

Παγκόσμιος Ηγέτης στο **Ιδανικό** Κλίμα.

# Αντλίες Θερμότητας



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## Daikin Altherma 4 H

New high temperature air-to-water heat pump, perfect for any house modernization

Daikin Altherma 4 H is an extremely efficient high temperature heat pump made to cover the needs of existing houses with traditional heating emitters.

Made for easy transition to more efficient, sustainable, comfortable and safe heating system.





#### Technology designed to boost performance to the next level

Engineered with in-house developed and produced key components, including a compressor and micro-channel heat exchanger, creates a synergy that ensures unmatched performance in all weather conditions.



High capacity at cold ambient



LWT at 75 °C



Low sound:

down to 28 dBA at 3 meters distance

Reliable cold climate operation With best-in-class heating capacity, Daikin Altherma 4 H delivers 10.2 kW at 7/55°C (for 14kW unit), ensuring warmth when it matters most.

Daikin Altherma 4 operates down to -28°C even in the harshest conditions, providing consistent comfort no matter the weather.

Best replacement solution Daikin Altherma 4 H is perfect for replacing fossil fuel boilers, as it fits seamlessly with existing radiators, delivering outstanding leaving water temperatures (LWT) of 70-75°C even at -15°C.



Operation range down to -28 °C





Domestic Hot Water

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Heating

Introduction

Residential oor air quality

Control systems

## Setting new boundaries in heat pump technology

#### We introduce to you the first heat pump within this 4th generation, with R-290 refrigerant.

Every home deserves sustainable and cost-saving heating system. That's why in Daikin Altherma 4we put ecofriendly R290 refrigerant, Daikin developed compressor, and a fan to make it highly efficient. Enjoy the affordable warmth with no worries about energy bills. You can reduce the costs of house heating even up to 70%!



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#### R-290 Refrigerant

- R-290 is a category A3 refrigerant (according to DIN EN 378).
- R-290 is similar in nature to the A3 refrigerant R-600A (isobutane), which is also widely used, and which is commonly used by manufacturers of white goods and the responsible logistics companies.
- The handling of A3 refrigerants is thus neither new nor unusual. However, some basic precautions must be taken during storage and transport.



#### Engineered for whisper-quiet operation.

Equipped with new soundbox and improved insulation technology to ensure peaceful environment. The sound box is mounted on the bottom plate instead of on the anti-vibration plate, with increased insulation.



Split

Sky Air

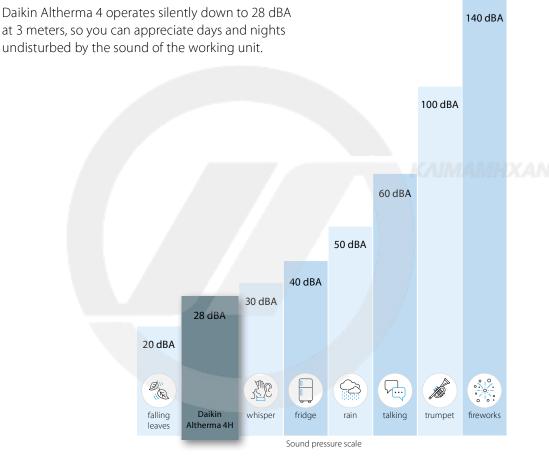
Transport frigeration

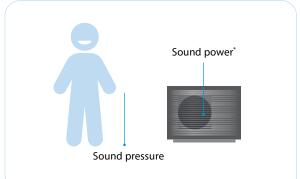
falling leaves Altherma 4H whisp

Innovative louvered grill was specially designed to minimize sound power to the impressive level of 50 – 54 dBA, ensuring uninterrupted peace

- Contemporary sleek design based on Daikin Altherma 3 award winning design
- Black louvered grill minimizes the visibility of the fan (made of >50% recycled plastics from industrial waste)
- Integrates seamlessly with the surrounding environment by reflecting the surroundings on its cover and side panels







## 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 between
   1 and 5 metres from the unit.

\* Erp sound power:

- class 06-08 45 dBA
   class 10 47 dBA
- class 10 47 dBA
   class 12-14 52 dBA

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## Highest safety standards in the industry

At Daikin, safety is our top priority. The Daikin Altherma 4 H heat pump is designed to set new industry safety standards, incorporating advanced features such as a high-efficiency gas separator and factory-mounted anti-freeze valves.

These components, developed specifically for Daikin, ensure unparalleled safety and performance.

#### Sealed Switchbox:

- Placed away from the refrigerant connections, on top of the fan
- The full sealing prevents R-290 to get inside the switchbox





#### Gas leak sensor:

- Detects potential refrigerant leaks
- In case of leak detection, sensor automatically triggers the fan to run at maximum speed, effectively ventilating the area to prevent the buildup of a flammable gas cloud.
- Minimum hourly self-inspection check, ensuring ongoing protection.



#### Refrigerant vessel:

- Protects refrigerant against possible damage during storage and transportation, that might cause leakages
- After installation, R-290 is released into the refrigerant cycle
- It can survive a 10 metres drop without leakage





#### Gas separator:

• In the outdoor unit prevents R-290 to reach the indoor unit via the water circuit.



#### Anti-freeze valve:

- Protects the plate heat exchanger
  against freezing
- Avoids R-290 leaks going from the
  refrigerant circuit to the water circuit



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## Intelligent control Straightforward and easy to use

Daikin's Altherma 4 H new intelligent control system is designed to enhance the user experience and installers efficiency.

With advanced features like a 5" color touch screen, streamlined commissioning, and remote troubleshooting functions, this system ensures reliable performance and easy management.

Tailored for installers, it offers secure settings access and future-proof technology, making it the ultimate choice for seamless installation and maintenance.



#### New intuitive MMI 5" touchscreen for better user experience.









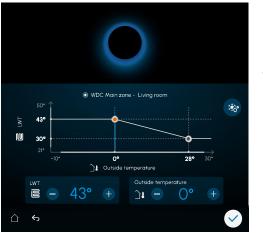
## Heating



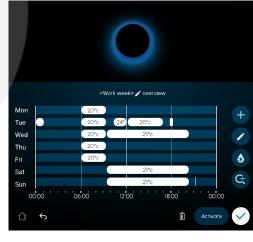
Easy customer access to main functionalities.

> Installer settings only visible in installer mode

Block based easy scheduling for cooling and heating



Thanks to the Weather Dependent Curve - optimal comfort and high efficiency with automatically determined desired temperature.



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#### Daikin Altherma 4 H

- Best-in-class heating capacity, ensuring warmth at cold ambient
- Outdoor unit extracts heat from the outdoor air, even at -28°C
  By heat pump operation only, the outdoor unit delivers a leaving
- water temperature of 70-75°C at -15°C ambient temperature
  Ultra low sound level of 50-54 dBA
- Choosing natural refrigerant R-290 product reduces the environmental impact, leading to lower energy consumption







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Outdoor Unit			EPSK	08AW1	10AW1	06AV3	08AV3	10AV3	12AW1	14AW1
Dimensions	Unit	HeightxWidthxDepth	mm	1,123x1,330x604						
Weight	Unit		kg	178		174			191	
Compressor	Quantity	1								
	Туре	Hermetically sealed scroll compressor								
Operation range	Cooling	Min.~Max.	°CDB	10 ~43						
	Domestic hot water	Min.~Max.	°CDB	-28 ~40						
Refrigerant	Туре			R-290						
	GWP			3						
	Charge kg			1					1.25	
	Control	Expansion valve								
Sound power level	Heating	Nom.	dBA	45 (1)	47 (1)	45 (1) 47 (1)		52 (1)		
	Cooling	Nom.	dBA	53	53.2 (2)	52.2 (2)	53	53.2 (2)	62	63
Sound pressure level	Heating	Nom.	dBA	32.4 (1)	32.8 (1)	32.6 (1)	32.6 (1) 32.4 (1) 32.8 (1) 38		8	
	Cooling	Nom.	dBA	37.2 (2)	37.3 (2)	36.9 (2)	37.2 (2)	37.3 (2)	47	48
Power supply	Name/Phase/Frequency/Voltage		Hz/V	W1/3~/50/400		V3/1~/50/230			W1/3~/50/400	
Current	Recommended fuses		A	16		25			16	

(1)Measured at LWC 47-55°C; Ta DB/WB 7°C/6°C. | (2)Measured at LWC 12-7°C; Ta 35°C. | 11/4" field piping | 11/2" field piping