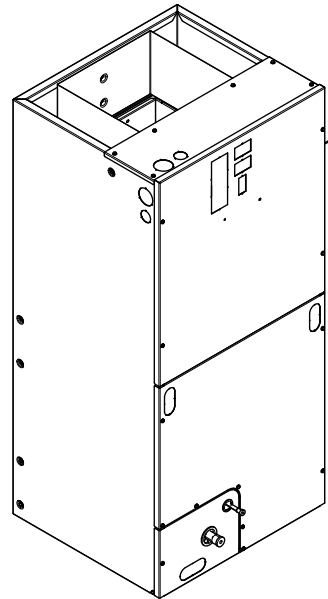


Product and Submittal Data

Convertible Air Handlers 2 to 5 Tons

A5AHV002A1B30A
A5AHV003A1B30A
A5AHV004A1D30A
A5AHV005A1D30A
A5AHV006A1D30A
A5AHV007A1D30A



Note: Graphics in this document are for representation only.
Actual model may differ in appearance.

Introduction

The A5AHV series air handler is designed for installation in a closet, utility room, alcove, basement, crawlspace or attic. These versatile units are applicable to air conditioning and heat pump applications. Several models are available to meet the specific requirements of the outdoor equipment. Field installed electric resistance heaters are available.

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Revision History

Updated Airflow Performance Data section.

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Features and Benefits

- Metal cabinet with captured foil face insulation
- 2% or less air leakage
- R-4.2 Insulating Value
- Multi-Position UP/Down Flow, Horizontal Left /Right
- ALL Aluminum Coil
- Electric Heaters with polarized plug connections (sold as accessory)
- R-454B Thermal Expansion Valve
- Variable Speed ECM Motor
- Low Voltage Pigtail Connections
- Draw Through Design
- Horizontal Drain Pan
- Single Color
- Fused 24V Power
- **5 Year Base Limited Warranty**
- **10 Year Registered Limited Warranty**
- **Optional extended warranty available**

Optional Equipment

Table 1. Optional equipment

Accessory Number	Description	Fits Cabinet Size (in.)
BAYHTR1504BRK	Electric Heater, 4KW, Breaker, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR1504LUG	Electric Heater, 4KW, Lug, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR1505BRK	Electric Heater, 5KW, Breaker, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR1505LUG	Electric Heater, 5KW, Lug, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR1508BRK	Electric Heater, 8KW, Breaker, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR1508LUG	Electric Heater, 8KW, Lug, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR1510BRK	Electric Heater, 10KW, Breaker, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR1510LUG	Electric Heater, 10KW, Lug, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR3510LUG	Electric Heater, 10KW, Lug, 24v Control, 3 Ph	18.5 and 23.5
BAYHTR1517BRK	Electric Heater, 15KW, Breaker, 24v Control, 1 Ph	18.5 and 23.5
BAYHTR3517LUG	Electric Heater, 15KW, Lug, 24v Control, 3 Ph	18.5 and 23.5
BAYHTR1523BRK	Electric Heater, 20KW, Breaker, 24v Control, 1 Ph	23.5
BAYHTR1525BRK	Electric Heater, 25KW, Breaker, 24v Control, 1 Ph	23.5 (D06, D07 only)
BAYTEMSPFG1	Supply Duct Flange Kit	18.5 and 23.5
BAYSPEKT201A	Single Point Power Entry Kit	18.5 and 23.5
TAYBASE185	Air Handler Downflow Sub-Bases 18.5 in	18.5
TAYBASE235 (TAYBASE100)	Air Handler Downflow Sub-Bases 23.5 in.	23.5
BAYTEMDFKT1A	Downflow Condensate Management Kit 23.5 in.	23.5
TEMBRKSEALKT01A	TEM Breaker Seal Kit	18.5 and 23.5
BAYSF1185AAA	Slim Fit Filter Box Kit 18.5 in.	18.5
BAYSF1235AAA	Slim Fit Filter Box Kit 23.5 in.	23.5
FLRSF1185	1 in. Slim Fit Replacement Filter, 17.75 in. x19.75 in., Qty 12 18.5 in.	18.5
FLRSF1235	1 in. Slim Fit Replacement Filter, 22.75 in. x19.75 in., Qty 12 23.5 in	23.5
BAYAH120VKT	120v Conversion Kit	18.5 and 23.5

Product Specifications

Table 2. Models A5AHV002A1B30A, A5AHV003A1B30A, and A5AHV004A1D30A

Model	A5AHV002A1B30A	A5AHV003A1B30A	A5AHV004A1D30A
Family	A5AHV	A5AHV	A5AHV
Brand	RunTru, Ameristar	RunTru, Ameristar	RunTru, Ameristar
Family Description	R-454B Convertible Variable Speed Air Handler	R-454B Convertible Variable Speed Air Handler	R-454B Convertible Variable Speed Air Handler
Application Configuration	4-Way	4-Way	4-Way
Rated Capacity Range (Btuh)	18K - 24K	18K - 30K	24K - 42K
System Control Type	24V	24V	24V
Power Conn. - V/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
Max Breaker Size, Without Electric Heater (Amps)	15	15	15
Max Breaker Size, With Electric Heater (Amps) ^(a)	60	60	60
Coil Type	All-Aluminum Plate Fin	All-Aluminum Plate Fin	All-Aluminum Plate Fin
Refrigerant Type	R-454B	R-454B	R-454B
Refrigerant Control	TXV	TXV	TXV
Refrigerant Line Connection - Gas (in.)	3/4	3/4	7/8
Refrigerant Line Connection - Liquid (in.)	3/8	3/8	3/8
Blower Type	Direct Drive Centrifugal	Direct Drive Centrifugal	Direct Drive Centrifugal
Configuration	Draw Through	Draw Through	Draw Through
Dimensions (Diameter x Width (in.))	11 x 8	11 x 8	11 x 8
Motor Type	Variable Speed	Variable Speed	Variable Speed
Nominal CFM ^(b)	800	1000	1200
Speed (RPM)	Variable	Variable	Variable
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
Full Load Amps	2.8	4.3	4.3
Filter Rack (Yes, No)	No	No	No
Dimensions (Length x Width (in.))	—	—	—
Duct Connections	L x W	L x W	L x W
Supply (in.)	12.15 x 16.50	12.15 x 16.50	12.15 x 21.50
Return (in.)	18.75 x 16.75	18.75 x 16.75	18.75 x 21.75
Drain Conn. Size (in.)	3/4 NPT	3/4 NPT	3/4 NPT
Dimensions	H x W x D	H x W x D	H x W x D
Uncrated (in.)	46-3/4 x 18-1/2 x 21-1/8	46-3/4 x 18-1/2 x 21-1/8	51-3/8 x 23-1/2 x 21-1/8
Crated (in.)	48-1/4 x 22-1/2 x 25-1/2	48-1/4 x 22-1/2 x 25-1/2	52-3/4 x 27-1/2 x 25-1/2
Weight - Shipping/Net (lbs)	126/117	126/117	155/144

^(a) Maximum overcurrent protection is dependent on which electric heater is installed. See [Electrical Data](#), p. 13.

^(b) For CFM versus external static pressure (in. w.c.), refer to Installation, Operation, and Maintenance manual.

Table 3. Models A5AHV005A1D30A, A5AHV006A1D30A, and A5AHV007A1D30A

Model	A5AHV005A1D30A	A5AHV006A1D30A	A5AHV007A1D30A
Family	A5AHV	A5AHV	A5AHV
Brand	RunTru, Ameristar	RunTru, Ameristar	RunTru, Ameristar

Product Specifications

Table 3. Models A5AHV005A1D30A, A5AHV006A1D30A, and A5AHV007A1D30A (continued)

Model	A5AHV005A1D30A	A5AHV006A1D30A	A5AHV007A1D30A
Family Description	R-454B Convertible Variable Speed Air Handler	R-454B Convertible Variable Speed Air Handler	R-454B Convertible Variable Speed Air Handler
Application Configuration	4-Way	4-Way	4-Way
Rated Capacity Range (BTUH)	36K - 48K	36K - 48K	42K - 60K
System Control Type	24V	24V	24V
Power Conn. - V/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
Max Breaker Size, Without Electric Heater (Amps)	15	15	15
Max Breaker Size, With Electric Heater (Amps)Nominal CFM ^(a)	60	60	60
Coil Type	All-Aluminum Plate Fin	All-Aluminum Plate Fin	All-Aluminum Plate Fin
Refrigerant Type	R-454B	R-454B	R-454B
Refrigerant Control	TXV	TXV	TXV
Refrigerant Line Connection - Gas (in.)	7/8	7/8	7/8
Refrigerant Line Connection - Liquid (in.)	3/8	3/8	3/8
Blower Type	Direct Drive Centrifugal	Direct Drive Centrifugal	Direct Drive Centrifugal
Configuration	Draw Through	Draw Through	Draw Through
Dimensions (Diameter x Width (in.))	11 x 8	11 x 8	11 x 8
Motor Type	Variable Speed	Variable Speed	Variable Speed
Nominal CFM ^(b)	1400	1600	2000
Speed (RPM)	Variable	Variable	Variable
Volts/Ph/Hz	208-230/1/60	208-230/1/60	208-230/1/60
Full Load Amps	4.3	6.8	6.8
Filter Rack (Yes, No)	No	No	No
Dimensions (Length x Width (in.))	—	—	—
Duct Connections	L x W	L x W	L x W
Supply (in.)	12.15 x 21.50	12.15 x 21.50	12.15 x 21.50
Return (in.)	18.75 x 21.75	18.75 x 21.75	18.75 x 21.75
Drain Conn. Size (in.)	3/4 NPT	3/4 NPT	3/4 NPT
Dimensions	H x W x D	H x W x D	H x W x D
Uncrated (in.)	51-3/8 x 23-1/2 x 21-1/8	57-3/8 x 23-1/2 x 21-1/8	57-3/8 x 23-1/2 x 21-1/8
Crated (in.)	52-3/4 x 27-1/2 x 25-1/2	58-1/8 x 25-7/8 x 25-1/2	58-1/8 x 25-7/8 x 25-1/2
Weight - Shipping/Net (lbs)	155/144	185/174	185/174

^(a) Maximum overcurrent protection is dependent on which electric heater is installed. See [Electrical Data](#), p. 13.

^(b) For CFM versus external static pressure (in. w.c.), refer to Installation, Operation, and Maintenance manual.

Heater Pressure Drop Table

Table 4. Heater pressure drop

Airflow CFM	Number of Racks					Heater Racks	
	1	2	3	4		Heater Model	No. of Racks
	Air Pressure Drop — Inches W.G.						
1800	0.02	0.04	0.06	0.14		BAYHTR1504	1
1700	0.02	0.04	0.06	0.14		BAYHTR1505	1
1600	0.02	0.04	0.06	0.13		BAYHTR1508	2
1500	0.02	0.04	0.06	0.12		BAYHTR1510	2
1400	0.02	0.04	0.06	0.12		BAYHTR1517	3
1300	0.02	0.04	0.05	0.11		BAYHTR3510	3
1200	0.01	0.04	0.05	0.10		BAYHTR3517	3
1100	0.01	0.03	0.05	0.09		BAYHTR1523	4
1000	0.01	0.03	0.04	0.09		BAYHTR1525	4
900	0.01	0.03	0.04	0.08		—	—
800	0.01	0.03	—	—		—	—
700	0.01	0.02	—	—		—	—
600	0.01	0.02	—	—		—	—

Performance and Electrical Data

Airflow Performance Data

Table 5. Cooling airflow performance – model A5AHV002A1B30A

A5AHV002A1B30A Cooling Airflow Performance, Wet Coil, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
1.5	Low	353 CFM/ton	ON	ON	OFF	ON	CFM	524	517	482	418	326
							Watts	49	83	111	133	148
	Normal	401 CFM/ton	ON	ON	OFF	OFF	CFM	608	604	580	535	471
							Watts	60	99	134	167	197
	High	451 CFM/ton	ON	ON	ON	OFF	CFM	683	683	664	626	571
							Watts	76	119	160	198	233
2	Low	343 CFM/ton	OFF	ON	OFF	ON	CFM	693	693	674	638	583
							Watts	78	122	164	202	237
	Normal	390 CFM/ton	OFF	ON	OFF	OFF	CFM	787	791	780	753	712
							Watts	98	149	197	241	284
	High	439 CFM/ton	OFF	ON	ON	OFF	CFM	883	889	877	847	801
							Watts	126	181	233	285	333
2.5	Low	300 CFM/ton	ON	OFF	OFF	ON	CFM	757	760	746	716	671
							Watts	91	140	186	229	269
	Normal ^(a)	340 CFM/ton	ON	OFF	OFF	OFF	CFM	863	867	854	826	781
							Watts	119	173	224	273	319
	High	383 CFM/ton	ON	OFF	ON	OFF	CFM	950	963	945	896	818
							Watts	151	213	265	310	345

^(a) Factory default setting.

Table 6. Heating airflow performance – model A5AHV002A1B30A

A5AHV002A1B30A Heating Airflow Performance, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
1.5	Low	394 CFM/ton	ON	ON	OFF	ON	CFM	594	596	568	525	456
							Watts	53	91	125	160	186
	Normal	448 CFM/ton	ON	ON	OFF	OFF	CFM	677	681	662	627	573
							Watts	68	110	152	192	226
	High	493 CFM/ton	ON	ON	ON	OFF	CFM	744	749	739	709	665
							Watts	81	127	175	219	257
2	Low	393 CFM/ton	OFF	ON	OFF	ON	CFM	791	796	792	764	726
							Watts	91	139	191	238	278
	Normal	446 CFM/ton	OFF	ON	OFF	OFF	CFM	892	900	894	865	815
							Watts	120	171	228	283	325
	High	491 CFM/ton	OFF	ON	ON	OFF	CFM	987	1013	983	961	913
							Watts	147	201	260	322	365

Table 6. Heating airflow performance – model A5AHV002A1B30A (continued)

A5AHV002A1B30A Heating Airflow Performance, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
2.5	Low	350 CFM/ton	ON	OFF	OFF	ON	CFM	878	886	880	851	810
							Watts	115	166	222	276	321
	Normal ^(a)	398 CFM/ton	ON	OFF	OFF	OFF	CFM	101	989	998	974	926
							Watts	151	205	264	328	371
	High	437 CFM/ton	ON	OFF	ON	OFF	CFM	1108	1092	1108	1072	1024
							Watts	185	241	300	372	412

^(a) Factory default setting.

Table 7. Cooling airflow performance – model A5AHV003A1B30A

A5AHV003A1B30A Cooling Airflow Performance, Wet Coil, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
1.5	Low	353 CFM/ton	ON	ON	OFF	ON	CFM	479	455	440	395	331
							Watts	39	68	95	121	143
	Normal	401 CFM/ton	ON	ON	OFF	OFF	CFM	577	553	548	509	454
							Watts	52	86	119	149	176
	High	451 CFM/ton	ON	ON	ON	OFF	CFM	672	647	652	620	571
							Watts	67	106	144	179	212
2	Low	343 CFM/ton	OFF	ON	OFF	ON	CFM	686	685	667	635	588
							Watts	69	110	148	184	218
	Normal	390 CFM/ton	OFF	ON	OFF	OFF	CFM	796	799	788	763	724
							Watts	92	137	181	223	264
	High	439 CFM/ton	OFF	ON	ON	OFF	CFM	892	899	892	872	837
							Watts	116	165	215	263	312
2.5	Low	300 CFM/ton	ON	OFF	OFF	ON	CFM	749	751	738	710	668
							Watts	82	125	166	206	244
	Normal	340 CFM/ton	ON	OFF	OFF	OFF	CFM	867	874	866	843	805
							Watts	109	157	205	252	299
	High	383 CFM/ton	ON	OFF	ON	OFF	CFM	965	976	972	954	922
							Watts	139	191	244	298	353
3	Low	310 CFM/ton	OFF	OFF	OFF	ON	CFM	940	950	945	926	892
							Watts	131	182	234	286	339
	Normal ^(a)	330 CFM/ton	OFF	OFF	OFF	OFF	CFM	993	956	1002	985	953
							Watts	149	202	257	313	370

^(a) Factory default setting.

Performance and Electrical Data

Table 8. Heating airflow performance – model A5AHV003A1B30A

A5AHV003A1B30A Heating Airflow Performance, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
1.5	Low	394 CFM/ton	ON	ON	OFF	ON	CFM	571	574	544	502	441
							Watts	44	82	113	137	171
	Normal	448 CFM/ton	ON	ON	OFF	OFF	CFM	677	682	668	618	572
							Watts	60	99	138	170	206
	High	493 CFM/ton	ON	ON	ON	OFF	CFM	746	752	739	712	674
							Watts	75	116	160	200	237
2	Low	393 CFM/ton	OFF	ON	OFF	ON	CFM	799	806	799	773	740
							Watts	86	128	175	220	259
	Normal	446 CFM/ton	OFF	ON	OFF	OFF	CFM	902	911	912	891	861
							Watts	111	157	210	260	308
	High	491 CFM/ton	OFF	ON	ON	OFF	CFM	995	994	986	984	954
							Watts	131	181	242	293	352
2.5	Low	350 CFM/ton	ON	OFF	OFF	ON	CFM	887	895	895	873	843
							Watts	106	152	204	254	300
	Normal	398 CFM/ton	ON	OFF	OFF	OFF	CFM	1004	1004	998	996	965
							Watts	135	186	246	298	359
	High	437 CFM/ton	ON	OFF	ON	OFF	CFM	1089	1079	1064	1079	1040
							Watts	160	215	282	332	408
3	Low	325 CFM/ton	OFF	OFF	OFF	ON	CFM	986	987	984	997	947
							Watts	131	180	239	291	349
	Normal ^(a)	346 CFM/ton	OFF	OFF	OFF	OFF	CFM	1042	1038	1029	1034	1001
							Watts	146	198	262	313	380

^(a) Factory default setting.

Table 9. Cooling airflow performance – model A5AHV004A1D30A/A5AHV005A1D30A

A5AHV004A1D30A/A5AHV005A1D30A Cooling Airflow Performance, Wet Coil, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
2.5	Low	300 CFM/ton	ON	ON	OFF	ON	CFM	717	714	698	669	629
							Watts	47	97	142	183	219
	Normal	341 CFM/ton	ON	ON	OFF	OFF	CFM	801	815	812	792	756
							Watts	61	116	167	216	262
	High	384 CFM/ton	ON	ON	ON	OFF	CFM	890	922	933	922	890
							Watts	76	136	195	252	308
3	Low	319 CFM/ton	OFF	ON	OFF	ON	CFM	887	919	929	918	886
							Watts	75	135	194	251	306
	Normal	363 CFM/ton	OFF	ON	OFF	OFF	CFM	1106	1149	1173	1176	1160
							Watts	135	202	272	342	414
	High	408 CFM/ton	OFF	ON	ON	OFF	CFM	1218	1263	1287	1291	1274
							Watts	175	249	323	401	480

Table 9. Cooling airflow performance – model A5AHV004A1D30A/A5AHV005A1D30A (continued)

A5AHV004A1D30A/A5AHV005A1D30A Cooling Airflow Performance, Wet Coil, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
3.5	Low	315 CFM/ton	ON	OFF	OFF	ON	CFM	1117	1161	1184	1188	1172
							Watts	139	207	227	348	420
	Normal	357 CFM/ton	ON	OFF	OFF	OFF	CFM	1233	1277	1300	1301	1281
							Watts	179	255	331	407	484
	High	402 CFM/ton	ON	OFF	ON	OFF	CFM	1323	1365	1379	1365	1326
							Watts	209	294	372	443	505
4	Low	308 CFM/ton	OFF	OFF	OFF	ON	CFM	1223	1268	1291	1294	1277
							Watts	176	250	326	403	482
	Normal ^(a)	350 CFM/ton	OFF	OFF	OFF	OFF	CFM	1317	1354	1378	1370	1310
							Watts	208	293	371	441	503
	High	394 CFM/ton	OFF	OFF	ON	OFF	CFM	1473	1493	1468	1400	1294
							Watts	281	372	435	471	482

^(a) Factory default setting.

Table 10. Heating airflow performance – model A5AHV004A1D30A/A5AHV005A1D30A

A5AHV004A1D30A/A5AHV005A1D30A Heating Airflow Performance, Wet Coil, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
2.5	Low	341 CFM/ton	ON	ON	OFF	ON	CFM	798	815	810	799	761
							Watts	53	108	158	211	255
	Normal	379 CFM/ton	ON	ON	OFF	OFF	CFM	873	906	917	912	881
							Watts	64	124	179	240	292
	High	417 CFM/ton	ON	ON	ON	OFF	CFM	1018	1061	1083	1087	1069
							Watts	101	165	229	296	361
3	Low	381 CFM/ton	OFF	ON	OFF	ON	CFM	1138	1186	1215	1222	1212
							Watts	135	204	275	347	422
	Normal	424 CFM/ton	OFF	ON	OFF	OFF	CFM	1232	1278	1309	1314	1295
							Watts	165	239	317	393	467
	High	466 CFM/ton	OFF	ON	ON	OFF	CFM	1306	1343	1373	1376	1332
							Watts	186	265	348	428	483
3.5	Low	348 CFM/ton	ON	OFF	OFF	ON	CFM	1199	1248	1280	1285	1276
							Watts	156	228	303	377	457
	Normal	386 CFM/ton	ON	OFF	OFF	OFF	CFM	1279	1319	1349	1353	1319
							Watts	179	255	337	415	477
	High	425 CFM/ton	ON	OFF	ON	OFF	CFM	1382	1415	1429	1399	1333
							Watts	218	301	389	442	484
4	Low	338 CFM/ton	OFF	OFF	OFF	ON	CFM	1279	1319	1350	1353	1319
							Watts	179	255	337	415	477
	Normal ^(a)	375 CFM/ton	OFF	OFF	OFF	OFF	CFM	1393	1426	1437	1402	1332
							Watts	222	307	395	444	484
	High	413 CFM/ton	OFF	OFF	ON	OFF	CFM	1488	1505	1411	1370	1295
							Watts	265	352	425	522	349

^(a) Factory default setting.

Performance and Electrical Data

Table 11. Cooling airflow performance – model A5AHV006A1D30A/A5AHV007A1D30A

A5AHV006A1D30A/A5AHV007A1D30A Cooling Airflow Performance, Wet Coil, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
3	Low	324 CFM/ton	ON	ON	OFF	ON	CFM	993	1003	997	974	935
							Watts	101	149	197	246	295
	Normal	368 CFM/ton	ON	ON	OFF	OFF	CFM	1077	1095	1096	1079	1045
							Watts	122	175	227	280	332
	High	423 CFM/ton	ON	ON	ON	OFF	CFM	1233	1258	1264	1254	1227
							Watts	173	236	297	356	413
3.5	Low	314 CFM/ton	OFF	ON	OFF	ON	CFM	1074	1092	1092	1075	1040
							Watts	121	174	226	279	331
	Normal	357 CFM/ton	OFF	ON	OFF	OFF	CFM	1208	1232	1239	1228	1200
							Watts	164	225	284	342	399
	High	411 CFM/ton	OFF	ON	ON	OFF	CFM	1453	1479	1490	1487	1468
							Watts	258	333	405	474	539
4	Low	298 CFM/ton	ON	OFF	OFF	ON	CFM	1134	1157	1162	1149	1118
							Watts	135	191	249	302	357
	Normal	339 CFM/ton	ON	OFF	OFF	OFF	CFM	1346	1371	1380	1373	1351
							Watts	217	286	352	416	478
	High	389 CFM/ton	ON	OFF	ON	OFF	CFM	1605	1633	1647	1648	1635
							Watts	371	401	481	556	626
5	Low	305 CFM/ton	OFF	OFF	OFF	ON	CFM	1565	1592	1606	1605	1591
							Watts	301	383	461	534	603
	Normal ^(a)	347 CFM/ton	OFF	OFF	OFF	OFF	CFM	1754	1791	1794	1788	1798
							Watts	414	499	582	665	745
	High ^(b)	399 CFM/ton	OFF	OFF	ON	OFF	CFM	1993	1997	1968	1906	1811
							Watts	557	645	707	743	753

^(a) Factory default setting.

^(b) Airflow must not exceed 1800 CFM in horizontal right, horizontal left, and downflow applications due to condensate blowoff. The 5 ton high tap shall not be used in these applications.

Table 12. Heating airflow performance – model A5AHV006A1D30A/A5AHV007A1D30A

A5AHV006A1D30A/A5AHV007A1D30A Heating Airflow Performance, Wet Coil, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
3	Low	360 CFM/ton	ON	ON	OFF	ON	CFM	1058	1074	1079	1067	1031
							Watts	108	159	11	264	315
	Normal	400 CFM/ton	ON	ON	OFF	OFF	CFM	1139	1159	1176	1166	1136
							Watts	128	183	242	296	351
	High	440 CFM/ton	ON	ON	ON	OFF	CFM	1292	1318	1333	1328	1307
							Watts	183	248	314	375	436
3.5	Low	348 CFM/ton	OFF	ON	OFF	ON	CFM	1162	1183	1199	1190	1162
							Watts	136	193	253	308	364
	Normal	387 CFM/ton	OFF	ON	OFF	OFF	CFM	1336	1364	1378	1375	1356
							Watts	199	267	335	398	461
	High	426 CFM/ton	OFF	ON	ON	OFF	CFM	1509	1544	1557	1559	1550
							Watts	261	341	417	489	558

Table 12. Heating airflow performance – model A5AHV006A1D30A/A5AHV007A1D30A (continued)

A5AHV006A1D30A/A5AHV007A1D30A Heating Airflow Performance, Wet Coil, No Filter, No Heater												
Outdoor Unit Size (Tons)	Speed Setting	Airflow Setting	DIP Switch Setting				Airflow Power	External Static Pressure				
			SW1	SW2	SW3	SW4		0.1	0.3	0.5	0.7	0.9
4	Low	338 CFM/ton	ON	OFF	OFF	ON	CFM	1332	1360	1375	1371	1352
							Watts	197	265	333	397	459
	Normal	375 CFM/ton	ON	OFF	OFF	OFF	CFM	1521	1556	1569	1571	1563
							Watts	265	346	422	495	564
	High	413 CFM/ton	ON	OFF	ON	OFF	CFM	1667	1714	1726	1725	1724
							Watts	341	426	510	587	665
5	Low	326 CFM/ton	OFF	OFF	OFF	ON	CFM	1650	1694	1707	1707	1705
							Watts	330	415	497	574	651
	Normal ^(a)	362 CFM/ton	OFF	OFF	OFF	OFF	CFM	1805	1846	1855	1831	1811
							Watts	423	509	597	660	729
	High	398 CFM/ton	OFF	OFF	ON	OFF	CFM	1980	1991	1992	1923	1851
							Watts	515	604	694	723	753

^(a) Factory default setting.

Electrical Data

1. See Product Data or Air Handler nameplate for approved combinations of Air Handlers and Heaters.
2. Heater model numbers may have additional suffix digits.

Table 13. Model — A5AHV002A1B30A

A5AHV002A1B30A Heater Data											
Heater Model No.	No. of Circuits/Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				2.8 ^(a)	4	15			2.8 ^(a)	4	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.84	13100	16.0	24	25	2.88	9800	13.8	21	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.80	16400	20.0	29	30	3.60	12300	17.3	25	25
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.68	26200	32.0	44	45	5.76	19700	27.7	38	40
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYHTR1517BRK Circuit 1 ^(b)	2/1	9.60	32800	40.0	54	60	7.20	24600	34.6	47	50
BAYHTR1517BRK Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR3510LUG	1/3	9.60	32800	23.1	32	35	7.20	24600	20.0	28	30
BAYHTR3517LUG	1/3	14.40	49100	34.6	46	50	10.80	36900	30.0	41	45

^(a) Motor Amps

^(b) MCA and MOP for circuit 1 contains the motor amps.

Performance and Electrical Data

Table 14. Model — A5AHV003A1B30A

A5AHV003A1B30A Heater Data											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				4.3 ^(a)	5	15			4.3 ^(a)	5	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.84	13100	16.0	25	25	2.88	9800	13.8	23	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.80	16400	20.0	30	30	3.60	12300	17.3	27	30
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.68	26200	32.0	45	45	5.76	19700	27.7	40	40
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1517BRK Circuit 1 ^(b)	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1517BRK Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR3510LUG	1/3	9.60	32800	23.1	34	35	7.20	24600	20.0	30	30
BAYHTR3517LUG	1/3	14.40	49100	34.6	48	50	10.80	36900	30.0	42	45

^(a) Motor Amps

^(b) MCA and MOP for circuit 1 contains the motor amps.

Table 15. Models — A5AHV004A1D30A/A5AHV005A1D30A

A5AHV004A1D30A/A5AHV005A1D30A Heater Data											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				4.3 ^(a)	5	15			4.3 ^(a)	5	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.84	13100	16.0	25	25	2.88	9800	13.8	23	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.80	16400	20.0	30	30	3.60	12300	17.3	27	30
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.68	26200	32.0	45	45	5.76	19700	27.7	40	40
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1517BRK Circuit 1 ^(b)	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1517BRK Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1523BRK Circuit 1 ^(b)	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	49	50
BAYHTR1523BRK Circuit 2		9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR3510LUG	1/3	9.60	32800	23.1	34	35	7.20	24600	20.0	30	30
BAYHTR3517LUG	1/3	14.40	49100	34.6	48	50	10.80	36900	30.0	42	45

^(a) Motor Amps

^(b) MCA and MOP for circuit 1 contains the motor amps.

Table 16. Models — A5AHV006A1D30A/A5AHV007A1D30A

A5AHV006A1D30A/A5AHV007A1D30A Heater Data											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				6.8 ^(a)	9	15			6.8 ^(a)	9	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.84	13100	16.0	29	30	2.88	9800	13.8	26	30
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.80	16400	20.0	34	35	3.60	12300	17.3	30	30

Table 16. Models — A5AHV006A1D30A/A5AHV007A1D30A (continued)

A5AHV006A1D30A/A5AHV007A1D30A Heater Data											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.68	26200	32.0	49	50	5.76	19700	27.7	43	45
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.60	32800	40.0	59	60	7.20	24600	34.6	52	60
BAYHTR1517BRK Circuit 1 ^(b)	2/1	9.60	32800	40.0	59	60	7.20	24600	34.6	52	60
BAYHTR1517BRK Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1523BRK Circuit 1 ^(b)	2/1	9.60	32800	40.0	59	60	7.20	24600	34.6	52	60
BAYHTR1523BRK Circuit 2		9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR1525BRK Circuit 1 ^(b)	4/1	6.00	20500	25.0	40	40	4.50	15400	21.6	36	40
BAYHTR1525BRK Circuit 2		6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR1525BRK Circuit 3		6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR1525BRK Circuit 4		6.00	20500	25.0	31	35	4.50	15400	21.6	27	30
BAYHTR3510LUG	1/3	9.60	32800	23.1	36	40	7.20	24600	20.0	33	35
BAYHTR3517LUG	1/3	14.40	49100	34.6	51	60	10.80	36900	30.0	45	45

(a) Motor Amps

(b) MCA and MOP for circuit 1 contains the motor amps.

Minimum Airflow CFM

Table 17. Models – A5AHV002A1B30A and A5AHV003A1B30A

Heater	Minimum Heater Airflow CFM	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	660	500
BAYHTR1508BRK, BAYHTR1508LUG	780	600
BAYHTR1510BRK, BAYHTR1510LUG	780	600
BAYHTR1517BRK	1050	850
BAYHTR3510LUG	780	600
BAYHTR3517LUG	900	850

Table 18. Models – A5AHV004A1D30A and A5AHV005A1D30A

Heater	Minimum Heater Airflow CFM	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	875	675
BAYHTR1508BRK, BAYHTR1508LUG	950	820
BAYHTR1510BRK, BAYHTR1510LUG	1000	820
BAYHTR1517BRK	1000	820
BAYHTR3510LUG	875	820
BAYHTR3517LUG	1000	950
BAYHTR1523BRK	1300	1140

Table 19. Models – A5AHV006A1D30A, and A5AHV007A1D30A

Heater	Minimum Heater Airflow CFM	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG, BAYHTR1505BRK, BAYHTR1505LUG	1200	975
BAYHTR1508BRK, BAYHTR1508LUG	1350	975
BAYHTR1510BRK, BAYHTR1510LUG	1350	975
BAYHTR1517BRK	1365	975
BAYHTR3510LUG	1300	975
BAYHTR3517LUG	1365	1120
BAYHTR1523BRK	1365	1300
BAYHTR1525BRK	1810	1505

Notes: See following tables for heater application:

- Pressure Drop for Electrical Heaters
- Minimum Heating Airflow Matrix (on unit nameplates)

Table 20. Airflow performance with auxiliary heat - models A5AHV002A1B30A and A5AHV003A1B30A

Airflow Settings	DIP Switch Settings		Nominal Airflow
	Switch 7	Switch 8	
Low	ON	ON	601
Med-Lo	OFF	ON	661
Med-Hi	ON	OFF	781
High	OFF	OFF	973

Table 21. Airflow performance with auxiliary heat - models A5AHV004A1D30A and A5AHV005A1D30A

Airflow Settings	DIP Switch Settings		Nominal Airflow
	Switch 7	Switch 8	
Low	ON	ON	696
Med-Lo	OFF	ON	825
Med-Hi	ON	OFF	1150
High	OFF	OFF	1298

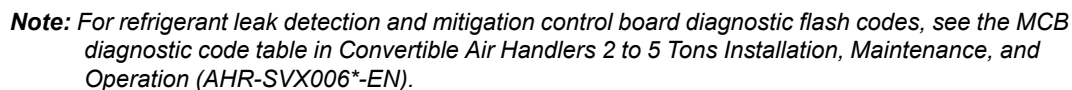
Table 22. Airflow performance with auxiliary heat - models A5AHV006A1D30A and A5AHV007A1D30A

Airflow Settings	DIP Switch Settings		Nominal Airflow
	Switch 7	Switch 8	
Low	ON	ON	1000
Med-Lo	OFF	ON	1130

Table 22. Airflow performance with auxiliary heat - models A5AHV006A1D30A and A5AHV007A1D30A (continued)

Airflow Settings	DIP Switch Settings		Nominal Airflow
	Switch 7	Switch 8	
Med-Hi	ON	OFF	1354
High	OFF	OFF	1596

Figure 1. Wiring diagram



Field Wiring Diagrams

Figure 2. Single stage

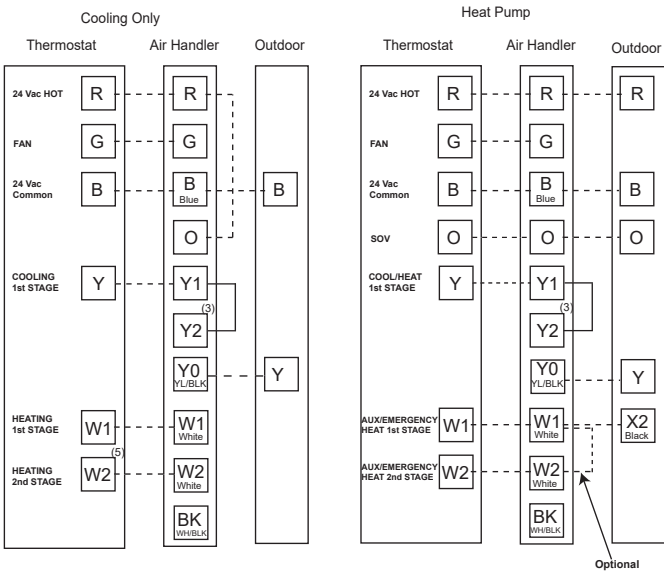


Figure 3. 2-Stage indoor airflow

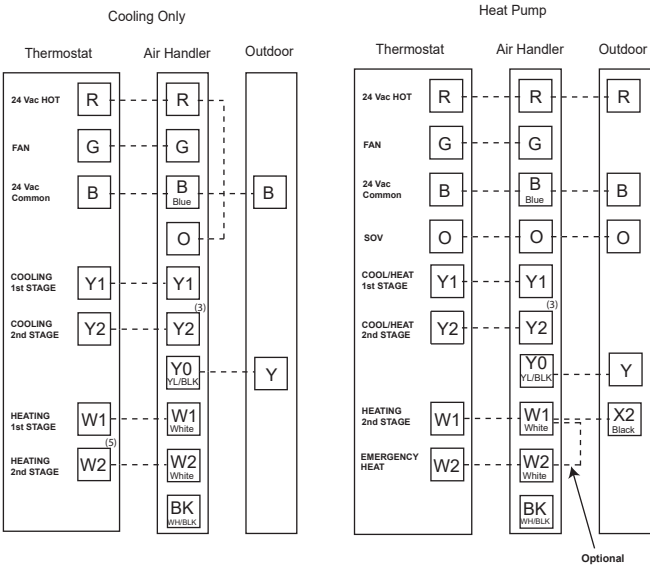
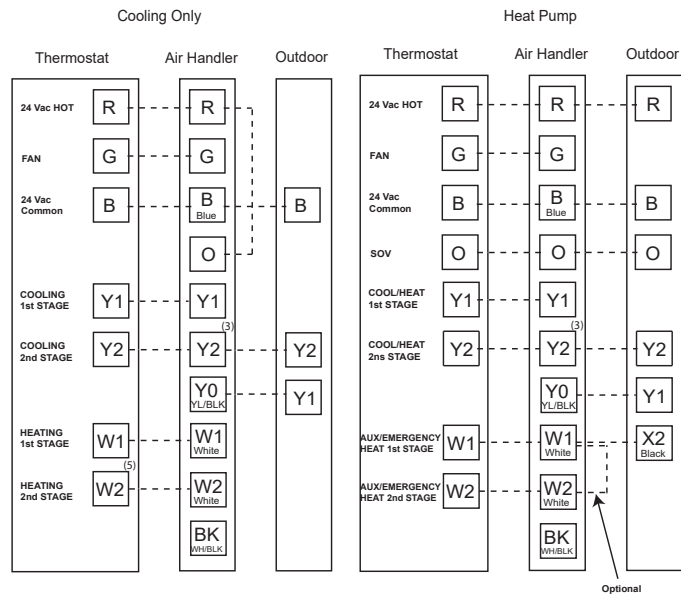


Figure 4. 2-Stage, 2-step



Notes:

1. Units with pigtails require wirenuts for connections.
2. Cap all unused wires.
3. When BK is used with PWM-enabled Comfort Control, do not connect Y2 at the air handler.
4. When BK is used, cut the jumper between R and BK on the control board. See wiring schematic for details.
5. In AC systems for multiple stages of electric heat, jumper W1 and W2 together if comfort control has only one stage of heat.

External Switches and Accessories

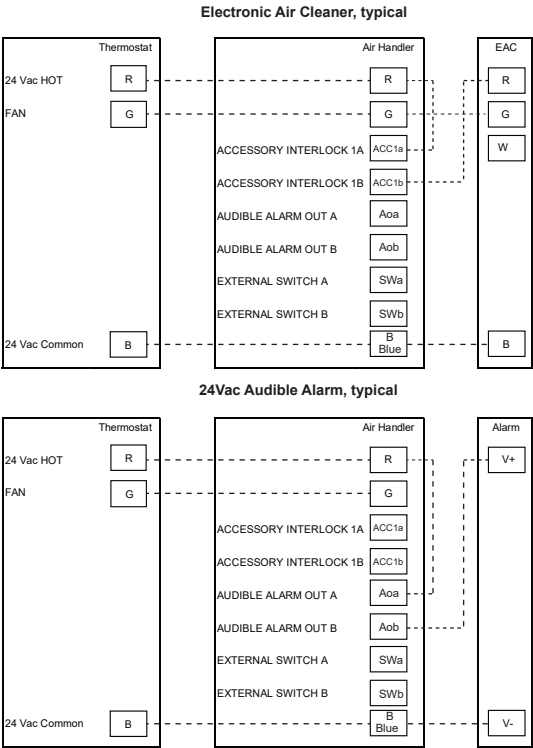
The following optional connections are available on the mitigation control board. See [Figure 5, p. 21](#).

- ACC1 and ACC2 accessory connections. Use when connecting an accessory to the air handler that could be considered a source of ignition (ex. electronic air cleaner).
- Aoa/Aob audible alarm connections. Use when configuring an audible alarm on the refrigerant detection system of the air handler.

ACC1, ACC2, and Aoa/Aob are dry contacts and need source voltage provided from either the accessory or the unit's control wiring.

Connect using field-supplied 3/16-inch (Aoa/Aob) or 1/4-inch (ACC1, ACC2) female spade connections.

Figure 5. Accessories diagram



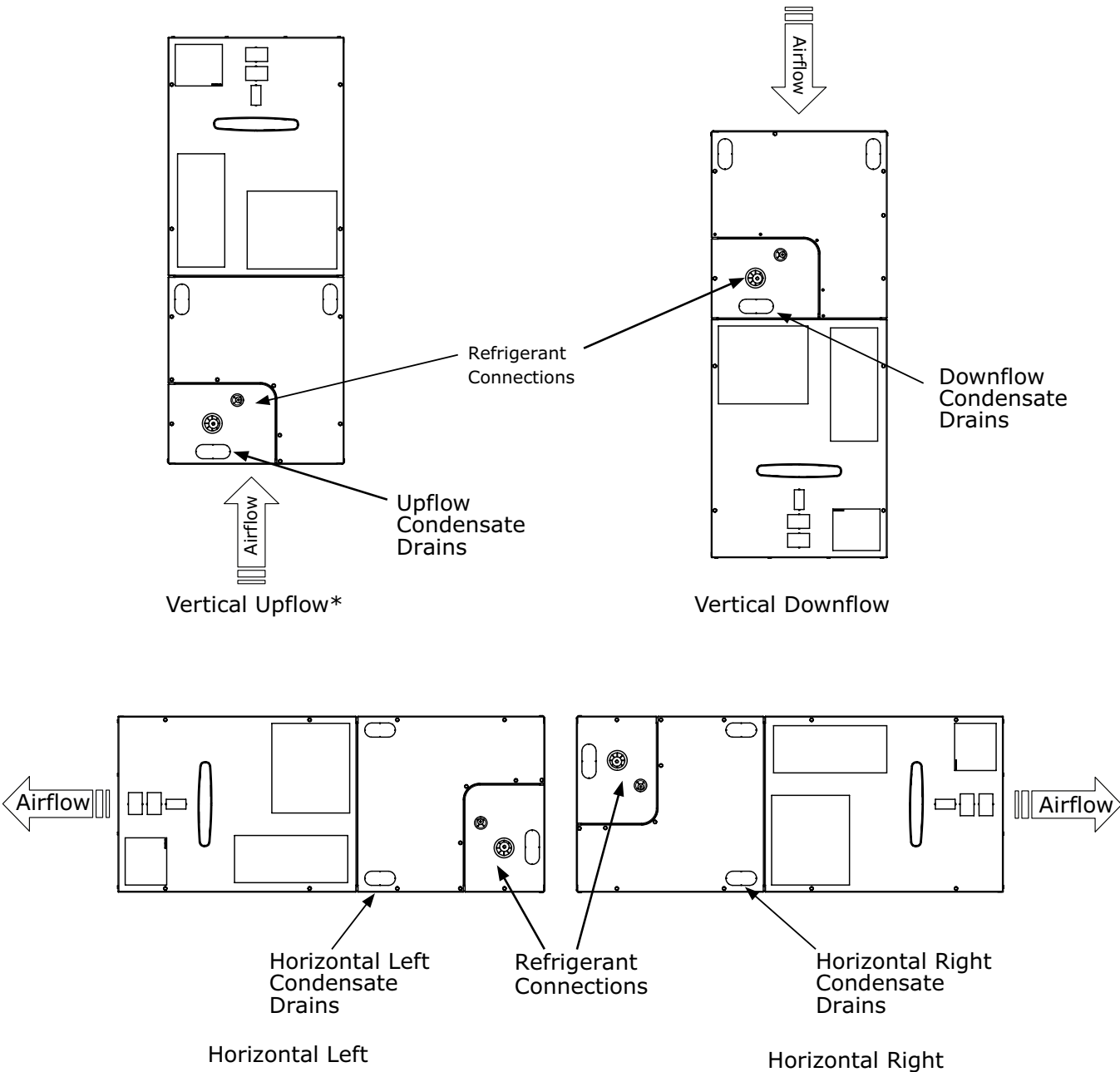
Scan QR code to view instructional videos on field wiring for CleanEffects or AccuClean electronic air cleaners.

Figure 6. Instructions for CleanEffects or AccuClean electronic air cleaners



Unit Convertibility

Figure 7. Multi-position air handler



Note: * = No internal modifications required.

Dimensional Data

Figure 8. Dimensional data

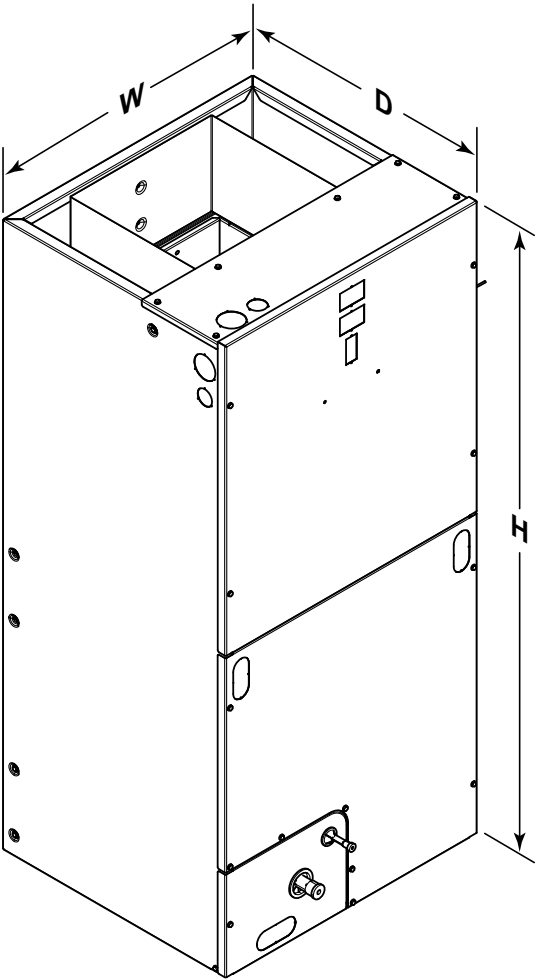


Table 23. Dimensions (inches)

Model No.	H	W	D
A5AHV002A1B30A	46.77	18.50	21.13
A5AHV003A1B30A	46.77	18.50	21.13
A5AHV004A1D30A	51.27	23.50	21.13
A5AHV005A1D30A	51.27	23.50	21.13
A5AHV006A1D30A	57.40	23.50	21.13
A5AHV007A1D30A	57.40	23.50	21.13

Figure 9. Dimensional data

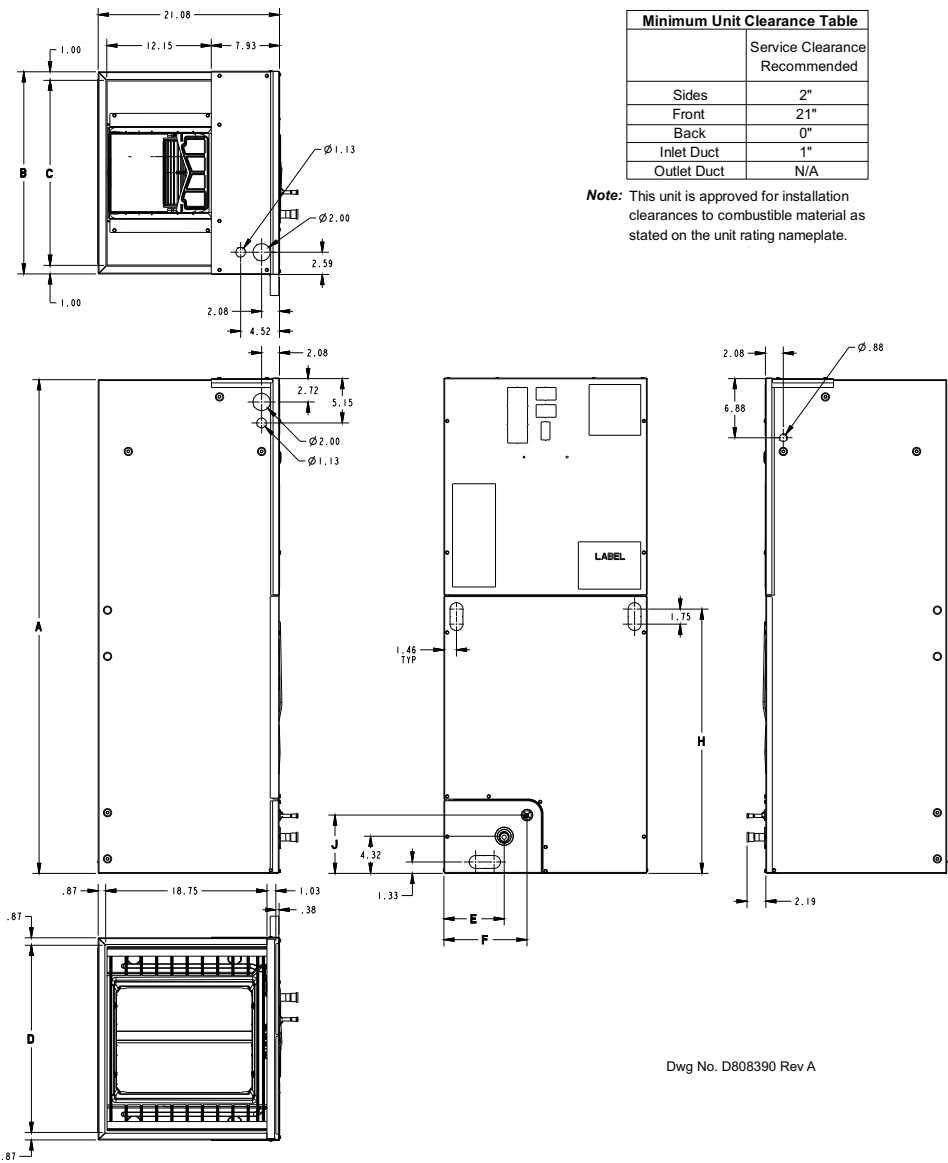


Table 24. Dimensions (inches)

Air Handler Model	A	B	C	D	E	F	H	J	Flow Control	Gas Line Braze
A5AHV002, 003	46.77	18.50	16.50	16.75	5.43	7.08	20.07	5.76	TXV	3/4
A5AHV004, 005	51.27	23.50	21.50	21.75	7.01	9.66	24.58	6.76	TXV	7/8
A5AHV006, 007	57.40	23.50	21.50	21.75	7.01	9.66	30.71	6.76	TXV	7/8

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