

# 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

The figure shows 2810625 MACX MCR-SL-CAC-5-I-UP

## Product Features

- Input/output can be configured via DIP switches



## Key commercial data

package_quantity	1
GTIN	4046356510356

## Technical data

### 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

### Input data

Configurable/programmable	Via DIP switches
Setting range for min. input current	0 A AC ... 5 A AC (configurable)
Setting range for max. input current	0 A AC ... 12 A AC (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

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## Technical data

### Output data

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

### Switching output

<b>Output name</b>	No switching output
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### Power supply

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

### Connection data

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

### General

<b>Maximum transmission error</b>	≤ 0.5 % (of nominal range value under nominal conditions)
<b>Maximum temperature coefficient</b>	< 0.02 %/K
<b>Temperature coefficient, typical</b>	< 0.015 %/K
<b>Step response (10-90%)</b>	< 300 ms
<b>Pollution degree</b>	2
<b>Rated insulation voltage</b>	300 V AC (to earth)
<b>Test voltage input/output</b>	4 kV (50 Hz, 1 min.)
<b>Test voltage output/power supply</b>	2 kV (50 Hz, 1 min.)
<b>Electromagnetic compatibility</b>	Conformance with EMC Directive 2004/108/EC
<b>Noise emission</b>	EN 61000-6-4
<b>Noise immunity</b>	EN 61000-6-2 When being exposed to interference, there may be minimal deviations.
<b>Color</b>	green

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### Technical data

#### General

<b>Housing material</b>	Polyamide PA non-reinforced
<b>Mounting position</b>	Any
<b>Conformance</b>	CE-compliant
<b>ATEX</b>	# II 3 G Ex nA IIC T4 Gc X

### classifications

#### eCl@ss

<b>eCl@ss 4.0</b>	27200303
<b>eCl@ss 4.1</b>	27200303
<b>eCl@ss 5.0</b>	27200303
<b>eCl@ss 5.1</b>	27200303
<b>eCl@ss 6.0</b>	27200303
<b>eCl@ss 7.0</b>	27142316
<b>eCl@ss 8.0</b>	27142316

#### ETIM

<b>ETIM 3.0</b>	EC001039
<b>ETIM 4.0</b>	EC002475
<b>ETIM 5.0</b>	EC002475

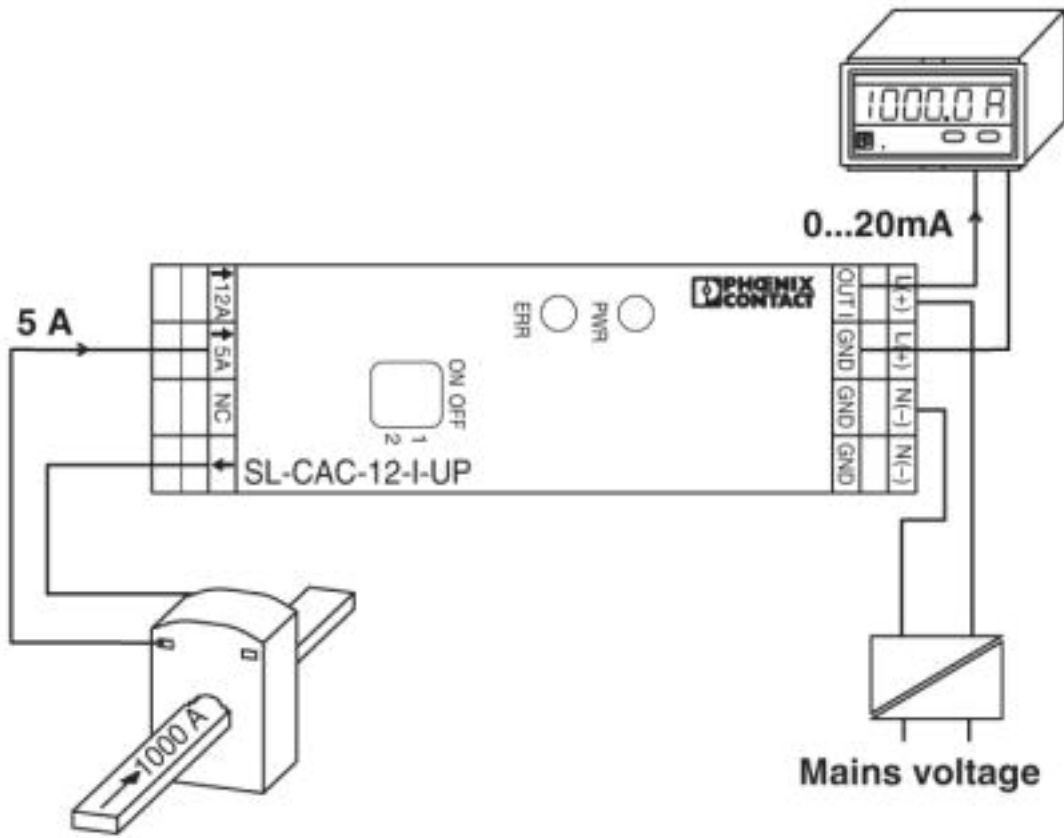
#### UNSPSC

<b>UNSPSC 6.01</b>	30211501
<b>UNSPSC 7.0901</b>	39121019
<b>UNSPSC 11</b>	39121006
<b>UNSPSC 12.01</b>	39121006
<b>UNSPSC 13.2</b>	39121006

### Drawings

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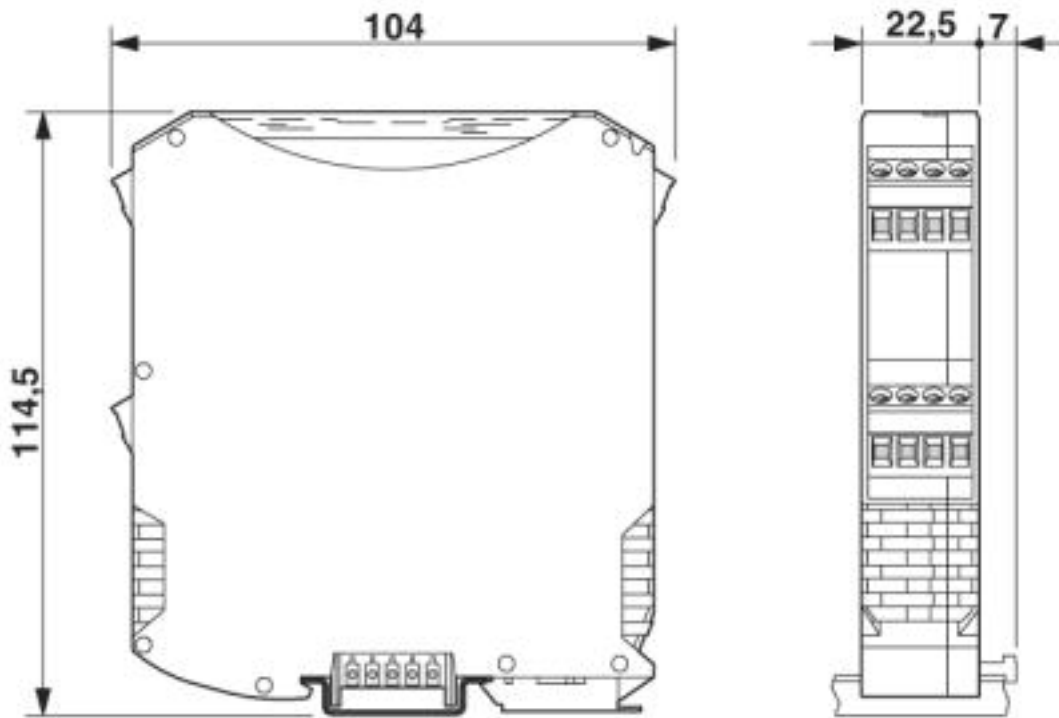
Application drawing



Current measurement

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Dimensioned drawing



Circuit diagram

