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MCR limit value switch, with adjustable hysteresis and delay time, with screw connection

Product description

The 6.2 mm wide configurable 3-way threshold value switch MINI MCR-SL-UI-REL... is used to control and monitor analog standard signals. On the input side, the analog standards signals 0...20 mA or 0...10 V per DIP switch can be set. On the output side, a relay with PDT contact is available. The switching thresholds are set via potentiometer.

The DIP switches located on the side of the housing have the following functions:

- Configuration of the switching hysteresis,
- Configuration of the operating and closed circuit current behavior,
- Setting of relay pickup times
- Setting of dropout delay

The relay status is indicated by a yellow LED on the front of the housing.

Power (19.2 V DC to 30 V DC) can be supplied through connection terminal blocks on the modules or in conjunction with the DIN rail connector.

Product Features

- ✓ Power supply possible via the foot element (TBUS)
- Highly-compact threshold value switch for switching analog limit values
- Operating current/closed circuit current switch-over
- ☑ PDT relay at output
- Limit value can be freely adjusted via potentiometer on the front
- Input signal, hysteresis, and delay time can be configured via DIP switches
- 3-way isolation









Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	85.0 GRM
Custom tariff number	85389091
Country of origin	Germany



Technical data

Note

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

Dimensions

Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

Ambient conditions

Ambient temperature (operation)	-20 °C 65 °C
Ambient temperature (storage/transport)	-40 °C 85 °C
Degree of protection	IP20

Input data

Number of inputs	1
Voltage input signal	0 V 10 V
Current input signal	0 mA 20 mA
Max. input voltage	30 V
Max. input current	100 mA
Input resistance of voltage input	> 100 kΩ
Input resistance current input	50 Ω

Output data

Number of inputs	1
Trainible of inputs	•

Switching output

Output name	Relay output
Contact type	1 PDT
Contact material	AgSnO ₂ , hard gold-plated
Maximum switching voltage	250 V AC
	240 V AC (UL)
Limiting continuous current	2 A
Setting range of the response delay	0 s 10 s (0 s; 1 s; 2 s; 3 s; 4 s; 6 s; 8 s; 10 s)
Internal hysteresis	0.1 %; 1 %; 2.5 %; 5 %

Power supply

Nominal supply voltage	24 V DC ±15 %
Supply voltage range	19.2 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))
Max. current consumption	< 14 mA (at 24 V DC)



Technical data

Power supply

Power consumption	< 330 mW (at 24 V DC)

Connection data

Connection method	Screw connection
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	12
Conductor cross section stranded min.	0.2 mm²
Conductor cross section stranded max.	2.5 mm ²
Stripping length	12 mm
Screw thread	M3

General

No. of channels	1
Maximum temperature coefficient	< 0.02 %/K
Switching point accuracy	< 0.05 %
Electrical isolation	Basic insulation according to EN 61010
Surge voltage category	II
Pollution degree	2
Rated insulation voltage	50 V AC/DC
Test voltage input/power supply	1.5 kV AC (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Color	green
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 nC IIC T4 Gc X
UL, USA	Class I, Zone 2, AEx nA nC IIC T5
UL, USA / Canada	UL 508 Recognized
UL, Canada	Class I, Zone 2, Ex nA nC IIC T5 Gc
GL	GL EMC 2 D

EMC data

Designation	Electromagnetic RF field
Designation	Liectionagnetic Ni lielu



Technical data

EMC data

Standards/regulations	EN 61000-4-3
Typical deviation from the measuring range final value	5 %
Designation	Fast transients (burst)
Standards/regulations	EN 61000-4-4
Typical deviation from the measuring range final value	5 %
Designation	Conducted interferences
Standards/regulations	EN 61000-4-6
Typical deviation from the measuring range final value	5 %

Classifications

eCl@ss

eCl@ss 4.0	27210107
eCl@ss 4.1	27210107
eCl@ss 5.0	27210107
eCl@ss 5.1	27210107
eCl@ss 6.0	27210107
eCl@ss 7.0	27210107
eCl@ss 8.0	27210122

ETIM

ETIM 2.0	EC001485
ETIM 3.0	EC001485
ETIM 4.0	EC001485
ETIM 5.0	EC001485

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008

Approvals

Approvals



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Approvals

UL Recognized / cUL Recognized / GL / cULus Recognized

Ex Approvals

UL Listed / cUL Listed / ATEX / cULus Listed

Approvals submitted

Approval details

UL Recognized **\$\)**

cUL Recognized

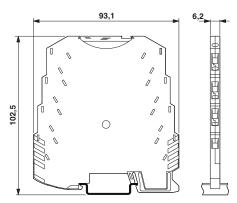
GL

cULus Recognized • Sus

Drawings

Sensor / Field IN OUT OUT PLC / DCS OUT S Sensor / Field OUT S Sensor /

Dimensioned drawing





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