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## NEA SMART R ROOM CONTROL UNIT

Installation and operating manual

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# CONTENT

<b>1</b>	<b>Safety</b>	<b>3</b>
1.1	Used symbols	3
1.2	Intended use	3
1.3	General safety warnings	3
<b>2</b>	<b>Versions</b>	<b>4</b>
2.1	Technical data	4
2.2	Compliance	4
<b>3</b>	<b>Installation</b>	<b>5</b>
3.1	Box contents	5
3.2	Installation	5
<b>4</b>	<b>Operation</b>	<b>7</b>
4.1	Overview and display	7
4.2	Commissioning (incl. pairing)	7
4.3	Operation	7
4.4	Wireless test	7
<b>5</b>	<b>Troubleshooting, Cleaning and Decommissioning</b>	<b>8</b>
5.1	Troubleshooting	8
5.2	Changing the batteries	8
5.3	Cleaning	8
5.4	Disposal	8



More information on the Nea Smart control system and all documentation available for download can be found at



[www.rehau.com/neasmart](http://www.rehau.com/neasmart)

# 1 SAFETY

## 1.1 Used symbols



There is danger for life and limb.

## 1.2 Intended use

The Nea Smart R room control unit (in the following abbreviated as room control unit) is a room control unit for the base station Nea Smart R 230 V.

The device is intended

- for the control of the base station Nea Smart R 230 V.
- the registration of the room temperature and the setting of the desired target temperature in the allocated heating zone.

Every other use is outside its intended use for which the manufacturer cannot be held liable.

## 1.3 General safety warnings



Danger to life in case of swallowing

Small children might swallow the knob.

- Install room control unit outside the reach of small children.

These instructions are part of the product.

- Retain this manual and provide it to future owners.

## 2 VERSIONS

### 2.1 Technical data

Nea Smart R room control unit	
Floor temperature monitoring	–
Power supply	2 x LR03/AAA (micro battery) alkaline
Battery lifetime	> 2 years
Wireless technology	Wireless, 868 MHz SRD band
Range	25 m (in buildings)
Protection type/protection class	IP20 / III
Ambient temperature	0 to 50 °C
Ambient humidity	5 to 80%, not condensing
Dimensions (HxWxD)	85 x 85 x 26 mm
Target temp. setting range	10 to 28 °C
Target temp. resolution	0.25 K
Actual temp. measuring range	0 to 40°C (int. sensor)
Measuring accuracy of internal NTC	±0.3 K

Tab. 2-1 Technical data Nea Smart R room control unit

### 2.2 Compliance

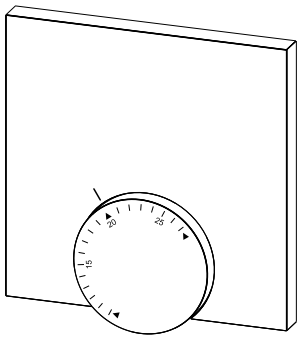
This product is labelled with the CE Marking and thus is in compliance with the requirements from the guidelines:

- 2004/108/EG with amendments “Council Directive on the approximation of the laws of the Member States relating to Electromagnetic Compatibility”
- 2006/95/EG with amendments “Council for Coordination of the Regulations of EU Member Countries regarding the electrical equipment for use within certain voltage limits”
- “Radio and Telecommunications Terminal Equipment Act (FTEG) and Guideline 1999/5/EG (R&TTE)”

Increased protection requirements may exist for the overall installation, the compliance of which is the responsibility of the installer.

# 3 INSTALLATION

## 3.1 Box contents



1 x



2 x



1 x

Fig. 3-1 Box contents

## 3.2 Installation

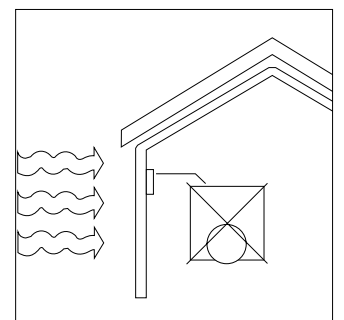
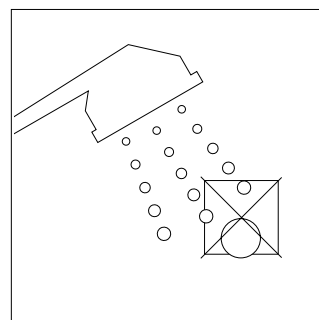
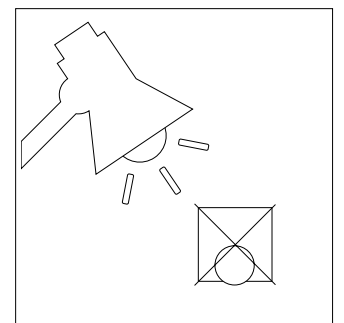
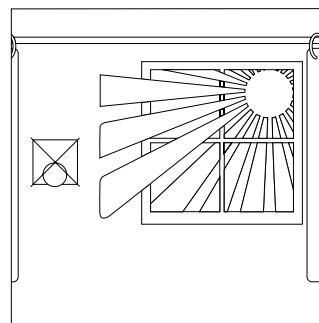
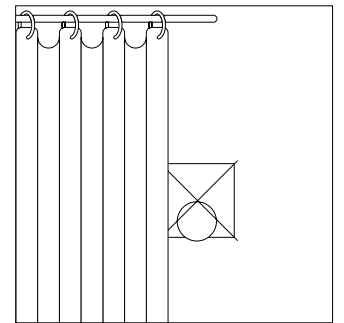
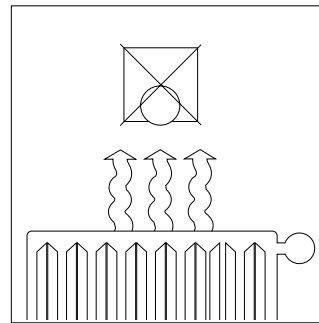
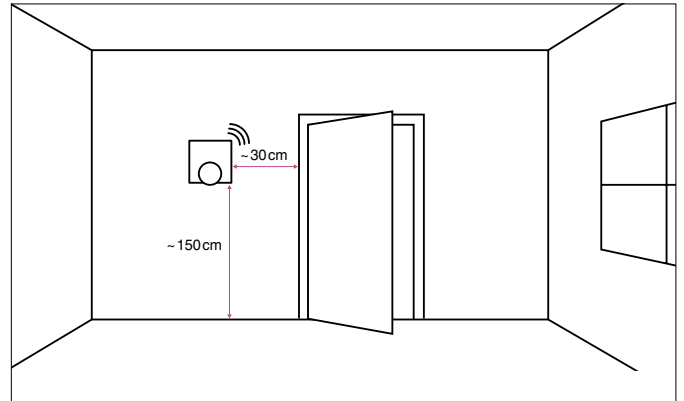


Fig. 3-2 Notes on the mounting location of the room control unit

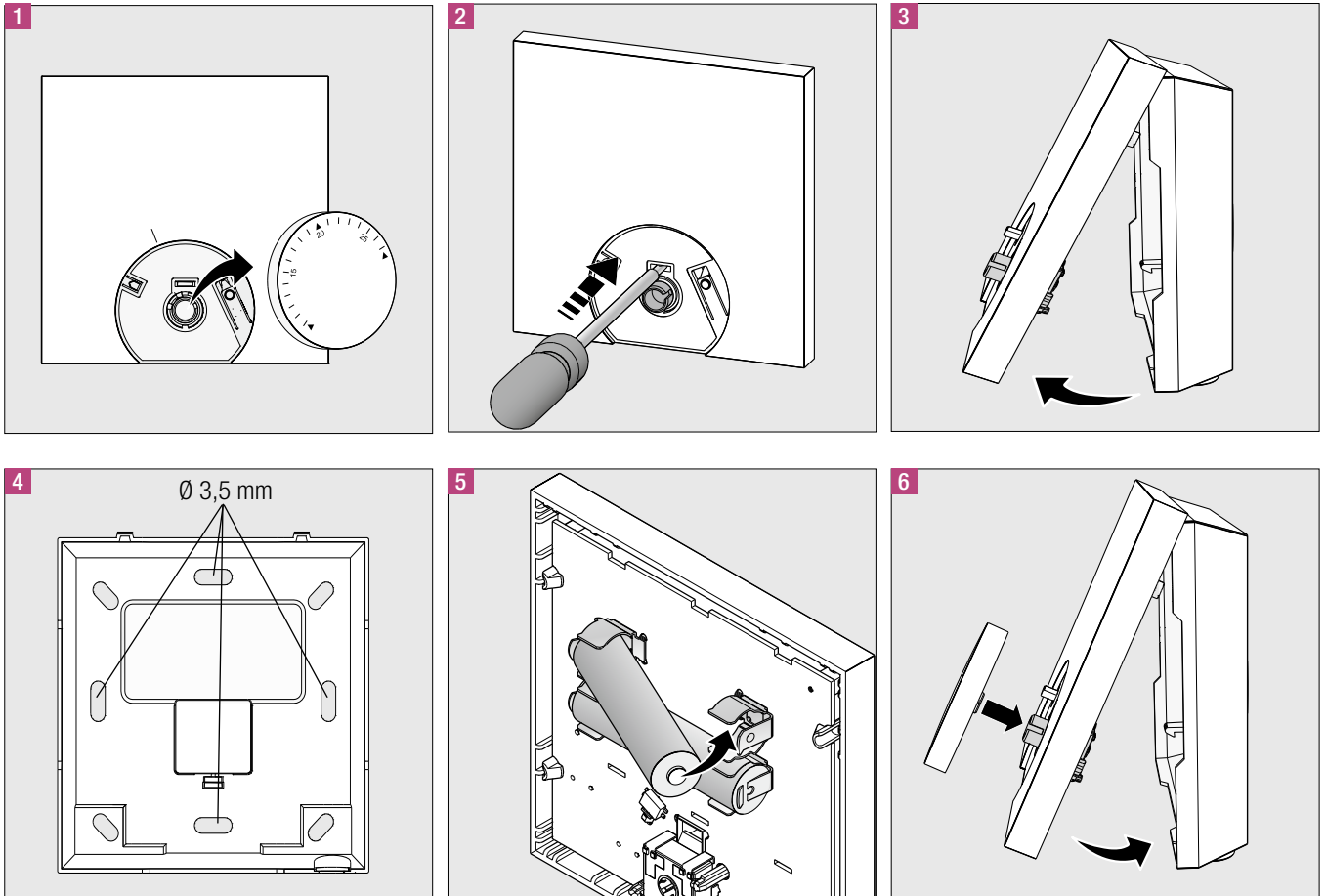


Fig. 3-3 Installation and connection of the room control unit

# 4 OPERATION

## 4.1 Overview and display

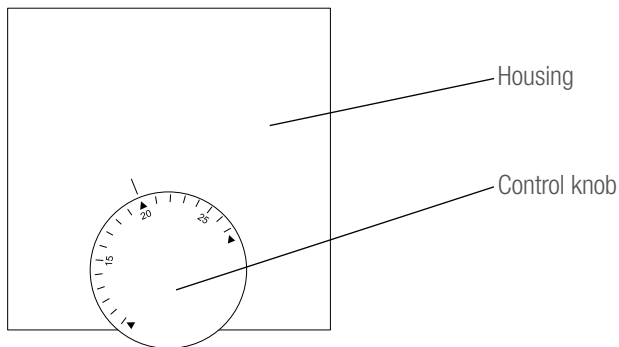


Fig. 4-1 Front view of Nea Smart R room control unit

## 4.2 Commissioning (incl. pairing)

1. Remove the control knob.
2. Activate the pairing function at the base station for the desired heating zone (see manual base station Nea Smart R 230 V).
3. Press the pairing button (see figure below) briefly in order to activate the pairing function of the room control unit.  
The base station and the room control unit are connected to each other.

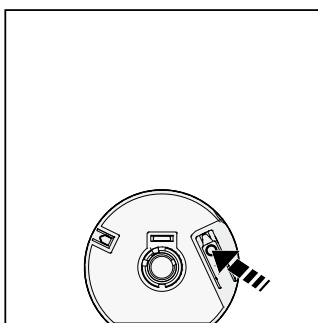


Fig. 4-2 Pairing button under the rotary knob

## 4.3 Operation

Set the target temperature by rotating the control knob.

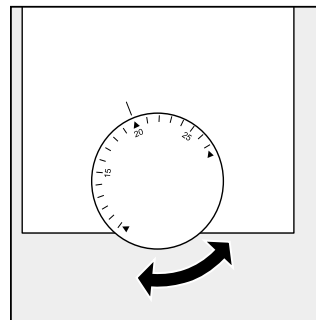


Fig. 4-3 Selecting the target temperature

## 4.4 Wireless test

Press the pairing knob briefly in order to activate the wireless test. At the base station, the heating zone connected to this room control unit is changed for 1 minute, in other words switched on or off depending on the previous operating status.

# 5 TROUBLESHOOTING, CLEANING AND DECOMMISSIONING

## 5.1 Troubleshooting

The error signalling is carried out via the heating zones LED on the base station assigned to the room control unit.

LED base station	Meaning	Solution
Heating zone Duration in sec. Duration in seconds 0 1 2 HZ off HZ on		<ul style="list-style-type: none"> <li>- Move position of the room control unit</li> <li>- Install active antenna or repeater</li> </ul>
Heating zone Duration in sec. Duration in seconds 0 1 2 HZ off HZ on	Low battery	<ul style="list-style-type: none"> <li>- Replace batteries in the room control unit</li> </ul>
Heating zone flash duration in sec. HZ 0 1 2	Safe mode active	<ul style="list-style-type: none"> <li>- Change batteries of room control unit</li> <li>- Activate test for wireless operation</li> <li>- Reposition the room control unit.</li> <li>- Replace defective device</li> </ul>

Tab. 5-1 Error display on the base station

## 5.2 Changing the batteries



Danger to life in case of swallowing

Small children can swallow batteries/rotating knobs. Do not leave the room control unit unattended during a battery change.

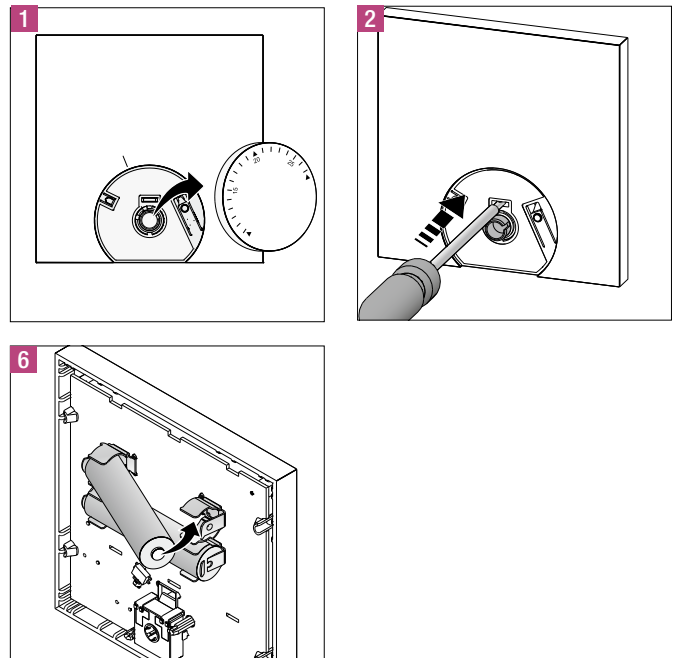


Fig. 5-1 Changing the batteries

Activate the room control unit after changing the batteries by pressing the pairing knob shortly.

## 5.3 Cleaning

Only use a dry and solvent-free, soft cloth for cleaning.

## 5.4 Disposal



The batteries and the room control unit must not be disposed with domestic waste. The user has the duty to dispose of the devices at designated collection points. The separate collection and orderly disposal of all materials will help to conserve natural resources and ensure a recycling in a manner that protects human health and the environment. If you need information about collection points for your devices, please contact your local municipality or your local waste disposal services.



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954625 EN 04.2015