

# Universal current transducer - MCR-SL-CUC-100-U



2308108

<https://www.phoenixcontact.com/us/products/2308108>

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Universal current transducer, for measuring DC, AC, and distorted currents, 0 ... 100 A input current, 0 ... 10 V output

## Your advantages

- Variable mounting on DIN rail and mounting plate
- Compact dimensions also enable distributed use
- Simple connection technology thanks to COMBICON plug-in connection terminal blocks
- Universal current measurement, no shunt required
- 3-way isolation

## Commercial Data

Item number	2308108
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	C04
Product Key	CK4A32
Catalog Page	Page 228 (C-5-2019)
GTIN	4046356569736
Weight per Piece (including packing)	297 g
Weight per Piece (excluding packing)	260 g
Customs tariff number	90303370
Country of origin	CN

## Technical Data

### Product properties

Product type	Current transducer
Insulation characteristics	
Overvoltage category	III
Pollution degree	2

### Electrical properties

Linearity error	$<\pm 1\%$ (From the range end value)
Maximum power dissipation for nominal condition	1 W
Step response (10-90%)	150 ms
Temperature coefficient, typical	0.02 %/K (0 °C ... 60 °C)
	0.04 %/K (-40 °C ... 65 °C)
Maximum transmission error	$<\pm 1\%$ (of final value)
Rated insulation voltage	300 V AC

### Electrical isolation Input/output

Test voltage	3.5 kV AC (50 Hz, 60 s)
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### Electrical isolation Input/power supply

Test voltage	3.5 kV AC (50 Hz, 60 s)
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### Supply

Nominal supply voltage	24 V DC
Supply voltage range	20 V DC ... 30 V DC
Max. current consumption	30 mA

### Input data

#### Measurement

Number of inputs	1
Configurable/programmable	no
Input current range	0 A AC/DC ... 100 A AC/DC
Overload capacity	$6 \times I_{IN}$
Frequency measuring range	20 Hz ... 6000 Hz (0 Hz)
Curve type	AC, DC or distorted currents

### Output data

#### Signal: Voltage

Voltage output signal	0 V ... 10 V
Load/output load voltage output	$\geq 10\text{ k}\Omega$

### Connection data

Connection method	Push-in connection
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Stripping length	10 mm
Conductor cross section solid	0.25 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 ... 12

## Dimensions

### Item dimensions

Width	90 mm
Height	33.8 mm
Depth	85 mm

### Circular conductor

Diameter	32 mm
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## Material specifications

Housing material	Frianyl B63 V0 GV30
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 65 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approval data

### CE

Certificate	CE-compliant
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### UKCA

Certificate	UKCA-compliant
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### UL, USA / Canada

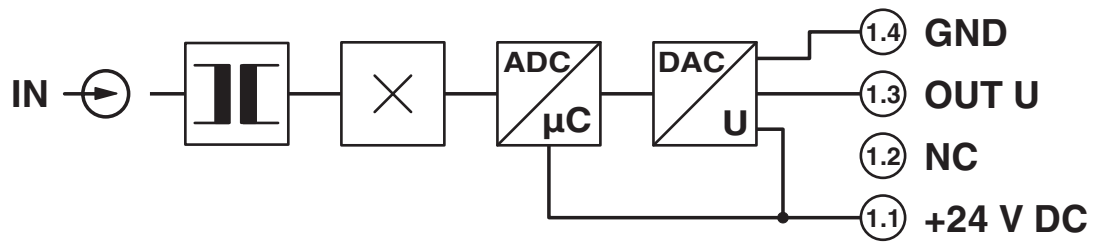
Identification	UL/C-UL Listed UL 508
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## Mounting

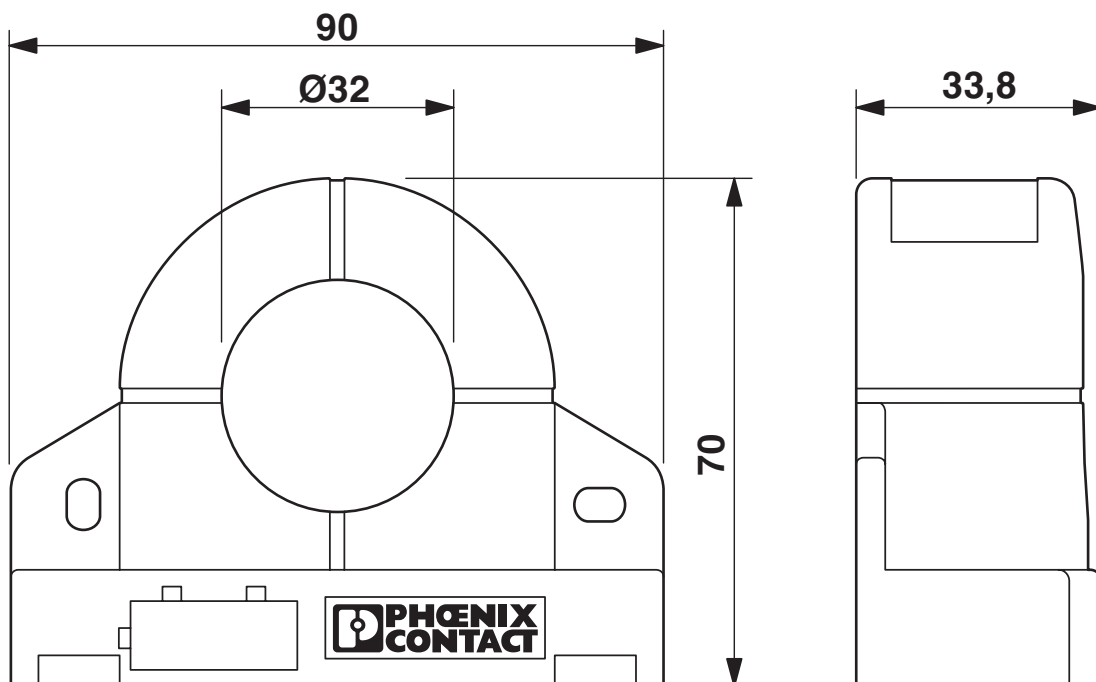
Mounting type	DIN rail mounting
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## Drawings

Circuit diagram



Dimensional drawing



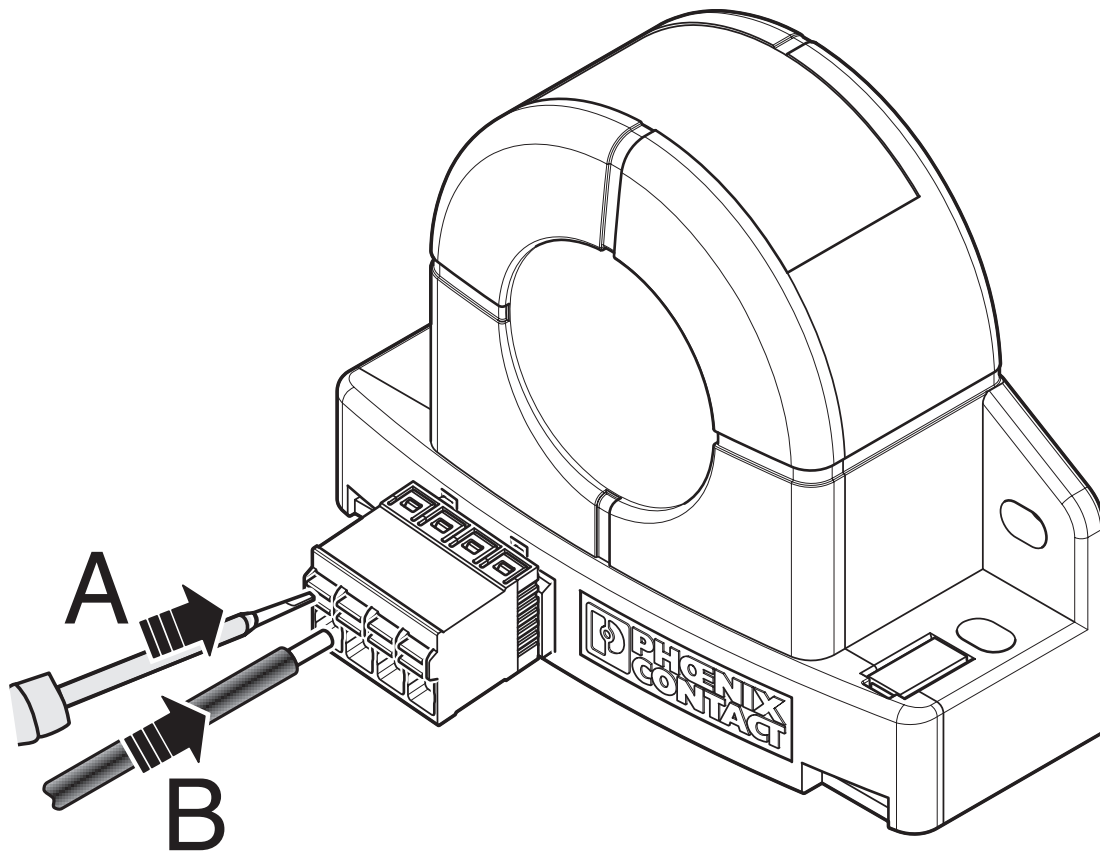
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Schematic diagram



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## Approvals



**EAC**

Approval ID: RU\*DE.\*08.B.01852-19



**UL Listed**

Approval ID: FILE E 123528



**cUL Listed**

Approval ID: FILE E 123528

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## Classifications

### ECLASS

ECLASS-9.0	27210123
ECLASS-10.0.1	27210123
ECLASS-11.0	27210123

### ETIM

ETIM 8.0	EC002475
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### UNSPSC

UNSPSC 21.0	39121000
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## Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 25; For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
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