

EcoAir 406-420 Air-to-Water Heat Pump

Air-to-water heat pumps draw energy from the ambient air. The energy gained under a low outdoor temperature (as low as -22°C) is then “pumped” to a higher temperature and transferred into heating water. **Its flow temperature reaches as much as +65°C.** It is subsequently used to heat a house, prepare DHW or heat a pool.

This line of air-coupled heat pumps has been developed using the most advanced technologies in order to reach the best parameters. They are equipped with a new, extra large air heat exchanger (evaporator) for the best utilization of air energy. In order to reach a high COP and effective operation even under very low temperatures, they are fitted with the latest compressors and an electronic expansion valve.

Heat pumps of the 400 line can be sized to cover 100% of the heat needed for space and water heating, with heating needs covered by the heat pump alone without any electric backup.



EcoAir 406-420 Heat Pumps are able to communicate with IR 12 Smart Controllers that permit comfort heating system control incl. control of up to 10 heat pumps connected in series.

**Energy Efficiency Class for the set with controller under average climate conditions for low-temperature application*

Technical Data				EcoAir 406	EcoAir 408	EcoAir 410	EcoAir 415	EcoAir 420
Air/water temperature in °C	A7/W35*	Heat output	[kW]	6.22	7.83	11.45	16.19	17.52
		Power input	[kW]	1.30	1.62	2.36	3.53	4.23
		COP	[-]	4.78	4.83	4.86	4.58	4.15
	A2/W35*	Heat output	[kW]	4.69	6.02	8.80	11.42	14.55
		Power input	[kW]	1.28	1.60	2.30	3.24	4.13
		COP	[-]	3.66	3.76	3.83	3.52	3.52
	A-7/W35*	Heat output	[kW]	3.87	4.73	7.32	9.96	11.51
		Power input	[kW]	1.25	1.57	2.29	3.27	3.94
		COP	[-]	3.10	3.02	3.19	3.04	2.92
Dimensions and weight	Width	[mm]	1245	1245	1375	1375	1375	
	Height	[mm]	1075	1075	1175	1175	1175	
	Depth	[mm]	545	545	610	610	610	
	Weight	[kg]	120	126	180	187	190	
Sound power level		[dB(A)]	56	58	58	67	70	
Noise level: (medium/reduced speed)	5 m distance	[dB(A)]	34-37	36-39	36-39	45-48	48-51	
	10 m distance	[dB(A)]	28-31	30-33	30-33	39-42	43-46	
Code			13243	13244	12994	12995	12848	

*Values measured according to EN 14511 incl. defrost cycle

Each CTC Heat Pump is equipped with a max. current limiter for compressor startup.

EcoAir 400 heat pumps are supplied without circulation pumps. They shall be installed exclusively with CSE IR 12 load units – see p. 21, or with an EcoZenith i250 Multi-Energy Thermal Store – see p. 11.