

# Daikin Altherma 3 H HT Heat Pump

E-Series



**High temperature air-to-water heat pump**  
Heating, cooling and domestic hot water



reddot design award  
winner 2019





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Designed to withstand  
the coldest climate  
conditions

## Made in Europe, for Europe

The new Daikin Altherma 3 H HT E-Series is designed to perform reliably, whatever the weather. This single fan outdoor unit achieves some of the highest efficiencies and lowest sound levels in the market. The sleek design makes it an aesthetically pleasing solution for all settings.

The Altherma H HT E-Series is a heat pump system designed for the renovation market. Available with both an integrated water tank and wall mounted indoor options, it delivers excellent performance and provides leaving water temperatures of up to 70°C. Environmentally friendly, the system uses R32 refrigerant, with GWP (Global Warming Potential) of just 675.

With the upgraded E-Series, we have introduced some new advanced features, including cloud connectivity and a Wireless LAN adaptor for the residential App control, Smart Grid compatibility and upgraded software for improved performance.

### Features and benefits

- › Ideal for boiler replacement, due to its high leaving water temperature (LWT)
- › LWT of 70°C down to -15°C with heat pump operation only
- › Operation range down to -28°C
- › Updated software for better performance

#### Easy and quick installation:

- › No F-gas licence needed - only water connection between indoor and outdoor unit
- › Sealed refrigerant circuit in outdoor unit - no risk of refrigerant leakage
- › All hydraulic components accessible from the top
- › Wall mounted and integrated water tank variants

#### Easy configuration and commissioning:

- › Configuration in 9 easy steps via the MMI controller (User Interface)
- › Selection and configuration via HSN

#### Cloud-ready:

- › Comes pre-fitted with the cloud and app control functionality. Simply insert the included SD card into the indoor unit to initiate
- › Comes with the in-built smart grid connections

## BLUEvolution

Bluevolution technology combines a specially developed compressor and R32 refrigerant. Daikin is a global pioneer: the first to have launched heat pumps using R32. With a lower Global Warming Potential (GWP), R32 is equivalent in power to standard refrigerants, but achieves higher energy efficiency and lower CO<sub>2</sub> emissions.

Easy to recover and reuse, R32 is the perfect solution for attaining the new CO<sub>2</sub> emission targets.

**R-32**

## Main features

1. WLAN/SD card included with the indoor unit.
2. Compatible with both integrated and wall mounted indoor variants.
3. In-Built Smart Grid connections for the solar PV connectivity.
4. Upgraded software for better performance.

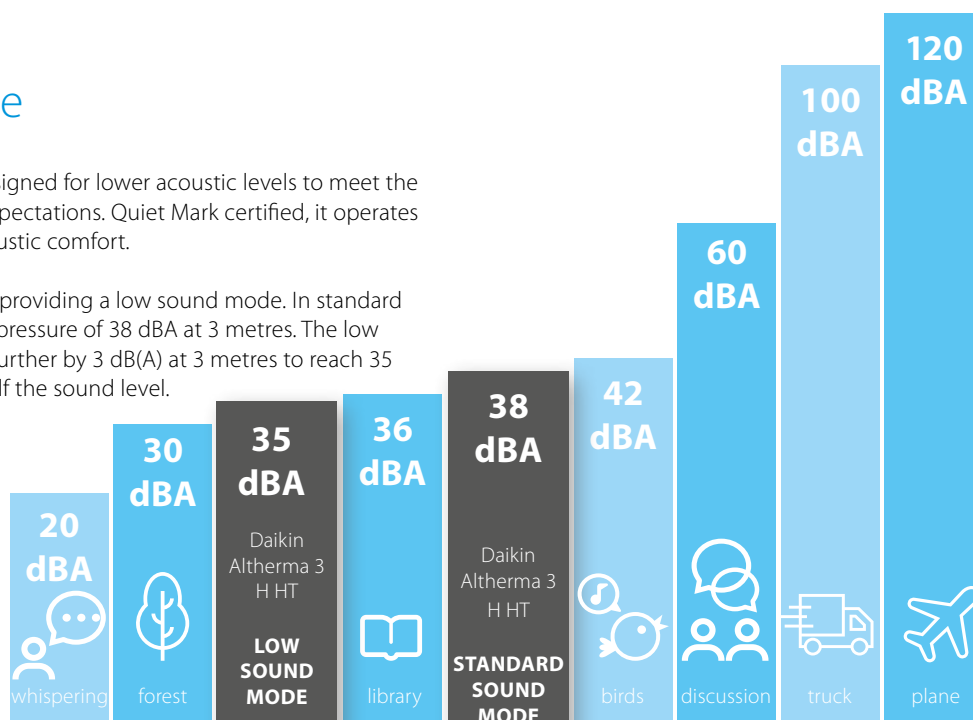
Meeting modern society's expectations



## The comfort of silence

The Daikin Altherma 3 H HT has been designed for lower acoustic levels to meet the needs of urban areas and homeowner expectations. Quiet Mark certified, it operates at whisper-quiet levels for maximum acoustic comfort.

The system offers enhanced flexibility by providing a low sound mode. In standard sound mode, the unit produces a sound pressure of 38 dBA at 3 metres. The low sound mode reduces the pressure even further by 3 dB(A) at 3 metres to reach 35 dBA, representing a real reduction of half the sound level.



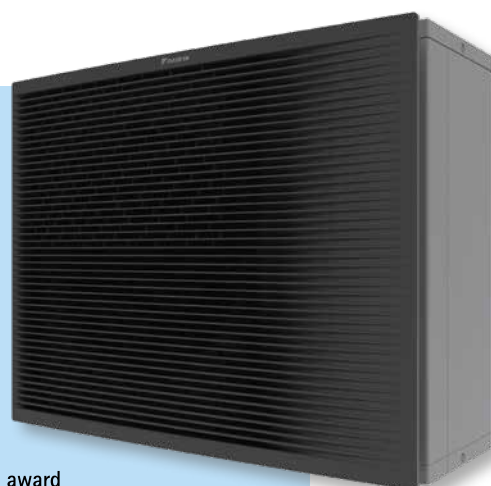
## Award-winning design

Along with acoustic comfort, specific attention has been given to the design of the outdoor unit. It has been designed to blend seamlessly into the home environment.

The black front horizontal grill conceals the fan inside, while the matt grey casing blends discreetly with the surrounding architecture. Winner of IF and reddot design awards 2019.



reddot design award  
winner 2019



# Innovation At the heart of our concerns

Thanks to the latest design developments, the Daikin Altherma 3 H HT is the pinnacle of acoustic comfort and heating performance. Several major components have been enhanced to achieve this excellence - such as a double injection compressor and a single fan even on large capacity units - all wrapped up in a brand-new casing.

## A redesigned casing

The black front grill of horizontal lines hides the fan from view, reducing the perception of the sound produced by the unit.

The light grey casing better reflects the environment in which the unit is installed, helping it to blend in with any decor.

This unique design has already received multiple design awards.

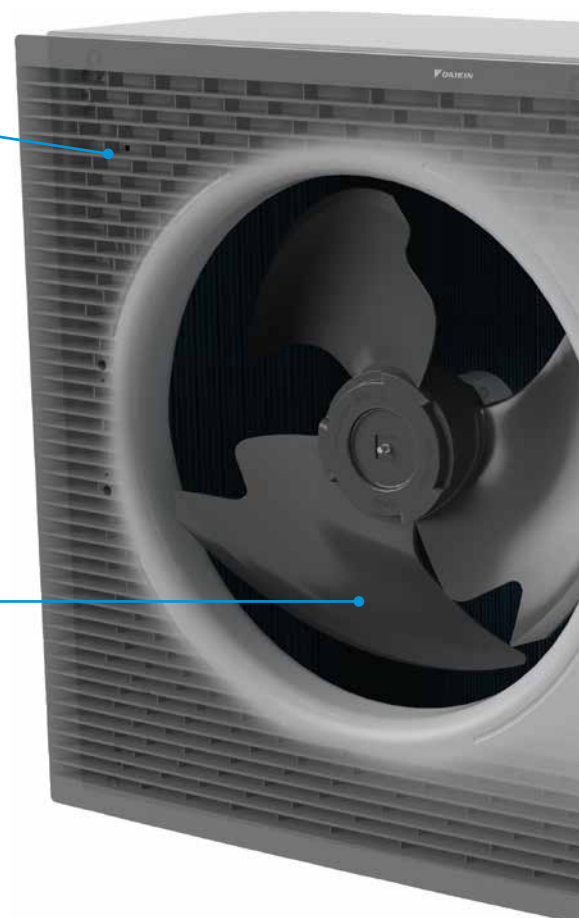


**reddot design award**  
winner 2019

## A single fan for high capacities

The single fan is slightly larger, replacing the usual double fan for high-capacity units.

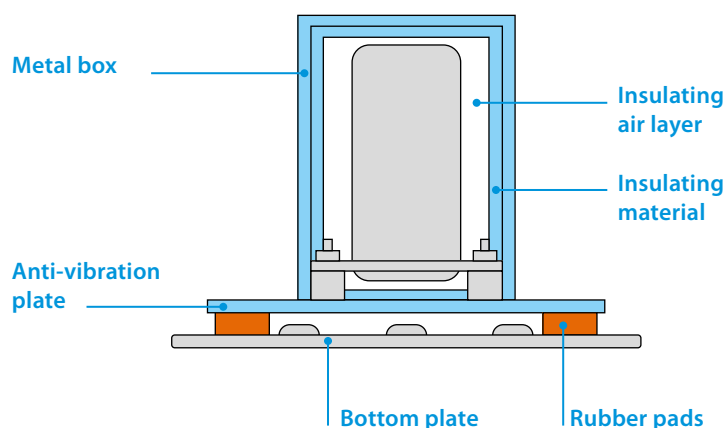
The shape of the fan has also been reviewed to reduce the contact surface with the air, therefore reducing the sound level by improving the air circulation.



## Compressor insulation and anti-vibration

Compressor sound power has been reduced by improving absorption and insulation.

The compressor has been designed with three-layer insulation of air, insulation material and a metal box. The unit also benefits from double sound reduction by using rubber pads between the bottom plate and the vibration plate under the compressor, thereby maximising absorption.



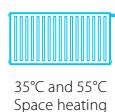
## New double injection compressor

Daikin Europe joined forces with Daikin Japan to develop world class components for this unique system. The Daikin Altherma 3 H HT compressor is able to deliver a high leaving water temperature of 70°C on its own.

Moreover, Daikin is a pioneer in launching heat pumps using 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 CO<sub>2</sub> emissions. Easy to recover and reuse, R-32 is the perfect solution for attaining the new European CO<sub>2</sub> emission targets.

## Unrivalled capacities

With these new developments, the Daikin Altherma 3 H HT achieves the best performances illustrated in the energy labels:



# Daikin Altherma 3 H HT Wall mounted unit

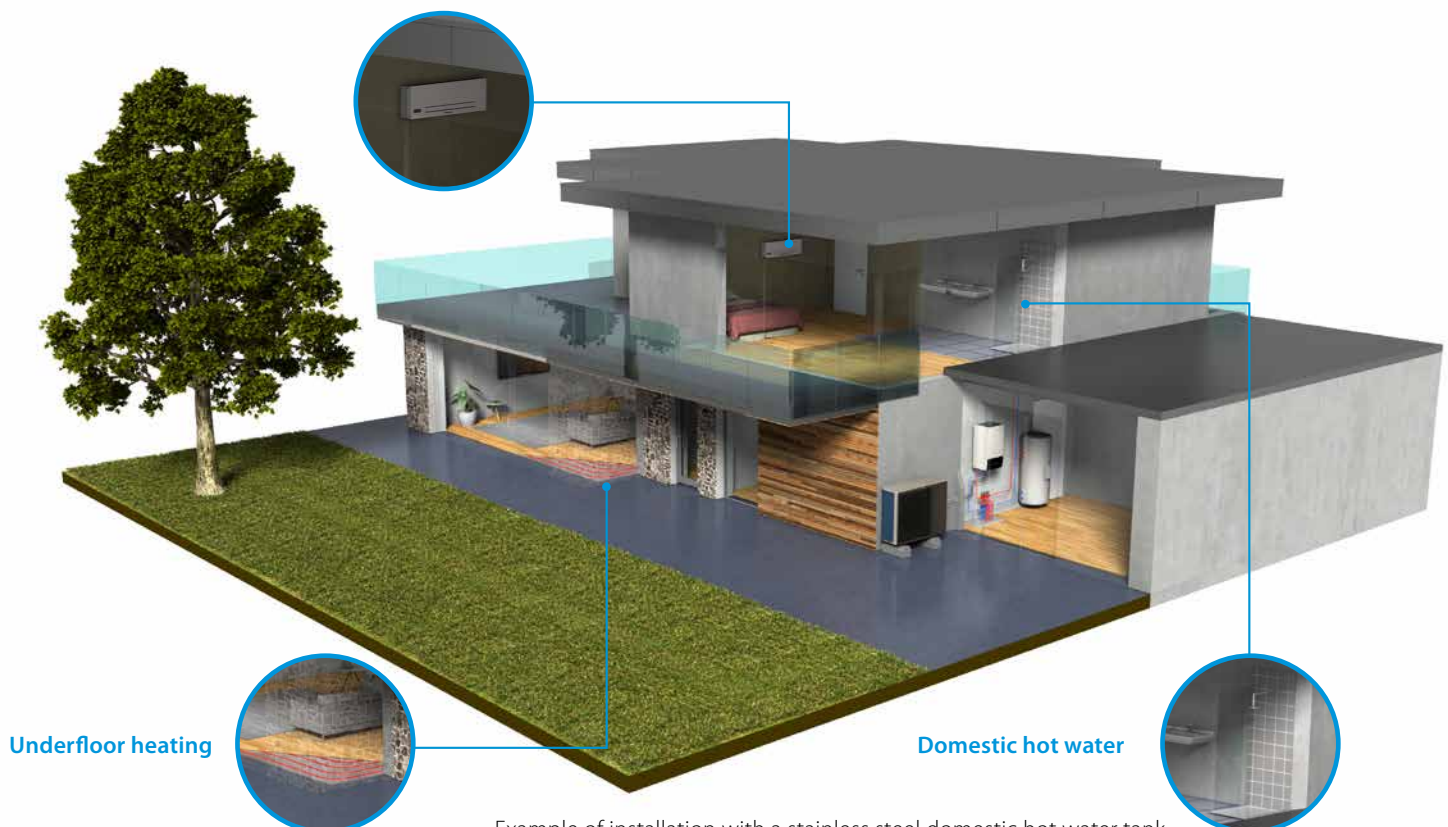
## Daikin wall mounted unit

The Daikin Altherma 3 H HT split wall mounted unit offers heating and cooling with optimum flexibility for a quick and easy installation.

### High flexibility for installation and domestic hot water connection

- › Inclusion of all hydraulic components means no third-party components are required
- › PCB board and hydraulic components are located in the front for easy access
- › Compact dimensions allow 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

### Heating and cooling



Underfloor heating

Domestic hot water

Example of installation with a stainless steel domestic hot water tank.

# Daikin Altherma 3 H HT

Wall mounted **heating only** and **reversible** air-to-water heat pump

- › Inclusion of all hydraulic components 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
- › Heat pump operation down to -28°C



up to



A+++

70°C

R-32

| Indoor Unit (wall hung)                     |                                   |               | Heating Only        |                     | Heating and Cooling |                     |
|---------------------------------------------|-----------------------------------|---------------|---------------------|---------------------|---------------------|---------------------|
|                                             |                                   |               | ETBH16E6V           | ETBH16E9W           | ETBX16E6V           | ETBX16E9W           |
| Compatible outdoor unit                     |                                   |               | EPRA14-18DV/DW1     | EPRA14-18DV/DW1     | EPRA14-18DV/DW1     | EPRA14-18DV/DW1     |
| Compatible DHW Cylinders                    |                                   |               | EKHSU-D             | EKHSU-D             | EKHSU-D             | EKHSU-D             |
| 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                                  | Height x Width x Depth            | mm            | 840 x 440 x 390     | 840 x 440 x 390     | 840 x 440 x 390     | 840 x 440 x 390     |
|                                             | Operating range                   | °C            | +18 to +70          | +18 to +70          | +18 to +70          | +18 to +70          |
|                                             | Cooling                           | °C            | -                   | -                   | +5 to +25           | +5 to +25           |
| Operating range                             | Domestic hot water <sup>[1]</sup> | °C            | +10 to 75           | +10 to 75           | +10 to 75           | +10 to 75           |
|                                             | Pump                              | No. of speeds | Inverter controlled | Inverter controlled | Inverter controlled | Inverter controlled |
| Expansion vessel volume                     |                                   | litres        | 10                  | 10                  | 10                  | 10                  |
| Minimum water volume                        |                                   | litres        | 20                  | 20                  | 20                  | 20                  |
| Minimum flow rate                           |                                   | l/min         | 25                  | 25                  | 25                  | 25                  |
| Water connections                           |                                   | inch          | 1" (female)         | 1" (female)         | 1" (female)         | 1" (female)         |
| Backup heater power supply <sup>[2]</sup>   | Phase                             |               | 1~ / 3~             | 3~                  | 1~ / 3~             | 3~                  |
|                                             | Frequency                         | Hz            | 50                  | 50                  | 50                  | 50                  |
|                                             | Voltage                           | V             | 230                 | 400                 | 230                 | 400                 |
|                                             | Maximum capacity <sup>[3]</sup>   | kW            | 6 (2 step)          | 9 (2 step)          | 6 (2 step)          | 9 (2 step)          |
|                                             | Maximum running current           | A             | 26                  | 13                  | 26                  | 13                  |
| Recommended fuse rating <sup>[4]</sup>      |                                   | A             | 20                  | 20                  | 20                  | 20                  |

## Notes

- [1] Tank temperature up to 75°C possible with booster heater only operation (if available in the system).
- [2] Power supply is for backup heater only. Indoor unit switch box and circulation pump are supplied via the outdoor unit
- [3] Backup heater steps electronically setup on the indoor unit interface.
- [4] 4 pole 20A curve 400V tripping class C (refer to wiring diagram)

| Outdoor Units                                                |                                      |            | Single Phase          |                       |                       | Three Phase           |                       |                       |
|--------------------------------------------------------------|--------------------------------------|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                                              |                                      |            | EPRA14DV3             | EPRA16DV3             | EPRA18DV3             | EPRA14DW1             | EPRA16DW1             | EPRA18DW1             |
| Description                                                  |                                      |            | Class 14              | Class 16              | Class 18              | Class 14              | Class 16              | Class 18              |
| Dimensions <sup>[1]</sup>                                    | Height x Width x Depth               | mm         | 990 x 1270 x 460      | 990 x 1270 x 460      | 990 x 1270 x 460      | 990 x 1270 x 460      | 990 x 1270 x 460      | 990 x 1270 x 460      |
| Weight                                                       |                                      | kg         | 146                   | 146                   | 146                   | 151                   | 151                   | 151                   |
| Nominal capacity                                             | Heating (a/b)                        | kW         | 10.17 / 10.12         | 11.57 / 11.51         | 12.11 / 12.04         | 10.39 / 10.26         | 11.82 / 11.67         | 12.37 / 12.21         |
|                                                              | Cooling (c/d)                        | kW         | 10.55 / 6.90          | 11.51 / 7.88          | 12.46 / 8.86          | 10.55 / 6.90          | 11.51 / 7.88          | 12.46 / 8.86          |
| Seasonal space heating efficiency (Heating Only Indoor Unit) | Space heating (Average climate) 35°C | Class      | A+++                  | A+++                  | A+++                  | A+++                  | A+++                  | A+++                  |
|                                                              |                                      | Efficiency | 177                   | 177                   | 177                   | 186                   | 186                   | 186                   |
|                                                              |                                      | SCOP       | 4.51                  | 4.51                  | 4.51                  | 4.71                  | 4.71                  | 4.71                  |
|                                                              | Space heating (Average climate) 55°C | Class      | A++                   | A++                   | A++                   | A++                   | A++                   | A++                   |
|                                                              |                                      | Efficiency | 140                   | 140                   | 140                   | 140                   | 140                   | 140                   |
|                                                              |                                      | SCOP       | 3.58                  | 3.58                  | 3.58                  | 3.57                  | 3.57                  | 3.57                  |
| Seasonal space heating efficiency (Reversible Indoor Unit)   | Space heating (Average climate) 35°C | Class      | A+++                  | A+++                  | A+++                  | A+++                  | A+++                  | A+++                  |
|                                                              |                                      | Efficiency | 180                   | 180                   | 180                   | 180                   | 180                   | 180                   |
|                                                              |                                      | SCOP       | 4.57                  | 4.57                  | 4.57                  | 4.57                  | 4.57                  | 4.57                  |
|                                                              | Space heating (Average climate) 55°C | Class      | A++                   | A++                   | A++                   | A++                   | A++                   | A++                   |
|                                                              |                                      | Efficiency | 142                   | 142                   | 142                   | 142                   | 142                   | 142                   |
|                                                              |                                      | SCOP       | 3.62                  | 3.62                  | 3.62                  | 3.63                  | 3.63                  | 3.63                  |
| COP                                                          | Heating (e/f)                        |            | 4.86 / 3.70           | 4.86 / 3.70           | 4.86 / 3.70           | 4.50 / 3.56           | 4.50 / 3.56           | 4.50 / 3.56           |
| EER                                                          | Cooling (c/d)                        |            | 4.13 / 2.70           | 4.11 / 2.69           | 4.09 / 2.68           | 4.13 / 2.70           | 4.11 / 2.69           | 4.09 / 2.68           |
| Operation range                                              | Heating                              | °C         | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            |
|                                                              | Cooling                              | °C         | +10 to +43            | +10 to +43            | +10 to +43            | +10 to +43            | +10 to +43            | +10 to +43            |
|                                                              | Domestic Hot water                   | °C         | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            |
| Sound pressure / power level                                 | Heating                              | dBA        | 43 / 54               | 44 / 54               | 48 / 54               | 43 / 54               | 43 / 54               | 48 / 54               |
|                                                              | Cooling                              | dBA        | 43 / 54               | 44 / 54               | 48 / 54               | 43 / 54               | 43 / 54               | 48 / 54               |
| Refrigerant charge                                           | R-32                                 | kg         | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   |
| Water Connections (Diameter)                                 |                                      | inch       | 1" (Male)             | 1" (Male)             | 1" (Male)             | 1" (Male)             | 1" (Male)             | 1" (Male)             |
| Piping length OU to IU <sup>[2]</sup>                        |                                      | m          | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     |
| Power supply                                                 |                                      |            | 1-phase / 230V / 50Hz | 1-phase / 230V / 50Hz | 1-phase / 230V / 50Hz | 3-phase / 400V / 50Hz | 3-phase / 400V / 50Hz | 3-phase / 400V / 50Hz |
| Recommended fuses                                            |                                      | A          | 32                    | 32                    | 32                    | 16                    | 16                    | 16                    |

Nominal capacity and nominal input tested according to EN 14511

Heating (a): Ambient air temperature -2°CDB and leaving water temperature 55°C (A-2/W55). Heating (b): Ambient air temperature -2°CDB and leaving water temperature 65°C (A-2/W65)

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)

Heating (e): Ambient air temperature 7°CDB and leaving water temperature 35°C (A7/W35). Heating (f): Ambient air temperature 7°CDB and leaving water temperature 45°C (A7/W45)

Sound pressure / power measured according to EN 12102 under conditions of EN 14825

[1] Excludes aesthetic grill

[2] Spare pump capacity can be utilised to extend the interconnecting pipe length using the Daikin HSN pipe sizing tool.

# Daikin Altherma 3 H HT

Floor standing unit with integrated tank

## Daikin floor standing unit

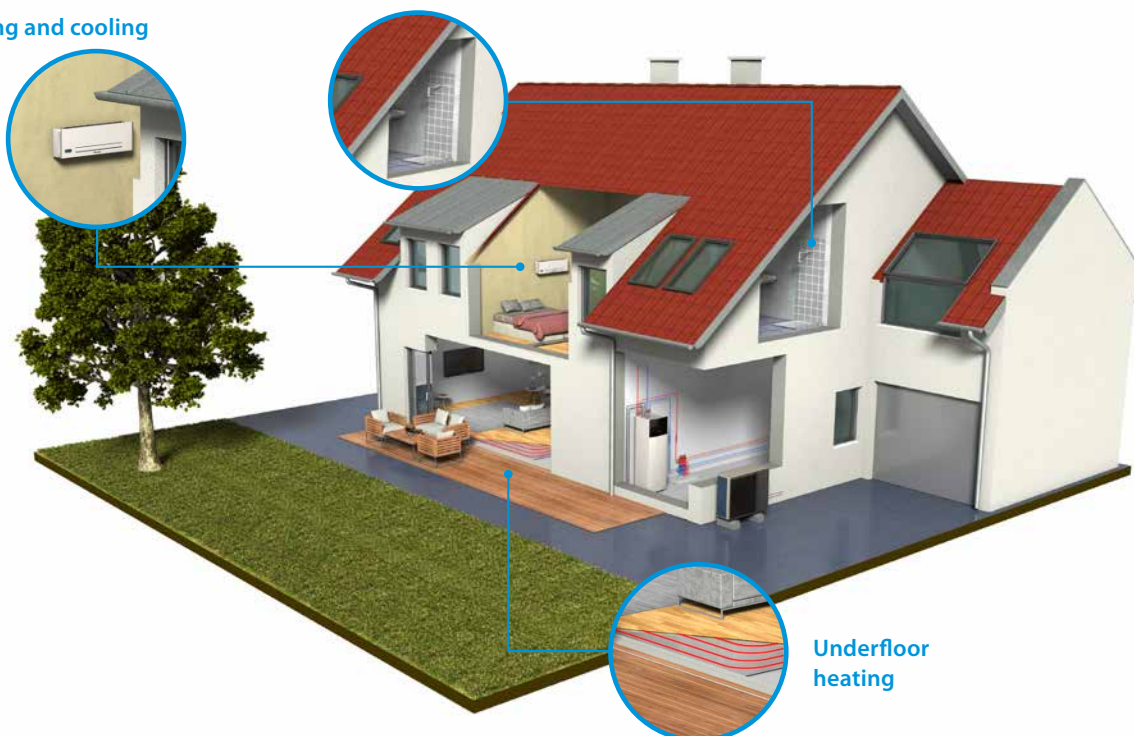
The Daikin Altherma floor standing unit delivers heating and domestic hot water in one fully-integrated system.

## All-in-one system to save installation space and time

- › Reduced footprint 595 x 600 mm
- › 180 or 230 litre tank options
- › All hydraulic components on top for easy installation and maintenance
- › Black top high-resolution MMI controller [User Interface] and Daikin Eye to show status
- › WLAN SD card supplied as standard for the Residential Control App as well as Cloud Interface
- › Smart Grid Ready

### Heating and cooling

### Domestic hot water



# Daikin Altherma 3 H HT

Floor standing air-to-water heat pump  
for heating and hot water

- › A combined stainless steel domestic hot water tank of 180 or 230L and heat pump for easy installation
- › Inclusion of all hydraulic components means no third-party components are required
- › PCB board and hydraulic components are located in the front for easy access
- › Small installation footprint of 595 x 625 mm
- › Integrated back-up heater of 6kW
- › Heat pump operation down to -28°C



| Indoor Units (Floor Standing)               |                                    |          | Single Phase                |                             |
|---------------------------------------------|------------------------------------|----------|-----------------------------|-----------------------------|
|                                             |                                    |          | ETVH16SU18E6V               | ETVH16SU23E6V               |
| Compatible outdoor unit                     |                                    |          | EPRA14/16/18DV3/W1          | EPRA14/16/18DV3/W1          |
| User interface (must be ordered separately) |                                    |          | BRC1HDD(W/S/K)              | BRC1HDD(W/S/K)              |
| G3 Kit (must be ordered separately)         |                                    |          | EKUHWG3D                    | EKUHWG3D                    |
| Function                                    |                                    |          | Heating only                | Heating only                |
| Casing                                      | Colour                             |          | White                       | White                       |
|                                             | Material                           |          | Resin + Sheet Metal         | Resin + Sheet Metal         |
| Dimensions                                  | Height x Width x Depth             | mm       | 1,650 x 595 x 625           | 1,850 x 595 x 625           |
| Weight                                      | Unit / Packed Unit                 | kg       | 109 / 126                   | 118 / 135                   |
| Operating range                             | Heating                            | Min-Max. | 10°C - 63°C                 | 10°C - 63°C                 |
|                                             | DHW                                | Max.     | 63°C <sup>[1]</sup>         | 63°C <sup>[1]</sup>         |
| Sound power level                           | Nom.                               | dBA      | 44                          | 44                          |
| Sound pressure level                        | Nom.                               | dBA      | 30                          | 30                          |
| Tank                                        | Water Volume                       | Litres   | 180                         | 230                         |
|                                             | Maximum water pressure             | bar      | 10                          | 10                          |
|                                             | Material                           |          | Stainless steel (EN 1.4521) | Stainless steel (EN 1.4521) |
|                                             | Load profile EN16147               |          | L                           | XL                          |
|                                             | Standing heat loss                 | W        | 56                          | 73                          |
|                                             | Energy efficiency rating           |          | C                           | B                           |
|                                             | Standing heat loss @ 45K dT        | kWh/24h  | 1.8                         | 1.4                         |
| Hydraulic characteristics                   | Water connections Indoor / outdoor | inch     | G 1" (female)               | G 1" (female)               |
|                                             | Water connections DHW / Recirc     | inch     | G 3/4" (female)             | G 3/4" (female)             |
|                                             | Water connections Space heating    | inch     | G 1" (female)               | G 1" (female)               |
| Minimum water volume                        |                                    | litres   | 20                          | 20                          |
| Minimum flow rate                           |                                    | l/min    | 20                          | 20                          |
| Backup heater power supply <sup>[2]</sup>   | Phase                              |          | 1~ / 3~                     | 1~ / 3~                     |
|                                             | Frequency                          | Hz       | 50                          | 50                          |
|                                             | Voltage                            | V        | 230                         | 230                         |
|                                             | Maximum capacity                   | kW       | 6 (2 step) <sup>[3]</sup>   | 6 (2 step) <sup>[3]</sup>   |
|                                             | Maximum running current            | A        | 26                          | 26                          |
|                                             | Recommended fuse rating            | A        | 20 <sup>[4]</sup>           | 20 <sup>[4]</sup>           |

## Notes - Indoor unit

- [1] Tank temperature up to 75°C possible with booster heater only operation (if available in the system).
- [2] Power supply is for backup heater only. Indoor unit switch box and circulation pump are supplied via the outdoor unit
- [3] Backup heater steps electronically setup on the indoor unit interface.
- [4] 4 pole 20A curve 400V tripping class C (refer to wiring diagram)

## Notes - Outdoor unit

- [1] Excludes aesthetic grill
- [2] Spare pump capacity can be utilised to extend the interconnecting pipe length using the Daikin HSN pipe sizing tool.

| Outdoor Units                                                |                                 |            | Single Phase          |                       |                       | Three Phase           |                       |                       |
|--------------------------------------------------------------|---------------------------------|------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|                                                              |                                 |            | EPRA14DV3             | EPRA16DV3             | EPRA18DV3             | EPRA14DW1             | EPRA16DW1             | EPRA18DW1             |
| Description                                                  |                                 |            | Class 14              | Class 16              | Class 18              | Class 14              | Class 16              | Class 18              |
| Dimensions <sup>[1]</sup>                                    | Height x Width x                | mm         | 990 x 1270 x 460      | 990 x 1270 x 460      | 990 x 1270 x 460      | 990 x 1270 x 460      | 990 x 1270 x 460      | 990 x 1270 x 460      |
| Weight                                                       |                                 | kg         | 146                   | 146                   | 146                   | 151                   | 151                   | 151                   |
| Nominal capacity                                             | Heating (a/b)                   | kW         | 10.17 / 10.12         | 11.57 / 11.51         | 12.11 / 12.04         | 10.39 / 10.26         | 11.82 / 11.67         | 12.37 / 12.21         |
|                                                              | Cooling (c/d)                   | kW         | 10.55 / 6.90          | 11.51 / 7.88          | 12.46 / 8.86          | 10.55 / 6.90          | 11.51 / 7.88          | 12.46 / 8.86          |
| Seasonal space heating efficiency (Heating Only Indoor Unit) | Space heating (Average climate) | Class      | A+++                  | A+++                  | A+++                  | A+++                  | A+++                  | A+++                  |
|                                                              |                                 | Efficiency | 177                   | 177                   | 177                   | 186                   | 186                   | 186                   |
|                                                              | 35°C                            | SCOP       | 4.51                  | 4.51                  | 4.51                  | 4.71                  | 4.71                  | 4.71                  |
|                                                              | Space heating (Average climate) | Class      | A++                   | A++                   | A++                   | A++                   | A++                   | A++                   |
|                                                              |                                 | Efficiency | 140                   | 140                   | 140                   | 140                   | 140                   | 140                   |
|                                                              | 55°C                            | SCOP       | 3.58                  | 3.58                  | 3.58                  | 3.57                  | 3.57                  | 3.57                  |
| Seasonal space heating efficiency (Reversible Indoor Unit)   | Space heating (Average climate) | Class      | A+++                  | A+++                  | A+++                  | A+++                  | A+++                  | A+++                  |
|                                                              |                                 | Efficiency | 180                   | 180                   | 180                   | 180                   | 180                   | 180                   |
|                                                              | 35°C                            | SCOP       | 4.57                  | 4.57                  | 4.57                  | 4.57                  | 4.57                  | 4.57                  |
|                                                              | Space heating (Average climate) | Class      | A++                   | A++                   | A++                   | A++                   | A++                   | A++                   |
|                                                              |                                 | Efficiency | 142                   | 142                   | 142                   | 142                   | 142                   | 142                   |
|                                                              | 55°C                            | SCOP       | 3.62                  | 3.62                  | 3.62                  | 3.63                  | 3.63                  | 3.63                  |
| COP                                                          | Heating (e/f)                   |            | 4.86 / 3.70           | 4.86 / 3.70           | 4.86 / 3.70           | 4.50 / 3.56           | 4.50 / 3.56           | 4.50 / 3.56           |
| EER                                                          | Cooling (c/d)                   |            | 4.13 / 2.70           | 4.11 / 2.69           | 4.09 / 2.68           | 4.13 / 2.70           | 4.11 / 2.69           | 4.09 / 2.68           |
| Operation range                                              | Heating                         | °C         | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            |
|                                                              | Cooling                         | °C         | +10 to +43            | +10 to +43            | +10 to +43            | +10 to +43            | +10 to +43            | +10 to +43            |
|                                                              | Domestic Hot water              | °C         | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            | -28 to +35            |
| Sound pressure / power level                                 | Heating                         | dBA        | 43 / 54               | 44 / 54               | 48 / 54               | 43 / 54               | 43 / 54               | 48 / 54               |
|                                                              | Cooling                         | dBA        | 43 / 54               | 44 / 54               | 48 / 54               | 43 / 54               | 43 / 54               | 48 / 54               |
| Refrigerant charge                                           | R-32                            | kg         | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   | 4.2                   |
| Water Connections (Diameter)                                 |                                 | inch       | 1" (Male)             | 1" (Male)             | 1" (Male)             | 1" (Male)             | 1" (Male)             | 1" (Male)             |
| Piping length OU to IU <sup>[2]</sup>                        |                                 | m          | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     | 10 <sup>[2]</sup>     |
| Power supply                                                 |                                 |            | 1-phase / 230V / 50Hz | 1-phase / 230V / 50Hz | 1-phase / 230V / 50Hz | 3-phase / 400V / 50Hz | 3-phase / 400V / 50Hz | 3-phase / 400V / 50Hz |
| Recommended fuses                                            | A                               |            | 32                    | 32                    | 32                    | 16                    | 16                    | 16                    |

Nominal capacity and nominal input tested according to EN 14511

Heating (a): Ambient air temperature -2°CDB and leaving water temperature 55°C (A-2/W55). Heating (b): Ambient air temperature -2°CDB and leaving water temperature 65°C (A-2/W65)

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)

Heating (e): Ambient air temperature 7°CDB and leaving water temperature 35°C (A7/W35). Heating (f): Ambient air temperature 7°CDB and leaving water temperature 45°C (A7/W45)

Sound pressure / power measured according to EN 12102 under conditions of EN 14825



## Accessories

| Accessory Ref | Description                                                                                                                                                                                      |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BRC1HHDW      | Madoka Heating - White                                                                                                                                                                           |
| BRC1HHDS      | Madoka Heating - Silver                                                                                                                                                                          |
| BRC1HHDK      | Madoka Heating - Black                                                                                                                                                                           |
| EKRELSG       | Smart grid relay kit (high voltage)                                                                                                                                                              |
| 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 and bivalent operation                                                                                                    |
| EKRP1AHT      | Optional PCB for upto 4 digital inputs for power limitation                                                                                                                                      |
| UK.FF600H150  | Pair of flexi-feet for mounting outdoor unit, 150mm tall**                                                                                                                                       |
| UK.CBR2XXL-B  | Wall bracket for outdoor unit (250 Kg, 780mm long arm, 2 arms, black)                                                                                                                            |
| UK.DT4        | Condensate drip tray (1420 x 550 x 50mm)                                                                                                                                                         |
| K.DTFB        | Floor bracket kit to mount drip tray to pair flexi-feet or wall bracket                                                                                                                          |
| 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)                                                                                   |
| EKUMBPART     | Third party tank connection kit for dry pocket (contains 3 way valve, tank sensor and contactor)                                                                                                 |
| BRP069A71     | Residential Controller App (See note)                                                                                                                                                            |
| K.ELECMETV    | <b>Electric meter for domestic RHI - Single-phase (Metering for performance compliant)</b><br>MID Class A electric meter to measure the electricity consumption of the Daikin Altherma heat pump |
| K.ELECMETW    | <b>Electric meter for domestic RHI - Three-phase (Metering for performance compliant)</b><br>MID Class A electric meter to measure the electricity consumption of the Daikin Altherma heat pump  |
| EKCC8-W       | Sequence Controller                                                                                                                                                                              |
| DCOM-LT/IO    | Daikin Altherma I/O (Sequence Controller/Voltage/Resistance/Smart Grid) Gateway                                                                                                                  |
| DCOM-LT/MB    | Daikin Altherma Modbus Gateway                                                                                                                                                                   |

## Notes:

- i) \* Only one optional remote sensor can be installed. Sensor connects to indoor unit.
- ii) \*\* Recommended to achieve minimum outdoor unit ground clearance of 150mm.
- iii) SD Card BRP069A78 is supplied as standard. This option will only be required in case of bad connectivity in location of the indoor unit

i

# Domestic hot water tank

## Hot water heating installation options

### ✓ Stainless steel domestic hot water tank



#### 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

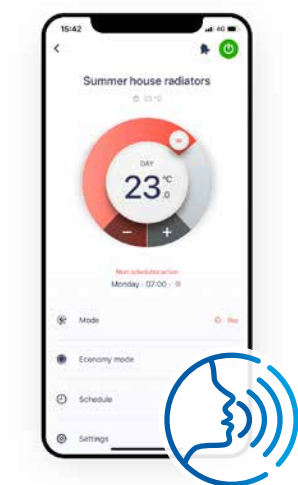
## Hot Water Cylinder

| 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.

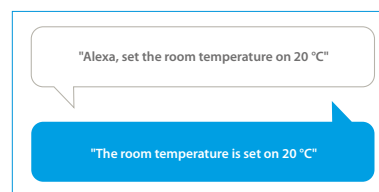
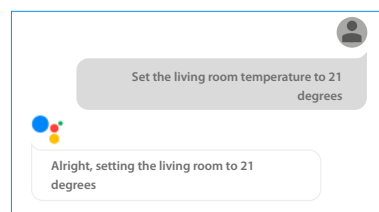
Cross-functional and multilingual, voice control pairs well with any smart device, including Google Assistant and Amazon Alexa.



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.

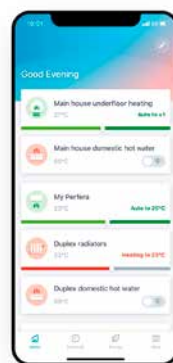
- ☒ Schedule room temperature and operation mode
- ☒ Enable holiday mode to save costs



## 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



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.



# 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 perfectly complement any interior design scheme. Silver has a sophisticated finish to suit 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 temperature 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



[www.daikin.co.uk/madoka](http://www.daikin.co.uk/madoka)

# Daikin Altherma HPC

## Floor standing model



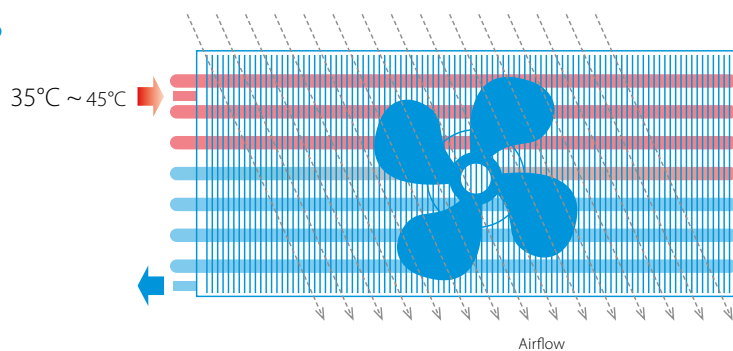
By providing cooling and heating, Daikin Altherma HPC is compatible with underfloor piping and can replace outdated radiators. Available in three models (floor standing, wall mounted and concealed), its silent operation makes it an ideal choice for living rooms and bedrooms.



### What is a heat pump convector?

A heat pump convector operates in a similar manner to a radiator; both use convection to heat a room. A radiator creates convection by running water through its pipes. However, with a heat pump convector, a radiator's convection process is faster because there is 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 in the radiator. This contributes to direct energy savings for users.

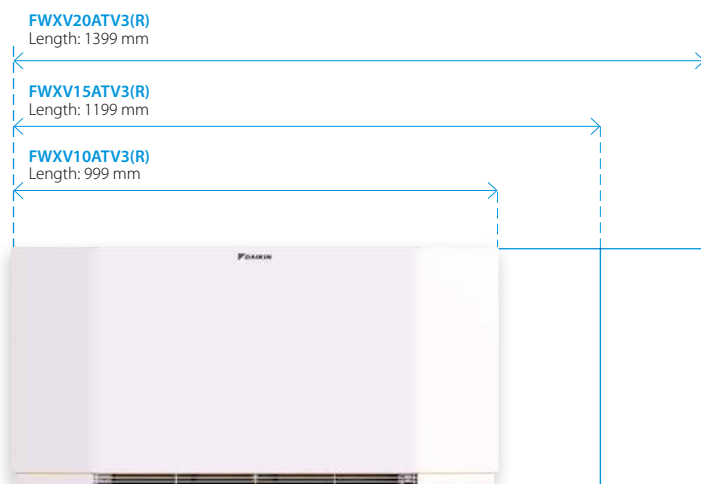


- › Optimised for new build houses
- › Can be selected at low water temperature (35°C) making it ideal for heat pump applications.



### Slim design

Measuring just 135mm in depth, the slim design of the floor standing Daikin Altherma HPC makes it the perfect fit for any house or apartment.



### Fast and high capacity

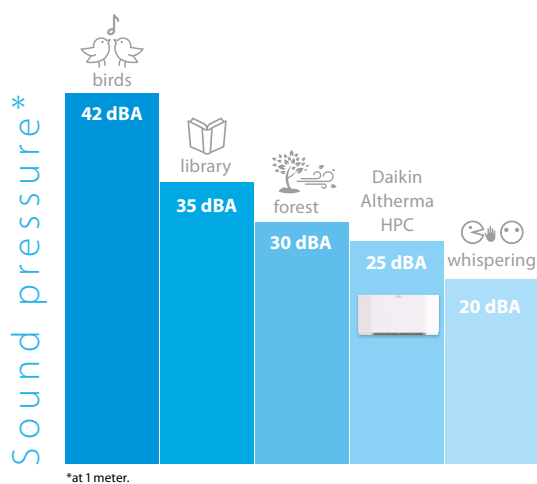
The Daikin Altherma HPC combines the advantages of residential underfloor heating and radiators. It delivers high-capacity heating or cooling at speed, and can be selected at ultra-low temperatures (35/30°C regime).





## 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 1m 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 input.



## Controls

Choose from a wide range of controllers to find the design and functionality you require.

### EKRTCTRL1



- > Built-in controller
- > Fully modulating
- > Multi colour display

### EKRTCTRL2



- > Built-in controller
- > 4 speed selection

### EKWHCTRL1



- > Wall controller
- > Fully modulating
- > In combination with EKWHCTRL0

### EKPCBO

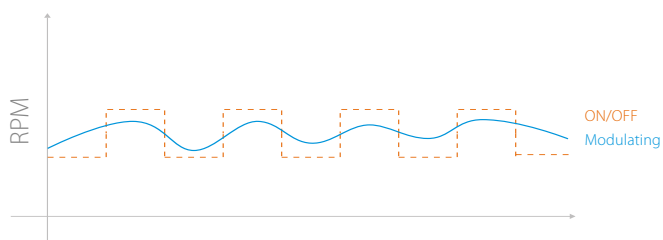


- > Built-in controller
- > ON/OFF
- > In combination with external thermostats



## 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.

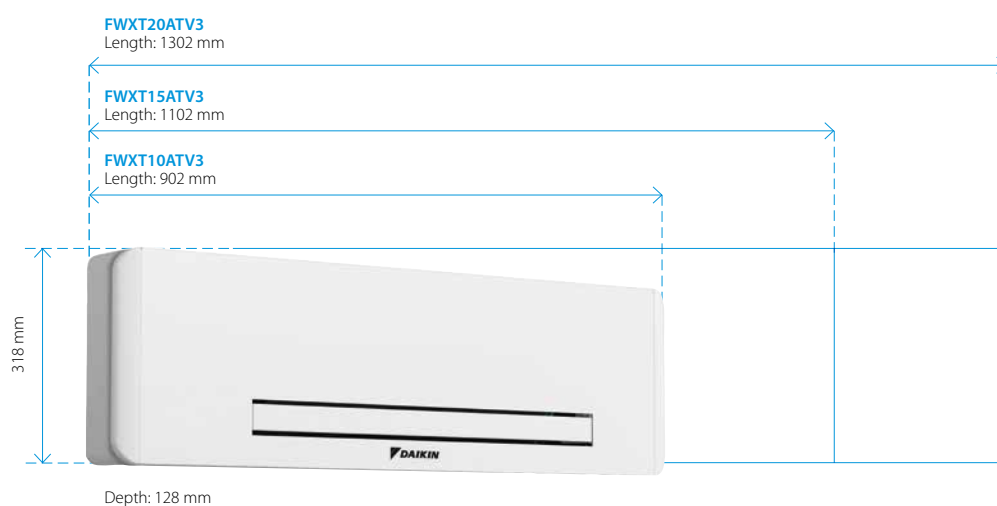


## Wall mounted model



### Slim design

Daikin Altherma HPC is a compact unit made of a design metal casing including all valves.



### Controls

Fully modulating controller allowing remote control of the unit.

#### EKWHCTRL1



- > Wall controller
- > Fully modulating



### Compactness



#### 1 SLIM DEPTH

Depth of 129 mm is an outstanding technical achievement that ensures the best fitting into any residential dwelling.

#### 2

##### MORE SPACE FOR VALVES

A wide and accessible space for hydraulic valves ensures easy, hassle-free installation.

#### 3

##### MODULATED AIRFLOW

When heating demand is reduced, the unit modulates airflow to slow down the fan and minimise operational sound.

## Concealed model



### Slim design

Blue dimensions are for the front cover.

**FWXM20ATV3(R)**  
Length: 1125/1372 mm

**FWXM15ATV3(R)**  
Length: 925/1172 mm

**FWXM10ATV3(R)**  
Length: 725/972 mm



Depth: 128 mm



### Flexible installation

The Daikin Altherma HPC unit can be installed in four ways, making it suitable for installation in almost every setting. The unit can be positioned either horizontally or vertically as required. Three different possibilities are available for horizontal ceiling installation:

- › Horizontal cover panel and vertical grill for air outlet
- › Horizontal intake grill and vertical grill for air outlet
- › Horizontal in and out grills for air outlet



### Controls

**EKWHCTRL1**



- › Wall controller
- › Fully modulating
- › In combination with EKWHCTRL0



# 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](http://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

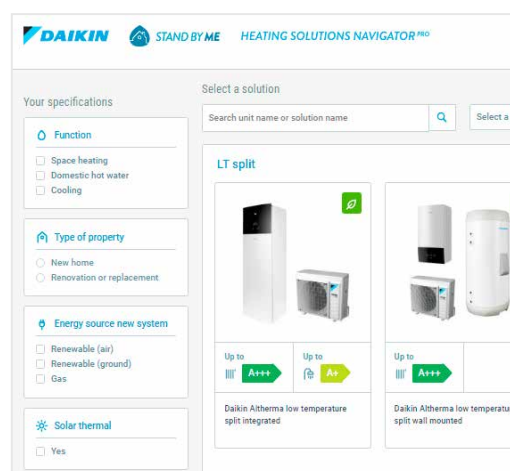
**Stand By Me** means that social housing providers no longer need physical access to properties in order to read meters for RHI reports. Remote monitoring of meters on **Stand By Me** provides a daily summary of the energy produced, consumed and the system efficiency, which can be submitted to Ofgem 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 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 and 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 your Stand By Me account
- › Track projects from lead, installation and commissioning to inviting your customers to select after-sales services



[daikin.co.uk](http://daikin.co.uk)

National Heating Installer Hub: 01932 879070

Heating Services Contact Centre: 01932 879271

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FSC