



Making the most of your air source heat pump



A Vaillant aroTHERM plus (5kW or 7kW) air source heat pump has been installed in your home.

An air source heat pump will generate 75% of your home's heating and hot water needs from the surrounding environment. The remaining 25% is imported from your household electricity supply.

Your fuel bills will be lower because you are drawing much less energy from the grid, compared to other forms of heating. Air source heat pumps are a sustainable, environmentally-friendly source of energy.

Please read this leaflet to get the most out of your air source heat pump system.

What is an air source heat pump?

The box outside your home that looks like a fan unit is your air source heat pump. An air source heat pump draws warmth from the surrounding environment (even when it is freezing outside) and uses it to heat your home.

Air source heat pumps work like a refrigerator in reverse. Heat is sucked from the air outside and transferred to a fluid, which is compressed to increase its temperature. This heat is then transferred into the central heating system, and used for both heating and hot water.

How are air source heat pumps different?

Air source heat pumps work most efficiently if they are left on constantly.

The system takes longer to warm up than other forms of heating and so it does not quickly provide heat when turned on.

For best results, leave your heating on all the time, so that your home stays at a consistent temperature.

Your radiators will feel warm, but not as hot to the touch compared to other heating systems. That is normal with an air source heat pump. As a result, your radiators may be slightly larger to increase their surface area and help your home stay warm.

The warm air needs to circulate to heat your home efficiently. Make sure you do not block the radiators with furniture or dry clothes on them.

How do I use my air source heat pump?

It is usually cheaper and warmer to leave the system running all day, rather than only heating in the morning and evenings.

The controller on the wall is for setting up your home's heating settings. Use the thermostat to choose a comfortable temperature for your home (see over the page). Once your heating is set up, you do not need to touch this controller very often.

It is possible to adjust your heating schedule to suit you - for example, if no one is at home in the day. But remember, the heat pump will take longer to heat up compared to other heating systems. The harder your heat pump works, the more electricity it will use.

Avoid turning your thermostat up very high or regularly changing the temperature in your home. The system works best when left on.

Always refer to the manufacturer's guide before you change the settings.

75% Renewable Outdoor air



25% Non-renewable
Electric energy



Renewable heating



Used for heating or stored for future



Top tips

- **Maintain a constant temperature** During the winter months, leave your thermostat at a constant set temperature (approx. 18-21 degrees).
- **To increase the temperature** Raise the room thermostat by 1-2 degrees at a time. Wait to see if you are comfortable at this new setting before turning it up more. If you turn the temperature up too quickly, the heat pump cannot respond quickly enough. It will work harder to boost the temperature and use more mains electricity, increasing your bill.
- **Trap the warmth** Close doors and windows. If your home lacks insulation or is draughty, it may struggle to get warm and your running costs will be higher. This is because the heat pump will have to work harder to maintain a constant interior temperature.
- **Check for obstructions** Outside, check there are no items obstructing the unit to ensure a steady flow of air inwards. Remove any snow or ice covering the vents during the winter. Indoors, do not block or cover radiators.
- **Never turn off the heat pump completely** When you turn it back on, it will try to raise the temperature as quickly as possible, which is very expensive. It can also take several days to restore your home to a comfortable temperature.
- **Optimise your settings**
The system 'user' panel should include all the settings you need to use. For example:
 - **Night time** Set the night time temperature to be around 10-15 degrees, and then to slowly increase so that the room is a comfortable temperature when you wake up in the morning.
 - **Away for a day?** Just leave the system running as usual.
 - **Summer settings** 'Summer' mode 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.

Benefits at a glance

- **Energy-efficient** – class A+++
- **Reduced energy bills** – most of the energy needed is generated from the surrounding environment, so overall running costs and energy bills are lower
- **Environmentally friendly** - no emissions, sustainable source of energy
- **Quiet operation** – Vaillant's aroTHERM plus models carry the Quiet Mark (the international award for quiet product design)
- **Low maintenance** – robust design and very few moving parts mean it requires very little maintenance

If you have any queries about your air source heat pump, please contact us.

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