

TECHNICAL SPECIFICATIONS

FG7T (A and K Series)

iSEER, Smartlite®

**Two Stage, Variable Speed,
High Efficiency Upflow/Horizontal
and Downflow Gas Furnaces**

**Induced Draft - 80 + AFUE
Input 60,000 - 140,000 Btuh**

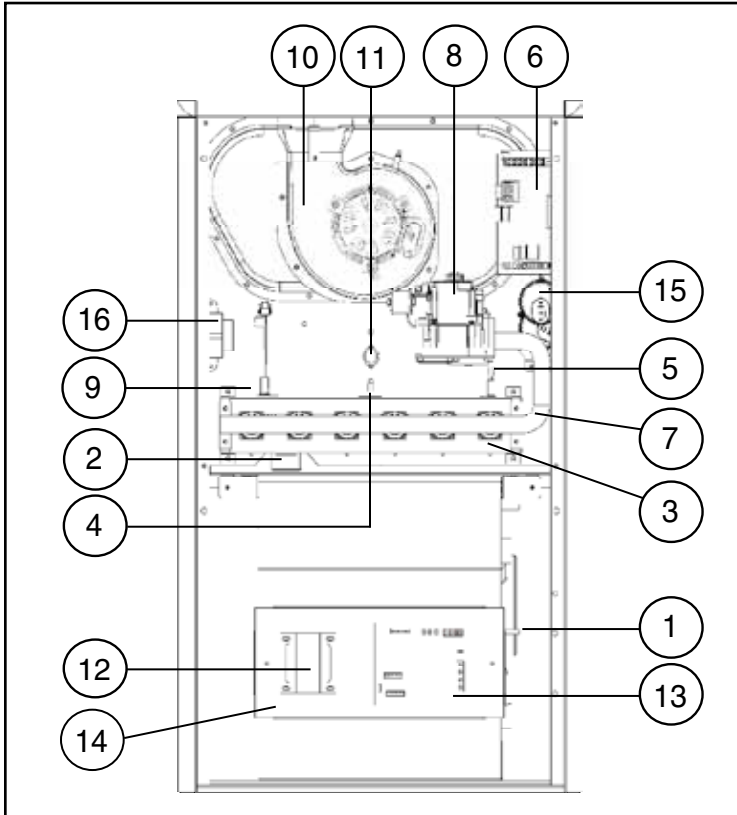
The high efficiency gas furnace may be installed free standing in a utility room, basement, or enclosed in an alcove or closet. The rounded corner jacket provides a pleasing "appliance appearance." Design certified by CSA for application in Canada and the United States.



FEATURES and BENEFITS

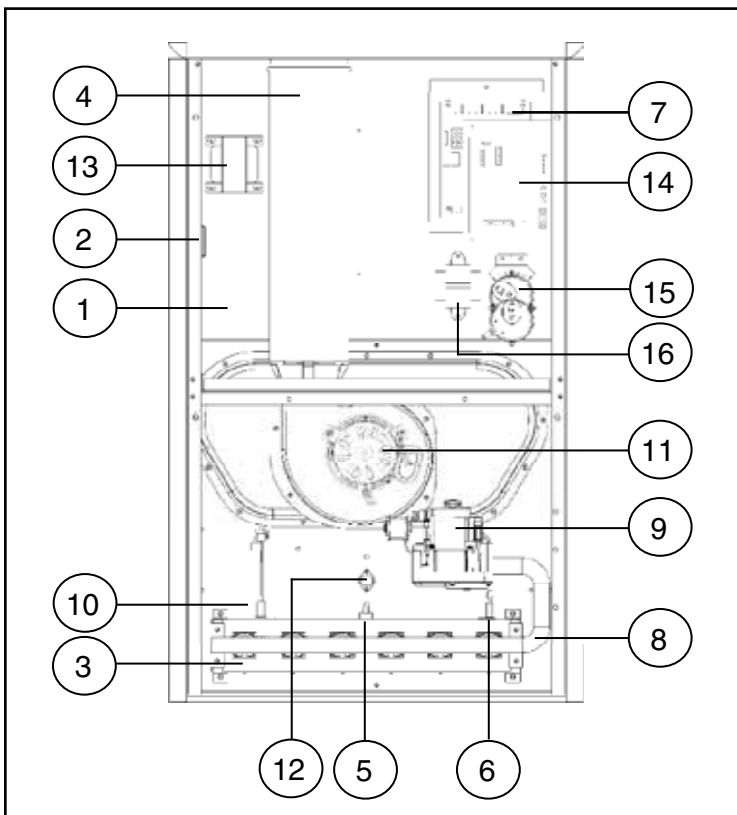
- **iSEER:** Energy efficient brushless DC (ECM) motor gives up to 1 SEER point efficiency gain in cooling.
- **100% fired and tested:** All units and each component are tested on the manufacturing line.
- **Best packaging in the industry:** Unique corner post design assures product will arrive to the homeowner dent free.
- **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 assures a long life.
- **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 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.
- **High static blowers:** All models equipped with high static blowers.
- **90 second cooling cycle blower-off delay (TDR):** increases cooling performance when matched with a NORDYNE coil.
- **Flexible category I venting system:** May be vented with dedicated venting system or common vented with other category one appliances.
- **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.
- **Integrated control board:** Incorporates 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:** Insulated for ultra quiet operation.

GAS FURNACE COMPONENTS



Upflow/Horizontal Gas Furnace

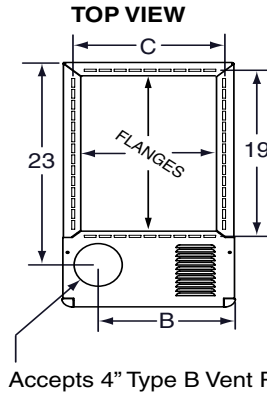
1. Blower Assembly
2. Blower Door Switch
3. Burner Assembly
4. Flame Roll-Out Switch
5. Flame Sensor
6. Furnace Control Board
7. Gas Manifold
8. Gas Valve
9. Igniter
10. Inducer Assembly
11. Main Air Limit Switch
12. Motor Choke (3/4 and 1HP only)
13. Motor Control Board
14. Motor Control Box
15. Pressure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



Downflow Gas Furnace

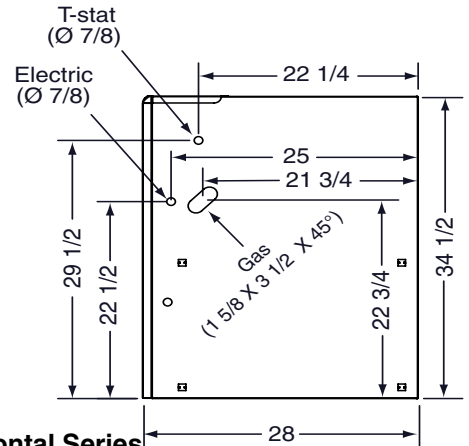
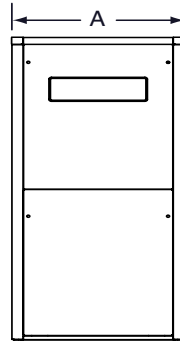
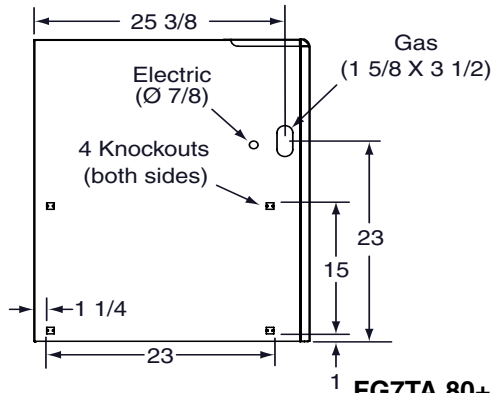
1. Blower Assembly
2. Blower Door Switch
3. Burner Assembly
4. Combustion Tube
5. Flame Roll-Out Switch
6. Flame Sensor
7. Furnace Control Board
8. Gas Manifold
9. Gas Valve
10. Igniter
11. Inducer Assembly
12. Main Air Limit Switch
13. Motor Choke (3/4 and 1HP only)
14. Motor Control Board
15. Pressure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

DIMENSIONS

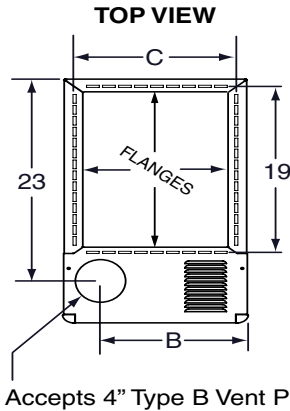


BOTTOM VIEW

*TA Model #'s	Dimension "A"	Dimension "B"	Dimension "C"	Dimension "D"
060-VA1	14 1/4	10 3/4	12 5/8	12 7/8
080-VB1	17 1/2	11 3/4	15 7/8	16 1/8
100-VC1	21	14	19 3/8	19 5/8
120-VC1		14	19 3/8	19 5/8
140-VD1	24 1/2	15 1/4	22 7/8	23 1/8

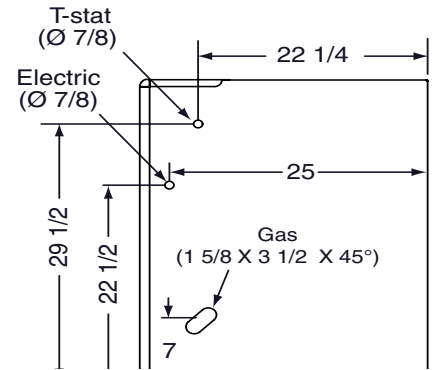
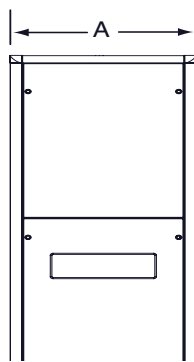
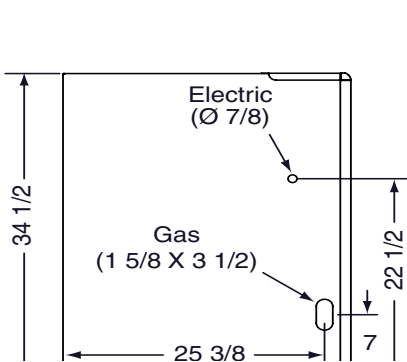


FG7TA 80+ High Efficiency Upflow/Horizontal Series



BOTTOM VIEW

*TK Model #'s	Dimension "A"	Dimension "B"	Dimension "C"	Dimension "D"
060-VA1	14 1/4	10 3/4	12 5/8	12 7/8
080-VB1	17 1/2	11 3/4	15 7/8	16 1/8
100-VC1	21	14	19 3/8	19 5/8
120-VC1		14	19 3/8	19 5/8



FG7TK 80+ High Efficiency Downflow Series

BLOWER PERFORMANCE - FG7TA/TK

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

A Cabinet					*TA/TK-060()-VA1 Models	
Switch Settings HEAT					Input (BTU) 60000	
A/B	2	3	4		CFM	Temp Rise (°F)
0	0	0	0		640	69
0	0	0	1		720	62
0	0	1	0		800	56
0	0	1	1		880	51
0	1	0	0		960	46
0	1	0	1		1040	43
0	1	1	0		1120	40
0	1	1	1		1200	37

B Cabinet					*TA/TK-080()-VB1 Models	
Switch Settings HEAT					Input (BTU) 80000	
A/B	2	3	4		CFM	Temp Rise (°F)
1	0	0	0		1000	59
1	0	0	1		1100	54
1	0	1	0		1200	49
1	0	1	1		1300	46
1	1	0	0		1400	42
1	1	0	1		1500	40
1	1	1	0		1600	37
1	1	1	1		1700	35

C Cabinet					*TA/TK-100()-VC1 Models		*TA/TK-120()-VC1 Models	
Switch Settings HEAT					Input (BTU) 100000		Input (BTU) 120000	
A/B 2 3 4					CFM	Temp Rise (°F)	CFM	Temp Rise (°F)
#	0	0	0	1000	74	1000	89	
#	0	0	1	1115	66	1115	80	
#	0	1	0	1230	60	1230	72	
#	0	1	1	1345	55	1345	66	
#	1	0	0	1460	51	1460	61	
#	1	0	1	1575	47	1575	56	
#	1	1	0	1690	44	1690	53	
#	1	1	1	1805	41	1805	49	

D Cabinet					*TA-140()-VD1 Model	
Switch Settings HEAT					Input (BTU) 140000	
A/B	2	3	4		CFM	Temp Rise (°F)
#	0	0	0		1500	69
#	0	0	1		1615	64
#	0	1	0		1730	60
#	0	1	1		1845	56
#	1	0	0		1960	53
#	1	0	1		2075	50
#	1	1	0		2190	47
#	1	1	1		2305	45

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.
3. Temperature rises that are shaded in grey are for reference only. These conditions are not recommended.
4. The blower operating range is .1" to .8" ESP in wc.

COOLING AIRFLOWS

A Cabinet							Nominal A/C and HP Capacity	
Switch Settings				CFM				
HEAT		COOL						
A/B	5	6	7	8	LOW	HIGH		
0	0	0	0	0	360	525		
0	0	0	0	1	400	580		
0	0	0	1	0	440	635		
0	0	0	1	1	475	690		
0	0	1	0	0	515	745		
0	0	1	0	1	550	800		
0	0	1	1	0	590	855		
0	0	1	1	1	630	910		
0	1	0	0	0	665	965		
0	1	0	0	1	705	1020		
0	1	0	1	0	740	1075		
0	1	0	1	1	780	1130		
0	1	1	0	0	820	1185		
0	1	1	0	1	855	1240		
0	1	1	1	0	895	1295		
0	1	1	1	1	930	1350		

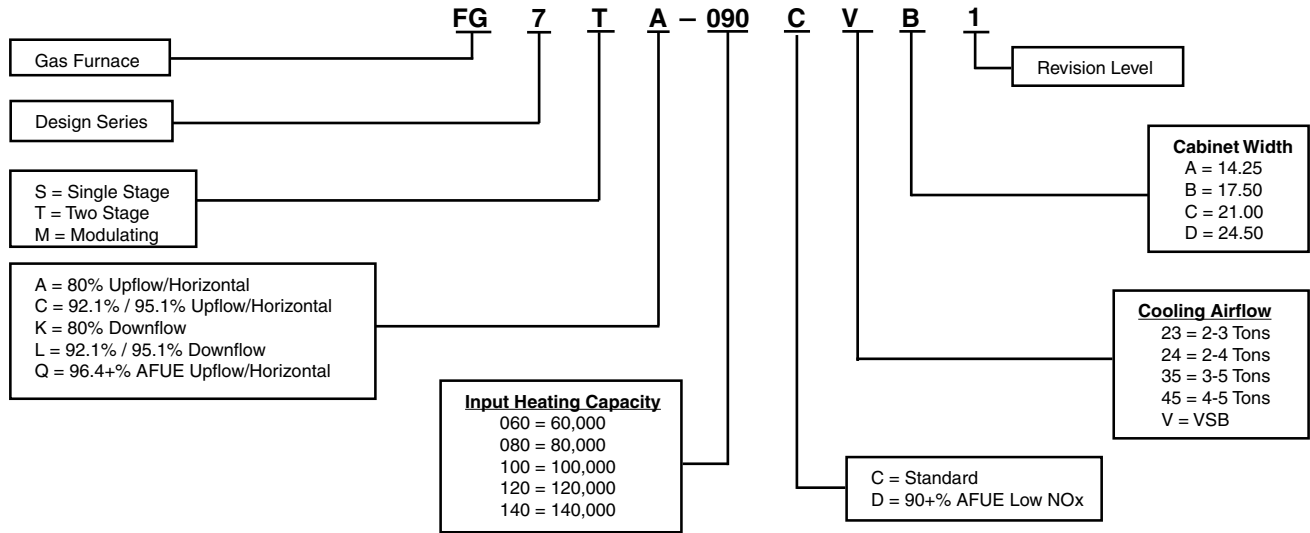
B Cabinet							Nominal A/C and HP Capacity
Switch Settings					CFM		
HEAT		COOL					
A/B	5	6	7	8	LOW	CFM	
1	0	0	0	0	485	700	
1	0	0	0	1	525	760	
1	0	0	1	0	565	820	
1	0	0	1	1	605	880	
1	0	1	0	0	650	940	
1	0	1	0	1	690	1000	
1	0	1	1	0	730	1060	
1	0	1	1	1	775	1120	
1	1	0	0	0	815	1180	
1	1	0	0	1	855	1240	
1	1	0	1	0	895	1300	
1	1	0	1	1	940	1360	
1	1	1	0	0	980	1420	
1	1	1	0	1	1020	1480	
1	1	1	1	0	1065	1540	
1	1	1	1	1	1105	1600	

C Cabinet							Nominal A/C and HP Capacity
Switch Settings				CFM			
HEAT		COOL					
A/B	5	6	7	8	LOW	CFM	
#	0	0	0	0	705	1025	
#	0	0	0	1	750	1090	
#	0	0	1	0	795	1155	
#	0	0	1	1	840	1220	
#	0	1	0	0	885	1285	
#	0	1	0	1	930	1350	
#	0	1	1	0	975	1415	
#	0	1	1	1	1020	1480	
#	1	0	0	0	1065	1545	
#	1	0	0	1	1110	1610	
#	1	0	1	0	1155	1675	
#	1	0	1	1	1200	1740	
#	1	1	0	0	1245	1805	
#	1	1	0	1	1290	1870	
#	1	1	1	0	1335	1935	
#	1	1	1	1	1380	2000	

D Cabinet							Nominal A/C and HP Capacity		
Switch Settings				CFM					
HEAT		COOL							
A/B	5	6	7						
#	0	0	0	0	965	1400	5 TON 4 TON 3.5 TON		
#	0	0	0	1	995	1440			
#	0	0	1	0	1020	1480			
#	0	0	1	1	1050	1520			
#	0	1	0	0	1075	1560			
#	0	1	0	1	1105	1600			
#	0	1	1	0	1130	1640			
#	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			
#	1	1	0	0	1295	1880			
#	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

MODEL IDENTIFICATION CODE



SPECIFICATIONS

FG7TA/TK MODEL NUMBERS	060C-VA1	080C-VB1	100C-VC1	120C-VC1	140C-VD1
Input - Btuh (a)	60,000 / 39,000	80,000 / 52,000	100,000 / 65,000	120,000 / 78,000	140,000 / 91,000
Heating Capacity - Btuh	48,000 / 31,200	64,000 / 41,600	80,000 / 52,000	96,000 / 62,400	112,000 / 72,800
AFUE	80.0	80.0	80.0	80.0	80.0
Blower D x W	10 x 6	11 x 8	11 x 10	11 x 10	11 x 10
Motor H.P. - Speed - Type	1/2 - Variable	1/2 - Variable	3/4 - Variable	3/4 - Variable	1 - Variable
Motor FLA	6.2	6.2	8.7	8.7	11.7
Rated Ext. SP - In. W.C.	0.5	0.5	0.5	0.5	0.5
Temperature Rise Range - °F	25-55	30-60	35-65	35-65	40-70
Shipping Weights	115lbs	110lbs	125lbs	135lbs	155lbs

All models are 115 V, 60 HZ. Gas connections are 1/2" N.P.T.
AFUE= Annual Fuel Utilization Efficiency

ACCESSORIES

FG7TA/TK KITS	
Description	SKU
"B", "C", "D" Cabinet downflow sub base kit	904911
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



GENERAL TERMS OF LIMITED WARRANTY

NORDYNE will furnish a replacement for any part of this product which fails in normal use and service 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

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