Omnia UL

Fan coil for universal installation

• **Fully silent functioning**
• **Ideal for residential or office solutions**

DESCRIPTION

fan coil can be installed in any 2 pipe system and operates with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

VERSIONS

C Vertical installation, intake at base, electronic thermostat
PC Vertical installation, intake at base, electronic thermostat, Cold Plasma purifier
S Vertical and horizontal installation, intake at base, without commands
UL Standard - Vertical installation, bottom intake, manual switch-over

FEATURES

Case

Protective metal cabinet with anti-corrosion polyester RAL 9003 paint, whereas the head with the air distribution grille is in RAL 7047 plastic.

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 electric motor is single-phase multi-speed (3 selectable), mounted on anti-vibration supports and with a permanently inserted capacitor.
The plastic augers are extractable for easy and efficient cleaning.

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.

The hydraulic connections can be inverted during installation.
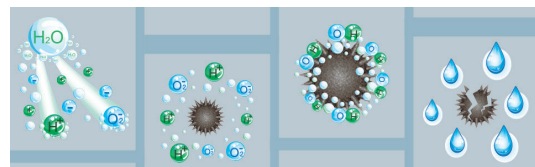
Condensate drip

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

Air filter

I ventilconvettori sono equipaggiati, di serie, con filtro aria per le specifiche consultare la documentazione dell'unità.
APC versions equipped with Coldplasma Air purifier.

The purifier is able to reduce pollutants, decomposing their molecules using electrical charges, causing the water molecules in the air to split into positive and negative ions. These ions neutralise the molecules in the gaseous pollutants, obtaining products normally present in clean air. The device is able to eliminate 90% of the bacteria. The result is clean, ionized air, free of foul odours.

ACCESSORIES

Control panels and dedicated accessories

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.

TX: Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors for 2/4 pipe. 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).

WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

WMT16: Electronic thermostat with thermostated ventilation.

AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.

This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.

For more information about the use of the application and the available functions, refer to the respective documentation on the website.

VMF system

DI24: Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.

DI24CP: Complete flush-mounted interface plate with support for DI24, Vimar brand, Arké series, graphite gray color.

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-E2U: User interface on the machine, to be combined with the VMF-E19 and VMF-E19I accessory. It has 2 selector switches, one for temperature and the other for speed control.

VMF-E3: Wall mounted user interface, to be combined with accessories VMF-E19, VMF-E19I, 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-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.

VMHI: The VMHI panel can be used as a user interface for VMF-E19/E19I thermostats, GLFxN/M or GLLxN grids, or as an interface for the MZC system. What determines the function to be performed by the user interface is determined by its correct parametrisation and by following the electrical connections between interface and thermostat or interface and plenum.

Common accessories

AMP: Wall mounting kit

DSC: Condensate drainage device.

VCH: 3-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.

VCHD: 2-way motorised valve kit. The kit consists of a valve, an actuator and the relative pipe fittings.

BC: Condensate drip.

GU: Intake grid covers the front space between the ornamental feet and does not interfere with the filter.

PCU: Sheet metal panel closing the rear of the unit.

ZU1: Pair of stylish and structural feet.

GU: Intake grid covers the front space between the ornamental feet and does not interfere with the filter.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Accessory	UL12C	UL12PC	UL12S	UL17C	UL17PC	UL17S	UL27C	UL27PC	UL27S	UL37C	UL37PC	UL37S
AER503IR			•			•			•			•
PRO503			•			•			•			•
SA5			•			•			•			•
SW3	•	•	•	•	•	•	•	•	•	•	•	•
SW5			•			•			•			•
TX			•			•			•			•
WMT10			•			•			•			•
WMT16			•			•			•			•

VMF system

Accessory	UL12S	UL17S	UL27S	UL37S
DI24	•	•	•	•
DI24CP	•	•	•	•
VMF-E19	•	•	•	•
VMF-E2U	•	•	•	•
VMF-E3	•	•	•	•
VMF-E4DX	•	•	•	•
VMF-E4X	•	•	•	•
VMF-IR	•	•	•	•
VMHI	•	•	•	•

3 way valve kit

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
VCH	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

2 way valve kit

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
VCHD	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Condensate drip

Accessory	UL17	UL17C	UL17PC	UL17S	UL27	UL27C
BC10 (1)	•	•	•	•	•	•
BC20 (2)	•	•	•	•	•	•

Accessory	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
BC10 (1)	•	•	•	•	•	•
BC20 (2)	•	•	•	•	•	•

(1) For vertical installation.
(2) For horizontal installation.

Condensate drainage

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
DSC5 (1)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

(1) The accessory cannot be fit if the accessory BC10 or BC20 is installed.

Wall mounting kit

Accessory	UL12C	UL17C	UL17PC	UL27C	UL27PC	UL37C	UL37PC
AMP10	•	•	•	•	•	•	•

Panel closing the rear of the unit

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
PCU12	•	•	•	•												
PCU17					•	•	•	•								
PCU27									•	•	•	•				
PCU37													•	•	•	•

Intake grids

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
GU12 (1)	•	•	•	•												
GU17 (1)					•	•	•	•								
GU27 (1)									•	•	•	•				
GU37 (1)													•	•	•	•

(1) The combination with a pair of stylish and structural feet is mandatory.

Pair of stylish structural feet

Accessory	UL12	UL12C	UL12PC	UL12S	UL17	UL17C	UL17PC	UL17S	UL27	UL27C	UL27PC	UL27S	UL37	UL37C	UL37PC	UL37S
ZU1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Configuration

Configuration options

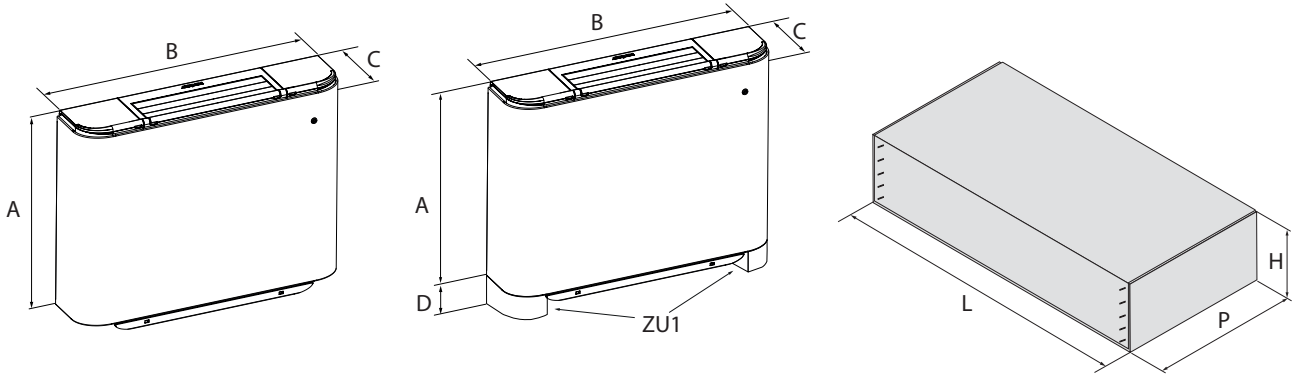| Field	Description
1,2	**UL**
3,4	**Size** 12, 17, 27, 37
5	**Version**
C	Vertical installation, intake at base, electronic thermostat
PC	Vertical installation, intake at base, electronic thermostat, Cold Plasma purifier
S	Vertical and horizontal installation, intake at base, without commands
UL	Standard - Vertical installation, bottom intake, manual switch-over

PERFORMANCE SPECIFICATIONS

Technical data

2-pipe

		UL12			UL17			UL27			UL37		
		1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)													
Heating capacity	kW	1,06	1,46	2,01	1,54	2,12	2,91	2,89	3,83	4,62	3,63	4,87	5,94
Water flow rate system side	l/h	93	128	176	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	1	2	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)													
Heating capacity	kW	0,52	0,73	1,00	0,76	1,05	1,44	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	92	126	176	133	183	251	249	331	399	305	420	513
Pressure drop system side	kPa	1	1	2	2	3	3	5	8	11	7	13	18
Cooling performance 7 °C / 12 °C													
Cooling capacity	kW	0,53	0,67	0,82	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	0,38	0,52	0,68	0,52	0,69	0,96	0,97	1,30	1,61	1,13	1,59	2,00
Water flow rate system side	l/h	94	117	145	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	1	2	2	2	3	5	5	8	11	7	13	19
Fan													
Type	type	Centrifugal			Centrifugal			Centrifugal			Centrifugal		
Fan motor	type	On-Off			On-Off			On-Off			On-Off		
Number	no.	1			1			2			2		
Air flow rate	m³/h	80	120	180	110	160	240	190	270	350	240	350	460
Input power	W	8	18	18	23	25	32	24	27	35	30	35	42
Electrical wiring		V1	V2	V3	V1	V2	V3	V1	V2	V3	V1	V2	V3
Fan coil sound data (3)													
Sound power level	dB(A)	31,0	37,0	46,0	34,0	43,0	48,0	35,0	43,0	48,0	34,0	43,0	50,0
Sound pressure	dB(A)	23,0	29,0	38,0	26,0	35,0	40,0	27,0	35,0	40,0	26,0	33,0	40,0
Finned pack heat exchanger													
Water content main heat exchanger	l	0,3			0,4			0,6			0,8		
Diametre hydraulic fittings													
Main heat exchanger	Ø	1/2"			1/2"			1/2"			1/2"		
Power supply													
Power supply		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
(3) 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

ZU1

Dimensions and weights

		UL12	UL12C	UL12S	UL17	UL17S	UL17C	UL17PC	UL27	UL27S	UL27C	UL27PC	UL37	UL37S	UL37C	UL37PC
Dimensions and weights																
A	mm	485	485	485	485	485	485	485	485	485	485	485	485	485	485	485
B	mm	640	640	640	750	750	750	750	980	980	980	980	1200	1200	1200	1200
C	mm	173	173	173	173	173	173	173	173	173	173	173	173	173	173	173
D	mm	94	94	94	94	94	94	94	94	94	94	94	94	94	94	94
Empty weight	kg	12	12	12	13	13	13	13	17	17	18	18	20	20	20	20
Dimensions and weights for transport																
H	mm	275	275	275	275	275	275	275	275	275	275	275	275	275	275	275
L	mm	710	710	710	820	820	820	820	1050	1050	1050	1050	1270	1270	1270	1270
P	mm	590	590	590	590	590	590	590	590	590	590	590	590	590	590	590
Weight for transport	kg	12,5	13,0	12,5	14,5	14,5	15,0	15,0	19,0	19,0	19,5	19,5	22,5	22,5	23,0	23,0

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