

# A802V

## PRODUCT SPECIFICATIONS

## TWO STAGE VARIABLE SPEED GAS FURNACE

FORM NO. A802V-100 (10/2018)



### VENTING

- Rotatable draft inducer for venting flexibility

### INSTALLATION FEATURES

- Left and right utility connections
- Removable floor base for bottom return air
- "L" designated models comply with California's South Coast Air Quality Management district Low NOx requirements
- Zero step horizontal conversion

### WARRANTY

10 year limited parts warranty / lifetime heat exchanger warranty available. See limited warranty document for details.

Note: Not for sale in Canada

#### *California Only*

*If installed in South Coast Air Quality Management District (SCAQMD) only: This furnace does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Furnace Rebate Program: [www.CleanAirFurnaceRebate.com](http://www.CleanAirFurnaceRebate.com).*

*If installed in San Joaquin Valley Air Pollution Control District (SJVAPCD) only: This furnace does not meet the SJVAPCD Rule 4905 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to \$450.*

### CONFIGURATIONS

- Upflow / Horizontal
- Downflow

### HEAT EXCHANGER DESIGN

- Aluminized steel crimped non-welded clamshell heat exchanger

### CABINET DESIGN

- Compact 33" height
- Standardized widths for easy coil fit

### AIR DELIVERY SYSTEM

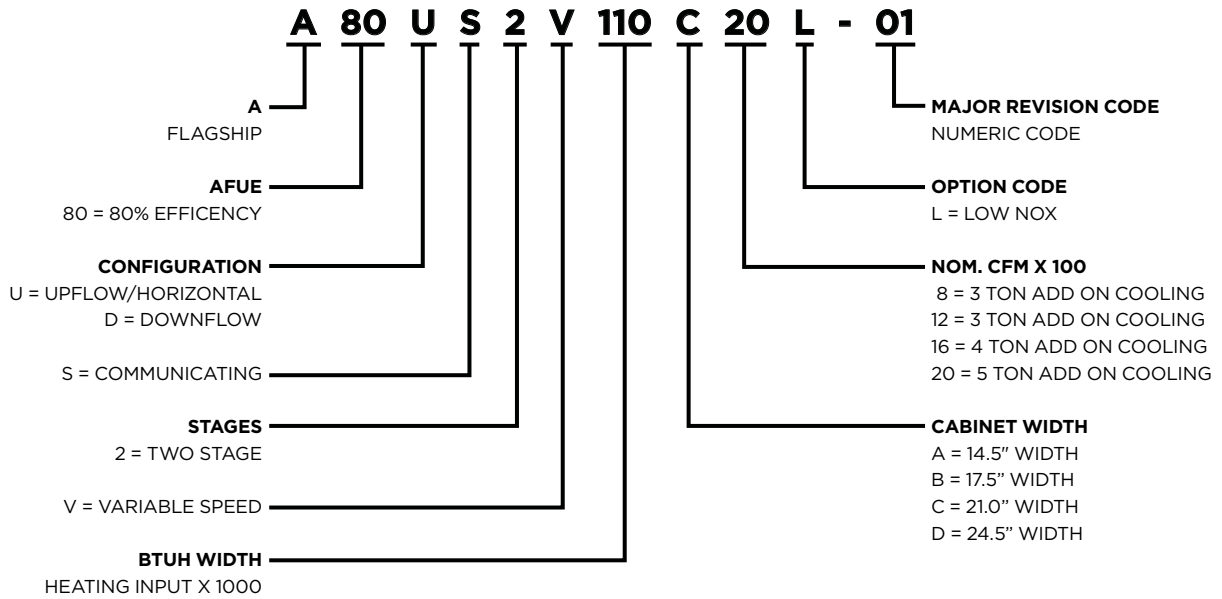
- ECM™ Variable speed blower motor
- Easily removable slide out blower design

### CONTROLS

- Communicating control enabled
- Two stage gas valve
- Thermostat flexibility: works with the Comfort Sync T-Stat or a conventional 24V T-Stat
- Self diagnostics saves last 5 fault codes regardless of power interruption



**MODEL NUMBER GUIDE**



**PHYSICAL AND ELECTRICAL DATA**

	Model	Input (Btuh)	Output* (Btuh)	AFUE (ICS)	Nominal Cooling Capacity	Gas Inlet (in.)	Volts/ Hz/ Phase	Max. Time Delay Breaker or Fuse	Nominal F.L.A.	Trans. (V.A.)	Approx. Shipping Weight (lbs.)
<b>UPFLOW/HORIZONTAL</b>	A80US2V070A12	66,000	52,000	80.0%	3 tons	1/2	120-60-1	15	7.7	40	128
	A80US2V090B12	88,000	70,000	80.0%	3 tons	1/2	120-60-1	15	7.7	40	143
	A80US2V090B16	88,000	70,000	80.0%	4 tons	1/2	120-60-1	20	12.8	40	154
	A80US2V090C20	88,000	70,000	80.0%	5 tons	1/2	120-60-1	20	12.8	40	173
	A80US2V110C20	110,000	87,000	80.0%	5 tons	1/2	120-60-1	20	12.8	40	181
	A80US2V135D20	132,000	105,000	80.0%	5 tons	1/2	120-60-1	20	12.8	40	199
	A80US2V070A12L	66,000	52,000	80.0%	3 tons	1/2	120-60-1	15	7.7	40	128
	A80US2V090B16L	88,000	70,000	80.0%	4 tons	1/2	120-60-1	20	12.8	40	154
	A80US2V110C20L	110,000	87,000	80.0%	5 tons	1/2	120-60-1	20	12.8	40	181
<b>DOWNFLOW</b>	A80DS2V070A12	66,000	52,000	80.0%	3 tons	1/2	120-60-1	15	7.7	40	130
	A80DS2V090B16	88,000	69,000	80.0%	4 tons	1/2	120-60-1	20	12.8	40	153
	A80DS2V110C20	110,000	87,000	80.0%	5 tons	1/2	120-60-1	20	12.8	40	173

Note: For vent length and clearances to combustibles, please reference installation instructions.

\* Outputs shown are High Fire, 100% rate, Low Fire is 67% of shown output.

**BLOWER PERFORMANCE DATA**

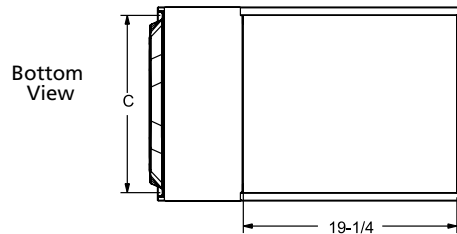
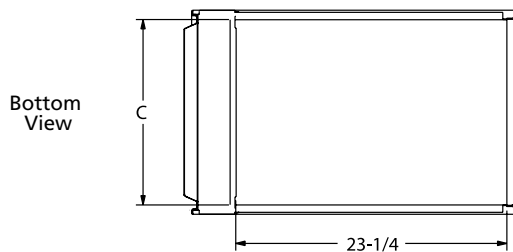
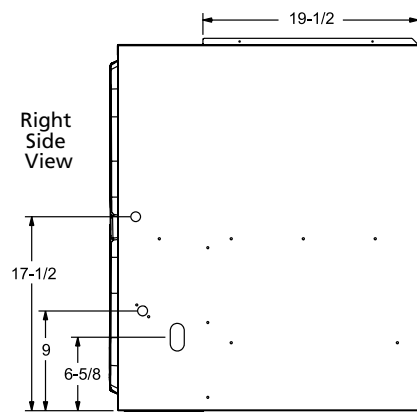
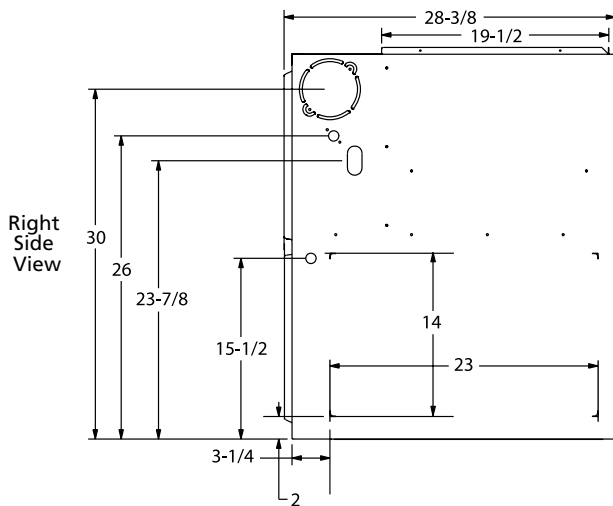
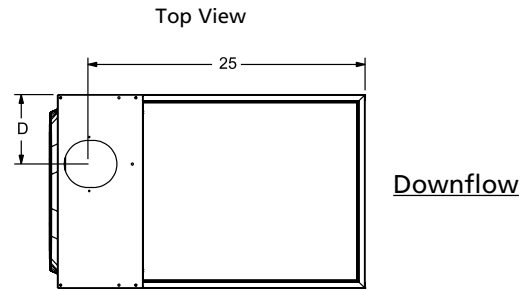
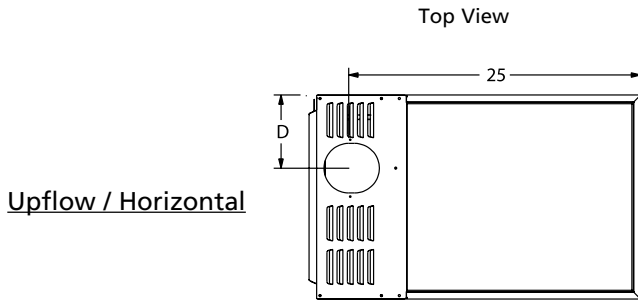
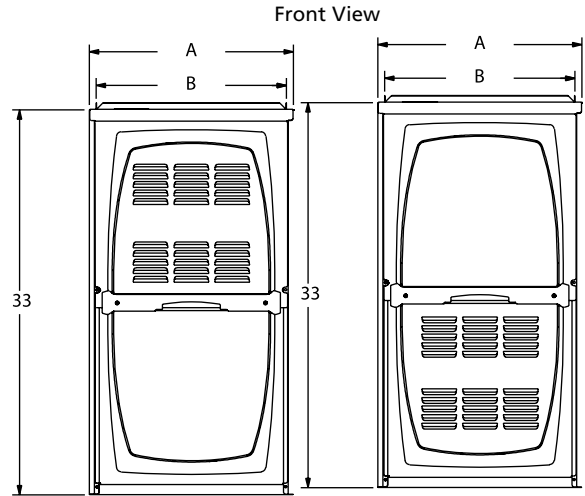
UPFLOW/HORIZONTAL	Model	Motor Size (hp)	Blower Size	Heating						Cooling					
				Low Fire			High Fire			Cooling Stage	Speed Adjustment	CFM @ 0" - 0.8" w.c.			
				Rise Range F <sup>2</sup>	Speed Adjustment	CFM @ 0" - 0.5" w.c.	Rise Range F <sup>2</sup>	Speed Adjustment	CFM @ 0" - 0.5" w.c.			Low	Med Low	Med High	High (Default)
A80US2V070A12(L)	1/2 HP	10 x 8	25-55	40 -70	+24%	1073	+24%	1178	1st Stage	+10%	748	801	864	970	
					+18%	1021	+18%	1121		Default	680	728	785	882	
					+12%	969	+12%	1064		-10%	612	655	707	974	
					+6%	917	+6%	1007		Default	1007	1095	1210	1348	
					Default	865	Default	950	2nd Stage	+10%	1007	1095	1210	1348	
					-6%	813	-6%	893		Default	915	995	1100	1225	
					-12%	761	-12%	836		-10%	824	896	990	1103	
					-18%	709	-18%	779		Default	915	995	1100	1225	
A80US2V090B12	1/2 HP	10 x 9	25-55	40 -70	+24%	1302	+24%	1426	1st Stage	+10%	556	699	787	919	
					+18%	1239	+18%	1357		Default	505	635	715	835	
					+12%	1176	+12%	1288		-10%	455	572	644	752	
					+6%	1113	+6%	1219		Default	930	1100	1210	1320	
					Default	1050	Default	1150	2nd Stage	+10%	930	1100	1210	1320	
					-6%	987	-6%	1081		Default	845	1000	1100	1200	
					-12%	924	-12%	1012		-10%	761	900	990	1080	
					-18%	861	-18%	943		Default	845	1000	1100	1200	
A80US2V090B16(L)	1 HP	11-1/2 x 9	25-55	40-70	+24%	1353	+24%	1488	1st Stage	+10%	743	935	1073	1238	
					+18%	1287	+18%	1416		Default	675	850	975	1125	
					+12%	1222	+12%	1344		-10%	608	765	878	1013	
					+6%	1156	+6%	1272		Default	1045	1320	1540	1760	
					Default	1091	Default	1200	2nd Stage	+10%	1045	1320	1540	1760	
					-6%	1026	-6%	1128		Default	950	1200	1400	1600	
					-12%	960	-12%	1056		-10%	855	1080	1260	1440	
					-18%	895	-18%	984		Default	950	1200	1400	1600	
A80US2V090C20	1 HP	11-1/2 x 10	25-55	35-65	+24%	1353	+24%	1488	1st Stage	+10%	897	1045	1177	1353	
					+18%	1287	+18%	1416		Default	815	950	1070	1230	
					+12%	1222	+12%	1344		-10%	734	855	963	1107	
					+6%	1156	+6%	1272		Default	1276	1491	1683	1931	
					Default	1091	Default	1200	2nd Stage	+10%	1276	1491	1683	1931	
					-6%	1026	-6%	1128		Default	1160	1355	1530	1755	
					-12%	960	-12%	1056		-10%	1044	1220	1377	1580	
					-18%	895	-18%	984		Default	1160	1355	1530	1755	
A80US2V110C20(L)	1 HP	11-1/2 x 10	25-55	35-65	+24%	1693	+24%	1860	1st Stage	+10%	1155	1210	1342	1419	
					+18%	1611	+18%	1770		Default	1050	1100	1220	1290	
					+12%	1529	+12%	1680		-10%	945	990	1098	1161	
					+6%	1447	+6%	1590		Default	1650	1735	1914	2024	
					Default	1365	Default	1500	2nd Stage	+10%	1650	1735	1914	2024	
					-6%	1283	-6%	1410		Default	1500	1575	1840	1840	
					-12%	1201	-12%	1320		-10%	1350	1418	1566	1656	
					-18%	1119	-18%	1230		Default	1500	1575	1840	1840	
A80US2V135D20	1 HP	11-1/2 x 11	25-55	40-70	+24%	1872	+24%	2058	1st Stage	+10%	1062	1139	1309	1419	
					+18%	1782	+18%	1959		Default	965	1035	1190	1290	
					+12%	1691	+12%	1859		-10%	869	932	1071	1161	
					+6%	1601	+6%	1760		Default	1513	1623	1870	2024	
					Default	1510	Default	1660	2nd Stage	+10%	1513	1623	1870	2024	
					-6%	1419	-6%	1560		Default	1375	1475	1700	1840	
					-12%	1329	-12%	1461		-10%	1238	1328	1530	1656	
					-18%	1238	-18%	1361		Default	1375	1475	1700	1840	

**BLOWER PERFORMANCE DATA**

DOWNFLOW	Model	Motor Size (hp)	Blower Size	Heating						Cooling					
				Low Fire			High Fire			Cooling Stage	Speed Adjust-ment	CFM @ 0" - 0.8" w.c.			
				Rise Range F <sup>2</sup>	Speed Adjust-ment	CFM @ 0" - 0.5" w.c.	Rise Range F <sup>2</sup>	Speed Adjust-ment	CFM @ 0" - 0.5" w.c.			Low	Med Low	Med High	High (Default)
DOWNFLOW	A80DS2V070A12	1/2 HP	10 x 8	25-55	35-65	+24%	1042	+24%	1147	1st Stage	+10%	693	755	855	986
						+18%	991	+18%	1092		Default	630	686	777	896
						+12%	941	+12%	1036		-10%	567	617	699	806
						+6%	980	+6%	981		Default	925	1078	1221	1408
						Default	840	Default	925		+10%	990	1078	1221	1408
						-6%	790	-6%	870		Default	900	980	1110	1280
				-12%	739	-12%	814	2nd Stage	+10%	990	1078	1221	1408		
				-18%	689	-18%	759		Default	900	980	1110	1280		
				+24%	1353	+24%	1488		+10%	810	882	999	1152		
				+18%	1287	+18%	1416		Default	900	980	1110	1280		
				+12%	1222	+12%	1344		+10%	990	1078	1221	1408		
				+6%	1156	+6%	1272		Default	900	980	1110	1280		
	Default	1091	Default	1200	2nd Stage	+10%	990	1078	1221	1408					
	-6%	1026	-6%	1128		Default	900	980	1110	1280					
	-12%	960	-12%	1056		+10%	990	1078	1221	1408					
	-18%	895	-18%	984		Default	900	980	1110	1280					
	+24%	1581	+24%	1742		+10%	990	1078	1221	1408					
	+18%	1505	+18%	1658		Default	900	980	1110	1280					
	A80DS2V090B16	1 HP	11-1/2 x 9	25-55	35-65	+24%	1353	+24%	1488	1st Stage	+10%	770	935	1073	1238
						+18%	1287	+18%	1416		Default	700	850	975	1125
						+12%	1222	+12%	1344		-10%	630	765	878	1013
						+6%	1156	+6%	1272		Default	1100	1320	1540	1760
						Default	1091	Default	1200		+10%	1100	1320	1540	1760
						-6%	1026	-6%	1128		Default	1000	1200	1400	1600
-12%						960	-12%	1056	2nd Stage	+10%	1100	1320	1540	1760	
-18%						895	-18%	984		Default	1000	1200	1400	1600	
+24%						1581	+24%	1742		+10%	900	1080	1260	1440	
+18%						1505	+18%	1658		Default	900	1080	1260	1440	
+12%						1428	+12%	1574		+10%	990	1078	1221	1408	
+6%						1352	+6%	1489		Default	900	980	1110	1280	
Default	1275	Default	1405	2nd Stage	+10%	990	1078	1221	1408						
-6%	1199	-6%	1321		Default	900	980	1110	1280						
-12%	1122	-12%	1236		+10%	990	1078	1221	1408						
-18%	1046	-18%	1152		Default	900	980	1110	1280						
+24%	1581	+24%	1742		+10%	990	1078	1221	1408						
+18%	1505	+18%	1658		Default	900	980	1110	1280						
A80DS2V110C20	1 HP	11-1/2 x10	25-55	35-65	+24%	1581	+24%	1742	1st Stage	+10%	985	1139	1293	1331	
					+18%	1505	+18%	1658		Default	895	1035	1175	1210	
					+12%	1428	+12%	1574		-10%	806	932	1058	1089	
					+6%	1352	+6%	1489		Default	1403	1625	1843	1898	
					Default	1275	Default	1405		+10%	1403	1625	1843	1898	
					-6%	1199	-6%	1321		Default	1275	1475	1675	1725	
					-12%	1122	-12%	1236	2nd Stage	+10%	1403	1625	1843	1898	
					-18%	1046	-18%	1152		Default	1275	1475	1675	1725	
					+24%	1581	+24%	1742		+10%	1148	1328	1508	1553	
					+18%	1505	+18%	1658		Default	1148	1328	1508	1553	
					+12%	1428	+12%	1574		+10%	1148	1328	1508	1553	
					+6%	1352	+6%	1489		Default	1148	1328	1508	1553	

**DIMENSIONS (IN.)**

	Model	A	B	C	D
<b>UPFLOW/HORIZONTAL</b>	A80US2V070A12(L)	14-1/2	13-3/8	13	4-3/4
	A80US2V090B12	17-1/2	16-3/8	16	6-1/4
	A80US2V090B16(L)	17-1/2	16-3/8	16	6-1/4
	A80US2V090C20	21	19-7/8	19-1/2	8
	A80US2V110C20(L)	21	19-7/8	19-1/2	8
	A80US2V135D20	24-1/2	23-3/8	23	11-1/8
<b>DOWNFLOW</b>	A80DS2V070A12	14-1/2	13-3/8	13	4-3/4
	A80DS2V090B16	17-1/2	16-3/8	16	6-1/4
	A80DS2V110C20	21	19-7/8	19-1/2	8



**ACCESSORY LIST**

CATALOG NUMBER	DESCRIPTION
External Filter Rack kits	
1.841018	1 pack (16 x 25)
1.841039	10 pack (16 x 25)
Natural to LP kits	
68W76	for -1 models
77W08	for -2 models
LP to Natural kits	
73W32	for -1 models
77W10	for -2 models
11K48	Replaces 78W94 and 77W08
11K47	High Altitude (>7500')
Return Air Base	
68W61	Return Air Base 14.5 Inch, A Width
68W62	Return Air Base 17.5 Inch, B Width
68W63	Return Air Base 21.0 Inch, C Width
Night Service Kit	
89W54	Two-Stage
Horizontal Suspension Kit	
51W10	80% & 90% Kit
Combustible Floor Base	
11M59	14.5 Inch, A Width
11M60	17.5 Inch, B Width
11M61	21.0 Inch, C Width

*Note: For vent length and clearances to combustibles, please reference installation instructions.*



1-800-448-5872

All specifications and illustrations subject to change without notice and without incurring obligations.