

AFM SERIES - AIR HANDLER

HYDRONIC MULTI-POSITION, COPPER COIL



Unit shown with service panels removed. Representative image only. Some models may vary in appearance.

APPLICATION VERSATILITY

This unit is designed for use in upflow, downflow, horizontal left and horizontal right applications. Can be AHRI certified with most brands of air conditioners or heat pumps.

- A2L refrigerants require a Refrigerant Detection System (RDS) for compliance. In accordance to UL 60335 Refrigerant Detection Systems are factory-installed on A2L refrigerant ready air handlers.
- ETL and AHRI listed for R22, R410A, R454B, and R32 refrigerants [A2L refrigerants certified with Refrigerant Detection System (RDS)].

120V CONSTANT TORQUE ECM MOTOR

Air handler models come equipped with a multi-speed, constant torque ECM. Motor speed and torque are managed via integrated software to ensure consistent torque output across all operating conditions.

BLOWER

Direct drive blowers circulate air quietly and efficiently. Blowers mounted on rails so they can be easily removed for service.

ELECTRONIC CONTROL BOARD

Electronic circuit board provides 30 seconds of ON/OFF blower time delay extracting more heat/cool from the coil. 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 water stagnation and coil freezing.

LOW LEAKAGE CABINET

Less than 2% air leakage from cabinet when tested in accordance with ASHRAE standard 193. Sturdy, galvanized steel cabinet with painted front panels. Cabinet fully insulated with 1/2" faced insulation to encapsulate glass fibers, to prevent sweating, and to provide excellent R-value. Stick pins ensure insulation remains in place.

DX COIL

High-efficiency rifled copper tubes and enhanced aluminum fins provide maximum heat transfer. All coils are immersion tested at 500 psi, followed by nitrogen pressurization and factory sealing to ensure optimal system integrity and long-term reliability. Coil mounted Schrader allows pre-installation pressure assurance testing. Available with either flowrator or TXV metering device.

Field-installable TXVs are also available. Rugged GLP drain pan holds minimal condensate while eliminating the possibility of corrosion. Drain pans are UV safe. GLP drain pans with bottom primary and secondary drain connections or alternate right-side primary. All connections 3/4" NPT. Access door allows for coil cleaning.

MODULAR HYDRONIC HEAT KITS

Air Handlers are available with either factory-installed circuit breakers or terminal blocks. Hydronic Coils come in 2, 3 and 4 row with the options of pump or no pump configurations. 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. 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.

WARRANTY Hassle-free five-year limited parts warranty. **OPTIONS** Ask your local Aspen Sales Rep for customization options.

CUSTOMIZATION OPTIONS*

DUAL A2L REFRIGERANT TECHNOLOGY FOR R32 & R454B SYSTEMS

Aspen coils and air handlers are engineered with Dual A2L Refrigerant Technology, allowing field configurability for either R32 or R454B refrigerants. Each unit ships with a factory-installed A2L metering device that can be easily swapped at installation, and includes the option for a factory- or field-installed universal Refrigerant Detection System (RDS) compatible with both refrigerants.

OTHER POPULAR CUSTOM OPTIONS:

- Refrigerant Detection System (RDS) kit factory-installed.
- Factory or field-installed TXV available.

DOWNFLOW KIT OPTIONS:

METAL DRAIN PANS

- 16" DWNFLWM-16
- 18" DWNFLWM-18
- 22" DWNFLWM-22

PLASTIC DRAIN PANS

- DWNFLWP

AFM-SS-AH-011-A

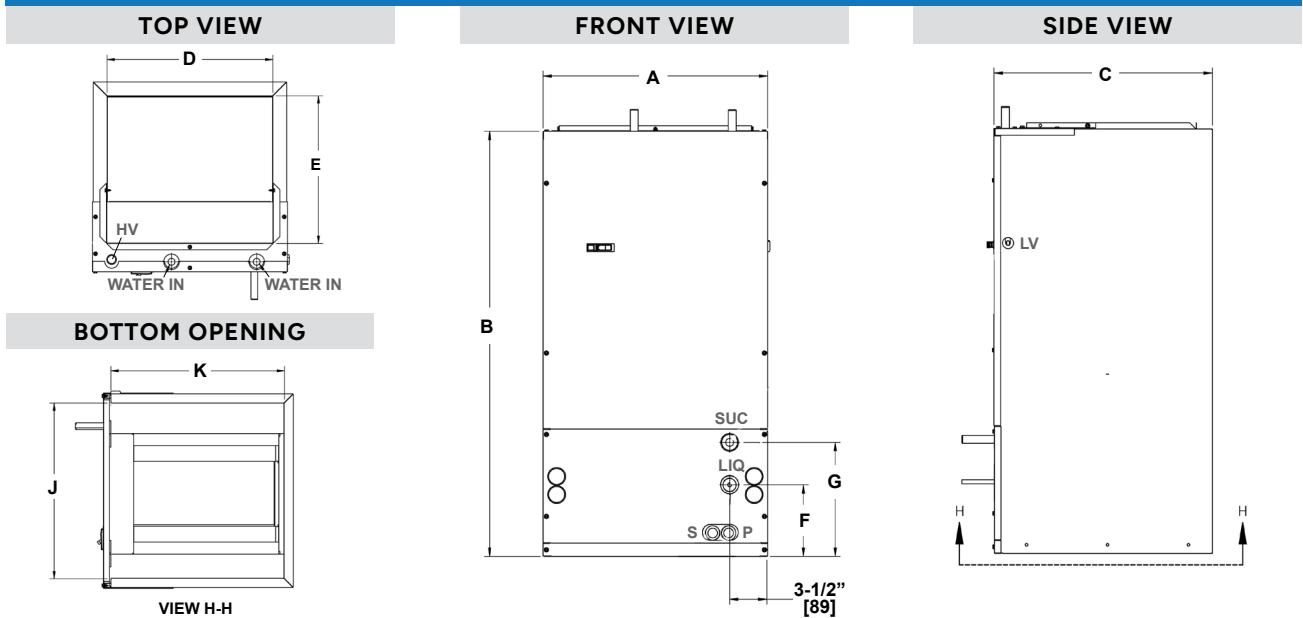


HEATING/COOLING PERFORMANCE & ELECTRICAL DATA												
MODEL	PERFORMANCE DATA							ELECTRICAL DATA				
	NOM. COOLING BTU	HYDRONIC HEAT KIT MODEL	# OF ROWS	COIL P.D. 3.5 GPM	HEATING CAPACITY (BTU/HR)				MIN. CIRCUIT AMPACITY MCA	MAX. BREAKER OR FUSE SIZE		
					STANDARD PUMP @ 3.5 GPM NOM. AIRFLOW							
					ENTERING WATER TEMP.							
					120°	140°	160°	180°				
AFM 18/19	18,000	W*2SP	2	2.7	17770	24900	32250	39600	6.78	15		
		W*3SP	3	2.1	21600	30500	39450	48400				
AFM 23/24/25	24,000	W*2SP	2	2.7	20200	28500	36950	45400	6.78	15		
		W*3SP	3	2.1	25000	35300	45800	56300				
AFM 30/31	30,000	W*2SP	2	2.5	22100	31300	40645	49990	9.28	15		
		W*3SP	3	1.9	27700	39100	50750	62400				
		W*4SP	4	1.1	31000	43900	57000	70100				
AFM 35	36,000	W*2MP	2	2.5	27040	38215	49610	61005	9.28	15		
		W*3MP	3	1.9	33185	46900	59540	72180				
		W*4MP	4	1.1	38750	54805	69815	84820				
AFM 36/37	36,000	W*2SP	2	2.5	23700	33500	43550	53600	9.28	15		
		W*3SP	3	1.9	29800	42100	54700	67300				
		W*4SP	4	1.1	33500	47400	61600	75800				
AFM 42/43	42,000	W*2LP	2	2.5	30200	42600	55300	68000	15.16	25		
		W*3LP	3	1.9	36300	51400	65000	78600				
		W*4LP	4	1.1	43600	61600	77250	92900				
AFM 47	48,000	W*3XP	3	1.3	38195	54020	65095	76170	15.16			

AIR HANDLER CHASSIS NOMENCLATURE (HYDRONIC MULTI-POSITION)				
AFM	NOM. TON.	METERING DEVICE	OPTION CODE	
	MBTUH	4	-000	
120V ECM MOTOR CONSTANT TORQUE HYDRONIC MULTI-POSITION AIR HANDLER	19 42	A1 REFRIGERANTS - R410A + R22 4 = R410A (TXV NON-BLEED AC/HP) G = R410A (FLOWRATOR) B = R22 (TXV 20% BLEED AC/HP) X = R22 (TXV NON-BLEED AC//HP) F = R22 (FLOWRATOR)	CUSTOM OPTIONS	
	19 43			
	23 47			
	24 48	A2L REFRIGERANTS - R454B + R32 J = R454B (TXV NON-BLEED AC/HP) K = R454B (TXV 20% BLEED AC/HP) N = R454B (PISTON) M = R32 (PISTON) D = R32 (TXV NON-BLEED AC/HP) Z = R454B/R32 CONFIGURABLE (Shipped with R454B piston)		
	25 49			
	30 59			
	31 60			
	35 61			
	36 62			
	37			

BLOWER DATA								
MODEL	120V ECM MOTOR			CFM VS EXTERNAL STATIC (DRY COIL)				
	SPEED TAP	HP	FLA	0.1	0.2	0.3	0.4	0.5
AFM 18/19/24/25	T5	1/3	4.8A	900	853	797	738	673
	T4	1/3	4.8A	670	646	613	592	553
	T3	1/3	4.8A	500	476	452	421	400
	T2	1/3	4.8A	400	381	360	339	312
	T1	1/3	4.8A	900	853	797	738	673
AFM 23	T5	1/3	4.8A	895	860	815	770	705
	T4	1/3	4.8A	825	795	770	750	700
	T3	1/3	4.8A	770	735	705	685	665
	T2	1/3	4.8A	705	675	655	615	595
	T1	1/3	4.8A	655	615	605	580	540
AFM 30/31/36/37	T5	1/2	6.8A	1150	1087	1030	975	910
	T4	1/2	6.8A	1080	1048	1010	960	895
	T3	1/2	6.8A	900	862	825	796	745
	T2	1/2	6.8A	700	663	632	600	552
	T1	1/2	6.8A	500	473	449	421	395
AFM 35	T5	1/2	6.8A	1245	1190	1130	1085	1020
	T4	1/2	6.8A	1170	1130	1085	1045	1000
	T3	1/2	6.8A	935	910	865	840	805
	T2	1/2	6.8A	815	785	745	715	685
	T1	1/2	6.8A	685	655	605	580	520

FIGURE 1



LIQUID LINE: 3/8" **SUCTION LINE:** • 1.5T to 3.0T = 3/4" • 3.5T to 5.0T = 7/8"

DRAINS: P = PRIMARY / S = SECONDARY

REFRIGERANT CONNECTIONS: SUC = SUCTION / LIQ = LIQUID

WIRE CONNECTIONS: LV = LOW VOLTAGE / HV = HIGH VOLTAGE

AFM DIMENSIONS (In.)[mm.] - FIGURE 1

MODEL	A	B	C	D	E	F	G	J	K	FILTER	SHIPPING INFO	
											WEIGHT	QTY
AFM18+W*	21 [533]	49.25 [1251]	20.5 [521]	18.75 [476]	12 [305]	5.75 [146]	9.75 [248]	18.5 [470]	18.5 [470]	16X20X1	99	4
AFM19/24/ 25+W*	21 [533]	49.25 [1251]	20.5 [521]	18.75 [476]	12 [305]	7.75 [197]	11.75 [298]	18.5 [470]	18.5 [470]	16X20X1	100	4
AFM30+W*	21 [533]	49.25 [1251]	20.5 [521]	18.75 [476]	12 [305]	10.5 [267]	14.5 [368]	18.5 [470]	18.5 [470]	16X20X1	118	4
AFM36+W*	21 [533]	49.25 [1251]	20.5 [521]	18.75 [476]	12 [305]	12.5 [317]	16.5 [419]	18.5 [470]	18.5 [470]	16X20X1	118	4
AFM31/ 37+W*	21 [533]	49.25 [1251]	20.5 [521]	18.75 [476]	12 [305]	14.75 [374]	18.75 [476]	18.5 [470]	18.5 [470]	16X20X1	147	4
AFM42+W*	24.5 [622]	57 [1448]	20.5 [521]	22.25 [565]	14.75 [375]	14.75 [374]	18.75 [476]	22 [559]	18.5 [470]	20X20X1	153	4
AFM48+W*	24.5 [622]	57 [1448]	20.5 [521]	22.25 [565]	14.75 [375]	16 [406]	20 [508]	22 [559]	18.5 [470]	20X20X1	180	4
AFM43/49/ 60/62+W*	24.5 [622]	57 [1448]	20.5 [521]	22.25 [565]	14.75 [375]	18 [457]	22 [559]	22 [559]	18.5 [470]	20X20X1	180	4
AFM61+W*	24.5 [622]	57 [1448]	20.5 [521]	22.25 [565]	14.75 [375]	20 [508]	24 [610]	22 [559]	18.5 [470]	20X20X1	200	4
AFM23+W*	21 [533]	40 [1016]	20.5 [521]	18 [457]	16 [406]	7 [178]	11 [279]	18.5 [470]	18.5 [470]	16X20X1	100	4
AFM35+W*	21 [533]	42 [1067]	23 [584]	18 [457]	19 [483]	8.75 [222]	12.75 [324]	18 [457]	20 [533]	20X20X1	170	4
AFM47/ 59+W*	21 [533]	48 [1219]										