 [427]	880 [415]	860 [406]	830 [392]	800 [380]
			MED-HI HIGH	1115 [526] 1270 [599]	1090 [514] 1250 [590]	1070 [505] 1225 [578]	1040 [491] 1200 [566]	1015 [479] 1165 [550]	985 [465] 1130 [533]	945 [446] 1085 [512]
80PJ07EAR01 80PJ07NAR01	11 x 6 [279 x 152]	1/2 [373]	LOW	970 [458]	955 [451]	940 [444]	910 [429]	880 [415]	845 [399]	805 [380]
			MED	1110 [524]	1090 [514]	1070 [505]	1040 [491]	1010 [477]	975 [460]	935 [441]
			HIGH	1265 [597]	1240 [585]	1210 [571]	1175 [555]	1140 [538]	1100 [519]	1055 [498]
80PJ07EBR01 80PJ07NBR01	11 x 7 [279 x 178]	1/2 [373]	LOW	1245 [588]	1220 [576]	1195 [564]	1165 [550]	1135 [536]	1105 [522]	1065 [503]
			MED	1555 [734]	1515 [715]	1475 [696]	1435 [677]	1395 [658]	1350 [637]	1300 [614]
			HIGH	1810 [854]	1755 [828]	1705 [805]	1645 [776]	1585 [748]	1530 [722]	1470 [694]
80PJ10ECR01	11 x 10 [279 x 254]	1/2 [373]	LOW	1295 [611]	1275 [602]	1250 [590]	1225 [578]	1195 [564]	1165 [550]	1135 [536]
			MED	1645 [776]	1615 [762]	1580 [746]	1550 [732]	1510 [713]	1465 [691]	1425 [673]
			HIGH	2045 [965]	2000 [944]	1955 [923]	1905 [899]	1845 [871]	1785 [842]	1720 [812]
80PJ10EDR01 80PJ10NDR01	11 x 10 [279 x 254]	3/4 [559]	LOW	1645 [776]	1615 [762]	1580 [746]	1550 [732]	1510 [713]	1465 [691]	1425 [673]
			MED	2045 [965]	2000 [944]	1955 [923]	1905 [899]	1845 [871]	1785 [842]	1720 [812]
			HIGH	2320 [1095]	2260 [1067]	2200 [1038]	2130 [1005]	2060 [972]	1985 [937]	1910 [901]
80PJ12EDR01 80PJ12NDR01	11 x 10 [279 x 254]	3/4 [559]	LOW	1645 [776]	1635 [772]	1615 [762]	1590 [750]	1560 [736]	1520 [717]	1470 [694]
			MED	2050 [967]	2015 [951]	1980 [934]	1935 [913]	1885 [890]	1835 [866]	1775 [838]
			HIGH	2365 [1116]	2310 [1090]	2250 [1062]	2185 [1031]	2115 [998]	2035 [960]	1950 [920]
80PJ15EDR01 80PJ15NDR01	11 x 10 [279 x 254]	3/4 [559]	LOW	1620 [765]	1595 [753]	1570 [741]	1545 [729]	1515 [715]	1480 [698]	1440 [680]
			MED	2010 [949]	1985 [937]	1960 [925]	1915 [904]	1850 [873]	1800 [850]	1730 [816]
			HIGH	2340 [1104]	2275 [1074]	2215 [1045]	2145 [1012]	2080 [982]	2010 [949]	1940 [916]

[] 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.



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