

# Endeavor™ Line *Achiever Plus*® Series Gas Furnaces







# **R962V**

96% A.F.U.E.† EcoNet® Enabled

Heating Stages: Two-Stage Motor Type: Constant CFM

Input Rates: 40 to 115 kBTU [11.7 to 33.7 kW] Configuration Options: 4-Way Multi-Position







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#### **Features and Benefits**

- PlusOne® Energy Efficiency: ENERGY STAR® certified, featuring 96% AFUE across all model sizes
- PlusOne® Diagnostics: With the Ruud Contractor & EcoNet® Apps, built-in EcoNet® & Bluetooth technology makes monitoring, troubleshooting and repairing the product easier than ever before
- Dip Switch Free Installation Commissioning via Bluetooth Technology: Seamless final install step without DIP switch configuration using the Ruud Contractor App
- PlusOne® Ignition System: Proven Direct Spark Ignition (DSI) for reliability and longevity
- PlusOne® Water Management System: Exclusive patented block drain sensor that automatically shuts off the furnace when the drain is blocked and alerts the contractor via diagnostic code

- Two-Stage Heating: Furnace operation mainly stays at low capacity around 60-65%, but will switch to high capacity to deliver stable heat distribution
- Constant CFM Motor: Truly variable speed technology allows for ultimate humidity control, quieter sound levels and year-round energy savings
- Quieter Operation¹: A fully insulated blower cabinet, solid bottom and truly variable speed airflow technology makes this furnace one of the quieter options available
- EcoNet® Enabled Furnace: The latest in sensor technology and the EcoNet® monitoring system provides a new level of protection, control and energy savings
- Allows on-the-go control and receipt of system alerts by the homeowner via the EcoNet® Smart Thermostat and Econet® App²

<sup>1</sup> Based on manufacturer's furnace offering, and the product's heating stages, motor type and cabinet insulation. Sound levels are also dependent on furnace location and installation.

<sup>2</sup> Wifi broadband internet connection required. Download the EcoNet® App from the App Store® or Google Play® to set up your EcoNet® Smart Thermostat. Receipt of notifications depend on home WiFi set up. Amazon, Alex and all related logos are trademarks of Amazon.com, Inc. or its affiliates.

Gas Furnaces												
<u>R</u>	<u>96</u>	<u>2</u>	<u>v</u>	040	<u>3</u>	<u>A</u>	<u>17</u>	<u>M4</u>	<u>s</u>	<u>c</u>	<u>A</u>	<u>P</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	96 - 96% AFUE	2 - Two-Stage V	' - ECM Variable Speed	040 - 40,000 [11.7 kW] 060 - 60,000 [17.6 kW] 070 - 70,000 [20.5 kW] 075 - 75,000 [22.0 kW] 085 - 85,000 [24.9 kW] 100 - 100,000 [29.3 kW] 115 - 115,000 [33.7 kW]			17 - 17.5" Width 21 - 21" Width 24 - 24.5" Width	M4 - Multi- 4 Way	S - Standard	C - Communicating, EcoNet®, Bluetooth	A - 1st Series	P - Premium Grade

#### [ ] Designates Metric Conversions

AVAILABLE MODELS
R962V0403A17M4SCAP
R962V0603A17M4SCAP
R962V0703A17M4SCAP
R962V0705A21M4SCAP
R962V0855A21M4SCAP
R962V1005A21M4SCAP
B962V1155A24M4SCAP

STANDARD EQUIPMENT
Pressure switches
Redundant 2 stage 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
Adjustable cool 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
Adjustable humidifier on/off delay
Low speed continuous fan option
Two speed heating
Two speed cooling
Direct drive motor
PWM controlled constant CFM electrically commutated blower motor
Multi-speed constant CFM electrically commutated blower motor
Solid bottom

NOTE: A thermostat is not included as standard equipment.

# WARNING

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

# Physical Data and Specifications U.S. and Canadian Models

MODEL NUMBERS	R962V0403 A17M4CAP	R962V0603 A17M4SCAP	R962V0703 A17M4SCAP	R962V0705 A21M4SCAP	R962V0855 A21M4SCAP	R962V1005 A21M4SCAP	R962V1155A 24M4SCAP
HIGH FIRE INPUT BTU/HR [kW] ①	42,000 [12.31]	56,000 [16.41]	70,000 [20.50]	70,000 [20.50]	84,000 [24.61]	98,000 [28.72]	112,000 [32.82]
LOW FIRE INPUT	29,400 [8.61]	39,200 [11.49]	49,000 [14.36]	49,000 [14.36]	58,800 [17.23]	68,600 [20.11]	78,400 [23.00]
HEATING CAPACITY BTU/HR [kW]	41,000 [12.02]	55,000 [16.12]	68,000 [19.93]	68,000 [19.93]	82,000 [24.03]	95,000 [27.84]	109,000 [31.94]
HIGH ALTITUDE OUTPUT 10% DERATE [kW] ②	36,288 [10.64]	48,384 [14.18]	60,480 [17.72]	60,480 [17.72]	72,756 [21.27]	84,672 [24.81]	96,768 [28.36]
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] VS-CT(ECM)	1/2 [373] VS-CT(ECM)	1/2 [373] VS-CT(ECM)	1 [746] VS-CT(ECM)	1 [746] VS-CT(ECM)	1 [746] VS-CT(ECM)	1 [746] VS-CT(ECM)
MIN. CIRCUIT AMPACITY	8	8	8	12	12	12	12
MIN. OVERLOAD PROTECTION DEVICE	15	15	15	20	20	15	15
MAX. OVERLOAD PROTECTION DEVICE	15	15	15	20	20	15	15
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]	0.9 [0.22]	0.9 [0.22]	0.9 [0.22]	0.9 [0.22]	0.9 [0.22]	0.9 [0.22]	0.9 [0.22]
HEATING HI CFM [L/s]	1150 [543]	1250 [590]	1000 [472]	1332 [6291]	1850 [873]	1965 [927]	1700 [802]
HEATING LO CFM [L/s]	870 [411]	1025 [484]	875 [413]	1121 [529]	1470 [694]	1710 [807]	1450 [6841]
COOLING HI CFM [L/s]	1125 [531]	1125 [531]	1125 [531]	1800 [850]	1800 [850]	1800 [850]	1800 [850]
COOLING LOCFM [L/s]	731 [345]	731 [345]	731 [345]	1170 [552]	1170 [552]	1170 [552]	1170 [552]
TEMPERATURE RISE-HIGH FIRE RANGE IN DEGREES °F [°C]	20 - 50 [11 - 28]	30 - 60 [17 - 33]	40 - 70 [22 - 39]	30 - 60 [17 - 33]	30 - 60 [17 - 33]	40 - 70 [22 - 39]	45 - 75 [25 - 42]
TEMPERATURE RISE-LOW FIRE RANGE IN DEGREES °F [°C]	15 - 45 [8 - 25]	20 - 50 [11 - 28]	30 - 60 [17 - 33]	20 - 50 [11 - 28]	20 - 50 [11 - 28]	30 - 60 [17 - 33]	35 - 63 [19 - 36]
APPROX. SHIPPING WEIGHT	128 [58]	128 [58]	132 [60]	139 [63]	147.5 [67]	152 [69]	165 [75]
AFUE ③	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%	96.00%

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

This furnace does not meet air district requirements of 14 ng/J NOx emissions limit. 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.

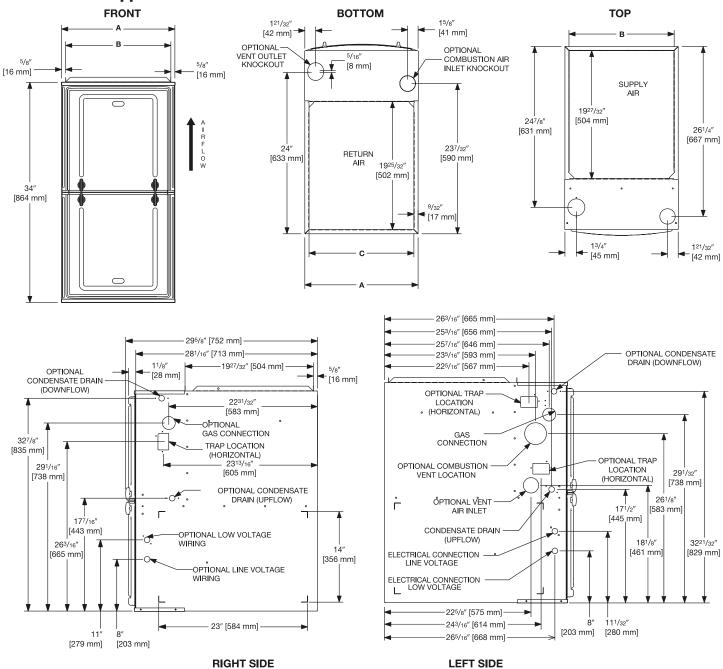
① Installation instructions for high altitude derate.

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.

# **Multi-Position Application**



# **Unit Dimensions (Clearance to Combustibles)**

	•									
MODEL LEET OLDE		MINIM	UM CLEA	RANCE (II	l.) [mm]		SHIP	FLANGE DIMENSIONS		
R962V	LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	WGTS.	Α	В	C
040	0	0	0	1 [25]	2 [51]	0	123.5 [56]	171/2 [445]	16 <sup>17</sup> /64 [413]	16 <sup>13</sup> /64 [412]
060	0	0	0	1 [25]	2 [51]	0	128.0 [58]	171/2 [445]	16 <sup>17</sup> /64 [413]	16 <sup>13</sup> /64 [412]
070	0	0	0	1 [25]	2 [51]	0	132.0 [60]	171/2 [445]	16 <sup>17</sup> /64 [413]	16 <sup>13</sup> /64 [412]
070 (wide)	0	0	0	1 [25]	2 [51]	0	147.5 [67]	21 [533]	19 <sup>49</sup> /64 [502]	19 <sup>45</sup> /64 [500]
085	0	0	0	1 [25]	2 [51]	0	147.5 [67]	21 [533]	19 <sup>49</sup> / <sub>64</sub> [502]	1945/64 [500]
100	0	0	0	1 [25]	2 [51]	0	152.0 [69]	21 [533]	19 <sup>49</sup> / <sub>64</sub> [502]	19 <sup>45</sup> /64 [500]
115	0	0	0	1 [25]	2 [51]	0	165.0 [75]	241/2 [662]	2317/63 [591]	2313/64 [589]

# **Blower Performance Data**

GAS HEATING TARGET CFM [L/s]								
	R962V0403 A17M4SCAP	R962V0603 A17M4SCAP	R962V0703 A17M4SCAP	R962V0705 A21M4SCAP	R962V0855 A21M4SCAP	R962V1005 A21M4SCAP	R962V1155 A24M4SCAP	
Furnace Lo Heat CFM A (factory)	870 [411]	900 [425]	1070 [505]	1100 [520]	1475 [697]	1320 [623]	1400 [661]	
Furnace Lo Heat CFM B (side return)	870 [411]	900 [425]	1070 [505]	1100 [520]	1475 [697]	1320 [623]	1400 [661]	
Furnace Lo Heat CFM C (Approx. +7°F)	766 [362]	792 [374]	941.6 [445]	968 [457]	1298 [613]	1161.6 [549]	1232 [582]	
Furnace Lo Heat CFM D (Approx. +12°F)	705 [333]	729 [345]	867 [410]	891 [421]	1195 [564]	1070 [505]	1134 [536]	
Furnace Hi Heat CFM A (factory)	990 [468]	1100 [520]	1000 [472]	1300 [614]	1574 [743]	1565 [739]	1575 [744]	
Furnace Hi Heat CFM B (side return)	990 [468]	1100 [520]	1000 [472]	1300 [614]	1574 [743]	1565 [739]	1575 [744]	
Furnace Hi Heat CFM C (Approx. +7°F)	891 [421]	990 [468]	900 [425]	1170 [553]	1417 [669]	1409 [665]	1418 [670]	
Furnace Hi Heat CFM D (Approx. +12°F)	822 [388]	913 [431]	830 [392]	1079 [510]	1307 [617]	1299 [614]	1308 [618]	

### **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)

FOSSIL FUEL KIT: RXPF-F01, RXPF-F02 (TVA)

**EXTERNAL BOTTOM FILTER (UPFLOW/HORIZONTAL) RACK:** 

**RXGF-CB** 

EXTERNAL SIDE (UPFLOW) FILTER RACK: RXGF-CD EXTERNAL (DOWNFLOW) FILTER RACK: RXGF-CC

FILTER RACK FILTER SIZES* INCHES [mm]								
MODEL	RXGF-CB (UPFLOW/ HORIZONTAL)	RXGF-CD (UPFLOW)	RXGF-CC (DOWNFLOW)					
R962V040	15 <sup>3</sup> / <sub>4</sub> x 25	15 <sup>3</sup> / <sub>4</sub> x 25	12 x 20					
	[400 x 635]	[400 x 635]	[305 x 508]					
R962V060	15 <sup>3</sup> / <sub>4</sub> x 25	15 <sup>3</sup> / <sub>4</sub> x 25	12 x 20					
	[400 x 635]	[400 x 635]	[305 x 508]					
R962V070	15 <sup>3</sup> / <sub>4</sub> x 25	15 <sup>3</sup> / <sub>4</sub> x 25	12 x 20					
	[400 x 635]	[400 x 635]	[305 x 508]					
R962V070	19¹/4 x 25	15 <sup>3</sup> / <sub>4</sub> x 25	12 x 20					
(wide)	[489 x 635]	[400 x 635]	[305 x 508]					
R962V085	19¹/4 x 25	15 <sup>3</sup> / <sub>4</sub> x 25	12 x 20					
	[489 x 635]	[400 x 635]	[305 x 508]					
R962V100	19 <sup>1</sup> / <sub>4</sub> x 25	15 <sup>3</sup> / <sub>4</sub> x 25	12 x 20					
	[489 x 635]	[400 x 635]	[305 x 508]					
R962V115	22 <sup>3</sup> / <sub>4</sub> x 25	15 <sup>3</sup> / <sub>4</sub> x 25	14 x 20					
	[578 x 635]	[400 x 635]	[356 x 508]					

<sup>\*</sup>Filter racks are shipped without filters.

# **Indoor Coil Casings**

MODEL Number
RXBC-D17A1
RXBC-D21A1
RXBC-D21B1
RXBC-D24A1

### 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-FP34

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

Filters shipped with furnace may be used or a suitable 1" [25.4 mm] filter.



#### THE ECONET® SMART THERMOSTAT

**BUILT-IN WIFI** 

4.3" LCD TOUCH SCREEN

**LOCAL WEATHER –** Current conditions plus 6-day forecast

5 OPERATING MODES - Heat, Cool, Auto, Emergency Heat and Fan Only

7-DAY PROGRAMMABLE SCHEDULE - Offers comfort without thought

**ONE-TOUCH AWAY –** Quickly switch to your energy-saving away preferences

**VACATION SCHEDULING** – Allows you to save while you're away and come home to comfort

**STANDBY SCREEN** – Displays indoor temperature and current weather



**UETST700SYS** 

#### **OPERATIONAL FEATURES**

AUTOMATIC CHANGEOVER - Transitions between heating and cooling automatically to keep the house comfortable

**INTEGRATED WATER CONTROL** – Enables easy water heater management

SMOOTH ARRIVAL - Prompts the system to start ahead of schedule to ensure the home is at the desired temperature at the scheduled time

**HUMIDITY CONTROL** – Supports humidifier accessories or over-cool based dehumidification

**DETAILED OPERATING STATUS –** View pertinent equipment status information and run times

**CONTINUOUS FAN** — Offers 5 speeds (Low, Medium Low, Medium, Medium High, High)

**SHORT-CYCLE PROTECTION** – Avoids damage to equipment from short run cycles

#### **MONITORING & REMOTE CONTROL FEATURES**

**ACTIVE MONITORING** – Alerts to problems that need immediate attention

REMOTE CONTROL - Allows adjusting of comfort and settings from anywhere using a mobile device

**SERVICE ALERTS** – Sends routine maintenance reminders

AIR FILTER MONITORING - Detects when it's time to replace the air filter

ALARM HISTORY - Displays time-stamped alarm codes with clear descriptions

Notes R962V



## **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 Unit Replacement	
(Registration Required)	Ten (10) Years
Heat Exchanger	Limited Lifetime
Conditional Parts	Ten (10) Years

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

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