



The new degree of comfort.™

Rheem *Classic*® Series Upflow/Horizontal Gas Furnace

R801P- Upflow/Horizontal Series

80% A.F.U.E.†

Input Rates 50-150 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

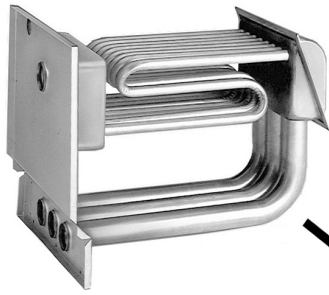


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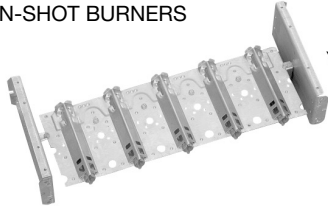
PATENTED HEAT EXCHANGER



DRAFT INDUCER MOTOR



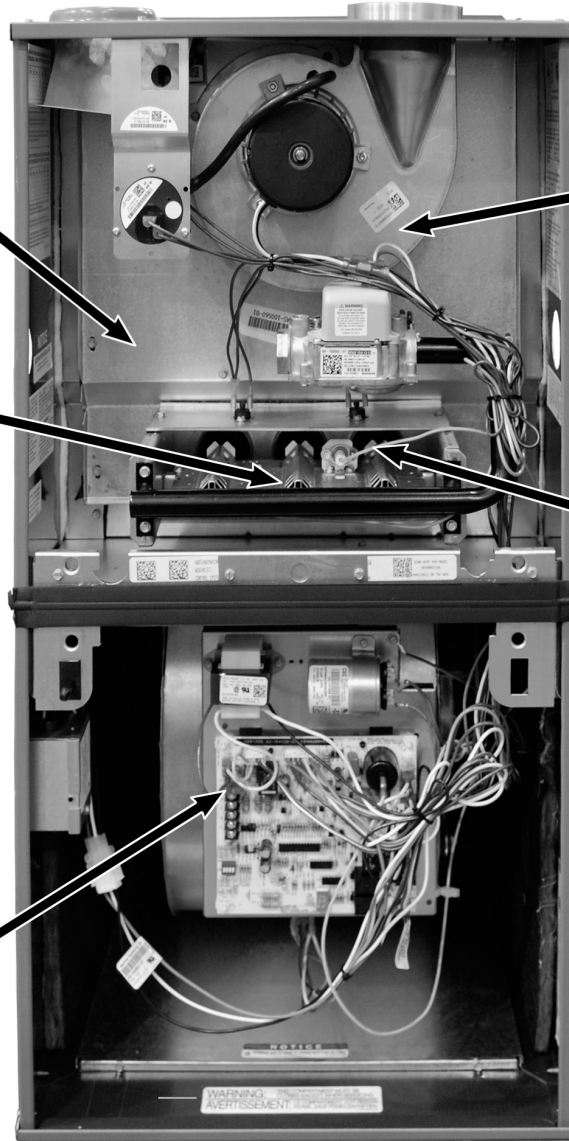
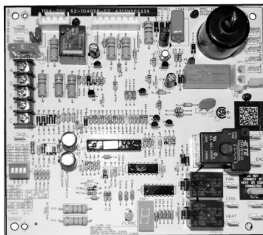
IN-SHOT BURNERS



DIRECT SPARK IGNITOR



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
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- 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

Physical Data and Specifications

| MODEL NUMBERS R801P SERIES | R801PA050314M*A | R801PA075317M*A | R801PA075417M*A | R801PA100417M*A | R801PA100521M*A | R801PA125524M*A | R801PA150524M*A |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Input-BTU/Hr ② | 50,000 | 75,000 | 75,000 | 100,000 | 100,000 | 125,000 | 150,000 |
| Heating Capacity BTU/Hr ① | 40,000 | 60,000 | 60,000 | 80,000 | 80,000 | 100,000 | 120,000 |
| Heat Ext. Static Pressure | .18 | .20 | .20 | .28 | .28 | .28 | .28 |
| Blower (D x W) | 11 x 6 | 11 x 7 | 11 x 7 | 11 x 7 | 11 x 10 | 11 x 10 | 11 x 10 |
| Motor H.P.–Speed–Type | 1/3-4-PSC | 1/2-4-PSC | 1/2-4-PSC | 1/2-4-PSC | 1/2-4-PSC | 3/4-4-PSC | 3/4-4-PSC |
| Motor Full Load Amps | 5.7 | 6.7 | 7.8 | 7.8 | 7.5 | 8.4 | 9.3 |
| Heating Speed | Med-Low | Med-High | Med-High | Med-High | Med-Low | Med-High | Med-High |
| Cooling Speed | High | Med-High | High | High | High | High | High |
| Cooling CFM @ 70° W.C. E.S.P. | 1164 | 1198 | 1657 | 1582 | 1807 | 1742 | 1916 |
| Max. E.S.P. (In. W.C.) | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| Temperature Rise Range °F | 25-55 | 25-55 | 25-55 | 35-65 | 35-65 | 35-65 | 45-75 |
| Max. Outlet Air Temp. °F | 155 | 155 | 155 | 165 | 180 | 165 | 190 |
| Approx. Shipping Weight (Lbs.) | 110 | 110 | 125 | 110 | 140 | 150 | 160 |
| AFUE ① | 80.0% | 80.0% | 80.0% | 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" 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





Air

Model Number Identification

| <u>R</u> | <u>80</u> | <u>1</u> | <u>P</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 | P = Premium PSC | Design Series A = 1st Design | Input BTU/HR [kW] | 3 = Up to 3 Ton | Cabinet Width | M = Multi | X = Low NO _x S = Standard | Revision- Marketing (A – First Time Release) |
| | | | | | 050 = 50,000 | 4 = 2½ to 4 Ton | 14 = 14" | | | |
| | | | | | 075 = 75,000 | 5 = 3½ to 5 Ton | 17 = 17.5" | | | |
| | | | | | 100 = 100,000 | | 21 = 21" | | | |
| | | | | | 125 = 125,000 | | 24 = 24.5" | | | |
| | | | | | 150 = 150,000 | | | | | |



Upflow Application

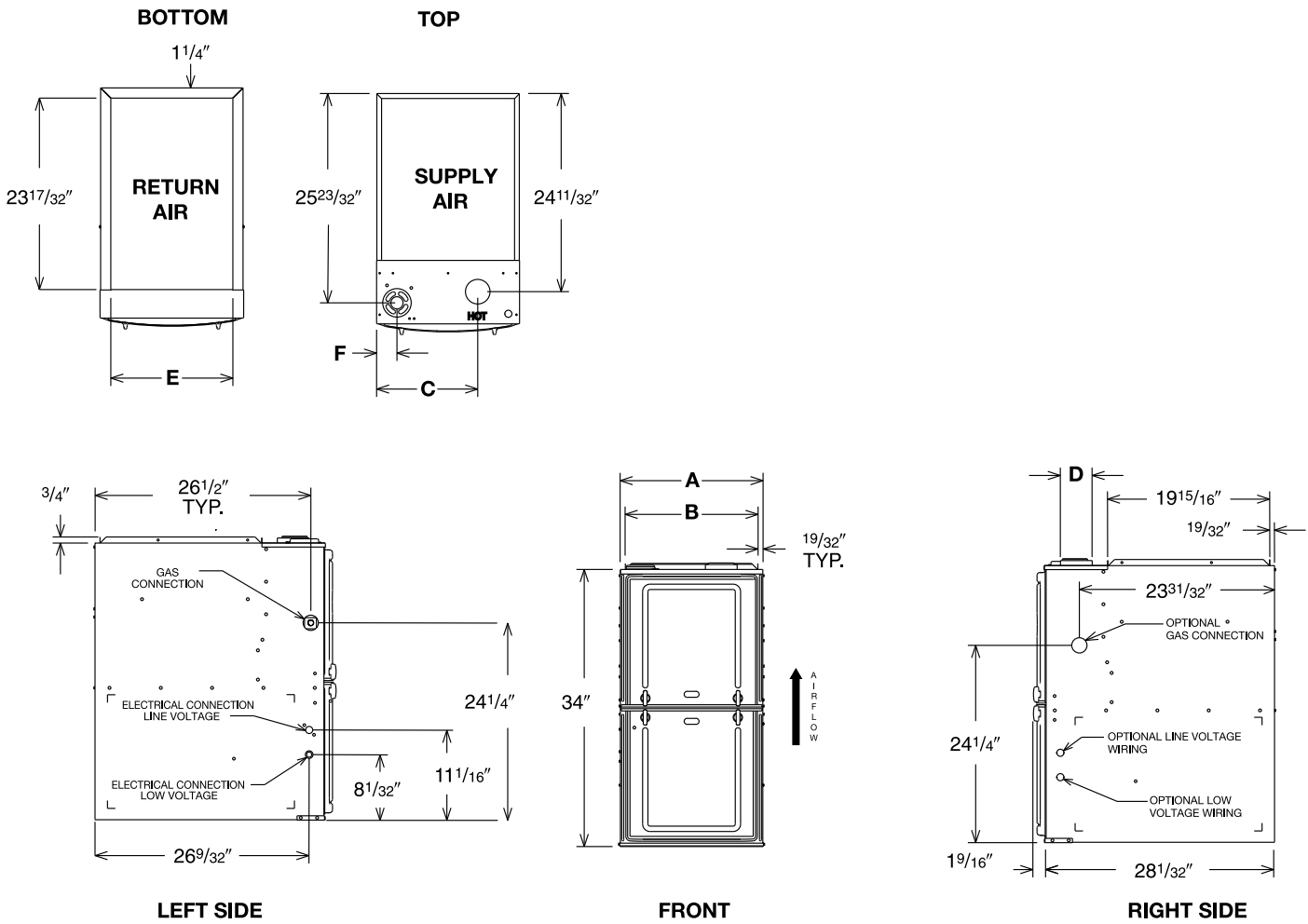


Illustration
ST-A1220-04-00
FIGURE 1

Dimensional Data: Upflow Model

| MODEL R801P- | A | B | C | D | E | F | MINIMUM CLEARANCE (IN.) | | | | | | SHIP WGT. (LBS.) |
|----------------|--------|----------|--------|---|--------|-------|-------------------------|------------|------|-----|-------|------|------------------|
| | | | | | | | LEFT SIDE | RIGHT SIDE | BACK | TOP | FRONT | VENT | |
| 050 | 14 | 12 27/32 | 10 5/8 | ① | 11 1/2 | 17/8 | 0 | 4 ② | 0 | 1 | 3 | 6 ③ | 85 |
| 075/ 100417 | 17 1/2 | 16 11/32 | 12 3/8 | ① | 15 | 2 1/2 | 0 | 3 ② | 0 | 1 | 3 | 6 ③ | 105 |
| 100521 | 21 | 19 27/32 | 14 1/8 | ① | 18 1/2 | 2 1/2 | 0 | 0 | 0 | 1 | 3 | 6 ③ | 120 |
| 125 | 24 1/2 | 23 11/32 | 15 7/8 | ① | 22 | 2 1/2 | 0 | 0 | 0 | 1 | 3 | 6 ③ | 140 |
| 150 | 24 1/2 | 23 11/32 | 15 7/8 | ① | 22 | 2 1/2 | 0 | 0 | 0 | 1 | 3 | 6 ③ | 150 |

NOTES: ① May require a 3" to 4" or 3" to 5" adapter.

② May be 0" with type B vent.

③ May be 1" with type B vent.

Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and/or Can/CGA-B149 Installation Codes and in accordance with local codes.

Horizontal Application

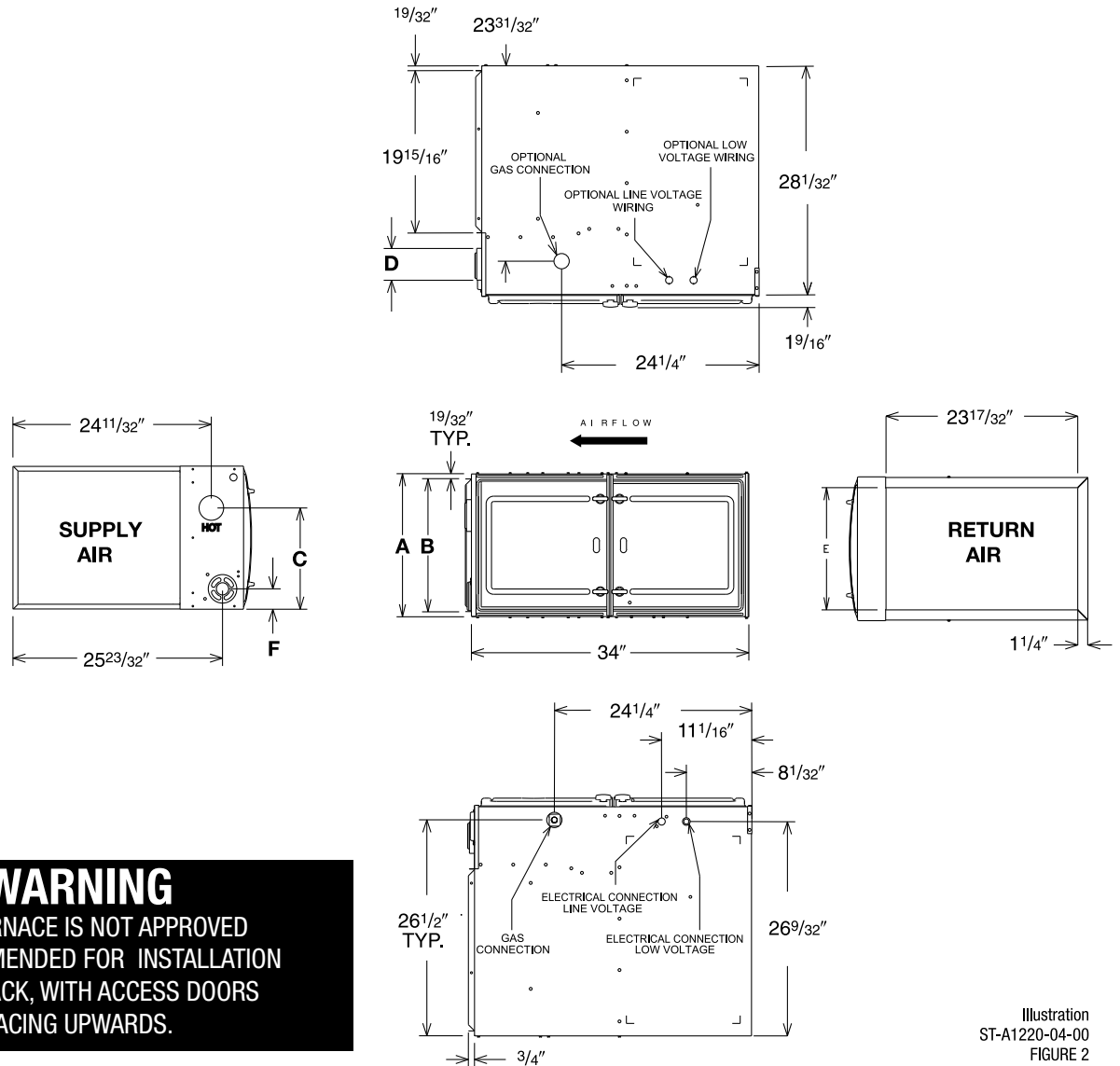


Illustration
ST-A1220-04-00
FIGURE 2

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

Dimensional Data: Horizontal Model

| MODEL R801P- | A | B | C | D | E | F | MINIMUM CLEARANCE (IN.) | | | | | | SHIP WGTS. (LBS.) |
|-----------------|--------------------------------|----------------------------------|--------------------------------|---|--------------------------------|-------------------------------|-------------------------|--------------------|------|-----|-------|------|-------------------------|
| | | | | | | | SUPPLY AIR SIDE | RETURN AIR SIDE | BACK | TOP | FRONT | VENT | |
| 050 | 14 | 12 ²⁷ / ₃₂ | 10 ⁵ / ₈ | ① | 11 ¹ / ₂ | 1 ⁷ / ₈ | 0 | 4 ② | 0 | 1 | 3 | 6 ③ | 85 |
| 075/ 100417 | 17 ¹ / ₂ | 16 ¹¹ / ₃₂ | 12 ³ / ₈ | ① | 15 | 2 ¹ / ₂ | 0 | 3 ② | 0 | 1 | 3 | 6 ③ | 105 |
| 100521 | 21 | 19 ²⁷ / ₃₂ | 14 ¹ / ₈ | ① | 18 ¹ / ₂ | 2 ¹ / ₂ | 0 | 0 | 0 | 1 | 3 | 6 ③ | 120 |
| 125 | 24 ¹ / ₂ | 23 ¹¹ / ₃₂ | 15 ⁷ / ₈ | ① | 22 | 2 ¹ / ₂ | 0 | 0 | 0 | 1 | 3 | 6 ③ | 140 |
| 150 | 24 ¹ / ₂ | 23 ¹¹ / ₃₂ | 15 ⁷ / ₈ | ① | 22 | 2 ¹ / ₂ | 0 | 0 | 0 | 1 | 3 | 6 ③ | 150 |

NOTES: ① May require a 3" to 4" or 3" to 5" adapter.

② May be 0" with type B vent.

③ May be 1" with type B vent.

Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and/or Can/CGA-B149 Installation Codes and in accordance with local codes.

Blower Performance Data

| MODEL | MOTOR H.P. [W] BLOWER SIZE IN | SPEED TAP | CFM AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN | | | | | | | |
|-------------------|-------------------------------------|----------------|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 |
| (-)801PA050314M*A | 1/3 11 x 6 | Low | 823 | 803 | 787 | 732 | 718 | 691 | 651 | 593 |
| | | Med. Lo | 1030 | 1018 | 1006 | 976 | 929 | 897 | 850 | 808 |
| | | Med. Hi | 1129 | 1132 | 1112 | 1087 | 1054 | 1028 | 971 | 919 |
| | | High | 1361 | 1353 | 1331 | 1297 | 1264 | 1232 | 1164 | 1117 |
| (-)801PA075317M*A | 1/2 11 x 7 | Low | 1008 | 977 | 935 | 893 | 854 | 823 | 777 | 735 |
| | | Med. Lo | 1215 | 1181 | 1133 | 1098 | 1065 | 1023 | 975 | 937 |
| | | Med. Hi | 1421 | 1408 | 1372 | 1326 | 1299 | 1247 | 1198 | 1152 |
| | | High | 1668 | 1648 | 1633 | 1580 | 1545 | 1481 | 1442 | 1373 |
| (-)801PA075417M*A | 1/2 11 x 7 | Low | 1229 | 1200 | 1181 | 1155 | 1120 | 1078 | 1013 | 970 |
| | | Med. Lo | 1308 | 1267 | 1266 | 1233 | 1204 | 1176 | 1113 | 1062 |
| | | Med. Hi | 1553 | 1542 | 1516 | 1491 | 1451 | 1417 | 1358 | 1306 |
| | | High | 1969 | 1924 | 1893 | 1840 | 1803 | 1728 | 1657 | 1570 |
| (-)801PA100417M*A | 1/2 11 x 7 | Low | 1211 | 1183 | 1148 | 1116 | 1077 | 1040 | 984 | 953 |
| | | Med. Lo | 1305 | 1261 | 1225 | 1185 | 1157 | 1113 | 1068 | 1012 |
| | | Med. Hi | 1520 | 1498 | 1464 | 1427 | 1387 | 1340 | 1292 | 1226 |
| | | High | 1874 | 1810 | 1767 | 1686 | 1678 | 1650 | 1582 | 1497 |
| (-)801PA100521M*A | 1/2 11 x 10 | Low | 1209 | 1182 | 1131 | 1112 | 1051 | 976 | 929 | 867 |
| | | Med. Lo | 1438 | 1420 | 1386 | 1350 | 1320 | 1293 | 1248 | 1186 |
| | | Med. Hi | 1902 | 1883 | 1844 | 1817 | 1753 | 1700 | 1636 | 1547 |
| | | High | 2071 | 2037 | 2001 | 1962 | 1905 | 1856 | 1807 | 1709 |
| (-)801PA125524M*A | 3/4 11 x 10 | Low | 1358 | 1354 | 1331 | 1301 | 1250 | 1224 | 1154 | 1089 |
| | | Med. Lo | 1541 | 1517 | 1476 | 1453 | 1416 | 1371 | 1339 | 1277 |
| | | Med. Hi | 1799 | 1774 | 1746 | 1712 | 1691 | 1629 | 1554 | 1495 |
| | | High | 2015 | 1989 | 1929 | 1902 | 1862 | 1815 | 1742 | 1665 |
| (-)801PA150524M*A | 3/4 11 x 10 | Low | 1411 | 1395 | 1370 | 1334 | 1310 | 1252 | 1220 | 1150 |
| | | Med. Lo | 1606 | 1579 | 1569 | 1537 | 1499 | 1468 | 1407 | 1346 |
| | | Med. Hi | 1889 | 1891 | 1849 | 1828 | 1764 | 1717 | 1659 | 1609 |
| | | High | 2178 | 2160 | 2105 | 2067 | 2024 | 1976 | 1916 | 1832 |

Note: Bold data is factory heating tap.

Table represents blower performance data WITHOUT filters.

SIDE RETURN FILTER RACK: RXGF-CD
BOTTOM RETURN FILTER RACK FOR
UPFLOW APPLICATION: RXGF-CB

| FILTER RACK FILTER SIZES* INCHES | | |
|----------------------------------|-------------------------------------|-------------------------------------|
| MODEL | RXGF-CB (UPFLOW/ HORIZONTAL) | RXGF-CD (UPFLOW) SIDE RETURN |
| R801PA050 | 12 ¹ / ₄ x 25 | 15 ³ / ₄ x 25 |
| R801PA075/ R801PA100417 | 15 ³ / ₄ x 25 | 15 ³ / ₄ x 25 |
| R801PA100521 | 19 ¹ / ₄ x 25 | 15 ³ / ₄ x 25 |
| R801PA125 | 22 ³ / ₄ x 25 | 15 ³ / ₄ x 25 |
| R801PA150 | 22 ³ / ₄ x 25 | 15 ³ / ₄ x 25 |

INDOOR COIL CASINGS

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

4" FLUE ADAPTER: RXGW-C01

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. | SOLID BOTTOM KIT NO. | BASE PLATE NO. | BASE PLATE SIZE IN. |
|--------------------------------|----------------------------|-------------------|--|
| 14 | RXGB-D14 | AE-61874-01 | 11 ⁵ / ₈ x 23 ⁹ / ₁₆ |
| 17 ¹ / ₂ | RXGB-D17 | AE-61874-02 | 15 ¹ / ₈ x 23 ⁹ / ₁₆ |
| 21 | RXGB-D21 | AE-61874-03 | 18 ⁵ / ₈ x 23 ⁹ / ₁₆ |
| 24 ¹ / ₂ | RXGB-D24 | AE-61874-04 | 25 ⁵ / ₈ x 23 ⁹ / ₁₆ |

FOR HIGH ALTITUDES:

OPTION CODE FOR HIGH ALTITUDE: U.S. & Canada
 None required for high altitudes.

HIGH ALTITUDE CONVERSION KITS: U.S. & Canada
 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.

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.

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 ExchangerTwenty (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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INTEGRATED HOME COMFORT

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