

# Limit value switches - MINI MCR-SL-UI-REL - 2864480

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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 (T-connector)
- ✔ Highly-compact threshold value switch for switching analog limit values
- ✔ Status and error indication via two diagnostic LEDs
- ✔ 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

package_quantity	1
GTIN	4017918974879

## Technical data

### Note

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

Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm

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## Technical data

### Ambient conditions

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

### Input data

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

### Switching output

Output name	Relay output
Contact type	1 PDT
Contact material	AgSnO <sub>2</sub> , hard gold-plated
Maximum switching voltage	250 V AC
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 T 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)
Power consumption	< 330 mW (at 24 V DC)

### Connection data

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

### General

No. of channels	1
Maximum temperature coefficient	< 0.02 %/K
Switching point accuracy	< 0.05 %

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## Technical data

### General

<b>Electrical isolation</b>	Basic insulation according to EN 61010
<b>Surge voltage category</b>	II
<b>Pollution degree</b>	2
<b>Rated insulation voltage</b>	50 V AC/DC
<b>Test voltage input/power supply</b>	1.5 kV AC (50 Hz, 1 min.)
<b>Electromagnetic compatibility</b>	Conformance with EMC Directive 2004/108/EC
<b>Noise emission</b>	EN 61000-6-4
<b>Noise immunity</b>	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
<b>Color</b>	green
<b>Housing material</b>	PBT
<b>Mounting position</b>	any
<b>Assembly instructions</b>	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.
<b>Conformance</b>	CE-compliant
<b>ATEX</b>	# II 3 G Ex nA nC IIC T4 Gc X
<b>UL, USA</b>	Class I, Zone 2, AEx nC IIC T6
<b>UL, USA / Canada</b>	UL 508 Recognized
<b>UL, Canada</b>	Class I, Zone 2, Ex nC IIC T6
<b>GL</b>	GL EMC 2 D

### EMC data

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

### classifications

#### eCl@ss

<b>eCl@ss 4.0</b>	27210107
<b>eCl@ss 4.1</b>	27210107
<b>eCl@ss 5.0</b>	27210107
<b>eCl@ss 5.1</b>	27210107
<b>eCl@ss 6.0</b>	27210107
<b>eCl@ss 7.0</b>	27210107
<b>eCl@ss 8.0</b>	27210107

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## classifications

### ETIM

<b>ETIM 2.0</b>	EC001485
<b>ETIM 3.0</b>	EC001485
<b>ETIM 4.0</b>	EC001485
<b>ETIM 5.0</b>	EC001485

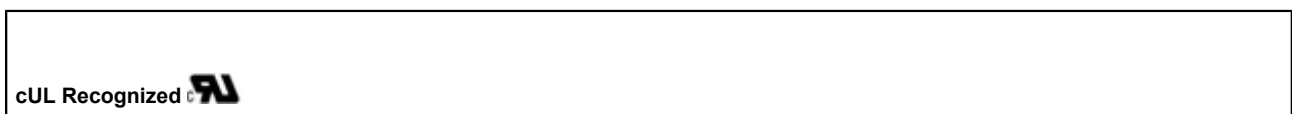
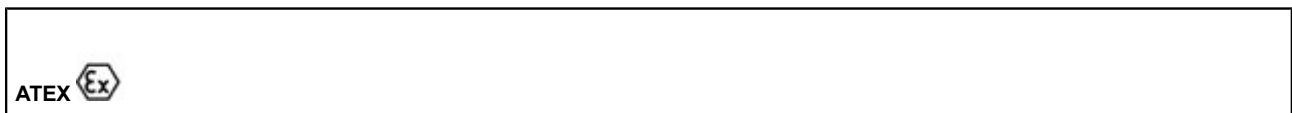
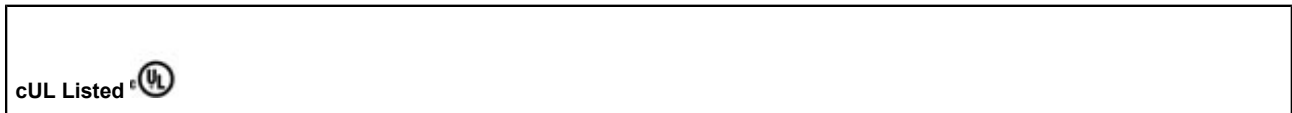
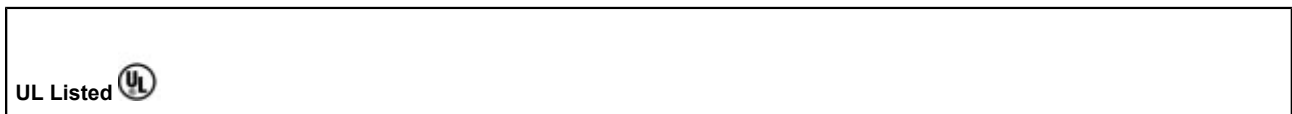
### UNSPSC

<b>UNSPSC 6.01</b>	30211506
<b>UNSPSC 7.0901</b>	39121008
<b>UNSPSC 11</b>	39121008
<b>UNSPSC 12.01</b>	39121008
<b>UNSPSC 13.2</b>	39121008

## approvals

UL Listed / cUL Listed / ATEX / cULus Listed / UL Recognized / cUL Recognized / GL / cULus Recognized /

### Approval details



## Limit value switches - MINI MCR-SL-UI-REL - 2864480

approvals

GL

cULus Recognized 

accessories

**DIN rail connector**

ME 6,2 TBUS-2 1,5/5-ST-3,81 GN - 2869728



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**Power module**

MINI MCR-SL-PTB - 2864134



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MINI MCR-SL-PTB-SP - 2864147



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**Power supply**

MINI-SYS-PS-100-240AC/24DC/1.5 - 2866983



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### accessories

MINI-PS-100-240AC/24DC/1.5/EX - 2866653



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### System adapter

MINI MCR-SL-V8-FLK 16-A - 2811268



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### Marking material

MINI MCR DKL - 2308111



MINI MCR-DKL-LABEL - 2810272



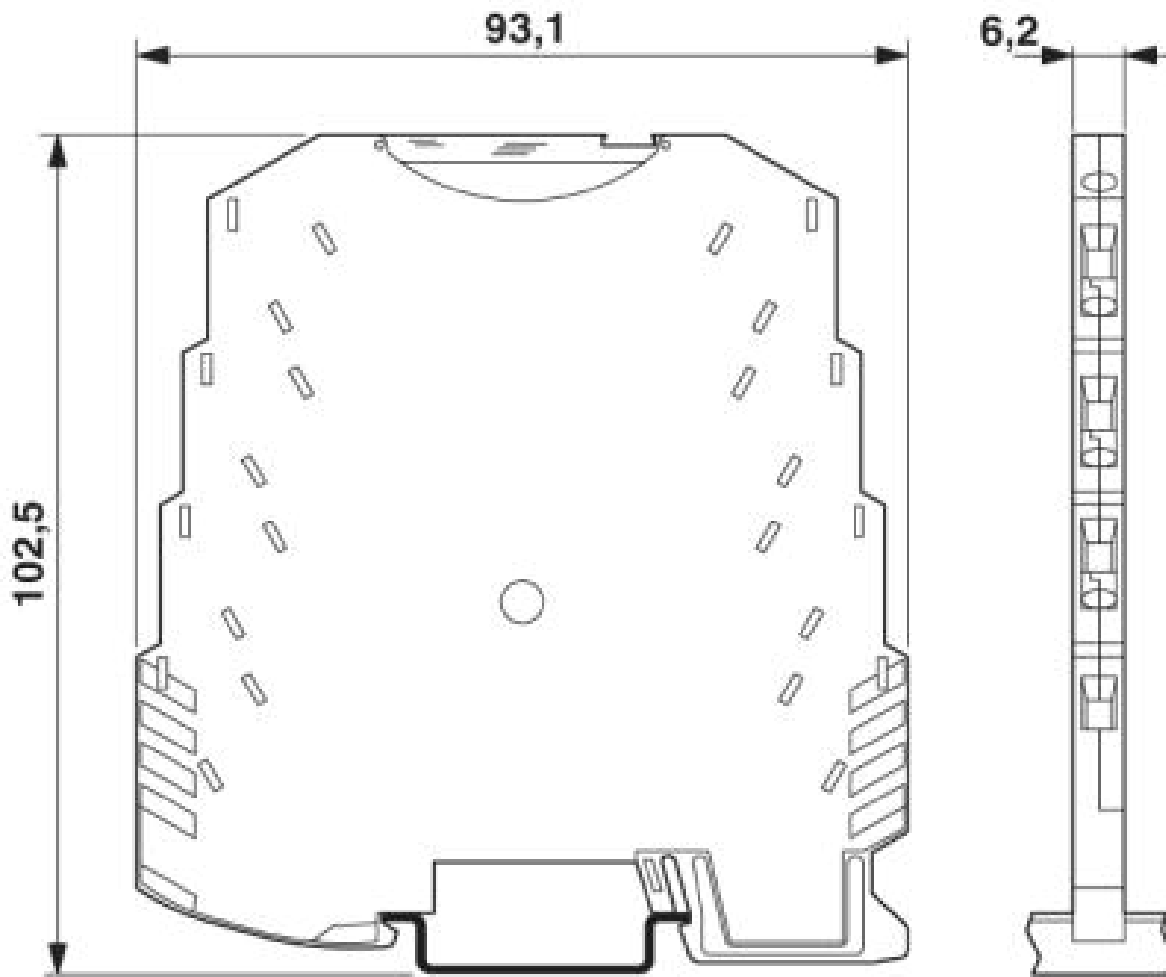
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### Drawings



# Limit value switches - MINI MCR-SL-UI-REL - 2864480

Dimensioned drawing



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