

## Current transducers - MCR-SL-S-100-U - 2813457

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MCR current measuring transducer, for measuring sinusoidal and non-sinusoidal alternating currents, input current 0...100 A, output voltage 0...(5) 10 V

### Your advantages

- Can be retrofitted with open-up Rogowski coil
- Loop-powered
- 30 6000 Hz true r.m.s. value measurement
- Measuring range selection via slide switch



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 043632
GTIN	4046356043632
Weight per Piece (excluding packing)	137.500 g
Custom tariff number	85437090
Country of origin	Japan

### Technical data

#### Dimensions

Width	55 mm
Height	85 mm
Depth	70.5 mm
Primary round conductor (diameter)	18.5 mm

#### Ambient conditions

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## Technical data

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Degree of protection	IP20

### Input data

Input	Current measuring input
Input current range	0 A ... 100 A (0 ... 50/75/100 A)
Operate threshold	1 % (of final value)
Setting range for min. input current	0 A ... 50 A
Setting range for max. input current	0 A ... 100 A
Overload capacity	Depending on laid conductor
Surge strength	Depending on through connected conductor
Frequency measuring range	30 Hz ... 6000 Hz

### Output data

Output name	Voltage output
Voltage output signal	0 V ... 10 V
	0 V ... 5 V
Max. output voltage	(0 V ... 10 V) 14 V, (0 V ... 5 V) 7 V
Load/output load voltage output	≥ 10 kΩ

### Switching output

Output name	No switching output
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### Power supply

Nominal supply voltage	24 V DC
Max. current consumption	< 30 mA

### Connection data

Connection method	Pluggable 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
Torque	0.5 Nm ... 0.6 Nm (4,4 ... 5,31 lbf-in.)

### General

Maximum transmission error	< 1 % (of final value)
Maximum temperature coefficient	< 0.035 %/K
Step response (10-90%)	< 340 ms
Overvoltage category	III

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### Technical data

#### General

Degree of pollution	2
Rated insulation voltage	300 V AC (to earth)
Test voltage input/output	5 kV (50 Hz, 1 min.)
Color	green
Housing material	Polyamide PA non-reinforced
Mounting position	any

#### Standards and Regulations

Conformance	CE-compliant
UL, USA/Canada	UL/C-UL listed UL 508

#### Conformance/approvals

Designation	CE
Identification	CE-compliant
Designation	UL, USA/Canada
Identification	UL/C-UL Listed UL 508
	Class I, Div. 2, Groups A, B, C, D T4A
	Class I, Zone 2, Group IIC T4A
	Or Non-Hazardous Locations only

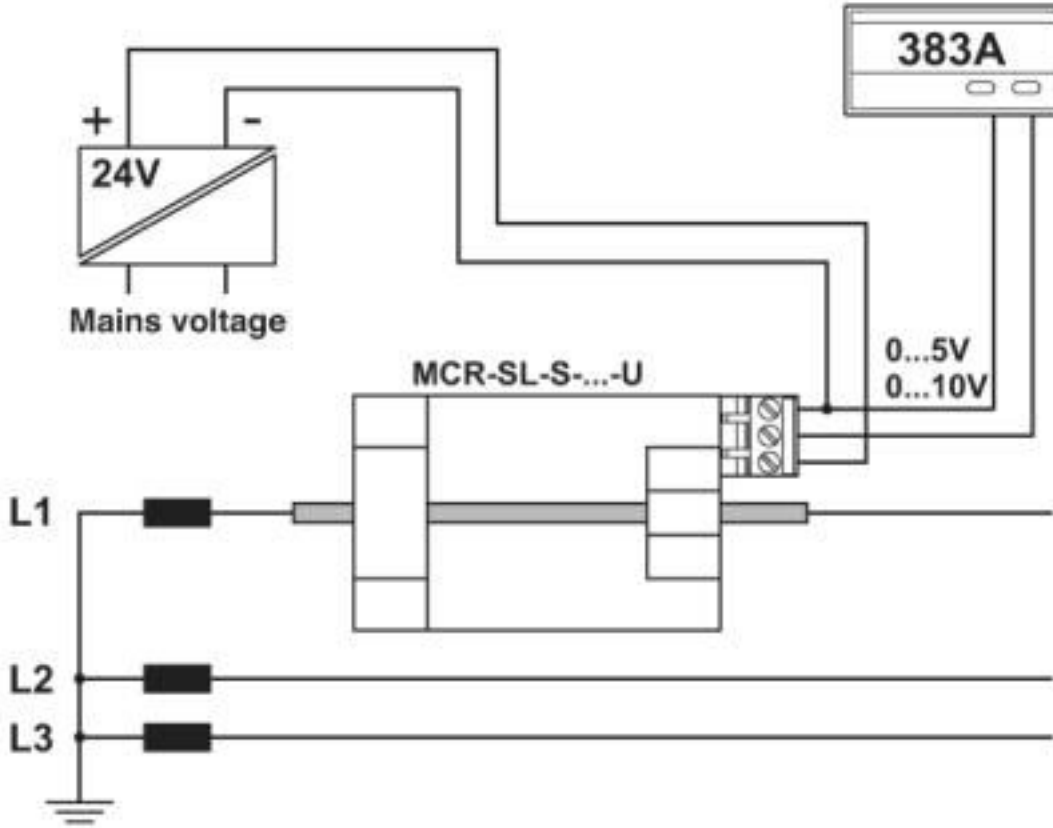
#### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

# Current transducers - MCR-SL-S-100-U - 2813457

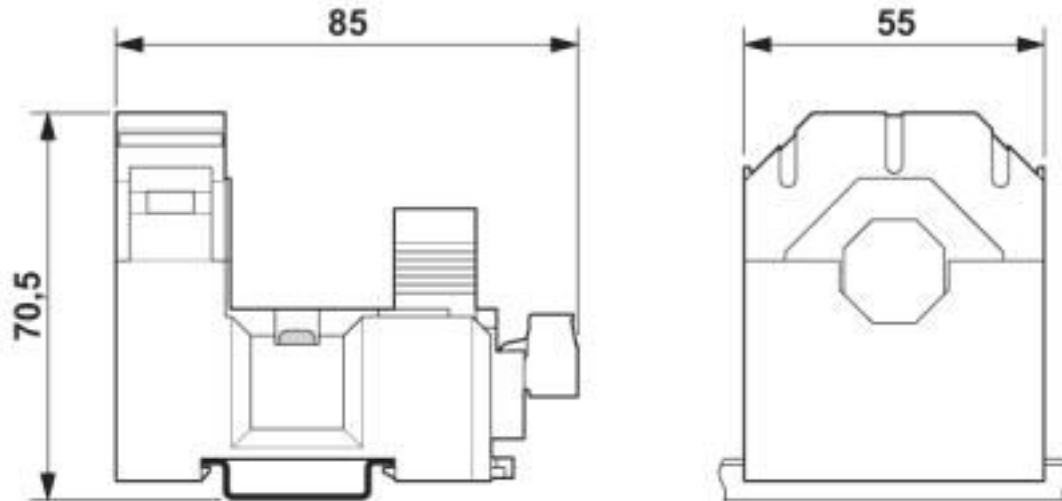
Application drawing



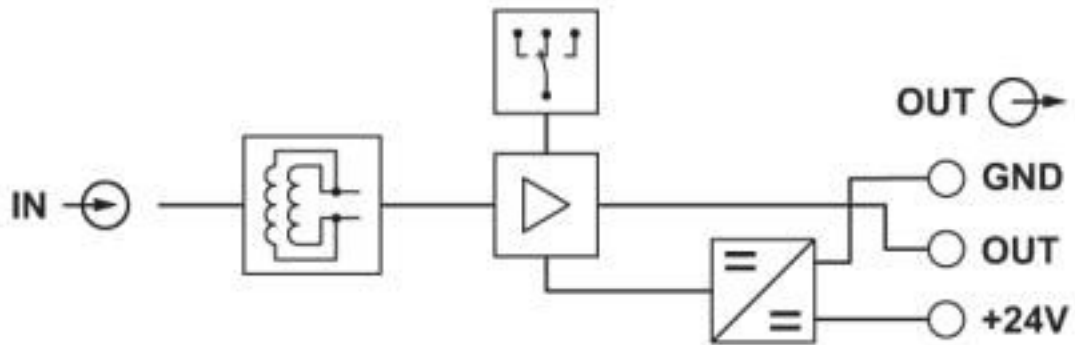
Current measurement

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Dimensional drawing



Circuit diagram



### 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

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## Classifications

### 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	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121032
UNSPSC 18.0	39121032
UNSPSC 19.0	39121032
UNSPSC 20.0	39121032
UNSPSC 21.0	39121032

## Approvals


### Approvals

#### Approvals

UL Listed / cUL Listed / EAC / cULus Listed

#### Ex Approvals


### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 123528
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 123528
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### Approvals

EAC		RU C- DE.A*30.B.01082
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cULus Listed	
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