



A80-1E

80% Gas Furnaces Single Stage - High Efficiency (Constant Torque) Motor

Form No. A80-1E-100 (03/2012)

Features and Benefits

CONFIGURATIONS

- Upflow / Horizontal
- Downflow

HEAT EXCHANGER DESIGN

- Aluminized steel tapered crimped non-welded clam shell heat exchanger design

BURNERS

- 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

Note: Not for sale in Canada



WARRANTY

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

**10 year
limited
Parts
Warranty**



Model Number Guide

Brand	AFUE	Config	Stages	Blower	BTUH Input	Cabinet Width	Nom. CFM x 100	Major Revision
A	80	UH	1	E	110	C	20	- 01
A = Armstrong Air 80 = 80% Efficiency UH = Upflow/Horizontal DF = Downflow 1 = 1 Stage E = High Efficiency Motor numeric code 12 = 3 Ton add on cooling 16 = 4 Ton add on cooling 20 = 5 Ton add on cooling A = 14.5" width B = 17.5" width C = 21.0" width D = 24.5" width Heating Input x 1000								

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	A80UH1E045A12	44,000	35,200	80.0%	1-1/2 — 3	1/2	120-60-1	15	6.8	40	111
	A80UH1E070B12	66,000	52,800	80.0%	1-1/2 — 3	1/2	120-60-1	15	6.8	40	127
	A80UH1E090B16	88,000	70,400	80.0%	2-1/2 — 4	1/2	120-60-1	15	8.4	40	142
	A80UH1E090C20	88,000	70,400	80.0%	3 — 5	1/2	120-60-1	15	10.9	40	152
	A80UH1E110C20	110,000	88,000	80.0%	4 — 5	1/2	120-60-1	15	10.9	40	160
	A80UH1E135D20	132,000	105,600	80.0%	4 — 5	1/2	120-60-1	15	10.9	40	178
Downflow	A80DF1E045A12	44,000	35,200	80.0%	2 — 3	1/2	120-60-1	15	6.8	40	113
	A80DF1E070B12	66,000	52,800	80.0%	2 — 3	1/2	120-60-1	15	6.8	40	128
	A80DF1E090B16	88,000	70,400	80.0%	3 — 4	1/2	120-60-1	15	8.4	40	140
	A80DF1E110C20	110,000	88,000	80.0%	4 — 5	1/2	120-60-1	15	10.9	40	160

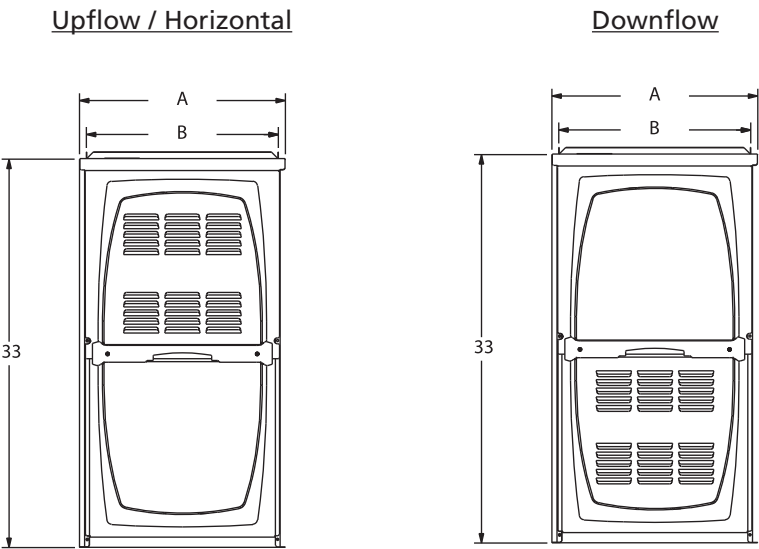
Note: For vent sizing and clearances to combustibles, please reference installation instructions.

Blower Performance Data

	Model	Motor Size (hp)	Blower Size	Temp Rise (°F)	Blower Speed	CFM @ External Static Pressure - " w.c.						
						0.20	0.30	0.40	0.50	0.60	0.70	0.80
Upflow / Horizontal	A80UH1E045A12	1/2	10 x 8	15 - 45	High	1320	1290	1265	1230	1190	1165	1130
					Med/High	1080	1055	1010	990	945	915	880
					Med	900	875	825	790	750	705	670
					Med/Low	805	750	710	660	630	570	535
					Low	700	640	595	535	500	435	380
	A80UH1E070B12	1/2	10 x 10	40 - 70	High	1355	1330	1290	1245	1225	1190	1160
					Med/High	1225	1190	1155	1115	1045	1000	925
					Med	1110	1060	1015	980	920	855	790
					Med/Low	1080	1035	970	930	865	790	735
					Low	885	825	770	695	625	540	445
	A80UH1E090B16	3/4	10 x 10	35 - 65	High	1730	1690	1645	1615	1590	1545	N/A
					Med/High	1505	1460	1435	1395	1350	1300	1270
					Med	1380	1345	1310	1265	1210	1175	1140
					Med/Low	1310	1275	1240	1180	1150	1095	1040
					Low	1110	1065	1010	955	915	860	820
	A80UH1E090C20	1	11-1/2 x 10	30 - 60	High	2150	2125	2090	2060	2020	1980	1935
					Med/High	1865	1835	1800	1760	1725	1680	1635
					Med	1655	1635	1585	1545	1515	1465	1420
					Med/Low	1490	1450	1405	1370	1320	1265	1225
					Low	1340	1285	1235	1200	1145	1105	1055
	A80UH1E110C20	1	11-1/2 x 10	35 - 65	High	2135	2090	2050	2025	2010	1965	1905
					Med/High	1865	1830	1785	1740	1710	1670	1635
					Med	1630	1595	1550	1500	1470	1420	1380
					Med/Low	1470	1440	1385	1340	1305	1255	1215
					Low	1280	1235	1175	1130	1080	1015	975
	A80UH1E135D20	1	11 x 11	30 - 60	High	2390	2360	2285	2240	2225	2160	2105
					Med/High	2175	2140	2125	2060	2015	1955	1925
					Med	1935	1895	1850	1815	1785	1755	1715
					Med/Low	1735	1720	1660	1610	1535	1500	1435
					Low	1550	1485	1455	1415	1330	1265	1215
Downflow	A80DF1E045A12	1/2	10 x 8	15 - 45	High	1375	1335	1320	1275	1245	1215	1175
					Med/High	1145	1120	1075	1045	1000	970	925
					Med	950	915	870	835	785	745	695
					Med/Low	840	790	745	715	655	605	555
					Low	725	665	625	565	520	455	400
	A80DF1E070B12	1/2	10 x 10	30 - 60	High	1400	1360	1310	1280	1250	1220	1165
					Med/High	1230	1205	1155	1110	1060	1000	935
					Med	1125	1085	1050	985	935	865	795
					Med/Low	1110	1055	1000	950	865	815	750
					Low	900	845	790	705	645	590	480
	A80DF1E090C16	3/4	10 x 10	30 - 60	High	1695	1660	1615	1570	1545	N/A	N/A
					Med/High	1470	1425	1395	1360	1295	1265	1215
					Med	1340	1290	1250	1210	1165	1120	1080
					Med/Low	1280	1225	1185	1145	1085	1040	1000
					Low	1105	1040	1005	945	865	810	755
	A80DF1E110C20	1	11-1/2 x 10	30 - 60	High	2325	2280	2235	2165	2125	2090	2035
					Med/High	2010	1940	1895	1845	1800	1755	1700
					Med	1760	1705	1635	1595	1545	1510	1460
					Med/Low	1570	1500	1440	1380	1320	1285	1255
					Low	1375	1320	1265	1200	1170	1100	1030

Dimensions (in.)

Front View

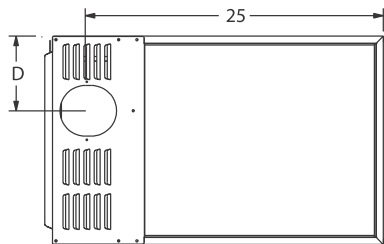


Dimensions (in.)

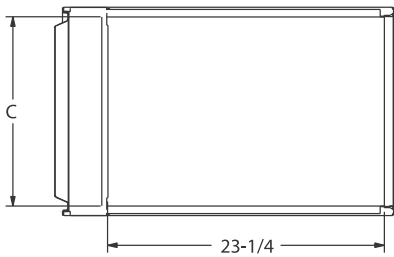
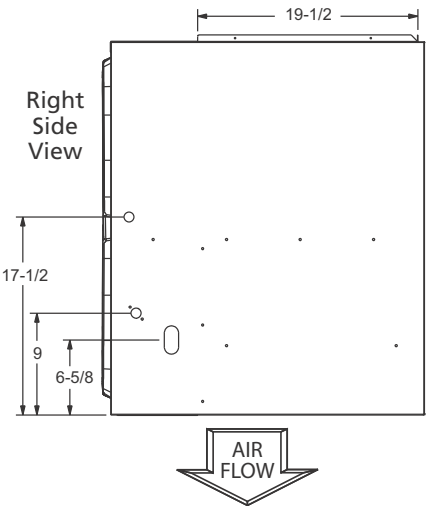
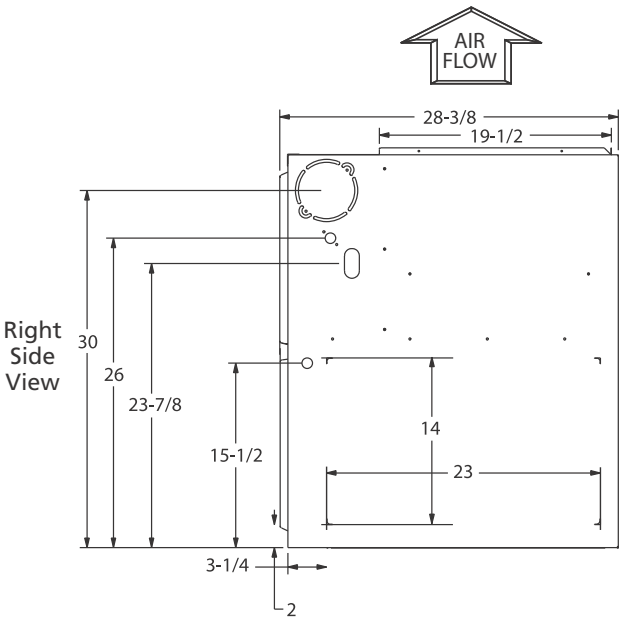
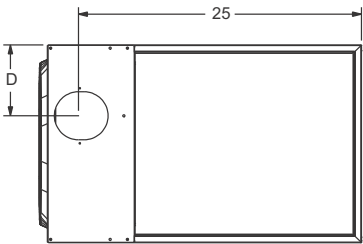
	Model	A	B	C	D
Upflow/Horizontal	A80UH1E045A12	14-1/2	13-3/8	13	4-3/4
	A80UH1E070B12	17-1/2	16-3/8	16	6-1/4
	A80UH1E090B16	17-1/2	16-3/8	16	6-1/4
	A80UH1E090C20	21	19-3/8	19-1/2	8
	A80UH1E110C20	21	19-3/8	19-1/2	8
	A80UH1E135D20	24-1/2	23-3/8	23	9-3/4
Downflow	A80DF1E045A12	14-1/2	13-3/8	13	4-3/4
	A80DF1E070B12	17-1/2	16-3/8	16	6-1/4
	A80DF1E090B16	17-1/2	16-3/8	16	6-1/4
	A80DF1E110C20	21	19-7/8	19-1/2	8

Top View

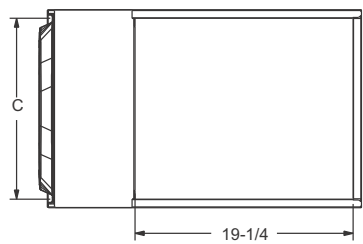
Upflow / Horizontal



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	
72W47	1-Stage - 80
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
Night Service Kits	
86W57	Single Stage
Horizontal Suspension Kits	
51W10	80 & 90% Kit
2-Stage Compressor Relay Kit	
85W66	Blower Relay Kit

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

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



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