













A NEW WATER / WATER HEAT PUMP SOLUTION

ECO-FRIENDLY REFRIGERANTS R513A AND R134a

With forecasts indicating that 84% of European citizens will live in urban areas by 2050, future heating solutions must prioritize urban applications to deliver maximum environmental benefits. The EU Heat Roadmap sets ambitious decarbonisation targets, aiming to increase smart Heating & Cooling networks to 30% by 2030 and 50% by 2050.

Our high-power ground source Heat Pumps can cut 80% of your installation's energy consumption by harnessing a renewable energy source that significantly reduces CO_2 emissions. Advanced algorithms allow these Heat Pumps to deliver simultaneous Heating & Cooling, efficiently meeting the thermal demands of a wide range of industrial and large-scale installations.

PORTUGUESE MANUFACTURING





KEY FEATURES

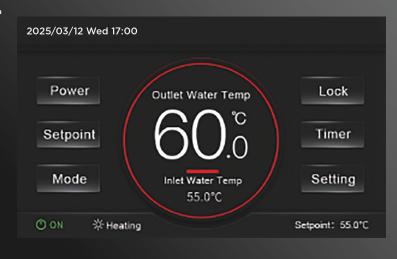
- **HIGH PERFORMANCE**: With geothermal technology, the Heat Pump operates more efficiently, significantly saving energy compared to conventional systems.
- **APPLICATION**: Regardless of the building size, whether a home, an office or a large commercial facility, a Heat Pump provides customized and efficient solutions.
- **ROBUST AND COMPACT**: Durable and reliable, the Heat Pump operates consistently throughout the year, unaffected by weather.
- **FLEXIBLE INSTALLATION**: Due to this compact design, it can be installed in different locations, including rooftops and basements.
- **DTU MODULE**: The DTU, with a pre-installed SIM card, connects to the main PCB via RS485. With 4G, all Heat Pump data is sent to the cloud and can be monitored by operators and engineers.
- **CENTRAL MANAGEMENT**: A single central display can manage up to 4 Heat Pumps, balancing operation and extending the Heat Pump's operating life.
- **ENVIRONMENTALLY FRIENDLY**: A sustainable residential geothermal system, combustion-free reduces emissions while providing year-round Heating & Cooling.

TACTILE AND INTUITIVE CONTROLLER

DHW PRODUCTION AND CLIMATE CONTROL

The AQUA Heat Pump controller is a user-friendly and intuitive interface that allows:

- Temperature timer and power timer
- Set function
- Set interface
- Sattus inquiry function
- Status inquiry function
- System time setting



TECHNICAL DATA		UNIT	AQUA HP 85kW	AQUA HP 175kW
Heating*				
	Heating capacity	kW	88,,55	175,,73
	Power input	kW	22,16	40,98
	COP		4,12	4,42
Heating**				
	Heating capacity	kW	69,09	138,49
	Power input	kW	16,91	33,72
	COP		4,25	4,28
Heating***				
	Heating capacity	kW	61,81	125,48
	Power input	kW	12,21	24,10
	COP		5,41	5,47
Cooling**				
	Cooling capacity	kW	52,94	105,98
	Power input	kW	16,43	32,86
	COP		4,41	4,41
Evaporator				
	Water flow	m³/h	7,21	20,60
	Water pressurre drop	kPa	25,34	56,14
	Water connection		DN65	DN80
Condenser				
	Water flow	m³/h	5,36	19,11
	Water pressurre drop	kPa	15,33	43,58
	Water connection		DN65	DN80
Dimensions & Weight				
	Length x Width x Height	mm	1172 × 900 × 1365	1600 x 1130 x 1500
	Weight	kg	441	866
Refrigerant				
	Туре		R513A	R134a
Electrical connections				
	Power supply	V/Ph/Hz	380~415V / 3N~/ 50Hz	380~415V / 3N~/ 50Hz
	Current	А	50	90
Compressor				
	Type		Copeland ZW150KBE-TFP-522	Copeland ZW150KBE-TFP-522
	Quantity	Unit	2	4
Sound				
	Sound power	dB(A)	68,0	69,0

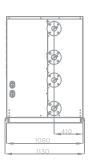
^{*} Heat source water inlet/outlet 35/30°C: Inlet/outlet water temperature user side 55/60°C. Based on EN14511.

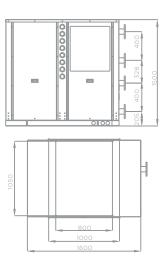
** Heat source water inlet/outlet 20/15°C: Inlet/outlet water temperature user side 45/55°C. Based on EN14511.

*** Heat source water inlet/outlet 10/7°C: Inlet/outlet water temperature user side 30/35°C. Based on EN14511.

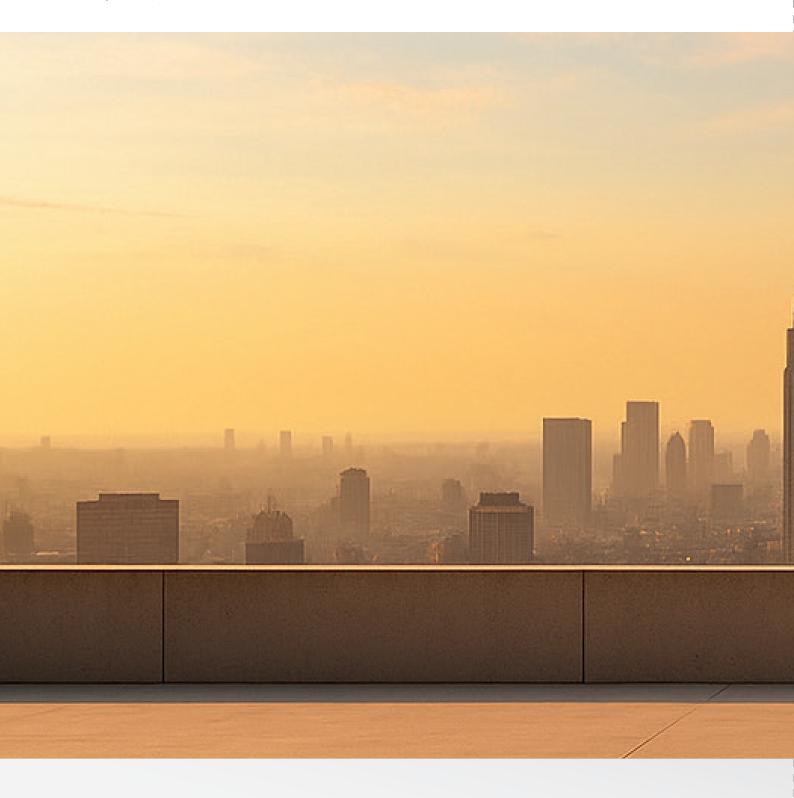
Tecnhical drawing: AQUA HP 85kW

Tecnhical drawing: AQUA HP 175kW





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