



Air Conditioning & Heating

# GR9S80 / GD9S80

HEATING INPUT : 40,000–120,000 BTU/H

*SINGLE-STAGE, MULTI-SPEED ECM,  
MULTI-POSITION GAS FURNACE  
80% AFUE*



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## R32

### Standard Features

- Heavy-duty aluminized-steel dual-diameter tubular heat exchanger
- Single-stage gas valve
- Durable Hot-surface igniter
- Quiet, single-speed draft induced
- Self-diagnostic control board
- Color-coded low-voltage terminals
- Multi-speed ECM blower motor
- California Low NOx emissions models available
- Can not be installed in California's South Coast AirQuality Management District (SCAQMD) and San Joaquin Valley Air Pollution Control District (SJVAPCD).
- AHRI Certified; ETL Listed

### Cabinet Features

- Installation:
  - GR9S80 -upflow, horizontal left or right
  - GD9S80- downflow, horizontal left or right
- Convenient left or right connection for gas and electrical service
- Heavy-gauge steel cabinet with durable baked-enamel finish
- Foil faced insulated heat exchanger

**LIFETIME**  
HEAT EXCHANGER  
LIMITED WARRANTY\*

**10 YEAR**  
PARTS LIMITED  
WARRANTY\*



**AHRI CERTIFIED**  
www.ahrincertified.org

COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =

COMPANY WITH  
ENVIRONMENTAL SYSTEM  
CERTIFIED BY DNV GL  
= ISO 14001 =



\* Complete warranty details available from your local dealer or at [www.goodmanmfg.com](http://www.goodmanmfg.com). To receive the Lifetime Heat Exchanger Limited Warranty (good for as long as you own your home) and 10-Year Parts Limited Warranty, online registration must be completed within 60 days of installation. Online registration is not required in California or Québec. The duration of warranty coverage in Texas and Florida differs in some cases.

	G	R	9	S	80	060	3	B	N	**	
	1	2	3	4	5,6	7,8,9	10	11	12	13,14	
<b>BRAND</b>											<b>ENGINEERING</b>
G - Goodman® Brand											Major/Minor Revisions A - Initial Release B - 1st Revision
<b>CONFIGURATION</b>											<b>NOx</b>
R - Upflow/Horizontal											N = > 40 NG/J NOx
D - Downflow/Horizontal											X = < 40 NG/J NOx
											U = < 14NG/J NOx
<b>MOTOR</b>											<b>CABINET WIDTH</b>
9 - Nine Speed ECM											A - 14"      C - 21"
											B - 17½"      D - 24½"
<b>GAS VALVE</b>											<b>MAXIMUM CFM</b>
S - Single Stage											3 - 1200 CFM      4 - 1600 CFM
T - Two Stage											5 - 2000 CFM
<b>AFUE</b>											<b>MBTU/h</b>
80 - 80% AFUE											030 - 30,000 BTU/h      080 - 80,000 BTU/hz
96 - 96% AFUE											040 - 40,000 BTU/h      100 - 100,000 BTU/h
											060 - 60,000 BTU/h      120 - 120,000 BTU/h

	GR9S80 0403A*	GR9S80 0603A*	GR9S80 0603B*	GR9S80 0604B*	GR9S80 0803B*	GR9S80 0804B*	GR9S80 0804C*	GR9S80 0805C*	GR9S80 1005C*	GR9S80 1205D*
<b>HEATING CAPACITY</b>										
Input <sup>1</sup>	40,000	60,000	60,000	60,000	80,000	80,000	80,000	80,000	100,000	120,000
Natural Gas Output <sup>1</sup>	32,000	48,000	48,000	48,000	64,000	64,000	64,000	64,000	80,000	96,000
LP Gas Output	32,000	48,000	48,000	48,000	64,000	64,000	64,000	64,000	80,000	96,000
AFUE <sup>2</sup>	80	80	80	80	80	80	80	80	80	80
Available AC @ 0.5" ESP	3	3	3	4	3	4	4	5	5	5
Temperature Rise Range (°F)	25-55	20-50	20-50	20-50	35-65	35-65	35-65	35-65	35-65	40-70
<b>CIRCULATOR BLOWER</b>										
Size (D x W)	10" x 6"	10" x 6"	10" x 8"	10" x 8"	10" x 8"	10" x 8"	10" x 10"	10" x 10"	10" x 10"	10" x 10"
Horsepower @1075 RPM	0.5	0.5	0.5	0.75	0.5	0.75	0.75	0.75	0.75	1
Speed	9	9	9	9	9	9	9	9	9	9
Vent Diameter <sup>3</sup>	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
No. of Burners	2	3	3	3	4	4	4	4	5	6
<b>ELECTRICAL DATA</b>										
Min. Circuit Ampacity <sup>4</sup>	7.7	7.7	7.7	11.3	7.7	11.3	11.3	11.3	11.3	14.3
Max. Overcurrent Device (amps) <sup>5</sup>	15	15	15	15	15	15	15	15	15	25
<b>SHIP WEIGHT (LBS)</b>	86	90	100	108	116	120	132	132	132	132

<sup>1</sup> Natural Gas BTU/h; for altitudes 0-4500' above sea level, reduce input rating by 4% for each 1000' above 4500' altitude.

<sup>2</sup> DOE AFUE based upon Isolated Combustion System (ICS)

<sup>3</sup> Vent and combustion air diameters may vary depending upon vent length. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ANSI Z223.1 (in the USA) and the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2 (in Canada).

<sup>4</sup> Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

<sup>5</sup> Maximum Overcurrent Protection Device refers to maximum recommended fuse or circuit breaker size. May use fuses or HACR-type circuit breakers of the same size as noted.

#### NOTES

- All furnaces are manufactured for use on 115 VAC, 60 Hz, single-phase electrical supply.
- Gas Service Connection ½" FPT
- Important: Size fuses and wires properly and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.

	GD9S80 0403A*	GD9S80 0603A*	GD9S80 0804B*	GD9S80 0805C*	GD9S80 1005C*
<b>HEATING CAPACITY</b>					
Input <sup>1</sup>	40,000	60,000	80,000	80,000	100,000
Natural Gas Output <sup>1</sup>	32,000	48,000	64,000	64,000	80,000
LP Gas Output	32,000	48,000	64,000	64,000	80,000
AFUE <sup>2</sup>	80	80	80	80	80
Available AC @ 0.5" ESP	3	3	4	5	5
Temperature Rise Range (°F)	25-55	30-60	35-65	35-65	40-70
<b>CIRCULATOR BLOWER</b>					
Size (D x W)	10" X 6"	10" X 6"	10" X 8"	10" X 10"	10" X 10"
Horsepower @1075 RPM	1/2	1/2	3/4	1	1
Speed	9	9	9	9	9
Vent Diameter <sup>3</sup>	4"	4"	4"	4"	4"
No. of Burners	2	3	4	4	5
<b>ELECTRICAL DATA</b>					
Min. Circuit Ampacity <sup>4</sup>	7.7	7.7	11.3	14.3	14.3
Max. Overcurrent Device (amps) <sup>5</sup>	15	15	15	25	25
<b>SHIP WEIGHT (LBS)</b>	90	94	107	115	115

<sup>1</sup> Natural Gas BTU/h; for altitudes 0-4500' above sea level, reduce input rating by 4% for each 1000' above 4500' altitude.

<sup>2</sup> DOE AFUE based upon Isolated Combustion System (ICS)

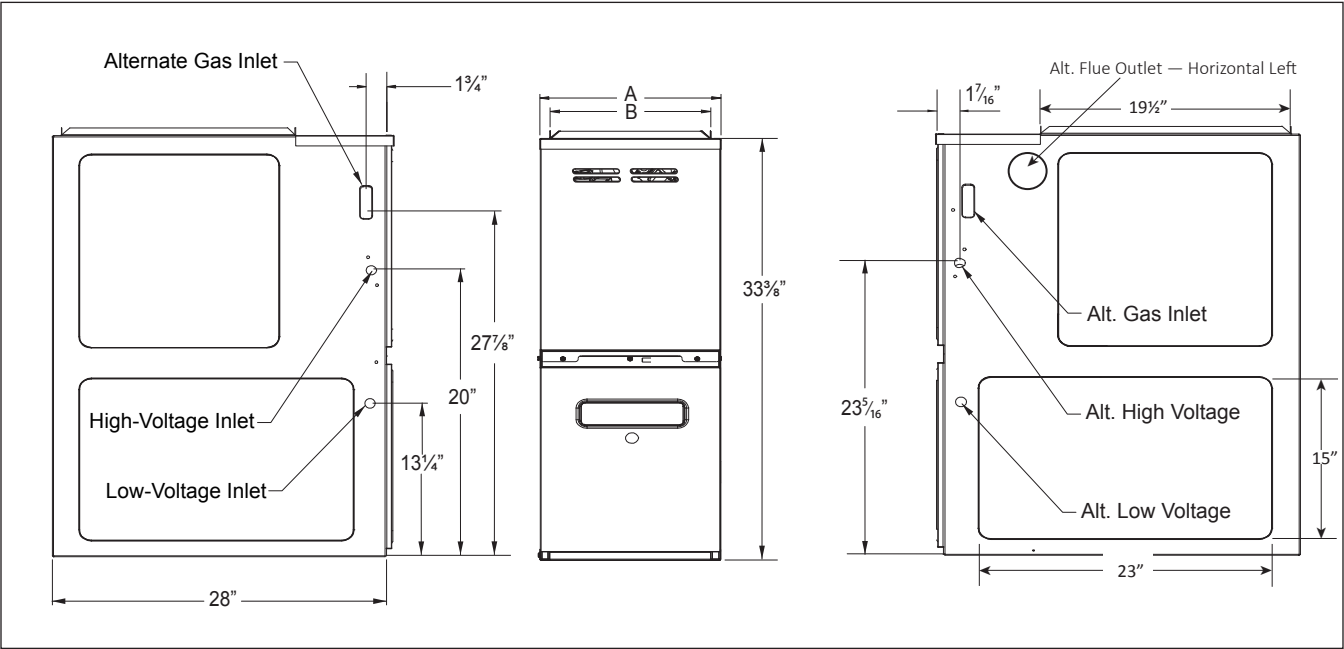
<sup>3</sup> Vent and combustion air diameters may vary depending upon vent length. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ANSI Z223.1 (in the USA) and the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2 (in Canada).

<sup>4</sup> Minimum Circuit Ampacity = (1.25 x Circulator Blower Amps) + ID Blower amps. Wire size should be determined in accordance with National Electrical Codes. Extensive wire runs will require larger wire sizes.

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#### NOTES

- All furnaces are manufactured for use on 115 VAC, 60 Hz, single-phase electrical supply.
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MODEL	A	B
GR9S800403A*	14"	12½"
GR9S800603A*	14"	12½"
GR9S800603B*	17½"	16"
GR9S800604B*	17½"	16"
GR9S800803B*	17½"	16"

MODEL	A	B
GR9S800804B*	17½"	16"
GR9S800804C*	21"	19½"
GR9S800805C*	21"	19½"
GR9S801005C*	21"	19½"
GR9S801205D*	24½"	23"

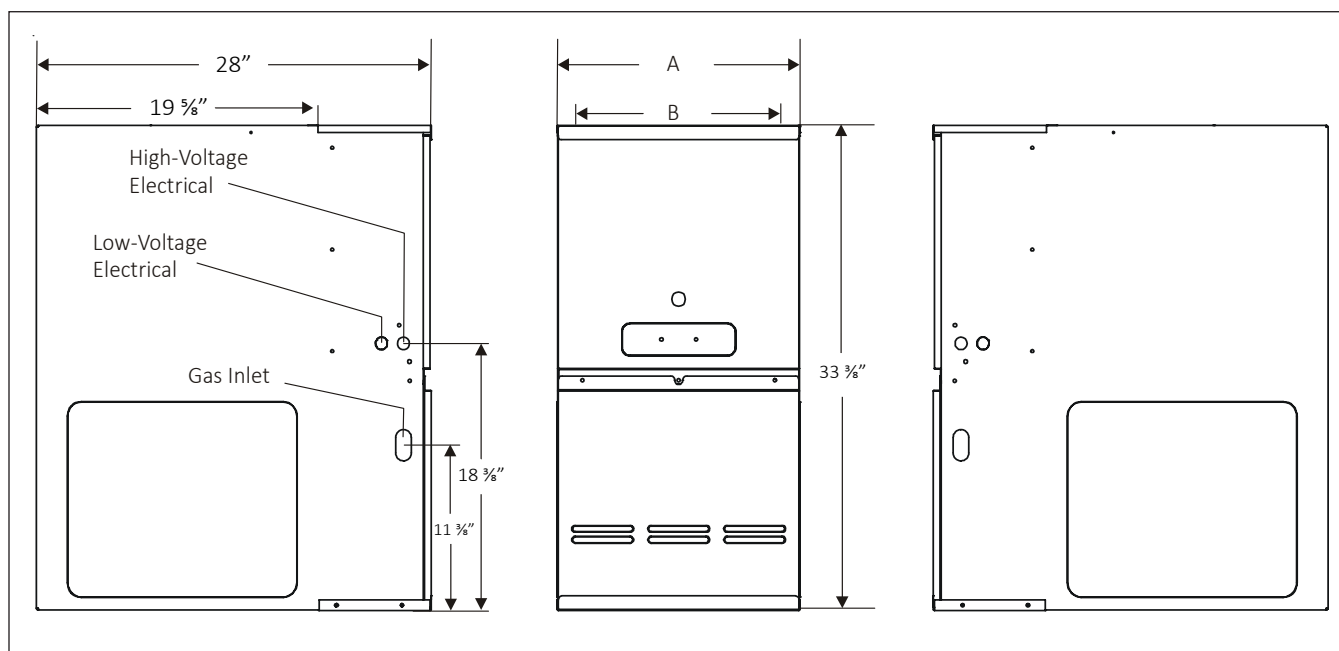
- NOTES**
- Line voltage wiring can enter through the right or left side of furnace.  
Low-voltage wiring can enter through the right or left side of furnace.
  - Conversion kits for high-altitude (4500+ ft) natural gas operation are available.  
Contact your Goodman distributor or dealer for details.
  - Installer must supply the following gas line fittings, according to which entrance is used:  
Left: One 90° street elbow; one 2½" pipe nipple; one 90° elbow; straight pipe; one ground joint union  
Right: Straight pipe to reach gas valve

**MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS**

SIDES	REAR	FRONT <sup>1</sup>	VENT <sup>2</sup>		TOP
			SW	B	
1"	0"	3"	6"	1"	1"

<sup>1</sup> 24" clearance for serviceability recommended.

<sup>2</sup> Single Wall Vent (SW) to be used only as a connector. Refer to the latest editions of the National Fuel Gas Code NFPA 54/ ANSI Z223.1 (in the USA) and the Canada National Standard of Canada, CAN/CSA B149.1 and CAN/CSA B142.2 (in Canada).



MODEL	A	B	NON-COMBUSTIBLE FLOOR BASE
GD9S800403A*	14"	12 1/2"	SBT14
GD9S800603A*	14"	12 1/2"	SBT14
GD9S800804B*	17 1/2"	16"	SBT17
GD9S800805C*	21"	19 1/2"	SBT17
GD9S801005C*	21"	19 1/2"	SBT21

**NOTES**

- Line voltage wiring can enter through the right or left side of furnace. Low-voltage wiring can enter through the right or left side of furnace.
- Conversion kits for high-altitude (4500+ ft) natural gas operation are available. Contact your Goodman distributor or dealer for details.

**MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS**

SIDES	REAR	FRONT <sup>1</sup>	VENT <sup>2</sup>		TOP
			SW	B	
1"	0"	3"	6"	1"	1"

<sup>1</sup> 24" clearance for serviceability recommended.

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MODEL	THERMOSTAT CALL	TAP #	EXTERNAL STATIC PRESSURE (INCHES WATER COLUMN)											
			0.1	0.2	0.3	0.4	0.5		0.6		0.7		0.8	
			CFM	CFM	CFM	CFM	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS
GR9S80 0403A*	Y/Y1, Y2, G	F01	658	585	545	495	444	83	390	88	332	94	151	49
		F02	749	697	652	607	554	102	509	108	459	113	406	120
		F03	925	881	840	800	760	150	721	157	681	162	645	169
		F04^	882	841	800	760	719	138	678	144	641	151	602	157
		F05	1330	1295	1273	1251	1223	358	1195	366	1168	375	1142	385
		F06	1130	1090	1059	1022	991	230	957	237	926	246	895	255
		F07	1158	1113	1090	1057	1024	247	996	258	964	264	935	271
		F08	1270	1235	1208	1179	1147	304	1119	312	1088	322	1060	329
		F09	1417	1380	1359	1336	1314	408	1288	419	1261	430	1238	440
GR9S80 0603A*	Y/Y1, Y2, G	F01	659	599	542	490	437	89	383	95	320	102	N/A	N/A
		F02	1268	1221	1188	1154	1122	336	1091	344	1060	353	1029	361
		F03	1087	1044	1008	973	938	234	905	242	871	249	841	257
		F04^	1118	1070	1033	997	963	243	929	251	896	260	865	267
		F05	1308	1262	1224	1197	1167	332	1141	341	1117	352	1089	361
		F06	868	823	780	741	699	148	662	154	624	160	584	167
		F07	922	877	835	795	757	165	718	173	679	180	642	187
		F08	1382	1341	1311	1291	1263	435	1234	443	1206	453	1177	464
		F09	1492	1448	1409	1381	1354	460	1332	470	1310	481	1288	491
GR9S80 0603B*	Y/Y1, Y2, G	F01	720	660	614	542	468	81	413	87	359	94	313	99
		F02	1289	1260	1232	1194	1161	257	1125	266	1087	275	1073	286
		F03	1125	1089	1052	1013	973	184	947	196	909	202	863	213
		F04^	1252	1198	1153	1110	1069	230	1028	239	990	247	953	256
		F05	922	872	830	786	736	122	683	130	616	139	565	146
		F06	1146	1113	1076	1039	1002	192	969	204	933	212	891	222
		F07	1370	1345	1317	1286	1260	299	1224	313	1187	320	1168	333
		F08	1413	1386	1360	1330	1302	317	1270	333	1242	345	1211	354
		F09	1544	1500	1459	1419	1387	379	1349	390	1317	402	1286	405
GR9S80 0604B*	Y/Y1, Y2, G	F01	764	695	630	559	485	95	415	102	358	109	N/A	N/A
		F02	1287	1235	1191	1147	1104	244	1062	252	1020	263	979	272
		F03	1339	1301	1258	1217	1174	270	1131	279	1090	289	1048	299
		F04^	1396	1346	1298	1257	1217	289	1175	299	1135	308	1098	319
		F05	1185	1135	1088	1040	992	203	947	211	901	219	855	227
		F06	1500	1460	1420	1360	1380	337	1294	353	1256	365	1219	380
		F07	1591	1539	1493	1454	1416	391	1379	402	1347	412	1311	424
		F08	1675	1622	1583	1545	1510	447	1474	459	1440	473	1402	482
		F09	1790	1741	1701	1668	1631	531	1599	546	1567	560	1532	570
GR9S80 0803B*	Y/Y1, Y2, G	F01	710	646	580	515	432	79	367	85	314	90	274	95
		F02	1298	1255	1216	1178	1140	242	1102	253	1067	263	1028	273
		F03	1209	1166	1124	1083	1045	208	1005	217	964	227	923	236
		F04^	1138	1091	1045	1001	959	181	920	188	876	197	832	208
		F05	1391	1352	1314	1278	1241	288	1209	298	1175	311	1140	242
		F06	977	931	880	836	785	135	734	142	683	151	626	158
		F07	1036	985	940	895	848	150	799	158	751	167	705	175
		F08	1456	1414	1376	1341	1302	315	1270	327	1238	337	1200	352
		F09	1533	1488	1452	1415	1383	360	1350	370	1317	381	1286	393

See note on page 8

GR9S80 FAN & COOLING AIRFLOW DATA (CONT.)

MODEL	THERMOSTAT CALL	TAP #	EXTERNAL STATIC PRESSURE (INCHES WATER COLUMN)											
			0.1	0.2	0.3	0.4	0.5		0.6		0.7		0.8	
			CFM	CFM	CFM	CFM	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS
GR9S80 0804B*	Y/Y1, Y2, G	F01	841	657	595	522	439	90	367	97	315	102	N/A	N/A
		F02	1141	1089	1045	1001	958	192	914	200	869	207	823	214
		F03	1311	1267	1226	1189	1150	253	1114	264	1072	275	1034	283
		F04^	1395	1347	1309	1270	1233	291	1199	302	1164	312	1125	323
		F05	1490	1447	1407	1373	1336	339	1303	351	1269	360	1237	373
		F06	1553	1510	1469	1435	1401	372	1368	384	1335	395	1300	408
		F07	1593	1548	1508	1474	1440	392	1409	405	1376	415	1343	429
		F08	1776	1735	1695	1661	1628	514	1601	529	1570	542	1542	555
		F09	1853	1812	1773	1739	1708	569	1679	585	1650	599	1623	614
GR9S80 0804C*	Y/Y1, Y2, G	F01	831	750	671	588	501	98	405	106	348	112	300	117
		F02	1214	1158	1103	1045	989	184	936	194	883	205	823	215
		F03	1303	1249	1191	1136	1081	212	1028	223	974	234	928	248
		F04^	1426	1375	1324	1277	1229	259	1177	270	1124	283	1078	295
		F05	1518	1465	1418	1372	1328	293	1284	305	1237	318	1195	330
		F06	1588	1539	1494	1447	1401	330	1358	349	1313	360	1267	373
		F07	1710	1666	1632	1595	1554	397	1512	412	1473	427	1431	440
		F08	1785	1751	1717	1675	1639	446	1596	453	1557	472	1516	483
		F09	1845	1805	1771	1733	1695	476	1655	488	1618	507	1576	521
GR9S80 0805C*	Y/Y1, Y2, G	F01	837	752	671	576	501	100	426	107	361	113	315	119
		F02	1316	1270	1218	1166	1114	217	1061	227	1000	238	962	251
		F03	1353	1323	1286	1235	1183	242	1131	253	1085	263	1040	275
		F04^	1587	1544	1506	1459	1416	333	1372	345	1323	358	1281	369
		F05	1731	1673	1632	1587	1546	398	1506	414	1463	426	1421	440
		F06	1794	1744	1709	1671	1632	444	1591	459	1555	474	1513	489
		F07	1861	1805	1761	1720	1681	481	1642	496	1603	509	1565	524
		F08	1910	1873	1839	1798	1761	525	1723	545	1686	559	1648	574
		F09	2110	2055	2035	2003	1973	700	1946	724	1907	731	1890	750
GR9S80 1005C*	Y/Y1, Y2, G	F01	802	724	637	551	468	87	389	95	342	100	294	106
		F02	1405	1356	1308	1262	1210	241	1182	0	1155	252	1102	264
		F03	1574	1531	1484	1440	1392	320	1357	331	1306	342	1256	355
		F04^	1619	1575	1526	1489	1446	336	1404	352	1355	361	1313	374
		F05	1688	1641	1600	1557	1513	367	1477	383	1428	398	1381	405
		F06	1811	1769	1730	1686	1649	443	1610	456	1572	468	1525	482
		F07	1857	1812	1774	1733	1697	475	1662	489	1622	505	1586	518
		F08	1892	1850	1805	1774	1735	496	1692	511	1658	523	1621	537
		F09	2116	2073	2039	2005	1981	675	1945	688	1909	707	1879	728
GR9S80 1205D*	Y/Y1, Y2, G	F01	851	774	692	615	535	105	470	111	411	118	359	124
		F02	1677	1629	1583	1540	1498	408	1449	422	1399	436	1349	450
		F03	1537	1489	1444	1404	1365	335	1322	348	1272	360	1211	372
		F04^	1416	1365	1315	1267	1220	277	1163	285	1106	296	1048	306
		F05	1154	1098	1043	983	932	177	874	187	819	196	755	205
		F06	1806	1764	1729	1688	1654	489	1615	503	1578	519	1535	535
		F07	1869	1816	1773	1731	1693	521	1661	535	1629	548	1589	560
		F08	1947	1903	1865	1833	1802	604	1769	621	1743	640	1708	654
		F09	2107	2066	2030	1996	1963	734	1932	753	1899	772	1867	788

Note: ^ DEFAULT SPEED

RECOMMENDED AIRFLOW SPEEDS FOR CONNECTION WITH 2 STAGE OUTDOOR MODELS		
FURNACE MODEL	Y2	Y1
GR9S800805C*	F08	F02
GR9S801205D*	F06	F05



HEATING AIFLOW											
MODEL	THERMOSTAT CALL	TAP #	EXTERNAL STATIC PRESSURE, (INCHES WATER COLUMN)								
			0.1		0.2		0.3		0.4		0.5
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM
GR9S80 0403A*	W/W1	F01^^	658	N/A	585	N/A	545	N/A	495	N/A	444
		F02^	749	40	697	42	652	45	607	49	554
		F03	925	32	881	34	840	35	800	37	760
		F04	882	34	841	35	800	37	760	39	719
GR9S80 0603A*	W/W1	F01^^	659	N/A	599	N/A	542	N/A	490	N/A	437
		F02^	1268	35	1221	36	1188	37	1154	38	1122
		F03	1087	41	1044	43	1008	44	973	46	938
		F04	1118	40	1070	42	1033	43	997	45	963
GR9S80 0603B*	W/W1	F01^^	720	N/A	660	N/A	614	N/A	542	N/A	468
		F02^	1289	34	1260	35	1232	36	1194	37	1161
		F03	1125	40	1089	41	1052	42	1013	44	973
		F04	1252	36	1198	37	1153	39	1110	40	1069
GR9S80 0604B*	W/W1	F01^^	764	N/A	695	N/A	630	N/A	559	N/A	485
		F02^	1287	35	1235	36	1191	37	1147	39	1104
		F03	1339	33	1301	34	1258	35	1217	37	1174
		F04	1396	32	1346	33	1298	34	1257	35	1217
GR9S80 0803B*	W/W1	F01^^	710	N/A	646	N/A	580	N/A	515	N/A	432
		F02^	1298	46	1255	47	1216	49	1178	50	1140
		F03	1209	49	1166	51	1124	53	1083	55	1045
		F04	1138	52	1091	54	1045	57	1001	59	959
GR9S80 0804B*	W/W1	F01^^	841	N/A	657	N/A	595	N/A	522	N/A	439
		F02^	1141	52	1089	54	1045	57	1001	59	958
		F03	1311	45	1267	47	1226	48	1189	50	1150
		F04	1395	42	1347	44	1309	45	1270	47	1233
GR9S80 0804C*	W/W1	F01^^	831	N/A	750	N/A	671	N/A	588	N/A	501
		F02^	1214	49	1158	51	1103	54	1045	57	989
		F03	1303	45	1249	47	1191	50	1136	52	1081
		F04	1426	42	1375	43	1324	45	1277	46	1229
GR9S80 0805C*	W/W1	F01^^	837	N/A	752	N/A	671	N/A	576	N/A	501
		F02^	1316	45	1270	47	1218	49	1166	51	1114
		F03	1353	44	1323	45	1286	46	1235	48	1183
		F04	1587	37	1544	38	1506	39	1459	41	1416
GR9S80 1005C*	W/W1	F01^^	802	N/A	724	N/A	637	N/A	551	N/A	468
		F02^	1405	53	1356	55	1308	57	1262	59	1210
		F03	1574	47	1531	48	1484	50	1440	51	1392
		F04	1619	46	1575	47	1526	49	1489	50	1446
GR9S80 1205D*	W/W1	F01^^	851	N/A	774	N/A	692	N/A	615	N/A	535
		F02^	1677	53	1629	55	1583	56	1540	58	1498
		F03	1537	58	1489	60	1444	62	1404	63	1365
		F04^^	1416	N/A	1365	N/A	1315	N/A	1267	N/A	1220

**Note:** ^ DEFAULT SPEED

^^NOT RECOMMENDED FOR HEATING

# GD9S80 FAN & COOLING AIRFLOW DATA

MODEL	THERMOSTAT CALL	TAP #	EXTERNAL STATIC PRESSURE (INCHES WATER COLUMN)											
			0.1	0.2	0.3	0.4	0.5		0.6		0.7		0.8	
			CFM	CFM	CFM	CFM	CFM	WATTS	CFM	WATTS	CFM	WATTS	CFM	WATTS
GD9S80 0403A*	Y/Y1, Y2, G	F01	712	663	610	559	514	86	462	94	395	102	337	108
		F02	1120	1081	1053	1022	990	216	955	225	918	231	887	240
		F03	929	891	858	815	772	142	737	150	699	157	664	165
		F04^	1073	1031	1003	969	922	191	891	200	854	207	822	217
		F05	1212	1198	1161	1138	1103	262	1076	268	1037	280	1007	288
		F06	871	830	789	743	702	123	665	131	628	139	583	146
		F07	825	784	741	694	650	114	609	120	563	126	520	133
		F08	1274	1252	1220	1195	1169	298	1145	307	1110	315	1084	324
		F09	1362	1342	1307	1273	1252	353	1237	364	1211	378	1185	385
GD9S80 0603A*	Y/Y1, Y2, G	F01	706	655	604	555	505	87	455	92	395	98	328	105
		F02	1035	991	951	913	876	182	844	189	807	197	770	203
		F03	932	887	844	806	767	145	728	152	689	158	651	164
		F04^	897	851	808	764	725	134	686	140	646	146	603	151
		F05	1123	1077	1041	1006	973	218	941	227	907	235	875	242
		F06	1155	1113	1074	1039	1006	233	974	241	945	251	913	258
		F07	1255	1214	1181	1147	1116	286	1087	296	1056	304	1028	313
		F08	1388	1331	1298	1266	1235	355	1207	367	1179	375	1151	387
		F09	1421	1380	1348	1318	1289	390	1262	401	1233	411	1207	421
GD9S80 0804B*	Y/Y1, Y2, G	F01	760	697	636	569	481	86	402	92	349	98	300	103
		F02	1286	1238	1196	1157	1117	232	1077	240	1036	250	998	259
		F03	1393	1348	1308	1270	1230	277	1196	289	1158	295	1123	306
		F04^	1459	1414	1371	1336	1297	310	1264	321	1229	333	1193	342
		F05	1753	1713	1677	1642	1611	493	1576	508	1549	524	1518	533
		F06	1309	1261	1218	1182	1142	239	1103	248	1064	258	1025	268
		F07	1580	1534	1495	1459	1429	376	1390	388	1356	394	1324	409
		F08	1523	1483	1438	1403	1370	351	1336	355	1299	366	1266	377
		F09	1643	1599	1562	1525	1491	418	1462	430	1431	444	1394	450
GD9S80 0805C*	Y/Y1, Y2, G	F01	1022	813	674	585	511	101	431	109	334	119	282	124
		F02	1453	1407	1332	1259	1190	244	1143	261	1064	273	1003	287
		F03	1176	1105	1020	935	864	163	797	173	729	183	673	194
		F04^	1710	1660	1613	1560	1505	344	1424	359	1353	375	1296	392
		F05	1843	1786	1747	1690	1643	420	1575	435	1497	445	1435	459
		F06	1859	1819	1779	1734	1691	432	1641	450	1593	465	1520	481
		F07	2028	1982	1946	1907	1861	536	1814	555	1749	564	1683	588
		F08	2096	2045	2006	1974	1927	585	1882	599	1818	611	1765	629
		F09	2203	2170	2138	2113	2074	689	2032	705	1990	723	1948	737
GD9S80 1005C*	Y/Y1, Y2, G	F01	956	777	675	587	468	100	377	107	324	112	296	117
		F02	1460	1404	1350	1299	1251	252	1203	264	1150	276	1098	287
		F03	1561	1499	1441	1385	1336	290	1289	302	1243	314	1197	325
		F04^	1628	1571	1521	1472	1425	317	1380	331	1337	343	1291	356
		F05	1714	1659	1611	1564	1519	360	1473	371	1432	387	1387	397
		F06	1833	1784	1735	1688	1645	420	1605	436	1562	450	1520	462
		F07	1899	1853	1804	1761	1720	465	1681	479	1640	494	1602	510
		F08	1926	1894	1849	1807	1764	487	1720	497	1683	514	1642	527
		F09	2222	2174	2132	2090	2053	688	2013	702	1976	719	1944	737

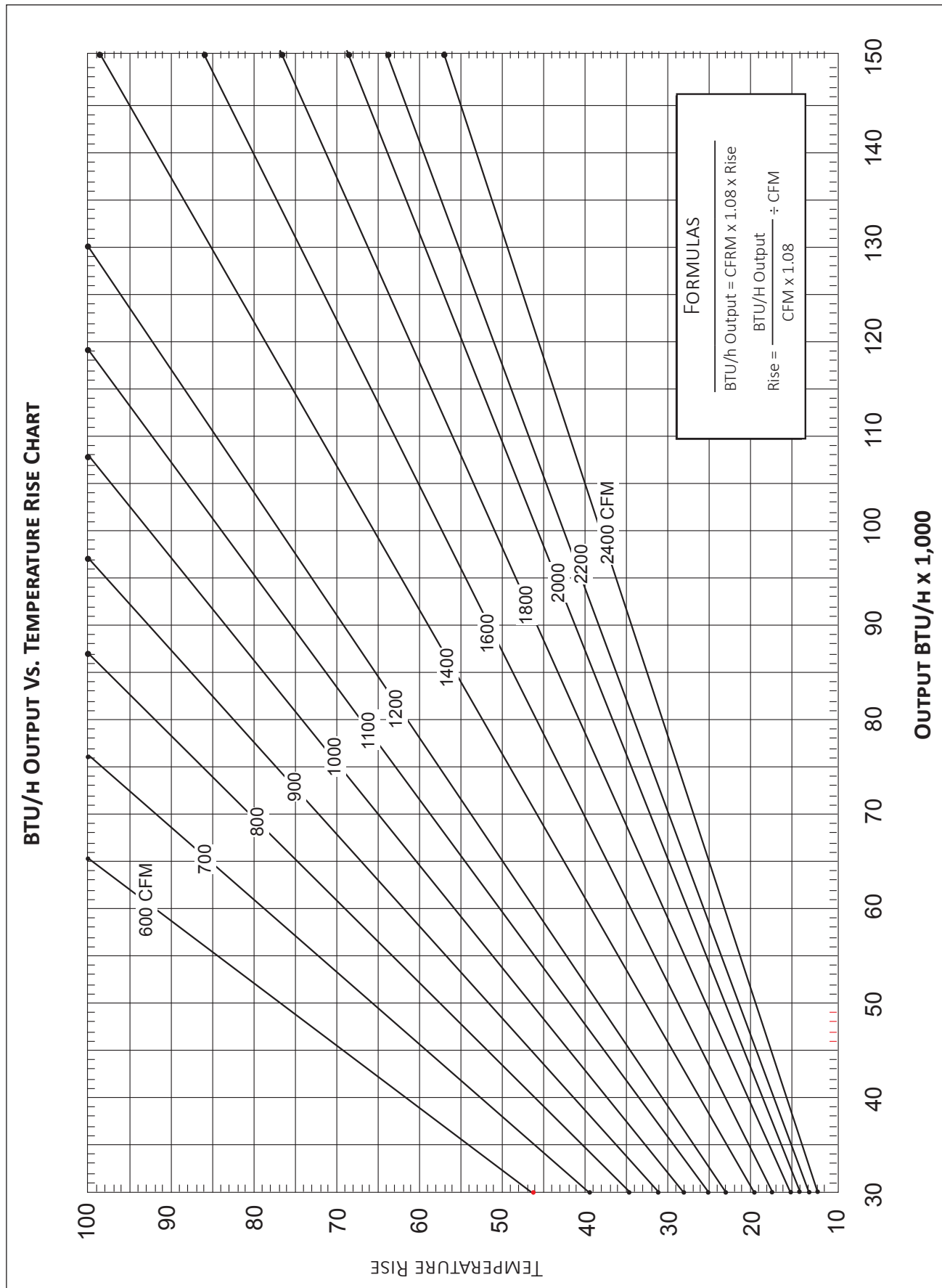
Note: ^ DEFAULT SPEED

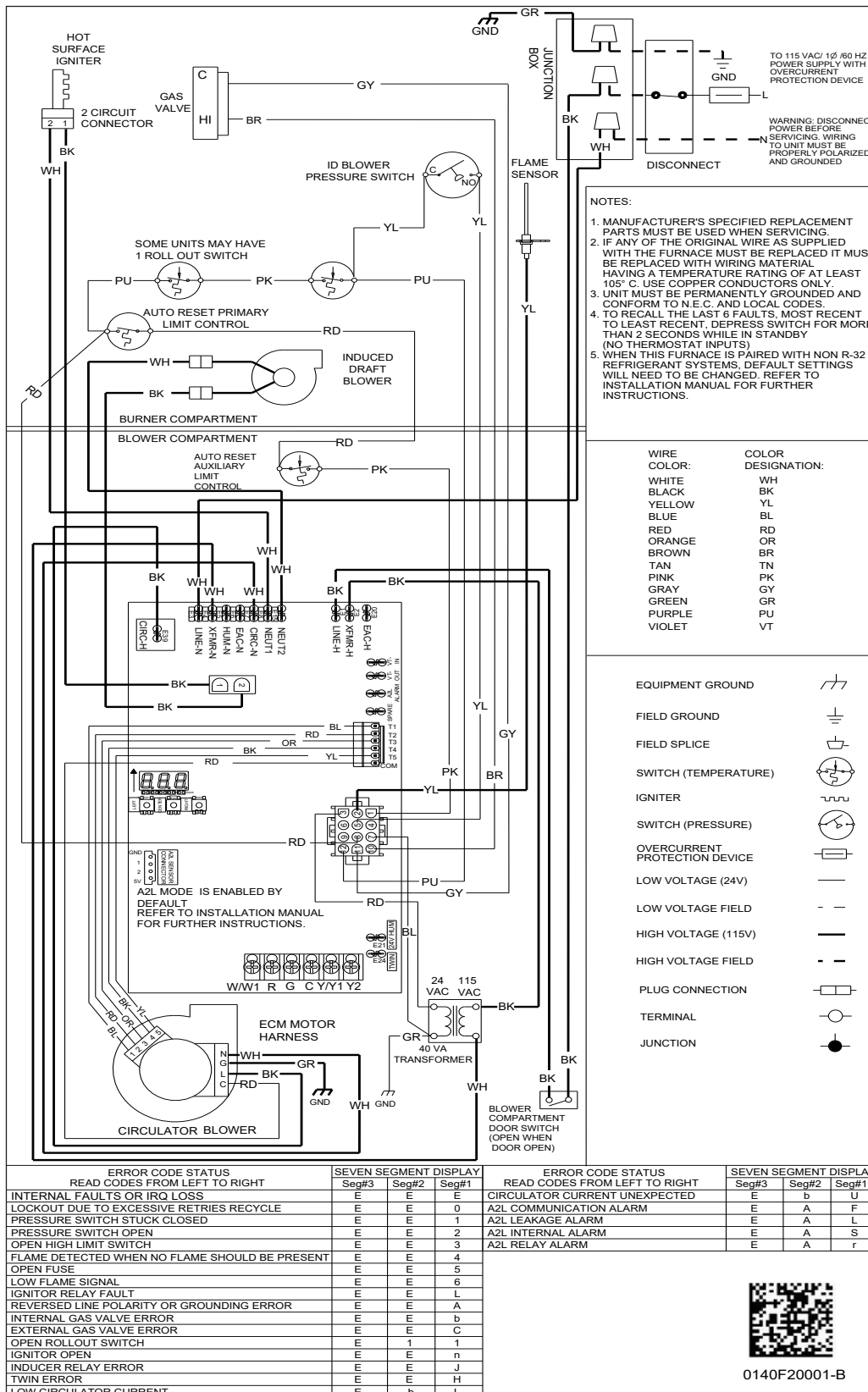
RECOMMENDED AIRFLOW SPEEDS FOR CONNECTION WITH 2 STAGE OUTDOOR MODELS		
FURNACE MODEL	Y2	Y1
*D9S800805C*	F08	F02

HEATING AIFLOW											
MODEL	THERMOSTAT CALL	TAP #	EXTERNAL STATIC PRESSURE, (INCHES WATER COLUMN)								
			0.1		0.2		0.3		0.4		0.5
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM
GD9S80 0403A*	W/W1	F01^^	712	N/A	663	N/A	610	N/A	559	N/A	514
		F02^	1120	26	1081	27	1053	28	1022	29	990
		F03	929	32	891	33	858	35	815	36	772
		F04	1073	28	1031	29	1003	30	969	31	922
GD9S80 0603A*	W/W1	F01^^	706	N/A	655	N/A	604	N/A	555	N/A	505
		F02^	1035	43	991	45	951	47	913	49	876
		F03	932	48	887	50	844	53	806	55	767
		F04^^	897	N/A	851	N/A	808	N/A	764	N/A	725
GD9S80 0804B*	W/W1	F01^^	760	N/A	697	N/A	636	N/A	569	N/A	481
		F02^	1286	46	1238	48	1196	50	1157	51	1117
		F03	1393	43	1348	44	1308	45	1270	47	1230
		F04	1459	41	1414	42	1371	43	1336	44	1297
GD9S80 0805C*	W/W1	F01^^	1022	N/A	813	N/A	674	N/A	585	N/A	511
		F02^	1453	41	1407	42	1332	45	1259	47	1190
		F03^^	1176	N/A	1105	N/A	1020	N/A	935	N/A	864
		F04	1710	35	1660	36	1613	37	1560	38	1505
GD9S80 1005C*	W/W1	F01^^	956	N/A	777	N/A	675	N/A	587	N/A	468
		F02^	1460	51	1404	53	1350	55	1299	57	1251
		F03	1561	47	1499	49	1441	51	1385	53	1336
		F04	1628	46	1571	47	1521	49	1472	50	1425

**Note:** ^ DEFAULT SPEED

^^NOT RECOMMENDED FOR HEATING





Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

**WARNING** High Voltage: Disconnect all power before servicing or installing this unit. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.

MODEL	DESCRIPTION	GR9S80 0403A*	GR9S80 0603A*	GR9S80 0603B*	GR9S80 0604B*	GR9S80 0803B*	GR9S80 0804B*	GR9S80 0804C*	GR9S80 0805C*	GR9S80 1005C*	GR9S80 1205D*
AFE18-60A	Fossil Fuel (Dual Fuel) Kit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HANG20	High-Altitude Natural Gas Kit	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LPM-31	LP Conversion Kits W/ LP Switch	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MVK-01 *	Masonry Vent Kit	✓	✓	✓	✓	✓	✓	✓	✓	✓	—
MVK-02 *	Masonry Vent Kit (for 120k model only)	—	—	—	—	—	—	—	—	—	✓

\* Upflow applications only

MODEL	DESCRIPTION	GD9S80 0403A*B	GD9S80 0603A*B	GD9S80 0804B*B	GD9S80 0805C*	GD9S80 1005C*B
SBT14	Downflow Sub-Base 14"	✓	✓	—	—	—
SBT17	Downflow Sub-Base 17.5"	—	—	✓	—	—
SBT21	Downflow Sub-Base 21"	—	—	—	✓	✓
AFE18-60A	Fossil Fuel (Dual Fuel) Kit	✓	✓	✓	✓	✓
HANG20	High-Altitude Natural Gas Kit	✓	✓	✓	✓	✓
LPM-31	LP Conversion Kits W/ LP Switch	✓	✓	✓	✓	✓

### MINIMUM FILTER SIZES

MODEL #	GR9S80 0403A*	GR9S80 0603A*	GR9S80 0604B*	GR9S80 0804B*	GR9S80 0805C*	GR9S80 81005C*	GR9S80 1205D*
Filter Size (in <sup>2</sup> )	(1) 16 x 25 (Side) or (1) 14 x 24 (Bottom)		(1) 16 x 25 (Side or Bottom)		(1) 16 x 25 (Side or Bottom) <sup>1</sup>	(2) 16 x 25 (Side) or (1) 20 x 25 (Bottom)	(2) 16 x 25 (Side) or (1) 24 x 24 (Bottom)

MODEL #	GD9S80 0403A*	GD9S80 0603A*	GD9S80 0804B*	GD9S80 0805C*	GD9S80 1005C*
Filter Size (in <sup>2</sup> )	(2) 10 x 20 or (1) 14 x 25 (Top Return)		(2) 14 x 20 or (1) 16 x 25 (Top Return)	(2) 14 x 20 or (1) 20 x 25 (Top Return)	

**Note:** Other size filters of equal or greater surface area may be used; filters may also be centrally located.

<sup>1</sup> Use 2 - 16 x 25 filters on side returns or 20 x 25 filter on bottom return if furnace is connected to a cooling unit over 4 tons nominal capacity.

[illegible]

[illegible]