**Instructions for Use** 

# **Concealed room thermostat**



for single room regulation of the Fonterra radiant heating and cooling systems



INT

**Model** 1230.5

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# 1 About these instructions for use

Trade mark rights exist for this document; for further information, go to *viega.com/legal*.

## 1.1 Target groups

The information in this instruction manual is directed at the following groups of people:

- Heating and plumbing experts and trained personnel
- Qualified electricians
- Operators
- Consumers

Individuals without the abovementioned training or qualification are not permitted to mount, install and, if required, maintain this product. This restriction does not extend to possible operating instructions.

The installation of Viega products must take place in accordance with the general rules of engineering and the Viega instructions for use.

# 1.2 Labelling of notes

Warning and advisory texts are set aside from the remainder of the text and are labelled with the relevant pictographs.



#### **DANGER!**

This symbol warns of possible life-threatening injury.



**WARNING!** This symbol warns of possible serious injury.



**CAUTION!** This symbol warns of possible injury.

# NOTICE!

This symbol warns of possible damage to property.



This symbol gives additional information and hints.

## 1.3 About this translated version

This instruction for use contains important information about the choice of product or system, assembly and commissioning as well as intended use and, if required, maintenance measures. The information about the products, their properties and application technology are based on the current standards in Europe (e.g. EN) and/or in Germany (e.g. DIN/DVGW).

Some passages in the text may refer to technical codes in Europe/ Germany. These should serve as recommendations in the absence of corresponding national regulations. The relevant national laws, standards, regulations, directives and other technical provisions take priority over the German/European directives specified in this manual: The information herein is not binding for other countries and regions; as said above, they should be understood as a recommendation.

# 2 Product information

# 2.1 Standards and regulations

The following standards and regulations apply to Germany / Europe and are provided as a support feature.

#### **Regulations from section: Disposal**

Scope / Notice	Regulations
Disposal of electronic compo- nents	WEEE-Richtlinie 2012/19/EU

## 2.2 Safety advice



#### DANGER! Danger due to electrical current

An electric shock can lead to burns and serious injury and even death.

- Work on the electrics may only be carried out by trained electricians or electrical trade professionals.
- Switch off the mains voltage before carrying out work on electrical parts.
- Installation must be performed in accordance with the applicable national legislation.

# 2.3 Intended use

The room thermostat is suitable for controlling or monitoring temperatures in offices, living rooms and hotels.

For hot water heating systems, control a maximum of ten normally closed actuators with one room thermostat.

## 2.4 Product description

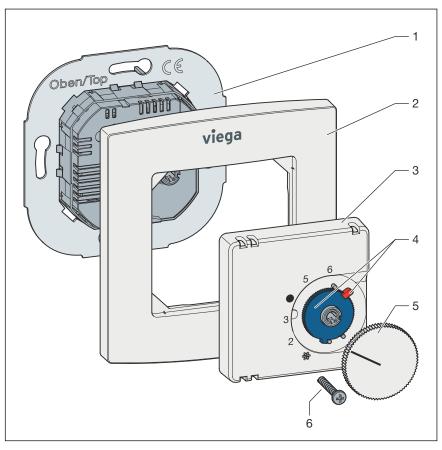
#### 2.4.1 Features and functions

The room thermostat detects the room temperature. Assembly takes place in a concealed socket.



Precise differential gap	
	Since the controller only detects the room temperature at a relatively late stage of the heating process, the controller is triggered to switch off in good time by means of thermal recirculation, thus achieving a very precise differential gap.
Temperature limitation	
	Two limiting rings allow the adjustable target temperature to be limited.
Temperature reduction	
	If the temperature setback input (terminal (b)) is connected, the room thermostat regulates to a temperature that is approx. 4 K lower.
Interchangeable frames	
	The room thermostat has a control panel measuring 50 x 50 mm and can be integrated into almost all switch ranges with various fixing frames.

### 2.4.2 Overview and description of component

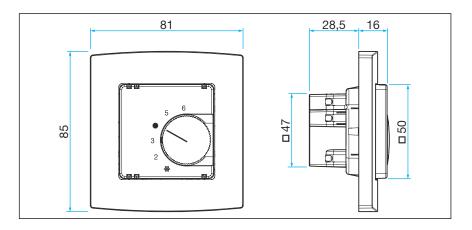


- 1 Flush-mounted installation part
- 2 Frame
- 3 Control panel



- 4 Limiting rings (red/blue)
- 5 Screw
- 6 Rotary knob
- ✤ Frost protection star (approx. 5°C)
- Comfort point (approx. 20°C)

#### Installation dimensions

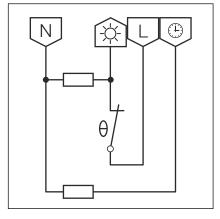


#### 2.4.3 Technical data

Operating voltage	230 V AC, 50 Hz
Switching current	max. 10 A (Ohm resistive load)
Switching capacity	max. 10 actuators
Switching element	Bimetal
Terminal design	4 screw terminals
Temperature adjustment range	5–30 °C
Hysteresis	± 0.5 K
Temperature reduction	4 K through external switch signal
Adjustment range can be limited and blocked	Yes
Ambient temperature	0–30 °C
relative humidity	max. 95 % non-condensing
IP Code	IP 30
Protection class	II (after successful assembly)
Housing material	PC
Housing colour and adjustment knob	RAL 9016, traffic white
Surface of housing and adjust- ment knob	gloss

CE conformity	in accordance with EN 60730
Control mode	Heating

#### **Connection diagram**



Symbol	Explanation
L	Phase (operating voltage)
Ν	Neutral conductor (operating voltage)
<b>\</b>	Heating output (actuator)
٨	Temperature reduction input (ECO input)



# 3 Handling

# 3.1 Transport and storage

Observe the following with transport and storage:

- Avoid heavy blows and vibrations.
- Store components in a clean and dry place.
- Do not remove the components from the packaging until immediately before use.



#### **NOTICE!**

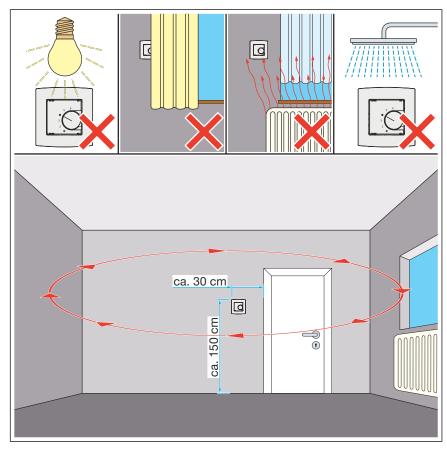
Replace defective components, do not repair.



# 3.2 Assembly information

#### 3.2.1 Preconditions for mounting

Room thermostats are mounted in rooms, usually close to doors together with switchboxes. Avoid direct sunlight, humidity and air draughts. The distance to the door is approximately 30 cm.



## 3.3 Assembly

#### 3.3.1 Mounting the room thermostat

#### **General safety advice**

- Only authorised professionals are allowed to open the device when it has been de-energised.
- Before opening, switch off the mains voltage and secure to prevent accidental reactivation. Check to ensure the absence of voltage.
- Respect the performance limits of the device and the ambient conditions.
- In case of emergency, de-energise the entire single room regulation system.

#### Installation variations

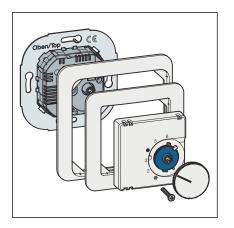


The product can be mounted with the following frames and intermediate frames:

- With the "Berlin" frame supplied
- With intermediate frame\* 50 x 50 mm (see Fig.)
- With one frame\* 55 x 55 mm without fixing frame

\*available as a separate item

When using an intermediate frame, always mount the control element at the lowest point.



#### Mounting in concealed socket



#### NOTICE!

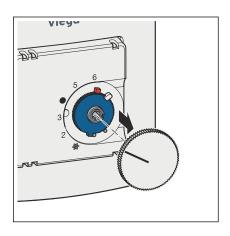
#### Faulty control due to contamination!

Too much dirt and dust during installation work can contaminate the contacts of the room thermostat. Dirty contacts can interfere with operation.

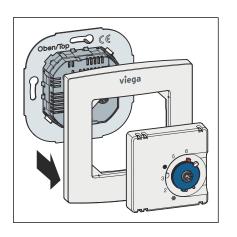
Keep the installation site clean when installing the room thermostat.

**Requirements:** 

- There is a concealed socket in the wall at the installation position.
- The 230 V connection cable has been laid up to the concealed socket.
- Pull the rotating knob forward to remove it.

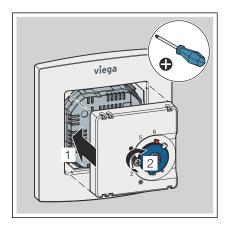






Remove the control element and the frame from the concealed builtin part.

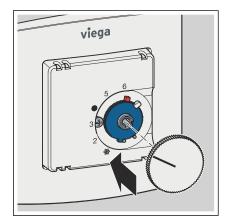
- Attach the connection cable according to the connection diagram, see & 'Connection diagram' on page 8.
  - Fasten the concealed built-in part in the concealed socket using the existing screws.



Re-attach the control element, incl. the frame, and screw to the concealed built-in part.

- If necessary, limit the setting range of the target temperature with the limiting rings.
  - blue limiting ring = limit minimum temperature value
  - red limiting ring = limit maximum temperature value

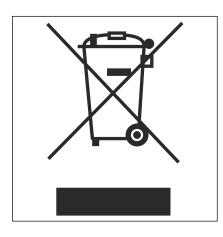




Mount the rotating knob.

3.4 Care tips

# 3.5 Disposal



Separate the product and packaging materials (e. g. paper, metal, plastic or non-ferrous metals) and dispose of in accordance with valid national legal requirements.

Electronic components and batteries must not be put in the domestic waste but must be disposed of appropriately in conformity with the applicable directives, see '*Regulations from section: Disposal'* on page 5.



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