

# Omnia ULS

## Vertical wall-mounting or free-standing installation

- Compact dimensions, thickness 129 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

**ULS** Standard without control board

**ULS\_C** 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.

The electric motor is a 3-speed single-phase motor with a permanently inserted condenser.

#### Heat exchanger coil

With copper pipes and aluminium fins, 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

**AER503:** Flush-mounting thermostat with backlit display and capacitive keypad, for controlling fan coils (either brushless or with asynchronous motors). 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 a radiant plate or FCZ-D twin delivery (Dualjet). In 4-pipe systems, only standard fan coils. In addition, it can control systems with radiant panels or mixed (fan coil and radiant floor) systems.

**SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.

**SW3:** Sonda acqua (L = 2.5 m).

**SW5:** kit sonda acqua (L = 15 m) con tronchetto porta sonda, clip di fissaggio e porta sonda da scambiatore.

**T-TOUCH-S:** Touch control installation on-board the fan coil. The Ther-mApp application is also available for remote control with smart devices with the Android operating system.

**TX:** Wall-mounting thermostat for controlling either brushless fan coils or those with asynchronous motors. 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 a radiant plate or FCZ-D twin delivery (Dualjet). In 4-pipe systems, only standard fan coils.

**TXBS:** Thermostat installation on the fan coil.

**KITSV:** Kit for installing the VMF-E0X or VMF-E19.

**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-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 or the VMF-E19 accessory is required.

**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.

**BCSV:** Condensate collection tray, for valve kit.

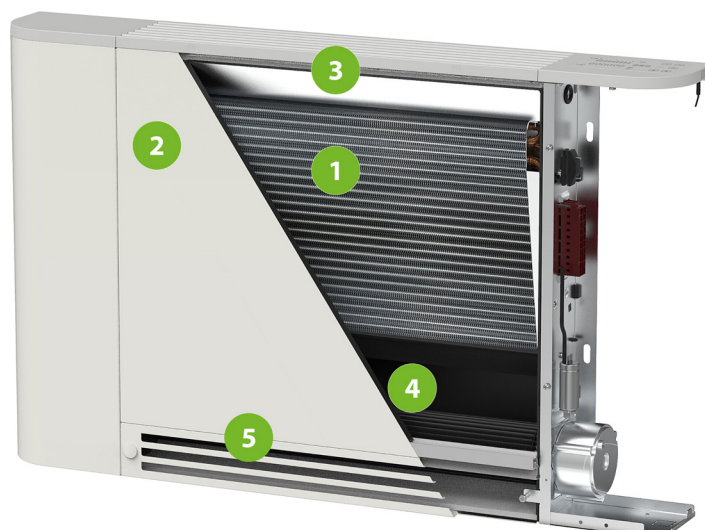
**DSC7:** Condensate drainage device.

**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.

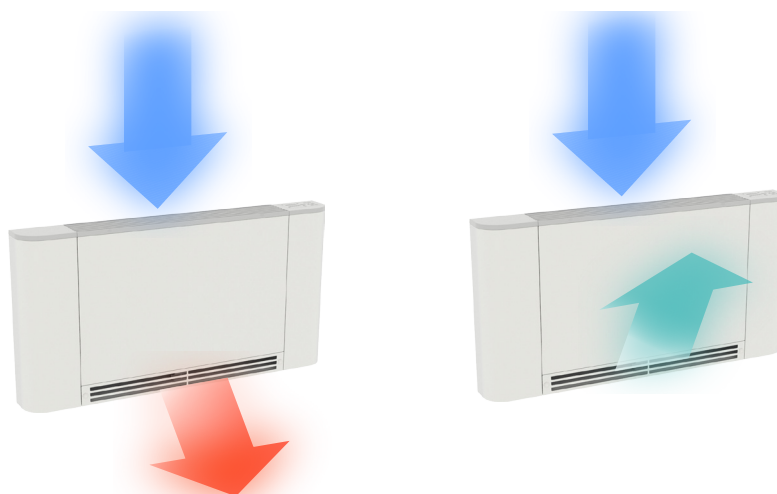
**ZXS:** Pair of stylish and structural feet.

## MAIN FEATURES



- 1 Air/water exchange coils with aluminium fins 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 3-speed motor.
- 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 |
|---------------|-----|----|----|----|----|----|
| AER503 (1)    | ULS | •  | •  | •  | •  | •  |
| SAS (2)       | ULS | •  | •  | •  | •  | •  |
| SW3 (2)       | ULS | •  | •  | •  | •  | •  |
| SW5 (2)       | ULS | •  | •  | •  | •  | •  |
| T-TOUCH-S (3) | ULS | •  | •  | •  | •  | •  |
| TX (4)        | ULS | •  | •  | •  | •  | •  |
| TXBS (3)      | ULS | •  | •  | •  | •  | •  |

(1) Wall installation

(2) Probe for AER503-TX thermostats, if fitted.

(3) Installation on the fan coil.

(4) Wall-mount installation.

### VMF system

| Model       | Ver | 10 | 20 | 30 | 40 | 50 |
|-------------|-----|----|----|----|----|----|
| KITSV (1)   | ULS | •  | •  | •  | •  | •  |
| VMF-E19     | ULS | •  | •  | •  | •  | •  |
| VMF-E2S (2) | ULS | •  | •  | •  | •  | •  |
| VMF-E4DX    | ULS | •  | •  | •  | •  | •  |
| VMF-E4X     | ULS | •  | •  | •  | •  | •  |

(1) Obbligatorio quando è previsto il termostato VMF-E2S.

(2) Installation on the fan coil.

### 3 way valve kit

| Model    | Ver       | 10 | 20 | 30 | 40 | 50 |
|----------|-----------|----|----|----|----|----|
| VCS3 (1) | ULS,ULS_C | •  | •  | •  | •  | •  |

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

### 2 way valve kit

| Model    | Ver       | 10 | 20 | 30 | 40 | 50 |
|----------|-----------|----|----|----|----|----|
| VCS2 (1) | ULS,ULS_C | •  | •  | •  | •  | •  |

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

### Condensate drip

| Model | Ver       | 10 | 20 | 30 | 40 | 50 |
|-------|-----------|----|----|----|----|----|
| BCSV  | ULS,ULS_C | •  | •  | •  | •  | •  |

### Condensate drainage

| Model | Ver       | 10 | 20 | 30 | 40 | 50 |
|-------|-----------|----|----|----|----|----|
| DSC7  | ULS,ULS_C | •  | •  | •  | •  | •  |

### Pair of stylish structural feet

| Model | Ver       | 10 | 20 | 30 | 40 | 50 |
|-------|-----------|----|----|----|----|----|
| ZXS   | ULS,ULS_C | •  | •  | •  | •  | •  |

## PERFORMANCE SPECIFICATIONS

### 2-pipe

|                                       |       | ULS10        |      |      | ULS20 |      |      | ULS30 |      |      | ULS40 |      |      | ULS50 |      |      |
|---------------------------------------|-------|--------------|------|------|-------|------|------|-------|------|------|-------|------|------|-------|------|------|
|                                       |       | 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    | 0,61         | 1,16 | 1,64 | 1,14  | 2,18 | 3,08 | 1,48  | 2,84 | 4,00 | 1,89  | 3,64 | 5,13 | 2,27  | 4,37 | 6,15 |
| Water flow rate system side           | l/h   | 53           | 102  | 144  | 99    | 191  | 269  | 129   | 248  | 350  | 166   | 318  | 448  | 199   | 382  | 538  |
| Pressure drop system side             | kPa   | 1            | 4    | 7    | 4     | 11   | 21   | 3     | 8    | 15   | 4     | 13   | 25   | 3     | 9    | 16   |
| Heating performance 45 °C / 40 °C (2) |       |              |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Heating capacity                      | kW    | 0,30         | 0,58 | 0,82 | 0,56  | 1,09 | 1,53 | 0,73  | 1,41 | 1,99 | 0,94  | 1,81 | 2,55 | 1,13  | 2,17 | 3,06 |
| Water flow rate system side           | l/h   | 52           | 101  | 142  | 98    | 189  | 266  | 128   | 245  | 346  | 164   | 315  | 443  | 196   | 378  | 532  |
| Pressure drop system side             | kPa   | 1            | 4    | 7    | 4     | 12   | 22   | 3     | 9    | 16   | 4     | 14   | 26   | 3     | 9    | 17   |
| Cooling performance 7 °C / 12 °C (3)  |       |              |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Cooling capacity                      | kW    | 0,30         | 0,57 | 0,80 | 0,55  | 1,07 | 1,50 | 0,72  | 1,38 | 1,95 | 0,92  | 1,78 | 2,50 | 1,11  | 2,13 | 3,00 |
| Sensible cooling capacity             | kW    | 0,22         | 0,43 | 0,62 | 0,42  | 0,81 | 1,17 | 0,54  | 1,05 | 1,52 | 0,69  | 1,35 | 1,95 | 0,83  | 1,62 | 2,34 |
| Water flow rate system side           | l/h   | 51           | 97   | 137  | 95    | 183  | 257  | 124   | 238  | 335  | 158   | 305  | 429  | 190   | 366  | 515  |
| Pressure drop system side             | kPa   | 1            | 4    | 8    | 4     | 13   | 25   | 3     | 10   | 18   | 5     | 16   | 29   | 3     | 10   | 19   |
| Fan                                   |       |              |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Type                                  | type  | Tangential   |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Fan motor                             | type  | Asynchronous |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Number                                | no.   | 1            |      |      | 1     |      |      | 1     |      |      | 2     |      |      | 2     |      |      |
| Air flow rate                         | m³/h  | 47           | 86   | 115  | 87    | 158  | 210  | 111   | 203  | 270  | 144   | 263  | 350  | 161   | 293  | 390  |
| Input power                           | W     | 9            | 16   | 21   | 15    | 21   | 32   | 17    | 32   | 42   | 22    | 40   | 53   | 18    | 26   | 56   |
| Electrical wiring                     |       | V1           | V2   | V3   | V1    | V2   | V3   | V1    | V2   | V3   | V1    | V2   | V3   | V1    | V2   | V3   |
| Fan coil sound data (4)               |       |              |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Sound power level                     | dB(A) | 42,0         | 49,0 | 52,0 | 42,0  | 49,0 | 52,0 | 43,0  | 50,0 | 53,0 | 44,0  | 51,0 | 54,0 | 45,0  | 52,0 | 55,0 |
| Water coil                            |       |              |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Water content main coil               | l     | 0,5          |      |      | 0,9   |      |      | 1,2   |      |      | 1,8   |      |      | 1,5   |      |      |
| Diametre hydraulic fittings           |       |              |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Main coil                             | Ø     | 1/2"         |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Power supply                          |       |              |      |      |       |      |      |       |      |      |       |      |      |       |      |      |
| Power supply                          |       | 230V~50Hz    |      |      |       |      |      |       |      |      |       |      |      |       |      |      |

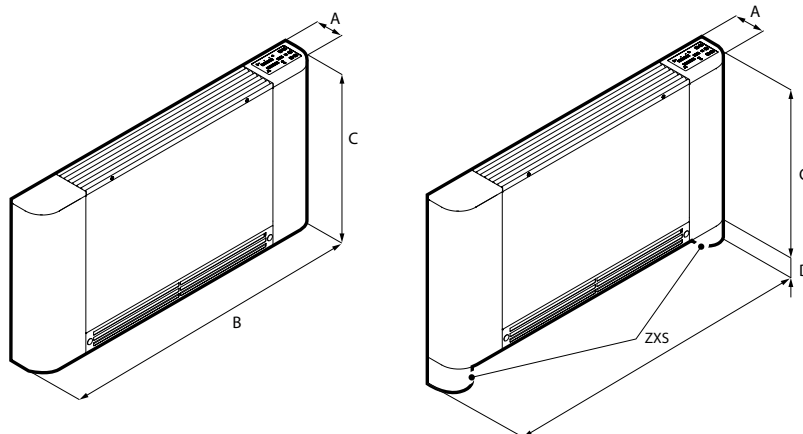
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C

(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   |
|-------------------------------|-----------|----|-----|-----|------|------|------|
| <b>Dimensions and weights</b> |           |    |     |     |      |      |      |
| A                             | ULS,ULS_C | mm | 130 | 130 | 130  | 130  | 130  |
| B                             | ULS,ULS_C | mm | 745 | 940 | 1134 | 1328 | 1524 |
| C                             | ULS,ULS_C | mm | 580 | 580 | 580  | 580  | 580  |
| D                             | ULS,ULS_C | mm | 80  | 80  | 80   | 80   | 80   |
| Empty weight                  | ULS,ULS_C | kg | 11  | 13  | 15   | 17   | 19   |

Aermec reserves the right to make any modifications deemed necessary.  
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