

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.

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 shipped in loose parts bag). 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.

Subject to change without notice. Published in U.S.A.
Copyright © 2015 by Johnson Controls, Inc. All rights reserved.

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 illustrated below, leaving enough clearance between door and rod so that doors may be easily removed for service.

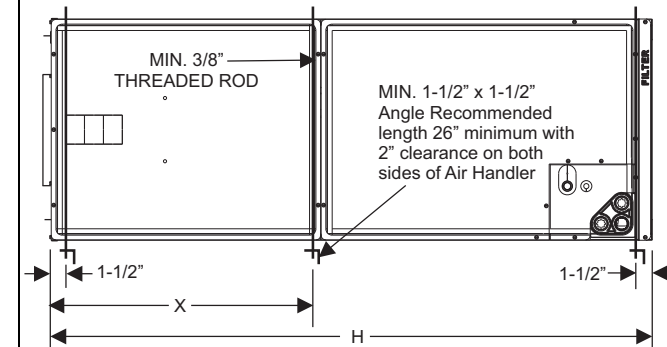
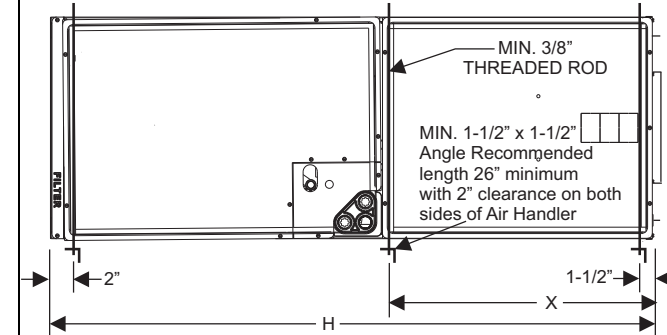
CAUTION

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.

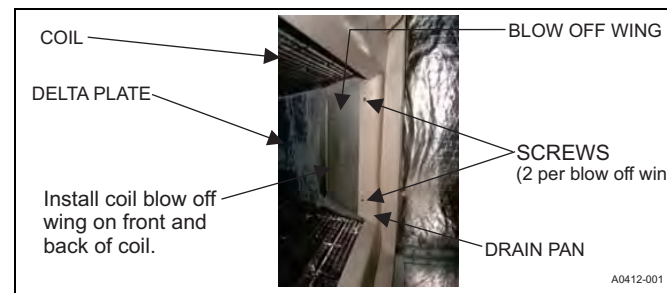
NOTICE

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

SUSPENSION SUPPORT LOCATIONS FOR HORIZONTAL APPLICATIONS



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"



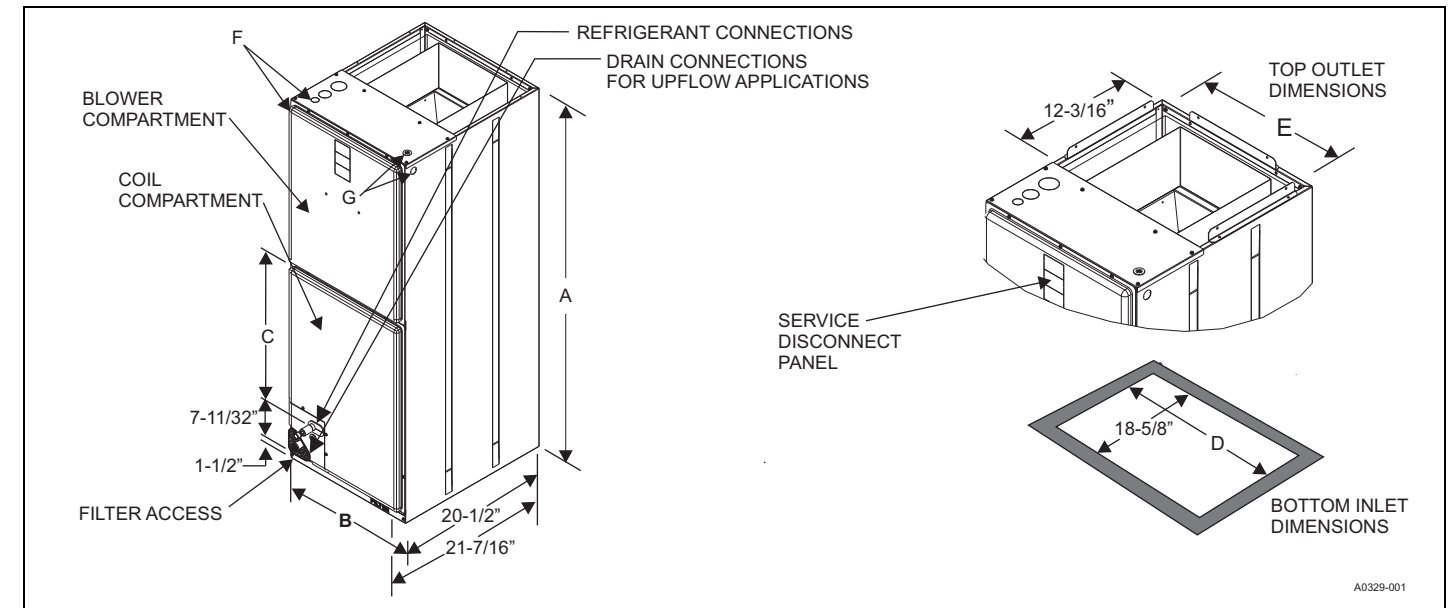
5001335-URG-C-0615
Supersedes: 5001335-URG-B-0615

York International Corp.
5005 York Drive
Norman, OK 73069

QUICK REFERENCE GUIDE

SINGLE-PIECE PSC 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)		
AP18BX2* 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
AP24BX2*	41	17-1/2	12-7/8	14-1/4	16-1/2				
AP30BX2*	47-1/2	17-1/2	19-1/2	14-1/4	16-1/2				
AP36BX2*	47-1/2	17-1/2	19-1/2	14-1/4	16-1/2				
AP36CX2*	51-1/2	21	22-5/8	17-3/4	20				
AP42CX2*	51-1/2	21	22-5/8	17-3/4	20			7/8	
AP48CX2*	51-1/2	21	22-5/8	17-3/4	20				
AP48DX2*	55-1/2	24-1/2	26-5/8	21-1/4	23-1/2				
AP60CX2*	55-3/4	21	26-7/8	17-3/4	20				
AP60DX2*	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 lines must be trapped and slope toward drain.
11. At start up, measure external duct static, and adjust blower speed accordingly.

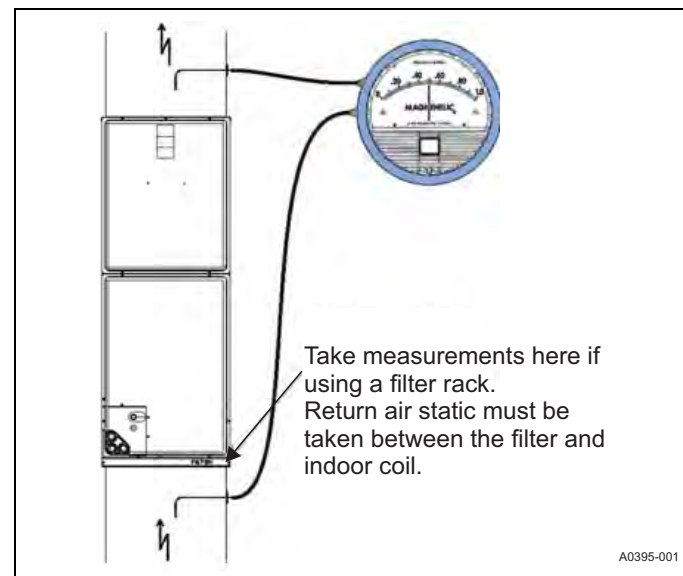
AIR FLOW DATA (CFM)¹

Models	Blower Motor Speed	External Static Pressure (in. wc.)						
		0.10	0.20	0.30	0.40	0.50	0.60	0.70
208 Volt								
AP18BX2* ²	High	723	702	666	576	523	373	317
	Medium	566	543	480	382	305	183	N/A
	Low	394	330	183	144	N/A	N/A	N/A
AP24BX2*	High	990	973	953	924	885	797	713
	Medium	736	723	703	644	606	540	457
	Low	579	562	513	463	395	287	202
AP30BX2*	High	1228	1192	1134	1078	1023	951	843
	Medium	1023	998	958	915	859	741	677
	Low	769	745	701	632	577	495	433
AP36BX2*	High	1522	1475	1416	1349	1276	1188	1108
	Medium	1251	1217	1180	1135	1085	1042	968
	Low	965	951	936	914	886	836	742
AP36CX2*	High	1539	1489	1450	1400	1283	1201	1110
	Medium	1159	1147	1096	1042	994	943	877
	Low	966	933	892	859	812	769	679
AP42CX2*	High	1827	1769	1707	1634	1545	1315	1236
	Medium	1444	1423	1392	1348	1204	1118	1050
	Low	1136	1140	1116	1041	982	893	842
AP48CX2*	High	1686	1643	1583	1507	1441	1357	1062
	Medium	1482	1439	1392	1340	1280	1090	971
	Low	1252	1222	1186	1148	987	928	810
AP48DX2*	High	1988	1931	1853	1775	1695	1606	1391
	Medium	1672	1636	1587	1522	1439	1302	1139
	Low	1376	1348	1309	1249	1138	1038	973
AP60CX2*	High	1851	1813	1757	1680	1601	1513	1262
	Medium	1718	1687	1631	1562	1499	1417	1185
	Low	1560	1546	1505	1441	1383	1258	1144
AP60DX2*	High	1932	1871	1784	1701	1610	1491	1345
	Medium	1795	1734	1660	1590	1510	1402	1225
	Low	1622	1584	1524	1472	1391	1277	1115

- Air handler units have been tested to UL 1995 / CSA 22.2 standards up to 0.70" 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.
- Asterisk is in place of the model generation number.

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 to determine the total external system static pressure. If a filter rack is installed on the return air end of the air handler or indoor coil section, make sure to measure the return air duct static between the filter and the indoor coil.



A0395-001

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
230 Volt								
AP18BX2* ²	High	806	780	745	687	623	508	380
	Medium	640	614	563	500	405	284	216
	Low	461	414	325	188	156	N/A	N/A
AP24BX2*	High	1142	1114	1078	1051	988	931	778
	Medium	854	840	826	800	738	688	605
	Low	684	663	633	578	510	445	322
AP30BX2*	High	1316	1270	1213	1151	1081	1008	917
	Medium	1139	1104	1059	1005	952	880	769
	Low	863	841	804	759	678	606	513
AP36BX2*	High	1601	1552	1485	1414	1337	1258	1178
	Medium	1385	1352	1302	1252	1193	1106	1057
	Low	1117	1103	1079	1044	1001	945	889
AP36CX2*	High	1671	1636	1581	1513	1439	1330	1210
	Medium	1326	1310	1280	1238	1162	1081	994
	Low	1125	1102	1059	1014	950	894	827
AP42CX2*	High	1924	1861	1778	1707	1618	1442	1271
	Medium	1629	1585	1541	1470	1403	1226	1073
	Low	1323	1295	1271	1232	1111	1045	954
AP48CX2*	High	1775	1727	1668	1596	1513	1431	1190
	Medium	1591	1551	1500	1447	1380	1312	1059
	Low	1392	1363	1317	1267	1206	1025	924
AP48DX2*	High	2150	2069	1988	1894	1812	1690	1481
	Medium	1878	1812	1752	1677	1604	1497	1258
	Low	1583	1543	1493	1437	1332	1164	1075
AP60CX2*	High	1931	1889	1808	1739	1655	1566	1472
	Medium	1845	1798	1731	1659	1581	1498	1249
	Low	1726	1692	1640	1578	1503	1416	1174
AP60DX2*	High	2040	1969	1885	1779	1686	1562	1439
	Medium	1917	1861	1779	1694	1604	1492	1299
	Low	1789	1738	1658	1591	1502	1404	1206

- Air handler units have been tested to UL 1995 / CSA 22.2 standards up to 0.70" 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.
- Asterisk is in place of the model generation number.

ELECTRICAL HEAT: MINIMUM FAN SPEED

Heater Kit Models ^{1,2}	Nom. kW @240V	Air Handler Models									
		AP18B	AP24B	AP30B	AP36B	AP36C	AP42C	AP48C	AP48D	AP60C	AP60D
6HK(0,1)6500206	2.4kW	Med	Low	Low	Low	Low	Low	Low	Low	Low	Low
6HK(0,1)6500506	4.8kW	Med	Low	Low	Low	Low	Low	Low	Low	Low	Low
6HK(0,1)6500806	7.7kW	High	High	Med	Low	Low	Low	Low	Low	Low	Low
6HK(0,1)6501006	9.6kW	High	High	Med	Low	Low	Low	Low	Low	Low	Low
6HK(1,2)6501306	12.5kW	-	High	Med	Low	Med	Low	Low	Low	Low	Low
6HK(1,2)6501506	14.4kW	-	-	Med	Low	Med	Med	Low	Low	Low	Low
6HK(1,2)6501806	17.3kW	-	-	-	Low	Med	Med	Low	Low	Low	Low
6HK(1,2)6502006	19.2kW	-	-	-	Low	High	Med	Med	Med	High	Med
6HK(1,2)6502506	24kW	-	-	-	-	-	-	-	Med	-	Med

- (0,1) - 0 = no circuit breaker OR 1 = with circuit breaker.
- (1,2) - 1 = with circuit breaker, no breaker jumper bar OR 2 = with circuit breaker & breaker jumper bar.