

FCW

Fan coils wall-mount installation

- Versions with internal 2 or 3-way valve
- Compact dimensions



DESCRIPTION

Fan coil model for wall-mount installations, whose elegance and reduced dimensions make it aesthetically pleasing; this terminal is thus suitable for applications in residential or light commercial sectors.

To respond to the various system requirements, the product is configurable and available with or without (2- or 3-way) valve, as well as with or without control board, which ensures compatibility with various system requirements. Fan coils without control board must be necessarily combined with an external control device.

VERSIONS

2V Internal 2-way valve and microprocessor control

2VN Internal 2-way valve without microprocessor control

3V Internal 3-way valve and microprocessor control

3VN Internal 3-way valve without microprocessor control

VL Without internal valve but with microprocessor control

VLN Without internal valve and microprocessor control

FEATURES

Case

Aesthetically styled with flat panel:

- Microprocessor control
- Air flow louvered louvers with horizontal adjustment facility

— Colors pure white pantone GRIS 1C RAL 9010.

Ventilation group

Consisting of a tangential fan, especially quiet and directly coupled to the motor shaft.

Three-speed cross flow fan.

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.

Air filter

Fan coils are fitted with air filters easy to remove and clean.

Control

The versions with microprocessor control have:

- Timer for programming switch-off or switch-on (TLW4 e PFW5)
- Program for operation in automatic, cooling, heating, ventilation and air ionising mode (TLW4 e PFW5)
- Night time Well-being Program (TLW4)
- Automatic season change (TLW4 e PFW5)
- Automatic re-start after power cut.

ACCESSORIES

FCWCP: Cold plasma mounting kit

For models with control board installed

FCW_2V, 3V, VL it is mandatory to select among the user interfaces designed for the FCW series (TLW4 o PFW5)

PFW5: This accessory is essential for fan coil operation (as an alternative to TLW4). The PFW5 wired panel is supplied separately from the fan coil. It is used to set the main device operating parameters, and is essential for setting the Modbus address of the unit (handy only if you want to command the unit via the RS-485 port).

TLW4: Mandatory accessory. Infrared remote control with liquid crystal display for controlling all unit functions. The remote control is delivered separately from the fan coil; with a single remote control it is possible to control more than one fan coil. The remote control is equipped with a support that allows you to hang it on the wall, from which it can be operated without having to be removed.



PFW5



TLW4

For models without control board installed

FCW_2VN, 3VN, VLN a user interface must be mounted outside the fan coil, using either a visible or a recessed wall-mount installation.

To make the selection please refer to the "control panels" or "VMF system shett" where you will find comprehensive information on this topic.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

FIHW: Electronic board allowing FCW/FCWI units to be controlled via the user interfaces of the VMF system (VMF-E3/E4, VMHI, VMF-DSK and DI24) and monitored via the VMF-E6 centraliser in a similar way to VMF-E19 thermostats or GLL/N - GLF/N grids.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
PFW5 (1)	*	*	*	*	*	*
TLW4 (1)	*	*	*	*	*	*

Accessory	FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
PFW5 (1)	*	*	*	*	*	*
TLW4 (1)	*	*	*	*	*	*

(1) Mandatory accessory.

Common accessories

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
FIHW	*	*	*	*	*	*

Accessory	FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
FIHW	*	*	*	*	*	*

Cold plasma mounting kit

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW232VN	FCW233V	FCW233VN	FCW332V	FCW332VN
FCWCP	*	*	*	*	*	*	*	*	*	*

Accessory	FCW333V	FCW333VN	FCW432V	FCW432VN	FCW433V	FCW433VN	FCW532V	FCW532VN	FCW533V	FCW533VN
FCWCP	*	*	*	*	*	*	*	*	*	*

VMF system

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
VMF-485LINK	*	*	*	*	*	*

Accessory	FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
VMF-485LINK	*	*	*	*	*	*

Accessory	FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
FIHW	*	*	*	*	*	*

Accessory	FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
FIHW	*	*	*	*	*	*

The VMF-485LINK accessory is not compatible with radiant floor heating systems.

PERFORMANCE SPECIFICATIONS

2-pipe

		FCW23VL			FCW33VL			FCW43VL			FCW53VL			FCW232V			FCW233V		
		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
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	2,85	3,66	4,29	3,73	4,51	5,24	6,44	7,84	8,56	8,20	13,06	15,28	2,35	3,02	4,03	2,35	3,02	4,03
Water flow rate system side	l/h	250	321	377	328	396	460	565	688	751	718	1.145	1.339	206	265	354	206	265	354
Pressure drop system side	kPa	4	6	9	9	12	16	16	22	26	10	23	30	9	14	24	9	14	24
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,42	1,82	2,14	1,85	2,24	2,61	3,21	3,90	4,26	4,10	6,50	7,60	1,17	1,50	2,00	1,17	1,50	2,00
Water flow rate system side	l/h	246	316	371	322	390	453	556	677	739	712	1.129	1.320	203	261	348	203	261	348
Pressure drop system side	kPa	4	6	8	9	12	16	15	22	25	10	22	29	9	14	24	9	14	24
Cooling performance 7 °C / 12 °C (3)																			
Cooling capacity	kW	1,37	1,74	2,05	1,78	2,15	2,50	3,07	3,74	4,08	4,40	6,50	7,45	1,10	1,45	1,90	1,10	1,45	1,90
Sensible cooling capacity	kW	1,16	1,47	1,73	1,51	1,82	2,04	2,59	3,10	3,47	3,30	5,05	5,80	0,92	1,20	1,55	0,92	1,20	1,55
Water flow rate system side	l/h	236	299	353	306	370	430	528	643	702	755	1.115	1.278	189	249	327	189	249	327
Pressure drop system side	kPa	5	7	9	8	11	15	15	21	26	12	24	30	9	14	23	9	14	23
Fan																			
Type	type	Tangential			Tangential			Tangential			Tangential			Tangential			Tangential		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			1			1			1			1		
Air flow rate	m³/h	280	340	389	330	400	446	476	602	684	592	945	1179	270	330	380	270	330	380
Input power	W	23	24	27	22	23	27	31	41	48	38	55	75	23	24	27	23	24	27
Fan coil sound data (4)																			
Sound power level	dB(A)	42,0	48,0	53,0	42,0	48,0	53,0	44,0	49,0	54,0	44,0	54,0	60,0	42,0	48,0	53,0	42,0	48,0	53,0
Sound pressure level	dB(A)	34,0	39,5	44,5	34,0	39,5	44,5	35,5	40,5	45,5	35,5	45,5	51,5	34,0	39,5	44,5	34,0	39,5	44,5
Diameter hydraulic fittings																			
Main heat exchanger	Ø	1/2"			1/2"			1/2"			3/4"			1/2"			1/2"		
Power supply																			
Power supply	V/Ph/Hz	230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		
		FCW332V			FCW333V			FCW432V			FCW433V			FCW532V			FCW533V		
		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
Heating performance 70 °C / 60 °C (1)																			
Heating capacity	kW	3,25	4,36	5,03	3,25	4,36	5,03	6,29	7,23	7,97	6,29	7,23	7,97	8,04	11,80	14,00	8,04	11,80	14,00
Water flow rate system side	l/h	286	383	442	286	383	442	552	635	699	552	635	699	704	1.034	1.227	704	1.034	1.227
Pressure drop system side	kPa	13	22	29	13	22	29	21	27	32	21	27	32	10	21	28	10	21	28
Heating performance 45 °C / 40 °C (2)																			
Heating capacity	kW	1,62	2,17	2,50	1,62	2,17	2,50	3,13	3,60	3,96	3,13	3,60	3,96	4,00	5,90	7,00	4,00	5,90	7,00
Water flow rate system side	l/h	281	377	434	281	377	434	543	624	688	543	624	688	695	1.025	1.216	695	1.025	1.216
Pressure drop system side	kPa	13	22	29	13	22	29	20	26	31	20	26	31	11	22	30	11	22	30
Cooling performance 7 °C / 12 °C (3)																			
Cooling capacity	kW	1,55	2,08	2,40	1,55	2,08	2,40	3,00	3,45	3,80	3,00	3,45	3,80	4,00	6,00	7,00	4,00	6,00	7,00
Sensible cooling capacity	kW	1,28	1,68	1,97	1,28	1,68	1,97	2,01	2,50	2,85	2,01	2,50	2,85	2,85	4,50	5,30	2,85	4,50	5,30
Water flow rate system side	l/h	267	358	413	267	358	413	516	593	654	516	593	654	686	1.030	1.201	686	1.030	1.201
Pressure drop system side	kPa	13	22	29	13	22	29	21	27	32	21	27	32	11	23	30	11	23	30
Fan																			
Type	type	Tangential			Tangential			Tangential			Tangential			Tangential			Tangential		
Fan motor	type	Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous			Asynchronous		
Number	no.	1			1			1			1			1			1		
Air flow rate	m³/h	320	390	440	320	390	440	370	470	540	370	470	540	535	859	1082	535	859	1082
Input power	W	22	23	27	22	23	27	31	41	48	31	41	48	38	55	75	38	55	75
Fan coil sound data (4)																			
Sound power level	dB(A)	42,0	48,0	53,0	42,0	48,0	53,0	44,0	49,0	54,0	44,0	49,0	54,0	44,0	54,0	60,0	44,0	54,0	60,0
Sound pressure level	dB(A)	34,0	39,5	44,5	34,0	39,5	44,5	35,5	40,5	45,5	35,5	40,5	45,5	35,5	45,5	51,5	35,5	45,5	51,5
Diameter hydraulic fittings																			
Main heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"			3/4"			3/4"		
Power supply																			
Power supply	V/Ph/Hz	230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz			230V~50Hz		

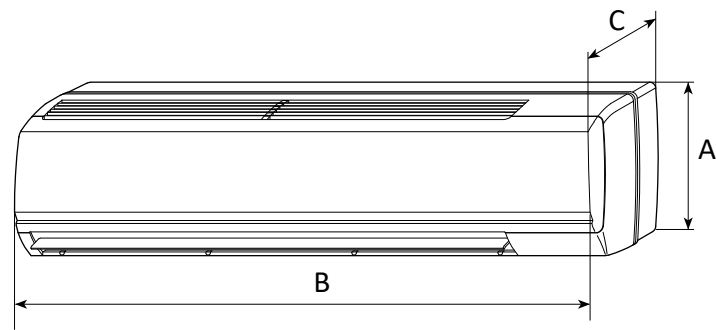
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

(2) Room air temperature 20 °C d.b.; Water (in/out) 45 °C/40 °C; EUROVENT (listing FCU AERMEC 2025)

(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT (listing FCU AERMEC 2025)

(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



		FCW23VL	FCW33VL	FCW43VL	FCW53VL	FCW232V	FCW233V
Dimensions and weights							
A	mm	298	305	360	365	298	298
B	mm	880	990	1170	1450	880	880
C	mm	205	210	220	230	205	205
Empty weight	kg	9	10	19	28	9	9

		FCW332V	FCW333V	FCW432V	FCW433V	FCW532V	FCW533V
Dimensions and weights							
A	mm	305	305	360	360	365	365
B	mm	990	990	1170	1170	1450	1450
C	mm	210	210	220	220	230	230
Empty weight	kg	10	10	19	19	28	28

Aermec reserves the right to make any modifications deemed necessary.
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responsibility or liability for errors or omissions.

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