

FCX P Fan coils Ductable installations

new version with Plasmacluster ionizing filter



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



Plasmacluster



Features

- Available in 14 sizes and 4 versions:
 - FCX-P:** wall/ceiling mounting without cabinet
 - FCX-PPC:** (FCX 22, 32, 42, 50, 62 and 82) Wall/ceiling installation, without cabinet, equipped with Plasmacluster ionizing filter (requires PXAE control panel).
 - FCX-PE:** wall/ceiling mounting without cabinet and with direct expansion coil
 - FCX-PO:** wall/ceiling mounting with high static 7 speeds available (3 can be selected) (FCX 22, 32, 42, 50, 62 and 82)
- Versions with 3 row coil (FCX 17, 22, 32, 42, 50, 62, 82, 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
- Broad range of controls and accessories
- Low noise operation
- Reduced pressure drops across heat exchangers
- Motors with permanently connected condensers
- Easy installation and maintenance
- Air filter easily removed and cleaned
- Possibility of residual pressure for duct requirements
- Type 1 fireproof internal insulation and air filter
- Removable blades for easy and effective cleaning
- Water connections reversibility during installation

Accessories

- **AMP:** Kit for wall/ceiling mounting.
- **BC:** Auxiliary condensate drip tray.
- **BV:** Single row hot water coil. The accessory is not available for 4-row models and for models fitted with a Plasmacluster filter and 4R.
- **CHF:** VentilCassaforma is a galvanised template that makes it possible to make a space to house fan coils in the wall. The template will make masonry work easier during the construction of niche where the fan coils will be installed. When the work is finished, the fan coil will be completely hidden from view. (Only for FCX-P).
- **DSC4:** Condensate drainage device for use when natural run-off is not possible.
- **GA:** Intake louver with fixed slats.
- **GAF:** Intake louver with fixed slats and filter.
- **GM:** Delivery louver with adjustable slats.
- **MA:** A-type cabinet (use Auxiliary Drip Tray BC 4 for FCX AS).
- **MU:** U-type cabinet (use Auxiliary Drip Tray BC 5-6 for FCX U).
- **PCR:** Galvanized cover panel for controls and heating element terminals.
- **PA:** Intake Plenum made of galvanized steel sheet, provided with Intake Connections for Circular Section Ducts.
- **PA-F:** Intake plenum that allows to have the

intake and the delivery on the same side, suitable for all the installations where it is requested to put the appliance outside the air-conditioned rooms in order to reduce to the minimum the noise and facilitate the maintenance operations.

- **PM:** Delivery plenum in galvanized steel with external insulation, with plastic outlet connections for circular section ducting.
- **RD:** Delivery straight duct connection.
- **RDA:** Intake straight duct connection.
- **RP:** Delivery 90° duct connection.
- **RPA:** Intake 90° duct connection.
- **RX:** Armoured electrical heating element with safety thermostat. (Need thermostat with el. heater control). The accessory is not available for 4-row models and 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 and 1-row coils (BV). Versions with 230V~50Hz and 24V~50Hz power supply.
- **VCFD:** Kit comprising motorized 2 way valve, unions and copper pipes. For 4, 3 and 1-row coils (BV). Versions with 230V~50Hz and 24V~50Hz power supply.
- **ZX:** Feet for built-in installation.
- **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	
FMT10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
FMT20AW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
KTLP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
PX	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
PX2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
PXAE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO-PPC
PXAR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
TF1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
WMT05	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
WMT10	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO
AMP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO-PPC
BC	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	FCX P + MA
	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	FCX P + MU
	6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	FCX P + MU
	8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO-PPC
	9	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PE-PO-PPC
BV	117	✓*													P-PE
	122		✓*												P-PE-PO
	132				✓*										P-PE-PO
	142						✓*		✓*						P-PE-PO
	162									✓*		✓*		✓*	P-PE-PO

Accessories	FCX fan coils											Versions			
	Size														
	17	22	24	32	34	42	44	50	54	62	64	82	84	102	
CHF	17	✓													P
	22		✓	✓											P
	32				✓	✓									P
	42						✓	✓	✓	✓					P
DSC4	62									✓	✓	✓	✓	✓	P
	17	✓													P-PE-PO-PPC
	22		✓	✓											P-PE-PPC
	32				✓	✓									P-PE-PO-PPC
GA	42					✓	✓	✓	✓						P-PE-PO-PPC
	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
	17	✓													P-PE-PPC
	22		✓	✓											P-PE-PO-PPC
GAF	32				✓	✓									P-PE-PO-PPC
	42						✓	✓	✓	✓					P-PE-PO-PPC
	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
	17	✓													P-PE-PPC
GM	22		✓	✓											P-PE-PO-PPC
	32				✓	✓									P-PE-PO-PPC
	42						✓	✓	✓	✓					P-PE-PO-PPC
	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
MA	17	✓													P-PE-PPC
	22		✓	✓											P-PE-PO-PPC
	32				✓	✓									P-PE-PO-PPC
	42						✓	✓	✓	✓					P-PE-PO-PPC
MU	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
	17	✓													P-PE-PPC
	22		✓	✓											P-PE-PO-PPC
	32				✓	✓									P-PE-PO-PPC
PA	42					✓	✓	✓	✓						P-PE-PO-PPC
	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
	17	✓													P-PE-PPC
	22		✓	✓											P-PE-PO-PPC
PA-F	32				✓	✓									P-PE-PO-PPC
	42						✓	✓	✓	✓					P-PE-PO-PPC
	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
	1	✓	✓	✓	✓	✓	✓	✓	✓						P-PE-PO-PPC
PCR	2									✓	✓	✓	✓	✓	P-PE-PO-PPC
	17	✓													P-PE-PPC
	22		✓	✓											P-PE-PO-PPC
	32				✓	✓									P-PE-PO-PPC
PM	42					✓	✓	✓	✓						P-PE-PO-PPC
	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
	17	✓													P-PE-PPC
	22		✓	✓											P-PE-PO-PPC
RD	32				✓	✓									P-PE-PO-PPC
	42						✓	✓	✓	✓					P-PE-PO-PPC
	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
	17	✓													P-PE-PPC
RDA	22		✓	✓											P-PE-PO-PPC
	32				✓	✓									P-PE-PO-PPC
	42						✓	✓	✓	✓					P-PE-PO-PPC
	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
RP	17	✓													P-PE-PPC
	22		✓	✓											P-PE-PO-PPC
	32				✓	✓									P-PE-PO-PPC
	42						✓	✓	✓	✓					P-PE-PO-PPC
RPA	62									✓	✓	✓	✓	✓	P-PE-PO-PPC
	17	✓													P-PE-PPC
	22		✓	✓											P-PE-PO-PPC
	32				✓	✓									P-PE-PO-PPC
RX	42						✓	✓	✓						P-PE-PO-PPC
	52								✓						P-PE-PO
	62									✓	✓	✓	✓	✓	P-PE-PO
	15X	✓													P-PE
SE	20X		✓	✓											P-PE-PO-PPC
	30X				✓	✓									P-PE-PO-PPC
	40X						✓	✓	✓	✓					P-PE-PO-PPC
	80X									✓	✓	✓	✓	✓	P-PE-PO-PPC
SIT	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	PE-PO
	5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	PE-PO
SW3		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PO
SWA		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	P-PO
VCF	41 - 4124**	✓	✓		✓										P-PO-PPC
	42 - 4224**			✓		✓									P-PO-PPC
	43 - 4324**														P-PO-PPC
	44 - 4424**	✓***	✓***		✓***		✓***				✓	✓	✓	✓	P-PO
	45 - 4524**										✓***		✓***		✓***
VCFD	1 - 124**	✓	✓		✓										P-PO-PPC
	2 - 224**			✓		✓		✓	✓						P-PO-PPC
	3 - 324**									✓	✓	✓	✓	✓	P-PO-PPC
	4 - 424**	✓***	✓***		✓***		✓***				✓***		✓***		✓***
ZX	7	✓	✓	✓	✓	✓	✓	✓	✓						P-PE-PO-PPC
	8									✓	✓	✓	✓	✓	P-PE-PO-PPC

* = The accessory is not available for models fitted with a Plasmacluster filter
** = 24 volt.
*** = only for accessory coil BV 1R

Technical data

Mod.	FCX-P	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	m ³ /h (max.)	200	290	290	450	450	600	600	720	720	920	920	1140	1140	1300	
	m ³ /h (med.)	160	220	220	350	350	460	460	600	600	720	720	930	930	1120	
	m ³ /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	
	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	
Sound pressure	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 pressure FCX PO	dB (A) (max.)	-	49,5	49,5	44,0	44,0	50,0	50,0	50,5	50,5	53,5	53,5	55,5	55,5	-
	Sound power FCX PO	dB (A) (max.)	-	58,0	58,0	52,5	52,5	58,5	58,5	59,0	59,0	62,0	62,0	60,0	64,0	-
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 P (E)	35	25	33	44	44	57	57	67	67	82	91	106	106	131	
	FCX PO	-	54	54	97	97	111	111	82	82	97	97	135	135	-	
Max. input current (A)	FCX P	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	
	FCX PO	-	0,25	0,25	0,45	0,45	0,51	0,51	0,36	0,36	0,48	0,48	0,62	0,62	-	
Max. motor power with electric heater (W)	FCX P	735	975	-	1344	-	1707	-	2017	-	2282	-	2306	-	2331	
	FCX PO	-	1004	-	1397	-	1761	-	2032	-	2297	-	2335	-	-	
Input current with electric heater (A)	FCX P	3,2	4,25	-	5,86	-	7,45	-	8,83	-	9,97	-	10,06	-	10,15	
	FCX PO	-	4,38	-	6,00	-	7,68	-	8,84	-	10,05	-	10,19	-	-	
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:

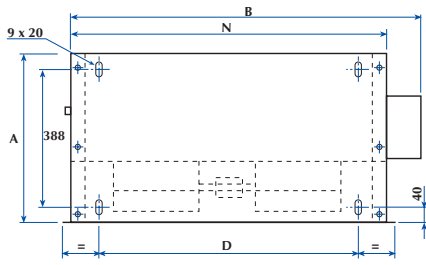
- room air temperature 20 °C;
- maximum speed:
- water inlet temperature 70 °C; Δt water 10 °C;
- medium and low speed:
- water inlet temperature 70 °C;
- water flow rate remains same as at maximum speed.

■ Heating*:

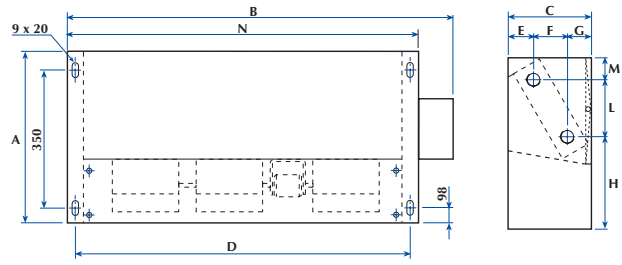
- room air temperature 20 °C;
- maximum speed:
- water inlet temperature 50 °C;
- water flow rate same as in cooling operation.

Dimensions (mm)

FCX P 17 - 22/24 - 32/34 - 42/44 - 50/54

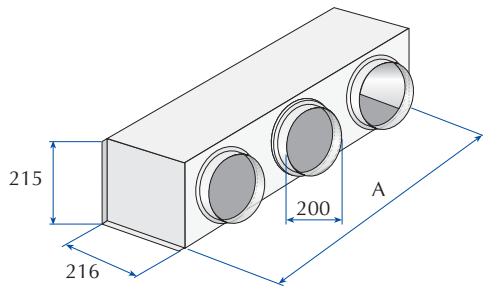


FCX P 62/64 - 82/84 - 102



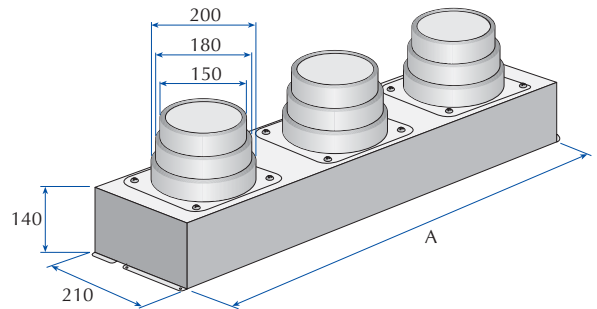
FCX P	17	22 - 24	32 - 34	42 - 44	50 - 54	62 - 64	82 - 84	102
A	453	453	453	453	453	558	558	558
B	452	562	793	1013	1013	1147	1147	1147
C	216	216	216	216	216	216	216	216
D	330	440	671	891	891	1102	1102	1102
E	41	41	41	41	41	41	41	41
F	101	101	101	101	101	107	107	107
G	74	74	74	74	74	68	68	68
H	260	260	260	260	260	273	273	273
L	144	144	144	144	144	253	253	253
M	49	49	49	49	49	32	32	32
N	412	522	753	973	973	1122	1122	1122
Weight (Kg)	11	13	18	22	22	33	33	33

PA - INTAKE PLENUM



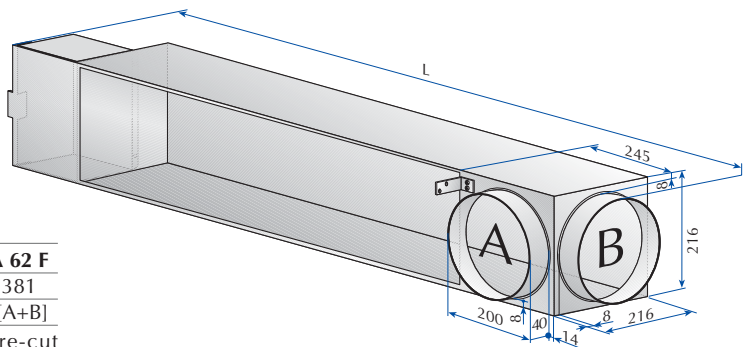
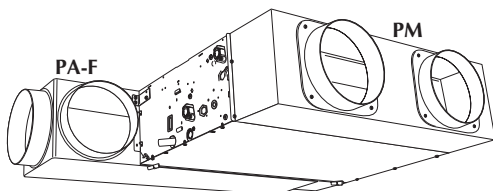
PA	17	22	32	42	62
A	390	500	731	951	1072
Blocks	1	2	2	3	4

PM - DELIVERY PLENUM



PM	17	22	32	42	62
A	412	522	753	973	1094
Blocks	1	2	2	3	4

PA-F - FRONT INTAKE PLENUM



	PA 17 F	PA 22 F	PA 32 F	PA 42 F	PA 62 F
L	658	768	1039	1259	1381
Blocks	1 [A]	1 [A]	2 [A+B*]	2 [A+B*]	2 [A+B]

B* = unopened intake spigot. To use it remove the pre-cut element.

The technical data in this document are not binding.
Aermec S.p.A. reserves the right to make whatever modifications it deems necessary to improve the product at any time.

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