

Air source heat pumps

Low-cost, electric powered space heating for your home.



What are they?

An air source heat pump absorbs heat from the environment, even when temperatures are well below freezing. It takes heat from the air outside and moves that heat inside your home, keeping you warm and comfortable.

Air source heat pumps use the same type of technology that keeps your fridge cold, but in reverse to make your home warm. Heat from the air is absorbed into a fluid, this then passes through a heat exchanger into the heat pump which raises the temperature. Then that heat is transferred to the water being pumped through your radiators/underfloor heating.

Heat pumps are suited to almost all homes. They are most effective in homes that have been insulated so they warm up quickly and keep the heat in. This means less energy is needed to keep your home warm.

Will a heat pump save me money on my energy bills?

- Running costs will depend on how your heat pump is designed and how it is operated. Savings on your energy bill will also depend on the system you are replacing.
- The potential annual savings from replacing old electric storage heaters with an air source heat pump in a typical three bedroom semi-detached home is £1100 per year*.
- The potential annual savings from replacing an old (G-rated) oil boiler with an air source heat pump in a typical three bedroom semi-detached home is £510 per year*.

(*Figures are based on fuel prices as of January 2024, Energy Saving Trust)

Benefits of heat pumps



More cost effective heating



Will cut your carbon emissions



Could lower your energy bills

How to heat your home effectively with an air source heat pump?

Heat pumps are designed to run for long periods of time. This means it is usually cheaper and warmer to leave them running during the day compared to only heating in the morning and evenings.

They work more efficiently when the temperature is changed gradually rather than suddenly. When you want to turn the temperature up, change the setting of your room thermostat by one or two degrees at a time. Wait to see if you are comfortable at this new setting before turning it up further.



Tips for using your air source heat pump:

- Heat pumps shouldn't be turned off completely because they will be extremely expensive when turned back on as they will try to raise the temperature in your home as quickly as possible
- **At night:** Lower the temperature to around 10-15°C, and then set it to slowly increase in the morning so that the room is a comfortable temperature when you wake up
- **Away for a day:** Just leave the system running as usual
- **Away for a week:** The system should have a 'holiday' or 'frost protection' setting on the control panel, which will lower the room temperature while you are away. This will also prevent the pipes freezing if you go away in cold weather
- **During the summer:** Your heat pump might have a 'summer' mode, or you can simply turn down the room thermostat. This means the heating will not come on, but you will still get hot water. You can raise your heating temperature again slowly as the autumn approaches.

cse.org.uk/my-home/advice

energysavingtrust.org.uk/advice/electric-heating

Contact our Customer Services team on 0300 323 0011