

Discover a world of
sustainable heating solutions



Globally, Daikin is renowned for its pioneering approach to product development and the unrivalled quality and versatility of its integrated solutions.

With more than 90 years' experience in the design and manufacture of heating and cooling technologies, Daikin made the heat pumps its DNA.

Daikin Europe N.V. is a leading manufacturer of air conditioners, heat pumps and refrigeration equipment, with approximately 5,500 employees throughout Europe and 10 major manufacturing facilities based in Belgium, the Czech Republic, Germany, Italy, Turkey and the UK.



Made in Europe, for Europe

As the heat pump market leader, Daikin is always striving to make the most reliable and efficient heat pumps possible.

To achieve this, Daikin develops in-house all the key components of its products, resulting in a better control and quality of the production.

Daikin is also the owner of cutting-edge technologies such as the use of the refrigerant R-32, using 30% refrigerant charge than its predecessor, and therefore reducing the environmental impact of the heat pumps.

With these innovations, Daikin is able to provide solutions fitting in all regions in Europe and their respective weather conditions.

By combining design excellence with high performance, Daikin keeps homes warm even in the coldest winters.



Heat pumps are ready to take on the challenge of home decarbonization and Daikin is ready to be the most suitable partner in this challenge.

Decarbonization of homes is the sustainability challenge of today. It's the newest addition to the global paradigm shift towards a more sustainable economy. In the automotive industry, agriculture and even in air travel, efforts have already been made to reduce or eliminate carbon emissions from energy sources. Next on the list: homes.

The European Union pledged to "play a central role" in achieving net-zero greenhouse gas emissions by 2050. How to achieve them?

They are betting on heat pumps

And at Daikin, we are convinced that they're right. Heat pumps are more than ready to take on the challenge of home decarbonization. They are not a technology of the future, but an established solution, ready to provide you comfort.

Did you know?

In several European countries, heat pumps are already installed in more than 50% of the new buildings. In renovation, heat pumps are more and more considered to replace boilers, especially high temperature models with a similar leaving water temperature of 70°C.

Your next heating system will be a heat pump

Whether you have a renovation or a new build project, in a house or in an apartment, you will always find a suitable Daikin heat pump.

Renovation

- › Replace your old heating system or boiler
- › Keep your radiators

New build

- › Enjoy the advantages of a low temperature heat pump
- › Use super efficient emitters such as heat pump convectors or UFH

Take advantage of a **renewable solution** and **reduce your CO₂ emissions**



Design

Design is important for homeowners, that's why Daikin gives it as much importance as any product feature.

The Daikin Altherma 3 indoor range benefits from a brand new design signature rewarded with the IF and reddot awards 2018.

With the brand new Daikin Altherma 3 H HT, Daikin is now proposing a high quality design outdoor unit that received the IF and Reddot awards 2019.



Simple use

The indoor units are equipped with a convenient and intuitive interface, where the Daikin Eye shows the status of the system: blue means that everything is fine, red alerts that a problem occurred.

All the Daikin heating products can be controlled via the Daikin Residential Controller app, allowing to manage the required temperature as well as the schedule.

Additionally, the Daikin Altherma 3 range synergises with the outstanding designed room thermostat: Madoka.



Compact dimensions

Both indoor and outdoor units take a limited space. Daikin's indoor units have a small footprint of about 600x600mm, like a washing machine, thereby fitting in all houses, whether in a garage or a utility room, replacing boilers easily.



Discrete operation

Daikin is committing to deliver the best comfort to its customer, that's why having discrete operations is a priority in the development of our products.

If indoor units need to be unnoticed in case they are installed in a utility room close to your living room, outdoor units also need to be as silent as possible to fit in the urban environment where sound restrictions might be applicable.

Within the Daikin range, several products are even equipped with a low sound mode, guaranteeing heating comfort quietly.

Why choose a Daikin Altherma air-to-water heat pump?

How does it work?

The outdoor unit extracts energy from the air to provide heating, cooling and hot water. They collect up to 75% of their energy in the air, while the rest is provided by electricity. The air-to-water heat pump relies on a compressor and a refrigerant to transfer the energy from the air to the water, and heat the water up to your needs and to deliver it into your house.

Set-up

Most heat pumps are installed in three different ways:

- › **Refrigerant split:** this heating system is made of an outdoor unit extracting the air and an indoor unit which is the command center on which you control your system.
- › **Monobloc:** The monobloc consists a larger outdoor unit also containing the refrigerant circuit. In this case, there is no indoor unit inside, only a wiring center and a stand-alone tank for domestic hot water comfort.
- › **Hydro-split:** In a system with hydraulic connection, the refrigerant circuit is fully integrated inside the outdoor unit. The water is bringing the heat inside the

house and an indoor unit which is the command center on which you control your system.

Leaving water temperature

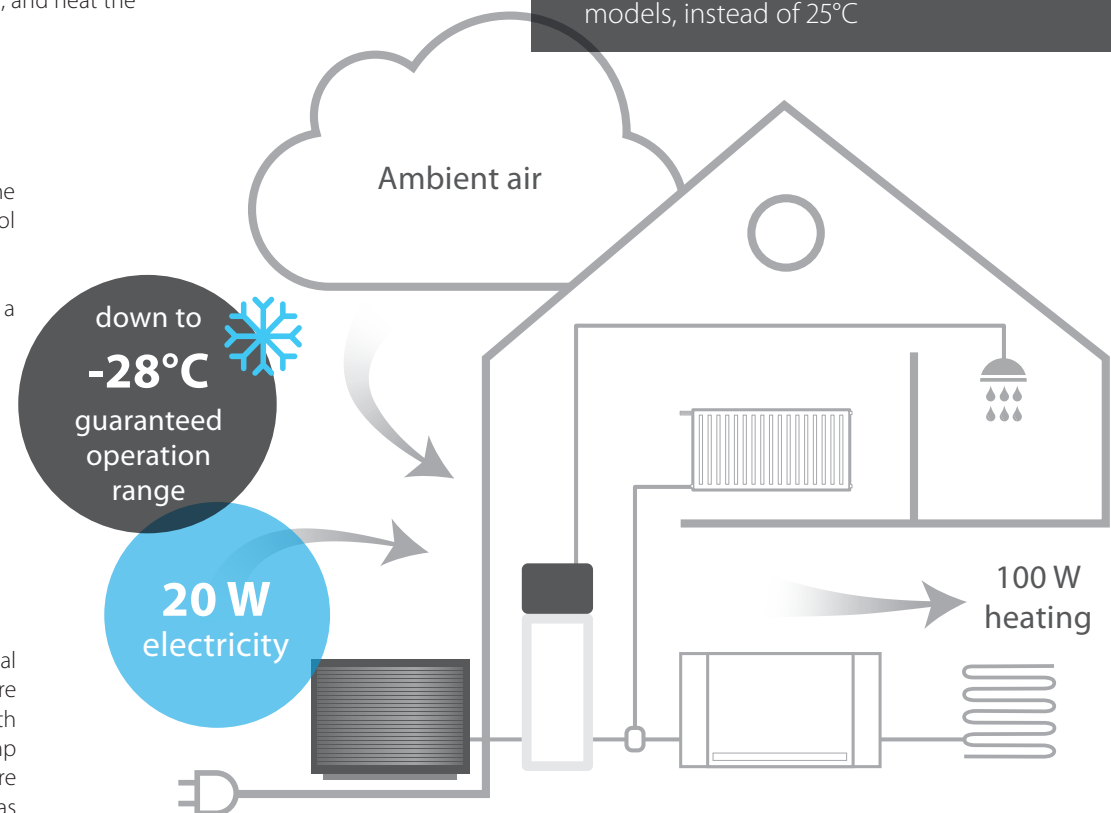
There are two main temperature thresholds:

- › **High temperature (>65°C):** typical renovation application with a boiler. High temperature heat pumps are also able to provide a leaving water temperature like the Daikin Altherma 3 H HT with a 70°C LWT.
- › **Low temperature (≤65°C):** typical new build application. Low temperature heat pumps are particularly fitting with underfloor heating and heat pump convectors requiring a lower temperature to provide an equivalent comfort as radiators.

Daikin's DNA

Innovation and excellence are part of Daikin's DNA, that's why Daikin is always further than the market standard.

- › **20 W of electricity** for 100 W of heating, instead of 25 kW
- › Operation range **down to -28°C** for selected models, instead of 25°C



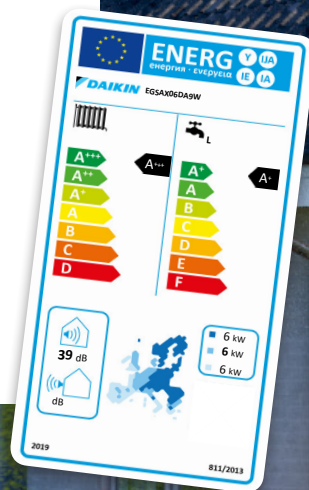
Highest energy label

Daikin heat pumps comply with the most recent regulations established by the European Union by holding an energy label with the highest scores, up to A+++ in space heating and A+ in domestic water heating.

Did you know?

Since 2015, all heating products must carry an energy label. The space heaters were rated from A++ to G and water heaters from A to G.

On 26th September 2019, new energy labels are available and rate the heating products from A+++ to D in space heating, and from A+ to F in water heating.



Always in control, no matter where you are



Madoka, your intuitively designed thermostat

Intuitive control with a premium design: the smooth curves of the Daikin Madoka controller offer a sleek, refined shape which is distinguished by its striking blue circular display. Presenting a clear visual reference with large easy to read numbers, the controller features are accessed using three touch buttons, which combine intuitive control with easy adjustability for an enhanced user experience.

Easily set operating parameters

Setting and finetuning your controller is simple and helps you attain higher energy savings and more comfort. The system enables you to select the space operation mode (heating, cooling or automatic), set the desired room temperature and control the domestic hot water temperature.

Three colours to match any interior design



Daikin Residential Controller

The Daikin Residential Controller application can, from any place at any time, control and monitor the status of your heating system and allows you to (*):

Monitor

- › The status of your system:
 - Room temperature
 - Requested room temperature
 - Operation mode
- › Energy consumption graphs (day, week, month)

Schedule

- › Schedule the room temperature and operation mode with up to **6 actions per day for 7 days**
- › Enable **holiday mode**

Control

- › Operation mode
- › Change the requested room temperature
- › Change the requested domestic hot water temperature
- › Powerful mode (fast heating domestic hot water)



*Availability of functions is depending on the system type, configuration and operation mode. App functionality is only available if both the Daikin system and the App have Internet connectivity.

Stand by me, your after-sales service

Stand by me, the online support platform between you and the installer

Stand by me has the aim of providing peace of mind comfort thanks to different features:

- ➔ A free warranty
- ➔ An additional extended warranty
- ➔ Easy contact with your installer



Extended warranty

If you opt for the extended warranty on spare parts, your Daikin system will be fully covered after the installation.

What are the advantages?

- › All spare parts are covered by the extended warranty
- › Guaranteed optimal performance during the full life of your Daikin system
- › If any problem, you'll be easily in contact with a Daikin service partner



Maintenance alert

You and the service partner will be automatically informed whenever the maintenance of your system must be done.



Digital maintenance book

On "Stand by me" you can also find the whole maintenance history of your system, user manuals, intervention details, ...

Want to know more? <https://standbyme.daikin.eu/>



The quintessence of heat pump

What is the essence of... Quintessence?

The purity of an idea, streamlined, stripped back...
until nothing is left... but perfection.

The quintessence stands for:

- ➔ The most perfect example of quality or class
- ➔ The purest essence of something
- ➔ The most refined part of something

Thanks to a number of dedicated developments, the Daikin Altherma 3 H HT outdoor unit represents the best that can be done for air-to-water heat pumps.

The Daikin Altherma 3 H HT is the first Daikin outdoor unit with a distinctive design. Its single fan reduces the sound level and its black front grill makes the unit fit in any environment.

Superior performance, renewable energy use, design and acoustic comfort. This is what the Quintessence of heat pump is all about.



Daikin Altherma 3 H HT

Invented to replace boilers

Change to what is essential

The Daikin Altherma 3 H HT is a perfect fit for your renovation project. Because it delivers a leaving water temperature of 70°C, similar to your boiler and without the use of an additional electrical back-up heater, you don't need to replace your radiators.

Changing your heating system from a boiler to Daikin Altherma 3 H HT will help you save space. Our floor standing model has a very small footprint of under 0.36m².

BEFORE



AFTER



A green investment

Your next heating system is a heat pump and it changes the paradigm. Moving from a boiler to a heat pump means switching to a totally green solution. No more fuel or gas is burned, heat pumps generally reduce CO₂ emissions by 70%. The difference is visible on your bill, and the return on investment can occur after a few years!

Innovation at the heart of our concerns

The Daikin Altherma 3 H HT is at top of low sound and heating performances thanks to dedicated developments. Several major components are designed to make this product reach the excellence such as a brand new single compressor, a larger single fan for high capacities and a complete redesign of the casing.



Black horizontal front grill

A redesigned casing

Since 2017 Daikin involves a design agency to bring fresh air to its product design. The cooperation works well as all new products launched were awarded with the Reddot and design awards 2018 and 2019.

The new grey casing helps the unit blending in in any environment, while the grill made of horizontal lines and hiding the fan from view, reduces the perception of the sound level.



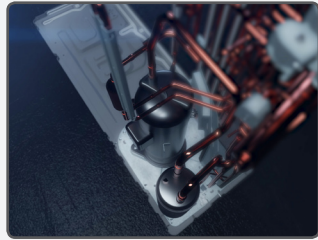
Single fan

A single fan for high capacities

The fan is not only invisible but is also slightly larger, replacing the usual double fan for high capacity units (class: 14-16-18).

The shape of the fan has also been reviewed to reduce the contact surface with air therefore lower the sound level by improving the air circulation.

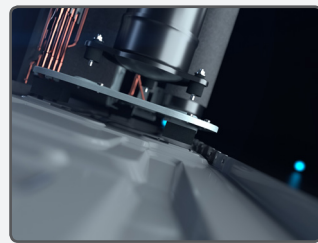




R-32 double injection compressor

A brand-new compressor

To make this product unique, Daikin Europe cooperated with the Daikin Technology Innovation Center (Japan) to develop top notch components. The Daikin Altherma 3 H HT compressor is able to deliver a high leaving water temperature up to 70°C in "heat pump only" mode.



Anti-vibration plate

Compressor insulation

To cancel the compressor sound power, several actions were taken in terms of absorption and insulation.

First, the compressor is surrounded by a 3-layer insulation made of air, insulation material and a metal box.

Regarding the absorption, the Daikin Altherma 3 H HT benefits from a double sound reduction by using rubber pads between the bottom plate and the vibration plate under the compressor.

Unrivaled performance

With these new developments, the Daikin Altherma 3 H HT reached the best performances illustrated in the energy labels:

35°C and 55°C



up to



Designed to withstand the coldest climate conditions



Enhanced operation range

European weather can be tough sometimes. That's why we designed the Daikin Altherma 3 H HT to work in "heat pump only" mode down to -28°C outside temperature.

Heating capacities are also maintained down to -15°C outside temperature. This performance is achieved thanks to genuine Daikin technology.

BLUEVOLUTION

The Bluevolution technology combines a specifically developed compressor and the R-32 refrigerant. Daikin is one of the first companies in the world to launch heat pumps equipped with R-32. With a lower Global Warming Potential (GWP), the R-32 is equivalent in power to standard refrigerants, but achieves higher energy efficiency and lower CO₂ emissions.

Easy to recover and re-use, R-32 is the perfect solution to help us attain the new European CO₂ emission targets.

R-32

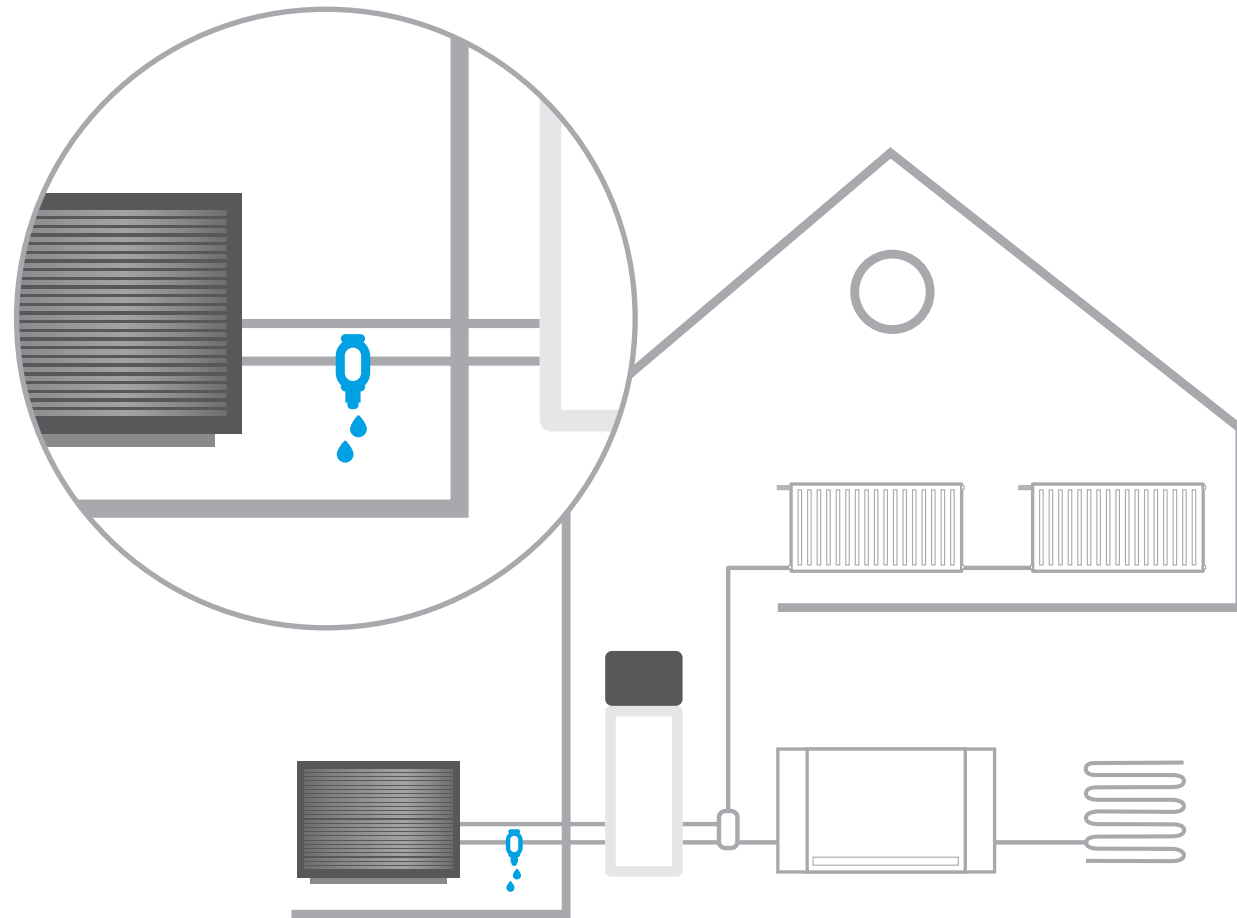
Peace of mind installation

Trouble free connection

The connection between the outdoor and the indoor unit is made of water which means that there is no refrigerant inside your house.

To make sure that the water is not freezing during your winter holiday, in case of a power cut or a pump break down, Daikin provides a freeze-up protection (option AFVALVE1).

This extra valve prevents ice forming by draining the water from the system in order to prevent any damage to unit and pipes.



Meeting modern society's expectations

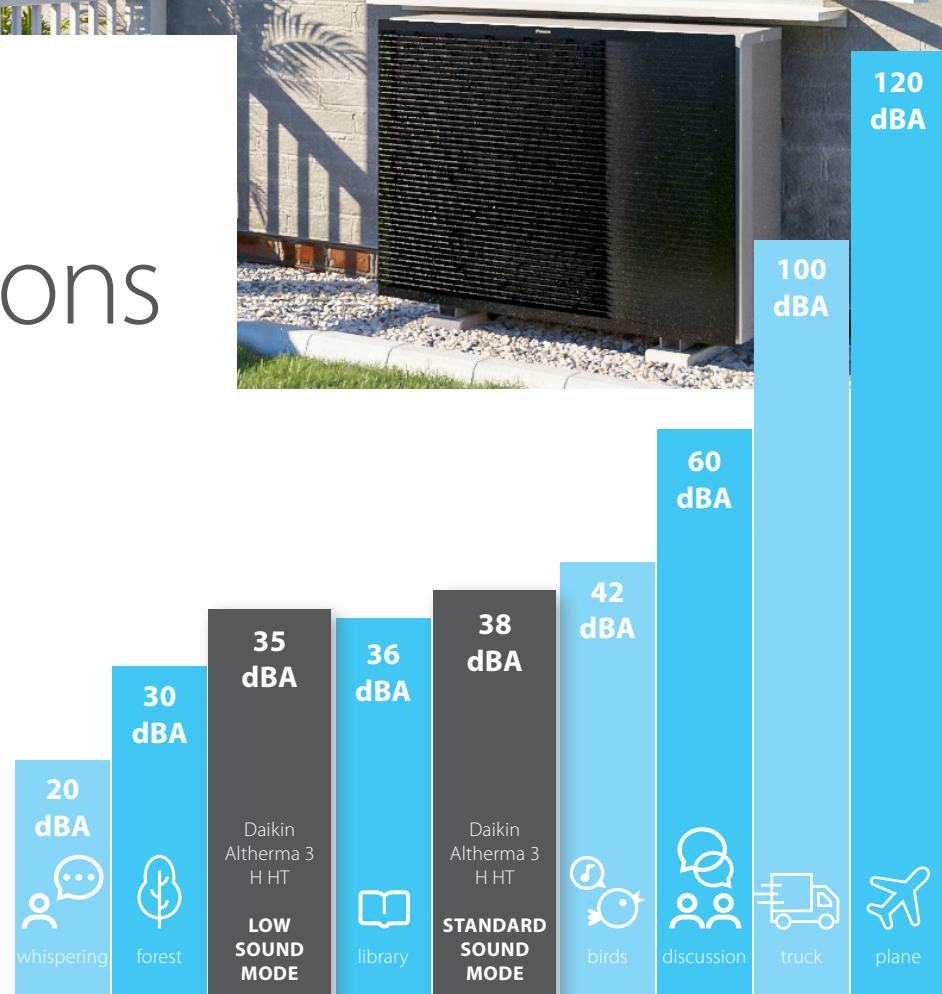
Silence rhymes with comfort

The Daikin Altherma 3 H HT has been designed to reduce its acoustic level and meet the expectations of today's society. In standard sound mode, the unit produces a sound pressure of 38 dBA at 3 metres, so a sound somewhere between birds chirping and the inside of a library.

The Daikin Altherma 3 H HT also offers greater flexibility by having a low sound mode that reduces the sound pressure at 3 metres to 35 dBA, representing a real reduction of half the sound level!

Did you know?

The sound curve is not linear but exponential, in such a way that 3 dBA less represents a reduction of 50% of the sound perceived.



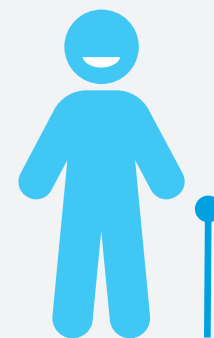


Listen to the silence
of our outdoor unit

← Check out the video !

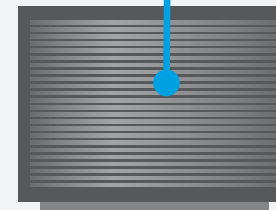
The acoustic level can be evaluated in two ways

- › The **sound power** is generated by the unit itself, independently of distance and environment
- › The **sound pressure** is the sound perceived at a certain distance. The sound pressure is usually calculated at a distance between 1 and 5 metres from the unit.



sound pressure

sound power



One solution, multiple combinations



The Daikin Altherma 3 H HT range can be combined with three different indoor units to connect to the outdoor unit, offering specific features to ensure heating, cooling and domestic hot water in your home.

Get the comfort you deserve
with the best functionalities

Choose from the Daikin "Three + " the functionality that best fits your needs, reversible and bizone, giving you the opportunity to tailor your Daikin heating system.

+ Heating only model

The heating only model is standard in the Daikin product range and is available for all three indoor units. This means that your heating system provides space heating and domestic hot water.

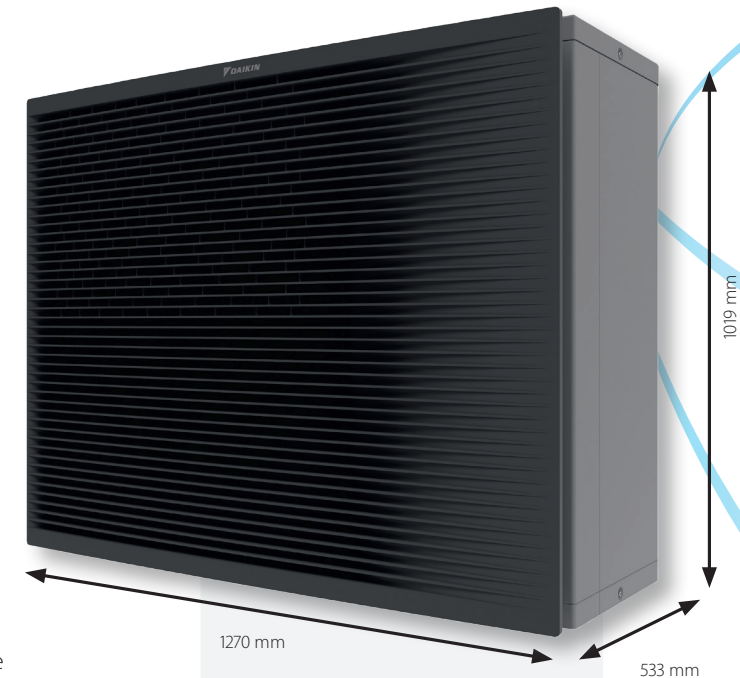
+ Reversible model

If you need cooling, the reversible model is for you! This feature is available in all three types of indoor units. Reversible means that the system can invert its way of working and provide cooling instead of heating. The cooling function requires a underfloor piping system or fan coil units.

+ Bizone model

Only the integrated floor standing unit is optionally equipped with a bizone function: you can choose two independent zones with different emitters that need a different temperature level in different rooms (example: underfloor system in the living room and radiators in the bedroom upstairs).

The 2 zones can also be managed independently: deactivate heating on the first floor during the day in order to reduce over consumption.



Outdoor unit

The outdoor unit is available in 3 classes 14-16-18.



Integrated DHW stainless steel tank model

This model is a compact unit with a small footprint of 595x625mm. The unit is equipped with a domestic hot water tank of 180 or 230L to answer your domestic hot water demand. Optionally, you can choose the cooling or the bizona functions. The unit comes standard in white but is also available in silver-grey.

- ✓ Heating only model
- ✓ Reversible model
- ✓ Bizona model



Integrated ECH₂O DHW tank model

The ECH₂O unit is equipped with a thermal DHW tank of 300 or 500L that can be connected to thermal solar panels. The ECH₂O technology is based on the fresh water principle: the domestic water is separated from the storage tank water, avoiding deposits and the legionella bacteria generation. Optionally, you can also choose the cooling function.

- ✓ Heating only model
- ✓ Reversible model

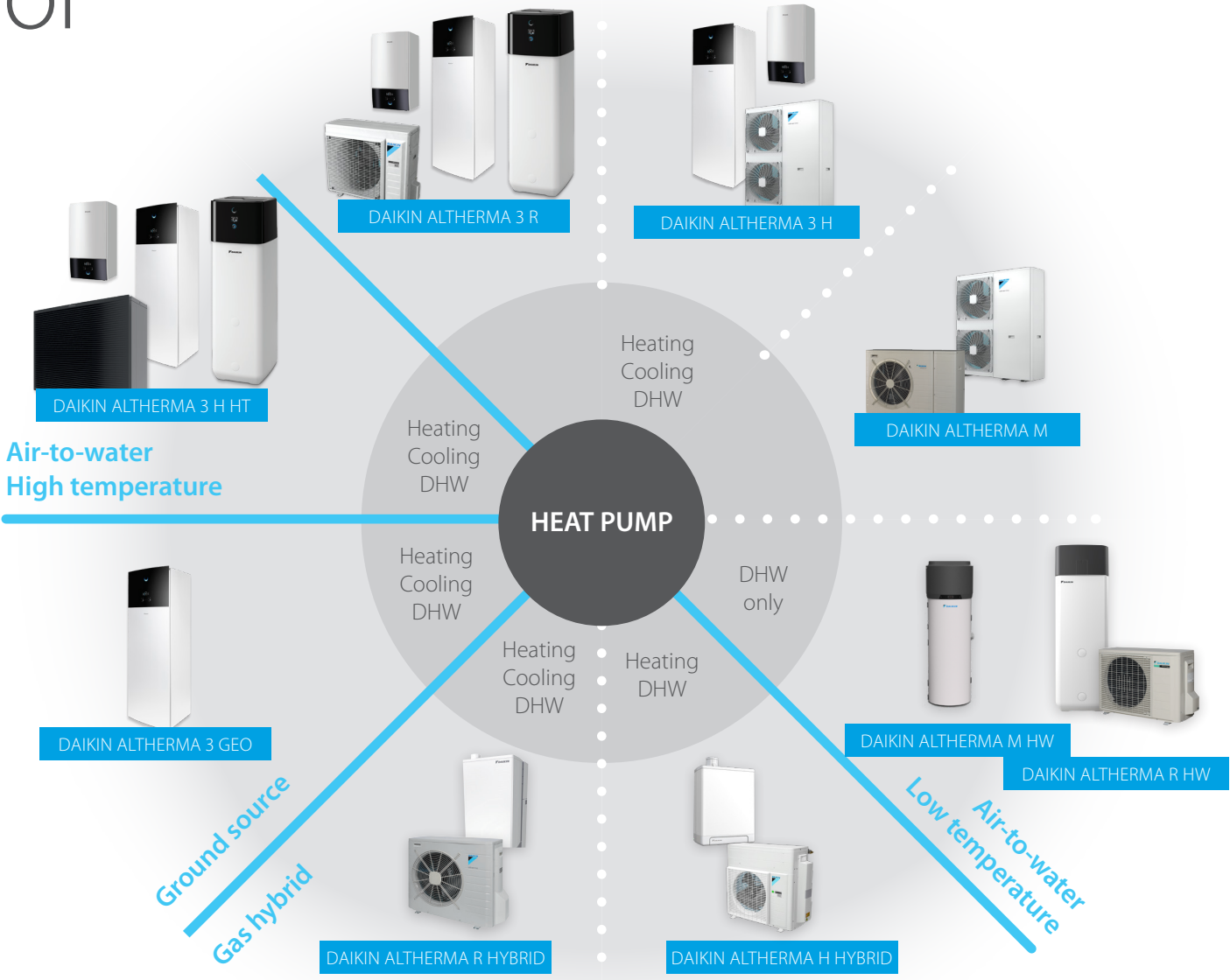


Wall mounted model

This model is the most compact unit but needs to be combined with a separate tank to deliver domestic hot water. Optionally, you can choose the cooling function.

- ✓ Heating only model
- ✓ Reversible model

A solution for every need



Optimise your system by choosing the right peripherals

Heat emitters

Daikin Altherma HPC

Enjoy the advantage of the Daikin Altherma heat pump convectors. Unlike radiators, Daikin heat pump convectors run on low temperature water and can provide heating or cooling more quickly thanks to a fan inside.

Obtain the same comfort as traditional radiators, but with energy savings.

Available in 3 models:



Concealed



Wall mounted

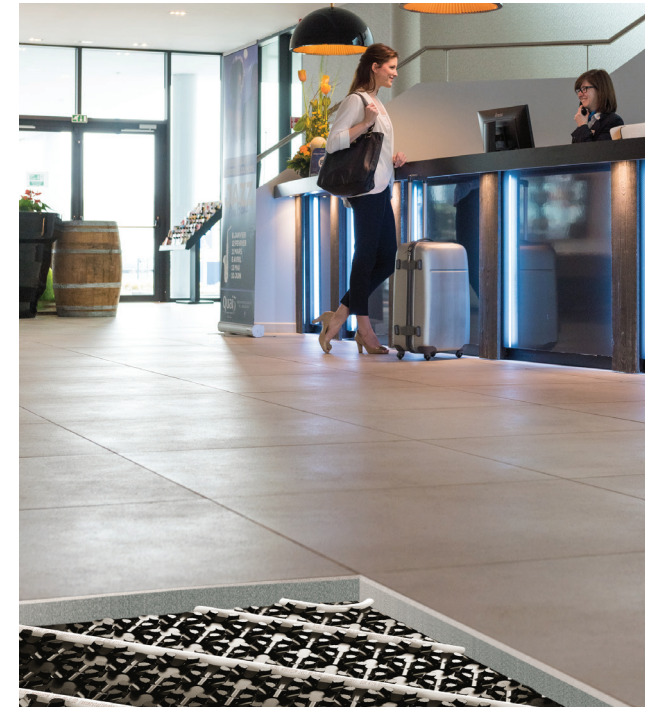


Floor standing

Daikin Altherma UFH

Daikin has its own range of underfloor pipes, plates and accessories to fulfil all the needs.

The Daikin Altherma underfloor heating is combinable with the heat pump convectors and can be installed instead of radiators.



Heat collectors

Daikin Altherma ST solar thermal panels

The Daikin Altherma ST offers a flexible solar thermal system providing water heating and space heating. The thermal solar panels convert the solar radiation into heat through their highly selective coating. Three different solar panel sizes are available, to meet flexibility in adapting to roof characteristics.



The heat pump standard

The Daikin Altherma 3 R and H series are the most sold heat pumps in Daikin's range. Thanks to their low temperature application, they are ideally fitting with newly built houses with low energy demands.

Daikin Altherma 3 R

- › 4 to 8 kW for new built or small renovation
- › Use the same Daikin Altherma 3 indoor units
- › Low temperature application, 60°C
Synergies with underfloor heating and heat pump convectors
- › Operation range down to -25°C
- › Refrigerant connection with R-32



Daikin Altherma 3 H

- › 11 to 16 kW for larger renovation
- › Connectable with the standard floor standing and wall mounted models
- › Low-temperature application, 65°C
Synergies with underfloor heating, heat pump convectors and recent radiators
- › Operation range down to -28°C
- › Water connection
R-32 refrigerant circuit in outdoor unit





The space-saving solution

The Daikin Altherma Monobloc is the most space-saving solution by including all hydraulic components outside of the house. These products are ideal where installation space is limited inside the house.

Daikin Altherma M 5-7 kW

- › Single outdoor unit
- › No indoor unit
- › Low temperature application, 60°C
- › Operation range down to -25°C
- › Combinable with indoor domestic hot water tank and wiring center



Daikin Altherma M 11-16 kW

- › Single outdoor unit
- › No indoor unit
- › Low temperature application, 60°C
- › Operation range down to -25°C
- › With or without integrated back-up heater
- › Combinable with indoor domestic hot water tank and wiring center



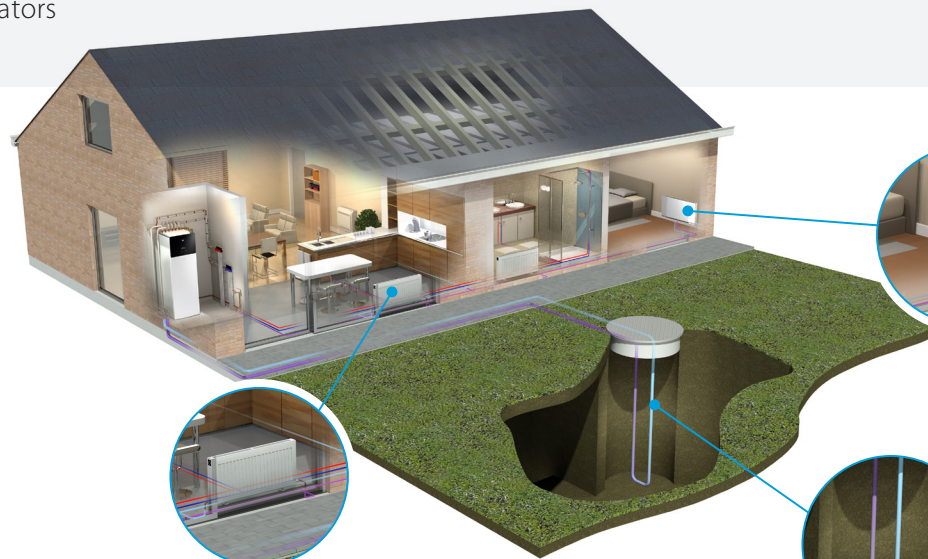


Groundbreaking innovation

The Daikin Altherma 3 GEO is a brand-new ground source heat pump. Its innovative features such as active cooling are breaking through the standard.

Daikin Altherma 3 GEO

- › Active cooling function with high efficiency
- › Applicable to renovation or new built projects
- › Combinable with heat pump convectors, underfloor heating or radiators
- › No outdoor unit but brine collector using R-32 refrigerant
- › 6 to 10 kW units
- › Low temperature application, 65°C



Daikin Altherma HPC provides heating or cooling for living rooms.

An 80-100 metre borehole in the ground creates a constant inlet temperature, fitting perfectly well in cold climate regions.

Leaving water temperature up to 65°C, so the unit can work with underfloor heating but also with radiators.

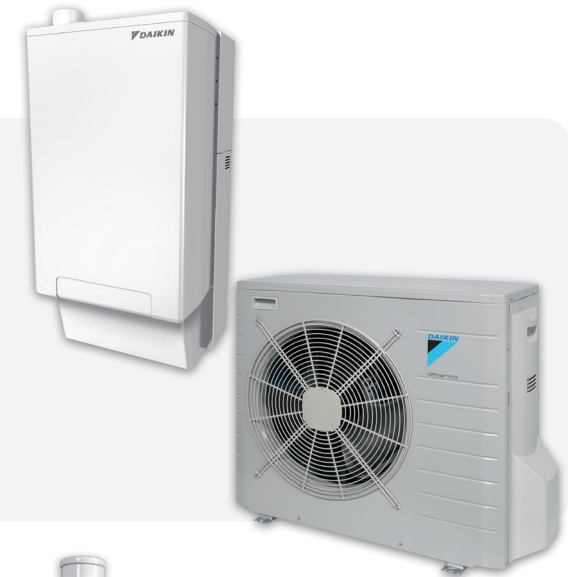


The right balance

The Daikin Altherma Hybrid heat pumps are among the most efficient heat pumps. Daikin's hybrid automatically determines the most economical energy source (electricity or gas) in an intelligent and unique way, based on energy prices, outdoor temperature and indoor heating requirements.

Daikin Altherma R Hybrid

- › Heating, cooling and hot water
- › Combine a gas condensing boiler and a outdoor heat pump
- › Refrigerant connection with R-410A
- › Connect your system with multiple air conditioners
- › Operation range down to -25°C



Daikin Altherma H Hybrid

- › Heating and hot water
- › Combine a gas condensing boiler and a outdoor heat pump
- › Water connection (R-32 refrigerant circuit in outdoor unit)
- › Connect the outdoor heat pump to your existing boiler thanks to the add-on feature
- › Operation range down to -15°C



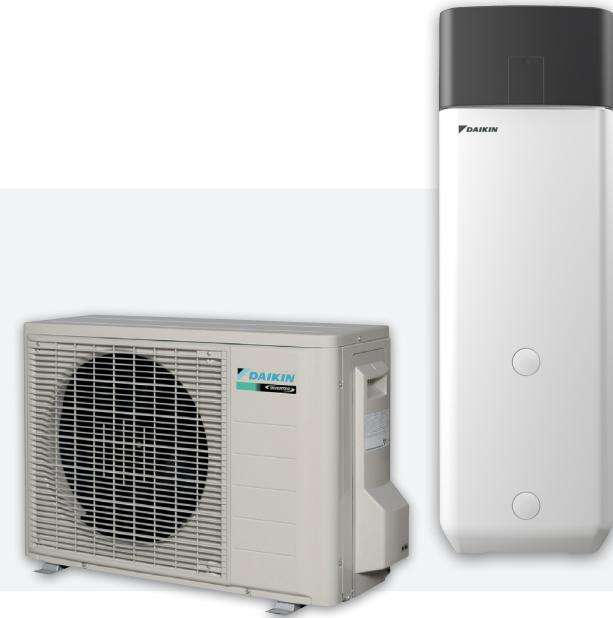


Enhanced hot water comfort

The domestic hot water heat pumps Daikin Altherma R HW and H HW are only providing domestic hot water, particularly interesting for passive houses or as a complementary renewable source of energy to your heating system.

Daikin Altherma R HW

- › Optimal domestic hot water production
- › Synergies with solar thermal panels
- › Low maintenance
- › Easy installation



Daikin Altherma H HW

- › Optimal domestic hot water production
- › Quiet operation
- › Compact size allowing an easy handling
- › 3 operating modes answering all your needs
- › Operation range down to -7°C without back-up heater





There is only one first choice: www.daikin.eu

Daikin Europe N.V. Naamloze Vennootschap

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