

ESTECH
ENERGY

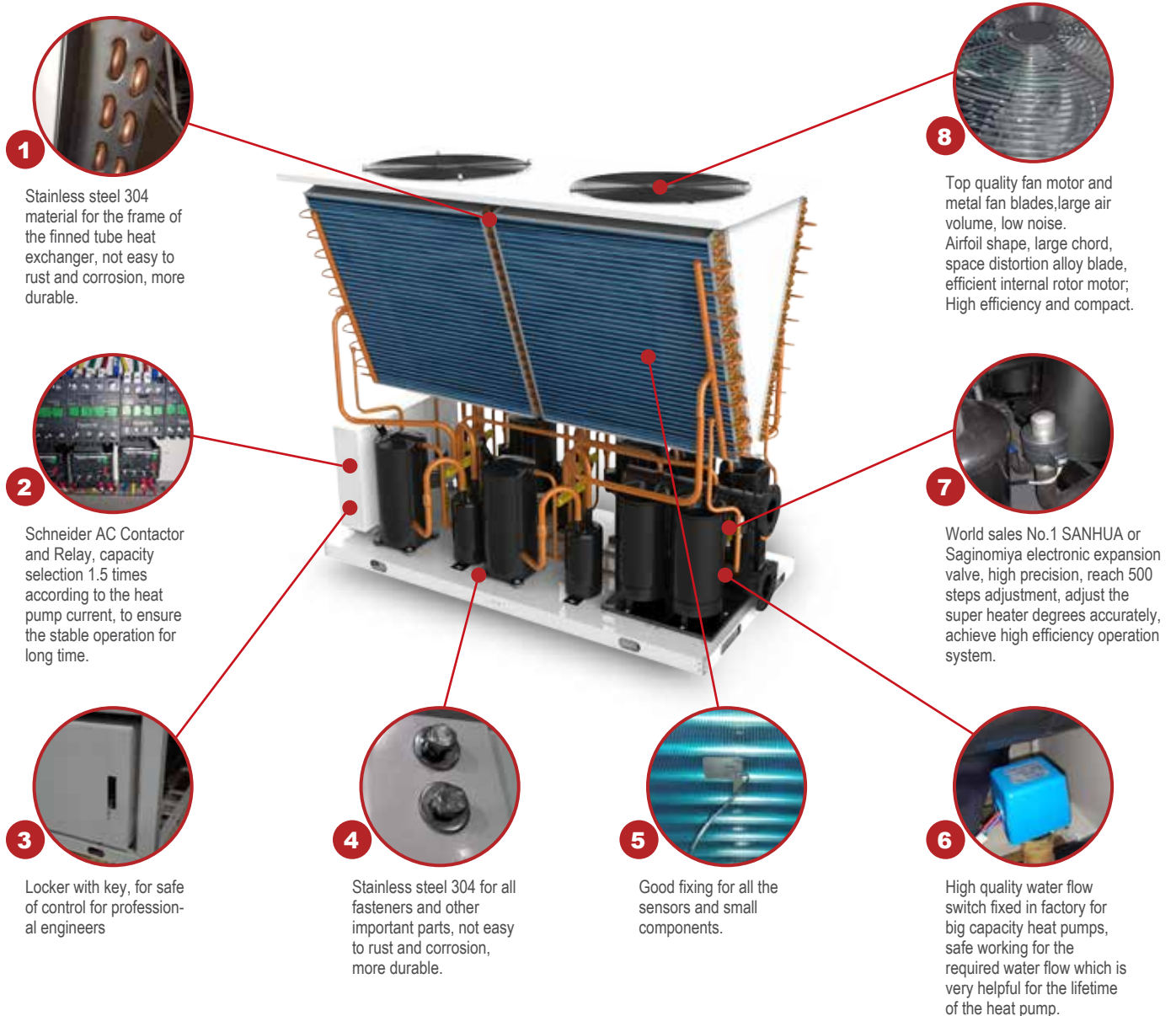


AIR TO WATER HEAT PUMP
COOLING HEATING - WCH SERIES

ESTECH ENERGY LLC

ADVANTAGE

- a. Copeland compressor and R410a refrigerant for best operation, low pressure but high water temperature.
- b. Stainless steel 304 material for all fasteners, frame of evaporator and etc..
- c. Low noise fan motor with metal fan blades, Durable and reliable.
- d. World famous brands of components, such as Saginomiya electronic expansion valves, SANHUA 4-way valves, Schneider AC contactor and etc.,
- e. With complete testing for good quality and highest COP.
- f. All copper material for water pipes.
- g. Advanced control system for reaching all of your requirements, such as Rs485, Modbus for BMS.
- h. Unique cabinet designing, for your better marketing.



COPELAND SCROLL

Copeland or Panasonic high quality compressor specially for heat pump water heater, the best operation and last for longest running time:

1. Adopt scroll heating technology;
2. With much wider operation range for different ambient temperature;
3. Not only can produce hot water for daily life use, can also produce high water temperature up to 80 degrees C, it can reach the requirement for daily life and industrial use;
4. Special designing for the heat pump water heater of high suction exhaust temperature and system high condensing temperature and high condensing pressure, performance is stable and efficient, long service life.



V-SHAPE

V-shape finned tube heat exchanger for evaporator, the best design for high capacity and efficiency.

Open angle v-shaped coils achieve the maximum efficiency at all conditions. A specific design of the condensing modules allow a reduction in both unit footprint as well as clearances, thus facilitating service and maintenance procedures. The structure is also designed to allow the easiest access to all the components in order to simplify maintenance work.

SHELL & TUBE HEAT EXCHANGER

High quality and efficiency Shell & tube heat exchanger, , adopt high efficiency fin tube which heating area is 3.7 times than ordinary smooth tube, larger diameter waterway design to make water flow more smoothly, energy efficiency is more superior.



WCH SERIES- DOMESTIC/ROOM HEATING & COOLING HEAT PUMP											
Model / Part No		WC9-H	WC13-H	WC9-H	WC14-H	WC18-H	WC30-H	WC40-H	WC70-H	WC140-H	
Rated Heating Capacity	kW	8.7	13.5	8.8	14.0	18.3	29.7	39.8	70.0	140.0	
Rated Power	kW	2.70	4.23	2.71	4.30	5.58	9.50	12.40	20.00	40.00	
Rated Current	A	12.85	19.72	5.16	8.32	10.49	18.10	23.50	37.98	75.97	
Performance Coefficient	COP	3.22	3.19	3.25	3.26	3.28	3.13	3.21	3.50	3.50	
Rated Cooling Capacity	kW	7.8	12.4	7.9	12.6	16.9	28.7	36.6	65.0	130.0	
Input Power	kW	2.48	3.95	2.54	4.08	5.59	9.50	11.80	20.00	39.40	
Input Current	A	12.12	18.94	4.83	7.72	10.66	17.90	22.93	39.46	74.83	
EER	/	3.15	3.14	3.11	3.09	3.02	3.02	3.10	3.26	3.30	
Max. Power	kW	3.24	4.97	3.24	5.20	6.91	11.60	14.80	26.70	51.20	
Max. Current	A	15.50	23.78	6.15	10.00	13.20	21.70	28.40	52.00	104.00	
Power Supply		1N 220V/50Hz			3N 380V/50Hz			or 3N 380V 60Hz			
Compressor	Type	Hermetic scroll type									
	Quantity	Set	1	1	1	1	1	1	2	2	2
	Start mode		Directly Start (Soft start for option)								
Application Side Heat Exchanger	Type	Braze Plate Heat Exchanger / Shell & Tube Heat Exchanger									
	Water Flow	m ³ /h	1.38	2.15	1.38	2.24	3.09	5.16	6.54	12.00	22.40
	Pressure Drop	KPa	40	40	40	40	40	40	40	60	70
	Connection Size	DN	DN20	DN25	DN20	DN25		DN32		DN50	DN65
	Connection type		BSP Threaded						ANSI / DN Flange		
Fan	Type	Efficient axial type									
	Wind blowing type		Horizontal				Vertical				
Refrigerant	Throttle type		Electronic Expansion Valve								
	Type		R410A								
	Quantity	KG	2.1	3.1	2.1	3.3	4.3	6.5	4.2x2	5x2	9x2
Noise	DB(A)	≤50	≤62	≤50	≤63	≤63	≤65	≤68	≤70	≤70	
Unit dimensions	m	0.8*0.5*1.4	0.8*0.5*1.4	0.8*0.5*1.4	0.8*0.5*1.4	0.8*0.7*1.4	1*1*1.9	1*1*1.9	2*1*1.8	2.2*1.2*2.1	
Weight	KG	115	135	115	170	190	335	395	530	900	
Remarks:											
1. Cooling Mode Standard Condition: Dry bulb temperature 35°C, water input 12°C, water output 7°C.											
2. Heating Mode Standard Condition: Dry bulb temperature 7°C, wet bulb 6°C; water input 40°C, water output 45°C.											
3. The above parameter are for single module,could be grouped according to requirements.											
4. The above parameters are based on Refrigearnt R410A,for parameters based on other refrigerant please contact us.											

High quality-
We believe that quality
is the best business
plan



R&D team-
Professional R&D team
for new and high-effi-
ciency heat pumps



Reasonable prices-
Competitive prices
which help you to
occupy your market



ESTECH ENERGY



Best compo-
nents-
World class
components
suppliers for
your heat
pumps

Fast delivery-
We always keep the
promise to you, you
always keep the promise
to your customers



Long warranty-
TWO years for heat
pumps, THREE years
warranty for Compre-
sor and Condenser



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