

Isolating amplifier - MINI MCR-SL-UI-UI-NC - 2864150

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3-way isolating amplifier for the electrical isolation of analog signals, I/O can be configured via DIP switches, with screw connection, standard configuration

Product Features

- Power supply possible via the foot element (T-connector)
- Up to 36 signal combinations can be configured using DIP switches
- Low power consumption
- Highly-compact isolating amplifier for electrical isolation, conversion, amplification, and filtering of standard analog signals
- 3-way isolation



Key commercial data

Packing unit	1 PCE
Catalog page	Page 352 (IF-2011)
GTIN	 4 017918 956615
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
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Input data

Configurable/programmable	Yes, unconfigured
Voltage input signal	0 V ... 10 V

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Input data

Voltage input signal	0 V ... 5 V
Voltage input signal	1 V ... 5 V
Voltage input signal	2 V ... 10 V
Current input signal	0 mA ... 20 mA
Current input signal	4 mA ... 20 mA
Max. input voltage	30 V
Max. input current	50 mA
Input resistance of voltage input	approx. 100 kΩ
Input resistance current input	approx. 50 Ω

Output data

Configurable/programmable	Yes, unconfigured
Voltage output signal	0 V ... 10 V
Voltage output signal	0 V ... 5 V
Voltage output signal	1 V ... 5 V
Voltage output signal	2 V ... 10 V
Current output signal	0 mA ... 20 mA (please indicate if different setting when ordering)
Current output signal	4 mA ... 20 mA
Max. output voltage	approx. 12.5 V
Max. output current	28 mA
Short-circuit current	approx. 22 mA
Load/output load voltage output	≥ 10 kΩ
Load/output load current output	< 500 Ω (at 20 mA)

Power supply

Nominal supply voltage	24 V DC
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	< 19 mA (Current output, at 24 V DC incl. load)
Max. current consumption	< 9 mA (Voltage output, at 24 V DC incl. load)
Power consumption	< 450 mW (Current output)
Power consumption	< 200 mW (Voltage output)

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 stranded min.	0.2 mm ²
Conductor cross section stranded max.	2.5 mm ²

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Connection data

Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	12
Stripping length	12 mm
Screw thread	M3

General data

No. of channels	1
Width	6.2 mm
Height	93.1 mm
Depth	102.5 mm
Maximum transmission error	≤ 0.1 % (of final value)
Maximum transmission error	< 0.4 % (Without adjustment)
Maximum temperature coefficient	< 0.01 %/K
Temperature coefficient, typical	< 0.002 %/K
Limit frequency (3 dB)	approx. 100 Hz
Step response (10-90%)	approx. 3.2 ms
Protective circuit	Transient protection
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.)
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
UL, USA / Canada	Class I, Div. 2, Groups A, B, C, D T5

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Technical data

General data

GL	GL EMC 2 D
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EMC data

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

Classifications

ETIM

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

UNSPSC

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

eCl@ss

eCl@ss 4.0	27210120
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

Approvals

Approvals

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Approvals

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 

Accessories

Accessories

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



DIN rail connector (TBUS), 5-pos., for bridging the supply voltage, can be snapped onto NS 35/... DIN rails according to EN 60715

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Accessories

Power terminal block - MINI MCR-SL-PTB - 2864134



MCR power terminal block for supplying several MINI Analog modules via the T-connector, with screw connection, maximum current consumption of up to 2 A

Power terminal block - MINI MCR-SL-PTB-SP - 2864147



MCR power terminal block for supplying several MINI Analog modules via the T-connector, with spring-cage connection, maximum current consumption of up to 2 A

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



DIN rail power supply unit, primary-switched mode, slim design, output: 24 V DC / 1.5 A

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



DIN rail power supply unit, primary-switched mode, slim design, output: 24 V DC / 1.5 A, ATEX approval

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



Eight MINI analog signal converters with screw connection method can be connected to a control system using a system adapter and system cabling with a minimum of wiring and very low error risk.

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Accessories

Transparent cover - MINI MCR DKL - 2308111



Fold up transparent cover for MINI MCR modules with additional labeling option using insert strips and flat Zack marker strip 6.2 mm

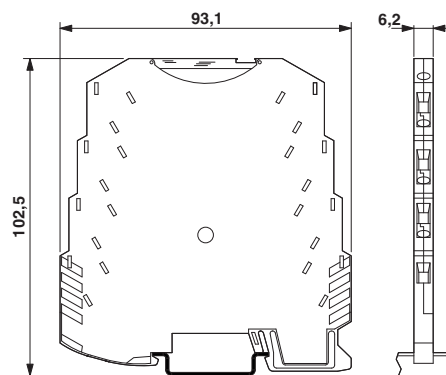
Marking label - MINI MCR-DKL-LABEL - 2810272



Label for extended marking of MINI MCR modules in connection with the MINI MCR-DKL

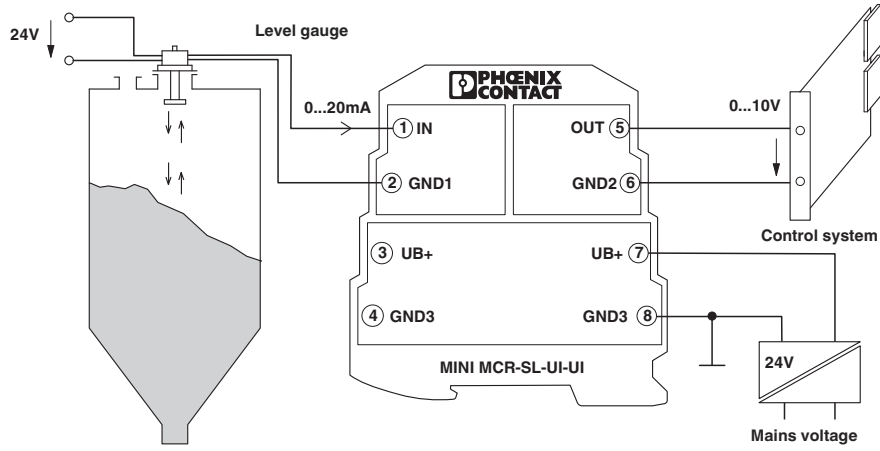
Drawings

Dimensioned drawing



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Application drawing



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Block diagram

