

# The RenewAble choice for modern homes

Daikin Altherma LT split heat pump range for the installer





## Why choose Daikin Altherma low temperature split?

Your customer requires a new heating system:

- Must work in a new build or low-energy house
- Must work with under floor heating, convectors > and low temperature radiators

Your solution - the Daikin Altherma low temperature split:

- Provides heating, domestic hot water and > cooling with optional solar support
- Available in capacities from 4 to 16 kW >
- Available as floor standing or wall hung >
- Ideal for new builds and low energy houses >

#### Your customer gains:

- Optimal comfort plus domestic hot water >
- Low operating costs thanks to high efficiencies >

#### You gain:

- Modular construction >
- Flexible installation >
- Simple commissioning >

Result: win-win for you AND the customer



MCS HP0006





## Daikin Altherma low temperature split heat pumps

# The RenewAble choice for modern homes

## Daikin Altherma low temperature split range

Offers the best seasonal efficiencies providing the highest savings on running costs, it is the perfect fit for new builds, as well as for low-energy houses.

Available in two types:

- A. Integrated heating and hot water unit, saving installation space and time:
  - > All components and connections factory-made
  - > Very small installation footprint required
  - > Available in Europe since 2013 and now available in the UK



B. Wall mounted indoor unit with optional domestic hot water tank:

- Ideal for space heating only or more flexibility for when domestic hot water is required
- Can be combined with a stainless steel cylinder or thermal store with optional solar
- > Our most popular choice over 10 years



# Daikin Altherma low temperature split

Guaranteed operation: Daikin Altherma is suitable for all climates, even withstanding severe winter conditions



Daikin is renowned for the frost protection features on its heat pump range. The outdoor units are specifically designed to avoid ice build-up, even in the most severe winter conditions.

Daikin Altherma LT Split has a guaranteed operation down to an outside temperature of -25°C. This ensures sufficient heat pump operation for even the coldest climates.

## 1. The 4-8kW Daikin Altherma LT Split has a casing designed specifically to avoid the risk of ice formation on the outdoor unit coil:

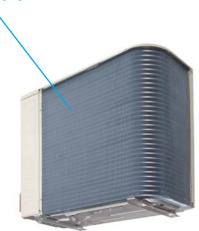
- > The outdoor unit has a free hanging coil, ensuring no ice accumulates in the lower part of the outdoor unit. This is key to offering appropriate frost protection and has the additional advantage that no electrical bottom plate heater is required
- > The discharge grill is also designed specifically to avoid ice accumulation

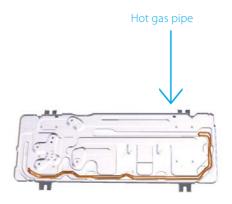
# 2. The 11-16kW Daikin Altherma LT Split out door unit has specific frost protection.:

- Hot gas pass: hot gaseous refrigerant coming from the compressor runs through the bottom plate to keep the base free of ice and all the drain holes open
- Sub-cool pass: before the refrigerant pipe is split by the distributor to the hairpins, the refrigerant passes through the bottom of the coil to keep this lower part free of ice



#### Free hanging coil

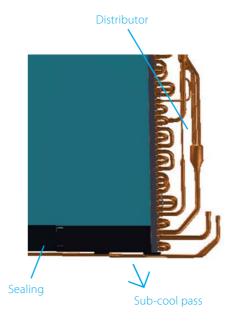




Our advanced protection against frost and ice means that we can offer the Daikin Altherma range across the whole of Europe.

#### New discharge grille





Only a small capacity bottom plate heater is installed (35W) on the ERLQ011,014,016C range, with smart operation logic only operating during defrost cycles. This saves around 90% of electricity consumption compared with a thermostatically controlled bottom plate heater.

# Floor standing indoor unit, saving installation space and time

- To allow you to provide a quick and efficient installation, we have included the stainless steel domestic hot water tank within the indoor unit. This reduces installation time, as it only needs refrigerant and water connections
- All hydraulic components are included (circulating pump, expansion vessel, back-up heater,etc.)
- The unit has been designed in such a way that allows for ease of servicing. All components are accessible from the front, including PCBs and hydraulic components. As well as being beneficial for servicing, it also avoids any chance of electrical damage if a water leakage is to occur, as it has been tested in accordance with IEC standards (60335-2-40)
- > A smaller installation footprint minimises the floor area taken up by the system. All water and refrigerant connections are at the top of the unit, assuring easy connections and accessibility
- To maintain the compact and integrated design, we have specifically designed a G3 to be inbuilt into the system, which includes expansion vessels, valves and tundish

# Thanks to the all-in-one design, the installation space is minimised both in terms of footprint and height

The installation space required is greatly reduced compared with a traditional split wall-hung indoor unit and separate domestic hot water tank

Minimal side clearances and no rear clearance are achieved by having top pipe connections. This results in an installation footprint of only 0.45m<sup>2</sup>

The compactness of the integrated indoor unit is emphasised by its sleek design and modern look, easily harmonising with other household appliances



600 mm

Floor standing indoor unit





## Wall mounted unit, offering flexibility for installation and domestic hot water connection

1.

#### 1. The wall mounted indoor unit

- > All hydraulic components are included in the heat pump unit (circulating pump, expansion vessel, backup heater, etc), so there's no need for third-party components
- > All hydraulic components and the PCB board, are accessible from the front for easy serviceability
- > Compact unit: 890 mm (height) x 480 mm (width) x 344 mm (depth)
- > Small installation space as almost no side clearances are required
- > Modern silhouette fits in easily with other modern household appliances

#### 2. Domestic hot water tank

> EKHWSU stainless steel tank: 150l, 200l or 300l

#### 3. Solar connection

> Use Daikin drainback solar system in conjuction with the thermal store EKHWP thermal store: 300l or 500l







#### Smart Comfort Controller

Take control of your heat pump even when you are away. The smart comfort controller provides the end user remote connection convenience via their smart device. Using the Daikin heating app, view, monitor and adjust various settings to suit a busy life style or a change of plans. Features include: -

- > Turn the system on or off
- > View and adjust the room and hot water temperature
- > View and amend heating and hot water schedules
- > Switch between heat pump modes of operation
- > System status reporting
- > Control multiple installations via one 'app'

#### System controller

In case something goes wrong, full-text error messages will guide the householder 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, supplied with every heat pump.

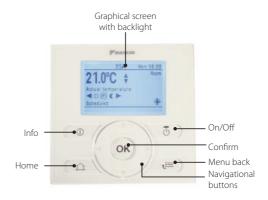
#### Optional simplified room thermostat

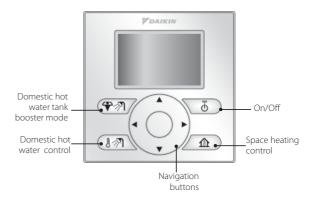
Ideal for social landlords, the simplified room thermostat allows for only basic operation of the heat pump system, preventing tenants from adjusting field settings and programmes. The functionality is limited to only allow the tenant to:

- > 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

Note: Can not be combined with Netatmo







# Technical Specifications

## Daikin Altherma LT split (Floor standing)



#### EHVH-CB (Indoor)

Indoor Units			Single Phase							
Description			EHVH04SU18CB6W	EHVH08SU18CB6W	EHVH08SU26CB6W	EHVH11SU260CB6W	EHVH16SU260CB6W			
				For For   ERLQ004CV3 ERLQ006-008CV3		For ERLQ011CV3	For ERLQ014-016CV3			
Function					Heating only					
Casing	Colour				White					
	Material		Pre-coated sheet metal							
Dimensions	Height x Width x Depth mm		1,732 x 6	600 x 728		1,922 x 600 x 728				
Weight		kg	116	117	126	126	127			
Sound power level	Nom.	dBA		4	12		44			
Sound pressure level	Nom.	dBA		2	28		30			
Operating range	Space heating	°C	15℃-55℃							
	DHW	°C	25°C-55°C							
Domestic hot water	Material			Stainless steel (EN 1.4521)						
	Water volume	1	1	180 260						
	Tapping profile according to EN1614	17	L	L	L	L	L			
	ERP heat losses	W	5	8	80					
	ERP efficiency rating		В	В	C	C	С			
	Standing losses @ 60°C	kWh/24h	1	.4		1.9				
	Max operating pressure	Bar			10					
	Immersion heater	kW			2.5					
Hydraulic	Available back up heater	kW	6							
characteristics	Water connections DHW	inch	G 3/4" (female)							
	Water connections Space heating	inch	G 1″1/4 (female)							
Power supply		V			1-phase / 230V / 50Hz					
Back-up heater	3kW 1ph 230V	A			16					
fuse rating	6kW 1ph 230V	А			32					

Notes:

 Back-up heater can be re-wired as 3kW/1ph or 6kW/1ph

## Daikin Altherma LT split (Wall hung)



#### EHBH-CB (Indoor)

Indoor Unit (wall h	ung)			Single	e Phase	S	ingle phase / 3 Phase	e*				
		EHBH04CB3V	EHBH08CB3V	EHBH11CB3V	EHBH16CB3V	EHBH08CB9W	EHBH11CB9W	EHBH16CB9W				
Description			For ERLQ004CV3	For ER- LQ006-008CV3	For ERLQ011CV3	For ER- LQ014-016CV3	For ER- LQ006-008CV3	For ERLQ011CV3/ W1	For ER- LQ014-016CV3/W1			
Function			Heating Only	Heating Only	Heating Only	Heating Only	Heating Only	Heating Only	Heating Only			
Dimensions	HxWxD	mm				890 x 480 x 344 / 381						
Leaving water Heating °C		°C	15~55									
temperature range	Cooling	°C				-						
Pump	No. of speeds					Inverter controlled						
Expansion vessel vol	ume	litres				10						
Water connections		Inch				1 1/4" (female)						
Back-up heater	3kW 1ph 230V	А				16						
fuse rating	6kW 1ph 230V	А	- 32**									
	6kW 3ph 400V	А			-			10**				
	9kW 3ph 400V	А			-			16**				

Indoor Unit (wall h	ung)			Single	e Phase	S	ingle phase / 3 Phase	e*			
			EHBX04CB3V	EHBX08CB3V	EHBX11CB3V	EHBX16CB3V	EHBX08CB9W	EHBX11CB9W	EHBX16CB9W		
Description			For ERLQ004CV3	For ER- LQ006-008CV3	For ERLQ011CV3	For ER- LQ014-016CV3	For ER- LQ006-008CV3	For ERLQ011CV3/ W1	For ER- LQ014-016CV3/W1		
Function			Reversible	Reversible	Reversible	Reversible	Reversible	Reversible	Reversible		
Dimensions		mm				890 x 480 x 344 / 381					
Leaving water	Heating	°C				15 ~ 55					
temperature range	Cooling	°C	5~22								
Pump	No. of speeds					Inverter controlled					
Expansion vessel vo	lume	litres				10					
Water connections		Inch				1 1/4" (female)					
Back-up heater	3kW 1ph 230V	А				16					
fuse rating	6kW 1ph 230V	А			-			32**			
	6kW 3ph 400V	А			-			10**			
	9kW 3ph 400V	А			-			16**			

#### Stainless steel domestic hot water tank

#### EKHWSU-B3V3

Domestic hot water cylinder			UK.EKHWSU150B3V3	UK.EKHWSU200B3V3	UK.EKHWSU300B3V3			
Description			150L unvented cylinder (Including EKUHWBB)	200L unvented cylinder (Including EKUHWBB)	300L unvented cylinder (Including EKUHWBB)			
Suitable for			Unvented systems (EKUHWBB kit included)					
Energy efficiency class			С	С	C			
Standing heat loss (ErP)		W	65	74	91			
Storage volume		L	150	200	285			
Standing heat loss			115	177	219			
Max water temperature		°C	85					
Booster heater capacity		kW	3					
Power supply			1-phase / 230V / 50Hz					
Recommended fuses		Α		16				
Height		mm	1015	1265	1715			
Diameter		mm		580				
Empty weight		kg	38	46	60			
Material inside cylinder			Stainless steel					
Piping connections (diameter)	Water inlet H/E	inch	3/4 (female)					
	Water outlet H/E	inch	3/4 (female)					
	Cold water in	inch	3/4 (female)					
	Hot water out	inch	3/4 (female)					



			User interface	Optional simplified room thermostat	
Indoor unit			EKRUCBL2	EKRUCBS	
Control systems	Class of temperature control		VI		
	Contribution to seasonal space heating efficiency	%	4	.0	

## Daikin Altherma LT split (Outdoor)



#### ERLQ-CV3/CW1

Outdoor Units					Single	Phase			
			ERLQ004CV3	ERLQ006CV3	ERLQ008CV3	ERLQ011CV3	ERLQ014CV3	ERLQ016CV3	
Description			4kW, 1-phase, 230V	6kW, 1-phase, 230V	8kW, 1-phase, 230V	11kW, 1-phase, 230V	14kW, 1-phase, 230V	16kW, 1-phase, 230V	
Dimensions	Height x Width x Depth	mm		735 x 832 x 307			1345 x 900 x 320		
Weight		kg	54	56	56		113		
Nominal capacity	Heating (a/b)	kW	4.4 / 4.2	6.0 / 5.12	7.4 / 6.13	11.2 / 9.6	14.5 / 10.8	16.0 / 10.9	
	Cooling	kW	4.17	4.84	5.36	11.72	12.55	13.12	
Nominal input	Heating (a/b)	kW	0.87 / 1.85	1.27 / 2.31	1.66 / 2.89	2.43 / 4.57	3.37 / 5.19	3.76 / 5.22	
	Cooling	kW	1.8	2.07	2.34	4.31	5.08	5.73	
COP	Heating (a/b)		5.04 / 2.27	4.74 / 2.22	4.45 / 2.12	4.60 / 2.1	4.30 / 2.08	4.25 / 2.09	
Seasonal space heating efficiency*	Space heating (Average climate) 35°C	Class	A++	A++	A++	A++	A++	A+	
		Efficiency	178	169	171	156	153	149	
		SCOP	4.52	4.29	4.34	3.98	3.90	3.80	
	Space heating (Average climate) 55°C	Class	A++	A++	A++	A+	A+	A+	
		Efficiency	125	126	126	120	123	119	
		SCOP	3.20	3.22	3.23	3.09	3.16	3.06	
EER	Cooling		2.32	2.34	2.29	2.72	2.47	2.29	
Operation range	Heating	°C		-25~25		-25~35			
	Cooling	°C		10~43		10~46			
	Hot water	°C		-25~35		-20~35			
Sound pressure /	Heating	dBA	48/61	48 / 61	49 / 62	51 / 64	51 / 64	52 / 66	
power level	Cooling	dBA	48 / 63	49 / 63	50 / 63	50 / 64	52 / 66	54 / 69	
Refrigerant charge	R-410A	kg	1.45	1.6	1.6		3.4		
Piping connections	Liquid	inches		1/4			3/8		
	Gas	inches		5/8			5/8		
Max piping length OU to IU		m		30			50		
Power supply		V			1-phase / 2	230V / 50Hz			
Recommended fuse	25	A		20			40		

Outdoor Units				3 Phase		
			ERLQ011CW1	ERLQ014CW1	ERLQ016CW1	
Description			11kW, 3-phase, 400V	14kW, 3-phase, 400V	16kW, 3-phase, 400V	
Dimensions	Height x Width x Depth	mm		1345 x 900 x 320		
Weight		kg		113		
Nominal capacity	Heating (a/b)	kW	11.2 / 9.6	14.5 / 10.8	16.0 / 10.9	
	Cooling	kW	11.72	12.55	13.12	
Nominal input	Heating (a/b)	kW	2.43 / 4.57	3.37 / 5.19	3.76 / 5.22	
	Cooling	kW	4.31	5.08	5.73	
COP	Heating (a/b)		4.60 / 2.1	4.30 / 2.08	4.25 / 2.09	
Seasonal space	Space heating	Class	A++	A++	A+	
heating efficiency*	(Average climate) 35°C	Efficiency	156	153	149	
		SCOP	3.98	3.90	3.80	
	Space heating	Class	A+	A+	A+	
	(Average climate) 55°C	Efficiency	120	123	119	
		SCOP	3.09	3.16	3.06	
EER	Cooling		2.72	2.47	2.29	
Operation range	Heating	°C		-25~35		
	Cooling	°C	10~46			
	Hot water	°C		-20~35		
Sound pressure /	Heating	dBA	51 / 64	51 / 64	52 / 66	
power level	Cooling	dBA	50 / 64	52 / 66	54/69	
Refrigerant charge	R-410A	kg		3.4		
Piping connections	Liquid	inches		3/8		
	Gas	inches	5/8			
Max piping length OU to IU		m		50		
Power supply				3-phase / 400V / 50Hz		
Recommended fuses		A		20		

\* When combined with matching indoor unit

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 (A-7 W45) Cooling: Ambient air temperature 35°C and leaving water temperature 7°C (A35 W7) Sound pressure level measured at 1m from the unit

#### Features:

- > This split system consists of an outdoor unit and an indoor hydrobox that can be connected to all standard low temperature radiators and underfloor heating systems
- > All models have extra features to withstand severe winter conditions

#### Notes:

i) Some units are available on special request with Blygold treatment to offer additional protection in coastal environments. Please contact your local sales office for further information



# 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. More than 400,000 Daikin Altherma heat pumps have been fitted across Europe since its initial launch in 2006.

### daikin.co.uk Heating installer line: 0845 641 9070 Dedicated homeowner support line: 0845 641 9271

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