

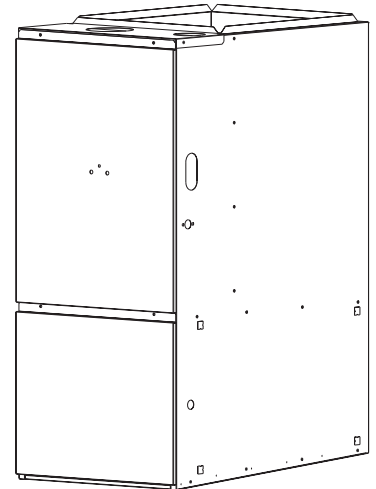
# FG6RC Series

## High Efficiency / Direct Vent or Non Direct Vent

### Condensing Upflow/Horizontal Gas Furnace

Induced Draft - 92+ AFUE Input 40,000 - 120,000 Btuh

The high efficiency upflow gas furnace may be installed free standing in a utility room, basement, or enclosed in an alcove or closet. With kit, it converts easily to horizontal application. The extended flush jacket provides a pleasing "appliance appearance." Design certified by the Canadian Standards Association (CSA). The product is truly designed with the contractor and the consumer in mind.



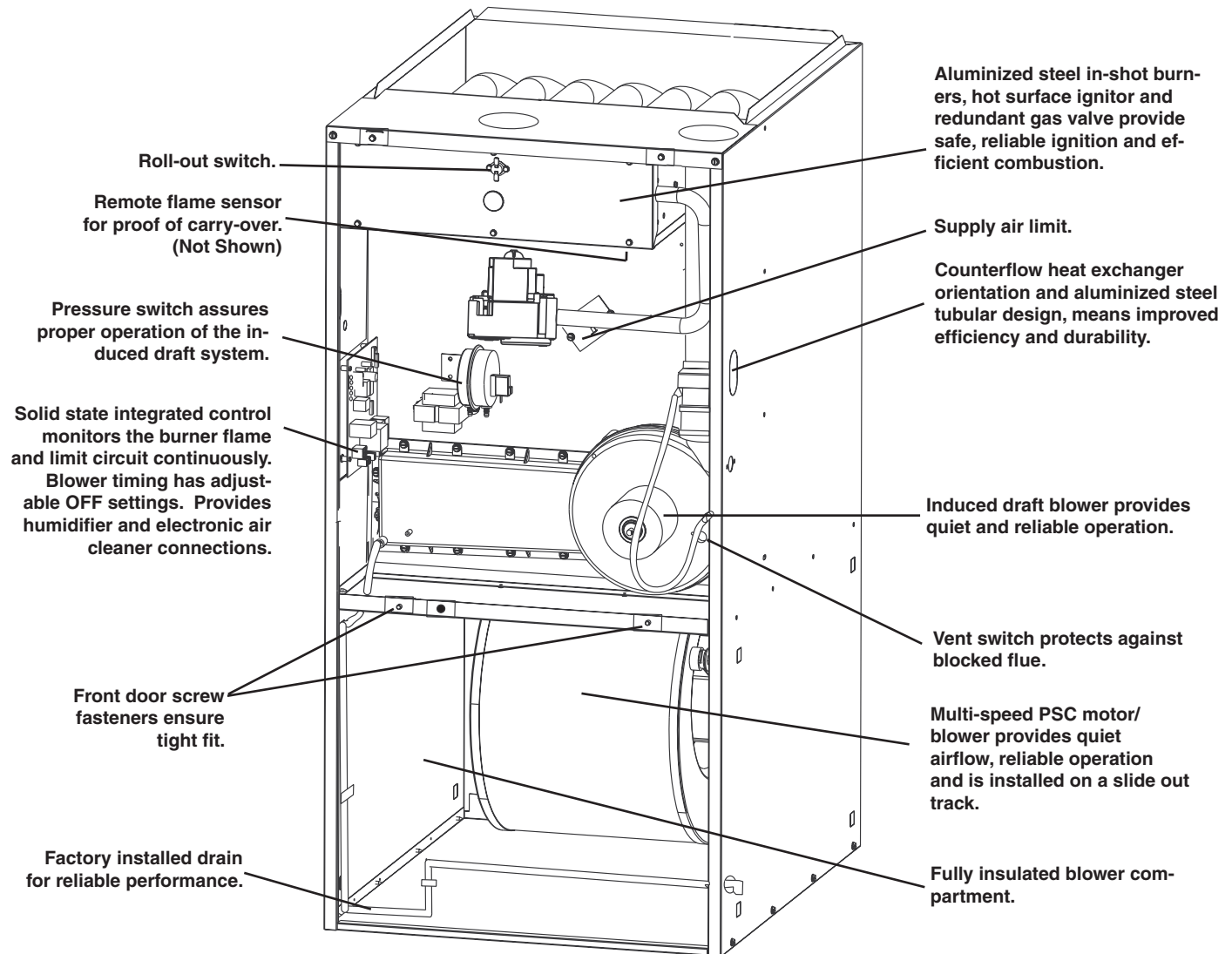
#### Features and Benefits

- **Warranty**

- This product offers a 10-year All-Parts Warranty.
  - This product offers a 10 year Quality Pledge to replace the entire unit, if the unit's major component (heat exchanger or compressor) fails within the first 10 years of operation, to the original owner. All split system products must be installed with a matched indoor air handler or indoor coil to qualify.
  - Consumer product registration required for both 10 year All Parts Warranty and Quality Pledge within a limited period of time after the installation. See current warranty document or visit our consumer web site listed on the back of this document for warranty details.
  - Also when registered, this furnace upgrades to a limited lifetime heat exchanger warranty.
- 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 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 call-backs 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 a 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.
  - Fully insulated blower cabinet for quiet operation.
  - 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.
  - Factory installed drain system for reliable performance.
  - Diagnostic light flashes identify limit failure, pressure switch failure and improper ground and polarization — for easy troubleshooting.
  - SmartLite™ Control Board provides extended life to ignitors programmed to learn the heat-up characteristics of the ignitor so the ignition timing is energized appropriately.
  - Incorporates integrated control board with connections for electronic air cleaner, humidifier and twinning.
  - Two piece door design enhances furnace appearance and uses screw fasteners for great fit and 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 92+ Gas Furnace



## STANDARD EQUIPMENT

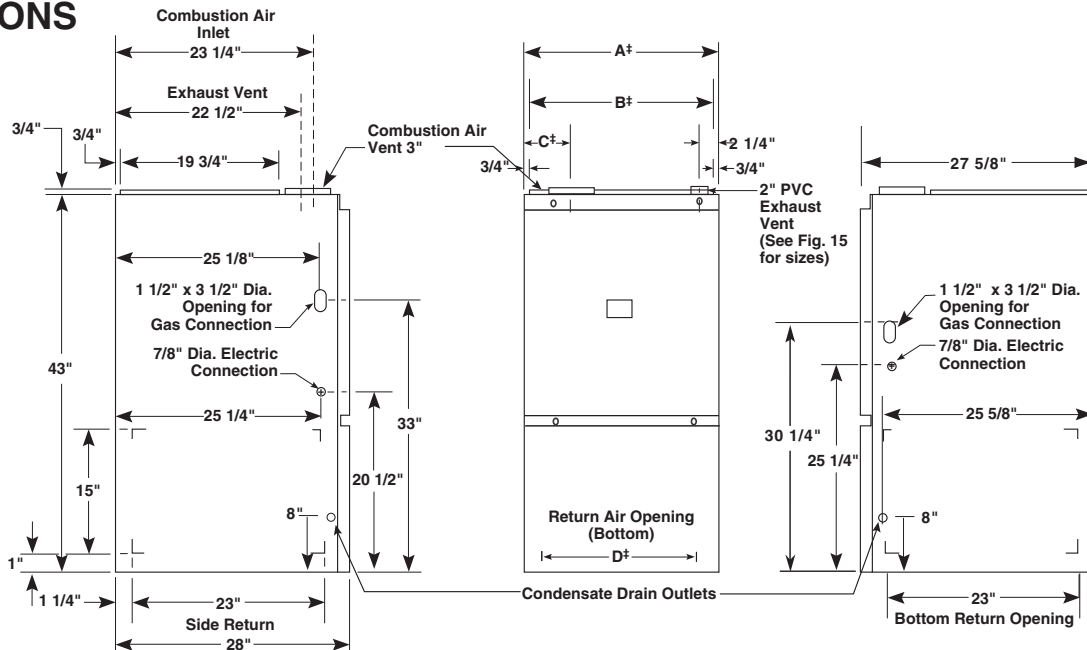
Direct vent; draft inducer; pressure switch; redundant main gas control; hot-surface ignition; timed ON/OFF blower controls (TDR); 40VA transformer for air conditioner application; limit controls; direct drive motor; all models can be converted to use L.P. (propane) gas. Factory approved kits *only*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

## SPECIFICATIONS

FG6RC MODEL NUMBERS:	-040C-08A	-040C-12A	-060C-12A	-080C-12B	-080C-16B	-100C-16B	-100C-20B	-120C-16C	-120C-20C
Input-Btuh (a)	40,000	40,000	60,000	80,000	80,000	100,000	100,000	120,000	120,000
Heating Capacity - Btuh	36,000	36,000	55,000	72,000	72,000	92,000	92,000	110,000	110,000
<b>AFUE</b>	<b>92.1</b>	<b>92.1</b>	<b>92.1</b>	<b>92.1</b>	<b>92.1</b>	<b>92.1</b>	<b>92.1</b>	<b>92.1</b>	<b>92.1</b>
Blower D x W	10 x 6	10 x 6	10 x 6	10 x 10	10 x 10	10 x 10	11 x 10	10 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	1/2 - 4 -PSC	1/2 - 4 -PSC	3/4 - 4 -PSC	1/2 - 4 -PSC	3/4 - 4 -PSC
Motor FLA	3.0	6.0	6.0	7.9	7.9	7.9	11.1	7.9	11.1
Maximum Ext. SP - In. W.C.	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Temperature Rise Range - °F	35 - 65	35 - 65	45 - 75	40 - 70	40 - 70	45 - 75	45 - 75	55 - 85	55 - 85

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 FG6RC	Dimensions				Shipping Weights (lbs)
	A (in.)	B (in.)	C (in.)	D (in.)	
40,000 A	14 1/4	12 3/4	5 1/8	11 3/4	133
60,000 A	14 1/4	12 3/4	5 1/8	11 3/4	140
80,000 B	19 3/4	18 1/4	7 7/8	17 1/4	172
100,000 B	19 3/4	18 1/4	7 7/8	17 1/4	180
120,000 C	22 1/2	21	9 1/4	20	204

## 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

APPLICATION	SINGLE PIPE LENGTH (ft.) with 1 long radius elbow*		DIRECT VENT, DUAL PIPE LENGTH (ft.) with 1 long radius elbow on each pipe*					
	Outlet	Outlet	Inlet/Outlet	Inlet/Outlet	Inlet/Outlet	Inlet/Outlet	Inlet/Outlet	Inlet/Outlet
PVC, CPVC or ABS SCH. 40 Pipe Size	2"	3"	2"	2"	3"	2"	3"	3"
Models 040	80	150	40	40	50	50	90	90
Models 060 & 080	60	150	30	30	35	35	90	90
Models 100 & 120	30	150	15	15	25	25	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 FG6 Condensing Furnaces.

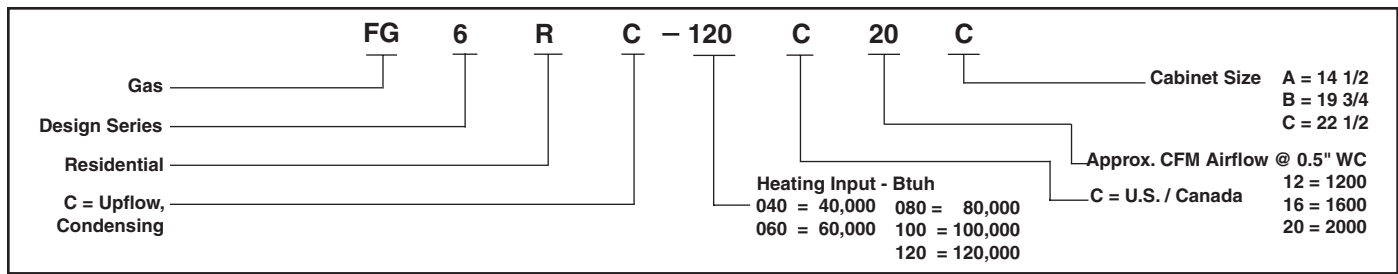
## ACCESSORIES

Kit	Order Number
U.S. LP Conversion Kit (0 to 10,000 ft.)	904090A
Canadian LP Gas Conversion Kit (0 to 4,500 ft.)	904091A
Fossil Fuel Kit	914762
Side Return Filter Kit	541036
Bottom Return	A Cabinet 903088
Filter (20/Box)	B Cabinet 903089
	C Cabinet 903090
Horizontal Drain Kit	903568
Internal Side Return Filter Wire	903152
Variable Speed Blower Kit for "A" cabinets	904231
Variable Speed Blower Kit for "B" & "C" cabinets	904075

## VENT KITS

Kit Description	2" PVC	3" PVC
Horizontal Exterior Vent Mounting Kit	902373	902375
Concentric Vent Kit	904177	904176
Neutralizer Kit (all models)	902377	
Side Wall Vent Kit	904347	

## IDENTIFICATION CODE



## BLOWER PERFORMANCE

Model Number *RC-	Heating Input (Btuh)	Motor Speed	Motor HP	External Static Pressure (Inches Water Column)															
				0.1		0.2		0.3		0.4		0.5		0.6		0.7		0.8	
				CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise	CFM	Rise
040( )-08A	40,000	High* Medium** Low	1/5	950 740 620	36 47 56	920 710 590	38 49 59	890 680 560	39 51 62	850 650 520	41 53 -	800 600 470	43 58 -	750 550 410	46 63 -	690 490 350	50 -	630 430 290	55 -
040( )-12A	40,000	High* Medium** Low	1/3	1330 1190 830	- - 42	1280 1160 810	- - 43	1230 1110 780	- - 44	1170 1060 760	- - 46	1120 1010 720	- - 48	1030 910 670	- 38 52	940 820 610	37 42 57	850 720 550	41 48 63
060( )-12A	60,000	High* Medium** Low	1/3	1310 1160 800	- 45 65	1260 1120 780	- 46 67	1210 1080 760	- 48 68	1160 1050 740	45 49 70	1100 990 710	47 52 73	1040 940 680	50 55 -	980 890 650	53 58 -	920 830 620	56 63 -
080( )-12B	80,000	High* Med-High** Med-Low Low	1/2	1775 1417 1031 808	38 47 65 -	1724 1385 987 751	39 48 67 -	1652 1339 967 717	40 50 69 -	1583 1280 914 679	42 52 73 -	1505 1224 882 641	44 54 75 -	1430 1163 839 595	46 57 -	1343 1097 783 538	49 61 -	1226 1013 692 430	54 66 -
080( )-16B	80,000	High* Med-High** Med-Low Low	1/2	1840 1600 1380 1100	- 43 50 63	1780 1560 1350 1050	- 44 51 66	1700 1470 1300 1000	41 47 53 69	1630 1400 1250 950	42 49 55 -	1550 1350 1190 900	45 51 58 -	1470 1280 1120 850	47 54 62 -	1380 1210 1040 800	50 57 67 -	1290 1150 960 750	54 60 -
100( )-16B	100,000	High* Med-High** Med-Low Low	1/2	1910 1640 1440 1230	45 53 60 70	1860 1620 1410 1210	47 53 61 72	1780 1540 1370 1180	49 56 63 73	1700 1480 1320 1140	51 58 66 -	1620 1420 1270 1090	53 61 68 -	1520 1340 1210 1030	57 65 72 -	1420 1250 1140 960	61 69 -	1310 1150 1060 880	66 75 -
100( )-20B	100,000	High* Med-High** Med-Low Low	3/4	2195 1975 1650 1320	39 43 51 64	2140 1910 1615 1300	40 44 52 65	2065 1875 1605 1280	41 45 53 66	2000 1845 1570 1275	42 46 54 67	1960 1805 1540 1265	44 47 55 67	1860 1735 1485 1250	46 50 57 68	1780 1670 1435 1210	48 51 59 70	1695 1590 1370 1160	50 53 62 73
120( )-16C	120,000	High* Med-High** Med-Low Low	1/2	1860 1650 1440 1230	56 63 72 84	1800 1610 1410 1210	58 65 74 -	1730 1550 1380 1180	60 67 75 -	1650 1480 1320 1140	63 70 79 -	1570 1410 1280 1090	66 74 81 -	1480 1320 1220 1030	70 79 85 -	1380 1230 1150 960	75 84 -	1270 1120 1080 880	82 -
120( )-20C	120,000	High* Med-High** Med-Low Low	3/4	2260 1870 1540 1360	- 56 67 76	2200 1840 1530 1330	- 56 68 78	2140 1790 1510 1310	- 58 69 79	2070 1760 1470 1280	- 59 71 81	1990 1710 1430 1250	- 61 73 83	1910 1660 1370 1220	- 63 76 85	1810 1610 1300 1190	57 65 80 -	1710 1560 1220 1150	61 67 85 -

( ) Can be C or N

\* 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.  
3. Temperature rises and airflows for external static pressures greater than 0.5 are for reference only. These conditions are not recommended.

Furnace Input (Btuh)	Cabinet Width (in.)	Nominal Electrical Supply	Maximum Operating Voltage	Minimum Operating Voltage	Maximum on Furnace Amperes	Minimum Wire Gauge	Maximum on Fuse or Circuit Breaker Amps*
40,000	14.25	115-60-1	127	103	7.8	14	15
60,000	14.25	115-60-1	127	103	7.8	14	15
80,000	19.75	115-60-1	127	103	9.7	14	15
100,000	19.75	115-60-1	127	103	9.7	14	15
120,000	22.50	115-60-1	127	103	12.9	12	20

\* Time-delay fuses or HACR-type circuit breakers are required.

Thermostat Wire Gauge	Recommended Maximum Thermostat Wire Length	
	2-wire (heating)	4 or 5-wire (cooling)
24	55 ft.	25 ft.
22	90 ft.	45 ft.
20	140 ft.	70 ft.
18	225 ft.	110 ft.

