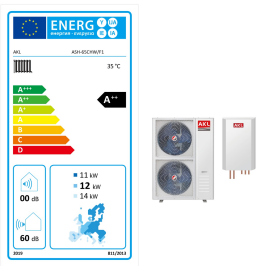
Air to Water Heat Pump System

The air to water heat pump is a new energy-saving solution for house heating and cooling. It extracts heat from the outside air and transfers it to water for various heating applications.



ADDITIONAL IMAGES

Product Overview

High-Efficiency Heating & Cooling Solution

This air-to-water heat pump system offers a sustainable energy-saving solution for residential and commercial climate control. By extracting heat from the outdoor air, it efficiently provides space heating, underfloor heating, and domestic hot water even in cold temperatures. The system features a versatile design with high-performance compressors and advanced safety protections like freeze and over-pressure prevention.

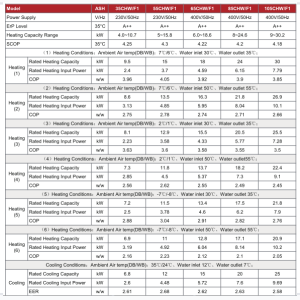
Energy Efficiency

Indoor and outdoor units showing the A++ energy efficiency rating and dual-fan configuration.

Energy Efficiency Class
A++ • ErP Level (35°C)

SCOP (35°C)	4.3 w/w

Performance Metrics



Model		ASH	35CHW/F1	55CHW/F1	85CHW/F1	85CHW/F1	105CHW/F1
Power Supply		1/Hz	230V/50Hz	230V/50Hz	400V/50Hz	400V/50Hz	400V/50Hz
ErP Level		35°C	A++	A++	A++	A++	A++
Heating Capacity Range		kW	4.0~10.7	5~15.8	6.0~18.6	8~24.6	9~30.2
SCOP		35°C	4.25	4.3	4.22	4.2	4.18
（1）Heating Conditions: Ambient Air temp(DB/WB): 7℃/6℃, Water inlet 30℃, Water outlet 35℃.							
Heating (1)	Rated Heating Capacity	kW	9.5	15	18	24	30
	Rated Heating Input Power	kW	2.4	3.7	4.59	6.15	7.79
	COP	w/w	3.96	4.05	3.92	3.9	3.85
（2）Heating Conditions: Ambient Air temp(DB/WB): 7℃/6℃, Water inlet 50℃, Water outlet 55℃.							
Heating (2)	Rated Heating Capacity	kW	8.6	13.5	16.3	21.8	26.9
	Rated Heating Input Power	kW	3.13	4.85	5.95	8.04	10.1
	COP	w/w	2.75	2.78	2.74	2.71	2.66
（3）Heating Conditions: Ambient Air temp(DB/WB): 2℃/1℃, Water inlet 30℃, Water outlet 35℃.							
Heating (3)	Rated Heating Capacity	kW	8.1	12.9	15.5	20.5	25.5
	Rated Heating Input Power	kW	2.23	3.58	4.33	5.77	7.28
	COP	w/w	3.63	3.6	3.58	3.55	3.5
（4）Heating Conditions: Ambient Air temp(DB/WB): 2℃/1℃, Water inlet 50℃, Water outlet55℃.							
Heating (4)	Rated Heating Capacity	kW	7.3	11.8	13.7	18.2	22.4
	Rated Heating Input Power	kW	2.85	4.5	5.37	7.3	9.1
	COP	w/w	2.56	2.62	2.55	2.49	2.45
（5）Heating Conditions: Ambient Air temp(DB/WB): -7℃/-8℃, Water inlet 30℃, Water outlet 35℃.							
Heating (5)	Rated Heating Capacity	kW	7.2	11.5	13.4	17.5	21.9
	Rated Heating Input Power	kW	2.5	3.78	4.6	6.2	7.5
	COP	w/w	2.88	3.04	2.91	2.82	2.76
（6）Heating Conditions: Ambient Air temp(DB/WB): -7℃/-8℃, Water inlet 50℃, Water outlet 55℃.							
Heating (6)	Rated Heating Capacity	kW	6.9	11	12.8	17.1	20.9
	Rated Heating Input Power	kW	3.19	4.92	6.04	8.14	10.2
	COP	w/w	2.16	2.23	2.12	2.1	2.05
Cooling Conditions: Ambient Air temp(DB/WB): 35℃/24℃, Water inlet 12℃, Water outlet 7℃.							
Cooling	Rated Cooling Capacity	kW	6.8	12	15	20	25
	Rated Cooling Input Power	kW	2.6	4.48	5.72	7.6	9.69
	EER	w/w	2.61	2.68	2.62	2.63	2.58

Detailed performance specifications across various ambient temperature conditions for heating and cooling.

Heating Capacity Range

4 kW	30.2 kW
Min Heating	Max Heating

Model Performance Comparison

Model	Power Supply	Rated Heating (7°C/35°C)	COP (7°C/35°C)	Rated Cooling (35°C/7°C)
ASH-35CHW/F1	230V/50Hz	9.5 kW	3.96	6.8 kW
ASH-55CHW/F1	230V/50Hz	15 kW	4.05	12 kW
ASH-65CHW/F1	400V/50Hz	18 kW	3.92	15 kW
ASH-85CHW/F1	400V/50Hz	24 kW	3.9	20 kW
ASH-105CHW/F1	400V/50Hz	30 kW	3.85	25 kW

Acoustics & Environment

Noise Levels

58 dB	0 dB
Outdoor Sound Power	Indoor Sound Power

System Features

Safety Protections

- Over-pressure protection
- Freeze protection
- Programmable thermostats
- Remote monitoring capabilities

Applications	Space Heating, Space Cooling, Underfloor Heating, Domestic Hot Water

Compliance

Regulatory Compliance

- European Energy Standard 811/2013
- ErP Level A++