

Daikin Altherma 3 M

Product catalogue 2020



The power pact



E(B/D)LA-D series

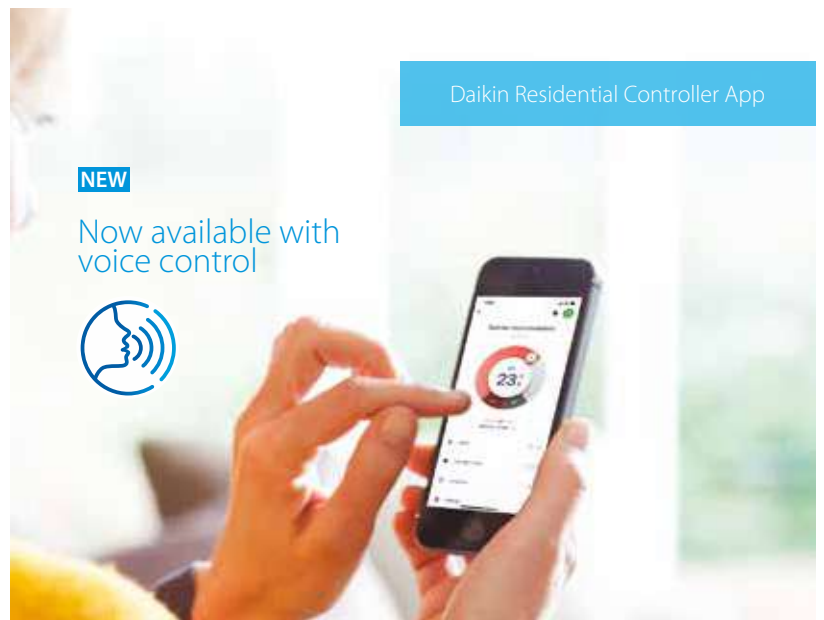


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Daikin Altherma 3 M

The power pact

The Daikin Altherma 3 M is Daikin's first third-generation monobloc. This new edition features a brand-new design and runs on refrigerant R-32.

Improved compact design

A redesigned casing

A black horizontal front grille hides the single fan, reducing the perception of sound produced by the unit.

The light grey casing reflects the installation space to help the unit blend into any environment.

A single fan for high-capacity units

Daikin engineers replaced the double fan with one larger fan and optimised its shape to lower the operational sound and improve air circulation.



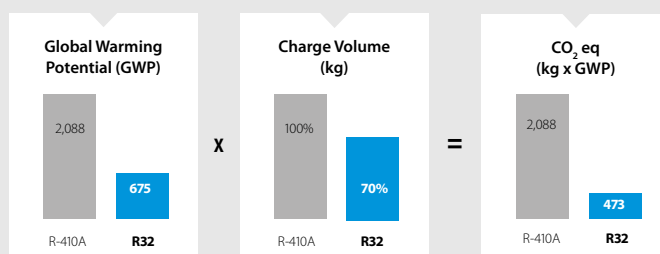


Monobloc running on refrigerant R-32

Daikin is a pioneer in launching heat pumps equipped with R-32. With a lower Global Warming Potential (GWP), the R-32 is equivalent in power to standard refrigerants, but achieves higher energy efficiency and lower CO₂ emissions. Easy to recover and reuse, R-32 is the perfect solution for attaining the new European CO₂ emission targets.

Reduced environmental impact: CO₂eq > 75% reduction

- > GWP: R410A: 2,088 > R32: 675
- > 30% less refrigerant charge needed

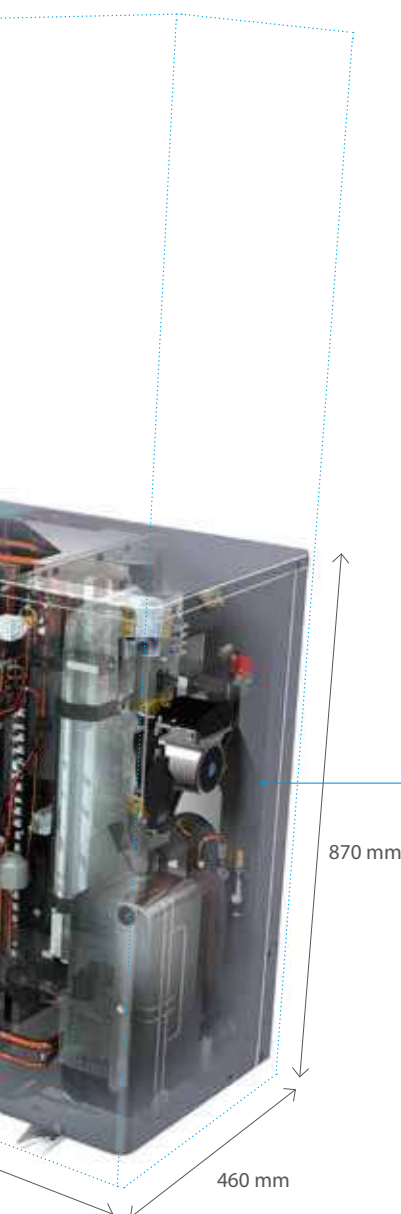


R-32

BLUEvolution

Ideal for small spaces

The monobloc is the ideal solution for places that have limitations on space. No additional indoor unit is required, and the monobloc can fit right under a window to save outdoor space.



Fully connected

The Daikin Altherma 3 M finds its power in Daikin Altherma total solution, including 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-grey)
- › Compact unit measuring only 85 x 85 mm



Heating and cooling emitters

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



NEW

Man-Machine Interface (MMI)

Inspired by the award-winning design of the Daikin Altherma 3 indoor units, Daikin also upgraded this controller to deliver an even more user-friendly interface.



✓ Quick configuration

After logging in, you'll be able to configure the unit with the new controller in less than 10 steps. You can even check if the unit is ready to use by running test cycles.

✓ Easy operation

The new interface features a few buttons and 2 navigational knobs to help you quickly set the room temperature and control units.

✓ User-friendly design

The interface features an intuitive design. The high contrasted colour screen delivers stunning and practical visuals for both installers and service engineers.

✓ WLAN cartridge connection

✓ Small dimensions for a discreet unit: 136 x 160 x 37 mm (HxWxD)

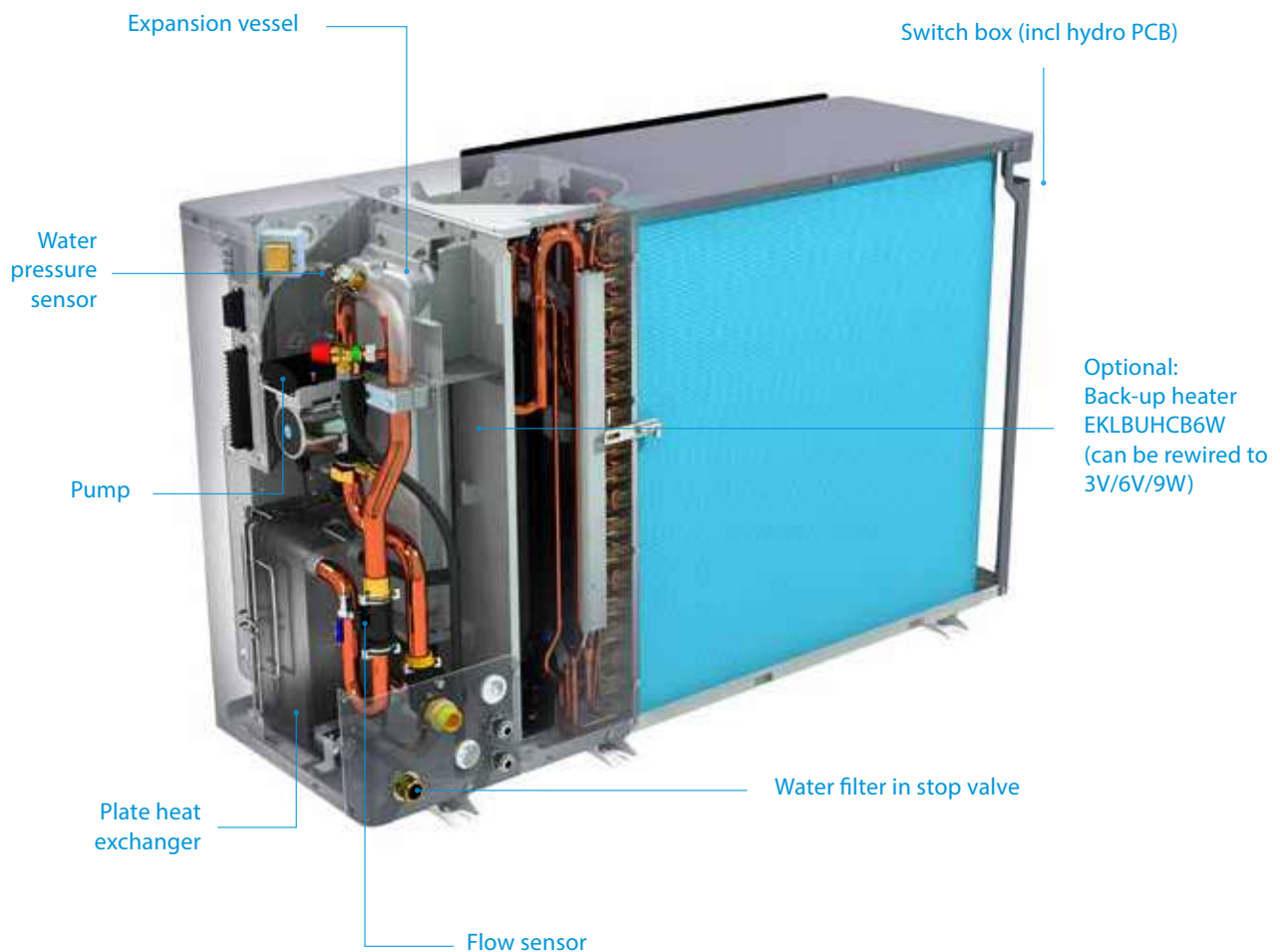


Domestic hot water production

The monobloc combines with stainless steel tanks (EKHWS-D), thermal stores and panels (EKHWP) to provide domestic hot water quickly.

Straightforward installation & maintenance

The Daikin Altherma 3 M attains its power from within by combining all the hydraulic components into one unit.



Hydraulic components included:

- › Circulation pump
- › Expansion vessel
- › Minimal wiring

Refrigerant circuit in the unit

- › No refrigerant connection inside the house
- › Only requires water pipe connections at the rear

Comfort and premium performance

The Daikin Altherma 3 M offers enhanced performance and a broad product lineup.

Extended product range

- › Heating only models (EDLA*)
- › Reversible models providing cooling (EBLA*)
- › One-phase models (EB/DLA-DV*)
- › Three-phase models (EB/DLA-DW*)
- › Back-up heater models (EB/DLA-D3V/D3W)
- › Back-up heater less models (EB/DLA-D/DW)
- › All available in 9, 11, 14 and 16 kW

Improved performance

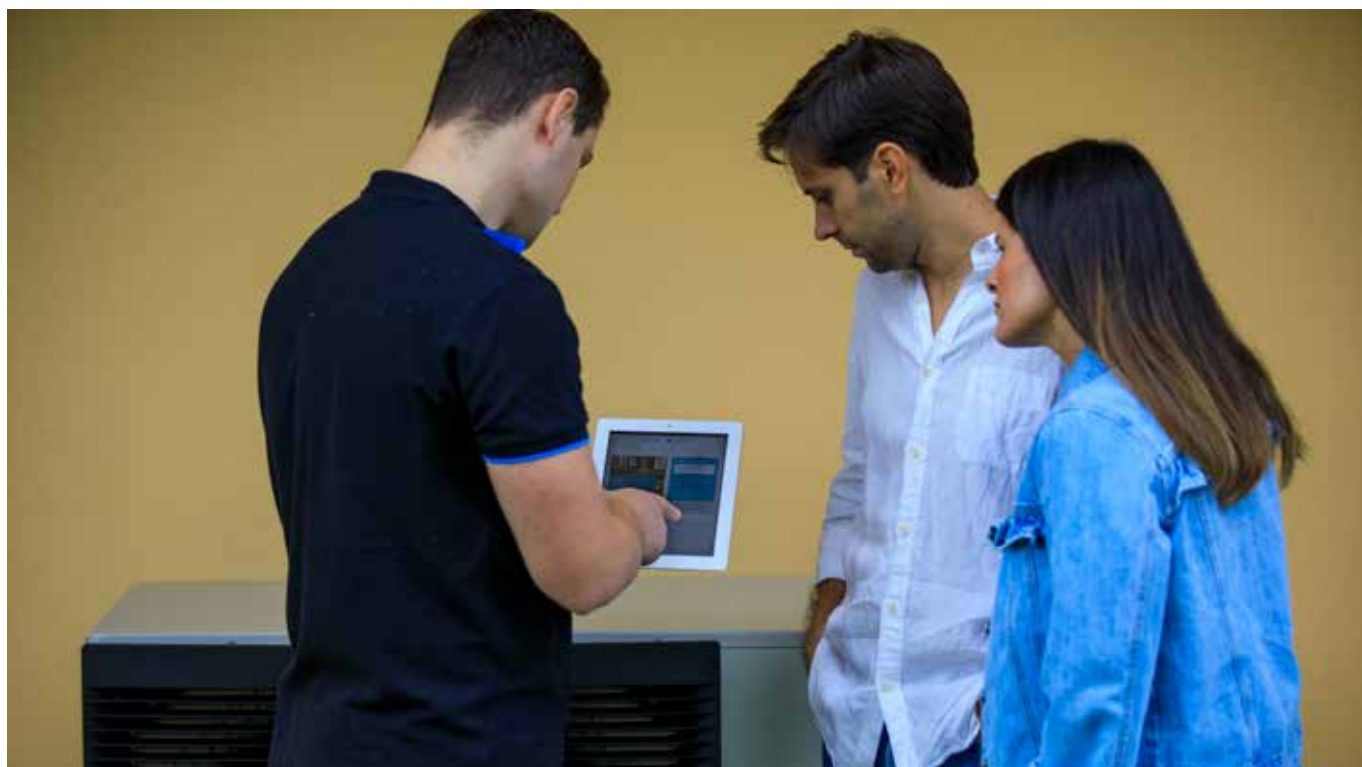
- › Up to **A+++**
- › Operation down to -25 °C outdoor temperature
- › Guaranteed heating capacities down to -20 °C
- › Delivers LWT 60 °C at -7 °C
- › Suitable for renovations, replacement, and large new buildings

Flexibility in domestic hot water production

Combinable with stainless steel domestic hot water tank (EKHWS(U)-D or ECH2O thermal store to get domestic hot water with support from the sun.

Perfect match with any heat emitter

Combine with underfloor heating applications or with Daikin Altherma HPC heat pump convectors.



Daikin Altherma 3 M

Air-to-water monobloc system that provides **heating only** and is ideal for indoor spaces that have limited room

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



011-1W0423 → 426

Single Unit				EDLA	09D(3)V3/D(3)W1	11D(3)V3/D(3)W1	14D(3)V3/D(3)W1	16D(3)V3/D(3)W1
Heating capacity	Nom.			kW	9.37 (1) / 9.00 (2)	10.6 (1) / 9.82 (2)	12.0 (1) / 12.5 (2)	16.0 (1) / 16.0 (2)
Power input	Heating	Nom.		kW	1.91 (1) / 2.43 (2)	2.18 (1) / 2.68 (2)	2.46 (1) / 3.42 (2)	3.53 (1) / 4.56 (2)
COP					4.91 (1) / 3.71 (2)	4.83 (1) / 3.66 (2)	4.87 (1) / 3.64 (2)	4.53 (1) / 3.51 (2)
 Space heating	Average climate water outlet 55 °C	General	ηs (Seasonal space heating efficiency)		133	130	132	130
			SCOP		3.39	3.32	3.37	3.33
			Seasonal space heating eff. class		A++			
	Average climate water outlet 35 °C	General	ηs (Seasonal space heating efficiency)		186	182		
			SCOP		4.72	4.64	4.62	
			Seasonal space heating eff. class		A+++			
Casing					Silver			
Colour					Polyester painted galvanised steel plate			
Material					870 x 1,380 x 460			
Dimensions	Unit	HeightxWidthxDepth			mm	DV3/DW1: 147, D3V3/D3W1: 149		
Weight	Unit				kg	1		
Compressor					Hermetically sealed swing compressor			
Quantity					DV3/DW1: -25 ~ 25, D3V3/D3W1: -25 ~ 35			
Type					DV3/DW1: 9 ~ 60, D3V3/D3W1: 15 ~ 60			
Operation range	Heating	Ambient	Min.~Max.		°CWB	-25 ~ 35		
		Water side	Min.~Max.		°C	25 ~ 55		
Operation range	Domestic hot water	Ambient	Min.~Max.		°CDB	R-32		
		Water side	Min.~Max.		°C	675.0		
Refrigerant	Type				3.80			
	GWP				2.57			
	Charge			kg	Expansion valve			
	Charge			TCO2Eq	62			
	Control				V3/1~/50/230 - W1/3~/50/400			
Sound power level (3)	Heating	Nom.		dBA	32/16			
Power supply	Name/Phase/Frequency/Voltage			Hz/V				
Current	Recommended fuses			A				

(1) Ta DB/WB 7 °C/6 °C - LWC 35 °C (DT = 5 °C) | (2) Ta DB/WB 7 °C/6 °C - LWC 45 °C (DT = 5 °C) | (3) According to EN14825 This product contains fluorinated greenhouse gases.

Daikin Altherma 3 M

Reversible air-to-water monobloc system that provides **heating and cooling**, and is ideal for indoor spaces that have limited room

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



011-1W0423 → 426

Single Unit				EBLA	09D(3)V3/D(3)W1	11D(3)V3/D(3)W1	14D(3)V3/D(3)W1	16D(3)V3/D(3)W1	
Heating capacity	Nom.			kW	9.37 (1) / 9.00 (2)	10.6 (1) / 9.82 (2)	12.0 (1) / 12.5 (2)	16.0 (1) / 16.0 (2)	
Power input	Heating	Nom.		kW	1.91 (1) / 2.43 (2)	2.18 (1) / 2.68 (2)	2.46 (1) / 3.42 (2)	3.53 (1) / 4.56 (2)	
COP					4.91 (1) / 3.71 (2)	4.83 (1) / 3.66 (2)	4.87 (1) / 3.64 (2)	4.53 (1) / 3.51 (2)	
Cooling capacity	Nom.			kW	9.35 (3) / 9.10 (4)	11.6 (3) / 11.5 (4)	12.8 (3) / 12.7 (4)	14.0 (3) / 15.3 (4)	
Power input	Cooling	Nom.		kW	2.79 (3) / 1.71 (4)	3.56 (3) / 2.17 (4)	4.06 (3) / 2.51 (4)	4.58 (3) / 3.24 (4)	
EER					3.35 (3) / 5.34 (4)	3.26 (3) / 5.31 (4)	3.16 (3) / 5.04 (4)	3.06 (3) / 4.74 (4)	
SEER					5.62 (5)	5.79 (5)	5.71 (5)	5.59 (5)	
 Space heating	Average climate water outlet 55 °C	General	ηs (Seasonal space heating efficiency)		135	132	134	132	
			SCOP		3.44	3.37	3.42	3.37	
			Seasonal space heating eff. class	A++					
	Average climate water outlet 35 °C	General	ηs (Seasonal space heating efficiency)		190	186	185		
			SCOP		4.82	4.73	4.70	4.69	
			Seasonal space heating eff. class	A+++					
Casing	Colour				Silver				
	Material				Polyester painted galvanised steel plate				
Dimensions	Unit	HeightxWidthxDepth		mm	870 x 1,380 x 460				
Weight	Unit				kg	DV3/DW1: 147, D3V3/D3W1: 149			
Compressor	Quantity				1				
	Type				Hermetically sealed swing compressor				
Operation range	Heating	Ambient	Min.~Max.	°CWB	DV3/DW1: -25 ~ 25, D3V3/D3W1: -25 ~ 35				
		Water side	Min.~Max.	°C	DV3/DW1: 9 ~ 60, D3V3/D3W1: 15 ~ 60				
	Operation range	Cooling	Ambient	Min.~Max.	°CDB	10 ~ 43			
Water side			Min.~Max.	°C	5 ~ 22				
Operation range	Domestic hot water	Ambient	Min.~Max.	°CDB	-25 ~ 35				
		Water side	Min.~Max.	°C	25 ~ 55				
Refrigerant	Type				R-32				
	GWP				675.0				
	Charge			kg	3.80				
	Charge			TCO2Eq	2.57				
	Control				Expansion valve				
Sound power level (5)	Heating	Nom.		dB(A)	62				
Power supply	Name/Phase/Frequency/Voltage			Hz/V	V3/1~/50/230 - W1/3~/50/400				
Current	Recommended fuses			A	32/16				

(1) Ta DB/WB 7 °C/6 °C - LWC 35 °C (DT = 5 °C) | (2) Ta DB/WB 7 °C/6 °C - LWC 45 °C (DT = 5 °C) | (3) Cooling: EW 12 °C; LW 7 °C; ambient conditions: 35 °CDB | (4) Cooling: EW 23 °C; LW 18 °C; ambient conditions: 35 °CDB | (5) According to EN14825. This product contains fluorinated greenhouse gases.

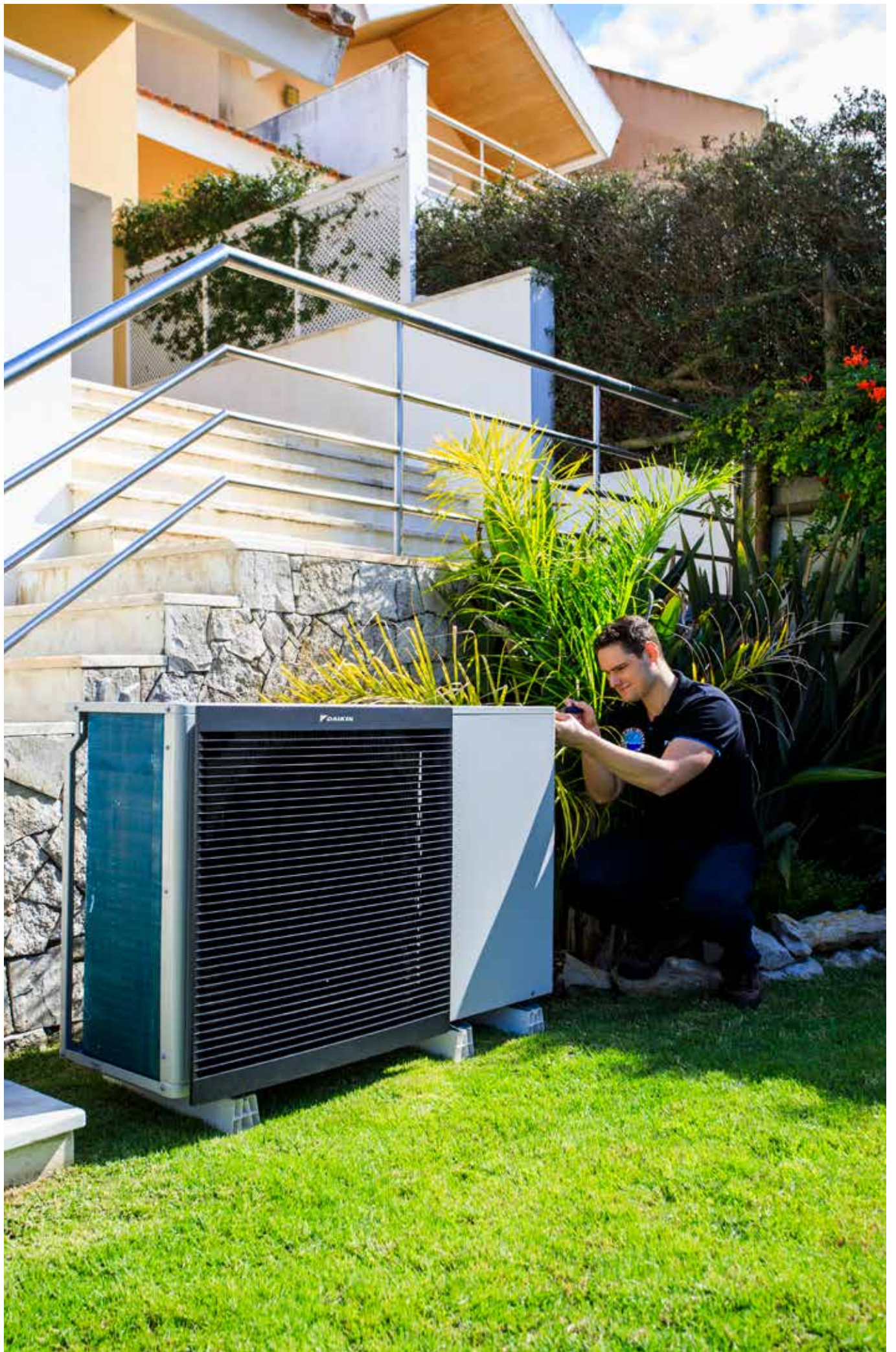
Options

				NO BUH		BUH	
				H/O	REV	H/O	REV
				EDLA-DV3/W1	EBLA-DV3/W1	EBLA-D3V3/3W1	EBLA-D3V3/3W1
		Type	Material name				
Controllers		Madoka, remote room thermostat	BRC1HHDW/S/K	•	•	•	•
		WLAN cartridge	BRP069A78	•	•	•	•
		Room thermostat (wired)	EKRTWA	•	•	•	•
		Room thermostat (wireless)	EKRTR1	•	•	•	•
		External sensor	EKRTETS	•	•	•	•
Adapters		Demand PCB	EKRP1AHTA	•	•	•	•
		Digital I/O PCB	EKRP1HBAA	•	•	•	•
Installation		Bi-Zone kit (watts kit)	BZKA7V3	•	•	•	•
		Anti-freeze valve	AFVALVE1	•	•	•	•
		Flow switch	EKFLSW1	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾	• ⁽¹⁾
		Bypass kit	EKMBHBP1		•		
		BUH-kit	EKLBUEHCB6W	•	•		
		Third party tank kit	EKHY3PART	• ⁽²⁾	• ⁽²⁾	• ⁽²⁾	• ⁽²⁾
		Third party tank kit	EKHY3PART2	• ⁽³⁾	• ⁽³⁾	• ⁽³⁾	• ⁽³⁾
Sensors		Remote indoor sensor	KRCS01-1	•	•	•	•
		Remote outdoor sensor	EKRSCA-1	•	•	•	•
Others		PC USB cable	EKPCCAB4	•	•	•	•

(1) Mandatory when glycol is used.

(2) To use when thermistor can be inserted in the tank.

(3) To use when thermistor cannot be inserted in the tank.



Thermal stores and tanks

Hot water heating installation solutions

Why choose a Daikin Altherma ST thermal store or domestic hot water tank?

Whether your customer only needs hot water or is interested in using solar technologies, Daikin offers a range of reliable solutions that use energy more efficiently and provide maximum comfort.



Thermal store



Stainless steel tank

Domestic hot water tank

Stainless steel tanks

Comfort

- › Available in 150, 180, 200, 250 and 300 litres in stainless steel EKHWS(U)-D

Efficiency

- › High-quality insulation keeps heat loss to a minimum
- › Efficient temperature heating: from 10 °C to 50 °C in only 60 minutes
- › Available as an integrated solution or separate tank

Reliability

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



The ECH₂O thermal store range

ECH₂O thermal store: additional hot water comfort

Combine your monobloc with a thermal store to achieve the ultimate comfort at home.

- › Fresh water principle: receive domestic hot water on demand while eliminating the risk of contamination and sedimentation
- › Optimal domestic hot water performance: the low temperature evolution enables high tapping performance
- › Fit for the future: possible to combine with renewable solar energy and other heat sources, e.g. fireplace
- › Lightweight and robust build of the unit combined with the cascade principle offers flexible installation options

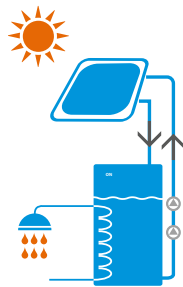
Built for small and large homes, customers can choose between a pressureless and a pressurised hot water system.

Efficiency

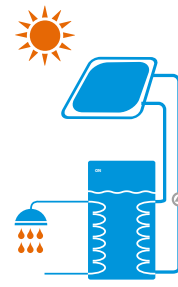
- › Fit for the future: maximise renewable energy sources
- › Intelligent Heat Storage Management: ensures continuous heating during defrost mode, and uses stored heat for space heating
- › High-quality insulation keeps heat loss to a minimum

Reliability

- › Maintenance-free tank: no corrosion, anode, scale or lime deposits, and no water loss through the safety valve



Drain-back solar system



Pressurised solar system

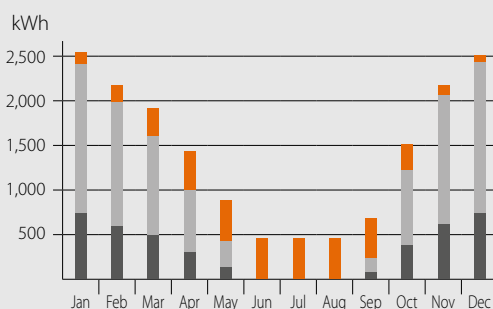
Pressureless (drain-back) solar system

- › The solar collectors are only filled with water when sufficient heating is provided by the sun
- › The pumps in the control and pump unit switch on briefly and fill the collectors with storage tank water
- › After filling, water circulation is maintained by the remaining pump

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

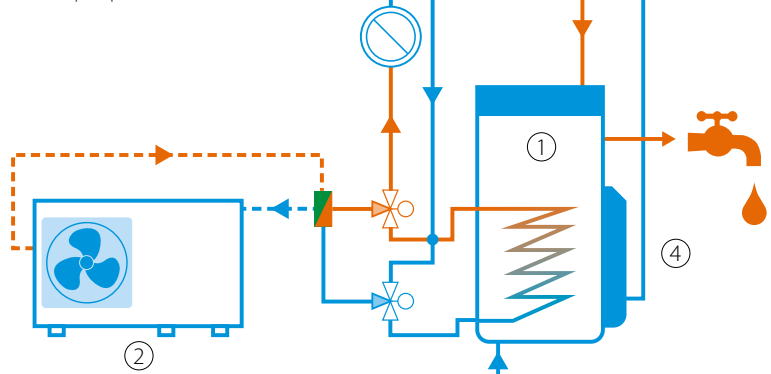
Monthly energy consumption of an average detached house



- Utilisation of solar energy for domestic hot water and central heating
- Heat pump (environmental heat)
- Auxiliary energy (electricity)

System diagram: Integrated solar unit

- 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

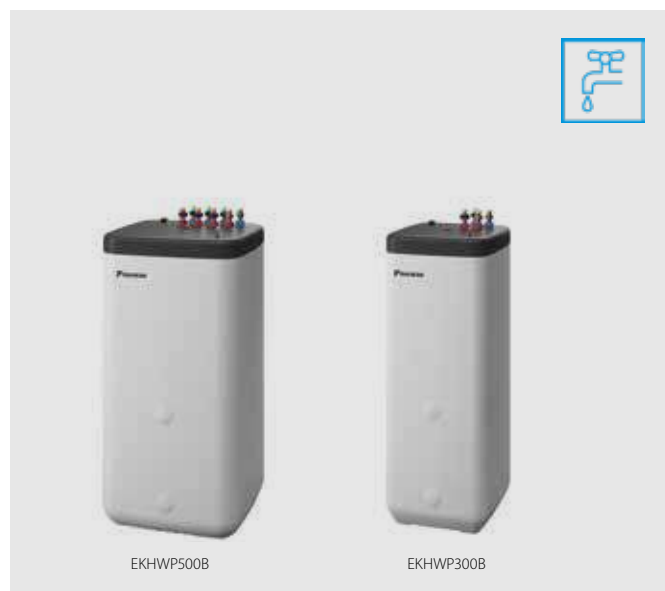


Daikin Altherma ST

Thermal store

Plastic domestic hot water tank with solar support

- › The thermal store EKHWP* is designed to work with Daikin Altherma heat pumps
- › Fresh water principle: receive domestic hot water on demand while eliminating the risk of contamination and sedimentation
- › Optimal domestic hot water performance: the low temperature evolution enables high tapping performance
- › Fit for the future: possible to combine with renewable solar energy and other heat sources, e.g. fireplace
- › Lightweight and robust build of the unit combined with the cascade principle offers flexible installation options
- › Available in 300 and 500 litres



Accessory		EKHWP	300B	500B	300PB	500PB	54419B
Casing	Colour		Traffic white (RAL9016) / Dark grey (RAL7011)				
	Material		Impact resistant polypropylene				
Dimensions	Unit	Width	mm	595	790	595	790
		Depth	mm	615	790	615	790
		Height	mm	1,646	1,658	1,646	1,658
Weight	Unit	Empty	kg	53	76	56	82
							71
Tank	Water volume		l	294	477	294	477
	Material			Polypropylene			
	Maximum water temperature		°C	85			
	Insulation	Heat loss	kWh/24h	1.5	1.7	1.5	1.7
	Energy efficiency class			B			
	Standing heat loss		W	64	72	64	72
	Storage volume		l	290	393	290	393
Heat exchanger	Domestic hot water	Quantity		1			
		Tube material		Stainless steel (DIN 1.4404)			
		Face area	m²	5.6	5.8	5.6	5.8
		Internal coil volume	l	27.8	28.9	27.8	29
		Operating pressure	bar	6			
	Charging	Quantity		1			
		Tube material		Stainless steel (DIN 1.4404)			
		Face area	m²	2.66	3.7	2.66	3.7
		Internal coil volume	l	12.9	18.1	12.9	18.1
		Operating pressure	bar	3			
	Auxiliary solar heating	Tube material		-	Stainless steel (DIN 1.4404)	-	Stainless steel (DIN 1.4404)
		Face area	m²	-	0.76	-	0.76
		Internal coil volume	l	-	3.9	-	3.9
		Operating pressure	bar	-	3	-	3
		Quantity		1			
		Tube material		Stainless steel (DIN 1.4404)			
		Face area	m²	2.66	3.7	2.66	3.7
		Internal coil volume	l	12.9	18.1	12.9	18.1
		Operating pressure	bar	3			

Domestic hot water tank

Stainless steel domestic hot water tank

› EKHWS(U)-D: available in 150, 180, 200, 250 and 300 litres in stainless steel





B

75 °C

Accessory				EKHWS(U)	150D3V3	180D3V3	200D3V3	250D3V3	300D3V3
Casing	Colour				Neutral white				
	Material				Epoxy coated steel / Epoxy-coated mild steel				
Dimensions	Unit	Height	Tank	mm	1,000	1,164	1,264	1,535	1,745
Weight	Unit	Empty		kg	45	50	53	58	63
	Water volume				l	145	174	192	242
	Material				Stainless steel (EN 1.4521)				
	Maximum water temperature				°C	75			
	Insulation	Heat loss		kWh/24h	1.1	1.2	1.3	1.4	1.6
	Energy efficiency class				B				
	Standing heat loss				W	45	50	55	60
	Storage volume				l	145	174	192	242
Heat exchanger		Quantity			1				
		Tube material			Stainless steel (EN 1.4521)				
		Face area			m²	1.050	1.400	1.800	
		Internal coil volume			l	4.9	6.5	8.2	
		Operating pressure			bar	10			
Booster heater	Capacity				3				
Power supply	Phase/Frequency/Voltage				1~/50/230				

Madoka

The beauty of simplicity



Silver
RAL 9006 (metallic)
BRC1HHDS



Black
RAL 9005 (matte)
BRC1HHDK



White
RAL9003 (glossy)
BRC1HHDW

User-friendly wired remote controller with premium design

Madoka combines refinement and simplicity

- ✓ Sleek and elegant design
- ✓ Intuitive touch button control
- ✓ Three colours to match any interior
- ✓ Compact unit measuring only 85 x 85 mm



reddot award 2018
winner



DESIGN
AWARD
2018

Madoka wired remote controller for Daikin Altherma 3 heat pumps

A new generation of user interface,
redesigned and intuitive



BRC1HHDW



BRC1HHDS



BRC1HHDK



Intuitive control with a premium design

The smooth curves of the Madoka 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

No matter your interior design, Madoka will match it. Silver gives an additional touch to stand out in any interior or application, while Black is an ideal match for darker, stylish interiors. White offers a sleek, modern look.

Easily set operation parameters

Setting and finetuning your controller is simple and helps you 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 temperature and control the domestic hot water temperature.

Easy update via Bluetooth

Using the latest software for the Madoka is strongly recommended. To update the software or check if updates are available, you'll need a mobile device and the Madoka Assistant App. This app is available on Google Play and the Apple Store.

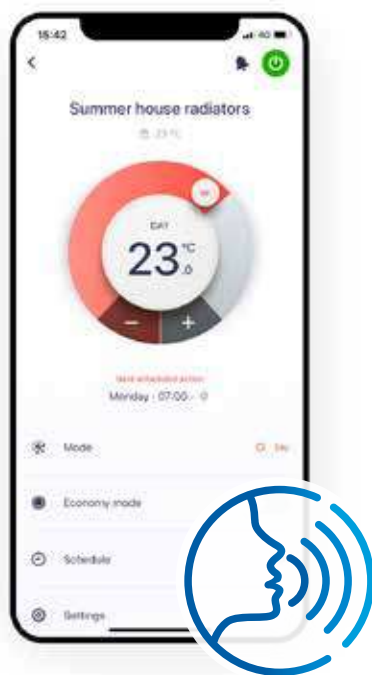


www.daikin.eu/madoka

Daikin Residential Controller App

Now available with voice control

The Daikin Residential Controller App is for those who live their life on the go and who want to manage their heating system from their smartphone.

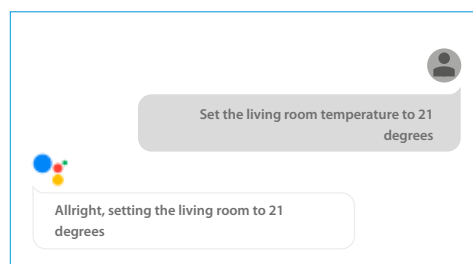


NEW

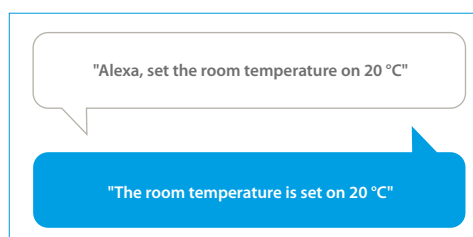
Voice control

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.

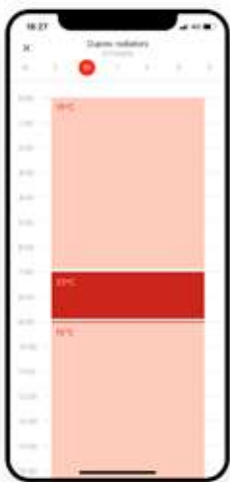
Cross-functional and multilingual, voice control pairs well with any smart device, including Google Assistant and Amazon Alexa.



Example of using the voice control via Google Assistant



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



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



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)

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.



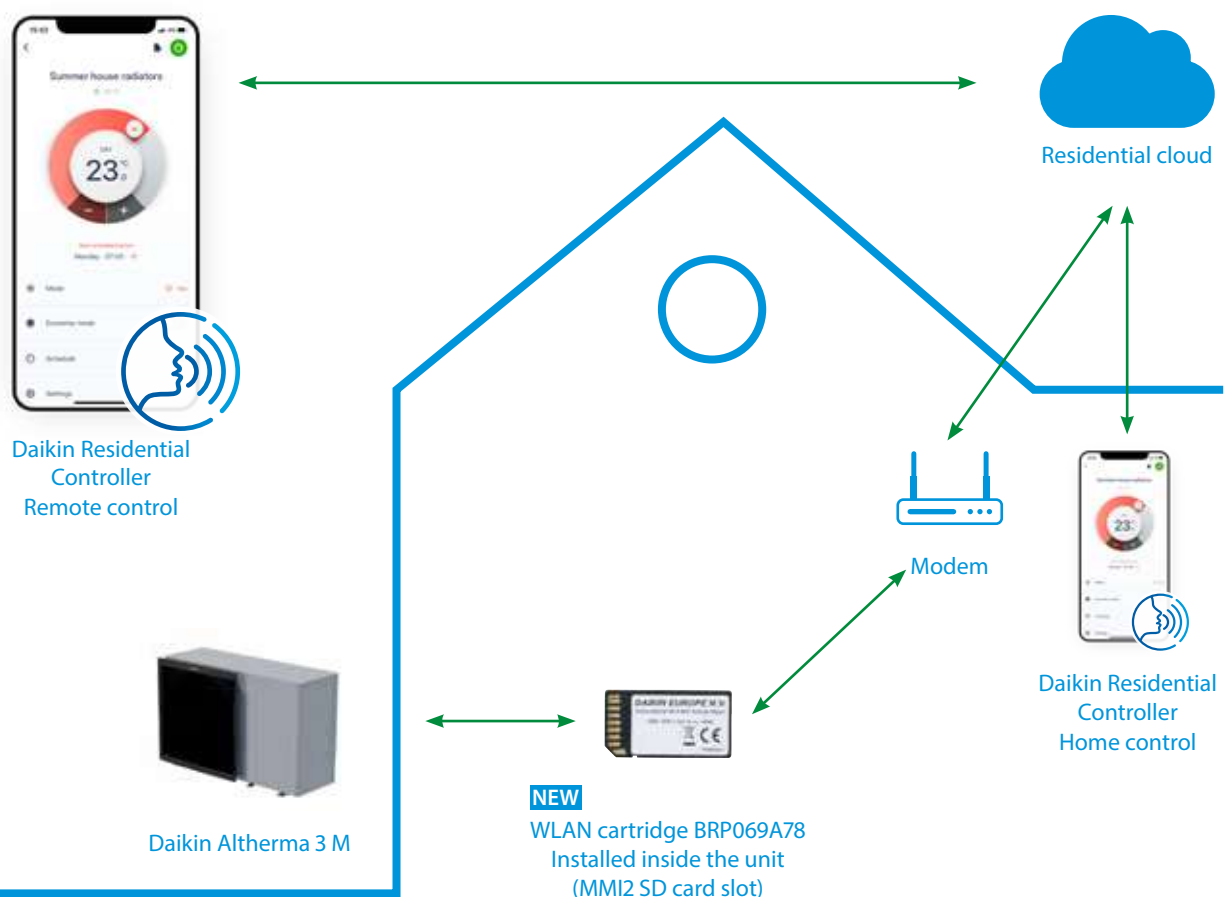
Scan the QR code to download the app now



Cloud connectivity

Customers can control their unit from anywhere with the Daikin Residential Controller App. This app is available via the cloud and delivers the best comfort for space heating, cooling and domestic hot water.

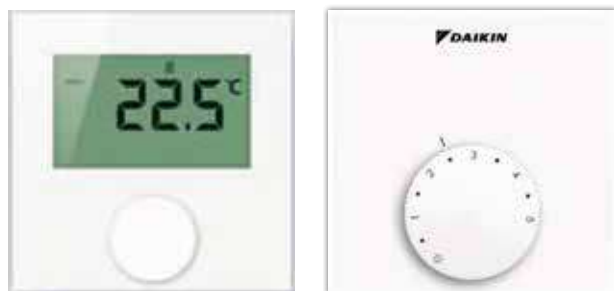
How it works



Benefits

- ✓ More connected to end users
- ✓ No hassle to switch from "home" to "out of home"
- ✓ Prepared for remote support from installers
- ✓ Prepared for preventive maintenance

Adjust the temperature of individual rooms



General features

- › Improve a home's energy efficiency
- › Universally deployable and scalable
- › Easy and intuitive installation, operation and maintenance
- › Cost-effective and convenient

How it works

With the help of an electronic room-by-room control system, users can regulate the temperature of each room individually.

In addition to the warmth output of the actual heating surfaces, the room temperature control system also takes other heat sources into account, such as sunshine, warmth from lights or people, and other heat sources, such as a fireplace or a tiled stove.

Based on a continuous comparison of the target and current temperatures, the room temperature control system opens and closes the individual heating circuits through electrical valve actuators.

System components

Base station EKWUFHTA1V3



The Daikin Wired Base Station is the central connection unit for room-by-room temperature control. It changes the surface temperature by adjusting heating and cooling systems.



Wired analogue thermostat EKWCTRA1V3

The Wired Analogue Thermostat is for customers that prefer to adjust the room temperature without the additional features, such as scheduling or performance boosts.



Wired digital thermostat EKWCTRD1V3

The setting of the desired room temperature and the operation, can be performed comfortably via a rotary control with rotary-push action and soft ratchet. The well-structured and language-neutral symbols of the display always clearly indicate all settings.



Valve actuator EKWCVAT1V3

The Daikin Valve Actuator is a thermoelectric valve drive for opening and closing valves on heating circuit distributors of concealed heating and cooling systems.

Daikin Altherma HPC

Floor standing model



The Daikin Altherma HPC provides cooling and heating and is combinable with underfloor piping. The unit is available in 3 models: floor standing, wall mounted and concealed. Its quiet operation makes it an ideal choice for bedroom and or living rooms.



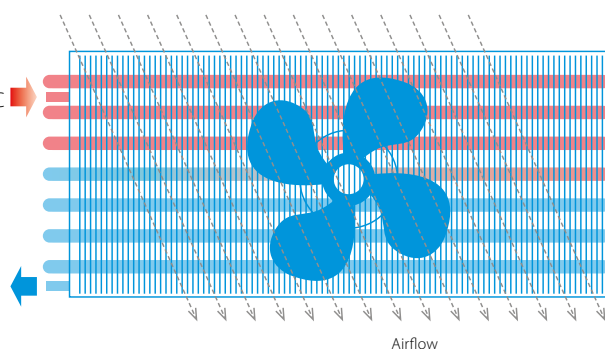
What is a heat pump convector?

The way a heat pump convector works is similar to a radiator, as both use convection to heat a room. A radiator creates convection by running water through its pipes. With a heat pump convector, a radiator's convection process is faster because there's a small fan behind it speeding up the heating cycle.

A heat pump convector creates the same room temperature as a traditional radiator, but with lower water temperatures.

A lower water temperature ensures more energy savings in the long run.

35 °C ~ 45 °C



- › Optimal for newly built homes
- › The low water temperature (35 °C) means this unit is ideal for heat pump applications



Slim design

The floor standing Daikin Altherma HPC measures 135 mm (depth), allowing this heat pump convector to fit in any house or apartment.



Fast and high capacity

The Daikin Altherma HPC delivers high-capacity heating or cooling faster and can be selected at ultra-low temperatures (35/30 °C).

FWXV20ATV3(R)
Length: 1,399 mm

FWXV15ATV3(R)
Length: 1,199 mm

FWXV10ATV3(R)
Length: 999 mm

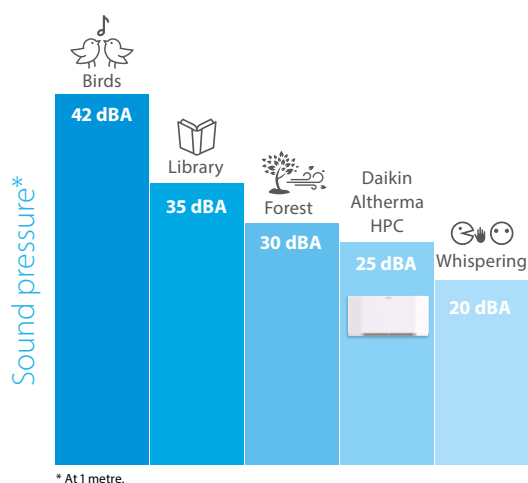


Depth: 135 mm



Discreet

As the unit reaches its set point, a continuous modulating fan gradually reduces its speed and creates less noise. The unit's sound pressure measures 25dB(A) at 1 m when the fan is on a low-speed setting.



DC Inverter

Daikin Altherma HPC uses the latest technologies to consume less electricity (down to 3W of standby power).



Controllers

Daikin offers a wide variety of controllers that are functional and have a great design.

EKRTCTRL1



- › Built-in controller
- › Fully modulating
- › Multicolour display

EKRTCTRL2



- › Built-in controller
- › 4-speed selection

EKWHCTRL1



- › Wall controller
- › Fully modulating
- › Combinable with EKWHCTRL0

EKPCBO

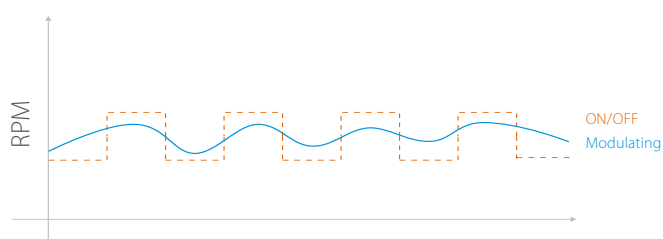


- › Built-in controller
- › ON/OFF
- › Combinable with external thermostats



Modulated airflow

When there is less heating demand, the unit modulates its airflow to slow down the fan rate, and in the process, lowers the operational sound. A standard ON/OFF fan running simultaneously at full speed can increase sound pressure.



* Only applicable for EKRTCTRL1, EKWHCTRL1.



Perfect combination

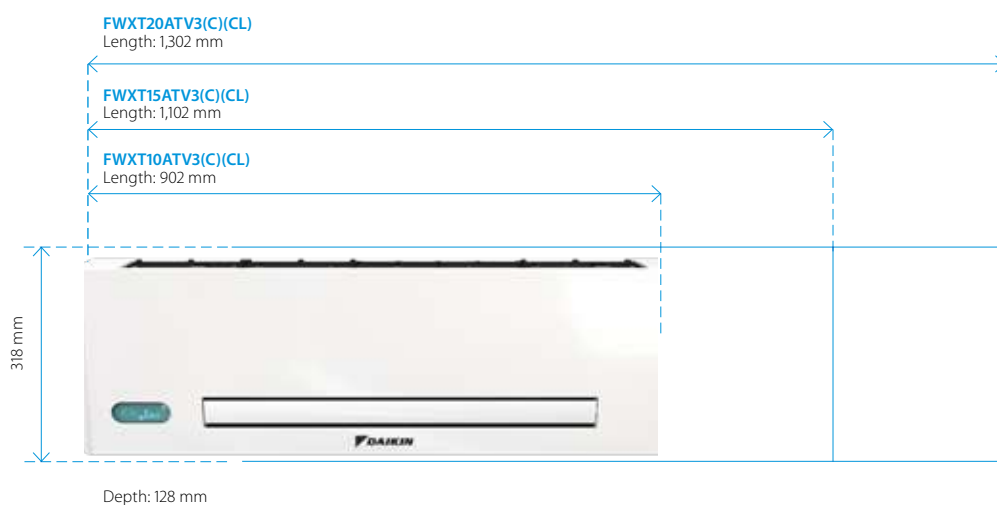
This heat pump convector fits perfectly within the Daikin Altherma 3 range.



Wall mounted model

Slim design

Daikin Altherma HPC is a compact unit made of a design metal casing with built-in valves. The wall-hung application saves floor space for furniture and decor.



Controllers

Choice of:

- › Fully modulating controller allowing remote control of the unit
- › Infrared remote controller and on-board touch panel (C and CL models).

EKWHCTRL1



- › Wall controller
- › Fully modulating

Infrared remote controller



Compactness



1 Slim depth

Depth of 129 mm is an outstanding technical achievement that ensures the unit fits well with any residential dwelling.

2 More space for valves

The wide and accessible valves ensure an easy installation process.

3 Modulated airflow

When there's a low heating demand, the unit modulates its airflow to slow down the fan, and in the process, lowers the operational sound.

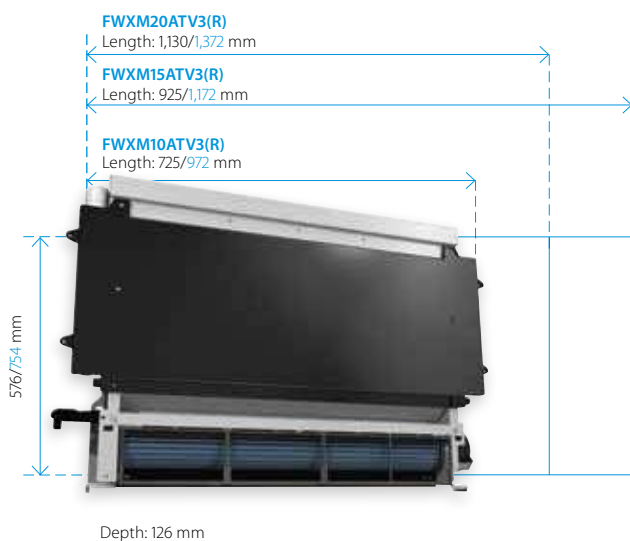
A standard ON/OFF fan running simultaneously at full speed can increase sound pressure.

Concealed model



Slim design

Blue dimensions are for the front cover.



Controllers

EKWHCTRL1



- › Wall controller
- › Fully modulating
- › Combinable with EKWHCTRL0



Flexible installation

Daikin Altherma HPC can be installed in 4 different ways, allowing you to install it in almost all conditions. The unit can be positioned horizontally or vertically. There are 3 different horizontal options:

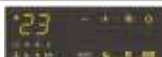
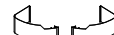
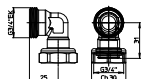
- › Horizontal cover panel and vertical grille for air outlet
- › Horizontal intake grille and vertical grille for air outlet
- › Horizontal in and out grilles for air outlet



Indoor unit				FWXV10ATV3(R)		FWXV15ATV3(R)		FWXV20ATV3(R)		
Cooling capacity at 7/12 °C	Min.			kW	0,66	1,30		1,82		
	Med.			kW	1,36	2,16		2,52		
	Max.			kW	1,77	2,89		3,20		
Sensible cooling capacity at 7/12 °C	Min.			kW	0,39	0,99		1,22		
	Med.			kW	0,98	1,53		1,55		
	Max.			kW	1,33	2,10		1,78		
Heating capacity at 35/30 °C	Min.			kW	0,41	0,45		0,93		
	Med.			kW	0,82	1,29		1,66		
	Max.			kW	1,14	1,73		2,15		
Heating capacity at 45/40 °C	Min.			kW	0,95	1,24		1,90		
	Med.			kW	1,63	2,33		3,05		
	Max.			kW	2,18	3,11		3,88		
Power input	Min.			kW	0,004	0,005		0,010		
	Med.			kW	0,011	0,012		0,016		
	Max.			kW	0,020	0,020		0,030		
Fan speed	Min.			m³/h	118	180		246		
	Med.			m³/h	210	318		410		
	Max.			m³/h	294	438		566		
Casing	Colour			RAL 9003						
	Material			Metal sheet						
Dimensions	Unit	Height		mm	601					
		Width		mm	999	1199		1399		
		Depth		mm	135	135		135		
	Packed unit	Height		mm	690					
		Width		mm	1230	1430		1630		
		Depth		mm	210					
Weight	Unit			kg	20	23		26		
	Packed unit			kg	21	24		27		
Packing	Material			Carton						
	Weight			kg	1					
Heat exchanger	Quantity				1	1		1		
	Internal coil volume			l	0,8	1,13		1,46		
		Max Operating pressure			bar	10				
Water circuit	Piping connections diameter			inch	3/4" male					
	Piping material				EUROKONUS					
	Heating - Water pressure drop at 35/30 °C	Min.		kPa	0,3	2,0		1,2		
		Med.		kPa	1,3	7,5		4,0		
		Max.		kPa	2,4	12,3		8,0		
	Heating - Water pressure drop at 45/40 °C	Min.		kPa	1,3	8,6		3,8		
		Med.		kPa	4,2	3,3		11,2		
		Max.		kPa	7,2	11,5		21,3		
	Cooling - Water pressure drop at 7/12 °C	Min.		kPa	1,2	4,3		2,1		
		Med.		kPa	2,8	19,3		13,1		
		Max.		kPa	2,9	27,0		24,0		
	Heating - Water flow rate at 35/30 °C	Min.		kg/h	69,9	73,6		160,2		
		Med.		kg/h	141,4	221,1		285,3		
		Max.		kg/h	195,2	297,2		369,9		
	Heating - Water flow rate at 45/40 °C	Min.		kg/h	163,5	212,5		327,0		
		Med.		kg/h	280,3	401,1		524,6		
		Max.		kg/h	374,1	534,5		667,5		
	Cooling - Water flow rate at 7/12 °C	Min.		kg/h	113,5	223,7		313,0		
		Med.		kg/h	234,1	371,7		433,6		
		Max.		kg/h	303,6	496,6		550,6		
	Pressure		Heating/Max.	bar	10		10			
Sound power level	Super silent			dBA	29	31		32		
	Min.			dBA	34	35		35		
	Max.			dBA	55	57		58		
Sound pressure level	Super silent			dBA	20	22		23		
	Min.			dBA	25	26		26		
	Max.			dBA	42	44		45		
Operation range	Heating	Water side	Min.	°C	30					
			Max.	°C	85					
	Cooling	Water side	Min.	°C	5					
			Max.	°C	18					
	Indoor installation	Ambient	Min.	°CDB	0					
			Max.	°CDB	45					
Control systems	Infrared remote control				no					
	On board control				yes					
Electrical specifications					FWXV10ATV3(R)		FWXV15ATV3(R)		FWXV20ATV3(R)	
Power supply	Phase				1					
	Frequency			Hz	50					
	Voltage			V	230					
Electrical power consumption	Max.			W	19	20		29		
	Standby			W	3	4		5		
Current	Maximum running current			A	0,16	0,16		0,26		

Indoor unit				FWXM10ATV3(R)		FWXM15ATV3(R)		FWXM20ATV3(R)	
Cooling capacity at 7/12 °C	Min.			kW	0,75	1,15		1,32	
	Med.			kW	1,36	2,08		2,39	
	Max.			kW	2,12	2,81		3,30	
Sensible cooling capacity at 7/12 °C	Min.			kW	0,59	0,83		1,02	
	Med.			kW	1,07	1,51		1,84	
	Max.			kW	1,72	2,11		2,71	
Heating capacity at 35/30 °C	Min.			kW	0,41	0,45		0,93	
	Med.			kW	0,82	1,29		1,66	
	Max.			kW	1,14	1,73		2,15	
Heating capacity at 45/40 °C	Min.			kW	0,82	1,20		1,47	
	Med.			kW	1,53	2,16		2,59	
	Max.			kW	2,21	3,02		3,81	
Power input	Min.			kW	0,004	0,005		0,006	
	Med.			kW	0,008	0,011		0,011	
	Max.			kW	0,019	0,020		0,029	
Fan speed	Min.			m³/h	118	180		246	
	Med.			m³/h	210	318		410	
	Max.			m³/h	294	438		566	
Casing	Material				No casing				
Dimensions	Unit		Height	mm	576				
			Width	mm	725	925		1125	
			Depth	mm	126	126		126	
	Packed unit		Height	mm	690				
			Width	mm	830	1030		1230	
			Depth	mm	210				
Weight	Unit			kg	12	15		18	
	Packed unit			kg	13	16		19	
Packing	Material				Carton				
	Weight			kg	1				
Heat exchanger	Quantity				1	1		1	
	Internal coil volume			l	0,8	1,13		1,46	
				bar	10				
Water circuit	Piping connections diameter			inch	3/4" male				
	Piping material				EUROKONUS				
	Heating - Water pressure drop at 35/30 °C	Min.		kPa	0,3	2,0		1,2	
		Med.		kPa	1,3	7,5		4,0	
		Max.		kPa	2,4	12,3		8,0	
	Heating - Water pressure drop at 45/40 °C	Min.		kPa	1,3	8,6		3,8	
		Med.		kPa	4,2	3,3		11,2	
		Max.		kPa	7,2	11,5		21,3	
	Cooling - Water pressure drop at 7/12 °C	Min.		kPa	1,2	4,3		2,1	
		Med.		kPa	2,8	19,3		13,1	
		Max.		kPa	2,9	27,0		24,0	
	Heating - Water flow rate at 35/30 °C	Min.		kg/h	69,9	73,6		160,2	
		Med.		kg/h	141,4	221,1		285,3	
		Max.		kg/h	195,2	297,2		369,9	
	Heating - Water flow rate at 45/40 °C	Min.		kg/h	163,5	212,5		327,0	
		Med.		kg/h	280,3	401,1		524,6	
		Max.		kg/h	374,1	534,5		667,5	
	Cooling - Water flow rate at 7/12 °C	Min.		kg/h	113,5	223,7		313,0	
		Med.		kg/h	234,1	371,7		433,6	
		Max.		kg/h	303,6	496,6		550,6	
		Pressure			bar	10	10		10
Sound power level	Super silent			dBA	29	31		32	
	Min.			dBA	35	35		36	
	Max.			dBA	53	54		55	
Sound pressure level	Super silent			dBA	20	22		23	
	Min.			dBA	25	26		26	
	Max.			dBA	42	44		46	
Operation range	Heating	Water side	Min.	°C	30				
			Max.	°C.	85				
	Cooling	Water side	Min.	°C.	5				
			Max.	°C	18				
	Indoor installation	Ambient	Min.	°CDB	0				
			Max.	°CDB	45				
Control systems	Infrared remote control				no				
	On board control				no				
Electrical specifications				FWXM10ATV3(R)		FWXM15ATV3(R)		FWXM20ATV3(R)	
Power supply	Phase				1				
	Frequency			Hz	50				
	Voltage			V	230				
Electrical power consumption	Max.			W	19	20		29	
	Standby			W	3	4		5	
Current	Maximum running current			A	0,16	0,16		0,26	

Indoor unit				FWXT10ATV3(C)(CL)		FWXT15ATV3(C)(CL)		FWXT20ATV3(C)(CL)	
Cooling capacity at 7/12 °C	Min.			kW	0,53	0,65		0,74	
	Med.			kW	0,98	1,20		1,35	
	Max.			kW	1,21	1,62		2,12	
Sensible cooling capacity at 7/12 °C	Min.			kW	0,13	0,15		0,36	
	Med.			kW	0,40	0,56		0,70	
	Max.			kW	1,01	1,44		1,99	
Heating capacity at 35/30 °C	Min.			kW	0,29	0,23		0,47	
	Med.			kW	0,48	0,69		1,08	
	Max.			kW	0,66	1,00		1,44	
Heating capacity at 45/40 °C	Min.			kW	0,61	0,85		1,08	
	Med.			kW	1,12	1,51		1,95	
	Max.			kW	1,51	2,03		2,62	
Power input	Min.			kW	0,004	0,005		0,006	
	Max.			kW	0,019	0,020		0,029	
Fan speed	Min.			m³/h	84	124		138	
	Med.			m³/h	155	229		283	
	Max.			m³/h	228	331		440	
Casing	Colour				RAL 9003				
	Material				Metal sheet				
Dimensions	Unit	Height			mm	335			
		Width			mm	902	1100	1300	
		Depth			mm	128			
	Packed unit	Height			mm	490			
		Width			mm	1030	1230	1430	
		Depth			mm	210			
Weight	Unit			kg	14	16	19		
Packing	Packed unit			kg	15	17	20		
	Material				Carton				
Heat exchanger	Weight			kg	1				
	Quantity				1				
	Internal coil volume			l	0,54	0,74	0,93		
Water circuit	Piping connections diameter			inch	3/4" male				
	Piping material				EUROKONUS				
	Heating - Water pressure drop at 35/30 °C	Min.		kPa	0,2	1,9		0,3	
		Med.		kPa	0,9	2,9		1,4	
		Max.		kPa	1,6	3,3		2,3	
	Heating - Water pressure drop at 45/40 °C	Min.		kPa	1,1	2,8		1,1	
		Med.		kPa	3,1	3,5		4,1	
		Max.		kPa	5,4	4,0		6,6	
	Cooling - Water pressure drop at 7/12 °C	Min.		kPa	1,1	3,9		1,3	
		Med.		kPa	3,0	4,8		4,2	
		Max.		kPa	5,2	5,7		6,9	
	Heating - Water flow rate at 35/30 °C	Min.		kg/h	39,3	39,0		80,8	
		Med.		kg/h	81,8	119,4		185,4	
		Max.		kg/h	114,0	172,4		247,8	
	Heating - Water flow rate at 45/40 °C	Min.		kg/h	91,9	112,6		164,8	
		Med.		kg/h	162,0	216,6		341,0	
		Max.		kg/h	218,4	310,0		447,2	
	Cooling - Water flow rate at 7/12 °C	Min.		kg/h	82,1	98,9		156,5	
		Med.		kg/h	138,1	177,4		300,6	
		Max.		kg/h	184,4	283,0		396,8	
Sound power level	Pressure			Heating/Max.	bar	10		10	
	Min.			dBA	35	36		36	
	Max.			dBA	53	54		55	
Sound pressure level	Min.			dBA	25	25		26	
	Max.			dBA	40	42		43	
Operation range	Heating	Water side	Min.	°C	30				
			Max.	°C.	85				
	Cooling	Water side	Min.	°C.	5				
			Max.	°C	18				
	Indoor installation	Ambient	Min.	°CDB	0				
			Max.	°CDB	45				
Electrical specifications					FWXT10ATV3(C)(CL)	FWXT15ATV3(C)(CL)		FWXT20ATV3(C)(CL)	
Power supply	Phase				1				
	Frequency			Hz	50				
Electrical power consumption	Voltage			V	230				
	Max.			W	17,6	19,8	26,5		
	Standby			W	5	5	5,8		
Current	Maximum running current			A	0,16				

							
			FWXV10ATV3(R)	FWXM10ATV3(R)	FWXM15ATV3(R)	FWXM20ATV3(R)	FWXT10ATV3(C)(CL)
			FWXV15ATV3(R)				FWXT15ATV3(C)(CL)
			FWXV20ATV3(R)				FWXT20ATV3(C)(CL)
			DC Inverter fan coil unit with sheet metal cabinet (white colour)	Built in DC Inverter fancoil for horizontal and vertical			High Wall fancoil
Material name	Description	Picture					
EKRTCTRL1	On board electronic control SMART TOUCH with PID full modulating fan and thermostat		Opt				
EKRTCTRL2	On board electronic control SMART TOUCH 4 speeds with thermostat		Opt				
EKPCBO	On board 4 speeds control switch to be combine with Daikin combinable thermostats		Opt				
EKWHCTRL0	On board controller for EKWHCTRL1		Opt	Opt	Opt	Opt	
EKWHCTRL1	SMART LCD wall controller with temperature probe, white casing		Opt	Opt	Opt	Opt	Opt
EKFA	Aestetical feet		Opt				
EK2VK0	Motorized 2-way valve (FWXV/M)		Opt	Opt	Opt	Opt	
EKT2VK0	Motorized 2-way valve (FWXT)						Opt
EK3VK1	Motorized 3-way valve (FWXV/M)		Opt	Opt	Opt	Opt	
EKT3VK1	Motorized 3-way valve (FWXT)						Opt
EKEUR90	L-bow 90 °C		Opt	Opt	Opt	Opt	
EKDIST	Extension piece		Opt	Opt	Opt	Opt	
EKM10COH	Condensate collector tray for horizontal installation		FWXV10ATV3(R)				
EKM15COH			FWXV15ATV3(R)				
EKM20COH			FWXV20ATV3(R)				
EKM10CS	Metal casing			Opt			
EKM15CS					Opt		
EKM20CS						Opt	
EKM10CH	Front cover for ceiling installation			Opt			
EKM15CH					Opt		
EKM20CH						Opt	
EKM10CV	Front cover for wall installation			Opt			
EKM15CV					Opt		
EKM20CV						Opt	
EKM10DH	Air intake fitting			Opt			
EKM15DH					Opt		
EKM20DH						Opt	
EKM10D90	90 °C exhaust bend (Horizontal)			Opt			
EKM15D90					Opt		
EKM20D90						Opt	
EKM10DT	Telescopic air flow duct			Opt			
EKM15DT					Opt		
EKM20DT						Opt	
EKM10IS	Aluminum air intake grill with straight airflow			Opt			
EKM15IS					Opt		
EKM20IS						Opt	
EKM10SV	Straight airflow vent			Opt			
EKM15SV					Opt		
EKM20SV						Opt	
EKM10IC	Aluminum air intake grill with curved airflow			Opt			
EKM15IC					Opt		
EKM20IC						Opt	
EKM10CA	Aluminum air outlet grill with curved airflow			Opt			
EKM15CA					Opt		
EKM20CA						Opt	

Stand By Me,

a journey to customer satisfaction

With the Stand By Me service programme, you can rest assured your customers are benefiting from the best comfort, energy efficiency, usability and service available on the market. Stand By Me eliminates clients' worries and provides them with a free, extended warranty, quick follow-up from Daikin service providers, and additional warranties for specific parts.



Free warranty extension



The first advantage of **Stand By Me** is a free warranty extension:

- ✓ Applies to both labour and parts
- ✓ Begins immediately after registration



Quick follow-up by Daikin service partners

Daikin service partners are automatically notified when a customer registers their installation on **www.standbyme.daikin.eu** and needs maintenance.

Your customers are guaranteed:

- ✓ Quick and reliable service
- ✓ Documentation management related to the installation, (i.e. registration documents, attendance records, maintenance records, etc.)
- ✓ Real-time error codes inform the service partner about possible issues



Extended warranty on parts

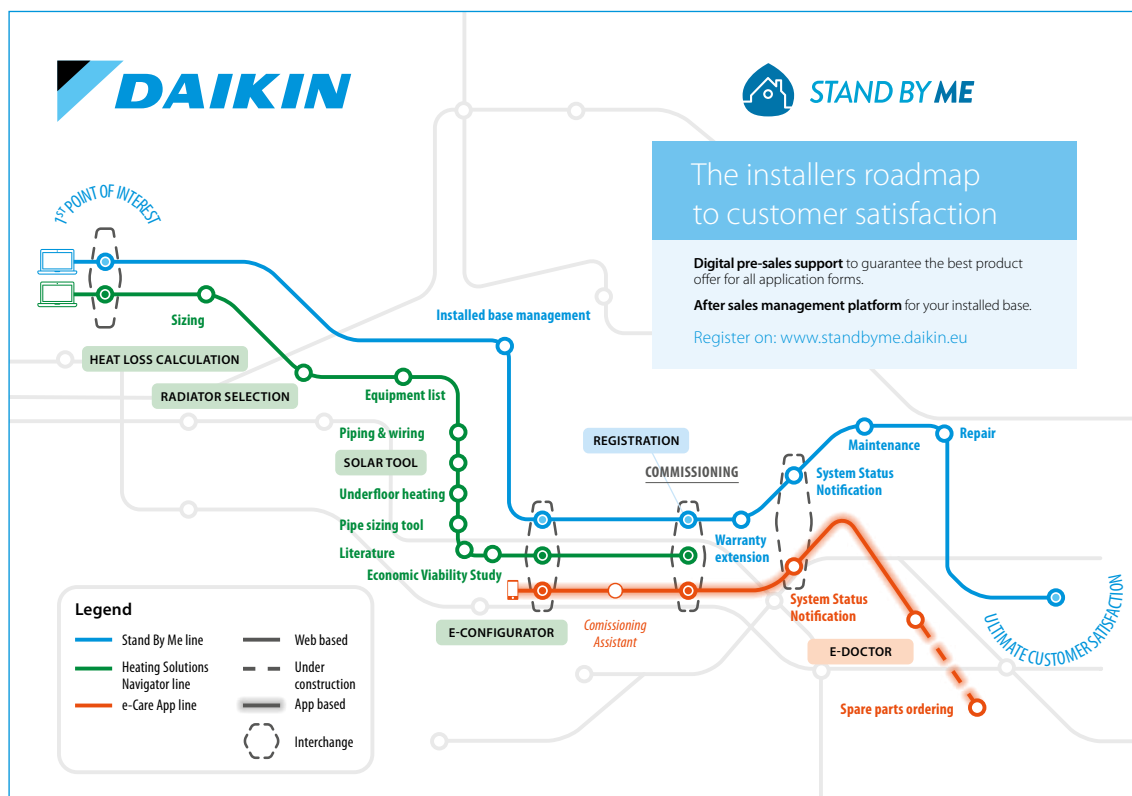
For a small fee, customers can extend the warranty on specific parts. Contact your local Daikin branch for more information about the specific offer in your country.

Stand By Me guarantees:

- ✓ That each component is replaced quickly
- ✓ Helps avoid financial surprises
- ✓ Long life and smooth operation and all other benefits of a Daikin installation
- ✓ Reliable service from official Daikin service partners

Daikin service partners work exclusively with Daikin parts and have all of the necessary technical knowledge to solve any issue that may arise.

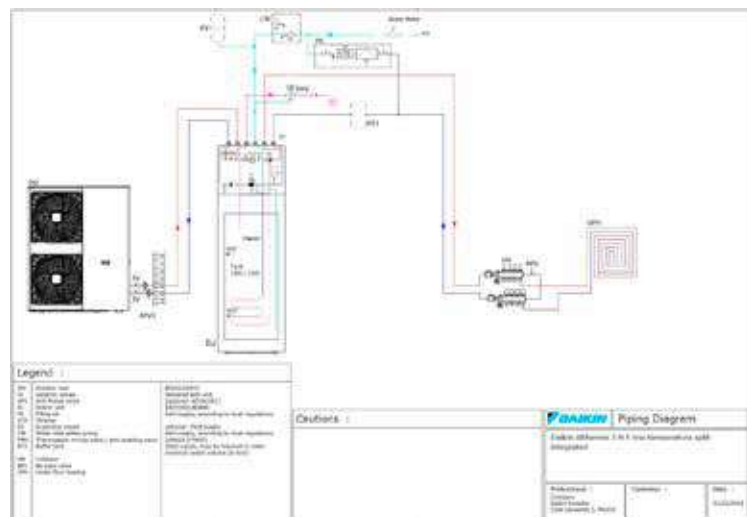
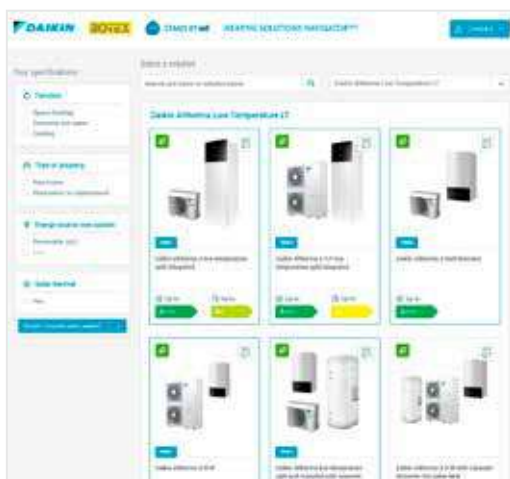
Stand By Me roadmap overview



Heating Solutions Navigator



- › The Heating Solutions Navigator is a digital toolbox developed for Daikin professionals who need to provide the best possible solution for their customers' homes.
- › As a service provider, you can use this tool to configure an installation, create custom-made piping and wiring diagrams, and much more.



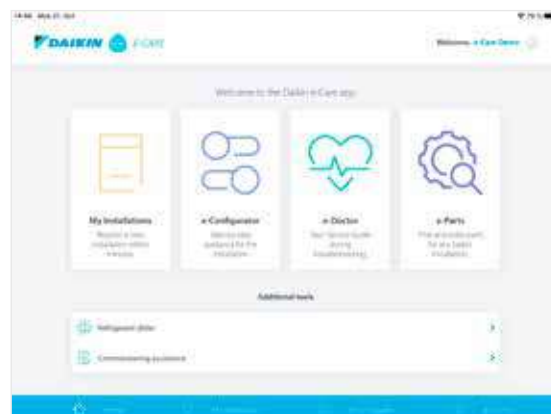
E-Care App



The Daikin e-Care App makes life easier to install a Daikin unit. This useful app allows you to retrieve Stand By Me registrations by scanning a QR code, easily configure heating installations, and troubleshoot via the e-Doctor feature.

Installers can now:

- › Order spare parts directly from the e-Care App
- › Update installation settings with a Wifi USB stick
- › Avoid issues with the Commissioning Assistant





STAND BY ME

www.standbyme.daikin.eu

Stand By Me and The Heating Solutions Navigator help connect Daikin with its partners to make installations easier.

Curious to learn how these platforms work? Scan the QR codes below to see a demo for each tool.



HEATING SOLUTIONS NAVIGATOR (HSN)

professional.standbyme.daikin.eu

The Heating Solutions Navigator is a digital toolbox that helps you select the right Daikin solution for your customer's home.



SIZING

HSN: Room By Room Heat Load

The optional Room by Room Heat Load Calculation tool helps you estimate the heat load of a property.

SOLAR

HSN: Solar Selection Tool

The Solar Selection Tool shows the benefits of Daikin solar technologies and helps you choose the right system for a home.

PIPE SIZING TOOL

Calculate the maximum hydronic piping length from the indoor unit to the outdoor unit based on the emitter pressure drop or vice versa.

ECONOMIC VIABILITY STUDY

Compare a Daikin solution with a benchmark solution.

INSTALLED BASE MANAGEMENT



EQUIPMENT LIST



RADIATOR

HSN: Radiator Selection Tool

The Radiator Selector Tool helps you select the appropriate radiator size for each room.

UNDERFLOOR HEATING

The Underfloor Heating Tool provides an overview of materials you'll need for a specific project, a detailed calculation and floor plan.

PIPING & WIRING

Get customised piping and wiring diagrams for every project that take many parameters into account, such as heat generator, zoning, emitter type and more.

CONFIGURATION TOOL

The e-Configurator is a web-based tool and app which allows installers to configure the settings of Daikin Altherma heat pumps remotely.

With a user friendly and intuitive interface, configuration can be completed in a couple of steps. Then it can be stored as a PDF or saved on a USB stick/ SD card to upload into the heat pump on the job site.





**CONTACT YOUR LOCAL
SBM/HSN SPECIALIST**

REGISTRATION

Installation Registration SBM is an after-sales service tool that extends the warranties of installations and allows you to place orders for maintenance packages.

With Stand By Me, you have access to a digital logbook to keep track of all your Daikin installations and refer back them via any mobile device.

SYSTEM STATUS NOTIFICATION

MAINTENANCE

REPAIR

COMMISSIONING

WARRANTY EXTENSION



DEMO

ULTIMATE CUSTOMER SATISFACTION

COMMISSIONING ASSISTANT

Use this special hydro check module during commissioning.



DEMO

SYSTEM STATUS NOTIFICATION

You can choose to receive malfunction codes about your installations via the Stand By Me platform or the e-Care App.

E-DOCTOR

e-Care App:
Daikin e-Doctor is part of the e-Care App and offers assistance when you need to troubleshoot a unit.

SPARE PARTS ORDERING

E-CARE



DAIKIN

*Stand By Me, a journey towards
customer satisfaction*



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