A801EK
PRODUCT SPECIFICATIONS

SINGLE STAGE HIGH EFFICIENCY CONSTANT TORQUE GAS FURNACE

FORM NO. A801EK-100 (11/2026)



CONFIGURATIONS
- Upflow / Horizontal
- Downflow

HEAT EXCHANGER DESIGN
- Aluminized steel crimped non-welded clamshell heat exchanger

BURNER
- Aluminized steel inshot burners for smooth ignition

CABINET DESIGN
- Compact 33” height
- Standardized widths for easy coil fit

AIR DELIVERY SYSTEM
- Multi-speed high efficiency (constant torque) blower motor
- Easily removable slide out blower design
- Enhanced cooling SEER ratings when applied with properly matched cooling equipment

CONTROLS
- Single stage gas valve
- Durable silicon nitride ignitor
- Self diagnostics saving last 10 fault codes regardless of power interruption
- Control features electronic air cleaner and humidifier terminals

VENTING
- Rotatable draft inducer for venting flexibility

INSTALLATION FEATURES
- Left or right utility connections
- Removable floor base (upflow / horizontal units) for bottom return air
- 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

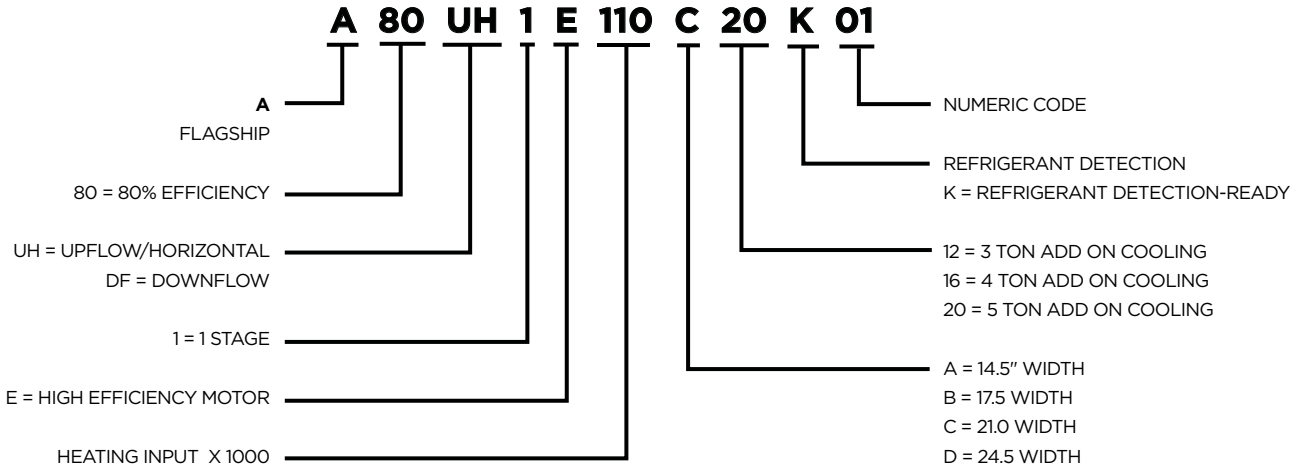
California Only
If installed in South Coast Air Quality Management District (SCAQMD) only: This furnace does not meet the SCAQMD Rule 1111 NOx emission limit (14 ng/J), and thus is subject to a mitigation fee of up to $450. This furnace is not eligible for the Clean Air Furnace Rebate Program: www.CleanAirFurnaceRebate.com.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

DESIGN CERTIFIED ®

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PFAS

MODEL NUMBER GUIDE



PHYSICAL AND ELECTRICAL DATA

	Model	Input (Btuh)	Output (Btuh)	AFUE (ICS)	Nom. 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	A80UH1E045A12K	44,000	36,000	80.00%	1-1/2 — 3	1/2	120-60-1	15	6.8	40	111
	A80UH1E070A12K	66,000	53,000	80.00%	1-1/2 — 3	1/2	120-60-1	15	6.8	40	111
	A80UH1E070B12K	66,000	53,000	80.00%	1-1/2 — 3	1/2	120-60-1	15	6.8	40	127
	A80UH1E090B16K	88,000	72,000	80.00%	2-1/2 — 4	1/2	120-60-1	15	8.4	40	142
	A80UH1E090C20K	88,000	72,000	80.00%	3 — 5	1/2	120-60-1	15	10.9	40	152
	A80UH1E110C20K	110,000	90,000	80.00%	4 — 5	1/2	120-60-1	15	10.9	40	160
	A80UH1E135D20K	132,000	107,000	80.00%	4 — 5	1/2	120-60-1	15	10.9	40	178
Downflow	A80DF1E045A12K	44,000	36,000	80.00%	2 — 3	1/2	120-60-1	15	6.8	40	113
	A80DF1E070A12K	66,000	54,000	80.00%	2 — 3	1/2	120-60-1	15	6.8	40	119
	A80DF1E070B12K	66,000	54,000	80.00%	2 — 3	1/2	120-60-1	15	6.8	40	128
	A80DF1E090B16K	88,000	72,000	80.00%	3 — 4	1/2	120-60-1	15	8.4	40	140
	A80DF1E110C20K	110,000	90,000	80.00%	4 — 5	1/2	120-60-1	15	10.9	40	160

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

BLOWER PERFORMANCE DATA

	Model	Motor Size (hp)	Blower Size	Temp Rise (°F)	Blower Speed	CFM @ External Static Pressure - " w.c.									
						0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Upflow / Horizontal	A80UH1E045A12K	1/2	10 x 8	15 - 45	High	1383	1346	1308	1268	1257	1211	1185	1140	1115	1074
					Med/High	1179	1132	1083	1057	1013	985	937	902	866	823
					Med	991	943	896	864	818	775	728	688	641	598
					Med/Low	970	854	797	748	697	651	605	554	512	446
					Low	959	764	668	612	562	508	456	385	N/A	N/A
	A80UH1E070A12K	1/2	10 x 10	40 - 70	High	1372	1340	1309	1281	1253	1225	1196	1158	1122	1090
					Med/High	1160	1125	1092	1059	1026	992	958	924	890	849
					Med	1073	1035	999	964	927	891	854	817	781	746
					Med/Low	1040	1002	965	929	891	855	818	780	742	707
					Low	880	836	794	752	709	666	622	582	544	504
	A80UH1E070B12K	1/2	10 x 10	40 - 70	High	1493	1433	1395	1353	1312	1270	1232	1187	1144	1067
					Med/High	1256	1221	1151	1094	1047	995	943	895	858	809
					Med	1166	1116	1067	1008	951	901	856	804	754	703
					Med/Low	1139	1078	1027	975	923	875	824	774	720	669
					Low	978	903	849	786	726	667	604	543	492	447
	A80UH1E090B16K	3/4	10 x 10	35 - 65	High	1740	1697	1655	1624	1581	1545	1513	1472	1421	1296
					Med/High	1528	1479	1437	1405	1376	1319	1277	1246	1197	1153
					Med	1404	1360	1329	1268	1234	1197	1150	1097	1051	1010
					Med/Low	1348	1302	1262	1215	1175	1119	1069	1025	983	935
					Low	1205	1147	1097	1043	996	944	889	845	781	723
	A80UH1E090C20K	1	11-1/2 x 10	30 - 60	High	2179	2141	2102	2065	2029	1991	1952	1912	1876	1842
					Med/High	1917	1874	1831	1790	1749	1708	1667	1623	1582	1543
					Med	1725	1679	1636	1591	1546	1500	1455	1408	1366	1320
					Med/Low	1565	1515	1468	1420	1371	1320	1271	1224	1176	1128
					Low	1422	1370	1321	1265	1208	1158	1107	1052	1003	947
	A80UH1E110C20K	1	11-1/2 x 10	35 - 65	High	2147	2129	2087	2065	2013	1995	1942	1913	1877	1797
					Med/High	1917	1857	1822	1787	1743	1701	1651	1617	1570	1545
					Med	1697	1632	1594	1542	1498	1452	1409	1358	1304	1263
					Med/Low	1550	1501	1436	1401	1343	1294	1243	1193	1158	1090
					Low	1367	1309	1263	1203	1150	1088	1039	974	N/A	N/A
	A80UH1E135D20K	1	11 x 11	30 - 60	High	2441	2384	2336	2269	2211	2186	2107	1979	1817	1576
					Med/High	2249	2200	2137	2069	2021	1966	1881	1826	1735	1525
					Med	2036	1978	1895	1837	1771	1710	1633	1598	1512	1401
					Med/Low	1826	1739	1662	1585	1517	1437	1429	1355	1224	1124
					Low	1647	1569	1507	1430	1346	1271	1201	1091	1000	927

BLOWER PERFORMANCE DATA - DOWNFLOW

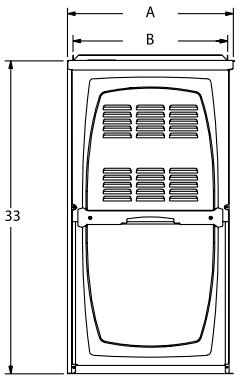
	Model	Motor Size (hp)	Blower Size	Temp Rise (°F)	Blower Speed	CFM @ External Static Pressure - " w.c.									
						0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
Downflow	A80DF1E045A12K	1/2	10 x 8	15 - 45	High	1347	1310	1278	1259	1210	1183	1155	1085	992	879
					Med/High	1137	1110	1066	1027	995	941	902	873	831	796
					Med	947	924	878	831	785	742	702	654	615	574
					Med/Low	880	818	771	713	669	615	570	522	478	437
					Low	787	707	645	587	530	478	430	384	N/A	N/A
	A80DF1E070A12K	1/2	10 x 10	30 - 60	High	1444	1403	1373	1350	1321	1279	1250	1214	1131	1029
					Med/High	1262	1227	1186	1151	1117	1082	1049	1018	966	930
					Med	1162	1121	1078	1045	1012	969	937	898	862	825
					Med/Low	1144	1112	1064	1034	992	948	914	872	840	798
					Low	986	939	894	861	816	773	730	682	639	595
	A80DF1E070B12K	1/2	10 x 10	30 - 60	High	1526	1480	1434	1388	1353	1309	1237	1123	969	753
					Med/High	1291	1241	1194	1163	1095	1046	1000	947	888	700
					Med	1202	1156	1089	1040	986	928	878	816	723	635
					Med/Low	1166	1117	1059	1003	951	900	842	750	673	609
					Low	1003	928	860	804	736	642	567	488	444	N/A
	A80DF1E090B16K	3/4	10 x 10	30 - 60	High	1711	1668	1643	1601	1559	1527	1486	1456	1407	1277
					Med/High	1499	1451	1421	1389	1352	1312	1265	1236	1195	1152
					Med	1372	1336	1307	1261	1215	1181	1139	1096	1055	1005
					Med/Low	1328	1281	1240	1198	1152	1113	1062	1024	982	940
					Low	1183	1132	1077	1036	984	934	887	843	778	716
	A80DF1E110C20K	1	11-1/2 x 10	30 - 60	High	2335	2276	2243	2183	2164	2120	2083	2032	2008	1962
					Med/High	2049	2007	1971	1917	1864	1818	1777	1728	1690	1634
					Med	1798	1767	1709	1654	1598	1561	1496	1450	1395	1345
					Med/Low	1664	1603	1563	1500	1439	1391	1333	1272	1211	1150
					Low	1476	1410	1347	1280	1222	1153	1100	1022	928	863

DIMENSIONS

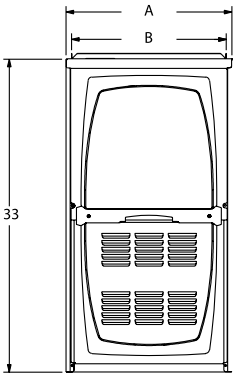
	Model	A	B	C	D
Upflow/Horizontal	A80UH1E045A12K	14-1/2	13-3/8	13	4-3/4
	A80UH1E070A12K	14-1/2	13-3/8	13	4-3/4
	A80UH1E070B12K	17-1/2	16-3/8	16	6-1/4
	A80UH1E090B16K	17-1/2	16-3/8	16	6-1/4
	A80UH1E090C20K	21	19-3/8	19-1/2	8
	A80UH1E110C20K	21	19-3/8	19-1/2	8
	A80UH1E135D20K	24-1/2	23-3/8	23	9-3/4
Downflow	A80DF1E045A12K	14-1/2	13-3/8	13	4-3/4
	A80DF1E070A12K	14-1/2	13-3/8	13	4-3/4
	A80DF1E070B12K	17-1/2	16-3/8	16	6-1/4
	A80DF1E090B16K	17-1/2	16-3/8	16	6-1/4
	A80DF1E110C20K	21	19-7/8	19-1/2	8

Front View

Upflow / Horizontal

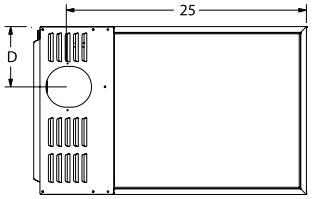


Downflow

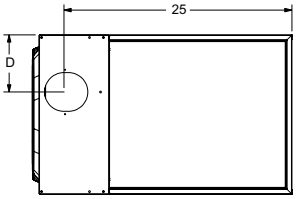


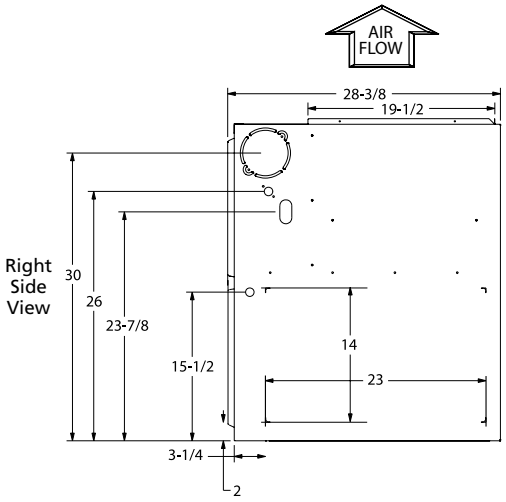
Top View

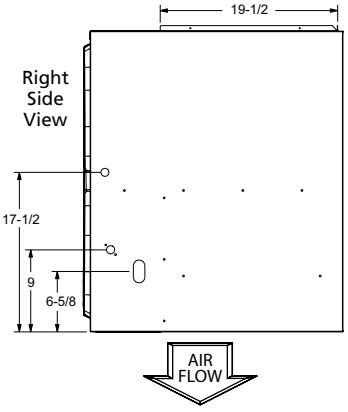
Upflow / Horizontal

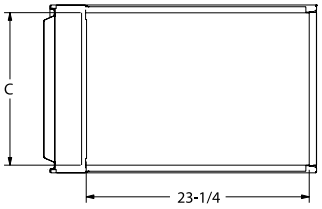


Downflow

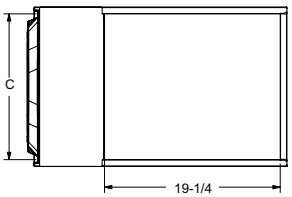








Bottom View



Bottom View

ACCESSORY LIST

CATALOG NUMBER	DESCRIPTION
External Filter Rack kits	
1.841018	1 Pack (16x25)
1.841039	10 Pack (16x25)
Natural to LP Kits	
11K50	1-Stage - 80
11K45	High Altitude (>7500')
Return Air Base	
68W61	14.5", A Width
68W62	17.5", B Width
68W63	21.0", C Width
68W64	24.5", D Width
Downflow Combustible Flooring Base	
11M59	14.5", A Width
11M60	17.5", B Width
11M61	21.0", C Width
Horizontal Suspension Kits	
51W10	80 & 90% Kit
2-Stage Compressor Relay Kit	
85W66	Blower Relay Kit
Transformer (75VA)	
27J32	Recommended when furnace is used with zoning or defrost thermostats and other 24V accessories requiring a higher VA rating
	Circuit breaker (furnished) is wired in series
	Replaces the standard 40VA transformer
Gas Entry Kit	
27U30	80% Right hand Gas entry Kit

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

ALLIED™ Air Enterprises

1-800-448-5872

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

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