

# SMALL COMPACT THERMOSTAT

## KTO 011 / KTS 011



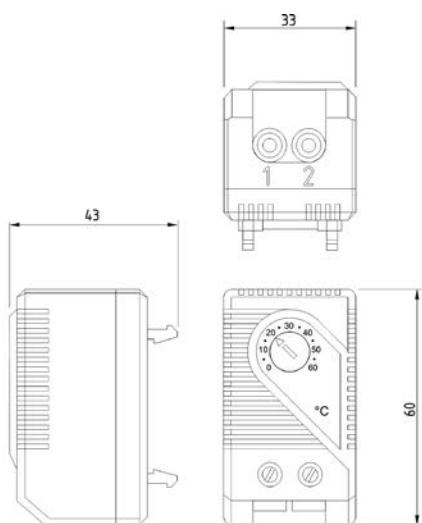
- > Large setting range
- > Small size

- > Simple to mount
- > High switching performance

The mechanical thermostats KTO 011 and KTS 011 are two state regulators used to control heaters, coolers, filter fans or signal devices.

**KTO 011:** Thermostat (NC); contact breaker for regulating heaters. The contact opens when temperature is rising.

**KTS 011:** Thermostat (NO); contact maker for regulating of filter fans and heat exchangers or for switching signal devices when temperature limit has been exceeded. The contact closes when temperature is rising.



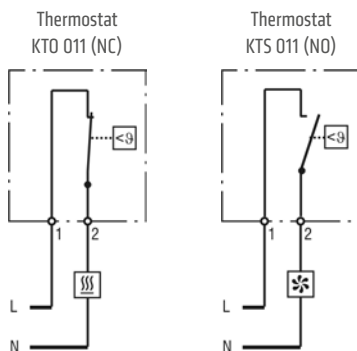
### TECHNICAL DATA

|                               |                                                                                                                                                     |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Switch temperature difference | 7 K ( $\pm 4$ K tolerance)                                                                                                                          |
| Sensor element                | thermostatic bimetal                                                                                                                                |
| Contact type                  | snap-action contact                                                                                                                                 |
| Service life                  | > 100,000 cycles                                                                                                                                    |
| Max. operating voltage        | AC 250 V (VDE)<br>AC 120 V (UL)                                                                                                                     |
| Max. inrush current           | AC 16 A for 10 sec.                                                                                                                                 |
| Connection                    | 2-pole terminal, clamping torque 0.5 Nm max.:<br>rigid wire 2.5 mm <sup>2</sup> (AWG 14)<br>stranded wire <sup>1</sup> 1.5 mm <sup>2</sup> (AWG 16) |
| Mounting                      | clip for 35 mm DIN rail, EN 60715                                                                                                                   |
| Casing                        | plastic according to UL94 V-0, light grey                                                                                                           |
| Dimensions                    | 60 x 33 x 43 mm                                                                                                                                     |
| Weight                        | approx. 40 g                                                                                                                                        |
| Fitting position              | variable                                                                                                                                            |
| Operating/Storage temperature | -45 to +80 °C (-49 to +176 °F)                                                                                                                      |
| Operating/Storage humidity    | max. 90 % RH (non-condensing)                                                                                                                       |
| Protection type               | IP20                                                                                                                                                |

<sup>1</sup> When connecting with wires, wire end ferrules must be used.

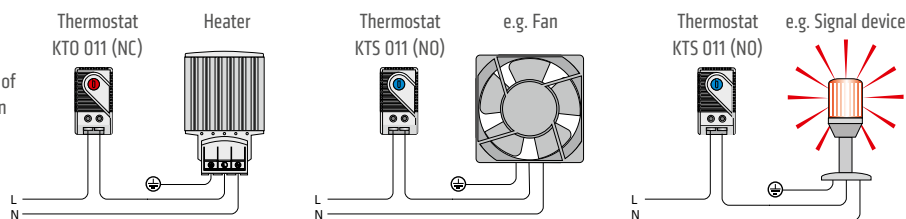
**Important note:** The contact system of the regulator is subjected to environmental influences, thus the contact resistance may change. This can lead to a voltage drop and/or self-heating of the contacts.

Connection diagrams



- Heater
- Filter fan, Cooling equipment, Signal device

Examples of connection



| Setting range  | Art. No.<br>Contact breaker (NC) | Art. No.<br>Contact maker (NO) | Switching current/capacity max. |          |              | Approvals |                     |     |     |
|----------------|----------------------------------|--------------------------------|---------------------------------|----------|--------------|-----------|---------------------|-----|-----|
|                |                                  |                                | AC 250 V                        | AC 120 V | DC 24 - 72 V |           |                     |     |     |
| 0 to +60 °C    | 01140.0-00                       | 01141.0-00                     | 10 (2) A                        | 15 (2) A | 30 W         | VDE       | -                   | -   | EAC |
| -10 to +50 °C  | 01142.0-00                       | 01143.0-00                     | 10 (2) A                        | 15 (2) A | 30 W         | VDE       | UL File No. E164102 | -   | EAC |
| +20 to +80 °C  | 01159.0-00                       | 01158.0-00                     | 3 (2) A                         | 3 (2) A  | 30 W         | VDE       | UL File No. E164102 | CSA | EAC |
| +32 to +140 °F | 01140.9-00                       | 01141.9-00                     | 10 (2) A                        | 15 (2) A | 30 W         | VDE       | UL File No. E164102 | CSA | EAC |
| +14 to +122 °F | 01142.9-00                       | 01143.9-00                     | 10 (2) A                        | 15 (2) A | 30 W         | VDE       | UL File No. E164102 | CSA | EAC |
| 0 to +60 °C    | 01146.9-00                       | 01147.9-00                     | 10 (2) A                        | 15 (2) A | 30 W         | VDE       | UL File No. E164102 | CSA | EAC |