



PRODUCT DIMENSIONS & SPECIFICATIONS

AFM SERIES HIGH EFFICIENCY MULTI-POSITION HYDRONIC HEAT DX COOL AIR HANDLERS



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

STANDARD FEATURES

APPLICATION VERSATILITY

Upflow or horizontal right as shipped (field-convertible for down-flow or horizontal left applications). Can be AHRI certified 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.

MOTOR

Constant torque ECM speeds and torques are controlled by software embedded in the motor to maintain constant torque. Motors are pre-programmed at the factory.

LOW LEAKAGE CABINET

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

BLOWER

Direct drive blowers circulate air quietly and efficiently. Motor speeds and torques programmed in the motor. 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.

MODULAR HYDRONIC HEAT KITS

Heat kits available with either circuit breakers or terminal blocks. Available in 2, 3 & 4 row. Heat kits are easily installed in the field using Molex plugs or can be ordered factory-installed. Freeze stat is standard, 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. Heat kits are available with or without circulating pump and check valve. Units are provided with auxiliary relay for remote pump. Schrader ports are standard on water-out manifold, hose bib available as an option.

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, UV safe, GLP drain pan holds minimal condensate while eliminating the possibility of corrosion. Galvanized metal drain pan with bottom primary and secondary drain connections or alternate right side primary. All connections 3/4" FPT. Access door allows for coil cleaning.

WARRANTY

Five-year limited parts warranty.

OPTIONS

See options menu.

Phone: 281.441.6500
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www.aspenmfg.com



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

Revised 02/15/19. In keeping with its policy of continuous progress and product improvement, Aspen reserves the right to make changes without notice and incurring obligation. © 2019

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		
AFM18/19	18,000	W*2SP	2	2.7	17770	24900	32250	39600	6.6	15
		W*3SP	3	2.1	21600	30500	39450	48400		
AFM24/25	24,000	W*2SP	2	2.7	20200	28500	36950	45400	6.6	15
		W*3SP	3	2.1	25000	35300	45800	56300		
AFM30/31	30,000	W*2SP	2	2.5	22100	31300	40645	49990	9.1	20
		W*3SP	3	1.9	27700	39100	50750	62400		
		W*4SP	4	1.1	31000	43900	57000	70100		
AFM36/37	36,000	W*2SP	2	2.5	23700	33500	43550	53600	9.1	20
		W*3SP	3	1.9	29800	42100	54700	67300		
		W*4SP	4	1.1	33500	47400	61600	75800		
AFM42/43	42,000	W*2LP	2	2.5	30200	42600	55300	68000	14.3	25
		W*3LP	3	1.9	36300	51400	65000	78600		
		W*4LP	4	1.1	43600	61600	77250	92900		
AFM48/49	48,000	W*2LP	2	2.1	31700	44800	58100	71400	14.3	25
		W*3LP	3	1.6	38200	54000	67300	80600		
		W*4LP	4	0.9	45900	64900	81450	98000		
AFM60/61/62	60,000	W*2LP	2	1.7	32900	46600	60500	74400	14.3	25
		W*3LP	3	1.3	39700	56200	70100	84000		
		W*4LP	4	0.8	47800	67600	84900	102200		
AFM23	24000	W*2SP	2	2.7	20200	28500	36950	45400	6.6	15
		W*3SP	3	2.1	25000	35300	45800	56300		
AFM35	36000	W*2MP	2	2.5	27040	38215	49610	61005	9.1	20
		W*3MP	3	1.9	33185	46900	59540	72180		
		W*4MP	4	1.1	38750	54805	69815	84820		
AFM47	48000	W*3XP	3	1.3	38195	54020	65095	76170	14.3	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		
AFM18/19	18,000	W*2S8	2	3.9	18700	26400	34150	41900	6.6	15
		W*3S8	3	2.9	22900	32300	41750	51200		
AFM24/25	24,000	W*2S8	2	3.9	22600	31600	40550	49500	6.6	15
		W*3S8	3	2.9	26900	38000	49150	60300		
AFM30/31	30,000	W*2S8	2	3.5	23900	33800	43800	53800	9.1	20
		W*3S8	3	2.6	30100	42500	55100	67700		
		W*4S8	4	1.5	34000	48000	62300	76600		
AFM36/37	36,000	W*2S8	2	3.5	25800	36500	47350	58200	9.1	20
		W*3S8	3	2.6	32800	46300	60000	73700		
		W*4S8	4	1.5	37200	52600	68200	83800		
AFM42/43	42,000	W*2L8	2	3.5	33200	46800	60650	74500	14.3	25
		W*3L8	3	2.6	40500	57300	70850	84400		
		W*4L8	4	1.5	49000	69300	86450	103600		
AFM48/49	48,000	W*2L8	2	3	34900	49300	63900	78500	14.3	25
		W*3L8	3	2.2	42750	60450	74825	89200		
		W*4L8	4	1.3	52000	73500	91725	109950		
AFM60/61/62	60,000	W*2L8	2	2.5	36600	51800	67150	82500	14.3	25
		W*3L8	3	1.9	45000	63600	78800	94000		
		W*4L8	4	1.1	55000	77700	97000	116300		
AFM23	24000	W*2S8	2	3.9	22600	31600	40550	49500	6.6	15
		W*3S8	3	2.9	26900	38000	49150	60300		
AFM35	36000	W*2M8	2	3.5	29625	41875	54295	66715	9.1	15
		W*3M8	3	2.6	36870	52095	65800	79505		
		W*4M8	4	1.5	43535	61545	78050	94560		
AFM47	48000	W*3X8	3	1.9	43295	61300	73190	85075	14.3	25
		W*4X8	4	1.1	55360	78230	95070	111900		

BLOWER DATA

MODEL	SPEED TAP	MOTOR HP	MOTOR AMPS	MOTOR VOLTAGE	CFM V. EXTERNAL STATIC *				
					0.10	0.20	0.30	0.40	0.50
AFM 18/19/24/25	TAP 5	1/3	4.8	120	900	853	797	738	673
	TAP 4				670	646	613	592	553
	TAP 3				500	476	452	421	400
	TAP 2				400	381	360	339	312
	TAP 1				900	853	797	738	673
AFM23	TAP 5	1/5	4.8		895	860	815	770	705
	TAP 4				825	795	770	750	700
	TAP 3				770	735	705	685	665
	TAP 2				705	675	655	615	595
	TAP 1				655	615	605	580	540
AFM 30/31/36/37	TAP 5	1/2	6.8		1150	1087	1030	975	910
	TAP 4				1080	1048	1010	960	895
	TAP 3				900	862	825	796	745
	TAP 2				700	663	632	600	552
	TAP 1				500	473	449	421	395
AFM35	TAP 5	1/2	5.4		1245	1190	1130	1085	1020
	TAP 4				1170	1130	1085	1045	1000
	TAP 3				935	910	865	840	805
	TAP 2				815	785	745	715	685
	TAP 1				685	655	605	580	520
AFM 42/43/48/60/61/62	TAP 5	1	10.9		1850	1806	1752	1700	1652
	TAP 4				1704	1656	1600	1532	1479
	TAP 3				1494	1461	1426	1400	1364
	TAP 2				1350	1310	1272	1229	1175
	TAP 1				676	652	621	600	559
AFM47	TAP 5	1	10.9		1950	1880	1845	1805	1780
	TAP 4				1765	1740	1725	1685	1660
	TAP 3				1500	1480	1450	1415	1385
	TAP 2				1245	1205	1185	1150	1105
	TAP 1				1010	900	825	765	705

*Dry coil

AIR HANDLER CHASSIS NOMENCLATURE

AFM	18	G	-001
AFM = 120V Constant torque ECM Multi-Position 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 = 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 8 = 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
AFM18+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
AFM19/24/25+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
AFM30/31+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
AFM36+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
AFM31/37+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
AFM42+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
AFM48+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
AFM43/49/60/62+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
AFM61+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
AFM23+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
AFM35+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
AFM47+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

