



MODEL: S95T Multi-Position Gas Furnaces

FORM NO. GRR-538 REV. 4



Russell™ By Rheem S95T Multi-Position Gas Furnaces

- **95% A.F.U.E.†**
- **Input Rates from 40 to 115 kBTU [11.72 to 33.71 kW]**



S95TA060 &
S95TA115 only)

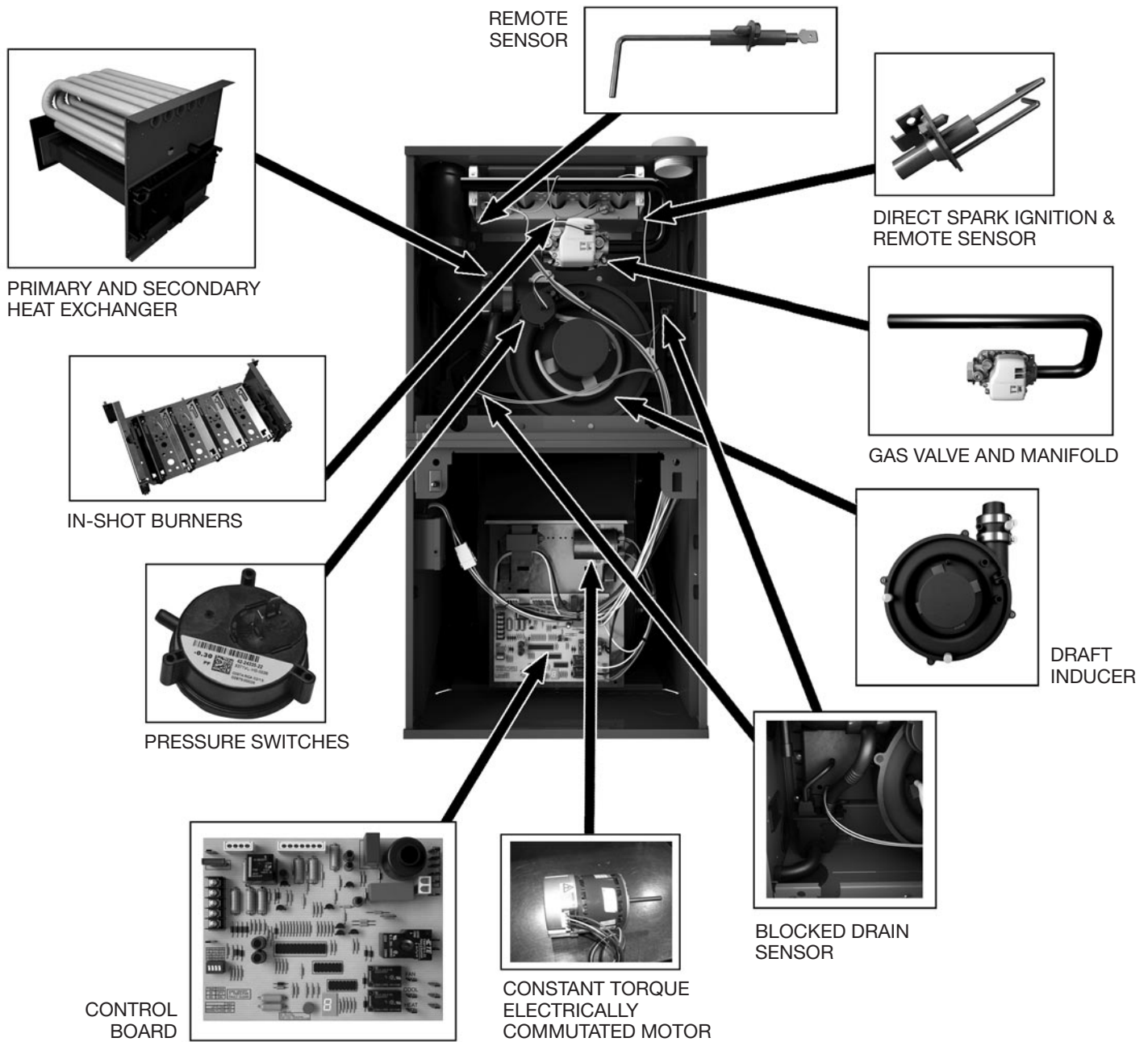
†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

"Proper sizing and installation of equipment is critical to achieve optimal performance. Split system air conditioners and heat pumps must be matched with appropriate coil components to meet Energy Star. Ask your Contractor for details or visit www.energystar.gov."

- **95% Residential Gas Furnace** CSA certified
- **4 Way Multi-Poise Design**
- **Diagnostics 7-Segment LED** all units
- **Ignition System** – DSI for reliability and longevity
- **Water Management System** with patented Blocked Drain Sensor
- **Heat Exchanger is Removable** for improved serviceability. Aluminized steel primary and stainless steel secondary construction provide maximum corrosion resistance and thermal fatigue reliability.
- **Low Profile "34 inch" cabinet** ideal for space constrained installations.
- **Blower Shelf Design** – serviceable in all furnace orientations
- **Pre Marked Hoses** – insures proper system drainage
- **Vent with 2" or 3" PVC**
- **Replaceable Collector Box**
- **Hemmed Edges** on cabinet and doors
- **Constant Torque** electrically commutated motor
- **Quarter Turn** fasteners for tool less access
- **Integrated Control Boards** feature dip switches for easy system set up
- **Self Priming Condensate Trap**
- **Solid Bottom Included**
- **Cabinet Air Leakage** less than 2% at 1 inch H₂O when tested in accordance with ASHRAE standard 193

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STANDARD EQUIPMENT

Completely assembled and wired; blocked drain sensor, 7 segment LED and marked hoses; heat exchanger; primary: aluminized steel, secondary: 29-4C stainless steel; solid bottom; induced draft; pressure switches; 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; power and self-test diagnostics; flame sense current diagnostics; electronic air cleaner connections; twinning (built-in) features; humidifier connections; humidifier on/off delay; low speed continuous fan option; single speed option for heating and cooling applications; transformer; direct drive, multi-speed Constant Torque electrically commutated motor. (Please note: a thermostat is not included as standard equipment.)

OPTIONAL EQUIPMENT

Side and bottom filter racks; return air cabinet for all sizes.

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

Physical Data and Specifications—Upflow Models
U.S. and Canadian Models

MODEL NUMBERS	S95T(-) 0401317MSA	S95T(-) 0601317MSA	S95T(-) 0701317MSA	S95T(-) 0701521MSA	S95T(-) 0851521MSA	S95T(-) 1001521MSA	S95T(-) 1151524MSA
HIGH FIRE INPUT BTU/HR [kW] ①	42,000 [12.30]	56,000 [16.41]	70,000 [20.51]	70,000 [20.51]	84,000 [24.61]	98,000 [28.72]	112,000 [32.82]
HEATING CAPACITY BTU/HR [kW]	39,900 [11.69]	53,200 [15.59]	66,500 [19.49]	66,500 [19.49]	79,800 [23.39]	93,100 [27.28]	106,400 [31.18]
HIGH ALTITUDE OUTPUT 10% DERATE [kW] ②	35,910 [10.52]	47,880 [14.03]	59,850 [17.54]	59,850 [17.54]	71,820 [21.05]	83,790 [24.56]	95,760 [28.06]
BLOWER (D x W) [mm]	11 x 7 [279 x 178]	11 x 8 [279 x 203]	11 x 8 [279 x 203]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 11 [279 x 279]
MOTOR H.P. [W]– TYPE	1/2 [373]-5- Constant Torque ECM	1/2 [373]-5- Constant Torque ECM	1/2 [373]-5- Constant Torque ECM	1 [746]-5- Constant Torque ECM	1 [746]-5- Constant Torque ECM	1 [746]-5- Constant Torque ECM	1 [746]-5- Constant Torque ECM
MIN. CIRCUIT AMPACITY	8.00	10.00	10.00	12.00	13.00	15.00	14.00
MIN. OVERLOAD PROTECTION DEVICE	15.00	15.00	15.00	15.00	20.00	20.00	20.00
MAX. OVERLOAD PROTECTION DEVICE	15.00	15.00	15.00	20.00	20.00	20.00	20.00
MOTOR FULL LOAD AMPS	4.0	6.8	6.8	10.6	8.3	8.3	8.3
HEATING SPEED	MED-LOW	MED-LOW	MEDIUM	MED-LOW	MEDIUM	MEDIUM	MEDIUM
COOLING SPEED	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
MINIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa]	.18 [.045]	.20 [.050]	.23 [.057]	.23 [.057]	.28 [.070]	.28 [.070]	.28 [.070]
MAXIMUM EXT. STATIC PRESSURE (IN. W.C.) [kPa]	.9 [0.224]	.9 [0.224]	.9 [0.224]	.9 [0.224]	.9 [0.224]	.9 [0.224]	.9 [0.224]
HEATING CFM @ .2" [.049 kPa] W.C. E.S.P. [L/s]	982 [463]	913 [431]	1113 [525]	1351 [638]	1574 [743]	1651 [779]	1524 [719]
COOLING CFM @ .5" [.124 kPa] W.C. E.S.P. [L/s]	1239 [585]	1227 [579]	1198 [565]	1750 [826]	1833 [865]	1975 [932]	1748 [825]
TEMPERATURE RISE-HIGH FIRE RANGE IN DEGREES °F [°C]	25 - 55 [14 - 31]	35 - 65 [19 - 36]	40 - 70 [22 - 39]	30 - 60 [17 - 33]	35 - 65 [19 - 36]	35 - 65 [19 - 36]	45 - 75 [25 - 42]
APPROX. SHIPPING WEIGHT (LBS.) [kg]	123.5 [56]	128 [58]	132 [60]	139 [63]	147.5 [67]	152 [69]	165 [75]
AFUE ③	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%	95.00%

NOTES: All models are 115V, 60HZ, 1 phase Gas connection size for all models is 1/2" [13 mm] N.P.T.

① Installation instructions for high altitude derate.

② Canadian installations only.

③ In accordance with D.O.E. test procedures.

*S=Standard Models

NOTE: Standard model complies with California low NOx requirements.

This furnace does not meet air district requirements of 14 ng/J NOx emissions limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.

This furnace is to be installed for propane firing only in air districts requiring 14 ng/J NOx emission limits. Operating in natural gas mode is in violation of these Rules.

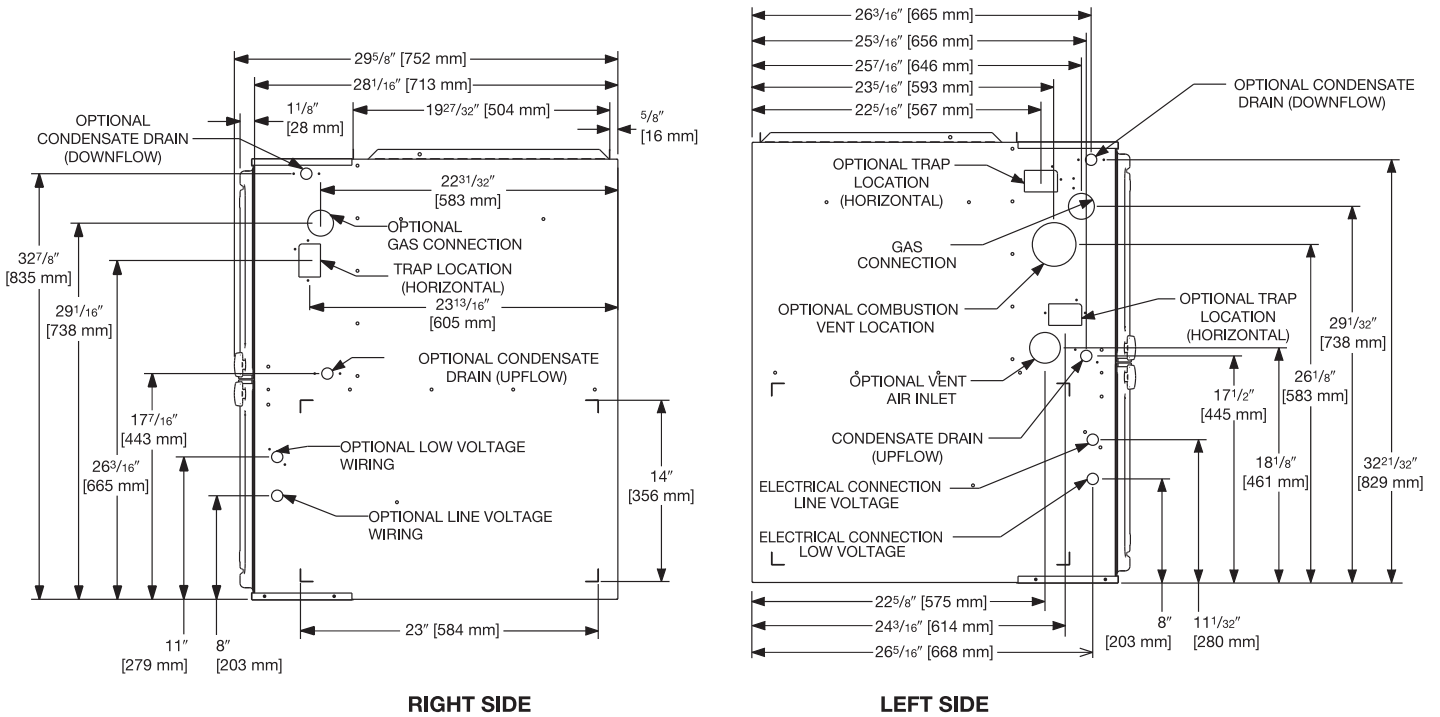
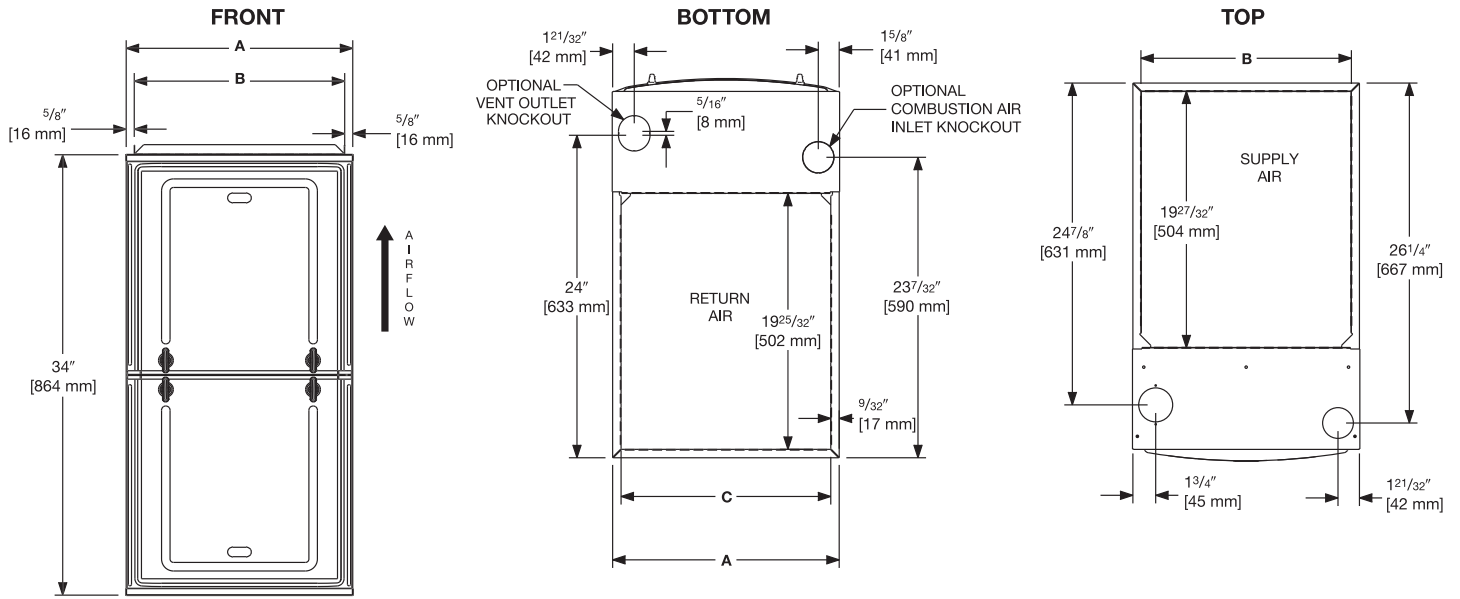
[] Designates Metric Conversions

Model Number Identification

<u>S</u>	<u>95</u>	<u>T</u>	<u>A</u>	<u>—</u>	<u>040</u>	<u>1</u>	<u>3</u>	<u>17</u>	<u>M</u>	<u>S</u>	<u>A</u>
Russell™ By Rheem	Series 95% Efficient	Motor - Constant Torque	Design Series A = 1st Design B = 2nd Design C = 3rd Design		Input BTU/HR 040 = 42,000 [12.31 kW] 060 = 56,000 [16.41 kW] 070 = 70,000 [20.51 kW] 085 = 84,000 [24.62 kW] 100 = 98,000 [28.72 kW] 115 = 112,000 [32.82 kW]	Stage - Single	Airflow 3 - Up to 3 Tons 5 - Up to 5 Tons	Cabinet Width 17 = 17.5" 21 = 21.0" 24 = 24.5"	Configuration - Multi-Position	S = Standard	Revision - Marketing (A - First Time Release)

[] Designates Metric Conversions

Russell™ By Rheem | S95T Multi-Position Gas Furnaces



UNIT DIMENSIONS (CLEARANCE TO COMBUSTIBLES)

MODEL S95T	LEFT SIDE	MINIMUM CLEARANCE (IN.) [mm]					SHIP WGTS.	FLANGE DIMENSIONS		
		RIGHT SIDE	BACK	TOP	FRONT	VENT		A	B	C
040	0	0	0	1 [25]	2 [51]	0	123.5 [56]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
060	0	0	0	1 [25]	2 [51]	0	128 [58]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
070	0	0	0	1 [25]	2 [51]	0	132 [60]	17 1/2 [445]	16 17/64 [413]	16 13/64 [412]
070 (wide)	0	0	0	1 [25]	2 [51]	0	147.5 [67]	21 [533]	19 49/64 [502]	19 45/64 [500]
085	0	0	0	1 [25]	2 [51]	0	147.5 [67]	21 [533]	19 49/64 [502]	19 45/64 [500]
100	0	0	0	1 [25]	2 [51]	0	152 [69]	21 [533]	19 49/64 [502]	19 45/64 [500]
115	0	0	0	1 [25]	2 [51]	0	165 [75]	24 1/2 [662]	23 17/64 [591]	23 13/64 [589]

*A service clearance of at least 24" is recommended in front of all furnaces
Supply and return depicted as upflow configuration.
Flange configuration will vary depending on installation orientation.

[] Designates Metric Conversions

FURNACE MODEL	BLOWER SIZE [mm]	MOTOR H.P. [W]	MOTOR TAP	MOTOR LEAD WIRE COLOR	SPEED	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN [kPa]									
						0.1 [0.2]	0.2 [0.05]	0.3 [0.07]	0.4 [0.10]	0.5 [0.12]	0.6 [0.15]	0.7 [0.17]	0.8 [0.19]	0.9 [0.22]	
(-)95T(-) 0401317MSA	11 x 7 [279 x 178]	1/2 [373]	1	Red	Low	874 [413]	820 [387]	765 [361]	710 [335]	658 [311]	575 [271]	523 [247]	482 [228]	448 [211]	
			2	Yellow	Medium Low	1029 [486]	982 [463]	930 [439]	881 [416]	833 [393]	780 [368]	716 [338]	665 [314]	621 [293]	
			3	Purple	Medium	1098 [518]	1055 [498]	1008 [476]	962 [454]	920 [434]	870 [411]	822 [388]	755 [356]	705 [332]	
			4	Blue	Medium High	1253.6 [592]	1209.1 [571]	1164.4 [550]	1128.1 [532]	1082.2 [511]	1043.7 [493]	1000 [472]	960 [453]	907.2 [428]	
			5	Black	High	1380.6 [652]	1345.5 [635]	1313.1 [620]	1276 [602]	1239.2 [585]	1202.3 [567]	1166 [550]	1132.7 [535]	1098.9 [519]	
(-)95T(-) 0601317MSA	11 x 8 [279 x 203]	1/2 [373]	1	Red	Low	818 [386]	766 [362]	720 [340]	668 [315]	594 [280]	548 [259]	494 [233]	444 [210]	416 [196]	
			2	Yellow	Medium Low	968 [457]	913 [431]	885 [418]	841 [397]	796 [376]	739 [349]	685 [323]	641 [303]	596 [281]	
			3	Purple	Medium	1018 [480]	981 [463]	931 [439]	903 [426]	860 [406]	815 [385]	756 [357]	703 [332]	656 [310]	
			4	Blue	Medium High	1173 [554]	1142 [539]	1108 [523]	1059 [500]	1025 [484]	989 [467]	951 [449]	912 [430]	855 [404]	
			5	Black	High	1338 [631]	1327 [626]	1288 [608]	1245 [588]	1227 [579]	1193 [563]	1165 [550]	1134 [535]	1099 [519]	
(-)95T(-) 0701317MSA	11 x 8 [279 x 203]	1/2 [373]	1	Red	Low	820 [387]	701 [331]	642 [303]	579 [273]	508 [240]	473 [223]	415 [196]	365 [172]	289 [136]	
			2	Yellow	Medium Low	1068 [504]	1027 [485]	976 [461]	935 [441]	897 [423]	825 [389]	758 [358]	709 [335]	656 [310]	
			3	Purple	Medium	1219 [575]	1180 [557]	1130 [533]	1093 [516]	1055 [498]	1005 [474]	967 [456]	895 [422]	842 [397]	
			4	Blue	Medium High	1368 [646]	1311 [619]	1281 [605]	1239 [585]	1209 [570]	1174 [554]	1129 [533]	1091 [515]	1047 [494]	
			5	Black	High	1442 [680]	1407 [664]	1380 [651]	1342 [633]	1306 [617]	1269 [599]	1233 [582]	1188 [561]	1147 [541]	
(-)95T(-) 0701521MSA (wide)	11 x 10 [279 x 254]	1 [746]	1	Red	Low	1155 [545]	1095 [517]	1044 [493]	968 [457]	906 [427]	846 [399]	766 [362]	702 [331]	643 [303]	
			2	Yellow	Medium Low	1453 [686]	1397 [659]	1349 [637]	1300 [614]	1255 [592]	1208 [570]	1134 [535]	1082 [511]	1033 [488]	
			3	Purple	Medium	1582 [747]	1532 [723]	1481 [699]	1441 [680]	1400 [661]	1358 [641]	1309 [618]	1247 [589]	1187 [560]	
			4	Blue	Medium High	1744 [823]	1702 [803]	1660 [783]	1624 [766]	1590 [750]	1550 [732]	1516 [715]	1475 [696]	1435 [677]	
			5	Black	High	1976 [933]	1934 [913]	1895 [894]	1860 [878]	1826 [862]	1794 [847]	1752 [827]	1659 [783]	1553 [733]	
(-)95T(-) 0851521MSA	11 x 10 [279 x 254]	1 [746]	1	Red	Low	1183 [558]	1128 [532]	1062 [501]	975 [460]	899 [424]	825 [389]	754 [356]	680 [321]	627 [296]	
			2	Yellow	Medium Low	1482 [699]	1427 [673]	1376 [649]	1315 [621]	1264 [596]	1193 [563]	1128 [532]	1067 [503]	1013 [478]	
			3	Purple	Medium	1651 [779]	1611 [760]	1571 [741]	1518 [717]	1476 [696]	1434 [677]	1383 [653]	1311 [619]	1271 [600]	
			4	Blue	Medium High	1754 [828]	1718 [811]	1680 [793]	1631 [770]	1591 [751]	1554 [733]	1501 [708]	1456 [687]	1395 [658]	
			5	Black	High	2114 [997]	2082 [983]	2049 [967]	2009 [948]	1974 [931]	1940 [916]	1903 [898]	1821 [860]	1752 [827]	
(-)95T(-) 1001521MSA	11 x 10 [279 x 254]	1 [746]	1	Red	Low	1187 [560]	1126 [531]	1035 [488]	963 [454]	891 [421]	825 [389]	754 [356]	692 [326]	633 [299]	
			2	Yellow	Medium Low	1490 [703]	1438 [678]	1391 [657]	1317 [621]	1265 [597]	1203 [568]	1128 [532]	1075 [507]	1018 [480]	
			3	Purple	Medium	1738 [820]	1692 [799]	1652 [779]	1606 [758]	1558 [735]	1510 [713]	1447 [683]	1385 [654]	1336 [630]	
			4	Blue	Medium High	1791 [845]	1757 [829]	1707 [806]	1661 [784]	1618 [763]	1562 [737]	1509 [712]	1457 [688]	1408 [665]	
			5	Black	High	2137 [1009]	2102 [992]	2062 [973]	2020 [953]	1975 [932]	1946 [918]	1908 [900]	1817 [858]	1685 [795]	
(-)95T(-) 1151524MSA	11 x 11 [279 x 279]	1 [746]	1	Red	Low	1219 [575]	1163 [544]	1078 [509]	1001 [473]	904 [427]	824 [389]	756 [357]	677 [320]	615 [290]	
			2	Yellow	Medium Low	1522 [718]	1451 [685]	1395 [658]	1327 [626]	1264 [596]	1203 [568]	1131 [534]	1049 [495]	991 [468]	
			3	Purple	Medium	1679 [792]	1625 [767]	1570 [741]	1521 [718]	1465 [691]	1415 [668]	1357 [640]	1306 [616]	1239 [585]	
			4	Blue	Medium High	1798 [848]	1751 [826]	1697 [801]	1658 [783]	1609 [759]	1555 [734]	1507 [711]	1448 [683]	1394 [658]	
			5	Black	High	2133 [1007]	2101 [992]	2046 [966]	2004 [946]	1963 [927]	1919 [906]	1882 [888]	1833 [865]	1765 [833]	

This table is for reference. The technician/installer must verify furnace is operating within the published rise range before completing the installation.

[] Designates Metric Conversions.

VENT TERMINATION KITS: =

- RXGY-E02:** Vertical/Horizontal Concentric Vent Termination Kit 2" Pipe (US Only)
- RXGY-E02A:** Vertical/Horizontal Concentric Vent Termination Kit 2" Pipe (US & Canadian)
- RXGY-E03:** Vertical/Horizontal Concentric Vent Termination Kit 3" Pipe (US Only)
- RXGY-E03A:** Vertical/Horizontal Concentric Vent Termination Kit 3" Pipe (US & Canadian)
- RXGY-G02:** Direct Vent Furnace Side Wall Vent 2" or 3" (US Only)
- RXGY-D05:** Combustion Air Drain Kit 2"
- RXGY-D06:** Combustion Air Drain Kit 3"
- NEUTRALIZER KIT:** RXGY-A01
(Replacement Cartridge 54-22120-01)
- EXTERNAL BOTTOM FILTER (UPFLOW/HORIZONTAL) RACK:**
RXGF-CB
- EXTERNAL SIDE (UPFLOW) FILTER RACK:** RXGF-CD
- EXTERNAL (DOWNFLOW) FILTER RACK:** RXGF-CC

FOR HIGH ALTITUDES:

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. See installation instructions as appropriate orifice change is required.

- L.P. CONVERSION KIT:** RXGJ-FP38
- CONDENSATE PUMP KIT:** PROSTOCK & 1PCB151TUL
- DOWNFLOW/HORIZONTAL CONVERSION KIT:** RXGY-CK
- DOWNFLOW/HORIZONTAL LEFT ZERO CLEARANCE CONVERSION KIT:** RXGY-ZK
- COMBUSTIBLE FLOOR BASE:** RXGC-B17
RXGC-B21
RXGC-B24

[] Designates Metric Conversions

FILTER RACK FILTER SIZES* INCHES [mm]			
MODEL	RXGF-CB (UPFLOW/ HORIZONTAL)	RXGF-CD (UPFLOW)	RXGF-CC (DOWNFLOW)
S95T(-)040	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
S95T(-)060	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
S95T(-)070	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
S95T(-)070 (wide)	19 ¹ / ₄ x 25 [489 x 635]	15 ³ / ₄ x 25 [400 x 635]	12 x 20 [305 x 508]
S95T(-)085	19 ¹ / ₄ x 25 [489 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
S95T(-)100	19 ¹ / ₄ x 25 [489 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
S95T(-)115	22 ³ / ₄ x 25 [578 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]

INDOOR COIL CASINGS

MODEL NUMBER
RXBC-D17A1
RXBC-D21A1
RXBC-D21B1
RXBC-D24A1

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.

Conditional Parts
(Registration Required)Ten (10) Years
Heat ExchangerLimited Lifetime

***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.**



The new degree of comfort.™



Russell[™]
By Rheem

Russell[™] *By Rheem*

5600 Old Greenwood Road, Fort Smith, AR 72908

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.

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