Omnia ULSI

Vertical wall-mounting or free-standing installation

- **Compact dimensions, thickness 130 mm**
- **Low operating temperature**
- **Cooling, heating, and dehumidification**

DESCRIPTION

The Omnia Slim fan coils have been designed to meet the need to combine the typical features of a classic radiator - namely reduced depth and quiet operation - with the ability of a fan coil to air-condition rooms throughout the year.
They can be installed on any system with a 2-pipe system and it fits 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

ULSI Inverter without control board
ULSI_C Inverter with on-board thermostat

FEATURES

Case

Structure in sheet metal, 12/10 and 8/10 mm.
Front cover in 8/10 mm galvanised sheet metal with RAL9003 white epoxy powder coating and thermal-acoustic insulation of 13 mm thickness.

Ventilation group

These fan coils have extremely silent ventilation by using special tangential fans, which guarantees maximum acoustic comfort.
Brushless motor with continuous speed variation.

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 coil has hydraulic connections on the left and is not reversible.*

Control

With thermostatic adjustment and manual or no-adjustment switching, for combination with any wall panel or with the AERMEC VMF system.

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.
T-TOUCH-IS: Touch control installation on-board the fan coil.
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).
TXBIS: Thermostat installation on the fan coil.
KITSV: Kit for installing the VMF-E0X or VMF-E19/19I.
VMF-E19I: Thermostat for inverter unit to be fixed on the side of the fan coil, fitted as standard with an air and water probe.
VMF-E2S: User interface on the fan coil, with two selectors - one for temperature and the other for speed control. For operation, the installation of either the VMF-E0X, VMF-E19 or VMF-E19I accessory is required.
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).

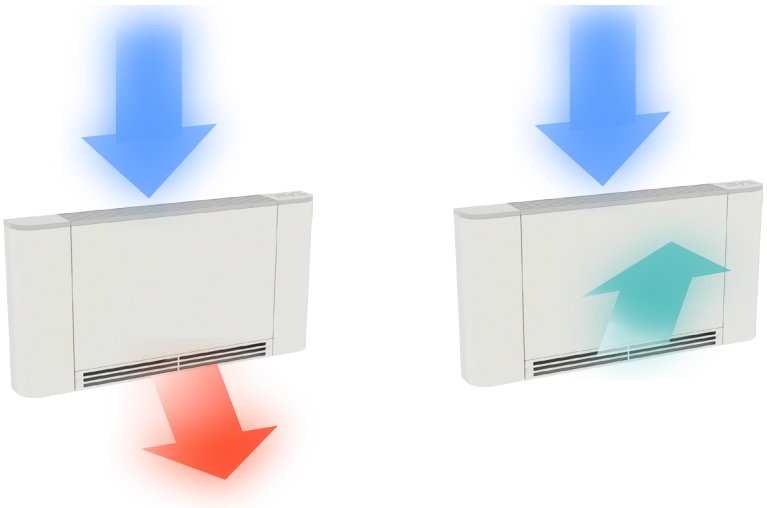
VMF-E4X: Wall-mounted user interface. Light grey front panel PANTONE COOL GRAY 1C.
VMF-IR: User interface compatible with the AER503IR, VMF-E3 thermostat and with all the grids of cassettes equipped with the infrared receiver compatible with the VMF system.
BCSV: Condensate collection tray, for valve kit.
DSC7: Condensate drainage device.

VCS2: 2-way motorised valve kit without insulating shell. The kit is made up of a valve, actuator and relative hydraulic fittings.
VCS3: 3-way motorised valve kit without insulating shell for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings.
ZXS: Pair of stylish and structural feet.

MAIN FEATURES

1 Air/water exchange coils with aluminium louvers and copper piping, arranged across 2 rows.
2 Front cover in 8/10 mm galvanised sheet metal with RAL9003 white epoxy powder coating and thermal-acoustic insulation of 13 mm thickness.
3 Plastic recovery grille with air filter.
4 Tangential fan driven by a Brushless motor with continuous speed variation.
5 Aluminium recovery grille and sheet metal delivery grille, with a special design conceived to create a homogeneous flow of air, both in summer and winter operation.

Flow rates



ACCESSORIES COMPATIBILITY

Model	Ver	10	20	30	40	50
AER503IR (1)	ULSI	•	•	•	•	•
PRO503	ULSI	•	•	•	•	•
SA5 (2)	ULSI	•	•	•	•	•
SW3 (2)	ULSI	•	•	•	•	•
SW5 (2)	ULSI	•	•	•	•	•
T-TOUCH-IS	ULSI	•	•	•	•	•
TX (1)	ULSI	•	•	•	•	•
TXBIS	ULSI	•	•	•	•	•

(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) Probe for AER503IR-TX thermostats, if fitted.

VMF system

Model	Ver	10	20	30	40	50
KITSV (1)	ULSI	•	•	•	•	•
VMF-E19I	ULSI	•	•	•	•	•
VMF-E2S (2)	ULSI	•	•	•	•	•
VMF-E3	ULSI	•	•	•	•	•
VMF-E4DX	ULSI	•	•	•	•	•
VMF-E4X	ULSI	•	•	•	•	•
VMF-IR	ULSI	•	•	•	•	•

(1) Mandatory when the VMF-E19/19I or VMF-E0X thermostat is required.
(2) Installation on the fan coil.

3 way valve kit

Model	Ver	10	20	30	40	50
VCS3 (1)	ULSI,ULSI_C	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

2 way valve kit

Model	Ver	10	20	30	40	50
VCS2 (1)	ULSI,ULSI_C	•	•	•	•	•

(1) Power supply 230V - Hydraulic connections Ø 1/2"

Condensate drip

Model	Ver	10	20	30	40	50
BCSV	ULSI,ULSI_C	•	•	•	•	•

Condensate drainage

Model	Ver	10	20	30	40	50
DSC7	ULSI,ULSI_C	•	•	•	•	•

Pair of stylish structural feet

Model	Ver	10	20	30	40	50
ZXS	ULSI,ULSI_C	•	•	•	•	•

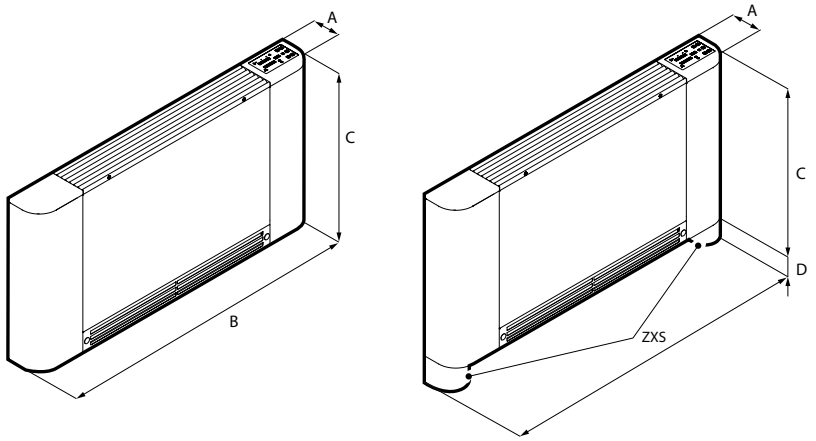
PERFORMANCE SPECIFICATIONS

2-pipe

		ULSI10			ULSI20			ULSI30			ULSI40			ULSI50		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
Heating performance 70 °C / 60 °C (1)																
Heating capacity	kW	0,70	1,14	1,53	1,27	1,88	2,86	1,88	2,91	3,72	2,32	3,55	4,77	2,49	3,85	5,73
Water flow rate system side	l/h	61	100	134	111	165	251	165	254	326	203	311	418	218	337	501
Pressure drop system side	kPa	2	4	7	5	10	20	6	14	22	6	13	22	5	10	21
Heating performance 45 °C / 40 °C (2)																
Heating capacity	kW	0,35	0,57	0,76	0,63	0,94	1,43	0,94	1,45	1,85	1,15	1,77	2,38	1,24	1,92	2,85
Water flow rate system side	l/h	61	99	132	110	163	248	163	251	322	201	307	413	216	333	495
Pressure drop system side	kPa	2	4	7	5	9	20	6	14	22	6	13	22	5	10	21
Cooling performance 7 °C / 12 °C (3)																
Cooling capacity	kW	0,37	0,60	0,80	0,67	0,98	1,50	0,98	1,52	1,95	1,22	1,86	2,50	1,30	2,02	3,00
Sensible cooling capacity	kW	0,25	0,42	0,57	0,46	0,68	1,08	0,68	1,06	1,39	0,84	1,30	1,79	0,90	1,40	2,15
Water flow rate system side	l/h	63	103	137	114	169	257	169	261	335	209	319	429	224	346	515
Pressure drop system side	kPa	3	6	10	7	13	28	9	19	30	9	18	30	7	14	29
Fan																
Type	type	Tangential														
Fan motor	type	Inverter														
Number	no.	1			1			1			2			2		
Air flow rate	m^3/h	46	82	134	78	128	241	109	188	301	126	218	370	127	225	427
Input power	W	5	8	10	6	9	15	7	12	17	7	14	20	7	13	21
Signal 0-10V	%	40	70	90	40	70	90	40	70	90	40	70	90	40	70	90
Fan coil sound data (4)																
Sound power level	dB(A)	39,0	47,0	51,0	39,0	47,0	51,0	40,0	48,0	53,0	41,0	49,0	54,0	42,0	52,0	56,0
Sound pressure	dB(A)	31,0	39,0	43,0	31,0	39,0	43,0	32,0	40,0	45,0	33,0	41,0	46,0	34,0	44,0	48,0
Water coil																
Water content main coil	l	0,5			0,9			1,2			1,5			1,8		
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



Size			10	20	30	40	50
Dimensions and weights							
A	ULSI,ULSI_C	mm	130	130	130	130	130
B	ULSI,ULSI_C	mm	745	940	1134	1328	1524
C	ULSI,ULSI_C	mm	580	580	580	580	580
D	ULSI,ULSI_C	mm	80	80	80	80	80
Empty weight	ULSI,ULSI_C	kg	11	13	15	17	19

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