

# TECHNICAL SPECIFICATIONS

# **G6RL Series**

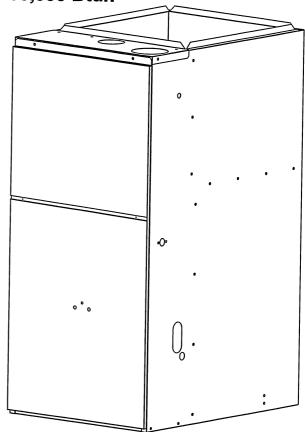
# High Efficiency / Direct Vent or Non Direct Vent Condensing Downflow Gas Furnace

Induced Draft - 90+ AFUE Input 40,000 - 100,000 Btuh

The high efficiency downflow gas furnace may be installed free standing in a utility room, 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 contractor and the consumer in mind.

### **FEATURES & BENEFITS**

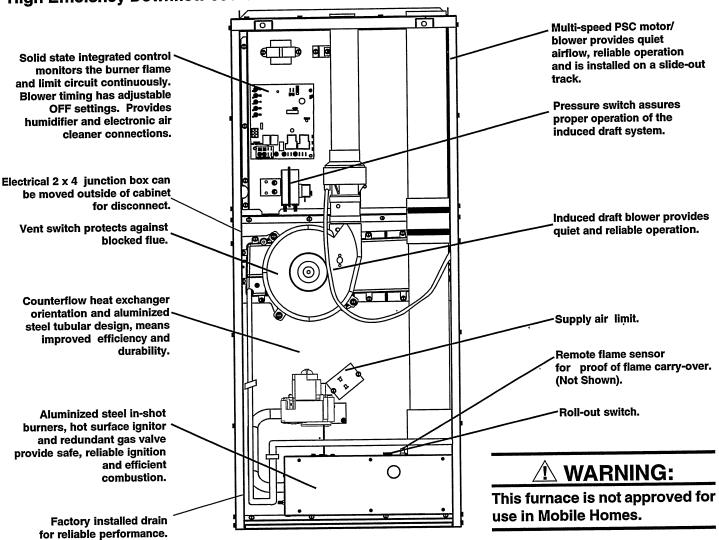
- Best warranty in the business -
  - A lifetime warranty on the heat exchanger
  - 6 year limited warranty on all parts
- 100% fired and tested All units and each component (both mechanical and electrical) are tested on the manufacturing line.
- Best packaging in the industry Unique design assures product 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, 120, 160 and 180 seconds).
- Fixed 30 second post purge increases life of heat exchanger.
- Dependable, 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.
- Tubular primary heat exchanger Heavy gauge aluminized steel heat exchanger assures a long life.
- Stainless steel secondary heat exchanger assures long life.
- 90-second fixed cooling cycle blower-off delay (TDR) increases cooling performance when matched with a NORDYNE coil.
- Approved for direct vent furnace, category IV venting system – May be vertically or horizontally vented using either a one-pipe or two-pipe system for maximum flexibility in installation.



- 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 light flashes identify limit failure, pressure switch failure and improper ground and polarization for easy troubleshooting.
- Incorporates integrated control board with connections for electronic air cleaner, humidifier and twinning.
- Factory installed drain system for reliable performance.
- Door design enhances furnace appearance and uses screw fasteners for great fit and accessibility.
- 3 amp fuse protection against high and 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 Downflow 90+ Gas Furnace



#### STANDARD EQUIPMENT

Direct vent; 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; 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 NORDYNE distributor.

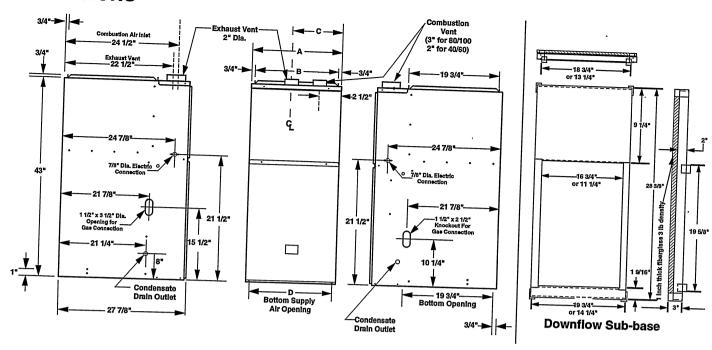
### **SPECIFICATIONS**

SPECII ICATIONO				
G6RL MODEL NUMBERS:	-040C-12A	-060C-12A	-080C-16B	-100-16B
Input-Btuh (a)	40,000	60,000	- 80,000	100,000
Heating Capacity - Btuh	36,000	54,000	72,000	90,000
AFUE	90+	90+	90+	90+
Blower D x W	10 x 6	10 x 6	10 x 10	10 x 10
Motor H.PSpeed -Type	1/3 - 3 - PSC	1/3 - 3 - PSC	1/2 - 4 -PSC	1/2 - 4 -PSC
Motor FLA	7.0	7.0	9.0	9.0
Maximum Ext. SP - In. W.C.	0.5	0.5	0.5	0.5
Temperature Rise Range - °F	35 - 65	40 - 70	45 - 75	50 - 80

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.

# **DIMENSIONS**



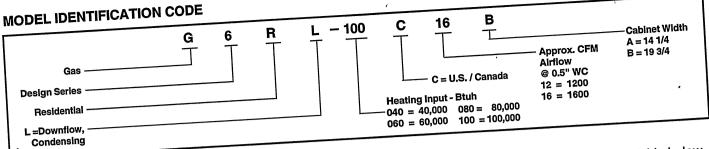
MODEL NUMBER	Furnace Input		Shipping			
G6RL-	(Btu/Hr)	A (in.)			D (in.)	Weights (lbs)
040C-12A	40,000	14 1/4	12 3/4	4 5/8	11 3/4	135
060C-12A	60,000	14 1/4	12 3/4	4 5/8	11 3/4	135
080C-16B	80,000	19 3/4	18 1/4	10	17 1/4	174
100C-16B	100,000	19 3/4	18 1/4	10	17 1/4	185

Allow 36" minimum clearance for service.

## **BLOWER PERFORMANCE**

Model	Heating			External Static Pressure (Inches Water Column)															
Number	input	Motor	Motor	0.	.1	0.	.2	0	.3	0.	4	0.	5	0.	6	0.	.7	0	.8
G6RL-	(Btuh)	Speed	HP	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
		High*		1280	-	1210		1180		1140	-	1090	-	1070		1030	-	990	-
040C-12A	40,000	Medium	1/3	1140	-	1090	-	1060	-	1030	-	980	35	950	36	910	37	870	39
1 1	Low**		875	39	835	41	820	41	805	42	780	43	770	44	760	45	750	45	
		High*		1260	40	1190	43	1155	44	1120	45	1075	47	1030	49	980	52	940	54
060C-12A	60,000	Medium	1/3	1120	45	1070	48	1040	49	1010	50	960	53	930	55	890	57	850	60
1	Low**		855	59	815	62	800	64	780	65	760	67	730	70	710	-	690	•	
		High*	l l	1635	-	1585	-	1525	-	1460	46	1400	48	1330	51	1260	54	1180	57
080C-16B	80.000	Med-High	1/2	1435	47	1395	49	1350	50	1300	52	1255	54	1200	56	1150	59	1090	62
0000 105	00,	Med-Low**		1230	55	1200	56	1165	58	1130	60	1090	62	1050	65	1000	68	960	71
		Low		1050	-	1035	-	1010	-	980	-	950	-	910	-	870	-	820	
		High*		1600	53	1555	54	1500	56	1445	59	1380	61	1310	65	1240	68	1160	73
100C-16B	100,000	Med-High**	1/2	1475	57	1435	59	1385	61	1335	63	1290	66	1240	68	1190	71	1130	75
1000-100	.00,000	Med-Low		1320	-	1290	-	1250	-	1215	-	1170	-	1120	-	1070	-	1020	-
1		Low		1150	-	1130	-	1110	-	1075		1040	-	1000	-	950		890	-

- \* Factory Set Cooling Speed
- \*\* Factory Set Heating Speed
- Not Recommended
- Notes: 1. Airflow rates of 1800 CFM or more require two return air connections. Data is for operation with filter(s).
  - 2. Temperature rises in the table are approximate. Actual temperature rises may vary.
  - Temperature rises and airflows for external static pressures greater than 0.5 are for reference only. These conditions are not recommended.



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.

							(4)	
	NOTH (# \	DIREC	T VEN	T, DUAL	. PIPE L	ENGTH	(IL.)	
SINGLE PIPE								
with 1 long ra	dius elbows .	Inlot/C	ontlet	Inlet/C	outlet	Illieo Cutios		
Outlet	Outlet				2"	3"	3"	
2"	3"	2"						
			40	50	50	90	90	
80	150	40	40	30	"			
					05	00	90	
60	150	30	30	35	35	90	55	
00							<del> </del>	
		1			1			
	150	15	15	25	25	90	90	
30	150	.0			1			
	with 1 long ra Outlet 2" 80	2" 3" 80 150 60 150	SINGLE FIT 2           with 1 long radius elbows*.         with 1           Outlet         Outlet         Inlet/C           2"         3"         2"           80         150         40           60         150         30	SINGLE FIT 2           with 1 long radius elbows*.         with 1 long radius radius elbows*.           Outlet         Outlet         Inlet/Outlet           2"         3"         2"         2"           80         150         40         40           60         150         30         30	SINGLE FITE Law in the Long radius elbows*.         with 1 long radius elfows*.           with 1 long radius elbows*.         With 1 long radius elfows*.           Outlet         Outlet         Inlet/Outlet         Inlet/Outlet           2"         2"         3"         3"           80         150         40         40         50           60         150         30         30         35	SINGLE FITE Language           with 1 long radius elbows*.         with 1 long radius elbows of the property of the prop	with 1 long radius elbows .         Inlet/Outlet         Inlet/Outlet	

- 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° elbow.
- 3. One short radius elbow is equivalent to 2 long radius elbows.
- Do not include termination elbows in calculation of vent lenath.
- 5. This table is applicable for elevations from sea level to 2000 ft. For higher elevations decrease pipe lengths by 8% per 1000 ft. of altitude.
- 6. Only the above pipe materials are approved for use with G6 Condensing Furnaces.

## ACCESSORY VENT KITS

High Efficiency 90+ with Honeywell VR Gas Valve						
Kit		Order Number				
J.S. LP Conversion Ki (0 to 10,000 ft.)	t	903616				
Canadian LP Gas Con (0 to 4,500 ft.)	version Kit	903617				
Fossil Fuel Kit		914762				
Downflow Sub-Base	A Cabinet B Cabinet	902974 902677				

Kit Description	2" PVC	3" PVC	4" PVC
Horizontal Exterior Vent Mounting Kit	9023730	9023750	9023760
Neutralizer Kit (all models)		9023770	

# **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.

**G6RL Models Warranty** Gas Heat Exchanger ...... Lifetime Limited Warranty\*\* Any Other Part...... 6-Year Limited Warranty

\*\* For original owner only – not transferable.

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













Asan Energy Star Partner, NORDYNE has determined that this product meets the Energy Star guidelines for energy

399A-0600 (Replaces 399A-1299)