# DUNG

Room temperature controller Ref.-no.: TR..231.., TR..241.., TR..236.., TR..246..

## Operating Instructions Room temperature controller



### 1. Area of application

The room temperature controller is used to regulate the temperature in closed rooms such as flats, schools, function suites, workshops, etc.



### Safety instructions

Electrical equipment may only be installed and fitted by qualified electricians while observing the current accident prevention regulations. A relative air humidity of max. 95% may not be exceeded. Avoid any moisture condensation. Non-observance of the safety warnings or installation instructions may damage the device, cause a fire or other hazards.

### 2. Installation

Notes:

- Mount the room temperature controller on an internal wall opposite the heat source if possible.
- Do not mount the room temperature controller on outside walls.
- Avoid draughts from windows and doors.
- Ensure that the normal air circulation in the room reaches the controller without any obstacles.
- External heat sources influence the accuracy of the controller. Avoid direct sunlight and do not place heat-emitting devices in the vicinity of the room temperature controller (heaters, lamps, etc.).
- Dimmers also generate heat. If a controller is installed in a common switch frame with a dimmer, the distance between them should be as great as possible. When arranging them vertically, the controller must be installed underneath the dimmer.

Mounting height: approx. 1.5 m above the floor.

Mounted in a switch box in accordance with DIN 49 073.



## DUNG

Room temperature controller Ref.-no.: TR..231.., TR..241.., TR..236.., TR..246..



## 3. Connection

1. Carry out the electrical connection according to the respective wiring diagram (Fig. (2) or Fig. (3).



#### Note:

Ensure that the neutral conductor N is connected to terminal N. Considerable fluctuations in temperature may otherwise occur. Conductor cross-section: 1 to 2.5 mm2 solid conductor.

#### Symbols used in the wiring diagram:

- L = L conductor
- N = N- conductor
- O = Connection for clock signal to reduce temperature
- ✤ = Cooling
- RF = Resistor for thermal feedback
- TA = Resistor for night reduction of room temperature
- 2. Clip the rocker (A in Fig. ) on the switch in the flush insert.
- 3. Place the center plate together with the frame on the flush insert. The center plate must snap in place in the top left of the housing base.
- 4. Tighten the screw (**B**).
- 5. Clip on the setting knob (**C**).

## DUNG

Room temperature controller Ref.-no.: TR..231.., TR..241..,

TR..236.., TR..246..





## 4. Technical data

	TR 231 U	TR 241 U	
Switching principle	1-pole break contact+on/off switch	1-pole break contact+on/off switch	
Temperature range	5 30 °C	5 30 °C	
Nominal voltage	AC 230 V ~, 50/60 Hz	AC 24 V ~	
Nominal current*	10 (4) A	10 (4) A	
Differential of functioning			
temperature	approx. 0.5 K	approx. 0.5 K	
Temperature reduction	approx. 4 K	approx. 4 K	
* The value in brackets indicates the inductive load at a cos in of 0.6			

\* The value in brackets indicates the inductive load at a  $\cos \varphi$  of 0.6. Subject to change without further notice.

## DUNG

Room temperature controller Ref.-no.: TR..231.., TR..241..,

TR..236.., TR..246..





## 5. Technical data

	TR 236 U	TR 246 U
Switching principle	1-pole change over contact without switch	1-pole change- over contact without switch
Temperature range	5 30°C	5 30 °C
Nominal voltage	AC 230 V ~, 50/60 Hz	AC 24 V ~
Nominal current*		
Heating	10 (4) A	10 (4) A
Cooling	5 (2) A	5 (2) A
Differential of functioning	approx. 0.5 K	approx. 0.5 K
temperature		

\* The value in brackets indicates the inductive load at a  $\cos \phi$  of 0.6. Subject to change without further notice.

# DUNG

Room temperature controller Ref.-no.: TR..231.., TR..241.., TR..236.., TR..246..

### 6. Restricting the temperature setting range

The temperature controller is set ex works to the maximum setting range of 5 °C to 30 °C. See Fig. 4.



Two adjustment rings are located in the setting knob. You can use these rings to restrict the temperature setting range required e.g. between 8  $^{\circ}$ C and 23  $^{\circ}$ C.

#### Procedure:

- 1. Select the temperature limits. Example: max. 23 °C, min 8 °C
- 2. Note!
  - First position the setting knob roughly in the centre of the required setting range. Example: The centre point between 8 °C and 23 °C is approximately 15 °C.
- 3. Now remove the setting knob.
- Set the red locating ring to the max. temperature limit. Example: 23 °C Rotate anti-clockwise. The numbers on the outer dial apply! Insert the tip of a pen in the hole and turn the red ring to the left until it reaches 23 °C (max. scale). See Fig. (5).



5. Set the blue locating ring to the min. temperature limit. Example: 8 °C Rotate clockwise. The numbers on the inner dial apply. Insert the tip of a pen in the hole and turn the blue ring to the right until it reaches 8 °C (min. scale). See Fig. <sup>(6)</sup>

## JUNG

Room temperature controller Ref.-no.: TR..231.., TR..241..,

TR..236.., TR..246..



6. Clip on the setting knob. The pointer must be roughly in the centre of the new setting range (see point 2). Example: approx. 15 °C

#### Scale for setting the temperature with dials

- 1 = approx. 05°C
- 2 = approx. 10°C
- 3 = approx. 15°C
- 4 = approx. 20°C
- $5 = approx. 25^{\circ}C$
- $6 = approx. 30^{\circ}C$

### 7. Symbols

O Off I On

### 8. Guarantee

Our products are under guarantee within the scope of the statutory provisions.

Please return the unit postage paid to our central service department giving a brief description of the fault:

ALBRECHT JUNG GMBH & CO. KG Service-Center Kupferstr. 17-19 D-44532 Lünen Service-Line: 0 23 55 . 80 65 51 Telefax: 0 23 55 . 80 61 89 E-Mail: mail.vki@jung.de

#### General equipment

Service-Line:	0 23 55 . 80 65 55
Telefax:	0 23 55 . 80 62 55
E-Mail:	mail.vkm@jung.de

#### KNX equipment

Service-Line: 0 23 55 . 80 65 56 Telefax: 0 23 55 . 80 62 55 E-Mail: mail.vkm@jung.de C C State authorities and does not contain any assurance of properties.