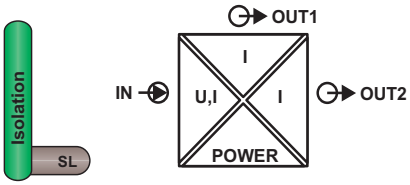
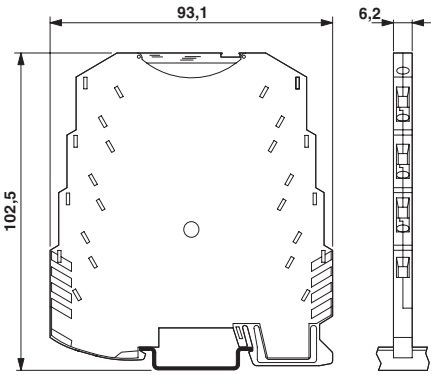
Configurable signal duplicator



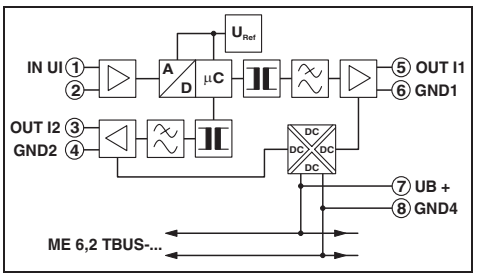


Ex n

MINI MCR-SL-UI-2I

Configurable signal duplicator

Housing width 6.2



– Configurable input and output signals
– 4-way isolation
– Two current output signals
– Power supply possible through the foot element (T-Connector)

The **MINI MCR-SL-UI-2I** 4-way signal duplicators are used for electrical isolation, duplicating and filtering of analog standard signals.

The devices are electrically isolated from each other in the input, output and supply circuit. 4-way isolation prevents different sensor circuits interfering with each other and thereby improves the quality of your measuring circuit.

The input signal can be switched over between the current and voltage signal via a DIP switch and the two current output signals can be switched independently between 0...20 mA and 4...20 mA.

The desired configuration must be specified when ordering pre-configured modules (refer to the order key). If specifications are incorrect or missing, the devices will be supplied with the standard configuration.

Accessories:
Information about components for energy bridging, system cabling and marking is given from page 347.

	solid [mm²]	stranded [mm²]	AWG	Screw
Screw connection	0.14-2.5	0.2-2.5	26-12	M3
Spring-cage conn.	0.2-2.5	0.2-2.5	24-12	

Description		Type	Order No.	Pcs. / Pkt.
MCR signal duplicator, for duplicating and electrical isolation of analog signals				
Order configuration	Screw connection	**MINI MCR-SL-UI-2I**	**2864794**	1
Order configuration	Spring-cage conn.	**MINI MCR-SL-UI-2I-SP**	**2864804**	1
Standard configuration	Screw connection	**MINI MCR-SL-UI-2I-NC**	**2864176**	1
Standard configuration	Spring-cage conn.	**MINI MCR-SL-UI-2I-SP-NC**	**2864189**	1

Technical data

	U input	I input
Input data		
Input signal	0 ... 10 V / 1 ... 5 V	0 ... 20 mA / 4 ... 20 mA
Maximum input signal	30 V	50 mA
Input resistance	Approx. 100 kΩ	Approx. 50 Ω
Output data		
Output signal (configurable using the DIP switch)	2x ; 0 ... 20 mA / 4 ... 20 mA	
Maximum output signal	24 mA	
No-load voltage	9 V	
Load R_B	≤ 250 Ω (at 20 mA)	
Ripple	< 20 mV_{PP} (at 250 Ω)	
General data		
Supply voltage U_B	19.2 V DC ... 30 V DC	
Current consumption	< 25 mA (at 24 V DC incl. load)	
Power consumption	< 600 mW	
Transmission error, max.	≤ 0.2% (of end value), Typ. < 0.1%	
Temperature coefficient	< 0.01%/K, Typ. < 0.004%/K	
Limit frequency (3 dB)	Approx. 35 Hz	
Step response (10-90%)	Approx. 10 ms	
Test voltage, input/output/supply	1.5 kV (50 Hz, 1 min.)	
Ambient temperature (operation)	-20°C ... 60°C	
Housing material	PBT	
Conformance / approvals		
Conformity	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	

Order key MINI MCR-SL-UI-2I (Standard configuration entered as example)

Order No.	Input	Output combination [1]	Behavior of the analog outputs	Factory calibration certificate
2864794	**IN03**	**A**	**0**	**NONE**
2864794 ≙ ...-UI-2I	IN01 ≙ 0...20 mA IN02 ≙ 4...20 mA IN03 ≙ 0...10 V IN06 ≙ 1...5 V	A B C	0 ≙ Analog behavior 1 ≙ Limit	NONE ≙ Without certificate YES ≙ With factory calibration certificate (fee) YESPLUS ≙ Factory calibration certificate with 5 measuring points (fee)
2864804 ≙ ...-UI-2I-SP				

Explanation of the output combination:

	Output 1	Output 2
A	0...20 mA	0...20 mA
B	0...20 mA	4...20 mA
C	4...20 mA	4...20 mA

[1]) For explanations see adjacent text on the right, for further details see data sheet: www.phoenixcontact.com