

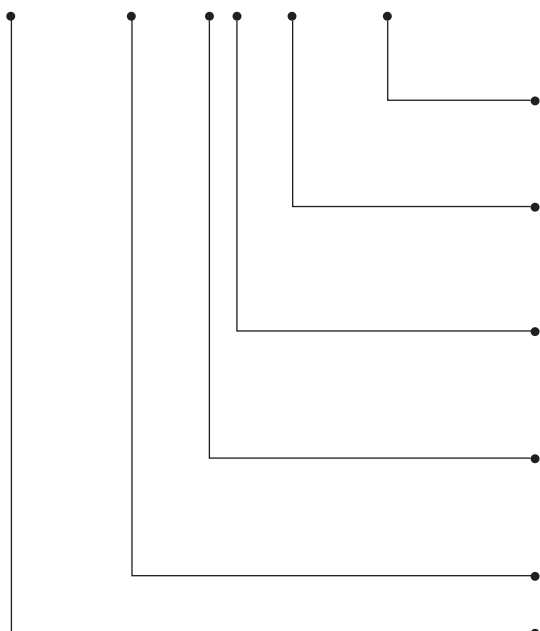
## MFCVU-AECM



The slim, space-saving MFCVU unit is designed specifically for under-ceiling mounting or vertical mounting. This flexibility allows the unit to be customized to meet a variety of job 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;
- » RAL9010 powered coat
- » 2-way /3-way modulating valve kit with Isolation ball valves & strainer as optional;
- » 6-way valve as optional;

### MFCVU - 01 - 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/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
01~05	Unit Sizes
MFCVU	Horizontal or Vertical Ultra Thin

# Technical Data

## MFCVU



### MFCVU-V-AECM

Product range: MFCVU-V~AECM Super Slim Universal Unit 2-pipe with EC Motor

MFCVU-[Size]-V~AECM				01	02	03	04	05	
<b>Unit Configuration</b>	Configuration			2-pipe					
	Number Of Fan Blowers			1			2		
	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 driversuitable for connection to AC or EC modulating thermostat					
<b>Performance Data</b>	Air	Air Flow	H	CFM	106	173	223	270	353
			M		82	144	194	217	294
			L		58	100	135	153	206
	Cooling	Cooling Capacity	H	BTU/Hr	4062	6672	8923	10774	14052
			M		3283	5795	8013	9218	12260
			L		2392	4375	6021	6960	9320
		Sensible Cooling Capacity	H		2674	4413	5853	7066	9200
			M		2134	3782	5202	5960	7937
			L		1523	2823	3864	4449	5690
	Heating	Heating Capacity	H	BTU/Hr	6315	10372	13871	16749	21845
			M		5214	9008	12457	14330	19059
			L		4016	6802	9360	10820	14487
		Max. Electric Heater Capacity @ 220V	kW		0.5	0.5	1	1	1.5
	Sound	Sound Pressure Level		dB(A)	43/35/29	43/36/30	45/43/31	46/42/33	47/43/33
		Sound Power Level			52/46/38	52/47/39	54/52/40	55/51/42	56/52/42
	Electrical	Fan Motor Power	H	W	16	19	22	24	26
			M		13	15	17	18	20
			L		10	11	12	12	12
	Fan Motor Running Current @ H		A		0.14	0.17	0.2	0.22	0.23
	Hydraulic	Cooling Water Flow Rate	H	GPM	0.8	1.32	1.76	2.13	2.78
			M		0.65	1.14	1.58	1.82	2.42
			L		0.51	0.86	1.19	1.37	1.84
		Cooling Pressure Drop	H	ft.wg.	7.08	7.48	15.47	11.83	21.94
			M		5.02	5.8	12.75	8.93	17.16
L			3.14		3.5	7.62	5.39	10.47	
Hot Water Flow Rate		H	GPM	0.8	1.32	1.76	2.13	2.78	
		M		0.65	1.14	1.58	1.82	2.42	
		L		0.51	0.86	1.19	1.37	1.84	
Hot Water Pressure Drop		H	ft.wg.	6.37	6.73	13.92	10.64	19.74	
		M		4.52	5.22	11.47	8.04	15.44	
		L		2.82	3.15	6.86	4.85	9.43	
Water Content		US gal		0.08	0.14	0.19	0.25	0.30	
<b>Construction and Packing Data</b>	Water	Type		Socket (Female Threaded)					
		In	inch	NPT 3/4"					
	Out	5/8"							
	Condensate Drainage Connection		5/8"						
	Dimensions	L	inch	28 15/16	36 13/16	44 11/16	52 9/16	60 7/16	
		W		5 5/16					
H		22 15/16							
Net Weight		lbs		41.9	48.5	55.2	61.8	68.4	

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

MFCVU



## MFCVU-P-AECM

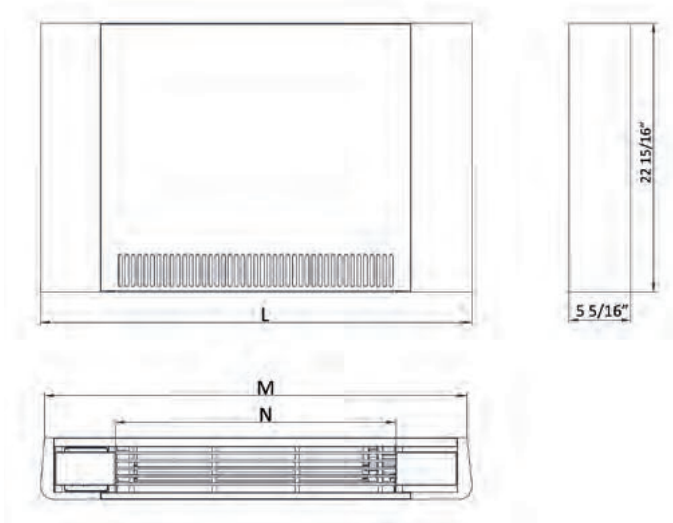
Product range: MFCVU-P~AECM Super Slim Universal Unit 4-pipe with EC Motor

MFCVU-[Size]-P~AECM				01	02	03	04	05			
<b>Unit Configuration</b>				Configuration		4-pipe					
				Number Of Fan Blowers		1		2			
				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					
<b>Performance Data</b>	Air	Air Flow	H	CFM	106	173	223	270	353		
			M		82	144	194	217	294		
			L		59	100	135	153	206		
	Cooling	Total Cooling Capacity	H	BTU/Hr	2995	5089	6772	8314	10752		
			M		2486	4414	6091	6969	9380		
			L		1907	3309	4577	5374	7118		
		Sensible Cooling Capacity	H		2018	3378	4483	5501	7168		
			M		1657	2899	4012	4582	6178		
			L		1250	2142	2963	3468	4634		
	Heating	Heating Capacity	H	BTU/Hr	4024	6692	8804	10728	13832		
			M		3313	5791	7883	9108	12092		
			L		2550	4386	5936	6953	9195		
	Sound	Sound Pressure Level		dB(A)	43/35/29	43/36/30	45/43/31	47/41/34	47/43/33		
		Sound Power Level			52/46/38	52/47/39	54/52/40	55/51/42	56/52/42		
	Electrical	Fan Motor Power	H	W	16	19	22	24	26		
			M		13	15	17	18	20		
			L		10	11	12	12	12		
	Fan Motor Running Current @ H		A	0.14	0.17	0.2	0.22	0.23			
	Hydraulic	Cooling Water Flow Rate	H	GPM	0.59	1.01	1.34	1.64	2.12		
			M		0.49	0.87	1.2	1.38	1.85		
L			0.38		0.65	0.9	1.06	1.41			
Cooling Pressure Drop		H	Ft.wg.	2.98	9.8	6.69	5.26	9.65			
		M		2.13	7.59	5.53	3.83	7.55			
		L		1.32	4.52	3.3	2.4	4.59			
Hot Water Flow Rate		H	GPM	0.2	0.33	0.44	0.53	0.69			
		M		0.17	0.29	0.39	0.45	0.6			
		L		0.13	0.22	0.3	0.35	0.46			
Heating Pressure Drop		H	Ft.wg.	0.97	3.29	6.85	1.68	3.11			
		M		0.69	2.54	5.61	1.25	2.44			
		L		0.43	1.54	3.37	0.77	1.49			
Chilled Water Content		US gal	0.06	0.10	0.14	0.18	0.22				
Hot Water Content			0.02	0.04	0.05	0.07	0.08				
<b>Construction and Packing Data</b>				Water Connection		Socket (Female Threaded)					
				Chilled Water	In	Inch	NPT: 1/2"				
					Out						
				Hot water	In						
					Out						
				Condensate Drainage Connection		5/8"					
				Dimensions	L	Inch	28 15/16	36 13/16	44 11/16	52 9/16	60 7/16
W	5 5/16										
H	22 15/16										
Net Weight		lbs	41.9	48.5	55.2	61.8	68.4				

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

## Dimensional drawings



MODEL	01	02	03	04	05
L	28 15/16"	36 13/16"	44 11/16"	52 9/16"	60 7/16"
M	28 3/16"	36 1/16"	43 15/16"	51 3/4"	59 5/8"
N	16 1/16"	23 15/16"	31 13/16"	39 11/16"	47 9/16"

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

## Accessories (Optional Parts)

Accessories	Photo	Code	Description
1. E-heater kit		BCP18-EH-MFCVU-PTC-001	0.75 KW 230Vac electric heater kit
		BCP18-EH-MFCVU-PTC-002	1.0 KW 230Vac electric heater kit
		BCP18-EH-MFCVU-PTC-003	1.5 KW 230Vac electric heater kit
		BCP18-EH-MFCVU-PTC-004	0.5 KW 115VVac electric heater kit
		BCP18-EH-MFCVU-PTC-005	0.75 KW 115Vac electric heater kit
		BCP18-EH-MFCVU-PTC-006	1.0 KW 115Vac electric heater kit
2. Valve kit		BCP18-RCS-VALVE-MFCVU-001	115~240VAC 1/2" 2-way thermal valve kit
		BCP18-RCS-VALVE-MFCVU-002	115~240VAC 1/2" 3-way thermal valve kit
		BCP18-RCS-VALVE-MFCVU-001B	24VAC 1/2" 2-way thermal valve kit
		BCP18-RCS-VALVE-MFCVU-002B	24VAC 1/2" 3-way thermal valve kit
		BCP18-RCS-VALVE-MFCVU-003	24VAC 1/2" Modulating 2-way thermal valve kit
		BCP18-RCS-VALVE-MFCVU-004	24VAC 1/2" Modulating 3-way thermal valve kit
3. Metal feet		BCP-PFWSL-001	metal supporting feet for floor standing applications
4. External Drain pan		BCP-PFWSL-002	Painted steel drain pan for suspended ceiling installation or built-in horizontal installation with right-sided coil connections
		BCP-PFWSL-003	Painted steel drain pan for suspended ceiling installation or built-in horizontal installation with left-sided coil connections
		BCP-PFWSL-004	Painted steel drain pan for floor standing installation, fixed wall installation and built-in vertical installations. Suitable for left-side and right-side unit coil connections.