Ruud *Ultra*™ Series Communicating Two-Stage Variable Speed Downflow Gas Furnace

U802V Downflow Series

80% A.F.U.E.†
Input Rates 75-125 kBTU

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

- 80% residential Gas Furnace CSA certified
- Two stages of operation to save energy and maintain optimal comfort level.
- Variable speed blower motor technology provides ultimate humidity control, quieter sound levels, and year round energy savings
- EcoNet enabled HVAC product
- PlusOne™ Diagnostics — 7 Segment LED all units
- PlusOne™ Ignition System – DSI for reliability and longevity
- Heat exchanger is removable for improved serviceability. Aluminized steel construction provides maximum corrosion resistance and thermal fatigue reliability.
- Low profile 34" cabinet ideal for space constrained installations
- Integrated Control board features dip switches for easy system set up
- Insulated blower compartment
- QR code for quick access to product information from your smart phone or tablet
- Compatible with single or two stage thermostats. For optimal performance a two stage thermostat is recommended.

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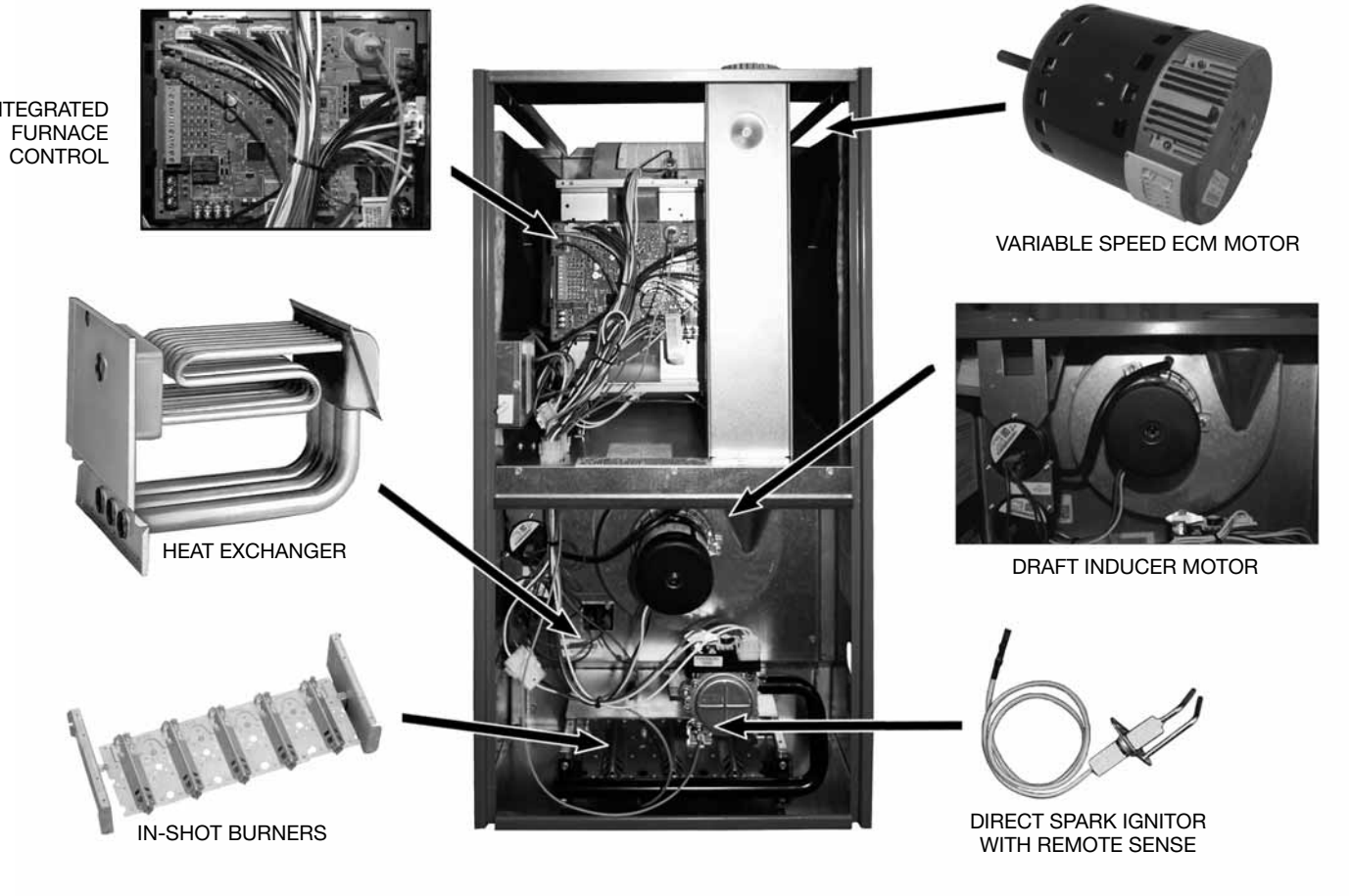

STANDARD EQUIPMENT

Completely assembled and wired; 2 speed induced draft blower; high and low pressure switches; 2 stage redundant main gas control; blower compartment door safety switch; solid state time on/time off blower control; limit control; transformer; ECM blower motor. Furnaces are equipped with cooling/heating relay and transformer (50VA) ready for air conditioning applications. (Please note: a thermostat is not included as standard equipment.) Flame sensor diagnostics; fused-protection (secondary), **3rd speed option for continuous fan.**

OPTIONAL EQUIPMENT

NOTE: Furnace is not listed for use with fuels other than natural or L.P. (propane) gas.

The complete terms of limited and other warranties are available at our sales office, or through local installer.

All models can be converted by a qualified Ruud 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 Ruud parts distributor.

For L.P. (propane) operation, refer to Conversion Kit Index Form.

NOTE: For natural and L.P. (propane) gas models, direct spark ignition is 100% lockout type.

WARNING

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

Model Features

- 80% residential Gas Furnace CSA certified
- Two stages of operation to save energy and maintain optimal comfort level.
- Variable speed blower motor technology provides ultimate humidity control, quieter sound levels, and year round energy savings
- EcoNet enabled HVAC product
- PlusOne™ Diagnostics — 7 Segment LED all units
- PlusOne™ Ignition System – DSI for reliability and longevity
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- QR code for quick access to product information from your smart phone or tablet
- Compatible with single or two stage thermostats. For optimal performance a two stage thermostat is recommended.

Physical Data and Specifications—Downflow Models

MODEL NUMBERS U802V (DF) SERIES		U802VA075317Z*B	U802VA075421Z*B	U802VA100521Z*B	U802VA125524Z*B
100% High Input–BTU/Hr [kW] ②		75,000 [22]	75,000 [22]	100,000 [29]	125,000 [37]
High Heating Capacity–BTU/Hr [kW] ①		61,000 [18]	62,000 [18]	82,000 [24]	102,000 [30]
70% Low Input–BTU/Hr [kW]		52,500 [15]	52,500 [15]	70,000 [20]	87,500 [25]
Low Heating Capacity–BTU/Hr [kW]		42,000 [12]	42,000 [12]	56,000 [16]	70,000 [20]
Heating–Ext. Static Pressure [kPa]		.12 [.029]	.12 [.029]	.15 [.037]	.20 [.05]
Blower (D x W) [mm]		11 x 7 [279 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
ECM Motor H.P. [W]		1/2 [373]	3/4 [559]	1 [746]	1 [746]
Min. Circuit Ampacity		9	11	15	15
Min. Overload Protection Device		15	15	20	20
Max. Overload Protection Device		15	15	20	20
Cooling CFM @ .5" [kPa] E.S.P. (Nominal) [L/s] (Range)		600-1200 [283]-[566]	1000-1600 [472]-[755]	1200-2000 [566]-[944]	1200-2000 [566]-[944]
Max. E.S.P. (In. W.C.) [kPa]		0.8 [0.2]	0.8 [0.2]	0.8 [0.2]	0.8 [0.2]
Temperature Rise Range °F [°C]	High Fire	30-60 [17-33]	25-55 [14-31]	30-60 [17-33]	35-65 [19.4-36.0]
	Low Fire	20-50 [11-28]	20-50 [11-28]	25-55 [14-31]	30-60 [17-33]
Max. Outlet Air Temp. °F [°C]		165 [73.9]	165 [73.9]	165 [73.9]	185 [85]
Approx. Shipping Weight (Lbs.) [kg]		115 [52]	115 [52]	120 [54]	140 [63]
AFUE ①		80%	80%	80%	80%

Notes: All models are 115V, 60 Hz, 1 Ph. Gas connection size for all models is 1/2" [12 mm] N.P.T.
① In accordance with D.O.E. test procedures.
② See Conversion Kit Index Form for high altitude derate in U.S. applications.

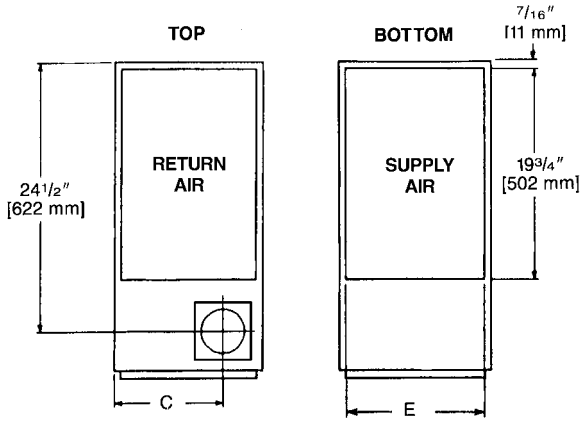
[ ] Designates Metric Conversions

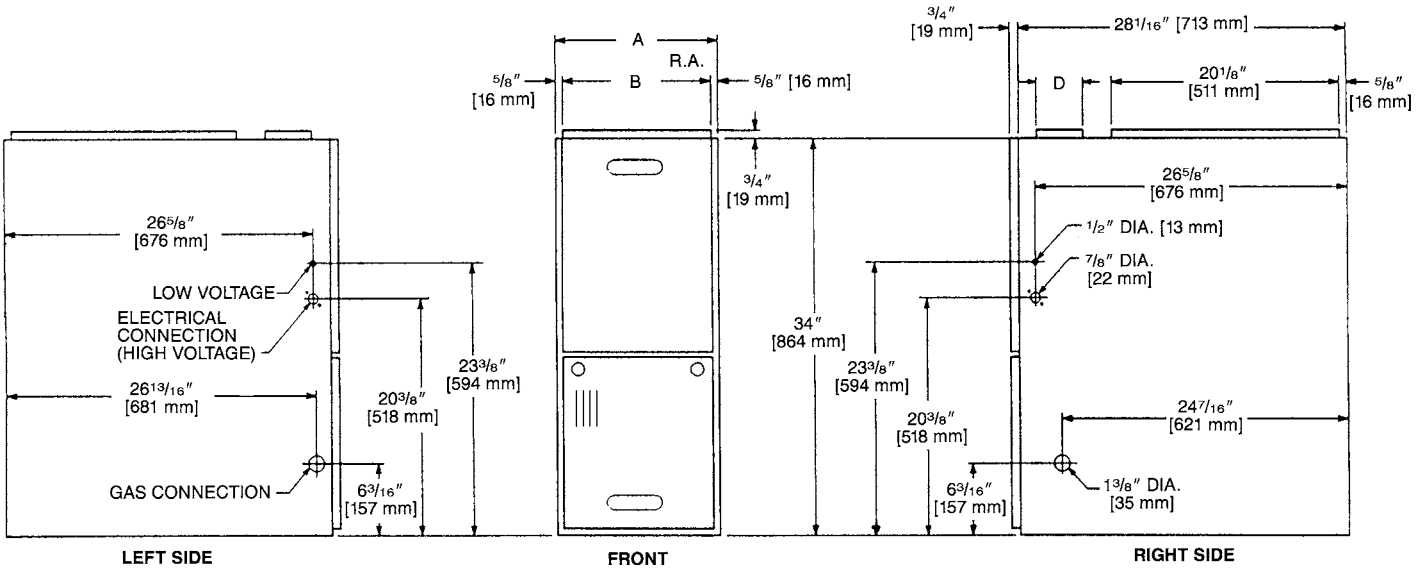
Model Number Identification—Downflow Models

U	80	2	V	A	075	4	17	Z	S	A
Ruud	80 = 80% AFUE	2 = Two Stage	V = Variable Speed ECM	Design Series A = 1st Design	Input BTU/HR [kW] 075 = 75,000 [22] 100 = 100,000 [29] 125 = 125,000 [37]	3 = Up to 3 Ton 4 = 2½ to 4 Ton 5 = 3½ to 5 Ton	Cabinet Width 17 = 17.5" 21 = 21" 24 = 24.5"	Z = Down and Zero Clearance Downflow	X = Low NO_x S = Standard	Revision-Marketing A – First Time Release B – 2nd Design Series

[ ] Designates Metric Conversions

Downflow Dimensions





Dimensions and Clearance to Combustible Material (inches) [mm]

MODEL U802V-SERIES	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]						
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGTS. (LBS.) [kg]
075317	17 1/2 [445]	16 11/32 [415]	12 1/8 [308]	①	16 5/8 [422]	0	3 ②	0	1 [25]	3 [76]	6 [152] ③	110 [49.9]
075421	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	115 [52.2]
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	120 [54.4]
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	140 [63.5]

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/or Can/CGA-B149 Installation Codes and in accordance with local codes.

[ ] Designates Metric Conversions

Blower Performance Data—Downflow Models

MODEL NUMBER				U802VA075317ZSA	U802VA075421ZSA	U802VA100521ZSA	U802VA125524ZSA
TARGET GAS HEATING AIRFLOW	HIGH HEATING CFM	SW15 = OFF	SW16 = OFF	1254	1305	1651	1998
		SW15 = ON	SW16 = OFF	1054	1173	1398	1600
		SW15 = OFF	SW16 = ON	DO NOT USE			
		SW15 = ON	SW16 = ON	953	1001	1251	1595
	LOW HEATING CFM	SW13 = OFF	SW14 = OFF	980	1125	1300	1480
		SW13 = ON	SW14 = OFF	850	850	1075	1250
		SW13 = OFF	SW14 = ON	DO NOT USE			
		SW13 = ON	SW14 = ON	750	700	875	1100
TARGET COOLING/ HEAT-PUMP AIRFLOW	HIGH COOLING CFM	SW4 = OFF	SW5 = OFF	1200	1600	2000	2000
		SW4 = ON	SW5 = OFF	1000	1400	1600	1600
		SW4 = OFF	SW5 = ON	800	1200	1400	1400
		SW4 = ON	SW5 = ON	600	1000	1200	1200
	LOW COOLING CFM	SW4 = OFF	SW5 = OFF	900	1200	1500	1500
		SW4 = ON	SW5 = OFF	750	1050	1200	1200
		SW4 = OFF	SW5 = ON	600	900	1050	1050
		SW4 = ON	SW5 = ON	450	750	900	900

[ ] 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-B17	U802VA075317	18 [457]	16 3/4 [425]	14 3/4 [451]
RXGC-B21	U802VA075421, U802V100	21 1/2 [546]	20 1/4 [514]	18 1/4 [464]
RXGC-B24	U802V125	25 [635]	23 3/4 [603]	21 3/4 [552]

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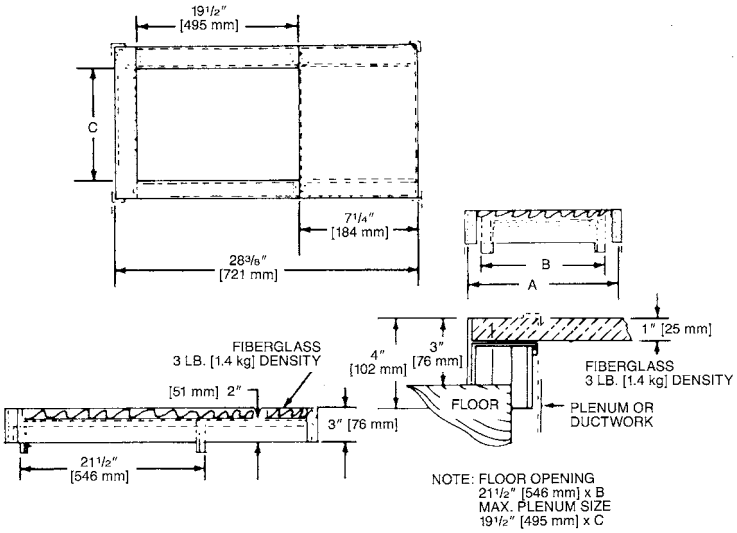

RXGF-CC*

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.
None required for high altitudes.

HIGH ALTITUDE CONVERSION KITS: U.S.
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.

ECONET CONTROL

RECOMMENDED COMMUNICATING FURNACE CONTROL

UETST600SYS

CONTRACTOR BENEFITS:
- Auto/Self Configuration
- Day-at-a-glance scheduling, with programmable fan
- Intuitive wiring connections
- Dual fuel ready
- Automatically optimizes airflow
- System status & mode information
- Complete diagnostic information on display

HOMEOWNER BENEFITS:
- Large, easy to read icons and characters
- Auto-mode control
- Smart recovery
- Continuous Fan Mode (5 speeds)
- Humidity Control
- Water heater, pool heater integration* (check model compatibility)

***ECONET CONTROL ACCESSORIES:**
Wall Plate = RCPN-AMC08
Face Plate = UETSTFPL

IMPORTANT: *Existing Comfort Control² System Condensing Units & Heat Pumps are compatible with EcoNet when matched with a U802V Gas Furnace and with an EcoNet Translator (RETRN620CC2) installed on the Comfort Control² System control board.*

*Available through PROSTOCK®.

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.**

Parts .....Ten (10) Years
Heat Exchanger .....Limited Lifetime

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