THERMA V™

RENEWABLE > SHIFT AWAY FROM FOSSIL FUELS

LG Renewable Heating Solutions

Air-to-water heat pump systems

LG

Renewable technology

Comfortable home

Lower bills

Reduce carbon emissions

Renewable technology

Comfortable home

Lower bills

Reduce carbon emissions

LG | Business Solutions

LG Electronics
Air Conditioning and Energy Solutions

Web: www.lg.com/uk/heating

For continual product development, LG reserves the right to change specifications without any notice.

Information on the complete range of LG Air Conditioning and Energy Solutions is available on our website. You can also download from PDF versions from our website. Whilst every care has been taken in the preparation of this catalogue, some changes may have occurred since publication. LG Electronics cannot accept responsibility for errors and omissions.

LG Electronics UK Limited have been working closely with their supplier's to reduce their environmental impact on the world.

Products in this brochure contain fluorinated greenhouse gases (R410A / R134a / R32)

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ABOUT LG THERMA V?

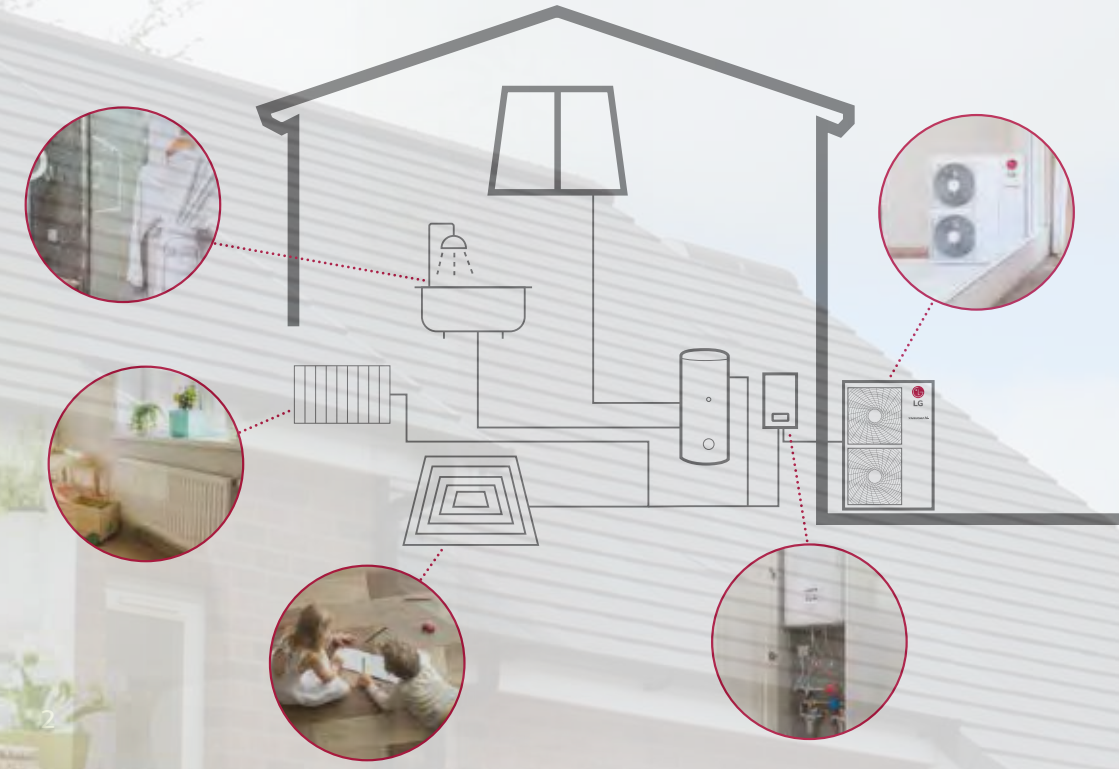
THERMA V is an air-to-water heat pump system - simply an alternative heating system to a fossil-fuel gas or oil central heating boiler. Therma V is the commercial name given to LG's air-to-water heat pump range.

Designed to create incomparable customer values such as energy saving, perfect comfort, easy control and superior services. By applying advanced LG technologies (like LG's own designed and manufactured Inverter Scroll Compressor, which is at the heart of the heat pump system), Therma V provides excellent energy efficiency.

Air-to-water heat pumps are becoming increasingly more popular in recent years across the UK and are being looked at as an alternative to tradational fossil-fuel central heating systems, due to their running cost savings, lower carbon emissions and prescise temperature control.

It is your responsibility as the homeowner to ensure anyone who installs or maintains your heat pump system is suitably qualified to do so, by checking with one of our heating distributors.

Find our heating distributors online: http://www.lg.com/uk/business/find-the-dealer



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Therma V Heating Systems

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RADIATOR

FLOOR HEATING

HOT WATER

Energy Related Product (ErP) - higher the efficiency, lower the energy bills

European Eco design rules (the ErP rules) have become an effective tool to drive European consumers towards products with reduced environmental impact and increased energy performances. The air-to-water heat pump product category must meet strict criterias for efficiency, while our customers will also be able to make more informed choices thanks to the energy labeling that accompanies LG's THERMA V range.

The energy class of the product indicated on the energy label reflects the seasonal space heating efficiency.

The energy efficiency of heat pumps is based upon their Seasonal Coefficient of Performance, calculated by taking the annual heat demand of the building and dividing it by the annual energy consumption, while considering the consumption of back-up systems and the regional location of the heat pump unit.

LG THERMA V products' efficiency is calculated according to the average climate zone of Strasbourg.

Water-based heat pumps are relying on a renewable energy for their functioning, the increased use of renewable energy in Europe will also reduce our energy dependency.

Example ErP label

The LG monobloc range and the 5,7 & 9kW Split Therma V A+++ from September 2019

Planning Permission: Air source heat pump

From December 1st, 2011 the installation of an air source heat pump used soley for heating on domestic properties is considered to be permitted development, not needing an application for planning permission, provided ALL the limits and conditions are met.
LG Electronics advise that you check with your local authority planning department to find out their list of conditions.

European Standards

LG Electronics is committed to product excellence, this is why we participate in different national and European certification schemes. Third party independent certification allows LG customers to compare our products' efficiency with other manufacturers on an equal footing, so as to make informed choices, based on the highest performance standards. In addition, LG THERMA V products that hold a third party performance certificate can often benefit from national bonus schemes that make the product more affordable for the customer.

In the UK, the Micro-generation Certification Scheme - MCS on the LG THERMA V allows its holders to benefit from the Renewable Heat Incentive payments - you must have the product installed and commissioned by a certified MCS installer.
https://www.microgenerationcertification.org/consumers/product-search/
https://www.microgenerationcertification.org/consumers/installer-search/

Eurovent heat pump certification grants recognition to THERMA V product performance across all European countries.

Certification benefit

- MCS (UK) : RHI (Renewable Heat Incentive) tariff 10.49Pence / kWh for 7 years

- EUROVENT (EU) : Model registration at the EUROVENT website

MICROGENERATION CERTIFICATION SCHEME (UK) EUROVENT (EU)

Domestic Renewable Heat Incentive

The Domestic Renewable Heat Incentive (dRHI) scheme pays participants that generate and use renewable energy to heat their homes for up to 7 years. By increasing the use of heat generated by renewables over fossil-fuels, the UK will greatly reduce gas emissions and help towards meeting the Governments targets for reducing the effects of climate change.

Renewable heat is defined as the heat generated minus the electrics input. Example, if the output is 10kW and the input is 3kW, then the renewable output is 10-3=7kW or 7kWh.

Further information: **www.ofgem.gov.uk/environmental-programmes/domestic-rhi**

THERMA V™

THERMA V is LG's renewable heating system, especially designed to provide heating and/or domestic hot water to new builds and renovations for lower carbon emissions and energy costs.

Energy Efficient Application

THERMA V offers the best solution for home heating and hot water supply. With LG's inverter technology running costs are lower than conventional fossil-fuel heating systems. Therma V is more energy efficient than a conventional boiler by absorbing renewable energy (heat) from the outside environment (air).

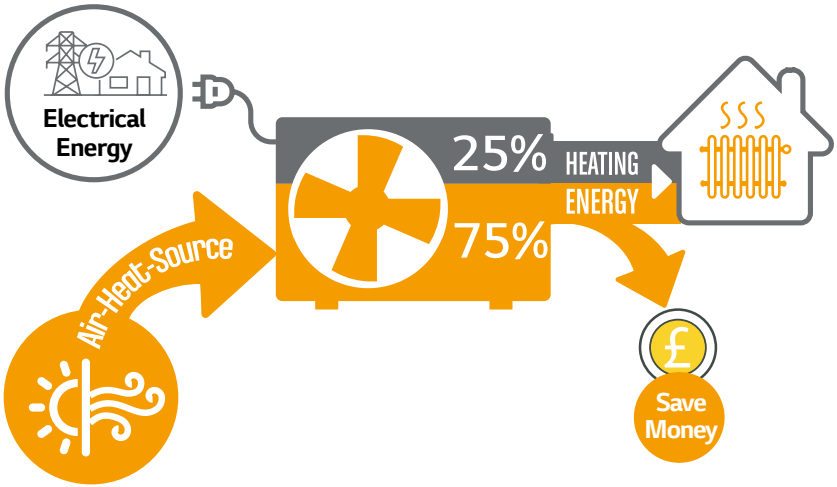

Image above: Example diagram 'How an air-to-water heat pump works'.

7 Years Warranty from LG

LG's distributors provide various levels of technical support to cover design, model selection, quotations, installation and commissioning. Advanced LG Electronics model selection software enables designers to choose the optimal THERMA V model based on the location and environmental factor of your property, to ensure that the right model is selected for your home.

LG's Therma V heat pumps come with a **standard warranty of 3 years** if installed and maintained correctly. For installation companies who have attended and passed the LG Therma V technical product training course and can gain access to LG's extended product warranty - up to 7 years if installed to LG Electronics recommend guidelines and maintained correctly. Ensure your installer has attended the course by checking with one of our distirbutors. It is your responsibility as the homeowner to ensure anyone who installs or maintains your heat pump system is suitably qualified to do so.

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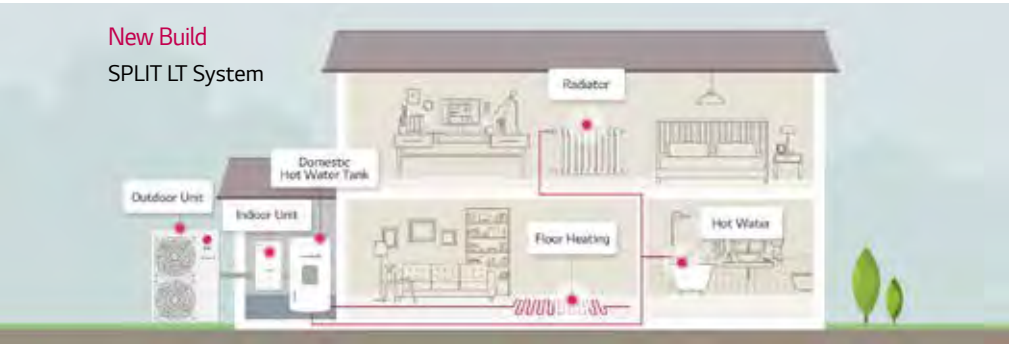
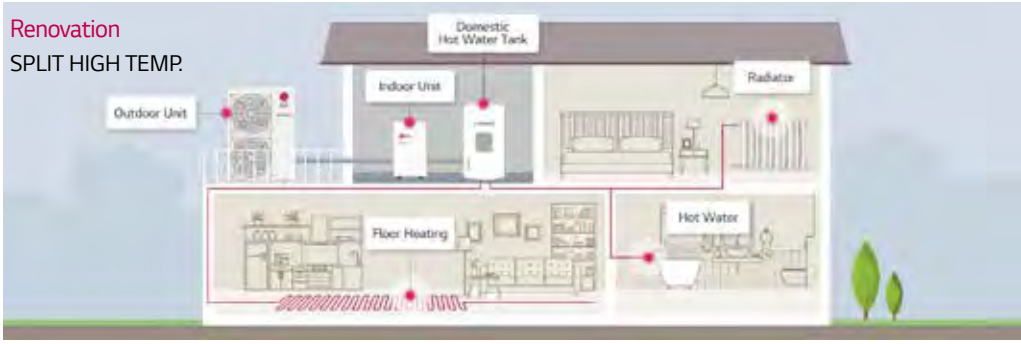
Various Application - Example diagrams showing different heat emitters, for illustration purpose only, not to scale.

With low temperature monobloc and split model, heating can be achieved even in the winter months.



High Temperature is ideal for renovation projects, older properties or where a large volume of DHW is needed as it provides water temperatures up to 80°C.



Solar Connection

Simple accessory kit can be provided to connect to new or exsiting solar thermal panel.
Both monobloc and low temperature split type systems.

THERMA V™

Types of systems

Monobloc - up to 65°C

The Monobloc unit sits against the properties outside wall and connects to the wet central heating system in the same way as a traditional boiler.

5~9kW Outdoor Unit (mm) WxHxD = 1,239 × 907 × 404
12~16kW Outdoor Unit (mm) WxHxD = 1,239 × 1,450 × 390

A+++
from
09/2019

5 ~ 9kW 12 ~ 16kW

Split type - low temperature - up to 65°C

Consisting of two components, the split systems have an outdoor unit and an indoor unit connecting via refrigerant pipework. This means the outdoor unit can be up to 50m away from the indoor unit.

Indoor Unit (mm) WxHxD = 490 × 850 × 315
5~9kW Outdoor Unit (mm) WxHxD = 950 × 834 x 330
12~16kW Outdoor Unit (mm) WxHxD = 950 × 1,380 × 330

A+++
from
09/2019

A++

5 ~ 9kW 12 ~ 16kW

Intuitive Advanced Controller - control your environment your way

High temperature - up to 80°C

Suitable for properties that are hard to treat for improving insualtion values and therefore need higher temperatures or a high quantity of hot water.

Indoor Unit (mm) WxHxD = 520 x 1,080 x 330
16kW Outdoor Unit (mm) WxHxD = 950 × 1,380 × 330

Corrosion Resistant Heat Exchanger - for prolonged life and higher efficiency

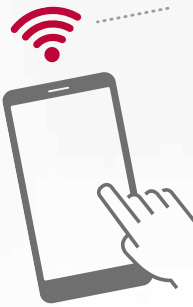
LG's outdoor units are coated with an anti-corrosive treatment on the aluminum heat exchanger coils, to helop towards preventing corrosion, improving the system efficiencies and expand the product life.
This maintains excellent heat transfer properties of the coil for an extended time, whereas non-coated coils progressively lose efficiency due to surface corrosion. Perfect for areas with high pollution or locations exposed to saltwater spray.

Easy to Use Controller

With multi-line, back-lit stylish and intuitive controller.
Easy step by step control for,
Scheduling,
Mode change,
Setting time,
Weekly reservation,
Holiday mode,
Sanitary water heating operation and Child lock programming.

Smart ThinQ

- Wi-Fi control your environment when you are away from home.



THERMA V™

A Reliabile System

Keeping you warm even on the coldest days in the UK.

LG's Therma V renewable heating systems are extremely reliable and reflected with the offered warranty. A long warranty of 7 years providing your system is installed and maintained annually in accordance with the manufactures recommended guidelines.

LG THERMA V

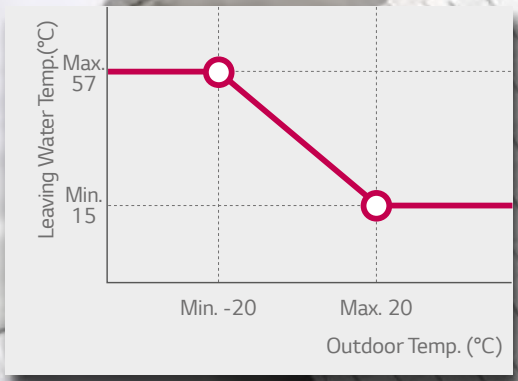
What is the Sterilisation Function

The Therma V Monobloc and Split LT systems operate at lower temperatures than traditional fossil-fuel central heating boilers. These low temperatures mean reduced operating costs and less wasted heat and low carbon emissions. However each week the system will automatically reach temperatures up to 80°C (a time to suit you) to sterilise the domestic hot water side.

Is the Therma V system loud?

Air-to-water heat pump units are designed to sit outside in order to absorb heat from the outside air and use this heat to warm inside your home and/or the domestic hot water system
At the heart of the outdoor unit is a compressor and this compressor. LG design and manufacture their own compressor based on inverter technology. Simply put the compressor ramps up and down depending on the system load required, rather than turning on or off. This keeps the heat pump quiet.

The fans have also been designed in a way to reduce noise and enhance air flow.



Weather Dependent Operation

If you choose this mode, the indoor setting temperature will follow outdoor temperature automatically.
If the outdoor temperature decreases, the heating capacity for the house will increase automatically in order to keep comfortable heating performance according to weather at all times.

High Efficiency and Low CO_2 Emission

Air to water heat pumps cost less to run than conventional fossil fuel boilers, have no need for flues, or fuel tanks and are low in carbon emissions.