DAIKIN

altherma

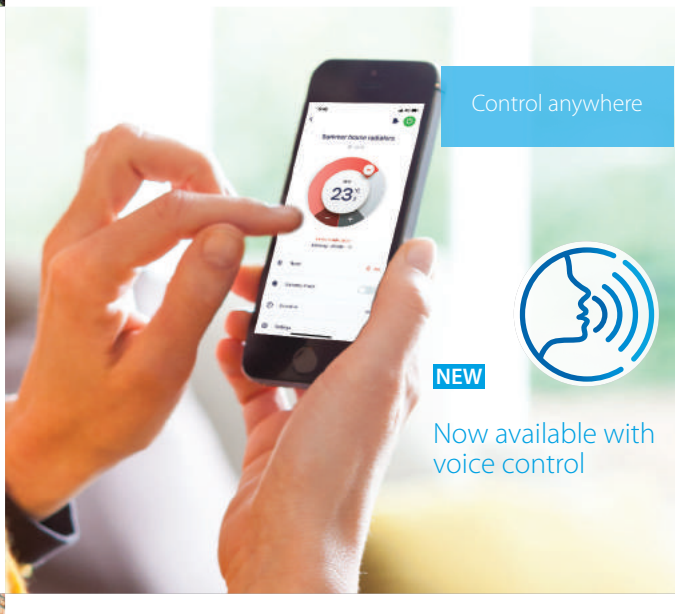
Daikin Altherma 3 Monobloc



Powerful yet compact




Discreet styling


Control anywhere
NEW
Now available with voice control


Compact dimensions

Table of contents

Daikin Altherma 3 Monobloc 4
New design 4
EDLA / EBLA 6

Hot water tanks 9

Controls 10
Daikin Online controller 10
Madoka for Heating 11
Modern user interface 12

Stand by me 13





Daikin Altherma 3 Monobloc

Powerful yet compact

The Daikin Altherma 3 Monobloc is the first all-in-one Monobloc unit to be added to the third generation Daikin Altherma range, featuring the latest controls and low environmental impact R32 technology.

This new addition to the Daikin Altherma 3 range offers higher capacity monobloc units, in 9, 11, 14 and 16 class, all delivered in a market leading compact single fan casing, making it ideal for new buildings and large renovations.

High performance in low ambient conditions

Operation range is down to -25°C, ensuring the system delivers in the harshest of conditions. The unit also has high performance of 60°C leaving water temperature down to -7°C ambient.

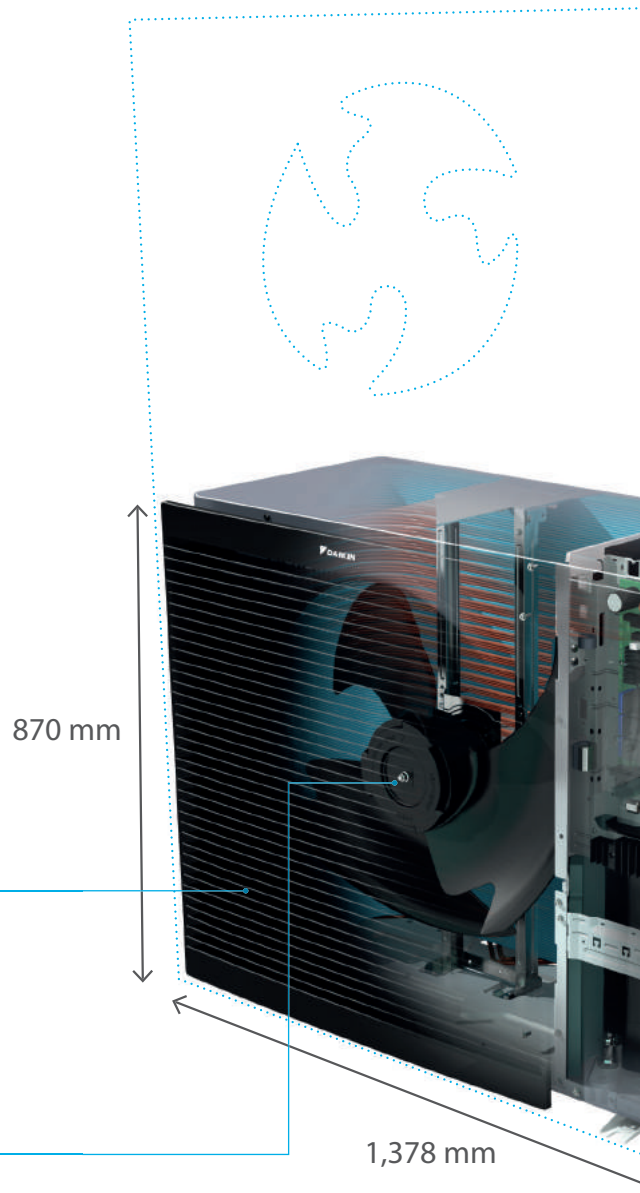
The capacities vary depending on the design conditions, ambient temperature and leaving water temperature selected so please check the capacity curves in the data books available on my.daikin.co.uk, or use our Heating Solutions Navigator design tool on Stand By Me to complete your selection.

At typical design conditions of -1.8°C and 45°C leaving water temperature, the 9 and 11 class units hold or even exceed their capacity. However for the 14 and 16 class units, you will need to check the design conditions more carefully depending on the requirements of your customer.

This ability to reliably deliver higher capacities - and even perform beyond the headline capacity in some cases - really makes the Daikin Altherma 3 Monobloc a stand-out solution for all kinds of properties where space saving is also a priority.

A redesigned outdoor unit

The new Daikin Altherma 3 Monobloc offers a modern, single fan design, with compact dimensions and a sleek black grill, providing an unobtrusive and versatile outdoor unit suitable for a wide range of house types.



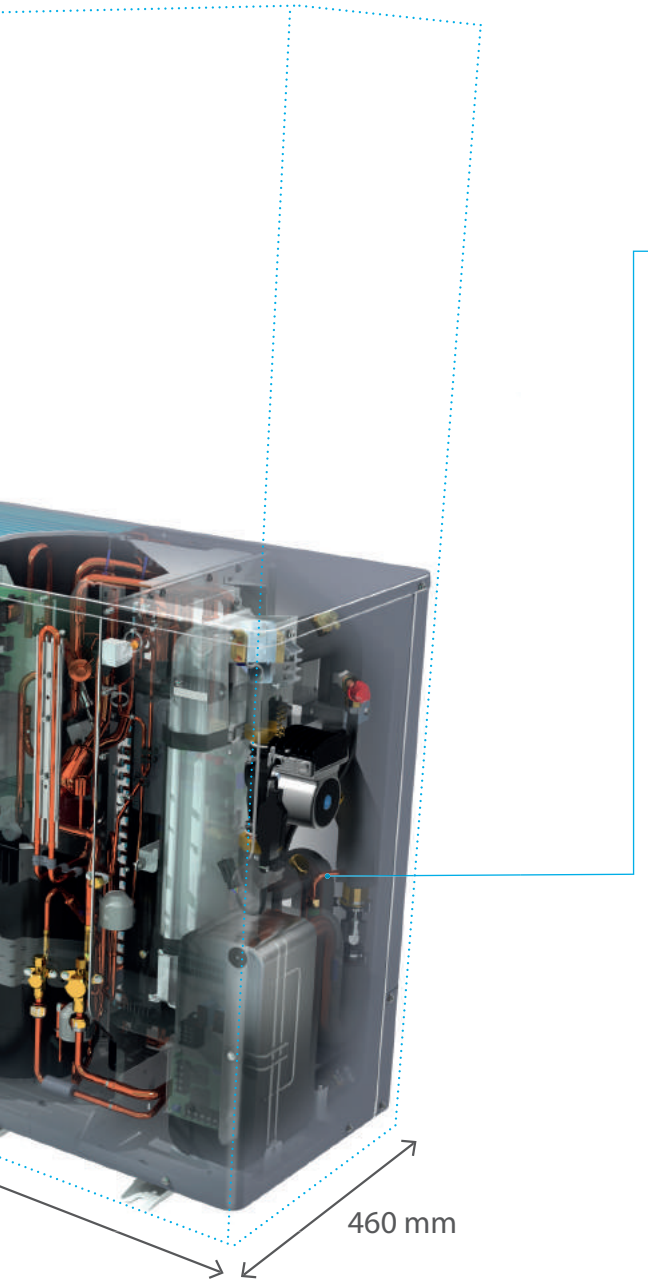
High performance single fan

Daikin have optimised the design of the Monobloc unit, meaning that the double fan arrangement has been replaced with a larger single fan. The new 'gull wing' fan design reduces drag to improve system air flow and create a quieter outdoor unit, with a low sound level of just 62 dBA.

All-in-one Monobloc unit

The Daikin Altherma 3 Monobloc is an outdoor only unit including an enclosed refrigerant circuit. It is an all-in-one concept with all key hydraulics included such as the pump, flow sensor, and water pressure sensor in the outdoor unit. The system requires no indoor unit, only a wiring centre and a stand-alone domestic hot water tank.

Because there are only water connections to the indoor heating system, you don't need F-Gas qualification to install it. The Daikin Altherma 3 Monobloc is designed for a fast and easy installation, making it ideal for heating engineers just starting out into the world of renewables, as well as experienced heat pump installers looking to increase the range of space-efficient solutions they can offer.



Reduced environmental impact

Daikin Altherma 3 Monobloc uses R32 refrigerant, which is more energy efficient and has a lower global warming potential (GWP) than refrigerants such as R410A. Requiring 30% less refrigerant charge than an R410A equivalent unit, the Daikin Altherma 3 Monobloc achieves 75% lower CO_2 emissions than previous Monobloc units. This means that you can reduce your customers' environmental impact even further by installing a Daikin Altherma 3 Monobloc heat pump with R32.

R-32 BLUEVOLUTION

Ideal where space is at a premium

The Daikin Altherma 3 Monobloc is the ideal solution for homes where indoor space is at a premium, as no additional indoor unit is required. With a reduced size casing of only 870mm height, the outdoor unit can fit right under a window to save outdoor space. With a total volume of less than 0.6m^3, the unit meets permitted development rights requirements, leading to a quicker project completion time as there's no delay for planning approvals.



Additional features

- Available in heating only, reversible heating and cooling, 1-phase and 3-phase models
- Integrated electric back-up heater for total reliability
- WLAN card inserts into the user Interface and allows connection to the wireless local area network for access to settings via smart phone
- Smart grid ready with the ability to connect to a PV system

R-32 BLUEVOLUTION

EDLA

Daikin Altherma 3 Monobloc



Outdoor Unit			Single Phase				Three Phase			
			EDLA09D3V3	EDLA11D3V3	EDLA14D3V3	EDLA16D3V3	EDLA09D3W1	EDLA11D3W1	EDLA14D3W1	EDLA16D3W1
Description			**Class 9**	**Class 11**	**Class 14**	**Class 16**	**Class 9**	**Class 11**	**Class 14**	**Class 16**
Function			Heating Only	Heating Only	Heating Only	Heating Only	Heating Only	Heating Only	Heating Only	Heating Only
Dimensions [1]	Height x Width x Depth	mm	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460
Weight		kg	149	149	149	149	149	149	149	149
Nominal capacity	Heating (a/b)	kW	9.37/9.00	10.6/9.82	12.0/12.5	16.0/16.0	9.37/9.00	10.6/9.82	12.0/12.5	16.0/16.0
	Cooling	kW	-	-	-	-	-	-	-	-
Nominal input	Heating (a/b)	kW	1.91/2.43	2.18/2.68	2.46/3.42	3.53/4.56	1.91/2.43	2.18/2.68	2.46/3.42	3.53/4.56
COP	Heating (a/b)		4.91/3.72	4.83/3.66	4.87/3.64	4.53/3.51	4.91/3.72	4.83/3.66	4.87/3.64	5.43/3.51
Seasonal space heating efficiency	Space heating (Average climate) 35°C	Class	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
		Efficiency	186	182	182	182	186	182	182	182
		SCOP	4.72	4.64	4.62	4.62	4.72	4.64	4.62	4.62
	Space heating (Average climate) 55°C	Class	A++	A++	A++	A++	A++	A++	A++	A++
		Efficiency	133	130	132	130	133	130	132	130
		SCOP	3.39	3.32	3.37	3.33	3.39	3.32	3.37	3.33
EER	Cooling		-	-	-	-	-	-	-	-
Operation range	Heating	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
	Cooling	°C	-	-	-	-	-	-	-	-
	Hot water	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
Sound power level	Heating	dBA	62	62	62	62	62	62	62	62
Refrigerant charge (factory)	R32	kg	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Power supply			1-phase 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	3-Phase / 400V / 50Hz	3-Phase / 400V / 50Hz	3-Phase / 400V / 50Hz	3-Phase / 400V / 50Hz
Recommended fuses	Outdoor unit	A	32	32	32	32	13	13	13	13
Pump	No. of speeds		Inverter controlle	Inverter controller	Inverter controller	Inverter controller	Inverter controller	Inverter controller	Inverter controller	Inverter controller
Expansion vessel volume		litres	8	8	8	8	8	8	8	8
Water connections (diameter)		inch	1" (male)	1" (male)	1" (male)	1" (male)	1" (male)	1" (male)	1" (male)	1" (male)
Minimum water volume		litres	20	20	20	20	20	20	20	20
Minimum flow rate	Cooling/Heating above 5°C	l/min	20	20	20	20	20	20	20	20
	Heating below -5°C	l/min	22	22	22	22	22	22	22	22
	Hot water	l/min	28	28	28	28	28	28	28	28
Maximum piping distance to tank		m	10	10	10	10	10	10	10	10
Maximum level difference		m	5	5	5	5	5	5	5	5

Nominal capacity and nominal input tested according to EN 14511 at the following conditions:
Heating a: Ambient air temperature 7°C and leaving water temperature 35°C (A7 W35)
Heating b: Ambient air temperature 7°C and leaving water temperature 45°C (A7 W45)
Cooling: Ambient air temperature 35°C and leaving water temperature 7°C (A35 W7)
Sound pressure level measured at 1m from the unit
[1] Excludes aesthetic grill



R-32 BLUEVOLUTION



EBLA

Daikin Altherma 3 Monobloc

Outdoor Unit			Single Phase				Three Phase			
			EBLA09D3V3	EBLA11D3V3	EBLA14D3V3	EBLA16D3V3	EBLA09D3W1	EBLA11D3W1	EBLA14D3W1	EBLA16D3W1
Description			**Class 9**	**Class 11**	**Class 14**	**Class 16**	**Class 9**	**Class 11**	**Class 14**	**Class 16**
Function			Reversible	Reversible	Reversible	Reversible	Reversible	Reversible	Reversible	Reversible
Dimensions [1]	Height x Width x Depth	mm	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460	870 x 1380 x 460
Weight		kg	149	149	149	149	149	149	149	149
Nominal capacity	Heating (a/b)	kW	9.37/9.00	10.6/9.82	12.0/12.5	16.0/16.0	9.37/9.00	10.6/9.82	12.0/12.5	16.0/16.0
	Cooling	kW	9.35/9.1	11.6/11.5	12.8/12.7	14.0/15.3	9.35/9.04	11.6/11.5	12.8/12.7	14.0/15.3
Nominal input	Heating (a/b)	kW	1.91/2.43	2.18/2.68	2.46/3.42	3.53/4.56	1.91/2.43	2.18/2.68	2.46/3.42	3.53/4.56
COP	Heating (a/b)		4.91/3.71	4.83/3.66	4.87/3.64	4.53/3.51	4.91/3.72	4.83/3.66	4.87/3.64	5.43/3.51
Seasonal space heating efficiency	Space heating (Average climate) 35°C	Class	A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++
		Efficiency	190	186	185	185	190	186	185	185
		SCOP	4.82	4.73	4.70	4.69	4.82	4.73	4.70	4.69
	Space heating (Average climate) 55°C	Class	A++	A++	A++	A++	A++	A++	A++	A++
		Efficiency	135	132	134	132	135	132	134	132
		SCOP	3.44	3.37	3.42	3.37	3.44	3.37	3.42	3.37
EER	Cooling		3.35/5.34	3.26/5.31	3.16/5.04	3.06/4.74	3.35/3.34	3.26/5.31	3.16/5.04	3.06/4.74
Operation range	Heating	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
	Cooling	°C	10 ~ 43	10 ~ 43	10 ~ 43	10 ~ 43	10 ~ 43	10 ~ 43	10 ~ 43	10 ~ 43
	Hot water	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
Sound power level	Heating	dBA	62	62	62	62	62	62	62	62
Refrigerant charge (factory)	R32	kg	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Power supply			1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	3-Phase / 400V / 50Hz	3-Phase / 400V / 50Hz	3-Phase / 400V / 50Hz	3-Phase / 400V / 50Hz
Recommended fuses	Outdoor unit	A	32	32	32	32	13	13	13	13
Pump	No. of speeds		Inverter controller	Inverter controller	Inverter controller	Inverter controller	Inverter controller	Inverter controller	Inverter controller	Inverter controller
Expansion vessel volume		litres	8	8	8	8	8	8	8	8
Water connections (diameter)		inch	1" (male)	1" (male)	1" (male)	1" (male)	1" (male)	1" (male)	1" (male)	1" (male)
Minimum water volume		litres	20	20	20	20	20	20	20	20
Minimum flow rate	Cooling/Heating above 5°C	l/min	20	20	20	20	20	20	20	20
	Heating below -5°C	l/min	22	22	22	22	22	22	22	22
	Hot water	l/min	28	28	28	28	28	28	28	28
Maximum piping distance to tank		m	10	10	10	10	10	10	10	10
Maximum level difference		m	5	5	5	5	5	5	5	5

Nominal capacity and nominal input tested according to EN 14511 at the following conditions:
Heating a: Ambient air temperature 7°C and leaving water temperature 35°C (A7 W35)
Heating b: Ambient air temperature 7°C and leaving water temperature 45°C (A7 W45)
Cooling: Ambient air temperature 35°C and leaving water temperature 7°C (A35 W7)
Sound pressure level measured at 1m from the unit
[1] Excludes aesthetic grill

Accessories:

Accessory Ref	Description
BRC1HHDW	Madoka Heating - White
BRC1HHDS	Madoka Heating - Silver
BRC1HHDK	Madoka Heating - Black
BRP069A78	Residential Controller App – Wi-fi module [SD Card]
EKRELSG	Smart grid relay kit (high voltage)
EKPCCAB4	PC cable – to upload field settings from PC to unit
AFVALVE1	Anti-freeze valve for glycol free systems (two required per heat pump)
EKFLSW1	Optional flow switch (See note)
EKRSC1	Optional remote temperature sensor for outdoor unit (See note)
KRCS01-1	Optional remote temperature sensor for indoor unit (See note)
EKRP1HBA	Optional PCB kit for remote alarm monitoring, fault indication, solar interlock and bivalent operation
EKRP1AHT	Optional PCB kit for demand control, power consumption control and power limitation
UK.FF600S1503	Three flexi feet, height 150mm, to mount the outdoor unit
UK.CWBXL3A-B	Wall bracket for outdoor unit (250kg, 660mm long, 3 arms, black)
UK.CWBXXL3A-B	Wall bracket for outdoor unit (250kg, 780mm long, 3 arms, black)
UK.DT4	Condensate drip tray (1420 x 550 x 50mm)
UK.DTFB3	Floor bracket kit to mount drip tray for 3 flexi feet or wall bracket
K.HOSE750	Pair of flexible hoses
K.HOSE750EL	Pair of flexible hoses with elbow
K.FERNOXTF1	Fernox magnetic filter 1"
K.FERNOXTF1FL	Fernox magnetic filter 1" and F1 inhibitor fluid (500ml)
EKEPRHLT5H	Thermal store (500l) connection kit – For heating only models (for R32 H HT, H-Split, Ref Split and Monobloc)
EKEPRHLT5X	Thermal store (500l) connecting kit – For reversible models (for R32 H HT, H-Split, Ref Split and Monobloc)
EKEPRHLT3HX	Thermal store (300l) connection kit – For heating only and reversible models (for R32 H HT, H-Split, Ref Split and Monobloc)
EKUMBPART	3rd party tank connection kit - Dry pocket sensor
K.ELECMETV	**Electric meter for domestic RHI - Single-phase (Metering for performance compliant)** MID Class A electric meter to measure the electricity consumption of the Daikin Altherma heat pump
K.ELECMETW	**Electric meter for domestic RHI - Three-phase (Metering for performance compliant)** MID Class A electric meter to measure the electricity consumption of the Daikin Altherma heat pump

Features:

- WLAN cartridge connection (optional)
- Possible to combine with domestic hot water tanks
- Reversible or heating only air-to-water heat pump
- Monobloc all-in-one concept including all hydraulic parts
- An optional built-in 3kW electric back-up heater or a separate back-up heater kit are available for



BRC1HHDW



011-1W0423 ⊠ 426

Notes:

i) User interface (MMI) is supplied with outdoor unit
ii) EKFLSW1 must be ordered if glycol is present within the system
iii) Only one optional remote sensor can be installed

Fully connected

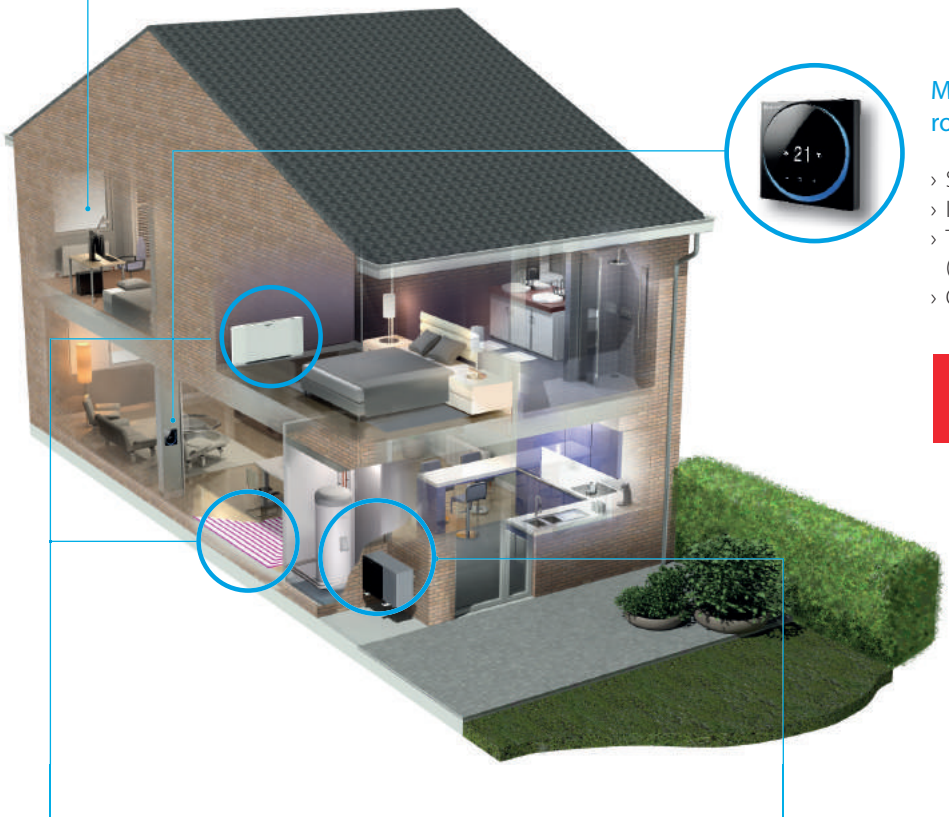
The true power of the Daikin Altherma 3 Monobloc is in its integration as part of a Daikin Altherma total solution, including smart controls, heat collectors and heat emitters.



Daikin Residential Controller App, with voice control

› Control the heating system from home or remotely via smartphone
› Control the heating system with voice commands
› Integrate with Google Assistant and Amazon Alexa
› Other features include:
- Scheduling for daily use or holiday mode
- Controlling multiple units/performance boosting
- Monitoring energy consumption

Cloud ready with WLAN option



Madoka: a user-friendly wired room thermostat

› Sleek and elegant design
› Intuitive touch button control
› Three colours to match any interior (white, black and silver)
› Compact unit measuring only 85 x 85 mm

DESIGN AWARD 2018

reddot award 2018 winner

Heating and cooling emitters

As a low temperature heat pump, the Daikin Altherma 3 Monobloc works perfectly with various emitters, including fan coils, underfloor heating and heat pump convectors.

Domestic hot water production

The Daikin Altherma 3 Monobloc can be combined with a stainless steel tank (EKHWSU-D), thermal store and solar panels (EKHWP) to provide a fast and efficient supply of domestic hot water.



Domestic hot water tank

Hot water heating installation options

Domestic hot water tank



EKHWSU-D

Comfort

› Available in 150, 180, 200, 250 and 300 litres in stainless steel EKHWSU-D

Efficiency

› High-quality insulation keeps heat loss to a minimum
› Efficient temperature heating: from 10°C to 50°C in only 60 minutes

Reliability

› At necessary intervals, the unit can heat up water up to 60°C to prevent the risk of bacteria growth

EKHWSU-D

Hot Water Cylinder

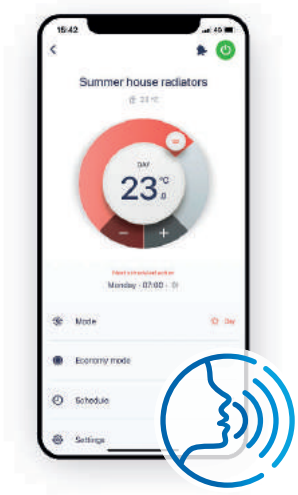
Domestic hot water cylinder			SB.EKHWSU150/EKEXP	SB.EKHWSU180/EKEXP	SB.EKHWSU200/EKEXP	SB.EKHWSU250/EKEXP	SB.EKHWSU300/EKEXP
Description			**150L unvented cylinder (Including EKEXPVES)**	**180L unvented cylinder (Including EKEXPVES)**	**200L unvented cylinder (Including EKEXPVES)**	**250L unvented cylinder (Including EKEXPVES)**	**300L unvented cylinder (Including EKEXPVES)**
Suitable for			R32 Split and Monobloc systems				
Energy efficiency class			B	B	B	B	B
Standing heat loss (ErP)		W	45	50	55	60	68
Storage volume		litres	145	174	192	242	292
Standing heat loss		kWh/24h	1.1	1.2	1.3	1.4	1.6
Max water temperature		°C	75	75	75	75	75
Booster heater capacity		kW	3	3	3	3	3
Power supply			1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz	1-phase / 230V / 50Hz
Recommended fuses		A	20	20	20	20	20
Height		mm	1015	1175	1283	1553	1763
Diameter		mm	595	595	595	595	595
Empty weight		kg	45	50	53	58	63
Material inside cylinder			Stainless steel (EN 1.4521)	Stainless steel (EN 1.4521)	Stainless steel (EN 1.4521)	Stainless steel (EN 1.4521)	Stainless steel (EN 1.4521)
Piping connections (diameter)	Water inlet H/E	inch	3/4 " (female)	3/4 " (female)	3/4 " (female)	3/4 " (female)	3/4 " (female)
	Water outlet H/E	inch	3/4 " (female)	3/4 " (female)	3/4 " (female)	3/4 " (female)	3/4 " (female)
	Cold water in	inch	3/4 " (female)	3/4 " (female)	3/4 " (female)	3/4 " (female)	3/4 " (female)
	Hot water out	inch	3/4 " (female)	3/4 " (female)	3/4 " (female)	3/4 " (female)	3/4 " (female)

Features:

› This stainless steel unvented cylinder is the ideal partner for Daikin Altherma R32 Split and Low temperature monobloc systems
› Fitted with a 3kW immersion heater as standard
› Quick and easy installation with semi pre-plumbed G3 safety kit included
› Supplied with 3-way valve



Always in control



NEW

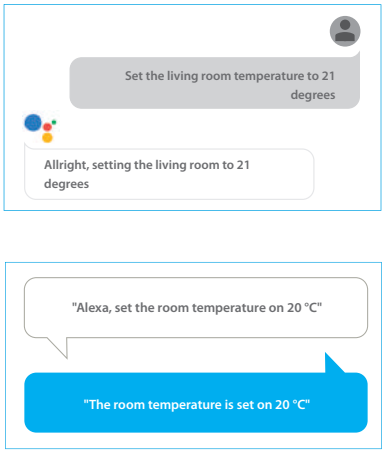
Voice control

To provide even more comfort and ease, the Daikin Residential Controller App now offers voice control. This hands-free feature cuts down on clicks to manage units faster than ever before.

Cross-functional and multilingual, voice control pairs well with any smart device, including Google Assistant and Amazon Alexa.

works with the Google Assistant

amazon alexa



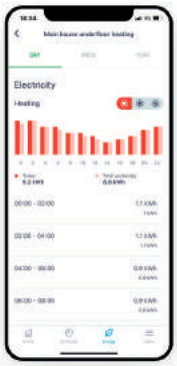
Example of using the voice control via Amazon Alexa



Schedule

Set up a programme outlining when the system should operate, and create up to six actions per day.

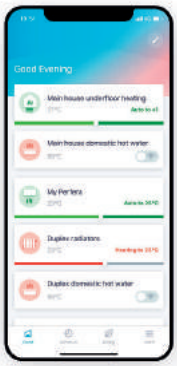
- ☑ Schedule room temperature and operation mode
- ☑ Enable holiday mode to save costs



Monitor

Receive a thorough overview of how the system is performing and how much energy it consumes.

- ☑ Check the status of the heating system
- ☑ Access energy consumption graphs (day, week, month)



Control

Customise the system to fit your lifestyle and year-round comfort levels.

- ☑ Change room and domestic hot water temperature
- ☑ Turn on powerful mode to boost hot water production

Scan the QR code to download the app now

DAIKIN

Function availability depends on the system type, configuration and operation mode. The app functionality is only available if both the Daikin system and the app have a reliable internet connection.

Available on the App Store

GET IT ON Google Play

Madoka for Heating

reddot award 2018
winner

DESIGN AWARD 2018

The beauty of simplicity



Silver
RAL 9006 (metallic)
BRC1HHDS



Black
RAL 9005 (matt)
BRC1HHDK



White
RAL9003 (glossy)
BRC1HHDW

User-friendly wired remote controller with premium design

Intuitive control with a premium design:

The smooth curves of the Madoka for Heating controller offer a sleek, refined shape which is distinguished by its striking blue circular display. Presenting a clear visual reference with large easy to read numbers, the controller features are accessed through three touch buttons, which combine intuitive control with easy adjustability for an enhanced user experience.

Three colours to match any interior design:

Madoka for Heating will complement perfectly any interior design scheme. Silver gives an additional touch to stand out in any interior or application, while Black is an ideal match for darker, stylish interiors and White offers a sleek, modern look.

Easily-set operation parameters:

Setting and fine-tuning your controller is simple and helps attain higher energy savings and more comfort. The system enables you to select the space operation mode (heating, cooling or automatic), set the desired room teperature and control the domestic hot water temperature.

Easy Update via Bluetooth:

It is strongly recommended that the user interface has the latest software version. To update the software or check if updates are available, you need a mobile device and the Madoka Assistant app. This app is available from Google Play and the Apple Store

GET IT ON Google Play

Available on the App Store

www.daikin.co.uk/madoka