



## EcoHeat

### Heat pump for bedrock, ground and lake heat source

- A complete heat pump solution designed for private houses and smaller properties
- Three sizes available for 230V 1ph: 5 / 8.5 and 10.5 kW
- Five sizes available for 400V 3ph: 5 / 7.5 / 8.5 / 10.5 and 12 kW
- Incorporated in the EcoHeat is a patented intercooler ensuring high efficiency, economy, and long life.
- User-friendly control system and display
- Provides domestic hot water (DHW)
- Suitable for single and double pipe systems, convectors and floor heating
- Automatic internal mixing valve provides uniform and pleasant heating
- Silent running
- Built-in soft starter

The EcoHeat combines a ground source heat pump and hot water accumulator providing a complete heat pump solution for private houses and smaller properties.

The heat pump is a water/water unit designed to utilise a closed collector loop extracting low temperature heat from either bedrock, soil or lake water. The heat pump evaporator incorporates a unique and patented intercooler which not only increases the system efficiency (COP) but also reduces system wear on the compressor and prolongs the life of the unit.

The EcoHeat provides both environmental heating water and domestic hot water (DHW). An integral electric immersion heater can be used to boost both the environmental heating water and DHW supply when necessary.

Both the environmental heating water and DHW connections are located on the top of the unit. Connections to the ground source heating loop are on the side of the unit.

DHW is produced in an internal finned coil delivering an 'instantaneous' supply of fresh hot water.

The EcoHeat is fitted with an internal baffle enabling hot water to be stored in the cylinder at two different temperatures. This enables the heat pump to heat the lower temperature water in the base of the cylinder while the immersion heater can be used to maintain a higher temperature in the upper section and hence the system capacity for generating DHW. The immersion heater can add up to 6kW.

A microprocessor controller mounted on the front of the EcoHeat provides fully automatic control of the heating system.

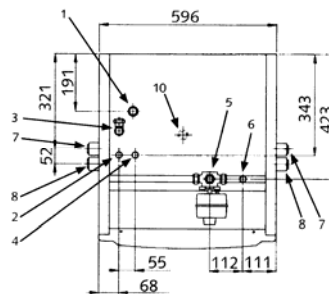
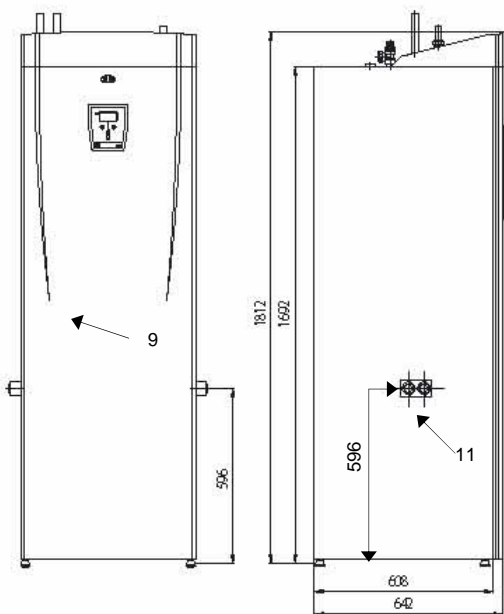
Environmental heating water is supplied by an internal mixing valve which together with indoor and outdoor temperature sensors provide an environment with uniform and pleasant heating.

A display on the controller indicates system temperatures and enables heating system set-up and adjustment.

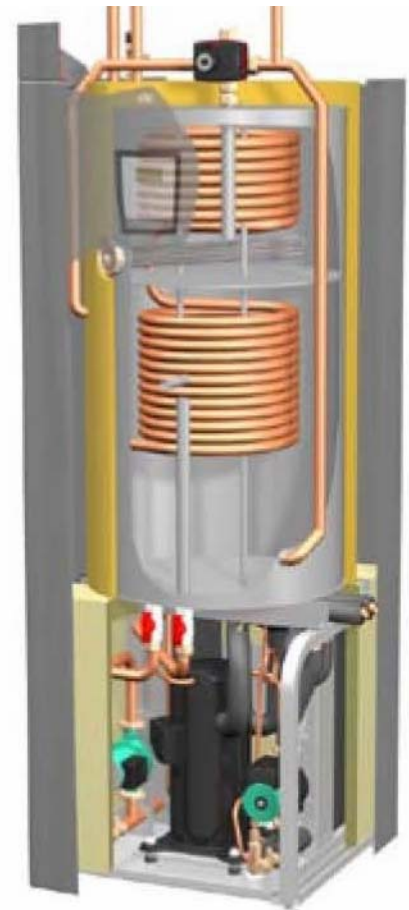
The EcoHeat has a 'footprint' of 600mm x 620mm and height of 1800mm.

EcoHeat		5	7.5	8.5	10.5	12
Main measurements	mm	600 x 619 x 1797				
Weight	kg	245	255	255	265	270
Water volume, boiler	litres	223				
Electrical supply options		230V 1ph 400V 3ph	- 400V 3ph	230V 1ph 400V 3ph	230V 1ph 400V 3ph	- 400V 3ph
Output from the compressor at 35°C	kW	5.9	7.6	8.7	10.4	12.4
Output from the compressor at 50°C	kW	5.1	7.1	7.7	10.3	11.6
Power consumption, compressor + pumps at 35°C	kW	1.3	1.8	2.0	2.5	2.9
Power consumption, compressor + pumps at 50°C	kW	1.7	2.3	2.5	3.4	3.9
Type of compressor		Scroll				
Min main fuse (at 3,6,9 kW elect connection)	A	10/16/20	16/16/20	16/20/25	16/20/25	16/25/25
Immersion heater/spare heating	kW	9 (3ph units)			6 (1ph units)	
Power steps, elect.	kW	1.5 / 2 / 4.5 / 6 / 7.5 / 9				
Power limiter	kW	0 . 1.5 / 3 / 4.5 / 6 / 7.5 / 9				
Internal charge control		Yes				
Control system		Micro computer, incl room sensor (standard delivery)				
Refrigerant (R407C)		1.55 kg	2.10 kg		2.50 kg	

## Measurements & connections



1. Expansion connection Rp ¾"
2. Cold water connection ø22
3. Connection waste pipe clamping ring 22
4. Hot water ø22
5. Radiator primary flow clamping ring 22
6. Radiator return ø22
7. From ground ø28 (optional side)
8. To ground ø28 (optional side)
9. Connection electricity
10. Lifting sleeve Rp ¾"
11. Opening for pipe left/right side



### The product complies to the EN directive:

LVD: 73/23/EEC och 93/86 EEC  
EMC: 89/336/EEC  
and is tested according to EN255

Subject to alterations in design

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