# VED 530I-741I

## Fan coil unit for ducted installations

- **Horizontal and vertical installation**
- **Ventilation group to 5 speed**
- **Large range of available static pressure**
- **Inspectable ventilation group**

## DESCRIPTION

Ducted fan coil, for heating, cooling and dehumidifying.
Designed to maintain the set temperature over time, ensuring very low sound levels.
Can be installed in any 2/4 pipe system and operates with any heat generator even at low temperatures.
Thanks to the availability of various options, with standard or increased coil, for horizontal or vertical installation, it is easy to choose the optimal solution for any need.

## FEATURES

### Case

Unit for internal installation.
Internally insulated structure with class 1 fire resistance and IP20 protection.

### Ventilation group

Centrifugal fans in anti-static plastic material with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise.
Brushless motor with continuous speed variation 0-100%.
Inverter motor allows precise adaptation to the real indoor environment requirements without temperature oscillations.
The air flow can be continuously changed through a 1-10 V signal, coming from adjustment and control commands Aermec or from independent adjustment systems.
This lowers noise and generates a better response to heat loads and a higher stability in the desired temperature inside the room.
The high efficiency even with low speed, makes it possible to reduce power consumption (more than 50% less than fan coils with traditional motors).

### Heat exchanger coil

With copper pipes and aluminium louvers, the main heat exchanger 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.*

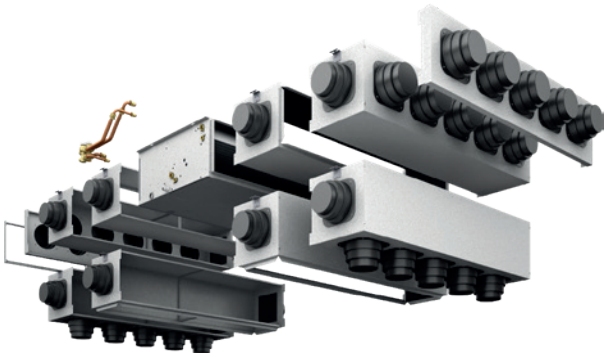
### Air filter

Air filter Class G3, for easy removal and cleaning.

### Controls and Accessoires

There is a wide selection of controls and a huge choice of accessories, to meet every system requirement.
The unit is supplied with the delivery connection supplied.

## 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.
**PRO503:** Wall box for AER503IR and VMF-E4 thermostats.
**SA5:** air probe kit (L = 15 m) with probe-locking cable grommet.
**SW5:** water probe kit (L = 15m) with probe-holder connection point, fixing clip and probe-holder from heat exchanger.
**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).
**WMT21:** Electronic thermostat for inverter fancoils.

### AerSuite

The AerSuite application is used to remotely control the DI24 user interface, with VMF-E19/VMF-E19I thermostats, using Smart Devices with iOS and Android operating systems.
This is an application for Smartphones and Tablets with which the user can access and control the system operation remotely.
For more information about the use of the application and the available functions, refer to the respective documentation on the website.

### VMF system

**The VMF-E19I accessory must be factory installed**

**DI24:** Flush-mounted interface (503 box) with 2.4" touch screen display to be combined with VMF-E19, VMF-E19I accessories. It allows you to regulate and monitor the temperature inside rooms precisely and on time; in addition to accessing and interacting with your system's operating information, parameters and alarms, it allows you to set time slots. Thanks to its Wi-Fi connection, DI24 in combination with the AerSuite APP (available for Android and iOS) can also be remotely controlled. All programming and most functions are done in a simple and intuitive way using the APP. To allow for customization of the interface so that it seamlessly integrates with the style of any home, DI24 is compatible with switch plates from major brands available on the market. For more information, please refer to our documentation. However, a switch plate with its graphite gray support, DI24CP, is also available as a separate accessory in our catalog.

**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-E3:** Wall-mounted user interface, also controllable via 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 AER503IR, VMF-E3 thermostat.
**VMF-SW:** Water probe (L = 2.5m) used if required in place of the standard unit supplied with the VMF-E19 and VMF-E19I thermostats for mounting it upstream of the valve.
**VMF-SW1:** Additional water probe (L = 2.5m) to be used if required for 4-pipe systems with the VMF-E19 and VMF-E19I thermostats for maximum control in the cold range
**VMHI:** The VMHI panel can be used as a user interface. 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.

### Water valves

**VJP:** Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components. The valve, which can guarantee a constant water flow rate in the terminal, within its operating range.
**VCF45C - 47C - 47CS - for main heat exchanger:** 3-way motorised valve kit for the main coil. The kit is made up of a valve with its insulating shell, actuator and relative hydraulic fittings. It can be installed on fan coils with both right and left connections. If the valve is combined with the BCZ5 or BCZ6 condensate drain pan, to ensure a better housing it is possible to remove the insulating shell.
**VCF45H - 47H - for heating only heat exchanger:** Motorized 3-way valve kit for hot only coil. The kit consists of a 3-way 4-way valve, the actuator and its hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.
**VCF25C - 25CS - for main coil:** 2-way motorized valve kit for main coil. The kit consists of a valve with its insulating shell, the actuator and the relative hydraulic fittings, it is suitable for installation on both fan coil units with hydraulic connections on the right and left.
**VCF25H - for heating only coil:** 2-way motorized valve kit for hot only coil. The kit consists of a valve, actuator and relative hydraulic fittings, it is suitable for installation on both fan coils with hydraulic connections on the right and left.
**BCV:** Condensate drip.

### Installation accessories

**MZC:** Plenum with motorised dampers.
**RDA_V:** Straight intake connection with rectangular flange.
**RPA_V:** Suction plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
**PA_V:** Suction plenum with circular plastic flanges; both sides have a circular push-out Ø 150mm that can be removed.
**PM_V:** Internally insulated delivery plenum with circular flanges; both sides have a circular push-out Ø 150mm that can be removed.
**RPM_V:** Internally insulated delivery plenum with rectangular flange; both sides have a circular push-out Ø 150mm that can be removed.
**KFV:** Circular flanges kit for plenum.

**MZCBC:** Mandatory electrical system for connecting the MZC plenum with a fan coil fitted with a brushless motor.

## ACCESSORIES COMPATIBILITY

### Control panels and dedicated accessories

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| AER503IR (1) | • | • | • | • | • | • | • | • |
| PRO503 | • | • | • | • | • | • | • | • |
| SA5 (2) | • | • | • | • | • | • | • | • |
| SW5 (2) | • | • | • | • | • | • | • | • |
| TX (3) | • | • | • | • | • | • | • | • |
| WMT21 | • | | • | | • | | • | |

(1) Wall-mount installation.
(2) Probe for AER503IR-TX thermostats, if fitted.
(3) 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.

### VMF system

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| DI24 | • | • | • | • | • | • | • | • |
| VMF-E19I (1) | • | • | • | • | • | • | • | • |
| VMF-E3 | • | • | • | • | • | • | • | • |
| VMF-E4DX | • | • | • | • | • | • | • | • |
| VMF-E4X | • | • | • | • | • | • | • | • |
| VMF-IO | • | • | • | • | • | • | • | • |
| VMF-IR | • | • | • | • | • | • | • | • |
| VMF-LON | | • | | • | | • | | • |
| VMF-SW | • | • | • | • | • | • | • | • |
| VMF-SW1 | • | • | • | • | • | • | • | • |
| VMHI | • | • | • | • | • | • | • | • |

(1) Mandatory accessory.

**The VMF-E19I accessory must be factory installed**

### Water valves

**3 way valve kit**

| | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| **3 way valve kit** | | | | | | | | |
| Main heat exchanger | VCF45C | VCF45C | VCF45C | VCF45C | VCF47C | VCF47C | VCF47CS | VCF47CS |
| Secondary heat exchanger for four pipes | - | VCF45H | - | VCF45H | - | VCF47H | - | VCF47H |

230V power supply - Hydraulic connection Ø 3/4"

**2 way valve kit**

| | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| **2 way valve kit** | | | | | | | | |
| Main heat exchanger | VCF25C | VCF25C | VCF25C | VCF25C | VCF25C | VCF25C | VCF25CS | VCF25CS |
| Secondary heat exchanger for four pipes | - | VCF25H | - | VCF25H | - | VCF25H | - | VCF25H |

230V power supply - Hydraulic connection Ø 3/4"

**2-way globe valves actuator excluded**

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| VCT102 | • | • | • | • | | | | |
| VCT202 | | | | | • | • | • | • |

**Actuator 230V**

| Accessory | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|
| VCTA | • | • | • | • | • | • | • |

**Actuator 24V**

| Accessory | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|
| VCTAM | • | • | • | • | • | • | • |

**Combined adjustment and balancing valve cold side**

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| VJP150 (1) | • | • | • | • | | | | |
| VJP150M (2) | • | • | • | • | | | | |
| VJP270M (2) | | | | | • | • | • | • |

(1) 230V~50Hz
(2) 24V

**VJP/VJP_M the compatibility of the hot water valves with the designed air flow in a four-pipe installation is to be verified.**

**Condensate drip**

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| BCV45 | • | • | • | • | | | | |
| BCV67 | | | | | • | • | • | • |

## Accessories for intake

### Intake plenum with rectangular flanges

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| RPA450V | • | • | • | • | | | | |
| RPA670V | | | | | • | • | • | • |

### Intake plenum with circular flanges

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| PA450V | • | • | • | • | | | | |
| PA670V | | | | | • | • | • | • |

## Delivery accessories

### Delivery plenum internally insulated, with rectangular flanges

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| RPM450V | • | • | • | • | | | | |
| RPM670V | | | | | • | • | • | • |

### Delivery plenum internally insulated, with circular flanges

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| PM450V | • | • | • | • | | | | |
| PM670V | | | | | • | • | • | • |

### Circular flanges kit for plenum

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| KFV | • | • | • | • | • | • | • | • |

## MZC

### Plenum with motor-driven dampers

| Accessory | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|
| MZC5040 | • | • | • | • | | | | |
| MZC7050 | | | | | • | • | • | • |

### Electric plant

| Accessory | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|
| MZCBC | • | • | • | • | • | • | • |

## PERFORMANCE SPECIFICATIONS

**2-pipe**

| | | VED530I | | | VED540I | | | VED730I | | | VED740I | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| | | L | M | H | L | M | H | L | M | H | L | M | H |
| **Heating performance 70 °C / 60 °C (1)** | | | | | | | | | | | | | |
| Heating capacity | kW | 13,80 | 16,47 | 17,57 | 15,38 | 18,59 | 19,91 | 21,18 | 25,36 | 29,00 | 22,88 | 27,65 | 31,71 |
| Water flow rate system side | l/h | 1.210 | 1.444 | 1.541 | 1.349 | 1.630 | 1.746 | 1.857 | 2.224 | 2.543 | 2.007 | 2.425 | 2.781 |
| Pressure drop system side | kPa | 13 | 18 | 21 | 18 | 25 | 29 | 38 | 55 | 67 | 26 | 36 | 46 |
| **Heating performance 45 °C / 40 °C (2)** | | | | | | | | | | | | | |
| Heating capacity | kW | 6,86 | 8,19 | 8,74 | 7,65 | 9,24 | 9,90 | 10,53 | 12,61 | 14,22 | 11,34 | 27,65 | 15,81 |
| Water flow rate system side | l/h | 1.180 | 1.409 | 1.503 | 1.316 | 1.589 | 1.703 | 1.811 | 2.169 | 2.446 | 1.950 | 2.425 | 2.719 |
| Pressure drop system side | kPa | 14 | 19 | 21 | 21 | 25 | 30 | 38 | 52 | 66 | 26 | 36 | 46 |
| **Cooling performance 7 °C / 12 °C (3)** | | | | | | | | | | | | | |
| Cooling capacity | kW | 6,05 | 7,25 | 7,39 | 7,31 | 8,40 | 8,70 | 10,25 | 11,96 | 13,48 | 11,81 | 13,99 | 15,71 |
| Sensible cooling capacity | kW | 4,61 | 5,57 | 6,02 | 4,93 | 5,99 | 6,18 | 8,33 | 9,75 | 11,07 | 8,19 | 9,73 | 10,95 |
| Water flow rate system side | l/h | 1.041 | 1.247 | 1.271 | 1.257 | 1.445 | 1.496 | 1.763 | 2.057 | 2.319 | 2.031 | 2.406 | 2.702 |
| Pressure drop system side | kPa | 12 | 19 | 21 | 19 | 25 | 28 | 35 | 46 | 58 | 27 | 37 | 45 |
| **Fan** | | | | | | | | | | | | | |
| Type | type | Centrifugal | | | | | | | | | | | |
| Fan motor | type | Inverter | | | | | | | | | | | |
| Number | no. | | 2 | | | 2 | | | 3 | | | 3 | |
| Air flow rate | $m^3/h$ | 1120 | 1400 | 1520 | 1100 | 1380 | 1500 | 1640 | 2040 | 2410 | 1600 | 2000 | 2358 |
| High static pressure | Pa | 32 | 50 | 58 | 32 | 50 | 56 | 32 | 50 | 69 | 32 | 50 | 69 |
| Input power | W | 115 | 160 | 205 | 115 | 160 | 205 | 147 | 241 | 370 | 147 | 241 | 370 |
| Signal 0-10V | % | 66 | 76 | 62 | 62 | 76 | 90 | 62 | 76 | 90 | 62 | 76 | 90 |
| **Duct type fan coil sound data (4)** | | | | | | | | | | | | | |
| Sound power level (inlet + radiated) | dB(A) | 53,0 | 59,0 | 62,0 | 53,0 | 59,0 | 62,0 | 62,0 | 66,0 | 68,0 | 62,0 | 66,0 | 68,0 |
| Sound power level (outlet) | dB(A) | 49,0 | 55,0 | 58,0 | 49,0 | 55,0 | 58,0 | 58,0 | 62,0 | 64,0 | 58,0 | 62,0 | 64,0 |
| **Diametre hydraulic fittings** | | | | | | | | | | | | | |
| Main heat exchanger | Ø | 3/4" | | | | | | | | | | | |
| **Power supply** | | | | | | | | | | | | | |
| Power supply | V/Ph/Hz | 230V~50Hz | | | | | | | | | | | |

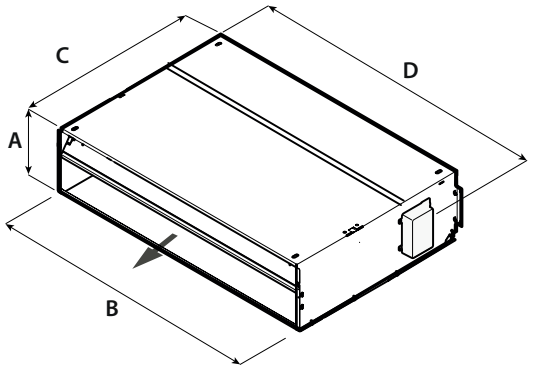
(1) Room air temperature 20 °C d.b.; Water (in/out) 70 °C/60 °C
(2) Room air temperature 20°C d.b.; Water (in/out) 45°C/40°C; EUROVENT (listing FCU AERMEC 2025)
(3) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT (listing FCU AERMEC 2025)
(4) Aermec determines the sound power value on the basis of measurements taken in accordance with standard UNI EN 16583:15, respecting the Eurovent certification.

**4-pipe**

| | | VED541I | | | VED741I | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 1 | 2 | 3 |
| | | L | M | H | L | M | H |
| **Heating performance 65 °C / 55 °C (1)** | | | | | | | |
| Heating capacity | kW | 6,70 | 7,62 | 7,90 | 10,57 | 11,88 | 12,96 |
| Water flow rate system side | l/h | 584 | 666 | 692 | 925 | 1.040 | 1.133 |
| Pressure drop system side | kPa | 19 | 24 | 26 | 17 | 21 | 25 |
| **Cooling performance 7 °C / 12 °C (2)** | | | | | | | |
| Cooling capacity | kW | 7,43 | 8,54 | 8,97 | 11,96 | 14,23 | 16,08 |
| Sensible cooling capacity | kW | 5,04 | 6,13 | 6,45 | 8,34 | 9,97 | 11,32 |
| Water flow rate system side | l/h | 1.278 | 1.469 | 1.543 | 2.057 | 2.448 | 2.766 |
| Pressure drop system side | kPa | 21 | 27 | 29 | 27 | 37 | 46 |
| **Fan** | | | | | | | |
| Type | type | Centrifugal | | | | | |
| Fan motor | type | Inverter | | | | | |
| Number | no. | | 2 | | | 3 | |
| Air flow rate | $m^3/h$ | 1060 | 1360 | 1460 | 1600 | 2000 | 2350 |
| High static pressure | Pa | 32 | 50 | 56 | 32 | 50 | 69 |
| Input power | W | 106 | 163 | 185 | 138 | 240 | 363 |
| Signal 0-10V | % | 66 | 84 | 90 | 64 | 78 | 90 |
| **Duct type fan coil sound data (3)** | | | | | | | |
| Sound power level (inlet + radiated) | dB(A) | 53,0 | 59,0 | 62,0 | 62,0 | 66,0 | 68,0 |
| Sound power level (outlet) | dB(A) | 49,0 | 55,0 | 58,0 | 58,0 | 62,0 | 64,0 |
| **Diametre hydraulic fittings** | | | | | | | |
| Main heat exchanger | Ø | 3/4" | | | | | |
| Secondary heat exchanger | Ø | 1/2" | | | | | |
| **Power supply** | | | | | | | |
| Power supply | V/Ph/Hz | 230V~50Hz | | | | | |

(1) Room air temperature 20°C d.b.; Water (in/out) 65 °C/55 °C; EUROVENT (listing FCU AERMEC 2025)
(2) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C; EUROVENT (listing FCU AERMEC 2025)
(3) 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




| | | VED530I | VED532I | VED540I | VED541I | VED730I | VED732I | VED740I | VED741I |
|---|---|---|---|---|---|---|---|---|---|
| **Dimensions and weights** | | | | | | | | | |
| A | mm | 300 | 300 | 300 | 300 | 351 | 351 | 351 | 351 |
| B | mm | 1133 | 1133 | 1133 | 1133 | 1533 | 1533 | 1533 | 1533 |
| C | mm | 737 | 737 | 737 | 737 | 789 | 789 | 789 | 789 |
| D | mm | 1158 | 1158 | 1158 | 1158 | 1558 | 1558 | 1558 | 1558 |
| Net weight | kg | 42,0 | 47,0 | 47,0 | 47,0 | 58,0 | 58,0 | 61,0 | 61,0 |

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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