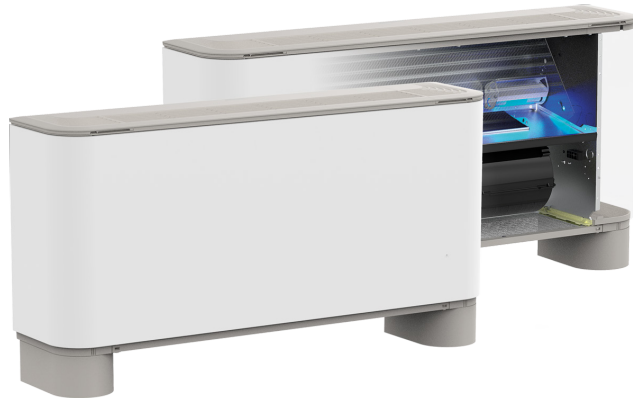


FCZI-H

Fan coil with the photocatalytic device, for universal and floor installation

- Photocatalytic device
- Very quiet
- Backlit touch-I command with programming via a smart device (accessory)
- Total comfort in every season



DESCRIPTION

Fan coil with built-in **photocatalytic device** for air conditioning in places requiring the maximum hygiene, such as:

- Hospitals
- Dentists' surgeries
- Doctors' and vets' surgeries
- Analysis laboratories
- Waiting rooms
- Public premises

They can be installed in any type of 2-pipe system (version for 4-pipe systems available upon request) and in combination with any heat generator, even at low temperatures. Thanks to the availability of several versions and configurations, it's easy to find the right solution for every need.

VERSIONS

- **H** Unit with shell without thermostat - vertical and horizontal installation.
- **HP** Unit without shell and without thermostat - vertical and horizontal installation.
- **HT** Unit with shell and thermostat - vertical installation.

FEATURES

Case

Metallic protective cabinet with rustproofing polyester paint RAL 9003. The head with adjustable air distribution grille is made of plastic RAL 7047. When the grille closes, the fan coil automatically switches off.

Ventilation group

Comprised of a dual intake centrifugal fan that is particularly silent, statically and dynamically balanced and directly coupled to the motor shaft.

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.

Continuous air flow rate variation is made possible by a 0-10V signal generated by Aermec adjustment and control commands or by independent regulation 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 scroll that protects the fan can be extracted and inspected, for easy and effective cleaning.

■ *Apart from the brushless motor, each unit can also be supplied with a single-phase asynchronous motor. Refer to the relative FCZ - H datasheet*

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 coil is not reversible during installation but, when ordering, you can choose units with the coil water connections on the right (at no extra charge).*

Air filter

Air filter class **COARSE 25%** for all versions; easy to pull out and clean. Shrouds can be pulled out and inspected for easy and effective cleaning.

PHOTOCATALYTIC DEVICE AT THE HEART OF THE FAN COIL

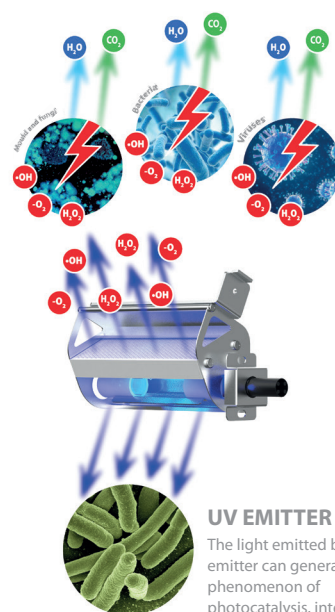


FILTER

The filter holds back dust, ash and "natural allergens" like pollen, spores, etc.

TITANIUM DIOXIDE CATALYS

Titanium dioxide (TiO_2) has a high degree of thermal and chemical stability, isn't toxic for humans and isn't expensive, but at the same time it's easily procurable, widely available, bio-compatible, and highly sensitive to UV light. The catalyst has a honeycomb form and increases the photocatalysis reaction surface, thereby maximising and guaranteeing system efficiency. The interaction of the catalyst with the UV light (photocatalysis) creates and releases highly reactive and oxidising species (H_2O_2 and OH^\cdot) that attack the polluting agents, breaking them down and eliminating them. The result is a powerful biocidal action with the decomposition of the VOC (Volatile Organic Compounds) and the release of harmless substances like CO_2 and H_2O .



UV EMITTER

The light emitted by the emitter can generate the phenomenon of photocatalysis, interacting with the titanium dioxide catalyser (TiO_2). The absorption level is 5,4W.

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Field	Description
1,2,3,4	FCZI
5	Size 2, 3, 4, 5, 7, 9
6	Main coil
0	Standard
5	Oversized (1)
7	Secondary coil
0	Without coil
8	Version
H	Unit with shell without thermostat - vertical and horizontal mount
HP	Unit without shell and thermostat - vertical and horizontal mount
HPR	Unit without shell and thermostat - vertical and horizontal installation - water connections on the right
HR	Unit with shell without thermostat - vertical and horizontal installation - water connections on the right
HT	Unit with shell with thermostat - vertical mount
HTR	Unit with shell with thermostat - vertical mount - water connections on the right

(1) Only for sizes 9

ACCESSORIES

Control panels and dedicated accessories - FCZI-H

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.

SW5: water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.

T-TOUCH-I: Touch control on board the machine, for controlling fan coils with brushless motors. In 2-pipe systems, it can control standard fan coils or those equipped with an electric heater, with air purifying devices or with FCZI-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).

TXBI: Thermostat on board the machine, for FCZI fan coils with brushless motor, complete with water probe and air probe to be positioned in the relative housings. 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), radiant plate or FCZI-D twin delivery (Dualjet).

VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and 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.

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

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

Common accessories

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.

AMP: Wall mounting kit

DSC: Condensate drainage device.

BCZ: Condensate drip.

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.

ZXZ: Pair of stylish and structural feet

BC: Condensate drip.

Ventilcassaforma: Galvanised sheet metal template. It makes it possible to obtain directly in the wall a space for housing the fan coil.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	200	300	400	500	700	900	950
AER503IR (1)	H,HP	•	•	•	•	•	•	•
PRO503	H,HP	•	•	•	•	•	•	•
SA5 (2)	H,HP,HT	•	•	•	•	•	•	•
SW5 (2)	H,HP,HT	•	•	•	•	•	•	•
T-TOUCH-I	H	•	•	•	•	•	•	•
TX (1)	H,HP	•	•	•	•	•	•	•
TXBI (3)	H	•	•	•	•	•	•	•

(1) Wall-mount installation.

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

(3) Installation on the fan coil.

Model	Ver	200	300	400	500	700	900	950
VMF-E19I	H,HP	•	•	•	•	•	•	•
VMF-E2Z	H	•	•	•	•	•	•	•
VMF-E3	H,HP	•	•	•	•	•	•	•
VMF-E4DX	H,HP	•	•	•	•	•	•	•
VMF-E4X	H,HP	•	•	•	•	•	•	•
VMF-IO	H	•	•	•	•	•	•	•
VMF-IR	H,HP	•	•	•	•	•	•	•
VMF-LON	H	•	•	•	•	•	•	•
VMF-SW1	HP	•	•	•	•	•	•	•

Common accessories

3 way valve kit

Model	Ver	200	300	400	500	700	900	950
VCZ41 (1)	H,HP,HT	•						
VCZ4124 (2)	H,HP,HT	•						
VCZ42 (1)	H,HP,HT		•	•	•	•		

Model	Ver	200	300	400	500	700	900	950
VCZ4224 (2)	H,HP,HT		•	•	•	•		
VCZ43 (1)	H,HP,HT						•	•
VCZ4324 (2)	H,HP,HT						•	•

(1) 230V~50Hz

(2) 24V

2 way valve kit

Model	Ver	200	300	400	500	700	900	950
VCZD1 (1)	H,HP,HT	•						
VCZD124 (2)	H,HP,HT	•						
VCZD2 (1)	H,HP,HT		•	•	•	•		
VCZD224 (2)	H,HP,HT		•	•	•	•		
VCZD3 (1)	H,HP,HT						•	•
VCZD324 (2)	H,HP,HT						•	•

(1) 230V~50Hz

(2) 24V

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	300	400	500	700	900	950
VJP060 (1)	H,HP,HT	•	•					
VJP060M (2)	H,HP,HT	•	•					
VJP090 (1)	H,HP,HT			•	•			
VJP090M (2)	H,HP,HT			•	•			
VJP150 (1)	H,HP,HT					•	•	•
VJP150M (2)	H,HP,HT					•	•	•

(1) 230V~50Hz

(2) 24V

Wall mounting kit

Ver	200	300	400	500	700	900	950
HP	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20	AMP20

Condensate drainage

Model	Ver	200	300	400	500	700	900	950
DSC4 (1)	HP	•	•	•	•	•	•	•

(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

Ver	200	300	400	500	700	900	950
HP	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)

(1) For vertical installation.

Ver	200	300	400	500	700	900	950
HP	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC8 (1)	BC9 (1)	BC9 (1)

(1) For horizontal installation.

Panel closing the rear of the unit

Ver	200	300	400	500	700	900	950
H,HP,HT	PCZ200	PCZ300	PCZ500	PCZ500	PCZ800	PCZ1000	PCZ1000

Grille also applicable for floor installation

Ver	200	300	400	500	700	900	950
H,HP,HT	GA200	GA300	GA500	GA500	GA800	GA800	GA800

Metal supports for GA grille

Ver	200	300	400	500	700	900	950
H,HP,HT	FIKIT200	FIKIT300	FIKIT500	FIKIT500	FIKIT800	FIKIT800	FIKIT800

Ventilcassaforma

Ver	200	300	400	500	700	900	950
HP	CHF22	CHF32	CHF42	CHF42	CHF62	CHF62	CHF62

Pair of stylish structural feet

Ver	200	300	400	500	700	900	950
H,HP,HT	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ	ZXZ

PERFORMANCE SPECIFICATIONS

2-pipe

	FCZI200H			FCZI300H			FCZI400H			FCZI500H			FCZI700H			FCZI900H			FCZI950H		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	L	M	H	L	M	H	L	M	H	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	6,50	8,10	10,00	10,77	13,35	15,14	11,20	14,42	17,10
Water flow rate system side	l/h	177	258	324	304	391	482	379	503	627	462	641	745	570	710	877	945	1171	1328	982	1264	1500
Pressure drop system side	kPa	6	12	18	7	12	18	9	16	24	12	21	28	12	18	26	12	17	22	16	25	33

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	3,32	4,03	4,97	5,35	6,64	7,53	5,57	7,17	8,50
Water flow rate system side	l/h	174	254	319	299	385	475	373	495	617	455	631	734	561	699	863	930	1152	1307	967	1245	1476
Pressure drop system side	kPa	6	12	18	8	12	18	10	16	24	12	21	28	12	18	26	12	17	22	15	24	33

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	3,22	3,90	4,65	4,29	5,00	6,91	5,77	7,32	8,60
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	2,56	3,17	3,92	2,97	3,78	5,68	3,80	4,87	5,78
Water flow rate system side	l/h	153	221	275	288	374	456	379	503	619	460	634	731	554	671	800	738	860	1189	992	1259	1479
Pressure drop system side	kPa	7	13	18	8	13	18	10	17	24	13	23	29	14	19	26	10	13	22	15	23	30

Fan

Type	type	Centrifugal																				
Fan motor	type	Inverter																				
Number	no.	1			2			2			2			3			3			3		
Air flow rate	m³/h	140	220	290	260	350	450	330	460	600	400	600	720	520	720	900	700	930	1140	700	930	1140
Input power	W	7	8	14	5	7	13	5	10	18	7	10	19	30	40	80	30	40	80	30	40	80
Signal 0-10V	%	44	68	90	52	70	90	49	68	90	50	74	90	56	72	90	56	72	90	56	72	90

Diameter hydraulic fittings

Type	type	Gas - F																				
Main coil	Ø	1/2"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		

Fan coil sound data (4)

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	50,0	57,0	62,0	51,0	57,0	62,0	51,0	57,0	62,0
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	42,0	49,0	54,0	43,0	49,0	54,0	43,0	49,0	54,0

Power supply

Power supply	230V~50Hz																				
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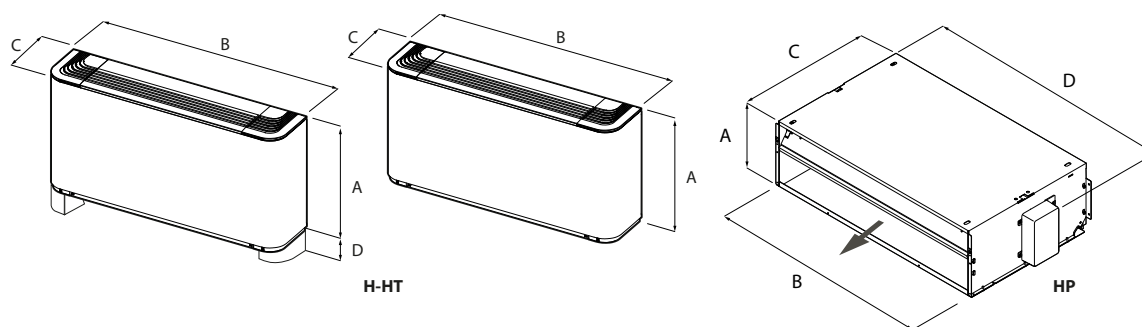
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

(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



Size			200	300	400	500	700	900	950
Dimensions and weights									
A	H,HT	mm	486	486	486	486	486	591	591
	HP	mm	216	216	216	216	216	216	216
B	H,HT	mm	750	980	1200	1200	1320	1320	1320
	HP	mm	522	753	973	973	1122	1122	1122
C	H,HT	mm	220	220	220	220	220	220	220
	HP	mm	453	453	453	453	453	558	558
D	H,HT	mm	90	90	90	90	90	90	90
	HP	mm	562	793	1013	1013	1147	1147	1147
Empty weight	H,HT	kg	15	17	22	22	29	34	34
	HP	kg	12	14	20	23	26	32	32

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