

# FCZ-D

## Fan coil for universal and floor 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



### 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

Provided standard in plastic and fixed to the interior structure; with external condensate discharge.

#### 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

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

#### 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.

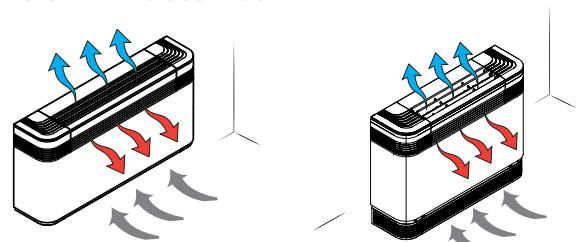
**The hydraulic connections can be inverted during installation.**

#### Condensate drip

#### 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

#### ThermApp

In units DS version with a **T-Touch-I** electronic thermostat (accessory) and the **ThermApp** application, the operating mode can be set and the weekly timer programmed by simply resting the smart device on the fan coil. The graphic interface of the app also gives access to a lot more information such as the alarm list, the closest SAT, etc.

**Available for Android operating systems.**



## GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3	<b>FCZ</b>
4	<b>Size</b> 2, 3, 4, 5
5	<b>Main coil</b> 0 Standard
6	<b>Secondary coil</b> 0 Without coil
7	<b>Version</b> 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 purifying 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. The ThermApp application is also available for remote control with smart devices with the Android operating system.

**TX:** Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors. 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).

## 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	DS	.	.	.	.
TX (1)	DS	.	.	.	.

(1) Wall-mount installation.

(2) Probe for AER503IR-TX thermostats, if fitted.

### VMF system

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

Model	Ver	200	300	400	500
VMF-E0X (1)	DS	.	.	.	.
VMF-E19	DS	.	.	.	.

### VMF 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-E3:** Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, VMF-E0X 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 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

### Water valves

**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.

**VDP:** Combined adjustment and balancing valve, for 2 and 4 pipe systems to be installed outside the unit. It is comprised of a valve body without nipples with  $\varnothing$  3/4" M water connections, a 230 V powered actuator with On-Off function and a 5 m power supply cable. The valve is supplied without connections or hydraulic components.

### Installation accessories

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

**GA:** Lower intake grille for encapsulated fan coils. Can also be used in wall-mounted or floor installations, the FKIT 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.

Model	Ver	200	300	400	500
VMF-E2Z	DS	*	*	*	*
VMF-E3	DS	*	*	*	*
VMF-E4DX	DS	*	*	*	*
VMF-E4X	DS	*	*	*	*
VMF-I0	DS	*	*	*	*
VMF-IR	DS	*	*	*	*

(1) Also the accessory VMF-SIT3 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)	DS	*			
VCZD124 (2)	DS	*			
VCZD2 (1)	DS		*	*	*
VCZD224 (2)	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.

## Installation accessories

### Condensate recirculation device

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

(1) DSC4 cannot be mounted if even just one of these accessories is also installed: AMP - AMPZ valve VCZ1-2-3-4 X4L/R and all the condensate collection trays.

### 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	*			
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	
<b>Heating performance 70 °C / 60 °C (1)</b>													
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
<b>Heating performance 45 °C / 40 °C (2)</b>													
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
<b>Cooling performance 7 °C / 12 °C (3)</b>													
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
<b>Fan</b>													
Type	type	Centrifugal											
Fan motor	type	Asynchronous											
Number	no.	1			2			2			2		
Air flow rate	m <sup>3</sup> /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
<b>Fan coil sound data (4)</b>													
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
<b>Water coil</b>													
Water content main coil	l	0,5			0,8			1,0			1,0		
<b>Diameter hydraulic fittings</b>													
Main coil	∅	1/2"			3/4"			3/4"			3/4"		
<b>Power supply</b>													
Power supply		230V~50Hz											

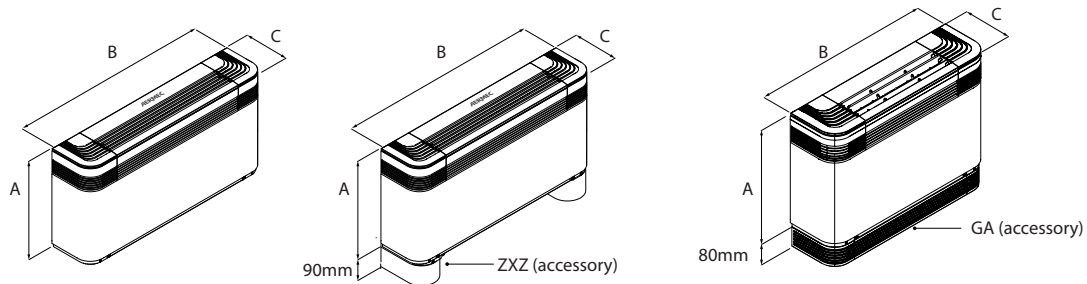
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

(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.

## DIMENSIONS



		FCZ200D	FCZ300D	FCZ400D	FCZ500D
<b>Dimensions and weights</b>					
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. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

**Aermec S.p.A.**

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia  
Tel. 0442633111 - Telefax 044293577  
www.aermec.com