

FCZ H - FCZI H

Fan coil for universal and floor installation



- **Very quiet**
- **Backlit Touch command with programming via a smart device**
- **Total comfort in every season**



DESCRIPTION

Fan coil with built-in photocatalytic bacterial lamp suitable for air conditioning in settings requiring the highest degree of 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 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.

VERSIONS

H Unit with shell without thermostat - vertical and horizontal mount

HP Unit without shell and thermostat - vertical and horizontal mount

HPO Unit without shell and thermostat with upgraded motor - vertical and horizontal mount

HT Unit with shell with thermostat - vertical mount

All "H" versions are supplied without control panel.

FEATURES

Case

Metallic protective cabinet with rustproofing polyester paint RAL 9003. The head with adjustable air distribution grille is in plastic material RAL 7047.

When the grille is closed, 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.

In FCZ - H fan coils

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.

In FCZI - H 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 scroll that protects the fan can be extracted and inspected, for easy and 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.*

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

Control panels and dedicated accessories - FCZ-H

PTI4Z: Electronic thermostat for fan coils in 4-tube systems.

PXAE: Electronic thermostat with thermostated or continuous ventilation.

SIT3: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card.

SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat). Commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

SW3: Water temperature probe. Allows automatic season change on electronic controllers supplied with water-side change over.

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-SIT3: Interface card that permits connecting the VMF-E19 thermostats to a fan coil with a high power motor.

VMF-SW: Water temperature probe.

Control panels and dedicated accessories - FCZI-H

AER503: Wall-mounted panel.

SA5: Air temperature probe.

SW5: Water temperature probe.

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

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories - FCZ-H

Model	Ver	200	300	400	500	600	900	950
PTI4Z	H	*	*	*	*	*	*	*
PXAE	H,HP,HPO	*	*	*	*	*	*	*
SIT3 (1)	H,HP,HPO,HT	*	*	*	*	*	*	*
SIT5 (1)	H,HP,HPO,HT	*	*	*	*	*	*	*
SW3 (2)	H,HP,HPO,HT	*	*	*	*	*	*	*
T-TOUCH	H	*	*	*	*	*	*	*

(1) Cards for PXAE-PXAR-AER503-TX thermostats if present.

(2) Probe for PXAE-PXAR-AER503-TX thermostats if present.

Model	Ver	200	300	400	500	600	900	950
VMF-E0X	H,HP,HPO	*	*	*	*	*	*	*
VMF-E19	H,HP,HPO	*	*	*	*	*	*	*
VMF-E2Z	H	*	*	*	*	*	*	*
VMF-E4DX	H,HP,HPO	*	*	*	*	*	*	*
VMF-E4X	H,HP,HPO	*	*	*	*	*	*	*
VMF-IO	H,HP,HPO	*	*	*	*	*	*	*
VMF-LON	H,HP,HPO	*	*	*	*	*	*	*
VMF-SIT3 (1)	H,HP,HPO	*	*	*	*	*	*	*

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-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, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.

AMP: Wall mounting kit

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.

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.

RDA_V: Straight intake connection with rectangular flange.

RPA_V: Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDA_C: Straight intake connection with circular flanges.

PA_V: Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.

PM_V: Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.

RPM_V: Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.

RDM_C: Straight discharge internally insulated, with circular flanges.

Model	Ver	200	300	400	500	600	900	950
VMF-SW	H,HP,HPO	.	.	.	.	.	.	.

(1) For the selection, consult the documentation for the thermostat and the fan coil.

Control panels and dedicated accessories - FCZI-H

Model	Ver	200	300	400	500	600	900
AER503	H,HP,HT	.	.	.	.	.	.
SAS	H,HP,HT	.	.	.	.	.	.
SW5	H,HP,HT	.	.	.	.	.	.
T-TOUCH-I	H	.	.	.	.	.	.

Model	Ver	200	300	400	500	600	900
VMF-E19I	H,HP	.	.	.	.	.	.
VMF-E2Z	H	.	.	.	.	.	.
VMF-E4DX	H,HP	.	.	.	.	.	.
VMF-E4X	H,HP	.	.	.	.	.	.
VMF-IO	H	.	.	.	.	.	.
VMF-LON	H	.	.	.	.	.	.
VMF-SW1	HP	.	.	.	.	.	.

Common accessories

3 way valve kit

Model	Ver	200	300	400	500	600	900	950
VCZ41 (1)	H,HP,HPO,HT	.						
VCZ4124 (2)	H,HP,HPO,HT	.						
VCZ42 (1)	H,HP,HPO,HT		.	.	.	.
VCZ4224 (2)	H,HP,HPO,HT		.	.	.	.
VCZ43 (1)	H,HT						.	
	HP,HPO						.	.
VCZ4324 (2)	H,HT						.	
	HP,HPO						.	.

(1) 230V~50Hz

(2) 24V

2 way valve kit

Model	Ver	200	300	400	500	600	900	950
VCZD1 (1)	H,HP,HPO,HT	.						
VCZD124 (2)	H,HP,HPO,HT	.						
VCZD2 (1)	H,HP,HPO,HT		.	.	.	.
VCZD224 (2)	H,HP,HPO,HT		.	.	.	.
VCZD3 (1)	H,HT						.	
	HP,HPO						.	.
VCZD324 (2)	H,HT						.	
	HP,HPO						.	.

(1) 230V~50Hz

(2) 24V

Combined Adjustment and Balancing Valve Kit

Model	Ver	200	300	400	500	600	900	950
VJPO60 (1)	H,HP,HPO,HT	.	.					
VJPO60M (2)	H,HP,HPO,HT	.	.					
VJPO90 (1)	H,HP,HPO,HT			.	.	.		
VJPO90M (2)	H,HP,HPO,HT			.	.	.		
VJP150 (1)	H,HPO					.	.	.
	HP,HT					.	.	.
VJP150M (2)	H,HPO					.	.	.
	HP,HT					.	.	.

(1) 230V~50Hz

(2) 24V

Condensate drainage

Model	Ver	200	300	400	500	600	900	950
DSC4 (1)	HP,HPO	.	.	.	.	.	.	.

(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

Ver	200	300	400	500	600	900	950
HP	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ6 (2)	BCZ6 (2)
HPO	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	BCZ4 (1)	-	-

(1) For vertical installation.

(2) For horizontal installation.

The accessory cannot be fitted on the configurations indicated with -

Ver	200	300	400	500	600	900	950
HP,HP0	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	600	900	950
H	PCZ200	PCZ300	PCZ500	PCZ500	PCZ800	PCZ1000	-
HP	PCZ200	PCZ300	PCZ500	PCZ500	PCZ800	PCZ1000	PCZ1000

Metal supports for GA grille

Ver	200	300	400	500	600	900	950
H,HT	FIKIT200	FIKIT300	FIKIT500	FIKIT500	FIKIT800	FIKIT800	-

PLENUM FOR DUCT TYPE INSTALLATION

Straight intake connection with rectangular flange.

Ver	200	300	400	500	600	900	950
HPO	RDA000V	RDA100V	RDA200V	RDA200V	RDA300V	RDA300V	RDA300V

Intake plenum with rectangular flange.

Ver	200	300	400	500	600	900	950
HPO	RPA000V	RPA100V	RPA200V	RPA200V	RPA300V	RPA300V	RPA300V

Straight intake connection with circular flanges.

Ver	200	300	400	500	600	900	950
HPO	RDAC000V	RDAC100V	RDAC200V	RDAC200V	RDAC300V	RDAC300V	RDAC300V

Intake plenum with circular flanges

Ver	200	300	400	500	600	900	950
HPO	PA000V	PA100V	PA200V	PA200V	PA300V	PA300V	PA300V

Internally insulated delivery plenum with circular flanges

Ver	200	300	400	500	600	900	950
HPO	PM000V	PM100V	PM200V	PM200V	PM300V	PM300V	PM300V

Internally insulated delivery plenum with rectangular flange.

Ver	200	300	400	500	600	900	950
HPO	RPM000V	RPM100V	RPM200V	RPM200V	RPM300V	RPM300V	RPM300V

Internally insulated straight delivery coupling with circular flanges.

Ver	200	300	400	500	600	900	950
HPO	RDMC000V	RDMC100V	RDMC200V	RDMC200V	RDMC300V	RDMC300V	RDMC300V

GUIDE TO SELECTING THE POSSIBLE CONFIGURATIONS

Configuration options FCZI - H

Field	Description
1,2,3,4	FCZI
5	Size 2, 3, 4, 5, 7, 9
6	Main coil
0	Standard
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
HT	Unit with shell with thermostat - vertical mount

Configuration options FCZ - H

Field	Description
1,2,3	FCZ
4	Size 2, 3, 4, 5, 6, 9
5	Main coil
0	Standard
5	Oversized (1)
6	Secondary coil
0	Without coil
7	Version
H	Unit with shell without thermostat - vertical and horizontal mount
HP	Unit without shell and thermostat - vertical and horizontal mount
HPO	Unit without shell and thermostat with upgraded motor - vertical and horizontal mount
HT	Unit with shell with thermostat - vertical mount

(1) Size 950 is only available for HP and HPO versions

PERFORMANCE SPECIFICATIONS

FCZH-FCZIH

2-pipe

	FCZ200H			FCZ300H			FCZ400H			FCZ500H			FCZ600H			FCZ900H			FCZ950H																																															
	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																																																														
Number	no.			1			2			2			2			3			3			3																																												
Air flow rate	m ³ /h			140			220			290			260			350			450			330			460			600			400			600			720			520			720			900			700			930			1140			700			930			1140		
Diameter hydraulic fittings																																																																		
Main coil	Ø			1/2"			3/4"			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			42,0			51,0			57,0			51,0			57,0			62,0			51,0			57,0			61,0		
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			34,0			43,0			49,0			43,0			49,0			54,0			43,0			49,0			53,0		
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-H

2-pipe

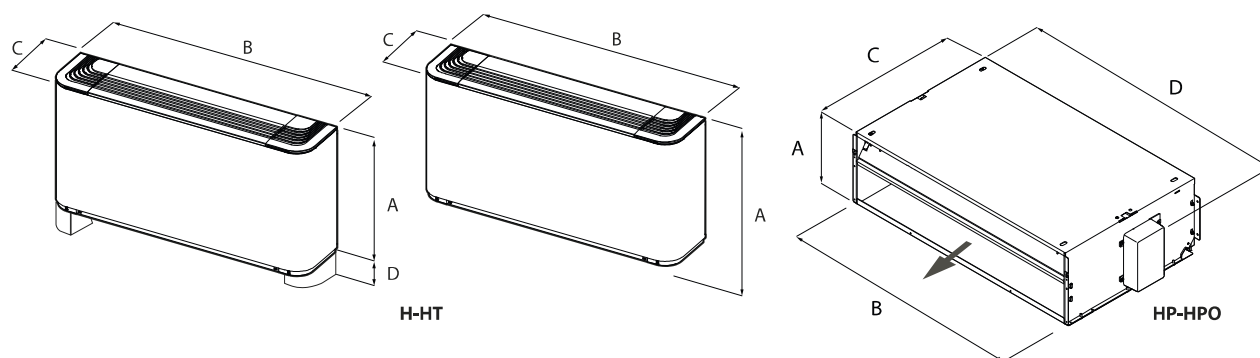
	FCZ200H			FCZ300H			FCZ400H			FCZ500H			FCZ600H			FCZ900H			FCZ950H																																															
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3																																													
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H																																													
Fan																																																																		
Fan motor	type			On-Off																																																														
Input power	W			25			29			33			25			33			44			30			43			57			38			52			76			38			60			91			59			80			106			59			80			106		
Electrical wiring				V1			V2			V3			V1			V2			V3			V1			V2			V3			V1			V2			V3			V1			V2			V3			V1			V2			V3											

Fans FCZI-H

2-pipe

	FCZI200H			FCZI300H			FCZI400H			FCZI500H			FCZI700H			FCZI900H																																									
	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																																							
Fan																																																									
Fan motor	type			Inverter																																																					
Input power	W			7			8			14			5			7			13			5			10			18			4			10			19			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		

DIMENSIONS



Size			200	300	400	500	600	900	950
Dimensions and weights									
A	H,HT	mm	486	486	486	486	486	591	-
	HP,HPO	mm	216	216	216	216	216	216	216
B	H,HT	mm	750	980	1200	1200	1320	1320	-
	HP,HPO	mm	562	793	1013	1013	1147	1147	1147
C	H,HT	mm	220	220	220	220	220	220	-
	HP,HPO	mm	453	453	453	453	453	558	558
D	H,HT	mm	90	90	90	90	90	90	-
	HP,HPO	mm	522	753	973	973	1122	1122	1122
Weight empty	H,HT	kg	15	17	23	22	29	34	-
	HP,HPO	kg	12	14	20	23	29	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.

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