

## Current transducers - MACX MCR-SL-CAC-12-I-UP - 2810638

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Current measuring transducer for 5 A and 12 A AC, the output signal 0...20 mA or 4...20 mA, can be configured using a DIP switch with an operating mode indication through an LED

### Your advantages

- Input/output can be configured via DIP switches



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 510356
GTIN	4046356510356
Weight per Piece (excluding packing)	140.000 g
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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#### Dimensions

Width	22.5 mm
Height	104 mm
Depth	114.5 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C (-4 °F...149 °F)
Ambient temperature (storage/transport)	-40 °C ... 85 °C (-40 °F ... 185 °F)
Degree of protection	IP20

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## Technical data

### Ambient conditions

Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
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### Input data

Configurable/programmable	Via DIP switches
Input current range	0 A ... 12 A
Setting range for min. input current	0 A AC ... 5 A (configurable)
Setting range for max. input current	0 A AC ... 12 A (configurable)
Overload capacity	1 x I <sub>N</sub> (continuous)
Surge strength	8 x I <sub>N</sub> (1 s)
Nominal frequency f <sub>N</sub>	50 Hz
Frequency measuring range	45 Hz ... 65 Hz
Connection method	Screw terminal block

### Output data

Output name	Current output
Configurable/programmable	Via DIP switches
Current output signal	0 mA ... 20 mA (configurable)
	4 mA ... 20 mA (configurable)
Max. output current	25 mA
Load/output load current output	< 500 Ω (20 mA)
Ripple	< 10 mV <sub>PP</sub> (for 500 Ω at 20 mA)
Status display	LED red (error), LED green (ready)

### Switching output

Output name	No switching output
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### Power supply

Supply voltage range	19.2 V AC/DC ... 253 V AC/DC
Max. current consumption	< 33 mA (at 24 V DC)
	< 15 mA (for 230 V AC)
Power consumption	< 0.8 W (at 24 V DC)
	< 3.5 VA (for 230 V AC)

### Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 14

### General

Maximum transmission error	≤ 0.5 % (of nominal range value under nominal conditions)
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#### General

Maximum temperature coefficient	< 0.02 %/K
Temperature coefficient, typical	< 0.015 %/K
Step response (10-90%)	< 300 ms
Degree of pollution	2
Rated insulation voltage	300 V AC (to earth)
Test voltage input/output	4 kV (50 Hz, 1 min.)
Test voltage output/power supply	2 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
Color	gray
Housing material	Polyamide PA non-reinforced
Mounting position	any
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X

#### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4
Conformance	CE-compliant
ATEX	# II 3 G Ex nA IIC T4 Gc X

#### Conformance/approvals

Designation	CE
Identification	CE-compliant
Designation	ATEX
Identification	# II 3 G Ex nA IIC T4 Gc X

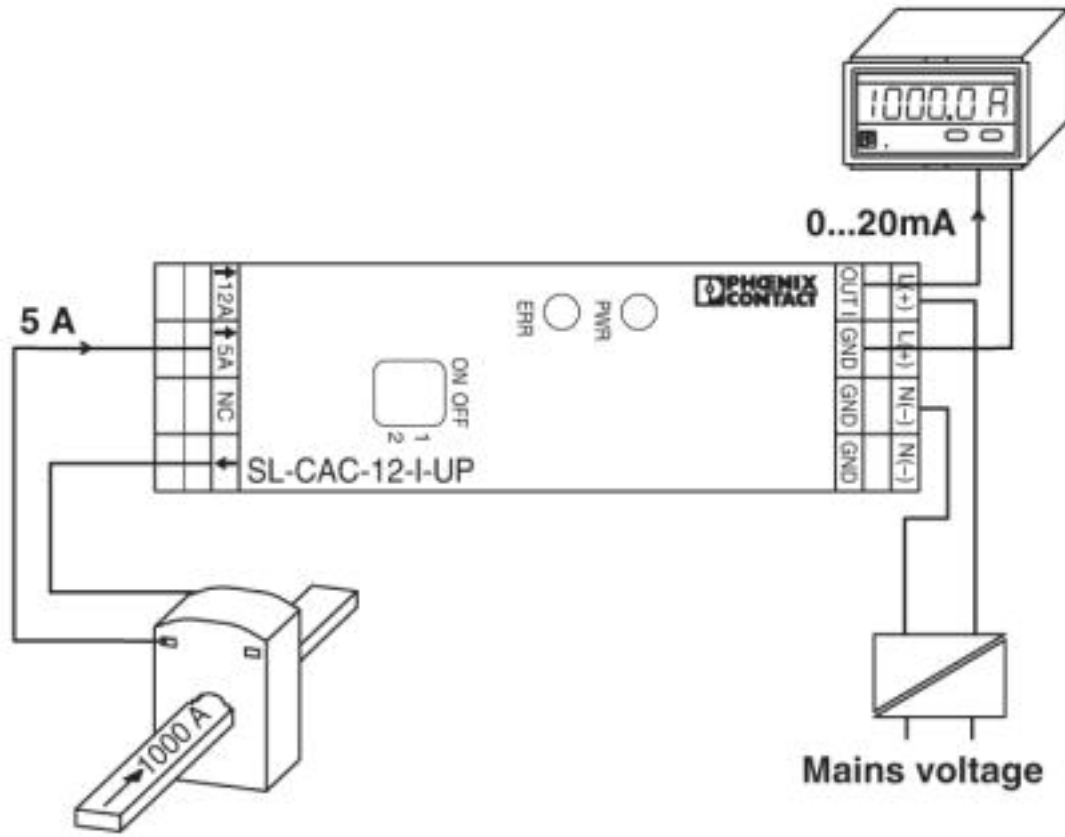
#### Environmental Product Compliance

REACH SVHC	N,N-dimethylacetamide 127-19-5
	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

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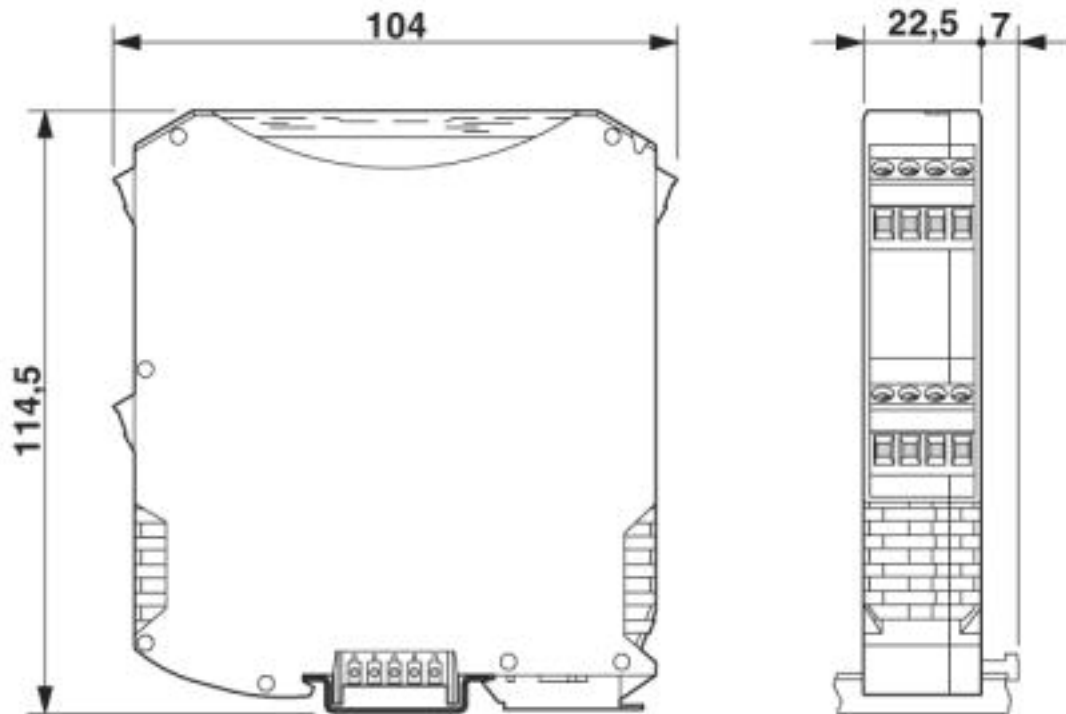
Application drawing



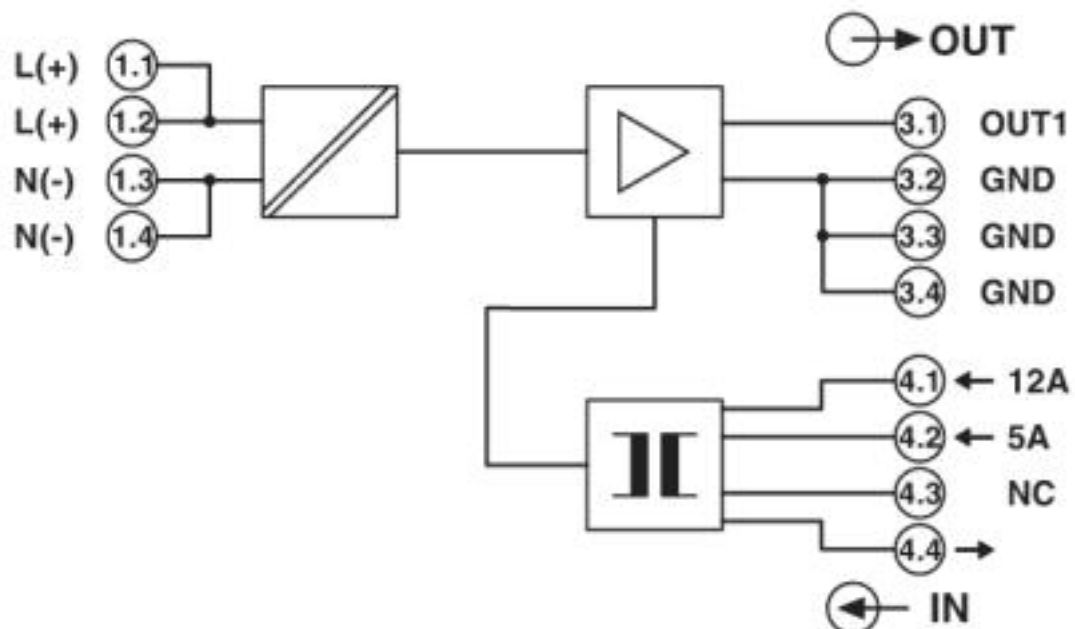
Current measurement

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Dimensional drawing



Circuit diagram



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### Classifications

#### eCl@ss

eCl@ss 4.0	27271100
eCl@ss 4.1	27200300
eCl@ss 5.0	27200300
eCl@ss 5.1	27200300
eCl@ss 6.0	27210100
eCl@ss 7.0	27210123
eCl@ss 8.0	27210123
eCl@ss 9.0	27210123

#### ETIM

ETIM 3.0	EC002475
ETIM 4.0	EC002475
ETIM 5.0	EC002475
ETIM 6.0	EC002475
ETIM 7.0	EC002475

#### UNSPSC

UNSPSC 6.01	30211501
UNSPSC 7.0901	39121019
UNSPSC 11	39121006
UNSPSC 12.01	39121006
UNSPSC 13.2	39121032
UNSPSC 18.0	39121032
UNSPSC 19.0	39121032
UNSPSC 20.0	39121032
UNSPSC 21.0	39121032