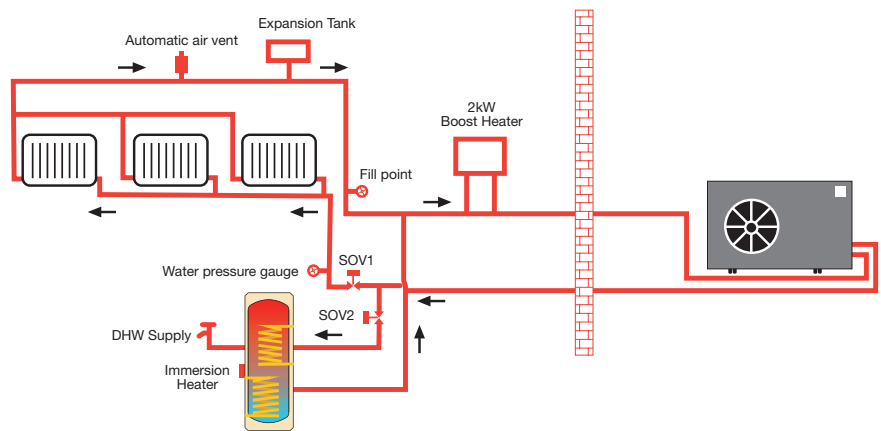




Heating that doesn't cost the earth



### What are heat pumps?

Heat pumps are electrically powered appliances consisting of a compressor and two carefully matched heat exchangers. They are designed to provide space heating through water systems, either radiators or underfloor, by extracting from a free, renewable energy source such as the earth, water or air. The earth, water and air will absorb and store heat from the sun and from the earth's core. In the UK the average constant temperature of the earth at about 1.5m deep is 11 to 12°C. A similar situation exists with underground water sources or large-surface water sources. It is also possible to extract considerable heat from the ambient air at temperatures as low as -20°C. Heat pumps are a very cost effective means of providing space heating and pre-heating domestic hot water. The high efficiency of the units means that the output heat energy can be up to four times the electrical input power, something not possible with other methods of heating.

### BWarm 6000, BWarm 8000 and BWarm 12000

- Heating optimised
- Nominal 6kW output (BWarm 6000), 8kW output (BWarm 8000) and 12kW output (BWarm 12000)
- Up to 4.0 COP (Coefficient of Performance)
- Low energy costs
- Provides high CO2 emissions savings
- Renewable energy
- Low capital cost
- Easily installed
- Flexible siting
- Operates down to -20°C
- Microprocessor control
- Latest compressor technology
- Incorporates circulating pump

## How does an air source heat pump work?

Heat pumps use similar technology to that employed in domestic refrigerators or freezers, but in reverse. An air source heat pump works by extracting low-grade heat from the air outside but where a refrigerator rejects heat from the contents to keep it cool, a heat pump will use it to heat water and provide heating.

## Why choose a BWarm air source heat pump?

The HeatKing BWarm units use the latest technological advances in both compressor design and system control. This allows the units to provide much needed heat, more efficiently than most other forms of heating. With rising fuel costs and the restricted availability of fuels in some areas, authorities and domestic users alike are being forced to look towards alternatives and BWarm is ideal.

The running cost of an air source heat pump is much lower than a conventional electrical heating system as the householder only pays for running the compressor and fan and the majority of the energy supplied to the house is renewable and free. Heat pumps also give a long trouble-free life with very low maintenance costs. The expected life of a BWarm heat pump is 20 years - much higher than an oil or gas boiler.

## Carbon emissions

Carbon emissions are an ever-increasing concern to global warming but the BWarm air source heat pump can save in excess of five tonnes of carbon per year compared to other forms of heating. The heat pump will produce 50 per cent less carbon than a modern gas boiler and around 70 per cent less than an all electric system, taking into account the inefficiency of power stations and losses in the delivery of electricity.

The BWarm range of heat pump units addresses the issue of carbon emissions head on, utilising renewable energy to provide heat for domestic space heating and hot water. By extracting energy from the air around us the BWarm domestic heat pump is able to achieve a COP (coefficient of performance - the ratio of energy output to energy input) of up to four. As a result these units provide effective heating with minimal carbon emissions.

Technical Specifications	BWarm 6000	BWarm 8000	BWarm 12000*
Height (inc. feet)	681mm	780mm	780mm
Width	1020mm	1274mm	1396mm
Depth (inc. fan)	312mm	340mm	374mm
Weight	87kg	110kg	175kg
Heating output **	6kW	8kW	12kW
COP ***		up to 4.0	
Power Supply	230V/1ph/50Hz or 400V/3ph/50Hz		
Water connector size	22mm		
Minimum ambient temperature	-20°C		
Maximum ambient temperature	45°C		

\*Available 2007. \*\*Based on 7°C ambient, 50°C supply water temperature. \*\*\*At 35°C supply water temperature.