

# GAS FURNACES



**RUUD**  
**ULTRA**  
Series

## ***SUPER QUIET 80*** **TWO STAGE** **80% A.F.U.E.†** **DOWNFLOW** **GAS FURNACES**

The Ruud *Ultra Series*® *Super Quiet 80* Two Stage Downflow line of downflow gas furnaces is designed for installation in closets, alcoves, utility rooms, or attics. The design is certified by CSA International.

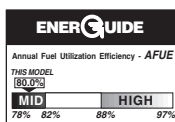
### **Features**

- Patented heat exchanger, constructed of both stainless and aluminized steel for the maximum in corrosion resistance.
- Low profile "34 inch" [864 mm] design is lighter and easier to handle, and leaves room for optional equipment.
- Energy efficient and quiet ECM 2+ motor.
- Improves cooling efficiency when matched with rated condensing unit and coil.
- Constant CFM.
- Dip switch settings for selectable cooling airflow.
- On-demand dehumidification terminal for improved comfort in cooling mode.
- Left or right side gas and electric inlet connections.
- All models feature an integrated board with humidifier and electronic air cleaner hookups.
- Insulated blower compartment, a slow-open gas valve, specially designed draft inducer motor and blower motor make it one of the quietest furnaces on the market today.
- Pre-paint galvanized steel cabinet.
- Easy door removal and replacement.
- Molded permanent filter.
- Compatible with single or two-stage thermostat. (For optimal performance, two-stage thermostat recommended.)

A variety of cooling coils and plenums designed to use with Ruud *Ultra Series*® *Super Quiet 80* Two Stage Downflow gas furnaces are available as optional accessories.

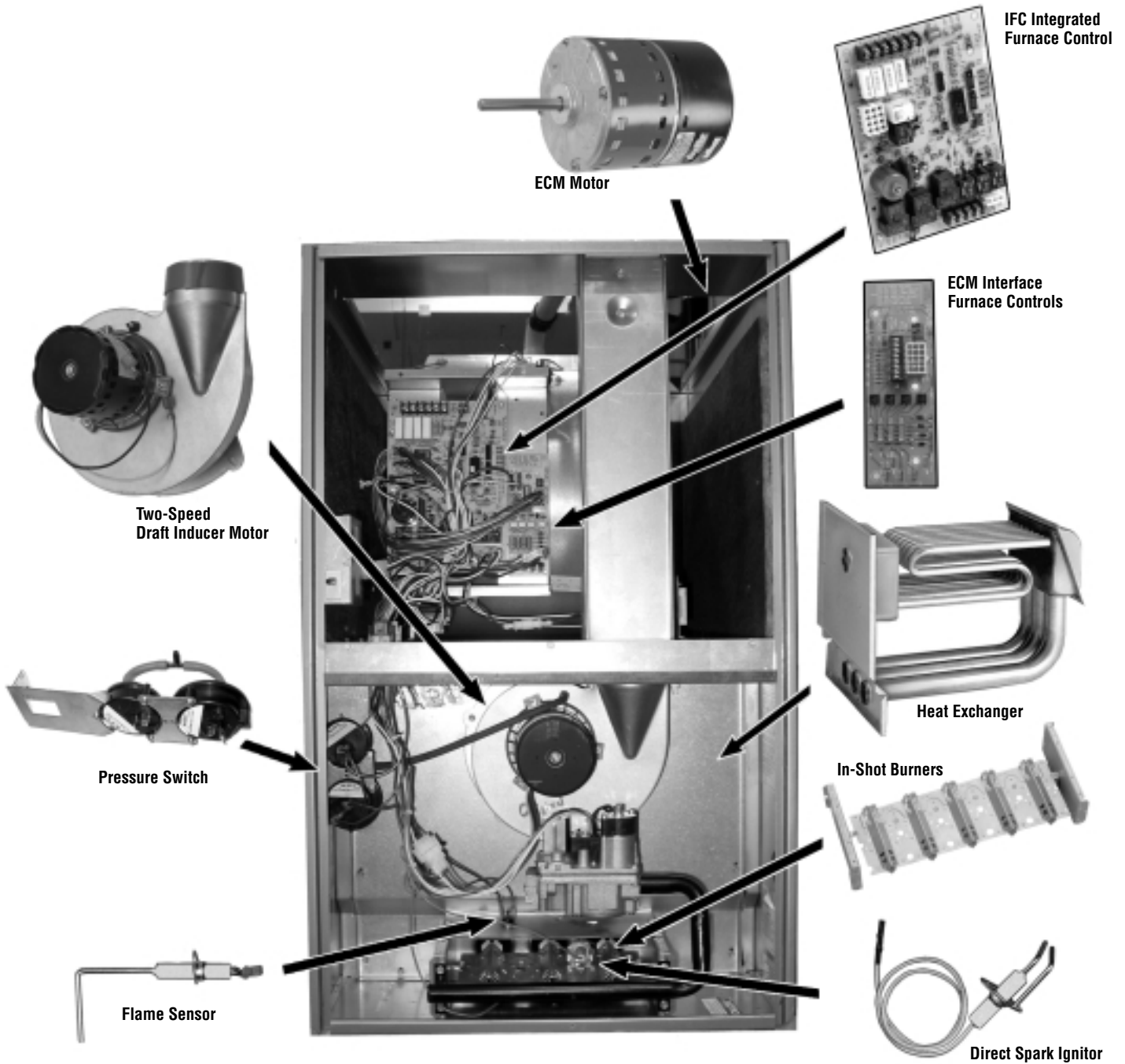
†A.F.U.E. (Annual Fuel Utilization Efficiency) calculated in accordance with Department of Energy test procedures.

**UGLR- SERIES**  
**ECM Equipped**  
**Models with Input Rates from**  
**75,000 to 125,000 BTU/HR**  
**115 Volts, 60 Hz, Single-Phase**  
**[22 to 37 kW]**  
**(U.S. & Canadian Models)**





# RUUD *ULTRA SERIES SUPER QUIET 80* TWO STAGE DOWNFLOW GAS FURNACE



## 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 (40VA) 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.**

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 HVAC professional 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

BEFORE PURCHASING THIS APPLIANCE, READ IMPORTANT ENERGY COST AND EFFICIENCY INFORMATION AVAILABLE FROM YOUR RETAILER.

# PHYSICAL DATA AND SPECIFICATIONS (DOWNFLOW) U.S. AND CANADA MODELS

MODEL NUMBERS UGLR- SERIES	07EAMKR 07NAMKR	07EBRQR 07NBRQR	10EBRMR 10NBRMR	12EARMR 12NARMR	
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	60,000 [18]	60,000 [18]	80,000 [23]	100,000 [29]	
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]	
Motor Full Load Amps.	7.7	9.6	12.8	12.8	
Unit Amps	8.7	12.0	12.0	12.0	
Maximum Overcurrent Protection	15	15	15	15	
Cooling CFM @ .5" [kPa] E.S.P. (Nominal) [L/s]	1200 [566]	1600 [755]	2000 [944]	2000 [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]	
Standard Filter Size—Inches [mm]	(2) 12 x 20 [305 x 508]	(2) 14 x 20 [356 x 508]	(2) 14 x 20 [356 x 508]	(2) 14 x 20 [356 x 508]	
Approx. Shipping Weight (Lbs.) [kg]	115 [52]	115 [52]	120 [54]	140 [63]	
AFUE ①	80%	80%	80%	80%	

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

② See Conversion Kit Index Form for high altitude derate in U.S. applications. For Canadian applications, reference the furnace installation instructions.

## 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 Warranty, Including Applicable Terms and Conditions, See Your Local Installer or Contact the Manufacturer for a Copy.

Gas Heat Exchanger Limited Warranty .....Twenty (20) Years  
\*Any Other Part.....Five (5) Years

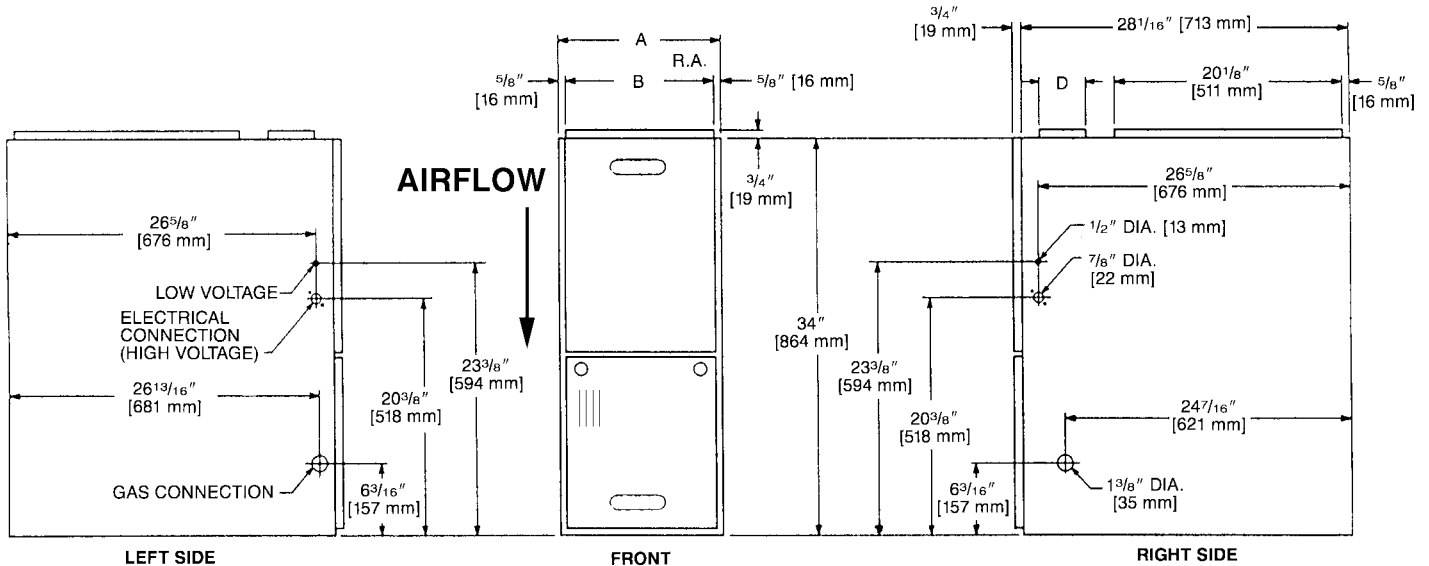
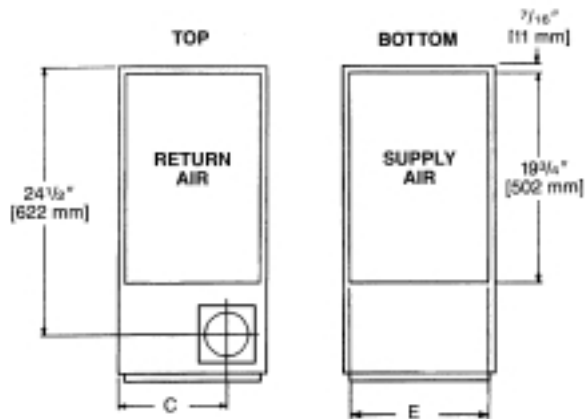
\*This five year limited warranty is applicable only to single-phase products installed in residential applications on or after January 1, 2001.

## MODEL IDENTIFICATION—DOWNFLOW MODELS

U	G	L	R	—	07E	A	M	K	R		
Ruud	Gas Furnace	Downflow	Design Series		Heating Input Designation		Variations	Blower Designation	Heating & Cooling Designation	Fuel Type	
					Electric Ignition	NO <sub>x</sub> Model	Input BTU/HR	A = Std. Cabinet	U = 11 x 6 [279 x 152 mm]	K = 600-1200 CFM [283-566 L/s]	R = Natural Gas, U.S. and Canadian Standard Furnace
					07E	07N	75,000 [22 kW]	B = Wide Cabinet	M = 11 x 7 [279 x 178 mm]	M = 1200-2000 CFM [566-944 L/s]	
					10E	10N	100,000 [29 kW]		R = 11 x 10 [279 x 254 mm]	Q = 1000-1600 CFM [566-755 L/s]	
					12E	12N	125,000 [37 kW]				

[ ] Designates Metric Conversions

# DOWNFLOW DIMENSIONS



## DIMENSIONS AND CLEARANCE TO COMBUSTIBLE MATERIAL (INCHES) [mm]

MODEL UGLR-SERIES	A	B	C	D	E	REDUCED CLEARANCES (IN.) [mm]						
						LEFT SIDE	RIGHT SIDE	BACK	TOP	FRONT	VENT	SHIP. WGTs. (LBS.) [kg]
07A	17 1/2 [445]	16 11/32 [415]	12 1/8 [308]	Ⓛ	16 5/8 [422]	0	3 ②	0	1 [25]	3 [76]	6 [152] ③	110 [49.9]
07B	21 [533]	19 27/32 [504]	13 7/8 [352]	Ⓛ	20 1/8 [511]	0	0	0	1 [25]	3 [76]	6 [152] ③	115 [52.2]
10	21 [533]	19 27/32 [504]	13 7/8 [352]	Ⓛ	20 1/8 [511]	0	0	0	1 [25]	3 [76]	6 [152] ③	120 [54.4]
12	24 1/2 [622]	23 11/32 [593]	15 5/8 [397]	Ⓛ	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.**

# BLOWER PERFORMANCE DATA—DOWNFLOW MODELS

MODEL UGLR-	BLOWER SIZE (D X W) INCHES [mm]	ECM MOTOR H.P. [W]	BLOWER SPEED	CFM [L/s] AIR DELIVERY EXTERNAL STATIC PRESSURE INCHES WATER COLUMN [kPa]
				.1 [.02]–.8 [.2]
07A	11 x 7 [279 x 178]	1/2 [373]	HIGH	1200 [566]
			MED-HI	1000 [472]
			MED	800 [378]
07B	11 x 10 [279 x 254]	3/4 [559]	LOW	600 [283]
			HIGH	1600 [755]
			MED-HI	1400 [661]
10, 12	11 x 10 [279 x 254]	1 [746]	MED	1200 [566]
			LOW	1000 [472]
			HIGH	2000 [944]
			MED-HI	1600 [755]
			MED	1400 [661]
			LOW	1200 [566]

NOTE: See Coil Specification Sheet for coil data.

[ ] Designates Metric Conversions

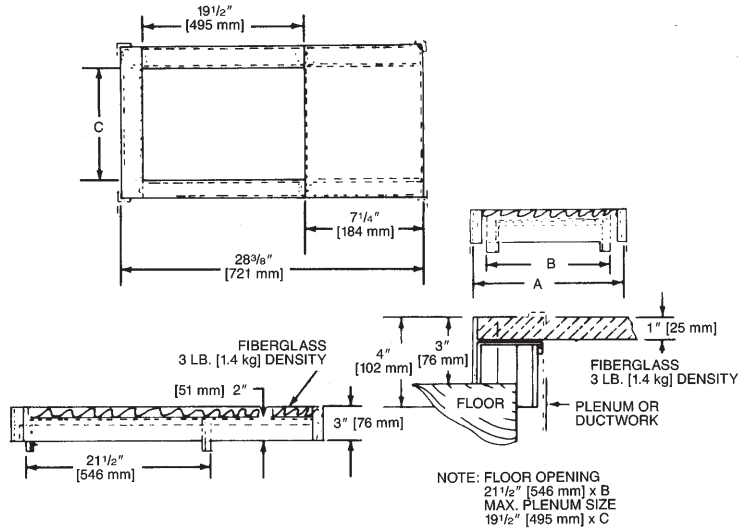
# ACCESSORIES—DOWNFLOW

**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	RGLR-07EAMK	18 [457]	16 <sup>3</sup> / <sub>4</sub> [425]	14 <sup>3</sup> / <sub>4</sub> [451]
RXGC-B21	RGLR-07EBRQ, RGLR-10EBRM	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	RGLR-12EARMR	25 [635]	23 <sup>3</sup> / <sub>4</sub> [603]	21 <sup>3</sup> / <sub>4</sub> [552]

[ ] Designates Metric Conversions



## RXPF-F01 and F02

**FOSSIL FUEL KITS**—are for use with Ruud Heat Pumps and Super Quiet 80 warm air furnaces. The RXPF-F02 also meets TVA requirements.

## RXGF-CC\*

**FILTER RACK**—Downflow top return mount.  
**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.

## RXGW-B01 CHIMNEY ADAPTER:

See Installation Instructions for application limitations.

# NOTES

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.

**RUUD  
AIR CONDITIONING  
DIVISION**

5600 Old Greenwood Road, Fort Smith, Arkansas 72908



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