Gas Fired Warm Air Furnace Specification Sheet

DIMENSIONS (Inches)



MODEL	А	В	С	D	Е	MINIMUM VENT DIAMETER	
703	16-1/2	15	5-1/4	12-5/8	4	4	
904	20-1/2	19	7-1/4	14-5/8	4	4	
1155 1405	24-1/2	23	9-1/4	18-5/8	4	5	

All dimensions are in inches.

SPECIFICATIONS

Model Number	High Fire Rates		Low Fire Rates		Temp. Rise Range	No. of	Minimum Circuit Ampacity ¹	Maximum Overcurrent Protection ²	Circulator Blower			Tons AC at	Pressure ³ Switch Settings (Inches W.C.)		Ship. Wt.
	Input (Btu/hr)	Output (Btu/hr)	Input (Btu/hr)	Output (Btu/hr)	(°F)	Burners	(Amps)	(Amps)	Size (D" x W")	ΗP	No. of Speeds	0.5 LSF	ID Blower (Low)	ID Blower (High)	(105)
0704	69,000	55,200	48,000	38,400	30 - 60	3	10.9	15	10 X 6	1/2	4	2.5 - 3.5	-0.45	-0.80	152
0903	92,000	73,600	64,000	51,200	35 - 65	4	8.0	15	10 x 8	1/2	4	1.5 - 3.5	-0.37	-0.74	169
0905	92,000	73,600	64,000	51,200	35 - 65	4	14.8	15	10 X 8	3/4	4	3.0 - 5.0	-0.37	-0.74	178
1155	115,000	92,000	80,000	64,000	35 - 65	5	13.5	15	10 X 9	3/4	4	3.0 - 5.0	-0.37	-0.66	194
1405	138,000	110,400	96,000	76,800	45 - 75	6	14.4	15	10 X 9	3/4	4	3.5 - 5.0	-0.32	-0.66	198

¹ Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower Amps.

² Maximum Overcurrent Protection refers to maximum recommended fuse or circuit breaker size.

³ As shipped for installations below 2000 feet.

Flame sensor output is 1 to 4 microamps at 115 volts.

FILTERS ARE NOT INCLUDED WITH FURNACE AND MUST BE SUPPLIED BY THE INSTALLER.



To avoid death, personal injury or property damage due to fire, do not exceed maximum recommended fuse or circuit breaker size.

MINIMUM CLEARANCES

To avoid death, personal injury or property damage due to fire, clearances to combustible surfaces listed as below must be observed.

SERVICE ACCESSIBILITY AND UNIT CONNECTIONS

- 36 inches front clearance is required for servicing or cleaning.
- Unit connections (electrical, flue, and drain) may necessitate greater clearances than the minimum clearances listed below.

NOTE: In all cases, accessibility clearance must take precedence over clearances from the enclosure where accessibility clearances are greater.

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS (INCHES)											
POSITION ¹	FRONT	RIGHT	LEFT	REAR	TOP	FLUE	FLOOR				
Upflow	0	6 ²	0	0	1	6 ³	С				
Horizontal Left	12	Alcove	6	0	6	6 ³	С				
Horizontal Right	6	Alcove	12	0	6	6 ³	С				

¹All positioning is determined as installed unit is viewed from the front.

²3 inch when Type B-1 vent is used.

³1 inch when Type B-1 vent is used.

C = If placed on combustible floor, floor MUST be wood ONLY.

BLOWER PERFORMANCE

		Tons					Ex	ternal S	Static P	Pressur	e, Inche	es Wate	er Colu	mn				
Htg Speed	Motor	Lons AC		0.1			0.2			0.3			0.4			0.5		0.6
as Shipped	Speed	at		RI	SE		RI	SE		RI	SE		RI	SE		RI	SE	
		.5" ESP	CFM	HIGH	LOW	CFM	HIGH	LOW	СЕМ	HIGH	LOW	CFM	HIGH	LOW	CFM	HIGH	LOW	СЕМ
0703	HIGH	3.5	1695	30		1625	31		1580	32		1520	34		1450	35		1365
(30-60)	MED-HI	3.0	1485	34		1450	35		1400	37		1350	38		1295	39		1235
High Fire: Med-Lo	MED-LO	3.0	1235	41		1200	43	30	1180	43	30	1140	45	31	1115	46	32	1050
Low Fire: Low	LOW	2.5	1095	47	33	1070	48	33	1050	49	34	1025	50	35	975	52	37	950
0903	HIGH	3.5	1630	42		1560	44		1550	44		1465	47		1380	49	35	1275
(35-65)	MED-HI	3.0	1360	50	35	1325	51	36	1290	53	37	1215	56	39	1155	59	41	1070
High Fire: High	MED-LO	2.0	920		52	920		52	900		53	890		54	850		56	800
Low Fire: Low	LOW	1.5	770		62	750		64	740		64	730		65	690			660
0905	HIGH	5.0	2250			2185			2120			2030	34		1975	35		1885
(35-65)	MED-HI	4.0	1775	38		1750	39		1735	39		1690	40		1650	41		1600
High Fire: Med-Lo	MED-LO	3.5	1320	52	36	1315	52	36	1315	52	36	1315	52	36	1280	53	37	1240
Low Fire: Low	LOW	3.0	1180	58	40	1180	58	40	1175	58	41	1170	58	41	1140	60	42	1120
1155	HIGH	5.0	2330	37		2245	38		2165	39		2065	41		1985	43		1885
(35-65)	MED-HI	5.0	2120	40		2070	41		2020	42		1940	44		1850	46		1775
High Fire: Med-Lo	MED-LO	4.0	1875	45		1840	46		1800	47		1735	49		1685	51	35	1600
Low Fire: Low	LOW	3.0	1290		46	1275		47	1250		48	1235		48	1210		49	1170
1405	HIGH	5.0	2455			2390			2290	45		2200	46		2050	50		1935
(45-75)	MED-HI	5.0	2050	50		2025	50		1965	52		1890	54		1810	56		1715
High Fire: Med-Hi	MED-LO	4.0	1715	60		1700	60		1660	62		1615	63		1555	66	46	1472
Low Fire: Low	LOW	3.5	1450	70	49	1436	71	50	1413	72	51	1380	74	52	1338		53	1280

NOTES:

- All furnaces ship as high speed for cooling. Installer must adjust blower speed as needed.
- For most jobs, about 400 CFM per ton when cooling is desirable.
- This chart is for furnaces installed at 0 2000 feet. At higher altitudes, a properly derated unit will have the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.
- The shaded area () indicates ranges in excess of maximum external static pressure allowable when heating. For satisfactory operation, external static pressure should not exceed 0.5" W.C. The data for 0.6" to 0.8" w.c. is shown for air conditioning purposes only.
- The dashed (-----) areas indicate a temperature rise not recommended for this model.
- The installation must be adjusted to obtain a temperature rise within the range listed on the furnace nameplate.

FURNACE SUSPENSION

If necessary to suspend the furnace from rafters or joists, use 3/8 inch threaded rod with angle iron as shown below.



PROPANE CONVERSIONS

When installing this furnace refer to the High Altitude Chart for proper high altitude kit, if required, and gas manifold pressure.

	HIGH ALTITUDE GAS ORIFICE CHART											
Gas	Altitude			Manifold I	Pressure	Pressure Switch Change						
	Altitude (ft)	Kit	Orifice	High Stage	Low Stage							
Propane	0-7000	LPTK09	#55	10.0" w.c.	6.0" w.c.	None						
	7001-8500	HALP09	#56	10.0" w.c.	6.0" w.c.	None						

NOTE: In Canada, gas furnaces are certified to 4500 feet.

Do **<u>NOT</u>** install this furnace above 8500 feet.

HIGH ALTITUDE INSTALLATIONS

Two-Stage High Altitude Kits (Category I Venting Only)									
Altitude (ft)	Model	Kit							
	0703								
	0903								
0-3000	0905	Not Required							
	1155								
	1405								
	0705	HATS01							
	0903	HATS02							
3001-7000	0905	HATS02							
	1155	HATS03							
	1405	HATS04							
	0703								
	0903	HATS06							
7001-8500	0905								
	1155	HATS07							
	1405	HATS08							

NOTE: Filters are required with this furnace and must be provided by the installer. The filters used must comply with UL900 or CAN/ULCS111 standards. Installing this furnace without filters will void the unit warranty.

This furnace has provisions for the installation of return air filters at the side and/or bottom return. The furnace will accommodate the following filter sizes depending upon cabinet size.

Side Return(s)									
Cabinet Width (in.)	Nominal Filter Size (in.)	Approx. Flow Area (in ²)							
All	16 x 25 x 1	400							

Bottom Return									
Cabinet Width (in.)	Nominal Filter Size (in.)	Approx. Flow Area (in ²)							
16-1/2	14 x 25 x 1	350							
20-1/2	16 x 25 x 1	400							
24-1/2	20 x 25 x 1	500							

Refer to Minimum Filter Area tables to determine filter area requirement. **NOTE:** Filters can also be installed elsewhere in the duct system such as a central return.

		Cooling Airflow Requirement (CFM)									
		600	800	1000	1200	1400	1600	2000			
,	0703			503*	576	672					
rflow	0903	610*	610*	610*	610*						
A	0905				610*	672	768	960			
nput	1155				762*	762*	768	960			
_	1405				838*	838*	838*	960			

*Minimum filter area dictated by heating airflow requirement.

Disposable Minimum Filter Area (in²)

[Based on a 300 ft/min filter face velocity]

		Cooling Airflow Requirement (CFM)									
		600	800	1000	1200	1400	1600	2000			
	0703			251*	288	336					
rflow	0903	305*	305*	305*	305*						
Ai	0905				305*	336	384	480			
nput	1155				381*	381*	384	480			
_	1405				419*	419*	419*	480			

*Minimum filter area dictated by heating airflow requirement.

Permanent Minimum Filter Area (in²)

[Based on 600 ft/min filter face velocity]

FLAME SENSOR

Flame sensor output is 1 to 4 microamps at 115 volts.

NOTES:

- 1. All furnaces have a redundant gas valve and blower door interlock switch.
- 2. All furnaces are manufactured for use on 115 VAC, 60 Hz, single phase electrical supply.
- 3. IMPORTANT: While the data is presented as a guide, it is very important to electrically connect the unit and properly size fuses and wires in accordance with the National Electrical Code and/or all existing local codes.
- 4. Performance figures are based on Department of Energy information and requirements under continuous operating conditions. Performance will vary with weather conditions and use.

ACCESSORIES

- Thermostat Programmable Digital Thermostat, Two Heat/Two Cool(1213407) Non-Programmable Digital Thermostat, Two Heat/Two Cool (1213411) • Fossil Fuel Kit (FFK03A)

 - External Filter Rack (EFR01)
 - Electronic Air Cleaner (EAC5)
 - Media Air Cleaner (MAC1)



To prevent death, personal injury or property damage due to electrical shock, disconnect electrical power to this furnace before servicing or performing maintenance.



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