



## Commercial Air Source Heat Pump





# EVI DC Inverter Air Source Heat Pump Water Heater ASDC Series



### EVI DC Inverter Air Source Heat Pump Water Heater (For Hot Water only)

Model	ASDC-10	ASDC-18	ASDC-21	ASDC-28	ASDC-35	ASDC-42	ASDC-52	ASDC-90	ASDC-110	ASDC-175	ASDC-210
Rated Heating Capacity (kW)(20°C)	10	18	21	28	35	42	52	90	110	175	210
Input Power(kW)(20°C)	2.26	4.07	4.76	6.33	7.94	9.50	11.76	20.41	25.06	39.68	47.84
COP(20°C)	4.42	4.42	4.41	4.42	4.41	4.42	4.42	4.41	4.39	4.41	4.39
Nominal Heating Capacity (kW)(7°C)	8.00	15.00	17.00	23.00	30.00	35.00	42.00	75.00	90.00	150.00	180.00
Input Power(kW)(7°C)	2.20	4.12	4.66	6.41	8.30	9.80	11.58	20.78	25.14	41.35	50.42
COP(7°C)	3.64	3.64	3.65	3.59	3.61	3.57	3.63	3.61	3.58	3.63	3.57
Low Temp. Heating Capacity(kW)(-12°C)	6.50	10.00	12.00	16.00	20.00	24.00	30.00	50.00	60.00	100.00	120.00
Input Power(kW)(-12°C)	2.81	4.27	5.17	6.93	8.47	10.30	12.88	21.65	25.42	43.29	51.50
COP(-12°C)	2.31	2.34	2.32	2.31	2.36	2.33	2.33	2.31	2.36	2.31	2.33
Nominal Hot Water Production (L)	215.0	387.0	451.5	602.0	752.5	903.0	1118.0	1935.0	2365.0	3762.5	4515.0
Maximum Input Power (kW)	4.40	5.30	6.30	10.41	12.50	14.50	18.85	30.00	33.00	61.00	65.00
Maximum Current (A)	23.10	27.80	33.10	19.70	23.75	27.50	35.00	53.00	62.00	115.00	124.00
Power Supply	220V ~50Hz	220V ~50Hz	220V ~50Hz	220V ~50Hz	380V ~50Hz	380V ~50Hz	380V ~50Hz	380V ~50Hz	380V ~50Hz	380V ~50Hz	380V ~50Hz
Anti-Electric Shock Level	Type I										
Water Proof Level	IPX4										
Refrigerant	R410A										
Compressor	EVI DC Inverter Compressor										
Water Inlet/Outlet Pipe	DN20	DN25	DN25	DN25	DN25	DN32	DN40	DN65	DN65	DN80	DN80
Maximum Outlet	60°C										
Operating Temperature Range	-30 ~ 43°C										
Water Volume Required (m <sup>3</sup> /h)	1.72	3.10	3.61	4.82	6.02	7.22	8.94	15.48	18.92	30.1	36.12
Water Resistance (kPa)	≤55	≤55	≤55	≤60	≤60	≤75	≤80	≤55	≤80	≤80	≤80
Noise(dBA)	≤61	≤61.5	≤61.5	≤62	≤64	≤64	≤65	≤70	≤73	≤76	≤77
Net Weight(kg)	98	120	140	140	165	170	240	550	590	1200	1250
Unit Dimensions(mm)	950 /350 /850	950 /350 /1250	950 /350 /1250	1000 /414 /1395	1000 /414 /1395	854 /854 /1830	854 /854 /1830	2000 /1100 /1950	2347 /1100 /2223	2546 /1306 /2475	2546 /1306 /2475

\* Dimensions Are Indicative Subject To Changes As Per R&D Updates

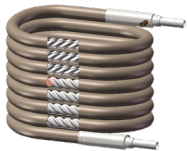
**HITACHI**  
Inspire the Next

**DC INVERTER TECHNOLOGY**

High quality DC Inverter compressor, approved in the market for long time, high reputation.



Asymmetrical Z-corrugated design improves energy efficiency and easily achieves 20° C subcooling  
Can save 35% heat exchange area, less refrigerant charge  
More compact, easy to install  
Higher welding reliability.



**Water side heat exchanger**

High-efficiency coaxial heat exchanger with both cooling and heating is adopted, with water in the copper tube. Bigger water loop diameter, higher heat exchange efficiency, excellent water quality, strong antifreeze ability, stable and reliable.



**Gas-Liquid Separator**

A large gas-liquid separator is used to prevent liquid from entering the compressor under low temperature conditions, ensuring more reliable system operation.



**Equipped with EVI technology**

Stable operation at ambient temperature -30°C



Wide running range, from -30°C to 43°C .



**Wifi function for option**

Control your heat pump in your smartphone anywhere, anytime.



**R410A**  
refrigerant,  
ODP=0



**Fan motor**

Large air volume, low noise blades; High torque, high efficiency motor. High efficiency and low noise.



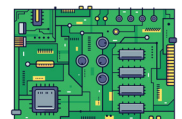
**Top quality Sensata pressure sensor**

Excellent precision, excellent mechanical resistance and EMC protection characteristics, meeting the most stringent application requirements under various pressure conditions



**FUJIKOJI Electronic expansion valve**

High precision electronic expansion valve: use electronic expansion valve for controlling, reach 500 steps adjustment, adjust super heat degrees accurately, achieve high efficiency operation system.



**Electric control**

The electric control adopts famous and high-quality components, and the quality is guaranteed; at the same time, the electric control box is set on the front, which is quick to install and easy to maintain.



# Air Source Heat Pump Water Heater (ET-H Series)



### Professional compressor for heat pump water heater

Adopt Copeland or Panasonic top quality scroll compressor specially for heat pump water heater, with much wider operation range for different ambient temperature. Special design for high suction & exhaust temperature, and system high condensing temperature & pressure, Higher efficiency, Lower noise, Higher reliability, Longer service life.



### Multiple protection functions

To ensure the safe operation of the system, a modular structure is adopted, and the units are started in stages to reduce the impact of the starting current of the units on the power grid. The unit is equipped with high and low pressure switches, antifreeze protection devices, water flow switches, overload protection devices, power supply phase sequence protection devices, etc., and is equipped with an operation control device. When a fault occurs, the controller will automatically alarm in real time.



### Fan motor

Large air volume, low noise blades; High torque, high efficiency motor. High efficiency and low noise.



### Reservoir

Large liquid receiver is used to store the condensed liquid refrigerant to prevent the liquid refrigerant from affecting the heat exchange of the heat exchanger, reduce the system pressure, and ensure more reliable system operation.



Wide running range, from -7°C to 52°C ( AS80 series ) .



### Wifi function for option

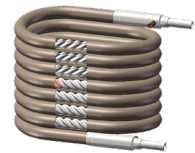
Control your heat pump in your smartphone anywhere, anytime.



**SANHUA**

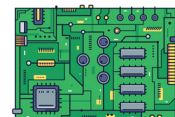
### High precision electronic expansion valve

High precision electronic expansion valve: use electronic expansion valve for controlling, reach 500 steps adjustment, adjust super heat degrees accurately, achieve high efficiency operation system.



### Water side heat exchanger

High-efficiency coaxial heat exchanger with both cooling and heating is adopted, with water in the copper tube. Bigger water loop diameter, higher heat exchange efficiency, excellent water quality, strong antifreeze ability, stable and reliable.



### Electric control

The electric control adopts famous and high-quality components, and the quality is guaranteed; at the same time, the electric control box is set on the front, which is quick to install and easy to maintain.



R410A refrigerant or R134A refrigerant, ODP=0

Note: R410A for AS60 series; R134A for AS80 series



Air Source Heat Pump Water Heater ET-H Standards												
Model		ET-12H	ET-19H	ET-25H	ET-38H	ET-50H	ET-75H	ET-90H	ET-110H	ET-175H	ET-210H	
Rated Heating Capacity	kW	12	19	25	38	50.0	75	90	110	175	210	
Rated Input Power	kW	2.81	4.50	5.84	8.94	11.74	17.52	21.13	25.76	41.37	49.53	
Performance Coefficient(COP)	/	4.27	4.22	4.28	4.25	4.26	4.28	4.26	4.27	4.23	4.24	
Maximum Input Power	kW	4.40	7.31	9.68	11.47	17.38	27.20	31.28	39.11	49.58	66.15	
Maximum Input Current	A	23.28	12.15	18.42	22.36	29.53	51.23	59.15	73.96	94.34	126.11	
Rated Hot Water Output Temp.	°C	55										
Max. Hot Water Output Temp.	°C	60										
Rated Hot Water Produce Capacity	L/H	258	408.5	537.5	817	1075	1612.5	1935	2365	3762.5	4515	
Power Supply		1N 220V/50Hz					3N 380V/50Hz					
Compressor	Type	Hermetic scroll type										
	Start Mode	Directly start										
	Quantity	Set	1	1	1	2	2	2	2	2	2	4
Water Side Heat Exchanger	Type	Shell & coil(tube) heat exchanger										
	Water Flow	m <sup>3</sup> /h	2.06	3.27	4.3	6.54	8.6	12.9	15.48	18.92	30.1	36.12
	Water Pressure	kPa	≤50	≤55	≤55	<60	<70	<70	<72	<72	<75	<75
	Pipe size	DN	DN25	DN25	DN25	DN40	DN40	DN50	DN65	DN65	DN80	DN80
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, Etc..											
Refrigerant / Throttle Type	R410A / Electronic expansion valve											
Noise	DB(A)	≤55	≤63	≤68	≤68	≤68	≤69	≤69	≤70	≤74	≤75	
Dimension	mm	710 /710 /860	750 /750 /1060	750 /750 /1060	1450 /755 /1100	854 /854 /1830	1850 /1000 /1950	2000 /1100 /1950	2347 /1100 /2223	2546 /1306 /2475	2546 /1306 /2475	
Net Weight	kg	90	135	160	245	290	447	510	610	1250	1280	
Testing conditions:												
*Application side initial water temperature: 15°C , end temperature 55°C , max. temperature 60°C .												
* Ambient temperature dry bulb 20°C , wet bulb 15°C .												
*The above parameters are based on Refrigerant R410a, for parameters based on other refrigerant please contact us.												

\* Dimensions Are Indicative Subject To Changes As Per R&D Updates



# High Temperature Air Source Heat Pump Water Heater (ET-H High Temp Series)





High Temperature Air Source Heat Pump Water Heater (ET-H High Temp Series)												
Model		ET-13H	ET-13H	ET-17H	ET-26H	ET-34H	ET-55H	ET-64H	ET-78H	ET-129H	ET-153H	
Rated Heating Capacity	kW	13.5	13.5	17.8	26.1	34.7	55.2	64.3	78.5	129.5	153.7	
Rated Input Power	kW	3.98	3.95	5.26	7.65	10.21	16.32	19.13	23.56	38.09	45.88	
Rated Input Current	A	17.56	7.52	9.99	14.55	19.35	30.95	36.33	44.71	72.34	87.14	
Maximum Input Power	kW	5.17	5.13	6.84	9.95	13.27	21.22	24.88	30.63	47.62	57.36	
Maximum Input Current	A	23.23	9.75	13.02	19.13	24.98	40.25	46.88	57.96	90.44	108.94	
Performance Coefficient(COP)	/	3.39	3.42	3.38	3.41	3.40	3.38	3.36	3.33	3.40	3.35	
Rated Hot Water Output Temp.	°C	75										
Maximum Hot Water Output Temp.	°C	80										
Rated Hot Water Production	△ t40	L/H	289.3	289.3	381.4	559.3	743.6	1182.9	1377.9	1682.1	2795.0	3440.0
	△ t60	L/H	192.9	192.9	254.3	372.9	495.7	788.6	918.6	1121.4	1863.3	2293.4
Power Supply		1N 220V/50Hz	3N 380V/50Hz									
Compressor	Type		Hermetic Scroll Type									
	Start Mode		Directly Start(Soft Start For Option)									
	Quantity	Set	1	1	1	2	2	2	2	2	4	4
Water Side Heat Exchanger	Type		Shell & coil(tube) heat exchanger									
	Water Flow	m <sup>3</sup> /h	2.3	2.3	3.1	4.5	6.0	9.5	11.2	13.8	22.4	27.6
	Water Pressure	kPa	≤53	<55	<57	<60	<70	<70	<72	<72	<75	<75
	Pipe Size	mm	DN25	DN25	DN25	DN32	DN32	DN50	DN50	DN50	DN80	DN80
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, etc..										
Refrigerant	Type		R134a									
	Throttle Type		Electronic expansion valve									
Noise	DB(A)	≤63	≤63	≤65	≤68	≤68	≤70	≤70	≤72	≤74	≤75	
Dimension	mm	750	750/	854	1450	854	1850	2000	2347	2546	2546	
		/750	750	/854	/755	/854	/1000	/1100	/1100	/1306	/1306	
		/1060	/1060	/1830	/1100	/1830	/1950	/1950	/2223	/2475	/2475	
Net Weight	kg	160	150	180	255	290	447	510	610	1250	1280	
Testing conditions:												
*Application side initial water temperature: 15°C , end temperature 75°C , max. temperature 80°C .												
*Ambient temperature dry bulb 20°C , wet bulb 15°C .												
*The above parameters are based on Refrigerant R134a, for parameters based on other refrigerant please contact us.												

\* Dimensions Are Indicative Subject To Changes As Per R&D Updates

# Water Heating & Cooling Solutions

Solar Water Heaters

Heat changers

Storage Calorifiers

Heat Pump

Hot Water Boilers

Gas Fired Calorifiers

Electric Calorifiers

Steam Boilers



 Corporate offices

 Sales offices

Versol Poland | Versol Italy | Versol UK | Versol USA | Versol Middle East | Versol Australia | Versol Canada | Versol india