

High Wall Type

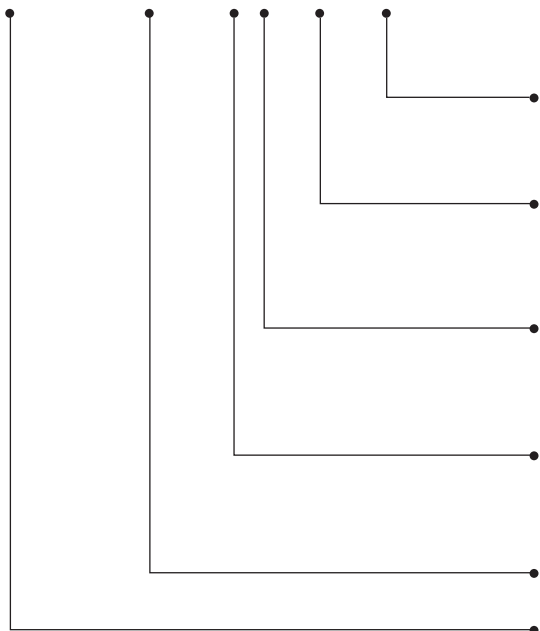
MFCHW-AECM



This High Wall Unit is designed to meet and exceed demanding requirements for efficiency, quiet operation and appearance. The sleek profile and elegantly styled cabinet complements any interior design theme, while the microprocessor assures accurate environmental control.

- » Performance in accordance to Standard AHRI440
- » Sound Performance tested as per AHRI Standard 350-2000 (non-ducted equipment)
- » ETL-Listed, Constructed in compliance with ANSI/UL 1995 Standard
- » High-efficiency Variable speed ECM motor available for higher energy efficiency
- » Completed controller with VAV & VVW control logic;
- » Merv 4 class filter as standard;
- » 2-way /3-way modulating valve kit with Isolation ball valves & strainer as optional;
- » 6-way valve as optional;

MFCHW-200 - V X - S - AECM



AECM	EC motor configuration
S	Complete controller with VAV&VVW control logic
W	EC motor driver suitable for connection to AC or EC modulating thermostat
X	220V/1P/60Hz EC motor
Y	115V/1P/60Hz EC motor
P	Chilled/Hot Water, 4-Pipe
V	Chilled/Hot Water, 2-Pipe
VEH	Chilled Water, 2-Pipe with Electric Heater
200~750	Unit Sizes
MFCHW	High wall type fan coil unit

Technical Data

MFCHW



MFCHW-V-AECM

Product range: MFCHW-AECM Hydronic High Wall Unit with EC Motor

MFCHW-[Size]-V~AECM				200	300	400	500	600	750	
Unit Configuration	Configuration			2-pipe						
	Number Of Fan Blowers			Single						
	Power Supply	(V/Ph/Hz)		115 / 1 / 60 or 220 / 1 / 60						
	Operation Control			~S: Complete controller with VAV&VWV control logic ~W: EC motor driver suitable for connection to AC or EC modulating thermostat						
Performance Data	Air	Air Flow	H	CFM	223	323	400	464	617	735
			M		159	223	323	353	500	600
			L		117	159	200	224	300	353
	Cooling	Cooling Capacity	H	BTU/Hr	6243	8499	11136	14767	17017	22199
			M		4824	6479	9606	12102	14381	18927
			L		3800	4939	6564	8508	9774	12577
		Sensible Cooling Capacity	H		4255	5869	7657	9980	11587	15126
			M		3241	4391	6522	8048	9670	12708
			L		2507	3295	4367	5538	6427	8251
	Heating	Heating Capacity	H	BTU/Hr	9705	13212	17311	22957	26454	34509
			M		7499	10072	14933	18813	22357	29422
			L		5907	7678	10205	13226	15195	19552
	Electrical	Fan motor power	H	W	13	20	30	38	50	65
			M		9	13	20	25	31	40
			L		7	9	11	13	12	16
		Fan Motor Running Current @ H		A	0.118	0.185	0.283	0.35	0.435	0.534
	Sound	Sound Pressure Level (H/M/L)		dB(A)	33/27/25	42/33/27	47/42/27	50/45/33	50.2/45.3/32	53/48/36
		Sound Power Level (H/M/L)			42/36/34	51/42/36	56/51/36	59/54/42	59.2/54.3/41	62/57/45
	Hydronic	Cooling Water Flow Rate	H	GPM	1.23	1.7	2.2	2.9	3.4	4.4
			M		0.95	1.3	1.9	2.4	2.8	3.7
			L		0.75	1.0	1.3	1.7	1.9	2.5
		Cooling Pressure Drop	H	ft.wg	2.69	2.6	3.9	5.3	8.7	15.0
			M		1.69	1.6	3.0	3.7	6.4	11.3
			L		1.1	1.0	1.5	2.0	3.2	5.4
Heating Water Flow Rate		H	GPM	1.23	1.7	2.2	2.9	3.4	4.4	
		M		0.95	1.3	1.9	2.4	2.8	3.7	
		L		0.75	1.0	1.3	1.7	1.9	2.5	
Heating Pressure Drop		H	ft.wg	2.42	2.3	3.5	4.8	7.8	13.5	
		M		1.52	1.4	2.7	3.4	5.8	10.1	
		L		0.99	0.9	1.4	1.8	2.9	4.9	
Water Content		gal	0.14	0.14	0.22	0.28	0.27	0.35		
Construction and Package Data	Water Connections	Type		Socket(Threaded Female)						
		In	inch	NPT1/2"						
		Out		Dia.5/8"						
	Condensate Drainage Connection		Dia.5/8"							
	Dimensions	L	inch	39 3/4				46 1/4		
		W		9 1/16				9 1/16		
		D		11 13/16				11 13/16		
Net Weight		lbs	26.5	30.9	33.1	37.5	39.7	41.9		

Testing conditions: a. Cooling mode: ~Return air temperature: 80F DB/ 67F WB. ~Inlet/ outlet water temperature: 45F/ 55F. b. Heating mode: ~ Return air temperature: 70F. ~ Inlet water temperature: 140F. ~ Water flow same to cooling mode

Technical Data

MFCHW



MFCHW-P-AECM

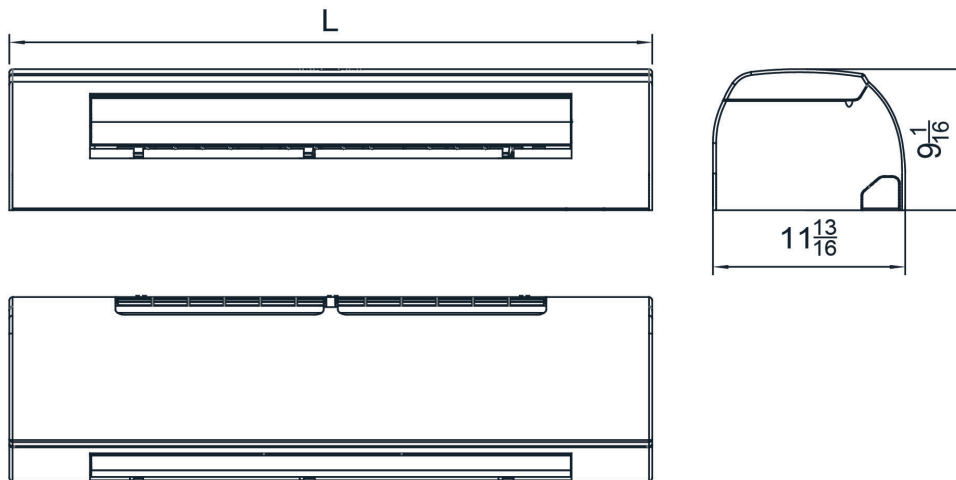
Product range: MFCHW-AECM Hydronic High Wall Unit with EC Motor

MFCHW-[Size]-P~ECM				500	750	
Unit Configuration		Configuration		4-pipe		
		Number Of Fan Blowers		Single		
		Power Supply	(V/Ph/Hz)	115 / 1 / 60 or 220 / 1 / 60		
		Operation Control		~S: Complete controller with VAV&VWV control logic ~W: EC motor driver suitable for connection to AC or EC modulating thermostat		
Performance Data	Air	Air Flow	H	CFM	464	735
			M		353	600
			L		224	353
	Cooling	Cooling Capacity	H	BTU/Hr	10623	16566
			M		8706	14124
			L		6120	9385
		Sensible Cooling Capacity	H		7099	11067
			M		5725	9297
			L		3939	6036
	Heating	Heating Capacity	H	BTU/Hr	5278	7572
			M		4295	6419
			L		3023	4295
	Sound	Sound Pressure Level (Outlet)		dB(A)	50/45/33	
		Sound Power Level (Outlet)			59/54/42	
	Electrical	Power input in cooling mode	H	W	38	65
			M		25	40
			L		13	16
		Fan Motor Running Current @ H		A	0.35	0.534
	Hydraulic	Cooling Water Flow Rate	H	GPM	2.1	3.3
			M		1.7	2.8
			L		1.2	1.8
		Cooling Pressure Drop	H	ft.wg	5.7	14.27
			M		4	10.71
			L		2.1	5.13
Heating Water Flow Rate		H	GPM	0.96	1.37	
		M		0.78	1.16	
		L		0.55	0.78	
Heating Pressure Drop		H	ft.wg	2.76	5.28	
		M		1.9	3.92	
		L		1.01	1.9	
Chilled Water Content		gal	0.20	0.25		
Hot Water Content		gal	0.08	0.09		
Construction and Packing Data	Water Connections	Type		Socket(Threaded Female)		
		In	inch	1/2"		
	Out	5/8"				
	Condensate Drainage Connection					
	Dimensions	L	inch	39 3/4	46 1/4	
		W		9 1/16	9 1/16	
D		11 13/16		11 13/16		
Net Weight		lbs	37.5	41.9		

Testing conditions: a. Cooling mode: ~Return air temperature: 80F DB/ 67F WB. ~Inlet/ outlet water temperature: 45F/ 55F.
b. Heating mode: ~Return air temperature: 70F. ~Inlet / outlet water temperature: 122F/ 113F.

Technical Data

Dimensional drawings



Model	MFCHW-200/300/400/500	MFCHW-600/750
L	39 3/4"	46 1/4"

(All dimensions are approximate within 1/16 of an inch of those indicated.)

Accessories (Optional Parts)

Accessories	Photo	Code	Description
1. Pump kit		BCP-PUMP-SWC-001	230V pump kit
		BCP-PUMP-MFCHW-001	115V pump kit
2. E-heater kit		BCP18-EH-SWC-001	1 kW(2700Btu/h) electric heater(220V) for MFCHW-12
		BCP18-EH-SWC-002	1.5 kW(5400Btu/h) electric heater kit(220V) for MFCHW-18
		BCP18-EH-SWC-003	1.5 kW(5400Btu/h) electric heater kit(220V) for MFCHW-24
		BCP18-EH-MFCHW-001	0.5 kW(1700Btu/h)electric heater kit(115V) for MFCHW-12/15
		BCP18-EH-MFCHW-002	0.8 kW(2700Btu/h) electric heater kit(115V) for MFCHW-18
		BCP18-EH-MFCHW-003	0.8 kW(2700Btu/h) electric heater kit(115V) for MFCHW-24
3. Valve kit		AA09-THV08-001	115~240VAC 1/2" thermoelectro 2-way valve kit
		AA09-THV08-001B	24VAC 1/2" thermoelectro 2-way valve kit
		AA09-THV08-003	115~240VAC 1/2" thermoelectro 3-way valve kit
		AA09-THV08-003B	24VAC 1/2" thermoelectro 3-way valve kit
		BCP18-RCS-VALVE-SWC-001	24VAC 3/4" Modulating 2-way ball valve kit