

## 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.



## Dry Radiant - Radiant system dehumidifier

- Strong self-supporting structure made of galvanized steel plate prevents vibrations and includes fixing brackets for ceiling or wall installation. Accessibility to internal components is guaranteed by opening the front panel for easy access. The filter can be removed without removing the panels.
- COARSE ISO class filter with ePM10 efficiencies <50% (ISO 16890), thickness 6mm, made of washable synthetic material.
- Plastic fans with curved forward blades directly coupled to motor mounted on maintenance-free ball bearings. For size 80 the motor is AC at three speed levels degree of protection IP20. For size 160 the motor is EC at low consumption;
- Exchange battery made of copper tube and corrugated aluminum fins with high efficiency, with hydrophilic treatment to increase heat exchange even in the presence of high humidity.
- Thermal and acoustic insulation in 3mm expanded cross-linked polyethylene for size 80, polyurethane 10mm for size 160.
- Refrigeration circuit complete with hermetic compressor, condenser, evaporative battery, filter, expansion device, sensors positioned in suction and discharge, copper pipes with thermal insulation, pressure sockets. Refrigerant preloaded in the factory.



DRY RADIANT EVO



Mechanical humidistat

### Versions:

VERSION D: Equipped with compressor on board, Summer operation with water between 15 and 20 C. Thanks to the post-heating battery, during the summer dehumidification the air is introduced in a neutral temperature environment. In winter, the operation of the radiant system can be integrated by supplying the battery with hot water.

VERSION I: Equipped with compressor on board, Summer operation with water between 15 and 20 C. Thanks to the post-heating battery and diverter valves of the internal circuit, during the summer dehumidification air can be released in a neutral temperature environment (dehumidification isotherm) or lower temperature (dehumidification with integration). In winter, by feeding the battery with hot water, it is possible to integrate the operation of the radiant system.

Model	Version	DRE 80 V		DRE 80 H		DRE 160 H	
		I	D	I	D	I	D
Dehumidification capacity	l/24h	20,4	20,4	20,4	20,4	48,1	48,1
Total cooling capacity <sup>(1)</sup>	W	1270	nd	1270	nd	2820	nd
Total heat output (water in 50 °F) <sup>(2)</sup>	W	1400	850	1400	850	2840	1690
Total heat output (water in 35 °F) <sup>(2)</sup>	W	690	425	690	425	1400	850
Feeding	V-Hz	230V-50Hz		230V-50Hz		230V-50Hz	
Power consumption compressor	W	300	300	300	300	600	600
Battery water capacity	l/h	210	150	210	150	430	320
Pressure drop in hydraulic circuit	kPa	21	9	21	9	24	14
Flow rate	mc/h	260		260		520	
Maximum current consumption	A	2,7	2,7	2,7	2,7	5,3	5,3
Refrigerant gas		R134a	R134a	R134a	R134a	R410a	
Weight horizontal version (H)	kg	39		39		55	
Weight vertical version (V)	kg	36		36		-	
Sound power	dB(A)	48	48	48	48	52	52
Sound pressure <sup>(3)</sup>	dB(A)	39	39	39	39	43	43

Versione scheda evoluta (I)

CODE		2005022	2005020	2005027	2005023	2005032	2005030
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Versione scheda base (B)

CODE		nd	2005021	nd	2005025	nd	nd
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(1) Temperatura ambiente 26°C; umidità relativa 65%; Temperatura ingresso acqua 15°C (per entrambe le versioni D e I)

(2) Temperatura ambiente 20°C; umidità relativa 50%; Temperatura ingresso acqua vedi dati in tabella;

(3) Pressione sonora alle seguenti condizioni, misurata a 1,5m di distanza

Versione 80 V: velocità media del ventilatore

Versione 80 H: velocità minima del ventilatore

Versione 160 H: velocità minima del ventilatore

OPTIONAL ACCESSORIES	Codice
Wall humidistat HCP Dry Radiant	2005053
Casing CCM kit disassembled DRE 80 V	2005040
Front panel MPK metal RAL9003	2005041
Shooting plenum SBC - DRE H 80	2005042
Shooting plenum SBC - DRE H 160	2005043
Sent plenum SBC DRE 80 V	2005044