## TECHNICAL SPECIFICATIONS

Frigidaire

# FG7T (C and L Series)

# ISEER<sup>®</sup> Smartlite<sup>®</sup>

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.



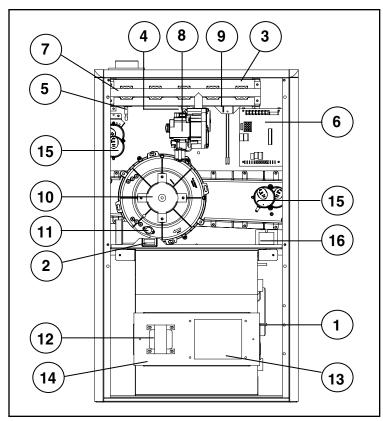
### WARRANTY

- 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.

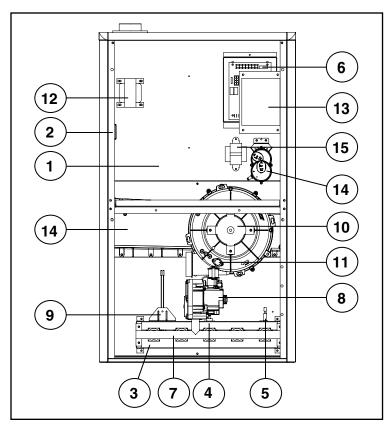
## FEATURES and BENEFITS

- **i SEER** 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, humidifier and twinning.
- **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.

# **GAS FURNACE COMPONENTS**



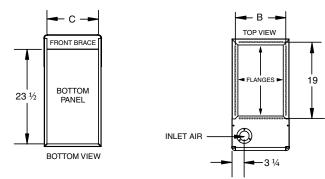
#### **Upflow/Horizontal Gas Furnace**



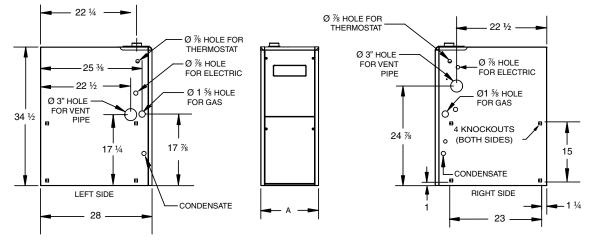
#### **Downflow Gas Furnace**

- 1. Blower Assembly
- 2. Blower Door Switch
- 3. Burner Assembly
- 4. Flame Roll-Out Switch
- 5. Flame Sensor
- 6. Furnace Control Board
- 7. Gas Manifold
- 8. Gas Valve
- 9. Igniter
- 10. Inducer Assembly
- 11. Inducer Limit Switch
- 12. Motor Choke (3/4 and 1HP only)
- 13. Motor Control Board
- 14. Motor Control Box
- 15. Pressure Switch(s)
- 16. Transformer
- 1. Blower Assembly
- 2. Blower Door Switch
- 3. Burner Assembly
- 4. Flame Roll-Out Switch
- 5. Flame Sensor
- 6. Furnace Control Board
- 7. Gas Manifold
- 8. Gas Valve
- 9. Igniter
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- 14. Pressure Switch(s)
- 15. Transformer

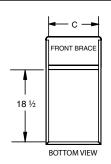
# DIMENSIONS

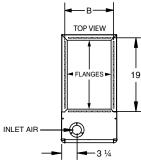


*TC Model #'s	Dimension "A"	Dimension "B"	Dimension "C"	
060D-VB	17 ½	15 7%	16 ½	
080D-VC	21	19 <sup>3</sup> ⁄8	19 5%	
100D-VC	21	19 %	19 78	
120D-VD	24 ½	22 7/8	23 <sup>1</sup> ⁄8	

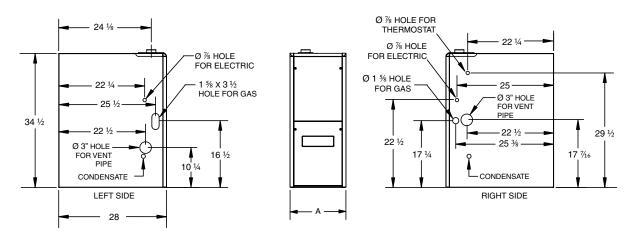


FG7TC 95.1+ High Efficiency Upflow/Horizontal Series

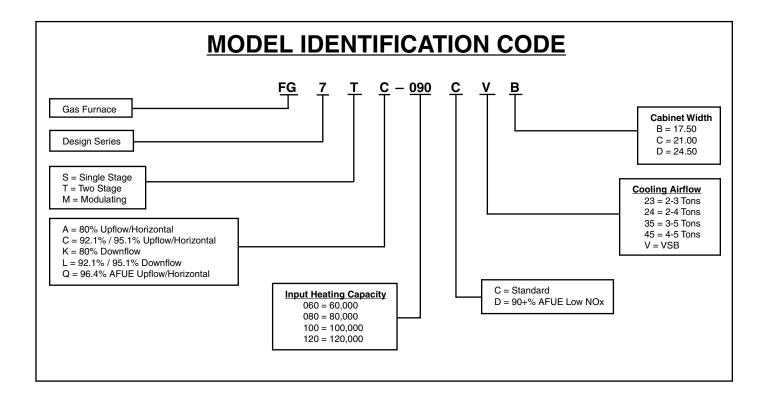




*TL Model #'s	Dimension "A"	Dimension "B"	Dimension "C"	
060D-VB	17 ½	15 %	16 ½	
080D-VC	21	10.3/	10.5/	
100D-VC	21	19 ¾	19 ½	
120D-VD	24 ½	22 7/8	<b>23</b> ½	



FG7TL 95.1+ High Efficiency Downflow Series



## **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.

## **BLOWER PERFORMANCE - FG7TC/TL**

cc	C Cabinet				-080D-VC odels	*TC/TL-100D-VC Models			
Se	wito ttin IEA	gs			ıt (BTU) 0000		t (BTU) 0000		
					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		

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.
- 3. Temperature rises that are shaded in grey are for reference only. These conditions are not recommended.

DC	abi	net	t		120D-VD odels
Se	vito ttin EA	gs		-	ut (BTU) 20000
					Temp
A/B	2	3	4	CFM	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
#	1	1	0	2190	48
#	1	1	1	2305	46

## **COOLING AIRFLOW**

				A Cabinet									
C and	I A/C	nina	Nom				gs	in	Switch				
city	apac	P C	н	FM	CF	C	L	00	CC		HEAT		
				HIGH	/	LOW	8	7	6	5	A/B		
z				525		360	0	0	0	0	0		
2				580		400	1	0	0	0	0		
.5 TON				635		440	0	1	0	0	0		
-				690		475	1	1	0	0	0		
	2 TON			745		515	0	0	1	0	0		
	2			800		550	1	0	1	0	0		
				855		590	0	1	1	0	0		
				910		630	1	1	1	0	0		
		NC		965		665	0	0	0	1	0		
		2.5 TON		1020		705	1	0	0	1	0		
		2.5		1075	Ī	740	0	1	0	1	0		
				1130	Ī	780	1	1	0	1	0		
			TON	1185		820	0	0	1	1	0		
			Э́Т	1240		855	1	0	1	1	0		
				1295	Ī	895	0	1	1	1	0		
				1350		930	1	1	1	1	0		

	C Cabinet											
Switch	ו S	et	ting	gs			1	Non	nina	al A/	'C ar	nd
HEAT		С	00	L	С	FM		HP Capacity				
A/B	5	6	7	8	LOW	CFM						
#	0	0	0	0	705	1025						NC
#	0	0	0	1	750	1090						2.5 TON
#	0	0	1	0	795	1155					3 TON	2.5
#	0	0	1	1	840	1220					⊢ 	
#	0	1	0	0	885	1285				z		
#	0	1	0	1	930	1350				1 <u></u>		
#	0	1	1	0	975	1415				3.5 TON		
#	0	1	1	1	1020	1480				e		
#	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		NO				
#	1	1	0	1	1290	1870		5 TON				
#	1	1	1	0	1335	1935						
#	1	1	1	1	1380	2000						

**HP** Capacity HEAT COOL CFM A/B 5678LOW CFM 2 TON 0 0 0 1 0 0 1 0 0 1 .5 TON 0 1 0 0 1 0 ง่ 0 1 1 0 1 1 TON 0 0 0 0 0 1 ო 1 0 1 0 .5 TON 1 0 1 1 1 1 0 0 1 1 0 1 с, 1 1 1 0 

Nominal A/C and

**B** Cabinet

Switch Settings

	D Cabinet											
Switch	h S	Set	tin	gs				Non	nina	I A/	C and	
HEAT		СС	00	L	CFM			HP Capacity				
A/B	5	6	7	8	LOW	CFM						
#	0	0	0	0	965	1400				Ν		
#	0	0	0	1	995	1440				3.5 TON		
#	0	0	1	0	1020	1480				ما		
#	0	0	1	1	1050	1520				ε		
#	0	1	0	0	1075	1560			_		-	
#	0	1	0	1	1105	1600			20			
#	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						
#	1	0	1	1	1270	1840		5 TON				
#	1	1	0	0	1295	1880		5 T				
#	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 MODELS	FURNACE		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	90	90	90	90		
80,000	Horizontal	30	90	30	90		
	Downflow	30	90	30	90		
	Upflow	60	90	60	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.

# ACCESSORIES

FG7TC/TL KITS									
Description	SKU								
2" Concentric vent kit	904177								
3" Concentric vent kit	904176								
"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.

www.frigidaire.net

#### NORDYNE 8000 Phoenix Parkway | O'Fallon MO 63368-3827

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