



## SOLITAIR, THE SMART VENTILATION THAT ALLOWS TO RECOVER HEAT

## Through a ceramic accumulator placed inside, this Decentralised unit is able to reduce heat loss guaranteeing, in addition to a suitable aeration of the interior spaces, also a heat recovery with up to 90% actual efficiency.

It's called "SOLITAIR" the new Ave's proposal for residential ventilation. Born from continuous commitment to research and development of technologies to improve the quality of life, the new Decentralized heat recovery unit with alternate flow is a product that excels in terms of efficiency, safety, noise and aesthetics, designed and built to ensure optimal ventilation for indoor environments by limiting heat loss with obvious benefits in terms of energy and costs.

An adequate ventilation of enclosed spaces is essential to preserve the integrity of the buildings and the well-being of its inhabitants: the Controlled Mechanical Ventilation units ensure a proper air exchange preventing the formation of condensation and mold that might going to affect the structure itself and the health of people who live in it. Ave S.p.a. has managed to bring to the market **SOLITAIR**, a device that complete the DomusAir, specially designed to ensure maximum comfort by limiting consumption and heat dissipation.

Another peculiarity is that **SOLITAIR does not require a condensation drainage**. Thanks to the expedients adopted, to install this unit it's sufficient a hole with a diameter of only 160mm on a perimeter wall, **avoiding splits for exhaust pipes and considerably reducing both installation times and the costs for the end user.** In this way, the new Ave's device adapts virtually to any type of building and **is particularly indicated for renovation work** where it's usually more difficult and expensive to operate.

Exploiting a reversible EC Brushless motor, **SOLITAIR is able to operate continuously (24 / 24h) expelling the stale air and entering clean air taken from outside.** By alternating these operations with an interval of about 75 seconds, the unit VNRD150EC unable to ensure a perfect aeration of the interiors limiting heat dispersion. Thanks to the **presence of a ceramic heat exchanger** with high thermal efficiency, SOLITAIR **is able to recover up to more than 90% of the heat that otherwise would be lost**: the air extracted through the duct gives up its thermal energy to the ceramic accumulator which can heat the incoming air.

For better balance of the system, it's common to use these units in pairs easily manageable through a single external command (which can manage up to ten units at the same time). In this way it's possible to synchronize with each other the flows and get a change of air more efficient and intelligent. Multiple synchronization is simple and immediate: you have just to select the integrated jumpers to tune VNRD150EC units each other.

**SOLITAIR is a product on human scale**: to ensure tenant's electrical safety, this unit has a double insulation and X4 IP degree. The operation speed of this CMV unit can be adjusted to fit the user's needs: through the **multi-speed** command it's possible to manually select between three options, depending on the rate of required ventilation, or to manage the speed variation in an entirely automatic manner by connecting the unit to a humidistat, a PIR sensor or CO2 sensor. **Free cooling mode** makes possible the work only in extraction or intake, avoiding the heat recovery when is not required and viewing comfortably the insertion of this function through a built-in led.

At the design phase, the care was focused to offer a product that be practical for the user and, at the same time, facilitate the installation work. Precisely for this reason CMV with heat recovery integrates a special telescopic ducting that is able to adapt to the wall thickness without having to apply any modifications. On the rear part of the ventilating unit it was also added a reinforcement ring that prevents the deformation of the sleeve during installation. To simplify the maintenance and cleaning operations, the anti-dust filter (removable by the user) and the wall plate (in galvanized steel pre-painted with 9010 color) are supplied as standard, while the flat front cover is made to be easily removed without any tools.

The EC Brushless motor combines maximum efficiency at low power consumptions. Provided with ball bearing "long life", which guarantee the continuous running and a long service life (up to 30,000 hours), this engine is equipped with thermal protection that avoid automatically overheating. Central aerodynamic-shaped inlet and deflectors increases the efficiency creating less friction to air flow and ensuring the maximum acoustic comfort. The **noiseless** is ensured by "winglets" blades, mounted on the fan aerodynamics, that optimize performance and reduce noise emissions during operation.





This device is suitable for installation in noble premises such as living rooms, bedrooms or living areas. Therefore particular attention was given to a design that reflects the DomusAir series. SOLITAIR is compact stylish product designed to fit any furnishing. The aesthetic choices of the white RAL9010 frontal make it an object with simple sinuous and contemporary shapes. Totally recyclable, the plastic parts are made of high quality ABS in order to preserve the area surface by natural aging and discolouration, being shock-proof and UV resistant. The external fixed grille (also made in ABS) has been treated carefully to maintain its integrity over time: equipped with anti-insect net, the bottom was shaped to prevent raindrops drip along the wall thus avoiding the accumulation of moisture.

The result of practical experience in the electric industry and a careful design study, the decentralized heat recovery CMV with alternate flow completes the Ave's offer in the ventilation field. Thanks to the measures adopted **the new DomusAir proposal is an innovative device that confirms the research activities carried out by the company to improve the quality of life and environment.** SOLITAIR: the smart ventilation to recover heat.

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