

DOWNFLOW OR HORIZONTAL RIGHT CONVERSION

NOTICE

Convert air handler to correct orientation prior to installation. Conversion must be made before brazing the refrigerant connections to the coil.

1. Remove coil access panel.
2. Slide coil/drain pan assembly out of air handler.

NOTICE

The center support bar for the coil/drain pan has a position identifier embossed into the cabinet structure between the two forward fingers of the support bar. There are four position identifiers: A, B, C, or D. The lettered hole location can differ from unit to unit due to the cabinet width of the air handler. After removal and reinstallation, the center support bar must be installed in the same lettered position that it was originally.

3. Note the lettered position of the center support bar for the coil/drain pan. Remove the center support bar by sliding the forward end of the support bar to the right or left until the lower finger clears the structure.

NOTICE

The position identifier for the coil slide rail is embossed into the aft right cabinet structure. There are four position identifiers: 1, 2, 3, or 4. The numbered attachment location can differ from unit to unit due to the cabinet height of the air handler. After removal and reinstallation, the coil slide rail must be installed in the same numbered position that it was originally.

4. Note the numbered position of the coil slide rail located at the upper right hand side of the indoor coil compartment. Remove slide rail from air handler cabinet by removing front screw and lowering bracket down to disengage hook on back of slide rail.
5. Turn air handler cabinet upside down (downflow position).
6. Install coil slide rail by hooking the aft end into holes at the numbered position the slide rail was originally in right rear corner post, and secure rail into right front edge of cabinet with screw in the predrilled hole.
7. Install center support bar for the coil/drain pan onto the lettered position that it was originally mounted.
8. For horizontal right applications, the front and back coil blow off wings must be installed (blow off wings are shipped with the unit). Locate 4 screws securing coil delta plates to coil drain pan. Loosen the screws. Slide each coil blow off wing between the drain pan and the coil delta plate. Tighten screws to secure coil blow off wings. See illustration in lower right column of this page.
9. Slide the coil back into the cabinet. Be sure to engage the side coil slide into the slide rail on the air handler cabinet.
10. Install coil access panel. Conversion is now complete.

HORIZONTAL SUSPENSION

These air handlers may be suspended in horizontal applications. It is recommended to use angle steel support brackets with minimum 3/8" threaded rods, supporting the unit from the bottom. Attach the threaded rods at the locations shown in the Figure for Horizontal Suspension Application, leaving enough clearance between door and rod so that doors may be easily removed for service.

CAUTION

DO NOT lift air handler by the cabinet brace. The cabinet brace is held in place by the coil channel. The cabinet brace could become disengaged from the cabinet causing the air handler to fall, potentially causing injury or damaging property.

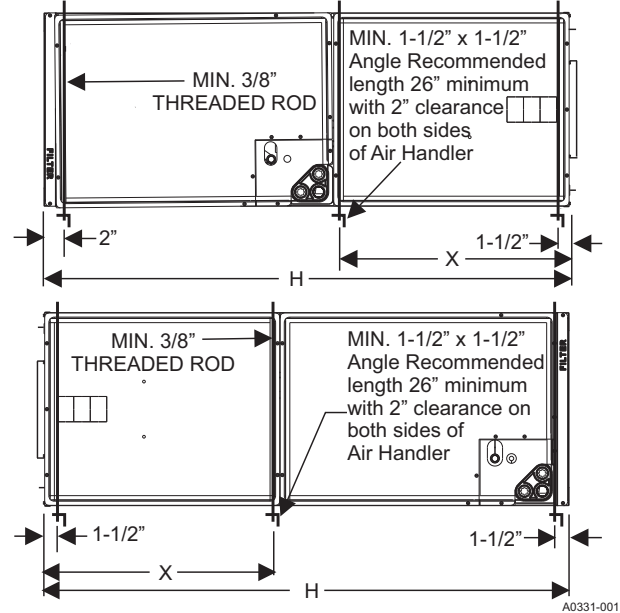
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NOTICE

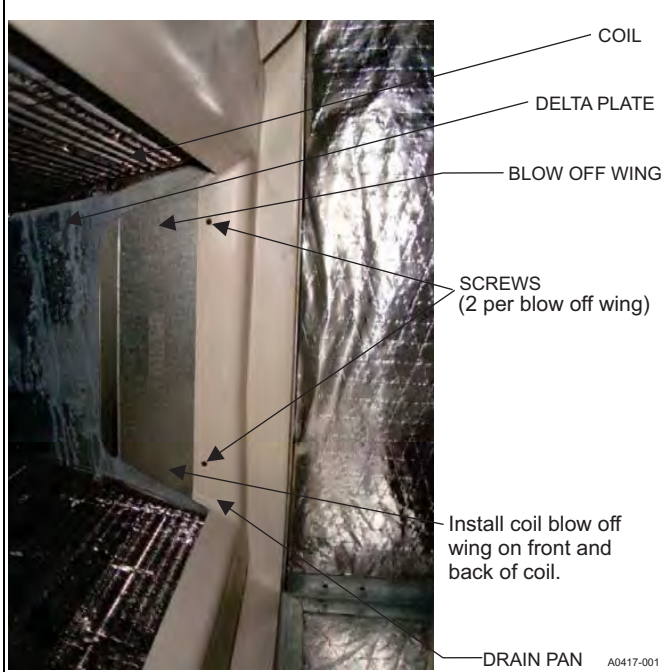
When assembling the support structure, make sure of size to provide clearance for access door removal.

HORIZONTAL SUSPENSION APPLICATION - SUPPORT LOCATIONS



Air Handler Cabinet Size	X	H
17-1/2" Width-Short H	21"	41"
17-1/2" Width-Long H	21"	47-1/2"
21" Width-Short H	21-1/2"	51-1/2"
21" Width-Long H	21-1/2"	55-3/4"
24-1/2" Width	21-1/2"	55-1/2"

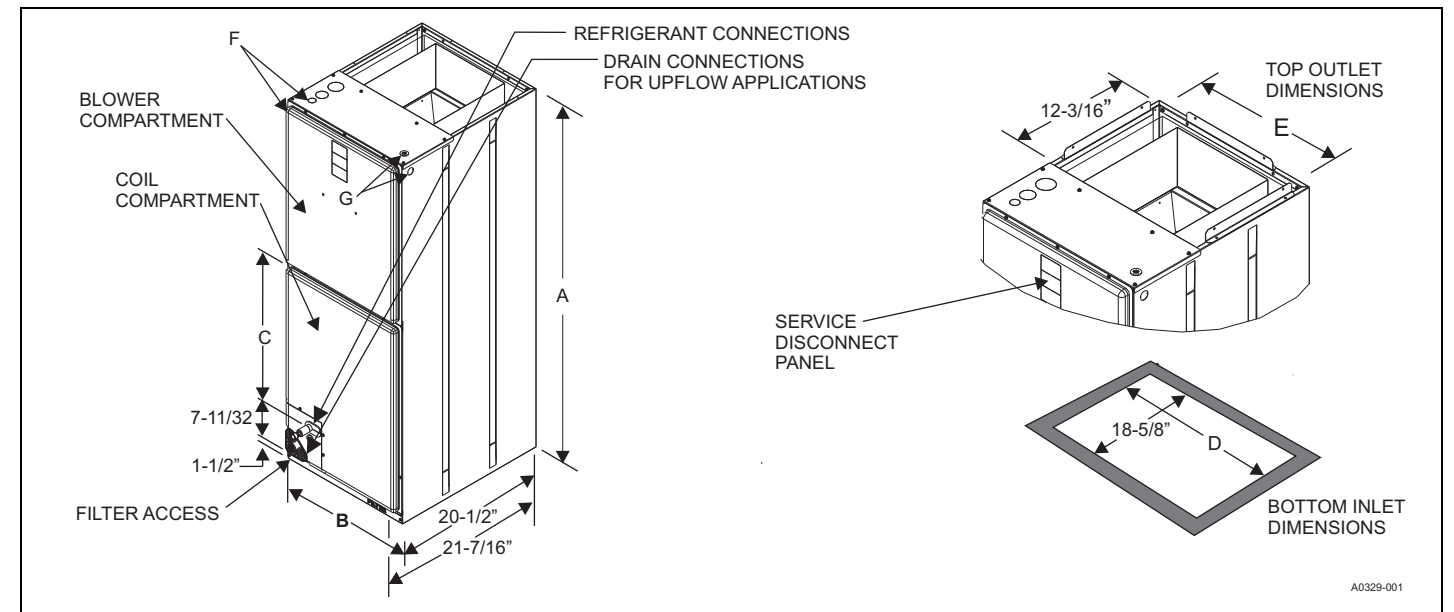
COIL BLOW OFF WING INSTALLATION



5001334-URG-A-0715
Supersedes: Nothing

**QUICK REFERENCE GUIDE
SINGLE-PIECE ECM MULTI-POSITION
RESIDENTIAL AIR HANDLERS**

This document does not replace the installation instructions, which must be referred to for detailed information.



DIMENSIONS¹

Models	Dimensions ¹					Wiring Knockouts ²		Refrigerant Connections Line Size	
	A	B	C	D	E	F	G	Liquid	Vapor
	Height	Width				Power (Conduit)	Control (Conduit)		
AE18BX2* ³	41	17-1/2	12-7/8	14-1/4	16-1/2	7/8 (1/2) 1-3/8 (1) 1-23/32 (1-1/4)	7/8 (1/2)	3/8	3/4
AE24BX2*	41	17-1/2	12-7/8	14-1/4	16-1/2				
AE30BX2*	47-1/2	17-1/2	19-1/2	14-1/4	16-1/2				
AE36BX2*	47-1/2	17-1/2	19-1/2	14-1/4	16-1/2				
AE36CX2*	51-1/2	21	22-5/8	17-3/4	20			7/8	
AE42CX2*	51-1/2	21	22-5/8	17-3/4	20				
AE48CX2*	51-1/2	21	22-5/8	17-3/4	20				
AE48DX2*	55-1/2	24-1/2	26-5/8	21-1/4	23-1/2				
AE60CX2*	55-3/4	21	26-7/8	17-3/4	20				
AE60DX2*	55-1/2	24-1/2	26-5/8	21-1/4	23-1/2				

1. All dimensions are in inches.
2. Knockout size (conduit size in parentheses).
3. Asterisk is in place of the model generation number.

NOTE:

1. The controls may require correct polarity on the power supply and a proper ground.
2. These units are rated for use with single phase 230 or 208 volts supply power.
3. Use of flexible duct connectors are recommended.
4. Supply air duct work must remain the size of the supply opening for the first 12" before transition to correct duct size.
5. Return and supply duct may be fastened to the bottom or sides of the air handler using screws no longer than 1/2" in length.
6. Line voltage electrical knockouts are available on left top and left casing side. See installation instructions for information on proper sizing of over current protection and supply wire sizes.
7. Low voltage electrical knockouts are available on right top and right casing side.
8. Seal electrical openings and duct connections to prevent air infiltration.
9. If the air handler is to be installed above a finished ceiling, a secondary drain pan is recommended.
10. Condensate drain pans must be trapped and slope toward drain.
11. At start up, measure external duct static, and adjust blower speed accordingly.

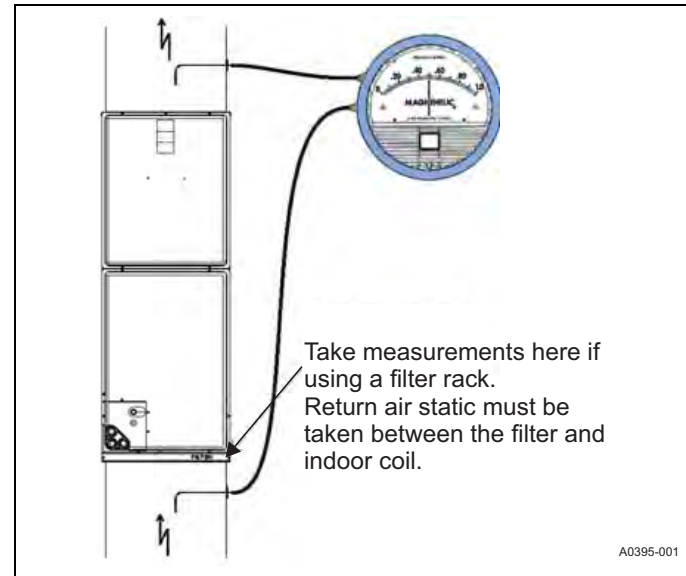
CLEARANCES

Clearances must be taken into consideration, and provided for as follows:

1. Refrigerant piping and connections - minimum 12" recommended.
2. Maintenance and servicing access - minimum 36" from front of unit recommended for blower motor / coil replacement.
3. Condensate drain lines routed to clear filter and panel access.
4. Filter removal - minimum 36" recommended.
5. The duct work connected to this unit is designed for zero clearance to combustible materials.
6. A combustible floor base accessory is available for downflow applications of this unit, if required by local code.

EXTERNAL DUCT STATIC

Measure the supply air static pressure. Record this positive number. Measure the return air static pressure. Record this negative number. Treat the negative number as a positive, and add the two numbers together. This is total system static. If the filter rack internal to the air handler is being used, you must measure return air duct static between the filter and the indoor coil.



AIR FLOW DATA (CFM)¹

Models	Blower Motor Speed	External Static Pressure (in. wc.)						
		0.10	0.20	0.30	0.40	0.50	0.60	0.70
AE18B	#5 HI	1132	1107	1074	1053	1023	990	955
	#4 MED-HI	1025	994	971	943	912	878	803
	#3 MED	821	798	764	727	657	599	536
	#2 MED-LO	661	632	572	491	414	335	279
	#1 LO	510	435	365	291	181	147	23
AE24B	#5 HI	1117	1078	1061	1034	1007	985	955
	#4 MED-HI	1032	1001	975	946	928	898	872
	#3 MED	838	799	768	742	698	634	582
	#2 MED-LO	644	620	582	521	440	378	284
	#1 LO	474	421	336	279	187	144	70
AE30B	#5 HI	1113	1083	1057	1034	1007	977	941
	#4 MED-HI	1057	1021	1000	977	947	914	881
	#3 MED	857	821	794	768	728	653	601
	#2 MED-LO	675	641	607	533	460	408	345
	#1 LO	489	457	386	324	261	209	158
AE36B	#5 HI	1323	1287	1264	1238	1210	1177	1149
	#4 MED-HI	1255	1222	1193	1170	1140	1113	1081
	#3 MED	1052	1025	992	967	927	857	811
	#2 MED-LO	855	823	799	739	691	637	572
	#1 LO	653	622	574	507	463	411	353
AE36C	#5 HI	1562	1531	1496	1453	1416	1381	1348
	#4 MED-HI	1277	1240	1206	1165	1133	1083	1025
	#3 MED	1078	1043	996	957	899	819	770
	#2 MED-LO	881	836	810	749	658	578	537
	#1 LO	707	677	595	524	451	405	346

AIR FLOW DATA (CFM)¹ (Continued)

Models	Blower Motor Speed	External Static Pressure (in. wc.)						
		0.10	0.20	0.30	0.40	0.50	0.60	0.70
AE42C	#5 HI	1548	1518	1481	1450	1423	1371	1338
	#4 MED-HI	1481	1450	1426	1389	1354	1305	1263
	#3 MED	1281	1242	1205	1164	1124	1051	992
	#2 MED-LO	1078	1042	992	922	866	799	756
	#1 LO	888	843	776	696	646	564	503
AE48C	#5 HI	1759	1719	1685	1644	1611	1578	1540
	#4 MED-HI	1684	1639	1606	1569	1536	1489	1452
	#3 MED	1511	1460	1427	1388	1347	1308	1262
	#2 MED-LO	1305	1260	1212	1178	1121	1076	1027
	#1 LO	1123	1068	1029	985	909	793	769
AE48D	#5 HI	1774	1726	1684	1651	1614	1574	1529
	#4 MED-HI	1709	1668	1619	1580	1548	1499	1459
	#3 MED	1484	1436	1410	1372	1321	1284	1237
	#2 MED-LO	1295	1254	1218	1167	1114	1069	1005
	#1 LO	1102	1051	1011	962	890	831	766
AE60C	#5 HI	1964	1930	1897	1858	1823	1789	1752
	#4 MED-HI	1889	1855	1818	1791	1747	1716	1668
	#3 MED	1693	1652	1627	1584	1551	1510	1462
	#2 MED-LO	1486	1450	1411	1375	1335	1291	1252
	#1 LO	1292	1247	1207	1172	1123	1055	990
AE60D	#5 HI	1959	1920	1886	1847	1806	1770	1727
	#4 MED-HI	1887	1843	1805	1771	1726	1692	1648
	#3 MED	1684	1641	1602	1554	1514	1472	1424
	#2 MED-LO	1492	1446	1401	1355	1307	1263	1207
	#1 LO	1308	1257	1204	1155	1104	1046	994

1. Air handler units have been tested to UL 1995 / CSA 22.2 standards up to 0.50" wc. external static pressure.

Dry coil conditions only, tested without filters.

For optimal performance, external static pressures of 0.2" to 0.5" are recommended. Applications above 0.5" are not recommended.

Airflow data shown is from testing performed at 230V. AE units use a standard ECM constant torque motor, and there is minimal variation of airflow at other distribution voltage values. The above data can be used for airflow at other distribution voltages.

ELECTRICAL HEAT: MINIMUM FAN SPEED (208V/230V SINGLE PHASE)

Heater Kit Models ^{1,2}	Nom. kW @240V	Air Handler Models									
		AE18B	AE24B	AE30B	AE36B	AE36C	AE42C	AE48C	AE48D	AE60C	AE60D
6HK(0,1)6500206	2.4kW	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(0,1)6500506	4.8kW	Med Lo (#2)	Med (#3)	Med (#3)	Med Lo (#2)	Med (#3)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(0,1)6500806	7.7kW	Med (#3)	Med Hi (#4)	Med Hi (#4)	Med Lo (#2)	Med Hi (#4)	Med (#3)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(0,1)6501006	9.6kW	Med (#3)	Med Hi (#4)	Med Hi (#4)	Med Lo (#2)	Med Hi (#4)	Med (#3)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(1,2)6501306	12.5kW	-	Med Hi (#4)	Med Hi (#4)	Med (#3)	Med Hi (#4)	Med (#3)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)	Med Lo (#2)
6HK(1,2)6501506	14.4kW	-	-	Med Hi (#4)	Med Hi (#4)	Med Hi (#4)	Hi (#5)	Med (#3)	Med (#3)	Med Lo (#2)	Med Lo (#2)
6HK(1,2)6501806	17.3kW	-	-	-	Med Hi (#4)	Med Hi (#4)	Hi (#5)	Med (#3)	Med Hi (#4)	Med (#3)	Med (#3)
6HK(1,2)6502006	19.2kW	-	-	-	Med Hi (#4)	Hi (#5)	Hi (#5)	Med Hi (#4)	Hi (#5)	Med Hi (#4)	Med Hi (#4)
6HK(1,2)6502506	24kW	-	-	-	-	-	-	-	Hi (#5)	-	Med Hi (#4)

1. (0,1) - 0 = no circuit breaker OR 1 = with circuit breaker.

2. (1,2) - 1 = with circuit breaker, no breaker jumper bar OR 2 = with circuit breaker & breaker jumper bar.