#### TECHNICAL SPECIFICATIONS

## **G8SD Series**

# Single Stage Upflow/Horizontal Gas Furnaces

#### Induced Draft - 95+ AFUE, Ultra-Low NOx Input 50,000 - 100,000 Btuh

The 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 UL for application in the United States.

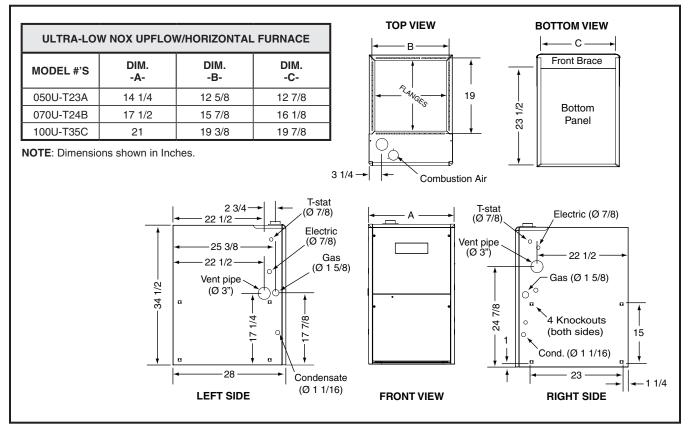


This furnace series is approved and certified by the SCAQMD and the SJVAPC Districts in the state of California with NOx levels below 14 ng/J when operating on natural gas.

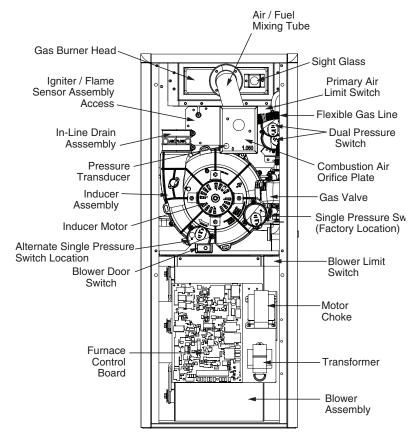
#### FEATURES and BENEFITS

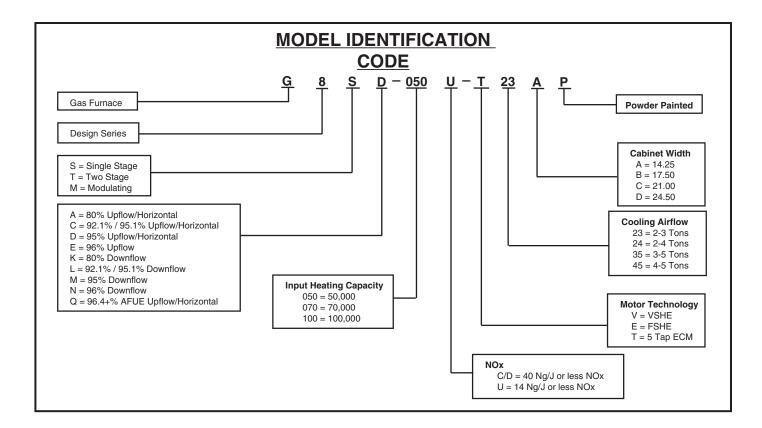
- **Ultra-low emissions:** 65% less NOx than standard furnaces.
- **100% fired and tested:** All units and each component are tested on the manufacturing line.
- Best packaging in the industry: Unique corner post design assures product will arrive to the homeowner dent free.
- Low Boy Height: Easy to 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, 100, 140 and 180 seconds).
- 30 second post purge: Increases life of heat exchanger.
- Hot surface igniter: Innovative application of a silicon nitride igniter.
- 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.
- **45 second cooling cycle blower-off delay (TDR):** increases cooling performance when matched with a Nordyne coil.
- Flexible category IV venting system: May be vented with dedicated venting system or common vented with other category one appliances.
- **High efficiency blower assemblies:** Maximize efficiencies and provide better temperature control, humidity control and air distribution.
- Multi-speed direct drive blower: Energy-efficient, brushless DC (ECM). Designed to give a wide range of cooling capacities.
- **7-segment LED for easy troubleshooting:** Saves time by providing easy to read fault codes.
- **Integrated control board:** Incorporates connections for electronic air cleaner and humidifier. Ergonomically located for ease of service.
- **Two piece door design:** Enhances furnace appearance and uses captured screws to prevent losing door screws.
- Furnace Air Leakage: These furnaces comply with Energy Star cabinet air leakage requirement of less than or equal to 2%. Keep the conditioned air flowing to where it's needed.

### **GAS FURNACE DIMENSIONS**



#### **GAS FURNACE COMPONENTS**





#### **SPECIFICATIONS**

G8SD MODEL NUMBERS	-050U-T23A*	-070U-T24B*	-100U-T35C*
Input - Btuh (a)	50,000	70,000	100,000
Heating Capacity - BtuH	48,000	67,000	95,000
AFUE	95.0	95.0	95.0
Motor H.P Speed - Type	3/4 - 9 - ECM	3/4 - 9 - ECM	1 - 9 - ECM
Motor FLA	8.4	8.4	11
Rated Ext. SP - In. W.C.	0.5	0.5	0.5
Temperature Rise Range - F	30-60	30-60	35-65
Shipping Weights	115	133	153
NOx	<14ng/J	<14ng/J	<14ng/J

#### ACCESSORIES

G8SD KITS								
Description SKU								
Side return filter kit	541036							

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			HEATING	AIRFLOW	(CFM) & TE	MPERATU	RE RISE (°I	F)					
MODEL NAME/			EXTERNAL STATIC PRESSURE (IN. W.C.)										
HEATING INPUT G8SD		MOTOR SPEED	0.1		0.2		0.3		0.4		0.5		
		CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE		
		Tap 9											
		Tap 8											
		Tap 7											
		Tap 6*											
	Bottom	Tap 5**	970	45	935	47	915	48	880	50	845	52	
		Tap 4	875	50	835	53	810	54	770	57	735	60	
		Тар 3	835	53	795	55	765	57					
-050U-T23A*		Tap 2											
		Tap 1***											
50,000 BTU/h Input		Tap 9											
48,000 BTU/h Output		Tap 8											
		Tap 7											
		Tap 6*											
	Side	Tap 5**	935	47	915	48	880	50	845	52	805	55	
		Tap 4	850	52	815	54	780	56	745	59			
		Тар 3	815	54	775	57	740	59					
		Tap 2											
		Tap 1***											

			COOL	ING AIRFLO	OW (CFM)							
MODEL NAME/			EXTERNAL STATIC PRESSURE (IN. W.C.)									
HEATING INPUT	RETURN AIR VIA:	MOTOR SPEED	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8		
G8SD			CFM	CFM	CFM	CFM	CFM	(CFM)	(CFM)	(CFM)		
		Тар 9	1,420	1,395	1,360	1,330	1,300	1,280	1,245	1,220		
		Тар 8	1,310	1,270	1,245	1,215	1,180	1,145	1,120	1,095		
		Тар 7	1,180	1,145	1,115	1,085	1,050	1,020	990	955		
		Tap 6*	1,085	1,050	1,015	985	950	920	890	855		
	Bottom Only	Tap 5**	970	935	915	880	845	810	780	745		
		Tap 4	875	835	810	770	735	700	665	630		
		Тар З	835	795	765	725	690	655	615	580		
-050U-T23A*		Tap 2	650	590	560	520	465	430	380	340		
		Tap 1***	550	485	450	405	330	290	250	195		
50,000 BTU/h Input		Тар 9	1,410	1,380	1,350	1,315	1,285	1,255	1,225	1,200		
48,000 BTU/h Output		Тар 8	1,290	1,260	1,230	1,195	1,160	1,135	1,100	1,070		
		Тар 7	1,145	1,115	1,090	1,055	1,030	995	960	920		
		Tap 6*	1,045	1,015	980	950	920	885	855	825		
	Left Side Only Motor	Tap 5**	935	915	880	845	805	775	745	695		
	WIOTOT	Tap 4	850	815	780	745	715	665	625	585		
		Тар 3	815	775	740	700	675	620	575	540		
		Tap 2	605	575	530	495	445	390	325	235		
		Tap 1***	495	470	410	365	320	260	160			

#### NOTES:

NOTES:
1. To comply with government mandated efficiency standards, two openings are required for airflows above 1,600 CFM.
2. Data is shown without filter.
3. Temperature rises in the table are approximate. Actual temperature rises may vary.
4. Individual cells shaded in gray indicate a temperature rise outside of the recommended range.
5. To comply with government mandated efficiency standards, speed settings shaded in gray are not allowed in HEAT mode.
6. The "\*" denotes the factory COOL setting, "\*\*" denotes the factory HEAT setting, and "\*\*\*" denotes factory FAN setting. If the Alternate speed is to be used, the speed tap must be adjusted at the blower motor plug.

		HEATING	AIRFLOW	(CFM) 8	<b>K TEMPE</b>	RATURE	RISE (°F	F)				
MODEL NAME/		MOTOR			EXT	ERNAL	STATIC F	PRESSU	RE (IN. W	/.C.)		
<b>HEATING INPUT</b>	RETURN AIR VIA:	SPEED	0	.1	0.2		0.3		0.4		0	.5
G8SD	,	TAP	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE
		9										
		8										
		7										
		6 **	1,460	42	1,430	43	1,385	45	1,345	46	1,300	48
	Bottom Only	5 *	1,380	45	1,330	47	1,285	48	1,240	50	1,200	52
		4	1,065	58								
		3										
		2										
		1 ***										
		9										
		8										
		7										
G8SD-070U-T24B*		6 **	1,440	43	1,400	44	1,360	46	1,315	47	1,270	49
70,000 BTU/h Input	Side Only	5 *	1,340	46	1,295	48	1,255	49	1,215	51	1,170	53
67,000 BTU/h Output	-	4										
		3										
		2										
		1 ***										
		9										
		8										
		7										
		6 **	1,460	42	1,415	44	1,375	45	1,330	47	1,290	48
	Side + Bottom	5*	1,400	44	1,355	46	1,310	47	1,270	49	1,225	51
		4	1,065	58								
		3										
		2										
		1 ***										

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	COOLING AIRFLOW (CFM)												
MODEL NAME/		MOTOR	EXTERNAL STATIC PRESSURE (IN. W.C.)										
HEATING INPUT G8SD	AIR VIA:	SPEED	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8			
		TAP	CFM	CFM	CFM	CFM	CFM	(CFM)	(CFM)	(CFM)			
		9	1,775	1,745	1,705	1,660	1,620	1,580	1,540	1,500			
		8	1,640	1,605	1,560	1,525	1,485	1,440	1,400	1,350			
		7	1,565	1,525	1,480	1,440	1,390	1,355	1,310	1,260			
		6 **	1,460	1,430	1,385	1,345	1,300	1,260	1,215	1,175			
	Bottom Only	5 *	1,380	1,330	1,285	1,240	1,200	1,150	1,110	1,065			
	Only	4	1,065	1,015	965	920	870	815	755	700			
		3	860	770	735	670	610	560	490	460			
		2	625	550	490	435	365						
		1 ***	660	610	550	460	430	360					
		9	1,715	1,710	1,675	1,640	1,600	1,565	1,525	1,480			
		8	1,600	1,565	1,530	1,490	1,445	1,410	1,370	1,320			
		7	1,515	1,480	1,440	1,405	1,360	1,320	1,275	1,230			
G8SD-070U-T24B*		6 **	1,440	1,400	1,360	1,315	1,270	1,230	1,180	1,130			
70.000 BTUH/h Input	Side Only	5 *	1,340	1,295	1,255	1,215	1,170	1,120	1,070	1,020			
67,000 BTU/h Output		4	1,025	980	925	875	820	780	740	680			
		3	830	760	700	650	595	525	495	465			
		2	585	530	490	420	370						
		1 ***	695	600	565	470	400	385					
		9	1,820	1,785	1,745	1,710	1,665	1,625	1,585	1,540			
		8	1,675	1,640	1,600	1,550	1,515	1,480	1,435	1,390			
		7	1,585	1,545	1,500	1,460	1,420	1,380	1,340	1,295			
		6 **	1,460	1,415	1,375	1,330	1,290	1,245	1,205	1,160			
	Bottom + Side	5 *	1,400	1,355	1,310	1,270	1,225	1,180	1,135	1,090			
	Side	4	1,065	1,010	965	915	850	810	755	710			
		3	860	790	735	680	625	550	500	460			
		2	650	550	500	435	390						
		1 ***	680	600	550	480	420	390					

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		HEATING A	AIRFLOW	(CFM) 8		RATURE	RISE (°F	F)				
MODEL NAME/		MOTOR			EXT	ERNAL	STATIC F	PRESSU	RE (IN. W	/.C.)		
HEATING INPUT G8SD	RETURN AIR VIA:	SPEED	0	.1	0	.2	0	.3	0	.4	0	.5
		TAP	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE
		9										
		8										
		7										
		6 *	1,850	48	1,790	49	1,745	50	1,700	52	1,650	53
	Bottom Only	5 **	1,745	50	1,690	52	1,645	53	1,590	55	1,535	57
		4	1,480	59	1,420	62	1,360	65				
		3										
		2										
		1 ***										
		9										
		8										
		7										
G8SD-100U-T35C*		6 *	1,785	49	1,740	51	1,690	52	1,640	54	1,590	55
100,000 BTU/h Input	Side Only	5 **	1,690	52	1,640	54	1,595	55	1,540	57	1,490	59
95,000 BTU/h Output		4	1,435	61	1,375	64	1,300					
		3										
		2										
		1 ***										
		9										
		8										
		7										
		6 *	1,865	47	1,810	49	1,755	50	1,695	52	1,645	53
	Side + Bottom	5 **	1,760	50	1,705	52	1,655	53	1,595	55	1,535	57
		4	1,495	59	1,430	62	1,365	64				
		3										
		2										
		1 ***										

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COOLING AIRFLOW (CFM)												
MODEL NAME/		MOTOR	EXTERNAL STATIC PRESSURE (IN. W.C.)									
HEATING INPUT G8SD	AIR VIA:	SPEED	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8		
		TAP	CFM	CFM	CFM	CFM	CFM	(CFM)	(CFM)	(CFM)		
		9	2,250	2,250	2,190	2,130	2,080	2,025	1,975	1,915		
		8	2,055	2,010	1,970	1,900	1,840	1,790	1,730	1,675		
		7	1,900	1,845	1,795	1,750	1,700	1,650	1,575	1,520		
	Dettern	6 *	1,850	1,790	1,745	1,700	1,650	1,595	1,535	1,470		
	Bottom Only	5 **	1,745	1,690	1,645	1,590	1,535	1,485	1,420	1,365		
	Only	4	1,480	1,420	1,360	1,300	1,230	1,165	1,110	1,055		
		3	1,315	1,245	1,170	1,100	1,025	975	915	860		
		2	1,140	1,055	975	890	820	765	705	660		
		1 ***	1,025	920	830	745	690	625	580	500		
		9	2,155	2,110	2,075	2,020	1,975	1,965	1,950	1,900		
		8	1,980	1,940	1,890	1,850	1,805	1,760	1,710	1,650		
		7	1,835	1,785	1,740	1,685	1,635	1,585	1,545	1,495		
G8SD-100U-T35C*		6 *	1,785	1,740	1,690	1,640	1,590	1,540	1,490	1,440		
100,000 BTUH/h Input	Side Only	5 **	1,690	1,640	1,595	1,540	1,490	1,440	1,390	1,340		
95,000 BTU/h Output		4	1,435	1,375	1,300	1,250	1,195	1,140	1,080	1,020		
		3	1,265	1,190	1,140	1,070	1,005	935	875	815		
		2	1,095	1,015	945	870	790	715	665	615		
		1 ***	980	905	835	740	665	590	525	440		
		9	2,245	2,195	2,155	2,095	2,065	2,070	2,015	1,950		
		8	2,080	2,030	1,980	1,930	1,880	1,820	1,765	1,705		
		7	1,915	1,875	1,820	1,765	1,715	1,655	1,600	1,535		
	Bottom +	6 *	1,865	1,810	1,755	1,695	1,645	1,585	1,530	1,485		
	Side	5 **	1,760	1,705	1,655	1,595	1,535	1,480	1,430	1,370		
		4	1,495	1,430	1,365	1,290	1,235	1,170	1,115	1,065		
		3	1,325	1,245	1,175	1,095	1,035	970	910	855		
		2	1,175	1,065	965	900	810	775	705	635		
		1 ***	1,040	930	850	750	680	610	560	475		

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#### **GENERAL TERMS OF LIMITED WARRANTY**

Nordyne, LLC will furnish a replacement for any part of this product which fails in normal use and service within the terms and conditions of the warranty.

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

Before purchasing this appliance, read important energy cost and efficiency information available from your retailer. Specifications and illustrations subject to change without notice and without incurring obligations. Printed in U.S.A (05/2021)