

## FG6T(C,L) Series

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

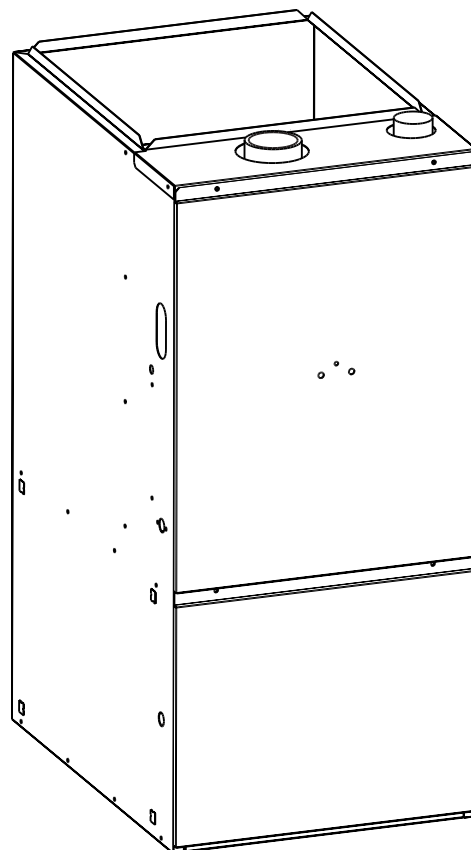
**92+ Upflow/Horizontal**  
**90+ Downflow**

The high efficiency 2-Stage gas furnace may be installed free standing in a utility room, basement, or enclosed in an alcove or closet. The upflow model converts easily to horizontal application. The extended flush jacket provides a pleasing “appliance appearance.” Design certified by CSA International (Canadian Standards Association). The product is truly designed with the contractor and the consumer in mind.

#### Features and Benefits

- **Best warranty in the business** –
  - A lifetime warranty 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, quiet, and efficient operation** – Due to the unique design of in-shot burners, location of inducer, use of insulation, and operating at low fire using 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 primary and stainless steel secondary heat exchanger assures long life.
- **40-second fixed cooling cycle blower-off delay (TDR)** increases cooling performance when matched with a NORDYNE coil.
- **Approved for direct vent and non direct vent furnace, category IV venting system** – May be vertically or

Upflow/  
Horizontal  
Gas  
Furnace  
Shown

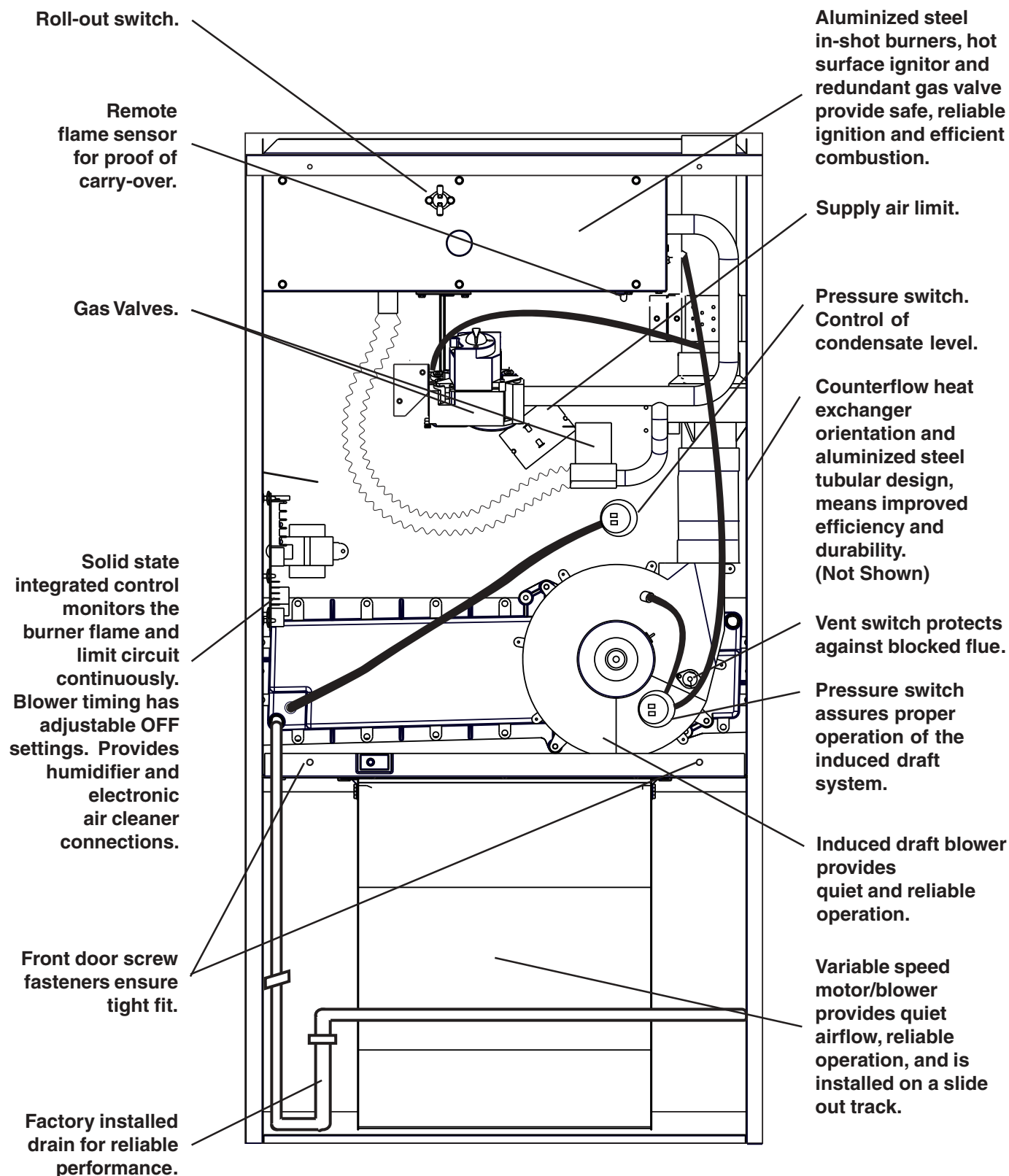


horizontally vented using either a one-pipe or two-pipe system for maximum flexibility in installation.

- **Variable speed blower** included to maximize air conditioner and heat pump efficiencies. On selected units, SEER ratings up to 16 and HSPF ratings up to 8.5 are ARI listed.
- **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.
- **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 92+ Gas Furnace



## FEATURES

### High Efficiency Downflow 90+ Gas Furnace

Solid state integrated control monitors the burner flame and limit circuit continuously. Blower timing has adjustable OFF settings. Provides humidifier and electronic air cleaner connections.

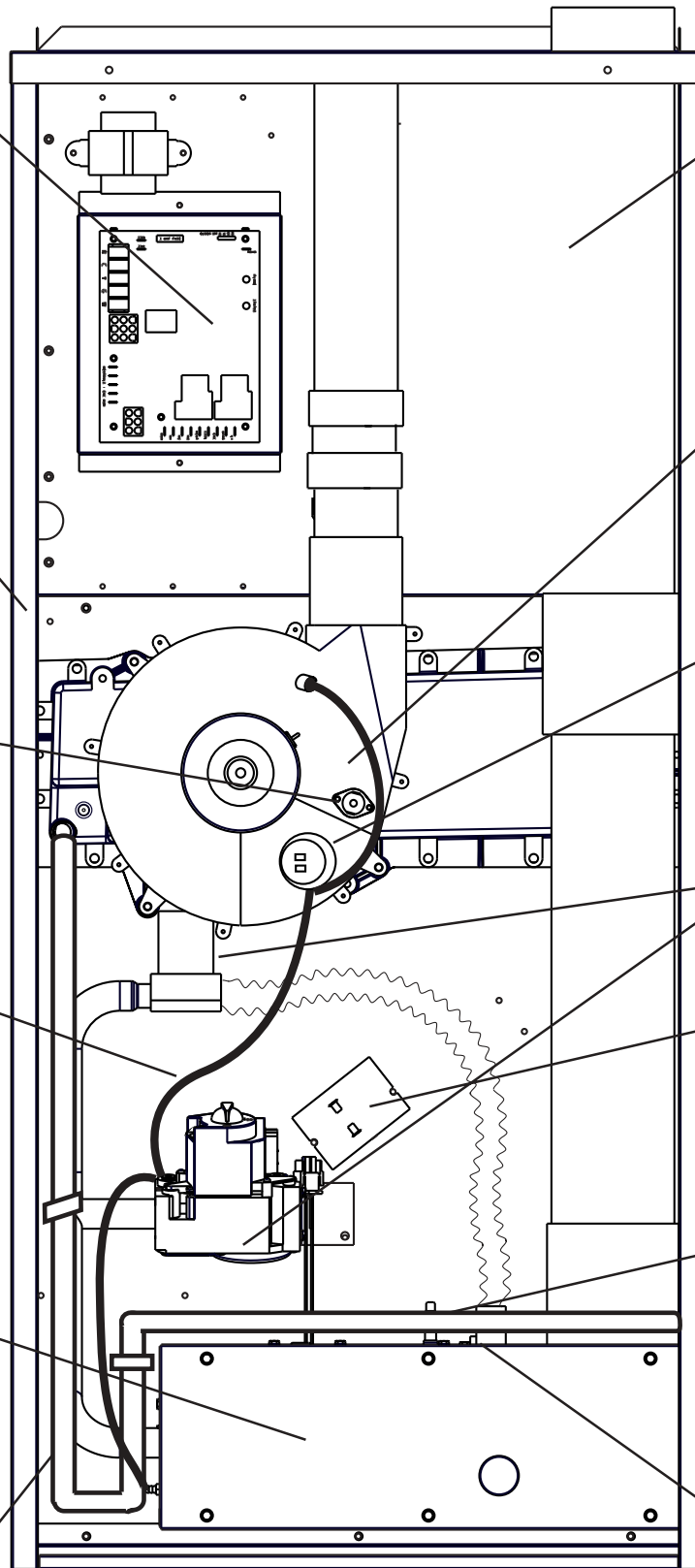
Electrical 2 x 4 junction box can be moved outside of cabinet for disconnect.

Vent switch protects against blocked flue.

Counterflow heat exchanger orientation and aluminized steel tubular design, means improved efficiency and durability. (Not Shown)

Aluminized steel in-shot burners, hot surface ignitor and redundant gas valve provide safe, reliable ignition and efficient combustion.

Factory installed drain for reliable performance.



Multi-speed PSC motor/blower provides quiet airflow, reliable operation, and is installed on a slide-out track. (Not Shown)

Induced draft blower provides quiet and reliable operation.

Pressure switch assures proper operation of the induced draft system.

Gas Valves.

Supply air limit.

Remote flame sensor for proof of flame carry-over. (Not Shown)

Roll-out switch.

## 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

MODEL NUMBER FG6TC-	060(C,N)-VB	080(C,N)-VB	092(C,N)-VB	110(C,N)-VC
High Fire Rated Input(Btu/h) (a)	60,000	80,000	92,000	110,000
High Fire Heating Capacity(Btu/h)	55,000	74,000	84,000	100,000
Low Fire Rated Input(Btu/h) (a)	40,000	48,000	55,000	74,000
Low Fire Heating Capacity(Btu/h)	37,000	44,000	50,000	68,000
<b>AFUE</b>	<b>92+</b>	<b>92+</b>	<b>92+</b>	<b>92+</b>
Maximum Heating Ext. St. Press.(in WC)	0.5	0.5	0.5	0.5
Blower Wheel D x W	11 x 10	11 x 10	11 x 10	11 x 10
Motor H.P. -Type	3/4 - Variable	3/4 - Variable	3/4 - Variable	3/4 - Variable
Motor FLA	9.6	9.6	9.6	9.6
High Fire Temperature Rise Range(F)	40 - 70	45 - 75	45 - 75	45 - 75
Low Fire Temperature Rise Range(F)	45 - 75	45 - 75	40 - 70	40 - 70

MODEL NUMBER FG6TL-	060(C,N)-VB	080(C,N)-VB	092(C,N)-VB	110(C,N)-VC
High Fire Rated Input(Btu/h) (a)	60,000	80,000	92,000	110,000
High Fire Heating Capacity(Btu/h)	55,000	74,000	84,000	99,000
Low Fire Rated Input(Btu/h) (a)	40,000	48,000	55,000	74,000
Low Fire Heating Capacity(Btu/h)	37,000	44,000	50,000	68,000
<b>AFUE</b>	<b>90+</b>	<b>90+</b>	<b>90+</b>	<b>90+</b>
Maximum Heating Ext. St. Press.(in WC)	0.5	0.5	0.5	0.5
Blower Wheel D x W	11 x 10	11 x 10	11 x 10	11 x 10
Motor H.P. -Type	3/4 - Variable	3/4 - Variable	3/4 - Variable	3/4 - Variable
Motor FLA	9.6	9.6	9.6	9.6
High Fire Temperature Rise Range(F)	40 - 70	45 - 75	45 - 75	45 - 75
Low Fire Temperature Rise Range(F)	45 - 75	45 - 75	40 - 70	40 - 70

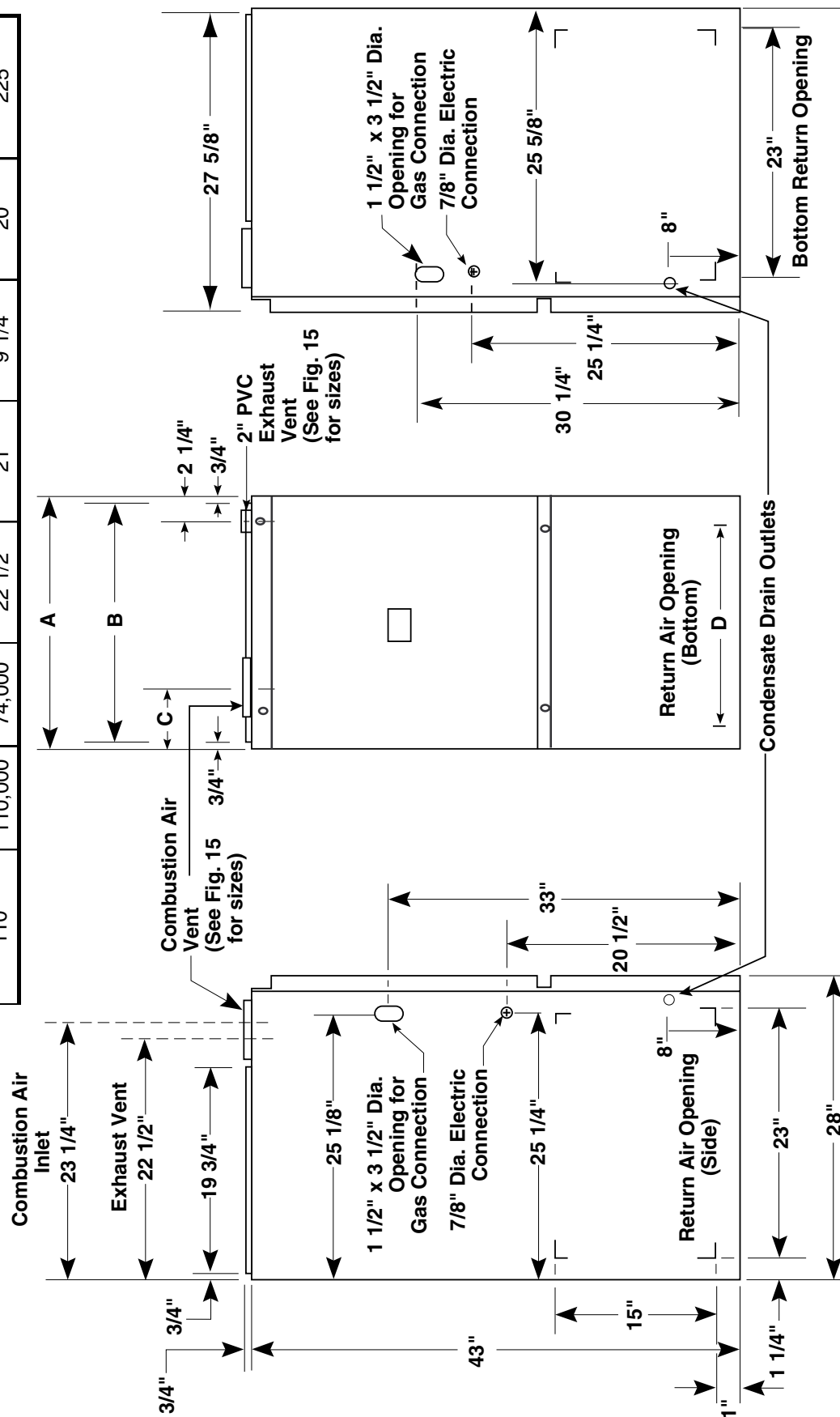
Note: All models are 115V, 60 Hz. Gas Connections are 1/2" N.P.T. AFUE = Annual Fuel Utilization Efficiency.

(a) Ratings to 2,000 feet. Over 2,000 feet, reduce 4% for each 1,000 ft. above sea level.

# DIMENSIONS

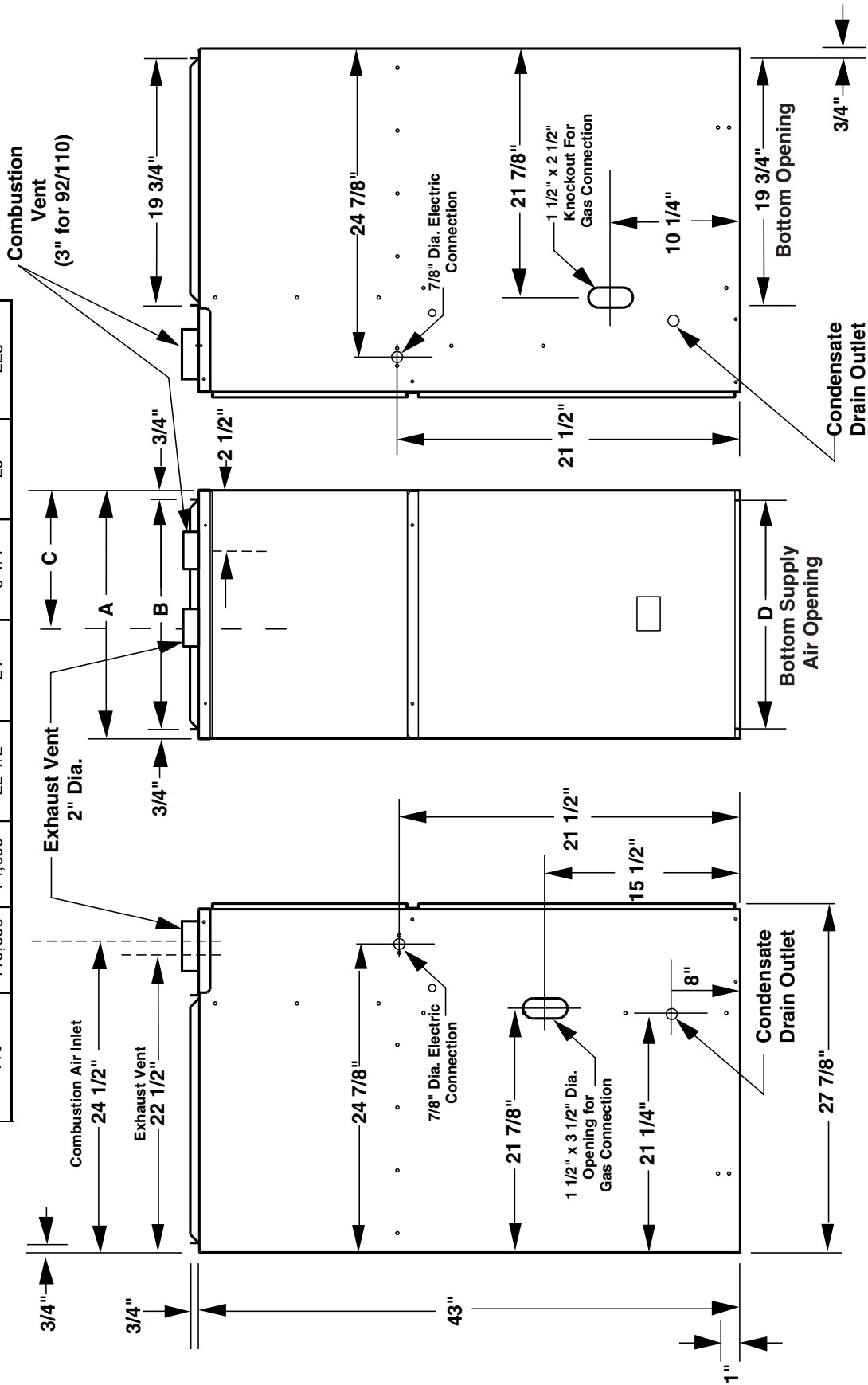
## Upflow/Horizontal Furnace

Model Number FG6TC-	High Fire Furnace Btuh	Low Fire Furnace Input	Dimensions (inches)				Shipping Weight (lbs)
			A	B	C	D	
060	60,000	40,000	19 3/4	18 1/4	7 7/8	17 1/4	162
080	80,000	48,000	19 3/4	18 1/4	7 7/8	17 1/4	200
092	92,000	55,000	19 3/4	18 1/4	7 7/8	17 1/4	200
110	110,000	74,000	22 1/2	21	9 1/4	20	225

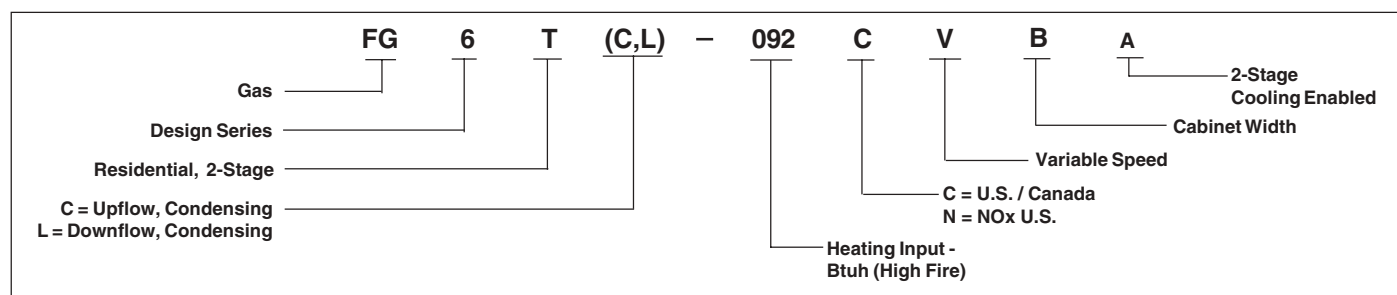


Downflow Furnace

Model FG6TL-	High Fire Furnace Btuh	Low Fire Furnace Input	Dimensions (inches)				Shipping Weight (lbs)
			A	B	C	D	
060	60,000	40,000	19 3/4	18 1/4	7 7/8	17 1/4	165
080	80,000	48,000	19 3/4	18 1/4	7 7/8	17 1/4	215
092	92,000	55,000	19 3/4	18 1/4	7 7/8	17 1/4	215
110	110,000	74,000	22 1/2	21	9 1/4	20	225



## MODEL IDENTIFICATION CODE



## 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 one elbow		DIRECT VENT, DUAL PIPE LENGTH (ft.) with one elbow			
	Outlet		Inlet/Outlet		Inlet/Outlet	
	2"	3"	2"	2"	3"	3"
Models *T(C,L) 060, 080, & 092	40	100	30	30	65	65
Models *T(C,L) 110	30	100	20	20	65	65

### \*\* NOTES

1. 3.5' for each additional 3" **long** radius elbow, and 7' for each additional 3" **short** radius elbow.
2. Two 45 degree elbows are equivalent to one 90 degree elbow.
3. Do not include termination elbows in calculation of vent length.
4. 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.
5. Only the above pipe materials are approved for use with these 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 Filter (20/Box)	B Cabinet 903089 C Cabinet 903090
Internal Side Return Filter Wire	903152
Horizontal Installation Kit	903568
Downflow "B" Combustion Floor Base	902677
High Altitude Pressure Switch Kit (5,000 ft. to 10,000 ft. above sea level)	903852
Downflow "C" Combustion Floor Base	904108

## VENT KITS

Kit Description	Order Number
Horizontal Exterior Vent Mounting Kit	902375
2" Concentric Vent Kit	904177
3" Concentric Vent Kit	904176
Neutralizer Kit (all models)	902377

## ELECTRICAL DATA

Furnace Input (Btuh)	Cabinet Width (in.)	Nominal Electrical Supply	Maximum Operating Voltage	Minimum Operating Voltage	Maximum Furnace Amperes	Minimum Wire Gauge	Maximum Fuse or Circuit Breaker Amps*	Thermostat Wire Gauge	Recommended Thermostat Wire Length	
									2-wire (heating)	4 or 5-wire (cooling)
60,000	19.75	115-60-1	127	103	12	14	15	24	55 ft.	25 ft.
80,000	19.75	115-60-1	127	103	12	14	15	22	90 ft.	45 ft.
92,000	19.75	115-60-1	127	103	12	14	15	20	140 ft.	70 ft.
110,000	22.50	115-60-1	127	103	12	14	15	18	225 ft.	110 ft.

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

## 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				

			Nominal Airflow (CFM) and Temperature Rises (degree F)															
			*T(C,L)-060(CN)-VB Models				*T(C,L)-080(C/N)-VB Models				*T(C,L)-092(CN)-VB Models				*T(C,L)-110(C,N)-VC Models			
Switches			Low Fire Input 40,000		High Fire Input 60,000		Low Fire Input 48,000		High Fire Input 80,000		Low Fire Input 55,000		High Fire Input 92,000		Low Fire Input 74,000		High Fire Input 110,000	
5	6	7																
0	0	#	660	51	1090	50	660	61	1090	63	660	69	1090	72	660	93	1090	85
1	0	#	750	47	1240	46	750	54	1240	55	750	61	1240	63	750	82	1240	76
0	1	#	1220	27	1680	33	1220	33	1680	41	1220	38	1680	47	1220	55	1680	56
1	1	#	1300	26	1880	30	1300	31	1880	36	1300	35	1880	42	1300	51	1880	50

# Switch not used - Can be 0 or 1.

### Notes:

1. Recommended blower speed settings 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.



028B-0305 (Replaces 028B-1204)