AIR FLOW DATA (CFM)

High/Low Speed Cooling and Heat Pump CFM										
Cool Tap	ADJ Tap	AVC18BX21		AVC24BX21		AVC30BX21		AVC36BX21		AVC36CX21	
		High	Low	High	Low	High	Low	High	Low	High	Low
A	B	810	527	1022	562	1060	731	1350	878	1350	878
B	B	675	439	795	437	1013	658	1238	804	1238	804
A	A	720	468	900	495	1000	650	1200	780	1200	780
B	A	600	390	700	385	900	585	1100	715	1100	715
A	C	630	410	783	431	875	569	1050	683	1050	683
C	B	534	347	766	421	844	548	1125	731	1125	731
B	C	525	341	609	335	788	512	963	626	963	626
D	B	450	293	568	312	703	457	900	585	900	585
C	A	475	309	675	371	750	488	1000	650	1000	650
D	A	400	260	500	275	625	406	800	520	800	520
C	C	416	270	587	323	656	427	875	569	875	569
D	C	350	228	435	239	547	355	700	455	700	455
Cool Tap	ADJ Tap	AVC42CX21		AVC48CX21		AVC48DX21		AVC60CX21		AVC60DCX21	
		High	Low	High	Low	High	Low	High	Low	High	Low
A	B	1596	1037	1760	1144	1760	1144	1860	1308	1935	1316
B	B	1400	910	1540	1001	1540	1001	1840	1196	1772	1152
A	A	1425	926	1600	1040	1600	1040	1750	1138	1800	1170
B	A	1250	813	1400	910	1400	910	1600	1040	1575	1024
A	C	1268	824	1424	926	1424	926	1531	995	1665	1082
C	B	1344	874	1320	858	1320	858	1581	1028	1491	969
B	C	1113	723	1246	810	1246	810	1400	910	1457	947
D	B	1120	728	1100	715	1100	715	1323	860	1350	878
C	A	1200	780	1200	780	1200	780	1375	894	1325	861
D	A	1000	650	1000	650	1000	650	1150	748	1200	780
C	C	1068	694	1068	694	1068	694	1203	782	1226	797
D	C	890	579	890	579	890	579	1006	654	1110	722

High/Low Speed Heat CFM										
Heat Tap	AVC18BX21		AVC24BX21		AVC30BX21		AVC36BX21		AVC36CX21	
	High	Low	High	Low	High	Low	High	Low	High	Low
A	850	850	1025	980	1025	850	1225	1020	1425	1150
B	750	750	960	960	960	775	1150	950	1150	1000
C	675	675	725	725	750	750	950	750	925	925
D	425	425	580	580	580	580	725	725	675	675
Heat Tap	AVC42CX21		AVC48CX21		AVC48DX21		AVC60CX21		AVC60DCX21	
	High	Low	High	Low	High	Low	High	Low	High	Low
A	1430	1200	1650	1200	1650	1150	1850	1250	1825	1150
B	1375	1150	1550	1150	1600	1050	1775	1200	1775	1050
C	1150	1050	1375	1050	1325	1000	1570	1150	1570	1000
D	900	900	1150	1000	1125	780	1370	1050	1375	950

NOTES:
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. Above 0.5" CFM is reduced by 2% per 0.1" increase in static.
The ADJ tap does not affect the HEAT tap setting
Low speed cooling used only with two stage outdoor units. Speed is preset to 65% of high speed.
Dehumidification speed is 85% of jumper selected COOL tap and ADJUST tap
When operating in both heat pump and electric heat modes, the airflow (CFM) will be per HEAT tap CFM values only.
At some settings, LOW COOL and/or LOW HEAT airflow may be lower than what is required to operate an airflow switch on certain models of electronic air cleaners. Consult the instructions for the electronic air cleaner for further details
Airflow (CFM) indicator light (LED2) flashes once for every 100 CFM (i.e.: 12 flashes is 1200 CFM) - blinks are approximate +/- 10% of actual CFM

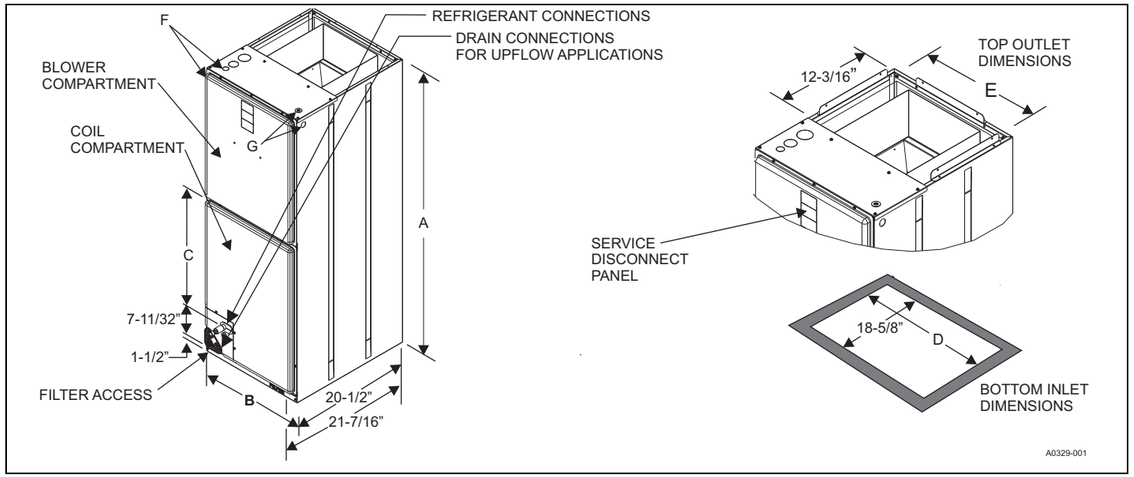
5009043-URG-A-0715
Supersedes: Nothing

York International Corp.
5005 York Drive
Norman, OK 73069

QUICK REFERENCE GUIDE

SINGLE-PIECE VARIABLE SPEED ECM MULTI-POSITION RESIDENTIAL AIR HANDLERS

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



DIMENSIONS[1]

Models	Dimensions[1]					Wiring Knockouts[2]		Refrigerant Connections Line Size	
	A	B	C	D	E	F	G		
	Height	Width				Power	Control	Liquid	Vapor
AVC18BX21	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
AVC24BX21	41	17-1/2	12-7/8	14-1/4	16-1/2				
AVC30BX21	47-1/2	17-1/2	19-1/2	14-1/4	16-1/2				
AVC36BX21	47-1/2	17-1/2	19-1/2	14-1/4	16-1/2				
AVC36CX21	51-1/2	21	22-5/8	17-3/4	20				7/8
AVC42CX21	51-1/2	21	22-5/8	17-3/4	20				
AVC48CX21	51-1/2	21	22-5/8	17-3/4	20				
AVC48DX21	55-1/2	24-1/2	26-5/8	21-1/4	23-1/2				
AVC60CX21	55-3/4	21	26-7/8	17-3/4	20				
AVC60DX21	55-1/2	24-1/2	26-5/8	21-1/4	23-1/2				

1. All dimensions are in inches.
2. Actual size (conduit size).

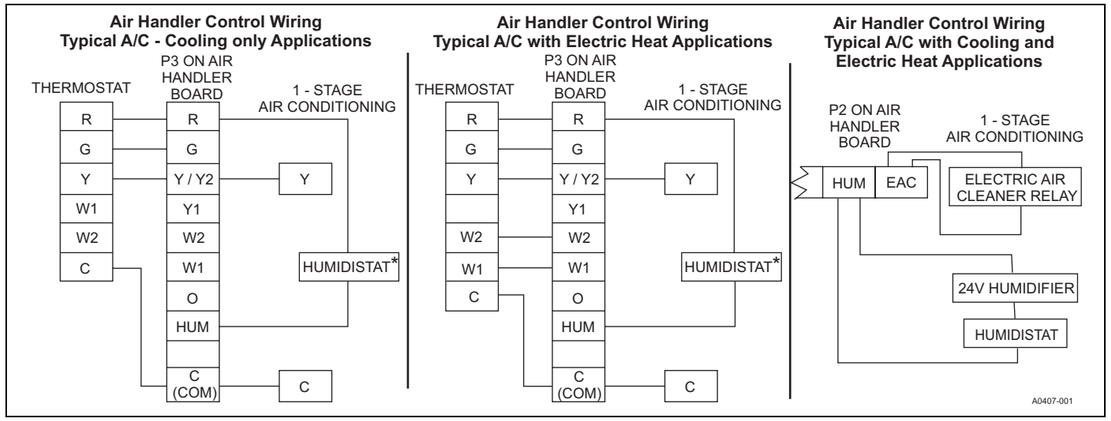
NOTES:
1. The controls may require correct polarity on the power supply and a proper ground.
2. These units are rated for use with single phase 230 or 208 volts supply power.
3. Use of flexible duct connectors are recommended.
4. Supply air duct work must remain the size of the supply opening for the 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 used with an indoor coil and is to be installed above a finished ceiling, a secondary drain pan is recommended.
10. 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.

TYPICAL THERMOSTAT CONNECTION

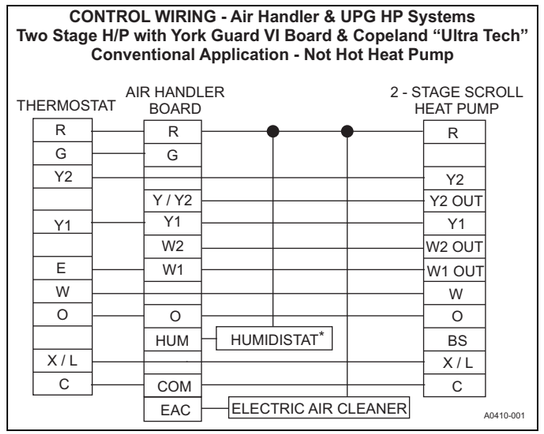


* Optional dehumidification humidistat switch contacts open on humidity rise.

NOTES:

1. "Y/Y2" Thermostat wire must be connected for full CFM and applications requiring 60 second blower off delay for SEER enhancement.
2. Move HUM STAT jumper on air handler control board to YES position if humidistat is used.
3. For heat pump applications - set AC/HP jumper on air handler control board to the HP position.

TYPICAL THERMOSTAT WIRING FOR 2-STAGE HEAT PUMP WITH ECM BLOWER MOTOR



* Optional dehumidification humidistat switch contacts open on humidity rise.

NOTES:

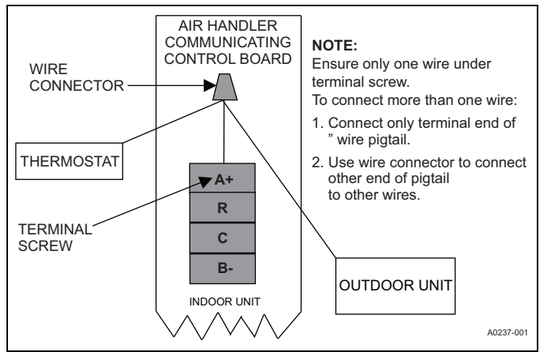
1. "Y/Y2" Thermostat wire must be connected for full CFM and applications requiring 60 second blower off delay for SEER enhancement.
2. Place humidistat jumper on air handler control board to YES.
3. For heat pump applications - set AC/HP jumper on air handler control board to the HP position.

AIR HANDLER WITH COMMUNICATING AC OR HP

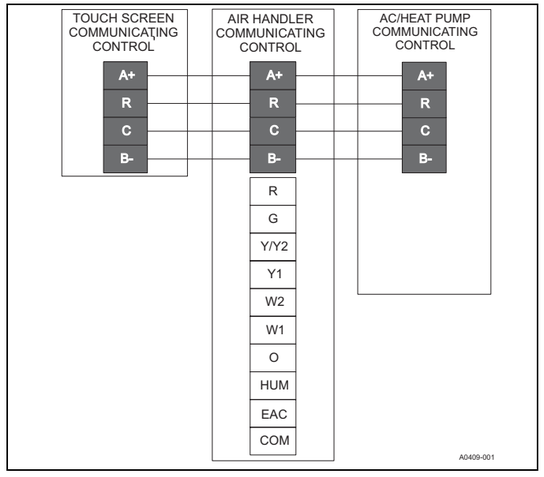
IMPORTANT

Do not place more than one wire under any single communication terminal screw (there are four communication terminal screws). If more than one wire must be connected to a terminal screw, attach only the terminal end of a one wire pigtail no longer than 6", and use a wire connector to connect the other end of the pigtail to the other wires. Failure to do this will result in nuisance communication error faults. See Terminal Screw Wire Connection Figure.

Terminal Screw Wire Connection

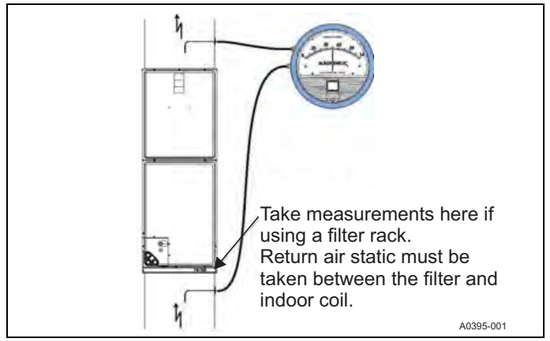


Air Handler and Communicating AC or HP



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 a filter rack is installed on the return air end of the air handler or indoor coil section, the return air duct static must be measured between the filter and the indoor coil.



FALT OR STATUS CONDITION

Fault or Status Condition	LED1 (RED) Flash Code
Status	
No power to control	OFF
Internal control fault	ON
2 sec on 2 sec off heartbeat	Normal
0.1 sec on, 0.1 sec off	Test mode
Call for heat and cool at the same time	7
Model Plug Not inserted	8
Internal fault self-corrected, attempting normal operation	9

COMFORT SETTING SELECTIONS

DELAY TAP	COMFORT SETTING
A	Normal
B	Humid
C	Dry
D	Temperate

See installation instructions for further details on these blower delay profiles.

ELECTRICAL HEAT: MINIMUM FAN SPEED

Heater Kit Models[1,2]	Nom. kW @240V	Air Handler Models									
		AVC18BX21	AVC24BX21	AVC30BX21	AVC36BX21	AVC36CX21	AVC42CX21	AVC48CX21	AVC48DX21	AVC60CX21	AVC60DX21
6HK(0,1)6500206	2.4kW	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)
6HK(0,1)6500506	4.8kW	Med Lo (D)	Med (C)	Med (C)	Med Lo (D)	Med (C)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)
6HK(0,1)6500806	7.7kW	Med (C)	Med Hi (B)	Med Hi (B)	Med Lo (D)	Med Hi (B)	Med (C)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)
6HK(0,1)6501006	9.6kW	Med (C)	Med Hi (B)	Med Hi (B)	Med Lo (D)	Med Hi (B)	Med (C)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)
6HK(1,2)6501306	12.5kW	-	Med Hi (B)	Med Hi (B)	Med (C)	Med Hi (B)	Med (C)	Med Lo (D)	Med Lo (D)	Med Lo (D)	Med Lo (D)
6HK(1,2)6501506	14.4kW	-	-	Med Hi (B)	Med Hi (B)	Med Hi (B)	Hi (A)	Med (C)	Med (C)	Med Lo (D)	Med Lo (D)
6HK(1,2)6501806	17.3kW	-	-	-	Med Hi (B)	Med Hi (B)	Hi (A)	Med (C)	Med Hi (B)	Med (C)	Med (C)
6HK(1,2)6502006	19.2kW	-	-	-	Med Hi (B)	Hi (A)	Hi (A)	Med Hi (B)	Hi (A)	Med Hi (B)	Med Hi (B)
6HK(1,2)6502506	24kW	-	-	-	-	-	-	-	Hi (A)	-	Med Hi (B)

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.

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 6, leaving enough clearance between door and rod so that doors maybe 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. See Figure 2 for location of cabinet braces.

NOTICE

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

Dimension in Inches		
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

SUSPENSION SUPPORT LOCATIONS FOR HORIZONTAL APPLICATIONS