

The advantages of proper ventilation

A controlled mechanical ventilation system with heat recovery is a system designed for the **continuous air exchange** in the home and in all indoor environments in general that allows stale air to be replaced and substituted with fresh, oxygen-rich outside air.

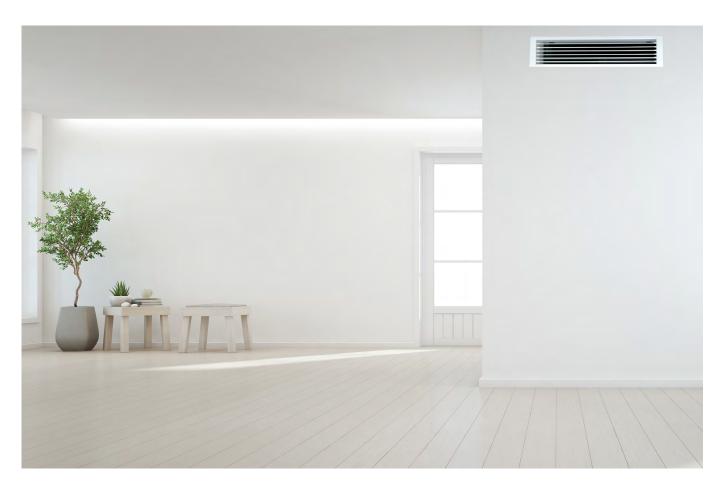
The choice of integrating a ventilation system into a building makes it possible to ensure proper exchange of air in closed rooms in all situations where it cannot be managed by opening windows. This is essential in promoting the evacuation of pollutants that accumulate in indoor spaces by ensuring **greater comfort** and **health** at home or in office spaces.

Mechanical ventilation is also essential in all modern homes or buildings with high energy efficiency and a high percentage of insulation for the prevention of issues regarding humidity and mould.

The most advanced VMC systems include a **heat recovery** system: the thermal energy of the outgoing air that has been heated or cooled is retained in the exchanger and then transferred to the incoming air, which will therefore be warmer in winter and cooler in summer than the outdoor air.

I Plus

- · Continuous, uniform temperature management;
- · Control of the percentage of humidity in rooms;
- · Advanced air filtering;
- · Containment of external noise;
- Reduction of energy loss to a minimum.





HFRM - Vertical wall units

Air renewal units for residential application in the HFRM series feature very high heat recovery efficiency, light weight and compactness, and easy, trouble-free installation.

Heat recovery, which takes place using a device made entirely of polystyrene, makes it practically unnecessary to use post-handling systems for replacement air. They can be supplied in combination with an air ionisation system, which is used to sanitise and deodorise air and the surfaces of the machine, ducting and neighbouring rooms.

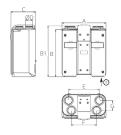
- · Compliant with ERP 2016-2018,
- · Low consumption EC fans,
- · Integrated by-pass system,
- · Compact and ultra lightweight,
- · F7 return filtering,
- · G4 expulsion filtration.



HFRM heat recovery unit

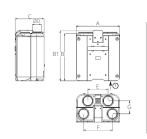
| MODEL | | HFRM15 | HFRM25 | HFRM35 | HFRM50 | HFRM60 |
|---|---------|--------------|-------------|--------------|--------------|--------------|
| Power supply | V/Ph/Hz | 230/1/50 | | | | |
| Maximum nominal air flow volume 100Pa | m³/h | 152 | 250 | 352 | 500 | 610 |
| Nominal static air flow | Pa | 300 | 100 | 280 | 100 | 100 |
| Dimensions | mm | 700x800x390 | 700x800x390 | 905x1030x600 | 905x1030x600 | 905x1030x600 |
| Weight | kg | 15 | 18 | 28 | 30 | 35 |
| Sound pressure level ⁽¹⁾ | dB (A) | 49 | 52 | 54 | 55 | 55 |
| Outdoor temperature/humidity limits | °C | -5+45/595% | | | | |
| Indoor temperature/humidity limits | °C | +10+35/1090% | | | | |
| FANS | | | | | | |
| Total nominal current consumption | А | 0.60 | 1.30 | 1.30 | 1.70 | 1.30 |
| Total nominal power consumption | W | 64 | 58 | 58 | 86 | 153 |
| Max. electric power consumption | W | 136 | 136 | 196 | 196 | 340 |
| Maximum total current consumption | A | 1.30 | 1.30 | 1.70 | 1.70 | 3.40 |
| WINTER OPERATION HEAT RECOVERY UNIT | | | | | | |
| Heating efficiency ⁽¹⁾ | % | 87.2 | 87.0 | 85.7 | 88.2 | 84.8 |
| Air delivery temperature ⁽¹⁾ | °C | 17.0 | 22.0 | 16.4 | 17.0 | 16.2 |
| SUMMER OPERATION HEAT RECOVERY UNIT | | | | | | |
| Heating efficiency ⁽²⁾ | % | 82.4 | 79.9 | 80.4 | 81.0 | 79.2 |
| Air delivery temperature ⁽²⁾ | °C | 27.1 | 27.2 | 27.2 | 27.1 | 27.2 |
| CODE | | 0006451 | 0006452 | 0006453 | 0006454 | 0006455 |

(1) Outdoor air -5°C 80% RH; room air 20°C 50% RH (2) Outdoor air 32°C 50% RH; room air 26°C 50% RH





HFRM 15 - 25





HFRM 35 - 60

| MODEL DIMENSIONS | | HFRM15 | HFRM25 | HFRM35 | HFRM50 | HFRM60 |
|------------------|----|--------|--------|--------|--------|--------|
| А | mm | 700 | 700 | 905 | 905 | 905 |
| В | mm | 740 | 740 | 970 | 970 | 970 |
| B1 | mm | 800 | 800 | 1030 | 1030 | 1030 |
| С | mm | 390 | 390 | 600 | 600 | 600 |
| E | mm | 490 | 490 | 418 | 418 | 418 |
| F | mm | 400 | 400 | 600 | 600 | 600 |
| G | mm | 155 | 155 | 265 | 265 | 265 |
| ØD | mm | 125 | 125 | 200 | 200 | 200 |
| ØS | mm | 20 | | | | |



Accessories - HFR and HFRM



PCUS/PCUSM



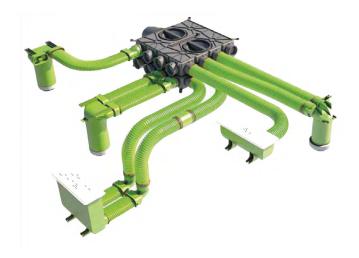






| MODEL | Abb. | | |
|--|------------|--|--|
| Electrical Pre-heat. | BE1 | | |
| Electric Post-Heat. | BE2 | | |
| Water Pre-heat, coil | BW1 | | |
| Water Pre-fleat. Coll | BW2 | | |
| Water Post-coolheat. coil | ВНС | | |
| 2-way valve kit ON-OFF | V20 | | |
| 3-way valve kit MODULATING | V3M | | |
| Filter and PM1 70% | F7CF | | |
| ADJUSTMENT ACCESSORIES | | | |
| PCUS control panel | PCUS | | |
| PCUSM (modbus) control panel | PCUSM | | |
| 4-button radio freq. panel | TS4 | | |
| Antenna | ANT | | |
| Wall-mounted control panel | WUI | | |
| | | | |
| Wall-mounted CO2 probe | QSW | | |
| Wall-mounted CO2 probe Wall-mounted humidity probe | QSW USW | | |
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Air distribution accessories - HFR, HFRM and HRH



Air distribution systems for controlled mechanical ventilation are available on request.