

 Heating  Hot water  Renewables

aroTHERM plus hybrid heating system



 **Vaillant** Comfort for your home

Hybrid system

Best suited for:



New build, renovations
and replacement



+++

One or more
people



Two or more
bathrooms



What are the advantages?

- **High flow temperatures achievable**
Delivering high hot water comfort and demand
- **Intelligent**
Intelligently selects the most economical heat appliance
- **Reduce fossil fuel use**
Can replace a traditional heating system
- **Sustainable**
Lower carbon emissions than traditional heating systems
- **Energy efficient**
Save money on your fuel bills when the heat pump is operating
- **Designed for a peaceful home**
With noise levels as low as 54 dB
- **App controlled**
When installed with VR 900 or sensoNET control
- **Eligible for government incentives**
Such as the Renewable Heat Incentive (RHI)

What is a hybrid heating system?

Vaillant offers an aroTHERM plus hybrid renewable heating system that combines a heat pump with a boiler. If you have a property with heat loss outside of the scope of a single heat pump or have a fossil fuel boiler that's expensive to run, a hybrid system could be the perfect choice.

Hybrid systems are intelligent, and use a sophisticated control to ensure they work as efficiently as possible. The boiler is installed inside the property as usual, while the heat pump is located outside*.

Air source heat pumps do require electricity to operate, and approximately 75% of the energy required is generated from the outside air, with only 25% being required from electricity. This means that 75% of the energy you use will be from a renewable source, which will reduce your emissions and CO₂ impact.

*Air source heat pumps need to be located outside. They must be installed on a solid base or structurally secure wall. A qualified and reputable heat pump installer will be able to advise you if your home is suitable for an air source heat pump.

aroTHERM plus

air source heat pump outdoor unit



*Up to seven years when installed by a registered Vaillant Advance Partner

The aroTHERM plus provides heating and hot water from renewable energy. It's perfect for both new build and retrofit properties that demand low running costs, high efficiency, and an environmentally friendly solution.

The aroTHERM plus is an outdoor unit which comes in a variety of outputs to suit every property.

Heat source	Air
Outputs (kW)	3.5, 5, 7, 10 and 12kW
Usage	New building, renovation, replacement
Heat emitters	Underfloor heating and/or radiators
House size	Up to 300m ²
Decibel level (sound power)	54 - 60 dB
ErP rating at 35° (range A+++ - D)	3.5kW A++, 5kW A+++, 7kW A+++, 10kW A+++, 12kW A+++
SCoP rating	Up to 5.03

The benefits of the aroTHERM plus

- With the aroTHERM plus heat pump you can reduce your carbon footprint and contribute to climate protection by already meeting future building regulations
- The aroTHERM plus system is suitable for a broad range of properties with underfloor heating and/or a radiator system. Depending on the heat demand and living space of your home, it will be suitable for retrofit projects
- Designed for a peaceful home, the aroTHERM plus system has very low sound emissions: reassuring for you and your neighbours
- With sound power as low as 54dB(A) the aroTHERM plus 3.5, 5, 7, and 12 kW outputs have been accredited with the Quiet Mark
- ErP A+++ rated with a SCoP up to 5.03, your monthly running costs for heating and hot water can be reduced by up to 40% compared to a replaced oil heating system
- Compatible with app-based controls to allow you to control your heating on the go



Controls for smart heating

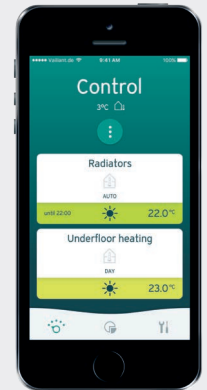
An aroTHERM plus hybrid heating system should always be fitted with a VRC 700 or sensoCOMFORT controller (supplied separately), that features Vaillant's unique intelligent tariff selection tool, triVAI®.

What is triVAI?

The triVAI intelligent tariff selection tool ensures a Vaillant hybrid system works as efficiently as possible. It assesses the energy use of each part of the system, analyses the Coefficient of Performance of the heat pump, the efficiency of the boiler, and the energy tariff prices. With this data, triVAI is able to select the most cost-effective heat source in the system. It does all of this automatically with no intervention required for the user.



sensoCOMFORT



Smartphone app



Comfort and control wherever you are

The VRC 700(f) or sensoCOMFORT app* makes it easy to control your heating and hot water from a mobile device for total flexibility.



Weather compensation

Uses data to understand the conditions outside the property to tell your system how hard it needs to work to reach the right temperature without wasting any energy to get there.



Reduce your energy bills

Ensures your system will run in the most efficient way possible, using the minimum energy to get the temperature you want and save you money.

Flexible control

The simple menu and override functions allow you to quickly boost the heating and hot water whenever you need.

Choose from a range of programmes

Both controls have easy-to-use interfaces with clear, high contrast displays. They have programming options for seven days, weekdays and weekends, or 24-hour time periods, making it easy for you to create your perfect comfort zone.

Compatible with ambiSENSE

Vaillant's wireless thermostatic radiator valves allow you to adjust the temperature and timings for individual rooms to maximise your comfort and your system efficiency.

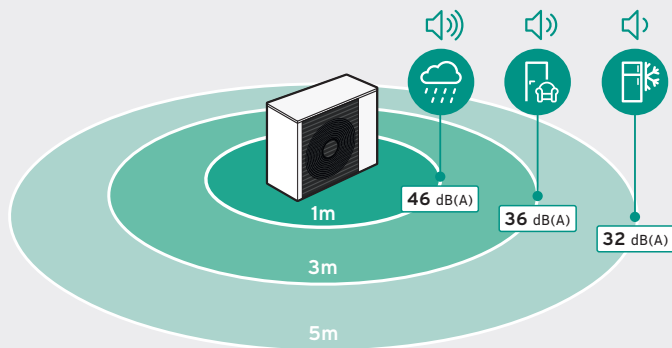
*VR 920 gateway or sensoNET required

To see how the
sensoCOMFORT works visit:



Key terms explained

What is sound power?



Sound emission from the aroTHERM plus

5kW heat pump, free standing

Sound power

This is the rate at which sound energy is emitted from a unit. The sound power of all heating products like heat pumps and boilers are displayed on the ErP product label.

Sound pressure

This is the volume of sound you hear as the sound travels through the air. So the further away you move from the sound source, the lower the volume of sound you hear. Sound pressure values are always lower than sound power values. An example of the sound pressure value would be 46dB(A) the (A) shows that is a sound pressure value.

What is Global Warming Potential (GWP)?



GWP is a comparative value that indicates the greenhouse effect of a greenhouse gas, such as a refrigerant, if it were to be released into the environment. The higher the value, the worse the impact on the climate. The aroTHERM plus has a very low impact on the environment, with an outstanding GWP of just three.

Coefficients Of Performance (CoP)

CoP is the efficiency ratio of heating output compared to the energy input required to power the unit depending on the air and flow temperatures. The higher the CoP figure, the more efficient the heat pump is. Air source heat pump units usually have a CoP of around 3 - 4, the aroTHERM plus has a CoP up to 5.03, making it highly efficient.

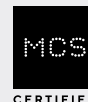
Seasonal Coefficient Of Performance (SCoP)

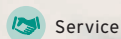
SCoP is a value that describes the efficiency of the output of the heat pump. It's derived from analysing the data from a combination of tests taken over the course of a year (to allow for seasonal variation). A SCoP value is used to calculate the running cost of your heat pump; the higher the SCoP value, the more efficient the heat pump and the lower the running costs of your heating system. This figure is required for the UK Government Renewable Heat Incentive (RHI) subsidy.

What is RHI?

RHI is the subsidy programme from the UK Government that pays quarterly dividends for seven years if you install, or have already installed, renewable technology to heat your home.

All Vaillant heat pumps are MCS accredited and eligible for RHI.





Service

Rely on Vaillant for sound advice



Heating



Hot water



Renewables

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VaillantHomeUK



VaillantHomeUK



VaillantUK

With its first-rate service, Vaillant can make life more comfortable before your new heating system has even been installed.

The first person to contact is, of course, your heat pump engineer who will provide expert advice on all of the technical aspects. To find a Vaillant renewable heating engineer near you, please visit: vaillant.co.uk/findaninstaller

If you would like details of the latest products and comprehensive information about heating in general, you can visit us online at any time: vaillant.co.uk

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