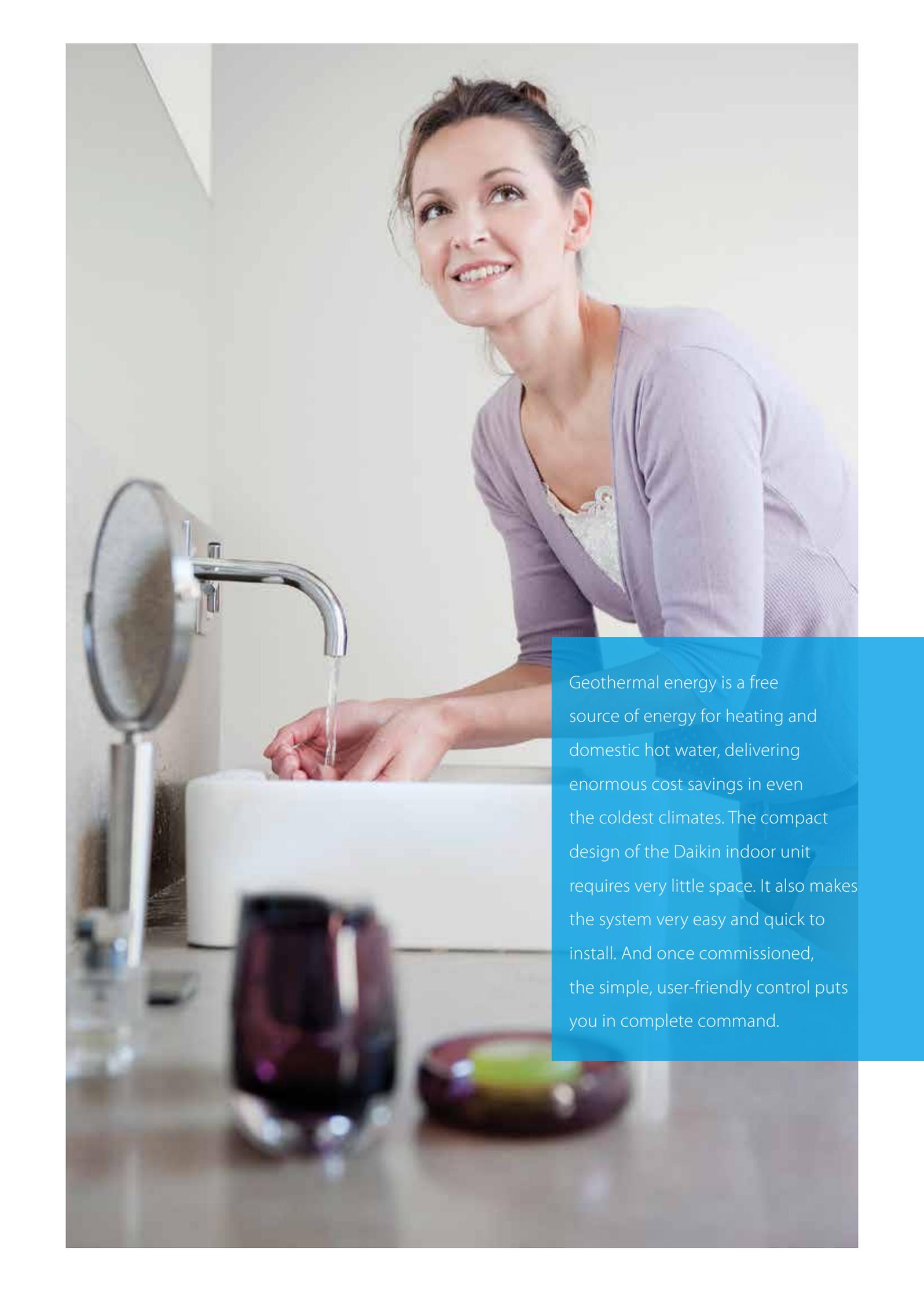


Daikin Altherma
ground source
heat pump



The geothermal power

A woman with her hair in a bun, wearing a light purple cardigan over a white lace top, is smiling and washing her hands in a white sink. The sink has a modern, curved chrome faucet with a circular showerhead-like attachment. In the foreground, a purple glass and a purple soap dish with a green bar of soap are visible on the countertop. The background is a plain, light-colored wall.

Geothermal energy is a free source of energy for heating and domestic hot water, delivering enormous cost savings in even the coldest climates. The compact design of the Daikin indoor unit requires very little space. It also makes the system very easy and quick to install. And once commissioned, the simple, user-friendly control puts you in complete command.



Key benefits

1. High efficiency heating technology optimised for all seasons

Heat pump inverter technology

Our inverter heat pump technology can provide up to 20% greater seasonal efficiency than "on/off" ground source heat pumps.

- › The inverter compressor operates most efficiently, especially when the full capacity of the unit is not needed. These "partial load conditions" represent 70-80% of the total heat output.
- › You enjoy a higher stable temperature.
- › The boosting effect of the inverter compressor reduces back-up heater usage.

The result?

Reduced heating costs and a faster return on investment.

Use of renewable energy

- › As the Daikin ground source heat pump uses the heat differential underground, the energy for heating is predominantly free thus reducing the cost dramatically.
- › The underground thermal energy is present all year round and cannot be depleted, it is a truly renewable resource the use of which does not damage the environment.

The result?

Reduced heating costs and a reduced impact on the environment.

2. Easy-to-use controller

- › Thermostat: water temperatures are automatically linked to the actual room temperature for more stable performance and higher comfort.
- › Energy management: the controller displays both the output and input energy of the unit. This helps you manage energy consumption more accurately and control costs.



3. Easy installation

To reduce the installation time at your home, the domestic hot water tank is already factory-fitted to the top of the heat pump module.

4. Compact, elegantly designed indoor unit

By integrating the heat pump module and the domestic hot water tank, the space needed is similar to a normal household appliance: 728 x 600 x 1,732mm.

The unit has an elegant design that blends in with other household units.

Connections are on top of the heat pump, so little space is needed around the unit.



Why choose the Daikin Altherma ground source heat pump?

Even in the coldest places in winter, geothermal heat is present in the ground resulting in a fairly constant temperature of 10°C at depth below 15 metres. This heat is a free source of energy that the ground source heat pump at the heart of our system can tap into to heat your home and domestic hot water as well as delivering you enormous cost savings even in the coldest climates.

For example, around Oslo, Norway more than 70% of heating occurs when the outdoor temperature is below 3°C. Here, the ground source heat pump uses a stable geothermal energy source that is unaffected by the outside temperature, resulting in the highest efficiency at low ambient temperatures.

✓ Comfort

Optimal comfort levels at all times in terms of space heating and domestic hot water production is crucial: the Daikin Altherma ground source heat pump delivers this as only Daikin can.

✓ Control

Our specially developed and proven control system with its new user interface makes the Daikin Altherma ground source heat pump intuitive and easy to control, allowing you to be totally in charge of your comfort and your costs.

✓ Energy Efficiency

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

✓ Reliability

Daikin's ground source heat pump design and construction has been proven to be completely reliable no matter what the temperature outside. Based on years of development and experience, and manufactured to exact tolerances, our technology will give years of trouble free operation.



1. Heat pump

1 indoor unit
heat pump with integrated domestic hot water tank

2. Ground collector

The geothermal ground collector can be either a vertical probe or a horizontal loop just below the surface. It is connected to the heat pump unit inside the house. This, in turn, is connected to the space heat emitters throughout your home and to the domestic hot water system.

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. Seasonal efficient units reflect the standardised conditions you can expect over an 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



* EGSQH10S18A9W



3. Domestic hot water

Hot water at all times for single to multi-family houses, new builds and modernizations

4. Space heating

- › Under-floor heating
- › Fan coil units
- › Heat pump convectors
- › Low and high temperature radiators

EGSQH-A9W

Daikin Altherma ground source heat pump

Indoor Unit		EGSQH		10S18A9W		
Heating capacity	Min.	kW		3.11 ¹ / 2.47 ²		
	Nom.	kW		10.20 ¹ / 9.29 ²		
	Max.	kW		13.00 ¹ / 11.90 ²		
Power input	Nom.	kW		2.34 ¹ / 2.82 ²		
COP				4.35 ¹ / 3.29 ²		
Casing	Colour			White		
	Material			Precoated sheet metal		
Dimensions	Unit	Height/Width/Depth	mm	1,732/600/728		
Weight	Unit			kg		
Tank	Water volume			l		
	Insulation	Heat loss	kWh/24h	1.4		
	Corrosion protection				Anode	
Operation range	Domestic hot water	Water side	Max (booster heater)	-		
Refrigerant	Type			R-410A		
	Charge			kg		
					TCO ₂ eq	
	Control			Electronic expansion valve		
GWP					2,087.5	
Sound power level	Nom.			dBA		
Sound pressure level	Nom.			dBA		
Power supply	Name/Phase/Frequency/Voltage			Hz/V		
Current	Recommended fuses			A		
Domestic hot water heating	General	Declared load profile		L		
	Average climate	η _{wh} (water heating efficiency)	%	93		
			Water heating energy efficiency class		A	
Space heating	Average climate water outlet 55°C	General	η _s (Seasonal space heating efficiency)	%	146	
			Seasonal space heating eff. class		A++	
	Average climate water outlet 35°C	General	η _s (Seasonal space heating efficiency)	%	146	
			Seasonal space heating eff. class		A++	

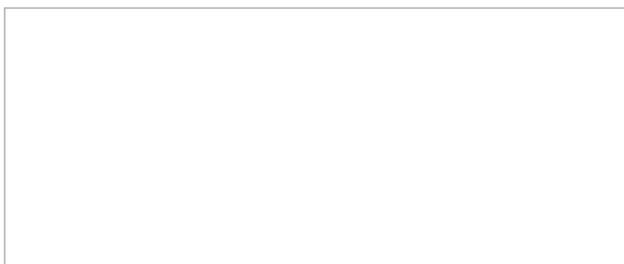
(1) EWB/LWB 0°C/-3°C - LWC 35°C (DT=5°C) (2) EWB/LWB 0°C/-3°C - LWC 45°C (DT=5°C) * Contains fluorinated greenhouse gases

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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