

TECHNICAL SPECIFICATIONS

MG3S

High Efficiency / Direct Vent or Non Direct Vent

Condensing Upflow Gas Furnaces Induced Draft - 96% AFUE Input 80,000 Btuh

The high efficiency upflow gas furnace is especially designed for Manufactured Housing. It may be installed in a utility room, or enclosed in a closet. The extended flush jacket provides a pleasing "appliance appearance." Design certified by CSA for application in Canada and the United States.



For installation in: Manufactured Homes, Modular Homes/
Buildings, Park Models & Manufactured Buildings

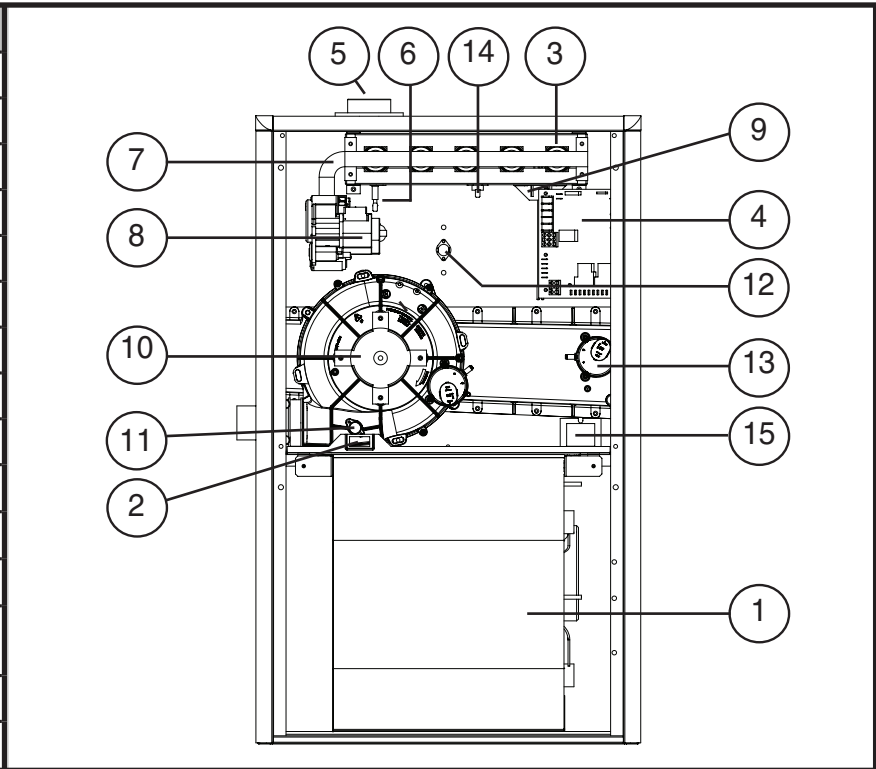
For California installations in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.

FEATURES and BENEFITS

- **100% fired and tested:** All units and each component are tested on the manufacturing line.
- **Best packaging in the industry:** Unique corner post design assures product will arrive to the homeowner dent free.
- **30 second blower delay:** At start-up assures a warm duct temperature at furnace start-up. Adjustable blower off settings (60, 90, 120 and 180 seconds).
- **30 second post purge:** Increases life of heat exchanger.
- **Hot surface igniter:** Innovative application of an appliance type igniter with a 20 year history of reliability. Utilizes proven Smartlite® technology.
- **Color coded wire harness:** Designed to fit the components, all with quick-connect fittings for ease of service and replacement.
- **Flexible category IV venting system:** May be vertically or horizontally vented using either a one-pipe or two-pipe system for maximum flexibility in installation.
- **High Static Blowers:** All models equipped with high static blowers.
- **Low Boy Height:** Easy to apply in low ceiling applications, works well with taller high SEER coils, easier to handle and install.
- **Tubular primary heat exchanger:** Heavy gauge aluminized steel heat exchanger and stainless steel secondary heat exchanger assures a long life.
- **90 second fixed cooling cycle blower-off delay (TDR):** Increases cooling performance when matched with a Nortek Global HVAC coil.
- **High efficiency blower kits:** Maximize efficiencies. On select units, a SEER improvement of up to 1 point is realized.
- **Multi-speed direct drive blower:** Designed to give a wide range of cooling capacities. Switches on PCB, provide ultra easy motor speed selection.
- **LP convertible:** Simple burner orifice and regulator spring change for ease of convertibility.
- **Diagnostic lights for easy troubleshooting without counting flashes:** Dedicated light for flame signal strength and 2 lights in combination to indicate all other fault codes with easy to recognize states without counting flashes.
- **Incorporates integrated control board:** With connections for electronic air cleaner and humidifier.
- **Two piece door design:** Enhances furnace appearance and uses captured screws to prevent losing door screws.
- **Seated vestibule:** Reduces burner and inducer sound levels.

GAS FURNACE COMPONENTS

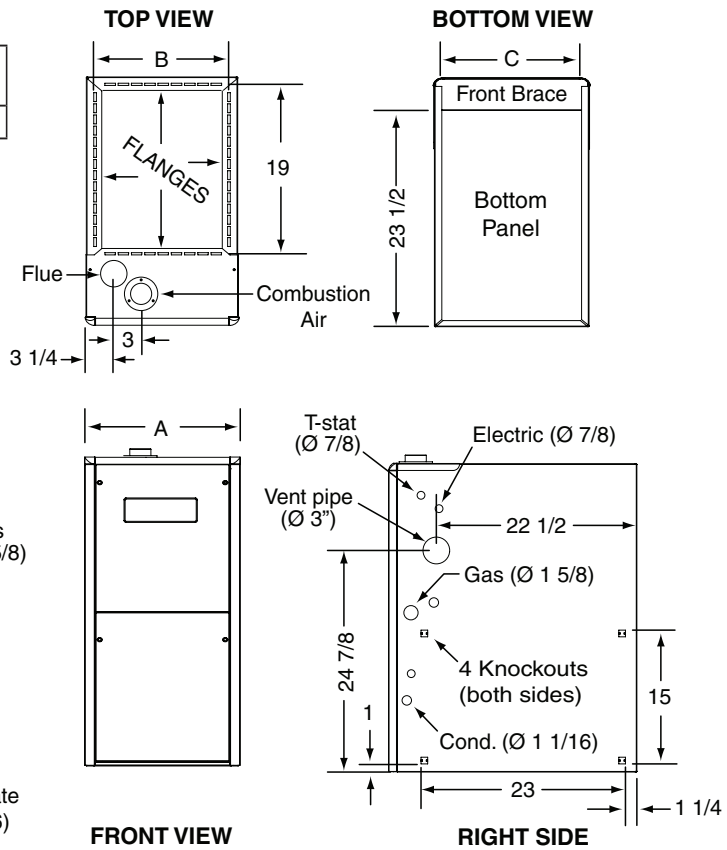
ITEM	COMPONENT NAME
1.	Blower Assembly
2.	Blower Door Switch
3.	Burner Assembly
4.	Control Board
5.	Finish Flange
6.	Flame Sensor
7.	Gas Manifold
8.	Gas Valve
9.	Igniter
10.	Inducer Assembly
11.	Limit Switch
12.	Main Air Limit Switch
13.	Pressure Switch(s) (‘B’, ‘C’, & ‘D’ cabinets only)
14.	Roll-Out Switch(s)
15.	Transformer



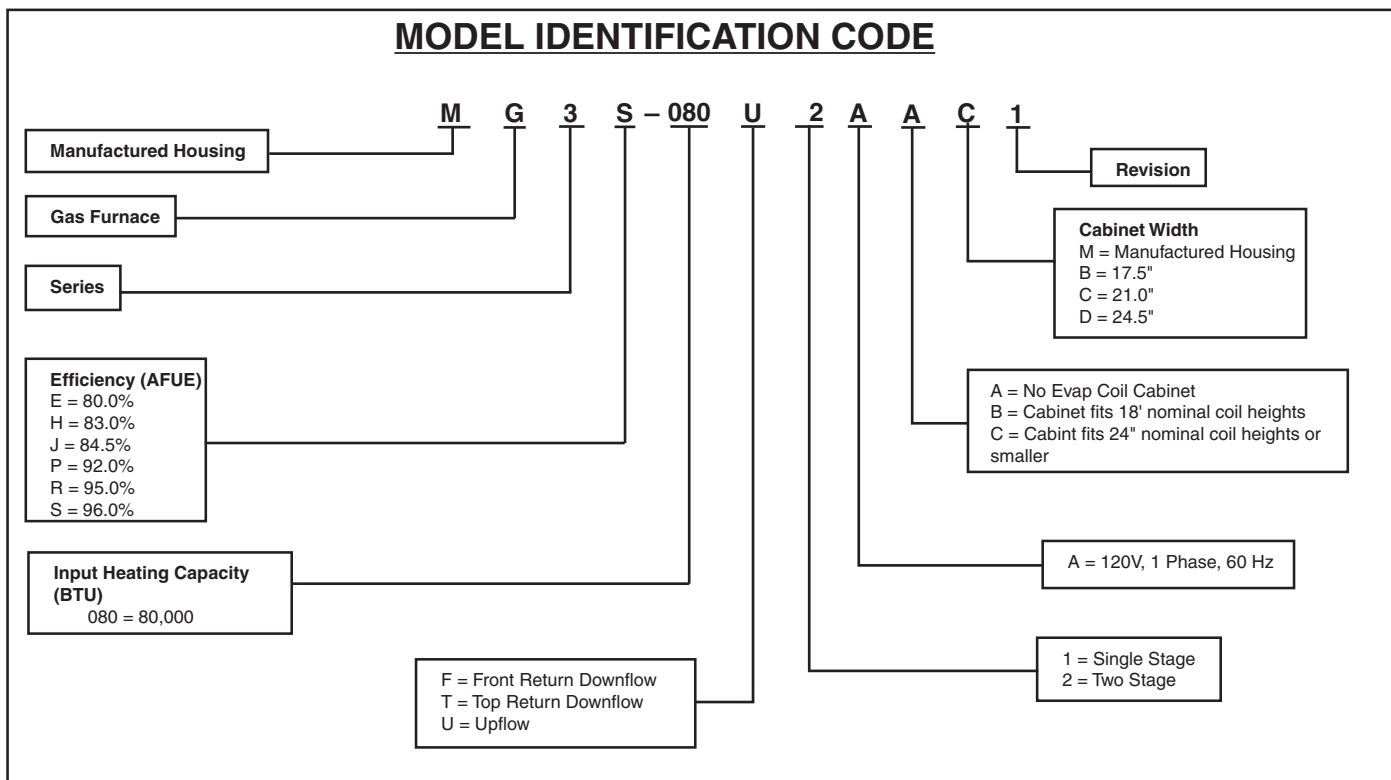
Upflow/Horizontal Gas Furnace

DIMENSIONS

Model #'s	Dimension "A"	Dimension "B"	Dimension "C"
080U2AAC1	21	19 3/8	19 5/8



MODEL IDENTIFICATION CODE



SPECIFICATIONS

MG3S MODEL NUMBERS:	080U2AAC1
Input - Btuh (a)	80,000 / 52,000
Heating Capacity - Btuh	77,000 / 50,000
AFUE	96
Blower D x W	1 - BLDC - 1
Motor H.P. - Speed - Type	11.5
Motor FLA	0.5
Rated Ext. SP - In. W.C.	30-60
Temperature Rise Range - °F	130lb
Shipping Weights	155lbs

Note: All models are 115V, 60 Hz. Gas Connections are 1/2" N.P.T. AFUE = Annual Fuel Utilization Efficiency
 (a) Ratings to 2,000 ft. Over 2,000 ft. reduce 4% for each 1,000 ft. above sea level.

MG3S-080D

HEATING AIRFLOW (CFM) & TEMPERATURE RISE (°F)														
Model Number/ Heating Input	MOTOR SWITCH SETTINGS (0=OFF, 1=ON)				External Static Pressure (in.w.c.)									
					0.1		0.2		0.3		0.4		0.5	
	1	2	3	4	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE
MG3S-080D 80,000 BTU/hr	0	0	0	0	1,125	63								
	1	0	0	0	1,205	59	1,120	63						
	0	1	0	0	1,305	54	1,225	58	1,150	62				
	1	1	0	0	1,430	50	1,350	53	1,270	56	1,190	60	1,110	63
	0	0	1	0	1,525	47	1,450	49	1,375	52	1,300	55	1,225	57
	1	0	1	0	1,620	44	1,540	46	1,465	49	1,390	51	1,315	54
	0	1	1	0	1,695	42	1,620	44	1,545	46	1,465	49	1,390	51
	1	1	1	0	1,770	40	1,700	42	1,630	44	1,555	46	1,485	47
	0	0	0	1	1,875	38	1,805	39	1,730	41	1,655	43	1,580	45
	1	0	0	1	1,905	37	1,840	39	1,775	40	1,710	42	1,640	43
	0	1	0	1	1,980	36	1,910	37	1,845	39	1,780	40	1,715	41
	1	1	0	1	2,025	35	1,960	36	1,895	38	1,830	39	1,765	40
	0	0	1	1			2,025	35	1,960	36	1,900	37	1,840	38
	1	0	1	1					2,010	35	1,945	37	1,880	37
	0	1	1	1							2,035	35	1,980	36
	1	1	1	1										

COOLING AIRFLOW (CFM)												
Model Number/ Heating Input	MOTOR SWITCH SETTINGS (0=OFF, 1=ON)				External Static Pressure (in.w.c.)							
					0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8
	5	6	7	8	CFM	CFM	CFM	CFM	CFM	CFM	CFM	CFM
MG3S-080D 80,000 BTU/hr	0	0	0	0	1,125	1,040	960	880	795			
	1	0	0	0	1,205	1,120	1,040	960	875	795		
	0	1	0	0	1,305	1,225	1,150	1,070	995	915	840	
	1	1	0	0	1,430	1,350	1,270	1,190	1,110	1,030	950	865
	0	0	1	0	1,525	1,450	1,375	1,300	1,225	1,150	1,075	1,000
	1	0	1	0	1,620	1,540	1,465	1,390	1,315	1,240	1,165	1,090
	0	1	1	0	1,695	1,620	1,545	1,465	1,390	1,315	1,235	1,160
	1	1	1	0	1,770	1,700	1,630	1,555	1,485	1,410	1,340	1,265
	0	0	0	1	1,875	1,805	1,730	1,655	1,580	1,510	1,435	1,340
	1	0	0	1	1,905	1,840	1,775	1,710	1,640	1,575	1,510	1,445
	0	1	0	1	1,980	1,910	1,845	1,780	1,715	1,650	1,580	1,515
	1	1	0	1	2,025	1,960	1,895	1,830	1,765	1,700	1,635	1,570
	0	0	1	1	2,085	2,025	1,960	1,900	1,840	1,775	1,715	1,655
	1	0	1	1	2,135	2,070	2,010	1,945	1,880	1,815	1,750	1,685
	0	1	1	1	2,200	2,145	2,090	2,035	1,980	1,925	1,870	1,820
	1	1	1	1	2,280	2,225	2,170	2,115	2,065	2,010	1,955	1,900

***NOTES:**

1. Motor switch settings for heating speeds use HEAT switches 1, 2, 3, & 4 and for cooling speeds use COOL switches 5, 6, 7, & 8.
2. To comply with government mandated efficiency standards, two openings are required for airflows above 1,600 CFM.
3. Data is shown without filter.
4. Temperature rises in the table are approximate. Actual temperature rises may vary.
5. Individual cells shaded in gray indicate a temperature rise outside of the recommended range.
6. To comply with government mandated efficiency standards, speed settings shaded in gray are not allowed in HEAT mode.
7. When in low stage heat, the airflow is approximately 70% of the tables high value (2-stage furnaces only).

VENTING

All models are approved for vertical non direct (1 pipe) and direct (2 pipe) venting applications. See Vent Table below for specified sizes and allowable lengths.

VENT TABLE

	SINGLE PIPE LENGTH (FT.) with 1 long radius elbow*	DIRECT VENT, DUEL PIPE LENGTH (ft.) WITH 1 long radius elbow on each pipe*
	OUTLET	INLET/OUTLET
MODELS	3"	3"
080	90	90

* NOTE:

1. Subtract 2.5 ft. for each additional 2" elbow and 3.5 ft. for each additional 3" elbow.
2. Two 45 degree elbows are equivalent to one 90 degree elbow.
3. One short radius elbow is equivalent to two long radius elbows.
4. Do not include termination elbows in calculation of vent length.
5. This table is applicable for elevations from sea level to 2000 ft. For higher elevations decrease vent pipe lengths by 8% per 1000 ft. of altitude.
6. Only the listed pipe materials are approved for use with M4R Condensing Furnaces.

ACCESSORIES

MG3S KITS	
Description	SKU
"C" Cabinet variable speed, high efficiency, VSHE	904878
2" Concentric vent kit	904177
3" Concentric vent kit	904176
2" Side wall vent kit	904617
3" Side wall vent kit	904347
U.S. LP Conversion kit (0 to 10,000 ft.)	904914
Canada LP Conversion kit (0 to 4,500 ft.)	904915
Side return filter kit	541036
Neutralizer kit	902377
Sloped roof ventilaire III kit	914098
Sloped roof ventilaire IV kit	914958
Soffit ventilaire kit	917201
Concentric vent termination kit	903578
3" PVC horizontal exterior vent mounting kit	902375
A/C coil box (C cabinet)	920261



GENERAL TERMS OF LIMITED WARRANTY

Nortek Global HVAC, LLC will furnish a replacement for any part of this product which fails in normal use and service within the terms and conditions of the warranty.

For complete details of the Limited Warranty, including applicable terms and conditions, see your local installer or contact the Nortek Global HVAC, LLC warranty department for a copy.

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A (08/2020)