

# Operating Instructions for Room and Surface Thermostats

**Model: TEA-R**



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## 2. Note

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Please read these operating instructions before unpacking and putting the unit into operation. Follow the instructions precisely as described herein.

The instruction manuals on our website [www.kobold.com](http://www.kobold.com) are always for currently manufactured version of our products. Due to technical changes, the instruction manuals available online may not always correspond to the product version you have purchased. If you need an instruction manual that corresponds to the purchased product version, you can request it from us free of charge by email ([info.de@kobold.com](mailto:info.de@kobold.com)) in PDF format, specifying the relevant invoice number and serial number. If you wish, the operating instructions can also be sent to you by post in paper form against an applicable postage fee.

Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

The devices are only to be used, maintained and serviced by persons familiar with these operating instructions and in accordance with local regulations applying to Health & Safety and prevention of accidents.

When used in machines, the measuring unit should be used only when the machines fulfil the EC-machine guidelines.

## 3. Instrument Inspection

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All Instruments are inspected before shipping and sent out in perfect condition. Should damage to a device be visible, we recommend a thorough inspection of the delivery packaging. In case of damage, please inform your parcel service / forwarding agent immediately, since they are responsible for damages during transit.

### **Scope of delivery:**

The standard delivery includes:

- Room and Surface Thermostats model: TEA-R

## 4. Regulation Use

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Any use of the Room and Surface Thermostats, model: TEA-R, which exceeds the manufacturer's specifications, may invalidate its warranty. Therefore, any resulting damage is not the responsibility of the manufacturer. The user assumes all risk for such usage.

## 5. Operating Principle

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### 5.1 TEA-R

The room thermostats are fitted with liquid-filled helix probes made out of copper or stainless steel that act as temperature dependant pressure sensors. A change in temperature causes a pressure change in the probe, which is transferred to a switch by a bellow system or a diaphragm. A compression spring acts as a counteracting force. The switching values are set by changing the initial stress of the compression spring with a setpoint spindle.

#### Function

##### Heating

The adjusted rated value (scale value) is equal to the turn-off-value of the heating. The turn-on-value is lower by the amount of the switching difference. When a temperature rises on the adjusted value the contact 2-3 (or red-blue) opens.

##### Cooling

The adjusted rated value (scale value) is equal to the turn-on-value of the cooling. The turn-off-value is lower by the amount of the switching difference. When temperature rises on the adjusted value the contact 1-2 (or red-white) closes.

## 6. Mechanical Connection

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- Remove all packing materials and transport retainers and ensure that no such materials remain in the device.
- Make sure that the maximum temperature of the device is not exceeded. (see section **Fehler! Verweisquelle konnte nicht gefunden werden. Fehler! Verweisquelle konnte nicht gefunden werden.**)

#### TEA-R

The room thermostats TEA-R is fastened by the housing holes to the lower surface to an even surface.

## 7. Electrical Connection

### 7.1 General

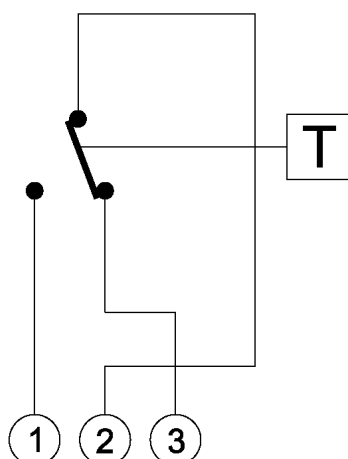


**Warning!** Make sure that the voltage values of your system correspond with the voltage values of the measuring unit.

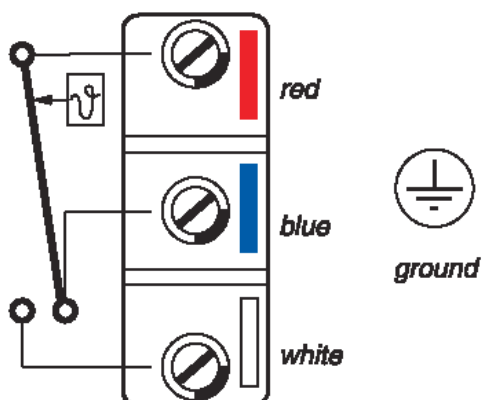


**Attention!** Make sure that the supply wires are de-energized.

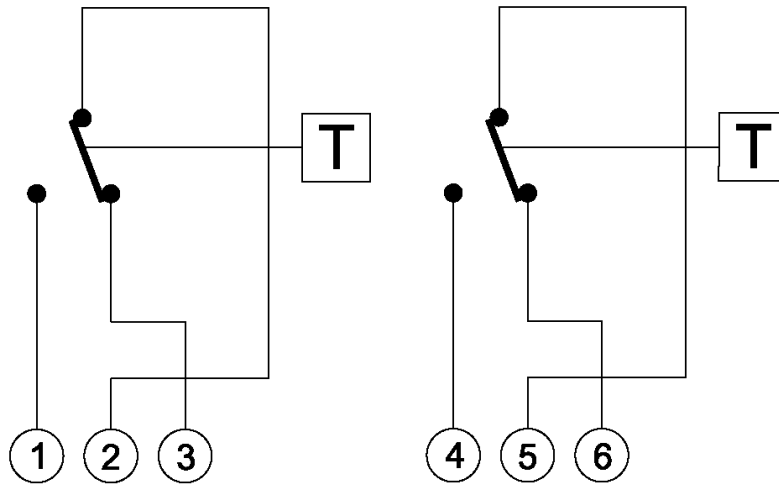
#### TEA-R1



#### TEA-R3



## TEA-R2



## 8. Technical Information

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Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

## 9. Order Codes

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Operating instructions, data sheet, approvals and further information via the QR code on the device or via [www.kobold.com](http://www.kobold.com)

## 10. Dimensions

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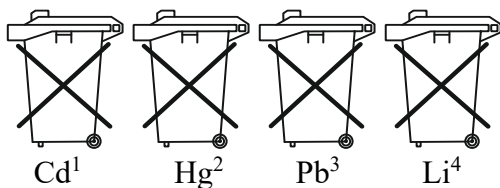
## 11. Disposal

### Note!

- Avoid environmental damage caused by media-contaminated parts
- Dispose of the device and packaging in an environmentally friendly manner
- Comply with applicable national and international disposal regulations and environmental regulations.

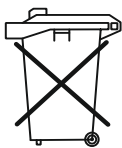
### Batteries

Batteries containing pollutants are marked with a sign consisting of a crossed-out garbage can and the chemical symbol (Cd, Hg, Li or Pb) of the heavy metal that is decisive for the classification as containing pollutants:



1. „Cd" stands for cadmium
2. „Hg" stands for mercury
3. „Pb" stands for lead
4. „Li" stands for lithium

### Electrical and electronic equipment



## 12. EU Declaration of Conformance

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We, KOBOLD Messring GmbH, Hofheim-Ts, Germany, declare under our sole responsibility that the product:

**Thermostat    Model: TEA – R**

to which this declaration relates is in conformity with the standards noted below:

**EN 60730-1:2011**    Automatic electrical controls for household and similar use -  
Part 1: General requirements


**EN 50581:2012**    Technical documentation for the assessment of electrical  
and electronic products with respect to the restriction of hazardous substances

Also, the following EU guidelines are fulfilled:

<b>2014/30/EU</b>	<b>EMC Directive</b>
<b>2014/35/EU</b>	<b>Low Voltage Directive</b>
<b>2011/65/EU</b>	<b>RoHS</b>



H. Peters  
General Manager



M. Wenzel  
Proxy Holder

Hofheim, 24 March 2020