

# OMNIA RADIANT

## Fan coils with radiant panel for residential use

Ceiling or floor mounted

- Low temperature radiation\*
- Ventilated heating
- Cooling - dehumidification
- Energy saving
- Low operating cost

\* Radiant technology under licence



### FEATURES

#### Omnia Radiant and Omnia Radiant Plus Aermec innovative solutions

In this particular worldwide market evolution, we are pleased to present to you OMNIA Radiant, which represents the innovation of the OMNIA AERMEC series, fan coils especially designed for residential comfort.

**OMNIA Radiant** inherits all the advantages of the OMNIA UL series, and is characterized by the introduction of the frontal plate for radiant heating.

**OMNIA Radiant Plus** is provided with the DC Brushless electric engine, equipped with the latest Inverter technology, granting the highest energy efficiency and able to regulate the air flow through the continuous fan speed modulation. This allows to achieve up to 60% in energy saving when compared to the traditional On-Off fan system, in both air conditioning and heating.

OMNIA Radiant and Radiant Plus offer the following advantages when compared to the traditional systems:

- the radiant plate combination – the finned coil allows the best winter comfort with the lower energy consumption because it provides heating with lower water temperature: only 45°C against the about 65°C needed for the traditional radiator. This not only increases the comfort for the user, but also significantly increases the overall efficiency in case of heat pumps usage;
- the fan system allows to quickly reach the desired temperature, meeting the requirement of a fast start-up;
- the unit can be combined other than the boiler, also to energy saving heat pumps: air to water, water to water and geothermic type;
- the electrostatic charge filter standard supplied, provides pure and clean air;
- during summer Omnia Radiant and Radiant Plus provide air conditioning and dehumidification in a fast and efficient way in every room.

#### The four different working modes of Omnia Radiant annual functioning

##### Radiant

Heating through radiation, comfortable and noiseless, is granted by the radiant plate placed on the front of the fan coil cover; if necessary, the triple-fins deli-

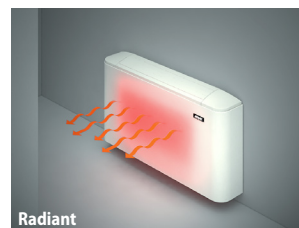
very head can be closed to increases the heating of the plate, thus maximizing the radiant effect.

##### Radiant + Natural Convection

With the triple-fins open, heating through natural convection, obtained thanks to the bigger coil exchange surface, is added to the radiant heating. As for the radiant-only mode (see above), the fan groups are in off mode. This results in acoustic comfort and energy saving.

##### Radiant + Forced Convection

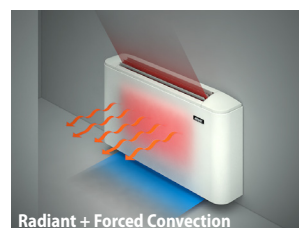
The electronic regulation, precise and reliable, continuously compares the effective indoor temperature with the desired temperature: whenever the difference between the two should prove to be too high (e.g. during the heating system start-up) the software will lead the fan system start-up. Start-up is fast and efficient and grants significant energy savings especially in rooms that are occasionally used.



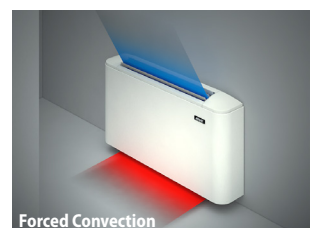
Radiant



Radiant + Natural Convection



Radiant + Forced Convection



Forced Convection

**Omnia Radiant during summer provides air conditioning and dehumidification:**

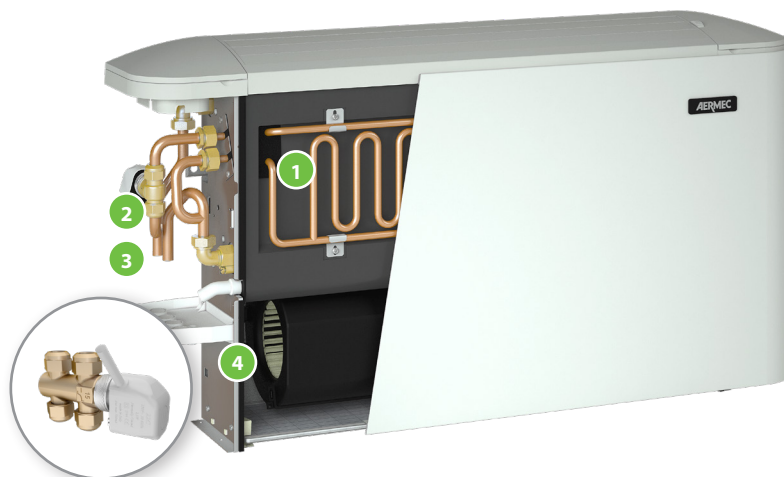
**Forced Convection**

During summer, Omnia Radiant and Radiant Plus provide air conditioning and dehumidification for each room of the house in a fast and efficient way. Effi-

ciency and quietness benefit from the quality that has always characterized the Omnia series.

**FEATURES OF THE OMNIA RADIANT SERIES**

- 1 Radiant plate
- 2 Switching valve
- 3 Water probe
- 4 Condensate storage container, hydraulic hoses



**VCHRAD accessory**

**OMNIA radiant (UL\_R) standard features:**

- Radiant panel
- Centrifugal fans
- Three-speed motor
- Condensate storage container, hydraulic hoses
- Switching valve
- Water probe
- Electro-statically preloaded filter
- VMF-thermostat for asynchronous motor
- Compatible with VMF system

**OMNIA radiant plus (UL\_RI) standard features:**

- Radiant panel
- Centrifugal fans
- Electric DC Brushless motor with Inverter
- Condensate storage container, hydraulic hoses
- Water probe
- Switching valve
- Electro-statically preloaded filter
- VMF thermostat for DC Brushless motor
- Compatible with VMF system

**Cleaning the fan**

The fan blades on the Omnia Radiant are easy to clean. As a matter of fact, the new versions now offer the possibility of opening the worm screw of the fan (the casing that encloses the blades) to perform routine cleaning.

**Electro-statically preloaded filter**

The Omnia Radiant fan coils feature standard air filters that are electro-statically preloaded. These filters, thanks to their particular construction, absorb and trap floating dust: the ideal system to provide clean air for all the family.

**Silent operation**

Thanks to special centrifugal fans, Omnia Radiant fan coils are incredibly silent, making them the best buy when it comes to acoustic comfort, given the total lack of peak noise. **"The heating by radiation at top speed ensures total silence regime"**

**Note: The coil had hydraulic hoses on the left and is not reversible.**

**ACCESSORIES**

**PCU:** Rear closing panel.

**ZU:** Wedges for floor mount.

**GU:** Exhaust grille: covers the front space of the wedges and does not interfere with the air filter. **Must be combined with ZU wedges.**

**VCHRAD:** Kit comprising motorized 3-way valve, unions and copper pipes.

**VMF System:** Its specs are described in its technical sheet.

**ACCESSORIES COMPATIBILITY**

	Omnia radiant		Omnia Radiant plus	
	UL26R	UL36R	UL26RI	UL36RI
PCU	25	35	25	35
GU	25	35	25	35
VCHRAD	•	•	•	•
ZU	•	•	•	•
VMF system				
VMF-E4X (compulsory accessory)	•	•	•	•
VMF-E4DX (compulsory accessory)	•	•	•	•
VMF-E5B	(1)	(1)	•	•
VMF-E5N	(1)	(1)	•	•

(1) Contact us

## TECHNICAL DATA

Omnia UL R			26			36		
Fan speed			H	M	L	H	M	L
<b>Heating Performance</b>								
<b>2 pipe configuration</b>								
Heating capacity (70°C)	(1)	kW	4,62	3,83	2,89	5,94	4,87	3,53
Heating capacity (50°C)	(2)	kW		2,75			3,54	
Water flow rate		l/h		397			511	
Pressure drop		kPa		17			21	
Static heating power (70°C)	(3)	kW		0,65			0,75	
Static heating power (50°C)	(4)	kW		0,39			0,45	
Static heating power (35°C)	(5)	kW		0,20			0,23	
<b>Cooling Performance</b>								
Total cooling capacity	(6)	kW	2,03	1,78	1,42	2,83	2,31	1,73
Sensible cooling capacity	(6)	kW	1,64	1,37	1,05	2,04	1,79	1,28
Water flow rate	(6)	l/h		349			487	
Pressure drops	(6)	kPa		18			22	
Water content		l		0,8			1,1	
<b>Fans</b>								
Fans		type/n°				centrifugal/2		
Air flow rate		m³/h	350	270	190	460	350	240
<b>Sound data</b>								
Sound power level	(7)	dB(A)	48	43	35	50	43	34
Sound pressure level		dB(A)	40	35	27	40	33	26
<b>Diameter connections</b>								
Standard coil		Ø(mm)		14			14	
<b>Electrical Features</b>								
Absorbed power		W		35			42	
Max. input current		A		0,18			0,22	
Electrical connections			V3	V2	V1	V3	V2	V1
Power supply		V/ph/Hz				230V~50Hz		
<b>Energy Efficiency classification (EUROVENT)</b>								
FCEER				D			D	
FCCOP	(8)			D			D	

Omnia UL RI			26			36		
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<b>2 pipe configuration</b>								
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Sound pressure level		dB(A)	40	35	27	40	33	26
<b>Diameter connections</b>								
Standard coil		Ø(mm)		14			14	
<b>Electrical Features</b>								
Absorbed power		W		12			16	
Max. input current		A		0,18			0,22	
Signal 0-10V			9V	7V	5V	9V	7V	5V
Power supply		V/ph/Hz				230V~50Hz		
<b>Energy Efficiency classification (EUROVENT)</b>								
FCEER				D			D	
FCCOP	(8)			D			D	

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

(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) Radiant power + natural convection; Hot water (in) 70°C (water flow same as in heating cycle)

(4) Room temperature 20°C b.s.; Hot water (in/\*) 50°C/80°C (water flow same as in heating cycle)

(5) Radiant power + natural convection; Hot water (in/\*) 35°C/80°C (water flow same as in heating cycle)

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

(7) Sound power: Aermec determines sound power values on the basis of measurements made in accordance with UNI EN 16583:15, as required for Eurovent certification

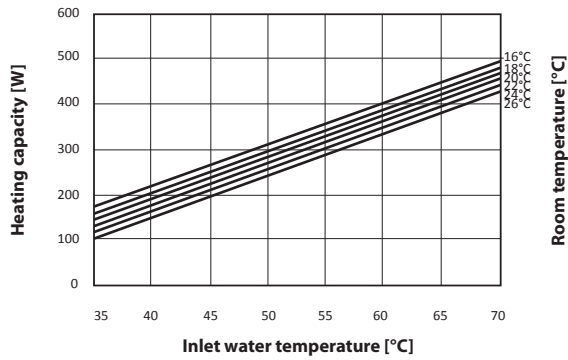
Level of sound pressure (A-weighted) measured in the room with volume V = 85m³; reverberation time t = 0.5s; direction factor Q = 2; distance r = 2.5m

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

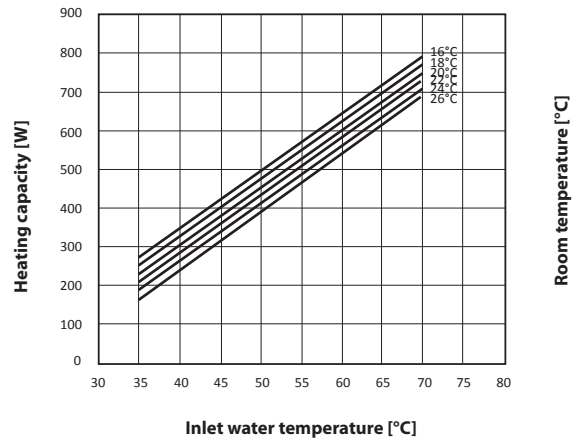
■ Note: For more information, please refer to the program selection and the technical documentation available on the website [www.aermec.com](http://www.aermec.com)

## HEATING CAPACITY WITH FAN OFF

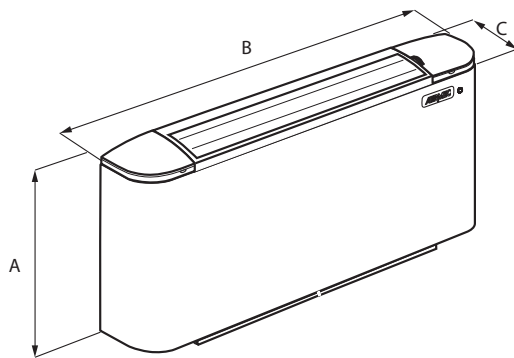
### UL26R - UL26RI



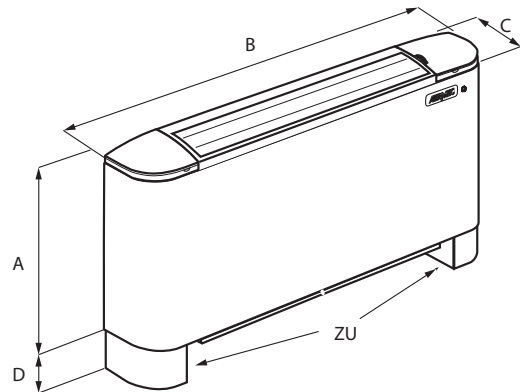
### UL36R - UL36RI



## DIMENSIONS



Wall installation



Floor installation

### Omnia UL\_R - UL\_RI

Size			26	36
<b>Dimensions and weights</b>				
Height	A	mm	513	513
Width	B	mm	980	1200
Depth	C	mm	173	173
Height ZU (Accessories)	D	mm	93	93
Weight	(1)	kg	20	24

(1) Standard configuration of unit with accessories

Aermec reserves the right to make any modifications deemed necessary. All data is subject to change without notice. Aermec does not assume responsibility or liability for errors or omissions.

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