

# Intelligent energy for the perfect climate all year round

The integrated solar unit combines highly efficient heat pump technology with an innovative thermal store in the smallest of spaces

## Daikin Altherma integrated solar unit

- > 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 integrated solar unit 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.

## Intelligent storage management:

- > The unit is 'Smart Grid Ready' which means that you can take advantage of low energy tariffs and store thermal energy, with no losses, until you need it for space heating or domestic hot water.
- > Continuous heating during defrost mode and use of stored heat for space heating
- > Electronic management of both heat pump and thermal store maximises energy efficiency as well as heating and domestic hot water convenience.
- > Achieves the highest standards of hygiene
- > Thanks to the use of renewable energy and solar integration, you can use free solar energy, especially during the summer



## Innovative, high quality tank

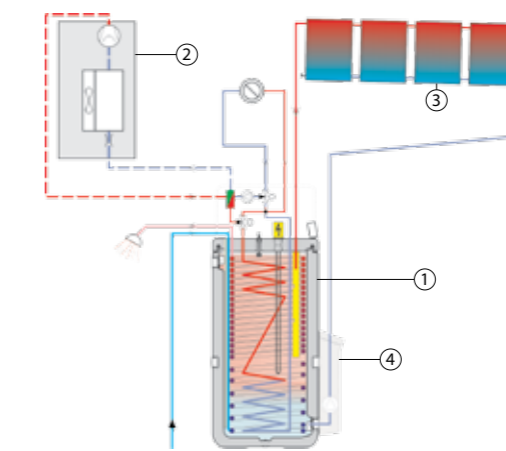
- > No corrosion, anode, scale or lime deposits
- > The storage tank water is used only for thermal storage, it is not exchanged or consumed
- > The tank has impact-resistant polypropylene inner and outer walls filled with highly insulating foam
- > The tank has excellent heat insulation values and minimum heat losses

## 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

## App control possible

- > Central heating, hot water and cooling operation via an app
- > The user interface manages the entire thermal store, the heart of the system
- > Comprehensive management guarantees highest system efficiency
- > Intuitive menu navigation

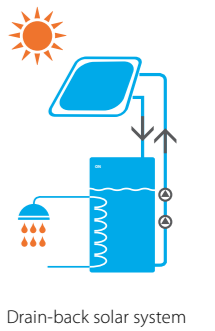


System diagram:  
HPSU compact with solar thermal

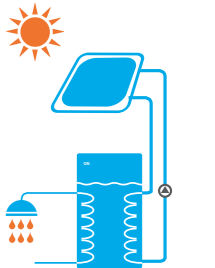
- 1 Use of solar energy for domestic hot water and central heating
- 2 External heat pump unit
- 3 Solar thermal collectors
- 4 Solar pump station

## Solar ready: optimum combination with solar energy

- > 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

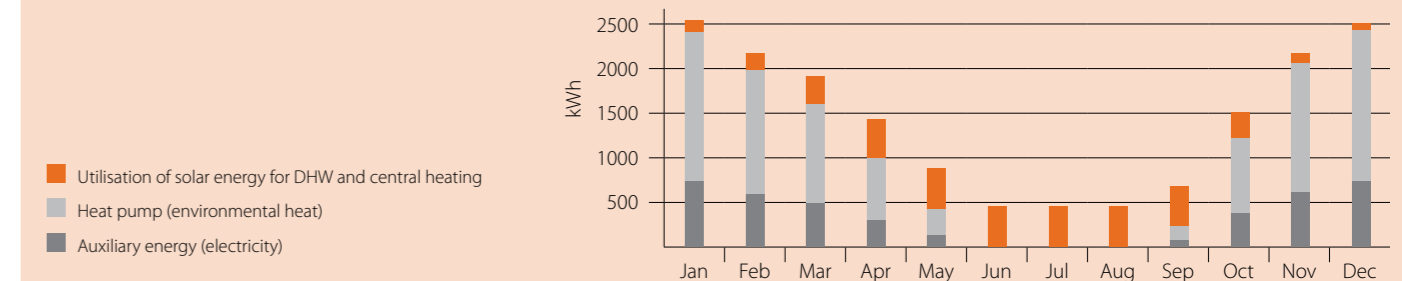


Drain-back solar system



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



## Specifications

Daikin Altherma low temperature split	Capacity	Nominal capacity (kW)		Space heating		Domestic hot water heating			Indoor unit dimensions	Sound power level indoor	Sound power level outdoor			Refrigerant (R-410A)		
		Heating	Cooling	Average climate water outlet 55°C		General	Average climate				HxWxD (mm)	Heating	Heating	Cooling	GWP	Charge (kg/TCO <sub>Eq</sub> )
				η <sub>s</sub> (Seasonal space heating efficiency)	Seasonal space heating eff. class		Declared load	η <sub>wh</sub> (water heating efficiency)								
Integrated solar unit	04P30B + 004CV3	4.26 / 3.47 / 4.53 / 3.98	-	130	A++	L	103	A	1,945x615x595	40	61	63	2,087.5	1.5/3.1		
	08P30B/P50B + 006CV3	5.14 / 4.60 / 6.06 / 5.78	-	125	A++	L/XL	98/102	A	1,945x615x595/1,945x790x790	40	61	63	2,087.5	1.6/3.3		
	08P30B/P50B + 008CV3	5.53 / 5.51 / 7.78 / 7.27	-	127	A++	L/XL	90/96	A	1,945x615x595/1,945x790x790	40	62	63	2,087.5	1.6/3.3		
	16P50B + 011CV3/W1	5.95 / 7.74 / 11.80 / 10.40	-	125	A++	XL	83	A	1,945x790x790	40	64	64	2,087.5	3.4/7.1		
	16P50B + 014CV3/W1	8.28 / 9.57 / 14.81 / 13.73	-	126	A++	XL	83	A	1,945x790x790	40	64	66	2,087.5	3.4/7.1		
EHSB-B + ERLQ-CW1/ERLQ-CV3	16P50B + 016CV3/W1	15.34 / 14.86 / 8.04 / 10.05	-	125	A++	XL	83	A	1,945x790x790	40	66	69	2,087.5	3.4/7.1		
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	16P50B + 016CV3/W1	15.34 / 14.86 / 8.04 / 10.05	16.8 / 13.1	127	A++	XL	83	A	1,890x790x790	40	66	69	2,087.5	3.4/7.1		
	04P30B + 004CV3	4.26 / 3.47 / 4.53 / 3.98	4.4 / 4.0	132	A++	L	103	A	1,890x615x595	40	61	63	2,087.5	1.5/3.1		
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Solar collectors		Thermal performance   collector efficiency (η <sub>col</sub> ) %	Thermal performance   Zero loss collector efficiency η <sub>0</sub> %	Dimensions
	EKSV-P	21	-	1300x2000
	EKSH-P	26	-	2000x1006
	EKSH-P	26	-	2000x1300

Accessory	EKSRP54A/EKSRD52A	4A	2A
Mounting		On side of tank	On wall
Dimensions	Unit	815x142x230	410x314x154
Weight	Unit	6	
Operation range	Ambient temperature	Min.-Max.	0-40
Operating pressure	Max.	bar	6
Stand still temperature	Max.	°C	120
Control	Type	Digital temperature difference controller with plain text display	
Power supply	Power consumption	W	2
Power supply intake	Phase/Frequency/Voltage	Hz/V	1~/50/230
		Indoor unit	

## Solar Keymark certification

Daikin's solar collectors have been awarded the Solar Keymark certification. Recognised across Europe, the Keymark for solar thermal products helps users select quality solar collectors. In most European countries this certification is mandatory for the products to be eligible for subsidies.



# Why choose Daikin?



Daikin may not be a household name. After all, we don't make cars, TVs, fridges or washing machines. But we are an industry leader in heat pumps, and we combine broad experience, technical innovation and responsive customer service to help you meet all your objectives. In fact, more than 275,000 Daikin Altherma heat pumps have been fitted across Europe since we launched them in 2006. 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.

## Comfort

You need optimum comfort at all times for your space heating and domestic hot water needs. Daikin Altherma integrated solar units deliver this as only Daikin can. They have provided 800,000 people with responsible heating, hot water and cooling in the decade since they were introduced.

## Control

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



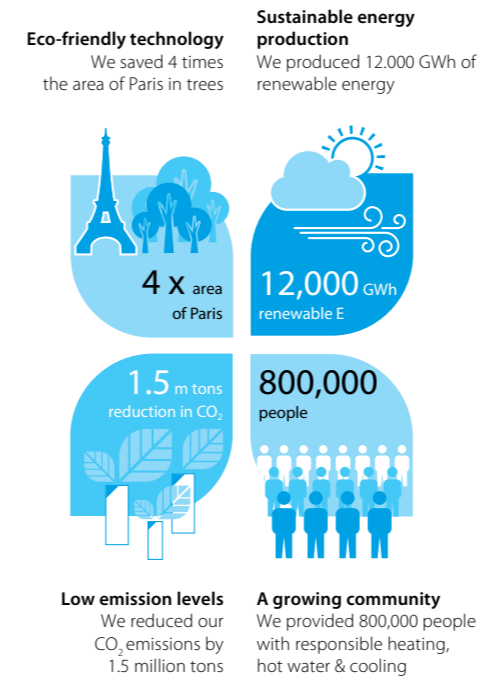
10 years Daikin Altherma  
A decade of comfort

## Energy Efficiency

Our technology will ensure that your Daikin Altherma integrated solar unit will give you years of operation at low running costs. Our eco-friendly technology has saved an area of trees 4 times the sizes of Paris and has produced 12,000 GWh of renewable energy. What's more, we have reduced our CO<sub>2</sub> emissions by 1.5 million ton(ne)?s).

## Reliability

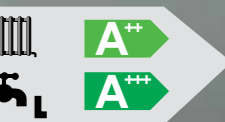
Reliability is a prerequisite for any new heating system. Daikin technology, designed and manufactured to the highest standards, has proved to be the ultimate in reliability. Based on years of development and experience, and manufactured to exact tolerances, our technology will give years of trouble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



Daikin Altherma  
integrated solar unit



System efficiency with solar\*:



EHSXB08P50BA / ERLQ006CAV3, RoCon control, 4 solar collectors V26P

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Air to water heat pump maximising renewable energy with top comfort for hot water preparation