
US Air Conditioning Distributors AM Series Multi-position Air Handler Engineering & Specification Guide

with 3-Speed Motor



Contents:

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Cabinet Features

- Two independent front access panels allow for easy access to clean the coil, even after installation.
- Only four (4) screws to remove blower panel for easier access.
- Slide-out blower and coil assemblies.
- Cabinet constructed of heavy gauge galvanized steel and lined with high quality 5/8" foil-faced insulation, with cabinet flanges & retaining rods for better attachment.
- Fully-painted cabinets for additional corrosion resistance.
- Brackets hold coil assembly in place when installed in horizontal position.
- Filter rack built into every air handler (filter not included).
- ETL-certified cabinet with 2% or less air leakage and wrap-around flanges that increase stability in horizontal configurations.

Evaporator Coil Features

- Coils are air pressure tested at 500 PSI, pressure tested with Helium, charged with dry air and then sealed.
- Lanced fin design.
- Rifled copper tubing.
- TXV Bulbs come standard attached to header assembly.
- *HYDROTEC™* drain pans hold less water, which reduces the possibility of mold and mildew growing in the pan.
- All drain pans have Microban protection, which inhibits the growth of mold and mildew that cause odors and staining.
- Drain pans are molded of corrosion proof engineered polymer.
- Dual 3/4" FPT condensate drains on left and right sides.

Electrical Features

- Dynamically balanced blowers for quiet, vibration-free operation.
- Fan time delay factory installed (1 second on, 45 seconds off).
- Line voltage connections can be made on top, right or left side of cabinet.
- Electric heat available factory installed or as kit for field installation. Plug in connections simplify kit installation (see Accessories & Replacement Parts list for available kits).

Physical Data

		Air Handler Size			
		AM24	AM36	AM48	AM60
Available Voltage		208/240 V, 60 Hz, 1 phase			
Maximum Elec. Heat Available (KW)		10	15	20	20
Transformer Size and Type		40 VA, Class 2			
Blower Data: 3-Speed Motor	Motor H. P.	1/4	1/3	3/4	3/4
	F. L. A. @ 240 V	1.9	2.6	4.3	4.3
Wheel (diameter x width)		9 x 6	10 x 8	10 x 10	10 x 10
Nominal CFM		800	1200	1600	2000
Air Filter Size (in)		12 x 20	16 x 20	20 x 25	20 x 25
Refrigerant Conn. (IDS) Suction (in)		3/4	7/8	7/8	7/8
Refrigerant Conn. (IDS) Liquid (in)		3/8	3/8	3/8	3/8
R-410A Metering Device		TXV	TXV	TXV	TXV
Approx. Weight lbs (base unit w/out heat)		80	105	155	155

Blower Performance— 3-Speed Motor (CFM vs. ESP inches H2O)

- All data is given while air handler is operating with a dry DX coil and air filter installed.
- Speeds marked ***Med with asterisk** are the factory speed settings for both heating and cooling.
- Heating speeds should not be reduced below factory setting.
- Different speeds can be set for cooling mode; see installation instructions for changing cooling speeds.

Lab Test Data

Size	Speed	0.10	0.20	0.30	0.40	0.50
AM24	Low	664	641	623	605	574
	*Med	906	855	802	783	764
	High	940	927	914	884	854
AM36	Low	1226	1156	1086	1061	1036
	*Med	1465	1382	1245	1217	1188
	High	1467	1447	1427	1381	1334
AM48	*Low	1728	1677	1629	1582	1535
	Med	1821	1796	1772	1714	1656
	High	1870	1844	1819	1760	1700
AM60	Low	1745	1645	1545	1509	1473
	*Med	2107	2078	2048	1981	1913
	High	2163	2133	2103	2034	1964

Electrical Data — 3 Speed Motor

208/240 V, 60 Hz, 1 phase

No Electric Heat

Air Handler Size	Elec. Heating Cap.		Blower Amps		Minimum Circuit Ampacity		Circuit Breaker Amps per Stage	
	kW	BTUH	208 V	240 V	208 V	240 V	1	2
	(1) 240 V	(1) 240 V						
AM24	0	0	2.0	1.9	2.5	2.4	15	-
AM36	0	0	2.8	2.6	3.5	3.3	15	-
AM48, AM60	0	0	4.6	4.3	5.8	5.4	15	-

With Electric Heat

Air Handler Size	Elec. Heating Cap.		Blower Amps		Minimum Circuit Ampacity		Circuit Breaker Amps per Stage	
	kW	BTUH	208 V	240 V	208 V	240 V	1	2
	(1) 240 V	(1) 240 V						
AM24	5	17,065	2.0	1.9	25.1	28.4	30	-
	7.5	25,598	2.0	1.9	36.4	41.4	45	-
	10	34,130	2.0	1.9	47.6	54.5	60	-
AM36	5	17,065	2.8	2.6	26.1	29.3	30	-
	7.5	25,598	2.8	2.6	37.4	42.3	45	-
	10	34,130	2.8	2.6	48.6	55.3	60	-
	*15	51,195	2.8	2.6	71.2	81.4	60	30
AM48, AM60	7.5	25,598	4.6	4.3	39.6	44.4	45	-
	10	34,130	4.6	4.3	50.9	57.5	60	-
	*15	51,195	4.6	4.3	73.5	83.5	60	30
	*20	68,260	4.6	4.3	96.0	109.5	60	60

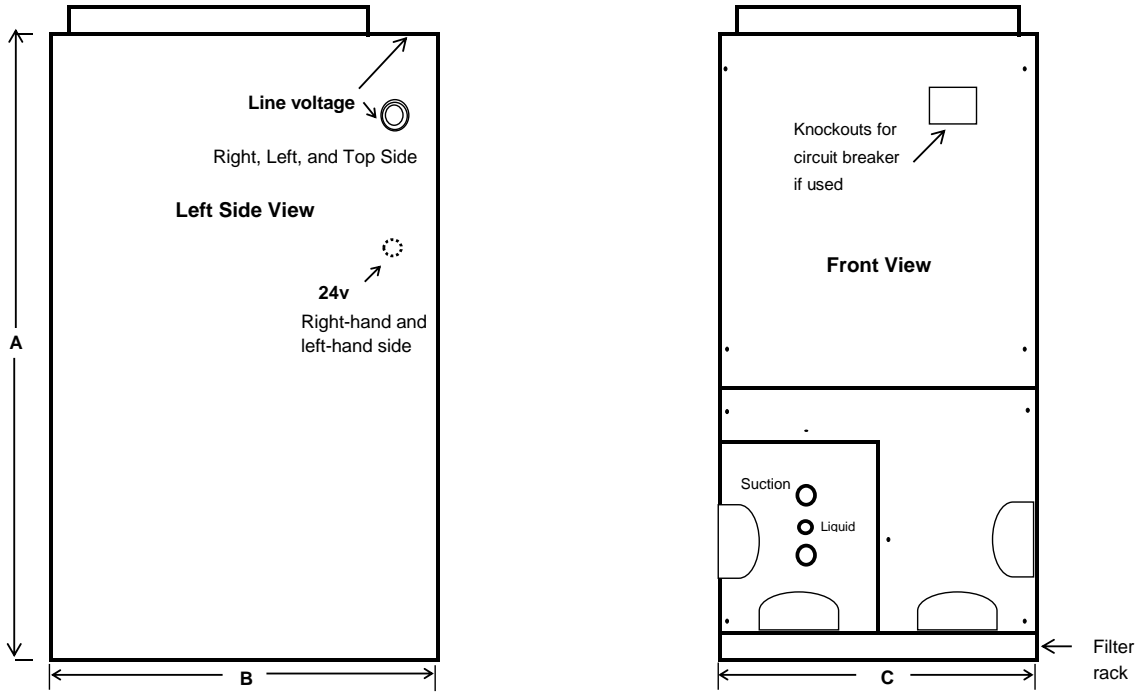
(1) For 208 volt use 0.751 correction factor for kW & BTUH.

* kW packages ***bold with asterisk** require and include circuit breakers; circuit breakers are optional for others.

Dimensions

Air Handler Size	A (in)	B (in)	C (in)	Supply Duct Opening		Return Duct Opening	
				Depth (in)	Width (in)	Depth (in)	Width (in)
AM24	36	22	15	17	13	20.35	12.20
AM36	41	22	18 1/2	17	16.5	20.35	16.20
AM48, AM60	48	26	21 7/8	21	20	24.60	20.08

Sizes AM24, AM36



Sizes AM48, AM60

