

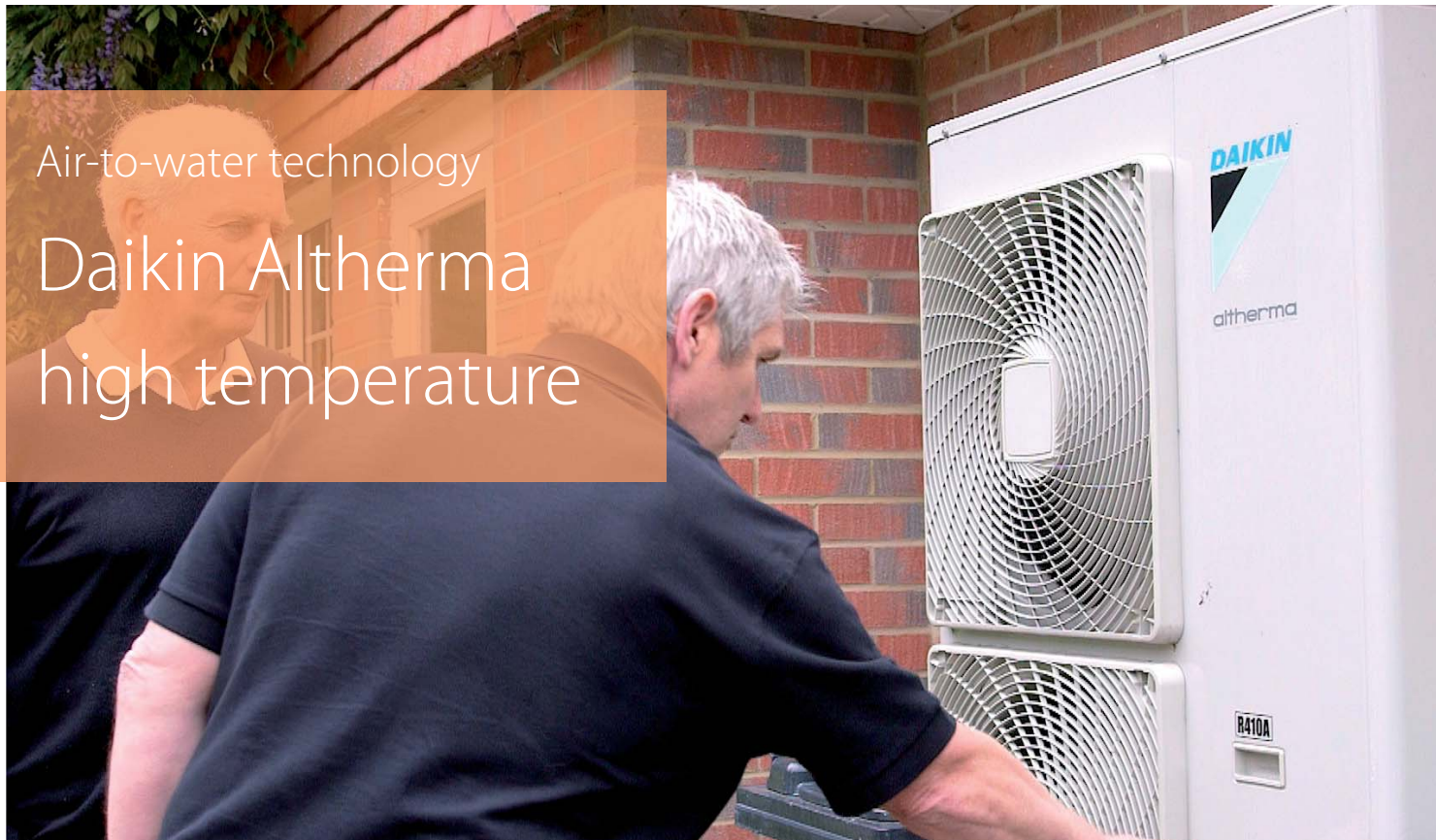
The efficient way to replace a boiler

Daikin Altherma High Temperature
heat pump for the installer



Air-to-water technology

Daikin Altherma high temperature



Why choose Daikin Altherma high temperature?

Your customer requires a new heating system that:

- › Must work with existing high temperature radiators
- › Must replace the existing boiler

Your solution - the Daikin Altherma high temperature:

- › Provides heating and domestic hot water with optional solar support
- › Is available in capacities from 11 to 16 kW depending on requirements
- › Works with existing high temperature radiators up to 80°C without additional back-up heater

Your customer gains:

- › Optimal comfort plus domestic hot water
- › Low operating costs due to high efficiencies

You gain:

- › Reduced installation time as a result of not having to replace radiators and piping
- › Simple commissioning

Result: win-win for you AND the customer



MCS HP0006

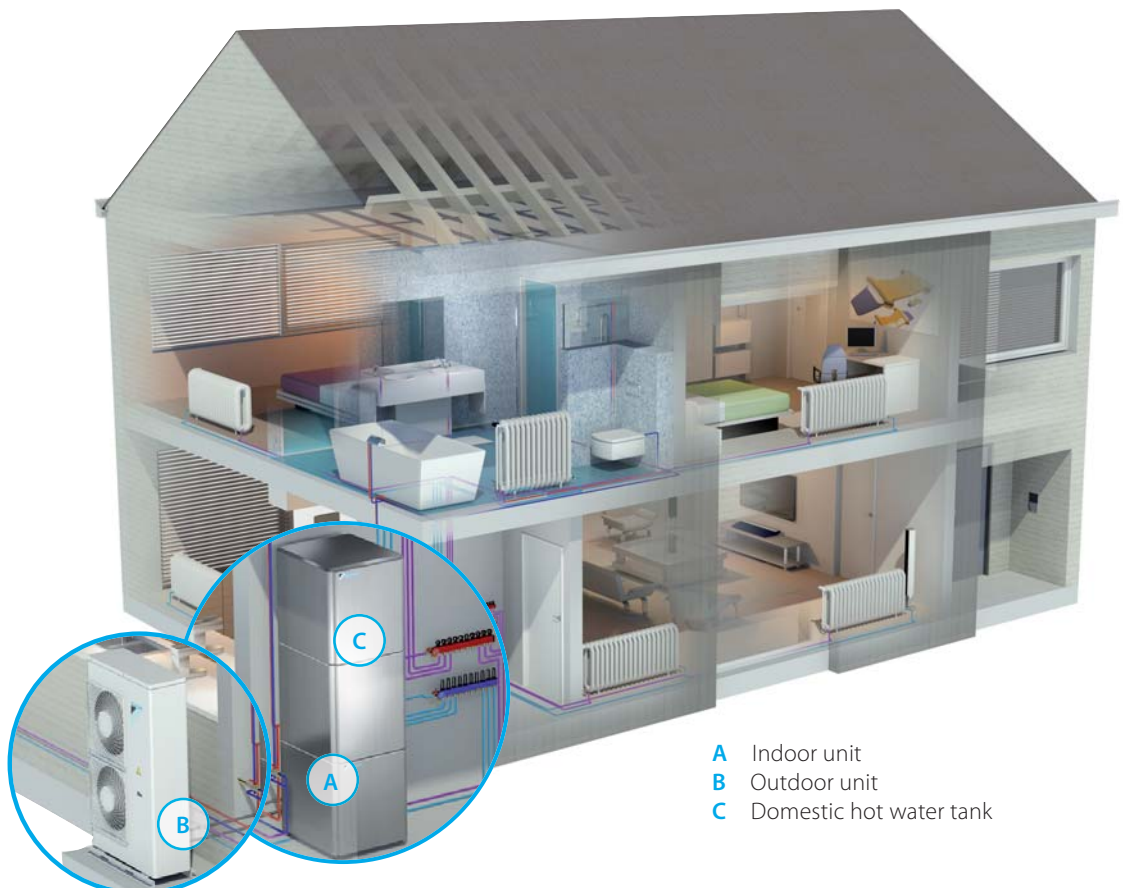
- › Heating: **A⁺**
- › Hot water: up to* **A⁺⁺⁺**

* When combined with solar thermal products

For replacement of oil boilers

Daikin Altherma high temperature system offers heating and domestic hot water for your home. This system can replace a traditional boiler and simply connect to the existing piping. Daikin Altherma high temperature is therefore the ideal solution for renovations. The split system consists of an outdoor unit and an indoor unit and can be complemented with solar connection.

- › Low running costs and optimum comfort at even the coldest outdoor temperatures, thanks to the unique cascade compressor approach
- › No need to change your existing radiators and piping as water temperatures can be increased up to 80°C for heating and domestic hot water use
- › Only limited installation space needed as the indoor unit and domestic hot water tank can be stacked on each other

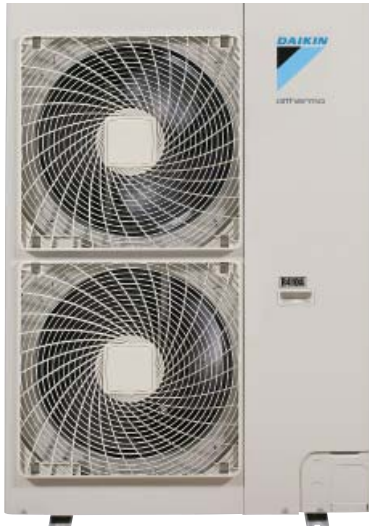


- A Indoor unit
- B Outdoor unit
- C Domestic hot water tank

✓ Outdoor unit and indoor unit

Outdoor unit

Daikin Altherma high temperature uses 100% thermodynamic energy to obtain water temperatures **up to 80°C** without using an additional heater.



Indoor unit

- › Available in heating only applications
- › No back-up heater required thanks to cascade technology

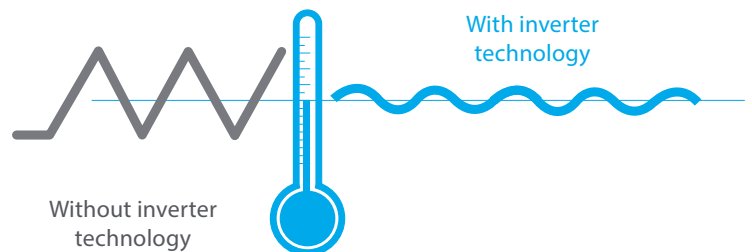


1. Heat exchanger R-134a ↔ H₂O
2. Heat exchanger R-410A ↔ R-134a
3. Pump (DC-inverter to maintain fixed ΔT)
4. Compressor R-134a
5. Air purge
6. Manometer
7. Expansion vessel (12l)

Inverter control means even more savings!

The inverter constantly adapts your system to actual heating demand. No need to fiddle with settings: the programmed temperature is optimally maintained regardless of outdoor and indoor factors such as the amount of sunlight, the number of people in the room, etc. This results in unparalleled comfort, prolonged system life since it's only in operation when needed, and 30% additional savings in energy costs compared to non-inverter heat pumps.

Heating operation:



Cascade technology



✓ Domestic hot water tank

Whether your customer wants domestic hot water only or the advantage of solar energy, Daikin offers you the domestic hot water tank that meets their requirements.

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.



EKHTSU: Domestic hot water tank

- › Available in 200 and 260 litres
- › Efficient temperature heat-up: from 15°C to 60°C in only 40 minutes*
- › Heat loss is reduced to a minimum, thanks to the high quality insulation
- › ErP rating B

* Test done with a 16kW outdoor unit and a 200L tank

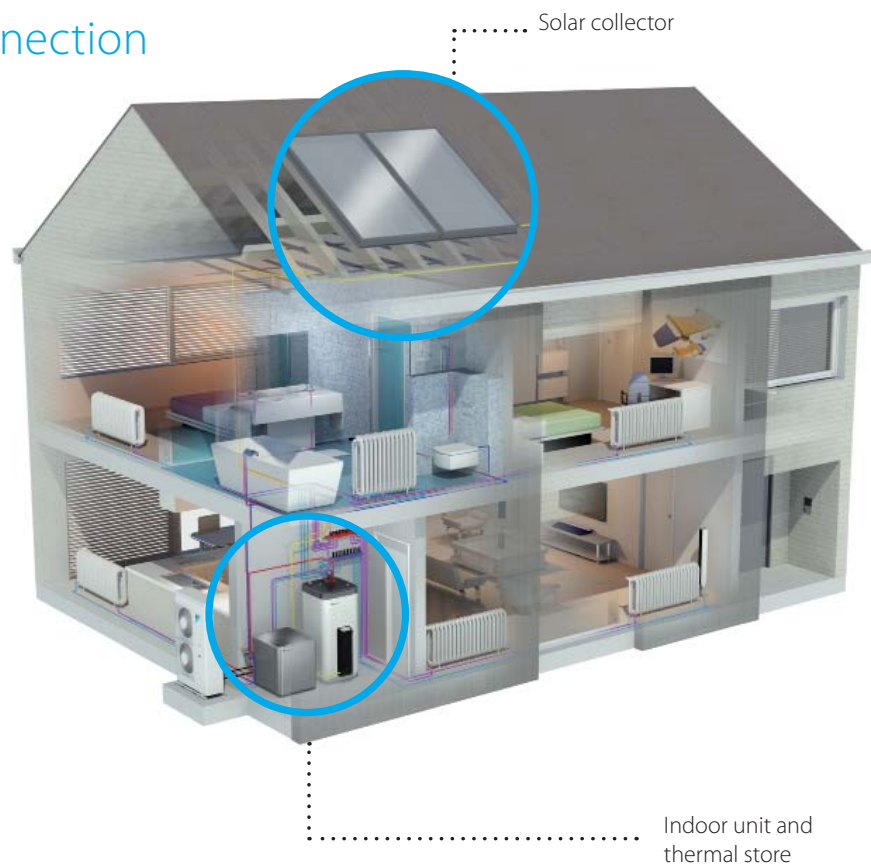
EKHWP: Thermal Store

The thermal store has two sections:
The upper, always hot, section – the active water zone – and the lower, colder section – the solar zone.
The active water is heated in the upper section of the storage tank. The high temperature of this zone ensures that sufficient hot water is always available.

Solar collectors work more efficiently when colder water flows through them. Therefore, the water that is fed directly to the solar collectors in solar operation is stored in the solar zone.

- › ErP rating B

✓ Solar connection



Daikin Altherma high temperature split



ER(S)Q-AV1/Y1



EKHBRD_ADV1/Y1

EKHBRD-AD + ERSQ-A

Indoor Unit (floor standing)			Single Phase			3 Phase		
			EKHBRD011ADV17	EKHBRD014ADV17	EKHBRD016ADV17	EKHBRD011ADY17	EKHBRD014ADY17	EKHBRD016ADY17
Description			11kW, 1-phase, 230V	14kW, 1-phase, 230V	16kW, 1-phase, 230V	11kW, 3-phase, 400V	14kW, 3-phase, 400V	16kW, 3-phase, 400V
To use with			ERSQ011AV1	ERSQ014AV1	ERSQ016AV1	ERSQ011AY1	ERSQ014AY1	ERSQ016AY1
Dimensions	Height x Width x Depth	mm	705 x 600 x 695			705 x 600 x 695		
Weight		kg	144.25			147.25		
Leaving water temperature range		°C	25~80 without electrical heater			25~80 without electrical heater		
Refrigerant charge (factory)	R134a	kg	3.2			3.2		
Power supply			1-phase / 230V / 50Hz			3-phase / 400V / 50Hz		
Recommended fuses		A	25			16		
Pump	No. of speeds		Inverter controlled			Inverter controlled		
Expansion vessel volume		litres	12			12		
Water connections (diameter)		inch	1 (female)			1 (female)		

Outdoor Unit			Single Phase			3 Phase		
			ERSQ011AV1	ERSQ014AV1	ERSQ016AV1	ERSQ011AY1	ERSQ014AY1	ERSQ016AY1
Description			11kW, 1-phase, 230V	14kW, 1-phase, 230V	16kW, 1-phase, 230V	11kW, 3-phase, 400V	14kW, 3-phase, 400V	16kW, 3-phase, 400V
Dimensions	Height x Width x Depth	mm	1345 x 900 x 320			1345 x 900 x 320		
Weight		kg	120			120		
Nominal capacity	Heating (a/b)	kW	11 / 11	14 / 14	16 / 16	11 / 11	14 / 14	16 / 16
Nominal input	Heating (a/b)	kW	3.03 / 3.57	4.07 / 4.66	4.83 / 5.57	3.03 / 3.57	4.07 / 4.66	4.83 / 5.57
COP	Heating (a/b)		3.63 / 3.08	3.44 / 3.00	3.31 / 2.88	3.63 / 3.08	3.44 / 3.00	3.31 / 2.88
Seasonal space heating efficiency*	Space heating (Average climate) 35°C	Class	B	B	B	B	B	B
		Efficiency	105	110	112	105	110	112
		SCOP	2.7	2.68	2.88	2.7	2.68	2.88
	Space heating (Average climate) 55°C	Class	A+	A+	A+	A+	A+	A+
		Efficiency	103	104	102	103	104	102
		SCOP	2.65	2.66	2.61	2.65	2.66	2.61
Operation range	Heating	°C	-20 ~ + 24			-20 ~ + 24		
	Hot water	°C	-20 ~ + 35			-20 ~ + 35		
Sound pressure / power level	Heating	dBA	52 / 68	53 / 69	55 / 71	52 / 68	53 / 69	55 / 71
Refrigerant charge	R-410A	kg	4.5			4.5		
Piping connections	Liquid	inches	3/8			3/8		
	Gas	inches	5/8			5/8		
Max piping length OU to IU		m	50			50		
Power supply			1-phase / 230V / 50Hz			3-phase / 400V / 50Hz		
Recommended fuses		A	25			16		

* When combined with matching indoor unit

Nominal capacity and nominal input tested at the following conditions: a. A7 W45 according to EN14511 b. A7 W65 according to Eurovent rating standard 6/C/003-2006

Domestic hot water tank

EKHTSU-AC



EKHTS260AC

EKHTS200AC

Domestic hot water cylinder			UK.EKHTSU200AC	UK.EKHTSU260AC
Description			200L unvented cylinder	260L unvented cylinder
Suitable for			Unvented systems (including EKHWHBTB)	
Energy efficiency class			B	B
Standing heat loss (ErP)	W		50	63
Storage volume	L		200	260
Max water temperature	°C		75	
Standing heat loss	kWh/24h		1.2	1.5
Dimensions (cylinder only)	Height x Width x Depth	mm	1335 x 600 x 695	1610 x 600 x 695
Dimensions (cylinder integrated on hydrobox)	Height x Width x Depth	mm	2010 x 600 x 695	2285 x 600 x 695
Empty weight	kg		70	78
Material inside cylinder			Stainless steel	
Piping connections (diameter)	Water inlet H/E	mm	25 (female quick coupling, supplied, integrated solution)	
	Water outlet H/E	mm	25 (female quick coupling, supplied, integrated solution)	
	Cold water in	inch	3/4 (female)	
	Hot water out	inch	3/4 (female)	

Options for Altherma high temperature

EKRTW/EKRTR



EKRTWA



EKRTR

Accessory				EKRTR1	EKRTWA
Dimensions	Unit	HeightxWidthxDepth	mm	87x125x34	
	Receiver	HeightxWidthxDepth	mm	170x50x28	-
Weight	Unit		g	-	215
	Thermostat		g	210	-
	Receiver		g	125	-
Ambient temperature	Storage	Min./Max.	°C	-20/60	
	Operation	Min./Max.	°C	0/50	
Temperature setting range	Heating	Min./Max.	°C	4/37	
	Cooling	Min./Max.	°C	4/37	
Clock				Yes	
Regulation function				Proportional band	
Power supply	Voltage		V	-	Battery powered 3* AA-LR6 (alkaline)
	Thermostat	Voltage	V	Battery powered 3x AA-LRG (alkaline)	-
	Receiver	Voltage	V	230	-
	Frequency		Hz	50	-
	Phase			1~	-
Connection	Type			-	Wired
	Thermostat			Wireless	-
	Receiver			Wired	-
Maximum distance to receiver	Indoor		m	approx. 30m	-
	Outdoor		m	approx. 100m	-
Control systems	Class of temperature control			IV	
	Contribution to seasonal space heating efficiency			2.0	



Trust Daikin

Daikin makes world-class heat pumps. In fact, more than 400,000 Daikin Altherma heat pumps have been fitted across Europe since its initial launch 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, for your customers, leaving you free to focus growing your business with a leading innovator in heating and renewable technologies.

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daikin.co.uk

Heating installer line: 0845 641 9070

Dedicated homeowner support line: 0845 641 9271

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