



# The perfect solution for renovations

The Daikin Altherma high temperature system offers heating and domestic hot water for your home. Replacing a traditional boiler, it connects to the existing piping, allowing you to keep your current hydraulic connections and emitters. The Daikin Altherma high temperature system is therefore the ideal solution for renovations. The split system consists of an outdoor unit and an indoor unit and can be completed with a solar connection.

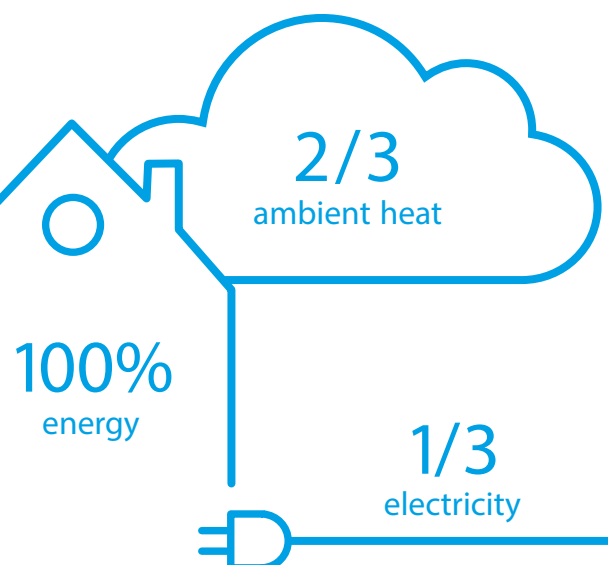
The Daikin Altherma heat pump uses a sustainable energy source: extracting heat from the outside air. In a closed loop containing a refrigerant, a thermodynamic cycle is created through evaporation, condensation, compression and expansion. This “pumps” heat from a lower to a higher temperature level. The heat gained is transferred to your home’s central heating via a heat exchanger.

Depending on the model and conditions, a Daikin Altherma heat pump delivers about 3kWh of usable heat for every kWh of electricity it consumes. This means approximately 2/3 of the required heat is free!

Talk about a good investment!

## The high efficiency system

Daikin Altherma can heat your home up to **3 times more efficiently than a traditional heating system** based on fossil fuels or electricity. By making use of the heat in the outside air, the system uses much less energy while you enjoy a stable and pleasant level of comfort. Also, maintenance requirements are minimal, keeping operational costs low.



# Daikin Altherma high temperature split

Efficiency data		EKHDRD + ERSQ/ERRQ		011ADV1 + 011AV1	014ADV1 + 014AV1	016ADV1 + 016AV1	011ADY1 + 011AY1	014ADY1 + 014AY1	016ADY1 + 016AY1
Heating capacity	Nom.	kW		11.00 (1 / 11.00 (2 / 11.00 (3 / 11.20 (3	14.00 (1 / 14.00 (2 / 14.00 (3 / 14.40 (3	16.00 (1 / 16.00 (2 / 16.00 (3	11.00 (1 / 11.00 (2 / 11.00 (3 / 11.20 (3	14.00 (1 / 14.00 (2 / 14.00 (3 / 14.40 (3	16.00 (1 / 16.00 (2 / 16.00 (3
Power input	Heating	Nom.		3.57 (1 / 4.40 (2 / 2.61 (3 / 2.67 (3	4.66 (1 / 5.65 (2 / 3.55 (3 / 3.87 (3	5.57 (1 / 6.65 (2 / 4.31 (3	3.57 (1 / 4.40 (2 / 2.61 (3 / 2.67 (3	4.66 (1 / 5.65 (2 / 3.55 (3 / 3.87 (3	5.57 (1 / 6.65 (2 / 4.31 (3
Domestic hot water heating	General	Declared load profile		-					
	Average climate	η <sub>wh</sub> (water heating efficiency) %		-					
Space heating	Average climate water outlet 55°C	General	SCOP	2.65	2.66	2.61	2.65	2.66	2.61
			η <sub>s</sub> (Seasonal space heating efficiency) %	103	104	102	103	104	102
	Seasonal space heating eff. class			A+					
	Average climate water outlet 35°C	General	SCOP	2.70	2.68	2.88	2.70	2.68	2.88
η <sub>s</sub> (Seasonal space heating efficiency) %			105	104	112	105	104	112	
Seasonal space heating eff. class			B						

Indoor Unit		EKHDRD		011ADV1	014ADV1	016ADV1	011ADY1	014ADY1	016ADY1	
Casing	Colour	Metallic grey								
	Material	Precoated sheet metal								
Dimensions	Unit	HeightxWidthxDepth		705x600x695			147			
Weight	Unit	kg		144			147			
Operation range	Heating	Ambient	Min.~Max.	-20 / 0~-20						
		Water side	Min.~Max.	25~80						
	Domestic hot water	Ambient	Min.~Max.	-20~35						
		Water side	Min.~Max.	25~80						
Refrigerant	Type	R-134a								
	Charge	kg		2.6						
	TCO <sub>2</sub> eq		3.718							
	GWP		1,430							
Sound pressure level	Nom.	dBA		43 / 46 / 0 / 0	45 / 46 / 0 / 0	46 / 46 / 0 / 0	43 / 46 / 0 / 0	45 / 46 / 0 / 0	46 / 46 / 0 / 0	
	Night quiet mode	Level 1		40 / 0 / 0	43 / 0 / 0	45 / 0 / 0	40 / 0 / 0	43 / 0 / 0	45 / 0 / 0	

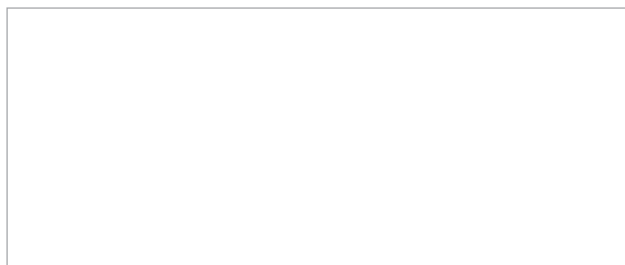
Outdoor Unit		ERSQ/ERRQ		011AV1	014AV1	016AV1	011AY1	014AY1	016AY1			
Dimensions	Unit	HeightxWidthxDepth		1,345x900x320								
Weight	Unit	kg		120								
Compressor	Quantity	1										
	Type	Hermetically sealed scroll compressor										
Operation range	Heating	Min.~Max.		-20~20								
	Domestic hot water	Min.~Max.		-20~35	-20~35	-20~35	-20~35	-20~35	-20~35	-20~35	-20~35	-20~35
Refrigerant	Type	R-410A										
	Charge	kg		4.5								
	TCO <sub>2</sub> eq		9.4									
	GWP		2,087.5									
Control		Expansion valve (electronic type)										
Sound power level	Heating	Nom.		68	69	71	68	69	71			
Sound pressure level	Heating	Nom.		52	53	55	52	53	55			
Power supply	Name/Phase/Frequency/Voltage		Hz/V	V1/1~/50/220-440	V1/1~/50/220-240	V1/1~/50/220-440	V1/1~/50/220-240	V1/1~/50/220-440	V1/1~/50/220-240	Y1/3~/50/380-415		
Current	Recommended fuses		A	25				16				

EW 55°C; LW 65°C; Dt 10°C; ambient conditions: 7°CDB/6°CWB | EW 70°C; LW 80°C; Dt 10°C; ambient conditions: 7°CDB/6°CWB | EW 30°C; LW 35°C; Dt 5°C; ambient conditions: 7°CDB/6°CWB | Contains fluorinated greenhouse gases

## Trust Daikin

Daikin may not be a household name. After all, we don't make cars, TVs, fridges or washing machines. But we do make world-class heat pumps. In fact, more than 275,000 Daikin Altherma heat pumps have been fitted across Europe since its initial launch in 2006. Because we focus on doing only what we're best at: creating the most efficient heating, ventilation and air conditioning solutions, renowned for design excellence, quality and reliability. So you can depend on Daikin for the ultimate in comfort, leaving you free to focus on other essentials.

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Daikin Altherma  
high  
temperature  
heat pump



The renovator's choice

# Why choose Daikin?

## ✓ Comfort

You need optimum comfort at all times for your space heating and domestic hot water needs. The Daikin Altherma heat pump delivers this as only Daikin can.

## ✓ Control

You need to be totally in charge of your comfort and costs. The Daikin Altherma heat pump is user-friendly and easy to control, thanks to our specially developed and proven control system and interface.

## ✓ Energy efficiency

By using renewable and free from the air energy combined with our highly efficient inverter heat pump technology, the Daikin Altherma delivers the ultimate in seasonal energy efficiency.

## ✓ Reliability

Reliability is a prerequisite for any new heating system. Daikin technology, designed and manufactured to the highest standards, has proved to be the ultimate in reliability. Based on years of development and experience, and manufactured to exact tolerances, our technology will give years of trouble free operation.

# Why choose the Daikin Altherma high temperature heat pump?

Because it is the perfect solution for renovations when you require a new heating system

- that works with your existing piping and radiators
- that replaces a traditional existing boiler
- that will provide heating and hot water for the home

The Daikin Altherma high temperature heat pump has an outdoor unit that delivers high seasonal efficiencies and can be linked to a solar system for the production of domestic hot water, leading to extra savings.

- 1 Indoor unit & domestic hot water**  
Can be stacked with hot water tank to save space
- 2 High temperature radiators**  
No need to replace your existing radiators
- 3 Outdoor unit**  
Compact and silent outdoor unit

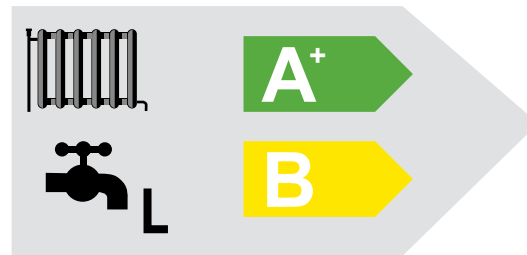


## Seasonal efficiency, smart use of energy

The EU wants to make people aware of what units are consuming and ban non-efficient products from the market. Seasonally efficient units reflect the standardised conditions you can expect over the entire heating and cooling season.

From September 2015 onwards, heating systems like heat pumps, combustion, domestic hot water tanks or any kind of combination, will receive an energy label to help you to make the most efficient choice.

### System efficiency



EKHBRD011ADV1 + ERSQ011AAV1

## Benefits

### Ideal for high temperature radiators

Many renovations make use of existing piping and high temperature radiators to save on costs, meaning that the new heating system must produce water temperatures up to 80°C if the radiators are to work properly.

Our high temperature system is designed for this scenario.

- It has two heat pumps: the first to extract heat from the outside air; the second to transfer that heat to your heating and hot water systems at up to 80°C to provide optimum comfort conditions in even the coldest climates.

The Daikin Altherma high temperature system is available with different capacities

- to suit all house sizes
- to work efficiently with all piping and radiator configurations, whether centrally or individually controlled.

So, if you are keeping your existing piping and radiators, the Daikin Altherma high temperature system is the most efficient and cost-effective solution for you.

\* COP (Coefficient of Performance) of up to 3.08  
EW: 55°C; LW 65°C, Dt 10°C; 7°CDB/6°CWB

### Easy replacement of existing boiler, without changing heating pipes

Daikin has designed the Daikin Altherma high temperature system not only to be highly efficient but also to be **install cost effectively**. The pipework to connect the indoor unit and tank to the outdoor unit is kept to a minimum but **the real cost saving** is that the system has been designed specifically **to work with existing** radiators, making it ideal for renovations and eliminating the need for the additional expense of changing the heating system.





## Domestic hot water with for lower energy consumption

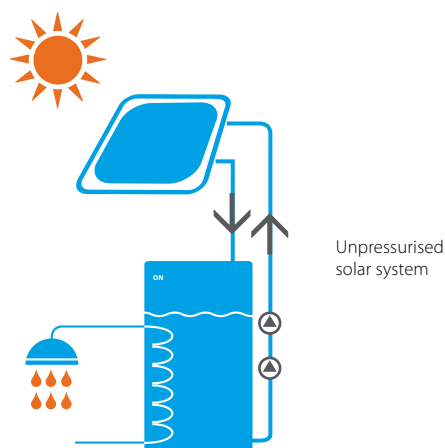
Daikin Altherma's high water temperature is ideal for heating domestic hot water without the need for an additional electric heater. Rapid heating of domestic hot water also means smaller heaters are needed. For a family of approximately four people, the standard tank (200l) is the best solution. Should you require more hot water, a larger tank (260l) is also available. The indoor unit and domestic hot water tank can be stacked to save space, or installed next to each other, if only limited height is available.

## Easy control

Our new, advanced system controller puts you in charge! Select the optimal comfort conditions no matter what the outside temperature is. You can adjust the settings to ensure the temperature of water leaving the outside unit is optimal for the heating demands inside the house. An integrated temperature sensor lets you to regulate the basic inside temperature quickly and easily. But it goes further. When combined with room-specific thermostats, you can set the comfort levels in different rooms – programming the demand to match the usage of the individual spaces.

## Solar connection

The Daikin Altherma high temperature heating system has the option of using solar energy for hot water production. If the solar energy is not required immediately, the purpose-built hot water tank (EKHWP) can store large quantities of heated water for later use as domestic hot water or for heating.



### Unpressurised solar system

To reduce the demand for energy, and so reducing the cost of running your system even further, the Daikin Altherma high temperature system can be optionally connected to an unpressurised solar system. This only operates when there is sufficient heat provided by the sun. At all other times, the system drains back into the storage tank, eliminating the need for antifreeze in the winter months. This is a real energy-efficient advantage.