

FCW

Fan coils wall-mount installation

- Versions with internal 2 or 3-way valve
- Compact dimensions



DESCRIPTION

Fan coil model for wall-mount installations, whose elegance and reduced dimensions make it aesthetically pleasing; this terminal is thus suitable for applications in residential or light commercial sectors.

To respond to the various system requirements, the product is configurable and available with or without (2- or 3-way) valve, as well as with or without control board, which ensures compatibility with various system requirements. Fan coils without control board must be necessarily combined with an external control device.

VERSIONS

2V Internal 2-way valve and microprocessor control

2VN Internal 2-way valve without microprocessor control

3V Internal 3-way valve and microprocessor control

3VN Internal 3-way valve without microprocessor control

VL Without internal valve but with microprocessor control

VLN Without internal valve and microprocessor control

FEATURES

Case

Aesthetically styled with flat panel:

- Microprocessor control
- Air flow louvered louvers with horizontal adjustment facility

— Colors pure white pantone GRIS 1C RAL 9010.

Ventilation group

Consisting of a tangential fan, especially quiet and directly coupled to the motor shaft.

Three-speed cross flow fan.

Finned pack heat exchanger

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.

Air filter

Fan coils are fitted with air filters easy to remove and clean.

Control

The versions with microprocessor control have:

- Timer for programming switch-off or switch-on (TLW4 e PFW5)
- Program for operation in automatic, cooling, heating, ventilation and air ionising mode (TLW4 e PFW5)
- Night time Well-being Program (TLW4)
- Automatic season change (TLW4 e PFW5)
- Automatic re-start after power cut.

ACCESSORIES

FCWCP: Cold plasma mounting kit

For models with control board installed

FCW_2V, 3V, VL it is mandatory to select among the user interfaces designed for the FCW series (TLW4 o PFW5)

PFW5: This accessory is essential for fan coil operation (as an alternative to TLW4). The PFW5 wired panel is supplied separately from the fan coil. It is used to set the main device operating parameters, and is essential for setting the Modbus address of the unit (handy only if you want to command the unit via the RS-485 port).

TLW4: Mandatory accessory. Infrared remote control with liquid crystal display for controlling all unit functions. The remote control is delivered separately from the fan coil; with a single remote control it is possible to control more than one fan coil. The remote control is equipped with a support that allows you to hang it on the wall, from which it can be operated without having to be removed.



PFW5



TLW4

For models without control board installed

FCW_2VN, 3VN, VLN a user interface must be mounted outside the fan coil, using either a visible or a recessed wall-mount installation.

To make the selection please refer to the "control panels" or "VMF system shett" where you will find comprehensive information on this topic.

VMF-485LINK: Expansion to interface the unit with the VMF communication protocol, making it possible to manage it from the VMF-E5 or VMF-E6 supervisors.

ACCESSORIES COMPATIBILITY

Control panels and dedicated accessories

| Accessory | FCW23VL | FCW33VL | FCW43VL | FCW53VL | FCW232V | FCW233V |
|-----------|---------|---------|---------|---------|---------|---------|
| PFW5 (1) | * | * | * | * | * | * |
| TLW4 (1) | * | * | * | * | * | * |

| Accessory | FCW332V | FCW333V | FCW432V | FCW433V | FCW532V | FCW533V |
|-----------|---------|---------|---------|---------|---------|---------|
| PFW5 (1) | * | * | * | * | * | * |
| TLW4 (1) | * | * | * | * | * | * |

(1) Mandatory accessory.

Cold plasma mounting kit

| Accessory | FCW23VL | FCW33VL | FCW43VL | FCW53VL | FCW232V | FCW232VN | FCW233V | FCW233VN | FCW332V | FCW332VN |
|-----------|---------|---------|---------|---------|---------|----------|---------|----------|---------|----------|
| FCWCP | * | * | * | * | * | * | * | * | * | * |

| Accessory | FCW333V | FCW333VN | FCW432V | FCW432VN | FCW433V | FCW433VN | FCW532V | FCW532VN | FCW533V | FCW533VN |
|-----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|
| FCWCP | * | * | * | * | * | * | * | * | * | * |

VMF system

| Accessory | FCW23VL | FCW33VL | FCW43VL | FCW53VL | FCW232V | FCW233V |
|-------------|---------|---------|---------|---------|---------|---------|
| VMF-485LINK | * | * | * | * | * | * |

| Accessory | FCW332V | FCW333V | FCW432V | FCW433V | FCW532V | FCW533V |
|-------------|---------|---------|---------|---------|---------|---------|
| VMF-485LINK | * | * | * | * | * | * |

The VMF-485LINK accessory is not compatible with radiant floor heating systems.

PERFORMANCE SPECIFICATIONS

2-pipe

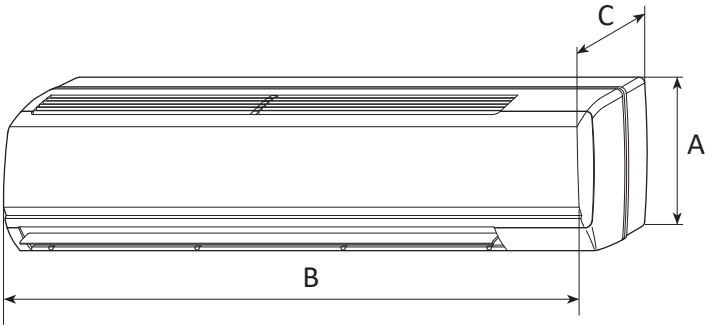
| | | FCW23VL | | | FCW33VL | | | FCW43VL | | | FCW53VL | | | FCW232V | | | FCW233V | | |
|---------------------------------------|-------|--------------|------|------|--------------|------|------|--------------|------|------|--------------|-------|-------|--------------|-------|-------|--------------|-------|-------|
| | | 1 | 2 | 3 | 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 | L | M | H |
| Heating performance 70 °C / 60 °C (1) | | | | | | | | | | | | | | | | | | | |
| Heating capacity | kW | 2,85 | 3,66 | 4,29 | 3,73 | 4,51 | 5,24 | 6,44 | 7,84 | 8,56 | 8,20 | 13,06 | 15,28 | 2,35 | 3,02 | 4,03 | 2,35 | 3,02 | 4,03 |
| Water flow rate system side | l/h | 250 | 321 | 377 | 328 | 396 | 460 | 565 | 688 | 751 | 718 | 1145 | 1339 | 206 | 265 | 354 | 206 | 265 | 354 |
| Pressure drop system side | kPa | 4 | 6 | 9 | 9 | 12 | 16 | 16 | 22 | 26 | 10 | 23 | 30 | 9 | 14 | 24 | 9 | 14 | 24 |
| Heating performance 45 °C / 40 °C (2) | | | | | | | | | | | | | | | | | | | |
| Heating capacity | kW | 1,42 | 1,82 | 2,14 | 1,85 | 2,24 | 2,61 | 3,21 | 3,90 | 4,26 | 4,10 | 6,50 | 7,60 | 1,17 | 1,50 | 2,00 | 1,17 | 1,50 | 2,00 |
| Water flow rate system side | l/h | 246 | 316 | 371 | 322 | 390 | 453 | 556 | 677 | 739 | 712 | 1129 | 1320 | 203 | 261 | 348 | 203 | 261 | 348 |
| Pressure drop system side | kPa | 4 | 6 | 8 | 9 | 12 | 16 | 15 | 22 | 25 | 10 | 22 | 29 | 9 | 14 | 24 | 9 | 14 | 24 |
| Cooling performance 7 °C / 12 °C | | | | | | | | | | | | | | | | | | | |
| Cooling capacity | kW | 1,37 | 1,74 | 2,05 | 1,78 | 2,15 | 2,50 | 3,07 | 3,74 | 4,08 | 4,40 | 6,50 | 7,45 | 1,10 | 1,45 | 1,90 | 1,10 | 1,45 | 1,90 |
| Sensible cooling capacity | kW | 1,16 | 1,47 | 1,73 | 1,51 | 1,82 | 2,04 | 2,59 | 3,10 | 3,47 | 3,30 | 5,05 | 5,80 | 0,92 | 1,20 | 1,55 | 0,92 | 1,20 | 1,55 |
| Water flow rate system side | l/h | 236 | 299 | 353 | 306 | 370 | 430 | 528 | 643 | 702 | 755 | 1115 | 1278 | 189 | 249 | 327 | 189 | 249 | 327 |
| Pressure drop system side | kPa | 5 | 7 | 9 | 8 | 11 | 15 | 15 | 21 | 26 | 12 | 24 | 30 | 9 | 14 | 23 | 9 | 14 | 23 |
| Fan | | | | | | | | | | | | | | | | | | | |
| Type | type | Tangential | | | Tangential | | | Tangential | | | Tangential | | | Tangential | | | Tangential | | |
| Fan motor | type | Asynchronous | | | Asynchronous | | | Asynchronous | | | Asynchronous | | | Asynchronous | | | Asynchronous | | |
| Number | no. | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | |
| Air flow rate | m³/h | 280 | 340 | 389 | 330 | 400 | 446 | 476 | 602 | 684 | 592 | 945 | 1179 | 270 | 330 | 380 | 270 | 330 | 380 |
| Input power | W | 23 | 24 | 27 | 22 | 23 | 27 | 31 | 41 | 48 | 38 | 55 | 75 | 23 | 24 | 27 | 23 | 24 | 27 |
| Fan coil sound data (3) | | | | | | | | | | | | | | | | | | | |
| Sound power level | dB(A) | 42,0 | 48,0 | 53,0 | 42,0 | 48,0 | 53,0 | 44,0 | 49,0 | 54,0 | 44,0 | 54,0 | 60,0 | 42,0 | 48,0 | 53,0 | 42,0 | 48,0 | 53,0 |
| Sound pressure | dB(A) | 34,0 | 39,5 | 44,5 | 34,0 | 39,5 | 44,5 | 35,5 | 40,5 | 45,5 | 35,5 | 45,5 | 51,5 | 34,0 | 39,5 | 44,5 | 34,0 | 39,5 | 44,5 |
| Diameter hydraulic fittings | | | | | | | | | | | | | | | | | | | |
| Main heat exchanger | Ø | 1/2" | | | 1/2" | | | 1/2" | | | 3/4" | | | 1/2" | | | 1/2" | | |
| Power supply | | | | | | | | | | | | | | | | | | | |
| Power supply | | 230V~50Hz | | | 230V~50Hz | | | 230V~50Hz | | | 230V~50Hz | | | 230V~50Hz | | | 230V~50Hz | | |
| | | | | | | | | | | | | | | | | | | | |
| | | FCW332V | | | FCW333V | | | FCW432V | | | FCW433V | | | FCW532V | | | FCW533V | | |
| | | 1 | 2 | 3 | 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 | L | M | H |
| Heating performance 70 °C / 60 °C (1) | | | | | | | | | | | | | | | | | | | |
| Heating capacity | kW | 3,25 | 4,36 | 5,03 | 3,25 | 4,36 | 5,03 | 6,29 | 7,23 | 7,97 | 6,29 | 7,23 | 7,97 | 8,04 | 11,80 | 14,00 | 8,04 | 11,80 | 14,00 |
| Water flow rate system side | l/h | 286 | 383 | 442 | 286 | 383 | 442 | 552 | 635 | 699 | 552 | 635 | 699 | 704 | 1034 | 1227 | 704 | 1034 | 1227 |
| Pressure drop system side | kPa | 13 | 22 | 29 | 13 | 22 | 29 | 21 | 27 | 32 | 21 | 27 | 32 | 10 | 21 | 28 | 10 | 21 | 28 |
| Heating performance 45 °C / 40 °C (2) | | | | | | | | | | | | | | | | | | | |
| Heating capacity | kW | 1,62 | 2,17 | 2,50 | 1,62 | 2,17 | 2,50 | 3,13 | 3,60 | 3,96 | 3,13 | 3,60 | 3,96 | 4,00 | 5,90 | 7,00 | 4,00 | 5,90 | 7,00 |
| Water flow rate system side | l/h | 281 | 377 | 434 | 281 | 377 | 434 | 543 | 624 | 688 | 543 | 624 | 688 | 695 | 1025 | 1216 | 695 | 1025 | 1216 |
| Pressure drop system side | kPa | 13 | 22 | 29 | 13 | 22 | 29 | 20 | 26 | 31 | 20 | 26 | 31 | 11 | 22 | 30 | 11 | 22 | 30 |
| Cooling performance 7 °C / 12 °C | | | | | | | | | | | | | | | | | | | |
| Cooling capacity | kW | 1,55 | 2,08 | 2,40 | 1,55 | 2,08 | 2,40 | 3,00 | 3,45 | 3,80 | 3,00 | 3,45 | 3,80 | 4,00 | 6,00 | 7,00 | 4,00 | 6,00 | 7,00 |
| Sensible cooling capacity | kW | 1,28 | 1,68 | 1,97 | 1,28 | 1,68 | 1,97 | 2,01 | 2,50 | 2,85 | 2,01 | 2,50 | 2,85 | 2,85 | 4,50 | 5,30 | 2,85 | 4,50 | 5,30 |
| Water flow rate system side | l/h | 267 | 358 | 413 | 267 | 358 | 413 | 516 | 593 | 654 | 516 | 593 | 654 | 686 | 1030 | 1201 | 686 | 1030 | 1201 |
| Pressure drop system side | kPa | 13 | 22 | 29 | 13 | 22 | 29 | 21 | 27 | 32 | 21 | 27 | 32 | 11 | 23 | 30 | 11 | 23 | 30 |
| Fan | | | | | | | | | | | | | | | | | | | |
| Type | type | Tangential | | | Tangential | | | Tangential | | | Tangential | | | Tangential | | | Tangential | | |
| Fan motor | type | Asynchronous | | | Asynchronous | | | Asynchronous | | | Asynchronous | | | Asynchronous | | | Asynchronous | | |
| Number | no. | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | |
| Air flow rate | m³/h | 320 | 390 | 440 | 320 | 390 | 440 | 370 | 470 | 540 | 370 | 470 | 540 | 535 | 859 | 1082 | 535 | 859 | 1082 |
| Input power | W | 22 | 23 | 27 | 22 | 23 | 27 | 31 | 41 | 48 | 31 | 41 | 48 | 38 | 55 | 75 | 38 | 55 | 75 |
| Fan coil sound data (3) | | | | | | | | | | | | | | | | | | | |
| Sound power level | dB(A) | 42,0 | 48,0 | 53,0 | 42,0 | 48,0 | 53,0 | 44,0 | 49,0 | 54,0 | 44,0 | 49,0 | 54,0 | 44,0 | 54,0 | 60,0 | 44,0 | 54,0 | 60,0 |
| Sound pressure | dB(A) | 34,0 | 39,5 | 44,5 | 34,0 | 39,5 | 44,5 | 35,5 | 40,5 | 45,5 | 35,5 | 40,5 | 45,5 | 35,5 | 45,5 | 51,5 | 35,5 | 45,5 | 51,5 |
| Diameter hydraulic fittings | | | | | | | | | | | | | | | | | | | |
| Main heat exchanger | Ø | 1/2" | | | 1/2" | | | 1/2" | | | 1/2" | | | 3/4" | | | 3/4" | | |
| Power supply | | | | | | | | | | | | | | | | | | | |
| Power supply | | 230V~50Hz | | | 230V~50Hz | | | 230V~50Hz | | | 230V~50Hz | | | 230V~50Hz | | | 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) 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



| | | FCW23VL | FCW33VL | FCW43VL | FCW53VL | FCW232V | FCW233V |
|------------------------|----|---------|---------|---------|---------|---------|---------|
| Dimensions and weights | | | | | | | |
| A | mm | 298 | 305 | 360 | 365 | 298 | 298 |
| B | mm | 880 | 990 | 1170 | 1450 | 880 | 880 |
| C | mm | 205 | 210 | 220 | 230 | 205 | 205 |
| Empty weight | kg | 9 | 10 | 19 | 28 | 9 | 9 |

| | | FCW332V | FCW333V | FCW432V | FCW433V | FCW532V | FCW533V |
|------------------------|----|---------|---------|---------|---------|---------|---------|
| Dimensions and weights | | | | | | | |
| A | mm | 305 | 305 | 360 | 360 | 365 | 365 |
| B | mm | 990 | 990 | 1170 | 1170 | 1450 | 1450 |
| C | mm | 210 | 210 | 220 | 220 | 230 | 230 |
| Empty weight | kg | 10 | 10 | 19 | 19 | 28 | 28 |

Aermec si riserva la facoltà di apportare in qualsiasi momento tutte le modifiche ritenute necessarie per il miglioramento del prodotto con eventuale modifica dei relativi dati tecnici.

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