

# Hybrid heating system



Gas combi boiler + Heat pump = Daikin Attherma hybrid heating system

Smart logic

# A hybrid gas boiler solution for efficient heating & hot water

Daikin Altherma Hybrid system is the ideal way to replace your gas or LPG boiler – combining a familiar gas boiler with the added efficiency of a renewable energy heat pump to give you the best of both worlds.

The hybrid gas boiler automatically selects the most efficient mode, choosing between heat pump, boiler and hybrid modes to give the most economical or ecological operation, depending on your preference. The Daikin Altherma Hybrid system is quite simply the most innovative smart solution for all your heating and hot water needs. So isn't it time you started to rethink the future of heating?

#### Indoor unit

- > Compact unit: 1075 mm (height) x 450mm (width) x 405mm (depth)



#### Outdoor unit

- > Single fan: 735mm (height) x 832mm (width) x 307mm (depth)



- > Heating: **A<sup>++</sup>**
- > Hot water: up to **A<sup>++</sup>**

#### Three key advantages

1. Two-in-one heating system for total peace of mind
2. Automatically selects the most energy-efficient operation
3. Works with all types of radiators\*

\* For the highest savings, always choose low temperature radiators

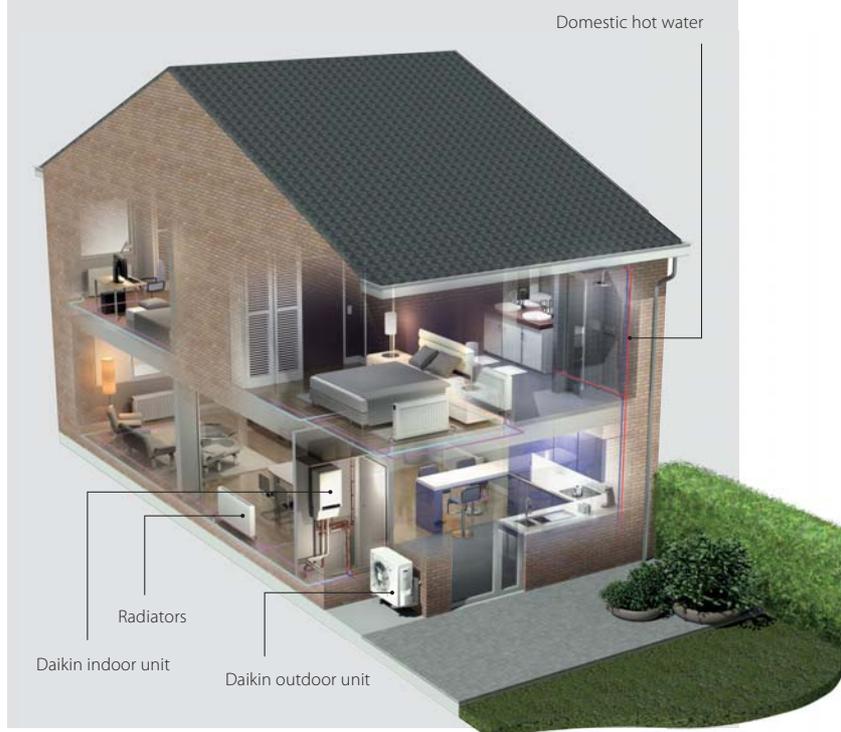
#### A heat pump makes green energy a breeze...

A Daikin Altherma air-to-water heat pump uses latent heat from the outside air to warm a home's central heating and hot water system. Even when it's freezing outside, a Daikin Altherma air-to-water heat pump can extract heat from the air.

For every kilowatt of electricity the heat pump uses, it generates about 3-4 kilowatts of renewable heat from the air. Over the course of a year, it's up to 300% efficient (even the most efficient fossil fuel boiler is less than 100% efficient).

Trust us: the future of heating is here.

To find out how a heat pump works, visit our YouTube page [Youtube.com/daikinuk](https://www.youtube.com/daikinuk) and click on How a heat pump works - homeowner.



#### Other benefits

- > Maximum energy-efficiency for lowest running costs
- > Gives you stability from energy price fluctuations
- > Eligible for the domestic Renewable Heat Incentive
- > Fuss-free, fast installation
- > Industry-leading manufacturers parts and labour warranty

# Saving money

reducing your impact on the environment



## Lower running costs

The Daikin Altherma Hybrid system minimises your running costs by making the most of the free renewable heat available.

Unlike other hybrids on the market, our technology utilises the heat pump and gas boiler in series – and automatically selects the most efficient mode for every operating condition. Heat pump efficiency is linked to the ambient temperature, so during the coldest periods when demand for heating or hot water is high the boiler provides additional capacity. So you can enjoy the best of both worlds.

As our example below shows, the Daikin Altherma Hybrid utilises energy from three sources – gas, electricity and renewable heat – to meet your energy demand in the most economical way.

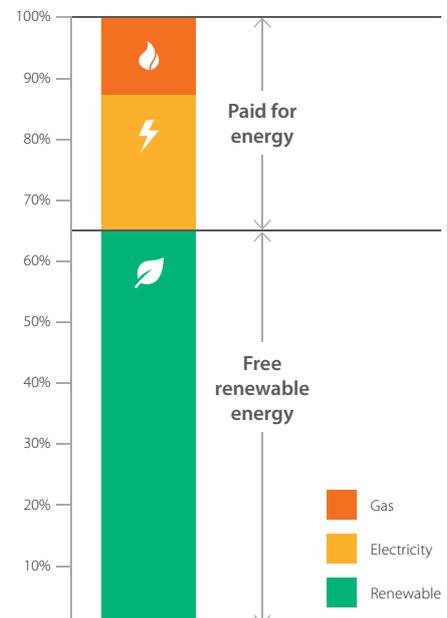
## Renewable Heat Incentive funding

The heat pump element of the Hybrid system is MCS accredited as a renewable heat source, so it's eligible for funding from the Renewable Heat Incentive.

This will provide you with quarterly payments over seven years, for the renewable heat you are using in your home.

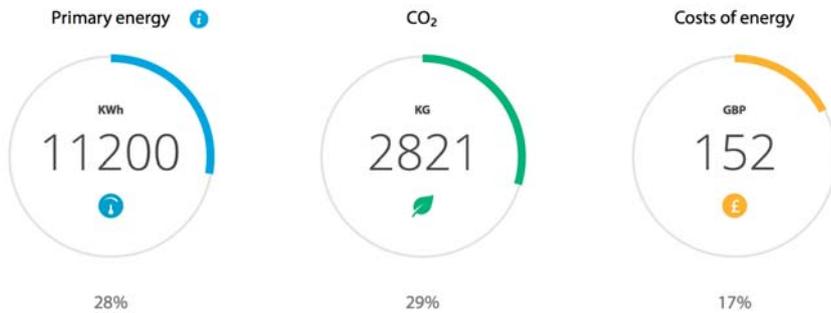
When you also take into account your expected running cost savings, your investment could be paid back in as little as six years.

And because the Hybrid system has a longer life expectancy than a traditional boiler-only system, you could save up to a further £5,000 over the life time of the system.



All savings referenced are relevant to the example property modeled with an annual heat demand of 22500 kWh. Lower demands will change the potential savings and expert guidance should be sought to understand your project and the possible savings.

## Your annual savings



At Daikin, we know that every home is different. To help you understand how this product could save you money by reducing your running costs, visit our Altherma hybrid heat pump simulation tool.

To see how much you could save, go to <http://hybridsimulator.daikin.eu/en/Calculate/Index>

## The whole picture

When making your decision about replacing your heating system, it is important to look at the overall picture and consider each solution and its costs.

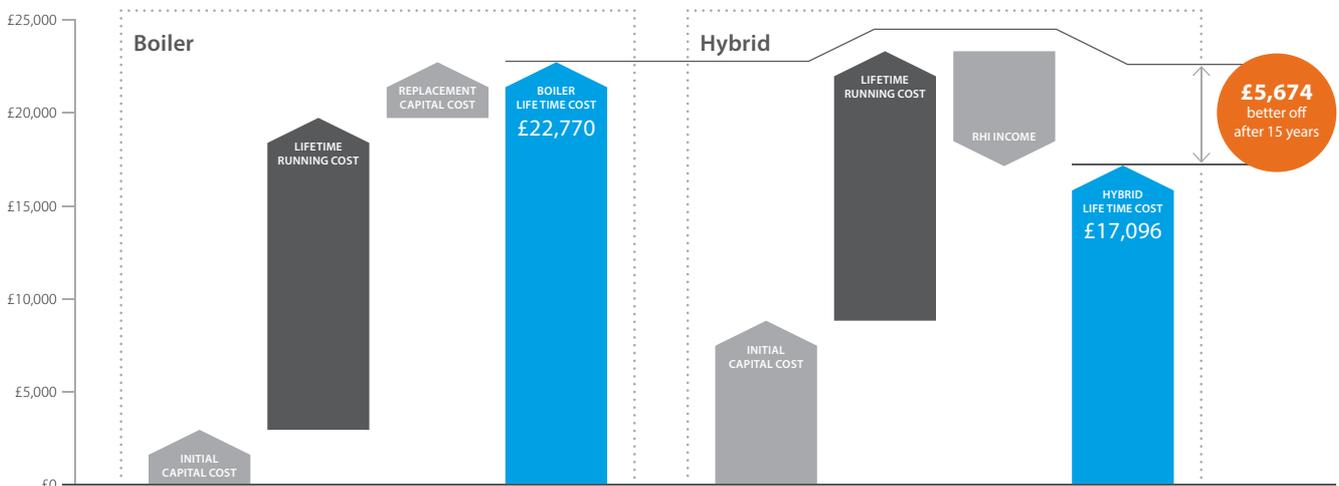
It is easy to see the benefit of using a product with higher efficiencies, as this will deliver lower running costs. However some costs may not be as obvious, like replacing the system at the end of its lifespan.

Current guidance on the life expectancy of a traditional gas boiler is between 10-15 years depending on use, given our Hybrid product

shares the load across two devices it is easy to see why the life expectancy is longer.

The following chart shows how choosing a Daikin Hybrid instead of a gas boiler makes longer term economic sense saving £5,674 over the installation's lifetime. When you factor the lower annual running costs, increased life expectancy of the hybrid system and the RHI payments, payback on the initial investment could be less than 6 years – so why not contact one of our installers to find out more.

## 15 year whole life comparison



	Initial capital cost	Life time running cost	7 year RHI income	10-15 year replacement cost	Total life time cost	Saving
<b>Scenario 1 – Boiler</b>	£3,000	£16,770 (Annual £1,118)	-	£3,000	£22,770	-
<b>Scenario 2 – Hybrid</b>	£8,780	£14,490 (Annual £966)	£6,174	-	£17,096	£5,674

### Model assumptions:

1. Annual heat demand of 22,500kWh
2. Electricity cost per kWh inc. VAT £0.12
3. Gas cost per kWh inc. VAT £0.04
4. Boiler replacement foreseen based on industry stated life expectancy
5. Hybrid life expectancy increase due to shared load across both heat pump and boiler
6. 75% heat pump coverage assumed
7. 50°C flow temperatures
8. Hybrid installation cost assumes 4 radiator changes @£600 (may not be required)

The information in this brochure does not constitute to financial advice and is provided for general information purposes only.



# Rethink the future of heating

## For a future less reliant on fossil fuels

The price of fossil fuels goes up and down and no one knows quite what the future will bring. But one thing's for certain: by generating renewable heat from fresh air, the hybrid gas boiler will always save you money. It's better for your wallet and for the environment.

## Reliable and efficient all year round

The smart hybrid control logic automatically selects the most energy-efficient and cost effective operation at any time, based on your energy tariffs. It maximises use of the heat pump to reduce your consumption of gas or LPG. The user-friendly, backlit controller is easy to operate and can be programmed by your installer for optimal comfort and efficiency.

## Limited disruption

Our hybrid system is quite simply the most innovative and smart solution for all your heating and hot water needs, when replacing your old heating system (LPG or mains gas). The Hybrid system can simply replace your existing boiler and connect to your radiators, limiting the disruption to your home. However, for the highest efficiency and running cost savings, we always recommend low temperature radiators or even underfloor heating.

## Space-saving, user-friendly design

Perfect for any modern home, the hybrid gas boiler is a space-saving system with an outdoor unit and a compact indoor unit that fits in place of a typical boiler. The indoor unit has a combi boiler, which is ideal for homes with a single bathroom.

For homes with a higher hot water demand, it can be connected to a separate hot water cylinder, and further enhanced with a solar thermal system.

## Fuss-free installation & commissioning

If your old boiler has broken down, the boiler element of the hybrid system can be up and running even before the heat pump has been commissioned, so your heating can be restored quickly. What's more, the dimensions of the outdoor unit meet the requirements of Permitted Development Regulations, so planning is not usually needed (\*rules may vary, check with your local planning office).

## Peace of mind

There is no good time for a system breakdown, but if it happens, being without heating and hot water can add significant disruption to your already busy life. The Daikin Altherma Hybrid system spreads the heating load across the two appliances, so the system has a longer life expectancy. Even in the event of a breakdown, the system can switch to the still-functioning heat source, thus limiting the impact of a malfunction and giving you time for a system repair to be completed.

## Control anywhere at anytime

Take control of your heat pump even when you are away. The Smart Comfort Controller allows you to monitor and adjust your system via your smart device. Using the Daikin 'app' adjust the room and hot water temperatures, activate time schedules to suit your life style, switch between heating and cooling modes, enable holiday periods, and so much more.



MCS HP0006



# Trust Daikin

Daikin UK offers the most efficient heating, ventilation and air conditioning solutions, renowned for design excellence, quality and reliability. So our customers can depend on Daikin for the ultimate in comfort.

Daikin UK has always prided itself on providing energy efficient and affordable heating solutions. And while we believe domestic heat pumps offer a future that makes greater use of renewable energy, we are also committed to offering options for every situation.

For some householders, energy efficient condensing boilers offer a value-for-money solution in existing dwellings. As a result, Daikin UK's portfolio of heating appliances includes a range of state-of-the-art gas condensing boilers and hybrid systems, so our customers can reduce their running costs, whatever the situation.

Compatible with a range of heat emitters, Daikin's hybrid systems combine a high efficiency gas condensing boiler and renewable energy heat pump, to offer the best of both worlds. Our hybrid systems complement our industry-leading range of gas condensing boilers, heat pumps and solar systems, available exclusively from Daikin UK.

More than 400,000 Daikin Altherma heat pumps have been fitted across Europe since its initial launch in 2006.

[daikin.co.uk](http://daikin.co.uk)

Dedicated homeowner support line: 0845 641 9271

Heating installer line: 0845 641 9070

The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin UK. Daikin UK has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin UK explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin UK.

