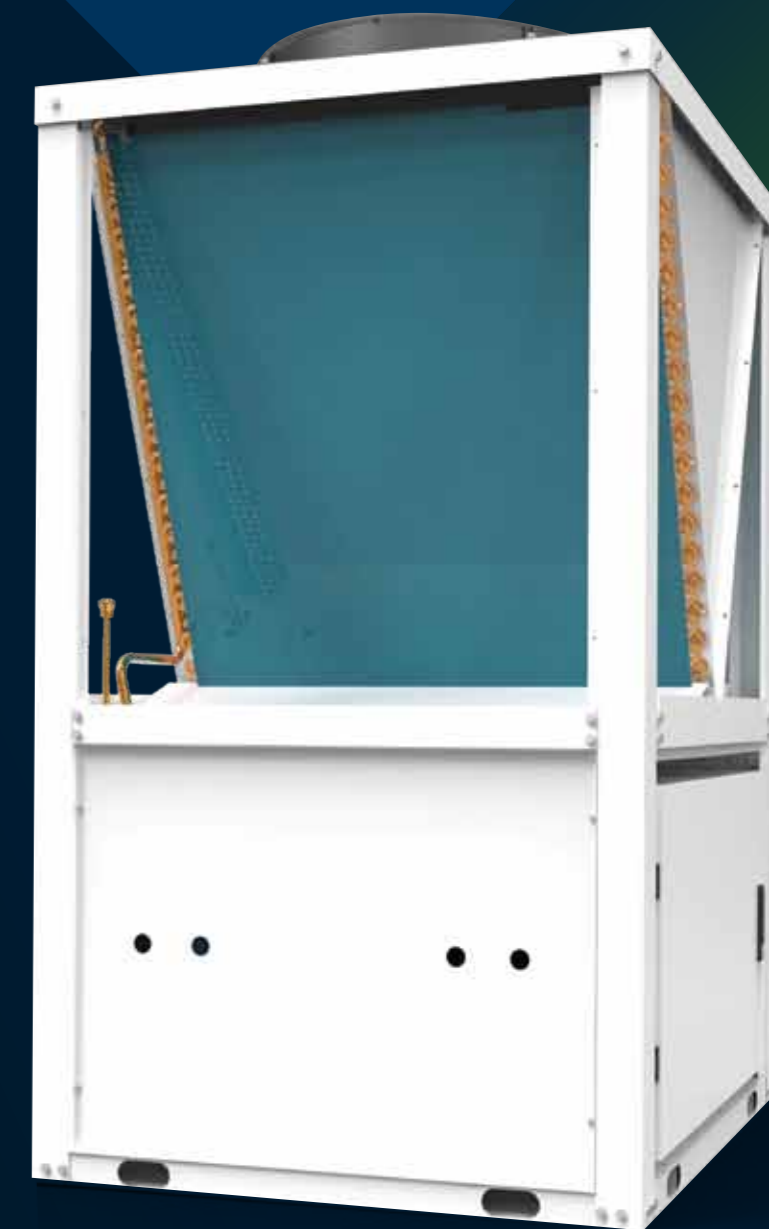


KÖNNEN 创能

SWIMMING POOL HEAT PUMP WATER HEATER S02H Series



Applications



Hotel



Family



School



Factory

COMPANY PROFILE

Zhejiang CEN New Energy Technology Co., Ltd., is a professional heat pump factory combines R&D, manufacture, installation, trade, and after-sales of heat pumps, with complete performance 25H/P laboratory.

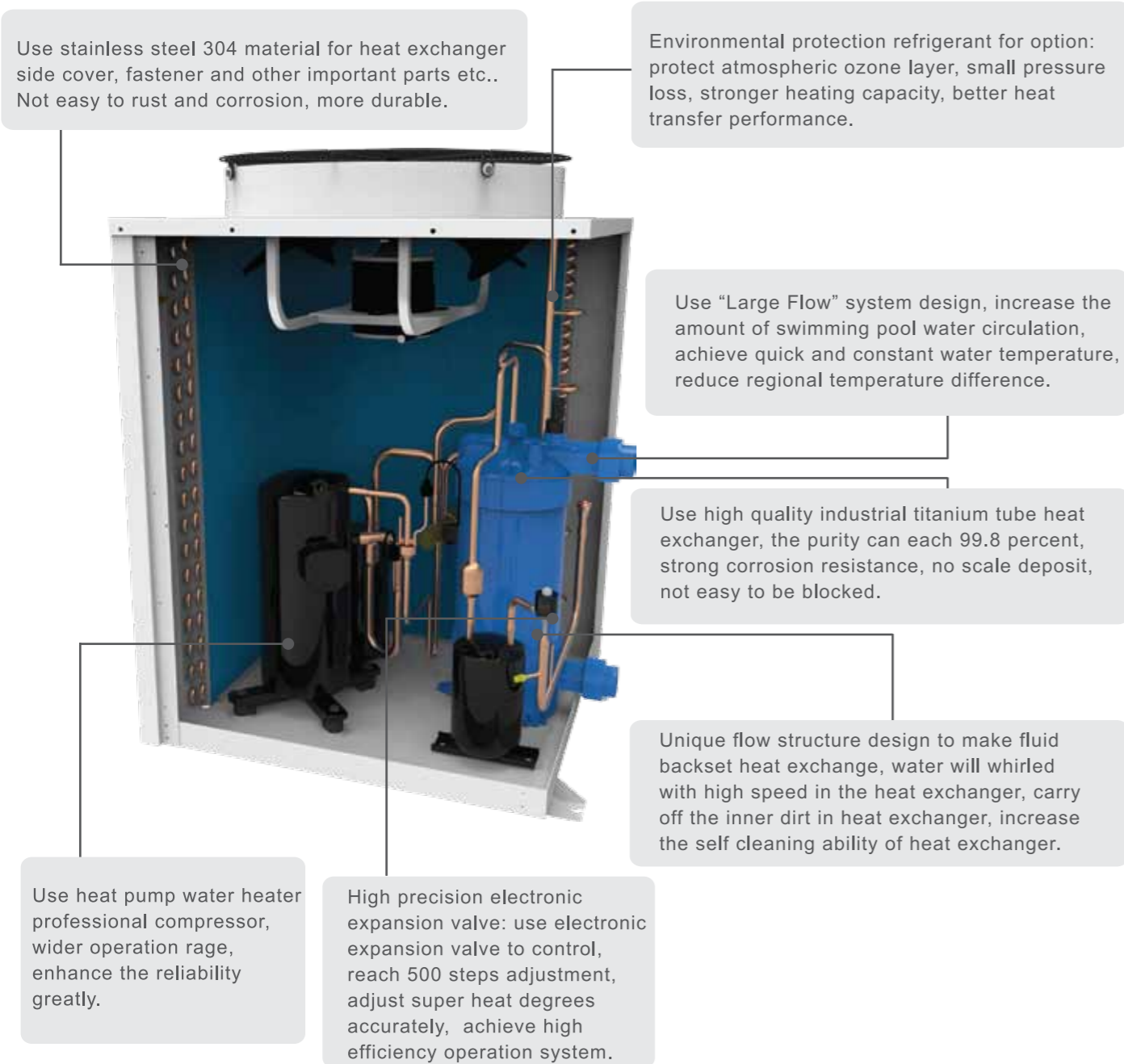
Our main products are air source heat pumps for home and commercial use, ground/water source heat pumps, combine cooling heating & hot water heat pumps, swimming pool heat pumps, etc.

We cooperate with first-class national academic institutions, established the heat pump research and development center, the laboratory, and testing center. With more than 25 engineers working on heat pump design, research and optimization.

Our laboratory can imitate different ambient conditions between -20°C to 50°C , to get the complete parameters from testing. Precise experiments make sure that our product design is reasonable, safe and stable.

We also have a professional installation team, which offers the best solution for installation, and instructions for after-sales. Our aim is to produce high quality product with our best service, and to grow up with our clients. Let's together create a win-win business relationship, and a more prosperous future!

Product Features



Professional Swimming Pool Heat Pump Titanium Tube Heat Exchanger

- 1、 Use professional material of PVC (PP-R) for shell, which meets the requirements of environmental protection ROHS;
- 2、 One-step Forming top cover and base cover, can work under water pressure of 2.5MPa;
- 3、 Pure titanium seamless tube, Acid and alkali resistance, good corrosion resistance, can work under refrigerant pressure of 5.3MPa;



Controller:

1. Adopt famous master chip, ensure the unit running stable.
2. The controller has many protection functions: high pressure protection, low pressure protection, antifreeze protection, high temperature protection, overload protection, lose phase protection and reverse phase protection and so on.
3. Modular design, can be combined freely according to the required capacity.
4. Adopt intelligent constant temperature control, multi-point temperature measurement, multistage energy adjustment, automatically adjustment of temperature difference, intelligent loading and unloading compressor according to the changing of environment.



AC Contactor & Relay:

Adopt "Schneider" AC Contactor & relay, model selection according to the current capacity of 1.5 times, to ensure the efficient and stable operation for long time.

Environmental Protection Refrigerant R410A

R410A will not damage ozone layer, during heat exchange process, small pressure loss, superior heat transfer performance, the heating capacity can be increased by more than twenty percent under low temperature condition.

S02H series (Swimming pool heat pump)

SP-150301

		SP2.5PS-H2	SP03PS-E3	SP05PS-E5	SP03P-E3	SP05P-E5	SP07P-E5	SP10P-C24
Rated heating capacity(kW)		12	14	24	14	24	32	48
Rated input power(kW)		2.11	2.45	4.14	2.37	4.06	5.69	8.14
Rated input current(A)		10.82	12.56	21.23	4.55	7.80	10.92	15.63
COP		5.59	5.71	5.80	5.91	5.91	5.62	5.90
*Heating capacity(kW)		9	12	20	12	20	25	40
*Input power(kW)		1.80	2.30	3.88	2.33	3.80	4.87	7.62
*Input current(A)		9.21	11.81	19.92	4.47	7.30	9.36	14.63
*COP		5.01	5.21	5.15	5.15	5.26	5.13	5.25
Maximum input power(kW)		2.74	3.19	5.38	3.08	5.28	7.40	10.58
Maximum input current(A)		14.05	16.33	27.60	5.92	10.13	14.20	20.32
Rated hot water output temperature()		28						
Maximum hot water output temperature()		35						
Power supply		1N 220V/50Hz			3N 380V/50Hz			
Compressor	Type	Rotor type	Fully closed scroll type					
	Start mode	Directly start						
	Quantity(Set)	1	1	1	1	1	1	2
Water side heat exchanger	Type	Titanium tube heat exchanger						
	Water flow(M ³ /h)	5.07	6.02	10.32	6.02	10.32	13.76	20.64
	Water pressure drop(KPa)	50						70
	Pipe size()	50						
Protections		1. High pressure and low pressure protection, 2. Anti-freezing protection, 3. High temperature protection, 4. Too big of the water temperature difference for outlet and inlet protection, 5. Overload protection, 6. Lack phase protection, 7. Reverse phase protection, 8. Water flow protection etc.						
Noise DB(A)		50	55	63	55	63	63	65
Unit dimensions	Length(mm)	1000	700	820	700	820	820	1000
	Width(mm)	360	700	695	700	695	695	1000
	Height(mm)	630	870	1060	870	1060	1060	1858
Weight(KG)		64	100	160	100	160	165	335
Testing condition: 1. Ambient temp.(DB/WB):24 /19 , Water temp.(In/Out):26 /28 2. *Ambient temp.(DB/WB):15 /12 , Water temp.(In/Out):26 /28								

The above parameters are based on Refrigerant R410A, for parameters based on other refrigerant please contact us.
The above parameters may have some differences from the final product because of products updating, so above information is not the provision of any business contract. Please refer to final product label when buy, or refer to us for any information. Our company keeps the right to interpret.

S02H series (Swimming pool heat pump)

SP-150301

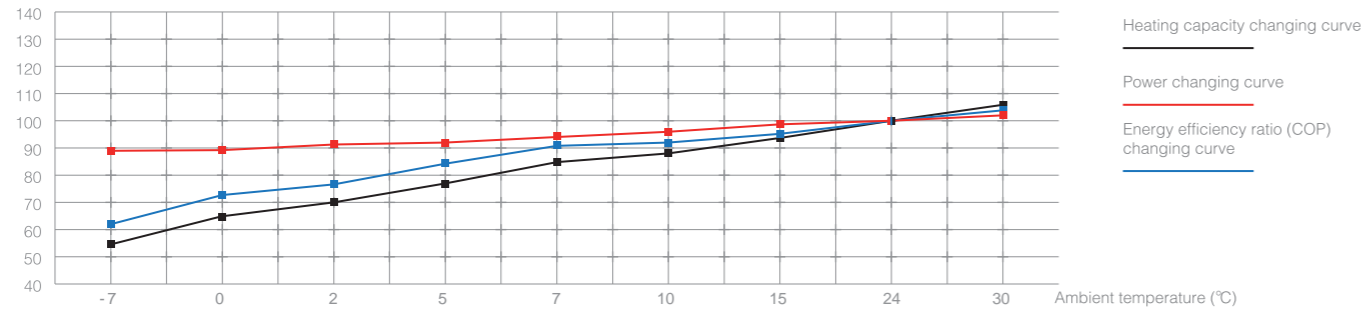
		SP14P-C24	SP20P-C48	SP24P-C48	SP30P-C48	SP36P-C96	SP40P-C96	SP48P-C96
Rated heating capacity(kW)		66	95	115	145	170	190	230
Rated input power(kW)		11.57	16.10	19.49	25.11	29.31	32.76	39.65
Rated input current(A)		22.21	30.91	37.42	48.21	56.28	62.90	76.13
COP		5.70	5.90	5.90	5.77	5.80	5.80	5.80
*Heating capacity(kW)		52	80	95	120	145	160	190
*Input power(kW)		9.98	15.36	18.20	22.81	27.83	30.48	36.19
*Input current(A)		19.16	29.48	34.94	43.80	53.44	58.51	69.49
*COP		5.21	5.21	5.22	5.26	5.21	5.25	5.25
Maximum input power(kW)		15.04	20.93	25.34	32.64	38.10	42.59	51.55
Maximum input current(A)		28.88	40.19	48.65	62.67	73.16	81.77	98.97
Rated hot water output temperature()		28						
Maximum hot water output temperature()		35						
Power supply		3N 380V/50Hz						
Compressor	Type	Fully closed scroll type						
	Start mode	Directly start						
	Quantity(Set)	2	2	2	3	3	4	4
Water side heat exchanger	Type	Titanium tube heat exchanger						
	Water flow(M ³ /h)	28.38	40.85	49.45	62.35	73.10	81.70	98.90
	Water pressure drop(KPa)	70						
	Pipe size()	50	50	90	90	110	110	110
Protections		1. High pressure and low pressure protection, 2. Anti-freezing protection, 3. High temperature protection, 4. Too big of the water temperature difference for outlet and inlet protection, 5. Overload protection, 6. Lack phase protection, 7. Reverse phase protection, 8. Water flow protection etc.						
Noise DB(A)		68	70	72	73	74	76	78
Unit dimensions	Length(mm)	1000	2050	2050	2050	2050	2050	2050
	Width(mm)	1000	1000	1000	1000	2000	2000	2000
	Height(mm)	1858	1900	1900	1980	1980	1980	1980
Weight(KG)		365	600	660	840	860	1225	1260
Testing condition: 1. Ambient temp.(DB/WB):24 /19 , Water temp.(In/Out):26 /28 2. *Ambient temp.(DB/WB):15 /12 , Water temp.(In/Out):26 /28								

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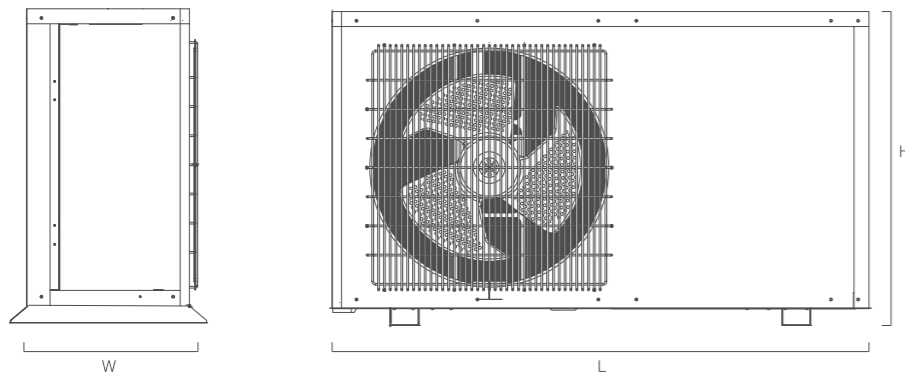
Heating performance correction coefficient (%)									
Ambient temperature (°C)	-7	0	2	5	7	10	15	24	30
Heating capacity (%)	55.0	65.0	70.0	78.0	85.0	88.0	93.0	100.0	105.0
Power (%)	89.5	89.6	91.0	92.0	93.8	95.6	98.8	100.0	102.0
Energy efficiency ratio(COP) (%)	61.5	72.5	76.9	84.8	90.6	92.1	94.1	100.0	102.9

Heating performance correction coefficient changing curve

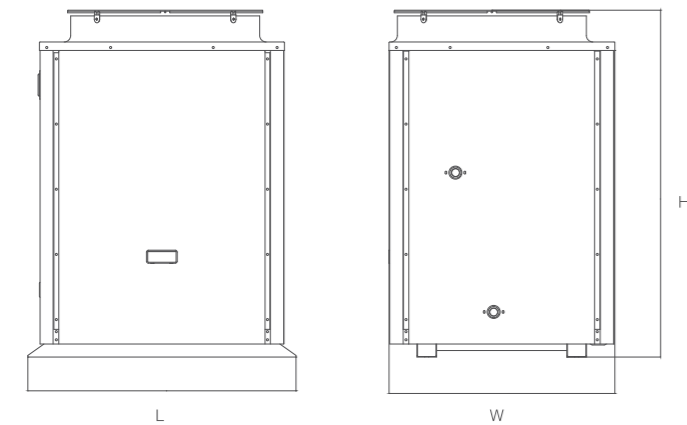
Correction coefficient (%)



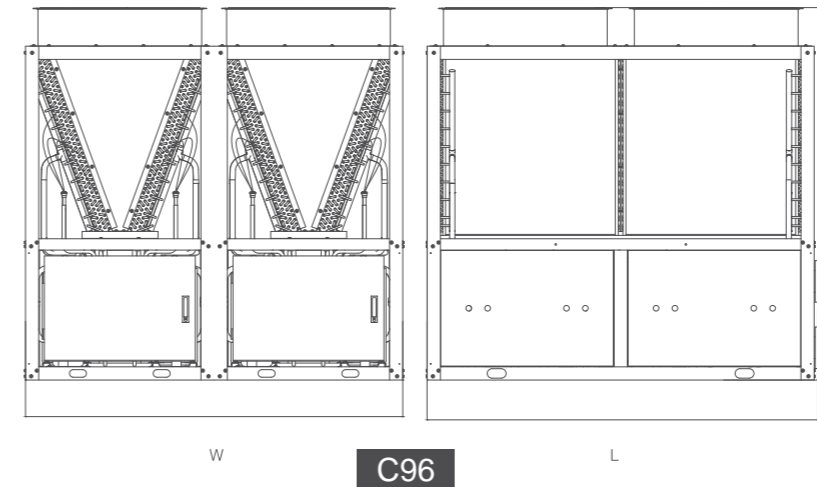
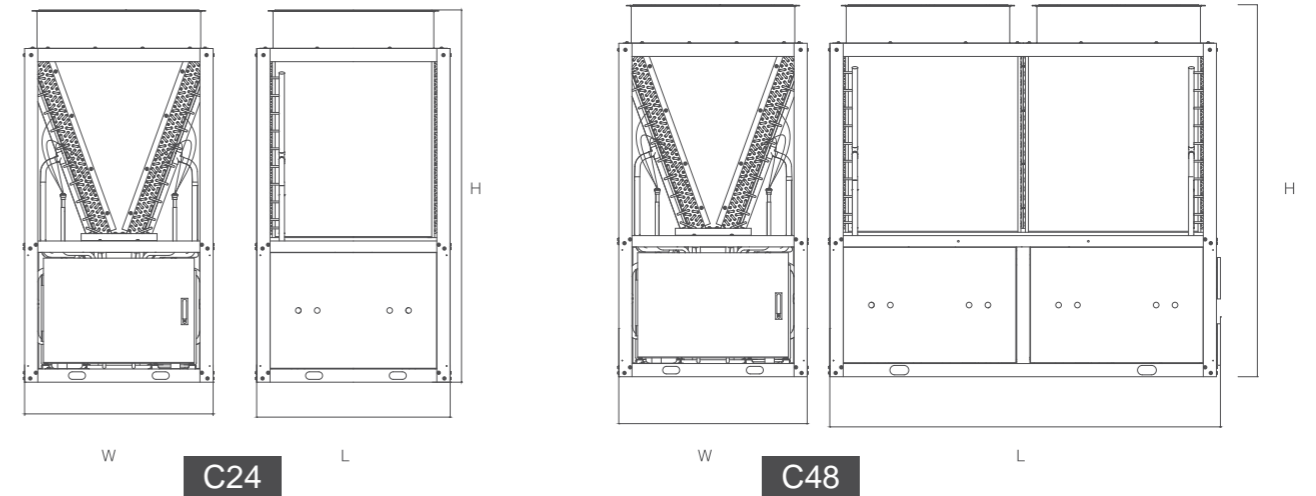
Product Dimensions



S02H series	
Model	Dimensions (L x W x H)
SP2.5PS - H2	1000 x 360 x 630



S02H series	
Model	Dimensions (L x W x H)
SP03PS - E3	700 x 700 x 870
SP05PS - E5	820 x 695 x 1060
SP03P - E3	700 x 700 x 870
SP05P - E5	820 x 695 x 1060
SP07P - E5	820 x 695 x 1060



S02H series	
Model	Dimensions (L x W x H)
SP10P - C24	1000 x 1000 x 1858
SP14P - C24	1000 x 1000 x 1858
SP20P - C48	2050 x 1000 x 1900
SP24P - C48	2050 x 1000 x 1900
SP30P - C48	2050 x 1000 x 1980
SP36P - C96	2050 x 2000 x 1980
SP40P - C96	2050 x 2000 x 1980
SP48P - C96	2050 x 2000 x 1980

Running Chart

