

FCZD - FCZI D

Fan coil for universal and floor installation

- Fully silent operation
- Backlit touch command with programming via a smart device
- Total comfort in every season



DESCRIPTION

The perception of uneven temperature distribution in various settings, especially in the vertical direction, is one of the main factors leading to a drastic reduction in the well-being perceived by occupants.

FCZ D are able to provide a pleasant sensation of comfort by directing the air in a way that ensures uniform temperature distribution throughout the setting.

In winter, hot air is direct downwards; in summer, cool air is directed upwards.

Air supply switching at the front or from the top by operating directly on the orientable grille.

They can be installed in any type of 2 / 4 pipe system and in combination with any heat generator even at low temperatures. Thanks to the availability of several versions and configurations, it is easy to choose the optimal solution for every requirement.

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7044 plastic.

Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.

Their characteristics permit energy savings compared to conventional fans.

They are statically and dynamically balanced and directly coupled to the motor shaft.

In FCZ - D fan coils

The electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.

In FCZI - D fan coils

The Brushless electric motor with 0-100% continuous speed variation, which allows precise adaptation to the real demands of the internal environment without temperature fluctuations.

The air flow can be continuously changed through a 1-10V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.

This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.

The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

The plastic augers are extractable for easy and efficient cleaning.

Heat exchanger coil

With copper pipes and aluminium fins, the main coil has female gas water connections on the left side and the manifolds have air vents.

The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.

■ *The hydraulic connections can be inverted during installation.*

Air filter

Air filter class **G2** for all versions; easy to pull out and clean. Shrouds can be pulled out and inspected for easy and effective cleaning.

ACCESSORIES

PTINZ: Electronic thermostat.

T-TOUCH: Touch control installation on-board the fan coil. The ThermApp application is also available for remote control with smart devices with the Android operating system.

VMF-E0X: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E19: Thermostat to be secured to the side of the fan coil, fitted as standard with an air probe and a water probe.

VMF-E2Z: User interface on the machine, to be combined with the VMF-E0X, VMF-E19 or VMF-E19I accessory.

VMF-E4DX: Wall-mounted user interface. Grey front panel PANTONE 425C (METAL).

VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.

VMF-IO: Expansion board that extends the availability of digital inputs and outputs (configured via the dip switches).

VMF-LON: Expansion allowing the thermostat to interface with BMS systems that use the LON protocol.

VMF-SW: Water temperature probe.

VMF-SW1: Extra water probe to be used for 4-pipe systems.

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, for 4-pipe systems. With totally separate "heating" and "cooling" circuits. This kit consists of two 3-way insulated valves and four connections, complete with electrothermal actuators, insulating shells for the valves, and the relative hydraulic couplings. X4L version for fan coils with LH connections, and X4R for fan coils with RH connections. 230V~50Hz power supply.

VCZ: 3-way motorised valve kit. The kit consists of a valve with its insulating shell, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VCZD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings. It can be installed on fan coils with both right and left connections.

VJP: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

DSC: Condensate drainage device.

BCZ: Condensate drip.

PCZ: Sheet metal panel closing the rear of the unit.

GA: Ceiling installation grille masking plumbing and electrical utilities. Can also be used in floor installations (using the FKIT accessory).

FIKIT: Metal supports for vertical installation of the GA grille.

ZXZ: Pair of stylish and structural gray feet with skirting board.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	200	300	400	500
PTINZ	DS	.	.	.	.
T-TOUCH	DS	.	.	.	.

Model	Ver	200	300	400	500
VMF-E0X	DS	.	.	.	.
VMF-E19	DS	.	.	.	.
VMF-E2Z	DS	.	.	.	.
VMF-E4DX	DS	.	.	.	.
VMF-E4X	DS	.	.	.	.
VMF-IO	DS	.	.	.	.
VMF-LON	DS	.	.	.	.
VMF-SW	DS	.	.	.	.
VMF-SW1	DS	.	.	.	.

Valve Kit for 4 pipe systems with main coil

Model	Ver	200	300	400	500
VCZ1X4L (1)	D,DS,DT	.	.	.	.
VCZ1X4R (1)	D,DS,DT	.	.	.	.
VCZ2X4L (1)	D,DS,DT	.	.	.	.
VCZ2X4R (1)	D,DS,DT	.	.	.	.

(1) The valve must be commanded via command panels enabled for valve control.

3 way valve kit

Model	Ver	200	300	400	500
VCZ41 (1)	D,DS,DT	.	.	.	.
VCZ4124 (2)	D,DS,DT	.	.	.	.
VCZ42 (1)	D,DS,DT	.	.	.	.
VCZ4224 (2)	D,DS,DT	.	.	.	.

(1) 230V~50Hz

(2) 24V

2 way valve kit

Model	Ver	200	300	400	500
VCZD1 (1)	D,DS,DT	.	.	.	.
VCZD124 (2)	D,DS,DT	.	.	.	.
VCZD2 (1)	D,DS,DT	.	.	.	.
VCZD224 (2)	D,DS,DT	.	.	.	.

(1) 230V~50Hz

(2) 24V

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	300	400	500
VJPO60 (1)	D,DS,DT	.	.	.	.
VJPO60M (2)	D,DS,DT	.	.	.	.
VJPO90 (1)	D,DS,DT	.	.	.	.
VJPO90M (2)	D,DS,DT	.	.	.	.

(1) 230V~50Hz

(2) 24V

Condensate drainage

Model	Ver	200	300	400	500
DSC4 (1)	D,DS,DT	.	.	.	.

(1) The accessory cannot be mounted if the AMPZ accessory and / or the VCZ1-2-3-4 X4L / R valve is also provided.

Condensate drip

Model	Ver	200	300	400	500
BCZ4 (1)	D,DS,DT	.	.	.	.

(1) For vertical installation.

Panel closing the rear of the unit

Model	Ver	200	300	400	500
PCZ200	D,DS,DT	.			
PCZ300	D,DS,DT		.		
PCZ500	D,DS,DT			.	.

Metal supports for GA grille

Model	Ver	200	300	400	500
FIKIT200	D,DS,DT	.			
FIKIT300	D,DS,DT		.		
FIKIT500	D,DS,DT			.	.

Pair of stylish structural feet

Model	Ver	200	300	400	500
ZKZ	D,DS,DT	.	.	.	.

CONFIGURATOR

Field	Description
1,2,3	FCZ
4	Size 2, 3, 4, 5
5	Main coil
0	Standard
6	Secondary coil
0	Without coil
7	Version
D	Dualjet with thermostat PTINZ on-board the system
DS	Dualjet without on-board thermostat

Field	Description
1,2,3,4	FCZI
5	Size 2, 3, 4, 5
6	Main coil
0	Standard
7	Secondary coil
0	Without coil
8	Version
D	Dualjet with on-board thermostat
DT	Dualjet with T-Touch-I thermostat (1)

(1) Compatibility with VMF system

PERFORMANCE SPECIFICATIONS

FCZD - FCZID

2-pipe

	FCZ200D			FCZ300D			FCZ400D			FCZ500D			
	1	2	3	1	2	3	1	2	3	1	2	3	
	L	M	H	L	M	H	L	M	H	L	M	H	
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	2,02	2,95	3,70	3,47	4,46	5,50	4,32	5,74	7,15	5,27	7,31	8,50
Water flow rate system side	l/h	177	258	324	304	391	482	379	503	627	462	641	745
Pressure drop system side	kPa	6	12	18	7	12	18	9	16	24	12	21	28
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	1,00	1,46	1,84	1,72	2,21	2,73	2,14	2,85	3,55	2,62	3,63	4,22
Water flow rate system side	l/h	174	254	319	299	385	475	373	495	617	455	631	734
Pressure drop system side	kPa	6	12	18	8	12	18	10	16	24	12	21	28
Cooling performance 7 °C / 12 °C (3)													
Cooling capacity	kW	0,89	1,28	1,60	1,68	2,17	2,65	2,20	2,92	3,60	2,68	3,69	4,25
Sensible cooling capacity	kW	0,71	1,05	1,33	1,26	1,65	2,04	1,59	2,14	2,67	1,94	2,73	3,18
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731
Pressure drop system side	kPa	7	13	18	8	13	18	10	17	24	13	23	29
Fan													
Type	type	Centrifugal											
Number	no.	1			2			2			2		
Air flow rate	m ³ /h	140	220	290	260	350	450	330	460	600	400	600	720
Diameter hydraulic fittings													
Main coil	∅	1/2"			3/4"			3/4"			3/4"		
Fan coil sound data (4)													
Sound power level	dB(A)	31,0	43,0	50,0	34,0	41,0	48,0	37,0	44,0	41,0	42,0	51,0	56,0
Sound pressure	dB(A)	23,0	35,0	42,0	26,0	33,0	40,0	29,0	36,0	53,0	34,0	43,0	48,0
Power supply													
Power supply		230V~50Hz											

(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT

(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT

(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

Fans FCZ-D

2-pipe

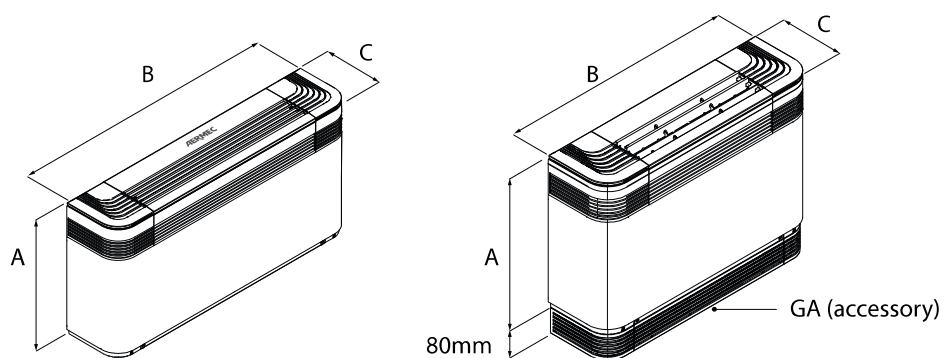
	FCZ200D			FCZ300D			FCZ400D			FCZ500D			
	1	2	3	1	2	3	1	2	3	1	2	3	
	L	M	H	L	M	H	L	M	H	L	M	H	
Fan													
Fan motor	type	On-Off											
Input power	W	13	25	35	25	33	44	30	43	57	38	52	76
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3

Fans FCZI-D

2-pipe

	FCZI200D			FCZI300D			FCZI400D			FCZI500D			
	1	2	3	1	2	3	1	2	3	1	2	3	
	L	M	H	L	M	H	L	M	H	L	M	H	
Fan													
Fan motor	type	Inverter											
Input power	W	7	8	14	5	7	13	5	10	18	4	10	19
Signal 0-10V	%	44	68	90	52	70	90	49	68	90	50	74	90

DIMENSIONS



Size			200	300	400	500
Dimensions and weights						
A	D,DS,DT	mm	486	486	486	486
B	D,DS,DT	mm	750	980	1200	1200
C	D,DS,DT	mm	220	220	220	220
D	D,DS,DT	mm	80	80	80	80
Weight empty	D,DS,DT	kg	15	17	23	22

Aermec si riserva la facoltà di apportare in qualsiasi momento tutte le modifiche ritenute necessarie per il miglioramento del prodotto con eventuale modifica dei relativi dati tecnici.

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