



Vantix™ Line Gas Furnaces



This product meets a stringent set of our internally defined sustainability standards



S951V Ultra Low NOx

95% A.F.U.E.†

EcoNet® Enabled

Heating Stages: Single Stage

Motor Type: Constant CFM

Input Rates: 40 to 100 kBTU [12.31 to 27.84 kW]

Configuration Options: Upflow Horizontal



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

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Features and Benefits

- **Ultra Low Greenhouse Gas Emissions:** Certified unit meets 14ng/j NOx emission standard – reducing NOx emissions by 65%
- **Energy Efficiency:** ENERGY STAR® certified, featuring 95% AFUE across all model sizes
- **Diagnostics:** With the Russell® By Rheem Contractor & EcoNet® Apps, built-in EcoNet® & Bluetooth®¹ 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 Russell® By Rheem Contractor App
- **Ignition System:** Proven Direct Spark Ignition (DSI) for reliability and longevity
- **Water Management System:** Russell® By Rheem-exclusive patented block drain sensor that automatically shuts off the furnace when the drain is blocked, and also alerts the contractor via diagnostic code
- **Constant CFM Motor:** Truly variable speed technology allows for ultimate humidity control, quieter sound levels and year-round energy savings
- **Quieter Operation²:** 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® App³
- **This unit is certified** for use in elevations up to 10,000 feet

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²Based 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.

³Wifi 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, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.

Gas Furnaces

| <u>S</u> | <u>95</u> | <u>1</u> | <u>V</u> | <u>040</u> | <u>3</u> | <u>A</u> | <u>17</u> | <u>UH</u> | <u>U</u> | <u>B</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 |
| S - Russell® By Rheem | 95 - 95% AFUE | 1 - Single Stage | V - ECM Variable Speed | 040 - 40K BTUH [12.31 kW] 060 - 60K BTUH [16.41 kW] 070 - 70K BTUH [20.51 kW] 100 - 100K BTUH [27.84 kW] | 3 - 3 ton drive 5 - 5 ton drive | A - 1st Design Series | 17 - 17.5" Width 21 - 21" Width | UH - Upflow Horizontal | U - Ultra Low NOx | B - Communicating, EcoNet®, Bluetooth® | A - 1st Series | P - Premium Grade |

[] Designates Metric Conversions

| AVAILABLE MODELS |
|--------------------|
| S951V0403A17UHUBAP |
| S951V0603A17UHUBAP |
| S951V0705A21UHUBAP |
| S951V1005A21UHUBAP |

STANDARD EQUIPMENT

| | |
|--|---|
| 100% Safety Lock Out | Limit Controls |
| 2 Stage Cooling | Low Speed Continuous Fan Option |
| 29-4C Stainless Steel Secondary Heat Exchanger | Manual Shut-Off Valve |
| 3 Way Multi Poise Design Upflow/Horizontal | On Demand Dehumidification |
| Blocked Drain Sensor | One-Hour Automatic Retry |
| Blower Compartment Door Safety Switch | Outdoor Air Temperature Connection |
| Bluetooth® Set Up, Diagnostics & Marked Hoses for Ease of Installation | Power and Self-Test Diagnostics |
| Complete Assembly and Wiring | Pressure Switches |
| Condensate Switch Connection | Redundant Main Gas Control |
| Constant CFM Variable Speed CT Motor | Return Air Temp Sensor Connection |
| Cool Fan Off Delay | Solid Bottom |
| Direct Drive | Blower Insulation |
| Electronic Air Cleaner Connections | Stainless Steel Primary Heat Exchanger |
| EXV Connection | Suction Pressure/Evap. Temperature Connection |
| Flame Sense Current Diagnostics | Suction Temperature Connection |
| Fully Insulated Heat Exchanger Cabinet | Supply Air Temperature Connection |
| Furnace Diagnostics-7 Segment LED All Units | Transformer |
| Humidifier Connections | Variable Speed 3 Phase Induced Draft Motor |

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

Physical Data and Specifications U.S. and Canadian Models

| MODEL NUMBERS S951V 1 STG VS-CT UP/HZ SERIES | S951V0403A17UHUBAP | S951V0603A17UHUBAP | S951V0705A21UHUBAP | S951V1005A21UHUBAP |
|---|----------------------|----------------------|---------------------|---------------------|
| INPUT-BTU/HR [kW] | 42,000 [12.31] | 56,000 [16.41] | 70,000 [20.51] | 95,000 [27.84] |
| HEATING CAPACITY BTU/HR [kW] ① | 39,900 [11.69] | 53,200 [15.59] | 66,500 [19.49] | 90,250 [26.45] |
| HEAT EXT. STATIC PRESSURE [kPA] | .10 [.02] | .12 [.03] | .15 [.04] | .20 [.05] |
| BLOWER (D X W) [mm] | 11 x 8 [279 x 203] | 11 x 8 [279 x 203] | 11 x 10 [279 x 254] | 11 x 10 [279 x 254] |
| MOTOR H.P. [W] TYPE | 1/2 [373] VS-CT(ECM) | 3/4 [560] VS-CT(ECM) | 1 [746] VS-CT(ECM) | 1 [746] VS-CT(ECM) |
| MIN. CIRCUIT AMPACITY | 9 | 13 | 17 | 17 |
| MIN. OVERLOAD PROTECTION DEVICE | 15 | 20 | 20 | 20 |
| MAX. OVERLOAD PROTECTION DEVICE | 15 | 20 | 25 | 25 |
| MOTOR FULL LOAD AMPS | 6.1 | 9.6 | 12.4 | 12.4 |
| HEATING CFM [L/s] | 825 [389] | 1050 [496] | 1210 [571] | 1650 [779] |
| MAX. COOLING CFM [L/s] | 1240 [585] | 1240 [585] | 1980 [934] | 1980 [934] |
| MIN. COOLING CFM [L/s] | 300 [142] | 300 [142] | 500 [236] | 500 [236] |
| FAN CFM [L/s] | 600 [283] | 800 [378] | 1000 [472] | 1000 [472] |
| MAX. E.S.P. (IN. W.C.) [kPA] | 1.0 [0.25] | 1.0 [0.25] | 1.0 [0.25] | 1.0 [0.25] |
| TEMPERATURE RISE RANGE °F [°C] | 30 - 60 [17 - 33] | 35-65 [19.4-36.1] | 35-65 [19.4-36.1] | 40 - 70 [22 - 39] |
| APPROX. SHIPPING WEIGHT (LBS.) [kg] | 143 [65] | 143.5 [65] | 168.5 [76] | 170.5 [77] |
| AFUE ② | 95.00% | 95.00% | 95.00% | 95.00% |

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

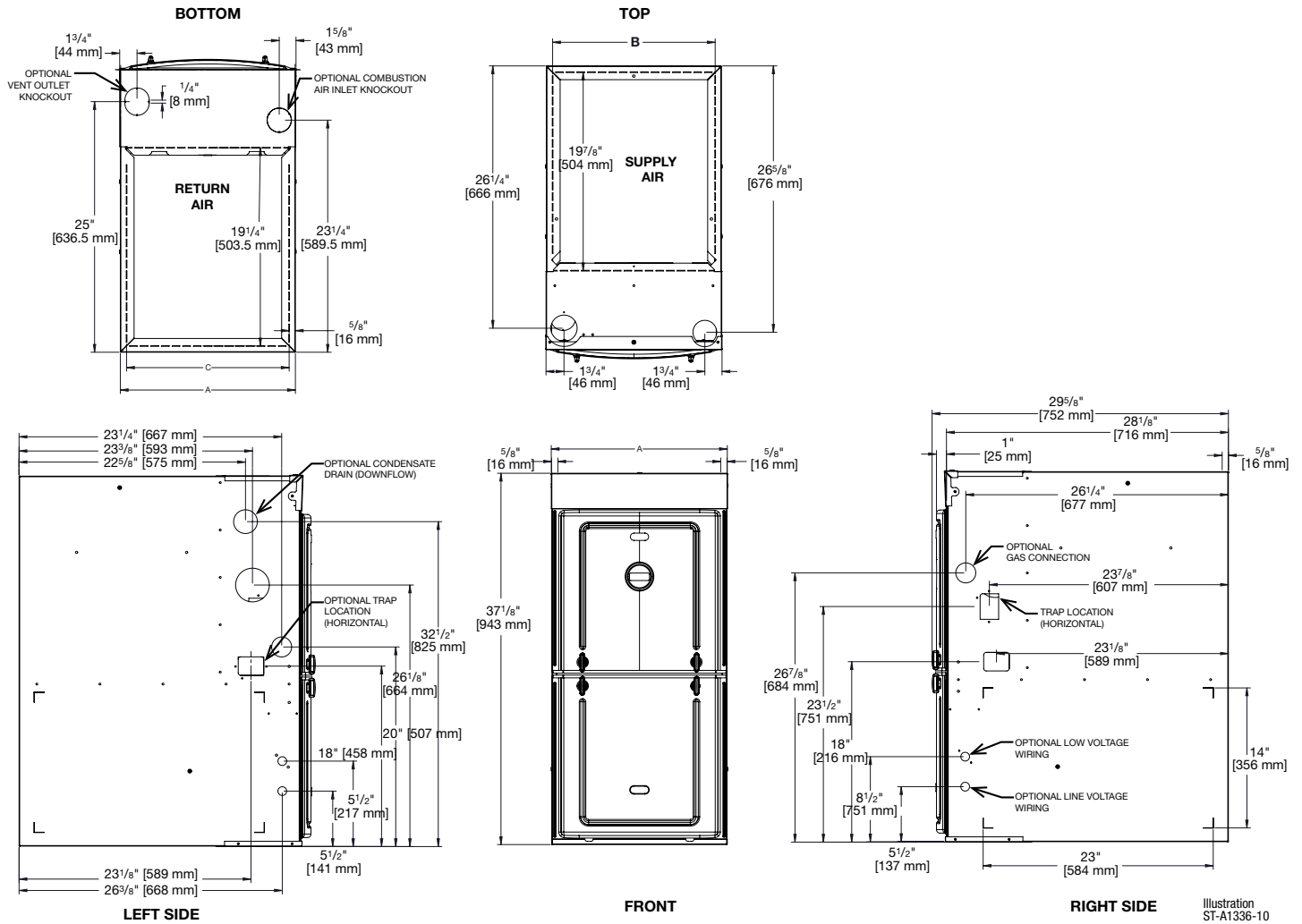
① This model does not require any component changes at elevations 0-5,500 ft. above sea level. At elevations higher than 2,000 ft. these models do require a 2% de-rate for every 1,000 ft. of elevation above sea level.

② In accordance with D.O.E test procedures.

This furnace meets air district requirements of 14 ng/J NOx emissions limit, and thus is eligible for the Clean Air Furnace Rebate Program:
www.CleanAirFurnaceRebate.com in SCAQMD.

[] Designates Metric Conversions

Multi-position Application



Unit Dimensions (Clearance to Combustibles)

| MODEL S951V ULN | MINIMUM CLEARANCE (IN.) [mm] | | | | | | FLANGE DIMENSIONS | | |
|--------------------|------------------------------|---------------|------|--------|--------|------|-------------------|----------------|----------------|
| | LEFT SIDE | RIGHT SIDE | BACK | TOP | FRONT | VENT | A | B | C |
| 040 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 17 1/2 [445] | 16 17/64 [413] | 16 13/64 [412] |
| 060 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 17 1/2 [445] | 16 17/64 [413] | 16 13/64 [412] |
| 070 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 21 [533] | 19 49/64 [502] | 19 45/64 [500] |
| 100 | 0 | 0 | 0 | 1 [25] | 2 [51] | 0 | 21 [533] | 19 49/64 [502] | 19 45/64 [500] |

Furnaces must be vented in accordance with the National Fuel Gas Code, ANSI Z223.1 and in accordance with local codes.

[] Designates Metric Conversions

Blower Performance Data

| TARGET GAS HEATING AIRFLOWS | | | | | |
|---------------------------------|---------------------------------|------------------------|------------------------|------------------------|------------------------|
| | | S951V0403 A17UHUBAP | S951V0603 A17UHUBAP | S951V0705 A21UHUBAP | S951V1005 A21UHUBAP |
| Factory High Heating CFM [L/s] | Factory High Heating CFM [L/s] | 825 [389] | 1050 [496] | 1210 [571] | 1650 [779] |
| High Heat Side Return CFM [L/s] | High Heat Side Return CFM [L/s] | 891 [421] | 1134 [535] | 1265 [597] | 1782 [841] |
| High Heat Approx. ±2°F CFM | High Heat Approx. ±2°F CFM | 797 [376] | 1014 [479] | 1168 [551] | 1593 [752] |
| High Heat Approx. ±4°F CFM | High Heat Approx. ±4°F CFM | 772 [364] | 982 [463] | 1132 [534] | 1543 [728] |

[] 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

CONDENSATE PUMP KIT: PROSTOCK & 1PCB151TUL

COMBUSTIBLE FLOOR BASE: RXGC-B17
 RXGC-B21

For High Altitudes:

PRESSURE SWITCH ASSEMBLY: 42-109148-05

The 100K BTU furnace will require the installation of 42-109148-05 when operating in elevations above 8,000 ft. Please read installation instructions for more details regarding the installation of the pressure switch assembly.

[] Designates Metric Conversions

| FILTER RACK FILTER SIZES* INCHES [mm] | | | |
|---------------------------------------|--|--|------------------------|
| MODEL | RXGF-CB (UPFLOW/ HORIZONTAL) | RXGF-CD (UPFLOW) | RXGF-CC (DOWNFLOW) |
| S951V(-)040 | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 14 x 20 [356 x 508] |
| S951V(-)060 | 15 ³ / ₄ x 25 [400 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 14 x 20 [356 x 508] |
| S951V(-)070 | 19 ¹ / ₄ x 25 [489 x 635] | 15 ³ / ₄ x 25 [400 x 635] | 14 x 20 [356 x 508] |
| S951V(-)100 | 19 ¹ / ₄ x 25 [489 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 |

Integrated Controls



EcoNet® is smart, technology that allows Heating and Cooling, products to communicate with each other on one integrated network.

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



CETST800SYS

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



GENERAL TERMS OF LIMITED WARRANTY*

Russell® By 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 Unit Replacement
(Registration Required)..... Ten (10) Years
Heat Exchanger Limited Lifetime
Parts Ten (10) Years

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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