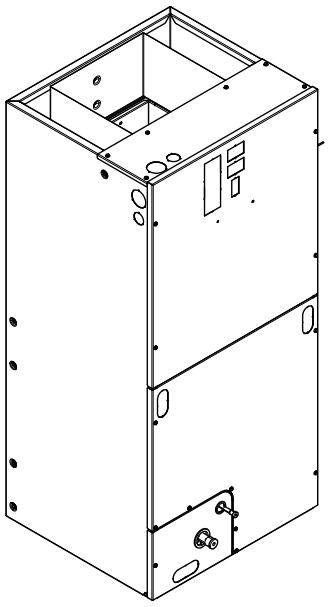
Product and Submittal Data

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.*

October 2025

AHR-PSD011B-EN

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.

Copyright

This document and the information in it are the property of Trane, and may not be used or reproduced in whole or in part without written permission. Trane reserves the right to revise this publication at any time, and to make changes to its content without obligation to notify any person of such revision or change.

Trademark

All trademarks referenced in this document are the trademarks of their respective owners.

Revision History

1. Updated note (a) on all product specification tables.
2. Corrected words “Painted” and “TEM”.

Table of Contents

Features and Benefits 4
Optional Equipment 4
Product Specifications 5
Heater Pressure Drop Table 7
Performance and Electrical Data 8
Airflow Performance data 8
Electrical Data 10
Minimum Airflow CFM 13
Wiring Diagram 15
Field Wiring Diagrams 16
External Switches and Accessories 17
Unit Convertibility 19
Dimensional Data 20

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. 10.
[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

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. 10.

[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 Watts	524 49	517 83	482 111	418 133	326 148
	Normal	401 CFM/ton	ON	ON	OFF	OFF	CFM Watts	608 60	604 99	580 134	535 167	471 197
	High	451 CFM/ton	ON	ON	ON	OFF	CFM Watts	683 76	683 119	664 160	626 198	571 233
2	Low	343 CFM/ton	OFF	ON	OFF	ON	CFM Watts	693 78	693 122	674 164	638 202	583 237
	Normal	390 CFM/ton	OFF	ON	OFF	OFF	CFM Watts	787 98	791 149	780 197	753 241	712 284
	High	439 CFM/ton	OFF	ON	ON	OFF	CFM Watts	883 126	889 181	877 233	847 285	801 333
2.5	Low	300 CFM/ton	ON	OFF	OFF	ON	CFM Watts	757 91	760 140	746 186	716 229	671 269
	Normal[a]	340 CFM/ton	ON	OFF	OFF	OFF	CFM Watts	863 119	867 173	854 224	826 273	781 319
	High	383 CFM/ton	ON	OFF	ON	OFF	CFM Watts	950 151	963 213	945 265	896 310	818 345

[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 Watts	594 53	596 91	568 125	525 160	456 186
	Normal	448 CFM/ton	ON	ON	OFF	OFF	CFM Watts	677 68	681 110	662 152	627 192	573 226
	High	493 CFM/ton	ON	ON	ON	OFF	CFM Watts	744 81	749 127	739 175	709 219	665 257
2	Low	393 CFM/ton	OFF	ON	OFF	ON	CFM Watts	791 91	796 139	792 191	764 238	726 278
	Normal	446 CFM/ton	OFF	ON	OFF	OFF	CFM Watts	892 120	900 171	894 228	865 283	815 325
	High	491 CFM/ton	OFF	ON	ON	OFF	CFM Watts	987 147	1013 201	983 260	961 322	913 365
2.5	Low	350 CFM/ton	ON	OFF	OFF	ON	CFM Watts	878 115	886 166	880 222	851 276	810 321
	Normal[a]	398 CFM/ton	ON	OFF	OFF	OFF	CFM Watts	101 151	989 205	998 264	974 328	926 371
	High	437 CFM/ton	ON	OFF	ON	OFF	CFM Watts	1108 185	1092 241	1108 300	1072 372	1024 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 Watts	479 39	455 68	440 95	395 121	331 143
	Normal	401 CFM/ton	ON	ON	OFF	OFF	CFM Watts	577 52	553 86	548 119	509 149	454 176
	High	451 CFM/ton	ON	ON	ON	OFF	CFM Watts	672 67	647 106	652 144	620 179	571 212
2	Low	343 CFM/ton	OFF	ON	OFF	ON	CFM Watts	686 69	685 110	667 148	635 184	588 218
	Normal	390 CFM/ton	OFF	ON	OFF	OFF	CFM Watts	796 92	799 137	788 181	763 223	724 264
	High	439 CFM/ton	OFF	ON	ON	OFF	CFM Watts	892 116	899 165	892 215	872 263	837 312
2.5	Low	300 CFM/ton	ON	OFF	OFF	ON	CFM Watts	749 82	751 125	738 166	710 206	668 244
	Normal	340 CFM/ton	ON	OFF	OFF	OFF	CFM Watts	867 109	874 157	866 205	843 252	805 299
	High	383 CFM/ton	ON	OFF	ON	OFF	CFM Watts	965 139	976 191	972 244	954 298	922 353
3	Low	310 CFM/ton	OFF	OFF	OFF	ON	CFM Watts	940 131	950 182	945 234	926 286	892 339
	Normal[a]	330 CFM/ton	OFF	OFF	OFF	OFF	CFM Watts	993 149	956 202	1002 257	985 313	953 370

[a] Factory Default Setting

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 Watts	571 44	574 82	544 113	502 137	441 171
	Normal	448 CFM/ton	ON	ON	OFF	OFF	CFM Watts	677 60	682 99	668 138	618 170	572 206
	High	493 CFM/ton	ON	ON	ON	OFF	CFM Watts	746 75	752 116	739 160	712 200	674 237
2	Low	393 CFM/ton	OFF	ON	OFF	ON	CFM Watts	799 86	806 128	799 175	773 220	740 259
	Normal	446 CFM/ton	OFF	ON	OFF	OFF	CFM Watts	902 111	911 157	912 210	891 260	861 308
	High	491 CFM/ton	OFF	ON	ON	OFF	CFM Watts	995 131	994 181	986 242	984 293	954 352
2.5	Low	350 CFM/ton	ON	OFF	OFF	ON	CFM Watts	887 106	895 152	895 204	873 254	843 300
	Normal	398 CFM/ton	ON	OFF	OFF	OFF	CFM Watts	1004 135	1004 186	998 246	996 298	965 359
	High	437 CFM/ton	ON	OFF	ON	OFF	CFM Watts	1089 160	1079 215	1064 282	1079 332	1040 408
3	Low	325 CFM/ton	OFF	OFF	OFF	ON	CFM Watts	986 131	987 180	984 239	997 291	947 349
	Normal[a]	346 CFM/ton	OFF	OFF	OFF	OFF	CFM Watts	1042 146	1038 198	1029 262	1034 313	1001 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 Watts	717 47	714 97	698 142	669 183	629 219
	Normal	341 CFM/ton	ON	ON	OFF	OFF	CFM Watts	801 61	815 116	812 167	792 216	756 262
	High	384 CFM/ton	ON	ON	ON	OFF	CFM Watts	890 76	922 136	933 195	922 252	890 308
3	Low	319 CFM/ton	OFF	ON	OFF	ON	CFM Watts	887 75	919 135	929 194	918 251	886 306
	Normal	363 CFM/ton	OFF	ON	OFF	OFF	CFM Watts	1106 135	1149 202	1173 272	1176 342	1160 414
	High	408 CFM/ton	OFF	ON	ON	OFF	CFM Watts	1218 175	1263 249	1287 323	1291 401	1274 480
3.5	Low	315 CFM/ton	ON	OFF	OFF	ON	CFM Watts	1117 139	1161 207	1184 227	1188 348	1172 420
	Normal	357 CFM/ton	ON	OFF	OFF	OFF	CFM Watts	1233 179	1277 255	1300 331	1301 407	1281 484
	High	402 CFM/ton	ON	OFF	ON	OFF	CFM Watts	1323 209	1365 294	1379 372	1365 443	1326 505
4	Low	308 CFM/ton	OFF	OFF	OFF	ON	CFM Watts	1223 176	1268 250	1291 326	1294 403	1277 482
	Normal[a]	350 CFM/ton	OFF	OFF	OFF	OFF	CFM Watts	1317 208	1354 293	1378 371	1370 441	1310 503
	High	394 CFM/ton	OFF	OFF	ON	OFF	CFM Watts	1473 281	1493 372	1468 435	1400 471	1294 482

[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 10. 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

Table 10. Model — A5AHV002A1B30A (continued)

(a) Motor Amps
(b) MCA and MOP for circuit 1 contains the motor amps

Table 11. 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 12. 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 13. 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
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 14. 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 15. 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 16. 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 17. 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 18. 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 19. Airflow performance with auxiliary heat - models A5AHV006A1D30A and A5AHV007A1D30A

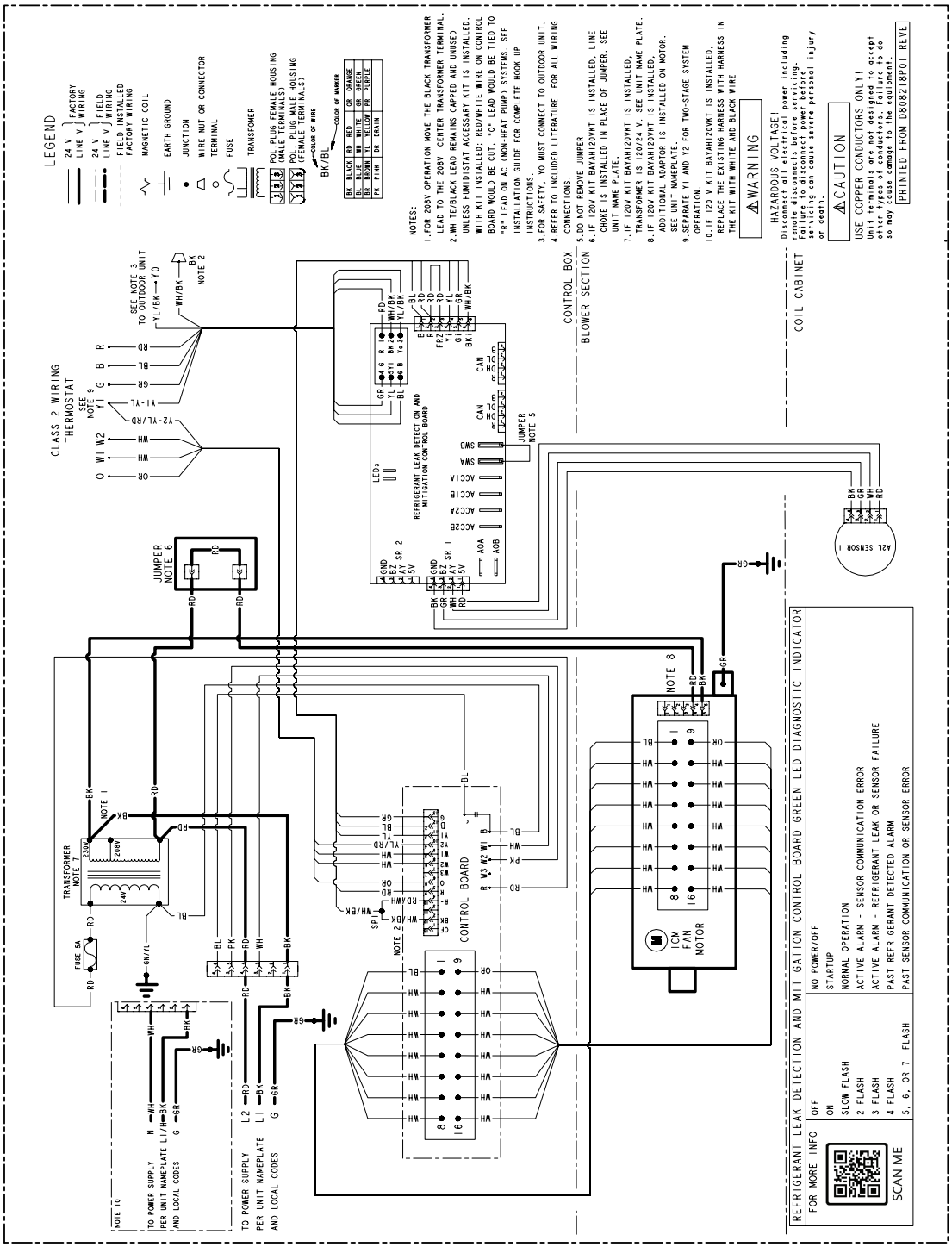
Airflow Settings	DIP Switch Settings		Nominal Airflow
	Switch 7	Switch 8	
Low	ON	ON	1000
Med-Lo	OFF	ON	1130

Table 19. 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

Wiring Diagram

Figure 1. Wiring diagram

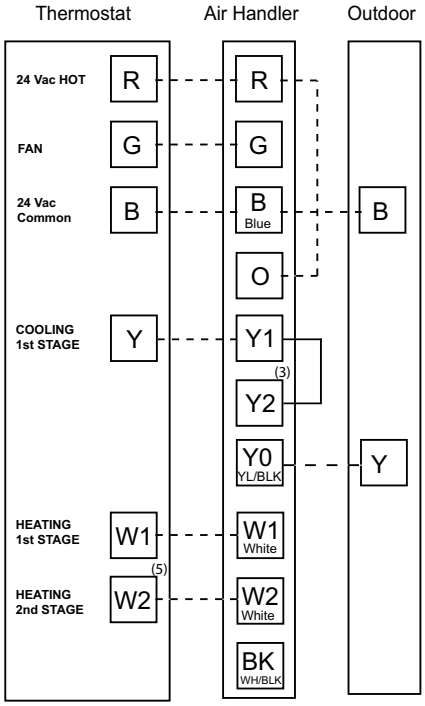


Note: *For refrigerant leak detection and mitigation control board diagnostic flash codes, see the MCB diagnostic code table in Convertible Air Handlers 2 to 5 Tons Installation, Maintenance, and Operation (AHR-SVX006*-EN).*

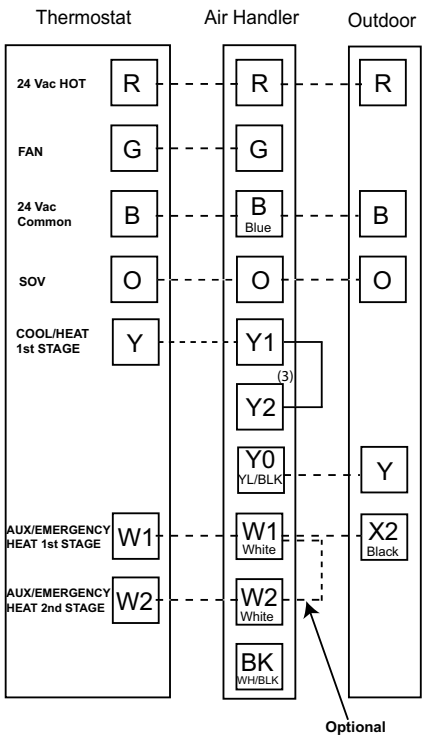
Field Wiring Diagrams

Figure 2. Field wiring diagrams

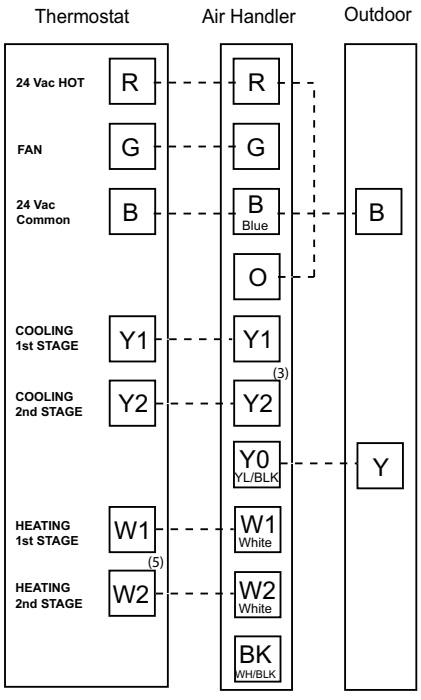
Single Stage, Cooling Only



Single Stage, HP



2 Stage Indoor Airflow, Cooling Only



2 Stage Indoor Airflow, HP

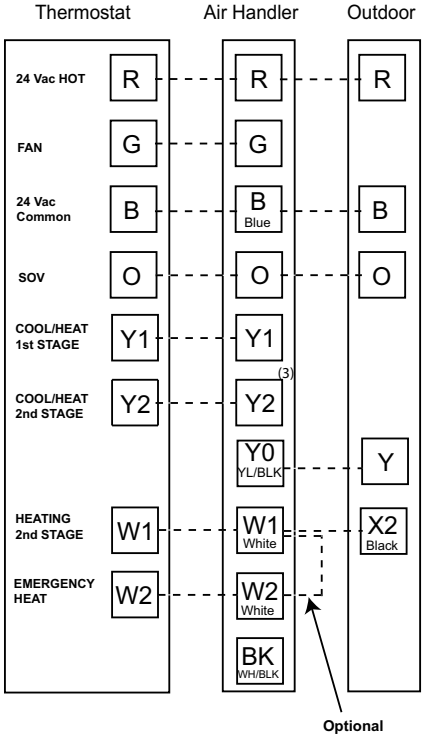
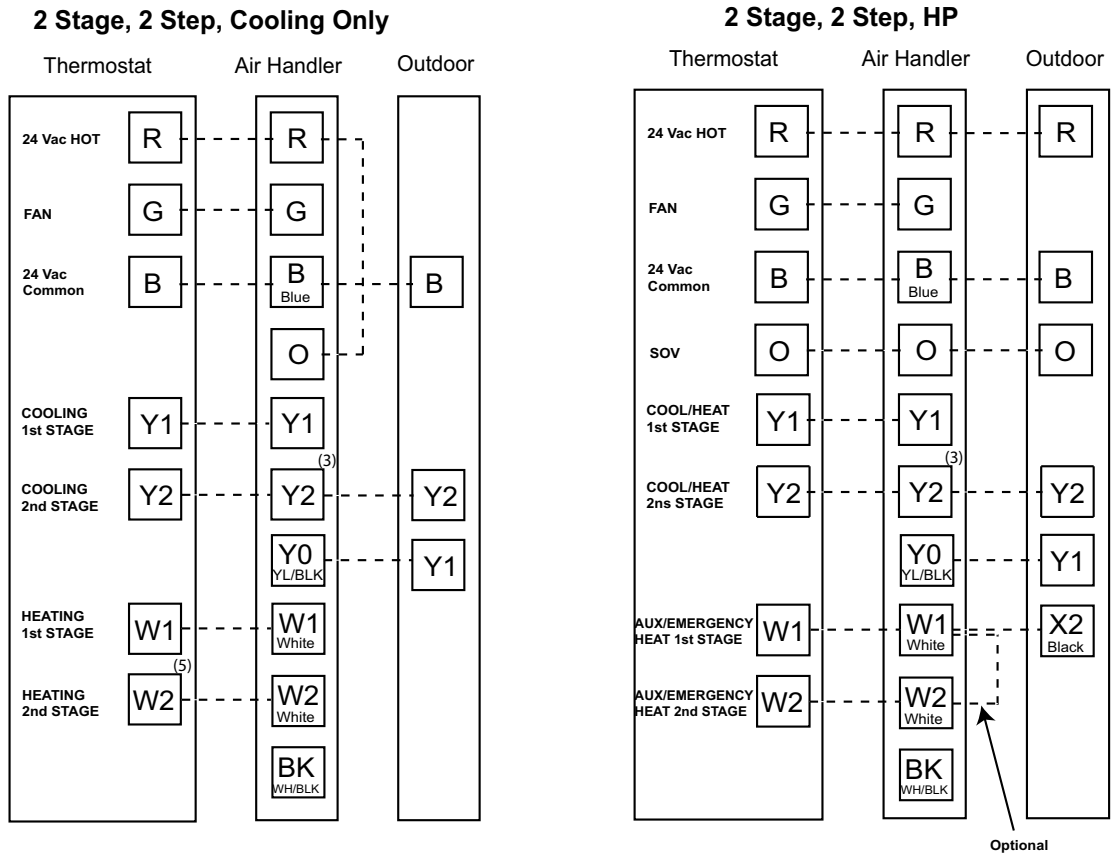


Figure 3. Field wiring diagrams



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 connection diagrams Figure 4, p. 18):

- 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.

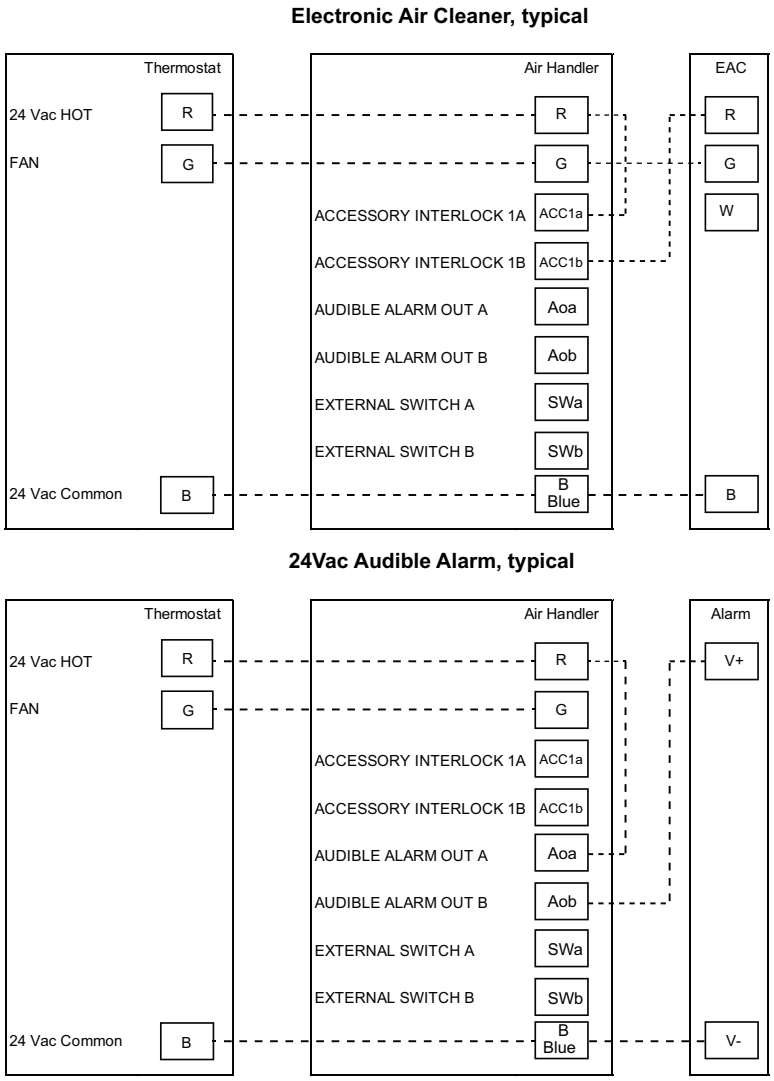
ACC1, ACC2, and Aoa/Aob are dry contacts and need source voltage provided from either the accessory or the unit's control wiring.

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

Figure 4. Accessories diagram

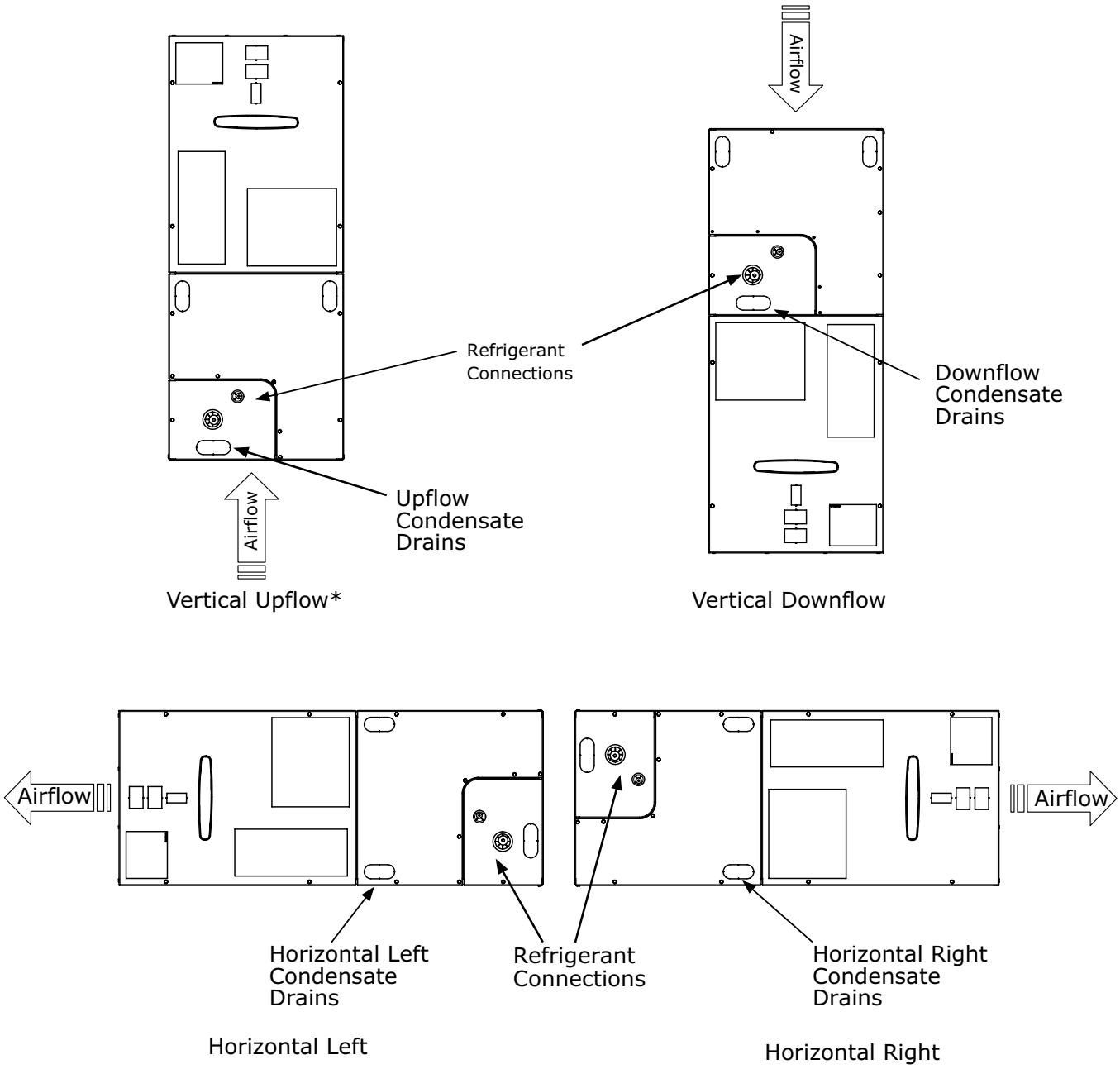
SCAN ME

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



Unit Convertibility

Figure 5. Multi-position air handler
*** = No internal modifications required.**



Dimensional Data

Figure 6. Dimensional data

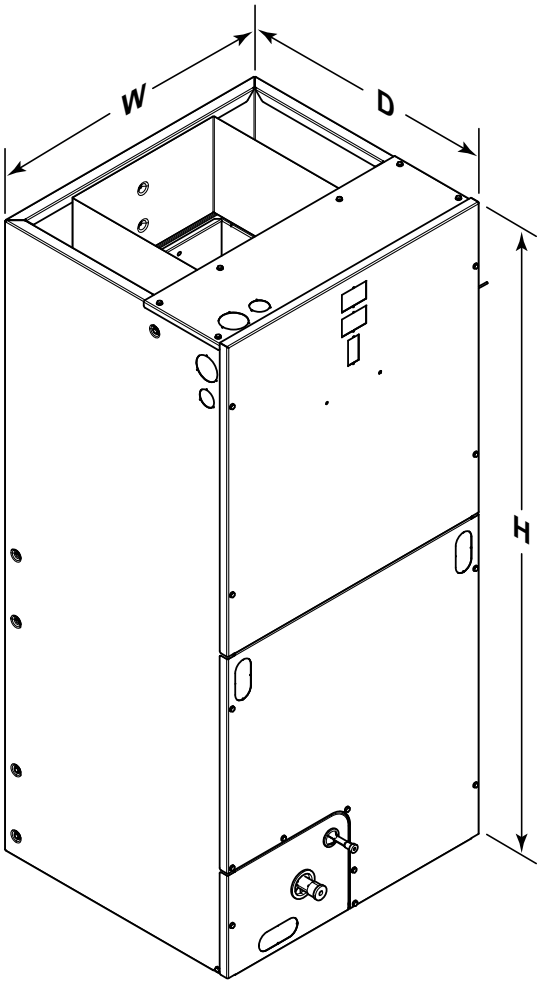
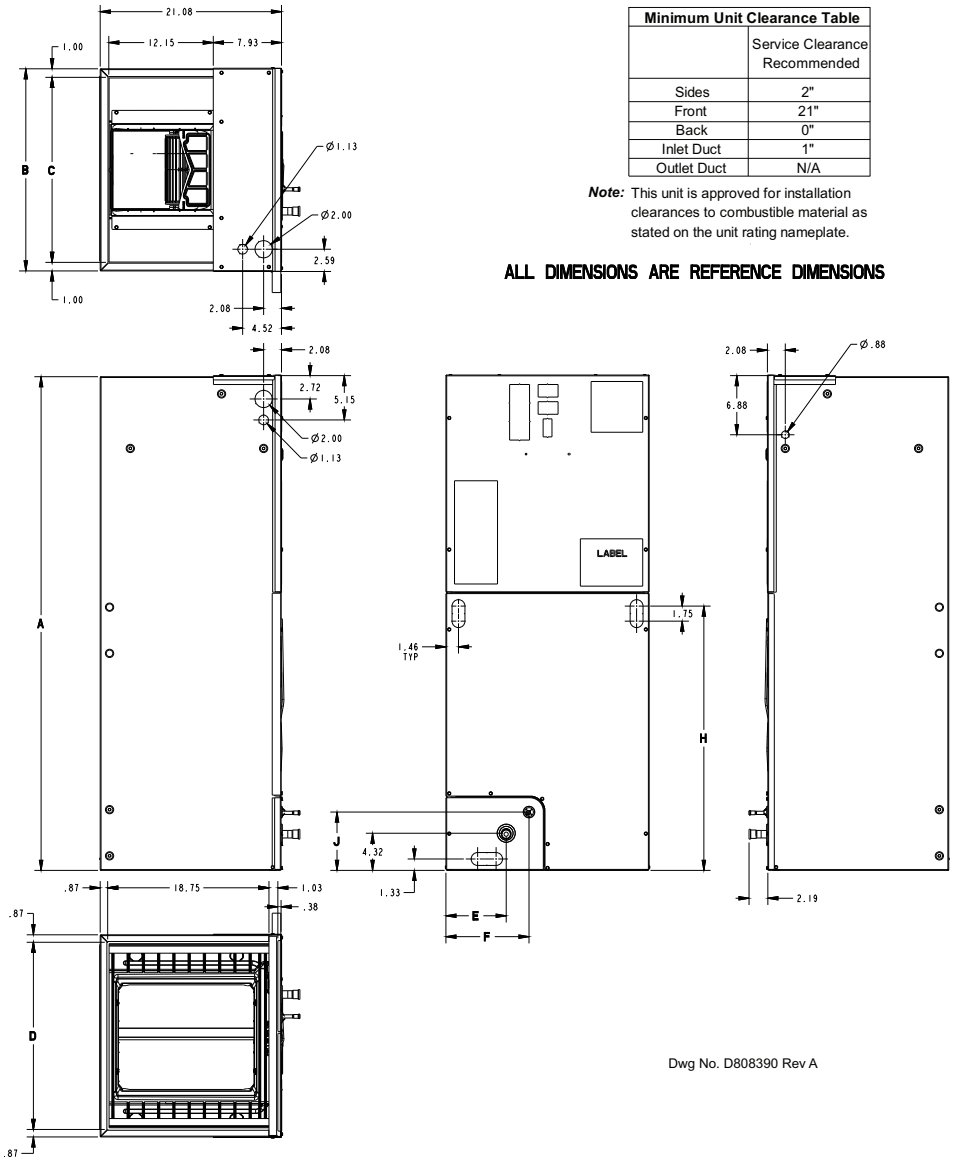


Table 20. Dimensions (inches)

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 7. Dimensions



Minimum Unit Clearance Table	
	Service Clearance Recommended
Sides	2"
Front	21"
Back	0"
Inlet Duct	1"
Outlet Duct	N/A

Note: This unit is approved for installation clearances to combustible material as stated on the unit rating nameplate.

ALL DIMENSIONS ARE REFERENCE DIMENSIONS

Dwg No. D808390 Rev A

Table 21. 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

Notes

About Trane and American Standard Heating and Air Conditioning

Trane and American Standard create comfortable, energy efficient indoor environments for residential applications. For more information, please visit www.trane.com or www.americanstandardair.com.



The manufacturer has a policy of continuous data improvement and it reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

AHR-PSD011B-EN 31 Oct 2025
Supersedes AHR-PSD011A-EN (June 2025)

©2025