**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



# JUMO heatTHERM

## Panel-mounted thermostat

### for controlling and monitoring thermal processes

### Areas of application

- Mechanical and plant engineering
- Heating, ventilation, and air-conditioning
- Industrial kitchen equipment suppliers

### Special features

- Electromechanical measuring principle
- Temperature compensation
- Control ranges up to 500 °C
- Safety switch-off

### Description

The panel-mounted thermostat controls and monitors thermal processes.

The device is suitable for use as a temperature controller TR, temperature monitor TW, safety temperature monitor STW, or safety temperature limiter STB.

The device is used in heating or cooling sources.

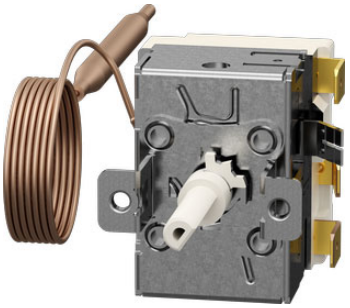
### Switching functions

**Temperature controller TR and Temperature monitor TW**
If the temperature on the temperature probe exceeds the setpoint value, the electrical circuit is opened or closed by a microswitch. If the temperature falls below the selected setpoint value (by the switching differential), the microswitch is reset to its initial position.

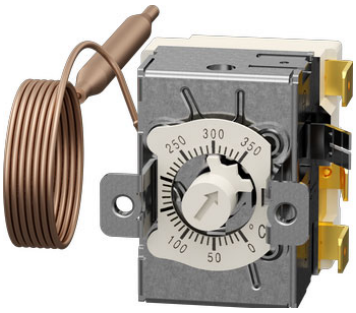
**Restart lock at safety temperature limiter STB**
If the temperature at the temperature sensor exceeds the set limit value, the electrical circuit is opened and the microswitch is mechanically locked. After falling below the limit value by approx. 10 % of the temperature range (approx. 15 % of the limit value setting > +350 °C), the switch can be unlocked manually.

**Use of the safety temperature monitor STW as a safety temperature limiter STB**
The circuitry used with the thermostat must comply with DIN EN 14597 and VDE 0631.

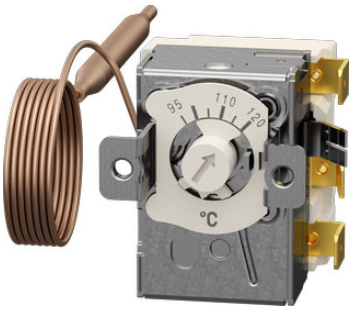
**Self-monitoring for the safety temperature limiter STB and safety temperature monitor STW (STB)**
If the measuring system is destroyed (i.e. if the expansion fluid leaks), the pressure in the membrane of the STB and STW (STB) drops and permanently opens the electrical circuit. Unlocking is no longer possible.
When the STW (STB) and STB probe cools down into the negative temperature range, the electrical circuit opens. The STB must be unlocked manually using the restart knob when the temperature rises. The STW (STB) automatically restarts.



**Type 602030/01**




**Type 602030/02**




**Type 602031/20, type 602031/21**



**Type 602031/80, type 602031/81**

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



# Approval marks and certificates

| | | |
|---|---|---|
| | Designation | DIN |
| | Testing agency | DIN CERTCO/TÜV Süd |
| | Certificate no. | STB1169 |
| | Inspection basis | DIN EN 14597 |
| | Valid for | Type 602031/80, Type 602031/81 |
| | Designation | DIN |
| | Testing agency | DIN CERTCO/TÜV Süd |
| | Certificate no. | STW(STB)1190 |
| | Inspection basis | DIN EN 14597 |
| | Valid for | Type 602031/20, Type 602031/21 |
| | Designation | DIN |
| | Testing agency | DIN CERTCO/TÜV Süd |
| | Certificate no. | TR1168 |
| | Inspection basis | DIN EN 14597 |
| | Valid for | Type 602030/01 |
| | Designation | DIN |
| | Testing agency | DIN CERTCO/TÜV Süd |
| | Certificate no. | TW1189 |
| | Inspection basis | DIN EN 14597 |
| | Valid for | Type 602030/02 |
| | Designation | B10d |
| | Testing agency | TÜV Süd |
| | Certificate no. | C-T 1355-03/11[a] |
| | Inspection basis | DIN EN 14597, DIN EN ISO 13849-1, DIN EN 13611 A2 |
| | Valid for | Type 602031 |
| | Designation | B10d |
| | Testing agency | VDE Offenbach |
| | Certificate no. | TL3-249079 |
| | Inspection basis | DIN EN 60730-1:2017, DIN EN 60730-2-9:2011, EN 60730-1:2016, EN 607030-2-9:2010 |
| | Valid for | Type 602030/02 |

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



| | | |
|---|---|---|
| c UL us | Designation | UL |
| | Testing agency | UL Germany |
| | Certificate no. | UL-CA-L66358-517-60505002-0 |
| | Inspection basis | C22.2 No.24-15 |
| | Valid for | Type 602030/01, Type 602030/02, Type 602031/20, Type 602031/21, Type 602031/80, Type 602031/81 |
| | Designation | UL |
| | Testing agency | UL Germany |
| | Certificate no. | UL-US-L66358-217-60505002-0 |
| | Inspection basis | UL 873 |
| | Valid for | Type 602030/01, Type 602030/02, Type 602031/20, Type 602031/21, Type 602031/80, Type 602031/81 |
| | Designation | UL |
| | Testing agency | UL Germany |
| | Certificate no. | UL-CA-L45736-41-10216002-0 |
| | Inspection basis | UL 353 |
| | Valid for | Type 602031/80, Type 602031/81 |
| | Designation | UL |
| | Testing agency | UL Germany |
| | Certificate no. | UL-US-L45736-21-10216002-0 |
| | Inspection basis | UL 353 |
| | Valid for | Type 602031/80, Type 602031/81 |
| PED | Designation | DGRL |
| | Testing agency | TÜV Süd |
| | Certificate no. | Z-IS-TAF-MUC-18-05-2652099-02162623 |
| | Inspection basis | Directive 2014/68/EU, DIN EN 14597 |
| | Valid for | Type 602031/20, Type 602031/21, Type 602031/80, Type 602031/81 |

[a] For further details see safety manual B 602031.9. Switching capacity check implemented at 230 V, 16 A, ohmic load.

Certificates for approved device versions are available for download on the manufacturer's website.

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



# Technical data

## Electrical data

| | | | |
|---|---|---|---|
| Switching element | Snap-action switch with single-pole changeover contact | | |
| Max. switching capacity[a] | | | |
| On the NC contact (contact deck 1 to 2) | | | |
| TW/TR, STW (STB), STB | AC 400 V +10 %, 16 A, AC 230 V +10 %, 16 (2.5)[b] A, cos φ = 1 (0.6)[b], DC 230 V +10 %, 0.25 A | | |
| On the NO contact (contact deck 1 to 4) | | | |
| TW/TR, STW (STB) | AC 400 V +10 %, 6.3 A, AC 230 V +10 %, 6.3 (2.5)[b] A, cos φ = 1 (0.6)[b], DC 230 V +10 %, 0.25 A | | |
| On the signal contact (contact deck 1 to 4) | | | |
| STB | AC 400 V +10 %, 2 A, AC 230 V +10 %, 2 (0.4)[b] A, cos φ = 1 (0.6)[b], DC 230 V +10 %, 0.25 A | | |
| Gold-plated snap-action switch (extra code 702) | AC/DC = 24 V, 100 mA | | |
| Switching differential in % of the control range and limit value range | Nominal value | | |
| TW/TR | 2.5 | | |
| | 7 | | |
| STW (STB) | 7 | | |
| Switching point accuracy in % of the limit value range | | | |
| TW/TR | In the upper third of the scale ± 3 %, at scale beginning ± 6 %, valid for the nominal value 2.5 | | |
| | In the upper third of the scale ± 4 %, at scale beginning ± 8 %, valid for the nominal value 7 | | |
| STW (STB), STB | Control range | In the "first half" | In the "second half" |
| | 70 to 130 °C | 0/-12 K | 0/-5 K |
| | 95 to 120 °C | 0/-5 K | 0/-5 K |
| | 20 to 150 °C | 0/-15 K | 0/-10 K |
| | 50 to 300 °C | 0/-30 K | 0/-15 K |
| Electrical connection | DIN 46244 | | |
| Connection elements | Contact plate/tab connector form A | | |
| | A 6.3/0.8 | | |
| Switching reliability | Minimum load for maximum switching reliability: | | |
| For silver contacts | AC/DC = 24 V, 100 mA | | |
| With gold-plating | AC/DC = 10 V, 5 mA | | |

[a] On request max. 25 A at AC 230 V.

[b] Inductive loads.

## Environmental influences

| | |
|---|---|
| Ambient temperature influence | Related to the control range and limit value range:<br>When the ambient temperature on the switching head deviates from the calibration ambient temperature of +22 °C, a switching point offset occurs. |
| Admissible storage temperature | -50 to +50 °C or up to max. admissible ambient temperature, see nameplate |
| Admissible ambient temperature | 80 °C, see nameplate |
| Rated position (NL) | Any |

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



## Max. admissible probe temperatures

| | |
|---|---|
| Control ranges | |
| 0 to 120 °C | 145 °C |
| 0 to 200 °C | 230 °C |
| 20 to 90 °C | 115 °C |
| 20 to 150 °C | 180 °C, only with setting range with 250 angular degrees (only STW/STB) |
| 50 to 300 °C | 345 °C, probe material CrNi |
| 50 to 300 °C | 345 °C, probe material CrNi, only with setting range with 250 angular degrees (only STW/STB) |
| 95 to 120 °C | 145 °C |
| 70 to 130 °C | 155 °C |
| Up to 500 °C[a] | Upon request |

[a] Up to 350 °C with approval, from 350 to 500 °C without approval

## Switching point tolerance

| | |
|---|---|
| Switching point tolerance of limit value range | |
| STW (STB) | |
| 95 °C | 0/-5 K<br>With max. admissible probe temperature 145 °C |
| 100 °C | 0/-5 K<br>With max. admissible probe temperature 145 °C |
| 110 °C | 0/-5 K<br>With max. admissible probe temperature 145 °C |

## Mechanical features

| | |
|---|---|
| Material | |
| Housing | Steel sheet, zinc-plated |
| Capillary | CrNi<br>Cu-DHP (standard), up to max. 300 °C |
| Probe | CrNi<br>Cu, up to max. 200 °C |
| Switching socket | Polyester resin molding compound, white |
| Capillary | |
| Length | 1000 mm<br>2000 mm (standard) including 460 mm protective tubing<br>3000 mm<br>Different lengths upon request |
| Diameter | 1.25 mm |
| Min. bending radius | 5 mm |
| Protection type | DIN EN 60529<br>IP00 |
| Weight | Approx. 120 g |

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

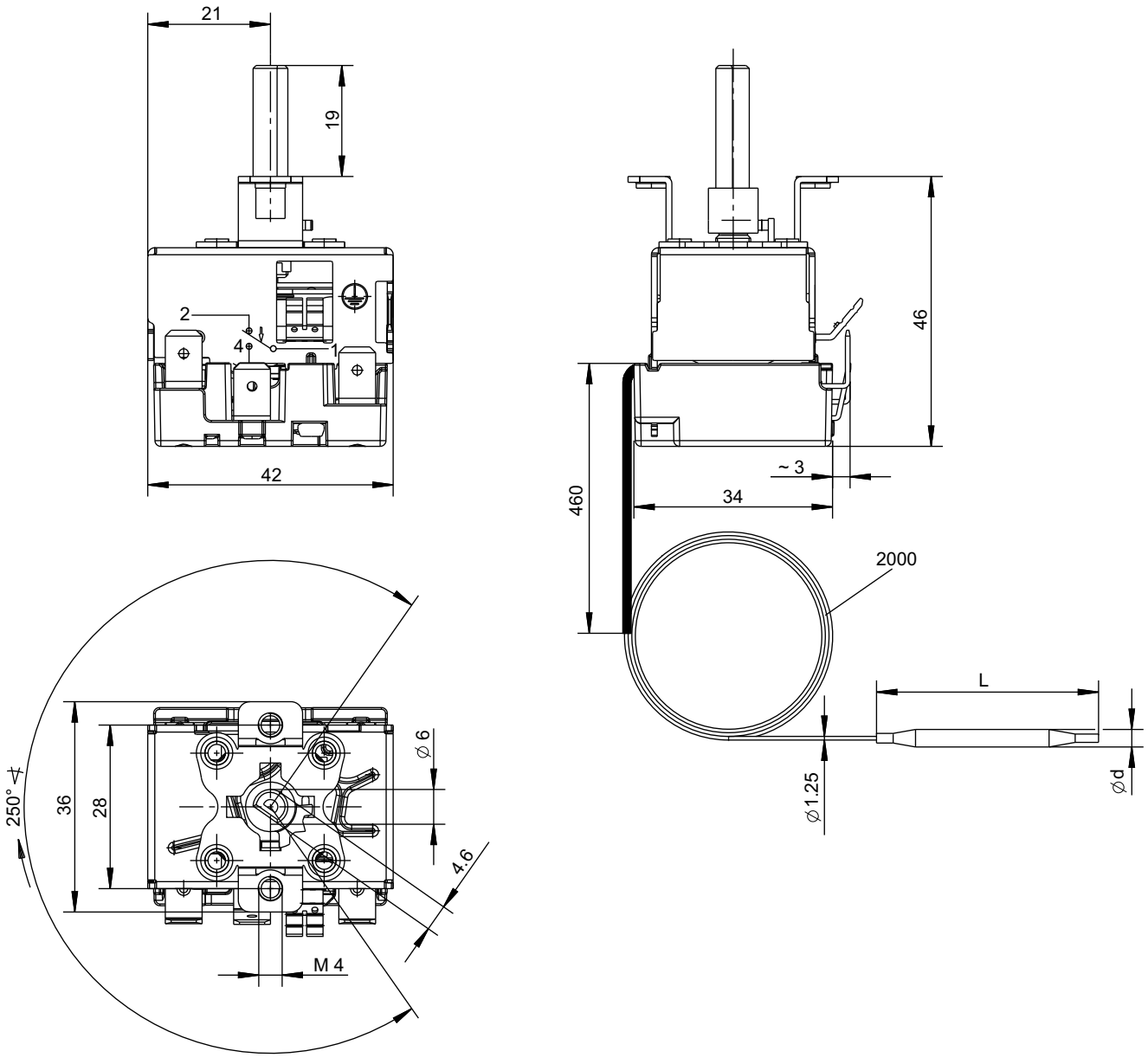
**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



## Dimensions

Type 602030/01, temperature controller TR




All specifications in mm.

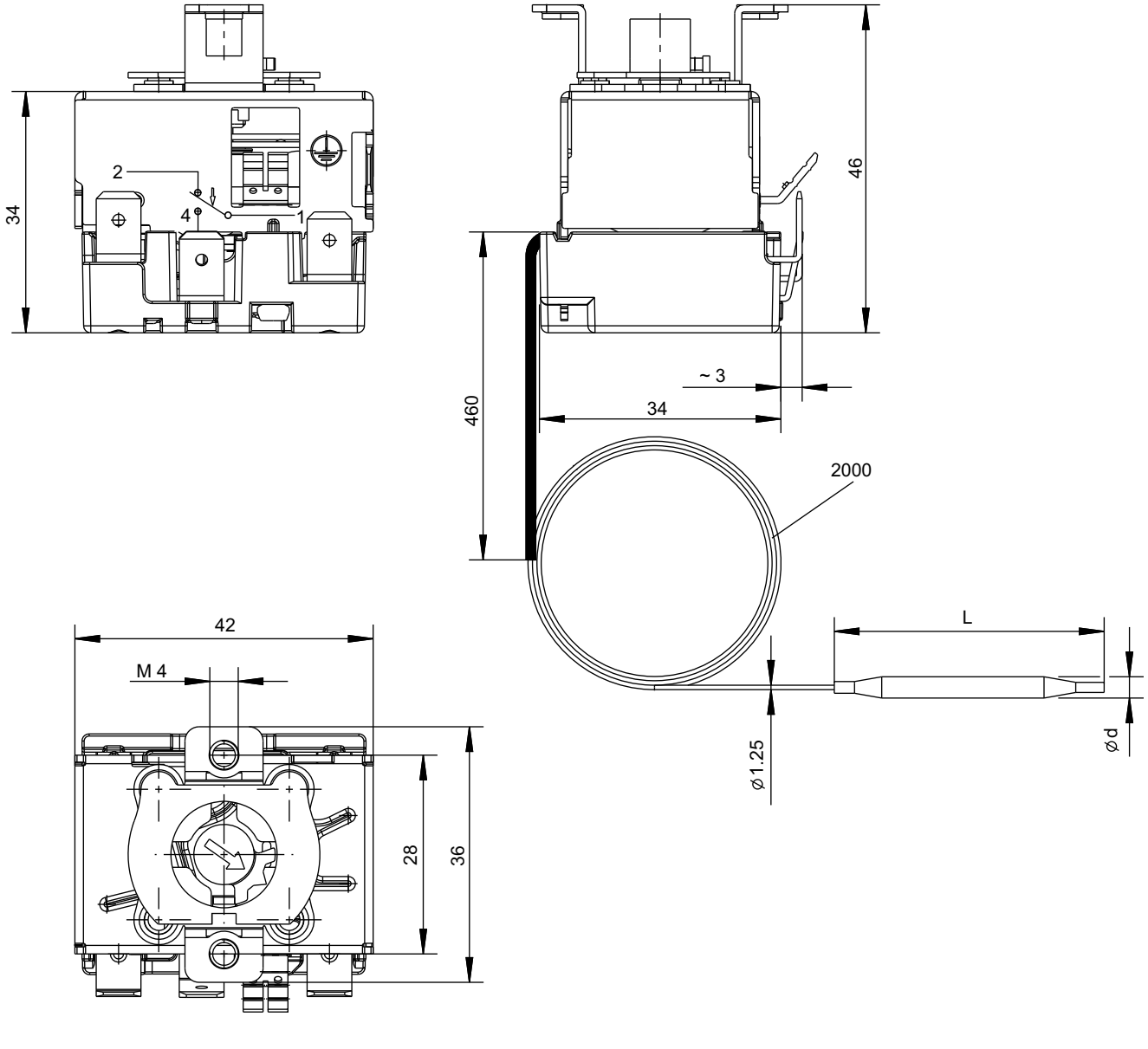
**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



Type 602030/02, temperature monitor TW




All specifications in mm.

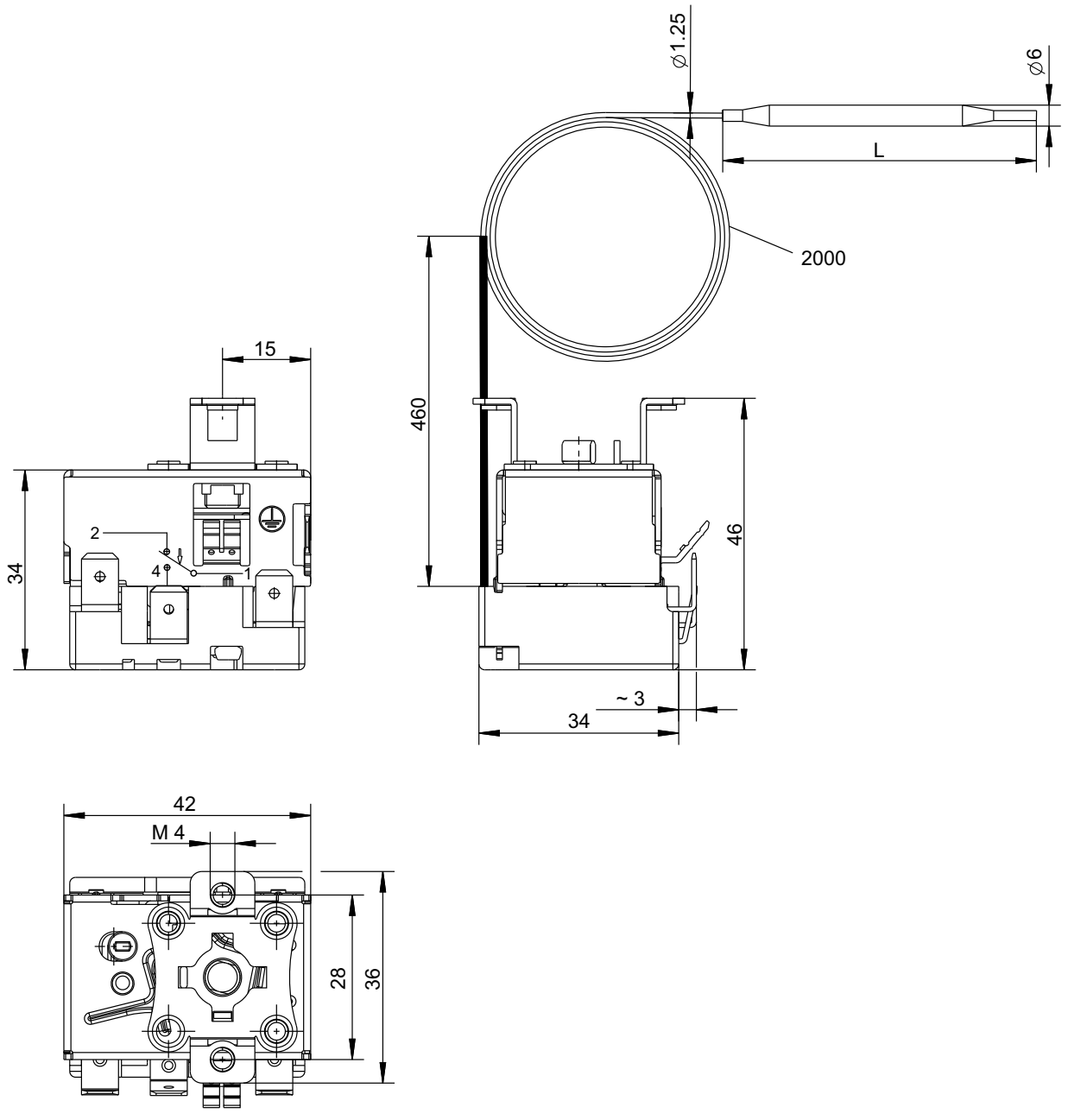
**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



Type 602031/20, safety temperature monitor STW with permanently set switching point




All specifications in mm.

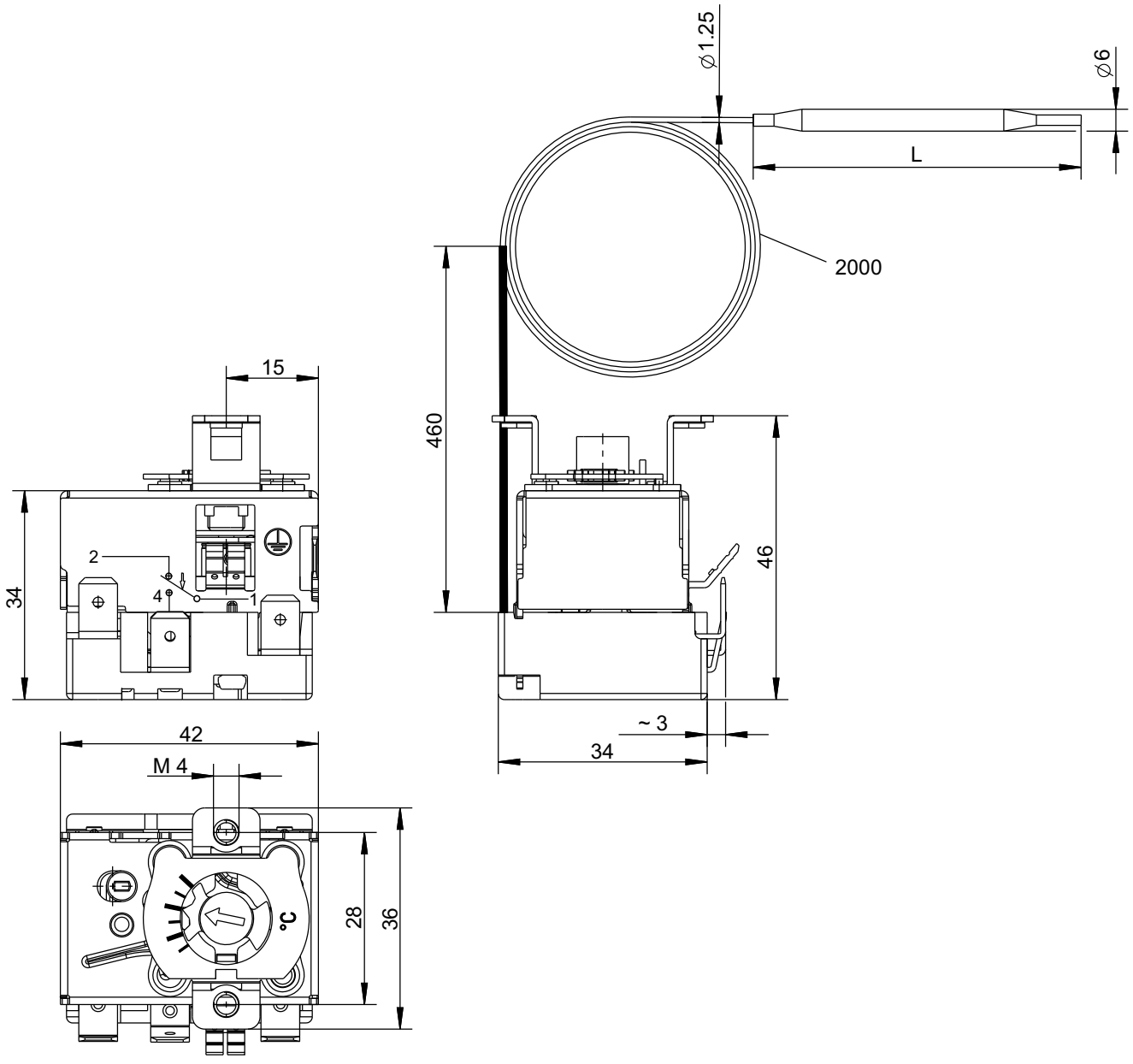
**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



Type 602031/21, safety temperature monitor STW with adjustable switching point




All specifications in mm.

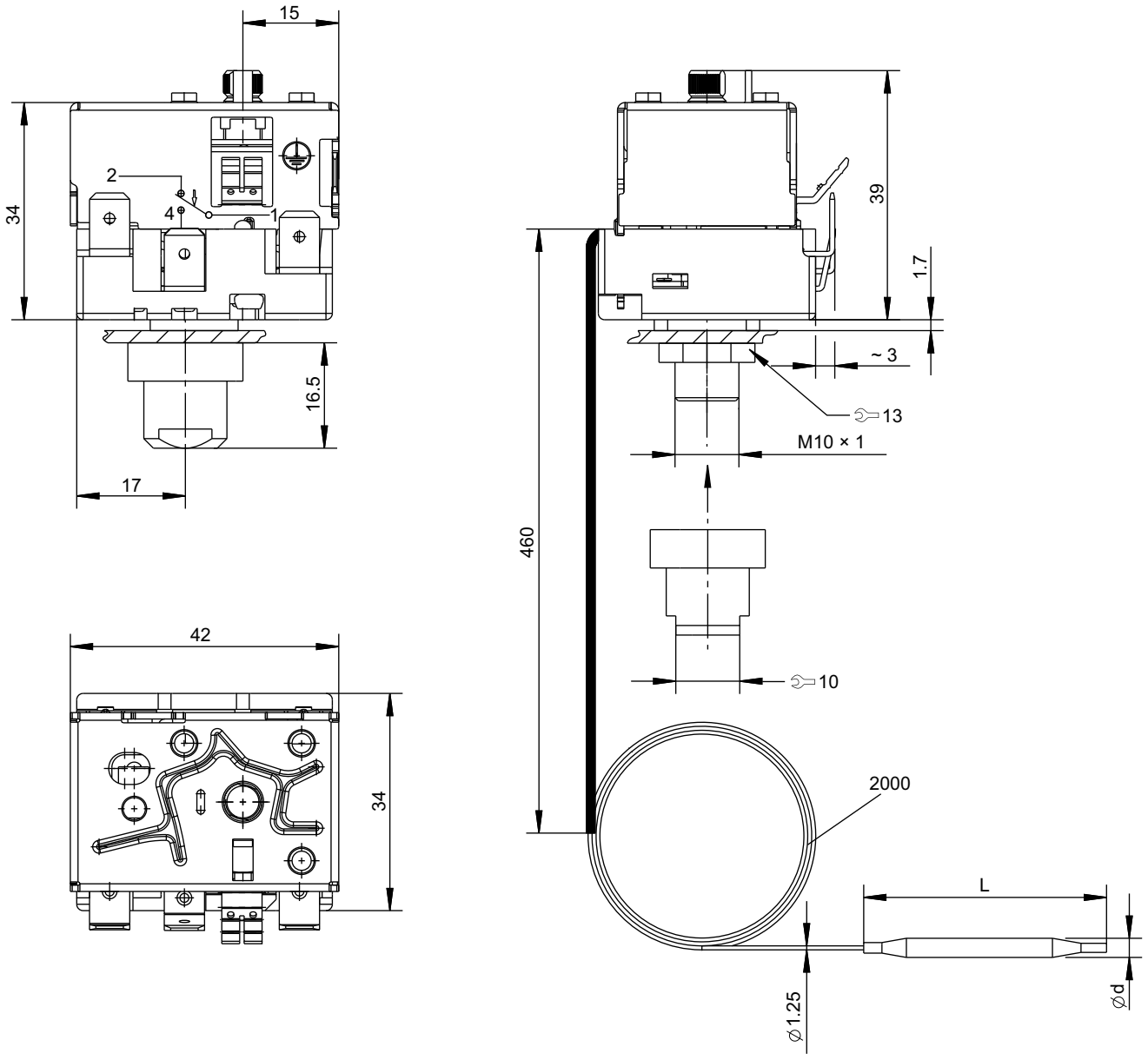
**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



Type 602031/80, safety temperature limiter STB with permanently set switching point




All specifications in mm.

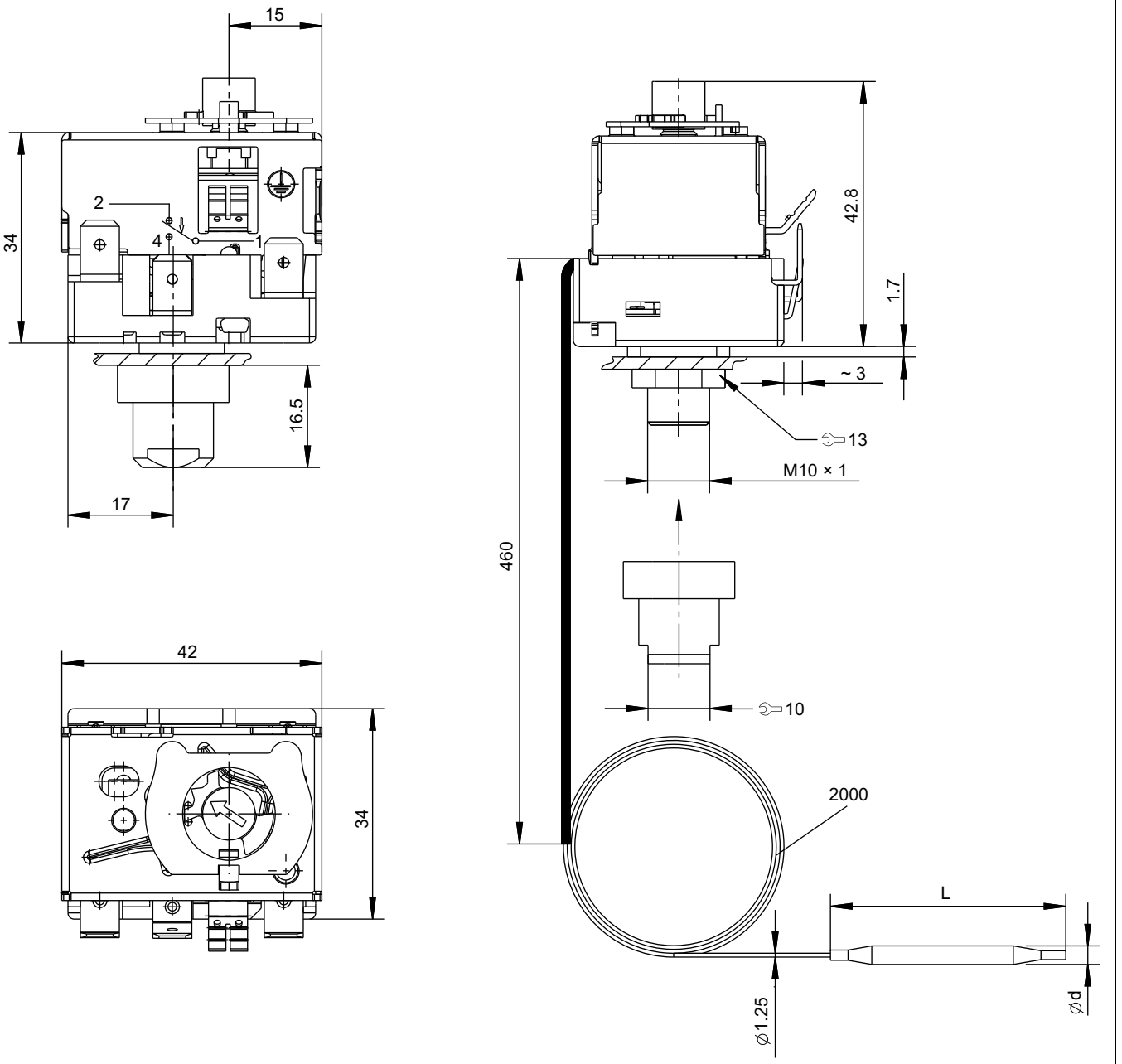
**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



Type 602031/81, safety temperature limiter STB with adjustable switching point




All specifications in mm.

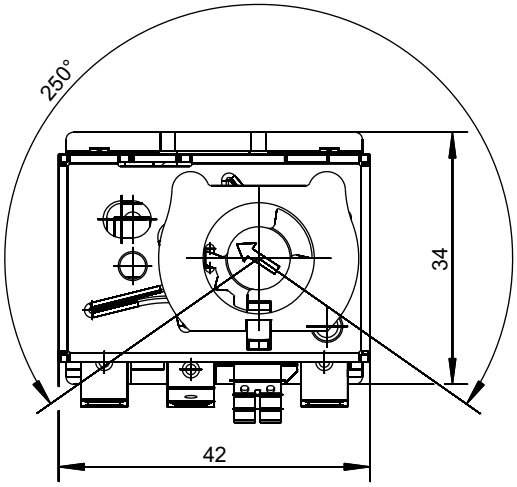
**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



Type 602031/81, safety temperature limiter STB, setting range with 250 angular degrees




All specifications in mm.

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

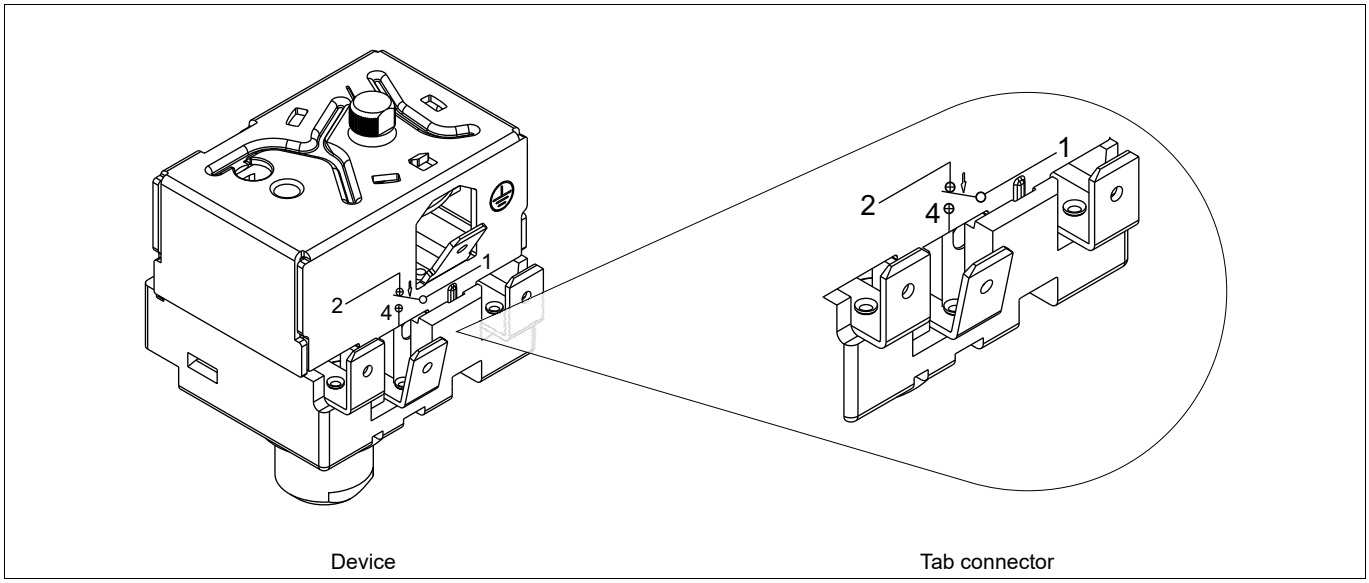
**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



# Connection elements

The connection elements in the data sheet provide information on product selection.

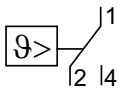
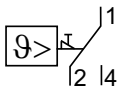
**For the electrical connection, only use the installation instructions or the operating manual.**




Device Tab connector

## Terminal assignment

### Tab connector

| Designation | Description | Assignment | Circuit diagram |
|---|---|---|---|
| TR, TW, STW | COM | 1 |  |
| | NC | 2 | |
| | NO | 4 | |
| STB | COM | 1 |  |
| | NC | 2 | |
| | NO | 4 | |

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



# Order details

| | | |
|---|---|---|
| | **(1)** | **Basic type** |
| 602030/01 | | JUMO heatTHERM – panel-mounted thermostats, temperature controller (TR) |
| 602030/02 | | JUMO heatTHERM – panel-mounted thermostats, temperature monitor (TR) |
| 602031/20 | | JUMO heatTHERM – panel-mounted thermostats, safety temperature monitor (STW), permanently set |
| 602031/21 | | JUMO heatTHERM – panel-mounted thermostats, safety temperature monitor (STW) |
| 602031/80 | | JUMO heatTHERM – panel-mounted thermostats, safety temperature limiter (STB), permanently set |
| 602031/81 | | JUMO heatTHERM – panel-mounted thermostats, safety temperature limiter (STB) |
| | **(2)** | **Control range** |
| 000 | | With permanently set limit value |
| 026 | | 0 to 120 °C (max. admissible probe temperature 145 °C) |
| 028 | | 0 to 200 °C (max. admissible probe temperature 230 °C) |
| 041 | | 20 to 90 °C (max. admissible probe temperature 115 °C) |
| 043 | | 20 to 150 °C (only with setting range with 250 angular degrees, max. admissible probe temperature 180 °C) |
| 064 | | 50 to 300 °C (probe material CrNi, max. admissible probe temperature 345 °C) |
| 640 | | 50 to 300 °C (probe material CrNi, only with setting range with 250 angular degrees, max. admissible probe temperature 345 °C) |
| 666 | | 95 to 120 °C (max. admissible probe temperature 145 °C) |
| 671 | | 70 to 130 °C (max. admissible probe temperature 155 °C) |
| ... | | Up to 500 °C upon request (up to 350 °C with approval, from 350 to 500 °C without approval) |
| | **(3)** | **Limit value (STW/STB)** |
| 000 | | With adjustable control range |
| 095 | | 95 °C (max. admissible probe temperature 145 °C, switching point tolerance 0/-5 K) |
| 100 | | 100 °C (max. admissible probe temperature 145 °C, switching point tolerance 0/-5 K) |
| 110 | | 110 °C (max. admissible probe temperature 145 °C, switching point tolerance 0/-5 K) |
| | **(4)** | **Switching differential** |
| 00 | | None (no specifications for STB) |
| 25 | | 2.5 % |
| 70 | | 7 % |
| | **(5)** | **Capillary length** |
| 1000 | | 1000 mm |
| 2000 | | 2000 mm (standard) |
| 3000 | | 3000 mm |
| .... | | Upon request |
| | **(6)** | **Capillary material** |
| 20 | | CrNi (stainless steel), Ø 1.25 mm |
| 40 | | Cu (copper, up to max. 300 °C), Ø 1.25 mm |
| | **(7)** | **Process connection** |
| 10 | | Plain cylindrical probe |
| | **(8)** | **Probe diameter** |
| 4 | | 4 mm |
| 6 | | 6 mm |
| | **(9)** | **Probe material** |
| 20 | | CrNi (stainless steel) |
| 40 | | Cu (copper, up to max. 200 °C) |
| | **(10)** | **Type of capillary protective tubing** |
| 00 | | None |
| 01 | | PTFE shrink tubing 01, Ø 2.3 mm |
| 13 | | PVC tube |
| | **(11)** | **Protective tubing length** |
| 0 | | None |

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



| | | |
|---|---|---|
| 460 | | 460 mm |
| | **(12)** | **Extra code** |
| 702 | | Snap-action switch contact with gold-plating |
| 707 | | Temperature compensation |
| 742 | | Tab connector, straight |
| 749 | | Setting range with 250 angular degrees (only STW/STB) |

| | (1) | | (2) | | (3) | | (4) | | (5) | | (6) | | (7) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Order code** | | - | | - | | - | | - | | - | | - | | - |
| **Order example** | 602031/80 | - | 000 | - | 110 | - | 00 | - | 2000 | - | 40 | - | 10 | - |

| | (8) | | (9) | | (10) | | (11) | | (12) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | - | | - | | - | | / | | , …[a] |
| | 6 | - | 40 | - | 13 | - | 460 | / | 707 | |

[a] List extra codes in sequence, separated by commas.

Further versions are available.
Minimum order quantity: 400 pieces

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



# Stock versions

**JUMO heatTHERM – temperature controller (TR) with 2000 mm capillary and adjustable control range**

| Order code | Control range | Switching differential | Probe diameter × length | Part no. |
|---|---|---|---|---|
| 602030/01-041-000-25-2000-40-10-6-40-13-460/707 | 20 to 90 °C | Approx. 2 K | 6 × 132 mm | 60003218 |
| 602030/01-041-000-70-2000-40-10-6-40-13-460/707 | 20 to 90 °C | Approx. 5 K | 6 × 79 mm | 60003280 |
| 602030/01-026-000-25-2000-40-10-6-40-13-460/707 | 0 to 120 °C | Approx. 3 K | 6 × 87 mm | 60003219 |
| 602030/01-028-000-25-2000-40-10-6-40-13-460/707 | 0 to 200 °C | Approx. 5 K | 6 × 78 mm | 60003220 |
| 602030/01-064-000-25-2000-40-10-6-20-13-460/707 | 50 to 300 °C | Approx. 6 K | 6 × 66 mm | 60003221 |

**JUMO heatTHERM – temperature monitor (TW) with 2000 mm capillary and adjustable control range**

| Order code | Control range | Switching differential | Probe diameter × length | Part no. |
|---|---|---|---|---|
| 602030/02-041-000-25-2000-40-10-6-40-13-460/707 | 20 to 90 °C | Approx. 2 K | 6 × 132 mm | 60003222 |
| 602030/02-041-000-70-2000-40-10-6-40-13-460/707 | 20 to 90 °C | Approx. 5 K | 6 × 79 mm | 60003281 |
| 602030/02-026-000-25-2000-40-10-6-40-13-460/707 | 0 to 120 °C | Approx. 3 K | 6 × 87 mm | 60003223 |
| 602030/02-028-000-25-2000-40-10-6-40-13-460/707 | 0 to 200 °C | Approx. 5 K | 6 × 78 mm | 60003224 |
| 602030/02-064-000-25-2000-40-10-6-20-13-460/707 | 50 to 300 °C | Approx. 6 K | 6 × 66 mm | 60003225 |

**JUMO heatTHERM – safety temperature monitor (STW) with 2000 mm capillary and adjustable control range**

| Order code | Control range | Switching differential | Probe diameter × length | Part no. |
|---|---|---|---|---|
| 602031/21-671-000-70-2000-40-10-6-40-13-460/707 | 70 to 130 °C | Approx. 10 K | 6 × 68 mm | 60003226 |

**JUMO heatTHERM – safety temperature limiter (STB), permanently set, with 2000 mm capillary and permanently set to 100 °C**

| Order code | Control range | Unlocking difference | Probe diameter × length | Part no. |
|---|---|---|---|---|
| 602031/80-000-100-00-2000-40-10-6-40-13-460/707 | Permanently set limit value | Approx. 10 K | 6 × 72 mm | 60002994 |

**JUMO heatTHERM – safety temperature limiter (STB) with 2000 mm capillary and adjustable control range**

| Order code | Control range | Unlocking difference | Probe diameter × length | Part no. |
|---|---|---|---|---|
| 602031/81-666-000-00-2000-40-10-6-40-13-460/707 | 95 to 120 °C | Approx. 10 K | 6 × 72 mm | 60002995 |
| 602031/81-671-000-00-2000-40-10-6-40-13-460/707 | 70 to 130 °C | | 6 × 68 mm | 60003136 |
| 602031/81-043-000-00-2000-40-10-6-40-13-460/707, 749 | 20 to 150 °C | In the upper third approx. 15 K | 6 × 60 mm | 60003291 |
| | | At the scale beginning approx. 30 K | | |
| 602031/81-640-000-00-2000-40-10-6-20-13-460/707.749 | 50 to 300 °C | In the upper third approx. 25 K | 6 × 85 mm | 60003292 |
| | | At the scale beginning approx. 45 K | | |

Minimum order quantity: 1 packaging unit with 5 pieces

**JUMO GmbH & Co. KG**
Delivery address: Mackenrodtstraße 14
36039 Fulda, Germany
Postal address: 36035 Fulda, Germany
Phone: +49 661 6003-0
Fax: +49 661 6003-607
Email: mail@jumo.net
Internet: www.jumo.net

**JUMO UK LTD**
JUMO House
Temple Bank, Riverway
Harlow, Essex, CM20 2DY, UK
Phone: +44 1279 63 55 33
Fax: +44 1279 62 50 29
Email: info.uk@jumo.net
Internet: www.jumo.co.uk

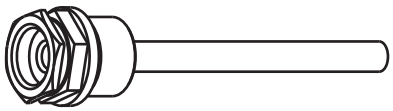
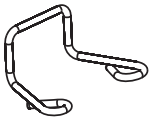
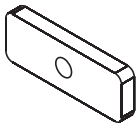
**JUMO Process Control, Inc.**
6724 Joy Road
East Syracuse, NY 13057, USA
Phone: +1 315 437 5866
Fax: +1 315 437 5860
Email: info.us@jumo.net
Internet: www.jumousa.com



# Accessories

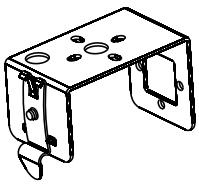
## According to product groups 606710 and 606715

**Thermowell set**
(according to product group 606710), suitable for type 602030, 602031, and 603070 up to probe diameter Ø 6 mm

|  | |  |  |  | |
|---|---|---|---|---|---|
| Thermowell with sealing collar | | Clamp for strain relief | Plate for surface-mounted thermostat | Screw for surface-mounted thermostat | |
| Type | Code | Connection | Sleeve diameter × insertion length EL[a] in mm | Material | **Part no.** |
| Screw-in thermowell with sealing collar | 28 | G 1/2" | Ø 8 × 100 | Brass, nickel-plated compressive strength at 150 °C: 48 bar | 60003177 |
| | | | Ø 8 × 150 | | 60003203 |
| | | | Ø 8 × 200 | | 60003171 |
| | | | Ø 8 × 100 | Stainless steel, 1.4571 compressive strength at 150 °C: 88 bar | 60003172 |
| | | | Ø 8 × 150 | | 60003205 |
| | | | Ø 8 × 200 | | 60003173 |

[a] Insertion length corresponds to the end of the sleeve to the sealing collar

**Mounting set for mounting rail DIN EN 60715 TH 35-7.5**
(according to product group 606710)

|  |  |  | |
|---|---|---|---|
| Type | 2 screws | | **Part no.** |
| Adapter set, mounting rail JUMO heatTHERM/EM | M3 × 4 | M4 × 5 | 00511794 |

**Setpoint adjuster**
(according to product group 606715), suitable for type 602031/01

|  |  |  |  | | |
|---|---|---|---|---|---|
| Type | Control range in °C | Rotary knob 07 | Orifice plate 23 | Adjustable limit stop 16 | 2 screws | **Part no.** |
| W8 | 20 to 90 | | | | M4 × 8 | 60003091 |
| | 0 to 120 | | | | | 60003227 |
| | 0 to 200 | | | | | 60003095 |
| | 50 to 300 | | | | | 60003098 |