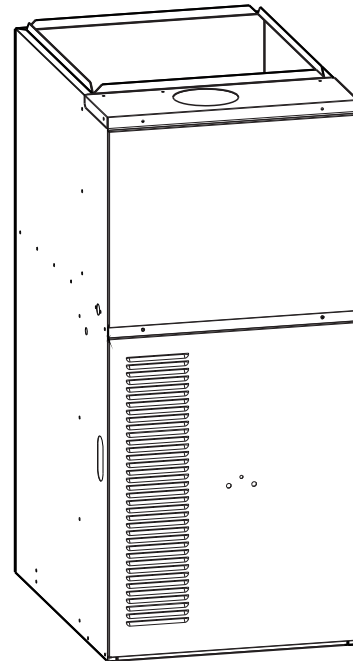


## FG6RK Series with Variable Speed Blower High Efficiency Downflow Gas Furnace

**Induced Draft - 80+ AFUE**

**Input 72,000 - 120,000 Btuh**

The heart of the FG6 series furnace with variable speed blower is the ECM motor (electronically commutated motor). The ECM consists of a brushless DC type motor with a microprocessor based variable speed drive. The drive continuously monitors RPM and torque output of the motor. This information is fed into pre-programmed algorithms in the microprocessor for correct motor output to maintain constant airflow regardless of external static pressure. The microprocessor stores delay profiles to optimize the efficiency and performance of the split system. The variable speed blower steps through intermediate airflows during the on and off profiles. This results in smoother, more efficient operation with quiet, gradual starts and stops. The furnace is design certified by CSA International (Canadian Standards Association).

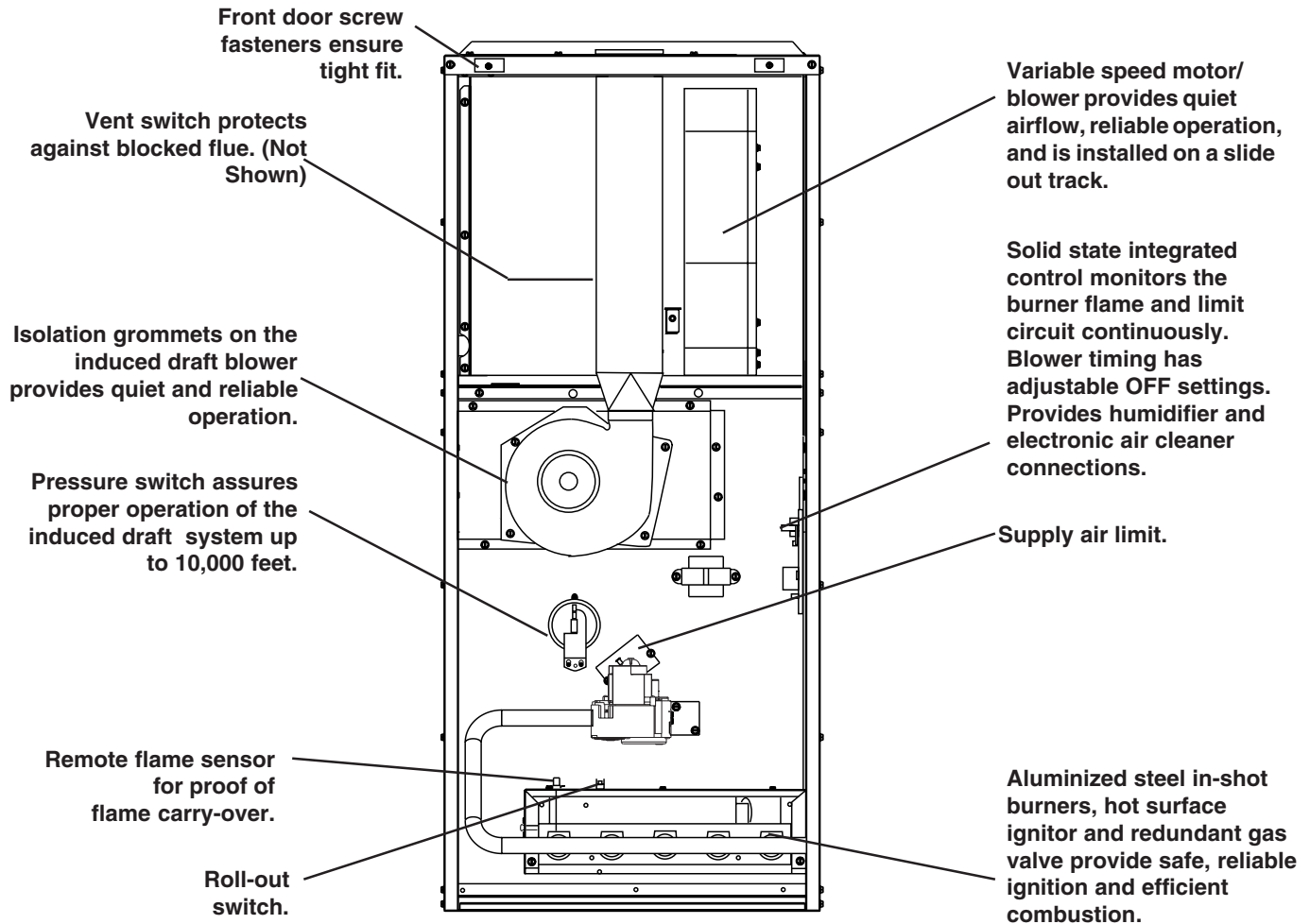


### Features and Benefits

- **Best warranty in the business** -
  - A full 20 years on the heat exchanger
  - 8 Year Limited Parts and 5 Year Quality Pledge
- **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.
- **SmartLite™ Control Board** — Provides extended life to ignitors in furnaces using hot surface ignition technology. Programmed to learn the heat-up characteristics of the ignitor, then adapt the ignition time to the characteristics of the furnace so the ignitor is energized appropriately.
- **Dependable** - 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 horizontally vented for maximum flexibility in installation.
- **Tubular primary heat exchanger** - Heavy gauge aluminized steel heat exchanger assures a long life.
- **Fully insulated blower cabinet** for quiet operation.
- **90 second fixed cooling cycle blower-off delay (TDR)** increases cooling performance when matched with a NORDYNE coil.
- **Variable speed blower** included 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.
- **LP convertible** - Simple burner orifice and regulator spring change for ease of convertibility.
- **Diagnostic lights flash to identify limit failure, pressure switch failure, low flame signal and improper ground and polarization** - for easy troubleshooting.
- **Incorporates new integrated control board** with connections for electronic air cleaner, humidifier and twinning.
- **New 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 Downflow 80+ Gas Furnace



# STANDARD EQUIPMENT

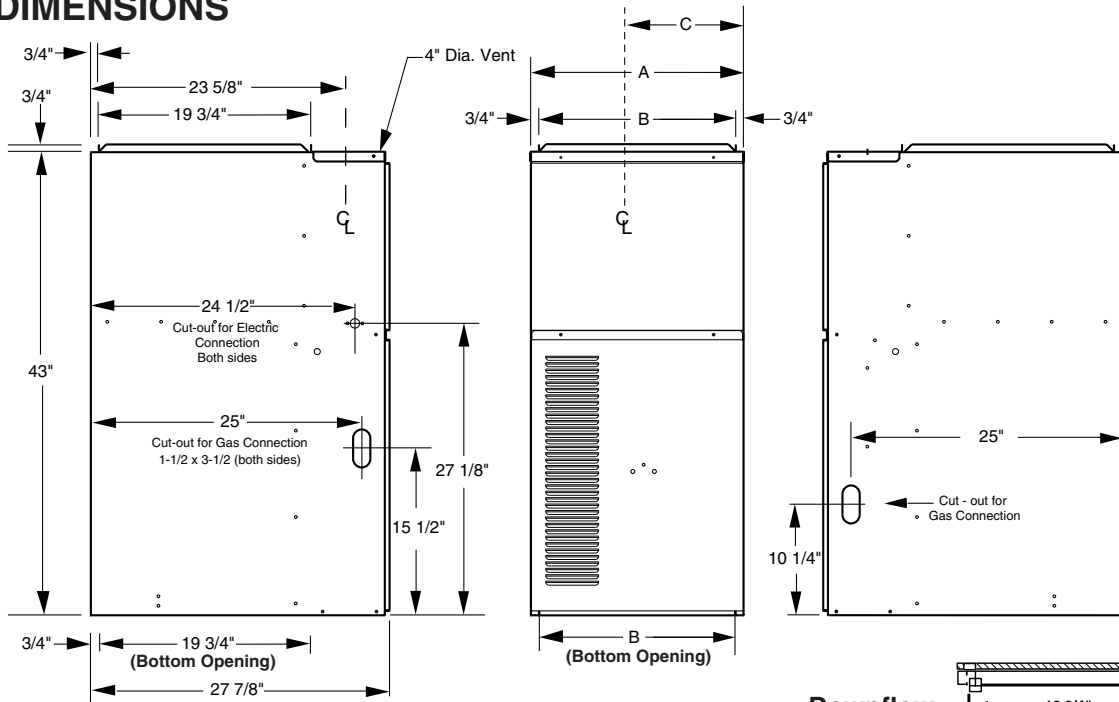
Draft inducer; pressure switch; redundant main gas control; hot-surface ignition; timed ON/OFF blower controls (TDR); 40 VA transformer for air conditioner application; limit controls; direct drive motor; all models can be converted to use L.P. (propane) gas. Factory approved kits *only* must be used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

# SPECIFICATIONS

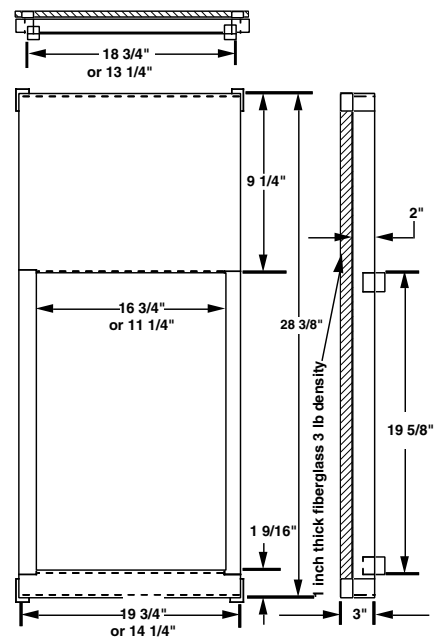
FG6RK MODEL NUMBERS	-072C-VB	-096C-VB	-120C-VB
Input-Btuh (a)	72,000	96,000	120,000
Heating Capacity - Btuh	58,000	77,000	96,000
<b>AFUE</b>	<b>80+</b>	<b>80+</b>	<b>80+</b>
Blower D x W	11 x 10	11 x 10	11 x 10
Motor H.P. -Speed -Type	Variable	Variable	Variable
Motor FLA	11.1	11.1	11.1
Maximum Ext. SP - In. W.C.	0.5	0.5	0.5
Temperature Rise Range - °F	35 - 65	45 - 75	40 - 70

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 feet. Over 2,000 feet, reduce 4% for each 1,000 ft. above sea level.

# DIMENSIONS

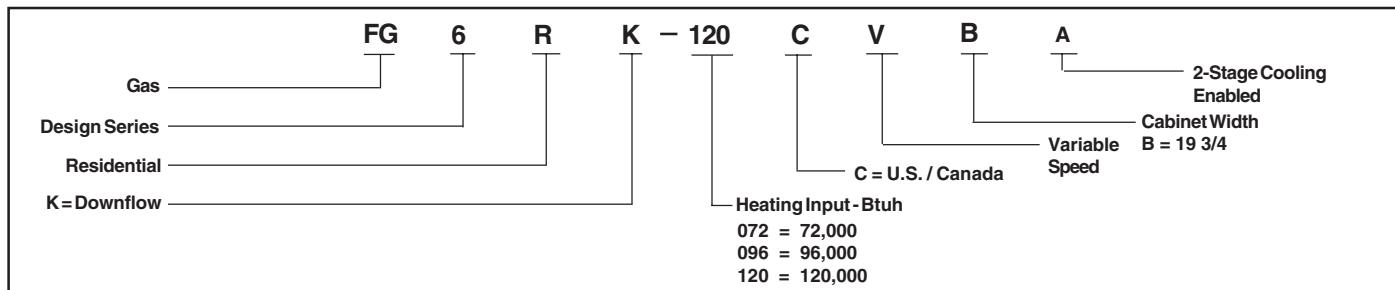


**Downflow Sub-Base**



Model Number	Dimensions			Shipping Weights (lbs)
	A inches	B inches	C inches	
FG6RK-072C-VB	19 3/4	18 1/4	11	155
096C-VB	19 3/4	18 1/4	11	160
120C-VB	19 3/4	18 1/4	11	182

# MODEL IDENTIFICATION CODE



## CAPACITIES – Furnace Airflow Data

CFM		SWITCH NUMBER							Nominal A/C and HP Capacity
LOW	HIGH	1	2	3	4	5	6	7	
500	720	0	0	0	1				
550	800	0	0	0	0				
610	880	0	0	1	0				
650	945	1	0	0	1				
720	1050	1	0	0	0				
800	1155	1	0	1	0				
900	1305	0	1	0	1				
1000	1450	0	1	0	0				
1060	1530	1	1	0	1				
1100	1595	0	1	1	0				
1170	1700	1	1	0	0				
1290	1870	1	1	1	0				

NOTE: 0 = OFF 1 = ON

		Nominal Air-Flow							
		720	900	1056	1200	1350	1500	1656	1800
Switches	7	1	0	1	0	1	0	1	0
	6	0	0	0	0	0	0	1	1
	5	0	0	1	1	0	0	1	1
80+% Temperature Rise °F (Recommended settings are <b>Bold</b> )	72,000		59	<b>51</b>	44				
	90,000			63	<b>55</b>	49	44		
	96,000			67	59	<b>53</b>	47		
	108,000				67	<b>59</b>	53	48	
	120,000					66	<b>59</b>	54	49
	126,000					69	62	<b>56</b>	51
	144,000						71	<b>64</b>	59

NOTE: 0 = OFF 1 = ON

## HORIZONTAL VENTING

These furnaces are approved to use with 3" single wall Z-AL29-4C stainless steel vent pipe in horizontal vent applications. 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**)

## ACCESSORIES

Kit	Order Number
U.S. LP Conversion Kit (0 to 10,000 ft.)	903616A
Canadian LP Gas Conversion Kit (0 to 4,500 ft.)	903617
Fossil Fuel Kit	914762
Side Return Filter Kit	541036
Bottom Return Filter (20/Box) B Cabinet	903089
Horizontal Vent Kit	903196
Internal Side Return Filter Wire	903152

## SPECIFICATIONS

Nominal Blower Size	11 x 10
Maximum Motor HP	3/4
Motor Type	Programable Variable Speed
RPM Range	300-1300
Cooling CFM Range*	720-1870
Heating Airflow Range*	720-1800
Approximate Shipping Weight	45 lbs

\* Airflow is held constant regardless of external static pressure within the HP and RPM limits of the motor.

### All Cooling/Heat Pump Airflow Settings

(Data is for operation with filters)

Notes:

1. Recommended temperature rises are highlighted in bold.
2. Airflow rates of 1800 CFM or more require two return air connections. Data is for operation with filter(s).
3. Temperature rises in the table are approximate. Actual temperature rises may vary.
4. Temperature rises that are shaded grey are for reference only. These conditions are not recommended.
5. For single stage cooling, the indoor blower will operate at the CFM listed in the high column.

Model Number FG6RK-	Min. Pipe Size	Reducer Needed	Flue Outlet (in.)	Max. # Elbows	Max. Ft. Vent Pipe
072( )-VB	3"	4" to 3"	4	4	35
096( )-VB	3"	4" to 3"	4	4	35
120( )-VB	3"	4" to 3"	4	4	35

## VENTING

All models are approved for vertical or 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 gravity (vertical) vent system. The installation must be in accordance with the venting instructions supplied with the furnace.

