

## FCX

Fan coils  
Universal and vertical installations

new version with  
**Plasmacluster ionizing filter**



Aermec adheres to t EUROVENT Certificati Programme. The products concern appear in t EUROVENT Certifi Products Guide.



FCX-APC

**White colour:**  
cover: RAL 9002  
top and supports: RAL 7044



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 breath clean, odour-free ionised air.**

### Features

- Available in 14 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:** (FCX 22, 32, 42, 50, 62 and 82) 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
- Versions with 3 row coil (FCX 17, 22, 32, 42, 50, 62, 82 and 102)
- Versions with 4 row coil (FCX 24, 34, 44, 54, 64 and 84)
- 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. The accessory is not available for models fitted with a Plasmacluster filter and 4R.
- **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). The accessory is not available for models fitted with a Plasmacluster filter and 4R.
- **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 which permits operation of the unit only with water above 35 °C.

- **SWA:** External probe accessory SWA (length L = 6m). It detects the temperature of the room air if connected to the connector (A) of the FMT20AW panel. The room air temperature probe, incorporated in the panel, is automatically disabled. It detects the temperature of the

water in the system for ventilation consent if connected to the connector (W) of the FMT20AW panel. Two SWA probes can be connected simultaneously to the FMT20AW panel.

- **VCF:** Kit comprising motorized 3 way valve, unions and copper pipes. For 4, 3-row and 1-row coils (BV). Combine the SW3 probe with FCX ACT, too. Versions with 230V and 24V~50Hz power supply.
- **VCFD:** Kit comprising motorized 2 way valve, unions and copper pipes. For 4, 3-row and 1-row coils (BV). Combine the SW3 probe with FCX ACT, too. Versions with 230V and 24V~50Hz power supply.
- **ZX:** Feet for floor-standing installations for A-AS-ACB-ACT-APC models.
- **Control panels:** The control panels are described in a separate document.

Accessories	FCX fan coils														Versions
	Size														
	17	22	24	32	34	42	44	50	54	62	64	82	84	102	
AMP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	U-UE
4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	A-AS-ACB-ACT-APC-U-UE
BC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	U-UE
5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	U-U
6										✓	✓	✓	✓	✓	A-AS-U
117	✓*														A-AS-U
122		✓*													A-AS-U
BV				✓*											A-AS-U
132						✓*		✓*							A-AS-U
142										✓*					A-AS-U
162											✓*			✓*	A-AS-U
DSC4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	A-AS-ACB-ACT-APC-U-UE
FMT10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
FMT20AW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
KTLM	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
17	✓														A-AS-ACB-ACT-APC
18	✓														U-UE
22		✓	✓												A-AS-ACB-ACT-APC
23		✓	✓												U-UE
PC				✓	✓										A-AS-ACB-ACT-APC
32				✓	✓										U-UE
33				✓	✓										A-AS-ACB-ACT-APC
42						✓	✓	✓	✓						U-UE
43						✓	✓	✓	✓						A-AS-ACB-ACT-U-UE
62										✓	✓	✓	✓	✓	AS-62U-82U-102U
PTI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
PX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
PX2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
PXBI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
PXAE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
PXAI	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
PXAR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
PXLM	✓	✓	✓	✓	✓					✓	✓	✓	✓	✓	U
17	✓*														A-AS-U
22		✓*													A-AS-U-UE
RX				✓*											A-AS-U-UE
32						✓*									A-AS-U-UE
42							✓*								A-AS-U-UE
52								✓*							A-AS-U-UE
62										✓*		✓*		✓*	A-AS-U-UE
15X	✓														A-AS-ACB-ACT-APC
20X		✓	✓												A-AS-ACB-ACT-APC
SE				✓	✓										A-AS-ACB-ACT-APC
30X						✓	✓								A-AS-ACB-ACT-APC
40X							✓	✓	✓	✓					A-AS-ACB-ACT-APC
80X										✓	✓	✓	✓	✓	A-AS-ACB-ACT-APC
SIT	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U-UE
3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U-UE
5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
SW3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
SWA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
TF1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
41 - 4124**	✓	✓		✓											A-AS-ACB-ACT-APC-U
VCF	✓		✓												A-AS-ACB-ACT-APC-U
42 - 4224**			✓												A-AS-ACB-ACT-APC-U
43 - 4324**				✓											A-AS-ACB-ACT-APC-U
44 - 4424**	✓***	✓***		✓***		✓***		✓***		✓	✓	✓	✓	✓	A-AS-U
45 - 4524**										✓***		✓***		✓***	A-AS-U
1 - 124**	✓	✓		✓											A-AS-ACB-ACT-APC-U
VCFD	✓		✓												A-AS-ACB-ACT-APC-U
2 - 224**			✓												A-AS-ACB-ACT-APC-U
3 - 324**										✓	✓	✓	✓	✓	A-AS-ACB-ACT-APC-U
4 - 424**	✓***	✓***		✓***		✓***		✓***		✓***		✓***		✓***	A-AS-U
WMT05	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
WMT10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AS-U
ZX	✓	✓	✓	✓	✓	✓	✓	✓	✓						A-AS-ACB-ACT-APC
5	✓	✓	✓	✓	✓	✓	✓	✓	✓						A-AS-ACB-ACT-APC
6										✓	✓	✓	✓	✓	A-AS-ACB-ACT-APC

\* = The accessory is not available for models fitted with a Plasmacluster filter.

\*\* = 24 volt

\*\*\* = only for accessory coil BV 1R.

## Technical data

Mod.	FCX	17	22	24	32	34	42	44	50	54	62	64	82	84	102
Heating capacity	W (max.)	2490	3400	3950	4975	5850	7400	8600	8620	10100	12920	14300	15140	17100	17020
	W (med.)	2070	2700	3200	4085	4850	6415	6930	7530	8760	10940	11500	13350	14420	15240
	W (min.)	1610	1915	2200	3380	3850	5115	5200	5420	6240	8330	8500	10770	11200	12560
Heating capacity* (water inlet 50°C)	W (max.) (E)	1360	2100	2320	3160	3550	4240	5250	4900	6100	6460	7810	7990	10400	9670
Electric heating element power	W	700	950	-	1300	-	1650	-	1950	-	2200	-	2200	-	2200
Water flow rate	l/h	214	292	340	427	503	636	740	741	869	1110	1230	1300	1471	1464
Water pressure drops	kPa	2,8	6,3	4,0	14,2	8,0	14,1	21,0	14,2	22,0	14,8	22,0	19,8	30,0	16,6
Total cooling capacity	W (max.) (E)	1000	1500	1730	2210	2800	3400	4450	4190	4970	4860	6350	7420	8600	7620
	W (med.)	890	1330	1500	2055	2450	2800	3780	3640	4770	4660	5520	5500	7600	7140
	W (min.)	720	1055	1150	1570	2050	2310	2970	2840	3620	3950	4500	4710	6270	6270
Sensible cooling capacity	W (max.) (E)	830	1240	1380	1750	2130	2760	3300	3000	3540	3980	5030	5680	5780	5980
	W (med.)	710	1055	1140	1540	1789	2115	2722	2750	3101	3510	4195	4250	5016	4984
	W (min.)	540	755	828	1100	1441	1635	2079	2040	2281	2825	3330	3450	4013	4263
Water flow rate	l/h	172	258	297	380	482	585	765	721	855	836	1092	1276	1479	1311
Water pressure drops	kPa (E)	2,6	5,8	3,0	16,6	9,0	14,3	19,2	19,3	25,9	11,6	13,0	13,5	22,0	19,2
Air flow rate	m³/h (max.)	200	290	290	450	450	600	600	720	720	920	920	1140	1140	1300
	m³/h (med.)	160	220	220	350	350	460	460	600	600	720	720	930	930	1120
	m³/h (min.)	110	140	140	260	260	330	330	400	400	520	520	700	700	900
Fans	n.	1	1	1	2	2	2	2	2	2	3	3	3	3	3
Sound pressure	dB (A) (max.)	36,5	41,5	42,5	39,5	39,5	42,5	46,5	47,5	47,5	48,5	48,5	53,5	52,5	57,5
	dB (A) (med.)	29,5	34,5	37,5	32,5	32,5	35,5	41,5	42,5	44,5	42,5	42,5	48,5	48,5	52,5
	dB (A) (min.)	22,5	22,5	26,5	25,5	27,5	28,5	32,5	33,5	35,5	33,5	35,5	41,5	42,5	47,5
Sound power	dB (A) (max.) (E)	45,0	50,0	51,0	48,0	48,0	51,0	55,0	56,0	56,0	57,0	57,0	62,0	61,0	66,0
	dB (A) (med.) (E)	38,0	43,0	46,0	41,0	41,0	44,0	50,0	51,0	53,0	51,0	51,0	57,0	57,0	61,0
	dB (A) (min.) (E)	31,0	31,0	35,0	34,0	36,0	37,0	41,0	42,0	44,0	42,0	44,0	50,0	51,0	56,0
Water contents	l	0,58	0,79	1,0	1,11	1,5	1,48	1,9	1,48	1,9	2,52	3,4	2,52	3,4	2,52
Max. motor power (W)	FCX (E)	35	25	33	44	44	57	57	67	67	82	91	106	106	131
Max. input current (A)	FCX	0,16	0,12	0,25	0,21	0,45	0,28	0,51	0,35	0,36	0,40	0,48	0,49	0,62	0,58
Max. motor power with electric heater (W)	FCX	735	975	-	1344	-	1707	-	2017	-	2282	-	2306	-	2331
Input current with electric heater (A)	FCX P	3,2	4,25	-	5,86	-	7,45	-	8,83	-	9,97	-	10,06	-	10,15
Coil connections	ø (4R)	-	-	3/4"	-	3/4"	-	3/4"	-	3/4"	-	3/4"	-	3/4"	-
	ø (3R)	1/2"	1/2"	-	1/2"	-	3/4"	-	3/4"	-	3/4"	-	3/4"	-	3/4"
	ø (1R)	1/2"	1/2"	-	1/2"	-	1/2"	-	1/2"	-	1/2"	-	1/2"	-	1/2"

Power supply = 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.

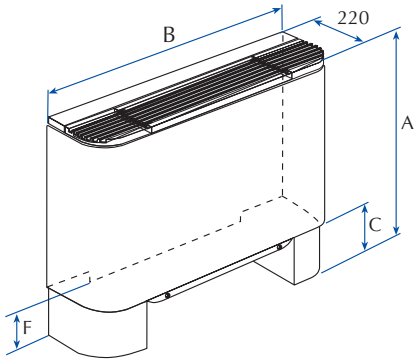
■ Heating:

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

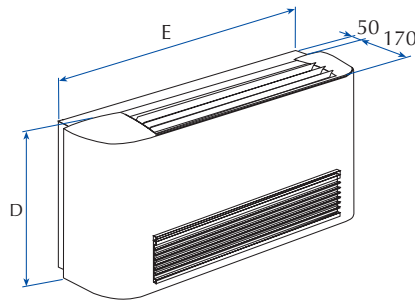
■ Heating\*:

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

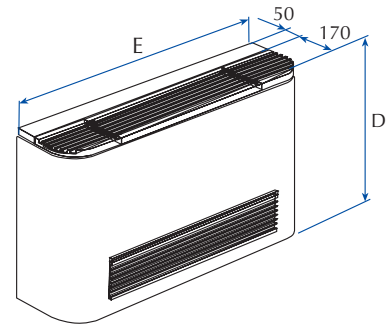
## Dimensions (mm)



FCX A



FCX U 17 - 22 - 32 - 42 - 50  
FCX U 24 - 34 - 44 - 54



FCX U 62 - 82 - 102  
FCX U 64 - 84

Mod FCX		17 A	22 A/24 A	32 A/34 A	42 A/44 A	50 A/54 A	62 A/64 A	82 A/84 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/24 U	32 U/34 U	42 U/44 U	50 U/54 U	62 U/64 U	82 U/84 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