

A802V

PRODUCT SPECIFICATIONS

TWO STAGE VARIABLE SPEED GAS FURNACE

FORM NO. A802V-100 (01/2021)



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.

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

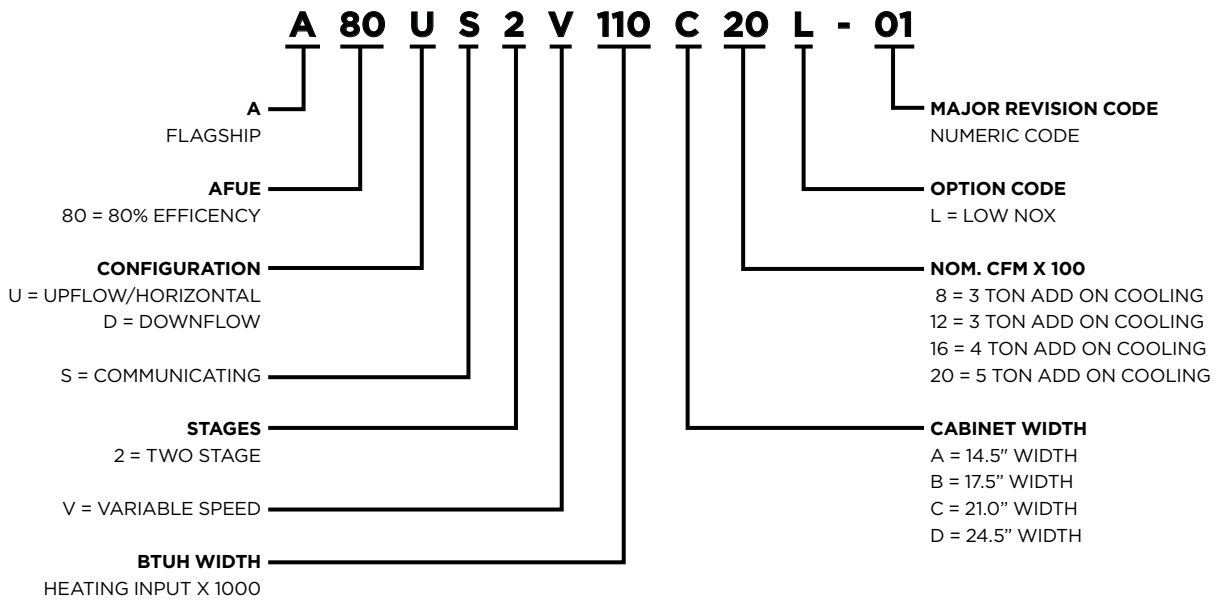
- ECM™ Variable speed blower motor
- Easily removable slide out blower design

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.)
UPFLOW/HORIZONTAL	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
DOWNFLOW	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

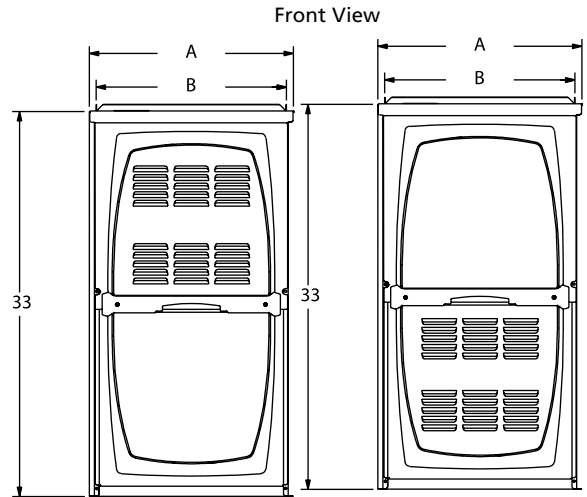
	Model	Motor Size (hp)	Blower Size	Heating						Cooling							
				Low Fire			High Fire			Cooling Stage	Speed Adjustment	CFM @ 0" - 0.8" w.c.					
				Rise Range F ²	Speed Adjustment	CFM @ 0" - 0.5" w.c.	Rise Range F ²	Speed Adjustment	CFM @ 0" - 0.5" w.c.			Low	Med Low	Med High	High (Default)		
												1st Stage					2nd Stage
UPFLOW/HORIZONTAL	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%	915	995	1100	1225
						-6%		813	-6%		893		Default	824	896	990	1103
						-12%		761	-12%		836		-10%	556	699	787	919
						-18%		709	-18%		779		Default	505	635	715	835
	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	455	572	644	752
						+12%		1176	+12%		1288		-10%	930	1100	1210	1320
						+6%		1113	+6%		1219		Default	845	1000	1100	1200
						Default		1050	Default		1150	2nd Stage	+10%	761	900	990	1080
						-6%		987	-6%		1081		Default	743	935	1073	1238
						-12%		924	-12%		1012		-10%	1045	1320	1540	1760
						-18%		861	-18%		943		Default	950	1200	1400	1600
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%	855	1080	1260	1440	
					-6%		1026	-6%		1128		Default	897	1045	1177	1353	
					-12%		960	-12%		1056		-10%	815	950	1070	1230	
					-18%		895	-18%		984		Default	1160	1355	1530	1755	
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%	1044	1220	1377	1580	
					-6%		1026	-6%		1128		Default	1155	1210	1342	1419	
					-12%		960	-12%		1056		-10%	1050	1100	1220	1290	
					-18%		895	-18%		984		Default	1050	1100	1220	1290	
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	945	990	1098	1161	
					+12%		1529	+12%		1680		-10%	1650	1735	1914	2024	
					+6%		1447	+6%		1590		Default	1500	1575	1840	1840	
					Default		1365	Default		1500	2nd Stage	+10%	1350	1418	1566	1656	
					-6%		1283	-6%		1410		Default	1062	1139	1309	1419	
					-12%		1201	-12%		1320		-10%	965	1035	1190	1290	
					-18%		1119	-18%		1230		Default	869	932	1071	1161	
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%	1513	1623	1870	2024	
					+6%		1601	+6%		1760		Default	1375	1475	1700	1840	
					Default		1510	Default		1660	2nd Stage	+10%	1238	1328	1530	1656	
					-6%		1419	-6%		1560		Default	1062	1139	1309	1419	
					-12%		1329	-12%		1461		-10%	965	1035	1190	1290	
					-18%		1238	-18%		1361		Default	869	932	1071	1161	

BLOWER PERFORMANCE DATA

	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 ²	Speed Adjustment	CFM @ 0" - 0.5" w.c.	Rise Range F ²	Speed Adjustment	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	990	1078	1221	1408
						Default	840	Default	925	2nd Stage	Default	900	980	1110	1280
						-6%	790	-6%	870		-10%	810	882	999	1152
						-12%	739	-12%	814		Default	770	935	1073	1238
						-18%	689	-18%	759		Default	700	850	975	1125
	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	630	765	878	1013
						+12%	1222	+12%	1344		-10%	630	765	878	1013
						+6%	1156	+6%	1272		Default	1100	1320	1540	1760
						Default	1091	Default	1200	2nd Stage	Default	1000	1200	1400	1600
						-6%	1026	-6%	1128		-10%	900	1080	1260	1440
						-12%	960	-12%	1056		Default	985	1139	1293	1331
						-18%	895	-18%	984		Default	895	1035	1175	1210
	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	2nd Stage	Default	1275	1475	1675	1725
						-6%	1199	-6%	1321		-10%	1148	1328	1508	1553
						-12%	1122	-12%	1236		Default	1275	1475	1675	1725
						-18%	1046	-18%	1152		Default	1275	1475	1675	1725

DIMENSIONS (IN.)

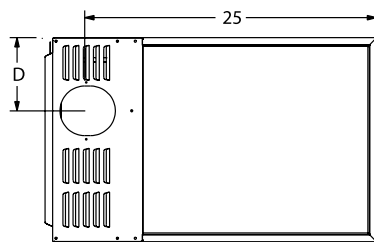
	Model	A	B	C	D
UPFLOW/HORIZONTAL	A80US2V070A12(L)	14-1/2	13-3/8	13	4-3/4
	A80US2V090B12	17-1/2	16-3/8	16	6-1/4
	A80US2V090B16(L)	17-1/2	16-3/8	16	6-1/4
	A80US2V090C20	21	19-7/8	19-1/2	8
	A80US2V110C20(L)	21	19-7/8	19-1/2	8
	A80US2V135D20	24-1/2	23-3/8	23	11-1/8
DOWNFLOW	A80DS2V070A12	14-1/2	13-3/8	13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



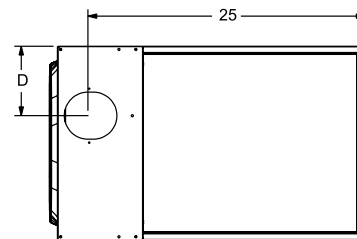
Top View

Top View

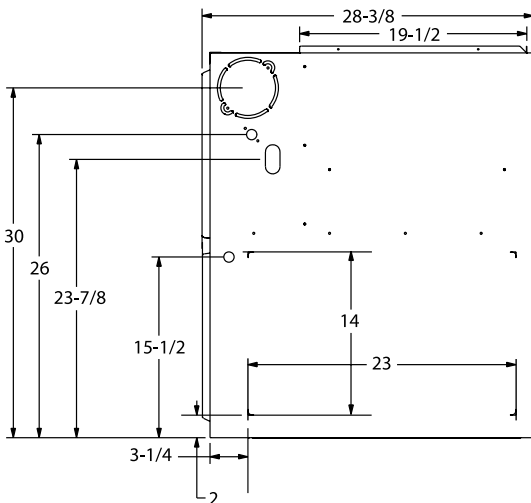
Upflow / Horizontal



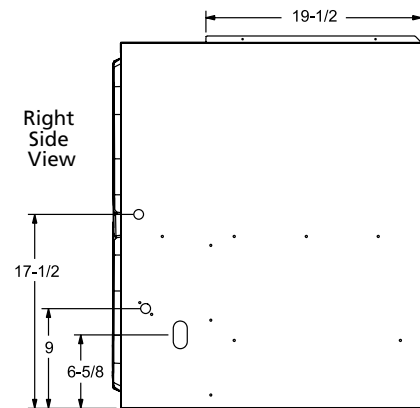
Downflow



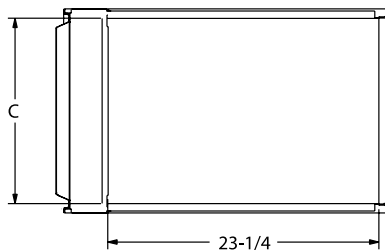
Right Side View



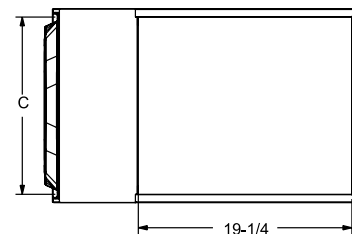
Right Side View



Bottom View



Bottom View



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	
11K48	Two-Stage (0 - 7500 ft.)
11K47	Two-Stage (>7500 ft.)
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
Comfort Sync® Controls	
1.841226	Comfort Sync® A3 Thermostat
1.851399	Comfort Sync® Zoning Controller
1.851422	Comfort Sync® Zone Sensor

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.