



The new degree of comfort.™

## Rheem *Classic Plus*™ Series Upflow/Horizontal Gas Furnace

### R801T- Upflow/Horizontal Series

80% A.F.U.E.†

Input Rates 50-125 kBTU



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

- 80% residential Gas Furnace CSA certified
- 3 way multi poise design UF / HZ
- PlusOne™ Diagnostics – 7 Segment LED all units
- PlusOne™ Ignition System – DSI for reliability and longevity
- Heat exchanger is removable for improved serviceability. Aluminized steel construction provides maximum corrosion resistance and thermal fatigue reliability.
- Solid doors provide quiet operation
- Solid bottom
- Insulated blower compartment
- Low profile 34" cabinet ideal for space constrained installations
- Blower shelf design – serviceable in all furnace orientations
- Hemmed edges on cabinets and doors
- 1/4 turn door knobs for tool less access
- Integrated Control board features dip switches for easy system set up
- QR code for quick access to product information from your smart phone or tablet
- Constant Torque electrically commutated motor

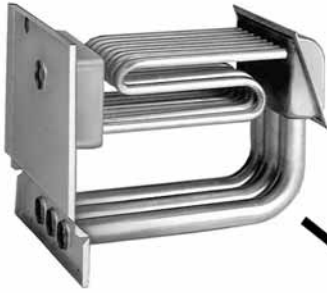


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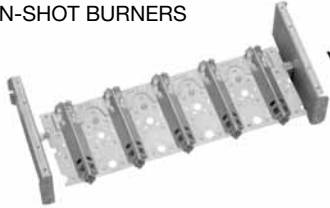
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PATENTED HEAT EXCHANGER



IN-SHOT BURNERS



DRAFT INDUCER MOTOR



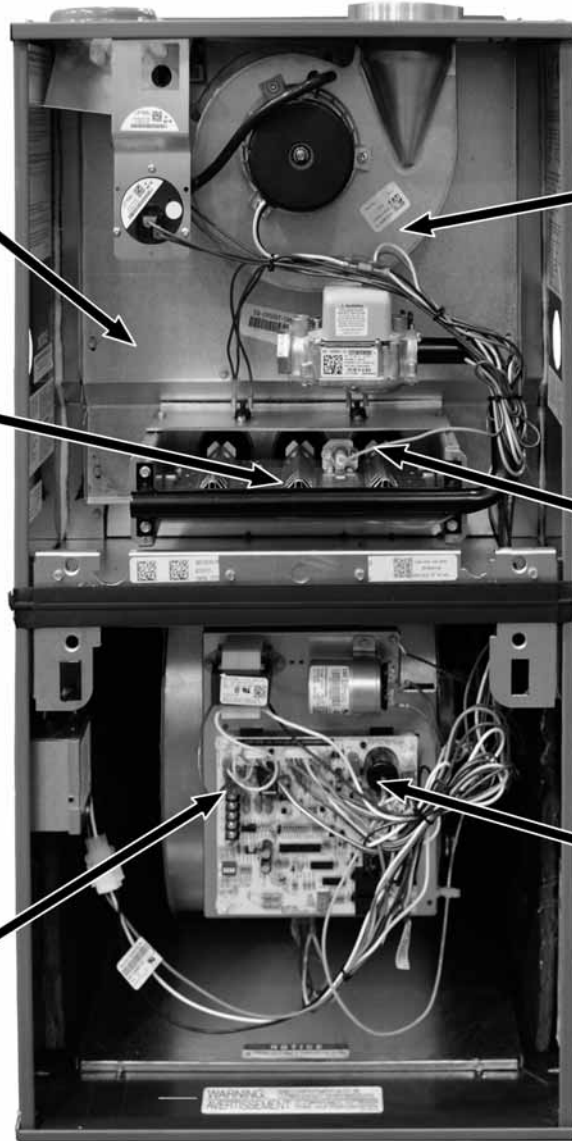
DIRECT SPARK IGNITOR



CONSTANT TORQUE MOTOR



INTEGRATED  
FURNACE  
CONTROL



## 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.) Flame sensor diagnostics.

## OPTIONAL EQUIPMENT

Side and bottom filter frame assembly. Return air cabinet for all sizes.  
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.

NOTE: For natural and L.P. (propane) gas models, direct spark ignition is 100% safety lockout type.

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



## Model Features

- 80% residential Gas Furnace CSA certified
- 3 way multi poise design UF / HZ
- PlusOne™ Diagnostics – 7 Segment LED all units
- PlusOne™ Ignition System – DSI for reliability and longevity
- Heat exchanger is removable for improved serviceability. Aluminized steel construction provides maximum corrosion resistance and thermal fatigue reliability.
- Solid doors provide quiet operation
- Solid bottom
- Insulated blower compartment
- Low profile 34" cabinet ideal for space constrained installations
- Blower shelf design serviceable in all furnace orientations
- Hemmed edges on cabinets and doors
- 1/4 turn door knobs for tool less access
- Integrated Controls board features dip switches for easy system set up
- QR code for quick access to product information from your smart phone or tablet
- Constant Torque electrically commutated motor

## Physical Data and Specifications

MODEL NUMBERS R801T SERIES	R801TA050314M*A	R801TA075417M*A	R801TA100521M*A	R801TA125524M*A
Input-BTU/Hr [kW] ②	50,000 [15]	75,000 [22]	100,000 [29]	125,000 [37]
Heating Capacity BTU/Hr [kW] ①	40,000 [12]	60,000 [18]	80,000 [23]	100,000 [29]
Heat Ext. Static Pressure [kPa]	.10 [.025]	.12 [.029]	.15 [.037]	.20 [.05]
Blower (D x W) [mm]	11 x 6 [279 x 152]	11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Motor H.P.–Speed–PSC Type [W]	1/2-5 Spd Constant Torque [373]	1/2-5 Spd Constant Torque [373]	3/4-5 Spd Constant Torque [560]	3/4-5 Spd Constant Torque [560]
Motor Full Load Amps	6.2	6.2	8.1	8.1
Heating Speed	Med-Low	Med	Med-Low	Med
Cooling Speed	High	High	High	High
Cooling CFM @ Rating Point [L/s]	1300 [613]	1450 [684]	1850 [873]	1950 [920]
Max. E.S.P. (In. W.C.) [kPa]	0.9 [.22]	0.9 [.22]	0.9 [.22]	0.9 [.22]
Temperature Rise Range °F [°C]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	35-65 [19.4-36.1]	35-65 [19.4-36.1]
Max. Outlet Air Temp. °F [°C]	155 [68.3]	155 [68.3]	180 [82.2]	165 [73.8]
Approx. Shipping Weight (Lbs.) [kg]	110 [50]	125 [57]	140 [64]	150 [68]
AFUE ①	80.0%	80.0%	80.0%	80.0%

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.

\* S = Standard, X = Low Nox

[ ] Designates Metric Conversions





Air

## Model Number Identification

<u>R</u>	<u>80</u>	<u>1</u>	<u>T</u>	<u>A</u>	<u>075</u>	<u>4</u>	<u>17</u>	<u>M</u>	<u>S</u>	<u>A</u>
Rheem	80 = 80% AFUE	1 = Single Stage	T = Constant Torque	Design Series A = 1st Design	Input BTU/HR [kW] 050 = 50,000 [15] 075 = 75,000 [22] 100 = 100,000 [29] 125 = 125,000 [37]	3 = Up to 3 Ton 4 = 2 <sup>1</sup> / <sub>2</sub> to 4 Ton 5 = 3 <sup>1</sup> / <sub>2</sub> to 5 Ton	Cabinet Width 14 = 14" 17 = 17.5" 21 = 21" 24 = 24.5"	M = Multi	X = Low NO <sub>x</sub> S = Standard	Revision- Marketing (A – First Time Release)

[ ] Designates Metric Conversions

## Upflow Application

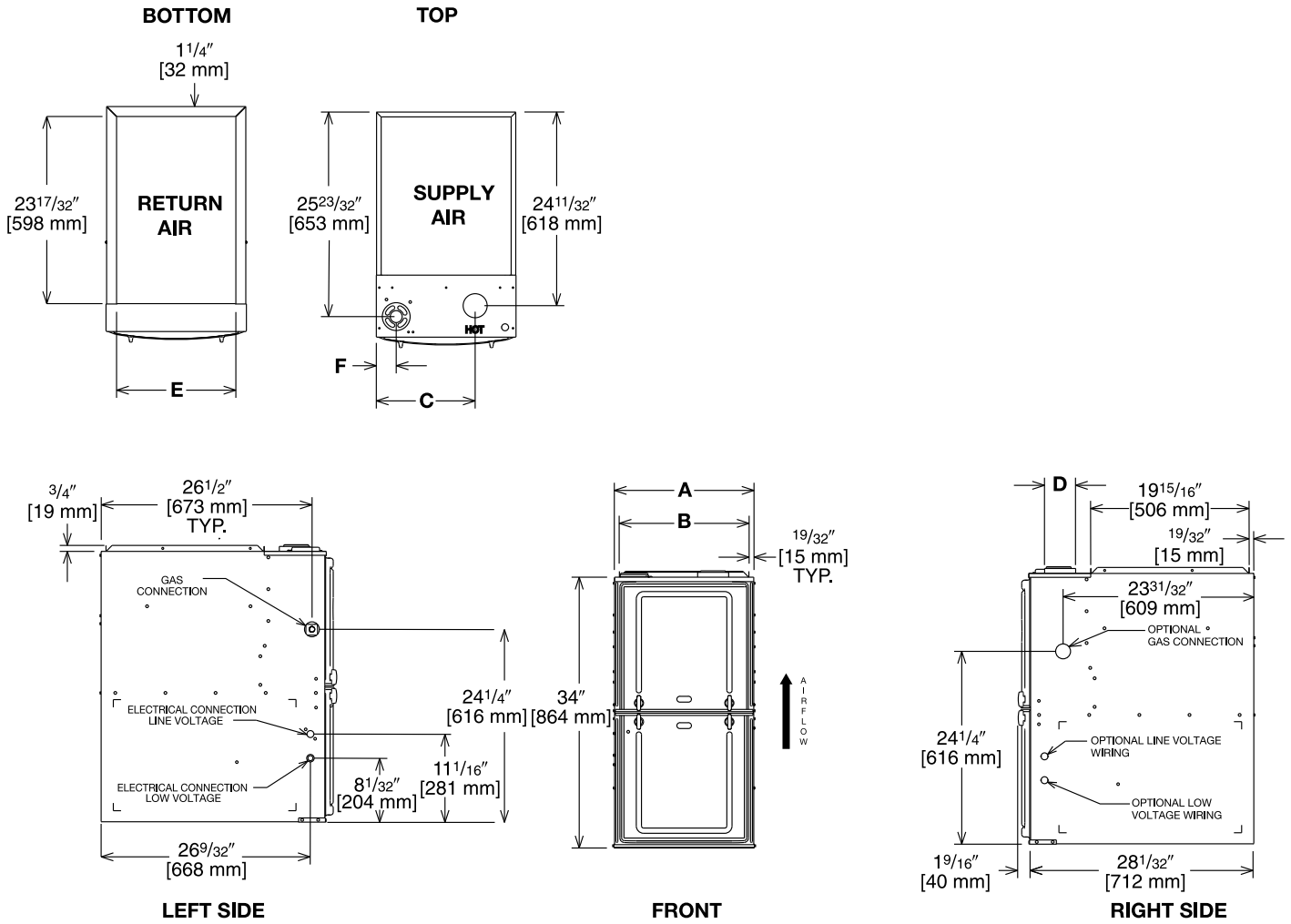


Illustration  
ST-A1220-04-00  
FIGURE 1

## Dimensional Data: Upflow Model

MODEL R801T-	A	B	C	D	E	F	REDUCED CLEARANCE (IN.) [mm]						SHIP WGT. (LBS.) [kg]
							LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	
050	14 [356]	12 27/32 [326]	10 5/8 [270]	①	11 1/2 [292]	1 7/8 [48]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③	110 [50]
075	17 1/2 [445]	16 11/32 [415]	12 3/8 [314]	①	15 [381]	2 1/2 [64]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	125 [57]
100	21 [533]	19 27/32 [504]	14 1/8 [359]	①	18 1/2 [470]	2 1/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [64]
125	24 1/2 [622]	23 11/32 [593]	15 7/8 [403]	①	22 [559]	2 1/2 [64]	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.

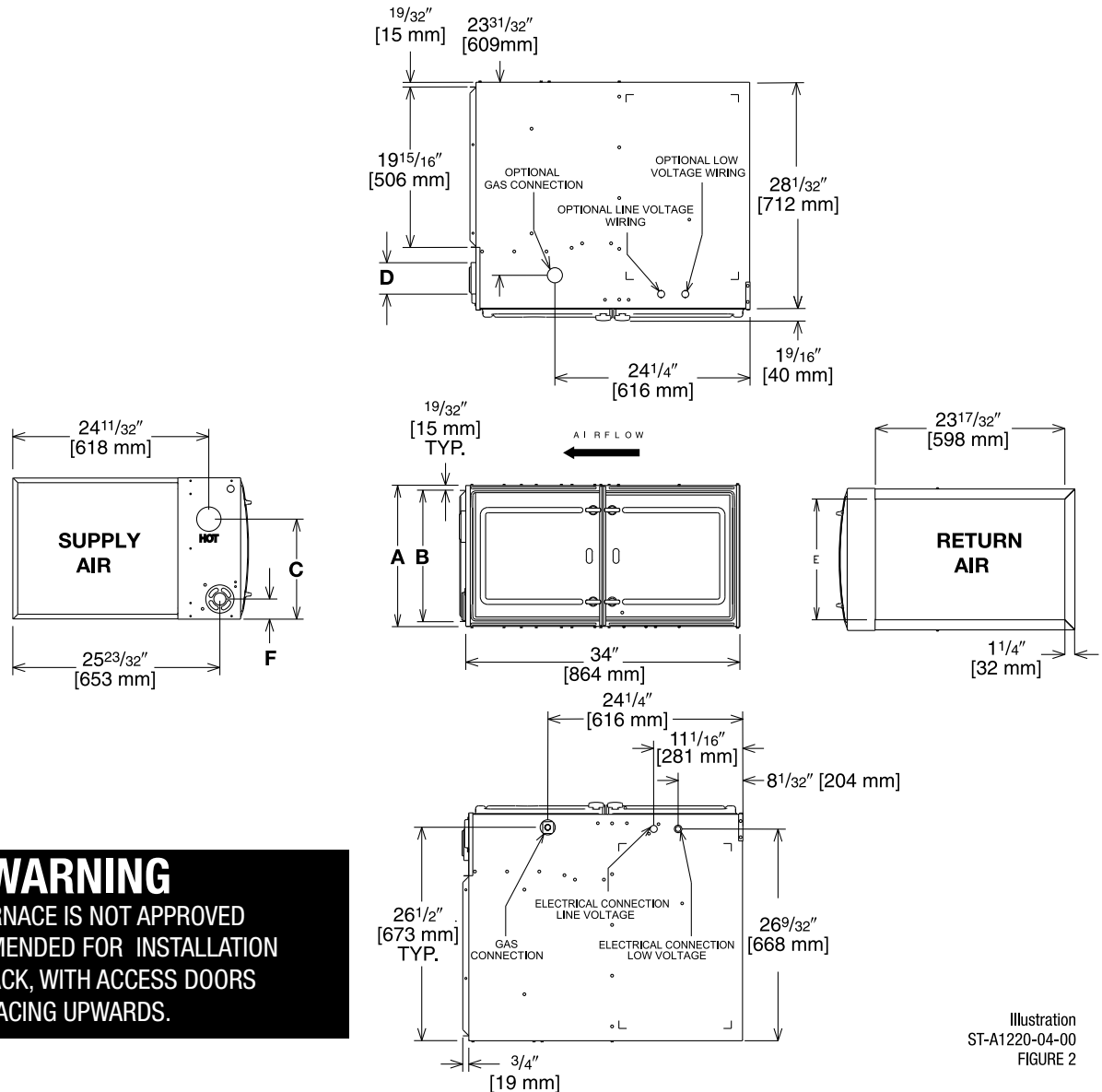
② May be 0" [0 mm] with type B vent.

③ May be 1" [25 mm] with type B vent.

Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and in accordance with local codes.

[ ] Designates Metric Conversions

## Horizontal Application



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

Illustration  
ST-A1220-04-00  
FIGURE 2

## Dimensional Data: Horizontal Model

MODEL R801T-	A	B	C	D	E	F	REDUCED CLEARANCE (IN.) [mm]						SHIP WGTS. (LBS.) [kg]
							LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	
050	14 [356]	12 27/32 [326]	10 5/8 [270]	①	11 1/2 [292]	1 7/8 [48]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③	110 [50]
075	17 1/2 [445]	16 11/32 [415]	12 3/8 [314]	①	15 [381]	2 1/2 [64]	0	3 [76] ②	0	1 [25]	3 [76]	6 [152] ③	125 [57]
100	21 [533]	19 27/32 [504]	14 1/8 [359]	①	18 1/2 [470]	2 1/2 [64]	0	0	0	1 [25]	3 [76]	6 [152] ③	140 [64]
125	24 1/2 [622]	23 11/32 [593]	15 7/8 [403]	①	22 [559]	2 1/2 [64]	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 the National Fuel Gas Code, ANSI Z223.1 and in accordance with local codes.

[ ] Designates Metric Conversions

## Blower Performance Data

AIR FLOW PERFORMANCE - (-)801T (Upflow) SERIES MODELS											
MODEL	MOTOR H.P. [W] BLOWER SIZE IN [mm]	SPEED TAP	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]	0.8 [.19]	0.9 [.22]
			(-)801TA050314MSA	1/2 [373] 11 x 6 [279 x 152]	Low	894	775	655	595	533	496
<b>Med. Lo</b>	<b>971</b>	<b>912</b>			<b>875</b>	<b>839</b>	<b>804</b>	<b>758</b>	<b>713</b>	<b>684</b>	<b>644</b>
Med	1117	1081			1051	1024	995	973	938	908	878
Med. Hi	1326	1291			1275	1240	1204	1171	1144	1114	1077
High	1440	1432			1405	1382	1353	1322	1305	1272	1251
(-)801TA075417MSA	1/2 [373] 11 x 7 [279 x 178]	Low	1208	1141	1103	1057	1008	966	916	869	818
		<b>Med. Lo</b>	<b>1363</b>	<b>1318</b>	<b>1275</b>	<b>1230</b>	<b>1189</b>	<b>1129</b>	<b>1091</b>	<b>1053</b>	<b>1012</b>
		<b>Med</b>	<b>1447</b>	<b>1417</b>	<b>1366</b>	<b>1329</b>	<b>1288</b>	<b>1250</b>	<b>1215</b>	<b>1176</b>	<b>1137</b>
		Med. Hi	1553	1521	1478	1444	1407	1372	1332	1295	1264
		High	1616	1574	1547	1508	1478	1438	1402	1375	1341
(-)801TA100521MSA	3/4 [559] 11 x 10 [279 x 254]	Low	1277	1211	1164	1103	1035	967	861	800	740
		<b>Med. Lo</b>	<b>1556</b>	<b>1498</b>	<b>1456</b>	<b>1409</b>	<b>1353</b>	<b>1308</b>	<b>1254</b>	<b>1198</b>	<b>1125</b>
		Med	1644	1597	1554	1511	1463	1400	1358	1304	1253
		Med. Hi	1879	1842	1785	1729	1692	1674	1621	1579	1537
		High	2071	2025	1992	1948	1902	1872	1840	1795	1750
(-)801TA125524MSA	3/4 [559] 11 x 10 [279 x 254]	Low	1398	1338	1278	1232	1177	1130	1041	975	909
		<b>Med. Lo</b>	<b>1593</b>	<b>1546</b>	<b>1495</b>	<b>1454</b>	<b>1414</b>	<b>1342</b>	<b>1304</b>	<b>1251</b>	<b>1190</b>
		<b>Med</b>	<b>1878</b>	<b>1844</b>	<b>1807</b>	<b>1753</b>	<b>1714</b>	<b>1675</b>	<b>1634</b>	<b>1578</b>	<b>1536</b>
		Med. Hi	2025	1967	1931	1886	1856	1812	1748	1721	1668
		High	2165	2124	2082	2047	2012	1973	1934	1894	1859

**Note:** Bold data is factory heating tap.

[ ] Designates Metric Conversions



**BOTTOM RETURN FILTER RACK FOR  
UPFLOW APPLICATION: RXGF-CB**

**SIDE RETURN FILTER RACK: RXGF-CD**

FILTER RACK FILTER SIZES* INCHES [mm]		
MODEL	RXGF-CB (UPFLOW/ HORIZONTAL)	RXGF-CD (UPFLOW) SIDE RETURN
R801TA050	12 <sup>1</sup> / <sub>4</sub> x 25 [311 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]
R801TA075	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]
R801TA100	19 <sup>1</sup> / <sub>4</sub> x 25 [489 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]
R801TA125	22 <sup>3</sup> / <sub>4</sub> x 25 [578 x 635]	15 <sup>3</sup> / <sub>4</sub> x 25 [400 x 635]

**4" FLUE ADAPTER: RXGW-C01**

**INDOOR COIL CASINGS**

MODEL NUMBER
RXBC-D14AI
RXBC-D17AI
RXBC-D21AI
RXBC-D21BI
RXBC-D24AI

**WARNING: IMPORTANT NOTICE**

A SOLID METAL BASE PLATE (SEE TABLE) MUST BE IN PLACE WHEN THE FURNACE IS INSTALLED WITH SIDE 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 <sup>5</sup> / <sub>8</sub> x 23 <sup>9</sup> / <sub>16</sub> [295 x 598]
17 <sup>1</sup> / <sub>2</sub> [445]	RXGB-D17	AE-61874-02	15 <sup>1</sup> / <sub>8</sub> x 23 <sup>9</sup> / <sub>16</sub> [384 x 598]
21 [533]	RXGB-D21	AE-61874-03	18 <sup>5</sup> / <sub>8</sub> x 23 <sup>9</sup> / <sub>16</sub> [473 x 598]
24 <sup>1</sup> / <sub>2</sub> [622]	RXGB-D24	AE-61874-04	25 <sup>5</sup> / <sub>8</sub> x 23 <sup>9</sup> / <sub>16</sub> [651 x 598]

**FOR HIGH ALTITUDES:**

**OPTION CODE FOR HIGH ALTITUDE: U.S.**

None required for high altitudes.

**HIGH ALTITUDE CONVERSION KITS: U.S.**

None required for high altitudes.

**80+ HIGH ALTITUDE INSTRUCTIONS**

**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.

[ ] 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 Exchanger .....Twenty (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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