

MFCVFB & MFCVSB-AECM

MFCVFB Flat top unit



MFCVSB Slope top unit



MFCVFB & MFCVSB units independently provide comfort cooling and heating within a room. They are often located against walls or ceiling, beneath windows or along the perimeter of a room to accommodate maximum load requirements.

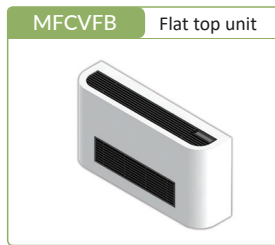
- » Performance in accordance to Standard AHRI440
- » Sound Performance tested as per AHRI Standard 350-2000 (non-ducted equipment)
- » ETL-Listed, Constructed in compliance with ANSI/UL 1995 Standard
- » High-efficiency Variable speed ECM motor available for higher energy efficiency
- » Completed controller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

MFCVSB & MFCVFB - 300 - V X - S - AECM

	AECM	EC motor configuration
	S	Complete controller with VAV&VWV control logic
	W	EC motor driver suitable for connection to AC or EC modulating thermostat
	X	220V EC motor
	Y	115V EC motor
	P	Chilled/Hot Water, 4-Pipe
	V	Chilled/Hot Water, 2-Pipe
	300~800	Unit Sizes.
MFCVSB	MFCVSB	Vertical or Horizontal Exposed Series (Slope top unit)
MFCVFB	MFCVFB	Vertical or Horizontal Exposed Series (Flat top unit)

Technical Data

MFCVFB & MFCVSB



MFCVFB & MFCVSB-V-AECM

Product range: MFCVFB & MFCVSB (3R)-V~ Universal 2-pipe Unit with 3-row Coil and EC motor

MFCVSB & MFCVFB(3R)-[Size]-V~-AECM						300	400	600	800	
Unit Configuration		Configuration				2-pipe				
		Number Of Fan Blowers				Twin			Four	
		Power Supply		(V/Ph/Hz)		115 / 1 / 60 or 220 / 1 / 60				
		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	3	CFM	296	398	571	794	
			M	2		254	318	486	688	
			L	1		201	224	289	398	
	Cooling	Cooling Capacity	H	3	Btu/Hr	8658	11209	16545	22823	
			M	2		7706	9557	14580	20497	
			L	1		6459	7252	9809	13351	
		Sensible Cooling Capacity	H	3		5885	7681	11131	15455	
			M	2		5179	6453	9725	13735	
			L	1		4314	4840	6397	8723	
			Heating	Heating Capacity		H	3	Btu/Hr	13460	17425
	M	2			11979	14856	22665		31863	
	L	1			10041	11274	15249		20755	
	Max. Electric Heater Capacity			kW	1.5	2	2		3	
	Sound	Sound Pressure Level				dB(A)	43/38/33	47/40/33	49/44/33	52/48/33
		Sound Power Level					52/47/42	56/49/42	58/53/42	61/57/42
	Electrical	Power input	H	3	W	26	38	52	87	
			M	2		15	23	36	60	
			L	1		11	13	14	22	
	Hydraulic	Cooling Water Flow Rate		3	GPM	1.7	2.2	3.3	4.5	
				2		1.5	1.9	2.9	4.1	
				1		1.3	1.4	1.9	2.6	
		Cooling Pressure Drop		3	ft.wg	6.0	3.7	8.6	8.8	
				2		4.9	2.7	6.8	7.2	
				1		3.6	1.7	3.4	3.3	
		Heating Water Flow Rate		3	GPM	1.7	2.2	3.3	4.5	
				2		1.5	1.9	2.9	4.1	
				1		1.3	1.4	1.9	2.6	
		Heating Pressure Drop		3	ft.wg	5.4	3.3	7.7	7.9	
				2		4.4	2.5	6.2	6.5	
				1		3.2	1.5	3.0	3.0	
Water Content				Us.gal	0.20	0.25	0.33	0.46		
Construction and Packing Data		Water		Type		Socket(Threaded Female)				
		Connections		In	in	NPT 3/4"				
				Out		Dia.5/8"				
		Condensate Drainage Connection				Dia.5/8"				
Net Weight				lbs	75	84	97	119		

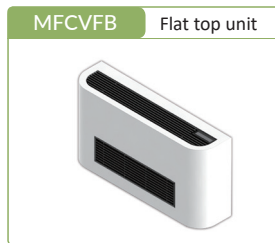
Testing conditions:

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

MFCVFB & MFCVSB



MULTI MFG

MFCVFB & MFCVSB (4R)-V-AECM

Product range: MFCVFB & MFCVSB(4R)-V~ Universal 2-pipe Unit with 4-row Coil and EC motor

MFCVSB & MFCVFB(4R)-[Size]-V~-AECM						300	400	600	800	
Unit Configuration n		Configuration				2-pipe				
		Number Of Fan Blowers				Twin			Four	
		Power Supply		(V/Ph/Hz)		115 / 1 / 60 or 220 / 1 / 60				
		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	3	CFM	296	398	571	794	
			M	2		254	318	486	688	
			L	1		201	224	289	398	
	Cooling	Cooling Capacity	H	3	Btu/Hr	8147	10954	16009	21943	
			M	2		7250	9339	14108	19707	
			L	1		6077	7087	9492	12837	
		Sensible Cooling Capacity	H	3		5734	7676	11132	15349	
			M	2		5047	6449	9726	13641	
			L	1		4204	4838	6398	8663	
	Heating	Heating Capacity	H	3	Btu/Hr	12664	17028	24887	34112	
			M	2		11271	14518	21932	30635	
			L	1		9447	11017	14755	19955	
		Max. Electric Heater Capacity			kW	1.5	2	2	3	
	Sound	Sound Pressure Level				dB(A)	43/38/33	47/40/33	49/44/33	52/48/33
		Sound Power Level					52/47/42	56/49/42	58/53/42	61/57/42
	Electrical	Power input	H	3	W	26	38	52	87	
			M	2		15	23	36	60	
			L	1		11	12	14	22	
	Hydraulic	Cooling Water Flow Rate	3		GPM	1.1	1.5	2.1	2.9	
			2			1.0	1.2	1.9	2.6	
			1			0.8	0.9	1.3	1.7	
		Cooling Pressure Drop	3		ft.wg	3.5	6.9	16.0	11.6	
			2			2.8	5.2	12.8	9.5	
			1			2.1	3.2	6.3	4.4	
		Heating Water Flow Rate	3		GPM	1.1	1.5	2.1	2.9	
			2			1.0	1.2	1.9	2.6	
			1			0.8	0.9	1.3	1.7	
		Heating Pressure Drop	3		ft.wg	3.1	6.2	14.4	10.4	
			2			2.6	4.7	11.5	8.6	
			1			1.9	2.8	5.6	4.0	
		Water Content				Us.gal	0.23	0.26	0.44	0.61
Construction and Packing Data		Water		Type		Socket(Threaded Female)				
		Connections		In	in	NPT 3/4"				
				Out						
		Condensate Drainage Connection		Dia.5/8"						
Net Weight				lbs		75	84	97	119	

Testing conditions:

a. Cooling mode:

~Return air temperature: 80F DB/ 67F WB.

~Inlet/ outlet water temperature: 45F/ 60F.

b. Heating mode:

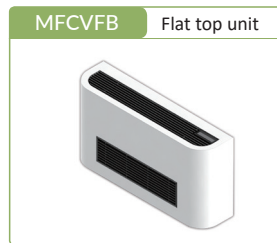
~ Return air temperature: 70F.

~ Inlet water temperature: 140F.

~ Water flow same to cooling mode

Technical Data

MFCVFB & MFCVSB



MFCVFB & MFCVSB (3R+1)-P-AECM

Product range: MFCVFB & MFCVSB (3R+1)-P~ Universal 4-pipe Unit with 3-row Coil for cooling, 1-row coil for heating and EC motor

MFCVSB & MFCVFB(3R+1)-[Size]-P~-AECM					300	400	600	800	
Unit Configuration		Configuration			4-pipe				
		Number Of Fan Blowers			Twin			Four	
		Power Supply		(V/Ph/Hz)	115 / 1 / 60 or 220 / 1 / 60				
		Control			~S: Complete controller with VAV&VWV control logic				
Performance Data	Air	Air Flow	H	3	CFM	296	398	571	794
			M	2		254	318	486	688
			L	1		201	224	289	398
	Cooling	Cooling Capacity	H	3	Btu/Hr	8658	11209	16545	22823
			M	2		7706	9557	14580	20497
			L	1		6459	7252	9809	13351
		Sensible Cooling Capacity	H	3		5885	7681	11131	15455
			M	2		5179	6453	9725	13735
			L	1		4314	4840	6397	8723
			Heating	Heating Capacity		H	3	Btu/Hr	8816
	M	2			7773	9990	14693		20581
	L	1			6589	7598	9867		13490
	Max. Electric Heater Capacity			kW	1.5	2	2		3
	Sound	Sound Pressure Level			dB(A)	43/38/33	47/40/33	49/44/33	52/48/33
		Sound Power Level				52/47/42	56/49/42	58/53/42	61/57/42
	Electrical	Power input	H	3	W	26	38	52	87
			M	2		15	23	36	60
			L	1		11	13	14	22
	Hydraulic	Cooling Water Flow Rate		3	GPM	1.7	2.2	3.3	4.5
				2		1.5	1.9	2.9	4.1
				1		1.3	1.4	1.9	2.6
		Cooling Pressure Drop		3	ft.wg	6.0	3.7	8.6	8.8
				2		4.9	2.7	6.8	7.2
				1		3.6	1.7	3.4	3.3
		Heating Water Flow Rate		3	GPM	0.4	0.6	0.8	1.1
				2		0.4	0.5	0.7	1.0
				1		0.3	0.4	0.5	0.7
		Heating Pressure Drop		3	ft.wg	0.8	1.5	4.6	1.1
				2		0.6	1.2	3.8	0.9
				1		0.5	0.7	1.8	0.4
Chilled Water Content			Us.gal	0.20	0.25	0.33	0.46		
Hot Water Content				0.07	0.08	0.11	0.15		
Construction and Packing Data		Water		Type		Socket(Threaded Female)			
	Chilled Coil Connections		In	in	NPT 3/4"				
			Out						
	Hot Coil Connections		In		NPT 1/2"				
			Out						
	Condensate Drainage Connection				Dia.5/8"				
Net Weight			lbs	75	84	97	119		

Testing conditions:

a. Cooling mode:

~Return air temperature: 80F DB/ 67F WB.

~Inlet/ outlet water temperature: 45F/ 55F.

b. Heating mode:

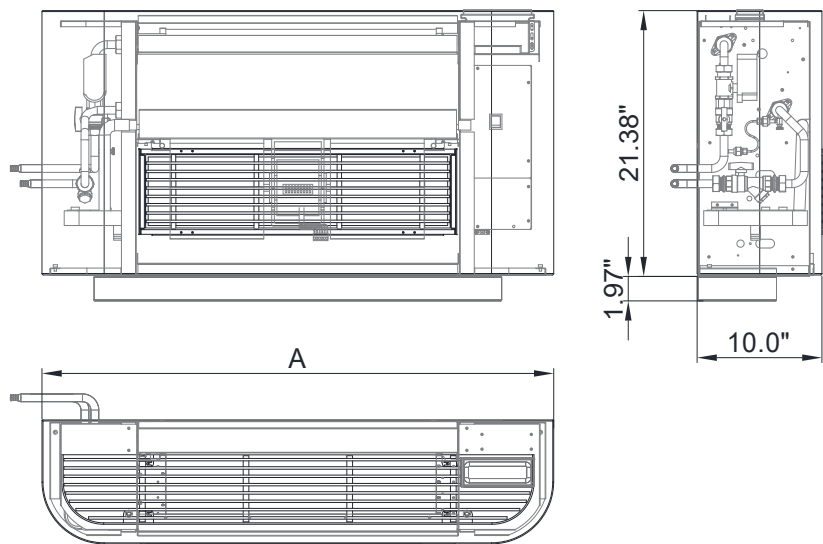
~ Return air temperature: 70F.

~ Inlet/Outlet water temperature: 180F/140F

Technical Data

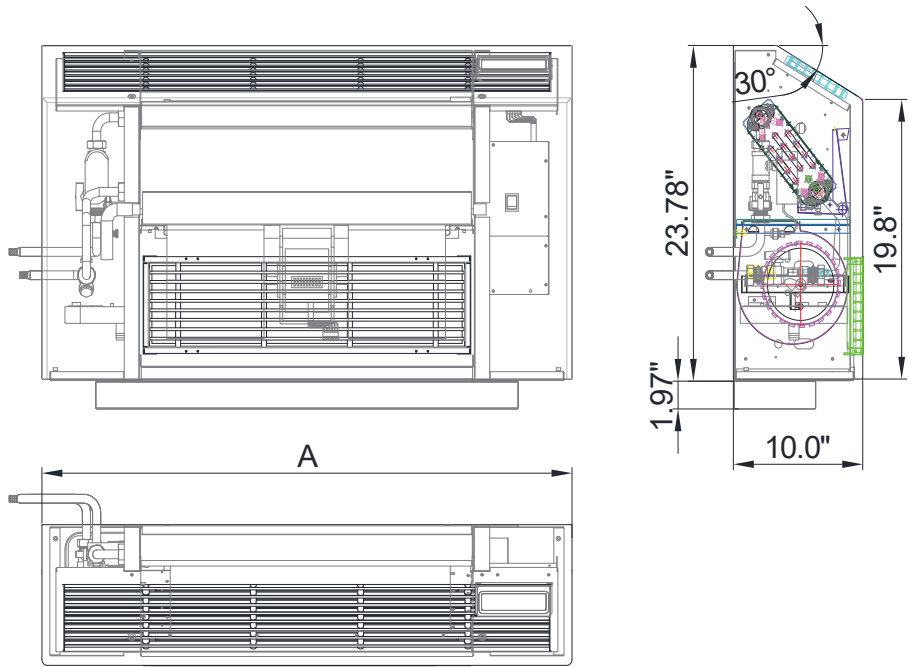


Dimensional Drawings: MFCVFB-Flat top unit



Model	300	400	600	800
A	40 13/16	46 13/16	52 13/16	64 7/8

Dimensional Drawings: MFCVSB-Slope top unit

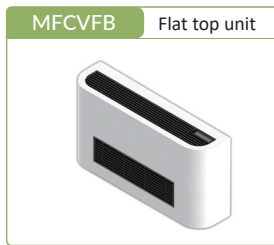


Model	300	400	600	800
A	40 13/16	46 13/16	52 13/16	64 7/8

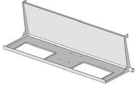
(All dimensions are approximate within 1/16 of an inch of those indicated)

Technical Data

MFCVFB & MFCVSB



Accessories (Optional Part)

Accessories	Photo	Code	Description
1. Drain Pan		BCP-SSDP-MFCVSB & MFCVFB-001	Stainless steel drain pan for MFCVSB & MFCVFB-300
		BCP-SSDP-MFCVSB & MFCVFB-002	Stainless steel drain pan for MFCVSB & MFCVFB-400
		BCP-SSDP-MFCVSB & MFCVFB-003	Stainless steel drain pan for MFCVSB & MFCVFB-600
		BCP-SSDP-MFCVSB & MFCVFB-004	Stainless steel drain pan for MFCVSB & MFCVFB-800
2. Filter		AA14-M8-MFCVSB & MFCVFB-001	HAF 3M filter for MFCVSB & MFCVFB-300
		AA14-M8-MFCVSB & MFCVFB-002	HAF 3M filter for MFCVSB & MFCVFB-400
		AA14-M8-MFCVSB & MFCVFB-003	HAF 3M filter for MFCVSB & MFCVFB-600
		AA14-M8-MFCVSB & MFCVFB-004	HAF 3M filter for iMFCVSB & MFCVFB-800
3. Valve kit		BCP24-VALVE-MFCVSB& MFCVFB-001	24VAC 3/4" ON/OFF 2-way ball valve kit
		BCP24-VALVE-MFCVSB& MFCVFB-002	24VAC 3/4" Modulating 2-way ball valve kit
		BCP24-VALVE-MFCVSB& MFCVFB-003	24VAC 3/4" Belimo Modulating 2-way ball valve kit