

---

## TECHNICAL SPECIFICATIONS

---

# G6RA Series for Modular Housing

## High Efficiency Upflow/Horizontal Gas Furnace

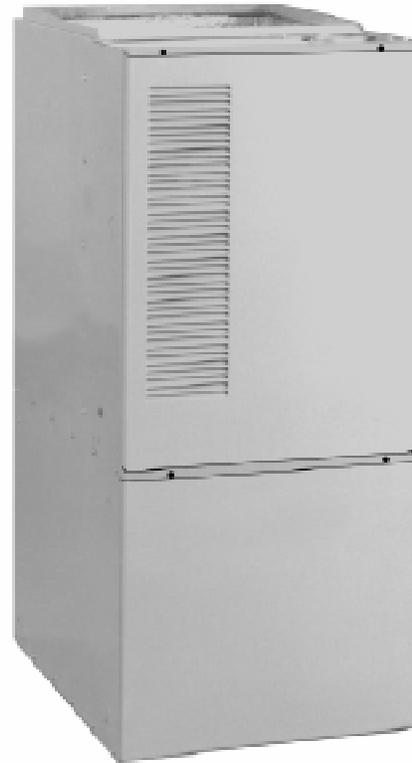
**Induced Draft - 80+ AFUE**

**Input 45,000 - 144,000 Btuh**

The high efficiency upflow gas furnace may be installed free standing in a utility room, basement, or enclosed in an alcove or closet. The extended flush jacket provides a pleasing "appliance appearance." Design certified by the American Gas Association (AGA) Laboratories and the Canadian Gas Association (CGA) Laboratories. The product is truly designed with the installer and the consumer in mind.

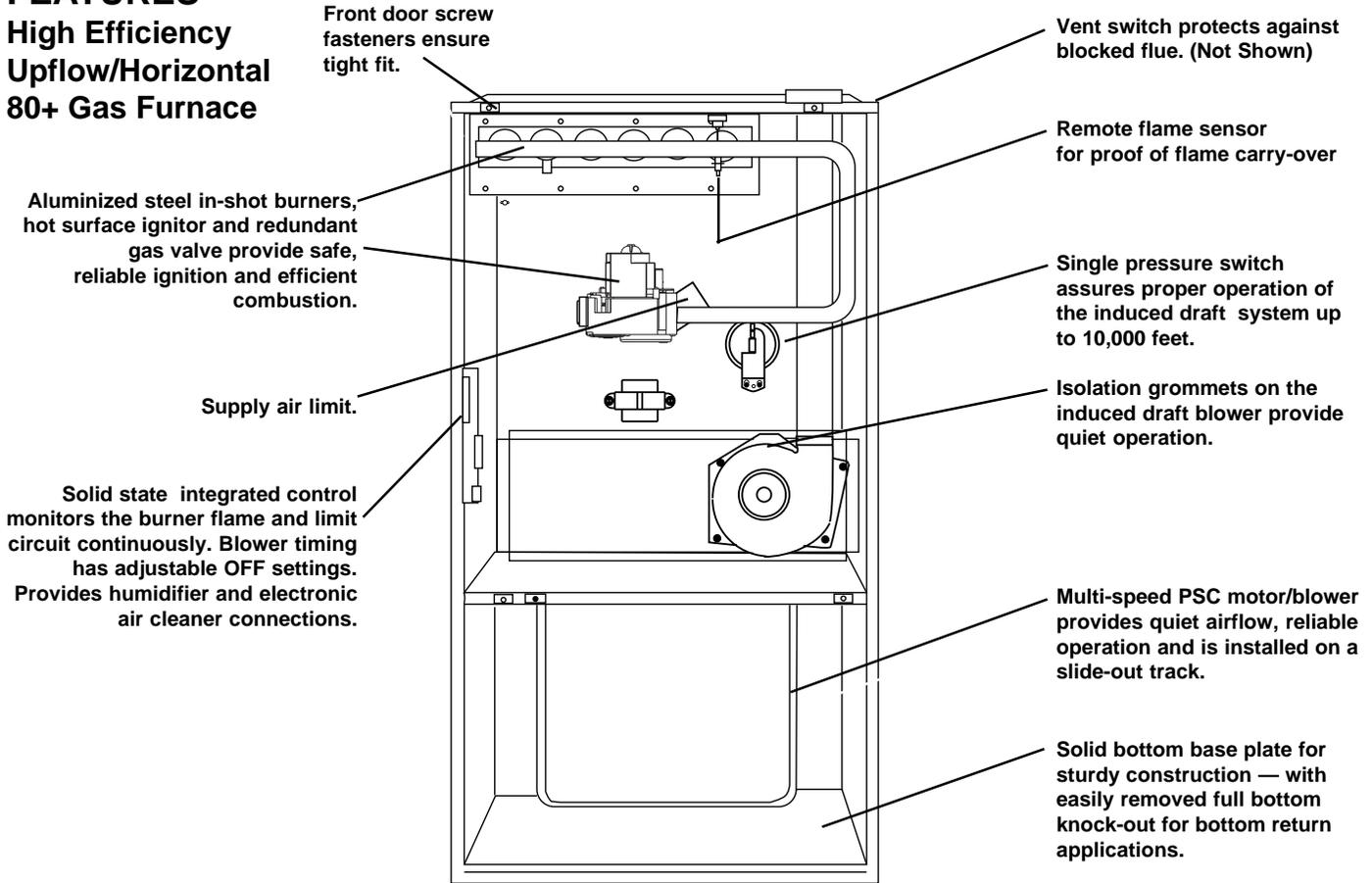
### FEATURES and BENEFITS

- Best warranty in the business —
  - A full 10 years on the heat exchanger
  - 1 year on all parts
- 100% fired and tested — All units and each component (both mechanical and electrical) are tested on the manufacturing line.
- Best packaging in the industry — Unique design assures product will arrive to the homeowner dent free.
- Clean and quiet operation — Due to the unique design of in-shot burners, location of inducer, return air vents, and use of insulation.
- Fixed 30 second blower delay at burner start-up assures a warm duct temperature at furnace start-up. Adjustable blower off settings (60, 90, 120 and 180 seconds).
- Fixed 30 second post purge increases life of heat exchanger.
- Dependable, shock-mounted hot surface ignitor — Innovative application of an appliance type ignitor with a 20 year history of reliability, assures no callbacks because of handling.
- Color coded wire harness — Designed to fit the components, all with quick-connect fittings for ease of service and replacement.
- Approved for categories I and III venting systems — May be common, dedicated, or horizontal vented for maximum flexibility in installation.
- Tubular primary heat exchanger — Heavy gauge aluminized steel heat exchanger assures a long life.
- 90 second fixed cooling cycle blower-off delay (TDR) increases cooling performance when matched with a NORDYNE coil.
- Variable speed blower kit is available to maximize air conditioner and heat pump efficiencies. On selected units, SEER ratings up to 14 and HSPF ratings up to 8.5 are ARI listed.
- Multi-speed direct drive blower — Designed to give a wide range of cooling capacities. 40VA transformer included.
- LP convertible — Simple burner orifice and regulator spring change for ease of convertibility.
- Diagnostic lights flash to identify limit failure, pressure switch failure, improper ground and polarization, and low flame signal — for easy troubleshooting.
- Incorporates new integrated control board with connections for electronic air cleaner, humidifier and twinning.
- New two piece door design enhances furnace appearance and uses screw fasteners for easier accessibility.
- 3 amp fuse protection against low voltage shorts; protects transformer and control board.
- Low voltage terminal board for easy field wiring.
- Components and Controls — Designing quality into our products means selecting manufacturers that have a reputation for delivering high quality, dependable products.



# FEATURES

## High Efficiency Upflow/Horizontal 80+ Gas Furnace



# STANDARD EQUIPMENT

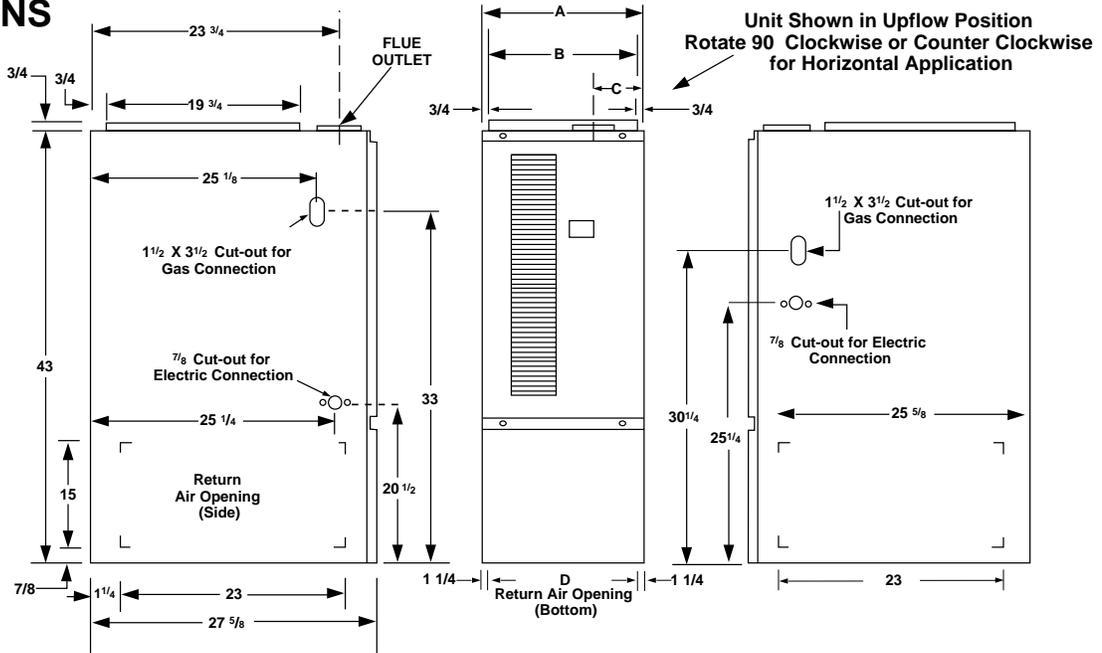
Draft inducer; pressure switch; redundant main gas control; hot-surface ignition; timed ON/OFF blower controls(TDR) ; 40VA transformer for air conditioner application; limit controls; solid base plate with knock-out for easy removal; direct drive motor; all models can be converted to use L.P. (propane) gas. Factory approved kits *only* must be used and are available as an optional accessory from your distributor.

# SPECIFICATIONS

G6RA MODEL NUMBERS:	-045( )08	-060( )12	-072( )12	-072( )16	-096( )12	-096( )16	-096( )20	-120( )16	-120( )20	-144( )20
Input-Btuh (a)	45,000	60,000	72,000	72,000	96,000	96,000	96,000	120,000	120,000	144,000
Heating Capacity - Btuh	36,000	48,000	58,000	58,000	77,000	77,000	77,000	96,000	96,000	115,000
<b>AFUE</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>
Max. Htg. Ext. St. Press. In W.C.	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
Blower Wheel D x W	10 x 6	10 x 6	10 x 6	10 x 10	10 x 9	10 x 10	11 x 10	10 x 10	11 x 10	11 x 10
Motor H.P. -Speed -Type	1/5 - 3 - PSC	1/3 - 3 - PSC	1/3 - 3 -PSC	1/2 - 4 -PSC	1/3 - 3 - PSC	1/2 - 4 -PSC	3/4 - 4 -PSC	1/2 - 4 -PSC	3/4 - 4 -PSC	3/4 - 4 -PSC
Motor FLA	2.8	6.0	6.0	7.9	6.0	7.9	11.1	7.9	11.1	11.1
Temperature Rise Range - °F	45 - 75	45 - 75	45 - 75	40 - 70	50 - 80	50 - 80	40 - 70	50 - 80	45 - 75	45 - 75
Approximate Shipping Wt. - lbs.	123	134	135	152	163	163	174	174	182	194

All models are 115 V, 60 HZ. Gas connections are 1/2" N.P.T  
AFUE= Annual Fuel Utilization Efficiency

# DIMENSIONS



MODEL NUMBER G6RA	A (in.)	B (in.)	C (in.)	D (in.)	MODEL NUMBER G6RA	A (in.)	B (in.)	C (in.)	D (in.)
045(*)-08	14 1/4	12 3/4	3 1/4	11 3/4	096(*)-16	19 3/4	18 1/4	3 3/4	17 1/4
060(*)-12	14 1/4	12 3/4	3 3/4	11 3/4	096(*)-20	22 1/2	21	3 3/4	20
072(*)-12	14 1/4	12 3/4	3 3/4	11 3/4	120(*)-16	19 3/4	18 1/4	3 3/4	17 1/4
072(*)-16	19 3/4	18 1/4	3 3/4	17 1/4	120(*)-20	22 1/2	21	3 3/4	20
096(*)-12	19 3/4	18 1/4	3 3/4	17 1/4	144(*)-20	22 1/2	21	4 1/4	20

# BLOWER PERFORMANCE

Upflow Furnace Airflow Data												
G6RA Furnace Model No.	Motor HP	Motor Speed	External Static Pressure (Inches Water Column)									
			0.1		0.2		0.3		0.4		0.5	
			CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
045C-08	1/5	High *	1000	-	970	-	950	-	920	-	870	-
		Medium	760	46	740	47	730	47	720	48	690	50
		Low **	630	55	620	56	610	57	600	58	570	61
060C-12	1/3	High *	1380	-	1350	-	1310	-	1260	-	1210	-
		Medium	1220	-	1190	-	1160	-	1120	-	1070	-
		Low **	820	57	800	58	780	59	760	61	730	63
072C-12	1/3	High *	1380	-	1350	-	1310	-	1260	-	1210	-
		Medium	1220	46	1190	47	1160	48	1120	49	1070	52
		Low **	820	68	800	69	780	71	760	73	730	76
072C-16	1/2	High *	1980	-	1910	-	1830	-	1760	-	1660	-
		Med-High	1710	-	1660	-	1610	-	1540	-	1470	-
		Med-Low	1490	-	1470	-	1420	-	1380	-	1320	-
		Low **	1270	44	1250	45	1230	45	1190	47	1140	49
096C-12	1/3	High *	1530	-	1450	-	1390	-	1300	-	1220	-
		Medium**	1380	64	1320	67	1250	71	1190	75	1100	81
		Low	930	-	900	-	870	-	820	-	750	-
096C-16	1/2	High *	1980	-	1910	-	1840	-	1760	-	1680	-
		Med-High	1720	-	1670	-	1610	-	1560	-	1480	-
		Med-Low **	1470	50	1440	52	1410	53	1370	54	1320	56
		Low	1270	58	1240	60	1220	61	1190	62	1140	65
096C-20	3/4	High *	2340	-	2290	-	2280	-	2180	-	2150	-
		Med-High	1910	-	1880	-	1860	-	1830	-	1810	-
		Med-Low	1520	49	1510	49	1490	50	1480	50	1460	51
		Low **	1370	54	1350	55	1340	55	1320	56	1300	57
120C-16	1/2	High *	1900	-	1830	-	1750	-	1630	-	1580	-
		Med-High**	1720	54	1670	56	1610	58	1560	59	1480	63
		Med-Low	1450	64	1420	65	1380	67	1340	69	1280	72
		Low	1260	-	1230	-	1200	-	1170	-	1120	-
120C-20	3/4	High *	2300	-	2250	-	2190	-	2130	-	2090	-
		Med-High	1910	49	1880	49	1860	50	1830	51	1800	52
		Med-Low**	1540	60	1530	61	1520	61	1500	62	1480	63
		Low	1320	-	1310	-	1300	-	1280	-	1260	-
144C-20	3/4	High *	2240	-	2190	-	2130	-	2070	-	2020	-
		Med-High**	1900	49	1860	50	1820	51	1780	52	1740	53
		Med-Low	1520	61	1510	61	1490	62	1480	63	1450	64
		Low	1330	-	1310	-	1290	-	1280	-	1250	-

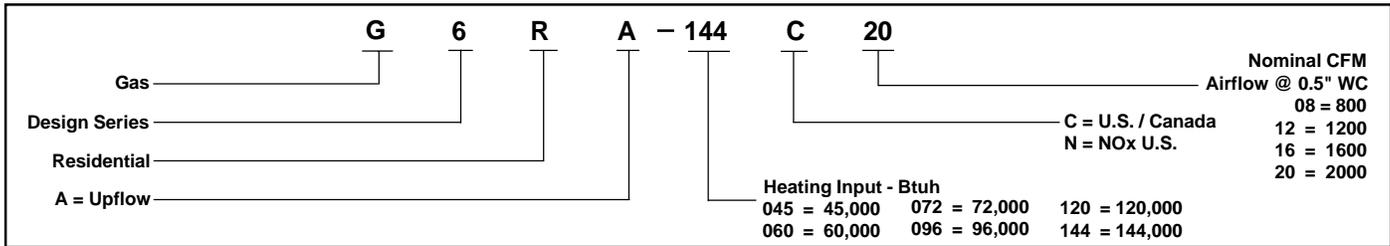
\*Factory wired cooling speed tap.

\*\*Factory wired heating speed tap.

- Not Recommended

NOTE: Airflow rates of 1800 CFM or more require two air return connectons. Data is for operation with filters.

# IDENTIFICATION CODE



## HORIZONTAL VENTING Venting Requirements

These furnaces are approved to use with 3" single wall AL29-4C stainless steel vent pipe in horizontal vent applications, and with the required horizontal vent kit listed below. The pipe is available from the following manufacturers:

- Z-Flex Inc.** - vent brand name (**Z-VENT**)
- Heat-fab Inc.** - vent brand name (**Saf-T Vent**)
- Flex-L International** - vent brand name (**STAR-34 Vent**)

When venting horizontally, this is a Category III furnace, the vent pressure is positive, and the venting system must be sealed in both horizontal and vertical runs.

Model Number G6RA	Min. Pipe Size	Reducer Needed*	Flue Outlet (in.)	Max. # Elbows	Max. Ft. Vent Pipe
045( )-08	3"	None	3	4	35
060( )-12	3"	4" to 3"	4	4	35
072( )-12	3"	4" to 3"	4	4	35
072( )-16	3"	4" to 3"	4	4	35
096( )-12	3"	4" to 3"	4	4	35
096( )-16	3"	4" to 3"	4	4	35
096( )-20	3"	4" to 3"	4	4	35
120( )-16	3"	4" to 3"	4	4	35
120( )-20	3"	4" to 3"	4	4	35
144( )-20*	3"	4" to 3"	5	3	30

\* NOTE: Special 5" to 4" Reducer Kit (#902249) required for model G6RA144C-120.

High Efficiency 80+ with Honeywell VR Gas Valve		
Kit		Order Number
U.S. LP Conversion Kit (0 to 10,000 ft.)		903616
Canadian LP Gas Conversion Kit (0 to 4,500 ft.)		903617
Fossil Fuel Kit		914762
Side Return Filter Kit		541036
Bottom Return Filter Kit	A Cabinet	903088
	B Cabinet	903089
	C Cabinet	903090
Downflow Sub-Base	A Cabinet	902974
	B Cabinet	902677
Horizontal Vent Kit		903196
Internal Side Return Filter Wire		903152

## VENTING

All models, with the exception of the reduced NOx models, are approved for vertical and horizontal venting applications (see table above). All models may be common vented with a gas water heater. Type B gas vent materials may be used when connected to a vertical vent system. The installation must be in accordance with the venting instructions supplied with the furnace.

### GENERAL TERMS OF LIMITED WARRANTY \*\*

NORDYNE will furnish a replacement for any part of this product which fails in normal use and service within the applicable periods stated below, in accordance with the terms of the warranty.

**G6RA Models Warranty**  
 Gas Heat Exchanger ..... 10-Year Limited Warranty  
 Any Other Part ..... 1-Year Limited Warranty

\*\* For complete details of the Limited Warranty, including applicable terms and conditions, see your local installer or contact the factory for a copy.

