

# OMNIA

FAN COIL FOR RESIDENTIAL APPLICATIONS  
EXCLUSIVE DESIGN, NUMEROUS VERSIONS

---



Floor & ceiling installation  
Applicable with VMF management system

---



# OMNIA HL - UL and ULI

## THE RIGHT CLIMATE, WHENEVER AND WHEREVER YOU WANT IT



The extremely low heat inertia that is characteristic of the fan coil gives rapid warmth (or coolness) only when and where it is needed, without pointlessly wasting energy. A fan coil system can be compared to a lighting system: just as a light is switched on and off only when and where it serves a purpose, the fan coil provides warmth (or coolness) only when and where it is necessary.

## WARM AND COOL IN A SINGLE SYSTEM



The OMNIA HL-UL fan coil is an essential element in modern residential heating: it replaces and supersedes outdated radiators, improving air quality and giving substantial energy savings. In summer, when it get very hot, OMNIA HL-UL becomes an unbeatable air conditioning unit. There's no longer any need to waste space fitting specific units for hot and cold weather. A single fan coil system saves space and creates comfort all year long.

## INSTANT COMFORT AND INEXPENSIVE



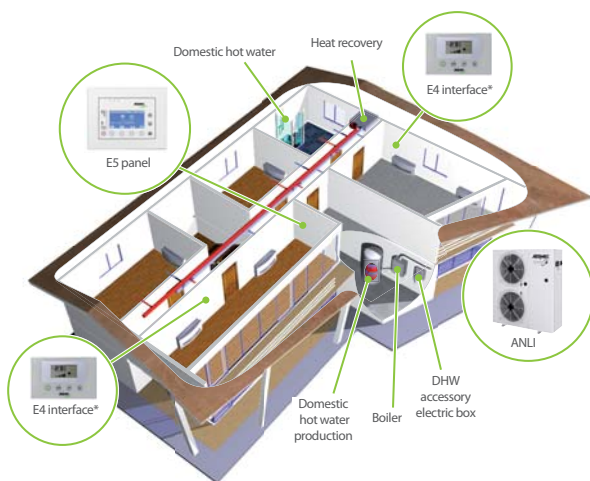
One click is all that is needed and in a few minutes the required room temperature is reached. This rapid response is at the roots of enormous energy savings that make the fan coil the most economical and ecological integrated system.

## SIMPLIFIED MAINTENANCE



A few simple operations are all that's needed to access the internal parts of the fan coil. This facilitates cleaning the filter, the fan and the condensate drain tray. Fan coil maintenance has never been so simple!

## Variable Multi Flow



VMF is the brand new system for managing and controlling the entire heating-air conditioning system and domestic hot water production.

- The system allows the various elements of the system to interact: fan coils and possible integrated heating systems (solar, boiler, etc.).

The VMF hydronic system provides maximum comfort and maximum energy saving thanks to the CONTINUOUS VARIATION:

- of the refrigerant delivery inside the chiller/inverter heat pump
- of the treated air flow rate from the fan coil with brushless motor;
- of the water flow rate (controlling the inverter hydraulic pumps).

Furthermore, by using the ECONOMY mode, the VMF system adapts the function of each system element (chiller, fan coils, etc.) to obtain maximum energy efficiency.

As awarded by  
The Chicago Athenaeum:  
Museum of  
Architecture and Design.

\* Winner for the International design Award "Good Design 2010" for the "Electronics"

# FAN COILS

## CLEAN HEALTHY AIR



OMNIA HL-UL heats rooms using hot water at a low temperature (50°C as against the 70°C typical of radiators). This avoids house dust being toasted and the unpleasant occurrence of so-called "bearded walls": dust burnt by radiators stains the walls and, much worse, our lungs. A special electrostatic filter keeps household air clean and salubrious. Its filtration efficiency (even for micro-particles) is up to 10 times greater than that of a normal filter.

## SILENCE NEVER HEARD BEFORE

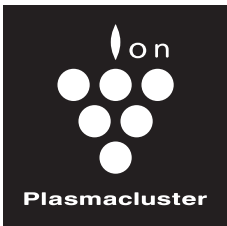


We all know that you should enter a house on tiptoe. That's why the OMNIA HL-UL fan coil has been designed to guarantee silent operation. Studies on air flow inside the ventilation system have allowed us to achieve a noise level that is totally imperceptible. The fan-motor assembly is anchored to the frame: the mechanical system is well balanced and vibration is reduced to a minimum.

## EASY INSTALLATION



OMNIA HL-UL makes the installer's job quick and easy. The practical assembly template, machined directly on the fan coil packaging allows easy installation without any errors. The plumbing connections can be positioned either on the right or the left, for extraordinary flexibility of assembly.



Plasmacluster is an exclusive system that does not just deodorise and clean the air but it eliminates viruses, mould, dust mites, pollens and dust, as well.

The Plasmacluster purifier re-establishes the right balance of positive and negative ions in closed spaces as well as refreshing the air and guaranteeing ideal conditions for a healthy life. The result is air that is always fresh, deodorised, really purified and extremely healthy that makes for relaxation and recouping ones energies exactly like being in a wood, near a waterfall.

Asthma, dermatitis and other problems of the airways are often caused by pollution, dust mites, pollens and pet hair.

Plasmacluster ensures first class air sanitisation in closed spaces making it a valid aid against the spread of allergens. The air purification mechanism used by the Plasmacluster can be put briefly like this: by decomposing a number of molecules contained in the room's humidity with electric discharges, a generator creates a flow of hydrogen and oxygen ions (plasma). Clusters of ions gather around the polluting agent (e.g. virus). At this point, positive and negative ions join to form the hydroxyl radical  $OH$  that robs the surrounded virus of the oxygen necessary for its survival.

From the acquisition of the oxygen by the  $OH$  hydroxyl, water is generated that is sent back into the room and, at the same time, the virus damaged by the reaction is weakened.

The Plasmacluster purification process is completed. This technology simulates a natural process that has always purified the air in the terrestrial atmosphere, that is why the Plasmacluster technology is absolutely harmless for people and pets.



# OMNIA HL



## ELECTRONIC THERMOSTAT

OMNIA HL is also available in the version with a multi-function electronic thermostat.

Through the control panel you can:

- Set the required temperature;
- Select one of three fan speeds;
- Activate the AUTO function which automatically varies the speed of the fan according to the difference between the set temperature and the room temperature;
- View the operating mode (heating or cooling) thanks to different coloured LED lights.

Version Omnia HL equipped with Plasmacluster has cleaning control operating . When the fan start, Plasmacluster start up automatically.

The exclusive, soft, flowing design means the control panel is fully integrated into the cabinet, where it is protected by a strong, practical door.

## WIDE CHOICE OF VERSIONS

OMNIA HL meets any installation need. The following versions are available:

- With cabinet for floor-standing installation - available with Plasmacluster filter (factory-mounted only);
- With cabinet for wall-mounting installation available with Plasmacluster filter (factory-mounted only);
- With cabinet for wall/ceiling-mounting installation;
- Without cabinet, for installation in false ceilings and walls.

The versions with cabinet are available in two colours:

- White housing;
- Grey housing.







# OMNIA UL e ULI

## WIDE CHOICE OF VERSIONS

OMNIA UL meets any installation need.

The following versions are available:

- With cabinet for floor-standing installation - available with Plasmacluster filter (factory-mounted only);
- With cabinet for wall-mounting installation - available with Plasmacluster filter (factory-mounted only);
- With cabinet for wall/ceiling-mounting installation;
- Without cabinet, for installation in false ceilings and walls.

Version with inverter is available in frontal aspiration.

- with cabinet without with electronic thermostat compatible with VMF System.



Omnia UL and ULI, in the version cabinet, can be inserted into the ventilcassaforma accessory, completely hiding it from view and occupying zero space.

The ventilcassaforma "hosts" the fan coil unit, and is ideal for this type of installation; in fact, it is an accessory that satisfies the requirement for rationalising space that is an integral part of modern interior design.

The ventilcassaforma has two parts: an outer frame, a recessed box and a closing panel complete with deflector. To find out which model is right for the recessed box, just match the size of the ventilcassaforma with the right size of fan coil unit.

The table below shows the correct combinations, but for more information see the ventilcassaforma brochure.

Ventilcassaforma	CHU 12 L	CHU 17 L	CHU 27 L	CHU 37 L
Fan coils	Omnia UL11 P	Omnia UL16 P	Omnia UL26 P	Omnia UL36 P
	-	Omnia ULI16 P	Omnia ULI26 P	Omnia ULI36 P

## ELECTRONIC THERMOSTAT

OMNIA UL is also available in the version with a multi-function electronic thermostat.

Through the control panel you can:

- Set the required temperature;
- Select one of three fan speeds;
- Activate the AUTO function which automatically varies the speed of the fan according to the difference between the set temperature and the room temperature;
- View the operating mode (heating or cooling) thanks to different coloured LED lights.

The elegant, soft, flowing design means the control panel is fully integrated into the cabinet, where it is protected by a strong, practical door.



## Technical data

Omnia HL-UL		11			16			26			36		
Fan speed		H	M	L	H	M	L	H	M	L	H	M	L
<b>Heating Performance - 2 pipe configuration</b>													
Heating capacity (70°C)	(1) kW	2,01	1,46	1,06	2,91	2,12	1,54	4,62	3,83	2,89	5,94	4,87	3,53
Water flow rate	(1) l/h	176	128	93	255	186	135	405	336	254	521	427	310
Pressure drops	(1) kPa	2	1	1	4	2	1	11	8	5	7	5	3
Heating capacity (50°C)	(2) kW	1,15	0,87	0,65	1,70	1,25	0,93	2,75	2,24	1,67	3,54	2,86	2,08
Water flow rate	(2) l/h	145	117	94	206	153	122	349	289	220	487	394	286
Pressure drops	(2) kPa	2	1	1	4	2	2	10	7	4	16	11	6
Heating capacity (45°C)	(3) kW	1,00	0,73	0,53	1,45	1,05	0,77	2,30	1,91	1,44	2,96	2,42	1,76
Water flow rate	(3) l/h	174	126	92	251	183	133	399	331	249	513	420	305
Pressure drops	(3) kPa	2	1	0,5	4	2	1	11	8	5	7	5	3
<b>Cooling Performance</b>													
Total cooling capacity	(4) kW	0,84	0,68	0,54	1,20	0,89	0,71	2,03	1,68	1,28	2,83	2,29	1,66
Sensible cooling capacity	(4) kW	0,70	0,53	0,39	0,99	0,71	0,54	1,64	1,33	0,99	2,04	1,62	1,16
Water flow rate	(4) l/h	145	117	94	206	153	122	349	289	220	487	394	286
Pressure drops	(4) kPa	2	1	1	5	3	2	11	8	5	19	13	7
<b>Fans</b>													
Fan	type/n°	centrifugal/1						centrifugal/2					
Air flow rate	m³/h	180	120	80	240	160	110	350	270	190	460	350	240
<b>Sound data</b>													
Sound power level	(5) dB(A)	46	37	31	48	43	34	48	43	35	50	43	34
Sound pressure level	dB(A)	38	29	23	40	35	26	40	35	27	40	33	26
<b>Electrical features</b>													
Absorbed power	W	18	12	8	32	25	23	35	27	24	42	35	30
Max. input current	A		0,09			0,15			0,18			0,22	
Electrical wiring		V3	V2	V1	V3	V2	V1	V3	V2	V1	V3	V2	V1

Omnia ULI		16			26			36		
Fan speed		H	M	L	H	M	L	H	M	L
<b>Heating Performance - 2 pipe configuration</b>										
Heating capacity (70°C)	(1) kW	2,91	2,12	1,54	4,62	3,83	2,89	5,94	4,87	3,53
Water flow rate	(1) l/h	255	186	135	405	336	254	521	427	310
Pressure drops	(1) kPa	4	2	1	5	8	11	7	13	18
Heating capacity (50°C)	(2) kW	1,70	1,25	0,93	2,75	2,24	1,67	3,54	2,86	2,08
Water flow rate	(2) l/h	206	153	122	349	289	220	487	394	286
Pressure drops	(2) kPa	4	2	2	10	7	4	16	11	6
Heating capacity (45°C)	(3) kW	1,45	1,05	0,77	2,30	1,91	1,44	2,96	2,42	1,76
Water flow rate	(3) l/h	251	183	133	399	331	249	513	420	305
Pressure drops	(3) kPa	4	2	1	5	8	11	7	12	18
<b>Cooling Performance</b>										
Total cooling capacity	(4) kW	1,20	0,89	0,71	2,03	1,68	1,28	2,83	2,29	1,66
Sensible cooling capacity	(4) kW	0,99	0,71	0,54	1,64	1,33	0,99	2,04	1,62	1,16
Water flow rate	(4) l/h	206	153	122	349	289	220	487	394	286
Pressure drops	(4) kPa	5	3	2	11	8	5	19	13	7
<b>Fans</b>										
Fan	type/n°	centrifugal/1			centrifugal/2					
Air flow rate	m³/h	240	160	110	350	270	190	460	350	240
<b>Sound data</b>										
Sound power level	(5) dB(A)	48	43	34	48	43	35	50	43	34
Sound pressure level	dB(A)	40	35	26	40	35	27	40	33	26
<b>Electrical features</b>										
Absorbed power	W	12	8	6	15	10	7	18	12	8
Max. input current	A		0,16			0,16			0,25	
Signal 0-10V	%	83	56	38	90	70	49	90	70	48

H max. speed; M med. speed; L min. speed

Power supply V/ph/Hz 230V~50Hz

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

(2) Room air 20°C b.s.; Water (in) 50°C; Water flow rate as in cooling mode (EUROVENT)

(3) Room air 20°C b.s.; Water (in/out) 45°C/40°C (EUROVENT)

(4) Room air 27°C b.s./19°C b.u.; Water (in/out) 7°C/12°C (EUROVENT)

(5) Sound power level on the basis of measurements made in compliance with Eurovent 8/2

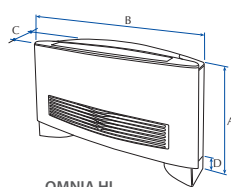
(6) FCCOP Related to: Room air 20°C b.s.; Water (in) 50°C; Water flow rate as in cooling mode



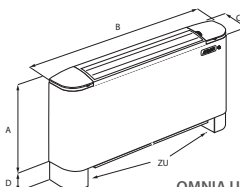
Aermec

participate in the EUROVENT program: FCH  
the products are present on the site  
[www.eurovent-certification.com](http://www.eurovent-certification.com)

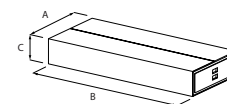
## Dimensional data



OMNIA HL



OMNIA UL - ULI



PACKAGING design example

Mod Omnia		HL 11	HL 16	HL 26	HL 36	UL 11	UL/ULI 16	UL/ULI 26	UL/ULI 36
Height / Height feet	A/D mm	600 / 93	605 / 93	615 / 93	623 / 93	513 / 93	513 / 93	513 / 93	513 / 93
Width	B mm	640	750	980	1200	640	750	980	1200
Depth	C mm	187	189	191	198	173	173	173	173
Weight <sup>1</sup>	kg	13,6	14,6	17,6	20,6	12,5	13,5	16,5	19,5
Standard coil	Ø	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Packaging Dimensions	A/B/C mm	590/275/710	590/275/820	590/275/1050	590/275/1270	590/275/710	590/275/820	590/275/1050	590/275/1270

(1) Standard configuration without accessories

Aermec S.p.A.

Via Roma, 996 - 37040 Bevilacqua (VR) - Italia

Tel. + 39 0442 633111 - Fax +39 0442 93577

sales@aermec.com - [www.aermec.com](http://www.aermec.com)

All specifications are subject to change without prior notice. Although every effort has been made to ensure accuracy, Aermec does not assume responsibility or liability for eventual errors or omissions.

Cod. DOHLULUY\_01