



Instruction manual heatapp! system experience heating new



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EN
English

Instruction manual **heatapp!** system

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1 Safety

1.1 General information

The devices are not suitable for children and must not be used as toys.

Store packaging material safely away from children or dispose of it.

Do not dismantle the devices; they do not contain any user-serviceable parts. If defects occur, please contact your installer.

1.2 Structure of the warning instructions

Explanation of the warning instructions in this manual:



Danger

Brief description of the hazard

The signal word **DANGER** indicates a directly threatening hazard.

Non-observation leads to severe injuries or death.



WARNING

Brief description of the hazard

The signal word **WARNING** indicates a possible hazard.

Non-observation may result in severe injuries or death.



CAUTION

Brief description of the hazard

The signal word **CAUTION** indicates a possible hazard.

Non-observation can result in slight or moderate injuries.



ATTENTION

Brief description

The signal word **Attention** indicates possible property damage.

Non-observation can lead to damage to the device or plant.



Note

The signal word **note** indicates further information about the device or its use.

1.3 Intended use

The device or system is intended solely for the use described in the section "System description", with supplied and approved components.

Any other use is classified as an improper use. The manufacturer shall not be liable for any damage resulting from this. The user/operator is solely responsible for the risk.

Observance of the information contained in the operating instructions forms part of the intended use.

Hazards can arise from the system if it is not used as intended.

1.4 Personnel qualifications

The electrical installation, initial operation and servicing of the device may only be performed by qualified electrical technicians who have been authorised by the operator.

The technicians must have read and understood these operating instructions and follow their procedures.

Requirements to be met by a qualified electrical technician:

- Knowledge of general and special safety and accident prevention regulations.
- Knowledge of the relevant electrical regulations (e.g. DIN VDE 0100 Part 600, DIN VDE 0100-722) plus the relevant national regulations.
- Ability to identify risks and avoid possible hazards.

1.5 Warranty conditions

Improper use, non-observation of these instructions, use of inadequately qualified personnel and independent changes exclude any liability on the part of the manufacturer for the resulting damage. The manufacturer's warranty becomes void.



ATTENTION

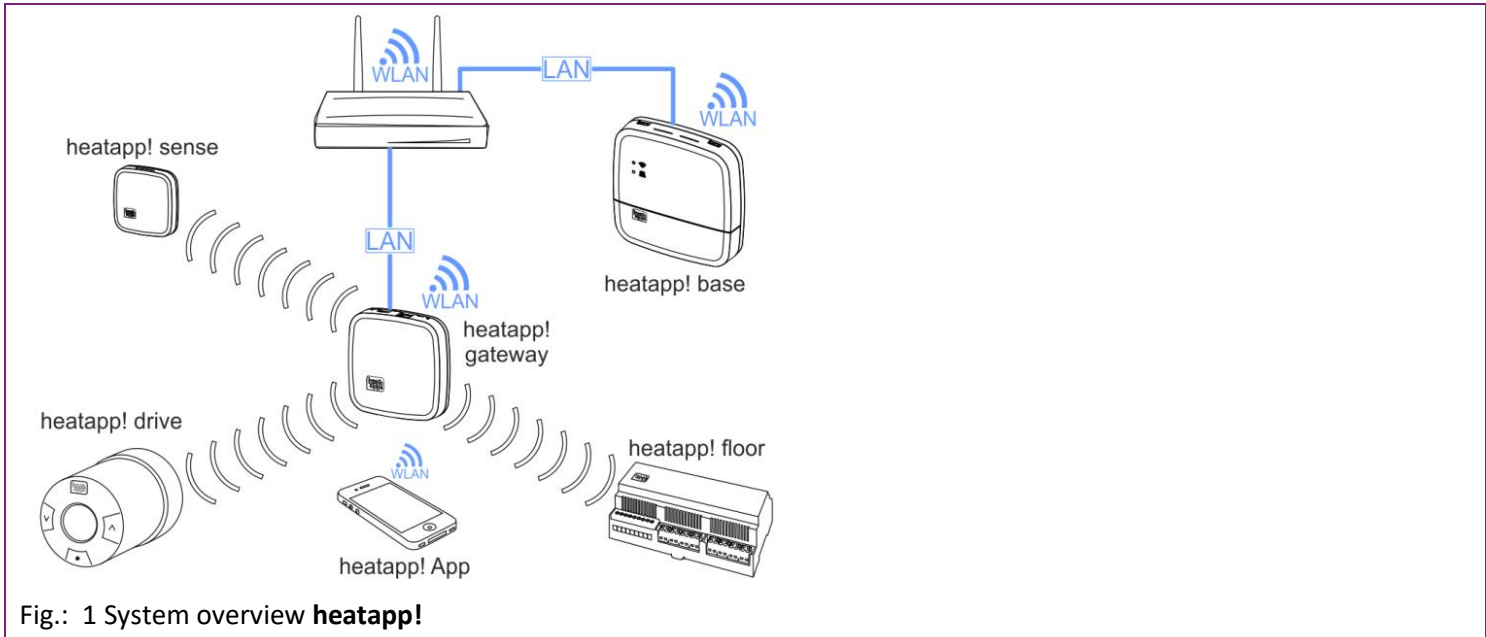
Impairment of device function if incorrect spare parts are used!

If unauthorised parts are used correct functioning is not assured. Use spare parts authorised by customer service.

1.6 Safety instructions

- The device is not suitable for children and must not be used as a toy.
- Store packaging material safely away from children or dispose of it.
- Do not dismantle the device; it does not contain any user-serviceable parts. If defects occur, please contact your installer.

2 System description



heatapp! is a system that lets you control your heating system via app. From anywhere. At any time. **heatapp!** allows the definition of individual switching times as a repeating program as well as setting three temperature levels—comfort temperature, economy temperature and setback temperature—for each room or group of rooms. A temporary adjustment of the temperature can be activated via the wheel and the scenes Holiday, Walk, Party, Shower, Boost and Standby.

In conjunction with **heatapp! gateway** and the wireless components, **heatapp!** is turned into a highly efficient individual room control, which determines the heat requirement of each room and regulates the heat distribution.

The three user roles to be selected are “User”, “Owner” and “Expert”. These roles have different operating and viewing rights, allowing each user to be individually assigned his or her area to be controlled.

2.1 Application variants

heatapp! supports several options on how to connect to the energy producer. This results in various application scenarios. These scenarios are shown below:

- **heatapp! as remote control when connecting the system to the energy generator** via OpenTherm bus or **T2B** bus for THETA controllers. In order to control this setting, the outside temperature is used to determine the heat demand. The available heating circuits (without room station) are displayed as room groups.
- **heatapp! as reference room controller when connecting the system to the energy generator** via OpenTherm bus or **T2B** bus for THETA controllers, 0 - 10 V connection or switching contact for a heating circuit. The temperature is regulated based on the temperature determined in a reference room by using the hard-wired room sensor **heatapp! sense-wire**. The heat demand is calculated by using the difference between the determined actual temperature and the set target temperature and is transmitted as a heat request to the energy provider. All rooms connected to this heating circuit are adjusted to the temperature of the reference room.
- **heatapp! as controller for a single room when connecting the system to the energy generator** via OpenTherm bus or **T2B** bus for THETA controllers, 0 - 10 V connection or switching contact. The temperature is controlled based on the actual temperature determined in each room. When the setpoint temperature is reached, the heat request to the energy provider is stopped, so that it can be turned off. In order to determine the actual temperature, the **heatapp! radio components** and the **heatapp! gateway** are required.

- **heatapp!** as individual room controller without connection of the **heatapp! base** to the energy generator. The **heatapp! base** assumes the heat distribution based on the heat demand of each individual room. The **heatapp! gateway** transmits the temperatures of the room sensors to the **heatapp! base**. As long as there is a heat request, the valves of the corresponding rooms are opened. When the setpoint temperature is reached, the valves close. The temperature is regulated independently of the heat generation. Therefore, only the available heat can be distributed.

2.2 The Z-Wave wireless system

The Z-Wave wireless system is a wireless communication standard specially for use in the smart home sector. The wireless communication is optimised for low energy consumption and maximum communication safety.

Z-wave uses two-way communication with acknowledgement. Only confirmed telegrams are classed as sent successfully. If a communication error occurs, the transmit process is repeated three times.

Z-Wave has implemented the feature of a mesh-networking technology in which every mains operated device can send telegrams to other devices in its own network. The resultant meshed network is controlled by **heatapp! gateway** and the routes updated upon changes to the network.

heatapp! floor and **heatapp! repeater** are constantly active in the wireless network and can therefore serve as Z-Wave routers. Battery operated devices such as **heatapp! drive** and **heatapp! sense** are mainly inactive, only waking periodically to receive and send commands. They cannot be used as routers.



Note

- **heatapp!** Z-Wave radio components can be included in any Z-Wave network. The operation depends on the respective system and can therefore differ from **heatapp!**
- All 230 V radio components within the Z-Wave network have repeater functions for other Z-Wave products and help to increase the reliability of the network.

3 heatapp! Components

3.1 heatapp! base

heatapp! base is the central control and regulation unit of the system. **heatapp! base** can communicate with the energy generator via the switching contact, 0 - 10 V and Open Therm interfaces of an existing heating system and transmit the heat demand to the energy generator. **heatapp! base** also communicates with the **heatapp! gateway** via the home network. As an option, and in conjunction with **heatapp! sense-wire**, it can be used as a reference room controller. Without room temperature detection it can be used as a remote control of an OpenTherm energy generator.

3.2 heatapp! base T2B

Starting with version V3.X, **heatapp! base T2B** is the central control unit in conjunction with the THETA controller. The **heatapp! base T2B** can communicate with the energy generator via the switching contact, 0 - 10 V and T2B bus interfaces of an existing heating system and transmit the heat demand to the THETA controller. The **heatapp! base T2B** communicates with the **heatapp! gateway** via the home network. As an option, and in conjunction with **heatapp! sense-wire**, it can be used as a reference room controller. Without room temperature detection it can be used as a remote control of a THETA controller.



Note

In the following text, **heatapp! base** is always to be understood as **heatapp! base** and **heatapp! base T2B**, unless the difference is explicitly pointed out.

3.3 heatapp! sense-wire

heatapp! sense-wire is a wired temperature sensor for measuring the current temperature of the reference room in the **heatapp! base/T2B**. The device is mounted on the wall and connected to the E1 input of the **heatapp! base/heatapp! base T2B**. **heatapp! sense-wire** is used for control of a heating circuit based on the reference room principle.

3.4 heatapp! gateway

heatapp! gateway is the main wireless interface of the single room heat regulation. **heatapp! gateway** wirelessly sends and receives information to all radio components for control of the radiators (**heatapp! drive**), underfloor heating system (**heatapp! floor**) and for room temperature measurement (**heatapp! sense** and **heatapp! sense control**) and serves as a message interface for **heatapp! base/heatapp! base T2B** and **heatcon! EC**.

heatapp! gateway communicates with the radio components, which are located in the individual rooms via the Z-wave wireless protocol. Communication with **heatapp! base / heatapp! base T2B / heatcon! EC** takes place via the home network of the customer.

3.5 heatapp! drive

heatapp! drive is a wireless actuator for flow-controlling a radiator.

The **heatapp! drives** can be fitted to all common makes of valve with an M30 x 1.5mm connection or RA adapter. For valves with RA/V and RA/VL connection, we offer a corresponding adapter. Other adapters are available through the trade. A **heatapp! drive** communicates wirelessly with the **heatapp! gateway**.

3.6 heatapp! floor

heatapp! floor is a control system for underfloor heating systems and -heating coils. Up to eight channels each with up to three thermoelectric actuators can be controlled. A maximum of 24 thermoelectric actuators can be connected. **heatapp! floor** communicates wirelessly with the **heatapp! gateway**. **heatapp! floor** also contains an integrated repeater to improve the wireless range of other **heatapp!** radio modules.

3.7 heatapp! single floor

The **heatapp!** system operates a Z-wave component available on the open market, to be able to execute heating-relevant functions. Only those components which we declare as having been **heatapp! checked** can be assigned a room in **heatapp!** and consequently adopt a heating-relevant function. Switchable wireless sockets and in-wall relays are used to control electrical heaters, such as fan heaters, infrared heaters or panel heaters. These are detected in the system as a **heatapp! single floor** unit. A list of **heatapp! checked** components from other manufacturers can be downloaded from <https://ebv-gmbh.eu/en/downloads/>.

3.8 heatapp! sense

The **heatapp! sense** is a room sensor for measuring the current temperature in rooms with underfloor heating. Thanks to wireless technology, the position of the **heatapp! sense** in the room can be flexibly selected; nevertheless it must not be covered to ensure it receives accurate temperatures. The **heatapp! sense** communicates wirelessly with the **heatapp! gateway**.

3.9 heatapp! sense control

The **heatapp! sense control** is used to measure the current temperature and to display the air humidity, as well as the desired temperature setting (setpoint) for a room. Thanks to the battery-operated wireless technology, the position of the **heatapp! sense control** in the room can be flexibly selected; nevertheless it must not be covered to ensure it receives accurate temperatures. The **heatapp! sense control** communicates wirelessly with the **heatapp! gateway**.

3.10 heatapp! repeater und heatapp! repeater S

heatapp! repeater and **heatapp! repeater S** are used to improve the wireless coverage in a system. If one or more radio components are inaccessible, a **heatapp! repeater** is positioned between the **heatapp! gateway** and the radio component that cannot be reached thereby improving the wireless coverage. In very large rooms or buildings with strongly attenuating building materials (e.g. reinforced concrete), it may be necessary to use stronger repeaters. In this case, the **heatapp! repeater S** is used.

3.11 Window sensor

The **heatapp! system** operates a Z-wave component available on the open market, to be able to execute heating-relevant functions. Only those components which we declare as having been **heatapp! checked** can be assigned a room in **heatapp!** and consequently adopt a heating-relevant function. Z-wave window contacts are used to control window shutdown of the heating system in accordance with the configured function. In this way, control is more efficient because the window shutdown function, dependent on configuration, switches off the heating until the window is closed again. To enable this configuration, ensure components are **heatapp! checked** before purchasing. A list of **heatapp! checked** components from other manufacturers can be downloaded from <https://ebv-gmbh.eu/en/downloads/>.



3.12 heatapp! App

The app is installed on mobile devices such as smartphones or tablets (iOS or Android) and is used to control **heatapp!** systems.

The app is currently available in German and English, Dutch, Italian, French, Turkish, Polish, German, Russian and Spanish. If the tablet or smartphone is set to “English” the app is automatically displayed in English.

Language extensions in other languages will be made available via updates.

The **heatapp! app** is free and can be also be downloaded without a **heatapp!** system from the corresponding app stores. Demo mode demonstrates operation of the **heatapp!** system.

3.13 heatapp! connect

Activate **heatapp! connect** using the setup wizard of **heatapp! base** if you want to be able to operate your heating system from anywhere. **heatapp! connect** is a webserver and creates the connection when you access your heating while underway. **heatapp! connect** does not save any data. All data, accesses and passwords are saved at home in your **heatapp! base / base T2B** and are only accessible to authorised users after login. This concept offers maximum data security.

If you connect **heatapp! base** to the Internet in your home, then you can operate your heating with **heatapp!** and control the room temperatures wherever you are. To do so, simply use your smartphone or tablet with a 3G/4G (UMTS/LTE) or Wi-Fi connection.

3.14 heatapp! WLAN Stick

The **heatapp! WLAN Stick** is available as an accessory. If there is no option for connecting the **heatapp! base** to the router via a LAN cable, the **heatapp! WLAN Stick** is used to make a Wi-Fi connection to the router. The **heatapp! WLAN Stick** must always be plugged into the **heatapp! base**

3.15 heatapp! Installationskit Installation accessories

The **heatapp! Installation kit** consists of a **heatapp! USB LAN Adapter** and a patch cable. These components are required as accessories to be able to access the installation interface of **heatapp! base** and **heatapp! gateway**. The **heatapp! Installation kit** creates the connection to the PC/laptop during the installation.

3.16 heatapp! Installations Stick Installation accessories

The **heatapp!** installation stick is an access point stick. It is required as an accessory, as an alternative to the **heatapp! Installation kit**, to be able to access the installation interface of **heatapp! base** and **heatapp! gateway**. The **heatapp!** Installation Stick creates a WLAN (Wi-Fi) network to which a PC/laptop, tablet or smartphone is connected for the installation.

The **heatapp!** system is undergoing continuous development. You can find information about new components and language extensions under <https://ebv-gmbh.eu/en/downloads/>.



Note

In the following text, **heatapp! base** is always to be understood as **heatapp! base** and **heatapp! base T2B**, unless the difference is explicitly pointed out.

4 Technical Requirements

You can use the **heatapp!** system with your underfloor or radiator heating as well as with electric heaters, irrespective of what sort of heat source you have. To be able to operate **heatapp!** conveniently from anywhere, you require:

- Your own residential Internet connection (broadband, cable, fibre optic, LTE)
- A wired or wireless home network (LAN, Wi-Fi) and
- A smartphone or tablet (from iOS 7.0 or Android 4.x from 8") with 3G/4G mobile (UMTS, LTE) and local wireless.

If you only want to use **heatapp!** at home and never underway, then all you need is a smartphone or tablet without even a mobile phone connection.

The **heatapp! app** is currently available for iOS (iPhone, iPad and iPod from iOS 7.0) and Android (from version 4.x for tablets from 8") and will soon be available for other operating systems and mobile devices.

You do not require any knowledge of heating technology because **heatapp!** is installed by experts for you.

4.1 Conditions and requirements

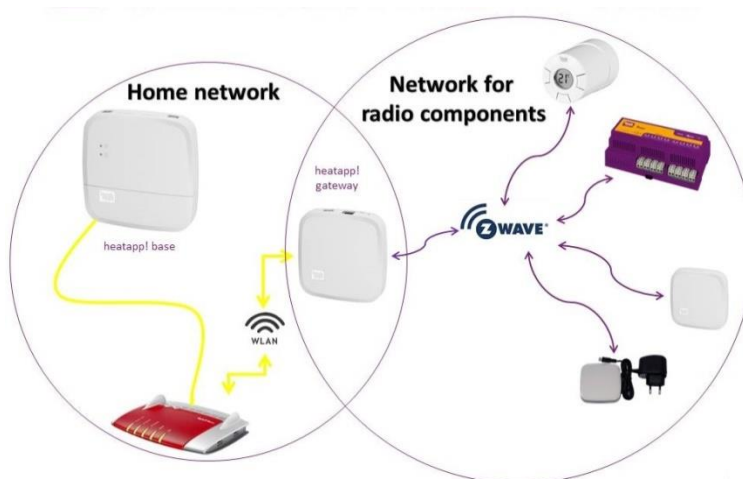


Fig.: 2 WLAN- and Z-Wave - Networks

The **heatapp!** system works with two different networks. **heatapp! base** and **heatapp! gateway** communicate with each other via the home network. The radio components communicate via Z-Wave radio with the **heatapp! gateway**.

To operate a **heatapp!** system, an Ethernet network (LAN / WLAN) is required. In most applications this is provided through use of an Internet connection and an appropriate router.

When connecting to the energy generator, you need a network connection in the boiler room. We recommend to connect the **heatapp! base** via LAN cable with the router. Ensure that a network connection is available; if necessary via a switch or Powerline Adapter.

heatapp! was developed in conjunction with the Institute for Internet Security. All data is stored centrally in your **heatapp! base** in your home. To protect the system from unauthorised access, the **heatapp!** system can only be operated with a user name and password. The access data is created during the installation. Ensure to keep your access data in a safe place, because without it, your system is no longer operable. You can record the access data on page 135 at the end of this installation manual.

4.2 heatapp! and Internet

An Internet connection is required to be able to operate the **heatapp!** system from anywhere. A wired connection to the Internet is available in most homes (ADSL, cable, optical fibre).



Fig.: 3 DSL or UMTS

heatapp! can be operated via mobile Internet (SIM card). Page loading speed depends on the transmission speed (bandwidth).

Connection type	Download-rate	heatapp! usefulness
GSM GPRS	53,6 kbits/s	no
GSM EDGE	256 kbits/s	conditional, very slow page layout, frequent timeouts
UMTS	384 kbits/s	yes
UMTS HSPA	7,2 Mbits/s	yes
UMTS HSPA+	42 Mbits/s	yes
LTE	300 Mbits/s	yes
LTE-Advanced	1 Gbits/s	yes

For average use, **heatapp!** requires 40-50 MB of data per week.

► Note

Check with your ISP whether your Internet connection is permanently online. Internet connections, which are not permanently online, may temporarily go into standby/sleep mode. The **heatapp!** system data transfer is small, so it may be that it is inadequate to deactivate an Internet access sleep mode.

5 Installation and initial operation

► Note

By single room control please adhere to the specified sequence for installation and initial operation of the **heatapp! base** and **heatapp! gateway**.

1. Firstly, completely configure **heatapp! base**,
2. then configure **heatapp! gateway**.
3. **heatapp!** radio components

For initial operation of a **heatapp!** system a standard laptop and the **heatapp!** installation kit comprising the **heatapp! USB-LAN adapter** and a network cable are required.

5.1 Installation accessories

The installation of the **heatapp!** system takes place via the Internet browser of your laptop, tablet or smartphone. In order to access the **heatapp!** Web interface, you need to set up a **heatapp!** installation kit or a **heatapp!** Installation stick, which are available as an accessory.

A The **heatapp!** installation kit consists of

- 1 USB LAN adapter
- 1 Patch cable
- 1 Transport bag

B **heatapp!** Installation-Stick (WLAN)

5.2 heatapp! base

5.2.1 Opening the housing

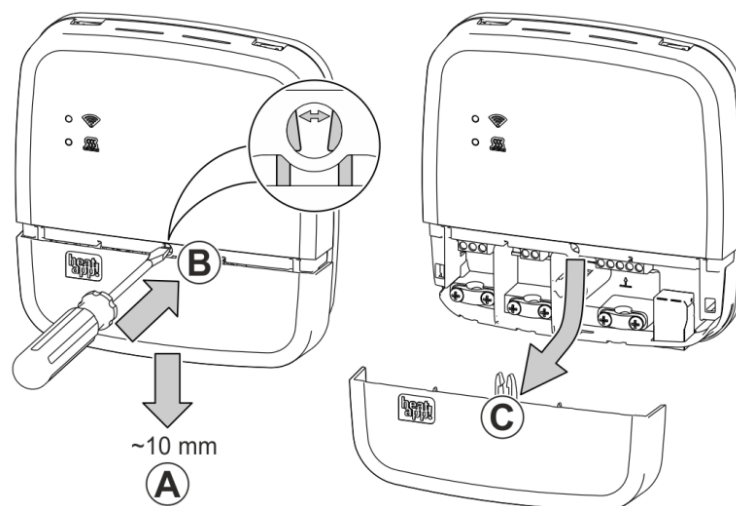


Fig.: 4 Opening the housing, **heatapp! base**

- A** Push the terminal cover up to the stop approximately 1 cm downwards.
- B** Press the latch of the terminal cover carefully apart using a screwdriver. To prevent damage to the electronics, do not push the screwdriver in too far when doing so.
- C** Take the terminal cover off in a downwards direction.

5.2.2 Installation

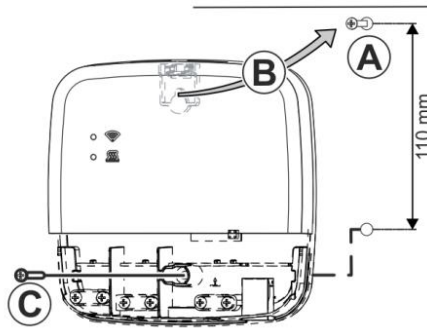


Fig.: 5 Wall mounting **heatapp! base**

Find a suitable installation location for the **heatapp! base** on a wall that fulfils the following requirements:

- A 230 V outlet must be available at the installation location of the **heatapp! base**.
- If the **heatapp! base** is going to be connected to the heat source (e.g. OpenTherm, 0-10V, demand contact) the installation location must be close to the heat source.
- A LAN connection to the customer's home network must be available at the installation location of the **heatapp! base**.

or alternatively

- The installation location must be within range of the customer's Wi-Fi network so that the **heatapp! Wi-Fi stick** can be used.

► Note

In many boiler rooms, WLAN coverage is not possible. If a LAN connection cannot be established, you can switch to a Powerline Adapter (DLAN). When selecting the Powerline Adapters, make sure that the sleep function is disabled.

Install the **heatapp! base** with the supplied installation material in the selected installation location.

- | |
|---|
| <p>* The heatapp! Wi-Fi stick is not included in the standard scope of delivery; it must be ordered as an accessory.</p> |
|---|

5.2.3 Requirement request to the energy generator

There are different options to connect the demand request:

- **T2B Bus:** The **T2B** bus (THETA 2-wire bus) enables **heatapp!** to specify the hot water and flow temperature for all heating circuits without room station.
- Connect the **T2B** link cable to the terminals **T2B BUS** (in doing so, ensure correct polarity A / B!). Subsequently, use the the set-up wizard and select the option "*Regulator T2B*" in the "*Energy generator*" field.
- If the single room heat regulation is set to "OFF", the **heatapp! base T2B** automatically displays a room group for each heating circuit without a room station.
- **OpenTherm:** The OpenTherm protocol allows **heatapp!** to specify the hot water and flow temperature, provided the heat source has an OT interface open to external connections. E.g. an OT room station can be replaced by the **heatapp! base**.

- Connect the OpenTherm link cable to the terminals OT/BUS (in doing so, ensure correct polarity A / B!). Then subsequently select the option "*Heat source control system (OT/Bus)*" in the field "*Heat source*" in the set-up wizard.
- **Actuator signal 0-10 V:** The **heatapp! base** converts the flow temperature specification or the heat source power into a 0-10 V output signal. The parameter setting for this is performed in expert mode of the **heatapp! base** menu.
Connect the actuator signal input (0-10 V) of the heat source to the A2 / GND terminals and subsequently select the option "*Heat source actuator signal 0-10V (A2)*" in the field "*Heat source*" in the set-up wizard.
- **Request contact (thermostat):** For a demand (heating operation) from the rooms, the contact is closed. If there is no demand from the rooms, the contact is opened. Connect the demand contact cable to the A1 terminal and subsequently select the option "*Heat source switching contact (A1)*" in the field "*Heat source*" in the set-up wizard.



WARNING

Danger due to live parts.

Some components are electrically live.

Contact with live parts can result in an electric shock, burns or even death.

Before working on the electrical system, observe the following points:

- Switch the system to a zero volts state.
- Secure to prevent switching back on.
- Check for zero volts state.

5.2.4 Electrical connection heatapp! base

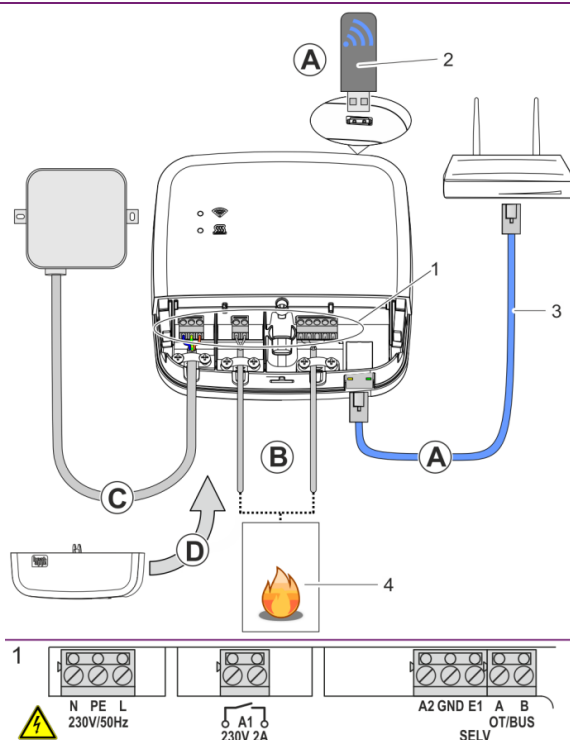


Fig.: 6 Connection **heatapp! base**

- Via a network cable (3) plugged into a free Ethernet port on the customer's Internet router or switch. The maximum total cable length from the **heatapp! base** to the next switch or router must not exceed 100m.
- Alternatively via a Wi-Fi connection. Plug the **heatapp! Wi-Fi-stick** (2) into one of the USB ports on the top side of the **heatapp! base**.
The Wi-Fi stick must remain plugged in to ensure correct functioning of the **heatapp! base**.

Ask the customer for the access data for their Wi-Fi network. You will require this in the following set-up steps.

- Moreover, inform the customer that future changes to their Wi-Fi network (new router, changed password, etc.) can impair the operation of **heatapp!** and may require an adjustment to the **heatapp!** set-up.

B Connect the heat source (Fig.: 6 Connection **heatapp! base**, item. 4, optional) according to the terminal configuration on the **heatapp! base**.

- At the E1 input, a **heatapp! sense-wire** (hard-wired room sensor) can be connected.

C Connect the power supply according to the terminal configuration on the **heatapp!** base. When connecting the power supply, VDE 0100 or the corresponding national regulations must be observed.

D Replace the terminal cover.

* The **heatapp! Wi-Fi stick** is not included in the standard scope of delivery; it must be ordered as an accessory.

Diagram showing the connection of a heatappliance base (WG 500) to a terminal block. The base has a digital display showing 28.0°C and 20.5°C, and a rotary switch. The terminal block has terminals labeled L, Hz, A1, potentialfrei 2A, A2, GND, E1, A, B, T2B/BUS, and SELV. Wires connect the base to the terminal block: a red wire from the base to A2, a blue wire from the base to A, and a black wire from the base to GND. The base is labeled WG 500.

Fig.: 7 Connection variant at WG 500

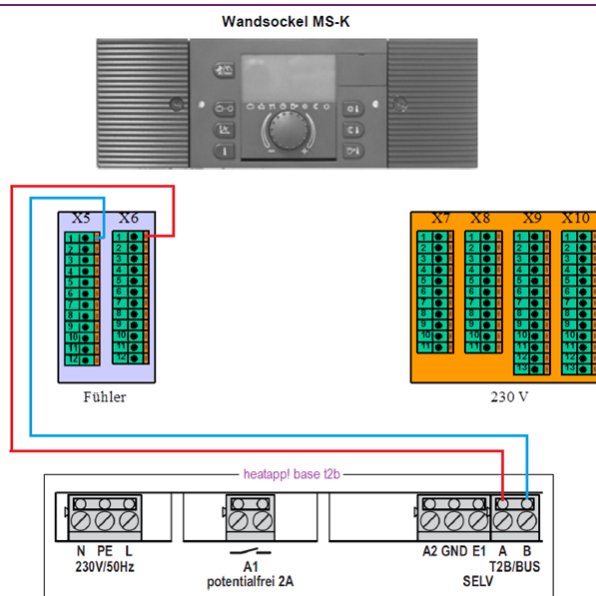


Fig.: 8 Connection variant wall base MS-K

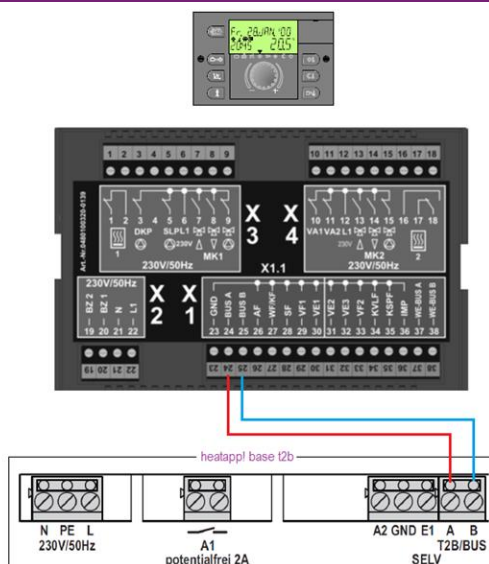


Fig.: 9 Connection variant THETA

5.2.6 Update heatapp! base und heatapp! gateway

Provided **heatapp! base** and **heatapp! gateway** are connected to the Internet and the installation takes place via PC/laptop/smartphone or tablet, the system requests the installation of a possibly available update. Alternatively, from version 2.1xxx, updates can be installed via USB stick, if an Internet connection is not available or not wanted.

► Note

Updates are provided to introduce new functions and to eliminate errors. Therefore it always makes sense to perform an available update.

For all **heatapp!** systems that are not connected to the Internet, we recommend installing of available updates via a USB stick.

OEM partners and specialist dealers receive available update files via EbV - Support access. The update files are encrypted and signed so that the security of your data and system are guaranteed at all times. The system checks

whether there is a suitable update file on the USB stick. This ensures that only suitable update files are installed. Incorrect swapping of files (the USB update system is available for all heatcon! and **heatapp!** devices), e.g. by renaming is therefore impossible.

5.2.7 Update installation via USB Stick

► Note

- Use an empty Fat32-formatted USB stick for the update.
- Before updating, create a data backup in the System Management menu.

Save the update file on the USB stick.

Insert the USB memory stick into the USB port of **heatapp! base** or **heatapp! gateway**.

Updating is signalled by the LED:

LED flashes cyan (blue)	Reading update file
LED steady green or yellow	Installing update
LED 5 sec red then green	Update failed (e.g. because of incorrect update file on the USB stick). System continues working in normal operation.

► Note

Under no circumstances should you disconnect the power supply to the **heatapp! base** and **heatapp! gateway** during updating

The actual update process takes between three and eight minutes. Thereafter the USB memory stick can be removed and setup of the system takes place or, if setup has already concluded, normal operation is resumed.

5.2.8 Initial operation / initial configuration

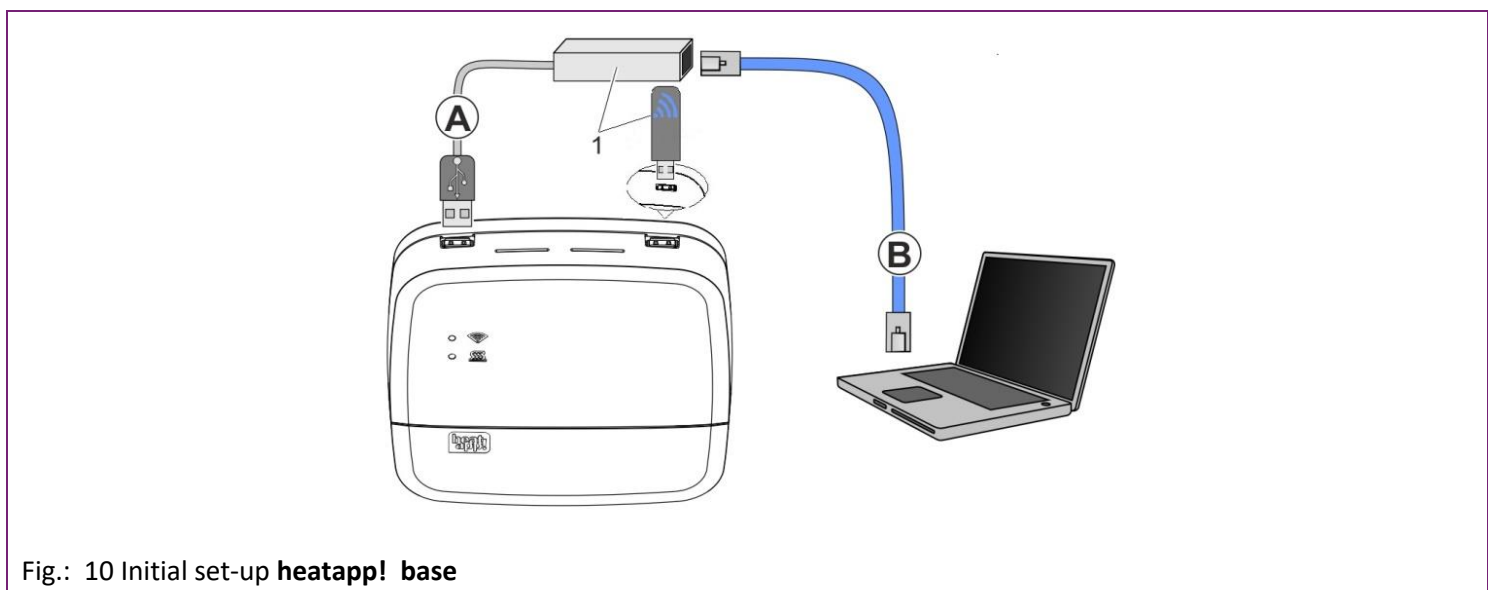


Fig.: 10 Initial set-up **heatapp! base**

► Note

When updating the device software by downloading via the Internet additional costs may be charged depending on the customer's actual Internet tariff.

The initial set-up of the **heatapp! base** is performed based on a menu control system via the browser-based set-up wizard of the connected PC / laptop.

DHCP must be enabled in the network settings of the PC / laptop (automatic address allocation) and no proxy server must be activated.

1. Switch the power supply for the **heatapp! base** on.
2. Connect the **heatapp! USB-LAN adapter** from the installation kit to the **heatapp! base** and the PC / laptop:
A Plug the **heatapp! USB-LAN adapter** into a free USB port on the top side of the **heatapp! base**.
B Start the PC / laptop. Connect the **heatapp! USB-LAN adapter** to the network port of the PC / laptop.

or

Plug the **heatapp! installation stick** into one of the USB sockets on the top of the **heatapp! base**. The displayed network name is generated by the **heatapp! base**:

heatapp! base[xxxxxxxx]

The last 6 digits of the Mac address of **heatapp! base** (located on the nameplate) are shown in brackets.

Connect your laptop, tablet or smartphone via WLAN to the **heatapp! base** network.

Shortly thereafter, the set-up assistant starts automatically in the browser window of your laptop. If the set-up assistant does not start automatically, enter the address <http://10.0.0.1> in the address line of the browser.

3. Follow the instructions in the set-up assistant. The setup wizard of the **heatapp! base** guides you in seven steps through the standard settings of the **heatapp!** system.
4. **Step 1 - Login**
5. Login to the setup wizard as an expert.

► Note

It is not necessary to login to the system for the initial configuration.

Step 2 - Network

For installation you require a functioning home network, an Internet connection is not necessary.

However, if you do not have an Internet connection you can only use **heatapp!** with your smartphone or tablet within your own home, not when you are underway.

Moreover you will not be able download any updates for **heatapp! base** or **heatapp! gateway**. Therefore we strongly recommend connection of the **heatapp!** system to the Internet.

Creating a network connection

- A LAN connection via DHCP is recommended (automatic setup of an Internet connection)
- LAN connection with manual settings (optional)
- Setup of a Wi-Fi connection (optional)
- Setup of a proxy connection (optional)

After an Internet connection has been created, the **heatapp!** system checks if an update is available.

- If a system update is available, an installation request appears. If the update is not installed, a setup cannot be performed.
- Connection to **heatapp! connect** for remote control of the **heatapp!** system. **heatapp! connect** is required so that the system can subsequently be operated via the app from any location.

Step 3 - Hydraulics

Here is where you select the type of actuation of the heat source in the system.

► Note

If single room heat regulation is implemented by demand request as per EN 15232, you must select here how **heatapp! base** is to actuate the heat source.

If "None" is selected, pure single room heat regulation is implemented.

Heat source selection

- *None*: no connection to the boiler
- *Burner control system OT/Bus*: OpenTherm connection
- The OpenTherm protocol allows **heatapp!** to specify the hot water and flow temperature, provided the heat source has an OT interface open to external connections. E.g. an OT room station can be replaced by the **heatapp! base**.
- Regulator **T2B**
- The **T2B** bus (THETA 2 wire bus) enables **heatapp!** to set the hot water and flow temperature for all heating circuits without a room station.
- *Actuator signal 0-10 V (A2)*:
- The **heatapp! base** converts the flow temperature specification or the heat source power into a 0-10 V output signal. The parameter setting for this is performed in expert mode of the **heatapp! base** menu.
- Request contact (A1):
- For a demand (heating operation) from the rooms, the contact is closed. If there is no demand from the rooms, the contact is opened.

Selection of single room control

When connecting the **heatapp! base T2B** to the regulator or the **heatapp! base** to the Open Therm Bus, you must select whether the system is used with single room control or as remote control for the controller.

Step 4 – Rooms or Roomgroups

If preselecting the function "Single room control ON", register all rooms that should be controlled with **heatapp!** This will also assign the energy generator to the rooms for which **heatapp!** prompts the requirement.

Only if the Open Therm or T2B bus is connected to the energy provider

If preselecting the function "Single room control OFF", **heatapp!** automatically generates a room group for each existing heating circuit to which no room station is connected. Allocate the heating circuits to the room groups and assign a meaningful room name, e.g., floor, 1st floor or wall heater, etc.

Step 5 - My System

Allocate a name to your **heatapp!** system and enter the location (town and postcode). The entered location is used to display the weather data in the **heatapp! app**.

Step 6 - Users

To be able to operate the **heatapp!** system, user must login to the system with user name and password. Create at least two users with the following user roles:

- Expert for complete access to all settings
- Owner, for customisation and user management

Further users can be added at a later date.



Attention

You cannot use the **heatapp! base** without access data. Make a note of the access data in your installation instructions in the appropriate form in chapter 10.1 and keep it carefully.

Step 7- Date and time

Here you select the time zone for your location (town of residence).

You can select between the following variants:

- Time synchronisation via the Internet
- Time synchronisation via an internal NTP server
- Manual time setting

After set-up the **heatapp! base** is successfully connected to the customer network and the Internet if the top LED "Network" on the **heatapp! base** remains a steady GREEN.

5.3 heatapp! gateway

5.3.1 Setting up

The **heatapp! gateway** is designed to be set up as a table-top unit.

Find a suitable installation location for the **heatapp! gateway** that fulfils the following requirements:

- A 230 V outlet must be available at the installation location of the **heatapp! gateway**.
- A LAN connection to the customer's home network must be available at the installation location of the **heatapp! gateway**.

Or alternatively

- The installation location must be within range of the customer's Wi-Fi network so that the Wi-Fi module integrated in the **heatapp! gateway** can be used.

Position the **heatapp! gateway** at the selected installation location.

► Note

If you favour wall fastening for the **heatapp! gateway**, we recommend double-sided adhesive strips, e.g. Powerstrips. Screw-fastening is not possible.

The **heatapp! gateway** should be positioned as centrally as possible between the radio components. Avoid room corners or positions near to the floor, so that propagation of the radio waves is not obstructed. Find out more about **heatapp!** and Z-wave radio communication under <https://learning.heatapp.de>

5.3.2 Connect at heatapp! gateway

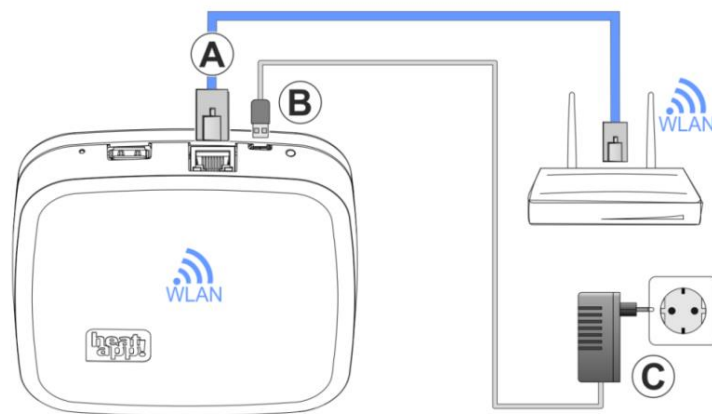


Fig.: 11 Connect at **heatapp! gateway**

A Connect the **heatapp! gateway** to the customer's LAN network:

- Via a network cable plugged into a free Ethernet port on the customer's internet router or switch. The maximum total cable length from the **heatapp! gateway** to the next switch or router must not exceed 100 m.
- Alternatively via Wi-Fi connection using the Wi-Fi module integrated in the **heatapp! gateway**. Ask the customer for the access data for their Wi-Fi network. You will require this in the following set-up steps. Moreover, inform the customer that future changes to their Wi-Fi network (new router, changed password, etc.) can impair the operation of **heatapp!** and many require an adjustment to the **heatapp!** set-up.

B Connect the supplied plug power supply unit to the **heatapp! gateway**..

C Plug the power supply unit into a power outlet.

5.3.3 Initial operation / initial configuration

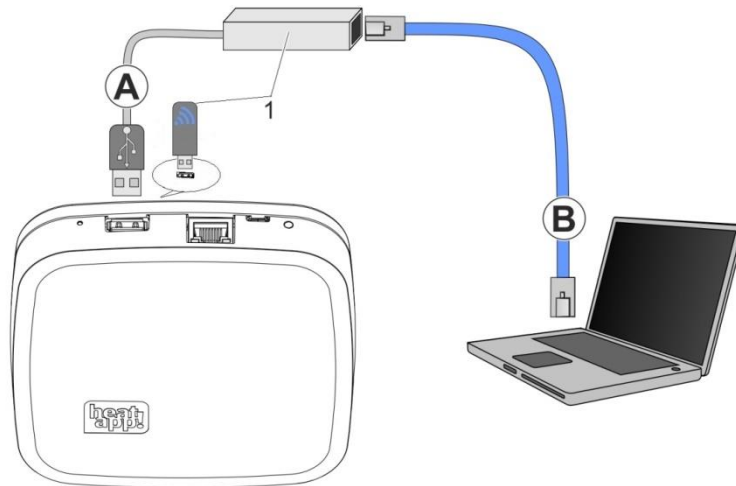


Fig.: 12 Initial set-up **heatapp! gateway**

- 1 **heatapp! USB-LAN Adapter or heatapp! Installations-Stick**

The initial set-up of the **heatapp! gateway** is performed based on a menu control system via the set-up assistant via the browser of the connected PC / laptop.

DHCP must be activated in the network settings of the PC / laptop (automatic address allocation) and no proxy server must be activated.

► Note

Through updating of the device software by downloading via the Internet additional costs may be charged depending on the customers actual internet tariff.

1. Connect the **heatapp! USB-LAN adapter** from the installation kit to the **heatapp! gateway** and the PC / laptop:

A Plug the **heatapp! USB-LAN adapter** into the USB port on the top side of the **heatapp! gateway**..

B Start the PC / laptop. Connect the **heatapp! USB-LAN adapter** to the network port of the PC / laptop..

or

Plug the **heatapp! installation stick** into the USB port on the top of the **heatapp! gateway**. The displayed network name is generated by the **heatapp! gateway**:

heatapp! gateway[xxxxxxx]

The last 6 digits of the Mac address of **heatapp! gateway** (located on the nameplate) are shown in brackets.

Connect your laptop, tablet or smartphone via WLAN to the **heatapp! gateway** network.

Shortly thereafter, the set-up assistant starts automatically in the browser window of your laptop. If the set-up assistant does not start automatically, enter the address <http://10.0.0.1> in the address line of the browser.

2. Follow the instructions in the set-up wizard. The setup wizard of the **heatapp! gateway** guides you through the standard settings in four steps

Step 1 - Login

Login with your password to **heatapp! gateway**

► Note

It is not necessary to login with a password for the initial configuration.

Step 2 – Network

For installation you require a functioning home network.

However, if you do not have an Internet connection you can only use **heatapp!** with your smartphone or tablet within your own home, not when you are underway.

Moreover you will not be able download any updates for **heatapp! base** or **heatapp! gateway**. Therefore we strongly recommend connection of the **heatapp!** system to the Internet.

Creating a network connection

- A LAN connection via DHCP is recommended (automatic setup of an Internet connection)
- LAN connection with manual settings (optional)
- Setup of a Wi-Fi connection (optional)
- Setup of a proxy connection (optional)

After an Internet connection has been created, the **heatapp!** system checks if an update is available.

- If a system update is available, an installation request appears. If the update is not installed, a setup cannot be performed.

Step 3 – Connection **heatapp! base**

Here select the **heatapp! base** that you want to connect to the **heatapp! gateway**.

Schritt 4 – Passwort

Enter a password for access to the **heatapp! gateway**.



ATTENTION

It is not possible to access the menu of the **heatapp! gateway** without a password. Make a note of the access data in your installation instructions in the appropriate form in the chapter “Login data” and keep it carefully.

After set-up the **heatapp! gateway** is successfully connected to the customer network, the **heatapp! base** and the Internet if the LED on the side **heatapp! gateway** remains a steady GREEN.

After initial set-up using the set-up wizard, you enter the **heatapp gateway** menu. Here you can include the **heatapp!** radio components (see section 6.1)

6 heatapp! radio components

The **heatapp! gateway** must be fully set up and the LED on the side must be a steady GREEN. Please refer to section "LED on **heatapp! gateway**", on page 113 to determine the meaning of other conditions and for troubleshooting instructions.

Include the radio components close to the **heatapp! gateway**. Including of new radio components is completed with the room assignment. An interview between the **heatapp! gateway** and the **heatapp!** radio components follows, to determine the functions of the new modules. During this process, battery-operated devices may change to sleep mode; if this occurs, they must be manually woken by pressing the learn key. The **heatapp! gateway** indicates (Include button is released) when the interview has ended.

If the **heatapp! gateway** is missing important information for a radio component, you receive a message – Link to the connection status page. The radio component concerned is marked with an orange spot. Continue to press the learn key at intervals of a second until the status point goes green.

6.1 Including radio components

Registration of the radio components takes place in the immediate vicinity of the gateway. During the registration phase, the gateway performs an interview with the radio component to be registered. Information from the radio component is transmitted to the gateway during this registration interview.

If the gateway recognises the radio component as a **heatapp!** component, a function is assigned, e.g. room assignment for room sensors or channel assignment for the **heatapp! floor**.

After registration of the radio components, they are installed/positioned in the corresponding rooms.

If not already done, connect the **heatapp! USB-LAN adapter** from the installation kit with the **heatapp! gateway** and the PC / laptop. Shortly thereafter the **heatapp! gateway** menu is displayed in the browser window of your PC. If the menu does not display automatically, enter the address <http://10.0.0.1> in the address line of the browser.

1. Login with your password from the installation.
2. Select the Radio component menu and then Include and Exclude.
3. Select the Include button.
4. If the gateway is ready, you are requested to press the learn key of the radio component (for operation of the radio component, please see the enclosed manual).
5. If the **heatapp! gateway** recognises the radio component you are requested to enter a name. Dependent on the radio component used, you are requested to select a room.
6. To complete the Include interview, you are requested to press the radio component learn key again.

Multiple radio components can be assigned to each room. This may be up to four **heatapp! drive** or **heatapp! floor** channels or a mixture of both.

If multiple **heatapp! drive** are registered, because for example multiple radiators are present, then the first registered **heatapp! drive** is the master component, whose temperature is subsequently displayed in the app.

► Note

The **heatapp!** system also supports other manufacturers' Z-wave components (e.g. actuators and repeaters). The basic functions of these third-party components can be controlled via the **heatapp! gateway** under "Settings / System / Gateway / Radio modules / Manage" dependent on the function in question.

Other information concerning the use of other manufacturers' radio modules can be found in section "Third party radio modules" on Page 91.

6.2 Excluding of radio components

Excluding is performed analogously to including. Instead of the button "Include", use the "Exclude" button and perform the previously described steps Verbindungstest und Funksystem reparieren.

7 Connection test and Repair radio system

The **heatapp! gateway** communicates with all radio components via Z-Wave wireless. In the Z-wave wireless standard, a meshed network is created within a few days. The functions “Connection test” and “Repair radio system” are provided for checking and repairing the radio network.

You can find the functions in the menu of the **heatapp! gateway** under Radio components > Connection status (look also selection „Radio coverage“ on page 86).

► Note

The **heatapp! gateway** menu is only available in the local network. In the app, select Settings > Gateway > Radio components.

Alternatively, you can also open the gateway menu via the IP address in the Internet browser of your PC.

8 Completion of the set-up

After the set-up is complete, create an establishment protocol and a backup. If you want to set up a single room control, create the establishment protocol and the backup only after the complete installation of the **heatapp! gateway**.

8.1 Establishment protocol

The establishment protocol (look also selection „Establishment protocol“) can be found in the **heatapp! base** menu. Click the Establishment protocol button, and then click Create establishment protocol. After a few minutes, the system has created a document from which you can view all parameters set.

Below the establishment protocol is the “Send by e-mail” button. Enter your e-mail address to send the establishment protocol as a PDF file.

8.2 Data backup

The **heatapp! base** offers you the option to create a data backup (look also selection „System“ on page 56) on a USB stick. Click the “System management” button. Insert a USB memory stick into a free USB port of the **heatapp! base** and create a data backup by clicking the OK button.



9 heatapp! App

The app is the user interface of the **heatapp!** system. Next, all individual areas of the App are explained in more detail. At home, the app accesses the **heatapp!** system via the Wi-Fi connection of a tablet or smartphone. For this to occur, the **heatapp!** system must be connected to the router and the Wi-Fi connection on the tablet or smartphone correctly configured.

The app is available for devices with Apple iOS or Android operating systems via the respective app stores (iTunes or Google Play).

The mobile terminals used (e.g. smartphones, tablets, etc.) must fulfil the following system requirements:

Apple iOS	iOS
Android	Android



Fig.: 13 Logo / Icon **heatapp!** App

Open the app store or Google Play and search for **heatapp!** .

After successful installation, the icon for the app is displayed on the desktop of the mobile device:

Now ensure that the mobile device is connected to the home network that also contains the **heatapp! base**. To do this call up the Wi-Fi settings in Apple iOS devices and Android devices and check whether the Wi-Fi network is switched on and connected to the correct network.

Start the app.

Control of the app is described in section "Control", on page 30.

10 Control

Depending on the size and type of the operating device, operation can vary slightly. Therefore this guide is only representative.

10.1 Starting App and Login to a system

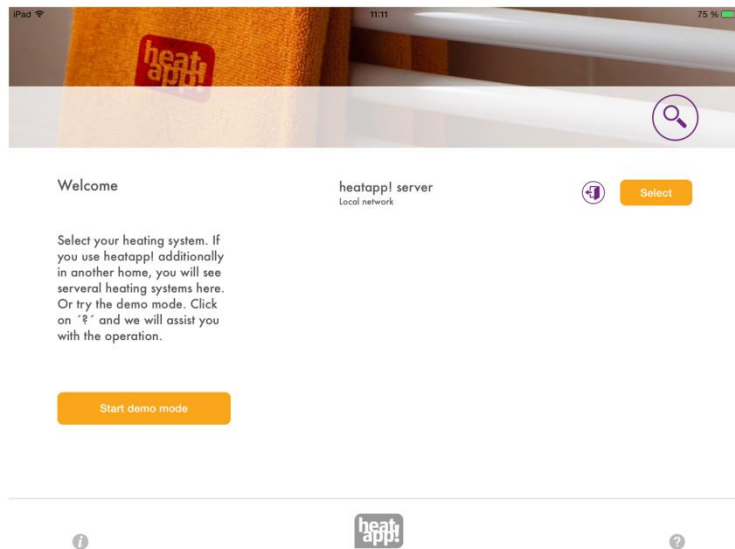



Fig.: 14 Homescreen

Demo-Mode

Demo mode is available on the left side of the start screen. In demo mode you can discover for yourself what options **heatapp!** offers.

To do so, tap the "Start demo mode" button.

Conditions of use

Tap the button  to display the conditions of use of the **heatapp!** app.

Tutorial

Tap the button  to display the tutorial for the **heatapp!** app.

10.1.1 Selecting the heating system

On the start screen you can see the heating systems available to you. Generally there will only be one available heating system.

Exceptions include:

- You are operating multiple **heatapp!** systems.
- The user of the mobile device has received one or more invitations (see section "**Invite a user to heatapp! connect**", on page 46) to control other heating systems.
- You are an expert and manage a number of customers.



Note

For the first login to your **heatapp!** system, your operating device (tablet or smartphone) must be connected to the same network as your **heatapp!** system.

The heating systems are listed by name.

Directly under the name it is apparent whether the heating system is in the same network "local network" or the connection to the heating system is made via the "Internet" and **heatapp! connect**.

Tap the desired heating system.

The pop-up window "Login" displays. Enter your user name (2) and password (3).

Confirm the entry by tapping the "Login" button (4). Tap the "Back" button (1) to return to the start menu without logging in.

After successful login, the "Homescreen" displays.

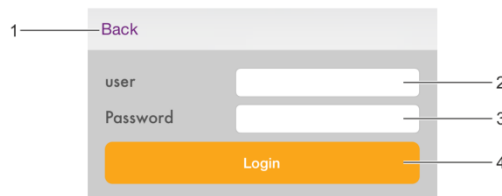



Fig.: 15 Pop-up window „Login“

After the login, the app saves the current user and password. As long as the current user remains logged in, it is not necessary to re-enter the user name and password.

You can log off from the corresponding system by tapping button .

Login by direct entry of the IP address of the **heatapp! base**

In rare case it can occur that no **heatapp! base** has been found. In this case you can also login to the system by entering the IP address of the **heatapp! base** (only in the local network).

► Note

- You can find the **heatapp! base** IP address in the setup wizard under the item "Network". To do so, the **heatapp! USB LAN Adapter** from the setup kit must connect to the **heatapp! base** (see section "Network", on page 63).
- Alternatively you can determine the IP address from the web interface of your router.

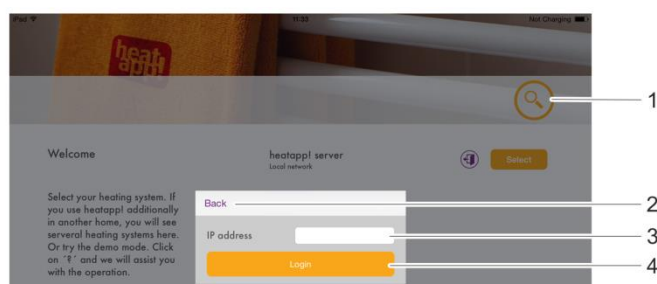


Fig.: 16 Entry of the IP address

1. Tap the "Search" button (1)
2. Enter the IP address (3) of the **heatapp! base** in the dialogue box.
3. Confirm the entry by tapping on the button (4) "Log in". Use the (2) "Back" button to return to the Start menu without logging in.
4. The "Log in" dialogue box is displayed. Carry out steps 2. ... 3. according to chapter "Selecting the heating system", on page 30.

10.1.2 User roles and access rights

The **heatapp!** system is equipped with a user-based authorisation system to prevent unauthorised access to the system. Each user must login to the **heatapp!** system using a valid user name and password.

Different authorisations can be assigned to individual users by use of different user roles.

The following user roles are available:

- **Owner:**

The Owner owns the **heatapp!** system. The Owner can manage all rooms. The Owner has access to all settings in the menu "**heatapp! base**" and the menu "**heatapp! gateway**". The Owner can create, delete and edit all users.

- **Expert:**

The Expert (generally the installer) can manage all rooms. The Expert has access to all settings in the menu "**heatapp! base**" and the menu "**heatapp! gateway**". The Expert can create and edit users. However, they cannot delete users.

- **User:**

A user can control those rooms for which they are granted authorisation. The User has access to the settings "*My profile*", "*Cycle times*", "*Design*" and "*Live View*".

Each user can only see and control the field for which they have been assigned rights. Assigned rights always include viewing of the corresponding area and the adjustment options associated with it.

10.1.3 Images und images rights

Graphical placeholders are saved for room images and users in the **heatapp!** system. These images can be replaced by your own images or default images saved in the **heatapp!** system.

The profile and room images saved in the system are provided with various rights.

- An "*Owner*" can create a corresponding room image for each room and a profile image for each user. The owner can see profile images, created by the user.
- An "*Expert*" cannot see or create profile or room images saved in the system; a neutral place holder is shown in each case.
- A "*User*" can see the room images saved in the system by the "*Owner*". A "*User*" can create and edit their own profile image.

10.2 The Homescreen

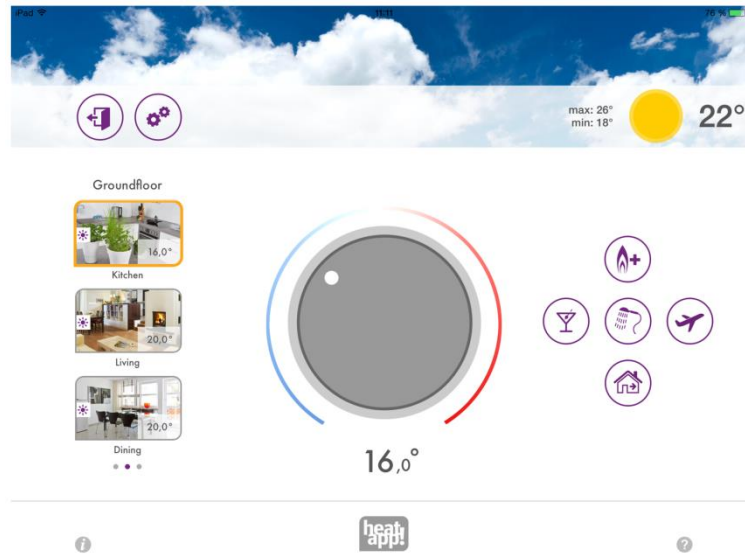


Fig.: 17 The Homescreen

The homescreen shows an overview of all the created rooms, the direct temperature adjustment option via the rotary wheel and the activation and deactivation of scenes.

Update available

After selection of the **heatapp!** system, the **heatapp! app** checks via the local network whether the system software is updated to the latest version. If an update exists, you receive a note.

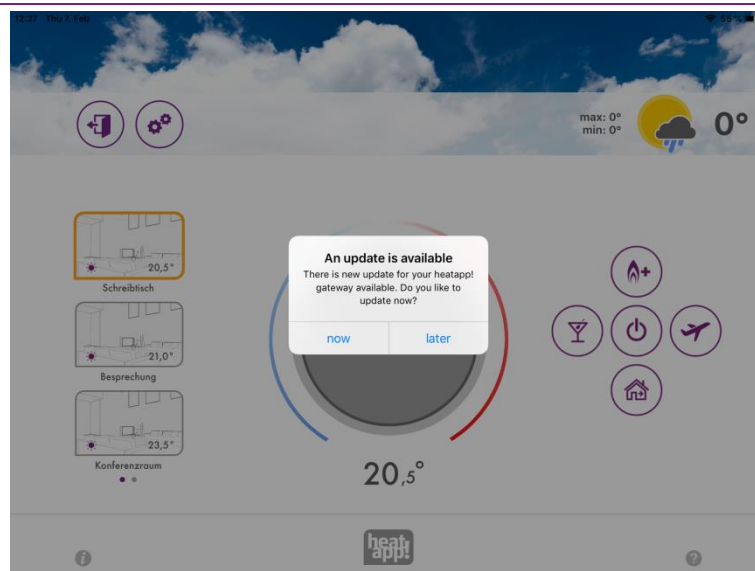


Fig.: 18 Update available

Pressing the "now" button takes you to the update page of **heatapp! gateway** or **heatapp! base**.
With the "later" button, you are reminded again of the available update in 5 days.

► Note

If you have not yet visited the **heatapp! gateway** menu via your operating device, you must enter the gateway password.

Exiting the homescreen

Tap the icon  to return to the start screen.

Calling the settings

Tap the symbol  to call the settings (see also section "The "Settings" menu", on page 40).

Weather display

heatapp! displays the weather data for the plant location that was entered in the **heatapp! base** menu. With a **heatapp!** system with THETA regulator or Open Therm connection to the energy generator, the values of the outside sensor are displayed as min/max values.



Note

The weather display varies dependent on the size of the operating device. With smaller operating devices tap the weather icon to view further information.

Room selection










Rooms are displayed with their room images in the room selection. Vertical swiping scrolls through the rooms in a group. Horizontal swiping scrolls through the room groups.















Rooms are selected by tapping. The selected room is highlighted with a red-orange border.





Small symbols in the room images display the current temperature and the currently active operating mode. If the **heatapp! base** is connected to the energy generator, the colours of the symbols (purple, red) change when there is a heat- or cooling - demand. See also chapter "Function heating and cooling" on page 107.

Rooms can be assigned to groups (see also chapter "Editing rooms and room groups").

10.3 Symbols in the rooms

Symbol	Operating mode without energy generator connection	Operating mode with energy generator connection
	Automatic mode comfort-temperature. Heating mode is active after the set cycle time.	Automatic mode comfort-temperature. Heating mode is active after the set cycle time. Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Automatic mode comfort-temperature. Heating mode is active after the set cycle time. Status: Actual temperature $<$ Setpoint temperature = heat demand present
	Automatic mode economy-temperature. Heating mode is active after the set cycle time.	Automatic mode economy-temperature. Heating mode is active after the set cycle time. Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Automatic mode economy-temperature. Heating mode is active after the set cycle time. Status: Actual temperature $<$ Setpoint temperature = heat demand present
	Automatic mode set-back-temperature. Reduce mode is active after the set cycle time.	Automatic mode set-back-temperature. Reduce mode is active after the set cycle time. Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Automatic mode set-back-temperature. Reduce mode is active after the set cycle time. Status: Actual temperature $<$ Setpoint temperature = heat demand present
	Heating mode takes place with the set required temperature until the end of the cycle time, however for at least 3 hours.	Heating mode takes place with the set required temperature until the end of the cycle time, however for at least 3 hours. Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Heating mode takes place with the set required temperature until the end of the cycle time, however for at least 3 hours. Status: Actual temperature $<$ Setpoint temperature = heat demand present
	Standby function. Using the standby function, the selected rooms are switched off in a frost-protected manner. In contrast to the holiday scene, the standby function has no time limit.	Standby function. Using the standby function, the selected rooms are switched off in a frost-protected manner. In contrast to the holiday scene, the standby function has no time limit. Status: Actual temperature \geq Setpoint temperature = No heat demand present

Symbol	Operating mode without energy generator connection	Operating mode with energy generator connection
	--	Standby function. Using the standby function, the selected rooms are switched off in a frost-protected manner. In contrast to the holiday scene, the standby function has no time limit. Status: Actual temperature < Setpoint temperature = heat demand present
	Window closed. Control according to the set desired temperature.	Window closed. Control according to the set desired temperature.
	Window open. Control takes place in accordance with the parameters defined in the heatapp! base Expert > Room menu.	Window open. Control takes place in accordance with the parameters defined in the heatapp! base Expert > Room menu.
	Summer mode. Deactivation of the request to exceed the set outdoor temperature value.	Summer mode. Deactivation of the request to exceed the set outdoor temperature value.
	Manual room cooling active. Cooling mode takes place according to set parameter in automatic mode after set cycle time.	Manual room cooling active. Cooling mode takes place according to set parameter in automatic mode after set cycle time.
	Blocking of the heating request, due to active manual cooling. Manual cooling must be deactivated in order to operate the heating request. Settings > Room deactivate "Global cooling" via the symbol  .	Blocking of the heating request, due to active manual cooling. Manual cooling must be deactivated in order to operate the heating request. Settings > Room deactivate "Global cooling" via the symbol  .
	Scene Boost active for the room according to preset parameters.	Scene Boost active for the room according to preset parameters. Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Scene Boost active for the room according to preset parameters. Status: Actual temperature < Setpoint temperature = heat demand present
	Go scene active for the room	Go scene active for the room Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Go scene active for the room Status: Actual temperature < Setpoint temperature = heat demand present
	Scene holiday active for the room	Scene holiday active for the room Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Scene holiday active for the room Status: Actual temperature < Setpoint temperature = heat demand present

Symbol	Operating mode without energy generator connection	Operating mode with energy generator connection
	Scene Party active for the room	Scene Party active for the room Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Scene Party active for the room Status: Actual temperature $<$ Setpoint temperature = heat demand present
	Scene showers active for the room	Scene showers active for the room Status: Actual temperature \geq Setpoint temperature = No heat demand present
	--	Scene showers active for the room Status: Actual temperature $<$ Setpoint temperature = heat demand present

10.4 Temperature setting via rotary wheel

"Tapping and rotating" of the rotary control sets the temperature for the currently selected room.

This desired temperature is indicated in the room image using the magic wand. It applies until the timer program end, as a minimum, however, for the time set in expert mode.

In this way the operator can reduce the sensitivity of the rotary wheel, by moving their finger out of the rotary control without lifting it off. The sensitivity becomes smaller the greater the distance from the rotary control.

The set temperature is displayed below the rotary control.

This desired temperature is indicated in the room image using the magic wand. It applies until the timer program end, as a minimum, however, for the time set in expert mode. If the current room temperature corresponds to the set temperature, the halo disappears.

The lower limit that can be set for the temperature is defined by the setback temperature specified for the room.

The upper limit that can be set for the temperature is fixed at 28.0 °C.

► Note

The temperature set using the rotary control relates to the currently active operation mode of the selected room (comfort temperature / setback temperature).

If the operation mode is changed by the set cycle time, the temperature set at the rotary control is also reset to the value specified in the cycle times for the comfort or setback temperature.

However the temperature set at the rotary control applies for at least three hours; resetting by the cycle time takes place correspondingly later.

10.4.1 Use of Scenes

Scenes allow set cycle times and temperatures to be overridden for the selected runtime of the scenes.

Scenes are allocated to individual rooms (see also section See chapter "**Editing scenes**" on page 48).

By tapping the scene symbols you activate scenes for the assigned rooms. At the same time, the input dialogue for the selected scene opens. Rooms are assigned and the corresponding parameters for the scene are set in this dialogue.

The scene runtime is set via a slide control in hours or days, or for shower scenes the start of the scene is set.

All scenes can be stopped at any time by touching the Stop button.

► Note



Activated scenes are highlighted in red-orange.



„Boost“ scene

The "Boost" scene allows quick attainment of a comfort temperature in the assigned rooms. Upon activation the comfort temperature + a fixed temporary increase should heat the room as quickly as possible.

The duration of the function is defined or can be made visible by pressing the symbol again.

The scene runtime can be set in 30 minute steps up to a maximum of 120 minutes.



„Shower“ scene

Under normal circumstances DHW is heated according to the set cycle times.

If outside the set cycle times hot water is required at a certain time, the shower scene can be activated.

In contrast to other scenes, here a long touch does not set the runtime of the scene, rather the start time of the scene in steps of 15 minutes.

The duration of the scene is fixed at 1 hour.

If the shower scene is activated, then the DHW cylinder is heated to the set target temperature from the start time. Additionally, the rooms assigned to the scene are heated to the comfort temperature.

Example:

Under normal circumstances no DHW heating takes place after 22:00. However at 02:00 hot water is required for showering (e.g. because of a flight).

When setting the scene start time, time should be allowed for the heating system to heat up the DHW cylinder.

Consequently the scene start time is set to 01:30 and the scene is activated.

DHW heating thus starts at 01:30 and the assigned rooms are heated to the comfort temperature.

► Note

- The time required to heat the DHW cylinder depends on the heating system being used and must be determined anew for each installation.
- The shower scene is only available if the heat source is connected via the bus systems OpenTherm or T2B.



„Party“ scene

The "Party" scene enables the overriding of the set cycle times for the rooms concerned.

As long as the "Party" scene is active, the corresponding comfort temperature applies for the rooms concerned.

The scene is deactivated after the set runtime elapses.

The scene runtime can be set in one hour steps up to a maximum of 12 hours.

Example:

Under normal circumstances, reduce mode is activated at 22:00.

Today a party is taking place that is expected to last until 00:00.

It is now 18:00, so the scene runtime is now set to 6 hours.

The comfort temperature is now set for the rooms concerned from 18:00 + 6 hours = 00:00.



„Go“ scene

The "Go" scene enables the overriding of the set cycle times for the rooms concerned.

As long as the "Go" scene is active, the corresponding setback temperature applies for the rooms concerned.

The scene is deactivated after the set runtime elapses.

The scene runtime can be set in one hour steps up to a maximum of 6 hours.



„Holiday“ scene

The "Holiday" scene is used to set the holiday duration in days. To do so, the holiday duration is entered from the current day using the slide control in days. Activation of the holiday function ensures that the temperature does not fall below the minimum temperature (frost protection) of the rooms.

In contrast to the Go scene (setback temperature), in the Holiday scene, the temperature is set to the frost protection temperature. The active holiday rooms can no longer be controlled using the thermostat rotary control.

DHW heating is deactivated for the scene runtime (only with DHW connection via the bus system Open Therm, **T2B**). However a set Legionella protection scheme remains active.

The scene runtime can be set in days up to a maximum of 30 days



„Standby“ scene

Using the standby function, the selected rooms are switched off in a frost-protected manner. In contrast to the holiday scene, the standby function has no time limit.

The setting for switching off hot water generation should be considered here. In the Expert menu of the **heatapp! base** a selection can be made between room switching off and operation mode switching off for hot water generation.

If for hot water generation switching off is set to "Room", then hot water generation is also deactivated if all rooms are in standby mode. If one room remains active, hot water generation takes places according to the timer programs.

If hot water generation switching off is set to "operation mode", then, even in standby mode, it remains set to automatic operation and control takes place according to the timer programs, even if all the rooms are in standby. The standby function corresponds to "Summer" operation mode.

10.4.2 The "Settings" menu

The "Settings" operating level is used for access to advanced functions.

The menu items "My profile", "Design", "Cycle times" and "Live View" are available to all users.

In addition the additional menu items "Rooms", "Users", "Devices", "Scenes", "System" and "Gateway" are available to Expert and Owner users.



„Settings“ menu

Tap the gearwheel symbol to access the settings level. The individual menu symbols are shown on the left.

On the right you can edit the individual menu items.

10.4.2.1 Edit user profile

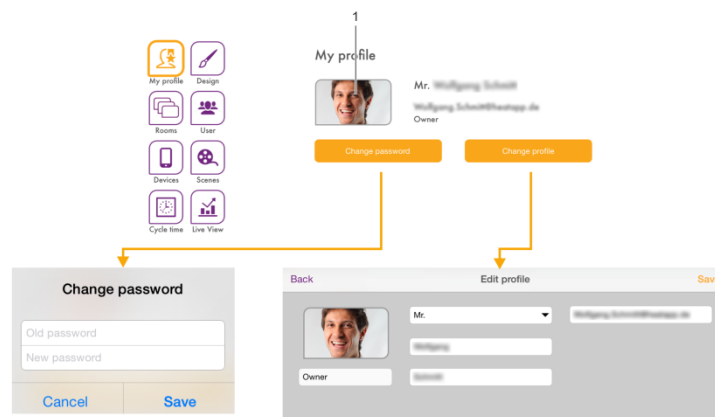


Fig.: 19 „My profile“ area

In the "**My profile**" area you can edit the profile of the currently logged in user.

Change profile image

Via button (1) you can allocate a profile image from the gallery or taken using the mobile device camera to the user.

Change password

Tap the "Change password" button to change the password of the currently logged in user.

Edit user profile

Tap the "Change profile" button to change the user data of the currently logged in user. The user role cannot be changed.

10.4.2.2 Adjust the app design

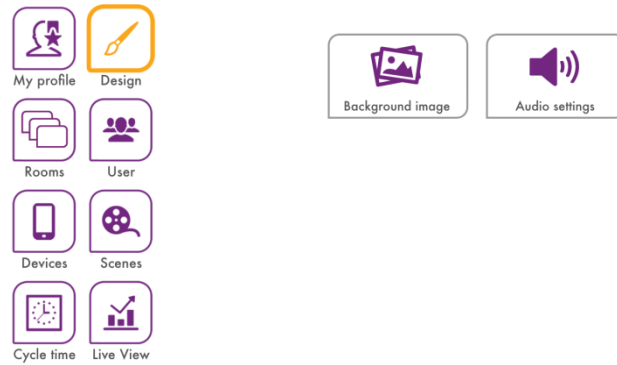


Fig.: 20 „Design" area

In the "Design" area you can edit the app design and audio settings.

Change background image

Tap the "Background image" button to change the app's background image. You can select a background image from the gallery or create one directly via the mobile device's camera (device dependent).

Alternatively you can also select one of the four supplied **heatapp!** standard background images.

Audio settings

Tap the "Audio settings" button to switch audible feedback for the rotary control on or off.

10.4.2.3 Editing rooms and room groups

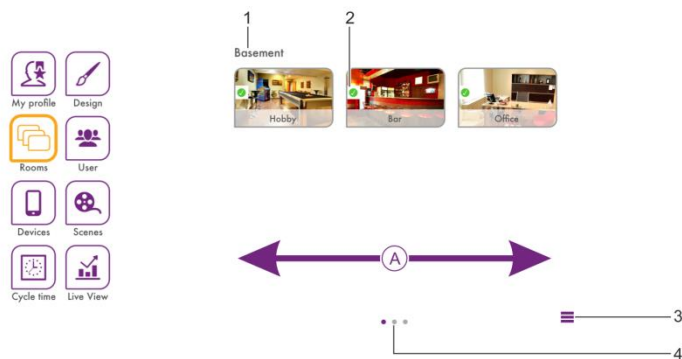


Fig.: 21 Area „Rooms"




- | | | | |
|---|------------------------|---|---------------------------|
| 1 | Name of the room group | 3 | Symbol „Edit room groups" |
| 2 | Symbol „Room status" | 4 | Number of room groups |

► Note

The available rooms are created by the expert during implementing. The names of the rooms are defined at the same time.

During the first use, all rooms are displayed in this view. No room groups have yet been created (for creation of room groups see section "**Creating room groups**", on page 43).

- Horizontal swiping A changes between the room groups.
- Rooms are dragged and dropped between room groups.
- Rooms are selected for editing by a simple tap.
- Small symbols in the room images indicate the status of the rooms.

Symbol	Status
	Room in operation, everything OK.
	Room undefined, no radio modules assigned.
	Fault of a radio module in the room (e.g. room sensor battery discharged).

Editing rooms

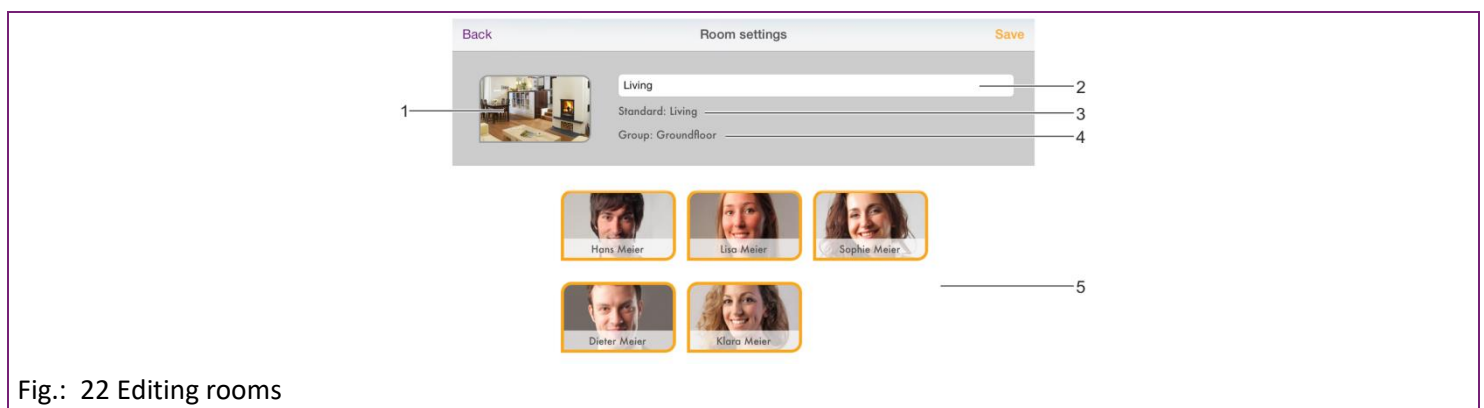


Fig.: 22 Editing rooms

1. Room image
2. Room name (name displayed)
3. Standard name (specified during implementing)
4. Room group
5. User list

This is where you can change room names, assign a room image to the room and assign the room to certain users.

1. Tap on a room in the area "Rooms". The pop-up window "Room settings" displays. Make the desired setting according to the following description.
2. Tap on "Save" to accept the settings for the room. Tap on "Back" to discard the settings.

Changing the room name

To rename a room, tap on the room name and enter the desired name. In doing so only the **displayed room name** is changed. This change does not affect the standard name specified in the **heatapp! base** setup wizard.

The standard name can only be changed in **heatapp! base** Expert mode (Settings / System / Expert) or by running through the setup wizard again.

► Note

If the standard name is to be used as the displayed name, delete the name in the input field. The input field is then automatically filled with the standard (default) name.

Changing room images

To change the room image tap on it. You can create an image using the mobile device camera or select one from the gallery. Alternatively you can also select one of the four supplied room images.

Assigning users

The already created users are displayed.

Users, you are authorised to control this room, are highlighted with an orange frame. Users not authorised to control this room are shown without a frame. Tapping on a particular user allows rights for the room in question to be allocated or withdrawn.

Deleting rooms

Rooms can only be deleted via the setup wizard. The deletion procedure always applies to the selected and all subsequent rooms that have already been created.

If multiple rooms have already been created, it is not possible to delete an individual room between the created rooms.

Creating room groups

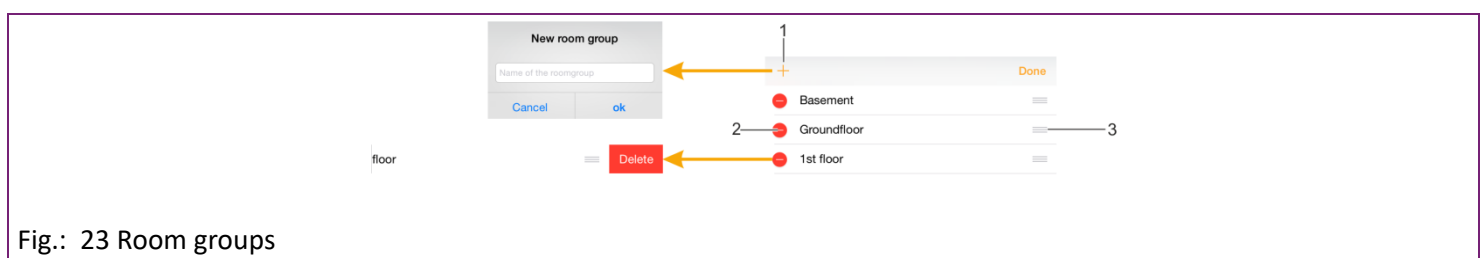


Fig.: 23 Room groups

1. Symbol "Create room groups"
2. Symbol "Delete room groups"
3. Symbol "Move room groups"

It often makes sense to create room groups. Thus you can create convenient room groups for floors or other worthwhile groupings.

Creating and editing room groups

1. In the "Rooms" area tap on the "Edit room groups" symbol. A pop-up window with the available room groups is displayed.
2. Tap the "+" symbol. The pop-up window "Create room group" is displayed.
3. Enter the name of the room group and confirm the entry by tapping "OK".

The room group has been created and is now available.

- To delete a room group tap the symbol "-".
 - To rename a room group, tap on the name of the room group.
 - To move a room group tap on the "Move room group" symbol and drag the room group to the desired position in the list.
4. Tap on "Save and close" to accept the settings.

You can now move the rooms by dragging and dropping between the room groups.

10.4.2.4 Managing users

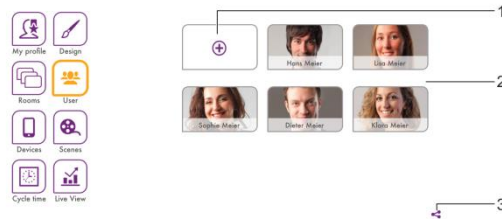


Fig.: 24 „Users“ area

- 1 Symbol "Create user"
- 2 User list
- 3 Symbol "Invite a user to **heatapp!** connect"

All the created users with the exception of the currently logged in user are displayed in the "Users" area. Users can be created and edited in the "Users" area.

Moreover from here you can also send invitations to **heatapp!** connect to other users (see section "Invite a user to **heatapp!** connect", on page 46).

Each user is assigned a user role. The following user roles are available:

- Owner
- Expert
- User

Creating users

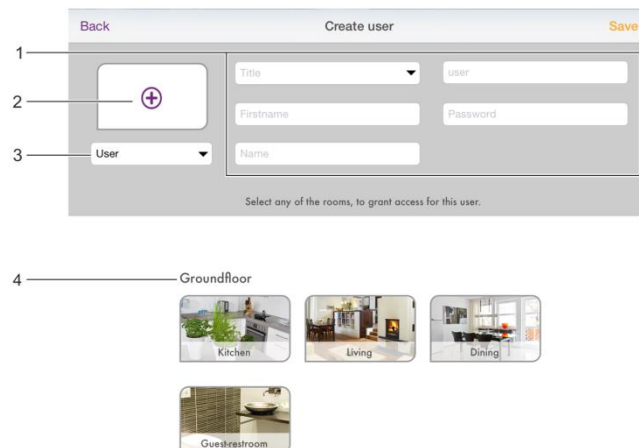


Fig.: 25 Creating users

- 1 Personal data
- 2 Profile image
- 3 User role
- 4 Room list

1. In the "Users" area tap on the "Create user" symbol. The pop-up window "Create user" is displayed.
2. Select the user role for the new user.
3. Enter the personal data in the input fields and select a user name and password.
4. Tap on the rooms that are to be assigned to the user. • To select all the rooms in a group, tap on the name of the room group. Horizontal swiping changes between the room groups.
5. Tap on "Save" to create the user. Tap on "Back" to cancel user creation.

Editing user data, deleting users

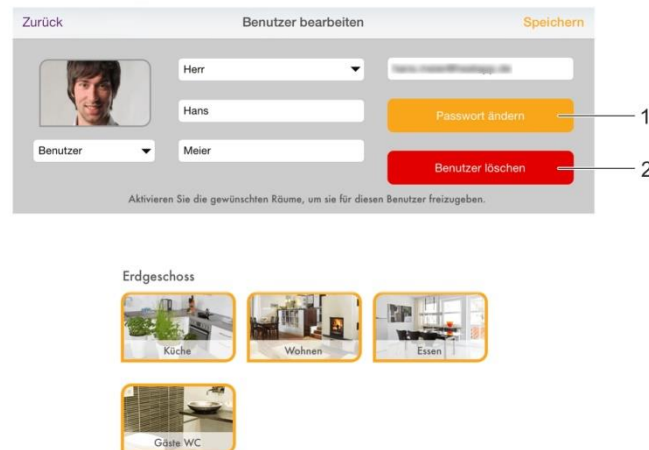


Fig.: 26 Edit user

- 1 Button „Change password“
- 2 Button „Delete user“

Editing a user is analogous to creating a user.

However there are two additional buttons to change the password and delete the user.

1. Tap on a user in the area "Users". The pop-up window "Edit user" is displayed.
2. Perform the required changes.
3. Tap on "Save" to accept the changes. Tap on "Back" to discard the settings.


► Note

The user data of the currently logged in user is changed in the "My profile" area.

Invite a user to heatapp! connect

heatapp! connect makes it possible to connect to the **heatapp!** system from anywhere. Irrespective of where you are, you can access your heating system via the app.

The share-icon  is located at the bottom right in the "Settings / User" area.

Tap on the  icon, to open the menu "Invite a user to **heatapp! connect**".

Use another control device to directly scan the QR code or tap on the "Send e-mail" button and enter the desired e-mail address. Then tap on the "Send" button.

The invited user must have the app installed on their mobile device to be able to use **heatapp! connect**. Independent of the invitation they require the access data for their user account. Please inform them of this data.

The invited user links the system with the app by tapping on the button "Accept invitation" in the e-mail or scans the QR code in the e-mail with their control device.

► Note

The app must be separately downloaded on to every mobile device (smartphone / tablet) from the Apple AppStore or Google Play Store. The invitation links the app with the system.

The user must be separately informed of their access data.

10.4.2.5 Managing devices

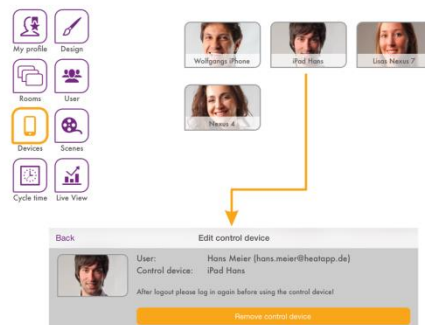


Fig.: 27 „Devices" area

The control devices with which the users have logged into **heatapp! base** are displayed in the "*Devices*" area.

All control devices are displayed here that have / had logged into the customer's **heatapp!** system. If a control device is lost or the owner / expert wants to remove an control device, this can also be performed from here.

Remove control device

1. Tap on the control device you want to remove.
2. The pop-up window "Edit control device" is displayed. Also shown here is which user has used the control device.
3. Tap on the button "Remove control device", to delete the corresponding control device from the device.
4. To be able to use the control device again, renewed login with user name and password is necessary.

10.4.2.6 Editing scenes

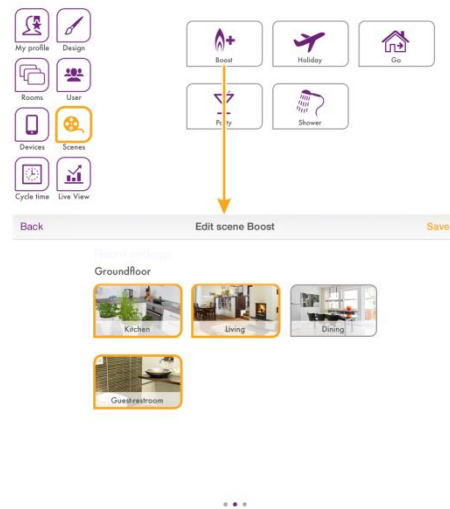


Fig.: 28 „Scenes" area

In the "Scenes" area, the rooms for which the scenes are to apply, are assigned to the scenes.

1. Tap a scene to open a room assignment.
2. Tap on the rooms that are to be assigned to the scene under consideration. Horizontal swiping changes between the room groups. Selected rooms are highlighted in orange.
3. Tap on "Save" to accept the settings for the room. Tap on "Back" to discard the settings.

► Note

If a user activates a scene, the scene is only activated for those rooms that have been assigned to the user.

Example:

The Boost scene has been assigned to all rooms.

However only the "Living room" and "Kitchen" are assigned to the user. If the user activates the "Boost" scene, the scene is only activated for the "Living room" and "Kitchen".

10.4.2.7 Editing cycle times

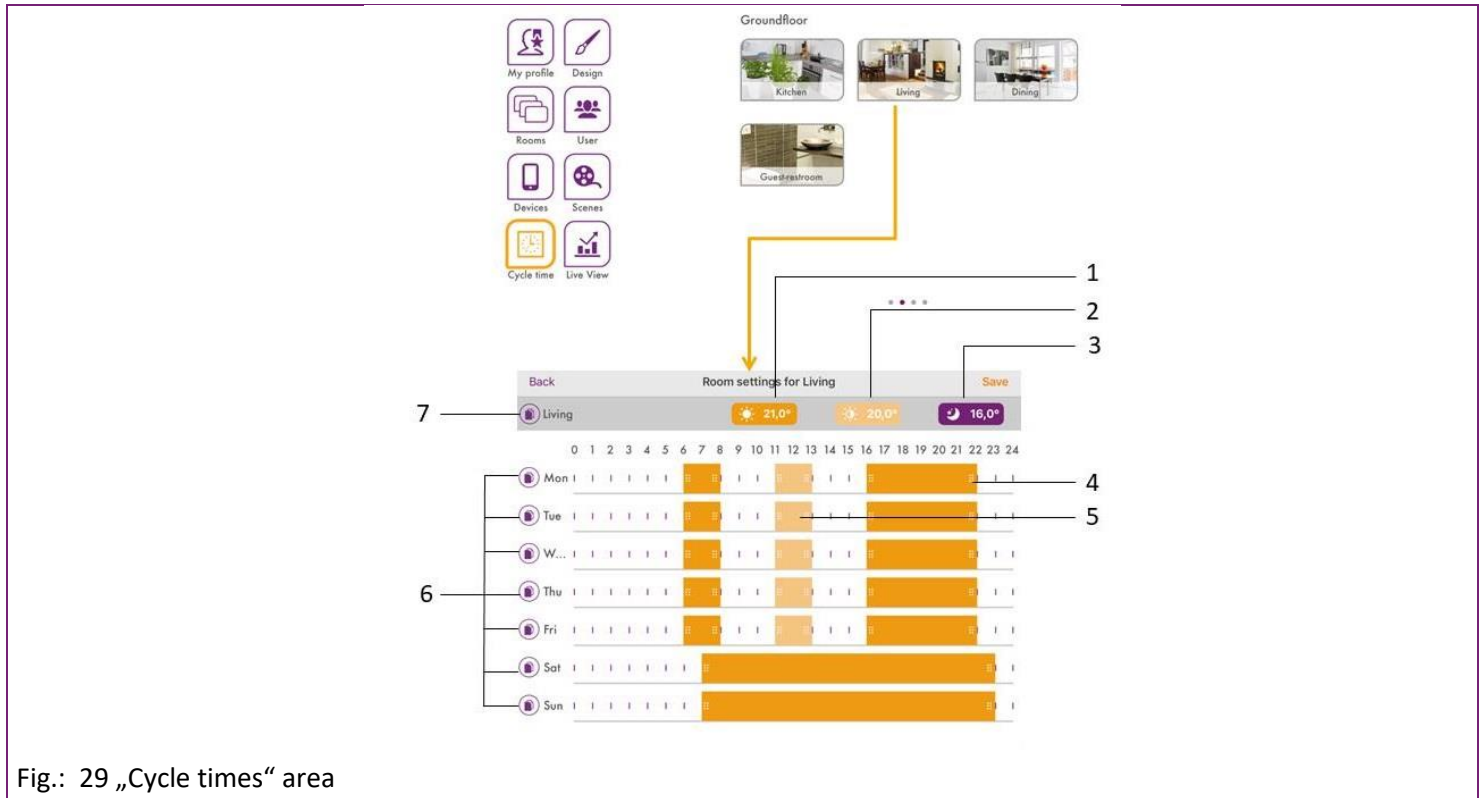


Fig.: 29 „Cycle times“ area

- 1 Comfort temperature setting
- 2 Eco temperature setting
- 3 Set-back temperature setting
- 4 Cycle time „Comfort temperatur active“
- 5 Cycle time „Eco temperature active“
- 6 Copy room cycle times (day-based)
- 7 Copy room cycle times (room-based)

In the "Cycle times" area, the cycle times for the comfort, eco and setback temperatures can be set separately for each room.

A maximum of three cycle times can be created per day.

The following basic settings are pre-set:

- Comfort temperature (sun symbol): 21.0°C
- Eco temperature(half sun symbol): 20°C
- Setback temperature (moon symbol): 18.0°C
- Heating periods: Monday to Sunday between 06:00 and 22:00

The timer programs for domestic hot water are reached by horizontal swiping. A maximum of three timer programs can be created per day. In the intervals between the timer programs, the system regulates the hot water temperature to the set-back temperature.

The following basic settings are pre-set:

- Domestic hot water day setpoint (sun icon): 50° C
- Domestic hot water night setpoint (moon icon): 40° C

Editing cycle times

1. Tap on a room in the "Cycle times" area. The pop-up window "Cycle times for ..." is displayed.
 - To insert a cycle time tap in an unassigned area of the time scale for the desired day and drag open a new cycle time.
 - To move a cycle time, tap in the middle of the cycle time and drag the cycle time to the desired position.
 - To change a cycle time, drag the ends of the cycle time to the desired time.
 - To delete a cycle time, drag the ends of the cycle time together.
2. Tap on "Save" to accept the settings for the room. Tap on "Back" to discard the settings.

Copying cycle times

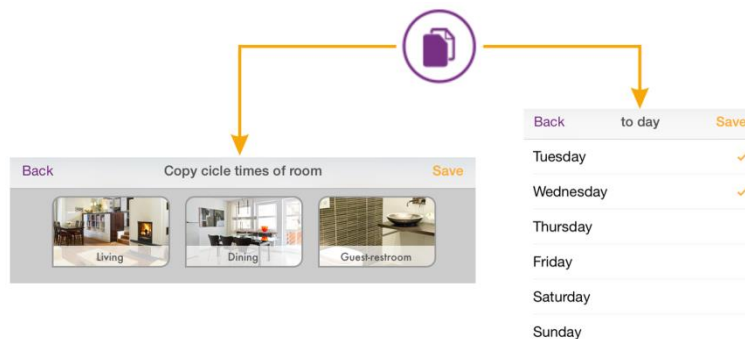




Fig.: 30 Copying cycle times

Cycle times can be copied in a room-based or day-based manner.

1. Tap on a room in the "Cycle times" area. The pop-up window "Cycle times for ..." is displayed.
 - Tap on the symbol  in front of the room name if you want to transfer the cycle times of the selected room to other rooms.
 - Tap on the symbol  in front of the day if you want to transfer the cycle times of the selected day to other days.
2. In the pop-up window tap on the rooms or days to which the cycle times are to be transferred. A multiple selection is possible.
3. Tap on "Save" to transfer the cycle times. Tap on "Back" to cancel the process.

10.4.2.8 Live View

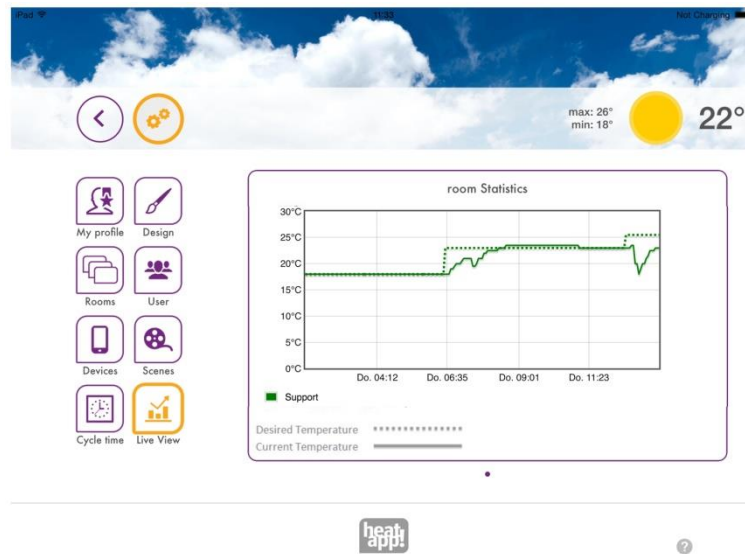


Fig.: 31 „Live View" area

The statistics of the setpoints and actual values of the last 12 hours are displaced in Live View. A long-term statistic can be displayed via the monitor. See also chapter „Monitor“

If the energy generator is connected via OpenTherm or THETA controller, then provided they are available, the domestic hot water heating and the energy generator are also displayed.

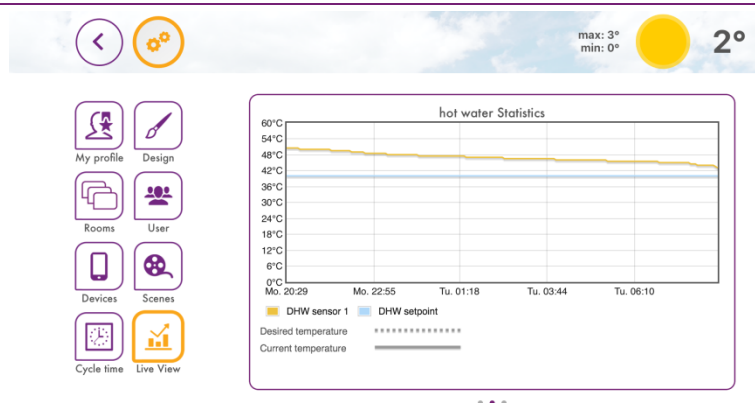


Fig.: 32 „Live View" domestic hot water area

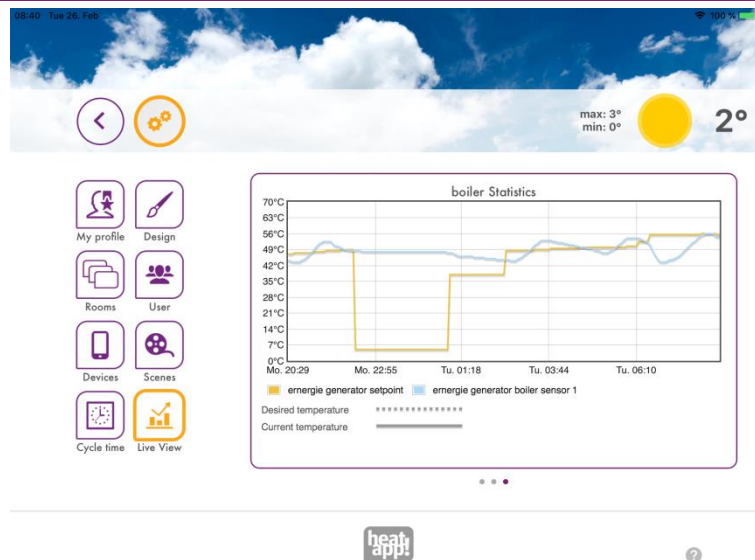


Fig.: 33 „Live View" energy generator area

The "Live View" area displays the variation with time of the target and current temperatures for the selected rooms, domestic hot water and the energy generator.

1. Horizontal swiping changes between rooms, hot water generation and energy generator.
2. For changing rooms tap on the bottom right symbol..
3. Choose the rooms for which Live View is to be displayed.
4. Tap on "Save" to save the data. Tap on "Back" to cancel the process.

► Note

A maximum of five rooms can be selected for simultaneous display to ensure the portrayal does not become to confusing.

10.4.3 The „System“ menu

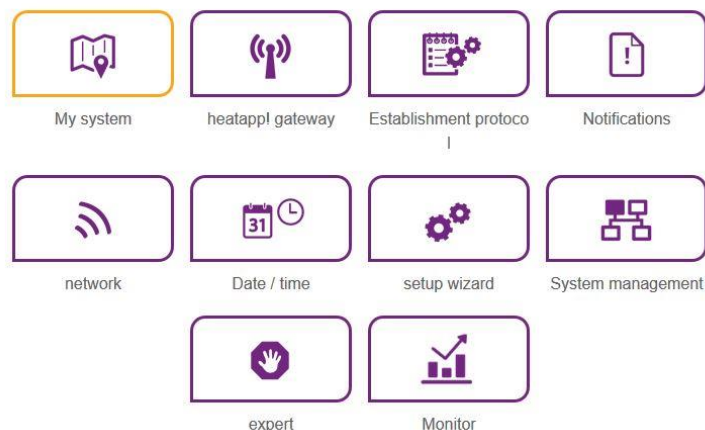


Fig.: 34 „System" area

In the "System" area you can access the complete menu of the **heatapp! base**.

► Note

The menu of the **heatapp! System** can also be accessed via IP address on a PC or laptop in the local network. How to find


out the IP address of your heatcon! System, refer to section "Network".

10.4.3.1 My system

In the "**My heatapp! base**" area you can edit the name and location of the **heatapp!** system.

Detailed information about **heatapp! base** and **heatapp! gateway** are also displayed here.

1. Tap on the corresponding input fields to change the system name or system location.
2. Tap on "Save" to apply the settings.

Tap button  to return to the "System" menu.


10.4.3.2 heatapp! gateway

In the "**heatapp! gateway**" area, the currently connected **heatapp! gateway** is displayed together with all the device details.

- You can call the **heatapp! gateway** menu by tapping the button "*To the heatapp! gateway menu*" (see also section "The „Gateway“ menu").
- If another **heatapp! gateway** is to be connected, you can delete the connection of the **heatapp! base** to the **heatapp! gateway** by tapping on the "*Remove connected heatapp! gateway*" button.

► Note

The **heatapp! gateway** menu can only be called in the local network. Calling the **heatapp! gateway** menu via **heatapp!** connect is not possible.

Tap button  to return to the "System" menu.

10.4.3.3 Establishment protocol

In the "*Establishment protocol*" area an establishment protocol can be generated and sent by e-mail. The establishment protocol contains all the information about your **heatapp!** configuration.

Generating the establishment protocol

- A new report is created by tapping on the button "*Generate a new establishment protocol*".


The establishment protocol is saved in the **heatapp! base** until a new establishment protocol is generated.

This means that at any time you can access the last generated establishment protocol (button "*Display establishment protocol*") and / or send a PDF by e-mail (button "*Send establishment protocol*").

Sending an establishment protocol by e-mail

1. Tap on the button "Add a new e-mail address".
2. Enter the new e-mail address to which the establishment protocol is to be sent. You can enter more than one e-mail address.
3. Tap on "*Send establishment protocol*" to send the establishment protocol.

If the establishment protocol has been sent successfully, a corresponding message is displayed.

Tap button  to return to the "System" menu.

10.4.3.4 Network

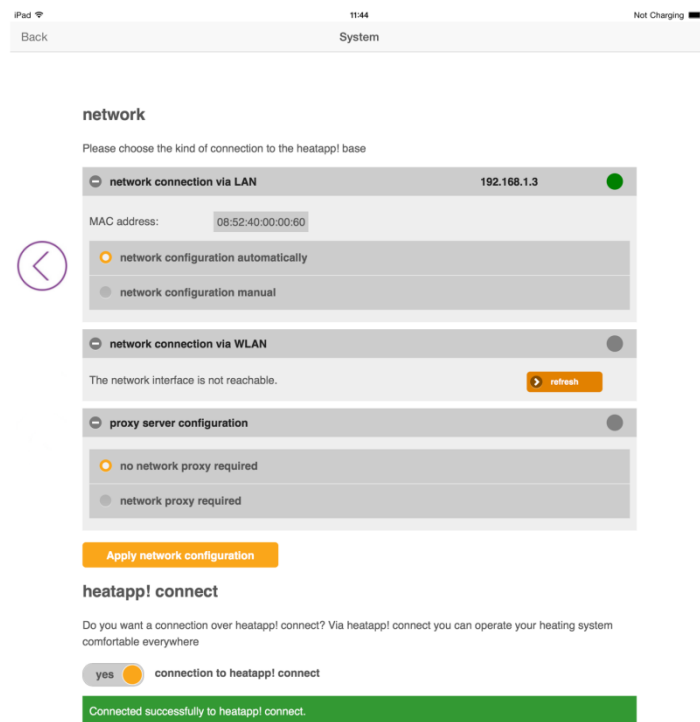



Fig.: 35 Network configuration

The current network settings are displayed in the "Network" area.

This is where you can change the network configuration, e.g. if for example a Wi-Fi is to be set-up after the initial configuration. You can also activate the connection to **heatapp! connect** from here.

You can also activate the continuous improvement process here to send anonymous reports to **heatapp!** In this way you actively help to improve the system further.

Tap button  to return to the "System" menu.

10.4.3.5 Date / time

date / time

system time: 23.03.2015 11:44 (Europe/Berlin)

time zone: Europe/Berlin ▼

time synchronisation

- ☒ automated time sync with custom NTP server
- ☐ automatische Zeitsynchronisation über eigenen NTP-Server
- ☐ manual time setting

The time and date will be synced automatically with the standard time servers through the internet connection.

save

time synchronisation

- ☐ automated time sync with custom NTP server
- ☒ automatische Zeitsynchronisation über eigenen NTP-Server
- ☐ manual time setting

Add the NTP server for automatic time synchronisation.

ntp server

save

time synchronisation

- ☐ automated time sync with custom NTP server
- ☐ automatische Zeitsynchronisation über eigenen NTP-Server
- ☒ manual time setting

Please enter the current time for the heatapp! base

transfer: ☒ Use time and date of this device for the server.

date: 2015 ▼ 03 ▼ 23 ▼

time: 11 ▼ 44 ▼ 39 ▼

save

Fig.: 36 "Date / time" area

You can make the settings for the real-time clock in the "Date / time" area. For example, this is necessary, if the manual time setting was selected (summer / winter time).

You can select between the following variants:

- Time synchronisation via the Internet
- Time synchronisation via an internal NTP server
- Manual time setting

Tap on "Save" to apply the settings.

Tap button to return to the "System" menu.


10.4.3.6 Notifications

The **heatapp!** system sends push and e-mail messages in the event of faults or service notifications.

Push messages are system notifications, which the **heatapp! base** sends directly to the user interface of the mobile device (smartphone / tablet), so that the user is immediately informed. These may be fault messages or service notifications.

E-mail addresses that are to be used for the sending of automatic push messages can be saved under the "*Notifications*" menu item. These e-mail addresses can likewise be offered as possible distribution addresses when sending the establishment protocol.

Tap on the desired users to specify which individual users are to receive the notifications.

Tap button  to return to the "*System*" menu.

10.4.3.7 Setup wizard

The "*Setup wizard*" menu item relaunches the setup wizard. This may be for example be due to a move and changed connection to the boiler.

10.4.3.8 System management

In the "*System management*" area, you can update the **heatapp!** system software and perform a data backup.

Updating the system software

EbV works constantly to improve the **heatapp!** system. To ensure our customers can benefit from this, we have developed an update system, which means you are always offered the latest version.

You decide whether you want to install the offered update or would prefer to retain the existing version.

A display appears below the current software indicating whether a software update is available.

► Note

If you are connected to the local network, the app sends you a message if an update is available for your **heatapp!** system. Read also "The Homescreen" chapter on page 33.

Software updates are only displayed, if the **heatapp!** system is connected to the Internet.

If you perform a software update of the **heatapp! base**, please check whether the new software is compatible with the software of the **heatapp! gateway**.

If necessary you may also need to perform a software update for the **heatapp! gateway**. When updating the device software by downloading via the Internet additional costs may be charged depending on the customer's actual Internet tariff.

Restart system now

The "*Restart system now*" button triggers a restart.

► Note

Restarting **heatapp! base** deletes "Live View" saved data.

Reset to factory settings

The "Reset now" button, resets the device to the factory settings.

► Note

Upon resetting, all set data is irrevocably lost and a new setup is necessary. Please only use this option, if expressly requested to do so by our customer support or your expert.

Monitor

The monitor shows current and historical data of your heating system. If you wish to store the data for more than 24 hours, insert a USB memory stick into the system and activate the storage option.

The system will store the data until the USB memory space is exhausted. The oldest data will then be overwritten automatically.

► Note

Before removing the USB memory stick from the system, please disable the option to avoid data loss.

The data will be overwritten automatically without warning. If you want to keep the data permanently, always make sure that there is enough memory on the USB memory stick.

System data backup

You can perform a data backup using a USB stick. Using this back-up system you can transfer the installation to a new device or after resetting of the system, quickly return to the backed up condition.

Insert a USB stick in a free USB port of the **heatapp! base**.

Tapping the "OK" button saves a backup file on the USB stick.


Restoring the backed up system data

If you want to restore a **heatapp!** system that is in the delivered condition using a backup from a USB stick, you must first run the setup wizard to recreate the basic settings.

Insert a USB stick with a data backup file in a free USB port of the **heatapp! base**.

Select the required backup file.

Tapping the "Update" button transfers the selected backup to the system.

Tap button  to return to the "System" menu.

10.4.4 Expert mode

For the sake of clarity, expert mode is further sub-divided:

Expert mode for Expert and Owner

- System
- Room 1-24
- Energy generator (by connection to the energy generator only)
- Regularo (only by connection THETA and **heatapp! base T2B**)
- Fault messages
- Configuration

Information and modifiable parameters are available for each area. These differ depending on the connection to the energy generator.

A complete parameter list is available in the chapter “Parameterlist **heatapp! base**” from page 94.

10.4.5 Monitor

The monitor shows current and historical data of your heating system.

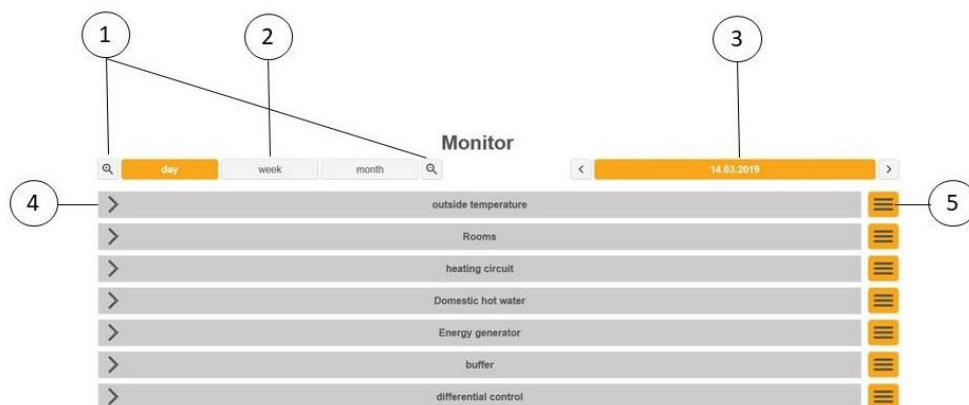


Fig.: 37 Monitorhome page

- | | |
|---|---|
| 1 | Zoom in / zoom out the X-axis (horizontal axis) |
| 2 | Selection day / week / month |
| 3 | Selection date |
| 4 | Representation of the individual areas |
| 5 | Menu |

Tap / click on the arrow (4) to open the display of the respective area.

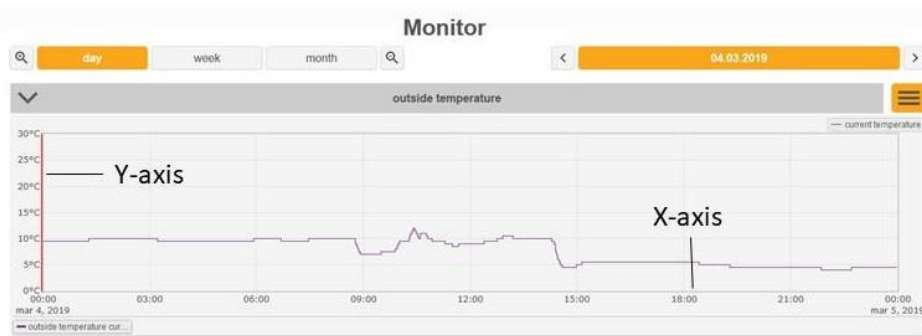


Fig.: 38 Monitor Outsidetemperature

Selection options are available by tapping / clicking on the menu.



Fig.: 39 Monitor menu

- 1 Zoom in / zoom out the Y-axis (vertical axis)
- 2 Selection of room / heating circuit / sensor and so on
- 3 Safe
- 4 Create screenshot (only possible on computer / laptop)

The selected areas are highlighted in orange in the menu. White areas are not selected.

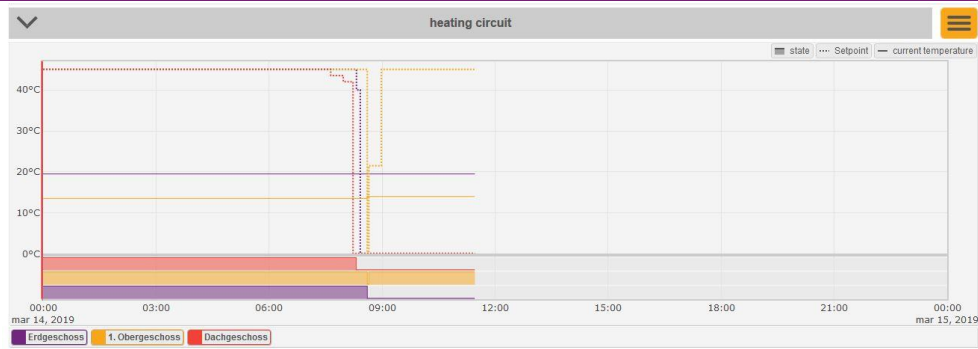


Fig.: 40 Monitor state

All selected areas (outdoor sensors, rooms, heating circuits, etc.) are displayed below the diagram as a legend. Individual areas can be hidden by clicking / tapping. The status is displayed below the diagram. A full bar shows the activity, an empty bar the inactivity of the respective device (heating circuit, pump, energy generator and so on).

The red vertical line moves by double-clicking / tapping on the desired time. This allows the comparison of the individual graphs. This makes it easy, for example, to find out where the request comes from.



Fig.: 41 Monitor as analytical tool

10.4.6 The „Gateway“ menu

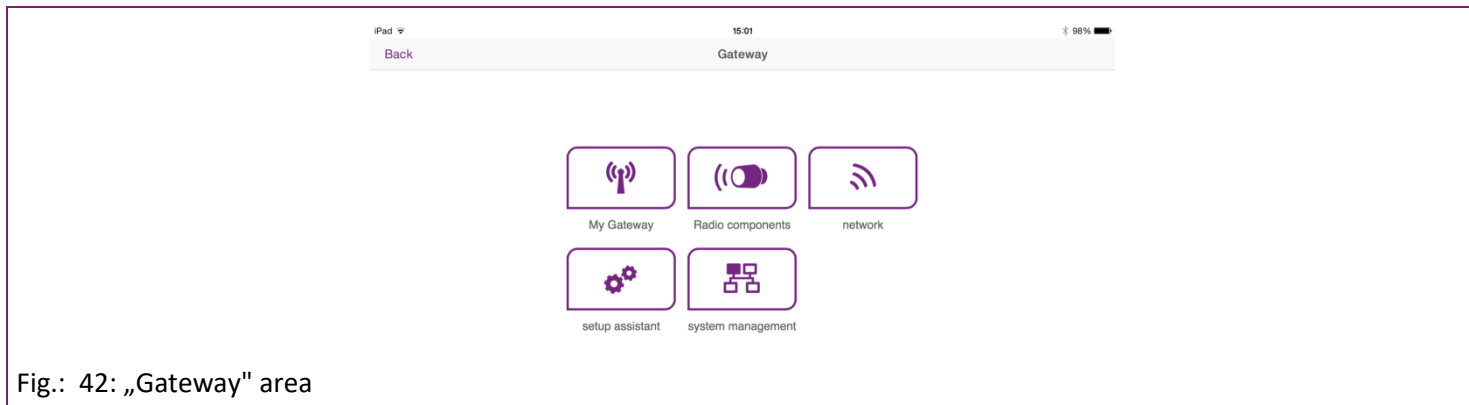


Fig.: 42: „Gateway“ area

In the "Gateway" area you can access the complete menu of the **heatapp! gateway**.

► Note

The **heatapp! gateway** menu is only available via the local network.

The menu of the **heatapp! gateway** can also be called in the local network via an IP address on a PC or laptop. You can see how to determine the IP address of your **heatapp! base** in the "Network" chapter on page 54.


10.4.6.1 My Gateway

In the "My gateway" menu, the current status of the **heatapp! gateway** is displayed with detailed information.

You can change the password for the **heatapp! gateway** here

1. Enter the new password in the input field.
2. Tap on "Change password" to apply the settings.

After changing the password you must login again.

Tap button  to return to the "Gateway" menu.

► Note

Store the login details for **heatapp! base** and **heatapp gateway** somewhere safe. If you lose your login details for your heatapp system, it will no longer be possible to operate your **heatapp!** system. You can record your login details on page 135 at the end of this document.

10.4.6.2 Radio modules

Radio Components

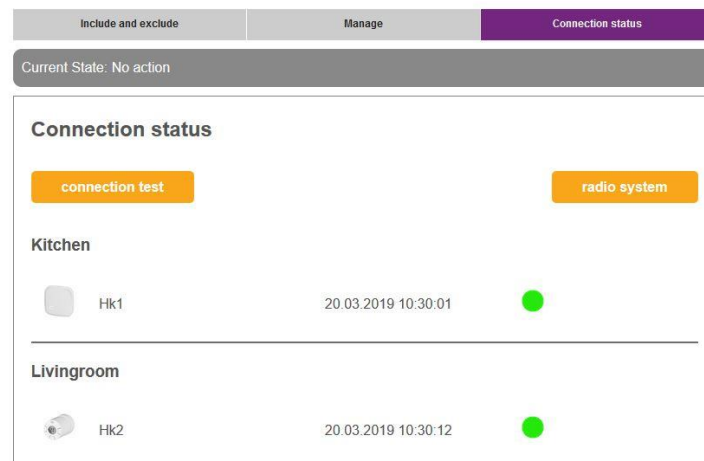



Fig.: 43: "Radio modules" area

The radio modules of the **heatapp!** system are managed from the "*Radio modules*" menu.

The menu is subdivided into three tabs:

- Include and exclude:
 - By tapping on the "*Include*" button you can integrate further radio modules in to the system. After successful inclusion and registration, these are, dependent on the module, assigned to the desired room and you can assign a name (e.g. left heater).
 - By tapping on the "*Exclude*" button you can remove radio modules that are no longer used from the system.
- Manage:
 - Tapping on the "*Refresh radio modules*" button reloads the list of radio modules.
 - The radio modules registered on the system are displayed in the list sorted by the rooms to which the are assigned.
 - Tap on the pen symbol to call the detailed view for the relevant radio module. You can also change the name of the radio module here.
- Connection test:
 - Tap the "Start connection test" button to start the connection test for the registered radio components (see Chapter "Connection test in the heatapp! gateway menu on page 89) or tap the "Radio system" and "Repair radio system" buttons to start the repair of the radio system (see Chapter "Function Repair radio system" on page 88).

Tap button  to return to the "*Gateway*" menu.

10.4.6.3 Network

Network configuration of the heatapp! gateway

To access the heatapp! gateway it must be integrated into the home network.

network connection via LAN

MAC address: 08:52:40:01:14:e6

☒ network configuration automatically

☐ network configuration manual

network connection via WLAN
192.168.104.28

MAC address: c8:3a:35:c3:71:f1

WLAN: EbV-Wlan

The following networks have been found. Please choose your network.:
scan again

Fritzbox
encryption: psk2
100%

-Wlan
encryption: psk2
77%

-Guest
encryption: psk2
77%

FRITZ!Box
encryption: psk2
55%

FRITZ!Box WLAN
encryption: psk2
22%

Connect to hidden WiFi
?

+ proxy server configuration

Internet access available

Apply network configuration

Participation in the continuous improvement process

Allow the system to send anonymous usage data to participate in the continuous improvement process.

☒ yes
Activate participation in the continuous improvement process

Fig.: 44: Network configuration gateway

The current network settings are displayed in the "Network" area.

This is where you can change the network configuration, e.g. if for example a Wi-Fi is to be set-up after the initial configuration.

Tap button to return to the "Gateway" menu.

10.4.6.4 Setup wizard

The "Setup wizard" menu item relaunches the setup wizard.

Renewed running of the setup wizard is necessary for instance in the event of a move or if the **heatapp! gateway** is to be connected to another **heatapp! base** (device replacement).

see also section "Initial configuration", on page 26.

► Note

Renewed running of the setup wizard, does not delete the radio components connected to the gateway.

10.4.6.5 System management

In the "System management" area, you can update the **heatapp! gateway** system software and reset the **heatapp! gateway** to the factory settings.

Updating the system software

The **heatapp!** system is constantly evolving. To ensure our customers can benefit from this, we have developed an update system, which means you are always offered the latest version.

You decide whether you want to install the offered update or would prefer to retain the existing version.

A display appears below the current software indicating whether a software update is available.

► Note

If you are connected to the local network, the app sends you a **message** if an update is available for your **heatapp!** system. Read also "The Homescreen" chapter on page 33.

Software updates are only displayed, if the **heatapp!** system is connected to the Internet.

If you perform a software update of the **heatapp! gateway** via the Internet, please check whether the new software is compatible with the software of the **heatapp! base**.

If necessary you may also need to perform a software update for the **heatapp! base**. When updating the device software by downloading via the Internet additional costs may be charged depending on the customer's actual Internet tariff.

Restart system now

The "Restart system now" button triggers a restart.

► Note

Restarting the **heatapp! gateway** causes the time stamp and status dots of the radio components to be set to "wait" in the menu radio components → connection status. They automatically reappear when the relevant radio component has registered.


Reset to factory settings

The "Reset now" button, resets the device to the factory settings.

► Note

Upon resetting, all set data is irrevocably lost and a new setup is necessary. Please only use this option, if expressly requested to do so by our customer support or your expert.

Resetting the **heatapp! gateway** requires resetting and re-registration of all radio components. See also chapter "Restoring the factory settings"

Tap button  to return to the "Gateway" menu.

11 Functions of the room- and radio components

11.1 heatapp! sense-wire



Fig.: 45: heatapp! sense-wire

heatapp! sense-wire is a wired temperature sensor for measuring the room temperature in **heatapp! base/baseT2B**. The device is mounted on the wall and connected to the E1 input of the **heatapp! base/heatapp! base T2B**.

For example, **heatapp! sense-wire** replaces a room station.

heatapp! sense-wire is automatically detected by **heatapp! base**. Registration is not necessary.

For example, **heatapp! sense-wire** is used in a control system according to the reference room principle. **heatapp! base** determines the heat requirement based on the difference between the setpoint and current temperature.

11.1.1 heatapp! sense- wire installation

- Select a suitable installation location. Ensure that no pipes or cables are routed in the wall beneath the mounting location that could be damaged by the installation.
- Ensure that a connection to the **heatapp! base/T2B** can be established at the installation location.
- Route the connecting cable to the sensor through the opening on the casing bottom and screw the casing bottom to the wall through the fastening holes.
- Connect the cable, which is polarity-insensitive, to the connection terminals on the **heatapp! sense-wire** and the connection terminals E1 and GND of the **heatapp! base/T2B**.

11.1.2 Closing the casing

Place the casing top on top of the casing bottom.

11.1.3 heatapp! sense- wire startup

In the setup wizard, select the **heatapp! base/T2B** with the energy generator/single room heat regulation “off”, to activate the input E1 of the **heatapp! base/T2B** as the room sensor ((E1:EF for sensor input). Activate the **heatapp! sense-wire** for one of the available room groups.

Follow the setup wizard, until **heatapp! base/T2B** is completely set up.

11.2 heatapp! drive



Fig.: 46: heatapp! drive

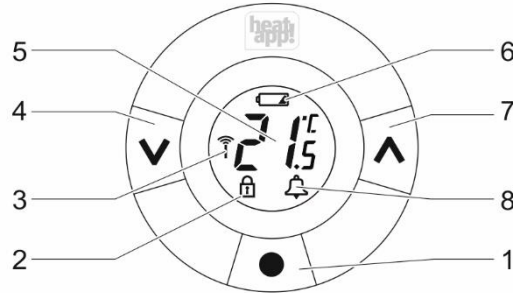


Fig.: 47: Bedienung heatapp! drive

- | | |
|-----------------------|------------------------|
| 1 "Enter" / "Lernkey" | 5 Setpoint temperature |
| 2 Lock | 6 Low battery |
| 3 Radio connection | 7 "Up" |
| 4 "Down" | 8 Alarm |

heatapp! drive is an electronic radiator thermostat for the **heatapp!** system for single room heat regulation of radiators in heating systems.

The device is supplied with adaptors for Danfoss RA valves and valves with an M30 x 1.5 connection, two alkaline AA batteries and a 2 mm Allen key.

heatapp! drive is a wireless actuator for wall-mounted radiators. The desired temperature is output to the display of the **heatapp! drive**. As the thermostat function is already included in the **heatapp! drive**, no additional room sensor is required. Regulation is performed by each **heatapp! drive** individually (even when there are several radiators in a room).

The **heatapp! drive** can also be operated directly at the radiator (see section „Setting Setpoint temperature“).

11.2.1 Insert / change battery

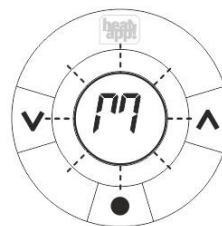
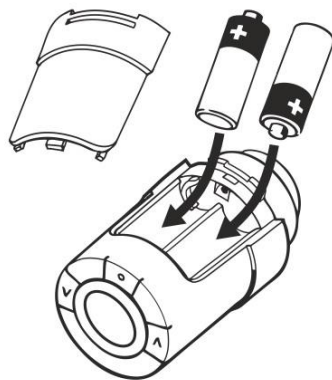


Fig.: 48: Insert / change battery heatapp! drive

Do not use rechargeable batteries.

1. Unpack a **heatapp! drive** and insert the AA batteries in the battery compartment. Ensure you connect the positive and negative terminals correctly!
2. Replace the battery cover.

The display on the **heatapp! drive** displays a flashing "M".

If the battery is low, the battery symbol flashes in the display. If the battery level is critical, the whole display flashes.

11.2.2 Including at heatapp! gateway

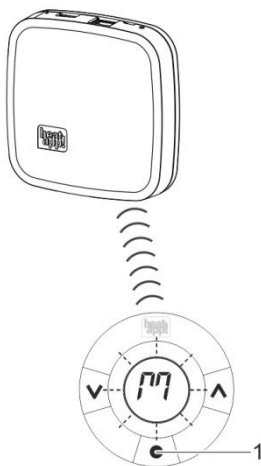


Fig.: 49: Including at **heatapp! gateway**

1. Activate register mode on the **heatapp! gateway** (see also chapter 6.1 on page 27).
2. Now press the learn key (1) in the middle below the display.
3. Check whether the **heatapp! drive** has been successfully registered on the **heatapp! gateway**.

If no connection can be made, then if necessary a **heatapp! repeater** must be used to improve wireless coverage.

11.2.3 Mounting heatapp! drive

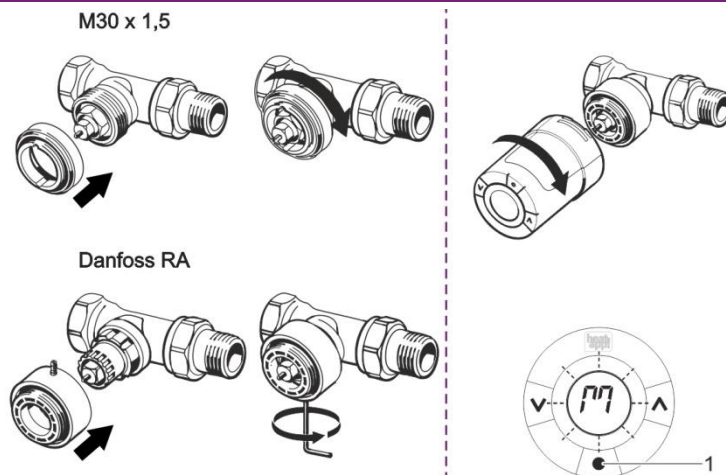


Fig.: 50 Mounting **heatapp! drive**

Before installation a flashing "M" must be shown in the display.

1. Check whether one of the two supplied adapters matches the radiator valve.
2. Fit the **heatapp! drive** to the corresponding radiator valve in the allocated room. Screw the adapter onto the radiator valve and then screw the **heatapp! drive** on to the adapter.
3. Press the learn key (1) for 3 seconds until the display goes out and the **heatapp! drive** audibly attaches to the valve.

11.2.4 Setting Setpoint temperature

Pressing the arrow keys causes the target temperature to be increased or lowered. The setting corresponds to the setting of the target temperature using the rotary control in the **heatapp! app**.

Local operation at the **heatapp! drive** can be switched on or off in the Expert Settings of the **heatapp! base**. To do so, select "Settings → System → Expert". Under System, it is possible to disable local operation for all **heatapp! drives** located in the system, under Room → Room settings, local operation for just this room is disabled.

11.2.5 Connection test heatapp! drive

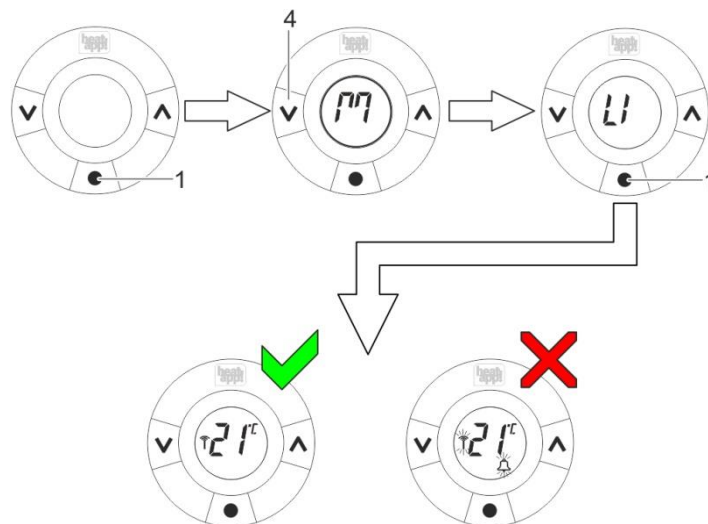


Fig.: 51: Connection test **heatapp! drive**

1. Press the middle key for at least 3 seconds until "M" is output to the display.
2. Then press the left key until "LI" is displayed and confirm with the central key. This approach triggers a device connection test.
3. Press key (1) to test the connection.

"LI" is hidden as soon as the connection has been made. If no wireless connection to the **heatapp! gateway** is made, the symbols "Wireless connection" and "Alarm" flash in the display.

11.2.6 Matching to the radiator / room conditions

The **heatapp! drive** has an option where it can be matched to the radiator or room conditions. In this way you can compensate for over or under-dimensioned radiators.

The default setting is P2.

1. Press the learn key on the **heatapp! drive** until an "M" is output to the display.

2. Repeatedly press "Down" until "Pb" appears in the display. Press the learn key to confirm the selection.
3. Select the desired adjustment with the up or down key according to the following table.

P1	For over-dimensioned radiators.
P2	Factory setting for "normally" dimensioned radiators.
P3	For under-dimensioned radiators.

11.2.7 „Window open“ identification

heatapp! drive has an integrated "Window open" detection facility.

If the room temperature decreases quickly over a short period (e.g. during airing), the valve is closed to reduce heat losses.

The valve remains closed for 30 minutes, then the **heatapp! drive** continues regulating according to its original settings.

The "Window open" detection facility is now blocked for 45 minutes.

► Note

"Window open" detection is impaired if the **heatapp! drive** is covered, for example by curtains or furniture, so that a fall in temperature cannot be detected.

11.2.8 Anti-lock system

To prevent blocking of the radiator valve, e.g. due to deposits, **heatapp! drive** automatically opens and closes the valve every week. This occurs when the valve position is not changed over long periods, e.g. in summer or in holiday mode. After opening and closing of the valve **heatapp! drive** again regulates according to the original settings.

11.2.9 Reset to factory settings

The **heatapp! drive** can be reset to the factory settings both when installed and not installed.

1. Open the battery compartment and remove the battery.
2. Keep the learn key depressed and reinsert the battery.
3. All symbols and characters are simultaneously shown in the display (display test).
4. Keep the learn key depressed until the display goes out and the **heatapp! drive** audibly actuates the valve.

After a successful reset, an "M" flashes in the display to indicate installation mode. Repeat the installation of the **heatapp! drive** as if from new.

► Note

If the **heatapp! drive** is registered in the system, then after resetting to factory settings, you must also remove it from the system via the menu item Include and exclude radio modules "Remove failed radio component".

11.2.10 Removal

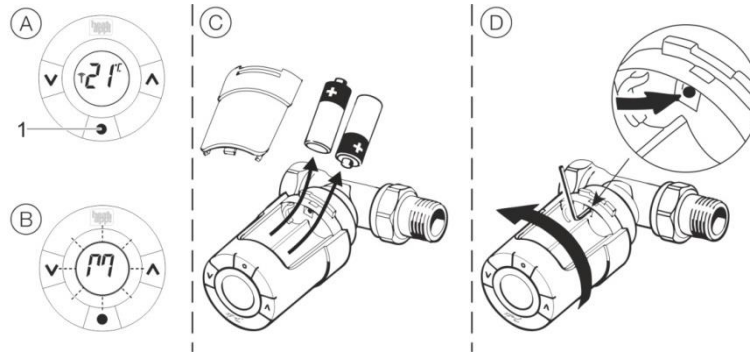


Fig.: 52: Removal **heatapp! drive**

1. Keep the learn key depressed for 3 seconds to call the function menu.
2. Repeatedly press "Down" until "M" appears in the display. Press the learn key to confirm the selection.
"M" now flashes in the display to indicate installation mode is activated.
3. Open the battery compartment and remove the batteries.
4. Insert an Allen key or a suitable tool in the hole to lock the adapter ring. Turn the **heatapp! drive** together with the Allen key in a clockwise direction to unscrew the **heatapp! drive** from the valve adapter.
5. If necessary also unscrew the valve adapter from the radiator valve.

11.3 heatapp! sense



Fig.: 53: heatapp! sense

heatapp! sense is a battery operated temperature sensor for the **heatapp!** system for single room heat regulation of heating systems.

The device is mounted on the wall in a room and wirelessly transmits the measured temperature to the **heatapp! gateway**. Wireless transmission takes place via the Z-wave protocol.

The device is supplied with two alkaline AAA batteries.

11.3.1 Montage heatapp! sense

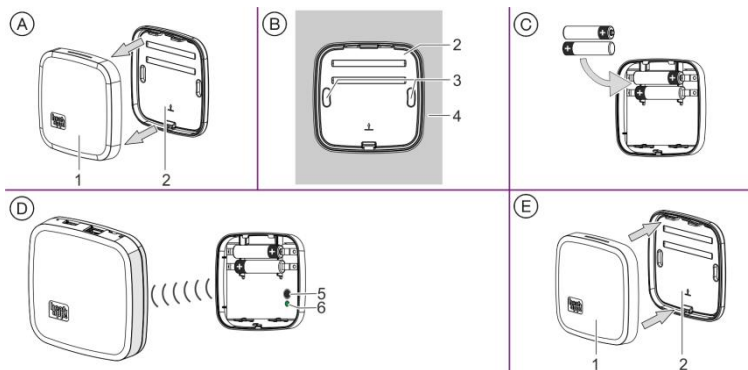


Fig.: 54 Installation / registering **heatapp! sense**

- Select a suitable installation location.
 - Ensure that no pipes or cables are routed in the wall beneath the mounting location that could be damaged by the installation.
1. Separate the upper casing (1) from the lower casing (2).
 2. Screw the lower casing (2) in place on the wall (4) in the desired mounting position through the fastening holes (3).

11.3.2 Insert / change battery

Don not use rechargeable batteries.

Insert the AAA batteries into the battery compartment of the upper casing. Ensure you connect the positive and negative terminals correctly!

11.3.3 Including / Excluding at heatapp! gateway

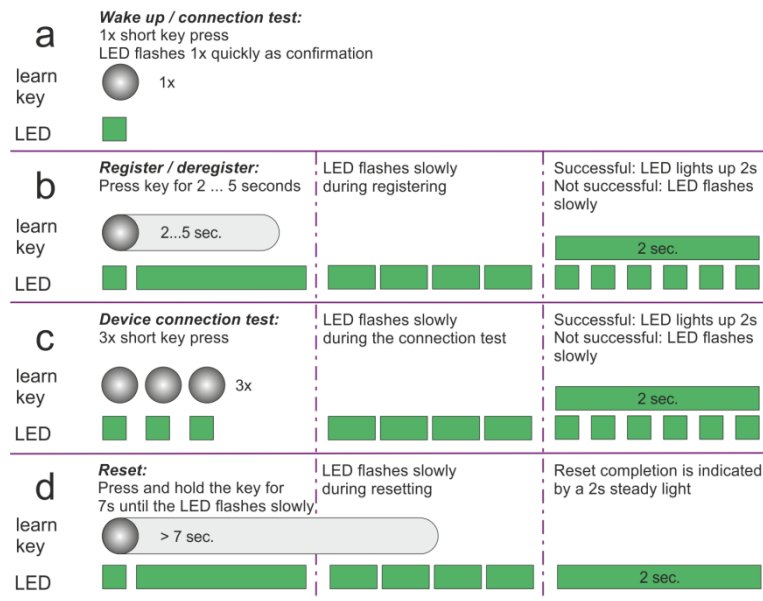


Fig.: 55: Functions of the learn key

1. In the menu of the **heatapp! gateway** select the menu item "Include and Exclude" under "Radio modules" and then "Include". You are requested to press the learn key (5).

Press the learn key (5) for 2 seconds

2. As soon as the **heatapp! gateway** detects the **heatapp! sense**, you are requested to assign a room and a name (e.g. *Left wall*) to the wireless room sensor.

11.3.4 heatapp! sense connection test

1. In the **heatapp! gateway**, select menu item "Connection status". You can now see a list of the included radio components and their connection status.
2. Click on the button "Connection test" and then "Start connection test". (See also the operating instructions at <https://ebv-gmbh.eu/en/downloads/heatapp!-system/>)

Press the learn key (5) once (See also Fig. 55, functions of the learn key, line d).

If a successful connection is made the corresponding **heatapp! sense** is labelled with a green dot in the menu of the **heatapp! gateway**.

If no connection can be made, then if necessary a **heatapp! repeater** must be used to improve wireless coverage.

11.3.5 Resetting heatapp! sense

Activating reset returns the device to its factory settings. To do this, press the learn key (5) for 7 seconds until the LED flashes (see also Fig. "1: Functions of the learn key", row "d").

11.4 heatapp! sense control



Fig.: 56: heatapp! sense control

11.4.1 Parameter structure

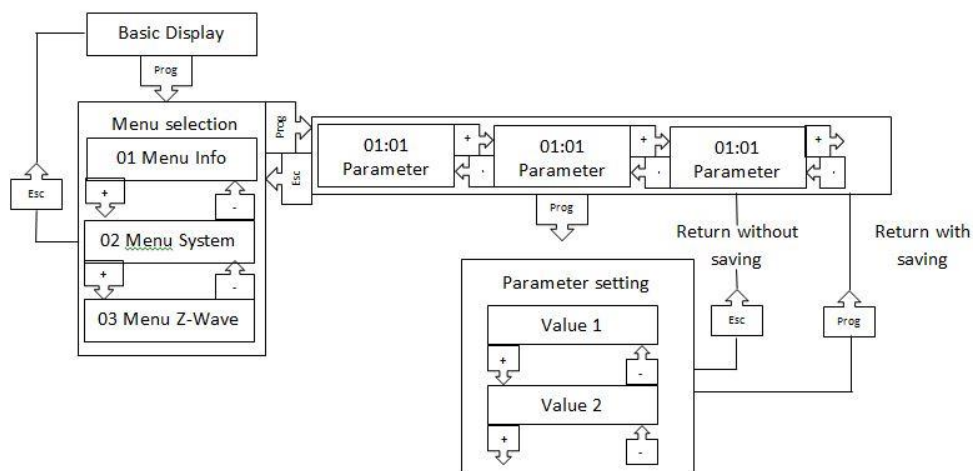


Fig.: 57: Parameter structure heatapp! sense control

Menu	1	2	3
Parameter	Info	System	Z-Wave
1	Battery voltage	Beep (Summer)	Link
2	Home ID_1	Display-modus = 1	Learnkey Include 1 Exclude 2
3	Home ID_2	Manufacturer-code	Learnkey 2 Node Info
4	Z-Wave Node ID (Device ID)	Temperature-Offset	
5		Damp-Offset	
9		Reset	

11.4.2 heatapp! sense control installation

- Insert the batteries observing correct polarity. Use only batteries of type CR 2450/3V.
- Select a suitable installation location.
- Ensure that no pipes or cables are routed in the wall beneath the mounting location that could be damaged by the installation.
- When installing the wall mounting plate, ensure that the two recesses for the engaging lugs of the **heatapp! sense control** are at the top.

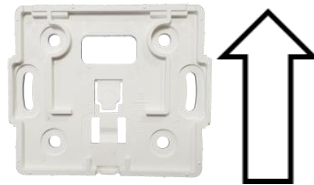


Fig.: 58: Wall mounting plate, **heatapp! sense control**

11.4.3 Including with the heatapp! gateway

Carry out registration of the radio components close to the **heatapp! gateway**.

Activate register mode on the **heatapp! gateway** (see also the online manual under <https://ebv-gmbh.eu/en/downloads/heatapp!-system/>).

Select menu 03:02 and save selection 1.

► Note

Unregistered new devices are indicated by ---- in the display. Registration then takes place by pressing the Prog key (learn key) twice.

If the gateway does not receive all the necessary information, you will be prompted to press the learn key again. Select menu 03:03 and save selection 1 (learn key 2).

In the gateway menu, enter a name for the **heatapp! sense control** and assign it to a room.

After registration, attach the **heatapp! sense control** to the wall mounting plate.

After registration, attach the **heatapp! sense control** to the wall mounting plate.

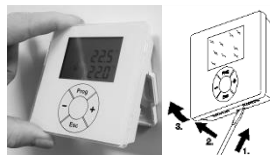


Fig.: 59: Attaching the **heatapp! sense control** to the wall mounting plate and battery change

To change the battery, carefully remove the **heatapp! sense control** from the wall plate using a screwdriver.

11.4.4 Excluding

If deregistration is started on the **heatapp! gateway**, then menu 03:02, selection 2 must be saved on the **heatapp! sense control**.

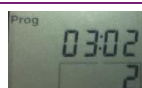


Fig.: 60: Excluding of the **heatapp! sense control**

11.4.5 Basic display

In the basic display, the top row shows the actual desired temperature and bottom row shows the actual temperature with the thermometer shelter icon.

11.4.6 Display – symbols

Info	Menu Info
Prog	Menu program
Pause	<ul style="list-style-type: none"> • Z-wave communication interrupted • The device is not properly registered
Hand	No operation possible. If the hand symbol remains displayed for a longer period, please remove and reinsert the battery.
Maintenance (service spanner)	Registering/Deregistering in progress
Frame around the operating area	Processing and sending settings

11.4.7 + and – Taste

Pressing the + or - key adjusts the desired temperature up or down. During input, the desired temperature is displayed inside a frame. After transfer of the setting to the gateway, the frame disappears again.

The desired temperature set in the **heatapp! sense control** is a temporary adjustment. It is valid only until the next switching time, as a minimum, however, for the time set in expert mode.

11.4.8 Air humidity display

If the Esc key is pressed once while the basic display is shown, the display of the actual temperature changes to an air humidity display. Repressing the Esc key returns the display to the basic display

11.4.9 Esc key

During navigation through the menus, the Esc key acts as a back key. Pressing it once takes the menu back a step. Pressing several time navigates back to the basic display.

If no key has been pressed for about 7 seconds or the Esc key is pressed, the display returns to the basic display.

11.4.10 Lo batt display

If the Lo Batt display appears, then the battery should be replaced as soon as possible.

11.4.11 Reset

To reset the **heatapp! sense control** to factory settings, call the menu 02:09 and confirm this with selection 01. This deletes the assignment to the **heatapp! gateway**.

11.5 heatapp! floor



Fig.: 61: heatapp! floor

heatapp! floor is a controller for thermal actuators in underfloor heating installations and is part of the **heatapp!** system, providing individual circuit control for underfloor heatings.

Up to eight channels each with up to three thermal actuators can be controlled. A maximum of 24 thermal actuators can be connected.

heatapp! floor communicates wirelessly with the **heatapp! gateway**. Wireless transmission takes place via the Z-wave protocol.

Like all 230V Z-wave components, the **heatapp! floor** also functions as a repeater. Therefore it improves the wireless coverage of the **heatapp!** system. Telegrams from radio components, which without a repeater would not reach the gateway, are forwarded by the repeater function of the **heatapp! floor**.

► Note

The aerial of the **heatapp! floor** should be led out of the control cabinet, so that good communication with the **heatapp! gateway** can be established.

The **heatapp! floor** is connected to existing thermo-electric actuators (230 V, closed without power).

To check the channels, a relay test is performed in the Expert menu of the **heatapp! base**. For more information, see “Hardware” chapter on page 106.

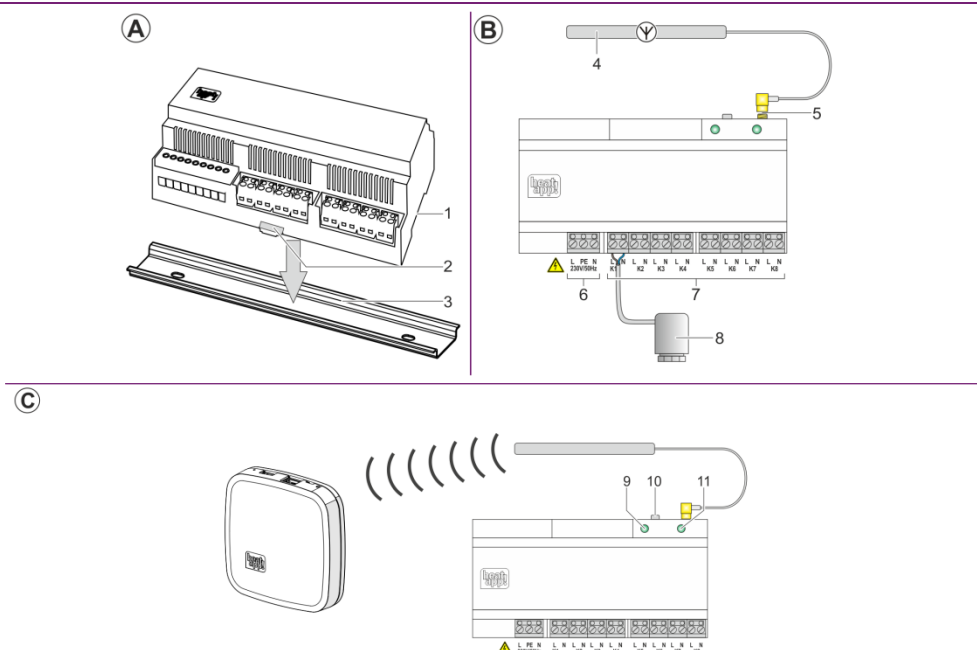


Fig.: 62: Installation **heatapp! floor**

11.5.1 Installation (hat rail mounting) of heatapp! floor

1. Place the **heatapp! floor** on the top hat rail
2. Engage the hooks by pressing down gently.

11.5.2 Antenna

1. Ensure that subsequently the aerial can be installed outside the distribution box of the underfloor heating system. Schließen Sie die Antenne (4) mit dem Antennenstecker an den Antennenanschluss (5) am **heatapp! floor** an.
2. Connect the aerial by means of its plug to the aerial socket on the **heatapp! floor**.
3. The length of the aerial cable (about 2 m) means the aerial can be installed in an optimum position.
4. To determine this, register the **heatapp! floor** with the **heatapp! gateway**, start the connection test and check the wireless coverage. If it is not possible to establish a connection, change the aerial's position and repeat the process (see chapter "Including / excuding at **heatapp! gateway**").
5. Attach the supplied adhesive strips to the aerial and place it in a suitable mounting place.

11.5.3 Anschluss an 230 V

1. Connect the thermoelectric actuators of the underfloor heating system (230 V N/C) to the **heatapp! floor** according to the terminal assignment.
2. Connect the power supply to the **heatapp! floor** according to the terminal assignment.

The operating indicator lights up in green when the **heatapp! floor** is ready for use.

When connecting the power supply, VDE 0100 or the corresponding national regulations must be observed.

11.5.4 Including / excuding at heatapp! gateway

1. In the menu of the **heatapp! gateway** select the menu item "Include and exclude" under "*Radio modules*" and then "*Include*". You are requested to press the learn key (10).
2. Press the learn key (10) for 2 seconds (see also "Functions of the learn key, line "b").
3. As soon as the **heatapp! gateway** detects the **heatapp! floor**, you will be requested to enter a name (e.g. Ground floor).
4. In the menu of the **heatapp! gateway**, check under "*Radio modules*", whether the **heatapp! floor** was successfully registered or deregistered
5. Assign the individual channels of the **heatapp! floor** to the rooms that have been created in the **heatapp! base** menu.

11.5.5 Connection test

1. In the **heatapp! gateway**, select menu item "*Connection status*". You can now see a list of the included radio components and their connection status.
2. Click on the button "Connection test" and then "Start connection test".
3. Press the learn key (10) once (see also Fig. 63 "Functions of the learn key **heatapp! floor**", row "a").

If a successful connection is made the corresponding **heatapp! sense** is labelled with a green dot in the menu of the **heatapp! floor**.

If no connection can be made, try to change the location of the aerial.

If this is not successful, then if necessary an external **heatapp! repeater** must be used to improve wireless coverage.

11.5.6 Reset

Activating reset returns the device to its factory settings. To do this, press the learn key (10) for 7 seconds until the LED flashes (see also Fig. 63 “Functions of the learn key **heatapp! floor**”, row “d”).

11.5.7 Functions of the learn key

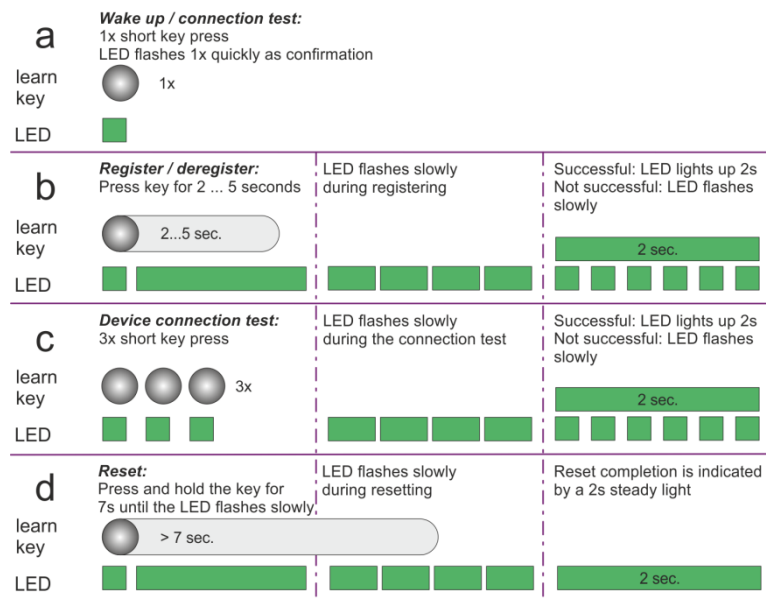


Fig.: 63: Functions of the learn key **heatapp! floor**

11.6 heatapp! single floor for electric heaters



Fig.: 64: heatapp! single floor

These products are Z-Wave products sourced from the open market. The devices are **heatapp! checked**. They can be incorporated in all **heatapp!** systems in accordance with the installation manual. Please take all device-specific details from the manufacturer's instructions.

The listed Z-wave products are used in **heatapp!** systems to enable the switching of electrical heaters, e.g. infrared heaters or fan heaters. They are detected as **heatapp! single floor** devices and used like all other **heatapp!** products.

heatapp! single floor components also have an integrated repeater function. They improve the wireless coverage of a **heatapp!** system. Telegrams from radio components, which without a repeater would not reach the gateway, are forwarded by the repeater function of the **heatapp!** single floor component.

When purchasing, note the exact type designation of the devices, as only devices listed here are compatible with **heatapp!**.

A complete list of **heatapp! checked** components can be found in chapter **heatapp! checked** Komponenten anderer Hersteller on page 133.

11.7 heatapp! repeater and heatapp! repeater S



Fig.: 65: **heatapp! repeater** und **heatapp! repeater S**

heatapp! repeater and **heatapp! repeater S** are used to improved the wireless coverage in a **heatapp!** system. If one or more radio components cannot be reached, a repeater is used to enable/improve communication.

heatapp! repeater and **heatapp! repeater S** are an enhancement for the **heatapp!** system. They improve the wireless coverage and thus stabilise the system.

All Z-wave repeaters are communication transmitters. The received telegrams of other radio components are transmitted from/to the gateway or other repeaters. They have no heating-relevant control function in the **heatapp!** system, rather are required to ensure reliable communication.

The **heatapp! repeater** is used if there is no wireless connection between the radio components and the **heatapp! gateway** due to the limited wireless coverage.

The **heatapp! repeater** is positioned between the radio component and the **heatapp! gateway**.

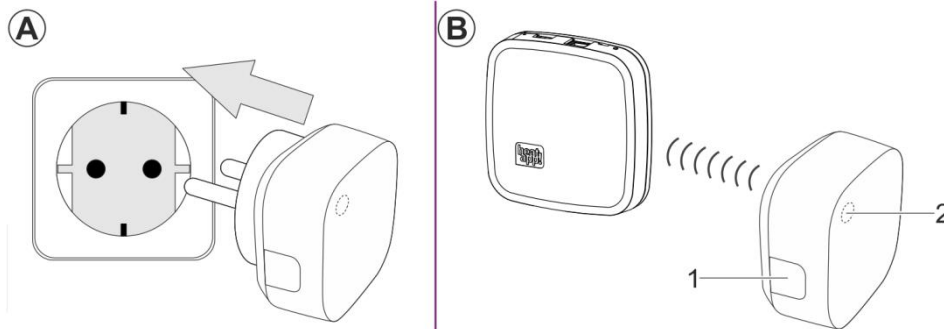


Fig.: 66: Installation **heatapp! repeater**

► Note

Our heatapp! repeater (article number: 9600920000) will no longer be available from May 2019!

AEON Labs Aeotec Range Extenders DSD37-ZWEU are still recognised as a **heatapp! repeater**.

Moreover, all Z-wave repeaters can be integrated in the **heatapp!** system. They are indicated by an



“R” in the gateway menu.

11.7.1 Installation **heatapp! repeater**

Unpack the **heatapp! repeater** and plug it into a free 230V outlet, which is located between the **heatapp! gateway** and the radio modules to be covered.

11.7.2 Including heatapp! repeater at heatapp! gateway

1. In the menu of the **heatapp! gateway** select the menu item "Register / deregister" under "Radio modules" and then "Register".
2. Now press the learn key (1) on the side of the **heatapp! repeater**. If the **heatapp! gateway** recognises the **heatapp! repeater**, the **heatapp! repeater** is added to the heating configuration. The LED (2) on the **heatapp! repeater** lights up permanently when there is a radio connection to the **heatapp! gateway**.
3. Repeat the connection test according to the description in section "Connection test and Repair radio system"

If you still do not have a working connection to one or more radio modules, then the wireless range is still insufficient!

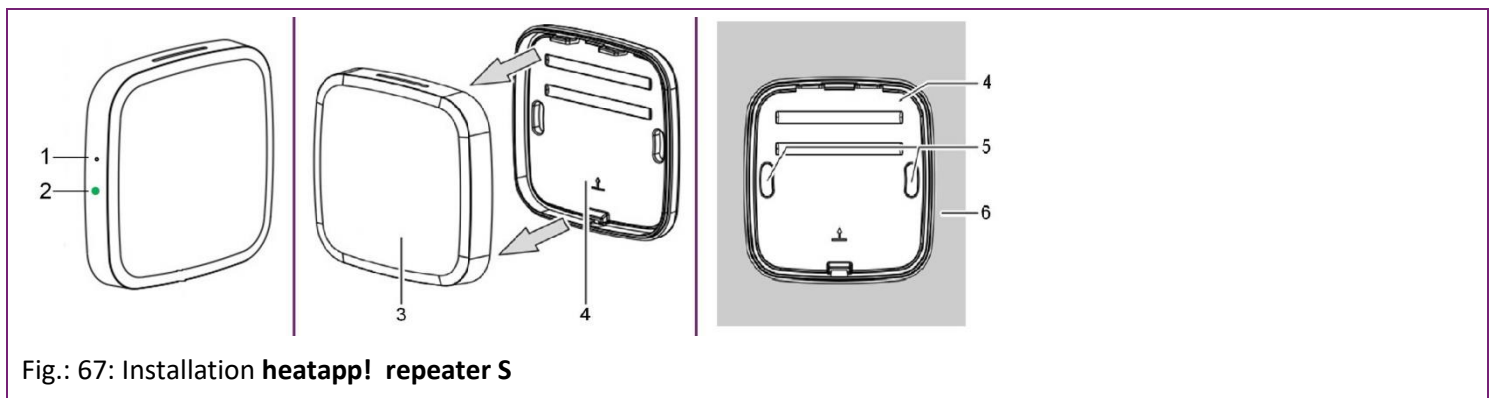
- Relocate the **heatapp! repeater** in another location so that all radio modules can be reached.
- If this does not work, add a further **heatapp! repeater** to improve wireless coverage.

11.7.3 Reset heatapp! repeater

To reset the **heatapp! repeater** to the factory settings, press the button until the LED starts to flash. This may take up to 50 seconds.

► Note

heatapp! repeaters are communication transmitters. They forward the received telegrams without changing them. When positioning repeaters, it must be ensured that they can communicate with the **heatapp! gateway** or another repeater as well as with the non-accessible radio components.



11.7.4 Installation heatapp! repeater S

Take the **heatapp! repeater S** out of the packaging and connect it to the power cable. Plug the power cable into a free 230V outlet.

11.7.5 Including / Excluding a heatapp! repeater S with/from the heatapp! gateway

1. Activate register mode on the **heatapp! gateway** (see also the operating instructions under <https://ebv-gmbh.eu/en/downloads/heatapp!-system/>).
2. Now press the learn key (1) on the side of the **heatapp! repeaters S** with an unfolded paper clip for 2-3 seconds. If the **heatapp! gateway** recognizes the **heatapp! repeater S**, the **heatapp! repeater S** is added to the heating configuration.
3. Assign a name to the **heatapp! repeater S**, e.g. ground floor hall.

4. To complete the registration, press the learn key (1) 2-3 times at intervals of one second until the registration button in the Gateway Menu is enabled.

11.7.6 heatapp! repeater S installation

Position the **heatapp! repeater S** between the non-accessible radio component and the **heatapp! gateway**, so that it has a good connection to the **heatapp! gateway**.

Prior to mounting, check that the selected installation location is suitable for ensuring communication between the inaccessible radio components and the **heatapp! gateway**.

1. Change to connection status and tap on the "Radio system" key button and then "Repair radio system" so that the other radio components detect the new repeater.
2. Repeat the connection test as described in chapter "Excluding of radio components"
3. Excluding is performed analogously to including. Instead of the button "*Include*", use the "*Exclude*" button and perform the previously described steps *Verbindungstest und Funksystem reparieren*" on page 27.

If you still do not have a working connection to one or more radio components, then the wireless coverage is still inadequate!

- Relocate the **heatapp! repeater S** in another location so that all radio components can be reached.
- If this does not work, add a further **heatapp! repeater S** to improve wireless coverage.
- Ensure that no pipes or cables are routed in the wall beneath the mounting location that could be damaged by the installation.
- Disconnect the power supply of the **heatapp! repeater S**.
- Separate the upper casing (3) from the lower casing (4).
- Screw the lower casing (4) in place on the wall (6) in the desired mounting position through the fastening holes (5).
- Place the upper casing (3) on top of the lower casing (4) and reconnect the power supply.

11.7.7 Fixed wiring

Alternatively the **heatapp! repeater S** can be permanently installed on a flush wall socket. A flush-mounting power supply with the following specifications is required:

Output voltage 4.5 V 6.0V

Standard for compliance of radiated emissions EN 61000-6-6, EN 61000-6-4 (one of these standards must be complied with).

11.7.8 Resetting heatapp! repeater S

To reset the **heatapp! repeater S** to factory settings, the learn key is pressed for 7-10 seconds. Then the LED begins to flash at regular intervals. Confirmation of successful resetting is indicated by a steady 2 second light.

11.7.9 Functions of the learn key **heatapp! repeater S**

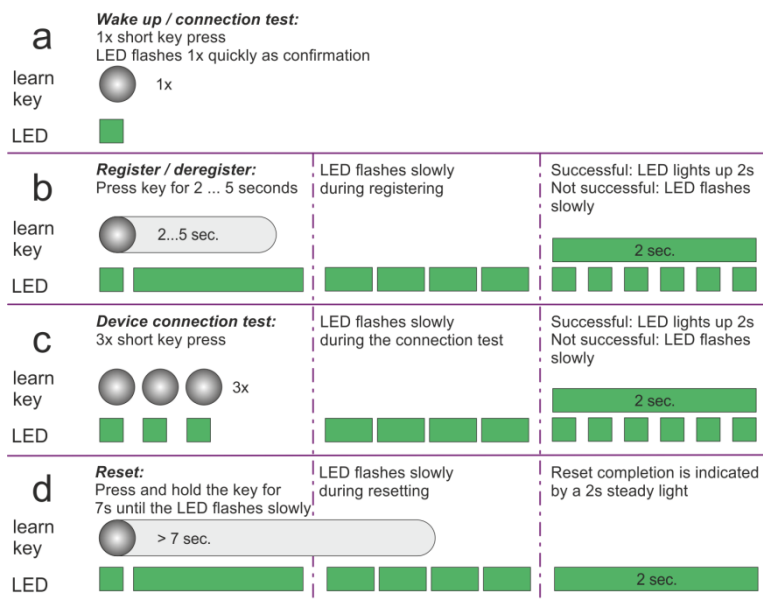


Fig.: 68: Functions of the learn key **heatapp! repeater S**

11.8 Window sensor



Fig.: 69: Window sensors (figure exemplary)

Some Z-wave window contacts of other manufacturers have been implemented in the **heatapp!** system as **heatapp! checked**. The window contacts are registered and deregistered in the Gateway Menu Radio components > Login and Logout and assigned to a room. Then they are initially displayed as information in the room image of the app.

11.8.1 Window contact as information

No function is assigned to the window contact in the factory. Therefore it serves initially purely as information. Consequently, the "Window open." or "Window closed" symbol is displayed in the room image. The set room setpoint temperature is unaffected.



Fig.: 70: Window sensor as information

11.8.2 Window shutdown setting

The function of the window contact can be configured in the **heatapp! base** menu under Expert → Room 1 ... n →. In the corresponding menu, select window shutdown and set the desired function. The following menu selection is available.

Window shutdown configuration menu

OFF	Window shutdown disabled (factory setting)
5 minutes to 240 minutes in 5 minute steps	Blocking of the heating function (regulation to the frost protection temperature) for the set duration. Rotary wheel is disabled, scenes only work after window is closed.
ON	Disabling of the heating function for the duration of window opening. Rotary wheel is disabled, scenes only work after window is closed.

Functions of the room- and radio components

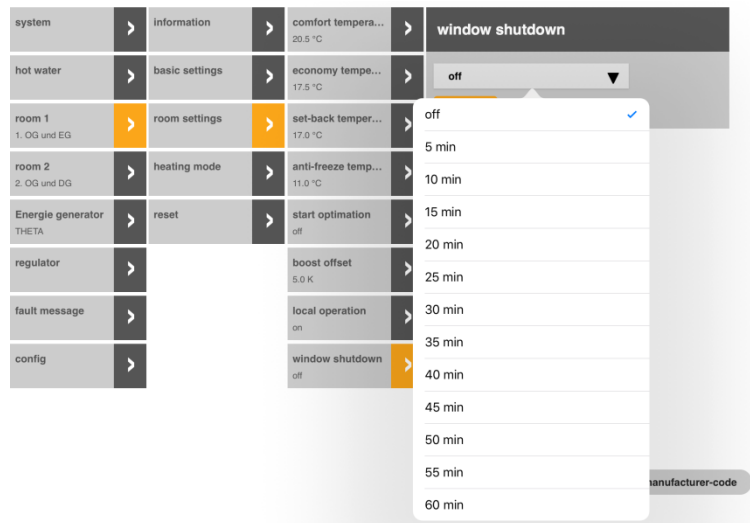


Fig.: 71: Configuration menu window shutdown

If window shutdown is activated (by selecting a time or ON), **heatapp!** regulates the room during the set window shutdown to the frost protection temperature. The rotary wheel on the homescreen is grey and disabled.

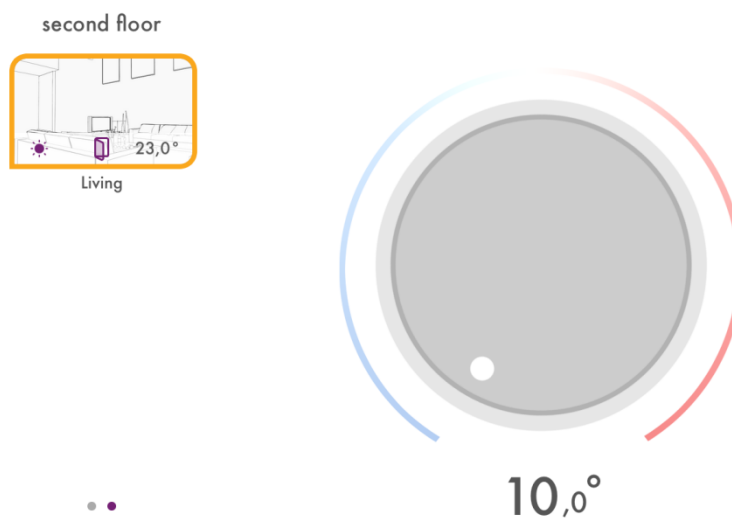


Fig.: 72: Window sensor with activated window shutdown

12 Z-Wave wireless network

heatapp! radio components communicate with the **heatapp!** gateway using the Z-wave wireless standard.

The Z-Wave radio system is a wireless communication standard specially for use in the smart home sector.

The wireless communication is optimised for low energy consumption and maximum communication safety.

Z-wave uses two-way communication with acknowledgement. Only confirmed telegrams are classed as sent successfully. If a communication error occurs, the transmit process is repeated three times.

heatapp! floor, **heatapp! single floor** and **heatapp! repeater** are constantly active in the wireless network and can therefore serve as Z-Wave routers. Battery operated devices such as **heatapp! drive** and **heatapp! sense control** and **heatapp! sense** are mainly inactive, only waking periodically to receive and send commands. They cannot be used as routers.

Z-Wave has implemented the feature of a mesh-networking technology in which every mains operated device can send telegrams to other devices in its own network. The resultant meshed network is controlled by the **heatapp! gateway** and the routes updated upon changes to the network.

12.1 Notes for radio coverage

The radio coverage depends on the building type and the building properties and condition. To achieve good radio coverage, it may be necessary to use repeaters. Radio coverage can be improved or worsened by changes in the object. As the manufacturer, we are responsible for the functionality of the goods produced by us. The radio network is set up through the installation and therefore does not form part of the supplied goods.

If you have questions on the installation, radio and network technology, please contact our technical support or visit our **heatapp!** training events.

13 Radio coverage

Transmitted radio waves have a limited energy which decreases with distance.

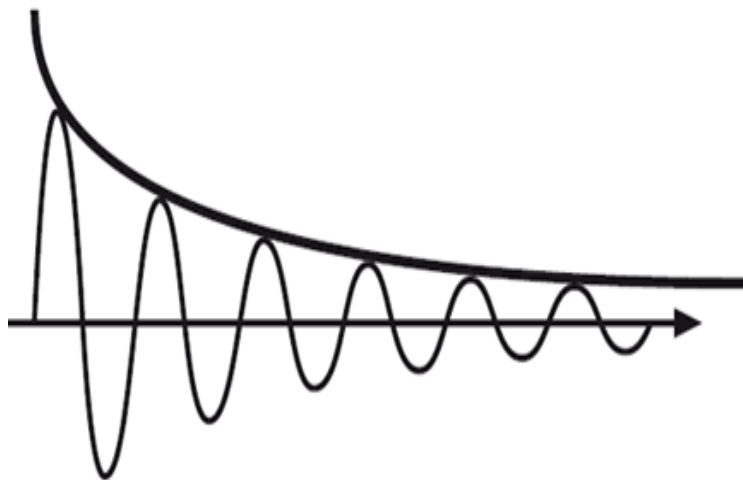


Fig.: 73: Radio waves

Wireless coverage is not the same as wireless range. Wireless is affected by various factors. Radio waves are absorbed, reflected and attenuated.

When radio waves penetrate solid material, e.g. walls or furniture, they are attenuated, that is absorbed.

Metal objects reflect the radio waves. The reflection occurs on nearly all metallic surfaces (e.g. mirrors, thermal insulation foils) as well as materials (e.g. metal door frames, steel or sheet metal cabinets) and also on structural steel. Thermal insulation with metal foil lining also reflects the radio waves.

Radio wave attenuation is frequently caused by weather conditions, including air humidity and moisture in materials, such as wood, walls, etc.

The wireless range of **heatapp!** components can only be specified for unimpeded paths. Without obstacles (clear line-of-sight without walls, glass, furniture or other objects), the radio waves of the **heatapp!** components can travel up to 60 metres. In occupied buildings the range through walls and furniture, and due to operational conditions is less. As no building is identically the same to any other building, we refer to wireless coverage.

The radio/wireless network is formed by the registering of radio components with the **heatapp! gateway**. Checking of the wireless coverage and functioning of the radio network takes place in connection status. Here the functions Connection test and Repair radio system are available.

13.1 Testing the wireless coverage

After the radio components have been positioned/installed in their intended location, the wireless coverage must be checked. To do so, we use the connection status in the Radio components menu of the **heatapp! gateway**.

► Note

The **heatapp! gateway** menu is only available in the local network. In the app, select Settings > Gateway > Radio components.

Alternatively, you can also open the gateway menu via the IP address in the Internet browser of your PC.

Selecting Connection Status

Via the app Settings → Gateway → Radio components → Connection status

On the PC/Laptop Open the gateway menu via IP Address → Radio component → Connection Status

13.1.1 Time stamp of the radio components

In Connection Status all radio components are listed with a time stamp and a status dot.

05.05.2017 11:21:44

05.05.2017 07:31:59

Fig.: 74: Time stamp of the radio components

The time stamp indicates when the last cyclic message of the radio component was issued via the **heatapp! gateway**.

Reporting cycles of the radio components

heatapp! drive	Every 5 minutes
heatapp! sense	Every 5 minutes
heatapp! sense control	Every 15 minutes
heatapp! floor	Every 10 minutes
heatapp! single floor	Every 15 minutes

heatapp! repeater	Every 15 minutes
Fensterkontakte	Every 5 minutes




If the time stamp is older than specified in the message cycle, it means the radio component has a poor radio/wireless connection to the **heatapp! gateway**. Wireless coverage is inadequate.

► Note

If the wireless coverage is inadequate, the position of **heatapp! gateway**, **heatapp! repeater** and **heatapp! floor** aerial must be checked. Sometimes, another orientation or position of the **heatapp! gateway** or repeater is sufficient to ensure adequate wireless coverage.

13.1.2 Status dots of the radio components

The status of the radio components is displayed using status dots in Connection Status.

	A red status dot indicates that there has been no communication with the heatapp! gateway for at least 90 minutes.
	An orange status dot indicates that the registration interview has not yet completed. Keep pressing the learn key of the radio components at 1 - 3 second intervals so that the registration interview completes and the dot goes green.
	The green status dot indicates that communication with the heatapp! gateway is functioning.

13.1.3 Function Repair radio system

The function Repair radio system is executed after installation and/or if there is a wireless malfunction.

The radio components must find their routes to the **heatapp! gateway** and save them.

1. In your PC's browser, select menu item "*Connection status*". You can now see a list of the included radio components and their connection status.
2. Click on the button "Radio system" and then "Repair radio system".

The **heatapp! gateway** now requests all radio components, to redefine their routes to the **heatapp! gateway**. Each radio component can define and save up to three routes.

► Note

Dependent on the number of included radio components, repair of the radio system may take a variable length of time. The function is executed in the background and the system continues working without limitation.

Repair of the radio system should take place after each movement or addition of components (**heatapp! gateway**, **heatapp! repeater** or other wireless components).

In the event of sporadic wireless disruptions, the function "Repair radio system" should be run multiple time on different days so that the meshed radio network stabilises.

13.1.4 Connection test in the heatapp! gateway menu

1. In your PC's browser, select menu item "*Connection status*". You can now see a list of the registered radio modules and their connection status.
2. Click on the button "Connection test" and then "Start connection test".
3. All radio components now receive the state " WAIT ".
4. Press the learn key on a fitted radio module to wake it up.
5. Repeat step 3 for all radio modules.

Alternatively to points 3 and 4, simply wait until the radio components report in their automatic cycle. See also Status dots of the radio components on page 88.

A green dot is shown for each radio module with a successful connection to the **heatapp! gateway**.

If you still do not have a working connection to one or more radio modules, then the wireless range is still insufficient!

- Relocate the **heatapp! gateway** or the aerial of the **heatapp! floor** or **heatapp! repeater** to another location so that all radio modules can be reached. Repeat the connection test.
- Execute the function "Repair radio system". See chapter "Repairing the radio system function" on page 91.
- If this does not work, add a **heatapp! repeater*** to improve wireless coverage. Repeat the repair of the radio system and then the connection test.

13.1.5 Radio module connection test

If it is not possible to perform the connection test in the **heatapp! gateway**, because for example the distance between **heatapp! gateway** and installed radio modules is too great, the connection test can also be performed directly on the fitted radio modules.

heatapp! drive

1. Press the middle key for at least 3 seconds until "M" is output to the display.
2. Then press the left key until "LI" is displayed and confirm with the central key. This approach triggers a device connection test.

As soon as the connection is created, "LI" goes out. If no connection is made, the aerial and alarm symbols flash.

heatapp! floor and heatapp! sense

- Press the learn key three times sequentially. As confirmation, the LED flashes quickly 3 times in succession.

During the connection test, the LED flashes slowly.

- If there is a successful connection, the LED illuminates for two seconds.
- If no connection to the **heatapp! gateway** can be made, the LED flashes quickly.

See also "Installation instructions **heatapp! floor** and **heatapp! sense** under <https://ebv-gmbh.eu/en/downloads/heatapp!-system/>.

Radio coverage

heatapp! sense control

Press the Prog key three times to access the Z-wave menu.

Confirm the Link Test by pressing the Prog key.

As soon as the connection is created, "OK" appears in the display.

If no connection is established, "FAIL" is output to the display.

14 Retrofitting radio modules

14.1 heatapp! radio modules

Retrofitting of radio modules can be performed in two ways.

- Using the **heatapp! app** on a tablet-PC (recommended).
- Using a PC / laptop and a **heatapp! USB-LAN adapter**.

Via the **heatapp! App**

Where possible use the **heatapp! App** on a tablet connected to the customer's home network for subsequent retrofitting of additional radio modules.

1. Log in to the **heatapp! app** as a user with user role "*Expert*" or "*Owner*".
2. Select the field "*Settings*".
3. Tap the "*Gateway*" symbol. Log in using the password you created.
4. Tap on the menu item "*Radio modules*".

Follow the instructions for teaching the radio modules.

Via a PC / laptop

The later retrofitting of extra radio modules via a PC / laptop is performed as described in Installation guide under <https://ebv-gmbh.eu/en/downloads/heatapp!-system/>.

14.2 Third party radio modules

The **heatapp! gateway** uses the established Z-Wave standard for digital home wireless systems for the wireless connection of **heatapp! drive**, **heatapp! floor**, **heatapp! sense** and **heatapp! repeater**.

Therefore other Z-Wave certified devices can be programmed into the **heatapp! gateway**. They then appear in the radio modules management of the gateway menu under "*Other radio modules*".

Dependent on whether the third party device offers any heating-relevant functions, it can also be operated from here. Operation of such devices directly from the home screen of the **heatapp! app** is not possible.

► Note

The **heatapp! checked** components of other manufacturers are excluded from this regulation. These can, as described in the corresponding functions, be incorporated in the **heatapp! system** relevant to the regulation.

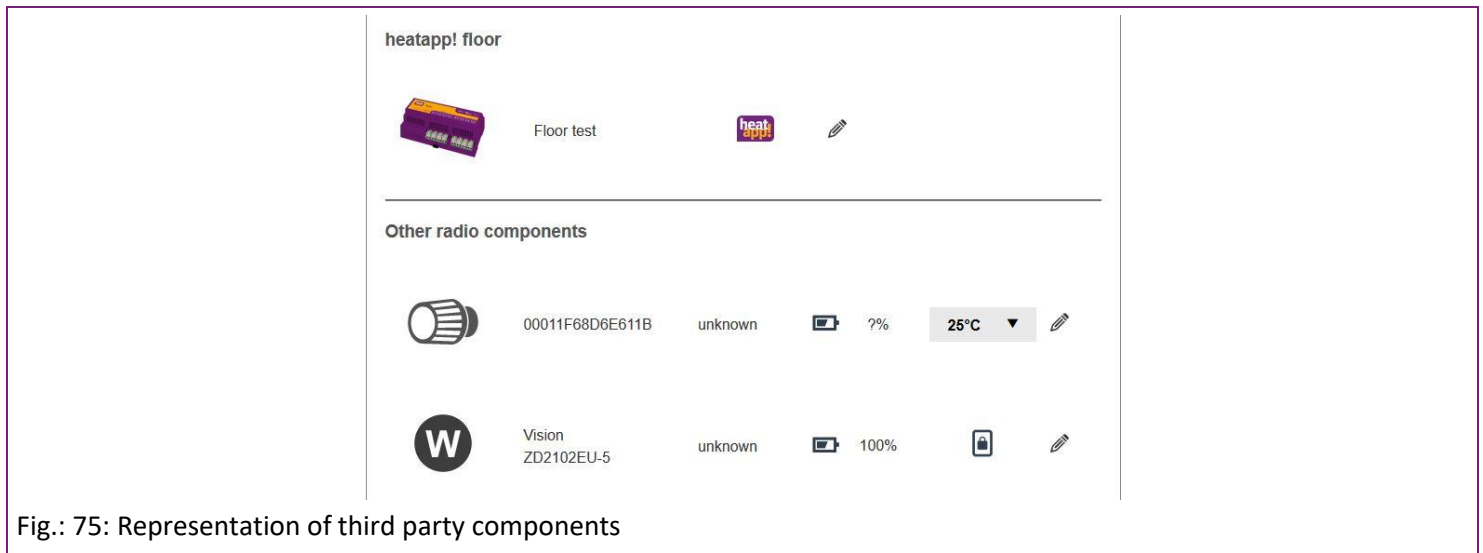


Fig.: 75: Representation of third party components

14.2.1 Including of foreign devices:

1. Login into your system as Expert or Owner from a tablet using the **heatapp! app**. To to the "Settings" area, scroll the icons right down and select "Gateway".
2. If necessary, login to the **heatapp! gateway** using the gateway password created during the initial setup.
3. Open the "Radio modules" menu.
4. Click on the tab, "Include and exclude" and start the registering process by clicking on the "Include" button. You are now requested, to trigger the registration process on the desired radio module. This is mainly implemented via a button on the device. For details please see the operating instructions of the third party device.
5. If the device has been successfully detected, you will now see it on the "Manage" tab under "Other radio modules". You can also control Z-Wave components from here (basic functions). For example, with actuators, you can set the temperature.
6. In Fig.: 75, it is apparent that another manufacturer's actuator and room sensor have been registered. The actuator makes it possible to set the desired room temperature via the drop-down field.

At this point, the window contact only transmits the window status. It cannot be used to control the heating.

► Note

The **heatapp!** system makes possible complete single room heat regulation from anywhere. This is only possible using original **heatapp!** components. To offer you maximum ease of use and convenience, we are constantly expanding our system.

For the latest news, make sure to check from time to time under <https://ebv-gmbh.eu/en/downloads/heatapp!-system/>.

Third party components can only be controlled if they are in the same network as the **heatapp!** system. Control via the home screen is not possible.

15 Restoring the factory settings

In exceptional cases it may be necessary to reset **heatapp!** components to the factory settings.

Resetting a running system always results in a new setup. A **heatapp!** system comprises several individual components. Therefore, a reset of individual components has different consequences for the components remaining in the system.

- **heatapp! base:** See chapter “System management” Resetting **heatapp! base** deletes all heating-relevant data, including the rooms, all user data and all images.
- Any possibly connected **heatapp! gateway** must be reconnected to the **heatapp! base** after the new setup. The radio components must be reassigned to the rooms.
- **heatapp! gateway:** See “Reset to factory settings” chapter on page 64. A reset of **heatapp! gateway** deletes the gateway password and the connection to **heatapp! base** and all radio components.
- In the new setup, the connection to the **heatapp! base** must be reselected and the radio components must be re-registered.

► Note

If the **heatapp! gateway** is reset, all other included radio components must be reset too. Without resetting, the radio components cannot be included again.

- **heatapp! drive:** See section „Reset to factory settings“.
- **heatapp! floor:** See section „Reset“.
- **heatapp! sense:** See section “Resetting heatapp! sense”.
- **heatapp! sense control:** See section „Reset“
- **heatapp! repeater:** See section „Reset **heatapp! repeater**“.
- **heatapp! repeater S:** See section „Resetting heatapp! repeater S“

► Note

If a reset of a radio component that is registered in a **heatapp!** system occurs, it must also be removed from the **heatapp!** system by pressing the button “Remove faulty radio component”.

16 Parameterlist heatapp! base

16.1 Menu – System

Menu / Parameter	Adjust-ment range	Discription	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... Expert / system												
Cooling mode	on, off	Enables or disables the cooling function for the system. X ₃	x	x	x	x	x					
clima zone	off, -20,0 ... -12,0 ... 0,0 °C	Setting of the coldest expected outdoor temperature value. The entered value is included in the calculation of the request value.	x			x		x			x	
building	off easy, medium, heavy	Selection of the building type when using outdoor temperature control.	x			x		x			x	
emergency mode outside temperature	-50,0 ...0,0... 30,0°C	Setting of an outdoor temperature value according to which the control takes place in the event of a failure of the outdoor sensor (requirement outside temperature control)	x		x	x		x			x	
emergency room control	100 ... 200 ... 400%	Setting for generating a request value in case of failure of the room temperature (Request Room control) e. g. Room set point 21°C x 2 (200%) = 42°C Requirement	x	x	x	x		x	x	x	x	
standby	on, off	Heating system can be switched off frost-protected by means of a standby button. With "On" the button Party, Absent, Vacation and Boost is available as well as the button Standby for activation.	x	x	x	x	x	x	x	x	x	x
local operation	on, off	Activate the local set point setting on heatapp! drive and heatapp! sense control . The setting applies to all heatapp! drive and heatapp! sense control registered on the heatapp! system, a restriction for individual rooms is possible in the respective room > Room setting.	x	x	x	x	x					
battery error level	off, 5 ... 10 ... 50 %	Setting of the switching threshold for the battery status message. If the battery power falls below the value entered here, a corresponding warning message appears in the app.	x	x	x	x	x					
Timer	Off, on	Select whether the cycle times are displayed in the Room / Room group menu tree.	x	x	x	x	x	x	x	x	x	x
error code machine	off, locking, blockage, warning	Selection of which error messages of a machine are displayed and processed in the system.				x					x	
color symbols	off, on	Activating the optical display "Heating active" in heatapp! APP	x	x	x	x	x	x	x	x	x	x
Manual room cooling	off, on	Enables the system parameter "cooling mode" X ₃	x	x	x	x	x					
room setpoint max	Off, on	Selection of whether the parameter Maximum temperature is displayed in the menu tree Room > Room setting.	x	x	x	x	x	x	x	x	x	x
reset	off, set	Reset the heatapp! parameters to factory settings according to the access authorization. Network settings, system name and location and user data remain unchanged.	x	x	x	x	x	x	x	x	x	x

X₃ Display only occurs if at least one **heatapp! floor** is integrated in the system.

16.2 Menu – hot water

16.2.1 Information

Menu / Parameter	Display	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / hot water / information			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
operation mode	automatic	Operation according to switching time program active	X			X		X			X	
	reloading	Manual hot water recharging activated by "Showers" scene	X			X		X			X	
	shutdown	Frost-protected shutdown activated by scene "Standby" or "Vacation"	X			X		X			X	
state	off	Hot water shutdown by scene "Standby" or "Vacation".	X			X		X			X	
	heating	DHW charge with setpoint active	X			X		X			X	
	setpoint	Setpoint is reached	X			X		X			X	
	emission	Programme for emission measurement active	X					X				
	manual	System in manual mode	X			X		X			X	
	forced draining	Active due to forced draining function	X			X		X			X	
setpoint		Display of the current setpoint value for DHW heating	X			X		X			X	
is temperature		Display of the current actual temperature of the DHW tank	X			X		X			X	

16.2.2 Timerprograms

Menu / Parameter	Display	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / hot water / timerprogram			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
Vacation	TT.MM ... TT:MM	Setting the holiday period for hot water preparation.	X			X		X			X	
Mo 1...3 Tu 1...3 ... So 1...3	00:00 ... 24:00	Setting the cycle times for hot water preparation.	X			X		X			X	

16.2.3 Basic settings

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / hot water / basic settings			T2B	Relay	0-10V	OT	off	T2B	Relay	0-10V	OT	off
shutdown	room, operation mode	room: In addition to switching times, the water heating is switched off via the scene "Standby" and "Vacation". operating mode: DHW heating is only carried out under consideration of the set switching times.	X			X		X			X	
name	Alphanumeric, max. 15 characters, no special characters	Enter the name for the hot water function.	X			X		X			X	

16.2.4 Heating mode

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / hot water / heating mode			T2B	Relay	0-10V	OT	off	T2B	Relay	0-10V	OT	off
day-setpoint	night- setpoint(+0, 5K) ...50,0°C... DHW-Max.	Setting the hot water setpoint temperature for heating mode.	X			X		X			X	
night-setpoint	DHW-Min. ... 40,0°C ... day-setpoint (-0,5K)	Setting of the hot water setpoint temperature for lowering mode.	X			X		X			X	
legionella protection day	off, mo ... su, all	Activation of the Legionella protection function. Selection of the day on which the Legionella protection function is to be carried out.	X2			X		*			X	
legionella protection time	0:00 ... 2:00 ... 23:50	Start time at which the Legionella protection function is to be carried out.	X2			X		*			X	
legionella protection	DHW-Min. ... 60°C ... DHW-Max.	Legionella protection temperature is sent to the energy producer as a requirement value at the beginning of the Legionella protection function. This requirement value remains the same for the duration of the charge.	X2			X		*			X	
charge duration for legionella protection	off, 5 ... 60min. ... 240min.	With the start of the Legionella protection time, the charging or monitoring of the set Legionella protection temperature takes place for the duration set here.	X2			X		*			X	

► Note

X2: The setting of the Legionella protection for **T2B** connection is done at the connected THETA controller.

16.2.5 Reset

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / hot water / reset			T2B	Relay	0-10V	OT	off	T2B	Relay	0-10V	OT	off
reset	off, set	Reset the parameters of the menu hot water to factory settings according to the access authorization.	X			X		X			X	

16.3 Menu – Room 1 ... n / Room group 1 ... n

16.3.1 Information

Menu / Parameter	Display	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / Room group resp. Room / information			T2B	Relay	0-10V	OT	off	T2B	Relay	0-10V	OT	off
operation mode	automatic	Operation according to switching time program active	x			x		x			x	
	absent	Operating mode / Scene "Absent" active	x	x	x	x	x	x	x	x	x	x
	party	Operating mode / Scene "Party" active	x	x	x	x	x	x	x	x	x	x
	standby	Operating mode / Scene "Standby" active, room / room group frost-protected switched off if room or outdoor sensor is present.	x	x	x	x	x	x	x	x	x	x
	vacation	Operating mode / "Vacation" scene active, room / room group frost-protected switched off if room or outdoor sensor is present.	x	x	x	x	x	x	x	x	x	x
	boost	Operating mode / Scene "Boost" active	x	x	x	x	x	x	x	x	x	x
	reloading	Room/room group with activated hot water recharging active	x			x		x			x	
	manual	Manual operation active	x	x	x	x		x	x	x	x	
	screed	Program screed drying active	x	x	x	x		x	x	x	x	
	emission	Emission measurement active	x					x				
	Run time- wand	Manual temperature setting via magic wand function active	x	x	x	x	x	x	x	x	x	x
	Window shut down	The heating operation is switched off frost-protected after the set window shut-off. *Only in conjunction with a window contact	x	x	x	x	x					
state	heating	Regulation to feel-good or economy temperature	x	x	x	x		x	x		x	
	off	Room/room group not active (e. g. in lowering phases automatic operation)	x	x	x	x		x	x		x	
	heat limit	Switch-off via heating limit function	x			x		x			x	
	frost protection	Room/room group frost-proof switched on	x	x	x	x		x	X1	X1	x	
	summer	Room/room group out of operation due to outside summer shutdown	x			x		x			x	
	anti-lock protection	Anti-lock protection for the actuators active in the room (single room control)	x	x	x	x	x					
	room blocking	Room/room group due to exceedance of the room setpoint temperature by the adjusted limit value (individual room control) in shutdown mode	x	x	x	x		X1	X1	X1	X1	
Setpoint	xx °C	Displays the current setpoint for the room temperature.	x	x	x	x	x	x	x	x	x	x
is temperature	xx °C	Display of the current actual room temperature (only if room temperature measurement is active).	x	x	x	x	x	x	x	x	x	x
outside temperature	xx °C	Display of the current outdoor temperature used for room control.	x			x		x			x	
battery valve 1 ... 4	xx %	Battery status of the heatapp! drive	x	x	x	x	x					
battery sensor	xx %	Battery status of the heatapp! sense	x	x	x	x	x					
state valve 1 ... 4	off, on	Display of the current position of a valve (floor) for single room control.	x	x	x	x	x					
request	xx °C	Display of the current setpoint temperature which is passed on to supply the heating circuits or hot water supply (e. g. heating circuit setpoint, taking into account cant values). If EG connection via switch contact/relay, ON/OFF is displayed.	x	x	x	x		x	x	x	x	
heating circuit xx	xx °C	Dislay of the actual temperature of the requested heating circuit.	x			x		x			x	

► Note

X1 when using a **heatapp! sense** wire

16.3.2 Timerprograms

Menu / Parameter	Display	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / Room group resp. Room / timerprogram			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
Vacation	TT.MM ... TT:MM	Setting the holiday period for room / roogroup.	X			X		X			X	
Mo 1...3 Tu 1...3 ... So 1...3	00:00 ... 24:00	Setting the cycle times for room / roogroup.	X			X		X			X	

16.3.3 Basic settings

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / room group resp. room / basic settings			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
request	Outside temperature control*, room control	Selection of the request for the room/room group. * If there is no outdoor sensor in the system, room control takes place.	X			X		X			X	
screed	off, functional heating, laying heating, functional- and laying heating	Selection of the screed heating programme for the room / room group, if supplied by a heating circuit.	X					X				
frost protection	off, -20 ... 3 ... 29 °C (resp. summer operation mode)	Setting of the outdoor frost protection temperature to activate the frost protection function for the room/room group.	X			X		X			X	
summer operation mode	off, frost protection ... 20,0 ... 30 °C	Setting of the outdoor temperature value to activate summer operation for the room/room group.	X			X		X			X	
room blocking	off, 0,1 ... 5 K	If the room setpoint is exceeded by the limit value set here, the demand on the energy generator is cancelled.	X	X	X	X		X1	X1	X1	X1	
room thermostat	off, 0,1 ... 5 K	If the room setpoint is exceeded by the limit value set here, the valves of the zones controlled by heatapp! floor close.	X	X	X	X	X					

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / room group resp. room / basic settings			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
frost protection mode	anti-freeze temperature , set-back temperature	Selection of the temperature level at which the frost protection function for the room/room group is to be regulated when activating the “Vacation” or “Standby” scenes. Regulation of room frost protection after set frost protection temperature or regulation of room frost protection after set settling temperature.	X	X	X	X	X	X	X	X	X	X
name	Alphanumeric, max. 15 characters, no special characters	Enter the name for the room/room group.	X	X	X	X	X	X	X	X	X	X

► Note

X1 when using a **heatapp! sense** wire

16.3.4 Room settings

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / room group resp. room / room settings			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
Comfort temperature	Economy temperature ...21,0... 28.0° C	Setting the room setpoint temperature for heating mode.	X	X	X	X	X	X	X	X	X	X
Economy temperature	Set-back-tempera- ture ...20,0° C... Comfort temperature	Adjustment of the reduced room setpoint temperature for heating mode.	X	X	X	X	X	X	X	X	X	X
set-back temperature	Anti-freeze temperature ... 18,0°C ... economy temperature	Setting the room setpoint temperature for set-back operation.	X	X	X	X	X	X	X	X	X	X
anti-freeze temperature	4,0 ... 16,0°C ... set-back temperature	Setting the room setpoint temperature for frost protection operation.	X	X	X	X	X	X	X	X	X	X
start optimation	off , 0,5 ... 8,0 h	Setting of the maximum bringing forward of the switch-on time (switching time) depending on the outdoor temperature.	X			X		X			X	
boost-offset	0,5 ... 2,0 ... 5,0 K	Setting of the increase of the room setpoint temperature with activated boost scene in the heatapp! app.	X	X	X	X	X	X	X	X	X	X
local operation	on , off	Activate the local setpoint setting on heatapp! drive and heatapp! sense control . The setting applies to all heatapp! drive and heatapp! sense control registered in this room.	X	X	X	X	X					

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / room group resp. room / room settings			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
window shutdown	off 5 ... 240 Min on	Off: Disables window shutdown, information only. Min.: Blocking of the heating function (adjustment to frost protection temperature) for the set duration. Turning wheel is blocked; scenes only take effect after closing the window. On: Blocks the heating function for the duration of the window opening. Turning wheel is blocked; scenes only take effect after closing the window.	X	X	X	X	X					

16.3.5 Heating mode

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / room group resp. room / heating mode			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
lowering mode	standby, heating	Selection of the operating mode for lowering operation. Frost-protected shutdown (standby) or set lowering temperature (heating)	X		X	X		X		X	X	
room factor	off, 5 ... 100 ... 500 %	Setting the room factor (influence of room temperature). On request = outside temperature control	X		X	X		X1		X1	X1	
antifreeze cycle	off, 0,5 ... 360,0 Min	Selection of the operating mode of the weather-compensated frost protection function for the room/room group. If required = outside temperature control and no room sensor (drive/sense) assigned. Off: Permanent system frost protection Time: Cycle time of the system frost protection	X			X		X			X	
heating curve	off, 0,5 ... 1,0 ... 3,5	Adjustment of the heating characteristic slope. On request = outside temperature control.	X		X	X		X		X	X	
heat system	1,0 ... 10,0	This parameter refers to the type of heating system and must be adapted to the heating system used. The exponent determines the curve course of the heating curve. Underfloor heating: 1.10; Radiator: 1.30; Convector: 1.40; Ventilation >2.00. If required = outside temperature control.	X		X	X		X		X	X	
Increase of the request	- 5.0 ... 0.0 ... 20 K	Setting the requirement increase for the room. Surcharge on the setpoint for transfer to the heating circuit.	X		X	X		X		X	X	
Regulation gain	1.0 ... 8.0 ... 100 %/K	If required = Room control. Adjustment of the gain for the PI controller of the single room control.	X		X	X		X		X	X	
Regulation adjust time	5 ... 15 ... 24 0 Min	If required = Room control. Adjustment of the reset time for the PI controller of the single room control.	X		X	X		X		X	X	
Regulation scan time	1 ... 20 ... 30 Min	If required = Room control. Setting the sampling time for the PI controller of the single room control.	X		X	X		X		X	X	

► Note

X1 when using a **heatapp! sense wire**

16.3.6 Cooling mode

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... Expert / room group resp. room / cooling mode												
cooling release	off, on	Selecting "On" determines that the room can participate in cooling.	X	X	X	X	x					
room thermostat	off, 0,1K ... 5,0K	Off: Cooling is not switched off above setpoint temperature < actual temperature. 0.1 K ... 5.0 K: Setting of the point at which the system stops cooling when the room temperature falls below the setpoint temperature.	X	X	X	X	X					

16.3.7 Reset

Menu / Parameter	Adjust- ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... Expert / room group resp. room / reset												
reset	off, Set	Reset the parameters in the "Room group/heating circuit" menu to factory setting according to the access authorization.	x	x	x	x	x	x	x	x	x	x

16.4 Menu – energy generator

16.4.1 Information

Menu / Parameter	Display	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / energie generator / information			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
state	heating	EG serves the request	X	X	X	X		X	X	X	X	
	off	EG switched off	X	X	X	X		X	X	X	X	
	manual	Manual mode EG active	X	X	X	X		X	X	X	X	
	emission	Emission measurement EG active	X					X				
energy generator	on	EG is active	X					X				
	off	EG is not active	X					X				
Setpoint	xx V	Setpoint in Volt at 0-10V output			X					X		
Setpoint	xx °C	Display of the current setpoint for the energy generator	X		X	X		X		X	X	
is temperature	xx °C	Displays the current actual temperature of the energy generator.	X			X		X			X	
return flow	xx °C	Display of the current return flow temperature of the EG-OT				X					X	
modulation	xx %	Display of the current modulation power of the EG-OT				X					X	
burner starts	xx	Display of the number of burner starts of the EG-OT				X					X	
burner runtime	xx h	Display of the burner running time of the EG-OT				X					X	

16.4.2 Service

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... Expert / energy generator / service												
manual	off, minimum temperature ... maximum temperature	Activate manual operation for the energy generator.	X	X	X	X		X	X	X	X	
Reset counter	Off, set	Reset the counter of burner starts and burner running time				X					X	

16.4.3 Basic settings

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / Energieerzeuger / Basic settings			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
summer lock	off, -19°C ... +30°C	If the current outdoor temperature exceeds the set summer lockout, all requirements for the energy generator are blocked. The energy generator is no longer in operation.				X					X	
winter lock	off, -20°C ... +30°C	The energy generator is not switched on as long as the outdoor temperature is below the set value.				X					X	
fault release	on, off	If the current outdoor temperature is disturbed (interruption or short circuit), the influence on the EG can be defined here. The EG can remain enabled (On) (without influence of the outside temperature fault) or be disabled (Off).				X					X	
Name	Alphanumeric, max. 15 characters, no special characters	Enter the name for the energy generator.	X	X	X	X		X	X	X	X	

16.4.4 Heating

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... Expert / energy generator / heating												
minimum temperature	5 ... 38°C ... maximum temperature	In combination with an automat as EG, the minimum EG temperature for the heating requirement can be set within the limits of the automat setting.				X					X	
maximum temperature	Minimum temperature ... 80 ... 95°C	In combination with an automat as EG, the maximum EG temperature for the heating requirement can be set within the limits of the automat setting.				X					X	

16.4.5 Reset

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... Expert / energy generator / reset												
reset	off, set	Reset the parameters in the "energy generator" menu to factory settings according to the access authorization.	X	X	X	X		X	X	X	X	

16.5 Menu – regulator

This menu lists all information values of the THETA regulator.

The individual parameter descriptions can be found in the product documentation THETA under www.ebv-gmbh.de/downloads.

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... Expert / regulator												
information	information	Display of all THETA parameters, which can also be called up on the display.	X					X				
parameter	parameter	Access to all THETA parameters. For a description, please refer to the THETA documentation.	X					X				

16.6 Menu – fault message

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... Expert / fault message												
fault 1-10		This menu lists the last 10 fault messages of the heatapp! system.	X	X	X	X	X	X	X	X	X	X
reset	reset	Deletes the history of error messages.	X	X	X	X	X	X	X	X	X	X

16.7 Menu – config

The "Config" menu can be used to check information on the configuration of the system and the values available at the inputs.

In addition, you can make further adjustments to the system that cannot be mapped using the setup wizard.

16.7.1 Information

In the "Information" submenu, the configuration of the system and the values present at the inputs can be checked.

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / config / information			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
measurements	E1	Display of temperature value Input E1 (sense wire)	x	x	x	x	x	x	x	x	x	x
	Room 1 ... n	Display of room temperature values from “heatapp! drive” or “heatapp! sense”	x	x	x	x	x					
connectors assignment	E1:EF	Display of the connector assignment of the inputs and outputs at the “heatapp! base”.	x	x	x	x	x	x	x	x	x	x
	A1:ARSP		x	x	x	x	x	x	x	x	x	
	A2:10V	If a function is assigned to an input/output, the function abbreviation is displayed in addition to the input/output number.	x	x	x	x	x	x	x	x	x	x
Room assignment	room/room group	Display of the allocation of rooms/room groups to the heating circuits in the “heatapp! ” system. If a name is assigned to a heating circuit / room, the name is also displayed.	x	x	x	x		x	x	x	x	

16.7.2 Function

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
... expert / config / function			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
energy generator	off	No energy generator available.	x	x	x	x	x	x	x	x	x	x
	Temperature signal 0-10V	Temperature setpoint via analogue 0... 10V signal	x	x	x	x	x	x	x	x	x	x
	release contact	Release of an external energy generator via switching contact	x	x	x	x	x	x	x	x	x	x
	automat (not for base T2B)	Control of energy generators via data bus protocol OpenTherm		x	x	x	x		x	x	x	x
	regulator(T2 B/BUS) (only for base T2B)	Control of the THETA controller via T2B bus	x	x	x		x	x	x	x		x
hot water	off	Hot water supply not activated	x			x		x			x	
	automat	Hot water supply via automat (OT)				x					x	
	regulator (T2B/BUS)	Hot water supply via T2B controller	x					x				

16.7.3 room group resp. room

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... expert / config / function / room group resp. room			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
supply by	off	No energy generator available	x	x	x	x		x	x	x	x	
	energy generator	Active energy supply by energy generator via switch contact or 0-10V		x	x				x	x		
	automat	Active energy supply by the energy generator (setpoint transfer) via OpenTherm Bus.				x					x	
	regulator EG	Selection of the heating circuits available in the THETA controller	x					x				
	regulator HC		x					x				
	regulator MC1		x					x				
	regulator MC2		x					x				
sense wire	off, E1:EF	Assignment of the wired room sensor heatapp! sense wire.	x	x	x	x	x	x	x	x	x	
room sensor	Display only!	Indication of the identifier of the room sensor "heatapp! sense" (ID of the Z-Wave module) CAUTION: Do not change or delete the entry, otherwise the radio component will not be recognized!	x	x	x	x	x					
valve n (1-4)	Display only!	Indication of the identifier of the valve "heatapp! drive" or "heatapp! floor" (channel) (ID of the Z-Wave module) CAUTION: Do not change or delete the entry, otherwise the radio component will not be recognized!	x	x	x	x	x					

16.7.4 Hardware

Menu / Parameter	Adjust-ment range	Description	Display condition depending on the EG connection with gateway					Display condition depending on the EG connection without gateway				
... Expert / config / hardware			T2B	Relais	0-10V	OT	off	T2B	Relais	0-10V	OT	off
calibration	E1 (or name) -5,0 ... 5,0	Temperature compensation of the wired room sensor “ heatapp! sense-wire ”.	x	x	x	x	x	x	x	x	x	x
	room 1 n (or name)	Temperature compensation of the radio room sensor “ heatapp! sense ” or “ heatapp! sense control ”	x	x	x	x	x					
output	test	Test switch contact A1	x	x	x	x	x	x	x	x	x	x

17 Function heating and cooling

By using room sensors **heatapp! sense** and **heatapp! drive** the current room temperature is recorded. The **heatapp! base** checks whether there is a temperature difference between the actual temperature and the setpoint temperature.

The **heatapp!** system regulates the existing heat demand. For this purpose the channels of the **heatapp! floor** as well as the valves of the **heatapp! drive** are opened or closed.

A cooling system requires two components:

1. there must be at least one **heatapp! floor** in the **heatapp!** system
2. cooling energy must be available.

A cooling operation by means of **heatapp! drive** is not possible.

Basically it has to be distinguished whether the **heatapp!** system is operated autarkic, that means without connection to an energy generator or whether there is a connection to an energy generator.

Autarkic **heatapp!** Systems

If the **heatapp!** system is operated without connection to a energy generator, the **heatapp!** system distributes the available heating or cooling energy according to the existing heating or cooling demand. A room control without weather control (outside temperature) is carried out. In case of existing heat demand the valves of the **heatapp! drive** on the radiator open and the **heatapp! floor** controls the corresponding valves of the underfloor heating. For systems with **heatapp! floor** there is also the possibility of cooling, which can be activated manually. If there is no need, the valves close.

Connection to a energy generator

The optimal connection of the **heatapp!** system to a energy generator is given by selecting "**Automat (OT/Bus)**" or "**Regulator (T2B/Bus)**": Please note that we offer two **heatapp! base** variants. This is the "standard" **heatapp! base**, which allows the possibility of OT-connection or the **heatapp! base T2B** version, which allows the connection to a THETA regulator. The THETA regulator, however, must be a THETA+, which is referred to as such from version 3.0 onwards.

This type of connection allows communication in both directions. The heat demand can be transmitted to the energy generator as required, optionally with reference to the weather conditions. In return, available information (temperatures and status) from the heating system is transmitted to the **heatapp!** system, which is then used for the control.

If the system has a **heatapp! floor**, the room cooling can be activated manually to distribute available external cooling energy.

Power generator selection "**Control output 0-10V**"

Via the selection "Control output 0-10V" there is a one-way communication from the **heatapp! base** to the energy generator. The heat demand is converted by the **heatapp! base** into a voltage 0-10V according to the adjusted characteristic diagram and transmitted to the energy generator. The energy generator executes the request on the basis of this voltage, but without a feedback to the **heatapp! base**. If the system has a **heatapp! floor**, the room cooling can be activated manually to distribute available external cooling energy.

Power generator selection "**Switch contact**"

The switching contact (potential-free) is also a one-way communication, a classic relay function. The potential-free switching contact can be used as a request contact or can be integrated into the control chain of the energy generator. The potential-free switching contact is closed when there is a heat demand. If there is no more heat demand in the system, the potential-free switching contact switches open. If the system has a **heatapp! floor**, the room cooling can be activated manually to distribute available external cooling energy.

17.1 Heating





Actuators **heatapp! drive**, the setpoint temperature is transmitted, which is automatically controlled by each actuator. If the set setpoint temperature is lower than the determined actual temperature, the **heatapp! drive** closes the radiator valve. If the set setpoint temperature is higher than the actual temperature, the radiator valve is opened.

heatapp! floor and **heatapp!** single floor receive the signal to "open" when the setpoint temperature is undershot by the actual room temperature detected by the **heatapp! sense**. The signal for "close" is given when the actual room temperature detected by the **heatapp! sense** exceeds the setpoint temperature, taking into account the values set in the "room thermostat" parameter.

17.2 Cooling

The **heatapp!** system offers the possibility to cool rooms independent of the energy source. If cooling energy is available, e.g. by means of an external cooling unit, "manual room cooling" can be activated in the system to enable cooling.

Cooling can only be done in connection with a **heatapp! floor** system. The cooling can be activated or deactivated for each room.

If there is a cooling demand and active cooling, the **heatapp!** system opens the floor channels of the rooms for which cooling has been activated. During manual cooling all heating requirements are blocked and will only be operated again when manual cooling is deactivated. The **heatapp!** system opens the floor channels for cooling (only in the rooms selected for cooling) in the operating mode Automatic Day (comfort  and economy  temperature) and Party . No cooling takes place during setback periods or frost protection phases and in standby mode .

► Note

The cooling function of the **heatapp!** system is only available to the expert and owner role. An operation with user role is not possible.

17.2.1 Operating manual room cooling

To enable room cooling, manual room cooling must first be activated in the System menu tree in the Expert menu. Switching from heating to cooling or conversely can be done both in the app and in the Expert menu.

Expert menu

Menu	Parameter	Description
Expert / System	Manual room cooling	Off On: Enables or disables the cooling function for the system
	Cooling mode	Off : Cooling function deactivated for all rooms On: Cooling function activated for all rooms for which cooling has been enabled.
Expert / Room	Cooling mode / cooling release	Off: Cooling deactivated for this room On: Cooling activated for this room
	Room thermostat	Off: Cooling is not switched off above setpoint temperature < actual temperature. 0.1 K ... 5.0 K: Setting of the point at which the system stops cooling when the room temperature falls below the setpoint temperature.

By selecting the system parameter " Manual room cooling" to "ON", the other parameters of the cooling function are enabled. With the cooling mode parameter in the system, cooling can be activated (no heating mode possible) and deactivated (no cooling mode possible) = switchover between heating and cooling.

For each room with **heatapp! floor** channel the parameter cooling mode is available to enable or disable the cooling release. The room thermostat value is used to determine the point at which the floor valve of this room closes when the room temperature falls below the setpoint temperature.

Rooms,









- that are not to be cooled can be recognised in the room information by the status room shutdown.
- that are to be cooled are indicated in the room information by the status Cooling.

heatapp! App

With activation of " Manual room cooling" in the menu Expert the snowflake symbol ❄ is available in the **heatapp!** app under setting rooms. By touching it the dialogue window "Global cooling function" opens for activation or deactivation of the cooling. By tapping on "Save" the setting is accepted, by tapping on "Back" the window closes without accepting the changes.

By tapping the rooms, the "Cooling function" switch can be used to activate or deactivate cooling for the respective room.



Display of the symbols in the room images when the global cooling function is activated:



Symbol	Cooling function switched on in the room	Status of the floor channel	Description
	Yes	On	Automatic daytime operating mode (comfort or economy temperature) Room cooling active Set temperature < Actual temperature
	Yes	Off	Automatic daytime operating mode (comfort or economy temperature) Room cooling not active Set temperature > Actual temperature
	Yes	On	Operating mode Party Room cooling active Set temperature < Actual temperature
	Yes	On	Desired temperature < Actual temperature by adjusting the rotary wheel Room cooling active
	Yes	Off	Desired temperature > Actual temperature by adjustment on the rotary wheel Room cooling not active, heating request blocked
	Yes	Off	Operating mode set-back temperature, standby or go Room cooling blocked Set temperature < Actual temperature
	No	Off	Room cooling deactivated Independent of set and actual temperature
	No	Not available	No floor channel assigned in the room, room cannot be cooled. Independent of set and actual temperature

18 Rectification of malfunctions

Malfunctions are displayed in the app on the home screen as a “warning triangle” symbol. It will be shown in the top centre and in the room. Depending on the setting, the user receives error messages via e-mail and/or as a push message via their operating device.

18.1 LEDs on heatapp! base

LED	 Network	 Control	Solution
Steady white	Start sequence step 1 - power supply switched on		Please wait until the starting process is completed.
	Boot error - If both LEDs light up in white after switch on for more than two minutes, disconnect the heatapp! base from the power supply and wait for one minute. Reconnect the heatapp! base to the power supply.		After the restart, the start process is usually completed. In very rare cases, even after a restart, the start process is not completed and the LEDs light up white again. In this case please contact our support.
Steady yellow	Start sequence step 2 - starting of the operating system		Please wait until the starting procedure is completed and both LEDs are green.
	Network connection made, no Internet connection possible. Check network configuration!	—	Please check Whether the router provides an Internet connection. Whether a fixed IP address was entered in heatapp! base which does not match the router. Whether a proxy was entered in the heatapp! base which does not match the router.
Flashes green	Start sequence step 3 - create network and Internet connection	Control system operates in manual mode	Network The system has detected a network connection and establishes the Internet connection. Control The system has been set to manual operation. To switch back to automatic mode, use the app as an owner or expert and select Settings > System > Expert > Energy generator > Service and set the manual mode to "OFF".
Steady green	Network and Internet connection created	Control ready for use	The system regulates during normal operation.
Flashes yellow	—	System update or parameter restore in progress.	Please wait until the update is completely installed and the LEDs are green again. This can take up to 20 minutes, depending on your available Internet connection and the volume of the update. Do not disconnect the internet connection and the power supply from the heatapp! base during this time.

LED	 Network	 Control	Solution
Steady red	No network connection possible.	Fault in the control, fault messages can be displayed via the heatapp! app with Owner or Expert level access.	<p>Network</p> <p>In this case the access to the heatapp! base menu is only possible with an installation stick or USB LAN adapter.</p> <p>Please check</p> <p>Whether the router is properly supplied with power.</p> <p>In case of a LAN connection</p> <p>If the LAN cable between the router and the heatapp! base is plugged in correctly and is ok (replace LAN cable if necessary)</p> <p>Whether any intermediate switches or powerline adapters are OK.</p> <p>In case of a WLAN connection</p> <p>Whether the WLAN network is available.</p> <p>Whether the WLAN stick is plugged into the heatapp! base.</p> <p>Whether a required WLAN repeater is ok.</p> <p>If the WLAN connection in the heatapp! base is established and the network key is correct.</p> <p>Control</p> <p>We have compiled the fault messages of the heatapp! system in chapter 0.</p>
Flashes red	System fault - update via Internet / USB necessary.	—	<p>The system has detected an error in the software and is in the self-repair process Recovery. This process takes between 30 and 40 minutes. Do not disconnect the internet connection and the power supply from the heatapp! base during this time. If possible, establish a LAN connection to the router (maybe temporarily).</p> <p>If there is still no change after one hour, the device must be sent in for repair.</p>

18.2 LED on heatapp! gateway

LED	Description	Solution
Steady white	Start sequence step 1 - power supply switched on	Please wait until the starting process is completed.
	Boot error - If the LED light up in white after switch on for more than two minutes, disconnect the heatapp! gateway from the power supply and wait for one minute. Reconnect the heatapp! gateway to the power supply.	After the restart, the start process is usually completed. In very rare cases, even after a restart, the start process is not completed and the LEDs light up white again. In this case please contact our support.
Steady yellow	Start sequence step 2 - starting of the operating system	Please wait until the starting procedure is completed and the LED is green.
	Network connection made, no heatapp! base found. Check network configuration!	Please check Whether the router provides an Internet connection. Whether a fixed IP address was entered in heatapp! base which does not match the router. Whether a proxy was entered in the heatapp! base which does not match the router. Whether the heatapp! base is in the same network and available (if necessary restart the heatapp! base)
Flashes green	Start sequence step 3 - create network and Internet connection	The system has detected a network connection and establishes the Internet connection.
Steady green	Network and Internet connection created	The system regulates during normal operation.
Steady red	No network connection possible.	In this case the access to the heatapp! gateway menu is only possible with an installation stick or USB LAN adapter. Please check Whether the router is properly supplied with power. In case of a LAN connection If the LAN cable between the router and the heatapp! gateway is plugged in correctly and is ok (replace LAN cable if necessary) Whether any intermediate switches or powerline adapters are OK. In case of a WLAN connection Whether the WLAN network is available. Whether a required WLAN repeater is ok. If the WLAN connection in the heatapp! gateway is established and the network key is correct.

LED	Description	Solution
Flashes red	System fault - update via Internet / USB necessary. Contact your contractor / installation company.	The system has detected an error in the software and is in the self-repair process Recovery. This process takes between 30 and 40 minutes. Do not disconnect the internet connection and the power supply from the heatapp! gateway during this time. If possible, establish a LAN connection to the router (maybe temporarily). If there is still no change after one hour, the device must be sent in for repair.
Steady purple	No Z-Wave module function	Disconnect the power supply of the heatapp! gateway for 30 seconds. Due to the following restart, the Z-Wave module will also be restarted and will work again.
Steady white for more than 2 minutes	Boot process cannot be completed	Power supply not sufficient or software damaged. Please test whether the power supply is OK. If possible, replace the plug-in power supply unit. You can use any commercially available Micro-USB cable, e.g. a mobile phone charging cable. If even this does not help, the software is damaged and the device must be sent in for repair.

18.3 Fault messages

18.3.1 heatapp! drive

Display	Description	Solution
E1	The radio transmitter is broken. The connection to the heatapp! gateway can no longer be maintained.	No repair possible. The heatapp! drive must be replaced.
E2	The front temperature sensor is broken. The temperature can no longer be determined correctly.	No repair possible. The heatapp! drive must be replaced.
E3	The rear temperature sensor is broken. The temperature can no longer be determined correctly.	No repair possible. The heatapp! drive must be replaced.
E4	The motor drive is broken. The valve can no longer be moved.	No repair possible. The heatapp! drive must be replaced.
E5	The heatapp! drive did not receive a response from the heatapp! gateway 3 times. The transmission interval is reduced to 30 minutes.	<ul style="list-style-type: none"> • Check the position and function of the repeaters • Check the position of the antenna of the heatapp! floor (if available in the system) • Perform the function "Repair radio system". • Check the connection status by pressing the up or down button of the heatapp! drive and check the time stamp of the heatapp! drive in the gateway menu under Radio Components > Connection Status (must not be older than 5 minutes and must update itself within 40 seconds after pressing the up or down button on the heatapp! drive) • If necessary move the heatapp! gateway so that it is positioned centrally between the radio components. • Change the orientation of the heatapp! gateway so that it stands upright and the cables go off to the right. • If necessary, use a repeater to improve radio coverage.

18.3.2 Fault messages of the heatapp! system

Message	Cause	Solution
The current version of your heatapp! base does not support all the required functionalities of your heatapp! gateway . Please update your heatapp! base on the update page.	Function compatibility of heatapp! base and heatapp! gateway do not match.	The heatapp! base must be updated. Go to the app and select Settings > System > System Management and update the heatapp! base .
The current version of your heatapp! gateway does not support all the required functionalities of your heatapp! base . Please update your heatapp! gateway on the update page.	Function compatibility of heatapp! base and heatapp! gateway do not match.	The heatapp! gateway must be updated. Go to the app and select Settings > Gateway > System Management and update the heatapp! gateway .
The heatapp! base is not connected to the heatapp! gateway right now	The error message is displayed after 15 minutes without communication between the devices. After 90 minutes, temperatures will not be displayed any more in the rooms.	<p>If the LED of the heatapp! gateway lights up light green or yellow (see also document "LED heatapp! gateway"), the cause of the malfunction is almost exclusively in the network area. Often the error occurs when one or both heatapp! devices are connected to the network via WLAN/Wi-Fi. WLAN/Wi-Fi networks are prone to interference even if the user cannot always identify this. Heatapp! frequently requires somewhat longer to reconnect to the WLAN/Wi-Fi network.</p> <p>If this error message occurs frequently, we always recommend to use a LAN cable to connect to the network—at least in order to test the cable. If the error message is no longer received when the LAN cable is connected, the cause is clearly to be found in the WLAN network. If necessary, a WLAN repeater or the connection of the heatapp! devices via Powerline Adapter may correct this problem.</p>
(Room name) radio component heatapp! drive (number) indicates a low battery	Battery warning message. Battery voltage <10%.	Batteries must be replaced.

Message	Cause	Solution
(Room name) radio component heatapp! drive (number) not responding	The communication of the respective heatapp! drive with the heatapp! gateway is interrupted for at least 90 minutes.	<ul style="list-style-type: none"> • Check the function and position of the repeaters • Check the position of the antenna of the heatapp! floor (if available in the system) • Check in Live View whether the line of the setpoint temperature is continuous or interrupted. A broken line indicates radio problems. • Executing the "Repair radio system" function • Check connection status • If necessary move the heatapp! gateway so that it is positioned centrally between the radio components. • Change the orientation of the heatapp! gateway, so that it stands upright and the cables go off to the right. • If necessary, use a repeater to improve the radio coverage.
(Room name) radio component heatapp! sense (number) indicates a low battery	Battery warning message. Battery voltage <10%.	Batteries must be replaced.
(Room name) radio component heatapp! sense (number) not responding	<p>The communication of the respective heatapp! drive with the heatapp! gateway is interrupted for at least 90 minutes.</p> <p>ATTENTION: The associated channel of the heatapp! floor or heatapp! single floor goes into emergency operation and opens the associated valves, as frost protection has top priority.</p>	<ul style="list-style-type: none"> • Check the function and position of the repeaters • Check the position of the antenna of the heatapp! floor (if available in the system) • Check in Live View whether the line of the setpoint temperature is continuous or interrupted. A broken line indicates radio problems. • Executing the "Repair radio system" function • Check connection status • If necessary move the heatapp! gateway so that it is positioned centrally between the radio components.

Message	Cause	Solution
		<ul style="list-style-type: none"> • Change the orientation of the heatapp! gateway, so that it stands upright and the cables go off to the right. • If necessary, use a repeater to improve the radio coverage.
(Room name) Radio component Actuator (number) not responding	The communication of the respective heatapp! floor with the heatapp! gateway is interrupted for at least 90 minutes.	<ul style="list-style-type: none"> • Check the function and position of the repeaters • Check the position of the antenna of the heatapp! floor (if available in the system) • Check in Live View whether the line of the setpoint temperature is continuous or interrupted. A broken line indicates radio problems. • Executing the "Repair radio system" function • Check connection status • If necessary move the heatapp! gateway so that it is positioned centrally between the radio components. • Change the orientation of the heatapp! gateway, so that it stands upright and the cables go off to the right. • If necessary, use a repeater to improve the radio coverage.
Interface is interrupted		This message occurs when the heatapp! base is connected to the energy provider via Open Therm or T2B bus and the data link is interrupted.

Message	Cause	Solution
Interface reports a malfunction		<p>This message occurs when the heatapp! base is connected to the energy provider via Open Therm or T2B bus and this interface cannot be reached.</p> <p>In this case, the technician can only proceed with troubleshooting while on-site. The error messages of the energy provider/controller can only be forwarded to a limited extent, and the error messages can only be used for information purposes. The user must find a remedy in order to repair the error.</p>
Interface with error code 1 (only with THETA controller is used)	Allocated energy source (heating circuit) from THETA is assigned to a room station.	heatapp! only can control the rooms / room groups, to which no room station is assigned. Remove the room station so that heatapp! can execute the control.
Interface with error code 2 (only with THETA controller is used)	Allocated energy source (heating circuit) from THETA is no longer available.	The heating circuit has been deactivated in the THETA hydraulic menu, so that it is no longer available for control.
Interface with error code 3 (only with THETA controller is used)	Customer code lock	The THETA is an OEM product which was not released for heatapp!

19 Technical data

19.1 heatapp! base



heatapp! base is the central control and regulation unit of the system.

heatapp! base can be connected to the heat generator of an existing system and transmit the heat demand to the heat generator. In this way genuine single room heat regulation with demand requests is possible in accordance with EN 15232.

Using the **heatapp! base** up to four **heatapp! drive** / **heatapp! floor** channels can be controlled per room. A maximum of 24 rooms can be controlled.

heatapp! base also communicates with the **heatapp! gateway** via the home network.

The connection to the home network can also be made via Wi-Fi using the **heatapp! Wi-Fi stick** which is available as an accessory.

Scope of delivery:

- **heatapp! base**
- Ethernet cable
- Bag of fasteners with cord grips

Article number: 9600301000

Technical data	
Installation	Wall mounting
Operating system	Linux
Connections	
<ul style="list-style-type: none"> • External 	<ul style="list-style-type: none"> • 2 x USB 2.0 • RJ45 Ethernet
<ul style="list-style-type: none"> • Internal (screw terminals) 	<ul style="list-style-type: none"> • Mains voltage L, N, PE • Energy generator relay • Energy generator bus (Open Therm) • 0 ... 10 V output • Sensor input (optional)
Power supply	230 V ±10 %, 50 Hz
Power consumption	5 VA
Protection class	II for wall mounting
IP rating	IP20
Fusing	User-supplied
Relay output	Potential-free contact, maximum 230V / 2A
Energy generator bus	Open Therm
Ambient conditions	
<ul style="list-style-type: none"> • Storage temperature • Operating temperature 	-25 ... +60 °C -10 ... +50 °C
Standards	EN 60730
Dimensions	160 x 160 x 34 mm (length x width x height)
Weight	335 g
Colour	Traffic white RAL 9016

19.2 heatapp! base T2B



heatapp! base T2B



heatapp! base is the central control and regulation unit of the system.

heatapp! base can be connected to the heat generator and with the THETA Controller of an existing system and transmit the heat demand to the heat generator. In this way genuine single room heat regulation with demand requests is possible in accordance with EN 15232.

Using the **heatapp! base T2B** up to four **heatapp! drive / heatapp! floor** channels can be controlled per room. A maximum of 24 rooms can be controlled.

heatapp! base T2B also communicates with the **heatapp! gateway** via the home network.

The connection to the home network can also be made via Wi-Fi using the **heatapp! Wi-Fi stick** which is available as an accessory.

Scope of delivery:

- **heatapp! base T2B**
- Ethernet cable
- Bag of fasteners with cord grips

Article numberr: 9600302000

Technical data	
Installation	Wall mounting
Operating system	Linux
Connections	
<ul style="list-style-type: none"> • External 	<ul style="list-style-type: none"> • 2 x USB 2.0 • RJ45 Ethernet
<ul style="list-style-type: none"> • Internal (screw terminals) 	<ul style="list-style-type: none"> • Mains voltage L, N, PE • Energy generator relay • Energy generator bus (Open Therm) • 0 ... 10 V output • Sensor input (optional)
Power supply	230 V \pm 10 %, 50 Hz
Power consumption	5 VA
Protection class	II for wall mounting
IP rating	IP20
Fusing	User-supplied
Relay output	Potential-free contact, maximum 230V / 2A
Energy generator bus	T2B Bus (THETA 2-wire Bus)
Ambient conditions	
<ul style="list-style-type: none"> • Storage temperature • Operating temperature 	<p>-25 ... +60 °C</p> <p>-10 ... +50 °C</p>
Standards	EN 60730
Dimensions	160 x 160 x 34 mm (length x width x height)
Weight	335 g
Colour	Traffic white RAL 9016

19.3 Drilling template heatapp! base / heatapp! base T2B

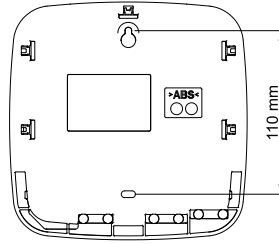


Fig.: 76: Drilling template **heatapp! base**

19.4 heatapp! gateway

heatapp! gateway



heatapp! gateway is the main communication interface for single room heat regulation. **heatapp! gateway** wirelessly sends and receives information to all radio components for control of the radiators (**heatapp! drive**), underfloor heating system (**heatapp! floor**), the electrical heaters (**heatapp! single floor**) and for room temperature measurement (**heatapp! sense** and **heatapp! sense control**) and serves as a message interface for **heatapp! base/heatapp! base T2B** and **heatcon! EC**.

Scope of delivery:

- **heatapp! gateway**
- Ethernet cable
- Power supply unit

Article number: 9600200000

Technical data	
Installation	Table device
Operating system	Linux
Wireless system	Z-Wave, Static Controller
Z-Wave frequency	Europe 868.4 to 869.9 MHz
Transmission power	max. 1,2 mW
Wi-Fi	802.11b/g/n
Connections	
<ul style="list-style-type: none"> • External 	<ul style="list-style-type: none"> • USB 2.0 • RJ45 Ethernet
Power supply	Power supply unit 5 V, 1 A
Power consumption	5 W
Ambient conditions	
<ul style="list-style-type: none"> • Storage temperature • Operating temperature 	-25 ... +60 °C -10 ... +50 °C
Dimensions	124 x 124 x 27.5 mm (LxBxH)
Weight	170 g
Colour	Traffic white RAL 9016

19.5 heatapp! drive




heatapp! drive is a wireless actuator for flow-controlling a radiator.

heatapp! drive communicates wirelessly with the **heatapp! gateway**.

Scope of delivery:

- Thermostat **heatapp! drive**
- Adapter M30x1.5 thread
- Adapter Danfoss RA

Article number:: 9600100000

Technical data	
Type of installation	At the radiator
Wireless system	Z-Wave
Z-Wave type	Thermostat
Synchronisation	Every 5 min
Power supply	Batteries 2 x 1.5 V AA alkaline
Battery life	approx. 2 years
Mechanical loading capacity (max. pressure from the valve)	70 N
Spindle movement	2 ... 3 mm at the valve (1 mm/s)
Maximum adjustment travel	4.5 mm
Ambient conditions	
• Storage temperature	-20 ... 65 °C
• Operating temperature	0 ... 40 °C
Colour	Traffic white RAL 9016
Dimensions	Length: 91 mm (incl. RA adapter), Ø: 51 mm
Weight	195 g (including RA valve adapter)
Checked according to the following standards	EN 60730-1, EN 60730-2-9, EN 60730-2-14

19.6 heatapp! floor



heatapp! floor is a control system for underfloor heating systems and -heating coils.

Up to eight channels each with up to three thermoelectric actuators can be controlled.

A maximum of 24 thermoelectric actuators (not supplied) can be connected.

heatapp! floor communicates wirelessly with the **heatapp! gateway**.

Scope of delivery:

- **heatapp! floor**
- Aerial
- Screw terminals
- Top-hat rail including fixing materials
- Clamp fittings

Article number : 9600801000

Technical data	
Type of installation	Top hat rail installation
Connections (screw terminals)	<ul style="list-style-type: none"> • Mains voltage L, N, PE • 8 x relay output L, N
Wireless system	Z-Wave
Z-Wave type	Binary switch
Synchronisation	5 min
Power supply	230 V \pm 10 %, 50 Hz
Power consumption	5 VA
Protection class	II when installed in a distribution cabinet
IP rating	IP00
Fusing	User-supplied
Contact rating relay output	1 A
Ambient conditions	<ul style="list-style-type: none"> • Storage temperature • Operating temperature
	-25 ... +60 °C -10 ... +50 °C
Standards	EN 60730
Colour	Magenta, RAL 320 30 30 or grey, RAL 7035
Dimensions	160 x 91 x 58 mm (length x width x height)
Weight	250 g

► Note

The **heatapp! floor** is supplied in the top-hat rail housing.

To achieve the IP20 rating, the **heatapp! floor** must be installed in a suitable control panel / distribution cabinet that requires a special opening tool.

19.7 heatapp! sense



heatapp! sense is a wireless room sensor for measuring the current temperature of the room.

heatapp! sense communicates wirelessly with **heatapp! gateway**.

Scope of delivery:

- **heatapp! sense**

Article number: 9600050000

Technical data	
Type of installation	Wall mounting
Wireless system	Z-Wave
Z-Wave type	Multilevel sensor
Power supply	Batteries 2 x 1.5 V AAA alkaline
Battery life	approx. 2 years
Temperature measuring range	-20 ... 50 °C
Ambient conditions	
• Storage temperature	-20 ... 65 °C
• Operating temperature	-10 ... 50 °C
Colour	Traffic white RAL 9016
Dimensions	79 x 79 x 18 mm (length x width x height)
Weight	75 g

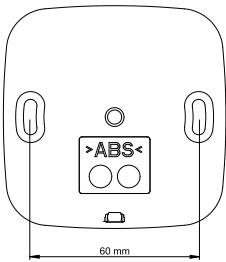


Fig.: 77: Drilling template **heatapp! sense**

19.8 heatapp! sense control



sense control



heatapp! sense control is a wireless room sensor for measuring the current temperature and the damp of the room.

heatapp! sense control communicates wirelessly with **heatapp! gateway**.

Permanent display of setpoint and actual temperature

Display damp

Scope of delivery:

- **heatapp! sense control**
- Battery 1 x 3 V CR2450

Article number: 9600052000

Technical data	
Installation	Wall mounting
Wireless system	Z-Wave
Z-Wave type	Setpoint Thermostate
Power supply	Battery 1 x 3 V CR2450
Battery life	approx. 1 year
Temperature measuring range	-20 ... 50 °C
Ambient conditions	
• Storage temperature	-20 ... 65 °C
• Operating temperature	-10 ... 50 °C
Colour	Traffic white RAL 9016
Dimensions	82 x 82 x 26 (width x height x depth)
Weight	90 g

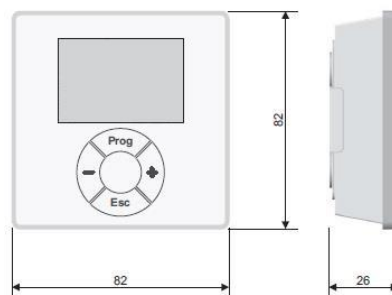


Fig.: 78: Dimensions **heatapp! sense control**

19.9 heatapp! repeater

repeater



The **heatapp! repeater** is used if there is no wireless connection between the radio modules and the **heatapp! gateway** due to the limited wireless range.

The **heatapp! repeater** is positioned between the radio module and the **heatapp! gateway**, i.e. plugged into a (230 V, 50 Hz) power socket.

Scope of delivery:

- **heatapp! repeater**

Article number: 9600920000

Technical data	
Installation	Plug-in device
Wireless system	Z-wave, repeater slave
Power supply	230 V, 50 Hz
Power consumption	1.8 W
Ambient conditions	
• Storage temperature	-25 ... +60 °C
• Operating temperature	-10 ... +50 °C
Dimensions	45 x 45 x 60 mm (length x width x height)
Weight	38 g
Colour	White

19.10 heatapp! repeater S



repeater S



The **heatapp! repeater S** is used if there is no wireless connection between the radio modules and the **heatapp! gateway** due to the limited wireless range.

The **heatapp! repeater S** is positioned between the radio module and the **heatapp! gateway**, i.e. plugged into a (230 V, 50 Hz) power socket.

Scope of delivery:

heatapp! repeater S

Power supply unit

fixing material

Article number: 9600921000

Technical data	
Installation	Wall mounting
Wireless system	Z-Wave, Repeater Slave
Power supply	230 V, 50 Hz
Power consumption	1,5 W
Ambient conditions	
• Storage temperature	-25 ... +60 °C
• Operating temperature	-10 ... +50 °C
Dimensions	124 x 124 x 27,5 mm (length x width x height)
Weight	75 g (150 g incl. power supply)
Colour	White

19.11 heatapp! WLAN-Stick



WLAN-Stick



The **heatapp!** Wi-Fi-stick is used if a direct connection of the **heatapp!** **base** to the home network via a network cable is not possible.

A Wi-Fi connection to the home network is made via the **heatapp!** Wi-Fi-stick.

The **heatapp!** Wi-Fi-stick is plugged into one of the two USB ports of the **heatapp!** **base**.

Scope of delivery:

- **heatapp!** Wi-Fi stick

Article number: 9600925000

Fig. similar

Technical data	
Wi-Fi	802.11b/g/n
Chip set	Matched to the heatapp!
Ambient conditions	
• Storage temperature	-25 ... +60 °C
• Operating temperature	-10 ... +50 °C
Weight	Approx. 20 g

19.12 heatapp! USB-LAN Adapter (Installationskit)

USB-LAN Adapter



The **heatapp!** USB-LAN Adapter is required for the initial operation of the **heatapp!** base and the **heatapp!** gateway.

A direct connection is made between the devices and the installation PC/laptop via the **heatapp!** USB-LAN adapter.

The **heatapp!** USB-LAN Adapter is plugged into one of the two USB ports of the **heatapp!** base or the **heatapp!** gateway.

Scope of delivery:

- **heatapp!** USB-LAN adapter
- Ethernet cable
- Transport bag

Article number: 9600915000

Technical data	
Connections / Interfaces	<ul style="list-style-type: none"> • USB matched to the heatapp! !
	<ul style="list-style-type: none"> • Ethernet RJ45
Cable length	15 cm with USB plug
Ambient conditions	
<ul style="list-style-type: none"> • Storage temperature 	-25 ... +60 °C
<ul style="list-style-type: none"> • Operating temperature 	-10 ... +50 °C
Dimensions	65 x 22 x 16 mm (length x width x height)
Weight	20 g
System requirements	
Connections / Interfaces	USB 2.0
Operating system	<ul style="list-style-type: none"> • Windows XP or higher • Apple Mac OS
Browser	<ul style="list-style-type: none"> • Mozilla Firefox* • Google Chrome* • Apple Safari*

► Note

* Firefox, Chrome und Safari haben eine Auto-Update-Funktion. Die jeweils aktuelle Browser-Version wird unterstützt.

19.13 heatapp! Installations-Stick



The **heatapp! Installation Stick** is used for the initial installation of the **heatapp!** system by the Expert.

A WLAN/Wi-Fi connection to the tablet or smartphone of the installer is created via the **heatapp! Installation Stick**.

The **heatapp! Installation Stick** is plugged into one of the two USB ports on the **heatapp! base** or the **heatapp! gateway**.

Scope of delivery:

- **heatapp! Installation-Stick**

Article number : 9600516000

Fig. similar

Technical data	
WLAN	802.11b/g/n
Chip	Tuned to heatapp! installation
Ambient conditions	
• Storage temperature	-25 ... +60 °C
• Operating temperature	-10 ... +50 °C
Weight	ca. 20 g

19.14 heatapp! checked Komponenten anderer Hersteller












Image	Manufacturer	Type designation	Function
	Aeon Labs LLC AEOTEC https://aeotec.com	Flush-mounted switch Aeon labs Aeotec Micro Switch G2 <ul style="list-style-type: none"> • DSC18103-ZWEU • DSC26103-ZWEU (no longer available)	Flush-mounted switch is integrated as a heatapp! single floor into the heatapp! system and used in conjunction with a heatapp! sense / sense control to switch electrical heaters.
	Aeon Labs LLC AEOTEC https://aeotec.com	Flush-mounted switch Aeotec Nano Switch <ul style="list-style-type: none"> • ZW139-C, EU • ZW116-C, EU mit Energy measurement function (not used in heatapp!) 	
	Aeon Labs LLC AEOTEC https://aeotec.com	Switch socket Aeotec Smart Switch 6 AEOEZW096-EU ZW096-C16	Switch socket is integrated as a heatapp! single floor into the heatapp! system and used in conjunction with a heatapp! sense / sense control to switch electrical heaters.
	Popp & Co. Große Johannisstr. 7 20457 Hamburg http://www.popp.eu	Switch socket Popp 009006	

Image	Manufacturer	Type designation	Function	
	Aeon Labs LLC AEOTEC https://aeotec.com	Window contact Aeotec Door/Window Sensor Gen5 DSB29-ZWEU	The window contact is integrated into the heatapp! system. The function must be configured in the Profi > Room > Room setting menu in the heatapp! base .	
	Cyrus Technology GmbH Hergelsbendenstraße 49 52080 Aachen http://www.cyrus-technology.de/	Window contact Cyrus Door/window contact ZUB_CYR10076	Settings	Function
			Off (factory setting)	Window deactivation off, information only
	Devol AG Charlottenburger Allee 67, 52068 Aachen https://www.devol.de	Home Control Tür-/Fensterkontakt Devol Modellnummer: MT2648 Artikelnummer 09355	5 min bis 240 min in 5 min steps	Blocking the heating function (regulation to frost protection temperature) for the set duration. The rotary knob is blocked; scenes only take effect after the window has been closed.
	D-Link (Deutschland) GmbH Schwalbacher Str. 74 D-65760 Eschborn Tel.: +49 (0)6196 /77 99-0 · www.dlink.com/de/de/	Door/Window Sensor D-link dch-z110	on	The heating function is blocked for the duration of the window opening. The rotary knob is blocked, scenes only take effect after the window has been closed.
	Aeon Labs LLC AEOTEC https://aeotec.com	Aeotec Range Extender heatapp! repeater DSD37-ZWEU	Z-Wave repeaters of the manufacturer Aeon Labs with the designation DSD 37-ZWEU are recognized as heatapp! repeaters and improve the radio coverage of a heatapp! system.	
	Aeon Labs LLC AEOTEC https://aeotec.com	Aeotec Range Extender 7 heatapp! repeater ZW189-C15	Z-Wave repeaters of the manufacturer Aeon Labs with the designation ZW189-C15 are recognized as heatapp! repeaters and improve the radio coverage of a heatapp! system.	
	Danfoss GmbH Carl-Legien-Str. 8 63073 Offenbach, Hessen Germany	Danfoss Z-Wave RS-Z 014G0160	Z-Wave room thermostat with display and possibility to adjust the setpoint temperature.	

20 Login data

20.1 Note the login data to your *heatapp!* system here:

User level	User name	Password
Expert	<hr/>	<hr/>
Owner	<hr/>	<hr/>

When connecting to the single room control *heatapp!* please record the password of the **heatapp! gateway** here:

heatapp! gateway	
Password:	<hr/>



Note

Create a establishment protocol and a data backup after completing the installation.

20.2 Access data lost - Forgotten password

During the setup of the **heatapp!** system, access data is created. For this purpose, a user with the expert role and a user with the administrator role must be created. The access data consists of a user name and password.

A separate, independent password is assigned for the **heatapp! gateway** during setup.

As of software version 2.2.39533, the **heatapp!** system has a "forgotten password" function. This function can be used to replace the access data. Read further in chapter 20.2.1.

For systems with an older software version, continue reading in chapter 20.2.2.

20.2.1 Forgotten password function

The function is only available at home in the local network and must be executed via a web browser (e.g. Mozilla Firefox, Google Chrome or similar) on the PC. The wizard of the "Forgotten password" function can be called up via the web browser. The system automatically detects if a **heatapp! gateway** is being used. When the wizard is executed, new access data is created for a user with the expert role and a user with the owner role. If a **heatapp! gateway** is connected to the system, a new password is also created for the gateway.

The Forgot Password Wizard ends with the saving of a txt document, which is saved on a USB stick.

When this USB stick is plugged into the **heatapp! base**, the device first checks the file on the stick. If there are suitable access data for an expert and an owner here,

- all previous users with the respective rights are deleted.
- all devices connected to the system are logged out (both via the web browser function and in the app).
- the new access data for a specialist and an administrator and, if available, a new password for the gateway, are read in.

Login data

This function protects the users from unauthorised changes of the access data by third parties, as all authorised users become aware of the password change through the logout.

► Note

If the forgotten password function is executed on a tablet or smartphone, it must be ensured that the file created can subsequently be saved on a USB stick.

<p>login</p> <p>Please login to the base using the expert or owner access.</p> <p>heatappl uses open source software. Click here to obtain more information.</p> <p>login: <input type="text"/></p> <p>password: <input type="password"/></p> <p>Forgot password</p> <p><input type="button" value="login"/></p>	<p>The "Forgotten password" link is located below the login screen.</p>
<p>Forgot password</p> <p>If you have forgotten your access data, you can create new ones here. To do this, follow the wizard and at the end save the resulting "password.txt" file on a USB stick.</p> <p>If the USB stick with the "password.txt" file is inserted into the unit, all existing access data and the user rights management are deleted and replaced by the user data created in the "password.txt" file.</p> <p><input type="button" value="next"/></p>	<p>The wizard guides you step by step through the function so that new access data can be generated for the system.</p>
<p>Forgot password</p> <p>Please enter username and password for a new owner access.</p> <p>login <input type="text"/></p> <p>password <input type="password"/></p> <p>repeat your password <input type="password"/></p> <p><input type="button" value="next"/></p>	<p>First, the user name and password for a new owner access must be created.</p>
<p>Forgot password</p> <p>Now please enter the new credentials for the expert-account.</p> <p>login <input type="text"/></p> <p>password <input type="password"/></p> <p>repeat your password <input type="password"/></p> <p><input type="button" value="next"/></p>	<p>Then the user name and password for a new expert access is created.</p>
<div data-bbox="76 1727 687 1883"> <p>attention</p> <p>The login name does not meet the requirements. It has to be at least 5 characters long and can only contain the characters a-z, A-Z, 0-9, äöü, ÄÖÜ and ß.</p> </div> <div data-bbox="76 1897 687 2047"> <p>attention</p> <p>Please enter a password with a minimum length of 5 signs which belongs to 2 character classes, without spaces and umlauts (äöü).</p> </div>	<p>The system automatically checks whether the new access data meet the necessary requirements. If this is not the case, a note appears.</p>

Forgot password

Please enter a new password for the gateway.

next

skip

If a gateway is connected to the **heatapp! base**, a new password for the gateway can be assigned here.

Note:

If the gateway password is to be changed and the software version of the gateway is lower than 2.2.39533, an update can be installed via USB stick for gateways with a software version of 2.1.xxx or higher so that the forgotten password function becomes available. The installation of the USB update is described in chapter 5.2.7.

Passwort vergessen

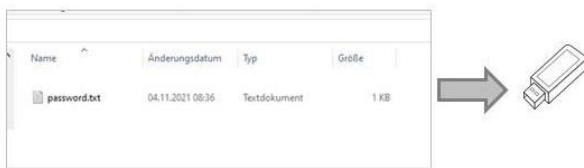
Die neuen Zugangsdaten sind erstellt. Mit „Speichern“ laden Sie die Passwort zurücksetzen Datei auf Ihren PC (in den eingestellten Download-Bereich) herunter. Kopieren Sie die Datei „password.txt“ auf einen leeren USB-Speicherstick.

Wird der USB Stick mit der „password.txt“ Datei an der heatap! base eingesteckt, werden alle vorhandenen Zugangsdaten sowie die Rechteverwaltung der Benutzer gelöscht und durch die in der „password.txt“ Datei angelegten Benutzerdaten ersetzt.

Speichern

zurück zum Login

Download the file to your PC / laptop



and save it on an empty USB stick.





Plug the USB stick into the **heatapp! base** for approx. 5 seconds.

The unit checks the file if it is OK,

- all previous users with the respective rights are deleted.
- all devices connected to the system are logged out (both via the web browser function and in the app).
- The new access data for a specialist and an administrator and, if available, a new password for the gateway, are created.

You can then log in with the new access data.

Login data

	<p>If the USB stick is plugged into the PC / laptop after the password has been changed, the log file can be displayed in addition to the password file.</p> <p>By opening the files, you can read out the contents.</p>
	<p>By opening the files, you can read out the contents.</p>

► Note

Never save a forgotten password file and a reset file on a USB stick. The reset file inevitably deletes all data on the unit and resets it to factory settings.

20.2.2 Reset without access data

To perform a factory reset without access data, an empty USB memory stick is required.

1. Use a blank USB memory stick with VFAT formatting
2. Create a blank text document and name it "Reset"
 - Open the USB stick on your PC / Laptop
 - Right-click
 - New
 - Text document
 - Rename it to "Reset.txt"
3. Disconnect **heatapp! base** from the LAN connection to the home network.
4. Connect **heatapp! base** to the power supply.
5. Insert the USB stick with the Reset.txt file in the **heatapp! base**.
6. Wait until the red network LED light is on.

The reset function erases all data from the devices. The data cannot be retrieved any more. Further use requires an entirely new set-up.

► Note

Resetting the **heatapp! gateway** results in the mandatory resetting of all radio components. For more information, see "Restoring the factory settings".

21 EbV – Learning

Learn more [here](#). Scan QR-Code or go to <https://learning.ebv-gmbh.de>



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