

## Signal conditioner - MINI MCR-SL-I-U-4-SP - 2813567

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



MCR 3-way isolating amplifier, for electrical isolation of analog signals, with spring-cage connection, input signal: 4 mA ... 20 mA, output signal: 0 V ... 10 V

The figure shows a version with a screw connection

### Product Features

- ✓ Power supply possible via the foot element (TBUS)
- ✓ Entry-level alternative to configurable signal conditioners
- ✓ Low power consumption
- ✓ 3-way isolation
- ✓ Highly-compact isolating amplifier for electrical isolation, conversion, amplification, and filtering of standard analog signals
- ✓ Fixed signal combinations



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	65.0 GRM
Custom tariff number	85437090
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

# Signal conditioner - MINI MCR-SL-I-U-4-SP - 2813567

## Technical data

### Dimensions

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

Configurable/programmable	no
Current input signal	4 mA ... 20 mA
Max. input current	50 mA
Input resistance current input	approx. 50 Ω

### Output data

Configurable/programmable	no
Voltage output signal	0 V ... 10 V
Max. output voltage	12.5 V
Short-circuit current	approx. 2 mA
Load/output load voltage output	≥ 10 kΩ

### Power supply

Nominal supply voltage	24 V DC
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	< 9 mA
Power consumption	< 200 mW

### Connection data

Connection method	Spring-cage 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.	24
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	8 mm

### General

Maximum transmission error	≤ 0.1 % (of final value)
Maximum temperature coefficient	< 0.01 %/K

# Signal conditioner - MINI MCR-SL-I-U-4-SP - 2813567

## Technical data

### General

Temperature coefficient, typical	< 0.002 %/K
Limit frequency (3 dB)	approx. 100 Hz
Step response (10-90%)	approx. 3.5 ms
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/output/supply	1.5 kV (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 IIC T4 Gc X
UL, USA / Canada	UL 508 Recognized
	Class I, Div. 2, Groups A, B, C, D T5 applied for
GL	GL EMC 2 D

### EMC data

Designation	Electromagnetic RF field
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	27210120
------------	----------

# Signal conditioner - MINI MCR-SL-I-U-4-SP - 2813567

## Classifications

### eCl@ss

eCl@ss 4.1	27210120
eCl@ss 5.0	27210120
eCl@ss 5.1	27210120
eCl@ss 6.0	27210120
eCl@ss 7.0	27210120
eCl@ss 8.0	27210120

### 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

---

#### Approvals

UL Recognized / cUL Recognized / GL / cULus Recognized

---

#### Ex Approvals

#### ATEX

---

#### Approvals submitted

---

#### Approval details

# Signal conditioner - MINI MCR-SL-I-U-4-SP - 2813567

## Approvals

UL Recognized

cUL Recognized

GL

cULus Recognized

## Drawings

Dimensioned drawing

