AERMEC

FCZ-D

Fan coil for vertical wall-mounting or free-standing installation

Cooling capacity 0,89 ÷ 4,25 kW
Heating capacity 2,02 ÷ 8,50 kW

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

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

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 7047 plastic.

Ventilation group
Consisting of double suction centrifugal fans that are particularly silent, statically and dynamically balanced, and directly coupled with the motor shaft.
The motor is wired for single phase and has three speeds, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings.
Extractable shrouds for easy, effective cleaning

Finned pack heat exchanger
With copper pipes and aluminium louvers, the main heat exchanger has female gas water connections on the left side and the manifolds have air vents.
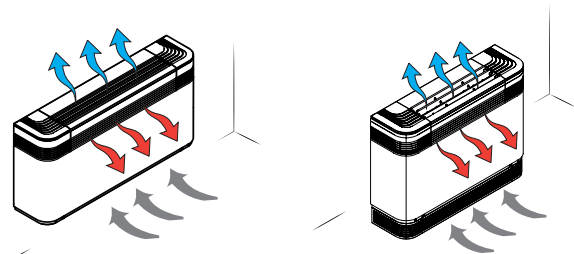The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
The hydraulic connections can be inverted during installation.

Air filter
Air filter class Coarse 25% for all versions easy to pull out and clean.

VERSION WITH DOUBLE SUPPLY

FCZ_D
— With on-board thermostat.
FCZ_DS
— Compatibility with VMF system.
— Without installed switch

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

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

ACCESSORIES

Control panels
AER503IR: Flush-mounting thermostat with backlit display, capacitive keypad and infrared receiver, for controlling both brushless fan coils and those with an asynchronous motor. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air puri-

fying devices (Cold Plasma and germicidal lamp), with radiant plate or with FCZ-D twin delivery (Dualjet). In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems. Being equipped with an infrared receiver, it can, in turn, be controlled by the VMF-IR remote control.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
SW3: Water probe (L = 2.5 m) for controlling the minimum and maximum and to allow automatic seasonal switching for electronic thermostats fitted with water side changeover.
SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
T-TOUCH: Touch control on board the machine, for controlling fan coils with asynchronous motors. In 2-pipe systems, it can control standard fan coils or those equipped with an electric heater, with air purifying devices or with FCZ-D twin delivery (Dualjet). In 4-pipe systems, only standard fan coils.
TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. In 2-pipe systems, the thermostat can control standard fan coils or those equipped with an electric heater, with air purifying devices, radiant plate or FCZ-D twin delivery (Dualjet).

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documen-

tation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.
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-E19 and VMF-E19I accessory.
VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, with grids GLF_N/M and GLL_N, can be controlled with VMF-IR control.
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: Manage the unit exclusively from a centralized VMF control panel without area control panel.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Water valves

VCZ_X: 3-way valve kit for single-coil fan coil, RH connections, (VCZ_X4R) or LH (VCZ_X4L) 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 for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
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.

Installation accessories

PCZ: Metal panel for the unit rear closing. SPCZ brackets are necessary to fix floor standing fan coils.
GA: Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FIKIT accessory is needed only in the case of floor installation.
FIKIT: Metal supports for vertical installation of the GA grille.
DSCZ4: Condensate drainage device.
BCZ: Condensate drip. If the valve is paired with the BCZ5 or BCZ6 condensate drip tray, the insulating shell can be removed to ensure better housing.

ACCESSORIES COMPATIBILITY

Control panels

Model	Ver	200	300	400	500
AER503IR (1)	DS	•	•	•	•
PRO503	DS	•	•	•	•
SA5 (2)	DS	•	•	•	•
SW3 (2)	DS	•	•	•	•
SW5 (2)	DS	•	•	•	•
T-TOUCH (3)	DS	•	•	•	•
TX (4)	DS	•	•	•	•

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) Installation on the fan coil.
(4) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.

VMF system

For more information about VMF system, refer to the dedicated documentation.

Model	Ver	200	300	400	500
DI24	DS	•	•	•	•
VMF-E19 (1)	DS	•	•	•	•
VMF-E2Z	DS	•	•	•	•
VMF-E3	DS	•	•	•	•
VMF-E4DX	DS	•	•	•	•
VMF-E4X	DS	•	•	•	•
VMF-I0	DS	•	•	•	•
VMF-IR	DS	•	•	•	•
VMHI	DS	•	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

Water valves

3 way valve kit

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

(1) 230V~50Hz
(2) 24V

2 way valve kit

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

(1) 230V~50Hz
(2) 24V

Valve Kit for 4 pipe systems - Requires a thermostat with valve management

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

(1) The valves can be combined with the units if there is a control panel for managing them.

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	300	400	500
VJP060 (1)	D,DS	•	•		
VJP060M (2)	D,DS	•	•		
VJP090 (1)	D,DS			•	•
VJP090M (2)	D,DS			•	•

(1) 230V~50Hz
(2) 24V

Installation accessories

Condensate recirculation device

Model	Ver	200	300	400	500
DSCZ4 (1)	D,DS	•	•	•	•

(1) DSCZ4 due to space problems inside the unit, the VCZ1-2-3-4 X4L/R valves cannot be mounted together with the amp/AMPZ accessories, with all the condensate collection trays. With the VMF-E19/E19I thermostats, please contact the head office.

Condensate drip

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

(1) For vertical installation.

Panel closing the rear of the unit

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

Ornamental grille

Model	Ver	200	300	400	500
GA200	D,DS	•			
GA300	D,DS		•		
GA500	D,DS			•	•

Supports to be combined with the ornamental grille (GA) for floor installation of the fan coil

Model	Ver	200	300	400	500
FIKIT200	D,DS	•			

Model	Ver	200	300	400	500
FIKIT300	D,DS		•		
FIKIT500	D,DS			•	•

Pair of stylish structural feet

Model	Ver	200	300	400	500
ZXZ	D,DS	•	•	•	•

PERFORMANCE SPECIFICATIONS

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													
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							
Fan motor	type					Asynchronous							
Number	no.		1			2			2			2	
Air flow rate	m³/h	140	220	290	260	350	450	330	460	600	400	600	720
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
Fan coil sound data (3)													
Sound power level	dB(A)	35,0	46,0	51,0	34,0	41,0	48,0	37,0	44,0	51,0	42,0	51,0	56,0
Sound pressure	dB(A)	27,0	38,0	43,0	26,0	33,0	40,0	29,0	36,0	43,0	34,0	43,0	48,0
Finned pack heat exchanger													
Water content main heat exchanger	l		0,5			0,8			1,0			1,0	
Diametre hydraulic fittings													
Main heat exchanger	Ø		1/2"			3/4"			3/4"			3/4"	
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) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

DIMENSIONS

90mm — ZXZ (accessory)

80mm — GA (accessory)
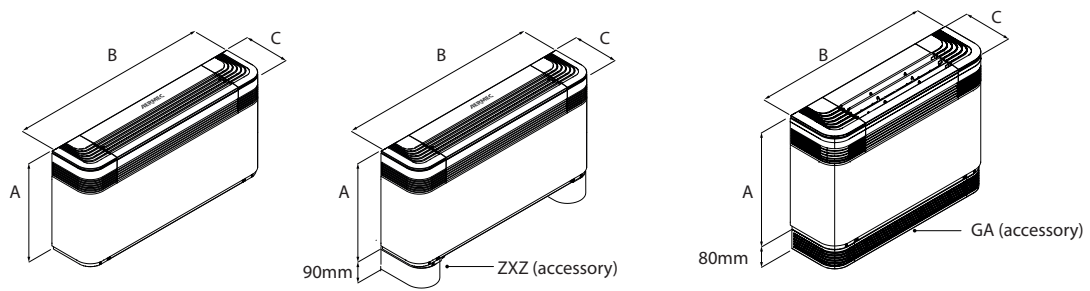
		FCZ200D	FCZ300D	FCZ400D	FCZ500D
Dimensions and weights					
A	mm	486	486	486	486
B	mm	750	980	1200	1200
C	mm	220	220	220	220
Empty weight	kg	15	17	23	22

Aermec reserves the right to make any modifications deemed necessary.
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