DAIKIN

altherma

eco

renewable

A new world of heating for your customers

Energy for change

EAB(H/X)-D

BRC1HHDK

EPGA-D

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Daikin Altherma 3
H-Split 11-14-16 kW
powered by Bluevolution with R32

R-32, the environmentally-friendly refrigerant

BLUEVOLUTION

R-32
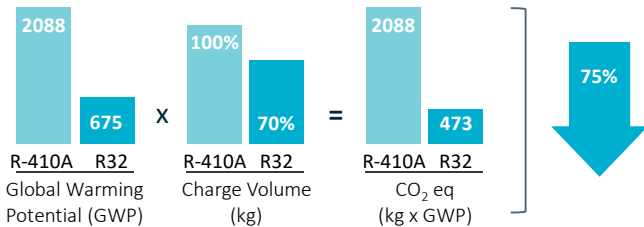
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Bluevolution
Bluevolution technology combines highly efficient compressor technology developed by Daikin, together with the future of refrigerants: R32.

Environmentally-friendly
Thanks to its combination of a lower Global Warming Potential (GWP) refrigerant - 675 vs. 2087.5 for R410A - and reduced refrigerant charge, R32 has a 75% lower CO_2 equivalent than
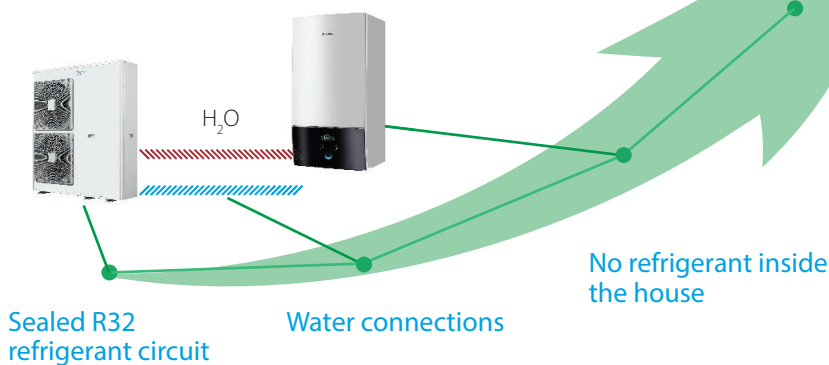
2088	100%	2088	75%
675	70%	473	
R-410A R32	R-410A R32	R-410A R32	
Global Warming Potential (GWP)	Charge Volume (kg)	CO_2 eq (kg x GWP)	

X =

The hydrosplit concept

Looking ahead to a better future

H_2O

With R32, the future is now

Pioneers in the use of R32 in air-to-water heat pumps, Daikin places an absolute priority on the reduction of our environment impact.

No refrigerant inside the house

Sealed R32 refrigerant circuit

Reduced risk of refrigerant leakage.

Water connections

Only water connections between the indoor and outdoor units.

Gas injection advantage
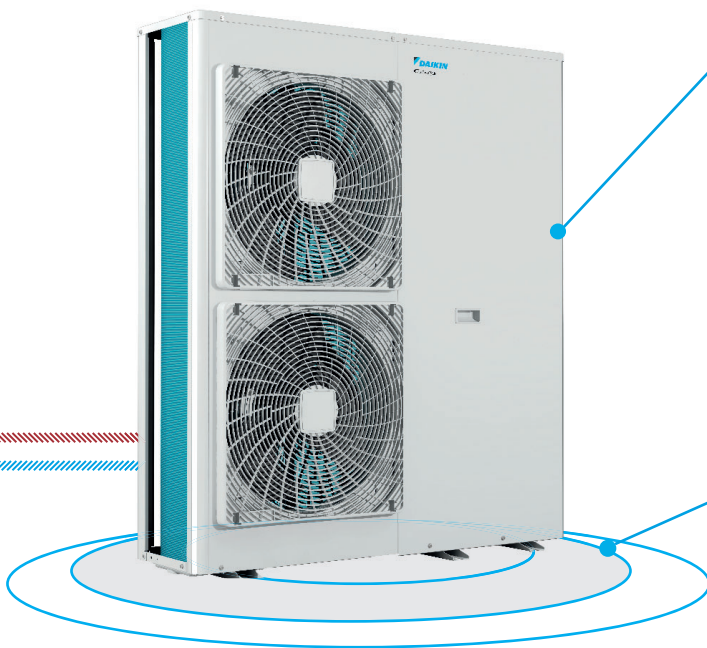
Higher capacity at low ambient

The Daikin Altherma 3 H-Split 11-16 kW outdoor unit is equipped with a new gas injection scroll compressor allowing the unit to operate even when it's down to -28°C outside.

Moreover, the heating capacity at low ambient temperature (-7/35°C) sees an improvement of 35% compared to its predecessor.

Convenient for sensitive urban areas

Low sound installer setting

In order to fulfil the requirements of the most sound sensitive urban areas, the unit can be set up in low sound mode, reducing the sound level by -3 dB(A).

Higher performances

Leaving water temperature

With a leaving water temperature of 60°C at -10°C outside, the Daikin Altherma 3 H-Split heat pump is perfect for:
- New build applications using underfloor heating
- Renovation applications using radiators

Daikin Altherma 3 H-Split 11-14-16 kW outdoor unit

The outdoor unit EPGA-D is available in size 11-14-16 kW 1 phase and is connectable to:
- EAB(H/X)-D wall mounted indoor units

Top energy performances

Thanks to the use of R32, the unit reaches the highest energy performances represented by the best energy labels.

up to

A+++ (3)   A (3)

(3) According to EU n°811/2013 label lay-out 2019, on a scale from G to A+++.
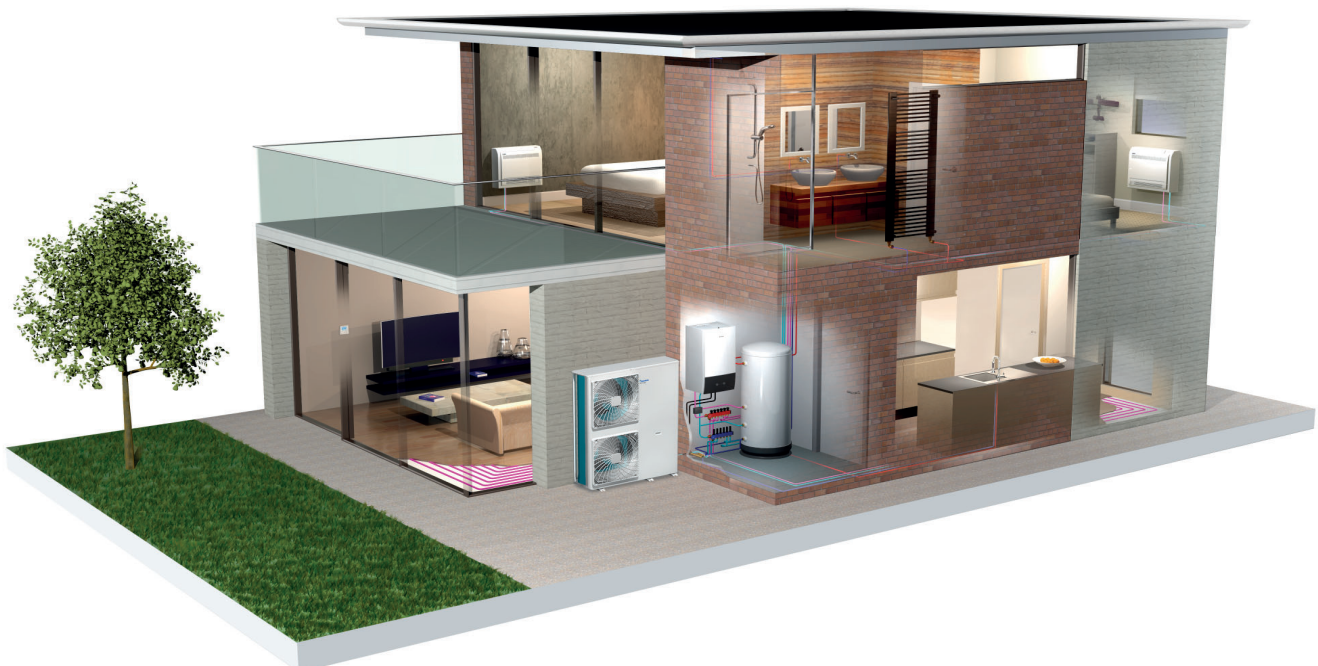
Daikin Altherma 3 H-Split
wall mounted indoor unit

Why choose the Daikin wall mounted unit?

The Daikin Altherma 3 H-Split split wall mounted indoor unit offers heating and cooling, with an optional connection to deliver domestic hot water.

High flexibility for installation and domestic hot water connection

› All hydraulic components included means no third party components are required
› PCB board and hydraulic components are located in the front for easy access
› Compact dimensions allows for small installation space, as almost no side clearances are required
› The unit's sleek design blends in with other household appliances
› Combine with a stainless steel domestic hot water tank

Advanced
user interface

The Daikin Eye
The intuitive Daikin eye shows you in real time the status of the system.

Blue:
When the Daikin Eye indicates a blue colour, it means the boiler is functioning properly. The Daikin Eye will flash on and off when it's running in stand by mode.

Red:
When the Daikin Eye indicates a red colour, it means the boiler is out of commission and requires a maintenance check.

Quick to configure
Log in and you'll be able to completely configure the unit via the new user interface in 9 steps. You can even check if the unit is ready for use by running test cycles. You can upload the settings on an USB stick and download it directly into the unit, or via the cloud.

Easy operation
Work super-fast with the new user interface. It's easy to use with just a few buttons and two navigational knobs.

Beautiful design
The user interface is designed to be very intuitive. The high contrasted colour screen delivers stunning and practical visuals that really help you as installer or service engineer.

Stainless steel tank
EKHWSU-D

Connect your Daikin Altherma 3 H-Split wall mounted unit with a stainless steel tank to achieve efficient domestic hot water heating production.

Flexibility in providing domestic hot water

Heating only models - EABH-D

The heating only Daikin Altherma 3 H-Split models provide domestic hot water and space heating in an efficient way.

Reversible models - EABX-D

In addition to its core heating and hot water function, the Daikin Altherma 3 H-Split can provide comfort cooling during hotter weather.

This cooling function is provided via emitters such as an underfloor system or heat pump convectors.

> See more details on thermal stores and tanks on page 10.

Single Phase EPGA-DV

Low Temperature H-Split (R32) Heat Pump

Outdoor Units			Single Phase		
			EPGA11DV	EPGA14DV	EPGA16DV
Description			**11kW, 1-phase, 230V**	**14kW, 1-phase, 230V**	**16kW, 1-phase, 230V**
Dimensions	Height x Width x Depth	mm		1436 x 1156 x 351	
Weight		kg		143	
Nominal capacity	Heating (a/b)	kW	11.10 / 11.30	14.50 / 14.50	16.50 / 15.60
	Cooling (c/d)	kW	10.50 / 10.70	11.10 / 11.90	13.50 / 11.90
Nominal input	Heating (a/b)	kW	2.16 / 2.91	2.91 / 3.96	3.45 / 4.21
	Cooling (c/d)	kW	2.21 / 3.30	2.72 / 3.97	3.42 / 3.97
Seasonal space heating efficiency*	Space heating (Average climate) 35°C	Class	A++	A+++	
		Efficiency	175	178	182
		SCOP	4.44	4.51	4.61
	Space heating (Average climate) 55°C	Class	A++		
		Efficiency	130	132	134
		SCOP	3.32	3.37	3.43
COP	Heating (a/b)		5.15 / 3.88	4.99 / 3.65	4.78 / 3.71
EER	Cooling (c/d)		4.75 / 3.23	4.09 / 2.99	3.94 / 2.99
Operation range	Heating	°C		-28 to +35	
	Cooling	°C		+10 to +43	
	Domestic Hot water	°C		-28 to +35	
Sound pressure / power level	Heating	dBA	48 / 64	49 / 64	52 / 66
	Cooling	dBA		55 / 68	
Refrigerant charge	R-32	kg		3.5	
Water Connections (Diameter)		inches		1" (Male)	
Maximum piping length OU to IU[1]		m		10[1]	
Power supply				1-phase / 230V / 50Hz	
Recommended fuses		A		32	

Nominal capacity and nominal input tested according to EN 14511
Heating (a): Ambient air temperature 7°CDB and leaving water temperature 35°C (A7/W35). Heating (b): Ambient air temperature 7°CDB and leaving water temperature 45°C (A7/W45).
Cooling (c): Ambient air temperature 35°C and leaving water temperature 18°C (A35/W18). Cooling (d): Ambient air temperature 35°C and leaving water temperature 7°C (A35/W7)
Sound pressure / power measured according to EN 12102 under conditions of EN 14825
[1] Spare pump capacity can be utilised to extend the interconnecting pipe length. All design parameters must be known to calculate longer pipe lengths.

Heating and Cooling EABH(X)-D

Low Temperature H-Split (R32) Heat Pump

Indoor Unit (wall hung)			Heating Only		Heating and Cooling	
				Single Phase		
			EABH16D6V	EABH16D9W	EABX16D6V	EABX16D9W
Compatible outdoor unit				EPGA11-16DV		
User interface (Must be ordered separately)			BRC1HHD(W/S/K)	BRC1HHD(W/S/K)	BRC1HHD(W/S/K)	BRC1HHD(W/S/K)
Function			Heating Only	Heating Only	Reversible	Reversible
Dimensions	H x W x D	mm		840 x 440 x 390		
Leaving water temperature range	Heating	°C		+18 to +65		
	Cooling	°C	-		+5 to +22	
Pump	No. of speeds			Inverter controlled		
Expansion vessel volume		litres		10		
Minimum water volume		litres		20		
Water connections		Inch		1" (female)		
Back-up heater fuse rating	6kW 1ph 230V	A	32	-	32	-
	9kW 3ph 400V	A	-	16	-	16

Notes: i) Back-up heaters are three step control, 1 phase 2-4-6 kW and 3 phase 3-6-9 kW

Notes:

i) * Only one optional remote sensor can be installed. Sensor connects to indoor unit.

ii) For compatible cylinders, see page 10

iii) Outdoor unit requires mounting on three flexi feet

Accessories:

Accessory Ref	Description
BRC1HHDW	Madoka Heating - White
BRC1HHDS	Madoka Heating - Silver
BRC1HHDK	Madoka Heating - Black
AFVALVE1	Anti-freeze valve for glycol free systems (two required per heat pump)
EKPCCAB4	PC cable – to upload field settings from PC to unit
EKRSC1	Optional remote temperature sensor for outdoor unit*
KRCS01-1	Optional remote temperature sensor for indoor unit*
EKRP1HBA	Optional PCB kit for remote alarm monitoring, run and fault indication, solar interlock for heat pump and bivalent operation
K.FF600ASN	Pair of flexi-feet for mounting outdoor unit
K.HOSE750	Pair of flexible hoses (Length 750mm, 19mm tough PVC coated insulation, 1" FBSP x 28mm compression)
K.HOSE750EL	Pair of flexible hoses with elbow (Length 750mm, 19mm tough PVC coated insulation, 1" FBSP x 28mm compression)
BRP069A62	Smart Comfort Controller
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

BRC1HHDW

Features:

› Combine with a stainless steel tank to provide domestic hot water
› PCB board and hydraulic components are located in the front for easy access
› Compact dimensions allows for small installation space, as almost no side clearances are required
› Integrated back-up heater choice of 6 or 9 kW
› Outdoor unit extracts heat from the outdoor air, even at -28°C

-28°

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				
Standing heat loss (ErP)		W	45	50	55	60	68
Storage volume		L	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				
Booster heater capacity		kW	3				
Power supply			1-phase / 230V / 50Hz				
Recommended fuses		A	20				
Height		mm	1015	1175	1283	1553	1763
Diameter		mm	595				
Empty weight		kg	45	50	53	58	63
Material inside cylinder			Stainless steel (EN 1.4521)				
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)				

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

Daikin Online Controller

The Daikin Online Controller application can control and monitor the status of a heating system and allows you to:

Monitor
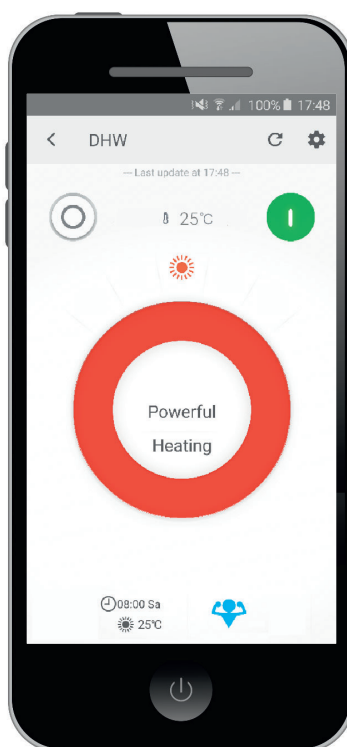› The heating system status
› Energy consumption graphs

Schedule
› Schedule the set temperature* and operation mode with up to **6 actions per day for 7 days**
› Enable **holiday mode**
› View in intuitive mode

Control
› Control space heating and domestic hot water via room thermostat
› Control leaving water temperature for domestic hot water

Main features
› Tank temperature monitoring
› Equipped with GDPR (data protection)
› Remote firmware update of LAN Adapter
› Control over multiple unit locations

Madoka for Heating

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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 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 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.eu/madoka

Stand By Me
A complete customer after-care solution.

With your customer's new Daikin installation and Stand By Me warranty and maintenance options, you can rest assured they are benefiting from the best comfort, energy efficiency, usability and service available on the market. Stand By Me provides an easy way to hand over the system to your customer. Simply complete the commissioning details on standbyme.daikin.co.uk, add your customer's email address and they will receive a code so they can create an account on Stand By Me and select their warranty and maintenance options.

✓ Installation database

Stand By Me provides a live dashboard of your project leads and, once the system is commissioned, your existing installations. So you can review and manage which products were installed, where and when.

✓ Easy commissioning

Hand over couldn't be simpler either. Simply complete the commissioning details, add your customer's email address and they will receive a code so they can create an account on **Stand By Me** and select their warranty and maintenance options.

✓ End user warranty registration

Warranty registration (previously on KEY) is now all done on **Stand By Me.** Once you've commissioned the system and emailed the code to your customer, your database will show you if the end-user has completed the warranty registration and the length of time remaining on their warranty*.
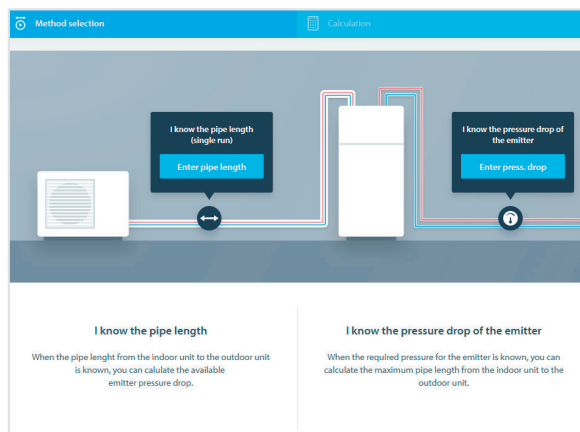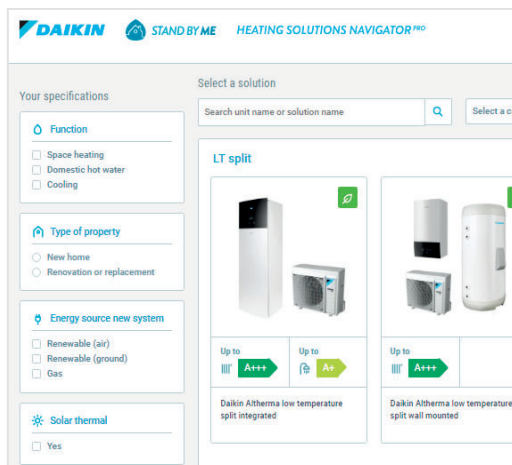
✓ Installation database

Stand By Me means that social housing providers no longer need physical access to properties in order to read meters for RHI reports. Remote monitoring of meters on **Stand By Me** provides a daily summary of the energy produced, consumed and the system efficiency, which can be submitted to Ofgem for RHI reporting. The Daikin remote metering cloud has been designed specifically for Daikin Altherma Hybrid systems and connects with your installed meters to provide all the information needed for quarterly RHI reporting.

Heating Solutions Navigator

The Heating Solutions Navigator is a versatile toolkit on Stand By Me, which brings together all the tools required to complete the design and selection of a system and allows you to to showcase Daikin heating solutions to your customers.

The Heating Solutions Navigator helps you to:

› Quickly see the wide array of Daikin Heating Solutions available
› Check all the options specifically for your installation
› Link easily to the installation specific literature
› Estimate the required heat load – from a simple snapshot to a detailed room-by-room calculation
› Use the embedded Pipe Sizing tool to calculate the maximum hydronic piping length from the indoor unit to the outdoor unit

› Create custom made piping & wiring diagrams
› Use the flue gas selection tool for gas based solutions
› Set the configuration of your installation
› Compare economic and environmental benefits of the Daikin system versus a conventional heating installation
› Store all your leads on you Stand By Me account
› Track projects from lead, installation and commissioning to inviting your customers to select after-sales services

daikin.co.uk

Heating installer line: 01932 879070
Dedicated homeowner support line: 01932 879271

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