PRODUCT CATALOGUE | 2025 | LG | THERMA V™

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LG

- The images in this catalogue are scenes created to help customers' understand and may differ from the actual product.
- The specifications or product appearance may be subject to change without prior notice to improve the appearance and product performance.

LG

LG

INDEX

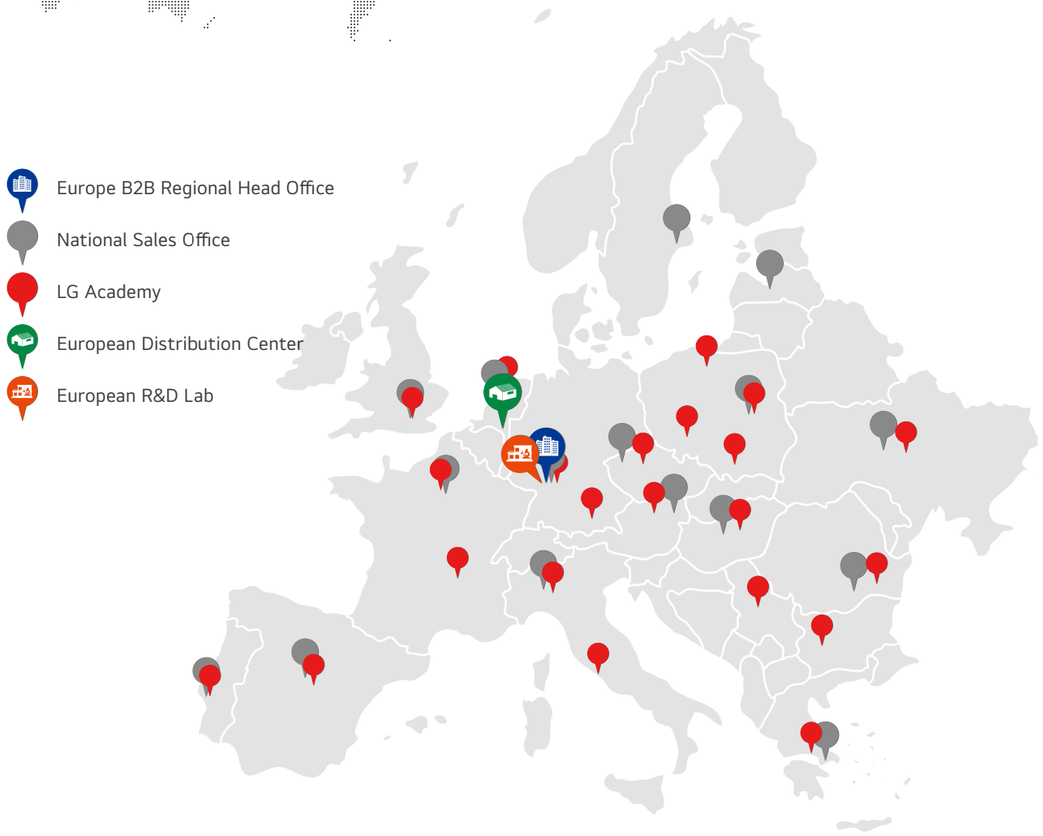
LG BUSINESS PARTNERSHIP & INFRASTRUCTURE

Infrastructure in Europe

LG Electronics' European Air Solution department is committed to ensuring your business success.
With 16 pan-European sales offices and academies, we seek to deliver on our promise of support, efficiency and proactivity throughout each stage of our business partnership.

Our highly competitive products are delivered through our dedicated European distribution centre to ensure a steady and reliable supply of inventory.

At our European Energy Lab, LG Business Solutions is developing a heat pump technology that is optimized for the varied European climates and weather patterns along with continuous product performance verification.



LG Europe R&D Center

LG Europe R&D Center is located in Eschborn Germany. Purpose of this laboratory where to test and verity LG Air Solution product's liability in advance and also to verify with local HVAC components compatibility.

LG Europe B2B Regional Head Office

LG Business Solutions Europe is based in Eschborn, Germany, with regional offices located throughout Europe. LG Europe B2B Regional Head Office is a control tower for European B2B business dealing with a wide range of products, including heat pumps and air conditioners. LG Electronics has a strong global network.

About LG Business Solutions:
http://www.lg.com/global/business/about-lg-business

LG Heat Pump and Air Conditioning Academy

LG has set up 20 official heat pump and air conditioning academies in Europe, teaching much needed skills to thousands of current industry professionals including installers, consultants, designers, sales staff and service technicians. The academy program is designed to share expertise and educate these HVAC experts by providing a cutting-edge technical experience with the newest and most advanced technologies and equipment. Moreover, as LG's entire product range is installed on site, professionals can be trained in a realistic way that offers them the chance to experience the latest products first-hand.

European Distribution Center

LG's European Distribution Center is located in Tilburg, the Netherlands. Supplying products all over Europe, this distribution hub has contributed to smooth and rapid delivery, direct shipping for smaller orders and delivery tailored to air conditioners. Inventory efficiency of the hub is secured by the LG EU's established inventory pool.

THE EU BUILDING SECTOR

Buildings account for 40% of the total carbon emissions in Europe. The building stock that dates back to the 90s is three times less energy efficient than new construction built today.

OF EU ENERGY IS USED BY BUILDING SECTOR, MAKING IT THE SINGLE LARGEST ENERGY CONSUMER IN EUROPE

OF GREENHOUSE GAS EMISSIONS COME FROM BUILDINGS

LG OUR MISSION

① Create low-consuming or self-consuming innovations
② Build awareness and help people use energy more conservatively
③ Reimagine a building's usability, connectivity, convenience & health

* Source: The European Commission website. https://commission.europa.eu/news/focus-energy-efficiency-buildings-2020-02-17_en

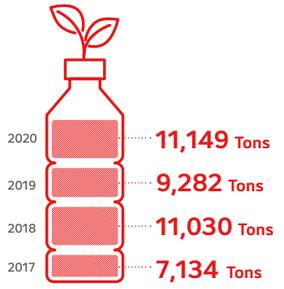
Re-Design

Improve Circularity of Raw Materials

Minimize environmental impact with our eco-conscious air conditioning solutions. By reducing reliance on finite resources such as plastic, aluminum, and copper, LG's innovative approach embraces a circular economy supply chain. This not only lessens carbon emissions during pre-manufacturing but also ensures resource efficiency, particularly for energy-hungry materials. Discover the sustainability of LG air conditioners, where recycled materials play a pivotal role. We conduct thorough stability and quality tests to guarantee optimal performance, leading the way toward a more sustainable and efficient future.

About LG Business Solutions:
http://www.lg.com/global/business/about-lg-business

Amount of recycled plastic that LG used in previous years



Target on amount of use of recycled plastics

27,000 Tons
2021 achievement

600,000 Tons
2030 target

Recycling Old Appliances

Many reusable resources are left in discarded products. Founded in 2001 through investment from LG, the Chilseo Recycling Center acts as a virtuous cycle of resources, from product design, use, and recovery, to disposal. Engineers collect old appliances from LG and other brands, then carefully take them apart. More than 40 kinds of renewable raw materials, including separated plastic, iron, and non-ferrous metals, are reborn into new LG products.

of old appliances become new resources

Target amount of e-waste collection

THE EU BUILDING SECTOR

Re-Program

Achieve 95% in Waste Recycling at Production Sites by 2030

At LGE, we continuously invest in environmental facilities and improve our waste treatment processes with a view to being able to recycle 95% of waste generated at production sites around the world by 2030.

Innovate

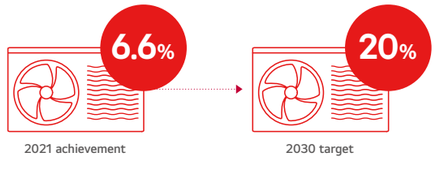
Reduce Reliance Upon High GWP Refrigerant Gases

Refrigerant gases contribute to global warming even though their contribution is not the biggest. LG was the first manufacturer to launch an R32 monobloc air-to-water heat pump in 2018 and have also converted our full single split line up to R32 with 3 years lead time on the EU -driven planned ban in 2025. Also, LG is likely to put in place collection and recovery streams of refrigerant gases from end of life equipment at no extra cost for its customers.

Constant Product Efficiency Improvements

Electrically-driven heating and cooling equipment is LG's signature. What's more, we always aim at the highest energy ratings, generation after generation of product launching.

Reduce carbon emissions during use of 7 major products (baseline year 2020)



First Home Appliances Lighthouse Factory

In March 2022, Changwon LG Smart Park was named the first 'lighthouse factory' by the World Economic Forum (WEF). The WEF "Lighthouse" facilities implement Fourth Industrial Revolution technologies, such as the Internet of Things, big data, artificial intelligence and robots, into manufacturing and supply chain operations to deliver a wide range of benefits, from increased production efficiency to enhanced environmental sustainability. LG plans to apply the innovative, smart production technologies pioneered at LG Smart Park to a total of 26 LG production facilities in 13 countries, accelerating the digital transformation of its global manufacturing network by 2025.

Educate

Life Cycle Analysis

The Air Solution Division has assessed 4 product families, as regards their total life cycle impact, according to the French PEP certification scheme: it provides product greenhouse gas emissions from production, transport, use and end of life phases, over a period of 22 years.

Efficiency comparisons between THERMA V & differing technologies

+132% improvement
Standard non-condensing gas boiler

+171%* improvement
Standard electric heating & DHW
* In Italy

+142% improvement**
Standard Coal boiler
** In Poland

Certifications

LG Electronics is listed in the:

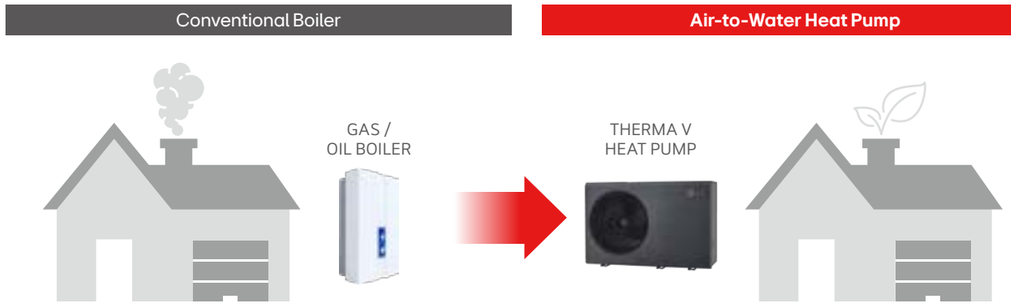
- DJSI World for 9 consecutive years
- 2020 Global Sustainability Leadership top 100, announced by Privileged United Nationals Sustainability Development Goals (UNSDGs)
- 6th place in the top 100 World Sustainable Management Companies by Wall Street Journal
- ECOVADIS Platinum certified in 2021 & 2023

HEAT PUMP TECHNOLOGY

What is an Air-to-Water Heat Pump System?

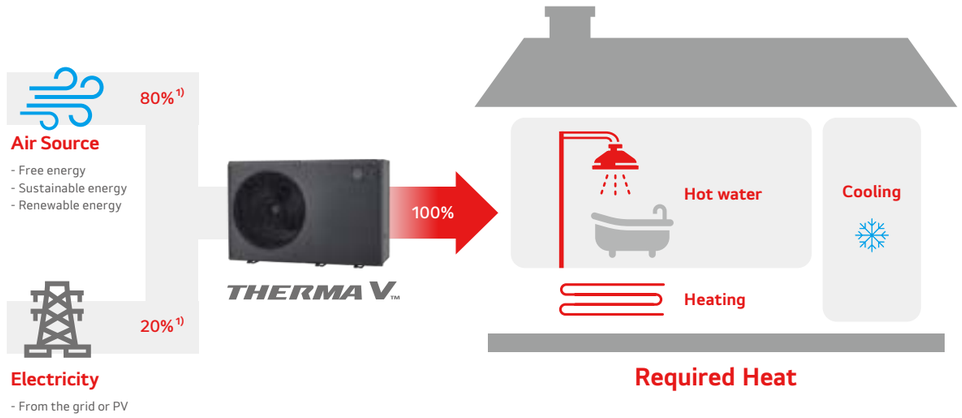
Modern Technology to Replace Conventional Boilers

Historically, conventional heating systems have used either oil or gas or have represented direct electric heaters. In such conventional heating systems, environmental aspects such as the pollution produced by fossil fuel use have been overlooked. Over the last years, the interest in these environmentally friendly devices has been increasing and in order to respond to the growing demand for eco-conscious devices, LG has further developed its heat pump technology to produce more efficient, environmentally friendly products.



Modern Technology for Renewable Energy

The term “Heat Pump” refers to a technique that pumps heat from renewable energy sources, like the air, ground and water. A heat pump device transforms this energy into a usable heat source via the refrigerant cycle. With THERMA V heat pump technology about 75% of the energy needed to provide heating and hot water comes from a natural air source.[1)]

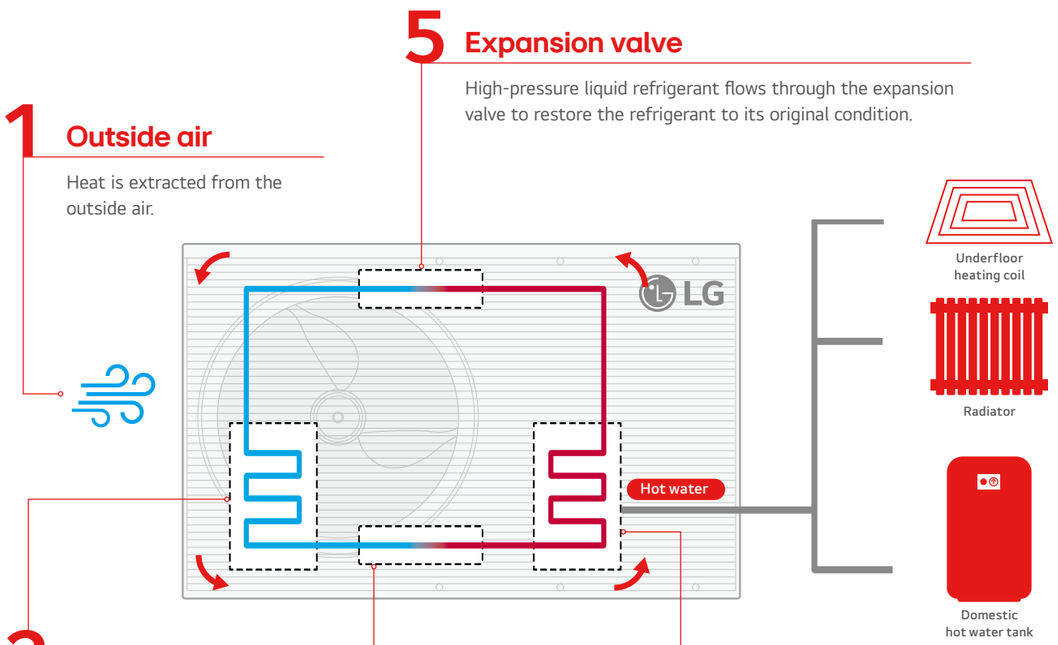


1) The efficiency ratio is to help general understanding and is based on the Seasonal Coefficient of Performance (SCOP) of THERMA V R290 Monobloc under Low Temperature & Average Climate conditions, which is higher than 5. The actual efficiency may vary with water and outside temperatures.

LG Electronics Leads the Way in Heat Pump Technology

As a leading HVAC supplier, LG’s heating product portfolio comprises a wide range of highly energy efficient renewable energy systems, providing the right heating solution for any type of requirements and/or buildings.

How do Air-to-Water Heat Pumps work?



REGULATIONS & CERTIFICATIONS

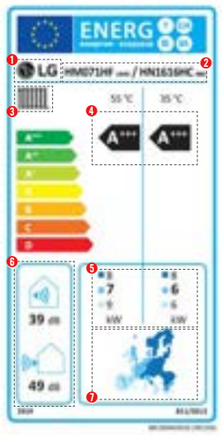
Energy Label

Energy Labels

The EU energy label has been a key driver for helping consumers choose products which are more energy efficient. At the same time, it also encourages manufacturers to drive innovation by using more energy efficient technologies. The energy label was recognized by 93% of consumers and 79% considered it when buying energy efficient products, according to the special eurobarometer 492 carried out in the 28 EU member states during 2019. Starting from 2013, the regulations apply to heat pumps, as well as to water heaters since 2015. As of September 26th, 2019, the energy efficiency scale for seasonal space heating ranges from A+++ to D, with A+++ being the most efficient. The water heating energy efficiency scale for the declared load profile for combination heat pumps ranges from to A+ to F, with A+ being the most efficient.

Information on the Energy Label

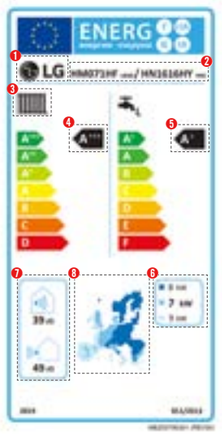
The energy labels provide minimum necessary information such as: manufacturer's name, manufacturer's model name, seasonal space heating energy efficiency class under average climate condition from A+++ to D in medium/low temperature applications (55°C/35°C), rated heat output under average, colder and warmer climate conditions in medium/low temperature applications (55°C/35°C), European map displaying the three temperature zones, the sound power level indoors and/or outdoors. In addition, just for combination heat pumps, the energy label also includes Water heating energy efficiency class under average climate condition from A+ to F at declared load profile, while the seasonal space heating energy efficiency class and rated heat output are indicated only for the medium temperature application (55°C).



Heat pump space heaters

1. Manufacturer's name or trade mark
2. Manufacturer's model name
3. Space heating function
4. Seasonal space heating energy efficiency class under average climate condition from A+++ to D in medium/low temperature applications (55°C/35°C)
5. Rated heat output (kW) under average, colder and warmer climate conditions in medium/low temperature applications (55°C/35°C)
6. Operating noise for indoor and outdoor
7. European map displaying the three temperature zones

* This energy label may differ depending on local regulations (for example in the UK).



Heat pump combination heaters

1. Manufacturer's name or trade mark
2. Manufacturer's model name
3. Space heating function
4. Seasonal space heating energy efficiency class under average climate conditions from A+++ to D in medium temperature applications (55°C)
5. Water heating energy efficiency class under average climate conditions from A+ to F
6. Rated heat output (kW) under average, colder and warmer climate conditions in medium temperature application (55°C)
7. Operating noise for indoor and outdoor
8. European map displaying the three temperature zones

* This energy label may differ depending on local regulations (for example in the UK).

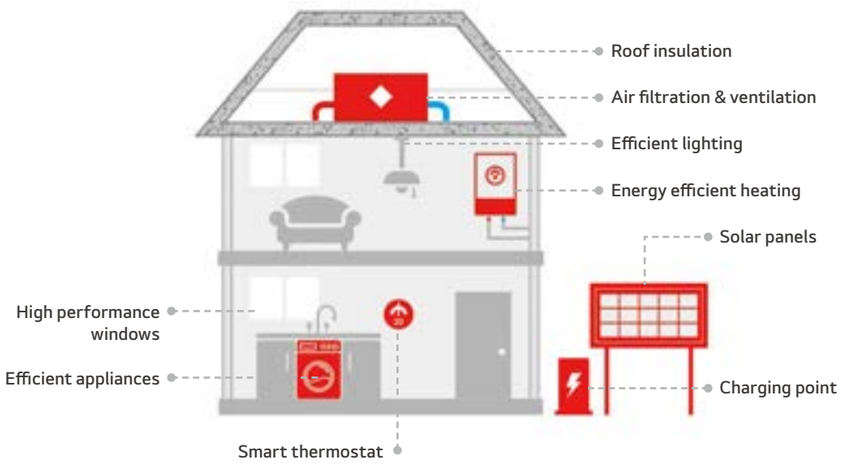
Nearly Zero Energy Building (nZEB)

Nearly Zero Energy Building

Nearly Zero-Energy Building (nZEB) means a building that has a very high energy performance, while the nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby. The Energy Performance of Buildings Directive (EPBD) requires that EU countries ensure that all new buildings are nearly zero-energy by the end of 2020, while all new public buildings had to be nearly zero-energy after 31 December 2018. As concrete numeric thresholds or ranges are not defined in the EPBD, each EU member state defines their Nearly Zero-Energy Buildings (nZEB) in a flexible way, taking into account their country-specific climate conditions, primary energy factors, calculation methodologies, building traditions and current ambitions.

How LG THERMA V Supports to Nearly Zero Energy Buildings (nZEB)

In general, consultants use software programs to evaluate nZEB satisfaction of a new building. LG has been registering THERMA V products in their database so that our THERMA V products can be used directly in these software programs such as BENG in Netherlands, SAP in UK and RE2020 in France.



LG THERMA V energy labels | Energy labels for each LG THERMA V model can be found on the websites below.

LG.COM - Compliance Information
https://www.lg.com/global/support/cedoc/cedoc
Browse now

EPREL - European Product Registry for Energy Labelling
https://eprel.ec.europa.eu/screen/product/spaceheaters
Browse now

Netherland - BENG
https://bcrg.nl/nl/databanken/energieprestaties/databank/
Browse now

UK - SAP
https://www.ncm-pcdb.org.uk/sap/pcdbsearch.jsp?type=362&pid=31
Browse now

France - RE2020
https://www.edibatec.org/base-produits/
Browse now

REGULATIONS & CERTIFICATIONS

Keymark

The heat pump Keymark is a voluntary, independent European certification mark (ISO type 5 certification) for all heat pumps, combination heat pumps and hot water heaters (as covered by ecodesign, EU regulation 813/2013 and 814/2013). It is based on independent, third party testing and demonstrates compliance with product requirements as set in the heat pump Keymark scheme rules and with efficiency requirements as set by ecodesign lot 1 and lot 2. The heat pump Keymark scheme is owned by the European committee for standardization (CEN). The certificates are granted by independent certification bodies to products fulfilling all requirements of the scheme. LG THERMA V products are certified with the heat pump Keymark. Please, refer to the web page below for details.

https://keymark.eu/en/products/heatpumps/certified-products

Browse now

Eurovent

Established in 1993, Eurovent certification is recognized as a world leader in third-party product performance certification in the heating, ventilation, air conditioning and refrigeration fields. Its major certification brand 'Eurovent Certified Performance' has become over the years a major European certification. Today over 67% of HVAC-R products sold in Europe hold this certification. LG THERMA V products are certified with Eurovent. Please, refer to the web page below for details.

https://www.eurovent-certification.com/en/

Browse now

Certifications

All heat pumps and water heaters in the European market are continuously tested by various certification schemes. These are usually the basis for qualifying for subsidy programs in each country.

MCS

MCS certification is a mark of quality and demonstrates compliance to industry standards. It is supported by the department for business, energy & industrial strategy of the UK. In particular, MCS certification demonstrates the quality and reliability of products in the renewable technology sector and it ensures that products are compliant with the UK regulations. LG THERMA V products are certified with MCS. Please, refer to the web page below for details.

https://mcscertified.com/product-directory/

Browse now

EHPA

The EHPA quality label is a label that shows the end-consumer a quality heat pump unit or model range on the market. The heat pumps that receive the label need to undergo tests according to the international standard EN14511 and EN16147. These tests are executed by EN17025 accredited test centres. LG THERMA V products are certified with the EHPA quality label for Austria, Germany and Switzerland. Please, refer to the web page below for details.

https://www.ehpa.org/quality/quality-label/

Browse now

THE SUSTAINABLE CHOICE

Today's informed consumer will consider multiple factors when choosing a heating solution, like an Air-to-Water Heat Pump (AWHP) to include user-friendliness, reliability and regulation-compliance. Shifting regulations year after year exceedingly impact the European customers' choice of heating products.

With refrigerant regulations changing around the world, it's time to move to a more eco-conscious solution. THERMA V R290 Monobloc uses natural R290 refrigerant which has a lower tonne of CO_2 equivalent index than other gases such as R32. Possible carbon emission from refrigerants is reduced by 99.7% compared to previous R32 Monobloc. The R290 can be vented directly into the atmosphere without any impact on the climate because it's eco-conscious refrigerant with nearly zero carbon emissions.

LG Electronics' THERMA V line-up fulfills both European regulations as well as customer needs.

THERMA V™

SIMPLER INSTALLATION |
BETTER DESIGN
MORE COMFORTABLE LIVING |

FORM MEETS FUNCTION: THERMA V IN DARK DAWN GRAY

Outdoor units are now transformed with an elegant monotone design, showcasing a distinctive style through their design alone while elevating the aesthetic appeal of home's exterior.

Its refined new design ensures seamless integration with a wide variety of home and building exteriors.

Designed with European environmental considerations in mind, it not only offers aesthetic excellence but also ensures exceptional installation efficiency.

This design has been applied not only to the R290 model but also to the R32 Monobloc S II, achieving design unity and maximizing display value by featuring a wave-shaped grille that harmonizes simplicity and a unique pattern.

THERMA V™

WHAT IS LG THERMA V?

LG's Advanced Heating Technology

The LG THERMA V Air-to-Water Heat Pump system boasts an advanced heating technology that can minimize energy consumption more than any other solution in the market. In addition, it has been specially designed to provide a valuable living space and domestic hot water supply to both new build and renovated homes.

THERMA V™

Space heating

The wide span THERMA V systems with high efficiency can cover heating loads of various types of houses.

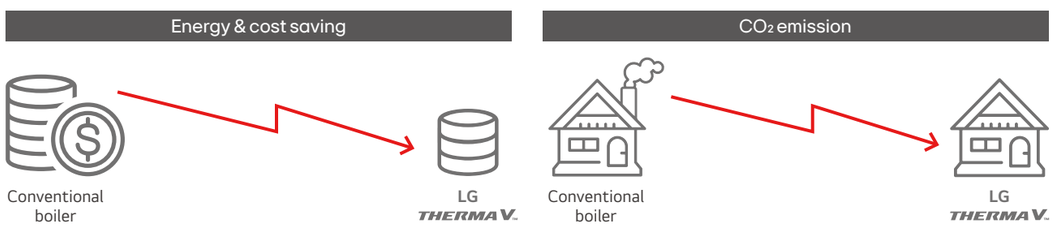
Domestic hot water

As the hot water efficiency becomes more and more important, THERMA V can provide an optimized solution for this.

Space cooling

THERMA V is a single device that can also provide a cooling solution besides the heating and hot water provided by boilers.

High Efficiency and Low CO_2 Emission



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Benefits of LG THERMA V

For Installers and Service Providers

- Time savings with features for quicker installation and commissioning
- Less manpower for handling with the compact size and light weight
- Less service visit with high reliability and durable equipment
- Intuitive controller interface for all LG products, requiring less training
- Remote control, monitoring and diagnosis to avoid unnecessary site visits
- Clip connections for quick maintenance and no need for special tools

For Consultants and Designers

- Variety of software to support selection and designing THERMA V
- Multiple solutions with space heating, cooling and DHW supply
- Wide leaving water temperature - compatible with various heat emitters
- Valuable space savings with the small footprint
- Excellent heating performance even at low ambient temperature
- Optimal system interoperability - open modbus with 3rd party controller
- Adapts operation to ESS battery output, maximizing self-consumption of locally produced PV energy

For Homeowners

- Energy saving by utilizing renewable energy and high efficiency equipment
- Multiple solutions with space heating, cooling and DHW supply
- Economic support through domestic renewable heat incentive programs
- Investment cost savings thanks to the compatibility with existing heating system like radiator, boiler, etc.
- Valuable space savings with the small footprint
- No disturbing caused to neighbors with low noise
- Low repair cost and high reliability with durable equipment
- Convenient control by user-friendly remote controller
- Remote connectivity for control and monitoring via LG ThinQ

THERMA V™
SOLUTION OVERVIEW

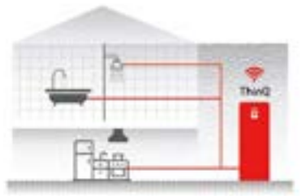
Individual Solutions

	Monobloc				Hydrosplit		Split	
Line-up								
	R290 Monobloc Control Unit	R290 Monobloc Hydro Unit	R290 Monobloc Combi Unit	R32 Monobloc S Ⅱ	R32 Hydrosplit Hydro Unit	R32 Hydrosplit Combi Unit	R32 Split Hydro Unit	R32 Split Combi Unit
Capacity	1 Ø: 7/9/12/14/16 kW 3 Ø: 7/9/12/14/16 kW	1 Ø: 7/9/12/14/16 kW 3 Ø: 7/9/12/14/16 kW	1 Ø: 7/9/12/14/16 kW 3 Ø: 7/9/12/14/16 kW	1 Ø: 5/7/9/12/14/16 kW 3 Ø: 12/14/16 kW	1 Ø: 12/14/16 kW 3 Ø: 12/14/16 kW	1 Ø: 12/14/16 kW 3 Ø: 12/14/16 kW	1 Ø: 4/6 kW (U24A) 1 Ø: 5/7/9 kW (U36A)	1 Ø: 4/6 kW (U24A) 1 Ø: 5/7/9 kW (U36A)
								
Application								
Energy label	Space heating A+++ 35°C A+++ 55°C DHW heating A+ L Combination with OSHW-200F (Profile L)	Space heating A+++ 35°C A+++ 55°C DHW heating A+ L Combination with OSHW-200F (Profile L)	Space heating A+++ 35°C A+++ 55°C DHW heating A+ L	Space heating A+++ 35°C A++ 55°C DHW heating A+ L Combination with OSHW-200F (Profile L)	Space heating A+++ 35°C A++ 55°C	Space heating A+++ 35°C A++ 55°C DHW heating A+ L	Space heating A+++ 35°C A++ 55°C	Space heating A+++ 35°C A++ 55°C DHW heating A+ L Profile L (4/6 kW) Profile L (5/7 kW) Profile XL (9 kW)
Certifications								
Operation range (heating) – Outdoor air	-28 ~ 35°C	-28 ~ 35°C	-28 ~ 35°C	-25 ~ 35°C	-25 ~ 35°C	-25 ~ 35°C	4/6 kW: -20 ~ 35°C 5/7/9 kW: -25 ~ 35°C	4/6 kW: -20 ~ 35°C 5/7/9 kW: -25 ~ 35°C
Operation range (heating) – Leaving water	15 ~ 75°C	15 ~ 75°C	15 ~ 75°C	15 ~ 65°C	15 ~ 65°C	15 ~ 65°C	4/6 kW: 15 ~ 55°C 5/7/9 kW: 15 ~ 65°C	4/6 kW: 15 ~ 55°C 5/7/9 kW: 15 ~ 65°C
Operation range (cooling) – Outdoor air	5 ~ 48°C	5 ~ 48°C	5 ~ 48°C	5 ~ 48°C	5 ~ 48°C	5 ~ 48°C	5 ~ 48°C	5 ~ 48°C
Operation range (cooling) – Leaving water	5 ~ 27°C	5 ~ 27°C	5 ~ 27°C	5 ~ 27°C	5 ~ 27°C	5 ~ 27°C	5 ~ 27°C	5 ~ 27°C
Operation range (hot water)	15 ~ 65°C [1]	15 ~ 65°C [1]	15 ~ 65°C [1]	15 ~ 55°C [1]	15 ~ 55°C [1]	15 ~ 55°C [1]	4/6 kW: 15 ~ 50°C [1] 5/7/9 kW: 15 ~ 55°C [1]	4/6 kW: 15 ~ 50°C [1] 5/7/9 kW: 15 ~ 55°C [1]
Domestic hot water tank included	X	X	○ (200 ℓ)	X	X	○ (200 ℓ)	X	○ (200 ℓ)
Backup heater included	X	○	○	X (accessory)	X (accessory)	○	○	○
F-gas license needed	X	X	X	X	X	X	○	○
Wi-Fi remote control via ThinQ [2]	○	○	○	○	○	○	○	○

1) With electric boost heater up to 80°C possible.
2) Wi-Fi modem (PWFMDD200) should be purchased and installed separately.

THERMA V™
SOLUTION OVERVIEW

Individual Solutions

		Heat Pump Water Heater	
Line-up			
		R290 Round Type	R134a Square Type
Capacity		1 Ø: 100/150/200 ℓ	1 Ø: 200/270 ℓ
			
Application			
Energy label		DHW heating A+ 100ℓ (profile M) 150/200ℓ (profile L)	DHW heating A+ 200/270ℓ (profile L)
Certifications			 [1] [2]
Operation range	Air temperature (Heat pump)	-7 ~ 48°C	-5 ~ 48°C
	Max. water temperature	up to 75°C	up to 60°C
Compressor type		Constant speed rotary	Inverter twin rotary
Heating element included		○	○
F-gas license needed		X	X
Wi-Fi remote control via ThinQ		○	○

1) WH20S.F5 / WH27S.F5
2) WH20STR2.FA / WH27STR2.FA

Collective Solutions

		Monobloc
Line-up		
		R32 Monobloc 51 kW
Capacity		3 Ø: 51 kW
		
Application		
Energy label		Space heating A++ 35℃ A++ 55℃
Certifications [1]		
Operation range (heating)	Outdoor air	-25 ~ 35°C
	Leaving water	25 ~ 60°C (65°C) [2]
Operation range (cooling)	Outdoor air	10 ~ 48°C
	Leaving water	5 ~ 27°C
Operation range (hot water)		25 ~ 55°C [3]
Domestic hot water tank included		X
Backup heater included		X
F-gas license needed		X
Wi-Fi remote control via ThinQ [4]		○

1) The other certifications for R32 Monobloc 51 kW are under progress.
2) The leaving water temperature of 65°C is possible only when a backup heater is installed.
3) With electric boost heater up to 80°C possible
4) Wi-Fi modem (PWFMDD200) should be purchased and installed separately.

		Cascade
Line-up		
		Cascade Control Unit
Max. number of outdoor units that can be combined		8 Units [1]
		
Application		
Compatible line-up		R290 Monobloc [2]
Operation range [3] (heating)	Outdoor air	-28 ~ 35°C
	Leaving water	15 ~ 70°C
Operation range [3] (cooling)	Outdoor air	5 ~ 48°C
	Leaving water	5 ~ 27°C
Operation range (hot water)		15 ~ 65°C [3] [4]
Indoor unit is needed separately from Cascade control unit		X
Wi-Fi remote control via ThinQ [5]		○

1) All units connected to Cascade Control Unit must be configured with models of the same capacity.
2) Only R290 Monobloc outdoor units manufactured after June of 2025 are compatible with cascade control unit.
3) When combined to R290 Monobloc
4) With electric boost heater up to 80°C possible
5) Wi-Fi modem (PWFMDD200) should be purchased and installed separately.

THERMA V™

LINE-UP OVERVIEW

Line-up	Unit	Type	Power supply	Appearance	4 kW	6 kW	Appearance	5 kW
R290 Monobloc	Outdoor Unit	-	1 Ø / 230 V					
			3 Ø / 400 V					
	Indoor Unit	Control Unit	Common					
		Hydro Unit	1 Ø / 230 V					
			3 Ø / 400 V					
		Combi Unit	1 Ø / 230 V					
			3 Ø / 400 V					
R32 Monobloc S II	Set	-	1 Ø / 230 V					HM051MRS UA40
			3 Ø / 400 V					
R32 Hydrosplit	Outdoor Unit	-	1 Ø / 230 V					
			3 Ø / 400 V					
	Indoor Unit	Hydro Unit	Common					
		Combi Unit	Common					
R32 Split	Outdoor Unit	-	1 Ø / 230 V		HU041MR U20	HU061MR U20		HU051MR U44
	Indoor Unit	Hydro Unit	1 Ø / 230 V		HN0613M NK5			HN091MR NK5
		Combi Unit	1 Ø / 230 V		HN0613T NK0			HN0913T NK0
R32 Monobloc 51 kW	Outdoor Unit	-	3 Ø / 400 V					
	Indoor Unit	Control Unit	1 Ø / 230 V					

1) This is the power specifications of the backup heater inside indoor unit, and the main power supply of the indoor unit is single phase (1Ø/230V).
2) Combinations for 1 Ø outdoor units
3) Combinations for 3 Ø outdoor units

7 kW	9 kW	Appearance	12 kW	14 kW	16 kW	Appearance	51 kW
HM071HF UB40	HM091HF UB40		HM121HF UB60	HM141HF UB60	HM161HF UB60		
HM073HF UB40	HM093HF UB40		HM123HF UB60	HM143HF UB60	HM163HF UB60		
PHCS0 ENCXLEU			PHCS0 ENCXLEU				
HN1616HC NK0 [2]			HN1616HC NK0 [2]				
HN1639HC NK0 [3]			HN1639HC NK0 [3]				
HN1616HY NK0 [2]			HN1616HY NK0 [2]				
HN1639HY NK0 [3]			HN1639HY NK0 [3]				
HM071MRS UA40	HM091MRS UA40		HM121MRS UB40	HM141MRS UB40	HM161MRS UB40		
			HM123MRS UB40	HM143MRS UB40	HM163MRS UB40		
			HU121MRB U30	HU141MRB U30	HU161MRB U30		
			HU123MRB U30	HU143MRB U30	HU163MRB U30		
			HN1600MC NK1				
			HN1616Y NB1				
HU071MR U44	HU091MR U44						
HN091MR NK5							
HN0913T NK0							
							HM513MR UXC0
							PHCSL0 ENCXLEU

Line-up	Type	Power supply	Appearance	100 ℓ	Appearance	150 ℓ	Appearance
Heat Pump Water Heater	Round Type	1 Ø / 230 V		WH10ESF0 HA [1]		WH15ESF0 HA [1]	
	Square Type	1 Ø / 230 V					

1) SG Ready certified

200 ℓ	Appearance	270 ℓ
WH20ESF0 CA [1]		
WH20STR2 FA [1] WH20S F5		WH27STR2 FA [1] WH27S F5

1) SG Ready certified

Line-up	Power supply	Appearance	Model name
Cascade Control Unit	1 Ø / 230 V		PHCM0 ENCXLEU

THERMA V™

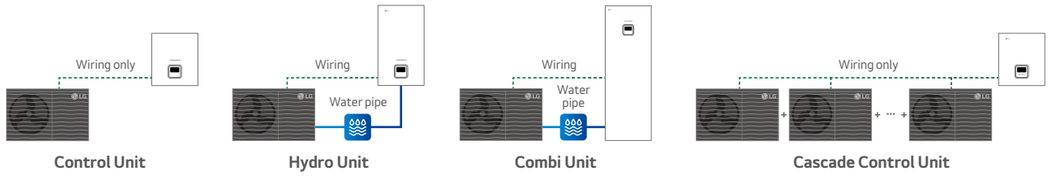
LINE-UP INTRODUCTION

R290 Monobloc

The new R290 Monobloc is a super-quiet, future-conscious heat pump that uses the R290 refrigerant which has lower GWP of only three. From an aesthetic standpoint, refined gray design allows it to seamlessly harmonize with a diverse range of home and building exteriors, and from a technical standpoint, it is designed to be low-noise, so you don't have to worry about causing noise pollution to neighbors. The LG THERMA V R290 Monobloc is available in three different combinations (Control Unit, Hydro Unit or Combi Unit) depending on the customers' needs. By adopting a high-efficiency compressor leveraging injection technology, R290 Monobloc can deliver a leaving water temperature of up to 75°C all year round. Thus, this unit is suitable for home renovations due to high water temperature compatibility with existing radiators.

Due to LG's advanced compressor technology, the THERMA V R290 Monobloc keeps indoor spaces comfortably warm-even when outdoor temperatures drop as low as -28°C.

Browse now



Control Unit | Hydro Unit | Combi Unit | Cascade Control Unit

Line-up	Capacity (kW)	4.0	5.5	6.0	7.0	9.0	12.0	14.0	16.0
R290 Monobloc	1 Ø 230 V				●	●	●	●	●
	3 Ø 400 V				●	●	●	●	●

* The power supply is shown based on the outdoor unit.

R32 Monobloc S Ⅱ

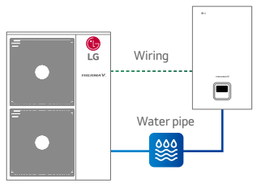
The THERMA V R32 Monobloc S Ⅱ is the next generation model that continues the legacy of the LG THERMA V R32 Monobloc S. The new generation's sleek look matches that of the rest of the modernized line-up, while maintaining the excellent performance of the existing R32 Monobloc S, and that the single fan design has been applied to not only the 5, 7, and 9 kW but also the 12, 14, and 16 kW models. Along with these design changes, various features and installation conveniences that were developed from the R290 Monobloc have been reflected.

Browse now

Line-up	Capacity (kW)	4.0	5.5	6.0	7.0	9.0	12.0	14.0	16.0
R32 Monobloc S Ⅱ	1 Ø 230 V		●		●	●	●	●	●
	3 Ø 400 V						●	●	●

R32 Hydrosplit Hydro Unit

The LG THERMA V Hydrosplit series separates the indoor unit (IDU) and outdoor unit (ODU), connecting them via water pipes. The unit's heat exchanger is located within the ODU, reducing the risk of indoor refrigerant leakage. THERMA V R32 Hydrosplit Hydro Unit is a solution providing space heating, cooling and DHW supply with high installation flexibility thanks to the characteristic of being a wall mounted type. Its wall-mounted design frees up floor space and speeds up installation due to its lightweight build. With the unit located indoors-often in a machine room-access for maintenance is quick and hassle-free.



Browse now

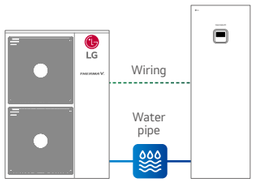
Line-up	Capacity (kW)	4.0	5.5	6.0	7.0	9.0	12.0	14.0	16.0
R32 Hydrosplit Hydro Unit	1 Ø 230 V						●	●	●
	3 Ø 400 V						●	●	●

* The power supply is shown based on the outdoor unit.

THERMA V™
LINE-UP INTRODUCTION

R32 Hydrosplit Combi Unit

The LG THERMA V Hydrosplit series separates the indoor unit (IDU) and outdoor unit (ODU), connecting them via water pipes. The unit's heat exchanger is located within the ODU, reducing the risk of indoor refrigerant leakage. THERMA V R32 Hydrosplit Combi Unit combines an indoor unit, a water tank and complex piping into a single, space-saving solution that is able to provide space heating, cooling and DHW supply. Relatively compact and lightweight, the innovative all-in-one system is easy to install and operate, and boasts outstanding reliability and efficiency. Since there is no need to install a separate domestic hot water tank for hot water supply, space is not wasted, and the concept with all-in-one enables quick installation.



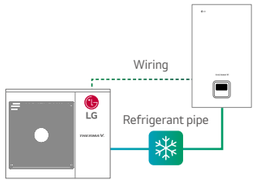
Browse now

Line-up	Capacity (kW)	4.0	5.5	6.0	7.0	9.0	12.0	14.0	16.0
R32 Hydrosplit Combi Unit	1 Ø 230 V						●	●	●
	3 Ø 400 V						●	●	●

* The power supply is shown based on the outdoor unit.

R32 Split Hydro Unit

The LG THERMA V R32 Split Hydro Unit is a hydro type system consisting of an indoor unit and an outdoor unit. The two units are connected by refrigerant piping only, thus hydronic components such as plate heat exchanger, expansion tank and water pump are located within the indoor unit. Due to the split nature, freezing will not compromise this unit regardless of outdoor ambient temperatures. The outdoor unit is on offer in 4/6 kW and 5/7/9 kW capacity range. R32 Split 4/6 kW model is suitable for new build houses that are well insulated and require a small heating load, while R32 Split 5/7/9 kW model is adapted for both new build and renovation projects.



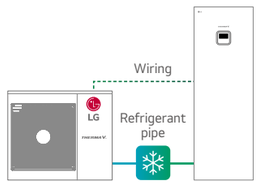
Browse now

Line-up	Capacity (kW)	4.0	5.5	6.0	7.0	9.0	12.0	14.0	16.0
R32 Split Hydro Unit	1 Ø 230 V	●	●	●	●	●			
	3 Ø 400 V								

* The power supply is shown based on the outdoor unit.

R32 Split Combi Unit

The LG THERMA V R32 Split Combi Unit is a domestic hot water supply, space heating and cooling solution that conveniently combines an indoor hot water tank with a separate outdoor unit. THERMA V R32 Split Combi Unit is the perfect space-saving solution for residential applications because hydronic components like the Domestic Hot Water (DHW) and buffer tanks, which are typically installed separately, are fully integrated. Its split design eliminates the risk of freezing, delivering reliable operation against harsh outdoor ambient temperatures. The outdoor unit is on offer in 4/6 kW and 5/7/9 kW capacity range. R32 Split 4/6 kW model is suitable for new build houses that are well insulated and require a small heating load, while the R32 Split 5/7/9 kW model is adapted for both new build and renovation projects.



Browse now

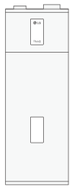
Line-up	Capacity (kW)	4.0	5.5	6.0	7.0	9.0	12.0	14.0	16.0
R32 Split Combi Unit	1 Ø 230 V	●	●	●	●	●			
	3 Ø 400 V								

* The power supply is shown based on the outdoor unit.

LINE-UP INTRODUCTION

R290 Heat Pump Water Heater

The new refrigerant technology allows the unit to efficiently reach outlet temperatures of up to 75°C. Available in sizes ranging from 100 to 200 liters, the unit is developed to meet the capacity needs of each household. Designed with modern living in mind, the R290 Heat Pump Water Heater blends seamlessly into any indoor space. Plus, its ultra-low noise level-quieter than a typical office-ensures everyday comfort without disruption. The magnesium anode and ICCP (Impressed Current Cathodic Protection) help to always keep the tank clean by preventing interior corrosion.



Browse now

Line-up	Capacity (ℓ)	80 ℓ	100 ℓ	150 ℓ	200 ℓ	270 ℓ	300 ℓ
R290 Heat Pump Water Heater	1 Ø 230 V		●	●	●		

R134a Heat Pump Water Heater

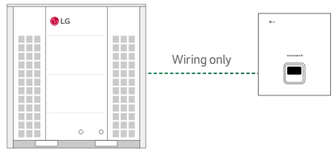
LG inverter compressor and two heater coils on the top and bottom provide hot water quickly. LG unit's exclusive square shape and luxury silver color make it an excellent fit for any interior design. With the LG ThinQ smartphone app, users can easily control and monitor the heat pump, check for current water temperatures, setting operating schedules and more. Four operating modes help the customer use the water heater more effectively.

Browse now

Line-up	Capacity (ℓ)	80 ℓ	100 ℓ	150 ℓ	200 ℓ	270 ℓ	300 ℓ
R134a Heat Pump Water Heater	1 Ø 230 V				●	●	

R32 Monobloc 51 kW

The LG R32 Monobloc 51 kW is a large capacity heat pump that provides a collective central heating solution for multi-family houses or light commercial buildings. Ideal for locations that require reliable heating and cooling year-round, this air to water heat pump offers a versatile solution.
Operating efficiently as a single system, it is well-suited for various commercial spaces including multi family house, office buildings, schools and universities.

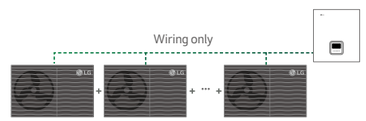


Browse now

Line-up	Capacity (kW)	18.0	24.0	32.0	36.0	48.0	51.0	64.0	80.0	96.0	112.0	128.0
R32 Monobloc 51 kW	3 Ø 400 V	Recommend to use Cascade Solution					●	Recommend to use Cascade Solution				

Cascade Control Unit

The LG Cascade Control Unit is an advanced heating solution designed to manage up to 8 units of the THERMA V system with a single controller. This centralized control enhances system efficiency and simplifies operation, making it an ideal choice for optimizing heat pump performance in multi-unit applications.
Cascade system offers efficient performance across all heating capacity ranges, adapting to fluctuating demand while maintaining reliability and reducing unnecessary energy consumption.



Browse now

Line-up	Capacity (kW)	18.0	24.0	32.0	36.0	48.0	64.0	80.0	96.0	112.0	128.0
Cascade Control Unit	Combination	9 kW x 2 Units	12 kW x 2 Units	16 kW x 2 Units	12 kW x 3 Units	16 kW x 3 Units	16 kW x 4 Units	16 kW x 5 Units	16 kW x 6 Units	16 kW x 7 Units	16 kW x 8 Units
	No of Units	2 Units			3 Units		4 Units	5 Units	6 Units	7 Units	8 Units

* LG recommends above combinations as much as possible even though up to eight (8) R290 Monobloc outdoor units of the same capacity can be connected.

PRE-SALES / ENGINEERING TOOLS

Pre-sales / Engineering Tools

LG provides a variety of software to support THERMA V for all customers including designers, installers, and end users.

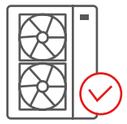
1. LATS THERMA V

LATS THERMA V is a web based simulation tool that enables to choose the optimal THERMA V model from various capacity range and simulates its energy cost comparing to other heating solutions. Furthermore, customer is easily able to simulate payback compared to a conventional system such as a gas boiler, electric boiler by using LATS THERMA V.

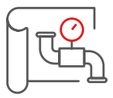
Browse now

There are 3 types project in LATS THERMA V WEB.

1. Model Selection : Select suitable model based on the design conditions you input.



2. Diagram : Generate piping / wiring diagrams in DWG format based on the design conditions and other selected applications.



3. Sound Simulation : Provide noise simulation results according to distance from house.

2. LG Energy Lab

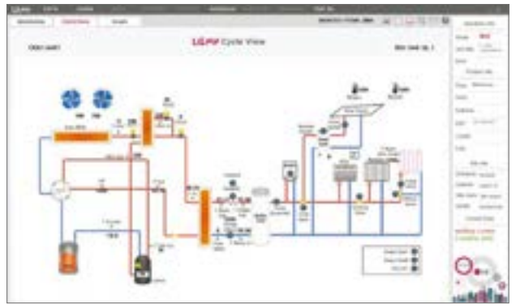
LG Energy Lab online is a web version tool that can print energy labels. It is easy to use because it is composed of a user-friendly UI, and provides additional functions such as contact function and project management function.

Browse now

3. LGMV

LGMV is a useful engineering tool that monitors THERMA V's real-time refrigerant and water cycle. It assists installers with effective and efficient start-up and commissioning after the THERMA V installation. LGMV enables service/field engineers to detect the errors and troubleshooting for fast and reliable problem solving.

* LGMV is available on the LG partner portal.



4. LG THERMA V Selector

The LG THERMA V Selector is a mobile application for designers, installers and end users, which provides various real-life simulations. An energy simulation can quickly indicate energy consumption and cost as well as CO_2 emission values that can be vastly reduced from conventional heating systems using minimal input values.
With both model selection and energy simulation tools, quick and accurate selection is made possible with detailed input values such as desired system configuration, required heating and Domestic Hot Water (DHW) load, which will calculate payback, result in a faster energy simulation and generate cost comparisons. Sound level can also be calculated through simulations based on the installation environment.

ThinQ SEAMLESS CONNECTIVITY

Smart Control, Smarter Life

LG ThinQ, a smart phone app, allows users to monitor and manage compatible LG products remotely, which means they can set the temperature and regulate the use of their THERMA V anytime and anywhere.
In most EU countries, LG ThinQ technology also works with Google Assistant, letting users control their THERMA V with voice commands.

Mandatory accessory:
PWFMDD200 (LG Wi-Fi Modem) / PWYREW000 (10 m extension connect cable in between THERMA V indoor and LG Wi-Fi Modem) could be required depending on installation conditions.
* Search "LG ThinQ" on Google market or App store, then download the app.
* Google assistant voice control may be restricted in use and language in some countries.
* Google and Google Home are trademarks of Google LLC.
* Voice-enabled smart speaker device is not included.

How to install the LG ThinQ app

Search and install for the LG ThinQ application from the Google Play or Apple App Store on a smart phone.

For Android users

GET IT ON Google Play

Download now

For iOS users

Download on the App Store

Download now

How to connect THERMA V to the LG ThinQ app

Watch now

In the video below, see how to install Wi-Fi modem and connect THERMA V and ThinQ.

A ThinQ guide for LG THERMA V

Watch now

In the video below, learn how to smartly monitor and control your THERMA V with ThinQ

Connect and Control from anywhere, anytime

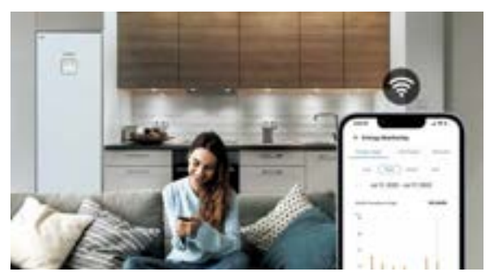
LG ThinQ allows end users to easily control their heating system in away they have never done before. Let them experience smart control of THERMA V with just the tap of a button. Even when outside, they can operate the THERMA V remotely.

Simple control with voice assistant

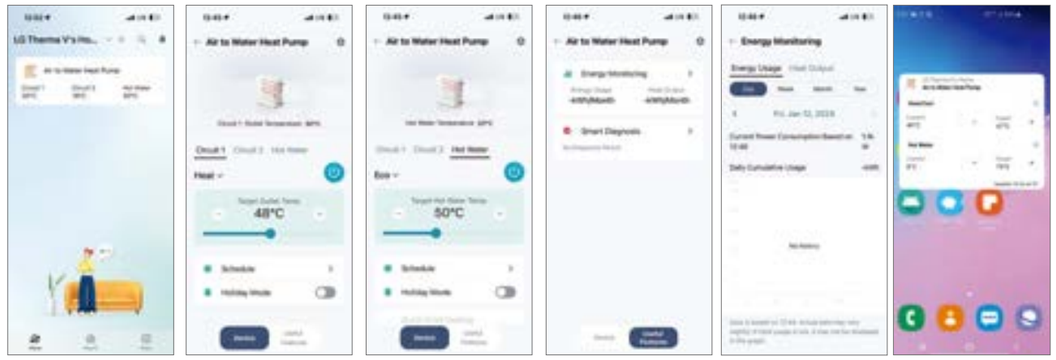
Tell THERMA V exactly what is needed.
Say, "Turn on/off the THERMA V" and the AI speaker will listen and turn on/off the THERMA V.

Efficient energy monitoring

The LG ThinQ app continuously monitors THERMA V. Whether it's everyday maintenance or something else, the app allows you to easily monitor energy usage.



ThinQ mobile app



Home screen | Space heating / Cooling control | Hot water control | Useful features | Energy monitoring | Widget on home screen (Android)

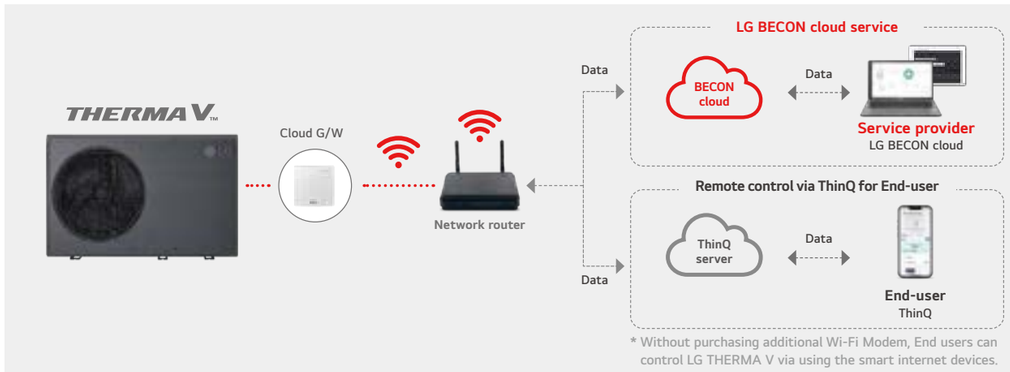
This image is intended to help you understand, and there may be some differences in actual use.
* Control via widgets is only possible with the Android app.

LG BECON CLOUD SERVICE

for THERMA V™

What is LG BECON cloud Service?

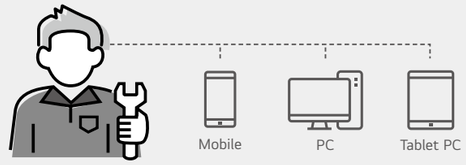
LG BECON cloud service is a cloud-based service that remotely monitors a customer's heating system via PC, tablet or mobile anytime, anywhere. The operation status of the heat pump can be monitored at a glance as well as the past operation history. In the event of an issue, the cause can be identified in advance and the repair can be completed during a one-time visit. For more details and service contract, please contact your LG regional service contact.



* Without purchasing additional Wi-Fi Modem, End users can control LG THERMA V via using the smart internet devices.

Target Customer and Benefits

Service partners / Installers



☑ Save time and cost

- One time visit with right parts
- No need pre-visit for diagnosis

☑ Quality of service

- Better service to end users with accurate diagnosis and fast repair

☑ Increased business opportunity

- Combine product + service offer
- Make more installation / repairs

End-users

☑ Enjoy peace of mind

- Be serviced at once or faster
- Be confident that immediate and quality of service will be provided in case of an error

☑ Less constraints

- No need to be at home for first diagnosis
- Monitor the operation status and control the system remotely

Key Features

Management at a glance

Monitoring status of customers

- Interactive map view or list view

Energy monitoring

Providing warning if energy usage is excessively high

- Display estimated power consumption by self-calculation

Monitoring with visualized schematic

Examining the operating state of the heat pump

- Schematic view or table view
- Cycle monitoring, sensor and actuator monitoring
- Current status and historical data

Operation and error history

Providing operation data and error history to quickly identify the issue

- Operation history, error history, setting history, etc

Remote control via cloud

Preventing unnecessary site visit caused by simple operation mistake

- Operation mode (heating / cooling / DHW), target temperature
- Emergency operation, low noise operation, quick DHW operation

Error notification by e-mail

Providing an e-mail notification automatically when an error occurs

- Possible to identify immediately and take a fast action

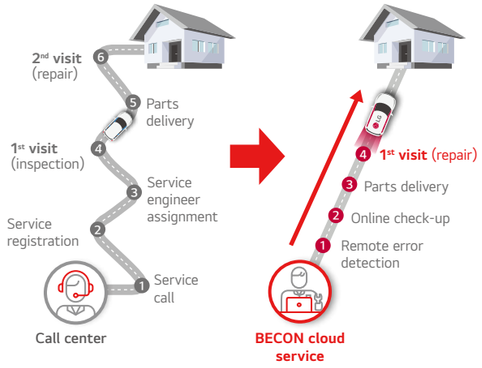
LG *BECON* CLOUD SERVICE

for THERMA V™

Why LG BECON cloud Service?

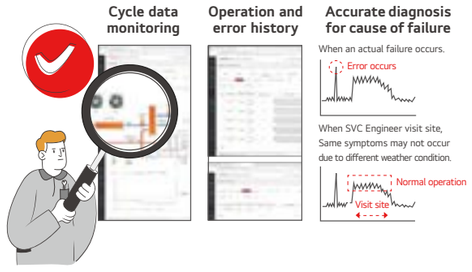
Quick service response time

Saving time and cost thanks to remote diagnosis of operation cycle without access to product.



Accurate diagnosis

Accurate diagnosis for cause of failure can be done by utilizing the error code and cycle data when an actual failure occurs.

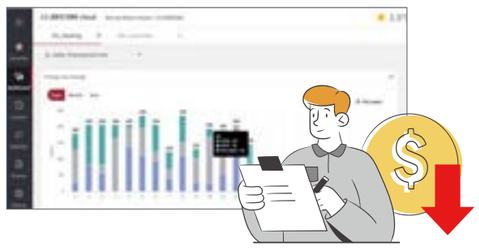


Remote device control

With single account, maintenance service provider (or installer) can control their customer's sites remotely. As a result, site visit is not needed for minor issues, such as adjusting temperature or mode.

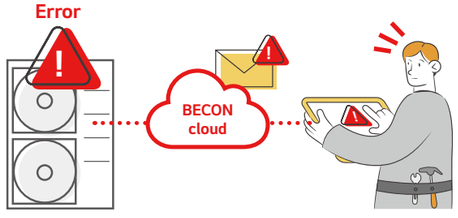
Energy monitoring

Power consumption based on self-calculation is recorded and displayed. Maintenance service provider (or installer) can provide warning if energy usage is excessively high.



Error notification by e-mail

Providing an e-mail notification automatically when an error occurs, making it possible for maintenance service provider (or installer) to immediately identify and quickly react.



ThinQ for end-users

Without purchasing additional Wi-Fi Modem, end-users can control LG THERMA V via using smart internet devices.

Requirements

Cloud gateway

PI485 gateway

Compatible THERMA V [1]	Required accessory	Network router
R290 Monobloc R32 Monobloc S Ⅱ R32 Split Hydro Unit R32 Split Combi Unit R32 Hydrosplit Hydro Unit	Cloud gateway (PWFMDB200) PI485 gateway (PP485A00T) [1]	Wireless or wired LAN
LG BECON cloud service contract	**Supported device / software**	**Supported language [2]**
Authority (ID and PW) to use LG platform (LG BECON cloud service)	PC, Tablet, Mobile PC or Mobile web browser, Mobile app. (Android / iOS)	English, Spanish, Italian, German, Polish, Greek

1) In the case of R290 Monobloc, PI485 G/W is built-in, so there is no need to purchase it separately.
2) More languages will be supported sequentially. The schedule for service availability may vary by country.

Interface Screen

Dashboard

[Operation status summary]

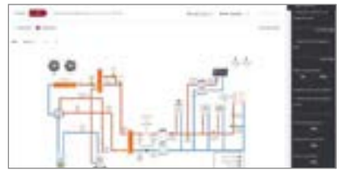
[Operation status]

Site

[Site overview]

Control

[Device control]



[Cycle monitoring – schematic view]

[Cycle monitoring – table view]

History

[Operation history]

[Error history]

[Outdoor unit cycle history]