Comfort-Aire®

SE Series

FEATURES

- Durable aluminized steel tubular heat exchanger
- Stainless-steel secondary heat exchanger
- Two-stage gas valve
- Hot surface ignition for dependable operation
- Quiet multi-speed ECM blower motor
- Control board with self-diagnostics and low-voltage terminal block
- Natural gas and propane (LP) convertible, LP kit included
- Designed for multi-position installation: Up flow and horizontal
- Industry-standard cabinet sizes for easy replacement, installation and add-on cooling
- Convenient left or right connection for gas and electric service
- Removable base for side or bottom return applications

California Only
This furnace does not meet the South Coast Air Quality Management District (SCAQMD) Rule 1111 and San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 4905 NOx emission limit (14 ng/J) and cannot be installed within the SCAQMD or SJVAPCD and Bay Area.

GFM96T SERIES

TWO STAGE MULTI-POSITION GAS FURNACE

96% AFUE

Intertek

Warranty–5 years on parts and 10 years on compressor and heat exchanger.
(Limitations apply, see actual warranty for complete details.)
visit www.comfort-aire.com

R-410A

HEAT CONTROLLER

MODEL NUMBER GUIDE

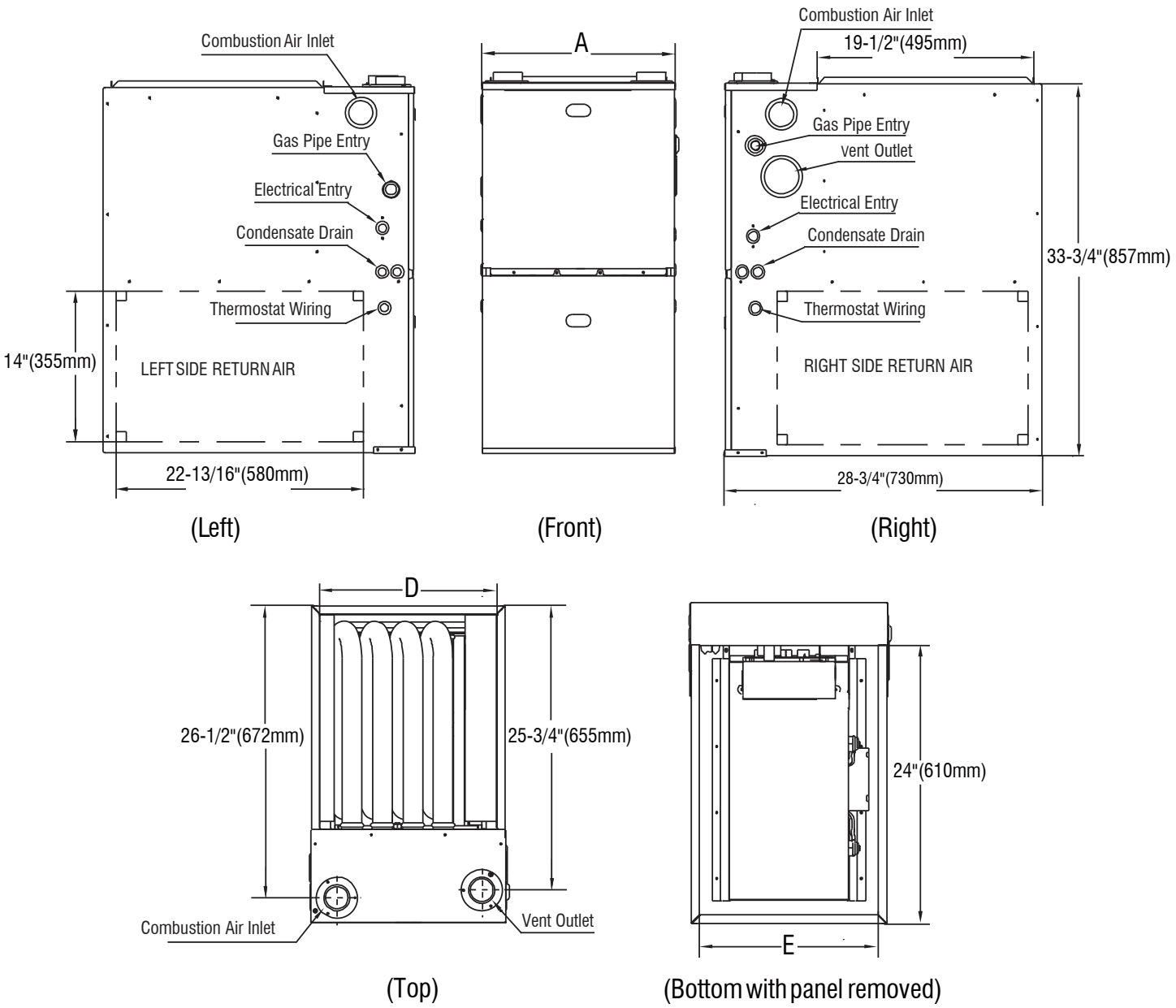
G	F	M	96	T	060	B	3	S	1	A
Gas	Furnace	Multi-Position	Efficiency %	Number of Stages: T=Two	Heating BTUH x 1000	Cabinet Width: B=17.5 in. C=21 in. D=24.5 in.	Cooling Tons	SE Series	Power 1=115-1-60	Revision Level

SPECIFICATIONS

	GFM96T060B3S1A	GFM96T080B3S1A	GFM96T080C4S1A	GFM96T100C5S1A	GFM96T100D5S1A	GFM96T120D5S1A
GAS HEATING PERFORMANCE						
High Fire Input (BTU/h)	60,000	80,000	80,000	100,000	100,000	120,000
High Fire Output (BTU/h)	57,000	76,000	76,000	95,000	95,000	115,000
Low Fire Input (BTU/h)	39,000	52,000	52,000	65,000	65,000	78,000
Low Fire Output (BTU/h)	37,000	49,000	49,000	62,000	62,000	75,000
ELECTRICAL DATA						
Voltage / Phase(60Hz)	115/1	115/1	115/1	115/1	115/1	115/1
Min. / Max. Voltage	104/127	104/127	104/127	104/127	104/127	104/127
Min. Circuit Amps	8	8	7.8	11.5	10.5	10.5
Max. Overcurrent Protection	15	15	15	20	20	20
BLOWER MOTOR						
Motor Type	ECM	ECM	ECM	ECM	ECM	ECM
Horsepower	3/4	3/4	3/4	1	1	1
Rated RPM	1050	1050	1050	1050	1050	1050
Full Load Amps (FLA)	8	8	7.8	11.5	10.5	10.5

Comfort-Aire®

DIMENSIONS



	060B3S	080B3S	080C4S	0100C5S	100D5S	120D5S
DIMENSIONS AND WEIGHTS						
A - Cabinet Width (in.)	17.5	17.5	21	21	24.5	24.5
D - Supply Air Width (in.)	16	16	19.5	19.5	23	23
E - Return Air Width (in.)	15-27/32	15-27/32	19-13/32	19-13/32	22-27/32	22-27/32
Net/Shipping Weight (lbs.)	135/147.5	141/153	152/165	162/173	170/185	176/190

AIRFLOW DATA

FURNACE SIZE	SPEED		External Static Pressure (in. w.c.)									
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
60B	H	CFM	1430	1390	1350	1320	1280	1240	1200	1160	1110	1065
		Temp Rise-1st stage°F	--	--	--	--	--	--	--	30.7	32.2	33.6
		Temp Rise-2nd stage°F	37	37.4	38.6	39.3	40.7	41.7	43.4	45.1	47.1	49.1
	MH	CFM	1245	1205	1165	1130	1100	1050	1010	960	920	865
		Temp Rise-1st stage°F	--	--	30	31.1	32.1	33.2	35.1	37	38.7	40.4
		Temp Rise-2nd stage°F	42.7	43.4	45	46.5	48.3	50.1	52.6	55.1	58	--
	M	CFM	1075	1035	1000	955	910	860	820	780	730	685
		Temp Rise-1st stage°F	32.1	33.4	35.5	37.6	39.3	41	43.1	45.1	48.2	51.3
		Temp Rise-2nd stage°F	49.4	52.9	55.4	58	--	--	--	--	--	--
	ML	CFM	885	830	780	735	690	650	590	550	520	470
		Temp Rise-1st stage°F	39.1	41.7	44.9	48	51.2	54.5	59.1	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
	L	CFM	780	707	640	579	500	466	403	356	320	253
		Temp Rise-1st stage°F	48.3	52.8	58	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
80B	H	CFM	1411	1374	1339	1303	1271	1233	1190	1148	1102	1054
		Temp Rise-1st stage°F	--	--	--	35.5	36.4	37.5	38.8	40.3	41.9	43.8
		Temp Rise-2nd stage°F	50.5	51.8	53.2	54.6	56.0	57.8	59.8	62.0	64.6	--
	MH	CFM	1215	1178	1144	1108	1071	1029	985	945	898	854
		Temp Rise-1st stage°F	38.0	39.2	40.4	41.7	43.2	44.9	46.9	48.9	51.5	54.2
		Temp Rise-2nd stage°F	56.6	58.4	60.2	62.3	64	--	--	--	--	--
	M	CFM	1044	1002	968	931	886	841	805	767	718	677
		Temp Rise-1st stage°F	40.8	43.4	45.8	50.5	50.9	54.0	57.6	60.8	64.4	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
	ML	CFM	825	790	743	698	649	608	457	527	491	463
		Temp Rise-1st stage°F	50.5	53.7	58.4	62.9	--	--	--	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
	L	CFM	786	720	645	598	539	503	436	385	348	302
		Temp Rise-1st stage°F	56.8	62.2	--	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
80C	H	CFM	1516	1467	1418	1367	1312	1261	1201	1144	1086	1029
		Temp Rise-1st stage°F	--	--	--	--	35.1	36.2	38	39.8	41.6	43.3
		Temp Rise-2nd stage°F	46.7	47.4	48.8	50.1	52.5	54.8	57.4	59.9	62.7	--
	MH	CFM	1316	1259	1203	1149	1092	1031	976	909	855	791
		Temp Rise-1st stage°F	35	37	38.2	39.4	41.1	42.7	45.2	47.7	50.9	54
		Temp Rise-2nd stage°F	53.8	53.2	55.8	58.4	62	--	--	--	--	--
	M	CFM	1142	1076	1014	960	894	823	765	702	651	597
		Temp Rise-1st stage°F	40.3	43.1	45.4	47.7	51.2	54.6	58.2	61.8	--	--
		Temp Rise-2nd stage°F	60	61.1	--	--	--	--	--	--	--	--
	ML	CFM	901	829	767	692	625	562	506	463	409	345
		Temp Rise-1st stage°F	49	49.9	55.7	61.5	--	--	--	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
	L	CFM	800	674	618	498	455	400	360	300	240	
		Temp Rise-1st stage°F	57	--	--	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--

AIRFLOW DATA CONT.

FURNACE SIZE	SPEED		External Static Pressure (in. w.c.)									
			0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
100C	H	CFM	2195	2158	2116	2072	2031	1985	1940	1896	1852	1862
		Temp Rise-1st stage°F	--	--	--	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	40.3	41.0	41.8	42.7	43.6	44.6	45.6	46.7	47.8	47.5
	MH	CFM	2008	1963	1924	1882	1836	1791	1744	1697	1648	1603
		Temp Rise-1st stage°F	--	--	--	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	44.1	45.1	46.0	47.0	48.2	49.4	50.8	52.2	53.7	55.2
	M	CFM	1753	1709	1666	1627	1573	1530	1487	1444	1395	1347
		Temp Rise-1st stage°F	--	--	--	35.4	36.6	37.6	38.7	39.9	41.3	42.7
		Temp Rise-2nd stage°F	50.5	51.8	53.1	54.4	56.3	57.9	59.5	61.3	63.5	65.8
	ML	CFM	1447	1388	1338	1286	1241	1186	1137	1083	1029	983
		Temp Rise-1st stage°F	39.8	41.5	43.0	44.7	46.4	48.5	50.6	53.2	55.9	58.5
		Temp Rise-2nd stage°F	61.2	63.8	--	--	--	--	--	--	--	--
	L	CFM	1089	1021	946	883	820	751	685	625	565	520
		Temp Rise-1st stage°F	52.8	56.4	60.8	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
100D	H	CFM	2283	2239	2193	2143	2095	2049	1998	1947	1897	1847
		Temp Rise-1st stage°F	--	--	--	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	38.8	39.5	40.4	41.3	42.3	43.2	44.3	45.5	46.7	48.0
	MH	CFM	2086	2038	1988	1942	1889	1841	1792	1745	1695	1637
		Temp Rise-1st stage°F	--	--	--	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	42.4	43.5	44.5	45.6	46.9	48.1	49.4	50.7	52.3	54.1
	M	CFM	1813	1760	1711	1657	1609	1560	1506	1453	1402	1350
		Temp Rise-1st stage°F	--	--	--	--	35.8	36.9	38.2	39.6	41.0	42.6
		Temp Rise-2nd stage°F	48.8	50.3	51.8	53.4	55.0	56.8	58.8	60.9	63.1	--
	ML	CFM	1487	1417	1360	1296	1241	1183	1123	1064	1005	941
		Temp Rise-1st stage°F	38.7	40.6	42.3	44.4	46.4	48.7	51.3	54.1	57.2	61.1
		Temp Rise-2nd stage°F	59.5	62.5	--	--	--	--	--	--	--	--
	L	CFM	1122	1036	977	889	802	731	646	586	532	485
		Temp Rise-1st stage°F	55.6	58.9	64.7	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
120D	H	CFM	2290	2253	2213	2170	2127	2080	2031	1985	1937	1888
		Temp Rise-1st stage°F	--	--	--	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	46.4	47.2	48.0	49.0	50.0	51.1	52.3	53.5	54.9	56.3
	MH	CFM	2079	2037	1993	1950	1907	1856	1813	1767	1726	1675
		Temp Rise-1st stage°F	--	--	--	--	--	--	--	--	40.0	41.2
		Temp Rise-2nd stage°F	51.1	52.2	53.3	54.5	55.7	57.3	58.6	60.1	61.6	63.4
	M	CFM	1809	1764	1719	1668	1620	1572	1528	1487	1432	1364
		Temp Rise-1st stage°F	--	--	40.2	41.4	42.6	43.9	45.2	46.5	48.2	50.6
		Temp Rise-2nd stage°F	58.7	60.2	61.8	63.7	65.6	67.6	69.6	--	--	--
	ML	CFM	1489	1429	1373	1311	1265	1208	1137	1083	1032	972
		Temp Rise-1st stage°F	46.4	48.3	50.3	52.7	54.6	57.2	60.7	63.8	66.9	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--
	L	CFM	1123	1051	1352	899	814	741	688	605	551	507
		Temp Rise-1st stage°F	61.5	65.7	--	--	--	--	--	--	--	--
		Temp Rise-2nd stage°F	--	--	--	--	--	--	--	--	--	--

A filter is required for each return-air inlet. Airflow performance Included 3/4-in. (19 mm) washable filter media such as contained in factory-authorized accessory filter rack. To determine airflow performance with this filter, assume an additional 0.1 in.w.c available external static pressure.

COMBUSTION SYSTEM SPECIFICATIONS

Model			060A3S	060B4S	080B4S	080C4S	100C5S	120D5S
Max. Inlet Gas Press	Natural Gas	in.w.c	10.5	10.5	10.5	10.5	10.5	10.5
	Propane Gas (LP)	in.w.c	13	13	13	13	13	13
Min. Inlet Gas Press	Natural Gas	in.w.c	4.5	4.5	4.5	4.5	4.5	4.5
	Propane Gas (LP)	in.w.c	11	11	11	11	11	11
Natural Gas Manifold Pressure(High fire)		in.w.c	3.5	3.5	3.5	3.5	3.5	3.5
Natural Gas Manifold Pressure(Low fire)		in.w.c	1.6	1.6	1.6	1.6	1.6	1.6
Propane Gas Manifold Pressure(High fire)		in.w.c	10	10	10	10	10	10
Propane Gas Manifold Pressure(Low fire)		in.w.c	4	4	4	4	4	4
Natural Gas Factory Orifice (0-2000 feet)		#	45	45	45	45	45	45
Propane Gas (LP) Factory Orifice (0-2000 feet)		#	55	55	55	55	55	55
Gas Connection Size		in. NPT	1/2	1/2	1/2	1/2	1/2	1/2
Igniton Device			Hot surface					
Number of Burners		#	3	4	4	5	5	6
Flue Vent Diameter		Inch	2"/3"	2"/3"	2"/3"	2"/3"	2"/3"	3"
Safety Switch Settings								
Pressure Switch Factory Setting	High	in.w.c	1.1	1.1	1.1	1.1	1.1	1.1
Pressure Switch Factory Setting	Low	in.w.c	0.55	0.55	0.55	0.55	0.55	0.55
Rollout switch - resettable	Off/On	°F	300	300	300	300	300	300
Inlet High Temperature Limit switch - fixed	Off/On	°F	150/120	150/120	150/120	150/120	150/120	150/120

HIGH ALTITUDE DERATE ORIFICE SIZE CHART (NATURAL AND LP GAS*)U.S. INSTALLATION

Input Rate KBTU/H	Number of Burners	Elevation(Ft)									
		0-2000		2000-4000		4000-6000		6000-8000		8000-10000	
		Nat	LP	Nat	LP	Nat	LP	Nat	LP	Nat	LP
60	3	45	55	47	56	48	57	49	58	50	59
80	4	45	55	47	56	48	57	49	58	50	59
100	5	45	55	47	56	48	57	49	58	50	59
120	6	45	55	47	56	48	57	49	58	50	59

NOTE: *LP orifice based on 10in.w.c manifold pressure
The input to the furnace must be checked AFTER reorificing

HIGH ALTITUDE DERATE ORIFICE SIZE CHART (NATURAL AND LP GAS*)CANADA INSTALLATION

Input Rate KBTU/H	Number of Burners	Elevation(Ft)									
		0-2000		2000-4000		4000-6000		6000-8000		8000-10000	
		Nat	LP	Nat	LP	Nat	LP	Nat	LP	Nat	LP
60	3	45	55	47	56	48	57	49	58	50	59
80	4	45	55	47	56	48	57	49	58	50	59
100	5	45	55	47	56	48	57	49	58	50	59
120	6	45	55	47	56	48	57	49	58	50	59

NOTE: *LP orifice based on 10in.w.c manifold pressure
The input to the furnace must be checked AFTER reorificing
For Canada application, based on regulation that requires 10% derating between 2000-4500ft. Orifice change is NOT required up to 4500ft.

Comfort-Aire®

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SE Series

"This product complies with all California product labeling laws including, but not limited to, the Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65."

1900 Wellworth Ave., Jackson MI 49203 • 517.787.2100
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HEAT CONTROLLER
Confidence in any climate
Comfort-Aire®

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