en:key

# Quick Start Guide




# Room Sensor
# Valve Controller

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# IMPORTANT INFORMATION

This quick start guide will help you to ensure that your devices always run reliably. You must read this guide and all other applicable documents before using the devices.

No previous special knowledge is required to commission and operate these devices. For issues that cannot be resolved using this guide, use other documents or contact an authorized service technician.

Other documents can be downloaded from the website *www.enkey.de* or directly via the QR code.

Other documents: Quick start guide, brief overview, assembly instructions, declarations of conformity

## » Symbols, signal words

The safety information and notices in this quick start guide are marked by graphical elements.

| Symbols | Description |
|---|---|
| **Caution**  | Safety information that helps to prevent property damage. |
|  | Basic safety instruction that guarantees the safe use and operational reliability of the devices. |

| Symbol | Description | Symbol | Description |
|---|---|---|---|
|  | Information that prevents malfunctions and potential extra work. |  | General information. |
|  | Information on disposing of the electronics. |  | Information on location and positioning. |
|  | Information on recycling. | | |

## » Basic safety instructions

Read and observe the following safety instructions before using the devices. This will reduce the risk of personal injury and damage to the environment or the devices.



This quick start guide is an integral part of the devices and must be kept easily accessible at all times.

If the devices are not used according to the instructions in this quick start guide, the existing protective measures will be impaired.

Unauthorized opening, conversion or modification of the devices is not permitted for safety reasons, and will result in the loss of all claims against the manufacturer.

**Caution**



**Housing with a sensitive surface.**

Shocks and abrasive cleaning materials can lead to scratches and a dulling.

- ▶ Remove the protective foil only after you have finished all work.
  Clean using a moist, lint-free cloth.
  Do not use any abrasive cleaning materials or cleaning products.

## » Proper use

The en:key room set devices are intended solely for the purpose of controlling the room temperature in closed, indoor rooms (e.g. residential and business rooms). The en:key room set is not suitable for the operation of underfloor heating. Each room requires a separate room sensor.

## » Wireless radio systems and health

The Institute for Social-Ecological Research and Education (ECOLOG) has issued an expert report confirming that the high-frequency emissions from wireless radio switches and sensors with EnOcean technology are significantly lower than those from equivalent conventional light switches. Other devices, such as wireless telephones, are higher than those of wireless radio switches with EnOcean technology by a factor of 1500.

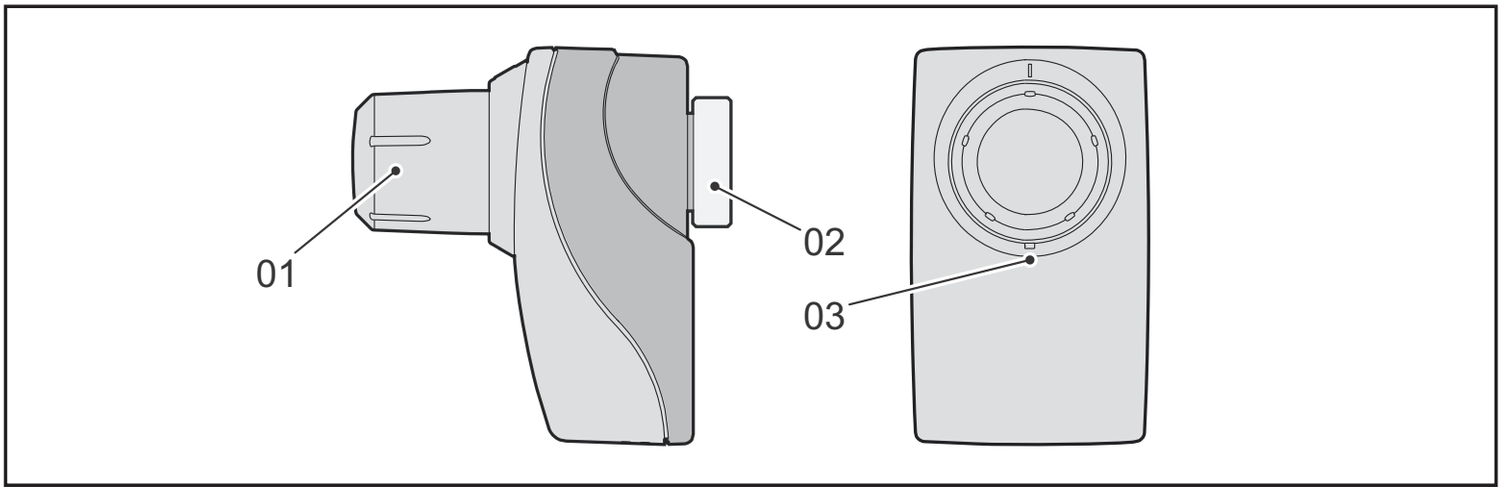
## » Data protection

To regulate room temperature according to the user's requirements, en:key only uses aggregate information. En:key processes this information in accordance with applicable data protection laws. The room sensor can be reset to the factory settings at any time using the “Restore factory settings” function. All information, such as the learned utilization time profile and radio partners, is permanently deleted when factory settings are restored.
→ *Restoring the defaults (S.32)*

# DEVICE OVERVIEW

## » Valve controller

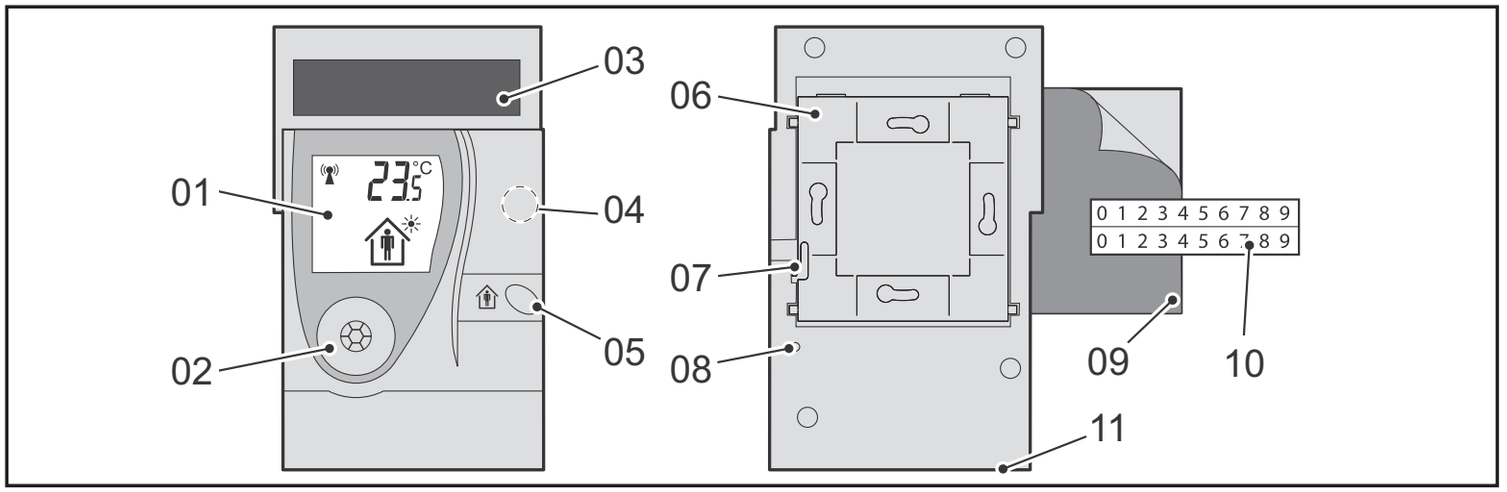
### Operating components, functional components




| Item | Designation | Explanation |
|---|---|---|
| 01 | Rotary knob | Adjusts comfort temperature<br>→ *Setting the comfort temperature (S.21)* |
| 02 | Octagon nut | Fastens the valve controller to the valve<br>→ *Mounting the valve controller (S.18)* |
| 03 | Registration button | Registers the valve controller<br>→ *Registering the valve controller (S.14)* |

# » Room sensor

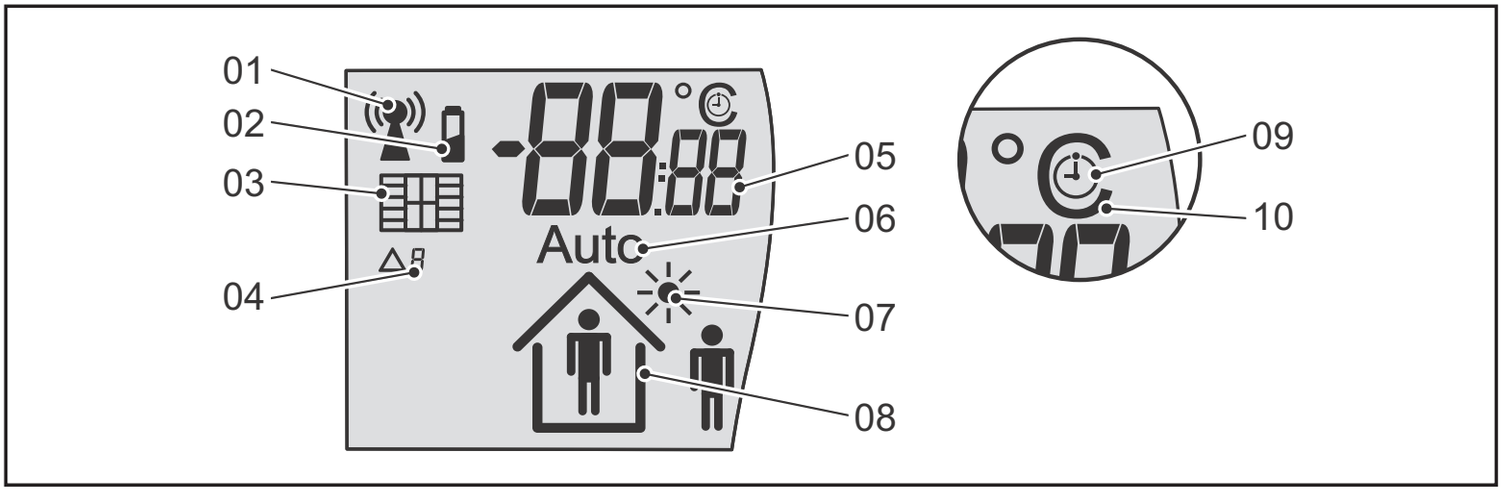
## Operating components, functional components




| Item | Designation | Explanation |
|---|---|---|
| 01 | Display | Shows information on the current state of the room sensor and valve controller |
| 02 | Occupancy sensor | Detects presence/absence for the utilization time profile |
| 03 | Solar cell | Generates energy for the room sensor. |
| 04 | Magnetic contact | Switches the display between room temperature/time<br>Starts the service level<br>→ *Toggling the display (S.28)*<br>→ *Activating the service level (S.35)* |

| Item | Designation | Explanation |
|---|---|---|
| 05 | Occupancy button | Switches the room sensor on (with setting button)<br>Temporarily changes comfort mode/economy mode<br>Starts valve controller registration<br>Sets the time and date<br>Edits vacation mode<br>→ *Testing the installation location (S.12)*<br>→ *Changing to comfort mode/economy mode (S.22)*<br>→ *Registering the valve controller (S.14)*<br>→ *Changing the time and date (S.25)*<br>→ *Start/change/end vacation mode (S.24)* |
| 06 | Wall mount | Fastens the room sensor to the wall<br>→ *Mounting the room sensor (S.16)* |
| 07 | Holding bar | Holds the room sensor in place on the wall mount |
| 08 | Setting button | Switches room temperature on (with occupancy button)<br>Starts registration procedure<br>Resets room controller to defaults<br>→ *Testing the installation location (S.12)*<br>→ *Registering the valve controller (S.14)*<br>→ *Restoring the defaults (S.32)* |
| 09 | Adhesive pad | Bonds the wall mount to the wall<br>→ *Mounting the room sensor (S.16)* |
| 10 | Adhesive digits | Identifies room sensor and wall mount<br>→ *Mounting the room sensor (S.16)* |
| 11 | Service connection | For authorized service technicians only (underside) |

## Display



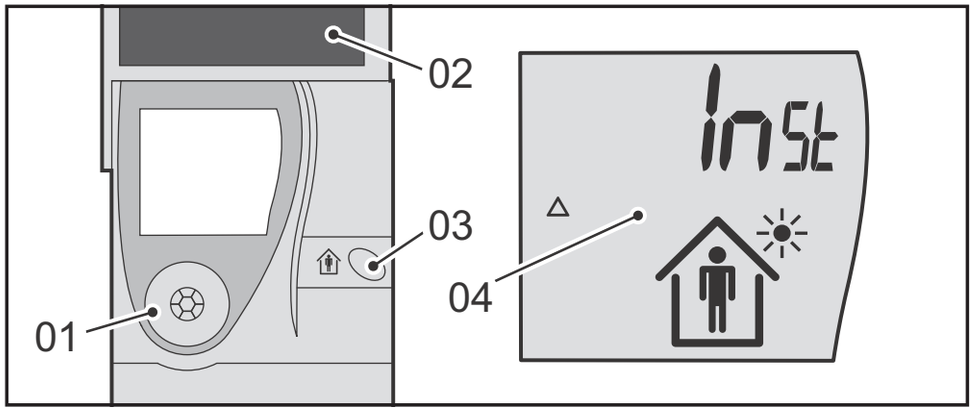

| Item | Designation | Explanation |
|---|---|---|
| 01 | Antenna | Wireless connection system status<br>→ *System status (S.40)* |
| 02 | Battery | Energy storage unit system status<br>→ *System status (S.40)* |
| 03 | Window | Rapid temperature drop detected<br>→ *System status (S.40)* |
| 04 | Code | Status messages<br>→ *System status (S.40)*<br>→ *Malfunctions (S.41)* |
| 05 | Information field | Display of the room temperature, time or texts<br>→ *Toggling the display (S.28)* |
| 06 | Auto | Utilization time profile is active (default/learned)<br>→ *Registering the valve controller (S.14)* |

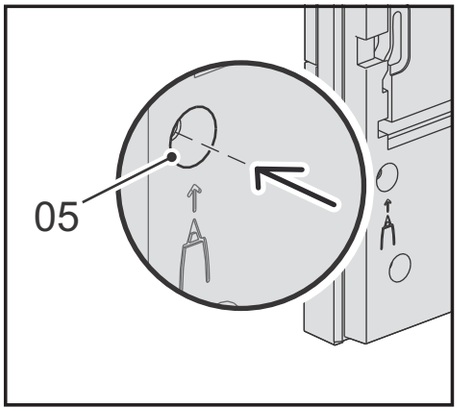
| Item | Designation | Explanation |
|---|---|---|
| 07 | Sun | Solar cell is active (test installation location)<br>en:key room set is in summer mode<br>→ *Testing the installation location (S.12)*<br>→ *System status (S.40)* |
| 08 | Occupancy | Occupancy sensor is active (test installation location)<br>Detected presence/absence<br>Vacation mode is active<br>→ *Testing the installation location (S.12)*<br>→ *Changing to comfort mode/economy mode (S.22)*<br>→ *Start/change/end vacation mode (S.24)* |
| 09 | o'clock | Information field displays the time (hh:mm) |
| 10 | Degrees Celsius | The information field displays the room temperature (°C). |

# COMMISSIONING

## » Testing the installation location

In order to ensure that the occupancy sensor functions correctly, mount the room sensor at a height of approx. 1.50 m above ground level.




| Item | Designation | Explanation |
|---|---|---|
| 01 | Occupancy sensor | Detects presence/absence for the utilization time profile |
| 02 | Solar cell | Generates energy for the room sensor |
| 03<br>05 | Occupancy button<br>Setting button | Switch on room sensor when used together. |
| 04 | Code, Sun, Occupancy, “InSt” | Room sensor switched on and installation location test active |

You want to switch on the room sensor and test an installation location for it.

▶ 1 Press the “occupancy button” and the “setting button” simultaneously and hold them down for 5 seconds.
*“rEs” is displayed briefly.*
*The “Code Δ”, “Sun” and “Occupancy” icons and the “InSt” text appear.*
*The room sensor is switched on; the occupancy sensor and solar cell are active.*

2 Position the room sensor at the potential installation location.

3 Check the “Sun” icon.

4 Move around the room and check the “Occupancy” icon.

| Evaluation | Display |
|---|---|
| Installation location good | The “Sun” icon is displayed permanently, and the “Occupancy” icon switches from “Person inside the house” to “Person outside the house” and back again |
| Installation location bad | The “Sun” icon is not displayed or … |
| | The “Occupancy” icon does not switch to “Person inside the house” and remains unchanged. |

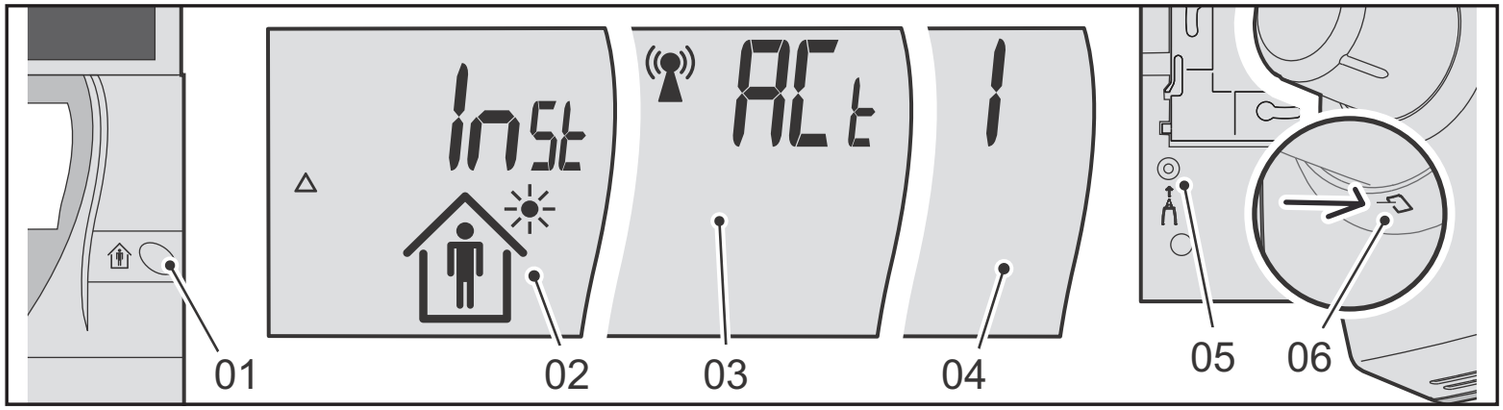
If the installation location is good, the room sensor can be mounted there.
If the installation location is bad, the test must be repeated in another location.



If the room sensor switches off after 15 minutes, switch it back on again.

# » Registering the valve controller

It is not possible to disconnect individual valve controllers from the room sensor or register them again once a registration procedure has been completed. The valve controllers must be registered in a new procedure.




| Item | Designation | Explanation |
|---|---|---|
| 01<br>05 | Occupancy button<br>Setting button | Switch on room sensor when used together. |
| 02 | Code, sun, occupancy, “InSt” | Initial Test installation location display<br>Room sensor switched on installation location test active |
| 03 | Antenna, “ACt” | Valve controller registration possible |
| 04 | 1 to 4 | Number of registered valve controllers |
| 06 | Registration button | Registers the valve controller |

You want to register one or up to four valve controllers on the room sensor.

►1 Press the “occupancy button” and the “setting button” simultaneously and hold them down for 5 seconds.
*“rEs” is displayed briefly.*

*The “Code Δ”, “Sun” and “Occupancy” icons and the “InSt” text appear.*
*The room sensor is switched on; the occupancy sensor and solar cell are active.*

2 Briefly press the “setting button”.
*The “ACt” text appears.*

3 Press and hold the “occupancy button” for 5 seconds.
*The “antenna” icon appears and flashes.*

4 Within 15 seconds, briefly press the “registration button.”.



After you press the “registration button” on the valve controller, another 15 seconds for the registration of the next valve controller start.

*Valve controller acknowledges the start with a signal tone.*
*Valve controller acknowledges the successful registration with two signal tones.*
*The number of registered valve controllers appears.*
*The flashing “antenna” icon disappears after approx. 15 seconds.*
*The “antenna” icon appears after approx. 45 seconds.*
*The configured initial display appears (default setting: temperature °C)*



If the valve controller acknowledges the registration with a series of tones or if “Code Δ2” appears on the display, the registration was not successful, and must be repeated.

If you hold down the “registration button,”, the valve controller switches off. The registration must be performed again.

Up to 10 minutes may elapse before the first data exchange. If the room sensor switches off after 15 minutes, registration was not successful and must be repeated.

The en:key room set is now in operation, and controls the room temperature in accordance with the current utilization time profile (default/learned).

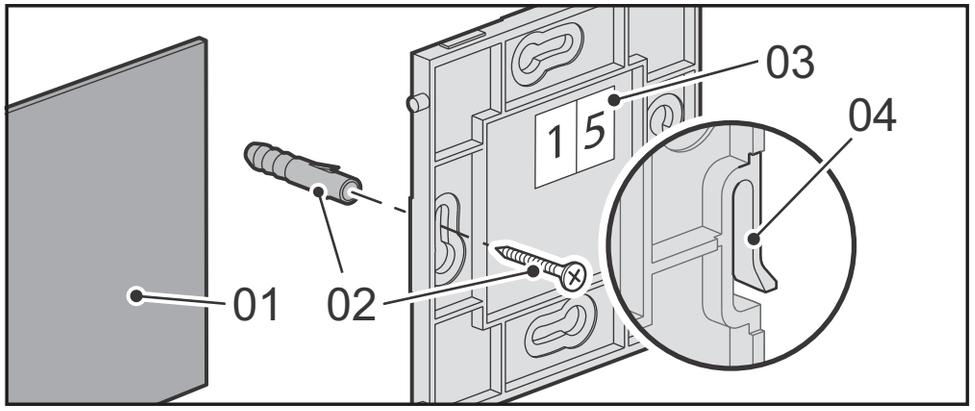
## » Mounting the room sensor

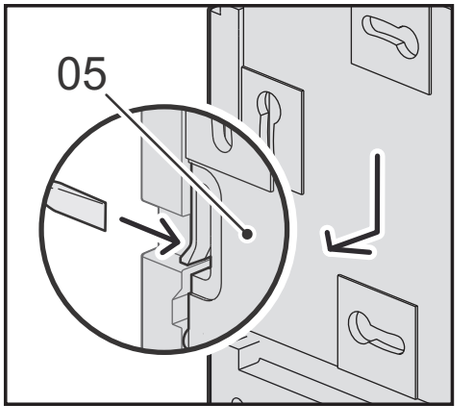
**Caution**

**Flush mounted cabling and piping at the installation location (electricity, gas, water).**

Cabling and piping can be damaged by drilling.

▶ Check the installation location for flush mounted piping and cabling, or contact a specialist.




| Item | Designation | Explanation |
|---|---|---|
| 01 | Adhesive pad | Bonds the wall mount to even surfaces |
| 02 | Fastening material | Select based on surface<br>(not included in scope of delivery) |
| 03 | Adhesive digits | Identifies room sensor and wall mount |
| 04 | Holding bar | Holds the room sensor in place on the wall mount |

| Item | Designation | Explanation |
|---|---|---|
| 05 | Wall mount | Room sensor wall fastening |

You want to bond or screw the wall mount to a wall.

| | |
|---|---|
|  | For a lasting bond, remove any dust and grease from the adhesive surfaces on the wall mount and the wall. |
|  | Position the wall mount so that the bar can be easily accessed. Ensure a distance of at least 10 cm from other objects (door frames, electrical sockets, cupboards, etc.). |
| | Observe the alignment of the wall mount. The bar must be mounted on the lower right side. |

▶1 Push in the bar on the wall mount and slide the wall mount down on the room sensor.

2 Remove the “wall mount” from the room sensor.

3 Hold the “wall mount” in place at the installation location.

4 Mark the position of the “wall mount” or the positions of two opposite mounting holes on the wall.

5a **Screws:** Drill two mounting holes in the marked positions.

6a If necessary, insert wall plugs into the mounting holes.

7a Hold the wall mount against the wall in the marked position and screw the wall mount in place tightly, making sure that it is aligned correctly.
*Go to item 8.*

5b **Bonding:** Remove a protective film from the adhesive pad and stick it to the smooth side of the wall mount.

6b Remove the second protective film from the adhesive pad and press the wall mount onto the marked position on the wall, making sure it is aligned correctly.

7b Press the “wall mount” onto the surface repeatedly and firmly.
*The pressing force is more important than the duration.*

8 Check the “wall mount” is mounted and aligned correctly on the wall.

9 Mark the room sensor and the wall mount with a unique number using the enclosed adhesive numbers.



If the room sensors are removed from their rooms, labeling them with a number makes it easier to assign them later and the valve controllers do not have to be registered again.

10 Place the room sensor on the wall mount.

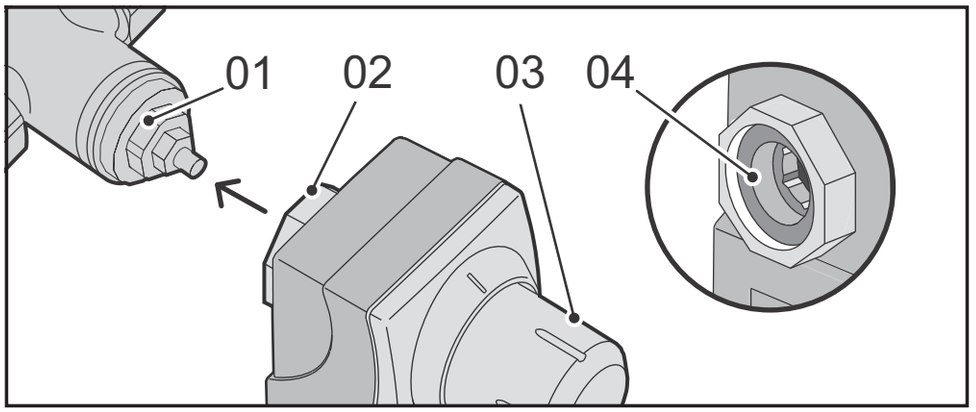
11 Slide the room sensor down up to the stop.
*The “holding bar” on the “wall mount” clicks audibly into place.*

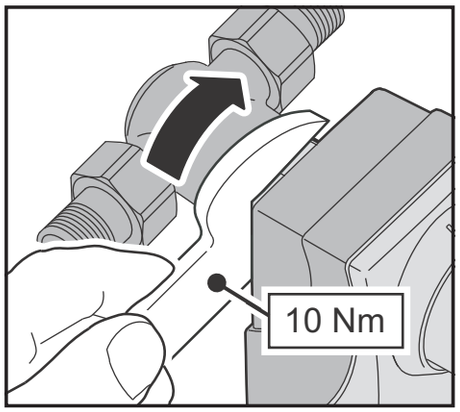
# » Mounting the valve controller

The valve controller is fastened directly onto radiator valves with an M30x1.5 DIN 13 connection (e.g. Heimeier, Honeywell, Cazzaniga, Oventrop - 1998 or later).

## Fastening the valve controller

The valve controller is fastened onto radiator valve using an octagon nut (M30x1.5 DIN 13).




| Item | Designation | Explanation |
|---|---|---|
| 01 | Radiator valve | Controls the heat supply for the radiator |
| 02 | Octagon nut | Fastens the valve controller to the radiator valve |
| 03 | Rotary knob | Adjusts comfort temperature |
| 04 | Flange | Connects valve controller with radiator valve |

| |
|---|
| Do not attach the flange and the octagon nut to the radiator valve in a tilted position. If they are attached in a tilted position, the power supply from the thermoelectric generator cannot be guaranteed. |
| The valve controller must not come into contact with the radiator when mounted. If the valve controller and radiator come into contact with one another, the power supply from the thermoelectric generator cannot be guaranteed. |

You want to fasten the valve controller onto a radiator valve.

▶ 1 Remove the old thermostat head from the radiator valve.

2 Turn the “rotary knob” on the valve controller to the maximum setting.

3 Ensure that the valve controller is not tilted when mounted on the “radiator valve”.

4 Tighten the “octagon nut” on the “radiator valve.”

5 Check that the valve controller is seated correctly on the radiator valve.

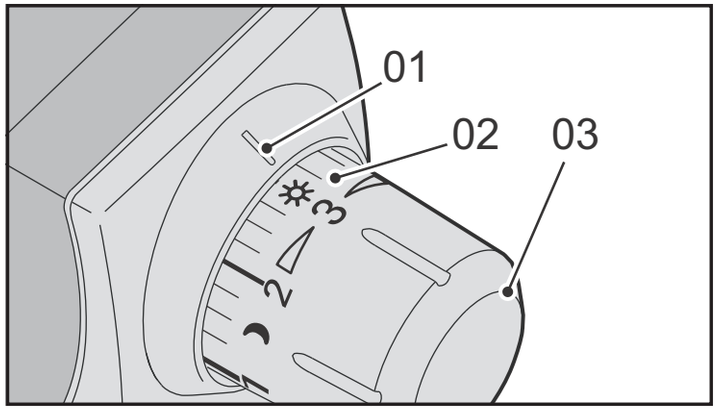
6 Turn the “rotary knob” to the comfort temperature you want.

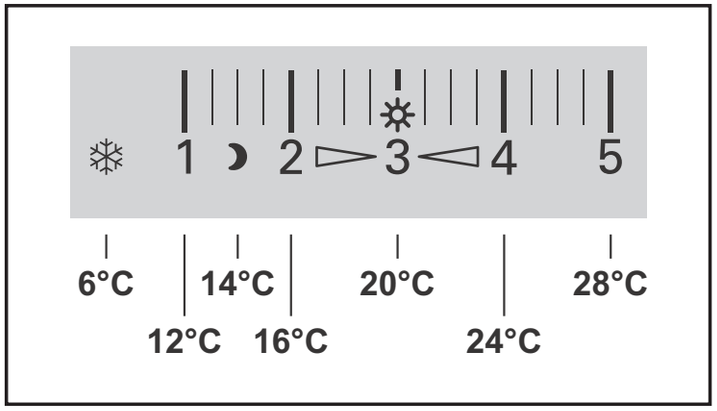
# OPERATION

## » Setting the comfort temperature

The time taken to reach the selected room temperature depends on the radiator and the size of the room.

In exceptional cases, settings on the heating system or insufficient radiator size can result in the set comfort temperature not being reached.




| Item | Designation | Explanation |
|---|---|---|
| 01 | Setting mark | Marks the active setting (comfort temperature) |
| 02 | Scale | Setting for comfort temperature |
| 03 | Rotary knob | Adjusts comfort temperature |

### Increasing the comfort temperature

It is too cold for you, and you want to increase the comfort temperature.

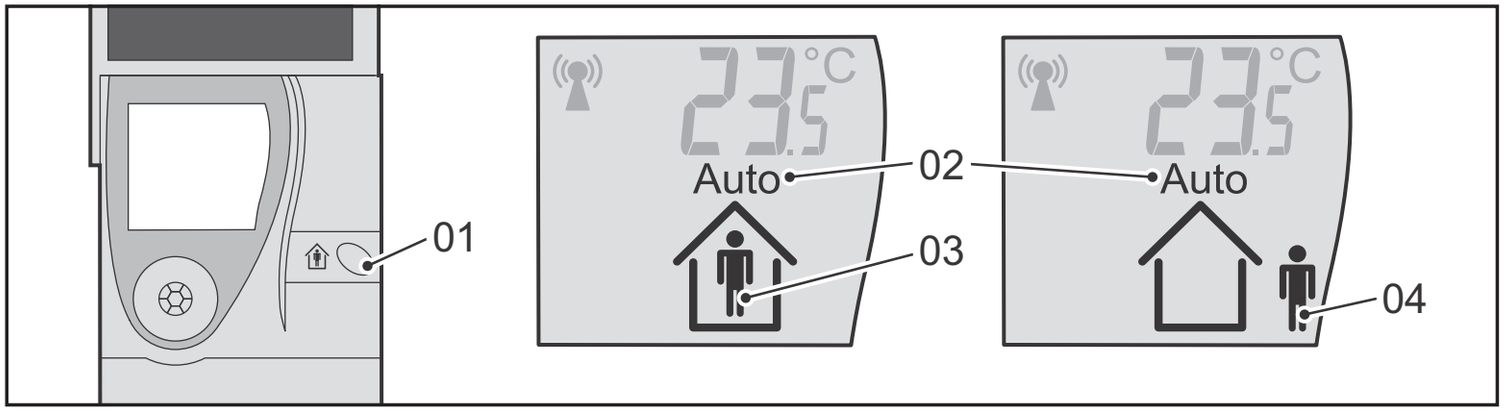
▶1 Turn the “rotary knob” to a higher setting.
*The room temperature rises to the set comfort temperature.*

### Lowering the comfort temperature

It is too warm for you, and you want to lower the comfort temperature.

▶1 Turn the “rotary knob” to a lower setting.
*The room temperature drops to the set comfort temperature.*

## » Changing to comfort mode/economy mode




| Item | Designation | Explanation |
|---|---|---|
| 01 | Occupancy button | Manually switches comfort mode/economy mode |
| 02 | Auto | Utilization time profile is active (default/learned) |
| 03 | Occupancy | Person in house – comfort mode |
| 04 | Occupancy | Person outside house – economy mode |

## Changing to comfort mode

You want to change to comfort mode.

▶1 Briefly press the “occupancy button.”
*The “Occupancy” icon changes to “Person in house.”*
*The “Auto” icon disappears.*
*Economy mode changes to comfort mode.*

The manually selected comfort mode stays on for 2 hours, then the learned utilization time profile reactivates and the “auto” icon appears.

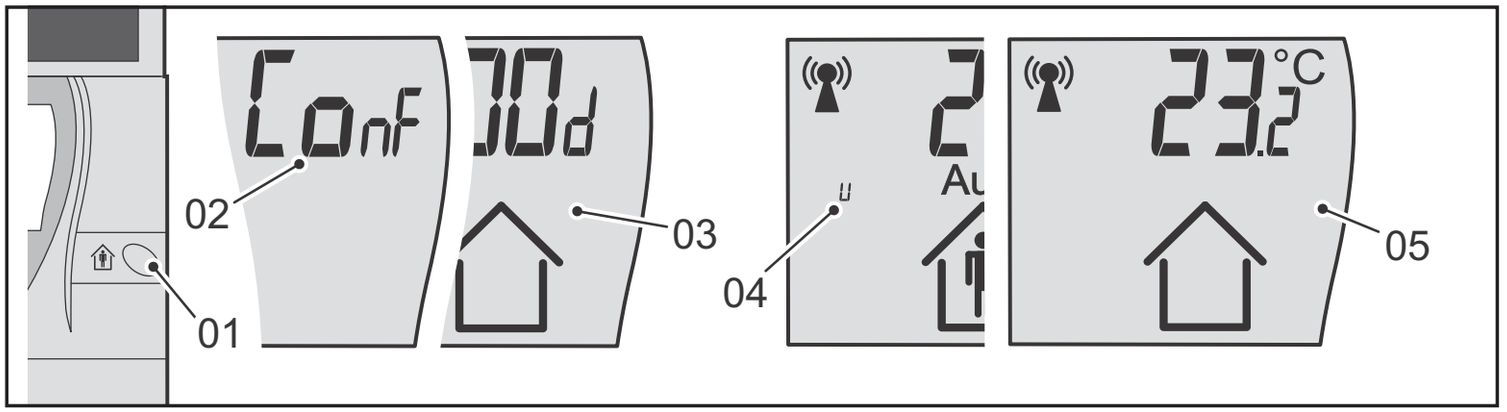
## Changing to economy mode

You want to change to economy mode.

▶1 Briefly press the “occupancy button.”
*The “Occupancy” icon changes to “Person outside.”*
*The “Auto” icon disappears.*
*Comfort mode changes to economy mode.*

The manually selected economy mode stays on for 4 hours, then the learned utilization time profile reactivates and the “auto” icon appears.

# » Start/change/end vacation mode




| Item | Designation | Explanation |
|---|---|---|
| 01 | Occupancy button | Starts/changes vacation mode |
| 02 | Configuration | Initial configuration display |
| 03 | Duration | Current duration of vacation mode |
| 04 | Code U | Vacation mode activated (from midnight) |
| 05 | Vacation display | Vacation mode active |

You want to start vacation mode for 01 to 31 days or change the specified duration.

►1 Press and hold the “occupancy button” for 5 seconds.
*The initial “configuration” or “information” display appears.*

2 Select the initial “configuration” display and press and hold the “occupancy button” for 5 seconds.
*The initial “duration” display appears.*

3 Press and hold the “occupancy button” for 5 seconds to activate the “duration” display.
*The “duration” display flashes.*

4 Briefly press the “occupancy button” multiple times until your required vacation duration is displayed.
*Vacation duration: 00 to 31 days.*



Briefly pressing the “occupancy button” increases the current setting by +1. Holding down the “occupancy button” continuously increases the displayed value.

5 Do not press the “occupancy button” again.
The set initial display appears after approx. 5 seconds, and *“Code U” also appears after approx. 3 seconds. Vacation mode activated.*
*Comfort mode/economy mode changes to vacation mode after midnight and shows the “vacation display”.*

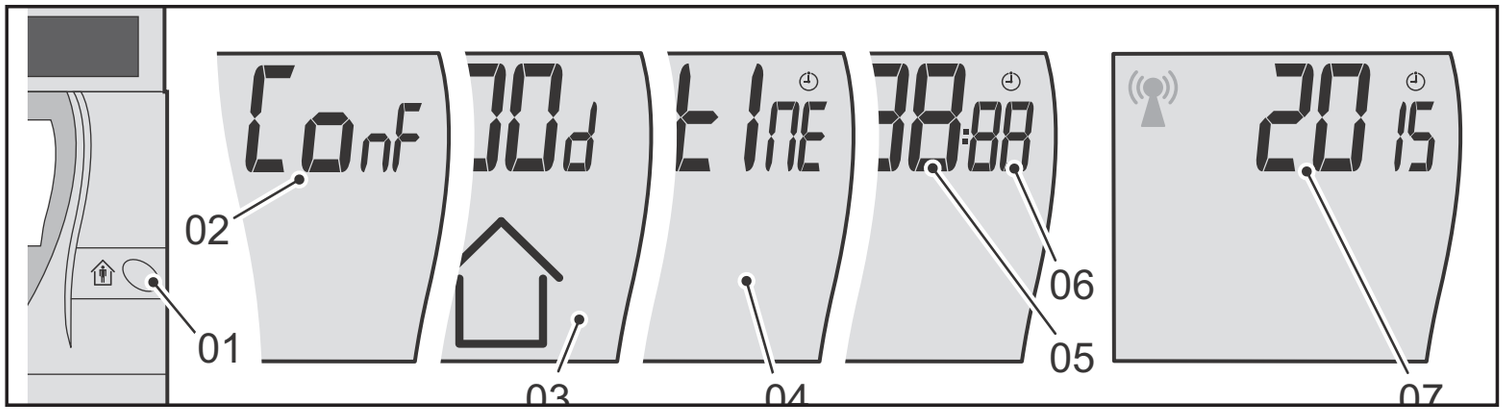
You want to deactivate vacation mode immediately.

▶1 Activate the “duration” display.
*The “duration” display flashes.*

2 Set the “duration” display to 00.
*The time or current room temperature appears after approx. 3 seconds.*
*The “Occupancy” icon changes to “Person in house” and “Code U” is no longer displayed.*
*Vacation mode is deactivated immediately and the utilization time profile is active again.*

# » Changing the time and date

The room sensor has a time and date (CET - Central European Time). The time and date are set in the factory and do not need to be entered manually.
The time is automatically adjusted for daylight saving/standard time.




| Item | Designation | Explanation |
|---|---|---|
| 01 | Occupancy button | Sets the time and date |
| 02 | Configuration | Initial configuration display |
| 03 | Duration | Current duration of vacation mode |
| 04 | Time/date | Initial display for time and date |
| 05 | Hour/day | Display of hour, day |
| 06 | Minute/month | Display of minute, month |
| 07 | Year | Display of year |

You want to change the time and date.

| |
|---|
| Briefly pressing the “occupancy button” increases the current setting by +1. Holding down the “occupancy button” continuously increases the displayed value. |
| If, when making settings, the “occupancy button” is not pressed for more than 10 seconds, the display switches back to the old display. Any settings that were previously made are not saved. |

▶1 Press the “occupancy button” for 5 seconds.
*The initial “configuration” display appears.*

2 Press the “occupancy button” for 5 seconds.
*The initial “duration” display appears.*

3 Briefly press the “occupancy button” until “tIne” is displayed.

4 Press the “occupancy button” for 5 seconds.
*The “Hour/day” and Minute/month” displays appear and the “Hour/day” display flashes.*

5 Press the “occupancy button” just once to confirm the displayed hour, or multiple times until the current hour appears.
*The “Minute/month” display flashes after approx. 3 seconds.*

6 Press the “occupancy button” just once to confirm the displayed minute, or multiple times until the current minute appears.
*The “Year” display flashes after approx. 3 seconds (current year).*

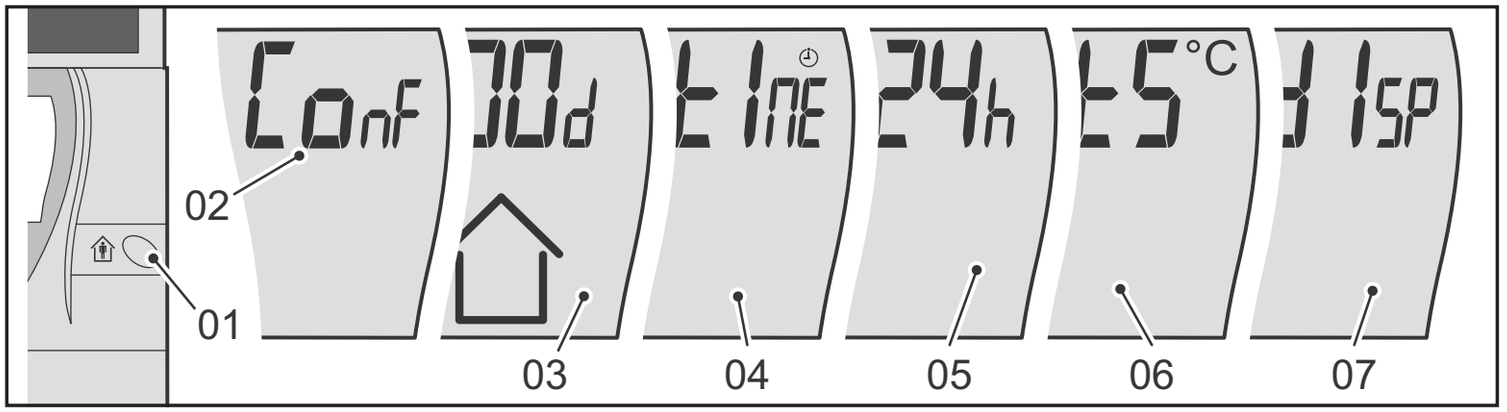
7 Press the “occupancy button” just once to confirm the displayed year, or multiple times until the current year appears.
*The “Minute/month” display flashes after approx. 3 seconds (current month).*

8 Press the “occupancy button” just once to confirm the displayed month, or multiple times until the current month appears.
*The “Hour/day” display flashes after approx. 3 seconds (current day).*

9 Briefly press the “occupancy button” to confirm the day displayed or press it multiple times until the current day appears.

10 Do not press the “occupancy button” again.
*The “Prog” icon appears and lines pass through the “Information field.”*
*The entries made are saved.*
*The set initial display appears after approx. 3 seconds.*

# » Toggling the display




| Item | Designation | Explanation |
|---|---|---|
| 01 | Occupancy button | Changes the initial display |
| 02 | Configuration | Initial configuration display |
| 03 | Duration | Current duration of vacation mode |
| 04 | Time/date | Initial display for time and date |
| 05 | 12/24 hours | Switches the time to 12/24 hours |
| 06 | Temperature | Switches the temperature to Celsius/Fahrenheit |
| 07 | Initial display | Switches the initial display to the temperature/date/time |

## Switching to 12/24 hours

You want to switch the display of the time to 12 or 24 hours.

►1 Press the “occupancy button” for 5 seconds.
*The initial “configuration” display appears.*

2 Press the “occupancy button” for 5 seconds.
*The initial “duration” display appears.*

3 Briefly press the “occupancy button” until you reach the “12h/24h” display.

4 Press the “occupancy button” for 5 seconds.
*The “12h” display switches to “24h” or the “24h” display switches to “12h”.*

5 Do not press the “occupancy button” again.
*The initial display appears after approx. 3 seconds.*
*The time display mode is saved.*

## Switching to Celsius/Fahrenheit

You want to switch the display of the temperature to Celsius or Fahrenheit.

▶1 Press the “occupancy button” for 5 seconds.
*The initial “configuration” display appears.*

2 Press the “occupancy button” for 5 seconds.
*The initial “duration” display appears.*

3 Briefly press the “occupancy button” until “Temperature” is displayed.

4 Press the “occupancy button” for 5 seconds.
*The “°F” display switches to “°C” or the “°C” display switches to “°F”.*

5 Do not press the “occupancy button” again.
*The initial display appears after approx. 3 seconds.*
*The temperature display mode is saved.*

## Changing the initial display

You want to switch the display of the temperature to the date or the time.

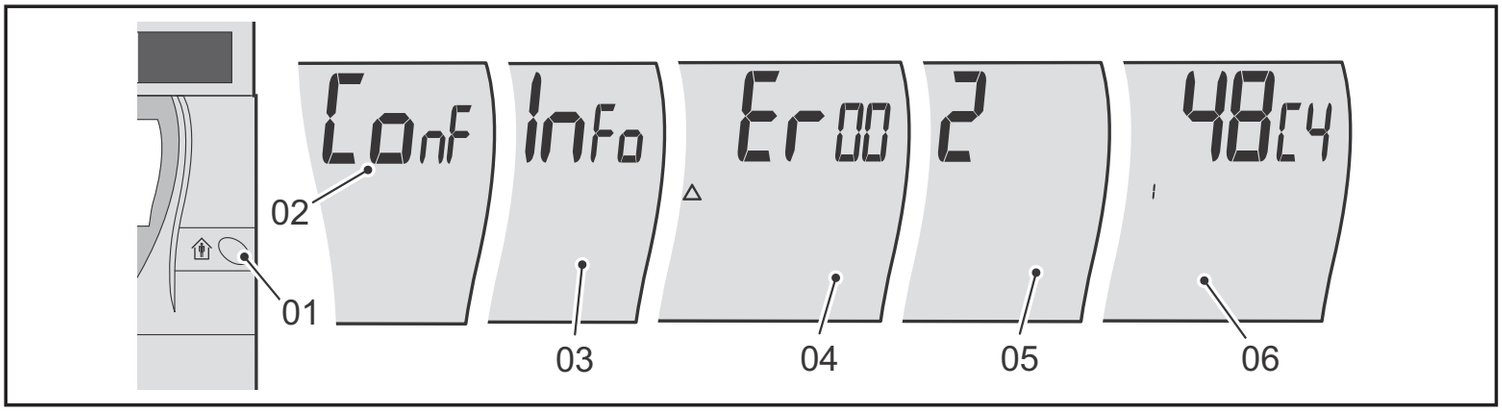
▶1 Press the “occupancy button” for 5 seconds.
*The initial “configuration” display appears.*

2 Press the “occupancy button” for 5 seconds.
*The initial “duration” display appears.*

3 Briefly press the “occupancy button” until “Initial display” is displayed.

4 Press and hold the “occupancy button” for 5 seconds.
*The initial display is shown in the next display mode.*
*(Temperature, date, time).*

# » Accessing information




| Item | Designation | Explanation |
|---|---|---|
| 01 | Occupancy button | Changes the initial display/display |
| 02 | Configuration | Initial configuration display |
| 03 | Info | Initial information display |
| 04 | Status code | System status display |
| 05 | Number | Display of the number of registered valve controllers |
| 06 | Radio ID | Radio ID display (last four hexadecimal digits) |

## Requesting the system status

You want to request the system status.

►1 Press the “occupancy button” for 5 seconds.
*The initial “configuration” display appears.*

2 Briefly press the “occupancy button” until “Info” is displayed.

3 Press and hold the “occupancy button” for 5 seconds.
*The “status code” display appears with the current system status.*
*→ System status (S.40)*

4 Do not press the “occupancy button” again.
*The initial display appears after approx. 3 seconds.*

## Requesting the number of registered valve controllers

You want to know the number of valve controllers that are registered on the room controller.

▶1 Go to the “status code” display.
*→ Requesting the system status (S.30)*

2 Briefly press the “occupancy button” until you reach the “Number” display.
*The initial “Number” display appears along with the current number of registered valve controllers.*

3 Do not press the “occupancy button” again.
*The initial display appears after approx. 10 seconds.*

## Requesting the radio ID of the registered valve controllers.

You want to see the radio ID of the valve controllers that are registered on the room controller.

▶1 Go to the “status code” display.
*→ Requesting the system status (S.30)*

2 Briefly press the “occupancy button” until you reach the “Radio ID” display.
*The radio ID of the first registered valve controller is displayed*
*(*last four hexadecimal digits).

3 Briefly press the “occupancy button” for the next radio ID.
*The radio ID of the next registered valve controller is displayed.*

4 Do not press the “occupancy button” again.
*The initial display appears after approx. 10 seconds.*

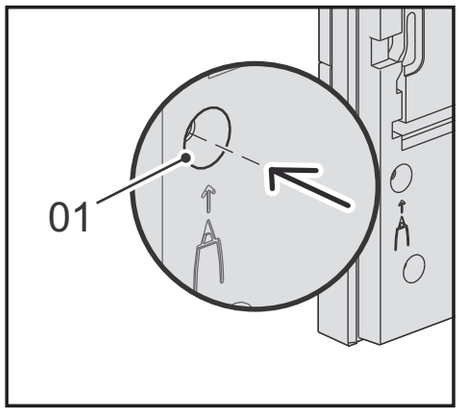
## » Restoring the defaults

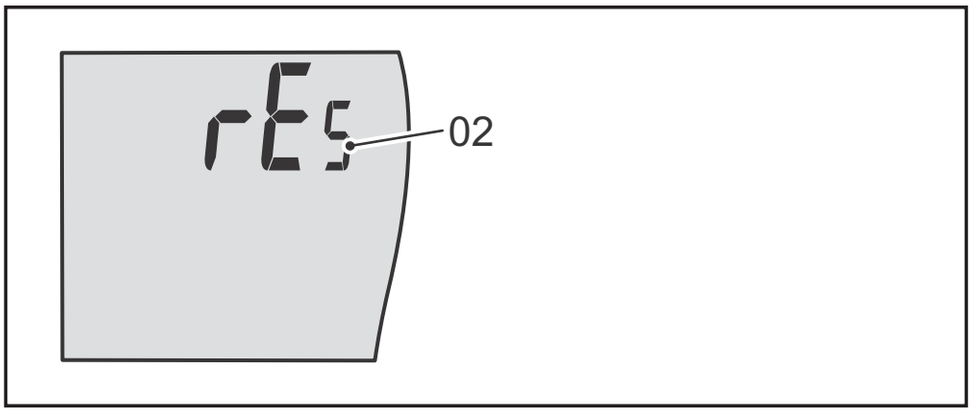
The delivery state of the room sensor can be restored by resetting it to its defaults. All information, the learned utilization time profile and the learned radio partners are deleted when defaults are restored.

After restoring the defaults, the valve controllers should be registered again, otherwise the room sensor will switch off after 15 minutes.
→ *Registering the valve controller (S.14)*

In its delivery state, the en:key room set controls the room temperature according to the default utilization time profile until a new utilization time profile is taught in.

*Default utilization time profile:*
*Comfort mode: 6:00 AM - 8:00 PM, comfort temperature*
*Economy mode: 8:00 PM - 6:00 AM, economy temperature*




| Item | Designation | Explanation |
|---|---|---|
| 01 | Setting button | Starts the reset procedure |

| Item | Designation | Explanation |
|---|---|---|
| 02 | Information field | Briefly displays “rEs” when logging off. |

You want to reset the room sensor to its defaults.

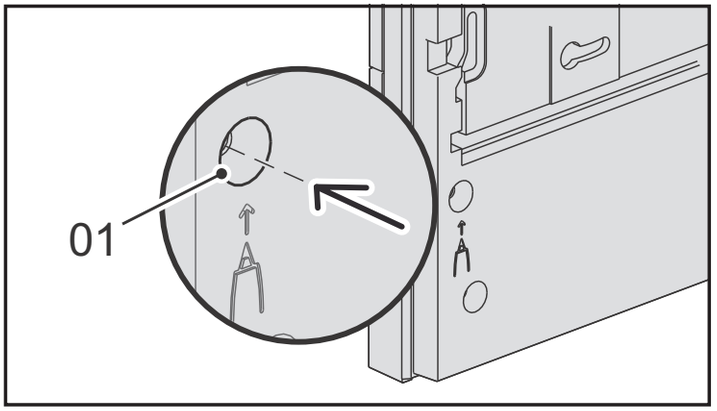
►1 Press and hold the “setting button” for 5 seconds.
*The text “rEs” briefly appears in the “information field”.*
*The room sensor and the display switch off.*
*The learned utilization time profile is deleted; the default utilization time profile is active.*

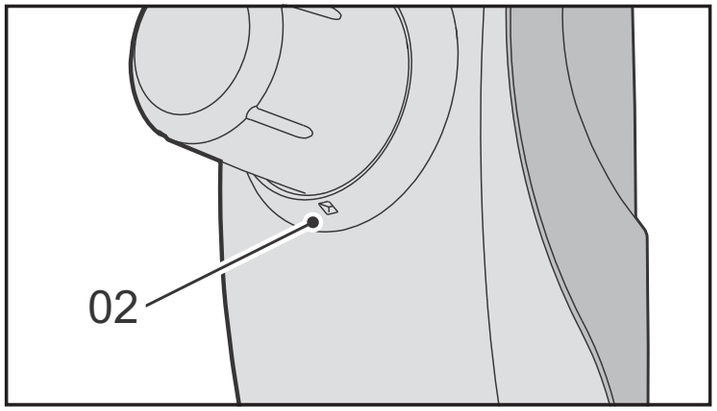
The room sensor is switched off, reset to the default settings and all registered valve controllers are logged off.

## » Switching off room sensor, valve controller

The room sensor and valve controller do not consume any energy when switched off.

In order for the en:key room set to automatically resume normal operation at the beginning of the next heating period, none of the devices may be switched off during the summer.



| Item | Designation | Explanation |
|---|---|---|
| 01 | Setting button | Switches off the room sensor |
| 02 | Registration button | Switches off the valve controller |

## Switching the room sensor off

You want to switch off the room sensor.

▶1 Press and hold the “setting button” for 5 seconds.
*The text “rEs” briefly appears in the “information field”.*
*The room sensor and the display switch off.*
*The learned utilization time profile is deleted.*

The room sensor is switched off, reset to the default settings and all registered valve controllers are logged off.

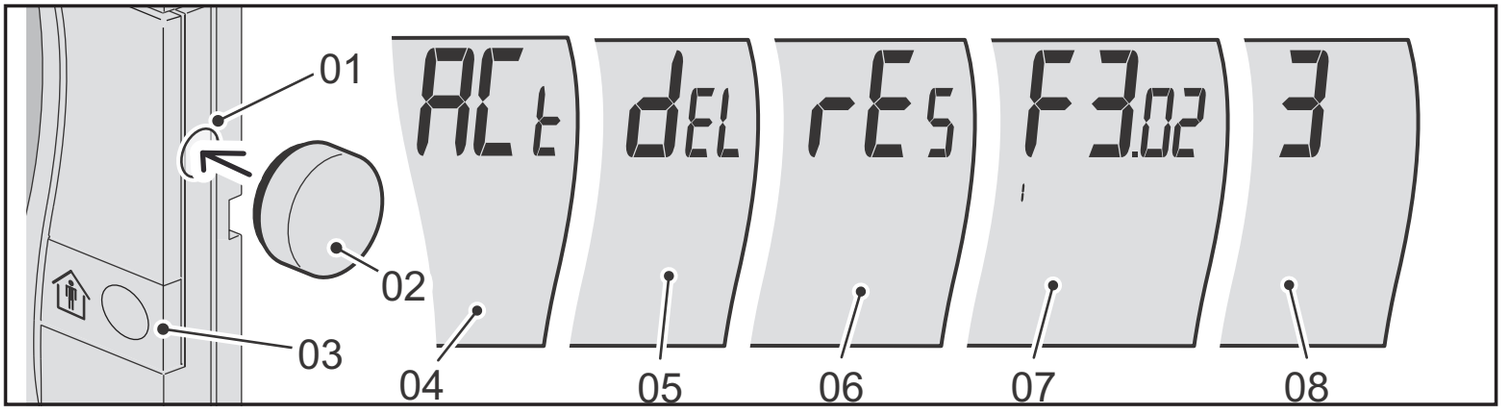
## Switching off the valve controller

You want to switch off the valve controller.

▶1 Press and hold the “registration button” for 5 seconds.
*The valve controller acknowledges a successful switch-off with a series of tones.*

The valve controller is switched off and the connection to the room sensor is broken.

# » Activating the service level




| Item | Designation | Explanation |
|---|---|---|
| 01 | Magnetic contact | Switches to service level |
| 02 | Magnet | Starts toggling to service level<br>(not included in scope of delivery) |
| 03 | Occupancy button | Selects the function |
| 04 | ACt | Registers valve controllers (1 to 4) |
| 05 | dEL | De-registers registered valve controllers |
| 06 | rEs | Switches off the room sensor |
| 07 | Version | Displays the software version (processors) |
| 08 | Number | Number of registered valve controllers |

You want to activate the service level.

▶ 1 Briefly hold a magnet to the “magnet contact.”
*The “ACt” text appears in the information field and service level is active.*

2 Briefly press the “occupancy button” until you reach your required function.
*ACt / dEL / ID, Code / rEs / Version, Code*

The “dEL” and “ID, code” functions are only visible when the valve controllers are registered on the room sensor.

## Registering the valve controller

You want to register one or up to four valve controllers on the room sensor.

▶1 Activate the service level and select the “ACt” function.

2 Press and hold the “occupancy button” for 5 seconds.
*The “antenna” icon appears in the “information field” and flashes.*

3 Within 15 seconds, briefly press the “registration button” on the valve controller.

After you press the “registration button”, an additional 15 second period to register the next valve controller begins.

*The valve controller acknowledges startup with one signal tone shortly afterwards.*
*The valve controller acknowledges successful registration with two signal tones.*
*The “antenna” icon appears permanently. The “Prog” icon disappears.*
*The “Code Δ” and “Sun” icons disappear after the first data exchange and the “Auto” icon appears.*

If the valve controller acknowledges the registration with a series of tones, the registration was not successful, and must be repeated.

Up to 10 minutes may elapse before the first data exchange. If the room sensor switches off after 15 minutes, registration was not successful and must be repeated.

The en:key room set is now in operation, and controls the room temperature in accordance with the current utilization time profile (default/learned).

## De-registering registered valve controllers

To de-register all registered valve controllers.

▶1 Activate the service level and select the “dEL” function.

2 Press and hold the “occupancy button” for 5 seconds.
*The “Code Δ,” “Sun” and “Occupancy” icons appear.*

All registered valve controllers are de-registered and the utilization time profile remains the same.



After de-registering the valve controllers, the room sensor switches off after 15 minutes if no other valve controller is registered.

## Displaying the radio ID

You want to see the radio ID of the valve controller.

▶1 Activate the service level and select the “ID, code” function.
*The figures show the last 4 digits of the radio ID (e.g.: 934F).*
*Code “1” to “4” shows the number of the valve controller.*

2 Briefly press the “occupancy button”.
*The next radio ID or the “ACt” function appears.*

## Switching off the room sensor and restoring the default settings

You want to switch off the room sensor.

▶1 Activate the service level and select the “rEs” function.

2 Press and hold the “occupancy button” for 5 seconds.
The text “rEs” appears briefly in the “information field”.

The room sensor and the display switches off.
The learned utilization time profile is deleted.

The room sensor is switched off, reset to the default settings and all registered valve controllers are logged off.

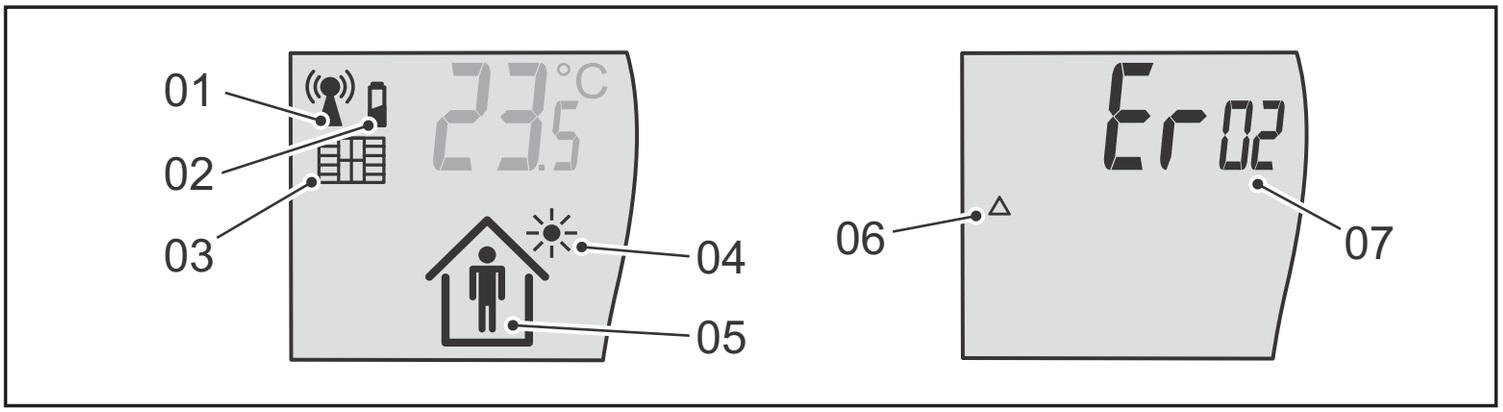
## Displaying the room sensor software version

You want to see the software version of the room sensor.

▶1 Activate the service level and select the “Version, code” function.
*The software version of processor 1 is displayed (code “1”).*

2 Press and hold the “occupancy button” for 5 seconds.
*The software version of processor 2 is displayed (code “2”).*

# MESSAGES




| Item | Icon | Explanation |
|---|---|---|
| 01 | Antenna | System status, wireless connection malfunctions |
| 02 | Battery | Energy storage unit system status |
| 03 | Window | Rapid temperature drop detected |
| 04 | Sun | Solar cell active, summer mode |
| 05 | Occupancy | Presence/absence, vacation mode |
| 06 | Code | System status, malfunctions |
| 07 | Text | Status information, error code |

# » System status

| Icon | State | Explanation |
|---|---|---|
| Antenna | On | Fault-free radio connection |
| “InSt”<br>Code Δ | Text<br>On | Installation location test active |
| Code Δ<br>“Er00” | On<br>Status code | Room sensor, valve controller functioning correctly |
| Antenna<br>Code Δ1<br>“Er01” | On<br>On<br>Status code | Wireless radio connection partly interrupted (> 1 hour)<br>At least one valve controller is being received |
| Antenna<br>Code Δ1<br>“Er01” | Off<br>On<br>Status code | Wireless radio connection interrupted (> 1 hour)<br>No valve controllers are being received |
| Antenna<br>Code Δ2<br>“Er02” | On<br>On<br>Status code | Wireless radio connection partly interrupted (> 4 hours)<br>At least one valve controller is being received |
| Antenna<br>Code Δ2<br>“Er02” | Off<br>On<br>Status code | Initial registration failed or<br>Wireless radio connection interrupted (> 4 hours)<br>No valve controllers signaling |
| Battery | On | Room sensor, energy storage unit<br>Charge status < 30% |
| Window | On | Economy mode for a maximum of 30 minutes |
| Code ΔE<br>“Er04” | On<br>Status code | Valve controller, energy storage unit<br>Charge status < 30% |

| Icon | State | Explanation |
|---|---|---|
| Code U | On | Vacation mode activated (from midnight) |
| Occupancy | House only | Vacation mode active |
| Sun<br>Occupancy | On<br>Off | Summer mode active<br>System in energy saving mode |

# » Malfunctions

| Icon | State | Explanation |
|---|---|---|
| Antenna<br>Code Δ8<br>“Er08” | Off<br>On<br>Status code | Room sensor, transmission function malfunctioning |
| Code Δ3<br>“Er03” | On<br>Status code | Room sensor, system time malfunctioning |

## Transmission function

The room sensor continuously monitors the wireless radio connections. If a transmission malfunction is detected in the room sensor, “Code Δ8” appears.

▶1 Reset the room sensor to its default setting.
*“Code Δ8” and “Er08” disappear*
→ *Restoring the defaults (S.32)*

2 Register the valve controllers again.
→ *Registering the valve controller (S.14)*

If the room sensor transmission function is continuously malfunctioning, the valve controllers operate in comfort mode. There is no reduction to economy mode.

## System time

The room sensor continuously monitors system time. If a time or date malfunction is detected in the room sensor, “Code Δ3” appears.

► 1 Reset the time and date.
*“Code Δ3” and “Er03” disappear*
→ *Changing the time and date (S.25)*

# OTHER

## » Care, disposal, service

| Caution | **Housing with a sensitive surface.** |
|---|---|
|  | Sponges and abrasive cleaning materials lead to scratches and a dulling.<br>▶ Clean using a moist, lint-free cloth.<br>Do not use any abrasive cleaning materials or cleaning products. |

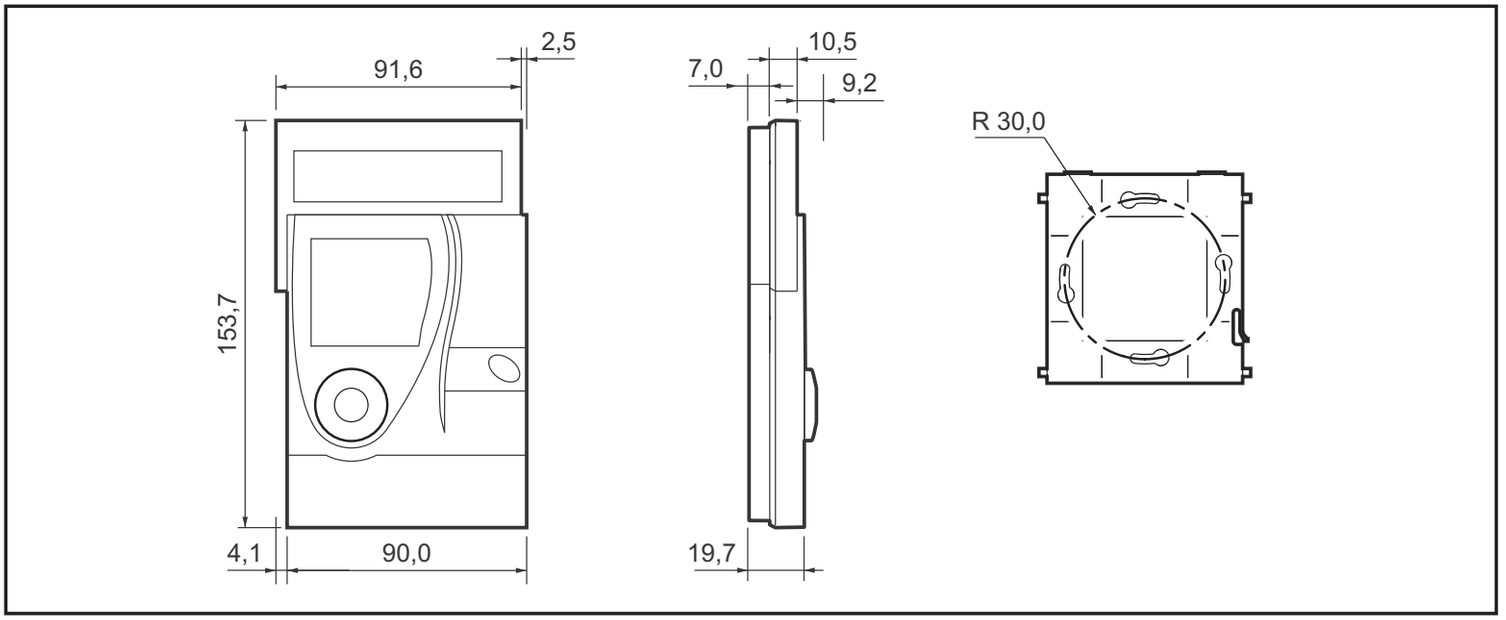
The room sensor and the valve controllers require no maintenance.
The device should be cleaned with due care. No water must be allowed into the inner workings of the device.

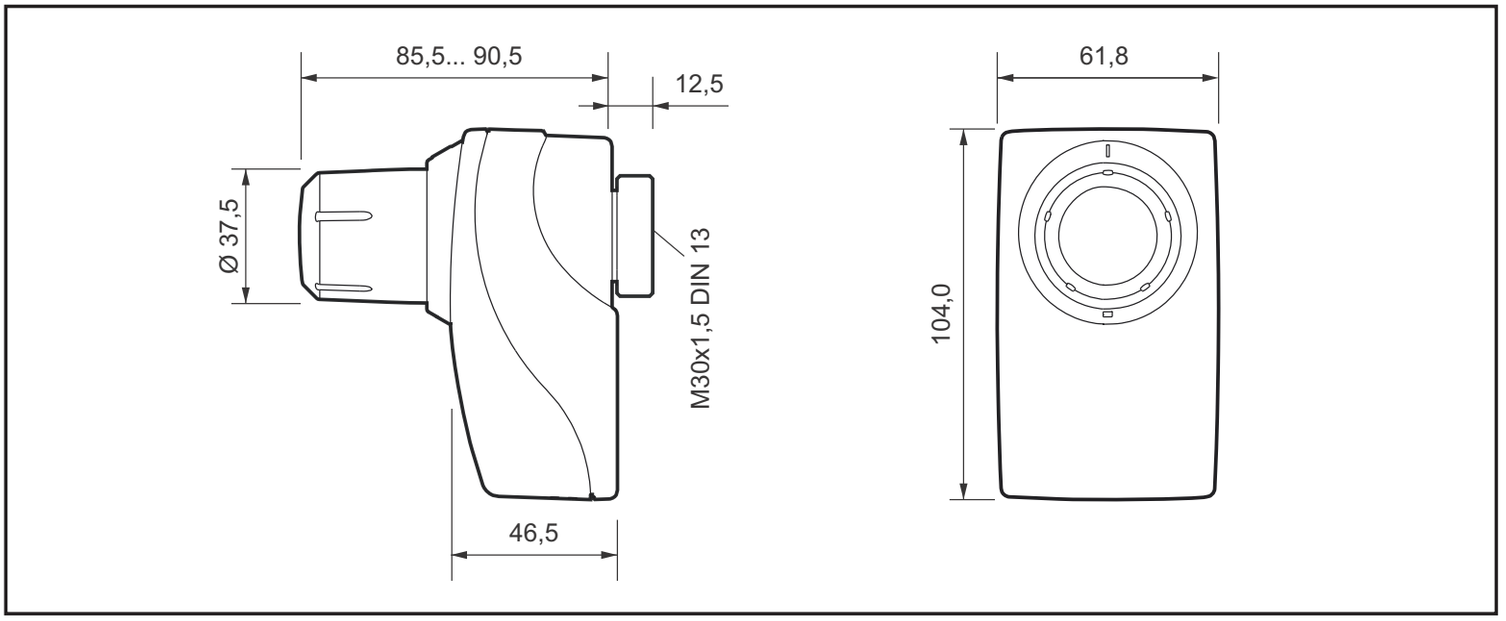
In accordance with the applicable laws and directives of the European Union countries, the room sensor and valve controllers should not be disposed of with household waste. This ensures environmental protection and sustainable recycling or raw materials.

| | |
|---|---|
|  | Private users should contact their local retailer or local authorities for information regarding environmentally safe recycling of old appliances. |
| | Commercial users should contact their supplier and observe the conditions of the purchase agreement. These devices may not be disposed of together with other commercial waste. |
|  | Packaging that is no longer needed can be recycled along with other paper. |

If you have any questions regarding the en:key room set, please contact an authorized service technician directly.

# » Technical data



| **Designation** | **Room sensor**<br>RPW301-FTL | **Valve controller**<br>MD10-FTL-HE |
|---|---|---|
| Nominal voltage | 2.3 V =/0.08 W | 3 V =/0.3 W |
| Power supply | Lithium battery (AA) | Energy storage unit |
| Measuring system | Digital room<br>temperature sensor: 0 °C to 50 °C, accuracy: ± 0.3 K | |
| Interface | EnOcean wireless protocol (< 10 mW)<br>Communication cycle: 10 minutes | |
| Connection | Service connection | None |
| Protection | IP30, protection class III | IP30, protection class III |
| Ambient conditions (operation) | 0 °C to 50 °C ambient temperature<br>20% to 85% r.F.<br>45 °C... 90 °C medium temperature (heating period)<br>at 20 °C ambient temperature | |
| Ambient conditions (transport, storage) | -20 °C to 50 °C ambient temperature<br>5% to 90% r.h., non-condensing | |
| Housing | Color: RAL 9010 / 7001<br>Weight: 0.220 kg | Color: RAL 9010 / 7035<br>Weight: 0.390 kg |
| Mounting | Screws, bonding | Screws |

en:key

**Saving is Fun**

➔ See www.enkey.de for more information

1.10-60.030-20 - 2018-04-19

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