

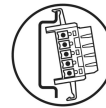
# MINI MCR-SL-SHUNT-UI-NC

Order No.: 2810780




<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2810780>

MCR 3-way isolating amplifier, with configurable input/output, for electrical isolation and conversion of analog signals in the mV range, single-pos. as well as 2-pos. with screw connection, pre-configured



## Commercial data

GTIN (EAN)	 4 046356 305341
sales group	H520
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 354 (IF-2011)

## Product notes

WEEE/RoHS-compliant since:  
04/23/2008



<http://www.download.phoenixcontact.com>  
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## Technical data

### Input data

Configurable/programmable	Yes, unconfigured
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Voltage input signal	-50 mV ... 50 mV
	-60 mV ... 60 mV
	-75 mV ... 75 mV
	-80 mV ... 80 mV
	-100 mV ... 100 mV
	-120 mV ... 120 mV
	-150 mV ... 150 mV
	-200 mV ... 200 mV
	-240 mV ... 240 mV
	-300 mV ... 300 mV
	-500 mV ... 500 mV
	-600 mV ... 600 mV
	-750 mV ... 750 mV
	-800 mV ... 800 mV
	-1 V ... 1 V
	-1.2 V ... 1.2 V
	-1.5 V ... 1.5 V
	-2 V ... 2 V
	-2.4 V ... 2.4 V
	-3 V ... 3 V
	0 mV ... 50 mV
	0 mV ... 60 mV
	0 mV ... 75 mV
	0 mV ... 80 mV
	0 mV ... 100 mV
	0 mV ... 120 mV
	0 mV ... 150 mV
	0 mV ... 200 mV
	0 mV ... 240 mV
	0 mV ... 300 mV
	0 mV ... 500 mV
	0 mV ... 600 mV
	0 mV ... 750 mV
	0 mV ... 800 mV
	0 V ... 1 V
	0 V ... 1.2 V
	0 V ... 1.5 V
	0 V ... 2 V
PHOENIX CONTACT Inc., USA <a href="http://www.phoenixcon.com">http://www.phoenixcon.com</a>	0 V ... 2.4 V
	0 V ... 3 V

Max. input voltage	Approx. 30 V DC
Input resistance of voltage input	Approx. 10 k $\Omega$

#### Output data

Configurable/programmable	Yes, unconfigured
Voltage output signal	0 V ... 10 V
	2 V ... 10 V
	0 V ... 5 V
	1 V ... 5 V
	-10 V ... 10 V (The bi-polar output can be used only for bi-polar input signals.)
Current output signal	-5 V ... 5 V (The bi-polar output can be used only for bi-polar input signals.)
	0 mA ... 20 mA
	4 mA ... 20 mA
Max. output voltage	12.5 V
Max. output current	28 mA
Load/output load voltage output	$\geq 10$ k $\Omega$
Load/output load current output	$< 500$ $\Omega$ (at 20 mA)

#### Power supply

Nominal supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC
Power consumption	$< 450$ mW (Current output)

#### Connection data

Connection method	Screw connection
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	12
Stripping length	12 mm
Screw thread	M3
Connection method	2-wire

<b>General data</b>	
Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm
Maximum transmission error	≤ 0.2 % < 0.4 % (Without adjustment)
Maximum temperature coefficient	< 0.01 %/K
Temperature coefficient, typical	< 0.002 %/K
Limit frequency (3 dB)	(100 Hz / 30 Hz switchable)
Step response (10-90%)	3.5 ms (At 100 Hz)
Ambient temperature (operation)	-20 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Degree of protection	IP20
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.)
Color	green
Housing material	PBT
Mounting position	Any
Assembly instructions	The DIN rail bus connector (TBUS) can be used for bridging the supply voltage. It can be snapped onto a 35 mm EN 60715 DIN rail.
Conformance	CE-compliant
ATEX	Ex II 3 G Ex nA II T4 X
UL, USA / Canada	UL 508 Recognized
GL	GL EMC 2 D

**Certificates / Approvals**

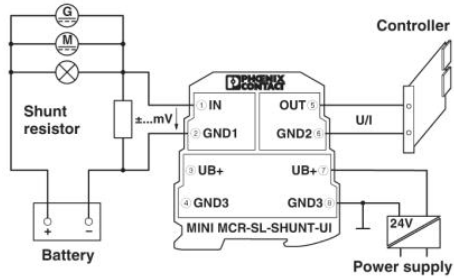


Certification: CUL, GL, UL  
 Certification Ex: PxC-EX

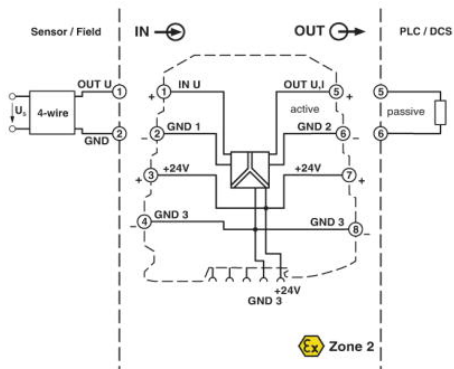
**Diagrams/Drawings**

Application drawing

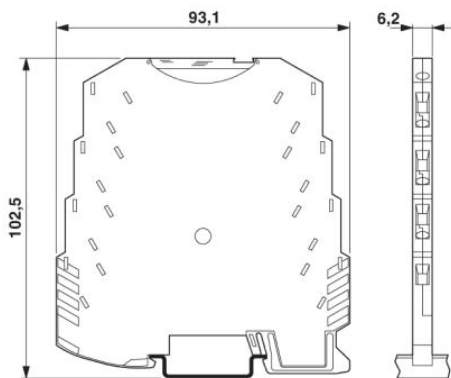
Monitoring of loading and unloading currents



Block diagram

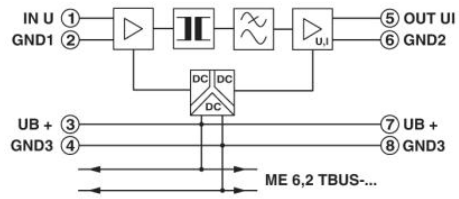


Dimensioned drawing



Circuit diagram

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