



HCE4S

WATER CASSETTES



## Noiseless and performance: HCE4S cassettes range

Elegant panel, high performances and maximum noiseless give rise to the HCE4S water cassettes range.

The square shape and the version 90x90 cm make these units excellent for the insertion in the standard modules of false ceilings used in modern commercial buildings and offices.

## Installation flexibility

The conformation of the unit allows the distribution of air in adjoining rooms thanks to the use of proper pre-cutted holes in the supporting structure to which a small circular ducting can be connected.

The unit also includes a circular hole for the intake of external air.



### 4 speed motor

The 4th speed allows to reach quickly the desired temperature in the room.



### Modular

Allows an easier installation in the standard false ceiling standard modules.



### Infrared remote control

Thanks to the infrared remote control it is possible to set the parameters in a simple and comfortable way.

## Cover panel

It is modern and elegant and can be installed in any environment. The standard color is white RAL 9003 (on request it can be supplied in other colors), it is made of plastic material to combine strength and lightness. The panel can be fixed to the supporting structure in a simple and fast way.

The central intake grid include a filter for air purification and can be removed to reach the internal part without removing the panel from the ceiling.

## Structure

It is made of thick galvanized steel and includes external brackets placed on the four side edges to simplify the installation to the ceiling. The inside thermal and acoustic insulation is made of polystyrene, the outside one is closed cells type. The supporting structure can be preset to distribute the air to adjacent rooms and for external air intake.

## Air filter

It consists of a frame made of plastic material containing the filtering section fixed inside the front panel. It is easily removable and can be reused after suction and washing with water.



## Infrared remote control

Handy and intuitive, the infrared remote control allows to display all functions and set the desired parameters to reach the best comfort.

## SLEEP function

The SLEEP function self-adjusts the temperature during the night in order to make the environment more comfortable. With cooling or dehumidification mode, the set temperature is gradually increased by 2° C during the first two hours of operation, in heating mode it is progressively decreased by 2° C.

Together with the SLEEP function also the automatic turn off can be programmed.

## Automatic adjustment of air flow

The automatic movement of the deflectors adjusts the air flow which is directed from above downwards and vice versa for optimum diffusion of the air and to ensure the maximum comfort.

Using the remote control it is possible to disable the fins oscillation stopping the air flow to the desired position.



## Heat exchanger

Coil is made of copper pipe with aluminum fins in a continuous block locked on the tubes by mechanical expansion. The hydrophilic treatment of the aluminum fins gives corrosion resistance and reduces the resistance to air passage. The brass headers have female fittings (GAS threads) and air vent / drain valve, they are easily accessible and located on the flat side of the unit.

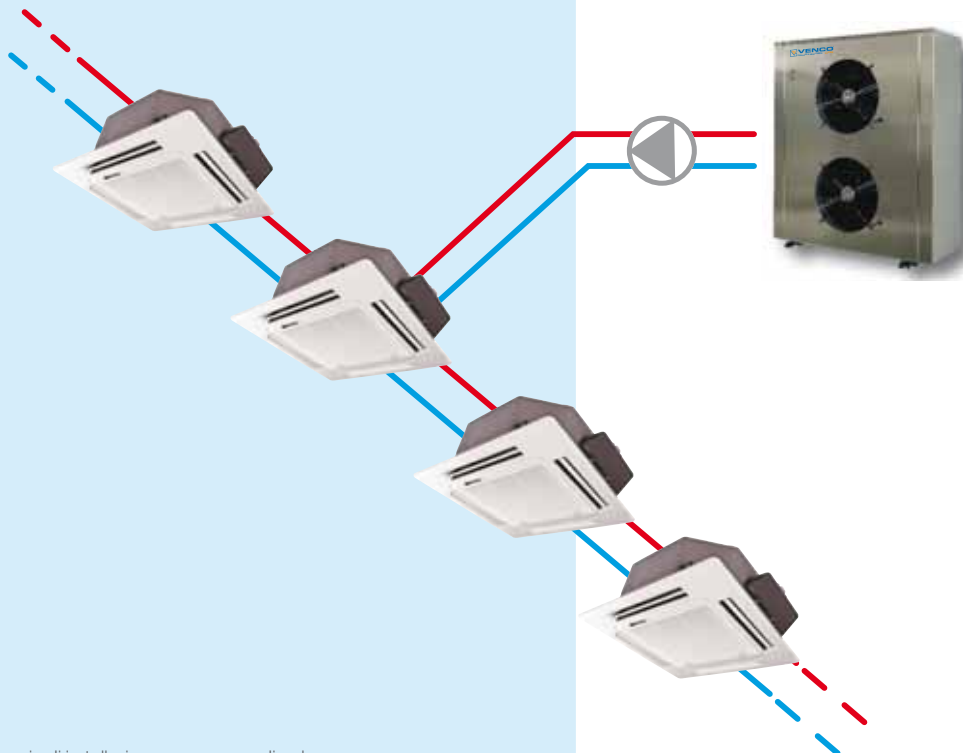
## Elimination of the condensation

The system consists of an internal drip tray made of plastic material to collect the condensate of the heat exchanger and an outside auxiliary drip tray, made of plastic material or steel, to collect water of condensation from the connecting pipes and valves. The electric pump, which is an integral part of the device, is connected to the outer fitting.

For the correct working of the water cassette the kit of 2 or 3 way valve is recommended.

## Fan group

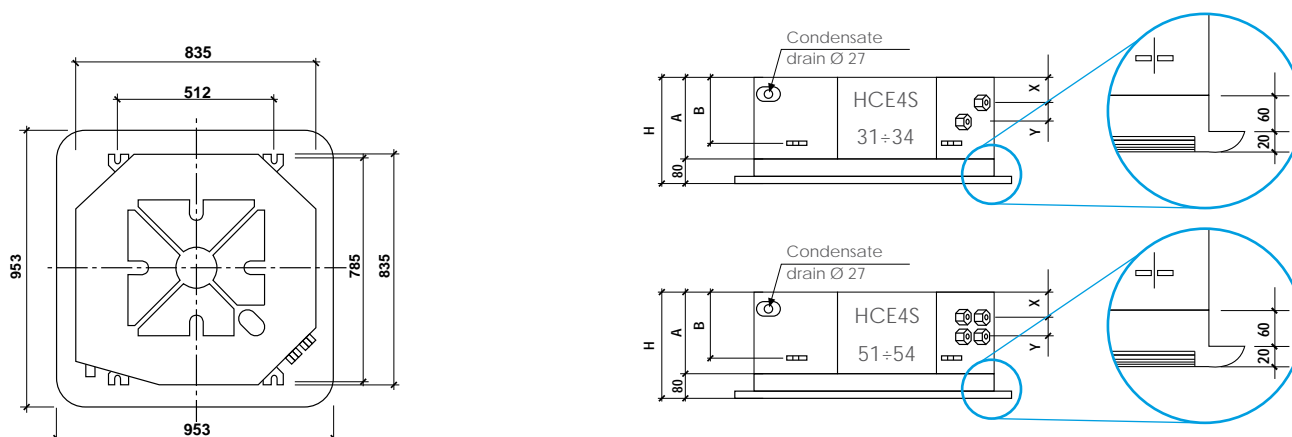
Efficient and noiseless, the ventilation group is composed of a centrifugal fan with a single intake plastic fan balanced statically and dynamically. The 4 speed electric motor is overload-proof, directly coupled to the fan and it is damped with elastic supports. The ventilation group is realized according to international standards and it has permanent running capacitor.



Esempio di installazione con pompa di calore  
Venco System (by Aliseo Group) Pico-AE ad alta efficienza




HCE4S		2 PIPE SYSTEM				4 PIPE SYSTEM			
		31	32	33	34	51	52	53	54
Fans	n°	1	1	1	1	1	1	1	1
Standard coil	Rows	n°	3	3	3	3	3	3	3
	Fittings	Ø	3/4" F	1" F	1" F	1" F	3/4" F	1" F	1" F
Auxiliary coil	Fittings	Ø	*	*	*	*	1/2" F	3/4" F	3/4" F
Condensate drain fittings	Ø mm	27	27	27	27	27	27	27	27
Dimensions	H	mm	320	385	385	385	320	385	385
	A	mm	240	305	305	305	240	305	305
	B	mm	180	325	325	325	180	325	325
	X	mm	58	88	88	88	95	88	88
	Y	mm	59	72	72	72	59	72	72
Net weight	kg	34,5	38	38	38,5	33,5	40	40	40

GENERAL DIMENSIONS FO 2/4 PIPES WATER CASSETTES range HCE4S (panel 950x950)



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## 2 pipe system (Standard coil)

	Total cooling capacity	W Smax	5940	7000	7790	8220
		W max	5590	6400	7050	7610
		W med	5230	5890	6550	6960
		W min	4850	5430	6160	6420
	Sensible cooling capacity	W Smax	4590	5480	6220	6530
		W max	4290	4950	5530	5980
		W min	3660	4160	4830	4960
	Water flow	l/h Smax	1020	1206	1338	1416
Water pressure drop	kPa Smax	8,6	16,8	19,3	23,1	
	Heating capacity	W Smax	7740	8070	8790	9020
		W max	7290	7340	8020	8330
		W med	6810	6690	7450	7550
		W min	6300	6130	6890	6920
	Water flow	l/h Smax	1020	1207	1337	1416
Water pressure drop	kPa Smax	7	15	17,2	20,6	
	Heating capacity	W Smax	13150	13480	14660	15010
		W max	12390	12260	13380	13860
		W med	11560	11160	12430	12550
		W min	10690	10220	11480	11500
	Water flow	l/h Smax	1150	1290	1460	1500
Water pressure drop	kPa Smax	8	13	16,5	18	
Air flow	m³/h Smax	1150	1200	1410	1290	
	m³/h max	1050	1050	1210	1160	
	m³/h med	950	940	1090	1020	
	m³/h min	850	840	1000	915	
Sound power level	db(A) Smax	56	58	61	61	
	db(A) max	54	55	59	58	
	db(A) med	52	53	58	54	
	db(A) min	49	50	54	51	
Sound pressure level	db(A) Smax	47	49	52	52	
	db(A) max	45	46	50	49	
	db(A) med	43	44	49	45	
	db(A) min	40	41	45	42	
Power input	W max	125	158	205	229	
Absorbet current	A max	0,61	0,7	0,9	1,0	
Water content	L -	2,45	3,25	3,25	3,25	

- **Standard unit with free outlet:** external static pressure = 0 Pa
- **Sound power level:** ISO 23741
- **Sound pressure level:** 8,6 dB(A) lower that the sound power level for a room of 90 m³ with a reverberation time of 0,5 sec.
- **Supported power supply:** ~230V±10% / 1ph / 50-60Hz



**COOLING**  
Inlet water temp.: 7°C  
Outlet water temp.: 12°C  
Inlet air temp.: 27°C d.b. - 19°C w.b.



**HEATING**  
Air temp.: 20°C  
Inlet water temp.: 50°C



**HEATING**  
Air temp.: 20°C  
Inlet water temp.: 70/60°C

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#### 4 pipe system (Standard + auxiliary coil)

	Total cooling capacity	W Smax	4520	5420	6000	6510
		W max	4280	4980	5450	6100
		W med	4030	4640	5100	5610
		W min	3760	4310	4830	5220
	Sensible cooling capacity	W Smax	3620	4170	4660	5030
		W max	3400	3800	4200	4660
		W med	3180	3510	3900	4250
	Water flow	l/h Smax	780	932	1030	1120
Water pressure drop	kPa Smax	11	20	24	28	
	Heating capacity	W Smax	6300	7210	8030	9060
		W max	5930	6590	7250	8600
		W med	5550	6120	6760	7880
		W min	5150	5670	6380	7310
	Water flow	l/h Smax	550	630	702	790
Water pressure drop	kPa Smax	15	26	31	39	
Air flow	m³/h Smax	1150	1200	1410	1290	
	m³/h max	1050	1050	1210	1160	
	m³/h med	950	940	1090	1020	
	m³/h min	850	840	1000	915	
Sound power level	db(A) Smax	56	58	61	61	
	db(A) max	54	55	59	58	
	db(A) med	52	53	58	54	
	db(A) min	49	50	54	51	
Sound pressure level	db(A) Smax	47	49	52	52	
	db(A) max	45	46	50	49	
	db(A) med	43	44	49	45	
	db(A) min	40	41	45	42	
Power input	W max	125	158	205	229	
Absorbet current	A max	0,61	0,7	0,9	1	
Water content (cooling)	L -	1,65	2,2	2,2	2,2	
Water content (heating)	L -	0,8	1,05	1,05	1,05	

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