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WiFi

BLE

Carisma Whisper CFF-ECM-MVM

Residential Fan coil units

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Residential Fan coil units

WiFi ((BLE)) (*)

The range includes 5 sizes (from 75 to 645 m³/h) with 2 row coil.

The Carisma Whisper CFF-ECM-MVM fan coil, thanks to the casing made entirely of metal with the outlet grid of anodized aluminium, combines a reduced dimension with a modern aesthetic, while maintaining great performances in terms of sound and consumption.

The CFF-ECM-MVM combines a reduced dimension, (130 mm depth), with a modern aesthetic that perfectly suits with any kind of furnishing, while maintaining great performances in terms of sound and consumption.

The Carisma CFF-ECM-MVM range is equipped with BLAC brushless and sensorless type synchronous electronic motor with permanent magnets, controlled by an inverter board designed and developed in Italy. The air flow rate can be varied in continuous by means of a 1-10 V signal.

The extreme efficiency, also at a low speed, makes possible a great reduction in electric consumption with absorption values, under normal operating conditions, that are no greater than 5 Watt.
The excellent values in terms of sound levels have been maintained in all working conditions, without any resonance phenomenon at any frequency.

The advanced controls CB-Touch EASY or CB-Touch with Bluetooth and Wi-Fi technology, together with the possibility of management via APP, make this fan coil unit the ideal solution for the air-conditioning of all residential ambients.

Outer casing: The casing is made entirely of metal with the outlet grid of anodized aluminium, all of beautiful design and great strength. White RAL 9003.

Inner casing: Made of 1 mm galvanized steel, a rear panel and two lateral sides insulated with 3 mm polyolefin (PO) foam (B-s2-d0 EN 13501-1).

Filter: Polypropylene cellular fabric regenerating filter. The filter frame, made of synthetic material, is inserted into special plastic sliding guides fastened to the internal structure for easy insertion and removal of the filter.

Fan assembly: Made of plastic tangential fan with anti-vibration fins. The fan hub, dynamycally and statically balanced, is directly secured onto the motor shaft.

Three phase permanent magnet DC brushless electronic motor that is controlled with current reconstructed according to a BLAC sinusoidal wave. The inverter board that controls the motor operation is powered by 230 Volt, single-phase and, with a switching system, it generates a three-phase frequency modulated, wave form power supply. The electric power supply required for the machine is therefore single-phase with voltage of 230 - 240 V and frequency of 50 - 60 Hz.

Coil: It is manufactured from drawn copper tube and the aluminium fins are mechanically bonded onto the tube by an expansion process. The coil has two Ø 1/2 inch BSP internal connections. The coil has Ø 1/8" inch BSP air vent and drain. The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
Flow and return pipe connections are situated at the same end on the left side looking at the unit. On request we can deliver the unit with the connections on the right end side: this must be specified on the order as this operation can not be carried out on site during installation.

Valves: The versions without valves or with mounted valves are available for all sizes.
The available valves are of 2- or 3-way type. The valves can be ordered separately and easily installed on the basic units without valves.

Condensate collection tray: Made of plastic (ABS UL94 HB) and fixed to the internal structure. The outside diameter of the condensate discharge pipe is Ø 15 mm.

Carisma Whisper CFF-ECM-MVM

(*) **Sabiana WiFi**, **il clima amico sempre con te**

Sabiana WiFi is the App for the control at a distance of your Sabiana system of-climatisation. Free and easy to use, it needs only a wireless network and a smartphone with internet connection.
Using the "Cloud" it allows to manage, program and supervise the status of Your air conditioners wherever You are.
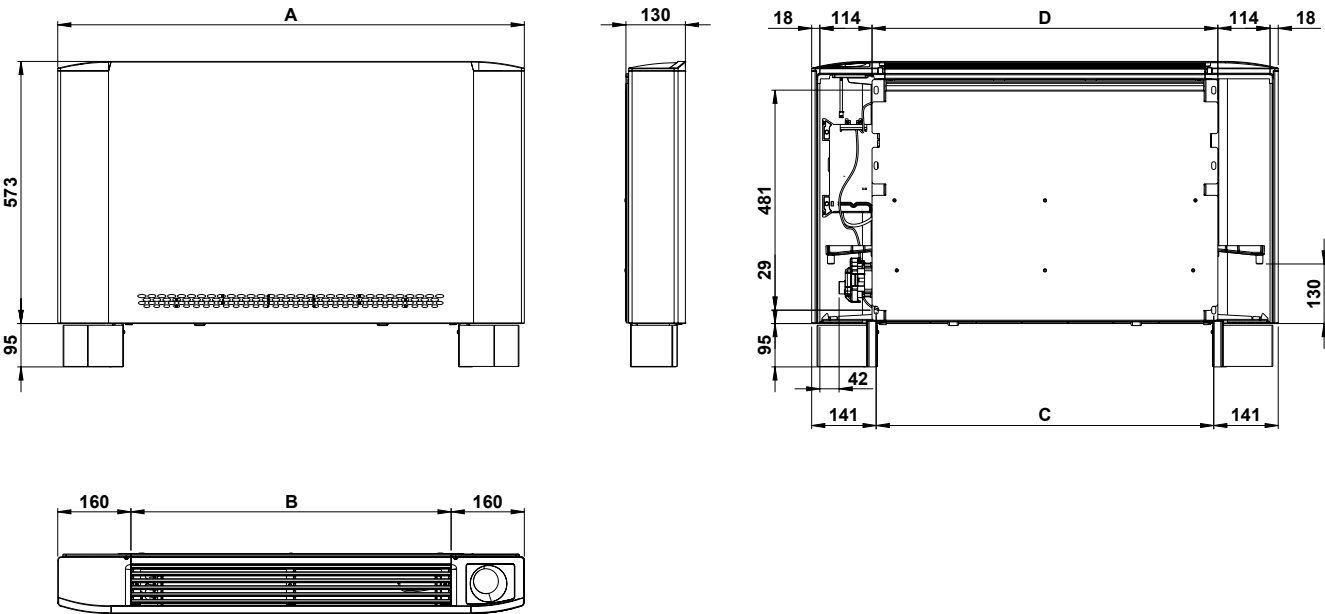
(*) **Sabiana BLE**, **il clima a portata di mano**

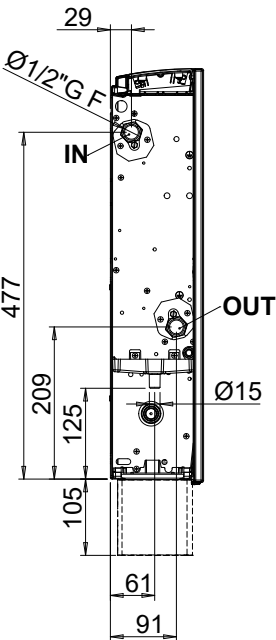Sabiana BLE is the new App for Android™ and iOS systems to set, manage and control Your climatisation system via Bluetooth Low Energy (BLE) transmission. Free and easy to configure and use, it needs only a smartphone with a Bluetooth connection (version 4.0 or later versions).

(*) See availabilty function on controls.

Carisma Whisper CFF-ECM-MVM │

Standard version with casing

Coil connections

DIMENSION, WEIGHT AND WATER CONTENT

Dimension (mm)

Model	10	20	30	40	50
A	620	820	1020	1220	1420
B	300	500	700	900	1100
C	338	538	738	938	1138
D	356	556	756	956	1156

Weight (kg)

Model	Weight with packaging					Weight without packaging				
	10	20	30	40	50	10	20	30	40	50
	13,0	16,4	20,3	23,9	27,9	11,5	14,7	18,2	21,6	25,2

Water content (litres)

Model	10	20	30	40	50
	0,4	0,7	1,1	1,4	1,7

Carisma Whisper CFF-ECM-MVM

The following standard rating conditions are used:

COOLING
Entering air temperature: +27 °C d.b.   +19 °C w.b.
Water temperature: +7 °C E.W.T.   +12 °C L.W.T.

HEATING
Entering air temperature: +20 °C
Water temperature: +45 °C E.W.T. +40 °C L.W.T.

Model		CFF-ECM-MVM 10						CFF-ECM-MVM 20						CFF-ECM-MVM 30					
Inverter power		1	2	3,5	5	7,5	10	1	2	3,5	5	7,5	10	1	2	3,5	5	7,5	10
			MIN		MED		MAX		MIN		MED		MAX		MIN		MED		MAX
Eurovent certified performances		-	(E)	-	(E)	-	(E)	-	(E)	-	(E)	-	(E)	-	(E)	-	(E)	-	(E)
Air flow	m³/h	75	90	110	130	170	205	125	145	175	205	255	305	190	225	270	315	395	470
Cooling total emission (E)	kW	0,40	0,48	0,58	0,66	0,80	0,92	0,67	0,83	1,01	1,15	1,39	1,62	0,92	1,08	1,56	1,91	2,30	2,61
Cooling sensible emission (E)	kW	0,30	0,36	0,44	0,52	0,64	0,75	0,50	0,62	0,76	0,88	1,08	1,28	0,67	0,79	1,15	1,41	1,72	1,99
Heating emission (E)	kW	0,55	0,60	0,68	0,78	0,96	1,10	0,97	1,01	1,16	1,32	1,57	1,81	1,52	1,62	1,85	2,10	2,53	2,90
Dp Cooling (E)	kPa	4,9	6,0	7,5	9,1	12,0	14,7	3,1	3,6	4,3	4,9	6,1	7,4	4,5	5,4	8,6	11,5	15,2	18,6
Dp Heating (E)	kPa	6,1	6,7	8,0	9,6	13,0	16,2	3,7	3,9	4,4	5,0	6,1	7,3	7,1	7,7	9,2	11,0	14,6	18,2
Motor power input (E)	W	3,2	3,5	4,2	5,2	7,4	10,3	3,7	4,0	4,9	6,3	9,5	14,0	4,1	4,8	6,3	8,6	14,1	21,6
Sound power (Lw)) (E)	dB(A)	31	33	36	40	45	50	30	33	38	42	47	52	32	34	39	43	47	53
Sound pressure (Lp) [1]	dB(A)	22	24	27	31	36	41	21	24	29	33	38	43	23	25	30	34	38	44

Model		CFF-ECM-MVM 40						CFF-ECM-MVM 50					
Inverter power		1	2	3,5	5	7,5	10	1	2	3,5	5	7,5	10
			MIN		MED		MAX		MIN		MED		MAX
Eurovent certified performances		-	(E)	-	(E)	-	(E)	-	(E)	-	(E)	-	(E)
Air flow	m³/h	220	260	320	380	480	575	255	300	365	430	535	645
Cooling total emission (E)	kW	1,14	1,45	2,06	2,50	2,97	3,36	1,44	1,95	2,55	2,92	3,37	3,81
Cooling sensible emission (E)	kW	0,82	1,05	1,48	1,80	2,17	2,49	1,04	1,40	1,82	2,10	2,47	2,83
Heating emission (E)	kW	1,79	1,91	2,23	2,58	3,13	3,62	2,19	2,25	2,61	3,00	3,60	4,20
Dp Cooling (E)	kPa	7,3	10,2	17,3	23,7	31,7	39,1	4,6	6,4	9,1	11,2	13,9	16,9
Dp Heating (E)	kPa	11,7	12,9	16,3	20,6	28,3	36,2	6,4	6,6	8,0	9,7	12,8	16,2
Motor power input (E)	W	4,7	5,4	7,2	9,9	16,4	25,4	5,3	6,1	8,2	11,4	19,0	29,5
Sound power (Lw)) (E)	dB(A)	33	37	41	45	51	55	34	38	42	46	51	55
Sound pressure (Lp) [1]	dB(A)	24	28	32	36	42	46	25	29	33	37	42	46

(E) Eurovent certified performance
(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec

On board controls

CB-Touch EASY	Automatic speed touch EASY control with electronic thermostat and seasonal/ventilation mode selection (to be used with UP-Touch EASY power unit only)
CB-Touch	Automatic speed on board touch control with WiFi/BLE connectivity with electronic thermostat and ventilation/summer/winter switch (to be used with UP-Touch power unit only)
UP-Touch EASY	UP-Touch power unit kit supplied with separate packaging, for CB-Touch EASY on board control
UP-Touch	UP-Touch power unit supplied with separate packaging, for CB-Touch on board control

Wall controls

WM-AU	Automatic speed wall control with electronic thermostat and summer/winter switch (to be used with UP-Touch power unit only) [1]
T-MB2	Wall control with LCD color display and WiFi (to be used with UP-Touch power unit or MB board only) [1]
UP-Touch	UP-Touch power unit supplied with separate packaging, for WM-AU and T-MB2 wall controls
WM-503-AC-EC	Automatic speed control with electronic thermostat to be mounted in the 503 box (to be used with UP-503-AC-EC only)
UP-503-AC-EC	Power unit UP-503 not fitted on the unit, for WM-503-AC-EC remote control (to be used with Kit 503-KNX only)

Controls for MB board or UP-Touch power unit [1] [2]

MB-CF-M	MB electronic board fitted on the unit
MB-CF-S	MB electronic board supplied with separate packaging
T-MB2	Wall control with LCD color display and WiFi (to be used with UP-Touch power unit or MB board only) [1]
PSM-DI	PSM-DI multifunction control panel (to be used with UP-Touch power unit or MB board only) [1]
T-DI	T-DI touch screen multifunction control panel (to be used with MB board only)
SabWeb	Web gateway for Sabiana Cloud (to be used with MB board only)

Management system for a network of fan coils with MB electronic board	
Sabianet	Hardware/software supervisory system (to be used with UP-Touch power unit or MB board only) [1]
Router-S	Router for Sabianet (default) or for BMS systems not provided by Sabiana
SIOS	Relay output board

[1] Not to be used with UP-Touch EASY power unit
[2] To the UP-Touch power unit max. 15 units can be connected

Controls for KNX systems

WM-KNX	Wall control with electronic thermostat and summer/winter switch (to be used with UP-KNX and PL mounting plate only)
UP-KNX	UP-KNX power unit supplied with separate packaging (to be used with Kit 503-KNX only)
PL-503-B	Mounting plate for wall rectangular box
PL-QUA-B	Mounting plate for wall round or square box

NOTE: for more detailed information about Controls and for the complete list of the main Accessories, see the dedicated pages.

Carisma Whisper CFF-ECM-MVM

Carisma Whisper CFF-ECM-MVM | CHARACTERISTIC

Digital touch control manageable via Wi-Fi and Bluetooth® with the app available into the Android™ and IOS® version
Interfaced with Modbus e KNX home automation systems

Tangential fan: strength and silent at the same time
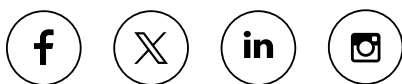The double aspiration reduces the noise and maximizes the emissions

Maximum performance, compact dimension: there is not such efficient and compact fan coil unit on the market EC motor with inverter at low energy consumption
Controls and valves already assembled: easier installation
Electronic board with contacts for the activation of boiler or heat pump

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Sabiana app

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Sabiana 4 - Operative unit "via Zanella 27 - Corbetta (MI)"