

FG6TA Series

High Efficiency / Non Direct Vent 2-Stage Gas Furnace with Variable Speed Blower

80+ Upflow/Horizontal

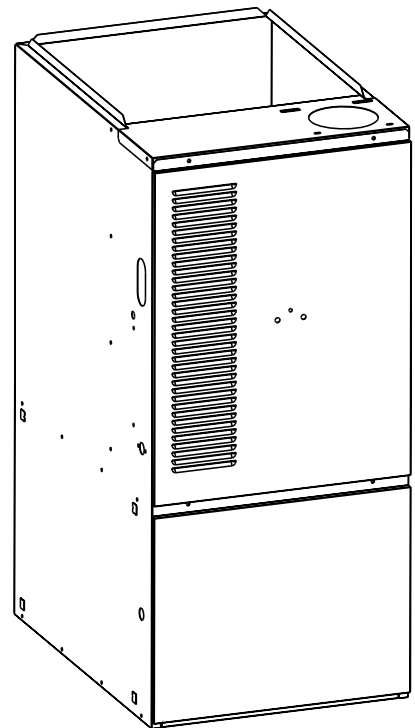
The high efficiency 2-Stage gas furnace may be installed free standing in a utility room or basement, or enclosed in an alcove or closet. The extended flush jacket provides a pleasing “appliance appearance.” Design certified by the Canadian Standards Association International (CSA). The product is truly 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 product is upgraded to a limited lifetime heat exchanger warranty.

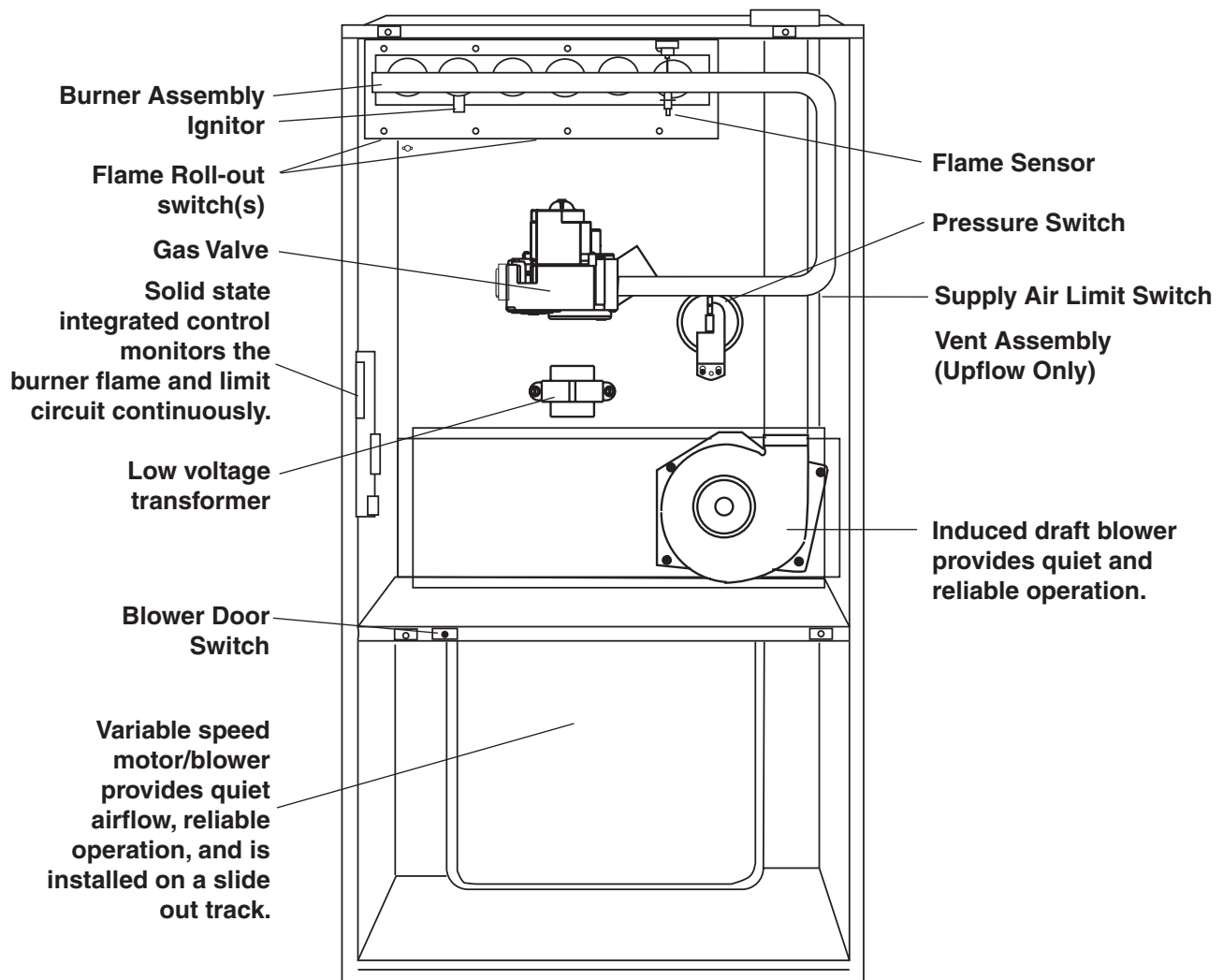
- **100% fired and tested** – All units and each component (both mechanical and electrical) are tested on the manufacturing line.
- **Best packaging in the industry** – Unique design assures product will arrive to the homeowner dent free.
- **Clean, quiet, and efficient operation** – Due to the unique design of in-shot burners, location of inducer, and use of insulation. Operation at low fire uses less fuel than single capacity furnaces.
- **Fixed 30 second blower delay** at burner start-up assures a warm duct temperature at furnace start-up.
- **Fixed 30-second inducer 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.



- **Reliable heat exchanger** – Aluminized heat exchanger assures long life.
- **Cooling cycle blower-off delay (TDR)** increases cooling performance when matched with a NORDYNE coil.
- **Approved for categories I and III venting systems** – May be common, dedicated, or horizontal vented for maximum flexibility in installation.
- **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.
- **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.
- **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.
- **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.

FEATURES

High Efficiency Upflow/Horizontal 80+ Two Stage Gas Furnace



STANDARD EQUIPMENT

Non-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.

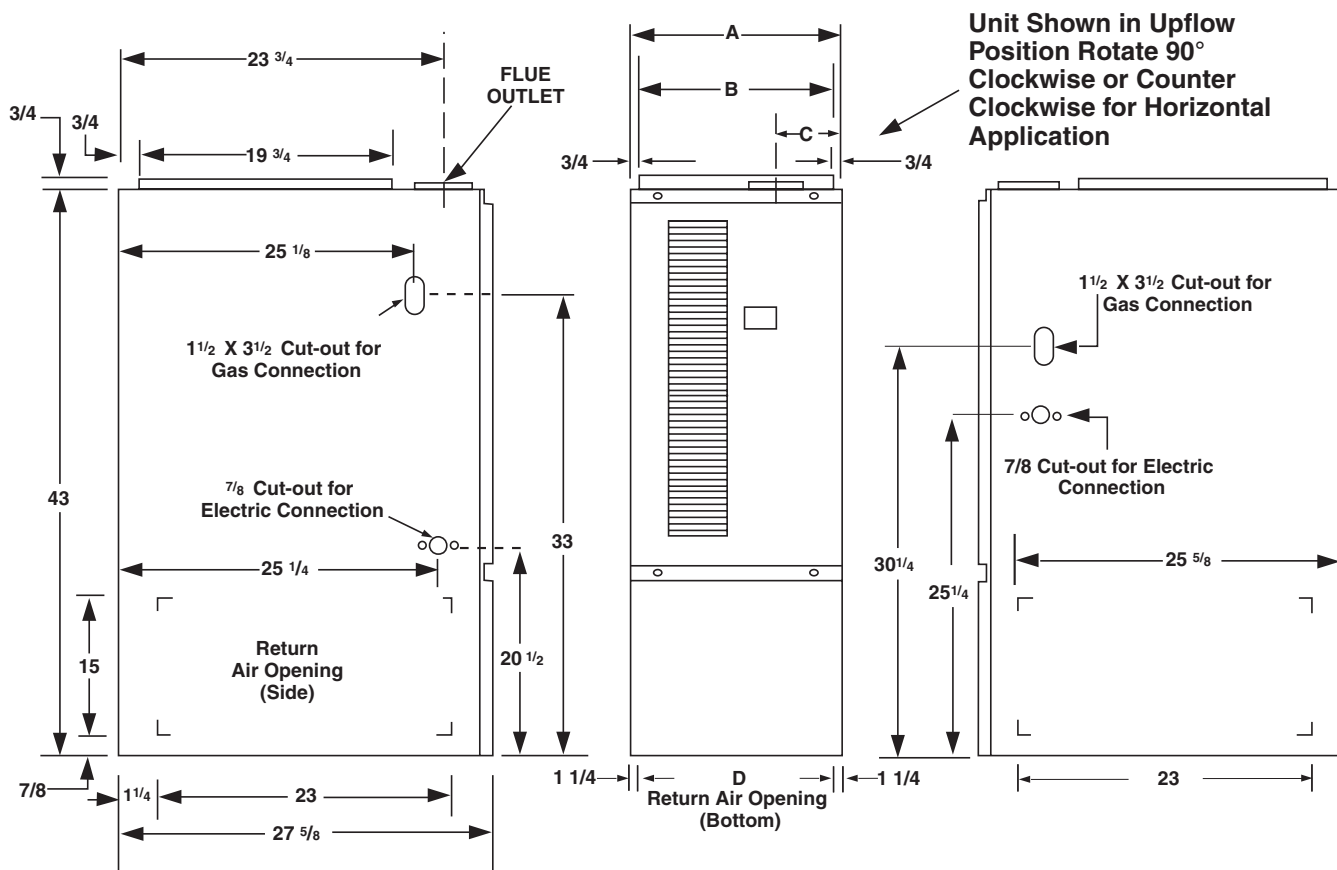
SPECIFICATIONS

MODEL NUMBER FG6TA-	072C-VB	096C-VB	120C-VC
High Fire Rated Input(Btu/h) (a)	72,000	96,000	120,000
High Fire Heating Capacity(Btu/h)	58,000	77,000	96,000
Low Fire Rated Input(Btu/h) (a)	50,000	67,000	84,000
Low Fire Heating Capacity(Btu/h)	40,000	54,000	67,000
AFUE	80+	80+	80+
Maximum Heating Ext. St. Press.(in WC)	1.0	1.0	1.0
Blower Wheel D x W	11 x 10	11 x 10	11 x 10
Motor H.P. -Type	3/4 - Variable	3/4 - Variable	3/4 - Variable
Motor FLA	9.6	9.6	9.6
High Fire Temperature Rise Range(F)	35 - 75	40 - 70	40 - 70
Low Fire Temperature Rise Range(F)	40 - 70	45 - 75	35 - 65

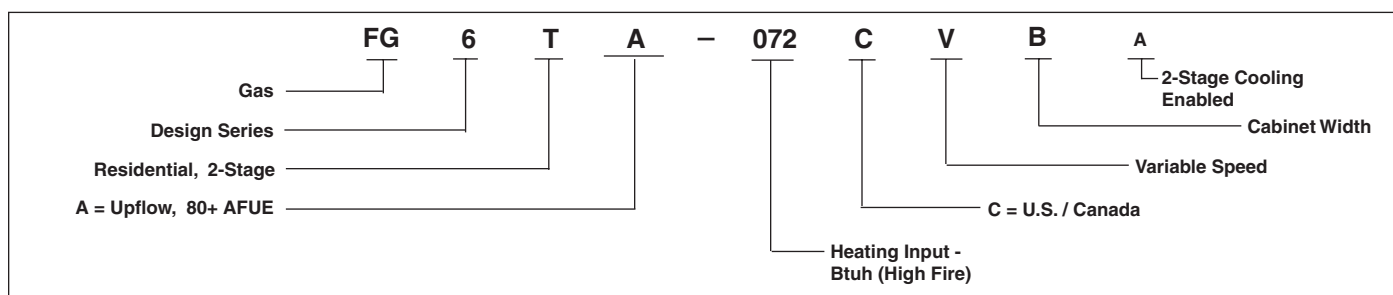
DIMENSIONS

Upflow/Horizontal Furnace

UPFLOW/HORIZONTAL FURNACE MODELS FURNACE DIMENSIONS AND SHIPPING WEIGHTS								
			Dimensions					
Model No	High Fire Input	Low Fire Input	A	B	C	D	Flue Outlet	Shipping Weight
	Btuh	Btuh	In.	In.	In.	In.	In.	Lbs
*TA 072C-VB	72,000	50,000	19 3/4	18 1/4	3 3/4	17 1/4	4	152
*TA 096C-VB	96,000	67,000	19 3/4	18 1/4	3 3/4	17 1/4	4	174
*TA 120C-VC	120,000	84,000	22 1/2	21	3 3/4	20	4	182



MODEL IDENTIFICATION CODE



VENTING

All models are approved for non direct (1 pipe) applications.

All models, with the exception of the reduced NOx models, are approved for vertical and horizontal venting applications. 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.

See Vent Table below for horizontal venting requirements.

Furnace Model Number *TA	Pipe Size	Reducer Needed	Maximum # Elbows	Max. Feet Vent Pipe
072()VB	3"	4" to 3"	4	35
096()VB	3"	4" to 3"	4	35
120()VC	3"	4" to 3"	4	35

Horizontal Venting Requirements

CAPACITIES — Furnace Airflow Data

CFM	SWITCH NUMBER	1	2	3	4	5	6	7	Nominal A/C and HP Capacity
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

These furnaces are approved to use with 3" single wall 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**)

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.



We Encourage Professionalism



Through Technician Certification by NATE

ACCESSORIES

Kit	Order Number
U.S. LP Conversion Kit (0 to 10,000 ft.)	904404
Canadian LP Gas Conversion Kit (0 to 4,500 ft.)	904405
Fossil Fuel Kit	914762
Side Return Filter Kit	541036
Bottom Return Filter (20/Box)	903089
B Cabinet C Cabinet	903090
Internal Side Return Filter Wire	903152

Nominal Airflow Rates (CFM) and Temperature Rises (Degree F)												
			*TA 072-VB Models			*TA 096-VB Models			*TA 120-VC Models			
Switches			Low Fire Input		High Fire Input	Low Fire Input		High Fire Input	Low Fire Input		High Fire Input	
5	6	7	50,000		72,000	67,000		96,000	84,000		120,000	
0	0	#	660	54	1090	50	660	73	1090	63	660	92
1	0	#	750	48	1240	44	750	64	1240	58	750	80
0	1	#	1220	30	1680	33	1220	40	1680	41	1220	50
1	1	#	1300	28	1880	29	1300	37	1880	36	1300	47

Switch not used - Can be 0 or 1.

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, reference the CFM listed in the high column.

Delay Settings

Delay Description	Switch Number								
	1	2	3	4	5	6	7	8	9
Delay A								0	0
Delay B								0	1
No Delay								1	0
De - Hum								1	1

Note: 0 = Off, 1 = On

- "Delay A" has a 2-step "on" profile operating the blower at 31% of the selected airflow for 30 seconds, then 75% of the selected airflow for 30 seconds. It will then operate at the selected airflow until the thermostat is satisfied, followed by an "off-cycle" profile running at 50% of the selected airflow for 60 seconds.
- "Delay B" has a single "on" profile operating the blower at 50% of the selected airflow for 30 seconds. It will then operate at the selected airflow until the thermostat is satisfied, followed by an "off-cycle" profile running at 50% of the selected airflow for 90 seconds.
- The "De-Hum" profile will operate the blower at 31% of the selected airflow for 30 seconds, followed by 75% of the selected airflow for 10 minutes. It will then operate at the selected airflow until the thermostat is satisfied.
- The "No Delay" option will ramp the blower up to the selected airflow. When the thermostat is satisfied, it will then ramp the blower off.