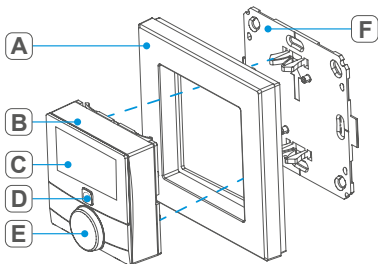


Installer and user reference guide

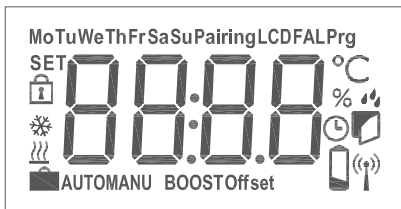
Daikin Home Controls Room Thermostat - 2



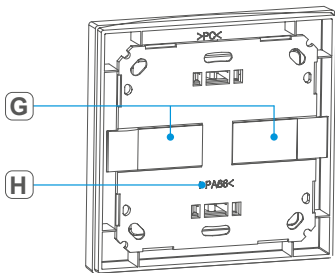
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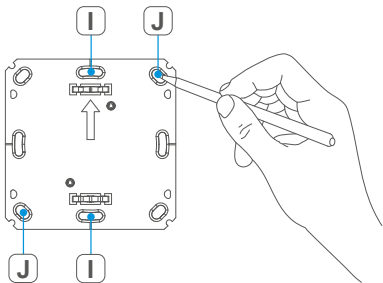
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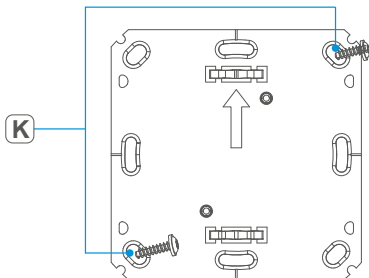
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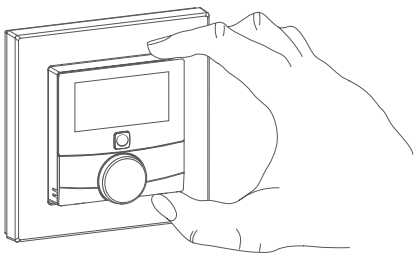
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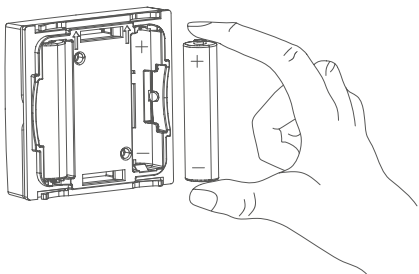
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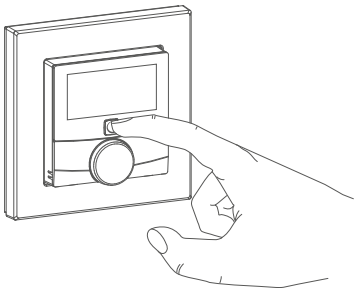
6



7



8



Package contents

Quantity	Description
1	Daikin Home Controls Room Thermostat - 2
1	Clip-on frame
1	Mounting plate
2	Double-sided adhesive strips
2	Screws 3.0 x 30 mm
2	Plugs 5 mm
2	1.5 V LR03/micro/AAA batteries
1	Installation and operation manual

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4P687366-1
2022.04

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1 Information about this manual

Read this manual carefully before beginning operation with your Daikin Home Controls (DHC) accessories. Keep the manual so you can refer to it at a later date if you need to. If you hand over the accessory to other persons for use, hand over this manual as well.

Symbols used:

**Attention!**

This indicates a hazard.

**Please note:**

This section contains important additional information.

2 Hazard information



Do not open the accessory. It does not contain any parts that can be maintained by the user. In the event of an error, please have the accessory checked by an expert.



For safety and licensing reasons (CE), unauthorized change and/or modification of the accessory is not permitted.



The accessory may only be operated in a dry and dust-free environment and must be protected from the effects of moisture, vibrations, solar or other types of heat radiation, cold and mechanical loads.



The accessory is not a toy; do not allow children to play with it. Do not leave packaging material lying around. Plastic films/bags, pieces of polystyrene, etc. can be dangerous in the hands of a child.



We do not assume any liability for damage to property or personal injury caused by improper use or the failure to observe the hazard information. In such cases, any claim under warranty is extinguished! For consequential damages, we assume no liability!



The accessory may only be operated within residential buildings.



Using the accessory for any purpose other than that described in this manual does not fall within the scope of intended use and shall invalidate any warranty or liability.



Always keep a minimum distance of 50 cm between the DHC accessories.

3 Daikin Home Controls

This accessory is part of the DHC ecosystem and communicates with a dedicated wireless connection.

All accessories of the system can be configured comfortably and individually via the ONECTA app. The available functions provided by the DHC ecosystem in combination with other accessories are described in the DHC Application Guide.

All current technical documents and updates can be found on the product pages:

<https://qr.daikin.eu/?N=EKRCTRDI3BA>



4 Function and accessory overview

The DHC Room Thermostat enables time-controlled regulation of your conventional radiators with DHC Radiator Thermostats, or of your floor heating in combination with DHC Floor Heating Controllers, and adjusts heating phases to your individual needs.

The DHC Room Thermostat measures the room temperature and humidity and transmits these at intervals to the DHC Radiator Thermostats or DHC Floor Heating Controllers enabling room temperatures to be precisely controlled.











You can comfortably control the DHC Room Thermostat in combination with a DHC Access Point via the free app.

Mounting and removal are particularly easy using the clip-on frame supplied. It is also possible to integrate the DHC Room Thermostat into existing switches.

Accessory overview (see *figure 1*):

- (A) Clip-on frame
- (B) Electronic unit (thermostat)
- (C) Display
- (D) System button and LED
- (E) Control wheel
- (F) Mounting plate

Display overview (see figure 2):

	Setpoint/actual temperature
	Humidity
	Warning about condensation
	Open window symbol
	Battery symbol
	Radio transmission
BOOST	Boost function
MANU	Manual mode*
AUTO	Automatic mode*
	Holiday mode*
	Heating
	Cooling
	Operating lock*
SET	Setpoint temperature

* See „6 Configuration“ on page 20

5 Start-up

5.1 Connecting DHC accessories



Read this entire section before starting to connect other accessories.

To integrate the DHC Room Thermostat into your ecosystem and enable it to communicate with other accessories, you must connect them first.

You can connect the DHC Room Thermostat to the DHC Access Point via the ONECTA app. It is also possible to create a direct connection to other DHC accessories. For further information on direct connection, see the DHC Application Guide.

5.1.1 Connecting to the DHC Access Point



First set up your DHC Access Point via the ONECTA app to enable operation of other DHC accessories within your ecosystem. For further information, see the manual of the DHC Access Point.

To connect the DHC Room Thermostat to the DHC Access Point, proceed as follows:

1. Open the ONECTA app.
2. Click on the plus symbol (+).
3. Select the menu item **Add Daikin Home Controls**.
4. Select **Add DHC Accessory**.
5. Remove the electronic unit **(B)** from the frame:

- grab the sides of the electronic unit and pull it from the mounting plate (see *figure 6*).
6. Turn over the electronic unit **(B)**.
 7. Remove the insulation strip from the battery compartment.
 - » Connection mode remains activated for 3 minutes.



- You can manually start the connection mode for another 3 minutes by pressing the system button **(D)** briefly (see *figure 8*).
8. Follow the instructions in the app.

5.2 Mounting



Please read this entire section before starting to mount the accessory.

You can use the supplied clip-on frame **(A)** to mount the DHC Room Thermostat or easily integrate it into an existing switch.

If you want to mount the DHC Room Thermostat to a wall with the supplied clip-on frame, you can use

- the supplied double-sided adhesive strips, or
- the supplied screws.

You can also mount the DHC Room Thermostat on a flush-mounted box.

5.2.1 Adhesive strip mounting

To mount the DHC Room Thermostat using the adhesive strips, proceed as follows:

1. Choose a site for installation.



Make sure that the mounting surface is smooth, solid, non-disturbed, free of dust, grease and solvents and not too cold to ensure long-time adherence.

2. Fix the adhesive strips **(G)** on the back side of the

- mounting plate **(F)** in the provided area. Make sure that you can read the letters on the back side **(H)** (see *figure 3*) and that the clips on the mounting plate latch into the openings on the DHC Room Thermostat.
3. Remove the protective film from the adhesive strips.
 4. Press the assembled DHC Room Thermostat with the back side to the wall .

5.2.2 Screw mounting

For mounting the DHC Room Thermostat with screws, proceed as follows:

1. Choose a site for installation.



Make sure that no electricity or similar lines run in the wall at this location!

2. Position the mounting plate **(F)** on the desired site on the wall. Make sure that the arrow on the mounting plate is pointing upwards.
3. Use a pen to mark the positions of the screw holes **(J)** (diagonally opposite) in the mounting plate on the wall (see *figure 4*).
4. Drill the marked holes.



If you are working with a stone wall, drill the marked 5 mm holes and insert the plugs supplied. If you are working with a wooden wall, you can pre-drill 1.5 mm holes to easier insert the screws.

5. Use the supplied screws and plugs (**K**) to fix the mounting plate to the wall (*see figure 5*).
6. Attach the clip-on frame (**A**) to the mounting plate.
7. Place the electronic unit (**B**) back into the frame (*see figure 1*). Make sure that “TOP” and the arrows on the back side point upwards and that the clips on the mounting plate latch into the openings on the electronic unit.

5.2.3 Flush-mounted box mounting

You can mount the DHC Room Thermostat on a flush-mounted box using the screw holes (**I**) (*see figure 4*).



If the accessory is mounted to a flush-mounted box, there may be no open conductor ends.



If changes or works have to be made on the house installation (e.g. extension, bypass of switch or socket inserts) or the low-voltage distribution for mounting or installing the accessory, the following safety instruction must be considered:



Only to be installed by persons with the relevant electro-technical knowledge and experience!*

Incorrect installation can put your own life at risk and the lives of other users of the electrical system. Incorrect installation also means that you are running the risk of serious damage to property, e.g. because of a fire. You may be personally liable in the event of injuries or damage to property. Contact an electrical installer!

***Specialist knowledge required for installation:**

The following specialist knowledge is particularly important during installation:



- The “5 safety rules” to be used: Disconnect from mains; Safeguard from switching on again; Check that system is de-energised; Earth and short circuit; Cover or cordon off neighbouring live parts;
- Select suitable tools, measuring equipment and, if necessary, personal safety equipment;
- Evaluation of measuring results;
- Selection of electrical installation material for safeguarding shut-off conditions;
- IP protection types;
- Installation of electrical installation material;
- Type of supply network (TN system, IT system, TT system) and the resulting connecting conditions (classical zero balancing, protective earthing, re-

quired additional measures etc.).

6 Configuration

The configuration of the accessory can be set up completely in the ONECTA app. For further information on configuration of the accessory without using the DHC Access Point, see the DHC Application Guide.

The following modes and settings can be adjusted:

6.1	AUTO	Automatic mode
6.2	MANU	Manual mode
6.3		Holiday mode
6.4		Operating lock (not yet available)
6.5	Prg	Programming a schedule
6.6	Offset	Offset temperature (not yet available)
6.7	LCD	Selecting a temperature display (not yet available)

6.1 Automatic mode

In automatic mode, the temperature is controlled in accordance with the set week schedule (see „6.5.2 Week schedule“ on page 22). Manual changes that are set via the control wheel **(E)** are activated until the next point at which the schedule changes. Afterwards, the defined schedule will be activated again.

6.2 Manual mode

In manual mode, the temperature is controlled in accordance with the current temperature set via the control wheel **(E)**. The temperature remains activated until the next manual change.

6.3 Holiday mode

Holiday mode can be activated in the ONECTA app. It will put your system into standby. The holiday mode is visualized on your Daikin Altherma and on the Air Conditioning units in the ONECTA App.

For further information, see the DHC Application Guide.

6.4 Operating lock (not yet available)

Operation of the accessory can be locked to avoid settings being changed unintended (e.g. through involuntary touching).



This setting is not yet available in the ONECTA app and cannot be changed for the moment.

6.5 Programming a schedule

You can create a schedule with time slots for heating and cooling according to your personal needs. For further information, see the DHC Application Guide.

6.5.1 Heating or cooling

You can use your floor heating system to heat or cool rooms, provided your Daikin Altherma unit supports it.

6.5.2 Week schedule

In the week schedule, you can set up to 6 time slots (13 change settings) for each weekday separately. The programming is carried out for the selected days, for which temperature settings have to be set for the entire period between 00:00 and 23:59h.

6.5.3 Optimum start/stop function

With the optimum start/stop you can reach the desired temperature in the room at the defined time. This function is activated by default and cannot be turned off.

6.6 Offset temperature (not yet available)

As the temperature is measured on the DHC Room Thermostat, the temperature distribution can vary throughout a room. To adjust this, a temperature offset of ± 3.5 °C can be set. If a nominal temperature of e.g. 20 °C is set but the room presents with only 18 °C, an offset of -2.0 °C needs to be set. An offset temperature of 0.0 °C is set in

the factory settings.



This setting is not yet available in the ONECTA app and cannot be changed for the moment.

6.7 **Selecting a temperature display (not yet available)**

You can choose which temperature will be displayed on the accessory. There are 3 options:

- display the actual temperature,
- display the setpoint temperature, or
- display the actual temperature and humidity alternately.



This setting is not yet available in the ONECTA app and cannot be changed for the moment.

7 Operation


After configuration, simple operations are available directly on the accessory.



If the DHC Room Thermostat is in standby mode, press the control wheel **(E)** once before operation to activate it.

- **Temperature:** In automatic mode, manual changes are activated until the next point at which the schedule changes. Afterwards, the defined heating schedule will be activated again. In manual mode, the temperature remains activated until the next manual change.
- **Boost function:** Press the control wheel **(E)** briefly to activate the boost function. The boost function will heat up the radiator quickly and shortly by opening the valve.

8 Replacing batteries

If the symbol for empty batteries () appears, replace the used batteries by two new LR03/micro/AAA batteries. You must observe the correct battery polarity.

To replace the batteries of the accessory, proceed as follows:

1. Once mounted, the electronic unit **(B)** can easily be

- pulled out of the frame **(A)** and removed from the mounting plate **(F)**. Grab the sides of the electronic unit and pull it out (see *figure 6*). You do not need to open the accessory.
2. Turn the electronic unit over to remove or insert the batteries.
 3. Insert two new 1.5 V LR03/micro/AAA batteries. Make sure that you insert them the right way round (see *figure 7*).
 4. Put the electronic unit back into the frame. Make sure that "TOP" and the arrows on the back side of the electronic unit point upwards and that the clips on the mounting plate latch into the openings on the electronic unit.
 5. Pay attention to the flashing signals of the LED while inserting the batteries (see „9.3 Error codes and flashing sequences“ on page 29).
 - » After inserting the batteries, the accessory will perform a self-test (approx. 2 seconds). Afterwards, initialisation is carried out. The LED will light up orange and green to indicate that initialisation is complete.



Attention! There is a risk of explosion if the battery is not replaced correctly. Replace only with the same or equivalent type. Never recharge non-rechargeable batteries. Do not throw the batteries into a fire. Do not expose batteries to excessive

heat. Do not short-circuit batteries. Doing so will present a risk of explosion.



Used batteries should not be disposed of with regular domestic waste! Instead, take them to your local battery disposal point.

9 Troubleshooting

9.1 Weak battery

Provided that the voltage value permits it, the accessory will remain ready for operation even if the battery voltage is low. Depending on the particular load, it may be possible to send transmissions again repeatedly, once the batteries have been allowed a brief recovery period.

If the voltage drops too far during transmission, the empty battery symbol (🔋) and the corresponding error code will be displayed on the accessory (see „9.3 Error codes and flashing sequences“ on page 29). In this case, replace the empty batteries by two new batteries (see „8 Replacing batteries“ on page 24).

9.2 Duty cycle

The wireless DHC accessories operate in the following frequency bands:

- 868,000~868,600 MHz
- 869,400~869,650 MHz

In order to safeguard operation of all devices working in this range, it is legally required to limit the transmission time of devices. Limiting the transmission time minimizes the risk of interference.

The ‘duty cycle’ is the maximum transmission time. It is the ratio of the time that a device is actively transmitting in comparison to the measurement period (1 hour), and is expressed as a percentage of 1 hour.

If the total amount of allowed transmission time is reached,






the DHC accessory will stop transmitting until the time limit is reached.

For example, when a device has a duty cycle limit of 1%, it is only allowed to transmit 36 seconds in 1 hour. After this, it will stop transmitting until the 1 hour limit is reached.

DHC accessories fully comply to this limitation and use 2 frequency bands with a duty cycle of respectively 1 % and 10%.

During normal operation of the DHC accessories, this limit is not usually reached. However it is possible that the limit is reached during start-up or during a fresh installation of a system. In this case, the LED of the accessory lights up red. It may be non-responsive for a short period (max. 1 hour), until the time restriction for transmission has expired. After this period, it will operate normal again.

9.3 Error codes and flashing sequences

Error and flashing codes	Meaning	Solution
Battery symbol ()	Battery voltage too low	Replace the batteries of the accessory (see „8 Replacing batteries“ on page 24).
Antenna symbol flashing ()	Communication problem with DHC Access Point/ DHC Floor Heating Controller	Check the connection with the DHC Access Point/ DHC Floor Heating Controller.
Flashing humidity symbol ()	Humidity limit (60 %) in the room is exceeded	Ventilate the room and switch from cooling to heating mode, if required.
Flashing condensation and cooling symbol ()	Humidity input of DHC Multi IO Box has been activated*	Ventilate the room and switch from cooling to heating mode, if required.
*Only applicable for the special application: Single zone reversible with dehumidifier. For further information, see the DHC Application Guide.		
Lock symbol ()	Operating lock activated	Deactivate the operating lock via the app or the menu.

Error and flashing codes	Meaning	Solution
Short orange flashing	Radio transmission/attempting to transmit/data transmission	Wait until the transmission is completed.
1x long green lighting	Operation confirmed	Continue operation.
Short orange flashing (every 10 seconds)	Connection mode active	Follow the instructions in the app to add accessory (see „5.1 Connecting DHC accessories“ on page 14).
Short orange lighting (after green or red confirmation)	Batteries empty	Replace the batteries (see „8 Replacing batteries“ on page 24).
1x long red lighting	Transmission/operation failed or duty cycle limit is reached	Try again (see. „9.2 Duty cycle“ on page 27).
6x long red flashing	Accessory defective	Contact your reseller.
1x orange and 1 x green lighting (after inserting batteries)	Test LED	After the test LED has stopped, you can continue.

10 Restore factory settings



The factory settings of the accessory can be restored. If you do this, you will lose all your settings.

To restore the factory settings of the accessory, proceed as follows:

1. Grab the sides of the electronic unit (**B**) and pull it out of the frame (*see figure 6*).
2. Remove a battery.
3. Insert the battery again (*see figure 7*) and long press the system button (**D**) for 4 seconds at the same time until the LED quickly starts flashing orange (*see figure 8*).
4. Release the system button again.
5. Long press the system button again for 4 seconds, until the LED lights up green.
6. Release the system button to finish the procedure.
 - » The accessory will perform a restart.

11 Maintenance and cleaning



The accessory does not require you to carry out any maintenance other than replacing the battery when necessary. Enlist the help of an expert to carry out any maintenance or repairs.

Clean the accessory using a soft, lint-free cloth that is clean and dry. You may dampen the cloth a little with lukewarm water in order to remove more stubborn marks. Do not use any detergents containing solvents, as they could corrode the plastic housing and label.

12 General information about radio operation

Radio transmission is performed on a non-exclusive transmission path, which means that there is a possibility of interference occurring. Interference can also be caused by switching operations, electrical motors or defective electrical devices.



The range of transmission within buildings can differ greatly from that available in the open air. Besides the transmitting power and the reception characteristics of the receiver, environmental factors such as humidity in the vicinity have an important role to play, as do on-site structural/screening conditions.

Hereby, Daikin Europe N.V. declares that the radio equipment type DHC EKRCTRDI3BA is in compliance with the Directive 2014/53/EU. The original declaration of conformity is available from the EKRCTRDI3BA product pages.

<https://qr.daikin.eu/?N=EKRCTRDI3BA>



13 Technical specifications

Device name:	EKRCTRDI3BA
Supply voltage:	2x 1.5 V LR03/micro/AAA
Current consumption:	50 mA max.
Battery life (typ.):	2 years
Degree of protection:	IP20
Ambient temperature:	0 to 35 °C
Dimensions (W x H x D):	
Without frame:	55 x 55 x 23.5 mm
Including frame:	86 x 86 x 25 mm
Weight:	100 g (including batteries)
Radio frequency:	
F1:	868.3 MHz
F2:	869.525 MHz
Receiver category:	SRD category 2
Typ. open area RF range:	250 m
Duty cycle:	
F1:	< 1 % per h
F2:	< 10 % per h
Method of operation:	Type 1
Degree of pollution:	2

Subject to technical changes.

Instructions for disposal



Do not dispose of the device with regular domestic waste! Electronic equipment must be disposed of at local collection points for waste electronic equipment in compliance with the Waste Electrical and Electronic Equipment Directive.

Information about conformity



The CE sign is a free trading sign addressed exclusively to the authorities and does not include any warranty of any properties.



For technical support, contact your specialist dealer.

Free download of the ONECTA app!



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