Omnia HL

Fan coil for universal and floor installation

- **Very quiet**
- **Ideal for residential or office solutions**
- **Version with Coldplasma Air purifier**

DESCRIPTION

Fan coils for heating, cooling, and dehumidification.
It can be installed on 2-pipe systems and combined with any heat generator even at low temperatures. Choosing the optimal solution for any requirement is easy thanks to the various versions available and to the possibility of horizontal or vertical installation, depending on the version.

VERSIONS

HL Metallic white cabinet with switch
L White cabinet with self-closing louver and electronic thermostat
N White cabinet with electronic thermostat VMF
PC White cabinet with electronic thermostat and Cold Plasma purifier
S Metallic withe cabinet without control board

FEATURES

Case

Top design metal protection cabinet with rounded design and painted with anti-corrosion polyester powders:
— Cover RAL 9002
— Top and supports RAL 7044.
The air distribution grid is adjustable. The fan coil switches off automatically when the grid is closed.

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 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.
The scroll that protects the fan can be extracted and inspected, for easy and effective cleaning.

Heat exchanger coil

With copper pipes and aluminium louvers, 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.

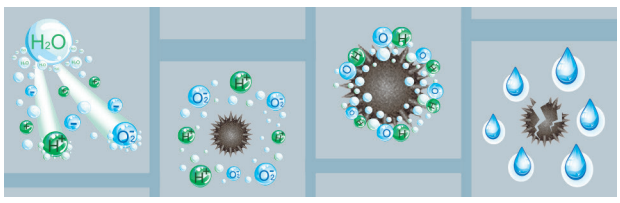
■ *The hydraulic connections can be inverted during installation.*

Condensate drip

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

Air filter

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

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.
FMT10: Electronic thermostat for fan coil in to 2/4 pipe systems.
PRO503: Wall box for AER503IR and VMF-E4 thermostats.
PX2: Commutator switch.
PX2C6: Commutator switch. Kit to 6 pz.
SA5: air probe kit (L = 15 m) with probe-locking cable grommet.
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. In case you decide to install Aermec thermostats and current absorbed by the unit exceeds 0.7 A, you're obliged to include SIT3 accessory.
SIT5: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel. 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 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.
SWA: External probe accessory SWA (length L = 6m). It detects the temperature of the room air if connected to the connector (A) of the FMT21 panel. The room air temperature probe, incorporated in the panel, is automatically disabled. It detects the temperature of the water in the system for ventilation consent if connected to the connector (W) of the FMT21 panel. Two SWA probes can be connected simultaneously to the FMT21 panel.
TPF: Electronic thermostat, black, with thermostated or continuous ventilation.
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).
WMT05: Electronic thermostat with thermostated ventilation.
WMT10: Electronic thermostat, white, with thermostated or continuous ventilation.

VMF system

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-E2H: User interface on the machine, to be combined with the VMF-E19 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, VMF-E3 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.
VMHI: The VMHI panel can be used as a user interface for VMF-E0X/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.

■ *Compatibility with VMF system: for more information about the system, refer to the dedicated documentation.*

Valves for main coil

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. It can be installed on fan coils with both right and left connections.

Installation accessories

BC10: Condensate drip.
DSC5: Condensate drainage device.
PCH: Panel closing the rear of the unit white
ZH1: White skirting for floor mounting.
ZH1B: White feet for floor mounting with skirting board.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

Model	Ver	16	26	36
AER503IR (1)	S	•	•	•
FMT10	S	•	•	•
PRO503	S	•	•	•
PX2	S	•	•	•
PX2C6 (2)	S	•	•	•
SA5 (3)	S	•	•	•
SIT3 (4)	S	•	•	•
SIT5 (5)	S	•	•	•
SW3 (3)	S	•	•	•
SW5 (3)	S	•	•	•
SWA	S	•	•	•
TPF	S	•	•	•
TX (1)	S	•	•	•
WMT05 (1)	S	•	•	•
WMT10 (1)	S	•	•	•

(1) Wall-mounting. If the unit intake exceeds 0.7A, or several units need to be managed with a single thermostat, board SIT3 and/or SIT5 is required.
(2) Only wall-mount installation
(3) Probe for AER503IR-TX thermostats, if fitted.
(4) Cards for AER503IR-TX thermostats, if present, to be installed if the unit absorption exceeds 0,7 Ampere.
(5) Probe for AER503IR-TX thermostats, if fitted.

VMF system

Model	Ver	16	26	36
VMF-E19 (1)	S	•	•	•
VMF-E2H	S	•	•	•
VMF-E3	S	•	•	•
VMF-E4DX	S	•	•	•
VMF-E4X	S	•	•	•
VMF-IO	S	•	•	•
VMF-IR	S	•	•	•
VMF-LON	S	•	•	•
VMHI	S	•	•	•

(1) Also the accessory VMF-SIT3V is mandatory if the unit exceeds 0.7 Amperes.

3 way valve kit

Accessory	HL16	HL26	HL36
VCH	•	•	•

2 way valve kit

Accessory	HL16	HL26	HL36
VCHD	•	•	•

Condensate drip

Ver	16	26	36
HL,L,N,PC,S	BC10 (1)	BC10 (1)	BC10 (1)

(1) For vertical installation.

Condensate drainage

Ver	16	26	36
HL,L,N,PC,S	DSC5 (1)	DSC5 (1)	DSC5 (1)

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

Panel closing the rear of the unit

Accessory	HL16	HL26	HL36
PCH16	•		
PCH26		•	
PCH36			•

Wall mounting kit

Accessory	HL16	HL26	HL36
AMP10	•	•	•

Pair of stylish structural feet

Model	Ver	16	26	36
ZH1	HL,L,N,PC,S	•	•	•

Model	Ver	16	26	36
ZH1B	HL,L,N,PC,S	•	•	•

PERFORMANCE SPECIFICATIONS

2-pipe

		HL16			HL26			HL36		
		1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)										
Heating capacity	kW	1,54	2,12	2,91	2,89	3,83	4,62	3,53	4,87	5,94
Water flow rate system side	l/h	135	186	255	254	336	405	310	427	521
Pressure drop system side	kPa	1	2	4	5	8	11	3	5	7
Heating performance 45 °C / 40 °C (2)										
Heating capacity	kW	0,73	1,05	1,90	1,44	1,90	2,29	1,75	2,42	2,95
Water flow rate system side	l/h	126	183	331	249	331	399	305	420	513
Pressure drop system side	kPa	1	3	8	5	8	11	7	13	18
Cooling performance 7 °C / 12 °C (3)										
Cooling capacity	kW	0,69	0,87	1,17	1,26	1,65	1,99	1,63	2,26	2,79
Sensible cooling capacity	kW	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	122	153	206	220	289	349	286	394	487
Pressure drop system side	kPa	2	3	5	5	8	11	7	13	19
Fan										
Type	type	Centrifugal								
Fan motor	type	On-Off								
Number	no.		1			2			2	
Air flow rate	m^3/h	110	160	240	190	270	350	240	350	460
Input power	W	23	25	32	24	27	35	30	35	42
Fan coil sound data (4)										
Sound power level	dB(A)	34,0	43,0	48,0	35,0	43,0	48,0	34,0	43,0	50,0
Sound pressure	dB(A)	26,0	35,0	40,0	27,0	35,0	40,0	26,0	33,0	40,0
Diametre hydraulic fittings										
Main coil	Ø	1/2"								
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.

DIMENSIONS

Dimensions and weights

		HL16	HL26	HL36
Dimensions and weights				
A	mm	605	615	623
C	mm	189	191	198
D	mm	93	93	93
Empty weight	kg	15	18	21