



PRODUCT DIMENSIONS & SPECIFICATIONS

ABM SERIES MULTI-POSITION HYDRONIC AIR HANDLERS

STANDARD FEATURES

APPLICATION VERSATILITY

Upflow or horizontal right as shipped (field-convertible for downflow or horizontal left applications). Can be AHRI matched with most brands of air conditioners or heat pumps. ETL listed for use with either R22 or R410a when a proper metering device is used.

LOW LEAKAGE CABINET

Less than 2% air leakage from cabinet when tested in accordance with ASHRAE standard 193. Unit must be installed according to Aspen installation instructions. Sturdy, fully insulated galvanized steel cabinet with knockout for duct return.

MODULAR HEAT KITS

Heat kits available with either circuit breakers or terminal blocks. Available in 2, 3 & 4 row. Modules are easily installed in the field using Molex plugs or can be ordered factory-installed. Freeze stat is wired into circulating pump control circuit. Controls are accessible from the front for easy service. Electrical connections can be made from the top or left. Disconnect does not protrude through the wall panel. Fan time delay relay standard for increased efficiency. Totally lead free constructed coil. Suitable for potable applications.

BLOWER

Direct drive multi-speed blowers circulate air quietly and efficiently. Multiple motor speeds allow for precise air volume selection. Motor speeds can be easily selected via motor terminals. Blowers mounted on rails so they can be easily removed for service.

ELECTRONIC CONTROL BOARD

An electronic board controls the functioning of the system reducing moving parts. The board provides for various hot water supply source connections and the blower time delay to maximize heat/cool extraction. As an enhanced feature the pump circulates hot water every 6 hours to prevent coil freeze during off cycle.

DX COIL

High efficiency rifled copper tubes/enhanced aluminum fins provide maximum heat transfer. All coils immersion tested at 500 psi then nitrogen pressurized and factory sealed for maximum reliability. Liquid-line Schrader allows pre-installation pressure testing. Available with either orifice or TXV metering device. Field-installable bolt-on TXVs are also available. Rugged GLN drain pan holds minimal condensate while eliminating the possibility of corrosion. Drain pan is UV safe. All drain connections are 3/4" FPT. Access door allows for coil cleaning.

WARRANTY

Five-year limited parts warranty.

OPTIONS

See options menu.



Representative image only. Some models may vary in appearance. Due to continuous product improvement, specifications are subject to change without notice.

Phone: 281.441.6500
Toll Free: 800.423.9007
Fax: 281.441.6510
www.aspenmfg.com



* For complete warranty details visit www.aspenmfg.com.

HEATING AND COOLING PERFORMANCE AND ELECTRICAL DATA

Model	PERFORMANCE DATA								ELECTRICAL DATA	
	Nominal Cooling	Hydronic Heat Kit Model	Rows	Coil P.D.	Heating Capacity BTU/HR Standard pump at 3.5 GPM Nominal Airflow				MINIMUM CIRCUIT AMPACITY (MCA)	MAX BREAKER OR FUSE SIZE
				3.5 GPM	Entering Water Temp					
					120	140	160	180		
ABM18/19	18,000	W*2SP	2	2.7	17770	24900	32250	39600	4.1	15
		W*3SP	3	2.1	21600	30500	39450	48400		
ABM24/25	24,000	W*2SP	2	2.7	20200	28500	36950	45400	4.1	15
		W*3SP	3	2.1	25000	35300	45800	56300		
ABM30/31	30,000	W*2SP	2	2.5	22100	31300	40645	49990	7.9	15
		W*3SP	3	1.9	27700	39100	50750	62400		
		W*4SP	4	1.1	31000	43900	57000	70100		
ABM36/37	36,000	W*2SP	2	2.5	23700	33500	43550	53600	7.9	15
		W*3SP	3	1.9	29800	42100	54700	67300		
		W*4SP	4	1.1	33500	47400	61600	75800		
ABM42/43	42,000	W*2LP	2	2.5	30200	42600	55300	68000	12.5	25
		W*3LP	3	1.9	36300	51400	65000	78600		
		W*4LP	4	1.1	43600	61600	77250	92900		
ABM48/49	48,000	W*2LP	2	2.1	31700	44800	58100	71400	12.5	25
		W*3LP	3	1.6	38200	54000	67300	80600		
		W*4LP	4	0.9	45900	64900	81450	98000		
ABM60/61/62	60,000	W*2LP	2	1.7	32900	46600	60500	74400	12.5	25
		W*3LP	3	1.3	39700	56200	70100	84000		
		W*4LP	4	0.8	47800	67600	84900	102200		
ABM23	24000	W*2SP	2	2.7	20200	28500	36950	45400	4.1	15
		W*3SP	3	2.1	25000	35300	45800	56300		
ABM35	36000	W*2MP	2	2.5	27040	38215	49610	61005	7.9	15
		W*3MP	3	1.9	33185	46900	59540	72180		
		W*4MP	4	1.1	38750	54805	69815	84820		
ABM47	48000	W*3XP	3	1.3	38195	54020	65095	76170	12.5	25
		W*4XP	4	0.8	48200	68125	83380	98640		
Model	PERFORMANCE DATA								ELECTRICAL DATA	
	Nominal Cooling	Hydronic Heat Kit Model	Rows	Coil P.D.	Heating Capacity BTU/HR High Pressure Drop pump at 5 GPM Nominal Airflow				MINIMUM CIRCUIT AMPACITY (MCA)	MAX BREAKER OR FUSE SIZE
				5 GPM	Entering Water Temp					
					120	140	160	180		
ABM18/19	18,000	W*2S8	2	3.9	18700	26400	34150	41900	4.1	15
		W*3S8	3	2.9	22900	32300	41750	51200		
ABM24/25	24,000	W*2S8	2	3.9	22600	31600	40550	49500	4.1	15
		W*3S8	3	2.9	26900	38000	49150	60300		
ABM30/31	30,000	W*2S8	2	3.5	23900	33800	43800	53800	7.9	15
		W*3S8	3	2.6	30100	42500	55100	67700		
		W*4S8	4	1.5	34000	48000	62300	76600		
ABM36/37	36,000	W*2S8	2	3.5	25800	36500	47350	58200	7.9	15
		W*3S8	3	2.6	32800	46300	60000	73700		
ABM42/43	42,000	W*4S8	4	1.5	37200	52600	68200	83800	12.5	25
		W*2L8	2	3.5	33200	46800	60650	74500		
ABM48/49	48,000	W*3L8	3	2.6	40500	57300	70850	84400	12.5	25
		W*4L8	4	1.5	49000	69300	86450	103600		
		W*2L8	2	3	34900	49300	63900	78500		
ABM60/61/62	60,000	W*3L8	3	2.2	42750	60450	74825	89200	12.5	25
		W*4L8	4	1.3	52000	73500	91725	109950		
		W*2L8	2	2.5	36600	51800	67150	82500		
ABM23	24000	W*3L8	3	1.9	45000	63600	78800	94000	12.5	25
		W*4L8	4	1.1	55000	77700	97000	116300		
		W*2S8	2	3.9	22600	31600	40550	49500		
ABM35	36000	W*3S8	3	2.9	26900	38000	49150	60300	4.1	15
		W*2M8	2	3.5	29625	41875	54295	66715		
ABM47	48000	W*3M8	3	2.6	36870	52095	65800	79505	7.9	15
		W*4M8	4	1.5	43535	61545	78050	94560		
		W*3X8	3	1.9	43295	61300	73190	85075		
		W*4X8	4	1.1	55360	78230	95070	111900	12.5	25

BLOWER DATA

MODEL	MOTOR SPEED	MOTOR HP	MOTOR AMPS	MOTOR VOLTAGE	CFM V. EXTERNAL STATIC *				
					0.10	0.20	0.30	0.40	0.50
ABM18/19/24/25	LOW	1/5	2.8	120	780	740	700	645	585
	HIGH				850	800	745	685	620
ABM23	LOW				825	780	735	675	630
	HIGH				865	815	780	705	640
ABM30/36 + WC2SL	LOW	1/3	5.8		925	910	850	825	800
	MED				1180	1155	1115	1060	1000
	HIGH				1330	1270	1205	1140	1070
ABM35+ WC4ML	LOW				995	980	750	915	885
	MED				1140	1085	1045	1000	950
	HIGH				1220	1165	1130	1060	1000
ABM 42/43/48/49/60/61/62	LOW	3/4	9.5		1360	1340	1310	1280	1230
	MED				1530	1470	1420	1360	1310
	HIGH			1730	1670	1600	1540	1480	
ABM47	LOW			1350	1315	1300	1245	1205	
	MED			1500	1450	1400	1350	1315	
	HIGH			1670	1615	1560	1515	1450	

* Dry coil with filter in place

AIR HANDLER CHASSIS NOMENCLATURE

ABM	18	F	-001
ABM = 120V PSC Motor Multi-Position Hydronic Air Handler	Nominal tonnage (MBTUH)	<u>Metering Device</u> 4 = non-bleed A/C or H/P R410 TXV B = 20% bleed A/C or H/P R22 TXV F = F-22 Flo-rater G = R410a Flo-rater X = non-bleed A/C or H/P R22 TXV	Option Code

HYDRONIC HEAT KIT NOMENCLATURE

W	C	2	S	P
Water heat (hydronic)	<u>Interruption</u> C = Circuit Breaker T = Terminal Block	<u>Row</u> 2 3 4	S = ABM18,19,23,24,25,30,31,36,37 M = ABM35 L = ABM42,43,48,49,60,61,62 X = ABM47	L = Less Pump and Check Valve P = with Standard Pump and Check Valve R = with 009 High Pressure Drop Pump B = with 008 High Pressure Drop Pump

DIMENSIONS AND SPECIFICATIONS (In. [mm]) - Figure 1

MODEL	A	B	C	D	E	F	G	J	K	FILTER SIZE	PISTON SIZE	SHIP WEIGHT (LBS)	SKID QTY
ABM18+W*	21 [533]	49-1/4 [1251]	20-1/2 [521]	18-3/4 [476]	12 [305]	7-1/4 [184]	10-1/4 [260]	18-1/2 [470]	18-1/2 [470]	16X20	0.055	99	4
ABM19/24/25+W*	21 [533]	49-1/4 [1251]	20-1/2 [521]	18-3/4 [476]	12 [305]	8-1/4 [209]	12-1/4 [311]	18-1/2 [470]	18-1/2 [470]	16X20	0.059	100	4
ABM30+W*	21 [533]	49-1/4 [1251]	20-1/2 [521]	18-3/4 [476]	12 [305]	8-1/4 [209]	14-1/4 [362]	18-1/2 [470]	18-1/2 [470]	16X20	0.068	118	4
ABM36+W*	21 [533]	49-1/4 [1251]	20-1/2 [521]	18-3/4 [476]	12 [305]	10-1/4 [260]	16-1/4 [412]	18-1/2 [470]	18-1/2 [470]	16X20	0.068	118	4
ABM31/37+W*	21 [533]	49-1/4 [1251]	20-1/2 [521]	18-3/4 [476]	12 [305]	10-1/4 [260]	16-1/4 [412]	18-1/2 [470]	18-1/2 [470]	16X20	0.074	147	4
ABM42+W*	24-1/2 [622]	57 [1448]	20-1/2 [521]	22-1/4 [565]	14-3/4 [375]	11 [279]	16 [406]	22 [559]	18-1/2 [470]	20X20	0.080	153	4
ABM48+W*	24-1/2 [622]	57 [1448]	20-1/2 [521]	22-1/4 [565]	14-3/4 [375]	13 [330]	18 [457]	22 [559]	18-1/2 [470]	20X20	0.084	180	4
ABM43/49/60/62+W*	24-1/2 [622]	57 [1448]	20-1/2 [521]	22-1/4 [565]	14-3/4 [375]	13 [330]	18 [457]	22 [559]	18-1/2 [470]	20X20	0.084	180	4
ABM61+W*	24-1/2 [622]	57 [1448]	20-1/2 [521]	22-1/4 [565]	14-3/4 [375]	15 [381]	20 [508]	22 [559]	18-1/2 [470]	20X20	0.092	200	4
ABM23+W*	21 [533]	40 [1016]	20-1/2 [521]	18 [457]	16 [406]	6-3/4 [171]	10-3/4 [273]	18-1/2 [470]	18-1/2 [470]	16X20	0.059	100	4
ABM35+W*	21 [533]	42 [1067]	23 [584]	18 [457]	19 [483]	8-3/4 [222]	12-3/4 [324]	18 [457]	20 [533]	20X20	0.068	170	4
ABM47+W*	21 [533]	48 [1219]	28 [711]	18 [457]	24 [610]	11-3/4 [298]	15-3/4 [400]	18 [457]	25 [660]	20X25	0.084	200	4

Figure 1

