

Limit value switches - MINI MCR-2-T-2RO - 2906876

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Universally configurable temperature limit value switch with two transistor outputs for the connection of 2, 3, and 4-conductor resistance thermometers and thermocouples. Configurable via DIP switch or software, screw connection technology

Product Description

Universally configurable temperature limit value switch with two transistor outputs for the connection of 2, 3, and 4-conductor resistance thermometers and thermocouples. You can configure the device using one of the free software solutions available or your smartphone. Default settings can also be made directly on the device by simply using the DIP switches (see configuration table). The temperature limit value switch supports fault monitoring and NFC communication.



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 1 pc |
| GTIN |  4 055626 131573 |
| GTIN | 4055626131573 |

Technical data

Note

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

Dimensions

| | |
|--------|----------|
| Width | 6.2 mm |
| Height | 110.5 mm |
| Depth | 120.5 mm |

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -40 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Input data

| | |
|------------------|---|
| Number of inputs | 1 |
|------------------|---|

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Input data

| | |
|---|---|
| Available input sources | Resistance thermometers |
| Sensor types (RTD) that can be used | Pt, Ni, Cu sensors |
| Connection technology | 2, 3, 4-wire |
| Sensor input current | approx. 200 µA |
| Max. permissible overall conductor resistance | ≤ 25 Ω (Per line, RTD in 3- or 4-wire technology) |
| | ≤ 50 Ω (Per line, RTD in 2-wire technology) |
| Linear resistance measuring range | 0 Ω ... 4000 Ω |
| Linear mV signal range | -500 mV ... 500 mV |
| Available input sources | Thermocouples |
| Sensor types that can be used (TC) | B, E, J, K, N, R, S, T, L, U, A-1, A-2, A-3, M, L |

Switching output

| | |
|---------------------------|--------------------------------|
| Output name | Switching output |
| Number of outputs | 2 |
| Contact type | 2 N/O contacts |
| Maximum switching voltage | 30 V DC |
| Max. switching current | 100 mA (30 V (≤ 50 °C)) |
| | 70 mA (30 V (51 °C ... 70 °C)) |

Power supply

| | |
|-----------------------------|--|
| Nominal supply voltage | 24 V DC |
| Supply voltage range | 9.6 V DC ... 30 V DC (The DIN rail bus connector (ME 6,2 TBUS-2 1,5/5-ST-3,81 GN, Order No. 2869728) can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail according to EN 60715)) |
| Typical current consumption | 20 mA (12 V DC) |
| | 10 mA (24 V DC) |
| Power consumption | 350 mW |

Connection data

| | |
|---|---------------------|
| Connection method | Screw connection |
| Single conductor/terminal point, solid, with ferrule, min. | 0.2 mm ² |
| Single conductor/terminal point, solid, with ferrule, max. | 1.5 mm ² |
| Single conductor/terminal point, solid, without ferrule, min. | 0.2 mm ² |
| Single conductor/terminal point, solid, without ferrule, max. | 2.5 mm ² |
| Conductor cross section flexible min. | 0.2 mm ² |
| Conductor cross section flexible max. | 1.5 mm ² |
| Min. AWG conductor cross section, flexible | 24 |
| Max. AWG conductor cross section, flexible | 12 |
| Stripping length | 10 mm |
| Screw thread | M3 |

General

| | |
|-----------------|---|
| No. of channels | 1 |
|-----------------|---|

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General

| | |
|--|--|
| Maximum temperature coefficient | 0.01 %/K |
| Switching point accuracy | < 0.1 % |
| Status display | Yellow LED (switching output) |
| Electrical isolation | Reinforced insulation in accordance with IEC 61010-1 |
| Overvoltage category | II |
| Degree of pollution | 2 |
| Rated insulation voltage | 300 V |
| Test voltage, input/output/supply | 3 kV (50 Hz, 1 min.) |
| Electromagnetic compatibility | Conformance with EMC directive |
| Noise emission | EN 61000-6-4 |
| Noise immunity | EN 61000-6-2 When being exposed to interference, there may be minimal deviations. |
| Color | gray |
| Housing material | PBT |
| Mounting position | any |
| Assembly instructions | The T connector can be used to bridge the supply voltage. It can be snapped onto a 35 mm DIN rail according to EN 60715. |
| Conformance | CE-compliant |
| ATEX | # II 3 G Ex nA IIC T4 Gc X |
| UL, USA/Canada | UL 508 Listed |
| | Class I, Div. 2, Groups A, B, C, D T6 |
| | Class I, Zone 2, Group IIC T6 |
| GL | GL applied for |
| Fire protection for rail vehicles (DIN EN 45545-2) R22 | HL 1 - HL 2 |
| Fire protection for rail vehicles (DIN EN 45545-2) R23 | HL 1 - HL 2 |
| Fire protection for rail vehicles (DIN EN 45545-2) R24 | HL 1 - HL 2 |

Standards and Regulations

| | |
|--|--|
| Electromagnetic compatibility | Conformance with EMC directive |
| Noise emission | EN 61000-6-4 |
| Electrical isolation | Reinforced insulation in accordance with IEC 61010-1 |
| Conformance | CE-compliant |
| ATEX | # II 3 G Ex nA IIC T4 Gc X |
| UL, USA/Canada | UL 508 Listed |
| | Class I, Div. 2, Groups A, B, C, D T6 |
| | Class I, Zone 2, Group IIC T6 |
| GL | GL applied for |
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| Fire protection for rail vehicles (DIN EN 45545-2) R23 | HL 1 - HL 2 |
| Fire protection for rail vehicles (DIN EN 45545-2) R24 | HL 1 - HL 2 |

Environmental Product Compliance

Limit value switches - MINI MCR-2-T-2RO - 2906876

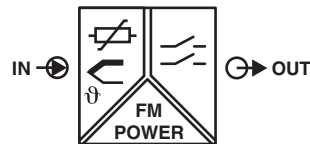
Technical data

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Pictogram



Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / cULus Listed

Ex Approvals

ATEX / UL Listed / cUL Listed / cULus Listed


Approval details

| | | | |
|-----------|--|---|---------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
|-----------|--|---|---------------|

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| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 238705 |
|------------|--|---|---------------|

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Approvals

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|-----|---|--------------------------|
| EAC |  | RU C- DE.A*30.B.01082 |
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| cULus Listed |  | |
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