FORM NO. G11-467 REV. 9 Supersedes Form No. G11-467 Rev. 8

GAS FURNACES



RGLK- SERIES Models with Input Rates from 50,000 to 150,000 BTU/HR [15 to 44 kW] (U.S. & Canadian Models)



dama



CRITERION[®] II PLUS 2 TWO STAGE 80% A.F.U.E.[†] DOWNFLOW GAS FURNACES

The Rheem[®] Criterion II Plus 2 line of downflow gas furnaces is designed for installation in closets, alcoves, utility rooms, or attics. The design is certified by CSA International.

Features

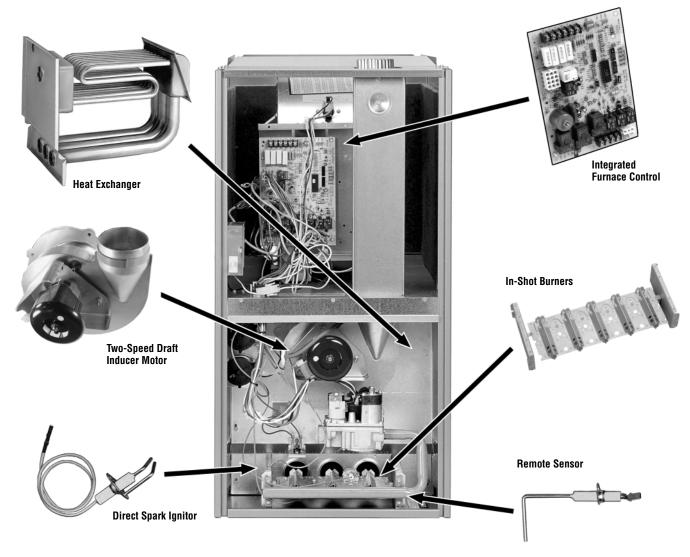
- Patented heat exchanger, constructed of both stainless and aluminized steel for the maximum in corrosion resistance.
- Low profile "34 inch" [864 mm] design is lighter and easier to handle, and leaves room for optional equipment.
- Left or right side gas and electric inlet connections with quick, simple change.
- Direct spark ignition.
- Integrated control board with humidifier and electronic air cleaner hookups.
- Insulated blower compartment, a two stage gas valve and a specially designed two speed draft inducer motor make it one of the quietest furnaces on the market today.
- Pre-paint galvanized steel cabinet.
- Grab-holes in doors to aid in easy door removal and replacement.
- Compatible with single or two-stage thermostat. (For optimal performance, two-stage thermostat recommended.)

A variety of cooling coils and plenums designed to use with Rheem Criterion $\rm I\!I$ Plus 2 gas furnaces are available as optional accessories.

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



RHEEM CRITERION II PLUS 2 TWO STAGE 80% DOWNFLOW GAS FURNACE



STANDARD EQUIPMENT

Completely assembled and wired; 2 speed induced draft blower; high and low pressure switches; 2 stage redundant main gas control; blower compartment door safety switch; solid state time on/time off blower control; limit control; 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; fused-protection (secondary), **3rd speed option for continuous fan; common heat/cool terminal.**

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% lockout type.



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

PHYSICAL DATA AND SPECIFICATIONS U.S. AND CANADA MODELS (DOWNFLOW)

| | | • | | • | | | |
|---|--------------------------------|--------------------------------|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| MODEL NUMBERS RGLK- SERIES | 05EAUER 05NAUER | 07EAMER 07NAMER | 07EAMGR 07NAMGR | 10EAMER 10NAMER | 10EBRJR 10NBRJR | 12EARJR 12NARJR | 15EARJR 15NARJR |
| High Input–BTU–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 | 40,360 [12] | 61,020 [18] | 61,470 [18] | 81,600 [24] | 81,040 [24] | 101,750 [29] | 121,550 [35] |
| Low Input–BTU/Hr [kW] | 35,000 [10] | 52,500 [15] | 52,500 [15] | 70,000 [20] | 70,000 [20] | 87,500 [25] | 105,000 [30] |
| Heating Capacity–BTU/Hr [kW] | 28,000 [8] | 41,600 [12] | 41,600 [12] | 56,000 [16] | 56,000 [16] | 70,000 [20] | 84,000 [24] |
| Heating–Ext. Static Pressure [kPa] | .10 [.025] | .12 [.029] | .12 [.029] | .15 [.037] | .15 [.037] | .20 [.05] | .20 [.05] |
| Blower (D x W) [mm] | 11 x 6 [279 x 152] | 11 x 7 [279 x 178] | 11 x 7 [279 x 178] | 11 x 7 [279 x 178] | 11 x 10 [279 x 254] | 11 x 10 [279 x 254] | 11 x 10 [279 x 254] |
| Motor H.P.–[W] Speeds–Type | ¹ /2 [373] 4-PSC | ¹ /2 [373] 4-PSC | ^{3/4} [559] 4-PSC | ¹ /2 [373] 4-PSC | ^{3/} 4 [559] 4-PSC | ^{3/} 4 [559] 4-PSC | ^{3/} 4 [559] 4-PSC |
| Motor Full Load Amps | 6.8 | 7.1 | 9.5 | 7.1 | 9.5 | 9.5 | 9.5 |
| Heating Speed–High Fire | MED-LOW | MED-HIGH | MED-LOW | MED-HIGH | MED-HIGH | MED-HIGH | MED-HIGH |
| Heating Speed–Low Fire | LOW | MED-LOW | LOW | LOW | LOW | LOW | LOW |
| Cooling Speed | HIGH | HIGH | MED-HIGH | HIGH | HIGH | HIGH | HIGH |
| Cooling CFM @ .5" [kPa] E.S.P. (Nominal) [L/s] | 1200 [566] | 1200 [566] | 1600 [755] | 1200 [566] | 2000 [944] | 2000 [944] | 2000 [944] |
| 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] | 35-65 [19.4-36.1] | 25-55 [13.9-30.6] | 45-75 [25.0-41.7] | 30-60 [16.7-33.3] | 35-65 [19.4-36.1] | 50-80 [27.8-44.4] |
| Max. Outlet Air Temp. °F [°C] | 155 [68.3] | 165 [78.3] | 155 [68.3] | 180 [82.2] | 180 [82.2] | 180 [82.2] | 190 [87.7] |
| Standard Filter–In. [mm] | (1) 14 x 20 [356 x 508] | (2) 12 x 20 [306 x 508] | (2) 12 x 20 [306 x 508] | (2) 12 x 20 [306 x 508] | (2) 14 x 20 [356 x 508] | (2) 14 x 20 [356 x 508] | (2) 14 x 20 [356 x 508] |
| Approx. Shipping Weight (Lbs.) [kg] | 85 [39] | 105 [48] | 105 [48] | 115 [52] | 120 [54] | 140 [63] | 150 [68] |
| AFUE ① | 80.0% | 80.0% | 80.0% | 80.0% | 80.0% | 80.0% | 80.0% |

NOTES: All models are 115V, 60HZ, 1Ø. Gas connection size for all models is 1/2" [12.7 mm] N.P.T.

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

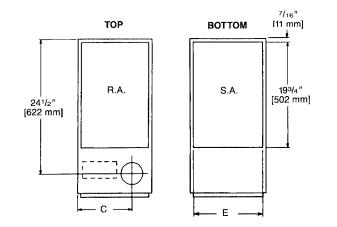
② See Conversion Kit Index for high altitude derate in U.S. applications. For Canadian applications, reference the furnace installation instructions.

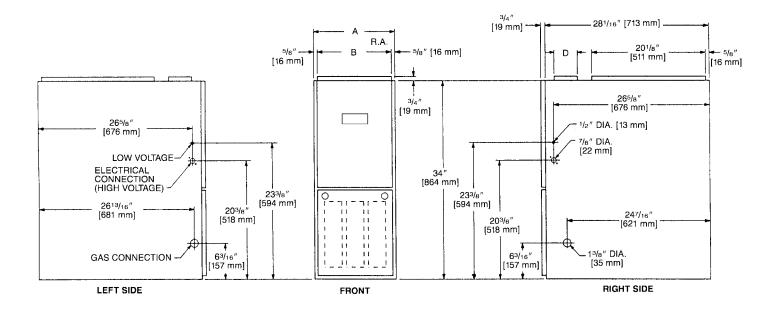
MODEL IDENTIFICATION—DOWNFLOW MODELS

| R | G | L | _К | | 07E | | Α | M | Ε | R |
|-------|----------------|----------|------------------|---|---|--|--|---|---|---|
| Rheem | Gas Furnace | Downflow | Design Series | Electric Ignition 05E 07E 10E 12E 15E | Heating Input D Electric Ignition– <u>NO_x Models</u> 05N 07N 10N 12N 15N | Input BTU/HR 50,000 [15 kW] 75,000 [22 kW] 100,000 [29 kW] 125,000 [37 kW] 150,000 [44 kW] | Variations A = Std. Cabinet B = Wide Cabinet | Blower Designation $U = 11 \times 6$ [279 x 152 mm] $M = 11 \times 7$ [279 x 178 mm] $R = 11 \times 10$ [279 x 254 mm] | Heating & Cooling Designation E = 1100-1330 CFM [519-628 L/s] G = 1450-1750 CFM [684-826 L/s] J = 1800-2075 CFM [850-979 L/s] | Fuel Type R = Natural Gas, U.S. and Canadian Standard Furnace |

[] Designates Metric Conversions

DOWNFLOW DIMENSIONS





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

| MODEL | | | | | | REDUCED CLEARANCES (IN.) [mm] | | | | | | |
|--------|--------------------------|----------------------------|--------------------------|---|--------------------------|-------------------------------|---------------|------|--------|--------|-----------|----------------------------|
| RGLK- | A | В | C | D | E | LEFT SIDE | RIGHT SIDE | BACK | ТОР | FRONT | VENT | SHIP. WGTS. (LBS.) [kg] |
| 05 | 14 [356] | 12 ²⁷ /32 [326] | 10 ³ /8 [264] | 1 | 13 ¹ /8 [333] | 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] | 1 | 16 ⁵ /8 [422] | 0 | 3 [76] 2 | 0 | 1 [25] | 3 [76] | 6 [152] ③ | 105 [47.6] |
| 10 (A) | 17 ¹ /2 [445] | 16 ¹¹ /32 [415] | 12 ¹ /8 [308] | 1 | 16 ⁵ /8 [422] | 0 | 3 [76] 2 | 0 | 1 [25] | 3 [76] | 6 [152] ③ | 115 [52.2] |
| 10 (B) | 21 [533] | 19 ²⁷ /32 [504] | 13 ⁷ /8 [352] | 1 | 20 ¹ /8 [511] | 0 | 0 | 0 | 1 [25] | 3 [76] | 6 [152] ③ | 120 [54.4] |
| 12 | 241/2 [622] | 2311/32 [593] | 155/8 [397] | 1 | 235/8 [600] | 0 | 0 | 0 | 1 [25] | 3 [76] | 6 [152] ③ | 140 [63.5] |
| 15 | 241/2 [622] | 2311/32 [593] | 155/8 [397] | 1 | 235/8 [600] | 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/or Can/CGA-B149 Installation Codes and in accordance with local codes.

[] Designates Metric Conversions

BLOWER PERFORMANCE DATA—DOWNFLOW MODELS

| MODEL NUMBER RGLK- | BLOWER SIZE | MOTOR H.P. | BLOWER | CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES [kPa] WATER COLUMN | | | | | | |
|--------------------------|------------------------|---------------|----------------------------------|--|---|---|---|---|--|--|
| SERIES | [mm] | [W] | SPEED | .1 [.02] | .2 [.05] | .3 [.07] | .4 [.10] | .5 [.12] | .6 [.15] | .7 [.17] |
| 05EAUER | 11 x 6 [279 x 152] | 1/2 [373] | LOW MED-LO MED-HI HIGH | 655 [309] 975 [460] 180 [557] 1335 [630] | 630 [297] 943 [445] 1140 [538] 1290 [608] | 600 [283] 915 [432] 1105 [521] 1250 [590] | 565 [266] 886 [418] 1067 [503] 1202 [567] | 532 [251] 852 [402] 1027 [484] 1157 [546] | 500 [236] 813 [383] 980 [462] 1110 [524] | 467 [220] 770 [363] 924 [436] 1060 [500] |
| 07EAMER | 11 x 7 [279 x 178] | 1/2 [373] | *LOW MED-LO MED-HI HIGH | 910 [429] 1074 [507] 1229 [580] 1409 [665] | 887 [418] 1054 [497] 1207 [569] 1385 [653] | 863 [407] 1034 [488] 1184 [558] 1361 [642] | 839 [396] 1007 [475] 1159 [547] 1329 [627] | 814 [384] 979 [462] 1134 [535] 1297 [612] | 776 [366] 944 [455] 1099 [518] 1260 [594] | 738 [348] 908 [428] 1063 [501] 1223 [577] |
| 07EAMGR | 11 x 7 [279 x 178] | 3/4 [559] | LOW MED-LO MED-HI HIGH | 1180 [557] 1438 [678] 1730 [816] 1842 [869] | 1170 [552] 1420 [670] 1697 [800] 1805 [851] | 1153 [544] 1400 [660] 1660 [783] 1761 [831] | 1141 [538] 1380 [651] 1620 [764] 1713 [808] | 1125 [531] 1348 [636] 1575 [743] 1664 [785] | 1108 [523] 1320 [623] 1530 [722] 1615 [762] | 1083 [511] 1281 [604] 1480 [698] 1560 [736] |
| 10EAMER | 11 x 7 [279 x 178] | 1/2 [373] | LOW MED-LO MED-HI HIGH | 895 [422] 1052 [496] 1238 [584] 1383 [652] | 874 [412] 1033 [487] 1217 [574] 1366 [644] | 852 [402] 1013 [478] 1196 [564] 1348 [636] | 825 [389] 991 [467] 1169 [551] 1317 [621] | 798 [376] 968 [457] 1143 [539] 1286 [607] | 766 [362] 930 [439] 1094 [516] 1245 [587] | 734 [346] 891 [420] 1044 [492] 1203 [567] |
| 10EBRJR | 11 x 10 [279 x 254] | 3/4 [559] | LOW MED-LO MED-HI HIGH | 1374 [648] 1709 [806] 2132 [1006] 2362 [1114] | 1356 [640] 1686 [795] 2085 [984] 2300 [1085] | 1339 [632] 1663 [784] 2038 [961] 2237 [1055] | 1323 [624] 1635 [771] 1988 [938] 2173 [1025] | 1286 [607] 1607 [758] 1937 [914] 2108 [994] | 1249 [589] 1562 [737] 1882 [888] 2036 [960] | 1212 [572] 1516 [715] 1827 [862] 1964 [926] |
| 12EARJR | 11 x 10 [279 x 254] | 3/4 [559] | LOW MED-LO MED-HI HIGH | 1315 [620] 1618 [763] 2065 [974] 2275 [1074] | 1292 [609] 1597 [753] 2025 [956] 2219 [1047] | 1269 [599] 1576 [743] 1984 [936] 2163 [1021] | 1250 [590] 1552 [732] 1938 [915] 2103 [992] | 1231 [581] 1528 [721] 1891 [892] 2042 [964] | 1194 [563] 1486 [701] 1824 [861] 1982 [935] | 1157 [546] 1443 [681] 1756 [829] 1921 [907] |
| 15EARJR | 11 x 10 [279 x 254] | 3/4 [559] | LOW MED-LO MED-HI HIGH | 1300 [614] 1675 [791] 2105 [993] — | 1280 [604] 1650 [779] 2075 [979] 2340 [1104] | 1230 [580] 1620 [765] 2035 [960] 2290 [1081] | 1205 [569] 1570 [741] 1990 [939] 2215 [1045] | 1170 [552] 1545 [729] 1955 [923] 2145 [1012] | 1115 [526] 1485 [701] 1900 [897] 2080 [982] | 1030 [486] 1425 [673] 1815 [857] 1995 [942] |

NOTES: *Not to be used as a low stage heating speed. Data compiled with factory filters installed. See Form Number C11-206 for MultiFlex® coil data.

[] 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 Warranty, Including Applicable Terms and Conditions, See Your Local Installer or Contact the Manufacturer for a Copy.

| Gas Heat Exchanger Limited Wa | rrantyTwenty (20) Years |
|-------------------------------|-------------------------|
| *Anv Other Part | Five (5) Years |

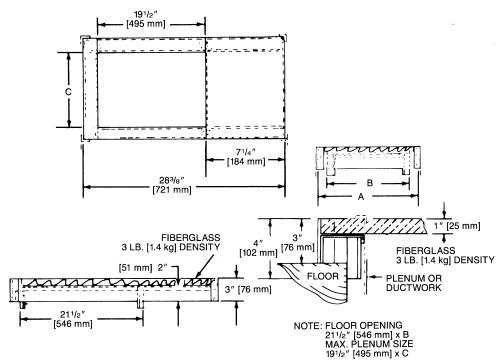
*This five year limited warranty is applicable only to single-phase products installed in residential applications on or after January 1, 2001.

ACCESSORIES—DOWNFLOW

DOWNFLOW WARNING: Unit design is certified for installation on non-combustible floor. A special factory supplied combustible floor sub-base is required when installing on a combustible floor. Failure to install the sub-base may result in fire, property damage and personal injury.

COMBUSTIBLE FLOOR BASE DIMENSIONS

| COMBUSTIBLE Floor base | USE WITH Furnace Sizes | A IN. [mm] | B IN. [mm] | C IN. [mm] |
|---------------------------|---------------------------|--------------------------|--------------------------|--------------------------|
| RXGC-B14 | RGLK-05 | 14 ¹ /2 [368] | 13 ¹ /4 [337] | 11 ¹ /4 [286] |
| RXGC-B17 | RGLK-07, RGLK-10(-)A | 18 [457] | 16 ³ /4 [425] | 14 ³ /4 [451] |
| RXGC-B21 | RGLK-10(-)B | 211/2 [546] | 201/4 [514] | 181/4 [464] |
| RXGC-B24 | RGLK-12, RGLK-15 | 25 [635] | 23 ³ /4 [603] | 213/4 [552] |



RXGF-CC*

FILTER RACK—Downflow top return mount. NOTE: Filter racks are shipped without filters. *Filters available through PROSTOCK®.

| DOWNFLOW FILTER SIZES | | | | | | | | |
|------------------------------|--------------------------------------|---------------------|----------|--|--|--|--|--|
| FURNACE Width In. [mm] | INPUT BTUH [kW] | SIZE IN. [mm] | QUANTITY | | | | | |
| 14 [356] | 45 [13.19] & 50 [14.65] | 14 [356] x 20 [508] | 1 | | | | | |
| 171/2 [445] | 67 [19.64], 75 [21.98] & 100 [29.31] | 12 [305] x 20 [508] | 1 | | | | | |
| 21 [533] | 100 [29.31] | 12 [305] x 20 [508] | 2 | | | | | |
| 241/2 [622] | 125 [36.63] & 150 [44.0] | 14 [356] x 20 [508] | 2 | | | | | |

[] Designates Metric Conversions

RXPF-F01 and F02

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

FOR HIGH ALTITUDES: OPTION CODE FOR

HIGH ALTITUDE: US & Canada – None required for high altitudes.

HIGH ALTITUDE CONVERSION KITS:

US & Canada – None required for high altitudes.

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

High altitude option codes are no longer 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.

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.

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. 3-05 DC