

## FCW Fan coil Wall installation



Aermec participate in the EUROVENT program: FC / 2 / H



**Variable Multi Flow<sup>®</sup>**  
VMF

- **2V version with 2-way valve fitted inside**  
**Wired control panel or remote control**
- **3V version with 2-way valve fitted inside**  
**Wired control panel or remote control**
- **VL version without valve**  
**Wired control panel or remote control**
- **2VN version with 2-way valve fitted inside**  
**Standard control or VMF System**
- **3VN version with 3-way valve fitted inside**  
**Standard control or VMF System**
- **VLN version without valve**  
**Standard control or VMF System**

### Features

By choosing the appropriate options it is possible to select the model to suit the specific system requirements:

#### Unit configuration:

1 2 3  
|  
Code  
**FCW**

4 5  
|  
Size  
**21**  
**31**  
**41**

6 7  
|  
Valve  
**2V** (2-way valve fitted inside)  
**3V** (3-way valve fitted inside)  
**VL** (without Valve)

8  
|  
Microprocessor Controller  
**(Blank)** with controller  
**N** without controller

- **EUROVENT certified**
- Cream color
- Display on panel front
- Tangential three-speed fan assembly
- Very quiet operation
- Aesthetic design
- Horizontally adjustable discharge air blades
- Horizontal deflector blades to vertically adjust discharge air. Manually adjustable only for units

without microprocessor controller. For units with microprocessor controller adjustable only via PFW2 wired control panel or TLW2 remote control

- Timer for on/off programming (TLW2 and PFW2)
- Automatic, cooling, heating, ventilation and dehumidification function programming (TLW2 and PFW2)
- Sleep function only with TLW2 remote control

- Automatic season change (TLW2 and PFW2)
- Automatic start after black-out (TLW2 and PFW2)
- Ease of installation with hydraulic and condensate drain connections adjustable in several directions
- Routine maintenance is limited to periodic cleaning of the air filter
- Air filter can be easily removed and cleaned
- Full compliance with safety regulations

### Accessories

#### • TLW2 REMOTE CONTROL (accessory for versions with microprocessor controller FCW\_2V, FCW\_3V, FCW\_VL):

**Accessory essential for the fan coil unit operation**, as an alternative to the PFW2 wired control panel. The two control systems cannot be used at the same time on the same fan coil unit.

The TLW2 remote control is provided loose from the fan coil unit. One remote control can control several fan coil units.

The remote control makes it possible to set all the operating parameters of the unit. These parameters are shown on a liquid crystal display making programming operations easier.

The remote control is supplied with a bracket allowing it to be hung on the wall.

The remote control is fitted with a support so it can be hung on the wall and it is therefore possible to carry out the required operations without removing it, it must be installed at a

point on the wall that is easy to reach and not exposed to sources of heat, steam or direct sunlight and that is at least a meter from televisions or other electronic apparatus

The remote control is powered by two 1.5V mini stick batteries of the R03 AAA type and works optimally up to seven meters from the unit.

#### • PFW2 WIRED CONTROL PANEL (accessory for versions with microprocessor controller FCW\_2V, FCW\_3V, FCW\_VL):

**Accessory essential for the fan coil unit operation**, as alternative to the TLW2 remote control. The two control systems cannot be used at the same time on the same fan coil unit.

A PFW2 wired control panel can control just one fan coil unit.

The wired control panel must be installed on the wall and connected to the fan coil unit

with the cable provided loose.

The panel cable is 4 metres long.

The PFW2 makes it possible to set the main operating parameters of the unit. These parameters are shown on a liquid crystal display making programming operations easier.

#### • WIRED CONTROL PANELS and VMF System (Accessories essential for versions without microprocessor controller FCW\_2VN, FCW\_3VN, FCW\_VLN):

**Accessories essential for the fan coil unit operation**, which then requires a cable connected accessory panel or connection to the accessories of the VFM system. The characteristics of the control panels are described on the appropriate card.

## Technical data

| Mod.                          | FCW                      | 212V | 213V | 21VL | 312V | 313V | 31VL | 412V | 413V | 41VL |
|-------------------------------|--------------------------|------|------|------|------|------|------|------|------|------|
| Heating capacity (E)          | W (max.)                 | 2400 | 2400 | 2560 | 3000 | 3000 | 3125 | 4750 | 4750 | 5100 |
|                               | W (med.)                 | 1800 | 1800 | 2180 | 2600 | 2600 | 2690 | 4310 | 4310 | 4675 |
|                               | W (min.)                 | 1400 | 1400 | 1700 | 1940 | 1940 | 2225 | 3750 | 3750 | 3840 |
| Water pressure drop (E)       | kPa (max.)               | 21   | 21   | 8    | 26   | 26   | 14   | 28   | 28   | 23   |
|                               | kPa (med.)               | 13   | 13   | 6    | 20   | 20   | 10   | 24   | 24   | 19   |
|                               | kPa (min.)               | 8    | 8    | 4    | 12   | 12   | 7    | 18   | 18   | 14   |
| Cooling capacity (E)          | W (max.)                 | 1900 | 1900 | 2050 | 2400 | 2400 | 2500 | 3800 | 3800 | 4080 |
|                               | W (med.)                 | 1450 | 1450 | 1740 | 2080 | 2080 | 2150 | 3450 | 3450 | 3740 |
|                               | W (min.)                 | 1100 | 1100 | 1370 | 1550 | 1550 | 1780 | 3000 | 3000 | 3075 |
| Sensible cooling capacity (E) | W (max.)                 | 1550 | 1550 | 1735 | 1970 | 1970 | 2040 | 2850 | 2850 | 3475 |
|                               | W (med.)                 | 1200 | 1200 | 1475 | 1680 | 1680 | 1825 | 2500 | 2500 | 3115 |
|                               | W (min.)                 | 920  | 920  | 1160 | 1280 | 1280 | 1510 | 2015 | 2015 | 2595 |
| Water flow rate               | l/h (max.)               | 327  | 327  | 352  | 413  | 413  | 430  | 654  | 654  | 702  |
|                               | l/h (med.)               | 249  | 249  | 299  | 358  | 358  | 370  | 593  | 593  | 643  |
|                               | l/h (min.)               | 189  | 189  | 236  | 267  | 267  | 306  | 516  | 516  | 529  |
| Water pressure drop (E)       | kPa (max.)               | 23   | 23   | 9    | 29   | 29   | 15   | 32   | 32   | 26   |
|                               | kPa (med.)               | 14   | 14   | 7    | 22   | 22   | 11   | 27   | 27   | 21   |
|                               | kPa (min.)               | 9    | 9    | 5    | 13   | 13   | 8    | 21   | 21   | 15   |
| Input power (E)               | W (max.)                 | 27   | 27   | 27   | 27   | 27   | 27   | 48   | 48   | 48   |
|                               | W (med.)                 | 24   | 24   | 24   | 23   | 23   | 23   | 41   | 41   | 41   |
|                               | W (min.)                 | 23   | 23   | 23   | 22   | 22   | 22   | 41   | 41   | 31   |
| Input current                 | A (max.)                 | 0,13 | 0,13 | 0,13 | 0,13 | 0,13 | 0,13 | 0,23 | 0,23 | 0,23 |
|                               | A (med.)                 | 0,11 | 0,11 | 0,11 | 0,11 | 0,11 | 0,11 | 0,19 | 0,19 | 0,19 |
|                               | A (min.)                 | 0,1  | 0,1  | 0,10 | 0,11 | 0,11 | 0,11 | 0,14 | 0,14 | 0,14 |
| Air flow rate                 | m <sup>3</sup> /h (max.) | 380  | 380  | 389  | 440  | 440  | 446  | 540  | 540  | 684  |
|                               | m <sup>3</sup> /h (med.) | 330  | 330  | 340  | 390  | 390  | 400  | 470  | 470  | 602  |
|                               | m <sup>3</sup> /h (min.) | 270  | 270  | 280  | 320  | 320  | 330  | 370  | 370  | 476  |
| Sound pressure                | dB (A) (max.)            | 44,5 | 44,5 | 44,5 | 44,5 | 44,5 | 44,5 | 45,5 | 45,5 | 45,5 |
|                               | dB (A) (med.)            | 39,5 | 39,5 | 39,5 | 39,5 | 39,5 | 39,5 | 40,5 | 40,5 | 40,5 |
|                               | dB (A) (min.)            | 34   | 34   | 34   | 34   | 34   | 34   | 35,5 | 35,5 | 35,5 |
| Sound power (E)               | dB (A) (max.)            | 53   | 53   | 53   | 53   | 53   | 53   | 54   | 54   | 54   |
|                               | dB (A) (med.)            | 48   | 48   | 48   | 48   | 48   | 48   | 49   | 49   | 49   |
|                               | dB (A) (min.)            | 42,5 | 42,5 | 42,5 | 42,5 | 42,5 | 42,5 | 44   | 44   | 44   |
| Coil connections              | ø                        | ½" F | ½" F | ½" F | ½" F | ½" F | ½" F | ½" F | ½" F | ½" F |

230V ~ 50Hz

(E) = EUROVENT certified performance

♪ Level of sound pressure (A-weighted) measured in the room with volume V=85m<sup>3</sup>; reverberation time t=0.5s; direction factor Q=2; distance r=2.5m

Performance values refer to the following conditions (EUROVENT 6/3) :

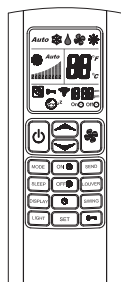
■ Cooling:

- Room air temperature 27°C B.S. ; 19°C B.U.
- Water inlet temperature 7°C
- Δt water 5°C

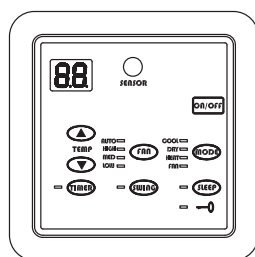
■ Heating:

- Room air temperature 20°C B.S.
- Water inlet temperature 50°C
- Δt water 5°C
- Water flow rate remains same as at cooling mode

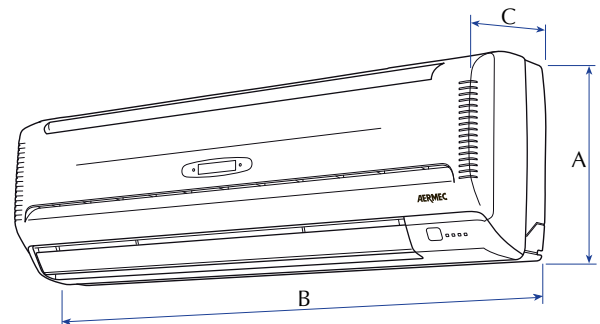
## Dimensions (mm)



TLW2



PFW2



|        | FCW | 212V | 212V | 21VI | 312V | 312V | 31VI | 412V | 412V | 41VI |
|--------|-----|------|------|------|------|------|------|------|------|------|
| Height | A   |      | 298  |      |      | 305  |      |      | 360  |      |
| Width  | B   |      | 880  |      |      | 990  |      |      | 1172 |      |
| Depth  | C   |      | 180  |      |      | 180  |      |      | 210  |      |
| Weight | kg  |      | 9    |      |      | 10   |      |      | 19   |      |

The technical data given in this documentation are not binding. Aermec S.p.A. reserves the right to apply at any time all the modifications deemed necessary for improving the product.

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