FG7T (C and L Series)

ĬSEER, **Smartlite®** ≝ecoLogic® **iQ**Drive®

Two Stage, Variable Speed, Condensing Upflow/Horizontal and Downflow Gas Furnaces Induced Draft - 95.1 AFUE Input 60,000 - 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. Upflow/horizontal units come ready for upflow or horizontal application. The extended flush jacket provides a pleasing "appliance appearance." Design certified by CSA for application in Canada and the United States.



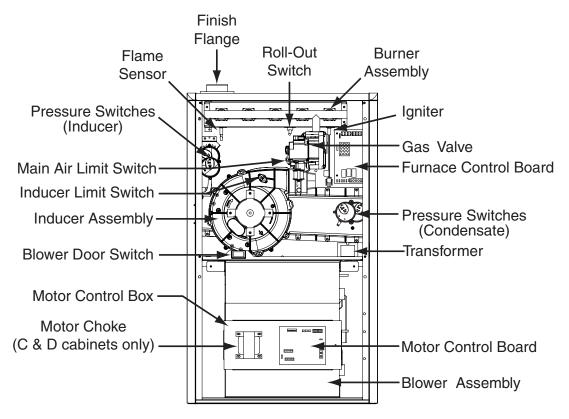
WARRANTY

- 10 Year all-parts warranty.
- 10 Year Quality Pledge to replace the unit if the heat exchanger fails within the first 10 years of operation, to the original owner.
- Consumer product registration required for 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.
- When registered, this product is upgraded to a limited lifetime heat exchanger warranty.

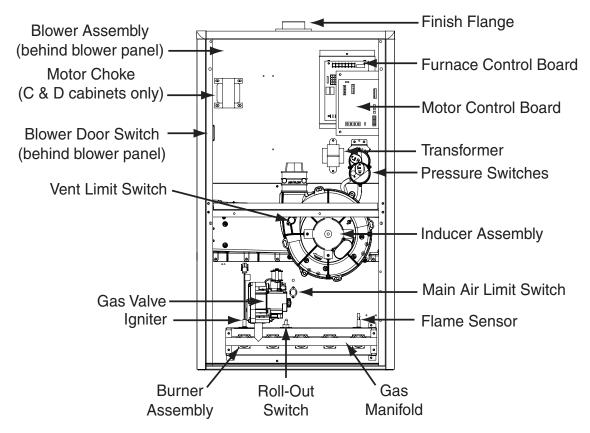
FEATURES and BENEFITS

- **iSEER:** Energy efficient brushless DC (ECM) motor gives up to 1 SEER point efficiency gain in cooling.
- 100% fired and tested: All units and each component are tested on the manufacturing line.
- Best packaging in the industry: Unique corner post design assures product will arrive to the homeowner dent free
- 30 second blower delay: At start-up assures a warm duct temperature at furnace start-up. Adjustable blower off settings (60, 90, 120 and 180 seconds).
- 30 second post purge: Increases life of heat exchanger.
- Two Stage Inducer: Optimizes efficiency on first stage heat and reduces sound levels.
- Hot surface igniter: Innovative application of a silicon nitride type igniter. Utilizes proven Smartlite® technology.
- Color coded wire harness: Designed to fit the components, all with quick-connect fittings for ease of service and replacement.
- Flexible category IV venting system: May be vertically or horizontally vented using either a one-pipe or two-pipe system for maximum flexibility in installation.
- High Static Blowers: All models equipped with high static blowers.
- Low Boy Height: Easy to apply in low ceiling applications, works well with taller high SEER coils, easier to handle and install.
- Tubular primary heat exchanger: Heavy gauge aluminized steel heat exchanger and 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.
- **LP convertible:** Simple burner orifice and regulator spring change for ease of convertibility.
- Diagnostic lights for easy troubleshooting without counting flashes: Dedicated light for flame signal strength and 2 lights in combination to indicate all other fault codes with easy to recognize states without counting flashes.
- Incorporates integrated control board: With connections for electronic air cleaner and humidifier.
- Two piece door design: Enhances furnace appearance and uses captured screws to prevent losing door screws.
- **Blower Compartment:** Sealed door to reduce air leakage and insulated for ultra quiet operation.
- Sealed Vestibule: Reduces burner and inducer sound levels.

LOCATION OF FURNACE COMPONENTS



Upflow/Horizontal Gas Furnace Components

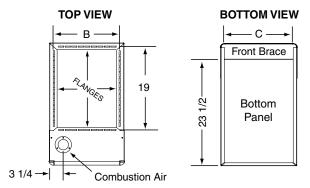


Downflow Gas Furnace Components

DIMENSIONS

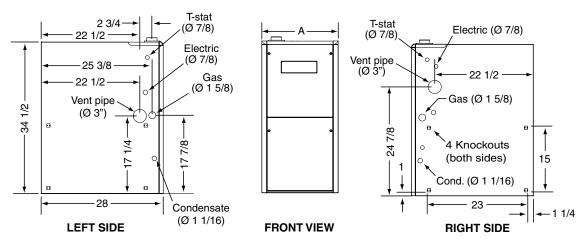
*TC Model #'s		Dimension "B"	Dimension "C"	
060D-VB	17 ½	15 %	16 ½	
080D-VC	21	19 3%	19 %	
100D-VC	21	19 %	19 %	
120D-VD	24 ½	22 %	23 1/8	

NOTE: Dimensions shown in inches



BOTTOM VIEW - C -

> Front Brace



FG7TC 95.1+ High Efficiency Upflow/Horizontal Series

TOP VIEW

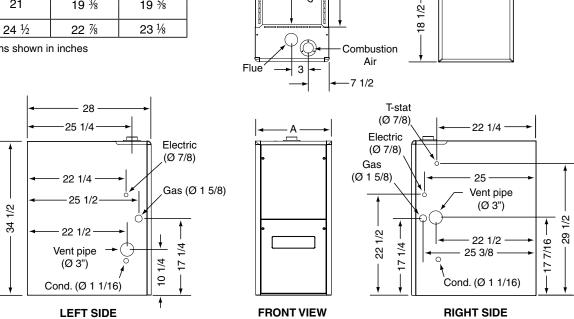
В

FLANGES

19

*TL Model #'s	Dimension "A"	Dimension "B"	Dimension "C"
060D-VB	17 ½	15 %	16 ½
080D-VC	21	19 3%	19 %
100D-VC	21	19 %	19 %
120D-VD	24 ½	22 %	23 1/8

NOTE: Dimensions shown in inches



FG7TL 95.1+ High Efficiency Downflow Series

BLOWER PERFORMANCE - FG7TC/TL

Nominal Heating Airflows (CFM) and Temperature Rise (°F)

ВС	abi	net	:		060D-VB odels		
Se	vito ttin EA	gs		Input (BTU) 60000			
A/B	2	3	4	CFM	Temp Rise (°F)		
1	0	0	0	1000	53		
1	0	0	1	1100	48		
1	0	1	0	1200	44		
1	0	1	1	1300	41		
1	1	0	0	1400	38		
1	1	0	1	1500 35			
1	1	1	0	1600 33			
1	1	1	1	1700	31		

1	1	1	1	1700	31						
DC	abi	net	t	*TC/TL-120D-VD Models							
Se	vito ttin EA	gs		Input (BTU) 120000							
A/B	2	3	4	CFM	Temp Rise (°F)						
#	0	0	0	1500	70						
#	0	0	1	1615	65						
#	0	1	0	1730	61						
#	0	1	1	1845	57						
#	1	0	0	1960	54						
#	1	0	1	2075	51						

2190

2305

48

46

c c	abi	net	t		-080D-VC odels	*TC/TL-100D-VC Models		
Se	wito ttin IEA	gs		-	ıt (BTU) 0000	Input (BTU) 100000		
					Temp		Temp	
A/B	2	3	4	CFM	Rise (°F)	CFM	Rise (°F)	
#	0	0	0	1000	70	1000	88	
#	0	0	1	1115	63	1115	79	
#	0	1	0	1230	57	1230	72	
#	0	1	1	1345	52	1345	65	
#	1	0	0	1460	48	1460	60	
#	1	0	1	1575	45	1575	56	
#	1	1	0	1690	42	1690	52	
#	1	1	1	1805	39	1805	49	

Switch not used - can be 0 or 1

Notes:

- 1. Two openings are recommended for airflows above 1600 CFM if the filter(s) is (are) adjacent to the furnace.
- 2. Temperature rises in the table are approximate. Actual temperature rises may vary.
- Temperature rises that are shaded in grey are for reference only. These conditions are not recommended.

COOLING AIRFLOW

		Α	C									
Switch	า S	ett	tin	gs			ı	Non	nina	ı A/	C ar	nd
HEAT		C	<u> </u>	L	С	FM		HP Capacity				
A/B	5	6	7	8	LOW	HIGH						
0	0	0	0	0	360	525					z	
0	0	0	0	1	400	580					1.5 TON	
0	0	0	1	0	440	635					.5	
0	0	0	1	1	475	690				l_	1	
0	0	1	0	0	515	745				NO NO		
0	0	1	0	1	550	800				2		
0	0	1	1	0	590	855				ļ ``		
0	0	1	1	1	630	910						
0	1	0	0	0	665	965			S			
0	1	0	0	1	705	1020			2.5 TON			
0	1	0	1	0	740	1075			2.5			
0	1	0	1	1	780	1130		_				
0	1	1	0	0	820	1185		O				
0	1	1	0	1	855	1240		3 TON				
0	1	1	1	0	895	1295						
0	1	1	1	1	930	1350						

		В	Ca	abir								
Switch	h S	et	tin	gs					nina	al A/	C a	nd
HEAT		C	00	L	С	FM		HP Capacity				
A/B	5	6	7	8	LOW	CFM						
1	0	0	0	0	485	700					1	
1	0	0	0	1	525	760					2 TON	
1	0	0	1	0	565	820					2 T	
1	0	0	1	1	605	880				z		
1	0	1	0	0	650	940				2		
1	0	1	0	1	690	1000				2.5 TON		
1	0	1	1	0	730	1060				2		
1	0	1	1	1	775	1120			l_			
1	1	0	0	0	815	1180			3 TON			
1	1	0	0	1	855	1240			3 ⊤			
1	1	0	1	0	895	1300						
1	1	0	1	1	940	1360		NC				
1	1	1	0	0	980	1420		3.5 TON				
1	1	1	0	1	1020	1480		3.5				
1	1	1	1	0	1065	1540						
1	1	1	1	1	1105	1600						

	С	C									
Switch	itch Settings			gs			Non	nina	ı A/	C ar	nd
HEAT		C	00	L	С	FM	Н	РС	apa	city	
A/B	5	6	7	8	LOW	CFM					
#	0	0	0	0	705	1025					JN
#	0	0	0	1	750	1090					.5 TON
#	0	0	1	0	795	1155				0	2.5
#	0	0	1	1	840	1220				3 TON	
#	0	1	0	0	885	1285			z		
#	0	1	0	1	930	1350			[2		
#	0	1	1	0	975	1415			3.5 TON		
#	0	1	1	1	1020	1480			က		
#	1	0	0	0	1065	1545		z		-	
#	1	0	0	1	1110	1610		4 TON			
#	1	0	1	0	1155	1675		4			
#	1	0	1	1	1200	1740	_				
#	1	1	0	0	1245	1805	TON				
#	1	1	0	1	1290	1870	2 T				
#	1	1	1	0	1335	1935					
#	1	1	1	1	1380	2000					

D Cabinet											
Switcl	h S	et	tin	gs			N	lon	nina	I A/	C and
HEAT		CC	00	L	С	FM	HP Capacity				
A/B	5	6	7	8	LOW	CFM					
#	0	0	0	0	965	1400				z	
#	0	0	0	1	995	1440				TON	
#	0	0	1	0	1020	1480				2	
#	0	0	1	1	1050	1520				3.	
#	0	1	0	0	1075	1560					
#	0	1	0	1	1105	1600			O		
#	0	1	1	0	1130	1640			4 TON		
#	0	1	1	1	1160	1680			,		
#	1	0	0	0	1185	1720					
#	1	0	0	1	1215	1760					
#	1	0	1	0	1240	1800	Ш.	_			
#	1	0	1	1	1270	1840		6			
#	1	1	0	0	1295	1880		5 TON			
#	1	1	0	1	1325	1920					
#	1	1	1	0	1350	1960					
#	1	1	1	1	1380	2000					

[#] Switch not used - can be 0 or 1

VENTING

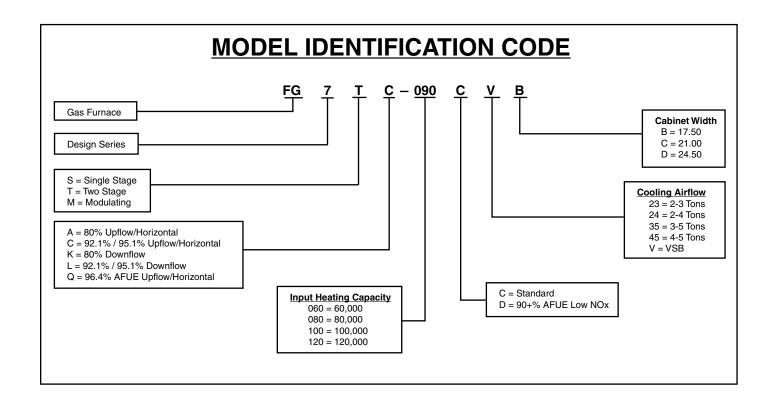
All models are approved for vertical non direct (1 pipe) and direct (2 pipe) venting applications. See Vent Table below for specified sizes and allowable lengths.

VENT TABLE

FURNACE FURNACE		SINGLE PIPE with 1 long ra	LENGTH (FT.) adius elbow**	DIRECT VENT, DUAL PIPE LENGTH (ft.) WITH 1 long radius elbow on each pipe**			
(BTU)	INSTALLATION	OUTLET	OUTLET	INLET/OUTLET	INLET/OUTLET		
		2" Diameter	3" Diameter	2" Diameter	3" Diameter		
	Upflow	90	90	90	90		
60,000	Horizontal	50	90	50	90		
	Downflow	30	90	30	90		
	Upflow	40	90	40	90		
80,000	Horizontal	30	90	30	90		
	Downflow	30	90	30	90		
	Upflow	30	90	30	90		
100,000	Horizontal	30	90	30	90		
	Downflow	30	90	25	90		
	Upflow	N/A	90	N/A	90		
120,000	Horizontal	N/A	90	N/A	90		
	Downflow	N/A	90	N/A	90		

*NOTES:

- 1. Subtract 2.5 ft. for each additional 2 inch long radius elbow, 5 ft. for each additional 2 inch short radius elbow, 3.5 ft. for each additional 3 inch long radius elbow, and 7 ft. for each additional 3 inch short radius elbow. Subtract 5ft for each 2" tee and 8ft for each 3" tee.
- 2. Two 45 degree elbows are equivalent to one 90 degree elbow.
- 3. This table applies for elevations from sea level to 2,000 ft. For higher elevations, decrease pipe lengths by 8% per 1,000 ft of altitude.



SPECIFICATIONS

FG7TC/TL MODELS NUMBERS:	-060D-VB	-080D-VC	-100D-VC	-120D-VD
Input - Btuh (a)	60,000 / 39,000	80,000 / 52,000	100,000 / 65,000	120,000 / 78,000
Heating Capacity - Btuh	57,000 / 37,050	76,000 / 49,400	95,000 / 61,750	114,000 / 74,100
AFUE	95.1	95.1	95.1	95.1*
Blower D x W	11 x 8	11 x 10	11 x 10	11 x 10
Motor H.P Speed - Type	1/2 - Variable	3/4 - Variable	3/4 - Variable	1 - Variable
Motor FLA	6.2	8.7	8.7	11.70
Rated Ext. SP - In. W.C.	0.5	0.5	0.5	0.5
Temperature Rise Range - ºF	30-60	35-65	35-65	40-70
Shipping Weights	125lbs	135lbs	145lbs	160lbs

^{*}TL 120 is 94.8% AFUE

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.

ACCESSORIES

FG71	TC/TL KITS				
Description	SKU				
2" Concentric vent kit	904952				
3" Concentric vent kit	904953				
"A" Cabinet downflow sub base kit	902974				
"B", "C", "D" Cabinet downflow sub base kit	904911				
2" Side wall vent kit	904617				
3" Side wall vent kit	904347				
U.S. LP Conversion kit (0 to 10,000 ft.)	904914				
Canada LP Conversion kit (0 to 4,500 ft.)	904915				
Bottom return filter 20 per box, "A" cabinet	903088				
Bottom return filter 20 per box, "B" cabinet	904916				
Bottom return filter 20 per box, "C" cabinet	904917				
Bottom return filter 20 per box, "D" cabinet	904918				
Side return filter kit	541036				
Neutralizer kit	902377				

















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 first ten years of installation, in accordance with the terms of the warranty.

For complete details of the Limited Warranty, including applicable terms and conditions, see your local installer or contact the NORDYNE warranty department for a copy.

NORDYNE

COMPLETE COMFORT. GENUINE VALUE. 8000 Phoenix Parkway | O'Fallon, MO 63368-3827

Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A (02/2012)