DAIKIN

altherma

The natural fit, all-in-one

Daikin Altherma monobloc heat pump for the installer

Air-to-water technology

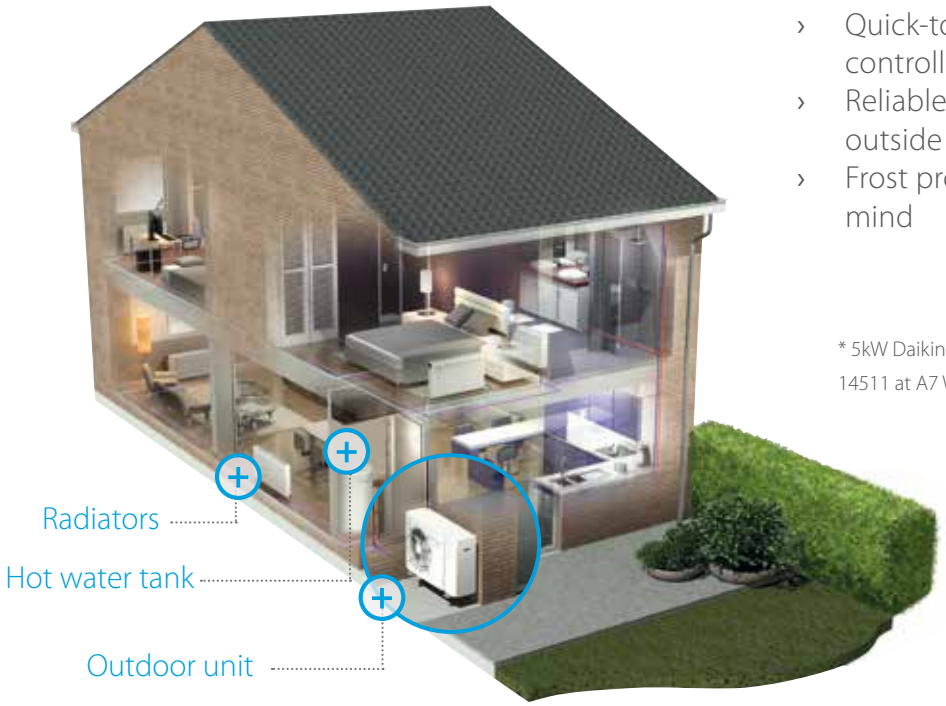
Daikin Altherma monobloc

Why choose Daikin Altherma monobloc?

APPROVED PRODUCT
MCS
BRE GLOBAL LISTED
MCS HP0006

A monobloc is the answer when the requirement is for a simple system relying on a single outside unit and no indoor unit.

- Everything combined in one outdoor unit
- Quick and easy installation as only water pipes run indoors from the outdoor unit
- Limited installation space required as only outdoor space is required
- Freeze protection of hydraulic parts
- Quiet, compact outdoor unit
- Easy installation out of the box, with no refrigerant handling
- COP up to 5* with typical annual efficiencies of up to 300%
- Quick-to-commission, user friendly controller
- Reliable operation even when -25°C outside
- Frost protection features for total peace of mind



* 5kW Daikin Altherma LT Monobloc tested in accordance to EN 14511 at A7 W35

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

* When combined with solar thermal products

Outdoor unit only

1. All hydraulic components are combined in the outdoor unit

Available in 5kW and 7kW models, the new Daikin Altherma monobloc requires only a controller indoors, when central heating is needed. When both central heating and domestic hot water are needed, a wiring centre is added. The outdoor unit can be installed almost anywhere, under a window sill, or in the smallest of gardens. So it's a natural fit for new build and renovation projects alike.

2. The space-saving design is ideal for homes where space is limited

› The outdoor unit includes all hydraulic components
› Smallest installed volume in the market:
  735 mm (height) x 1085 mm (width)
  x 360 mm (depth) – only 80 kg
› The separate installation of controller and wiring centre allows for a flexible installation in the house

3. Everything you need from one source

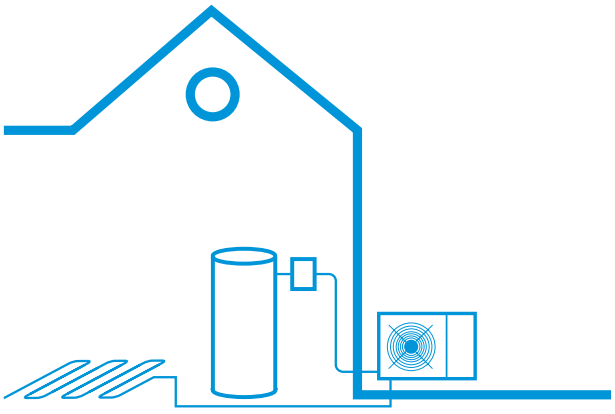
The Daikin Altherma monobloc works efficiently with Daikin's range of underfloor heating, fan convectors or third party radiators and can be combined with solar thermal systems. So you can count on Daikin for your entire project.

Wiring centre

5kW and 7kW casing

Freeze protection of hydraulic parts

In order to protect the water pipes from freezing up during winter, insulation is provided for all hydraulic components and special software has been applied to activate the pump and back-up heater if necessary. This prevents the water temperature from dropping below freezing point and obviates the need for the addition of glycol to the water pipes.



H_2O piping, no refrigerant piping

14kW and 16kW casing

Domestic hot water tank and solar support

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.

EKHWSU
Domestic hot water tank

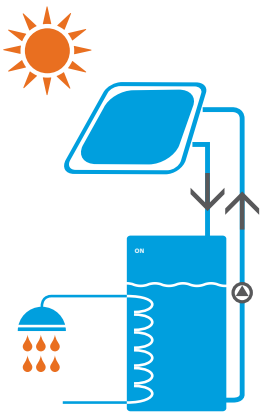
› Available in 150, 200 and 300l
› Stainless steel (EKHWSU)
› ErP rating C

EKHWP
Domestic hot water tank solar support

› Available in 2 capacities: 300 and 500 litres:
  - Can be combined with drain-back or presurised solar system
  - Optimised connections
› Easier installation of each system circuit:
  - Improved design: attractive colour and new form
  - Optimised for easy transport and installation
  - Better insulation means reduced energy costs
  - Higher flow-rate thanks to optimised connection technology
  - Clear connections mean easier installation
› ErP rating B

Pressureless (drain-back) solar system

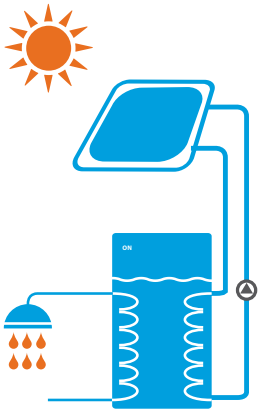
› The solar collectors are only filled with water
› Collectors are empty when there is no solar gain or when the temperature in the tank has reached the requested set point
› When there is sufficient solar gain, the pump switches on and fills the collectors with storage tank water



Drain-back
solar system

Pressurised solar system

› System is filled with heat transfer fluid with the correct amount of antifreeze to avoid freezing in winter
› System is pressurised and sealed.

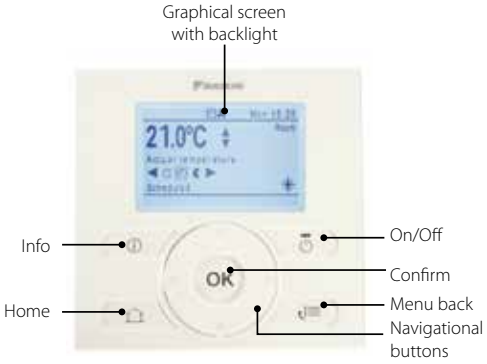


Pressurised
solar system

Easy control

System controller for Daikin Altherma monobloc 5-7 kW

In case something goes wrong, full-text error messages will guide the end-user to take appropriate action to try and resolve the problem. If the problem persists and a site intervention is necessary, the service engineer will be able to review the last 20 error occurrences. Detailed information on the operational conditions of the unit, such as the running hours of the different elements, operating temperatures or number of starts, can easily be read out from the extended end-user's menu.



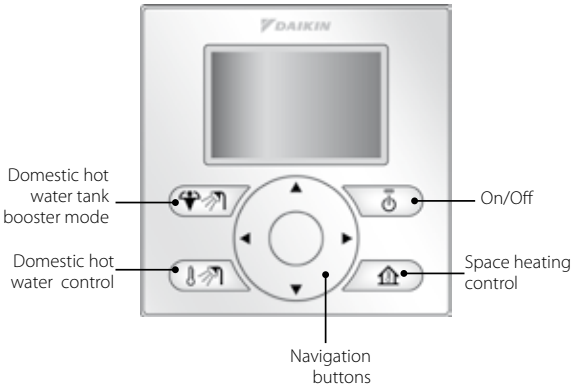
System controller for Daikin Altherma monobloc 14-16 kW

The leaving water temperature is dependant on the outside ambient temperature thanks to the floating setpoint functionality. At low outside ambient temperatures, the leaving water temperature will increase to satisfy the increasing heating requirement of the building and vice versa.

Optional simplified room thermostat

Ideal for social landlords, the simplified room thermostat allows for only basic operation of the heat pump system, preventing tenants from adjusting field settings and programs. The functionality is limited to only allow the tenant to:

- View the current room temperature
- Adjust to the desired room temperature
- View the stored domestic hot water tank temperature
- Perform a one time domestic hot water boost
- Turn on and off the central heating and domestic hot water



Netatmo

Netatmo called upon world-famous French designer Philippe Starck to turn the thermostat into a minimalist, designer object. But that's not all. The true innovation lies in the fact your heating is now connected to the Internet. Your thermostat will schedule your heating to suit your life. What's more, the Netatmo thermostat is equipped with software that takes into consideration your home's specific characteristics and even the outside temperature. Therefore you always have the ideal temperature.

Daikin Altherma monobloc

EDLQ

EDLQ-CV3 - (Outdoor Unit)

Single Unit					EDLQ 05CV3	EDLQ 07CV3
Heating capacity	Nom.			kW	4.40 / 4.03	7.00 / 6.90
	Heating	Nom.		kW	0.88 / 1.13	1.55 / 2.02
COP					5.00 / 3.58	4.52 / 3.42
Dimensions	Unit	Height		mm	735	
		Width		mm	1,085	
		Depth		mm	350	
Weight	Unit			kg	76	80
Operation range	Heating	Water side	Min.~Max.	°C	15~55	
	Domestic hot water	Ambient	Min.~Max.	°CDB	-25~35	
		Water side	Min.~Max.	°C	25~80	
Refrigerant	Type				R-410A	
	Charge			kg	1.30	1.45
				TCO_2eq	2.7	3.0
	Control				Expansion valve (electronic type)	
	GWP				2,087.5	
Sound power level	Heating	Nom.		dBA	61	62
Sound pressure level	Heating	Nom.		dBA	48	49
Space heating	Average climate water outlet 55°C	General	η_s (Seasonal space heating eff.)	%	125	126
			SCOP		3.20	3.22
			Seasonal space heating eff. class		A++	
	Average climate water outlet 35°C	General	η_s (Seasonal space heating eff.)	%	172	163
			SCOP		4.39	4.14
			Seasonal space heating eff. class		A++	

EKCB-CV3/EK2CB-CV3

Wiring centre					EKCB 07CV3
To use with					EDLQ05~07CV3
Dimensions	Unit	Height		mm	360
		Width		mm	340
		Depth		mm	97
Weight	Unit			kg	4
Operation range	Indoor installation	Ambient	Min.	°CDB	5
			Max.	°CDB	35

EKMBUHC3V3/EKMBUHC9W1

Back up heater kit (optional)				EKMBUHC3V3	EKMBUHC9W1
Nominal rating				3	3-6
Dimensions	Unit	Height	mm	560	
		Width	mm	250	
		Depth	mm	210	
Power supply				1-phase / 230V / 50Hz	1-phase / 230V / 50Hz
Recommended fuses	3 kW 1ph 230V		Amps	16	
	6 kW 1ph 230V		Amps	-	32
Water connections	Diameter		inch	1" (male)	

Options for Daikin Altherma monobloc

EKRUCBL/EKRUCBS

Indoor unit			EKRUCBL2	EKRUCBS
Control systems	Class of temperature control		VI	
	Contribution to seasonal space heating efficiency	%	4.0	

Daikin Altherma monobloc

EBHQ-BB

EBHQ-BB6V3/W1

Single Unit					EBHQ 014BB6V3		EBHQ 016BB6V3		EBHQ 014BB6W1		EBHQ 016BB6W1	
Heating capacity	Nom.			kW	14.00 (1) / 13.10 (2)		16.00 (1) / 15.06 (2)		14.00 (1) / 13.10 (2)		16.00 (1) / 15.06 (2)	
Cooling capacity	Nom.			kW	16.0 (1) / 12.5 (2)		16.7 (1) / 13.1 (2)		16.0 (1) / 12.5 (2)		16.7 (1) / 13.1 (2)	
Power input	Cooling	Nom.		kW	5.75 (1) / 5.39 (2)		6.36 (1) / 5.93 (2)		5.40 (1) / 5.06 (2)		6.15 (1) / 5.75 (2)	
	Heating	Nom.		kW	3.29 (1) / 4.01 (2)		3.88 (1) / 4.71 (2)		3.30 (1) / 4.07 (2)		3.81 (1) / 4.66 (2)	
COP					4.25 (1) / 3.27 (2)		4.12 (1) / 3.20 (2)		4.24 (1) / 3.22 (2)		4.20 (1) / 3.23 (2)	
EER					2.78 (1) / 2.32 (2)		2.63 (1) / 2.21 (2)		2.96 (1) / 2.47 (2)		2.72 (1) / 2.28 (2)	
Dimensions	Unit	Height x Width x Depth		mm	1,418 x 1,435 x 382							
Weight	Unit			kg	180							
Hydraulic component	Back-up heater	Type			6V3				6W			
	current	Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/230				3~/50/400			
Operation range	Heating	Ambient	Min.~Max.	°CWB	-20~35	-15~35	-20~35	-15~35	-25~35	-15~35	-25~35	-15~35
		Water side	Min.~Max.	°C	15 (3) ~ 55 (3)							
	Cooling	Ambient	Min.~Max.	°CDB	10 ~ 46							
		Water side	Min.~Max.	°C	5 ~ 22							
	Domestic hot water	Ambient	Min.~Max.	°CDB	-20~43	-15~43	-20~43	-15~43	-25~43	-15~43	-25~43	-15~43
		Water side	Min.~Max.	°C	25 ~ 80							
Refrigerant	Type				R-410A							
	Charge			kg	3.0							
				TCO_2eq	6.2							
	Control				Expansion valve (electric type)							
	GWP				2,087.5							
Sound power level	Heating	Nom.		dBA	65		66		65		66	
	Cooling	Nom.		dBA	66		69		66		69	
Sound pressure level	Heating	Nom.		dBA			52		51		53	
	Cooling	Nom.		dBA	52		54		52		54	
Compressor component	Main power supply	Name			V3				W1			
		Phase			1~				3N~			
		Frequency		Hz	50							
		Voltage		V	230				400			
Space heating	Average climate water outlet 55°C	General	ηs (Seasonal space heating eff.)	%	105		101		110		111	
			SCOP		2.71		2.60		2.82		2.85	
			Seasonal space heating eff. class		A+							
	Average climate water outlet 35°C	General	ηs (Seasonal space heating eff.)	%	130		123		130		127	
			SCOP		3.32		3.15		3.31		3.25	
			Seasonal space heating eff. class		A+							

(1) Condition 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) Condition 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) (3) 15°C-25°C: BUH only, no heat pump operation = during commissioning

ED(L/H)Q-BB

EDHQ BB6V3/W1

Single Unit				EDLQ/EDHQ	014BB6V3		016BB6V3		014BB6W1		016BB6W1	
Heating capacity	Nom.			kW	14.00 (1) / 13.10 (2)		16.00 (1) / 15.06 (2)		14.00 (1) / 13.10 (2)		16.00 (1) / 15.06 (2)	
Power input	Heating	Nom.		kW	3.29 (1) / 4.01 (2)		3.88 (1) / 4.71 (2)		3.30 (1) / 4.07 (2)		3.81 (1) / 4.66 (2)	
COP					4.25 (1) / 3.27 (2)		4.12 (1) / 3.20 (2)		4.24 (1) / 3.22 (2)		4.20 (1) / 3.23 (2)	
Dimensions	Unit	Height x Width x Depth		mm	1,418 x 1,435 x 382							
Weight	Unit			kg	180							
Hydraulic component	Back-up heater	Type			6V3				6W1			
	current	Power supply	Phase/Frequency/Voltage	Hz/V	1~/50/230				3~/50/400			
Operation range	Heating	Ambient	Min.~Max.	°CWB	-20~35	-15~35	-20~35	-15~35	-25~35	-15~35	-25~35	-15~35
		Water side	Min.~Max.	°C	15 (3)~55 (3)							
	Domestic hot water	Ambient	Min.~Max.	°CDB	-20~43	-15~43	-20~43	-15~43	-25~43	-15~43	-25~43	-15~43
		Water side	Min.~Max.	°C	25~80							
Refrigerant	Type				R-410A							
	Charge			kg	3.0							
				TCO_2eq	6.2							
	Control				Expansion valve (electronic type)							
	GWP				2,088							
Sound power level	Heating	Nom.		dBA	65		66		65		66	
Sound pressure level	Heating	Nom.		dBA			52		51		53	
Compressor component	Main power supply	Name			V3				W1			
		Phase			1~				3N~			
		Frequency		Hz	50							
		Voltage		V	230				400			
Space heating	Average climate water outlet 55°C	General	ηs (Seasonal space heating eff.)	%	105		101		110		111	
			SCOP		2.71		2.60		2.82		2.85	
			Seasonal space heating eff. class		A+							
	Average climate water outlet 35°C	General	ηs (Seasonal space heating eff.)	%	130		123		130		127	
			SCOP		3.32		3.15		3.31		3.25	
			Seasonal space heating eff. class		A+							

(1) Condition 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) Condition 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) (3) 15°C-25°C: BUH only, no heat pump operation = during commissioning

Trust Daikin

Daikin makes world-class heat pumps. In fact, more than 250,000 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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