



HiDew is proud to present a huge range of dehumidifiers for industrial processes, public and private pools, with a high efficiency heat recovery and air renewal system. 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.

## **QUALITY FOR YOUR WELLBEING**





Wall mounted dehumidifiers **DDS** P. 4 Wall mounted dehumidifiers for technical room DCS P. 6 Vertical floor-standing dehumidifiers DVS P. 8 Horizontal dehumidifiers for ducted installation DOS P. 10 Dehumidifiers for industrial processes and swimming pools SP P. 12 Dehumidifiers for industries / swimming pools with temperature control P. 14 Dehumidifiers with high air renewal **SPR** P. 16 Dehumidifiers with high air renewal and temperature control **STR** P. 18 Air conditioner with heat pump water condensed HDW P. 20 Air conditioner for cellars CCV CCA CCW P. 22







### **WALL MOUNTED DEHUMIDIFIERS**

















**DDS** series dehumidifiers with advanced control are completely autonomous and are conceived for wall-mounted installation in small private swimming pools.

DDS models are thought to be installed directly in the room to be dehumidified and the pleasant design is suitable also for other environments, such as museum, archives, libraries, churches, cellars and basements.

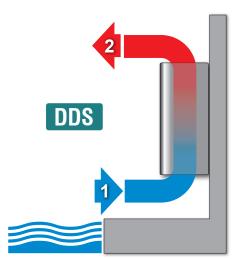
The sober but elegant look eases the installation in public and private venues, generally characterized by a sophisticated outline. DDS dehumidifiers with advanced control are completely autonomous in managing humidity: the control on board reads the ambient humidity and activates the dehumidification process when necessary: finally, the installation of these units is particularly simple.



Technical sheet of the range		040	050	060	070	090	100	160	190	210	230	300
Dehumidifying capacity	L/Day	46	52	62	68	89	98	165	186	211	226	290
Refrigerant	Туре	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air flow	m³/h	350	450	500	600	700	800	1000	1200	1500	1500	2000
Available static pressure	Pa	40	40	40	40	40	40	40	40	40	40	40
Hot water coil capacity	kW	3,7	4,5	4,8	6,1	6,8	7,5	10,1	11,5	14,5	14,5	17
Electrical heaters capacity	kW	1	1	1,5	2	3,2	3,2	4	4	7,2	7,2	7,2
Power supply	V/ph/Hz				230 / 1	+N/50				40	0/3+N/	50
Sound level	dB(A)	43	45	46	47	48	49	51	53	54	55	57
Dimensions L x P x H	mm	850	0 x 280 x 7	780	1050 x 280 x 780			1350 x 3	30 x 850	1550 x 330 x 850		
Weight	kg	46	46	46	55	55	55	88	88	100	100	102

All the values refer to the following conditions: inlet air:  $30^{\circ}\text{C}$  - 80% RH; inlet/outlet water:  $80/70^{\circ}\text{C}$ 





- Hot water coil with 3-ways valve
- Coils with epoxy coating
- Electrical heaters
- Modulating EC fans
- Hot gas defrost
- Silent version
- Kit for display at distance
- RS485 Serial board
- Feet kit for floor installation







### WALL MOUNTED DEHUMIDIFIERS FOR TECHNICAL ROOM

















**DCS** series dehumidifiers with advanced control are completely autonomous and are conceived for wall-mounted installation in small private swimming pools.

DCS models are thought for the installation in a technical room adjacent to the ambience to dehumidify: in this case, the installation requires supply and recover grilles.

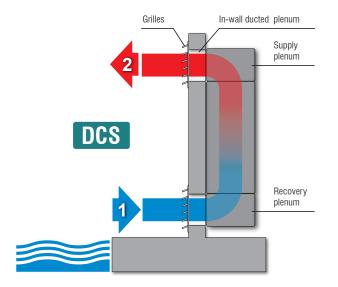
DCS dehumidifiers with advanced control are completely autonomous in managing humidity: the control on board reads the ambient humidity and activates the dehumidification process when necessary: finally, the installation of these units is particularly simple.



							DCS						
Technical sheet of the range		040	050	060	070	090	100	160	190	210	230	300	
Dehumidifying capacity	L/Day	46	52	62	68	89	98	165	186	211	226	290	
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
Air flow	m³/h	350	450	500	600	700	800	1000	1200	1500	1500	2000	
Available static pressure	Pa	40	40	40	40	40	40	40	40	40	40	40	
Hot water coil capacity	kW	3,7	4,5	4,8	6,1	6,8	7,5	10,1	11,5	14,5	14,5	17	
Electrical heaters capacity	kW	1	1	1,5	2	3,2	3,2	4	4	7,2	7,2	7,2	
Power supply	V/ph/Hz				230 / 1	+N/50				40	0/3+N/	50	
Sound level	dB(A)	43	45	46	47	48	49	51	53	54	55	57	
Dimensions L x P x H	mm	803	3 x 257 x 7	764	1003 x 256 x 745			1302 x 306 x 834			1503 x 306 x 834		
Weight	kg	46	46	46	55	55	55	88	88	100	100	102	

All the values refer to the following conditions: inlet air:  $30^{\circ}\text{C}$  - 80% RH; inlet/outlet water:  $80/70^{\circ}\text{C}$ 





- Hot water coil with 3-ways valve
- Coils with epoxy coating
- Electrical heaters
- Modulating EC fans
- Hot gas defrost
- Silent version
- Kit for display at distance
- RS485 Serial board
- In wall ducted plenum (2 pcs)
- Supply and recovery air plenum (2 pcs)
- Supply and recovery air grilles (2 pcs)







### **VERTICAL FLOOR-STANDING DEHUMIDIFIERS**















The new dehumidifiers of the range **DVS** with advanced control are completely autonomous and are conceived for a vertical installation in private swimming pools.

The attractive design is perfectly suitable also to other locations, such as museums, archives and cellars.

DVS models are thought for an installation directly in the room that needs to be dehumidified and the sober, but elegant, look eases the installation in public and private venues, generally characterized by a sophisticated design.

This series consists of 8 models, from 52 up to 230 L/day.

The DVS dehumidifiers are completely autonomous in managing humidity: the control on board reads the ambient humidity and activates the dehumidification process when necessary: finally, the installation of these units is particularly simple.



					D	vs			
Technical sheet of the range		050	070	090	100	160	190	210	230
Dehumidifying capacity	L/Day	52	67	92	99	161	182	213	225
Refrigerant	Туре	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air flow	m³/h	450	600	700	800	1000	1200	1400	1400
Available static pressure	Pa	250	200	175	150	100	90	40	40
Hot water coil capacity	kW	5,2	6,1	6,8	7,5	10,4	11,9	13,3	13,3
Electrical heaters capacity	kW	1,5	2	3	3	4	4	4	4
Power supply	V/ph/Hz			230 / 1	+N/50			400 / 3	+N/50
Sound level	dB(A)	45	46	47	48	50	52	53	54
Dimensions L x P x H	mm		550 x 33	30 x 1700			750 x 33	0 x 1700	
Weight	kg	80	80	80	80	140	140	160	160

All the values refer to the following conditions: inlet air:  $30^{\circ}\text{C}$  - 80% RH; inlet/outlet water:  $80/70^{\circ}\text{C}$ 

- Hot water coil with 3-ways valve
- Coils with epoxy coating
- Electrical heaters
- Hot gas defrost
- Silent version
- Cable for display connection
- RS485 Serial board
- Display mounted on board
- Kit rectangular flange, top supply
- Kit rectangular flange, back supply











### HORIZONTAL DEHUMIDIFIERS FOR DUCTED INSTALLATION















The new **DOS** series dehumidifiers with advanced control are completely autonomous, and are designed for use in private swimming pools where a ducted machine for under ceiling installation is required.

DOS dehumidifiers are perfect for all wet environments such as museums, libraries, archives, cellars.

Designed for suspended ceiling installation, they can also be supplied with all the air distribution accessories such as plenums, grilles, ducts. The series consists of 8 models, from 52 up to 225 L/day.

The dehumidifiers of the DOS series are completely autonomous in the management of humidity and ambient temperature: the probes are supplied on board as standard and the control manages the compressor and the heating coil, if supplied. The installation of these units is therefore particularly simple.



					D	os			
Technical sheet of the range		050	070	090	100	160	190	210	230
Dehumidifying capacity	L/Day	52	67	92	99	161	182	213	225
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Air flow	m³/h	450	600	700	800	1000	1200	1500	1500
Available static pressure	Pa	250	200	175	150	230	200	150	150
Hot water coil capacity	kW	5,2	6,1	6,8	7,5	10,4	11,9	13,3	13,3
Electrical heaters capacity	kW	1,5	2	3	3	4	4	4	4
Power supply	V/ph/Hz			230 / 1	+N/50			400 / 3	+N/50
Sound level	dB(A)	45	46	47	48	50	52	53	54
Dimensions L x P x H	mm		1105 x 8	300 x 410			1105 x 10	050 x 510	
Weight	kg	84	84	84	84	147	147	168	168

All the values refer to the following conditions: inlet air:  $30^{\circ}\text{C}$  - 80% RH; inlet/outlet water:  $80/70^{\circ}\text{C}$ 

- High efficiency air filter, Class G4
- Hot water coil with 3-ways valve
- Coils with epoxy coating
- Electrical heaters
- Hot gas defrost
- Silent version
- Cable for display connection
- RS485 Serial board
- Kit supply flange for circular ducts
- Kit extraction flange for circular ducts











# DEHUMIDIFIERS FOR SWIMMING POOLS AND INDUSTRY





















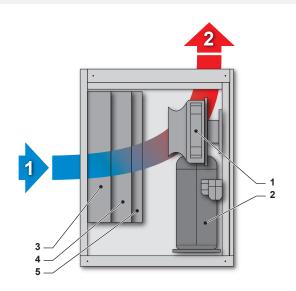
The **ID** and **SP** range dehumidifiers are designed for use in high latent load environments requiring 24hrs/day operation. They are typically installed in environments such as public and private swimming pools, dairies, basements, ironing shops, curing cellars, warehouses and wherever a lack of humidity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

						ID	ID SP						
Technical sheet of the range		0100	0130	0160	0190	0210	0260	0300	0350	0450	0580		
Dehumidifying capacity	L/Day	100	128	157	190	210	268	302	358	452	581		
Air flow rate	m³/h	900	1200	1600	1600	2000	2800	2800	3800	4000	4800		
Hot water coil capacity	kW	5,5	9,8	9,8	9,8	16,5	17	17	26,5	26,5	27		
Electric power supply	V/ph/Hz		230 / 1	+N/50				400 / 3-	+N/50				
Dimensions L x P x H	mm	550 x 700 x 900				85	0 x 700 x 9	00	850 x 830 x 1350				
Weight	kg	100	100	105	110	120	130	140	220	230	240		

		ID SP										
Technical sheet of the range		0750	0950	1100	1400	1500	1700	1900	2200	3000	4500	
Dehumidifying capacity	L/Day	760	955	1120	1380	1480	1710	1870	2180	2960	4650	
Air flow rate	m³/h	7000	8200	11000	12500	13000	15000	15000	17000	25000	35000	
Hot water coil capacity	kW	48	55	76	83	98	107	107	118	168	235	
Electric power supply	V/ph/Hz					400/3+	N / 50					
Dimensions L x P x H	mm		1400 x 1000 1950 x 1000 x 1350 x 1640				2500 x 10	00 x 1640		3390 x 1000 x 1640	4430 x 1000 x 1640	
Weight	kg	410	430	650	720	780	840	900	950	1250	1550	

All the values refer to the following conditions: inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C





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

Options:	STANDARD CONTROL (*)	ADVANCED CONTROL
Filter holder frame for suction ducting	X	Х
Mechanical hygrostat	x	
Electronic chrono – hygrostat	х	
Hot water coil with 3ways valve	х	Х
Chilled water coil with 3ways valve	х	Х
Silent version -2 dB(A)	Х	Х
Soft-start	Х	Х
Manometers	х	Х
Hot gas defrost	х	X
De-superheater for swimming pool water	х	X
Centrifugal fan with high prevalence	х	X
Electronic radial fans	(**)	X
Contact for 0-10 V humidifier control		X
ACF - Automatic Control Flow		X
Clock card – time scheduling		INCLUDED
Dirty filters sensor		X
Remote user terminal including 20 m cable		X
TH probe for duct installation		Х
Serial board Modbus, Lonworks, Bacnet, Konnex		X
Ethernet ™ interface card™ (***)		X
Version for outdoor installation	Х	X
Panels thermal insulation, thickness 20 mm	X	X
Panels thermal insulation, thickness 40 mm	X	X
Pivoting wheels	X	X
Mirror version (access on the left)		



- -- Not available.
- (\*) Available for models up to 0950.
- (\*\*) Adjustment with potentiometer.
- (\*\*\*) Protocols available: SNMP v1 & v2c, BACnet / IP, BACnet Ethernet e Modbus TCP / IP.











## DEHUMIDIFIERS FOR INDUSTRIES / SWIMMING POOLS WITH TEMPERATURE CONTROL





















The dehumidifiers of the series **IT** and **ST** are conceived for the use in high latent load environments requiring 24hrs/day operation. Thanks to the temperature control function, with an external condenser, these units grant a full control, not only of the humidity, but also of the ambient temperature.

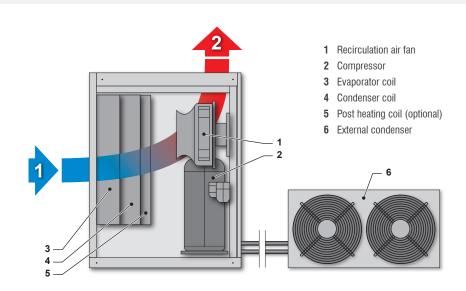
Therefore, these units are suitable for those applications in which the contemporary control of both parameters is required, such as swimming pools, food storage, salami and cheese seasoning processes and wherever the non-control of temperature and humidity can damage the goods.

		IT ST											
Technical sheet of the range		0100	0130	0160	0190	0210	0260	0300	0350	0450	0580		
Dehumidifying capacity	L/Day	100	128	157	190	210	268	302	358	452	581		
Air flow rate	m³/h	900	1200	1600	1600	2000	2800	2800	3800	4000	4800		
Cooling power	kW	4,9	6,5	8	10	11	15	16	19	23	30		
Hot water coil capacity	kW	5,5	9,8	9,8	9,8	16,5	17	17	26,5	26,5	27		
Electric power supply	V/ph/Hz		230 / 1	+N/50				400 / 3	+N/50				
Dimensions L x P x H	mm	550 x 700 x 900				85	0 x 700 x 9	00	850 x 830 x 1350				
Weight	kg	100	100	105	110	120	130	140	220	230	240		

		IT ST											
Technical sheet of the range		0750	0950	1100	1400	1500	1700	1900	2200	3000	4500		
Dehumidifying capacity	L/Day	760	955	1120	1380	1480	1710	1870	2180	2960	4650		
Air flow rate	m³/h	7000	8200	11000	12500	13000	15000	15000	17000	25000	35000		
Cooling power	kW	38	50	56	66	75	86	96	110	148	277		
Hot water coil capacity	kW	48	55	76	83	98	107	107	118	168	235		
Electric power supply	V/ph/Hz					400/3+	N / 50						
Dimensions L x P x H	mm		1400 x 1000 1950 x 1350 x					x 1000 640		3390 x 1000 x 1640	4430 x 1000 x 1640		
Weight	kg	410	430	650	720	780	840	900	950	1250	1550		

All the values refer to the following conditions: inlet air:  $30^{\circ}\text{C}$  - 80% RH; inlet/outlet water:  $80/70^{\circ}\text{C}$ ; outdoor air:  $30^{\circ}\text{C}$  - 50% RH.





Options:	STANDARD CONTROL (*)	ADVANCED CONTROL
Filter holder frame for suction ducting	Х	Х
Mechanical hygrostat	Х	-
Electronic chrono – hygrostat	X	
Hot water coil with 3ways valve	X	X
Chilled water coil with 3ways valve	X	X
Silent version -2 dB(A)	Х	Х
Soft-start	X	Х
Manometers	X	X
Hot gas defrost	X	Х
De-superheater for swimming pool water	X	X
Centrifugal fan with high prevalence	X	X
Electronic radial fans	(**)	X
Contact for 0-10 V humidifier control		X
ACF - Automatic Control Flow	-	X
Clock card – time scheduling	-	INCLUDED
Dirty filters sensor		X
Remote user terminal including 20 m cable	-	X
TH probe for duct installation	-	X
Serial board Modbus, Lonworks, Bacnet, Konnex	-	X
Ethernet ™ interface card ™ (***)	-	X
Version for outdoor installation	X	X
Panels thermal insulation, thickness 20 mm	X	X
Panels thermal insulation, thickness 40 mm	X	X
Pivoting wheels	X	X
Mirror version (access on the left)		
	1	1

### X Available.

- -- Not available.
- (\*) Available for models up to 0950.
- $(\star\star)$  Adjustment with potentiometer.
- (\*\*\*) Protocols available: SNMP v1 & v2c, BACnet / IP, BACnet Ethernet e Modbus TCP / IP.





## 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 developed a sophisticated adjustment software to adjust the SPR dehumidifiers air flow rate.

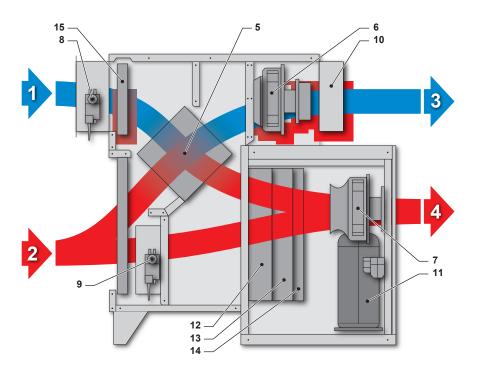
This software sets, measures and controls the air flow rate, eliminating any chance of incorrectly calculating the ducts' pressure drops, thereby making dehumidifier installation and system commissioning extremely easy and quick as well as by reducing installation times and costs.

		SPR									
Technical sheet of the range		0100	0130	0160	0190	0210	0260	0300	0350	0450	0580
Dehumidifying capacity (1)	L/Day	100	128	157	190	210	268	302	358	452	581
Recirculation air flow rate	m³/h	900	1200	1600	1600	2000	2800	2800	3800	4000	4800
Fresh air flow rate	kW	0 - 900	0 - 1200	0 - 1200	0 - 1200	0 - 2000	0 - 2000	0 - 2000	0 - 2000	0 - 2000	0 - 2000
Hot water coil capacity (1)	kW	5,5	9,8	9,8	9,8	16,5	17	17	26,5	26,5	27
Heat recovery system efficiency (2)	kW	70	70	70	70	70	70	70	70	70	70
Electric power supply	V/ph/Hz		230 / 1	+N/50				400 / 3	+N/50		
Dimensions L x P x H	mm		550 x 145	52 x 1320		850	x 1452 x 1	320	850	x 1682 x 1	769
Weight	kg	155	155	160	165	200	210	220	250	270	300

		SPR									
Technical sheet of the range		0750	0950	1100	1400	1500	1700	1900	2200	3000	4500
Dehumidifying capacity (1)	L/Day	760	955	1120	1380	1480	1710	1870	2180	2960	4650
Recirculation air flow rate	m³/h	7000	8200	11000	12500	13000	15000	15000	17000	20000	35000
Fresh air flow rate	kW	0 - 6000	0 - 6000	0 - 11000	0 - 12500	0 - 13000	0 - 15000	0 - 15000	0 - 17000	0 - 20000	277
Hot water coil capacity (1)	kW	48	55	76	83	98	107	107	118	168	
Heat recovery system efficiency (2)	kW	70	70	70	70	70	70	70	70	70	235
Electric power supply	V/ph/Hz					400/3+	N / 50				
Dimensions L x P x H	mm	1400 x 19		2700 x 23			2500 x 25	505 x 2380		2500 x 3390 x 2380	2500 x 4430 x 2380
Weight	kg	710	730	870	1060	1280	1280	1290	1290	1680	2100

(1) Inlet air: 30°C - 80% RH; inlet/outlet water: 80/70°C; 100% recirculation. (2) Indoor air: 26°C - 60% RH; outdoor air: -5°C - 80% RH.





- 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
- 16 Indoor recirculation air filter

- High efficiency air filters
- Hot water coil with 3-ways valve
- Chilled water coil with 3-ways valve
- Free cooling
- Silent version -2 dB(A)
- Soft-start
- Manometers
- Hot gas defrost
- Contact for 0-10 V humidifier control

- De-superheater for swimming pool water
- ACF Automatic Control Flow
- Clock card time scheduling
- Dirty filters sensor
- Remote user terminal including 20 m cable
- TH probe for duct installation
- Serial board Modbus, Lonworks, Bacnet, Konnex, Ethernet™
- External version (outside temperature down to -10°C)
- Panels thermal insulation, thickness 20 mm or 40 mm







## DEHUMIDIFIERS WITH HIGH AIR RENEWAL AND TEMPERATURE CONTROL



















The **STR** models are the ideal units for industries and swimming pools that require not only dehumidification, but also a high air renewal, without dispersing the internal heat outdoors, and the temperature control. With an efficiency of the recovery up to 80%, these units represent the state-of-art in terms of efficiency, reliability and emitted sound power.

The STR range only uses electronic radial fans with high-energy efficiency inverter integrated.

Thanks to the temperature control function, with an external condenser, these units grant a full control, not only of the humidity, but also of the ambient temperature.

Therefore, these units are suitable for those applications in which the contemporary control of both the parameters is required. Moreover, thanks to a sophisticated software, developed in HIDEW, the air flow can be set, measured and controlled: it eliminates any chance of incorrect calculation of load losses.

Finally, the installation and the first start of these units result simple, quick and cheap.

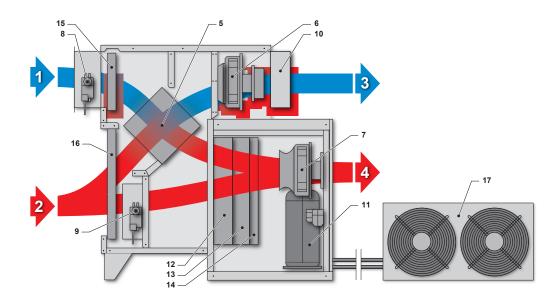
		STR									
Technical sheet of the range		0100	0130	0160	0190	0210	0260	0300	0350	0450	0580
Dehumidifying capacity (1)	L/Day	100	128	157	190	210	268	302	358	452	581
Recirculation air flow rate	m³/h	900	1200	1600	1600	2000	2800	2800	3800	4000	4800
Fresh air flow rate	kW	0 - 900	0 - 1200	0 - 1200	0 - 1200	0 - 2000	0 - 2000	0 - 2000	0 - 2000	0 - 2000	0 - 2000
Hot water coil capacity (1)	kW	5,5	9,8	9,8	9,8	16,5	17	17	26,5	26,5	27
Heat recovery system efficiency (2)	kW	70	70	70	70	70	70	70	70	70	70
Electric power supply	V/ph/Hz	230 / 1 + N / 50			400 / 3+N / 50						
Dimensions L x P x H	mm	550 x 1452 x 1320			850 x 1452 x 1320			850 x 1682 x 1769			
Weight	kg	155	155	160	165	200	210	220	250	270	300

							SIK				
Technical sheet of the range		0750	0950	1100	1400	1500	1700	1900	2200	3000	4500
Dehumidifying capacity (1)	L/Day	760	955	1120	1380	1480	1710	1870	2180	2960	4650
Recirculation air flow rate	m³/h	7000	8200	11000	12500	13000	15000	15000	17000	20000	35000
Fresh air flow rate	kW	0 - 6000	0 - 6000	0 - 11000	0 - 12500	0 - 13000	0 - 15000	0 - 15000	0 - 17000	0 - 20000	277
Hot water coil capacity (1)	kW	48	55	76	83	98	107	107	118	168	
Heat recovery system efficiency (2)	kW	70	70	70	70	70	70	70	70	70	235
Electric power supply	V/ph/Hz	400 / 3+N / 50									
Dimensions L x P x H	mm	1400 x 2331 2700 x 1950 x 1950 x 2340			2500 x 2505 x 2380				2500 x 3390 x 2380	2500 x 4430 x 2380	
Weight	kg	710	730	870	1060	1280	1280	1290	1290	1680	2100

<sup>(1)</sup> Inlet air:  $30^{\circ}\text{C}$  - 80% RH; inlet/outlet water:  $80/70^{\circ}\text{C}$ ; outdoor air:  $30^{\circ}\text{C}$  - 50% RH; 100% recirculation.

<sup>(2)</sup> Indoor air:  $26^{\circ}\text{C}$  - 60% RH; outdoor air:  $-5^{\circ}\text{C}$  - 80% RH.





- 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
- 16 Indoor recirculation air filter
- 17 External condenser

- High efficiency air filters
- Hot water coil with 3-ways valve
- Chilled water coil with 3-ways valve
- Free cooling
- Silent version -2 dB(A)
- Soft-start
- Manometers
- Hot gas defrost
- Contact for 0-10 V humidifier control

- De-superheater for swimming pool water
- ACF Automatic Control Flow
- Clock card time scheduling
- Dirty filters sensor
- Remote user terminal including 20 m cable
- TH probe for duct installation
- Serial board Modbus, Lonworks, Bacnet, Konnex, Ethernet™
- External version (outside temperature down to -10°C)
- Panels thermal insulation, thickness 20 mm or 40 mm







## AIR CONDITIONER WITH HEAT PUMP WATER CONDENSED















The range of **HDW** air conditioner with heat pump water condensed, are conceived for ambiences that need a conditioning by heating and/or cooling 24hrs/day. They are typically installed in offices, but the technical characteristics make them perfect also for other ambiences, such as museum, libraries, archives, places of religious worship, warehouses, cellars and other places that require a controlled air conditioning, in order to grant the comfort.

The air conditioners with heat pump water condensed, are completely autonomous and, by standard, they are supplied with temperature probes.

Their simple installation requires a condensate drain, water (also from geothermal source) and power supply.

The top-quality refrigeration, hydraulic, aeraulic and electric components, make HDW units the state of the art air conditioners in terms of efficiency and reliability.

HiDew HDW air conditioners have been designed to make the ordinary and extraordinary maintenance easy and quick.

The HDW range consists of 3 models, with air flows from 400 to 650 m<sup>3</sup>/h.



Technical sheet of the range		HDW 040	HDW 050	HDW 065			
Summer total cooling power (1)	kW	2,3	2,9	3,9			
Absorbed power compressor in summer (1)	kW	0,6	0,75	1,0			
COP summer		3,8	3,8	3,9			
EER summer		3,3	3,4	3,2			
Winter heating power (2)	kW	2,6	3,3	4,4			
Absorbed power compressor in winter (2)	kW	0,7	0,9	1,1			
COP winter		3,7	3,6	4,0			
EER winter		3,3	3,3	3,4			
Sound pressure level	dB	48	49	51			
Nominal air flow	m³/h	450	550	650			
Electric power supply V/ph/Hz		230 / 1+N / 50					
Rotary compressor	N°	1	1	1			
Steps / Circuits	N°	1/1	1/1	1/1			
Minimum water flow to the plate exchanger	min	5,1	6,6	9,0			
Water load losses	kPa	22	30	28			
Functioning limitations air in summer	°C		Min 20 °C $/$ Max 35 °C				
unctioning limitations air in winter °C		Min 20 °C / Max 35 °C					
Functioning limitations water in summer °C		Min 15 °C / Max 40 °C					
Functioning limitations water in winter	°C		Min 10 °C / Max 25 °C				
Dimensions L x P x H		1050 x 280 x 720	1050 x 280 x 720	1250 x 280 x 720			
Weight	kg	45	3,0	60			

(1) Inlet air:  $27^{\circ}\text{C}$  - 50% RH; inlet water:  $30^{\circ}\text{C}$ . (2) Inlet air:  $20^{\circ}\text{C}$ ; inlet water:  $15^{\circ}\text{C}$ .

- RS 485 serial board
- Water filter







### STAND-ALONE UNIT FOR HUMIDITY AND **TEMPERATURE CONTROL**

The air conditioners CCV - CCA - CCW have been especially developed to keep the indoor temperature and humidity in a really close range; the typical applications are wine rooms, laboratories, IT.



#### Working models:

- Heating
- Cooling
- Humidification
- Dehumidification





























#### Focus on technology:

- Electrical heating
- Refrigerant cooling circuit
- Sunked electrodes humidifier
- Recirculation fan: electronic radial with brushless motor and inverter, that can be modulated from 0 up to 100%
- Condensation fan: electronic radial with brushless motor and inverter, that can be modulated from 0 up to 100% (CCV and CCA models)
- Modulating water valve (CCW model) + modulation condensing control
- Temperature and humidity probe on board with close tolerance  $\pm -0.5\%$
- Advanced and programmable control with available remote display
- Water sanitization system
- Time-bands program
- Access and unit maintenance from the front



the unit is designed as a monoblock or direct expansion split solution and can claim a high level of technology:

- **CCV** = Air-to-air, monobloc, 4 connections for fresh air duct, d. 160 mm.
- **CCA** = Air-to-air, split, outdoor condenser with refrigerant connections.
- **CCW** = Water-to-air, monobloc.

		CCV - CO	CCA - CCW	
Technical sheet of the range		300	450	900
Total cooling power	Watt	1500	2200	4400
Sensible cooling power	Watt	840	1200	2440
Air flow	m³/h	300	450	900
Condensation external air flow	m³/h	Modulating from 0 to 350	Modulating from 0 to 500	Modulating from 0 to 950
Supply fan head	Pa	180	180	200
External air fan head (CCV)	Pa	150	150	-
Electric heater	kW	1,3	1,3	2,6
Nominal humidifier power	kW	1,5	1,5	1,8
Humidifier flow rate	Kg/h	3	3	3
Maximum power consumption (without options)	kW	0,6	0,8	1,5
Power consumption (with resistance and humidifier)	kW	4,5	5,7	7,1
Dimensions W x D x H	mm	650x1690x450	650x1690x450	650x1690x450
Weight	Kg	85	90	95
Refrigerant	Туре	R410A	R410A	R410A
Electric power supply	V/ph/Hz	230/1+N/50	400/3+N/50	400/3+N/50
Operating limits	°C / R.H.	10-30 / 45-95%	10-30 / 45-95%	10-30 / 45-95%

All the values refer to the following conditions: indoor air:  $18^{\circ}\text{C}$  - 80% RH; outdoor air:  $30^{\circ}\text{C}$  - 50% RH (CCV, CCA); inlet water:  $25^{\circ}\text{C}$  (CCW)

- Steam humidifier
- Electrical heater
- Silent version
- F6 high efficiency filter, inside air
- Intake from the back or the bottom
- Kit air connection for fresh air duct (only CCV) (composed by air duct 10 m, Ø 160 mm and n° 4 wall flanges)





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HD-I6EN-2023

MADE IN ITALY

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