

Párátlanítás és szellőzés lakóépületekhez, ipari létesítményekhez és uszodákhoz



A HiDew komplett páratlanító választékot kínál a felület hűtéssel-fűtéssel ellátott nagy páráképződésű lakóterek, ipari létesítmények, közösségi és magánuszodák számára, igény szerint nagyhatékonyságú hővisszanyerő rendszerrel illetve szabályzott gépi szellőztetéssel kombináltan.

Az összes HiDew pártlanítót és hővisszanyerőt úgy tervezték, hogy megfeleljen a mai megnövekedett piaci elvárásoknak, technológia, megbízhatóság, dizájn, kompaktság, hatékonyság, zajszint és egyszerű telepíthetőség szempontjából is. A széles kiegészítő választékkal (opció) sokféle igényt ki lehet elégíteni, illetve különösen körülményes, speciális telepítések esetén a HiDew gyár mérnökei egyedi, testreszabott konstrukciók tervezését és legyártását is vállalják.



MINŐSÉG AZ ÖN KOMFORTJÁÉRT

Dehumidifiers for horizontal drop ceiling radiant systems

RSO

Dehumidifiers for fitted vertical radiant systems

RSV

Dehumidifiers for radiant systems with heat recovery

RER

Horizontal heat recovery systems with electronic fans

ROE

Vertical heat recovery systems with electronic fans

RVE

Horizontal heat recovery systems for centralised systems

ROC

Dehumidifiers for small elegantly designed swimming pools

SPD

Dehumidifiers for small ducted swimming pools

SPC

Dehumidifiers for industrial processes

ID

Swimming pool dehumidifiers

SP

Dehumidifiers for swimming pools with high air renewal

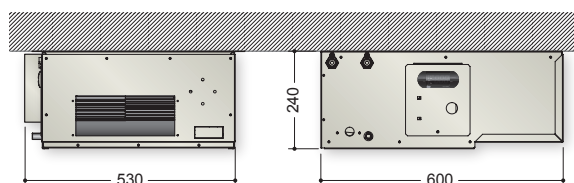
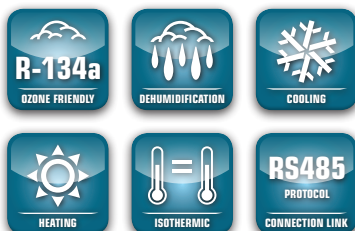
SPR



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.

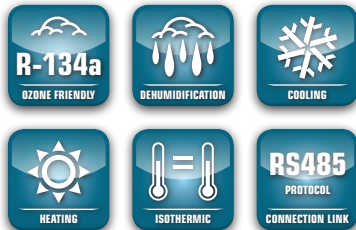
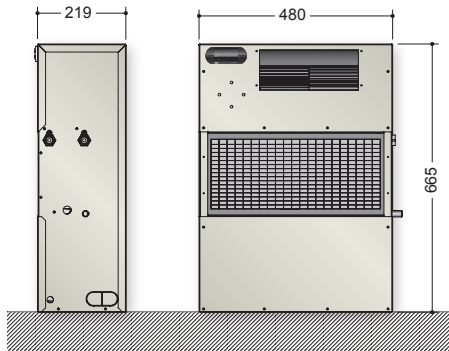
Technical sheet of the range **RS**

		RSO 020 A	RSO 020 I	RSV 020 A	RSV 020 I	RSE 050 A	RSE 050 I
Dehumidifying capacity	L / day	20	20	20	20	48	48
Air flow rate	m³/h	250	250	250	250	600	600
Cooling Power	Watt	isothermal	1240	isothermal	1240	isothermal	3360
Sound level	dB(A)	38	38	38	38	42	42
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	

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:

- Formwork
- White lacquered wooden panel
- Painted steel sheet panel with plastic grills
- Supply plenum
- Mechanical humidistat
- RS485 serial port
- Supply flange



RER

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



The **RER** range dehumidifiers with high-efficiency heat recovery system are used in radiant cooling buildings together with an air renewal system. The RER 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, aerolic and electrical components make RER 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 zero to 130/250 m³/h 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 RER dehumidifiers can be connected to a home automation system thanks to the standard supplied RS485 serial port and requested software customisation.

		RER 020			RER 050		
Technical sheet of the range RER		W	A	I	W	A	I
Dehumidifying capacity	L / 24h	29	24,5	24,5	58	48	48
Air flow rate	m ³ /h	260	260	260	520	520	520
Air renewal	m ³ /h	0 - 130	0 - 130	0 - 130	0 - 250	0 - 250	0 - 250
Recovery system yield	%	> 90%					
Cooling Power	Watt	1920	isothermal	1300	3650	isothermal	3230
Sound level	dB(A)	38	39	39	43	44	44
Power supply	V/ph/Hz	230/ 1~+ N /50					
Dimensions L X P X H	mm	1005 x 680 x 250	1125 x 680 x 250		1665 x 760 x 375		

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.

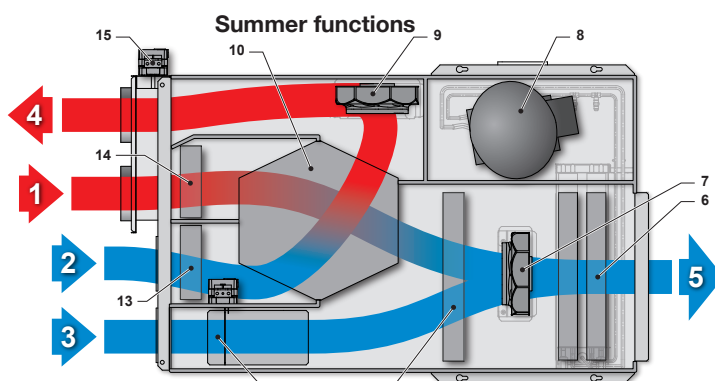
I = Cold integration version: The letter “I” represents a dehumidifier that can add cold power to the radiant system. Thanks to the presence of a brazed plate condenser, the “I” models cool the air as a normal air-conditioner, when required. This function is particularly useful, during half seasons, 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

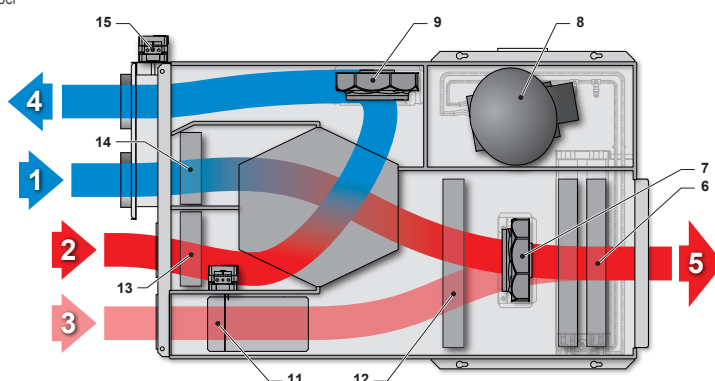
- | | |
|---------------------------------------|-------------------------------|
| 1 Fresh air intake | 9 Exhaust fan |
| 2 Exhaust air intake | 10 Heat recovery system |
| 3 Room air intake (for recirculation) | 11 Recirculation damper |
| 4 Exhaust air discharge | 12 Supply air filter |
| 5 Room air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



Winter functions

Winter functions

- Renewal
- Renewal + heating
- Heating



Options:

- Remote user terminal
- Outside air dampers
- Supply plenum
- Recovery plenum
- Dirty filters indicator pressure switch
- RS-485 serial port
- Set high efficiency air filters
- Antifreeze thermostat



HEAT RECOVERY SYSTEMS

ROE
ROC
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**, **RVE** and **ROC** 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.

		ROE				RVE		ROC	
Technical sheet of the range ROE, RVE, ROC		10	20	35	50	35	50	10	20
Nominal air flow rate	m³/h	100	200	350	500	350	500	100	200
Efficiency	%	93	91	90	88	90	88	93	93
Recovered heating power in winter	Watt	790	1547	2660	3732	2660	3732	790	1580
Recovered heating power in summer	Watt	270	538	920	1280	920	1280	270	540
Rated power consumption	Watt	21	40	75	85	75	85	--	--
Power supply	V/ph/Hz	----- 230/1/50 -----							
Available static pressure maximum speed	Pa	150	160	150	160	150	160	--	--
Load losses	Pa	--	--	--	--	--	--	110	110
Air connections diameter	mm	4x125	4x160	4x180	4x180	4x180	4x180	4x125	4x160

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	OPTIONAL	OPTIONAL
Dirty filters pressure switch	--	OPTIONAL
Humidity sensor	--	OPTIONAL
CO2 sensor	--	OPTIONAL
VOC sensor	--	OPTIONAL
Air purifier	--	OPTIONAL
Coil water duct	OPTIONAL	OPTIONAL
Supply temperature control kit	--	OPTIONAL
High-efficiency air filtering set	OPTIONAL	OPTIONAL
Air supply at constant flow	--	OPTIONAL
Air supply at constant pressure	--	OPTIONAL
Air heater for low outside temperatures	--	OPTIONAL



THE HEAT RECOVERY SYSTEMS:

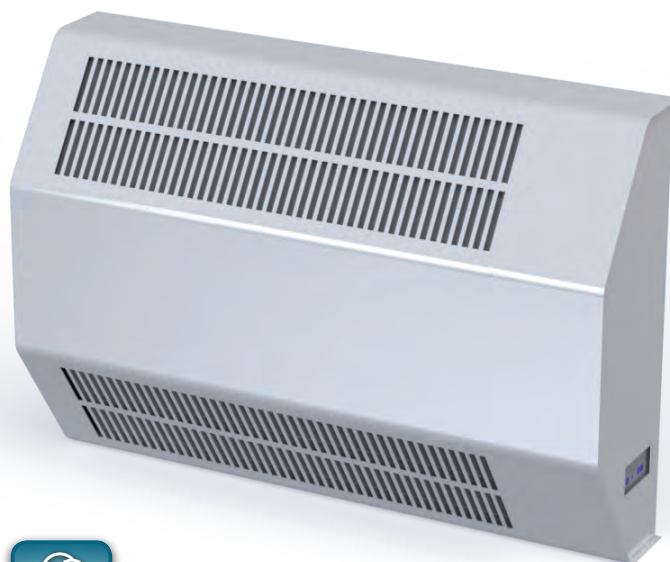
- Increase efficiency class and property value
- Renew air without dispersing heat
- Reduce danger of allergies



SPD

SPC

WALL MOUNTED DEHUMIDIFIER FOR ELEGANTLY DESIGNED SMALL SWIMMING POOLS



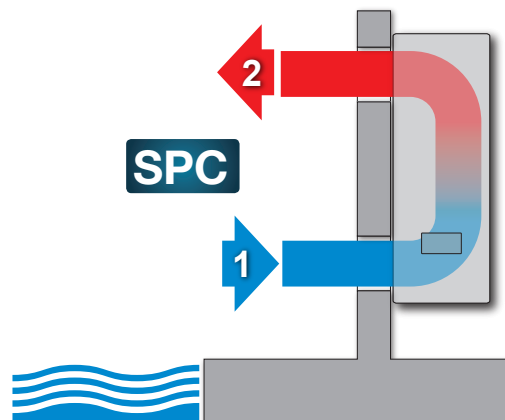
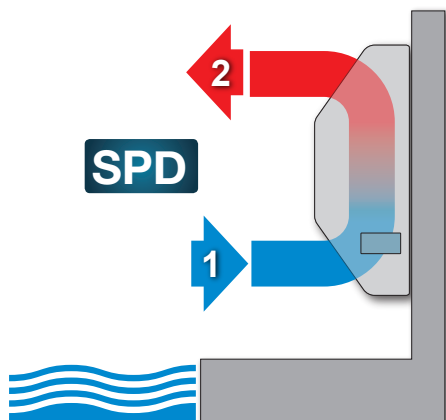
The **SPD** and **SPC** series dehumidifiers are designed for use in small, private pools where they need to be wall mounted.

The SPD models were designed to be installed directly in the room to be dehumidified. The model's look is simple, yet elegant and this eases its installation in a private pool which is generally characterized by a sophisticated and elegant design.

The SPC models are designed to be installed inside a boiler room adjacent to the pool. The installation therefore requires a grille for the air to be delivered and removed from the pool room. The series consists of 2 models from 50 to 130 litres / day.

The SPD and SPC dehumidifiers are completely autonomous in managing humidity. The machine controls read the ambient humidity and activate the dehumidification process as required. Installing these units is, therefore, particularly simple.





Technical sheet of the range

SPD - SPC 050

SPD - SPC 130

Dehumidifying capacity	(at 25°C, 65% RH)	L / day	34	77
Dehumidifying capacity	(at 28°C, 60% RH)	L / day	32	76
Dehumidifying capacity	(at 30°C, 80% RH)	L / day	52	129
Power supply		V/ph/Hz	230/1/50	230/1/50
Power consumption	(at 28 ° C, 60% RH)	Watt	700	1670
Maximum power consumption		Watt	900	2150
Working humidity		%RH	40...95	40...95
Working temperature		°C	+10...+32	+10...+32
Air flow rate		m³ / h	600	750
Hot water coil capacity		kW	6.3	7.5
Electric heating power		Watt	2000	2000
Net weight without accessories		Kg	68	77
Dimensions L x H x D		mm	1174 x 824 x 320	1174 x 824 x 320
Refrigerant gas			r407c	r410a
Sound level		db(A)	48	50

The hot water coil power is stated with water at 80°C, air temperature at 30°C.

Options:

- Hot water heating coil
- Electric heater
- Remote control
- Air discharge and supply grilles (SPC models)
- Compressor sound-proofing

ID
SP

DEHUMIDIFIERS FOR SWIMMING POOLS AND INDUSTRY



The **ID** and **SP** range dehumidifiers are designed for use in high latent load environments requiring 24hrs/day operation. They are typically installed in environments such as public and private swimming pools, dairies, basements, ironing shops, curing cellars, warehouses and wherever a lack of humidity control can damage the structure or the product.

Technical sheet of the range

0130 0160 0190 0210 0260 0300 0350 0450 0580

Dehumidifying capacity	L / day	128	157	190	210	268	302	358	452	581
Air flow rate	m³/h	1200	1600	1600	2000	2800	2800	3800	4000	4800
Hot water coil capacity	kW	9,8	9,8	9,8	16,5	17	17	26,5	26,5	27
Power supply	V/ph/Hz	I----- 230/1/50 -----I I----- 400/3/50 -----I								
Dimensions L X D X H	mm	I---- 700 x 550 x 900 -----I I----- 700 x 850 x 900 -----I I----- 830 x 850 x 1350 -----I								

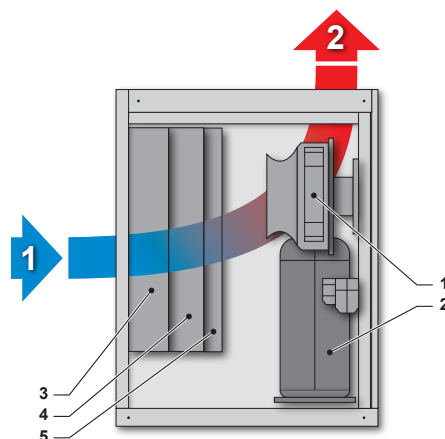
Technical sheet of the range

0750 0950 1100 1400 1500 1700 1900 2200 3000

Dehumidifying capacity	L / day	760	955	1120	1380	1480	1710	1870	2180	2960
Air flow rate	m³/h	7000	8200	11000	12500	13000	15000	15000	17000	25000
Hot water coil capacity	kW	48	55	76	83	98	107	107	118	168
Power supply	V/ph/Hz	I----- 400/3/50 -----I								
Dimensions L X D X H	mm	1000 x 1400 x 1350 -I- 1000 x 1950 x 1640 -I----- 1000 x 2500 x 1640 -----I 1000 x 3390 x 1640								

All the values refer to the following conditions: Air temperature 30°C, Relative Humidity 80%, Water temperature 80/70°C

- 1 Recirculation air fan
- 2 Compressor
- 3 Evaporator coil
- 4 Condenser coil
- 5 Post heating coil (optional)



	STANDARD CONTROL	DEVELOPMENT CONTROL
Electronic radial fans	--	OPTIONAL
ACF: automatic control flow	--	OPTIONAL
High pressure centrifugal fans	OPTIONAL	OPTIONAL
Hot water reheat coil with valve	OPTIONAL	OPTIONAL
Desuperheater	OPTIONAL	OPTIONAL
Dirty filters sensor	OPTIONAL	OPTIONAL
Softstart	OPTIONAL	OPTIONAL
RS485 serial port	--	OPTIONAL
Filter holder frame for suction ducting	OPTIONAL	OPTIONAL
EU4 Efficiency air filters	OPTIONAL	OPTIONAL
Condensate drain pump	OPTIONAL	OPTIONAL
Clock card - time bands	--	OPTIONAL
Humidity sensor	--	OPTIONAL
Mechanical humidistat	OPTIONAL	--
CTI - Chrono-hygrothermostat	OPTIONAL	--
Fresh air damper	OPTIONAL	OPTIONAL
Hot gas defrosting	OPTIONAL	OPTIONAL
CO2 or VOC sensor	--	OPTIONAL
Electric coils	OPTIONAL	OPTIONAL
Remote wall terminal	--	OPTIONAL
Outdoor version	OPTIONAL	OPTIONAL
Manometers	OPTIONAL	OPTIONAL
Summer / Winter operating modes	--	OPTIONAL



SPR

SWIMMING POOL DEHUMIDIFIERS WITH ENHANCED AIR RENEWAL AND HIGH-EFFICIENCY HEAT RECOVERY SYSTEM



The **SPR** units are ideal for swimming pools that not only require dehumidification but must also renew the indoor air without dispersing heat outdoors. Up to 80% yield is guaranteed by the high-efficiency recovery system. The SPR units represent the state-of-the-art in terms of efficiency, reliability and emitted sound power. The SPR range only uses electronic radial fans with high-energy efficiency incorporated inverter.

HiDew has developed a sophisticated adjustment software to adjust the SPR dehumidifiers air flow rate. This software sets, measures and controls the air flow rate, eliminating any chance of incorrectly calculating the ducts' pressure drops, thereby making dehumidifier installation and system commissioning extremely easy and quick and reducing installation times and costs.

Technical sheet of the range **SPR**

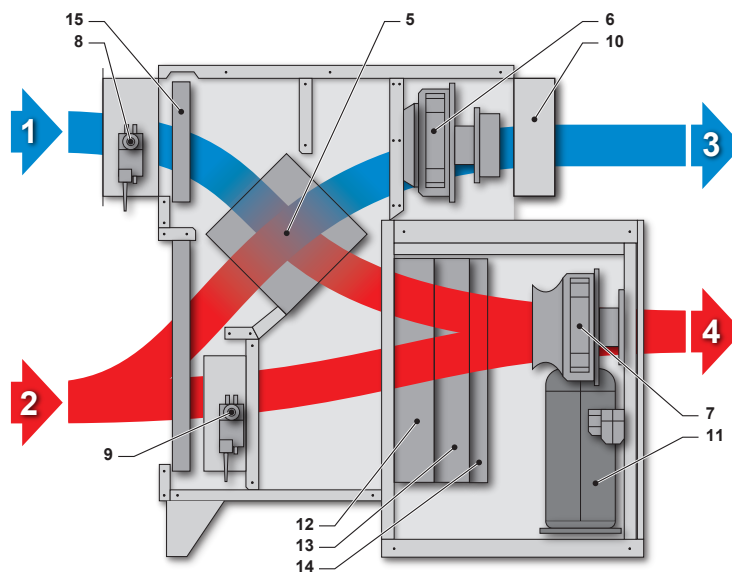
		0130	0160	0190	0210	0260	0300
Dehumidifying capacity	L / day	128	157	190	210	268	302
Recirculation air flow rate	m³/h	1200	1600	1600	2000	2800	2800
Fresh air flow rate	m³/h	0 - 1200	0 - 1200	0 - 1200	0 - 2000	0 - 2000	0 - 2000
Hot water coil capacity	kW	9,8	9,8	9,8	16,5	17	17
Heat recovery system efficiency	%	70	70	70	70	70	70
Alimentazione elettrica	V/ph/Hz	I----- 230/1/50 -----I		I----- 400/3/50 -----I			

Technical sheet of the range **SPR**

		0350	0450	0580	0750	0950
Dehumidifying capacity	L / day	358	452	581	760	955
Recirculation air flow rate	m³/h	3800	4000	4800	7000	8200
Fresh air flow rate	m³/h	0 - 3800	0 - 3800	0 - 3800	0 - 6000	0 - 6000
Hot water coil capacity	kW	26,5	26,5	27	48	55
Heat recovery system efficiency	%	70	70	70	70	70
Power supply	V/ph/Hz	I----- 400/3/50 -----I				

Dehumidification power in following conditions: Air Temperature 30°C, Relative Humidity 80% net of contribution of air renewal
 Recovery system efficiency with indoor 26°C/60% RH outdoor -5°C/80% RH conditions
















1 Inlet fresh outdoor air flow
 2 Indoor recirculation air flow
 3 Expelled outdoors air flow
 4 Supply air flow indoors
 5 High-efficiency crossed flows heat recovery system
 6 Exhaust air exhaust fan
 7 Recirculation air fan
 8 Outdoor air damper
 9 Calibration damper
 10 Discharged air gravity damper
 11 Compressor
 12 Evaporator coil
 13 Condenser coil
 14 Reheat coil (optional)
 15 Outdoor fresh air filter
 Indoor recirculation air filter



Options:

- ACF: automatic control flow
- Hot water reheat coil with valve
- Desuperheater
- Dirty filters sensor
- Softstart
- RS485 serial port
- EU4 Efficiency air filters
- Condensate drain pump
- Clock card - time bands
- Electric coils
- Wall remote terminal
- Outdoor version
- Manometers
- Summer / Winter operating modes

Key to symbols used

	Heat Recovery		Isothermic version		High Efficiency Fans
	De-humidification		R410A refrigerant gas		EC plug fans
	Winter time heating mode		R134a refrigerant gas		Low noise version
	Summer time cooling mode		Scroll Compressors		Air filter
	Free-Cooling		BLDC Compressors		Remote control via RS485

