HiDew
Dehumidifiers

Dehumidification and ventilation for cooling radiant systems
Air treatment for cellars, offices and light commercial

MADE IN ITALY

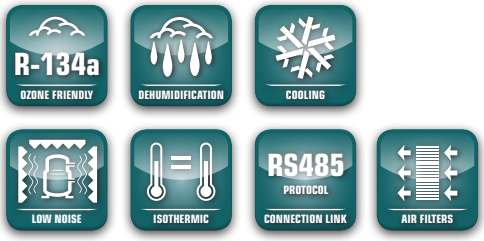
HiDew is proud to present a complete range of dehumidifiers for radiant cooling systems and high performance heat recovery systems for the residential Controlled Mechanical Ventilation.
Every HiDew dehumidifier and recovery system has been designed to respond to an increasingly demanding market in terms of technology, reliability, design, compactness, efficiency, sound level, simplicity and installation ease.
A wide range of accessories (optional) can fulfil any request and, in the event that installation is especially difficult, HiDew technicians are available to suggest and provide customized solutions.

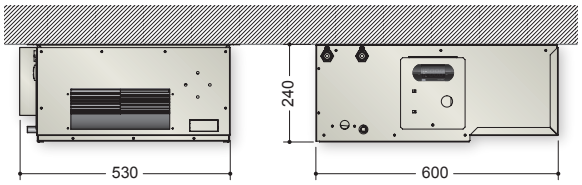
QUALITY FOR YOUR WELLBEING

HiDew
Dehumidifiers

RSO RSE

DEHUMIDIFIERS FOR HORIZONTAL DROP CEILING RADIANT SYSTEMS





The fitted vertical dehumidifiers of the **RSV** range and the horizontal ductable dehumidifiers for drop ceilings of the **RSO** / **RSE** range are designed for civil, residential and commercial environments with high latent load that require 24hrs/day operation. These are particularly suitable for buildings cooled by radiant systems, such as flooring, walls or ceiling. HiDew dehumidifiers can be connected and monitored with RS485 serial port.

The RS range consists of two versions : A – I

A = Neutral air version (isothermal): The letter "A" represents the neutral air isothermal dehumidifier with air condensation, which is supplied with pre and post cooling coils as standard. The outlet air is the same temperature as the inlet air.

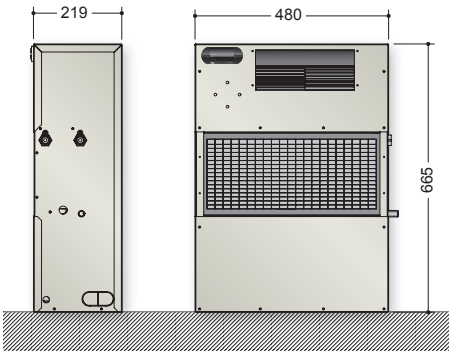
I = Cold integration version: The letter "I" represents the dehumidifier that can add cold power to the radiant system. Thanks to a brazed plate condenser, the "I" models cool the air when required, just as a normal air-conditioner. This function is particularly useful, during half seasons, due to the high difference in temperature, or when cooking or when guests arrive. The "I" models must always receive water from the radiant system in order to operate.

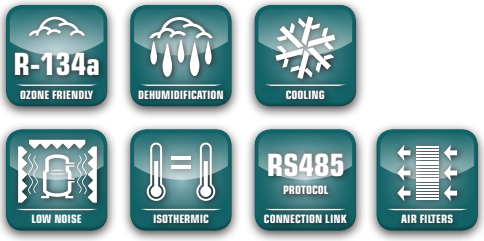
Technical sheet of the range		RSO 020 A	RSO 020 I	RSV 020 A	RSV 020 I	RSE 050 A	RSE 050 I	RSE 100 A	RSE 100 I
Dehumidifying capacity	L/24h	20	20	20	20	48	48	100	100
Air flow rate	m³/h	250	250	250	250	600	600	1000	1000
Cooling Power	Watt	isothermal	1240	isothermal	1240	isothermal	3360	isothermal	6800
Sound level	dB(A)	37	37	37	37	41	41	42	42
Electric power supply	V/ph/Hz	I---------- 230/1/50 ----------I							
Dimensions L X D X H	mm	I--- 530 x 600 x 242 ---I		I---- 480 x 220 x 665 ----I		I---- 760 x 650 x 350 ----I		I--- 1000 x 600 x 450 ---I	

All the values refer to the following conditions: Air temperature 26°C, Relative humidity 65%, Water temperature 15°C

DEHUMIDIFIERS FOR FITTED VERTICAL RADIANT SYSTEMS

RSV





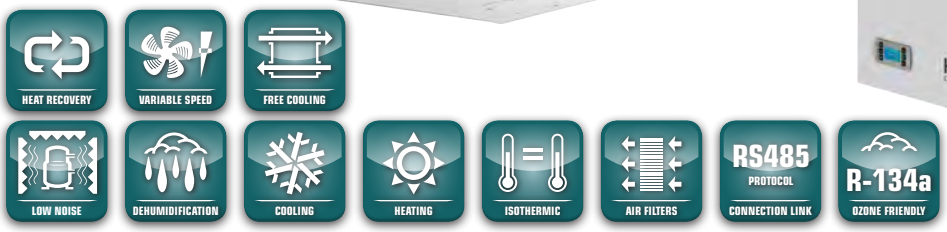
Options:

- Mechanical humidistat
- Mechanical humidistat for in-wall installation
- Two-steps hygrostat
- Chrono-Thermo hygrostat summer/winter
- Supply flange
- Kit frame for suction ducting
- RS485 serial port
- Rubber antivibration
- Supply plenum
- Formwork
- White lacquered wooden panel
- Painted steel sheet panel
- Steel formwork
- Air distribution: see chapter WMC

RADIANT SYSTEMS DEHUMIDIFIERS WITH AIR RENEWAL AND HIGH-EFFICIENCY HEAT RECOVERY SYSTEM

RER

REV



The **RER** and **REV** range dehumidifiers with high-efficiency heat recovery system are used in radiant cooling buildings together with an air renewal system. The RER and REV dehumidifiers dehumidify, cool, heat and change the air. They recover heat from expelled air.
High pressure and minimum electric consumptions are guaranteed by the adjustable electronic fans with permanent magnet brushless motor and cutting-edge incorporated inverter.
The top-quality refrigeration, hydraulic, aeraulic and electrical components make RER and REV units state of the art dehumidifiers in terms of efficiency, reliability and silence.
More than 90% yield is guaranteed by the high-efficiency counter-current heat recovery system. The modulating air renewal can be manual or automatic. The humidifier autonomously controls room temperature and humidity through the standard fitted temperature and humidity sensors. The dehumidifier autonomously controls room temperature and humidity through the optional temperature and humidity sensors. The RER and REV dehumidifiers can be connected to a home automation system thanks to the optional RS485 serial port and requested software customization.

Technical sheet of the range		**RER 015**			**RER 020**			**REV 020**		
		A	**I**	**W**	**A**	**I**	**W**	**A**	**I**	**W**
Dehumidifying capacity	L/24h	16	16	18	24,5	24,5	29	24,5	24,5	29
Nominal air flow	m³/h	160	160	160	260	260	260	260	260	260
Fresh air flow	m³/h	0-80	0-80	0-80	0-130	0-130	0-130	0-130	0-130	0-130
Recovery system efficiency	%	> 90%								
Cooling power	Watt	isothermal	800	1170	isothermal	1300	1920	isothermal	1300	1920
Sound level	dB(A)	36	36	35	39	39	38	39	39	38
Electric power supply	V/ph/Hz	230/ 1~+ N /50								
Dimensions L x D x H	mm	960 x 610 x 245			1125 x 680 x 250			600 x 380 x 980		

Scheda tecnica gamma		**RER 035**			**RER 050**			**RER 100**		
		A	**I**	**W**	**A**	**I**	**W**	**A**	**I**	**W**
Dehumidifying capacity	L/24h	34	34	40	48	48	58	100	100	120
Nominal air flow	m³/h	360	360	360	520	520	520	1000	1000	1000
Fresh air flow	m³/h	0-180	0-180	0-180	0-250	0-250	0-250	0-500	0-500	0-500
Recovery system efficiency	%	> 90%								
Cooling power	Watt	isothermal	1790	2650	isothermal	3230	3650	isothermal	6800	7700
Sound level	dB(A)	41	41	39	44	44	43	47	47	44
Electric power supply	V/ph/Hz	230/ 1~+ N /50								
Dimensions L x D x H	mm	1125 x 680 x 300			1665 x 760 x 375			1500 x 1120 x 450		

All the values refer to the following conditions: Air temperature 26°C, Relative Humidity 65%, W Version Water temperature 15°C : water at 10°C

The RER range consists of 3 versions : A – I - W

A = Neutral air version (isothermal): The letter “A” represents a neutral air isothermal dehumidifier with air condensation, which is supplied as standard with pre and post cooling coils. The outlet air has the same temperature as the inlet air.

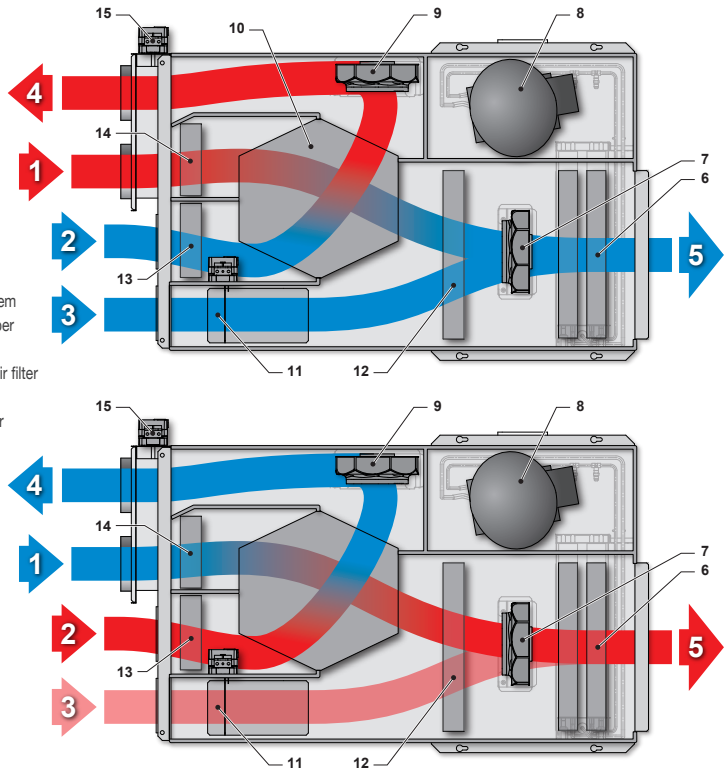
I = Cold integration version: The letter “I” represents a dehumidifier that can add cold power to the radiant system. Thanks to the presence of a brazed plate condenser, the “I” models cool the air as a normal air-conditioner, when required. This function is particularly useful, during half seasons, due to the high difference in temperature or when cooking or when gusts arrive. In order to operate, the “I” models must always receive water from the radiant system.

W = Water version: The letter “W” identifies an especially silent chilled water hydronic dehumidifier without compressor. The outlet air is always cooler than the inlet air. The “W” version supplies conditioned air in summer and heating in winter.

Summer functions

- Renewal
- Renewal + dehumidification
- Renewal + dehumidification + cooling
- Cooling
- Dehumidification
- Dehumidification + Cooling

1 Fresh air intake
2 Exhaust air intake
3 Room air intake (for recirculation)
4 Exhaust air discharge
5 Room air supply
6 Heat exchange coil
7 Blower fan
8 Compressor
9 Exhaust fan
10 Heat recovery system
11 Recirculation damper
12 Supply air filter
13 Recovery system air filter
14 Outdoor air filter
15 Outdoor air damper



Winter functions

- Renewal
- Renewal + heating
- Heating

Included:

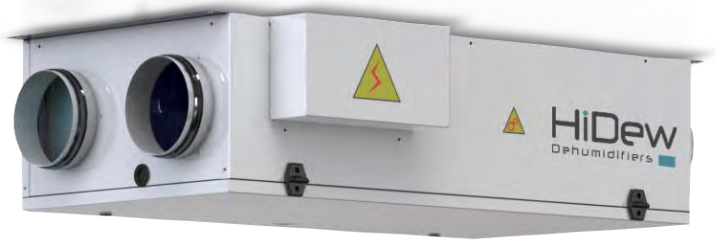
- remote on-wall graphic display
- time bands program
- multi-speed fresh air
- electronic radial fans with brushless engine and inverter integrated
- timed signal for air filters check
- boost mode for fresh air
- supply temperature control

Options:

- Outdoor air dampers for dew-point control
- Free-cooling
- High-efficiency air filter set
- Cable for display connection
- Additional temperature and humidity probes on board
- CO_2 probe
- Recovery automatic defrost
- RS485 serial port
- Silent version
- Adjustable supply air temperature control
- Kit adjustable supply air temperature control
- Supply plenum
- Recovery plenum
- Display mounted on board (REV)
- Outdoor installation (REV)
- Formwork for indoor installation (REV)
- Kit for white lacquered panels (REV)
- Formwork for outdoor installation, with frontal panel (REV)
- Recirculation plenum (REV)
- Kit for recirculation ducting (REV)

HEAT RECOVERY SYSTEMS

ROE



RVE

Air quality and purity, temperature and humidity are critical for comfort, especially during the winter when opening the windows for air results in a significant loss of heat and discomfort for the occupants. In this case a system of controlled mechanical ventilation is the best solution to maintain both the levels of energy performance and the quality of the indoor air.
Recent regulations on energy saving in buildings combined with increasingly efficient thermal insulation and ever-better fitting of doors and windows, have definitely made our homes more comfortable both thermally and acoustically. This, however, has also transformed them into potential “hazardous, sealed traps” where pollutants used in the production process (such as formaldehyde) can be spontaneous released. To achieve adequate air renewal in the building and to ensure good indoor air quality, it is essential to install a controlled mechanical ventilation system. Air renewal is essential for clean living air. The European Parliament has legislated on this, citing ventilation as a “need” for the building. This “need” can clash with the need to improve the building’s energy performance to reduce consumption to a minimum. Controlled mechanical ventilation with **ROE** and **RVE** of HiDew heat recovery is the best solution to reduce the energy needs of a building and at the same time improve the healthiness of the spaces.

Technical sheet of the range **ROE, RVE**		ROE				RVE	
		10	20	35	50	35	50
Efficiency rate		A / A+					
Nominal air flow rate	m^3/h	100	200	350	500	350	500
Heat recovery efficiency	%	93	91	90	88	90	88
Recovered heating power in winter	Watt	790	1547	2660	3732	2660	3732
Recovered heating power in summer	Watt	270	538	920	1280	920	1280
Rated power consumption	Watt	21	40	75	85	75	85
Sound level	dB(A)	49	50	51	49	50	49
Electric power supply	V/ph/Hz	230/1/50					
Available static pressure maximum speed	Pa	150	160	150	160	150	160
Dimensions L x D x H	mm	850x580x200	1000x580x270	1000x730x270	1000x730x400	510x700x860	510x700x860

The recovered heat power and yield values are stated in the indoor air 20°/50%rh and outdoor air -5°/80%rh points

	STANDARD CONTROL	DEVELOPMENT CONTROL
Electronic fans with brushless motor and built-in inverter	STANDARD	STANDARD
Correct fan rotation control	STANDARD	STANDARD
Intelligent automatic defrost	STANDARD	STANDARD
3 speed setting	STANDARD	--
Multi-speed setting	--	STANDARD
Timed dirty filters signalling	STANDARD	STANDARD
General fault signalling	STANDARD	--
Detailed fault signalling	--	STANDARD
Graphic adjustment display to be placed on the wall	--	STANDARD
Boost mode	--	STANDARD
Programming by time bands	--	STANDARD
RS485 serial port	--	OPTIONAL
Free-cooling	STANDARD	STANDARD
Humidity sensor	--	OPTIONAL
CO_2 sensor	--	OPTIONAL
Coil water duct	OPTIONAL	OPTIONAL
Supply temperature control kit	--	OPTIONAL
High-efficiency air filtering set	OPTIONAL	OPTIONAL

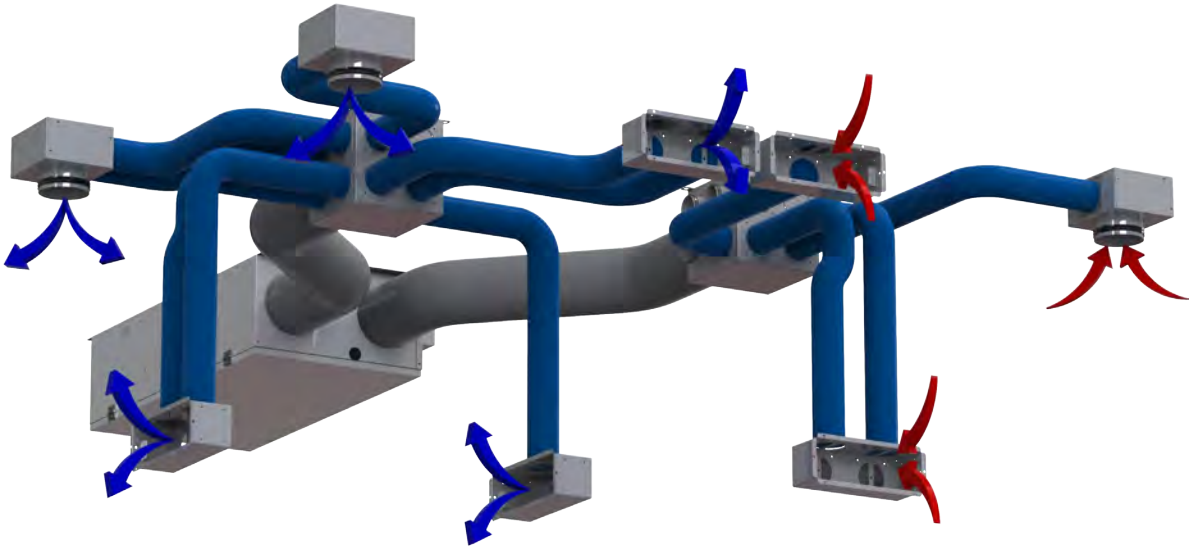
Sample of standard control (not supplied)

THE HEAT RECOVERY SYSTEMS:

- **Increase efficiency class and property value**
- **Renew air without dispersing heat**
- **Reduce danger of allergies**

DEVICES FOR AIR DUCTING

AIR DISTRIBUTION

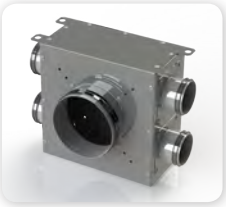
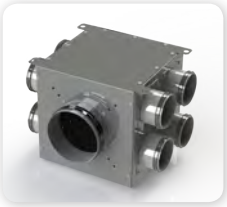


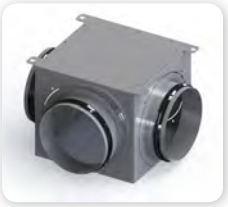
The new series of devices for air ducting for **AIR DISTRIBUTION**,
to be combined with the units of our **RS**, **RER** and **ROE** / **RVE** Series.

Thanks to the variety and completeness of this line, it is possible to realize the ideal comfort conditions and to give an optimal response to the needs for the different installations and canalizations of the units.
Our supply and recovery plenums, the coils for ducted installations and the grilles, combined with our machines, grant the realization of flexible, complete and customizable systems for the air distribution, capable of satisfying the needs of each single ambient.

The installation of HiDew devices for air ducting accessories is a child's play!

Accessories

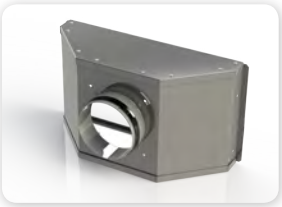
Supply and recover air galvanized steel plenums with internal thermal insulation and sound absorber, with circular connections.

"T" splitter plenum





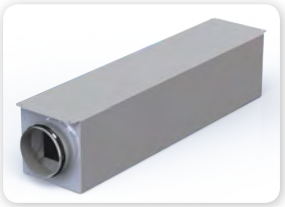

Supply and recover air galvanized steel plenums with internal thermal insulation and sound absorber, to be combined with design grilles.
All our plenums are equipped with an exclusive system of air flow calibration, to grant the right value of air renewal.



Conical supply plenum in galvanized steel with internal thermal insulation and sound absorber (for RER models).

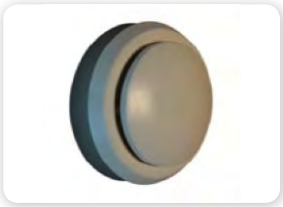
Hot / cold water coil ducted with galvanized steel plenum, internal insulation, sound absorber and steel basin for condensation collection.

Supply and recover grilles with high design, available in aluminium or glared steel.

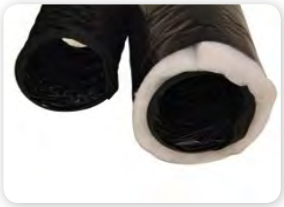


High performance silencer

Flange for the connection of flexible pipes in / out air renewal.



Ventilation valve for the air recover with adjustable jet.



Flexible pipe diameters mm. 125 / 160 / 180 / 200.

Polyethylene pipes for the canalization and distribution of air, to be combined with supply and recover plenums.

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Dehumidifiers

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GALLETTI GROUP