

FCX

Fan coils
Universal and vertical installations

new version with
Plasmacluster ionizing
filter



Aermec adheres to the EUROVENT Certification Programme. The products concerned appear in the EUROVENT Certification Products Guide.



FCX-APC



FCX-U



PLASMACLUSTER ionising filter.

Plasmacluster is capable of reducing the level of pollutants, by decomposing the molecules that form them.

Using a series of electric shocks, "Plasmacluster" causes the water molecules present in the air to separate into positive and negative ions. These ions neutralise the gas pollutant molecules, forming products that are normally present in clean air.

The result is in the air: you can finally breathe clean, odour-free ionised air.

Features

- Available in 8 sizes and 7 versions:
 - FCX-A:** vertical free-standing with switch
 - FCX-AS:** vertical free-standing without switch
 - FCX-ACB:** vertical free-standing with simplified electronic thermostat
 - FCX-ACT:** vertical free-standing with electronic thermostat
 - FCX-APC:** vertical free-standing with electronic thermostat, equipped with Plasmacluster ionizing filter
 - FCX-U:** universal free-standing or wall/ceiling mounting
- FCX-UE:** universal free-standing and wall/ceiling mounting with direct expansion coil
- EUROVENT certified
- 3-speed fan unit
- Full compliance with safety regulations
- Soft, flowing lines
- Adjustable air delivery louver on versions U and UE, except models 62, 82 and 102
- Automatic power-off function with closure of the air delivery louver
- Broad range of controls
- Metallic protective cabinet with rustproof polyester paint
- Low noise operation
- Reduced pressure drops across heat exchangers
- Motors with permanently connected condensers
- Easy installation and maintenance
- Air filter easily removed and cleaned
- Removable blades for easy and effective cleaning
- Water connections reversibility during installation

Electronic thermostat (FCX-ACT)

Automatic fan speed change

Possibility of automatic fan speed change to ensure gradual modulation of power supplied.

Automatic season changeover

After a check of the input water temperature, the panel automatically positions to winter or summer operation, changing also the thermostat temperature scale.

Automatic on - off

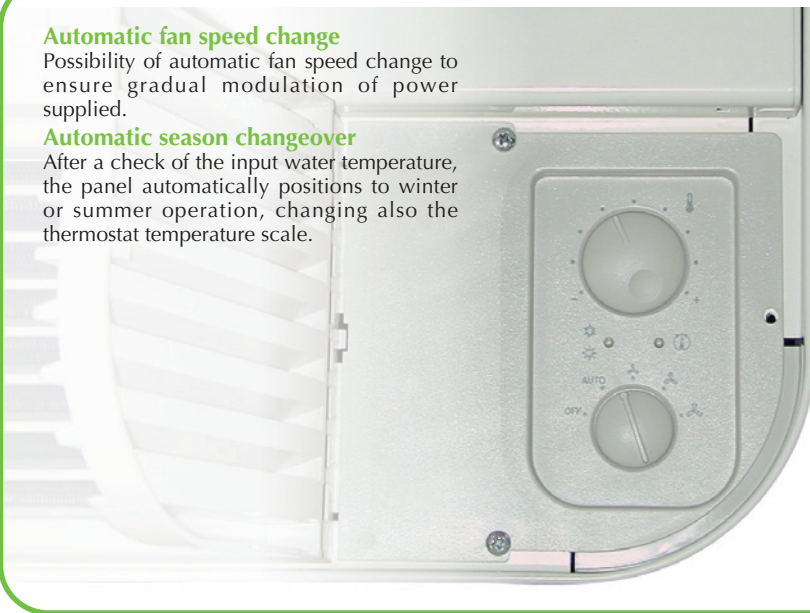
After a check of the input water temperature, the microprocessor starts up or shuts down (to stand-by) the fan (and valve if fitted) in summer or winter operation mode.

Silent operation

The absence of electro-mechanical actuators eliminates the typical clicking noises generated by relays in certain conditions. This fact, combined with the silent ventilation, ensure the outstanding acoustic comfort standards of Aermec fancoils.

Other functions:

AUTOTEST, winter antifreeze check.



Accessories

- **AMP:** Kit for wall/ceiling mounting for versions FCX U and UE.
- **BC:** Auxiliary condensate drip tray.
- **BV:** Single row hot water coil.
- **DSC4:** Condensate drainage device for use when natural run-off is not possible.
- **PC:** Rear cover panel.
- **RX:** Armoured electrical heating element with safety thermostat. (Need thermostat with el. heater control).
- **SE:** Manually operated fresh air intake louver.
- **SIT 3-5:** Thermostat interface cards. They

allow to set up a fancoils network (max. 10) commanded by a centralised panel (switch or thermostat).

SIT3: commands the three speeds of the fan and must be installed on each fancoil of the network; it receives the commands from the switch or from the SIT5 card.

SIT5: commands the 3 fan speeds and up to two valves (four-pipe systems); it sends the thermostat commands to the fancoils network.

- **SW:** Probe for the electronic thermostats (exclu-

ding PXB) which permits operation of the unit only with water above 35 °C.

- **VCF:** Kit comprising motorized three-way valve, unions and copper pipes. For 3-row (VCF 1, 2 and 3) and 1-row (VCF 4 and 5) coils. Combine the SW3 probe with FCX ACT, too.
- **ZX:** Feet for floor standing installation of models A, AS and ACT.
- **Control panels:** The control panels are described in a separate document.

Accessories	FCX fan coils								Versions		
	17	22	32	42	50	62	82	102			
AMP	✓	✓	✓	✓	✓	✓	✓	✓	U-UE		
BC	4	✓	✓	✓	✓	✓	✓	✓	All		
	5	✓	✓	✓	✓	✓	✓	✓	U-UE		
BV	6						✓	✓	U-UE		
	117	✓							A-AS-U		
	122		✓						A-AS-U		
	132			✓					A-AS-U		
	142				✓	✓			A-AS-U		
162						✓	✓	✓	A-AS-U		
DSC4	✓	✓	✓	✓	✓	✓	✓	✓	All		
FMT10	✓	✓	✓	✓	✓	✓	✓	✓	AS-U		
FMT20	✓	✓	✓	✓	✓	✓	✓	✓	AS-U		
KTLM	✓	✓	✓	✓	✓	✓	✓	✓	AS-U		
PC	17	✓							A-AS-ACB-ACT		
	18	✓							U-UE		
	22		✓						A-AS-ACB-ACT		
	23		✓						U-UE		
	32			✓					A-AS-ACB-ACT		
	33			✓					U-UE		
	42				✓	✓			A-AS-ACB-ACT		
	43				✓	✓			U-UE		
RX	62						✓	✓	✓	A-AS-ACB-ACT-U-UE	
	PTI	✓	✓	✓	✓	✓	✓	✓	✓	AS-62U-82U-102U	
	PX	✓	✓	✓	✓	✓	✓	✓	✓	AS-U	
	PX2	✓	✓	✓	✓	✓	✓	✓	✓	AS-U	
	PXB	✓	✓	✓	✓	✓	✓	✓	✓	AS-U	
	PXBI	✓	✓	✓	✓	✓	✓	✓	✓	AS-U	
	PXAE	✓	✓	✓	✓	✓	✓	✓	✓	AS-U	
	PXAI	✓	✓	✓	✓	✓	✓	✓	✓	AS-U	
	PXAR	✓	✓	✓	✓	✓	✓	✓	✓	AS-U	
	PXLM	✓	✓	✓	✓	✓				U	
	SE	17	✓								A-AS-U
		22		✓							A-AS-U-UE
		32			✓						A-AS-U-UE
		42				✓					A-AS-U-UE
52						✓				A-AS-U-UE	
62						✓	✓	✓	A-AS-U-UE		
SIT	15X	✓								A-AS-ACB-ACT	
	20X		✓							A-AS-ACB-ACT	
	30X			✓						A-AS-ACB-ACT	
	40X				✓	✓				A-AS-ACB-ACT	
	80X						✓	✓	✓	A-AS-ACB-ACT	
SW3	3	✓	✓	✓	✓	✓	✓	✓	✓	AS-U-UE	
	5	✓	✓	✓	✓	✓	✓	✓	✓	AS-U-UE	
TF1	✓	✓	✓	✓	✓	✓	✓	✓	AS-U		
VCF	1	✓	✓	✓						A-AS-ACB-ACT-U	
	2				✓	✓				A-AS-ACB-ACT-U	
	3						✓	✓	✓	A-AS-ACB-ACT-U	
	4	✓	✓	✓	✓	✓				A-AS-U	
	5						✓	✓	✓	A-AS-U	
WMT05	✓	✓	✓	✓	✓	✓	✓	✓	AS-U		
WMT10	✓	✓	✓	✓	✓	✓	✓	✓	AS-U		
ZX	5	✓	✓	✓	✓	✓				A-AS-ACB-ACT	
	6						✓	✓	✓	A-AS-ACB-ACT	

Technical data

Mod.		FCX 17	FCX 22	FCX 32	FCX 42	FCX 50	FCX 62	FCX 82	FCX 102
Heating capacity	W (max.)	2490	3400	4975	7400	8620	12920	15140	17020
	W (med.)	2070	2700	4085	6415	7530	10940	13350	15240
	W (min.)	1610	1915	3380	5115	5420	8330	10770	12560
Heating capacity* (water inlet 50°C)	W (E)	1360	2100	3160	4240	4900	6460	7990	9670
Electric heating element power	W	700	950	1300	1650	1950	2200	2200	2200
Water flow rate	l/h	214	292	427	636	741	1110	1300	1464
Water pressure drops	kPa	2,8	6,3	14,2	14,1	14,2	14,8	19,8	16,6
Total cooling capacity	W (max.) (E)	1000	1500	2210	3400	4190	4860	7420	7620
	W (med.)	890	1330	2055	2800	3640	4660	5500	7140
	W (min.)	720	1055	1570	2310	2840	3950	4710	6270
Sensible cooling capacity	W (max.) (E)	830	1240	1750	2760	3000	3980	5680	5980
	W (med.)	710	1055	1540	2115	2750	3510	4250	4984
	W (min.)	540	755	1100	1635	2040	2825	3450	4263
Water flow rate	l/h	172	258	413	585	721	836	1189	1311
Water pressure drop	kPa (E)	2,6	5,8	16,6	14,3	19,3	11,6	13,5	19,2
Air flow rate	m ³ /h (max.)	200	290	450	600	720	920	1140	1300
	m ³ /h (med.)	160	220	350	460	600	720	930	1120
	m ³ /h (min.)	110	140	260	330	400	520	700	900
Fans	n.	1	1	2	2	2	3	3	3
Sound pressure	dB (A) (max.)	36,5	41,5	39,5	42,5	47,5	48,5	53,5	57,5
	dB (A) (med.)	29,5	34,5	32,5	35,5	42,5	42,5	48,5	52,5
	dB (A) (min.)	22,5	22,5	25,5	28,5	33,5	33,5	41,5	47,5
Sound power	dB (A) (max.) (E)	45	50	48	51	56	57	62	66
	dB (A) (med.) (E)	38	43	41	44	51	51	57	61
	dB (A) (min.) (E)	31	31	34	37	42	42	50	56
Water contents	l	0,58	0,79	1,11	1,48	1,48	2,52	2,52	2,52
Max. motor power	W (E)	35	25	44	57	67	82	106	131
Max. input current	A	0,16	0,12	0,21	0,28	0,35	0,40	0,49	0,58
Max. motor power with electric heater	W	735	975	1344	1707	2017	2282	2306	2331
Input current with electric heater	A	3,2	4,25	5,86	7,45	8,83	9,97	10,06	10,15
Coil connections 3R	ø	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"
Coil connections 1R	ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"

Power supply = 1~ 230V 50Hz.

(E) = EUROVENT certified performance

Performance values refer to the following conditions:

♪ Sound pressure measured in an 85 m³ semi-reverberant test chamber with reverberation time Tr = 0.5s.

■ Cooling:

- room air temperature 27 °C D.B., 19 °C W.B.;
- water inlet temperature 7 °C; maximum speed;
- Δt water 5 °C;
- for medium and low speed, water flow rate remains same as at maximum speed.

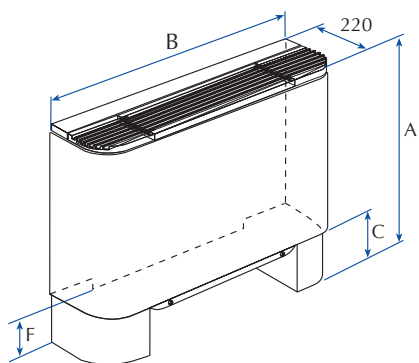
■ Heating:

- room air temperature 20 °C;
- water inlet temperature 70 °C; maximum speed;
- Δt water 10 °C;
- for medium and low speed, water flow rate remains same as at maximum speed.

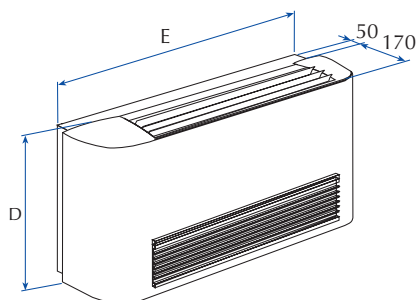
■ Heating*:

- room air temperature 20 °C;
- water inlet temperature 50 °C; maximum speed;
- water flow rate same as in cooling operation.

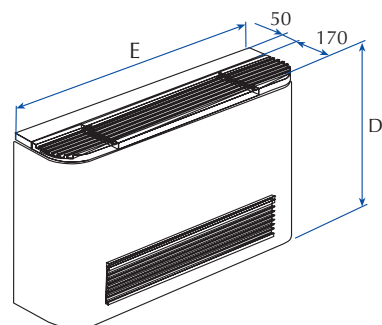
Dimensions (mm)



FCX A



FCX U 17 - 22 - 32 - 42 - 50



FCX U 62 - 82 - 102

Mod FCX		17 A	22 A	32 A	42 A	50 A	62 A	82 A	102 A
Height (with feets)	A	563	563	563	563	563	688	688	688
Width	B	640	750	980	1200	1200	1320	1320	1320
Feet height	C	105	105	105	105	105	125	125	125
Rear height (with feets)	F	88	88	88	88	88	108	108	108
Weight (without feets)	kg	13	15	20	24	24	34	34	34

Mod FCX		17 U	22 U	32 U	42 U	50 U	62 U	82 U	102 U
Height	D	520	520	520	520	520	590	590	590
Width	E	640	750	980	1200	1200	1320	1320	1320
Weight	kg	13	15	20	24	24	34	34	34