

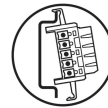
MINI MCR-SL-U-UI-NC

Order No.: 2865007




<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2865007>

MCR 3-way isolation amplifier, with configurable input/output, for electrical isolation and conversion of analog signals up to 30 V, with screw connection, standard configuration



Commercial data

GTIN (EAN)	 4 046356 046565
sales group	H520
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 356 (IF-2011)

Product notes

WEEE/RoHS-compliant since:
04/11/2006



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Product description

The 6.2 mm wide configurable 3-way isolating amplifier MINI MCR-SL-U-UI-... is used for electrical isolation, conversion, amplification and filtering of standard signals.

The signals 0...24 V and 0...30 V can be processed on the input side.

The analog signals 0...20 mA, 4...20 mA, 0...10 V, 2...10 V, 0...5 V or 1..5 V are available electrically isolated on the output side.

The DIP switches, which can be accessed on the side of the housing, can be used to configure the input and output signal ranges.

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.

Technical data

Input data

Configurable/programmable	Yes, unconfigured
Voltage input signal	0 V ... 24 V
	0 V ... 30 V
Max. input voltage	50 V DC
Input resistance of voltage input	Approx. 125 k Ω (0 ... 24 V)
	Approx. 155 k Ω (0 ... 30 V)

Output data

Configurable/programmable	Yes, unconfigured
Voltage output signal	0 V ... 10 V
	0 V ... 5 V
	1 V ... 5 V
	2 V ... 10 V
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
Max. output voltage	\leq 12.5 V
Max. output current	28 mA
Load/output load voltage output	$>$ 10 k Ω
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 (to bridge the supply voltage, the DIN rail connector (ME 6,2 TBUS-2 1,5/5-ST-3,81 GN, Order No. 2869728) can be used. It can be snapped onto a 35 mm DIN rail according to EN 60715)
Max. current consumption	$<$ 19 mA (at 24 V DC incl. load)
Power consumption	$<$ 450 mW

Connection data

Connection method	Screw connection
Conductor cross section solid min.	0.14 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
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)
	< 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. 3.5 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 61000-6-2:2005
Color	green
Housing material	PBT
Mounting position	Any
Assembly instructions	To bridge the supply voltage, the DIN rail connector (ME 6,2 TBUS-2 1,5/5-ST-3,81 GN, Order No. 2869728) can be used. It can be snapped onto a 35 mm DIN rail according to EN 60715.

Conformance	CE-compliant
ATEX	Ex II 3 G Ex nA II T4 X
UL, USA / Canada	UL 508 Recognized
	Class I, Div. 2, Groups A, B, C, D T5
GL	GL EMC 2 D

Certificates / Approvals



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

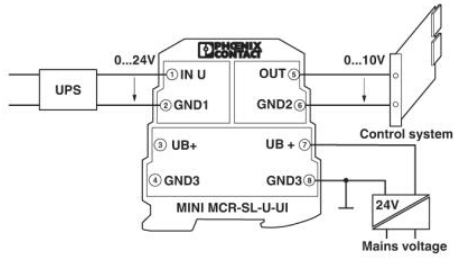
Accessories

Item	Designation	Description
General		
2869728	ME 6,2 TBUS-2 1,5/5-ST-3,81 GN	DIN rail connector (TBUS), 5-pos., for bridging the supply voltage, can be snapped onto NS 35/... DIN rails according to EN 60715
2308111	MINI MCR DKL	Fold up transparent cover for MINI MCR modules with additional labeling option using insert strips and flat Zack marker strip 6.2 mm
2810272	MINI MCR-DKL-LABEL	Label for extended marking of MINI MCR modules in connection with the MINI MCR-DKL
2864134	MINI MCR-SL-PTB	MCR power terminal block for supplying several MINI Analog modules via the DIN rail connectors, with screw connection, current consumption up to max. 2 A
2864147	MINI MCR-SL-PTB-SP	MCR power terminal block for supplying several MINI-ANALOG modules via the DIN rail connectors, with spring-cage connection, current consumption up to max. 2 A
2811268	MINI MCR-SL-V8-FLK 16-A	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.
2866653	MINI-PS-100-240AC/24DC/1.5/EX	DIN rail power supply unit, primary-switched mode, slim design, output: 24 V DC / 1.5 A, ATEX approval
2866983	MINI-SYS-PS-100-240AC/24DC/1.5	DIN rail power supply unit, primary-switched mode, slim design, output: 24 V DC / 1.5 A

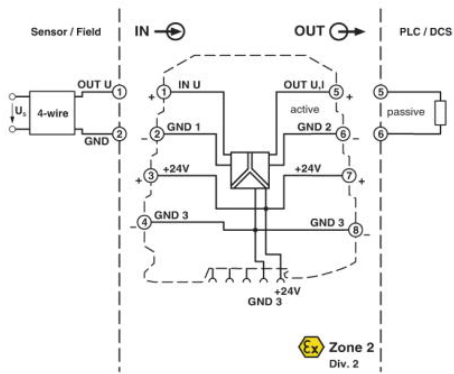
Diagrams/Drawings

Application drawing

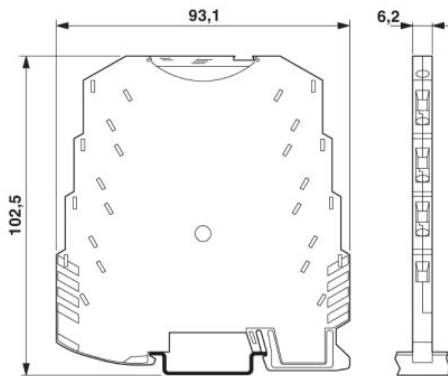
Signal conversion to uninterruptible power supply (UPS)



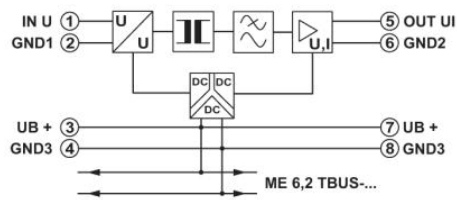
Block diagram



Dimensioned drawing



Circuit diagram



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