

# Daikin Altherma 3 R ECH<sub>2</sub>O



System efficiency  
with solar\*:



EHS04P30D2 / ERGA04DAV3 /  
4xEKSH26P1 / EKSRDS2A- /  
Integrated Controller

Low temperature air-to-water heat pump  
maximising renewable energy  
with top comfort for hot water preparation

Heat pump Keymark certification

EHS(B)-D+ERGA-DV  
011-1W0262  
011-1W0264 -> 267  
EHSX(B)-D+ERGA-DV  
011-1W0262 -> 267



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

## How does it work?

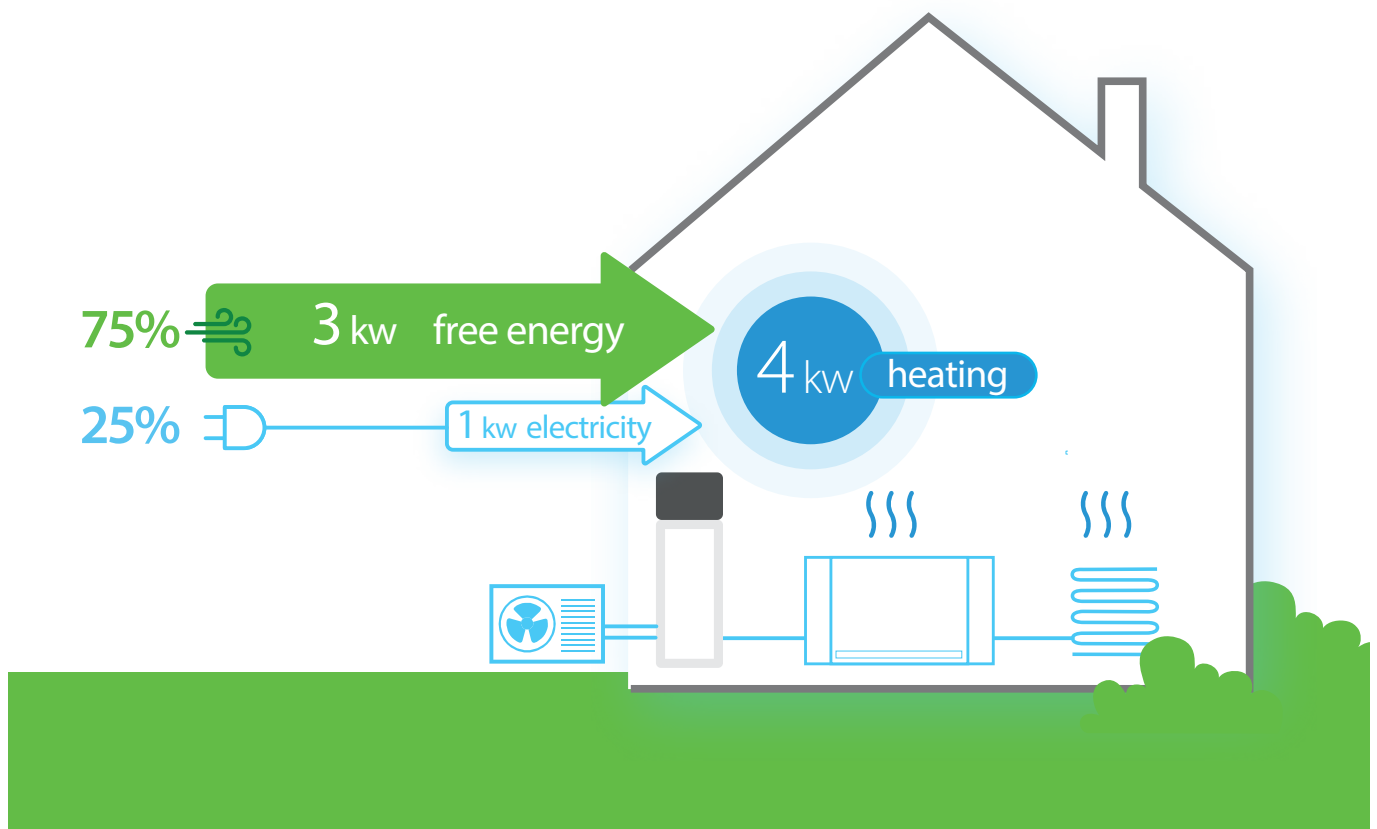
The outdoor unit extracts energy from the air to provide heating, cooling and hot water. They collect up to 75% of their energy in the air, while the rest is provided by electricity. The air-to-water heat pump relies on a compressor and a refrigerant to transfer the energy from the air to the water,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

## Low leaving water temperature

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.

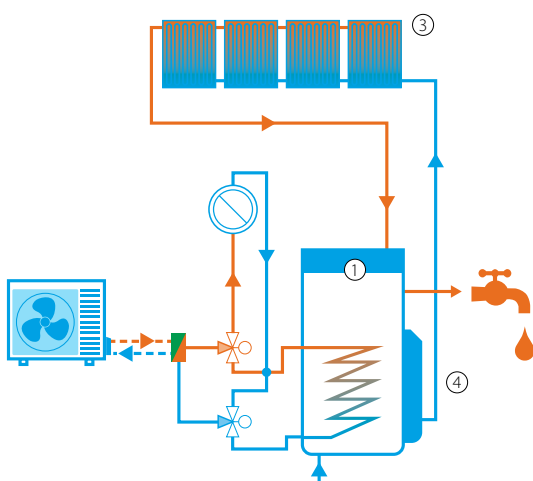
## Refrigerant split set-up

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. The connection ensures a limited heat loss when bringing in the heat.



# Take advantage of the sun

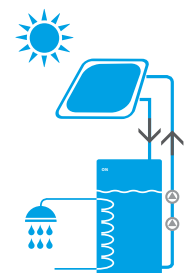
## Solar ready: optimum combination with solar energy



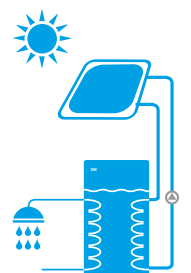
**System diagram:**  
HPSU compact with solar thermal

- 1 Use of solar energy for domestic hot water and central heating
- 2 External heat pump unit
- 3 Solar thermal collectors
- 4 Solar pump station

- > Adding a solar thermal system is the most effective way to achieve higher overall system efficiency
- > Tank design is specifically optimised for solar energy with perfect stratification
- > All connections are factory mounted for solar thermal combination
- > Two installation possibilities:
  - **Drain-back solar system:** only fills the solar collectors when sufficient heat is available. If there is not enough sunshine all the water drains back into the storage thermal store. No need for antifreeze as the collector are not filled with water
  - **Pressurised solar system:** Also easily connectable. The system is filled with heat transfer fluid with correct amount of antifreeze

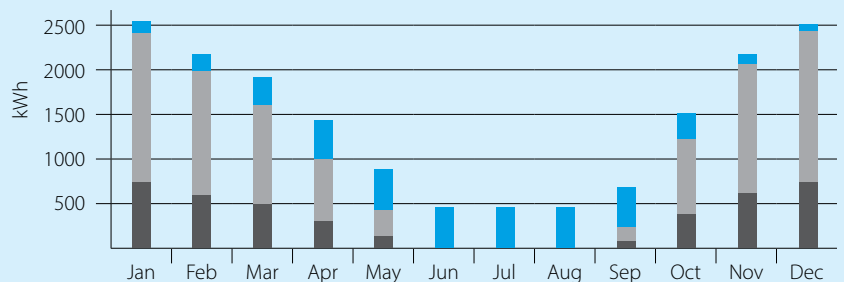


Drain-back solar system



Pressurised solar system

### Monthly energy consumption of an average detached house



## Fresh water principle:

- > Drinking water is held in the high performance stainless steel heat exchanger which is fundamentally different from large hot water tanks. It can deliver perfectly hygienic hot water at any time with no need for thermal legionella disinfection
- > Perfect hygiene as instantaneous hot water is available on demand, minimising the volume of stored domestic hot water
- > The thermal store has been designed to meet the latest thermal technology and water hygiene requirements





# Ultimate comfort

through maximal renewable energy use

The integrated ECH<sub>2</sub>O unit combines highly effective heat pump technology and thermal energy storage to provide space heating and domestic hot water.

## Daikin Altherma 3 R ECH<sub>2</sub>O

- › The ultimate comfort in heating, hot water and optional cooling
- › Ideal for new builds as well as modern buildings that require less heating energy
- › The Daikin Altherma 3 R ECH<sub>2</sub>O can operate in conjunction with low temperature radiators or an underfloor heating system
- › Underfloor heating requires lower surface temperatures and can also be used for cooling in summer

## Did you know?

During summer months, the system can produce 100% of the domestic hot water needs using solar energy alone.

## The Daikin-Eye

The intuitive Daikin eye shows you in real time the status of your system. Blue is perfect! Should the eye turn red, an error has occurred.



## Quick to configure

Log in and you'll be able to completely configure the unit in less than 10 steps. You can even check if the unit is ready for use by running test cycles!

## Easy operation

The user interface works really fast thanks to its icon based menus.

## Beautiful design

The interface was especially designed to be very intuitive. The high contrasted colour screen delivers stunning and practical visuals that really help the installer or service engineer.



## Innovative and high-quality tank

- › Lightweight plastic tank
- › No corrosion, anode, scale or lime deposits
- › Contains impact resistant polypropylene inner and outer walls filled with high-grade insulation foam to reduce heat losses to a minimum

## Combinable with other heat sources

- › The bivalent option allows heat from other sources such as oil, gas or pellet-fired boilers to be stored in the solar system, further lowering energy consumption

# Always in control



## Daikin Control

Set the desired heating temperature comfortably and easily. Time programs and operating modes can also be changed via the app. As an additional information, the Daikin Control app also provides the current weather with weather prediction for the next three days.

### Everything at a glance

- › Quick adjustment of the heating circuit temperature
- › Outdoor temperature and weather display
- › Management of any number of heating systems with up to 16 heating circuits
- › Free Daikin Cloud Services account



### Select operating mode

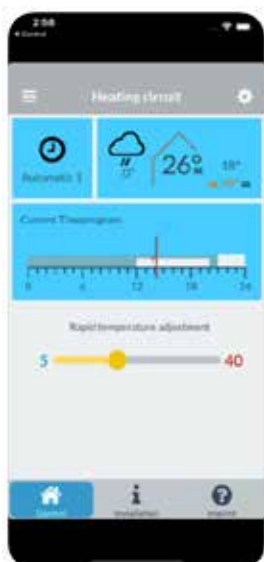
- › Selecting the operating mode (various time programs, party mode, lowering mode, etc.)
- › Homecoming mode (single charge of hot water storage, for example after vacation)

### Set time programs

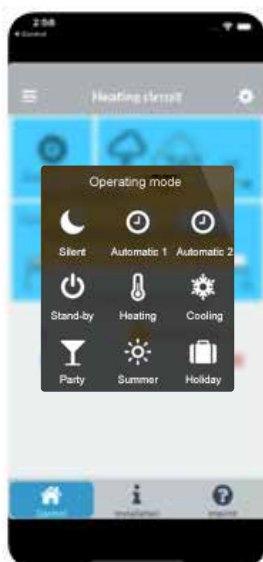
- › Easy creation and maintenance of time programs
- › Two time programs can be set for hot water and heating
- › Can be set per day

## App with intuitive lay-out

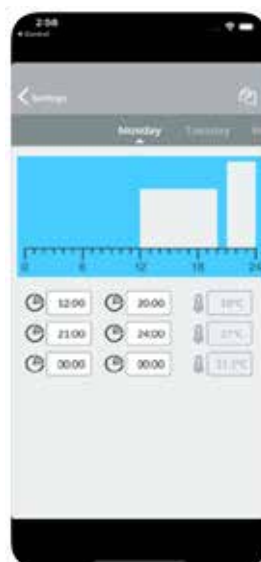
Everything at a glance



Select operating mode



Set time programs



Local weather forecast





# 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/>

## Specifications


Daikin Altherma 3 R ECH <sub>2</sub> O	Capacity	Nominal capacity (kW)		Space heating		Domestic hot water heating			Indoor unit dimensions	Sound power level indoor	Sound power level outdoor		Refrigerant (R-32)			
		Heating	Cooling	Average climate water outlet 55°C		General	Average climate				Heating	Heating	Cooling	GWP	Charge (kg)	Charge (TCO <sub>Eq</sub> )
				η <sub>s</sub> (Seasonal space heating efficiency)	Seasonal space heating eff. class		Declared load profile	η <sub>wh</sub> (water heating efficiency)								
EHS-D + ERGA-DV	04P30D2 + 04DV	4.30 (1) / 4.60 (2)	-	127	A++	L	115	A+	1891x595x615	39	58	61	675.0	1.5	1.01	
	08P30D2 + 06DV	6.00 (1) / 5.90 (2)	-			L					60	62				
	08P50D + 06DV	-	-			XL	106	A			1896x790x790	60				62
	08P30D2 + 08DV	7.50 (1) / 7.80 (2)	-	L		115	A+	1891x595x615			62	62				
	08P50D + 08DV		-	XL		106	A	1896x790x790			62	62				
EHSB-D + ERGA-DV	04P30D2 + 04DV	4.30 (1) / 4.60 (2)	-	127	A++	L	115	A+	1891x595x615	39	58	61	675.0	1.5	1.01	
	08P30D2 + 06DV	6.00 (1) / 5.90 (2)	-			L					60	62				
	08P50D + 06DV	-	-			XL	110	A			1896x790x790	60				62
	08P30D2 + 08DV	7.50 (1) / 7.80 (2)	-	L		115	A+	1891x595x615			62	62				
	08P50D + 08DV		-	XL		110	A	1896x790x790			62	62				
EHSX-D + ERGA-DV	04P30D2 + 04DV	4.30 (1) / 4.60 (2)	5.56 (1) / 4.37 (2)	127	A++	L	115	A+	1891x595x615	39	58	61	675.0	1.5	1.01	
	04P50D + 04DV	6.00 (1) / 5.90 (2)	5.96 (1) / 4.87 (2)			XL					106	A				1896x790x790
	08P30D2 + 06DV					6.00 (1) / 5.90 (2)	5.96 (1) / 4.87 (2)	L			115	A+				1891x595x615
	08P50D + 06DV	7.50 (1) / 7.80 (2)	6.25 (1) / 5.35 (2)	L		115	A+	1891x595x615			62	62				
	08P50D + 08DV			-		XL	106	A			1896x790x790	62				62
EHSXB-D + ERGA-DV	04P30D2 + 04DV	4.30 (1) / 4.60 (2)	5.56 (1) / 4.37 (2)	127	A++	L	115	A+	1891x595x615	39	58	61	675.0	1.5	1.01	
	04P50D + 04DV	6.00 (1) / 5.90 (2)	5.96 (1) / 4.87 (2)			XL					110	A				1896x790x790
	08P30D2 + 06DV					6.00 (1) / 5.90 (2)	5.96 (1) / 4.87 (2)	L			115	A+				1891x595x615
	08P50D + 06DV	7.50 (1) / 7.80 (2)	6.25 (1) / 5.35 (2)	L		115	A+	1891x595x615			62	62				
	08P30D2 + 08DV			-		XL	110	A			1896x790x790	62				62

(1) Cooling Ta 35°C - LWE 18°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 35°C (DT = 5°C)  
 (2) Cooling Ta 35°C - LWE 7°C (DT = 5°C); heating Ta DB/WB 7°C/6°C - LWC 45°C (DT = 5°C)

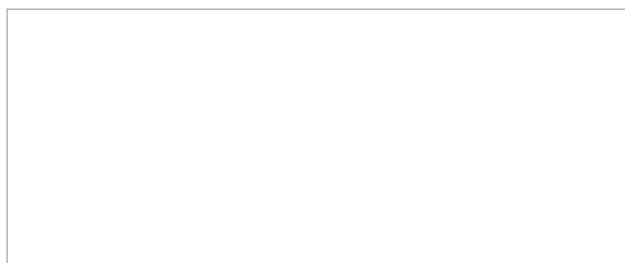
Solar collectors	Thermal performance   collector efficiency (η <sub>col</sub> ) ! %	Thermal performance   Zero loss collector efficiency η <sub>0</sub> ! %	Dimensions (HxWxD, mm)
 EKSVP	21	61	1006x85x2000
	26	61	1006x85x2000
	EKSH-P	26	61

Accessory	EKSRS4AB		EKSRS2A	
Mounting	On side of tank		On wall	
Dimensions	Unit	HeightxWidthxD	mm	mm
Weight	Unit	kg		
Operation range	Ambient temperature	Min.~Max.	°C	°C
Operating pressure	Max.	bar		
Stand still temperature	Max.	°C		
Control	Type	Digital temperature difference controller with plain text display		
Power supply	Power consumption	W		
Power supply intake	Phase/Frequency/Voltage	Hz/V	1~/50/230	1~/50/230

## Options

Daikin Altherma 3 R ECH <sub>2</sub> O	Type	Material name
	Back-up heater 1 kW + Switchbox	EKBUB1C + EKBUHSWB
	Back-up heater 3 kW + Switchbox	EKBUB3C + EKBUHSWB
	Back-up heater 9 kW + Switchbox	EKBUB9C + EKBUHSWB

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