



PRELIMINARY

Endeavor™ Line Achiever® Series Gas Furnaces



R921T

92% A.F.U.E.†

Heating Stages: Single Stage

Motor Type: Constant Torque

Input Rates: 40 to 115 kBTU [11.7 to 33.7 kW]

Configuration Options: 4-Way Multi-Position



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

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Features and Benefits

- **PlusOne® Energy Efficiency:** ENERGY STAR® certified, featuring 95% AFUE across all model sizes
- **PlusOne® Diagnostics:** Industry-first, 7-Segment LED for quick and easy service
- **PlusOne® Ignition System:** Proven Direct Spark Ignition (DSI) for reliability and longevity
- **PlusOne® Water Management System:** Ruud-exclusive patented block drain sensor that automatically shuts off the furnace when the drain is blocked and alerts the contractor via diagnostic code

Gas Furnaces

<u>R</u>	<u>92</u>	<u>1</u>	<u>T</u>	<u>040</u>	<u>3</u>	<u>A</u>	<u>17</u>	<u>M4</u>	<u>S</u>	<u>N</u>	<u>A</u>	<u>S</u>
Brand	Furnace Efficiency	Stages of Heating	Motor Type	Heating Input	AC Max. Capacity	Major Series	Width	Position	NOx	Controls	Minor Series	Option Code
R - Ruud	92 - 92% AFUE	1 - Single-Stage	T - Constant Torque	040 - 40,000 [11.7 kW] 060 - 60,000 [17.6 kW] 070 - 70,000 [21.5 kW] 085 - 85,000 [24.9 kW] 100 - 100,000 [29.3 kW] 115 - 115,000 [33.7 kW]	3 - 3 ton drive 5 - 5 ton drive	A - 1st Design Series	17 - 17.5" Width 21 - 21" Width 24 - 24.5" Width	M4 - Multi-4 Way	S - Standard	N - Non-Communicating	A - 1st Series	S - Standard Grade

[] Designates Metric Conversions

AVAILABLE MODELS
R921T0403A17M4SNAS
R921T0603A17M4SNAS
R921T0703A17M4SNAS
R921T0705A21M4SNAS
R921T0855A21M4SNAS
R921T1005A21M4SNAS
R921T1155A24M4SNAS

STANDARD EQUIPMENT
Multispeed Constant Torque ECM Motor
Complete assembly and wiring
Blocked Drain Sensor
7 Segment LED & marked hoses
Primary aluminized steel heat exchanger
29-4C stainless steel secondary heat exchanger
Induced Draft Blower
Pressure switches
Redundant main gas control
Limit controls
Manual shut-off valve
100% safety lock out
Blower compartment door safety switch
Solid State Time on/off blower control
Cool fan off delay
Field Selectable Heat Fan Off Delay
Low speed continuous fan option
Single Speed Option for Heating & Cooling Applications
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
Transformer
Direct drive
Solid bottom

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

Physical Data and Specifications

MODEL NUMBERS	R921T 0403A17M4SNAS	R921T 0603A17M4SNAS	R921T 0703A17M4SNAS	R921T 0705A21M4SNAS	R921T 0855A21M4SNAS	R921T 1005A21M4SNAS	R921T 1155A24M4SNAS
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 Spd Constant Torque	1/2 [373] 5 Spd Constant Torque	1/2 [373] 5 Spd Constant Torque	1 [746] 5 Spd Constant Torque	1 [746] 5 Spd Constant Torque	1 [746] 5 Spd Constant Torque	1 [746] 5 Spd Constant Torque
MIN. CIRCUIT AMPACITY	8	10	10	12	13	15	14
MIN. OVERLOAD PROTECTION DEVICE	15	15	15	15	20	20	20
MAX. OVERLOAD PROTECTION DEVICE	15	15	15	20	20	20	20
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 SPEED	MED-LOW	MED	MED	MED-LOW	MED	MED	MED
COOLING SPEED	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH
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.

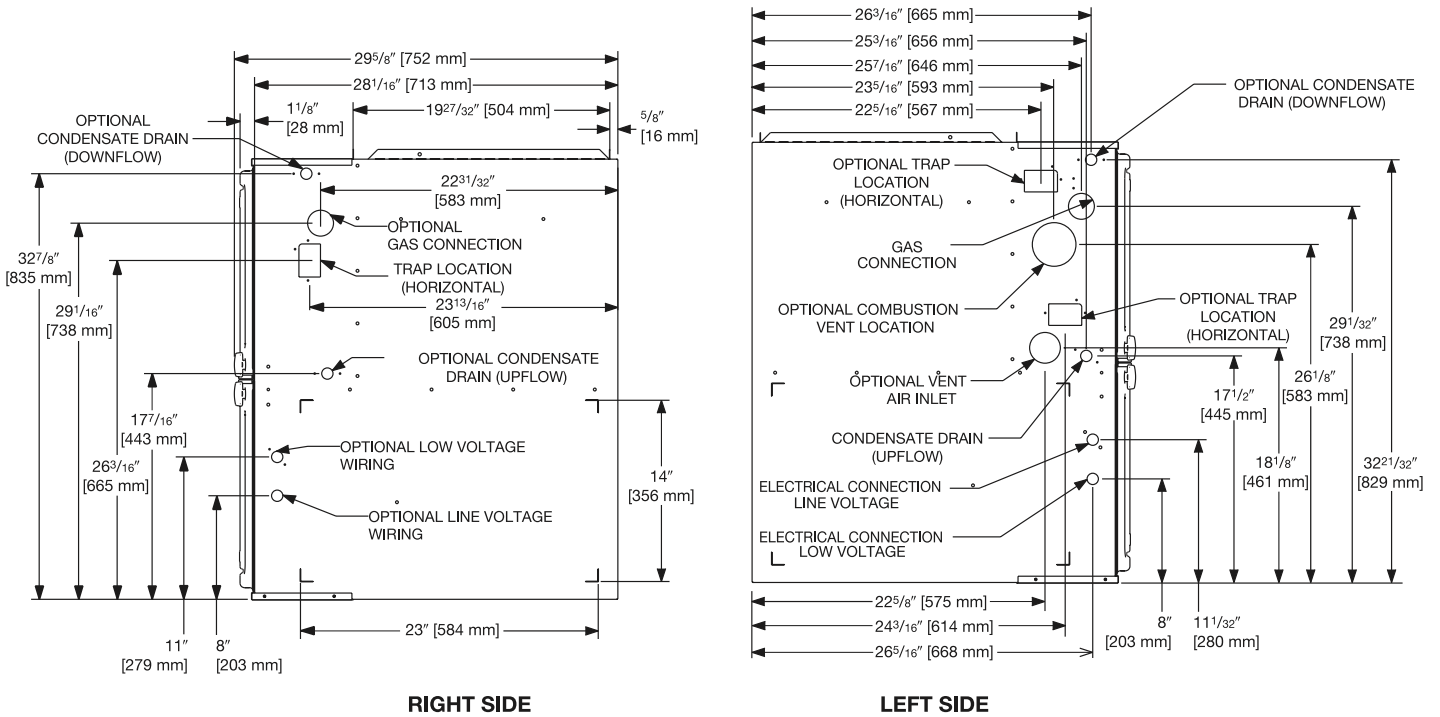
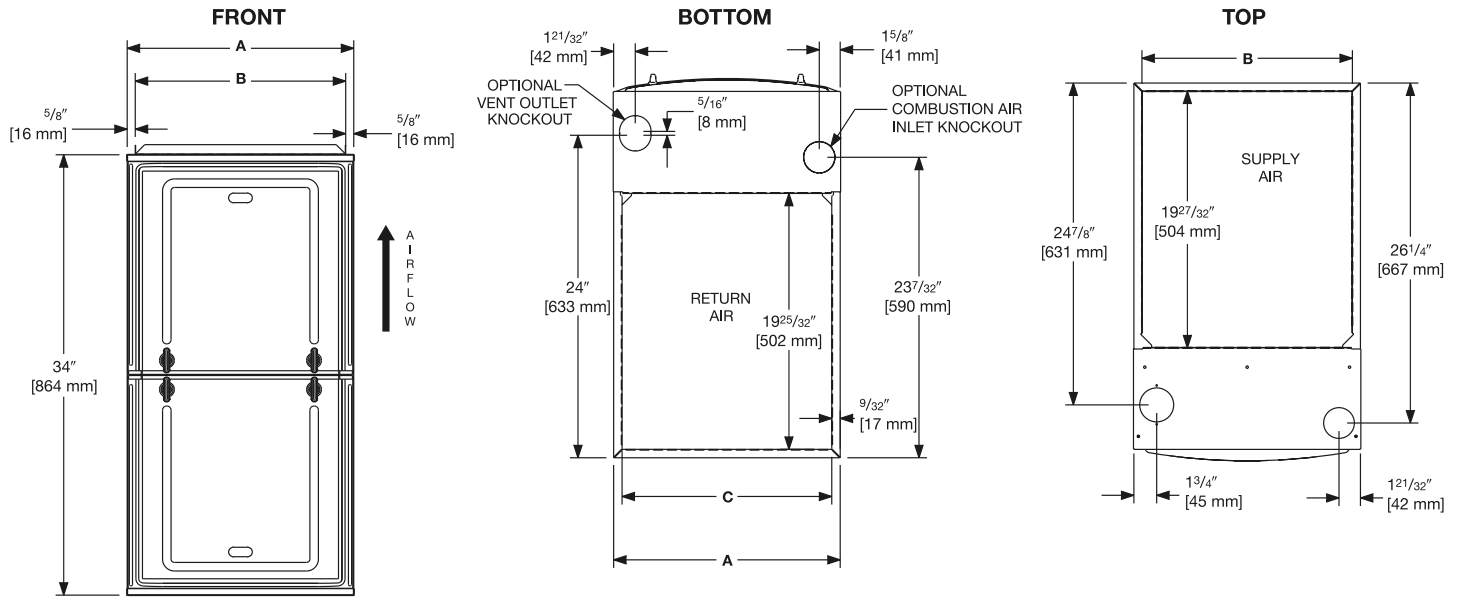
- ① Installation instructions for high altitude derate.
- ② Canadian installations only.
- ③ In accordance with D.O.E. test procedures.

NOTE: Standard model complies with California low NOx requirements up to 40ng/J.

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



Unit Dimensions Clearance to Combustibles

MODEL R921T	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.

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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
MED. LOW	971	912			875	839	804	758	713	684	644
MEDIUM	1117	1081			1051	1024	995	973	938	908	878
MED. HIGH	1326	1291			1275	1240	1204	1171	1144	1114	1077
HIGH	1440	1432			1405	1382	1353	1322	1305	1272	1251
	[279 x 110]	MED. HIGH	1568	1537	1498	1468	1433	1399	1353	1320	1287
		HIGH	1785	1775	1736	1704	1673	1629	1608	1573	1550
(-)801TA100521MSA	3/4 [559] 11 x 10 [279 x 254]	LOW	1277	1211	1164	1103	1035	967	861	800	740
		MED. LOW	1556	1498	1456	1409	1353	1308	1254	1198	1125
		MEDIUM	1644	1597	1554	1511	1463	1400	1358	1304	1253
		MED. HIGH	1879	1842	1785	1729	1692	1674	1621	1579	1537
		HIGH	2071	2025	1992	1948	1902	1872	1840	1795	1750
(-)801TA125525MSA	3/4 [559] 11 x 10 [279 x 254]	LOW	1398	1338	1278	1232	1177	1130	1041	975	909
		MED. LOW	1593	1546	1495	1454	1414	1342	1304	1251	1190
		MEDIUM	1878	1844	1807	1753	1714	1675	1634	1578	1536
		MED. HIGH	2025	1967	1931	1886	1856	1812	1748	1721	1668
		HIGH	2165	2124	2082	2047	2012	1973	1934	1894	1859

TO COME

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

[] 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

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FILTER RACK FILTER SIZES* INCHES [mm]			
MODEL	RXGF-CB (UPFLOW/ HORIZONTAL)	RXGF-CD (UPFLOW)	RXGF-CC (DOWNFLOW)
R921T(-)040	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
R921T(-)060	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
R921T(-)070	15 ³ / ₄ x 25 [400 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
R921T(-)070 (wide)	19 ¹ / ₄ x 25 [489 x 635]	15 ³ / ₄ x 25 [400 x 635]	12 x 20 [305 x 508]
R921T(-)085	19 ¹ / ₄ x 25 [489 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
R921T(-)100	19 ¹ / ₄ x 25 [489 x 635]	15 ³ / ₄ x 25 [400 x 635]	14 x 20 [356 x 508]
R921T(-)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*

Ruud 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

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

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