



## Vantix™ Line Gas Furnaces



### **S801V**

EcoNet® Enabled

Heating Stages: Single Stage

Motor Type: Constant CFM

Input Rates: 50–125 kBTU [4.7–29.3 kW]

Configuration Options: Downflow

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## Features and Benefits

- **Diagnostics:** With the Russell® By Rheem Contractor & EcoNet® Apps, built-in EcoNet® & Bluetooth®<sup>1</sup> 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 Spart Ignition (DSI) for reliability and longevity
- **Constant CFM Motor:** Truly variable speed technology allows for ultimate humidity control, quieter sound levels and year-round energy savings
- **Quieter Operation<sup>2</sup>:** 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® App<sup>3</sup>

<sup>1</sup>The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Rheem® is under license. Other trademarks and trade names are those of their respective owners.

<sup>2</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>3</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, Alexa and all related logos are trademarks of Amazon.com, Inc. or its affiliates.

# Gas Furnaces

<u>S</u>	<u>80</u>	<u>1</u>	<u>V</u>	<u>050</u>	<u>3</u>	<u>A</u>	<u>17</u>	<u>DZ</u>	<u>S</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	80 - 80% AFUE	1 - Single-Stage	V - ECM Variable Speed	050 - 50,000 075 - 75,000 100 - 100,000 125 - 125,000	3 - 3 ton drive 4 - 4 ton drive 5 - 5 ton drive	A - 1st Design Series	17 - 17.5" Width 21 - 21" Width 24 - 24.5" Width	DZ - Downflow Zero Clearance	S - Standard N - Low NOx	B - Communicating, EcoNet®, Bluetooth®	A - 1st Series	P - Premium Grade

[ ] Designates Metric Conversions

AVAILABLE MODELS
S801V0503A14DZ*BAP
S801V0754A17DZ*BAP
S801V0755A21DZ*BAP
S801V1005A21DZ*BAP
S801V1255A24DZ*BAP

\* S = Standard, N = Low NOx

STANDARD EQUIPMENT
**Condensate Switch Connection
100% Safety Lock Out
29-4C Stainless Steel Secondary Heat Exchanger Design
Adjustable Cool Fan Off Delay
Aluminized steel primary heat exchanger design
Blower Compartment Door Safety Switch
Bluetooth® diagnostics
Bluetooth® setup
Bluetooth® setup and diagnostics
Completely assembled and wired
Direct Drive Motor
EcoNet® Thermostat Connections
Electronic On/Off Blower Time Control
Fully Insulated Heat Exchanger Cabinet
Humidistat Terminal Connection
Induced Draft Motor
Limit Controls
Low Speed Continuous Fan Option
Manual Shut-Off Valve
Marked condensate hoses
One Hour Automatic Retry
Power And Self-Test Diagnostics
Pressure Switch
PWM Controlled Constant Torque Electrically Commutated Blower Motor.
Redundant Main Gas Control
Single Stage Heating Thermostat Connection
Blower Insulation
Two Plus* Stage Cooling Thermostat Connection

\* When Connected to Three Speed Or Modulating AC/HP Product

\*\* EcoNet® Only Features

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

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

MODEL NUMBERS S801V1stg VS-CT DOWNFLOW SERIES	S801V0503A14DZ*BAP	S801V0754A17DZ*BAP	S801V0755A21DZ*BAP	S801V1005A21DZ*BAP	S801V1255A24DZ*BAP
Input-BTU/Hr [kW]	50,000 [15]	75,000 [22]	75,000 [22]	100,000 [29]	125,000 [37]
Heating Capacity BTU/Hr [kW] ①	40,000 [12]	60,000 [18]	60,000 [18]	80,000 [23]	100,000 [29]
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 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)	1 [746] VS-CT(ECM)
Min. Circuit Ampacity	9	12	15	15	15
Min. Overload Protection Device	15	15	20	20	20
Max. Overload Protection Device	15	15	25	25	25
Motor Full Load Amps	6.1	9.6	12.4	12.4	12.4
Heating CFM [L/s]	975 [460]	1175 [555]	1480 [698]	1710 [807]	1850 [873]
MAX Cooling CFM [L/s]	1240 [585]	1650 [779]	1980 [934]	1980 [934]	1980 [934]
MIN Cooling CFM [L/s]	300 [142]	500 [236]	500 [236]	500 [236]	500 [236]
Fan CFM [L/s]	600 [283]	800 [378]	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]	1.0 [0.25]
Temperature Rise Range °F [°C]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	25-55 [13.9-30.6]	35-65 [19.4-36.1]	35-65 [19.4-36.1]
Approx. Shipping Weight (Lbs.) [kg]	108.5 [49]	120.5 [55]	128.5 [58]	140 [63]	151 [68]
AFUE ②	80.0%	80.0%	80.0%	80.0%	80.0%

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

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

② See Conversion Kit Index Form for high altitude derate.

\*S=Standard, N=Low NOx

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 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

## Downflow Dimensions

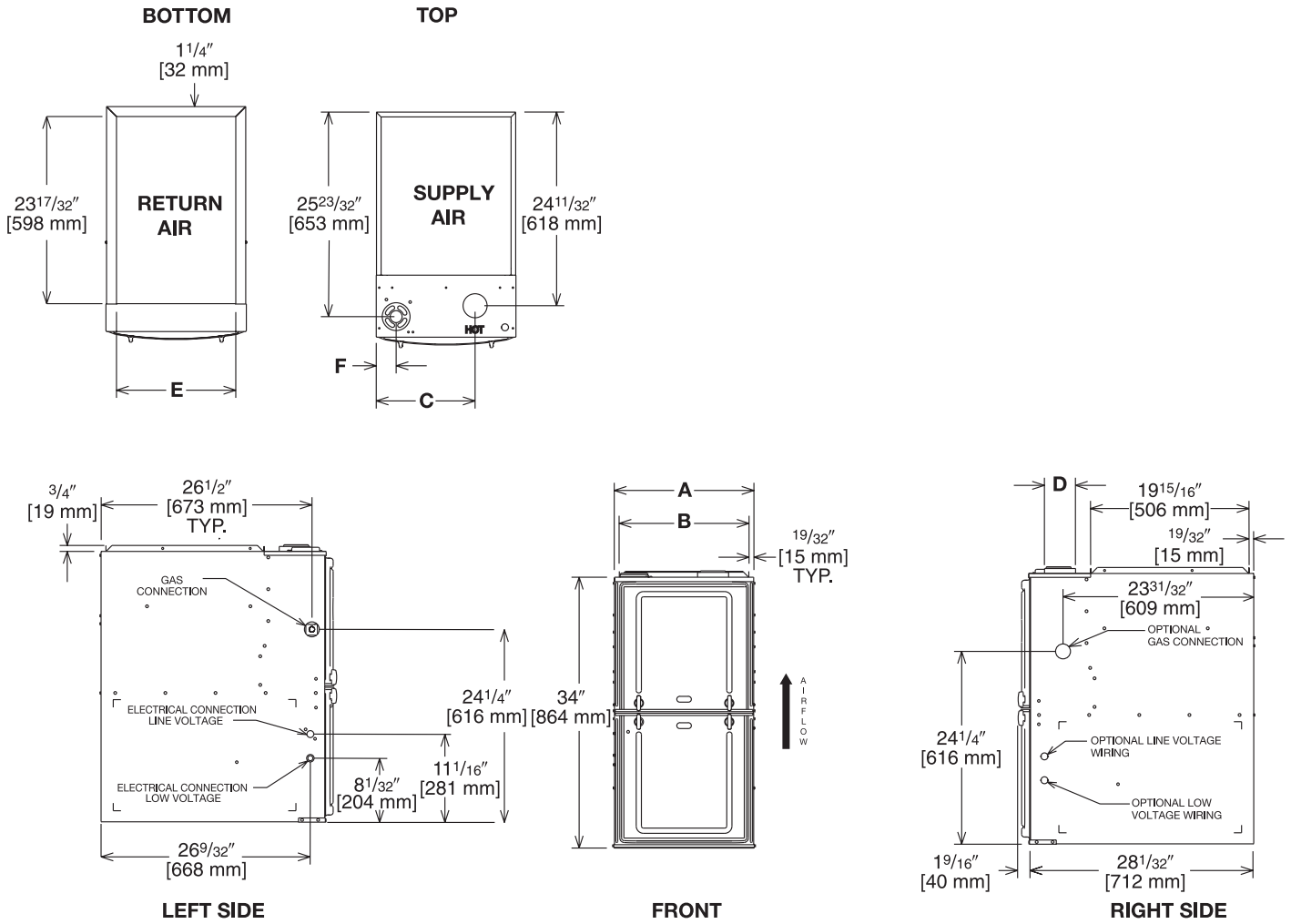


Illustration  
ST-A1220-04-00  
FIGURE 1

## Dimensional Data—Downflow Models

MODEL S801V-DZ	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]					
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT
050	14 [356]	12 27/32 [326]	10 9/8 [264]	①	13 1/8 [333]	0	4 [102] ②	0	1 [25]	3 [76]	6 [152] ③
050417	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
075521	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
100	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
125	24 1/2 [622]	23 11/32 [593]	15 5/8 [397]	①	23 5/8 [600]	0	0	0	1 [25]	3 [76]	6 [152] ③

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 in accordance with local codes.

[ ] Designates Metric Conversions

## Target Gas Heating Airflows

	<b>S801V0503A14DZ*BAP</b>	<b>S801V0754A17DZ*BAP</b>	<b>S801V0755A21DZ*BAP</b>	<b>S801V1005A21DZ*BAP</b>	<b>S801V1255A24DZ*BAP</b>
Factory Heating CFM [L/s]	975 [460]	1175 [555]	1480 [698]	1710 [807]	1850 [873]
Heating Approx. $\pm 7^{\circ}\text{F}$ CFM	878 [414]	1058 [499]	1332 [629]	1539 [726]	1665 [786]
Heating Approx. $\pm 12^{\circ}\text{F}$ CFM	810 [382]	976 [461]	1229 [580]	1420 [670]	1536 [725]

\* S = Standard, N = Low NOx

[ ] Designates Metric Conversions

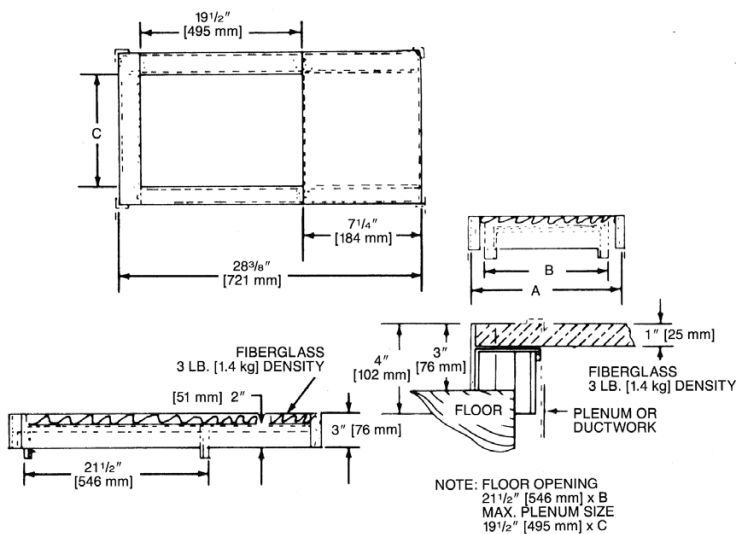
## Downflow Accessories

**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	S801T050	14 <sup>1</sup> / <sub>2</sub> [368]	13 <sup>1</sup> / <sub>4</sub> [337]	11 <sup>1</sup> / <sub>4</sub> [286]
RXGC-B17	S801T075317	18 [457]	16 <sup>3</sup> / <sub>4</sub> [425]	14 <sup>3</sup> / <sub>4</sub> [451]
RXGC-B21	S801T100521, S801T075521	21 <sup>1</sup> / <sub>2</sub> [546]	20 <sup>1</sup> / <sub>4</sub> [514]	18 <sup>1</sup> / <sub>4</sub> [464]
RXGC-B24	S801T125	25 [635]	23 <sup>3</sup> / <sub>4</sub> [603]	21 <sup>3</sup> / <sub>4</sub> [552]

[ ] Designates Metric Conversions



## RXGF-CC\*

**FILTER RACK**—Downflow top return mount. Requires (2) 14 x 20 Filters.

**NOTE:** Filter racks are shipped without filters.

\*Filters available through PROSTOCK®.

## For High Altitudes:

**HIGH ALTITUDE OPTION CODE:** U.S. & Canada –

None required for high altitudes.

**HIGH ALTITUDE CONVERSION KITS:** U.S. & Canada –

None required for high altitudes.

### 80+ HIGH ALTITUDE INSTRUCTIONS

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

High altitude option codes are not 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.



## 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 Parts  
(Registration Required)..... Ten (10) Years  
Heat Exchanger ..... Twenty (20) 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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Russell by Rheem • 5600 Old Greenwood Road  
Fort Smith, Arkansas 72908 • [www.russellbyrheem.com](http://www.russellbyrheem.com)