

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



2308108

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

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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 panel
- Compact dimensions also enable distributed use
- Simple connection technology thanks to COMBICON plug-in connection terminal blocks
- 3-way isolation
- Universal current measurement, no shunt required

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 2308108       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | C444          |
| Product key                          | CMMA32        |
| GTIN                                 | 4046356569736 |
| Weight per piece (including packing) | 294.2 g       |
| Weight per piece (excluding packing) | 260 g         |
| Customs tariff number                | 90303370      |
| Country of origin                    | CN            |

## Technical data

### Product properties

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

### Electrical properties

|                                                 |                                           |
|-------------------------------------------------|-------------------------------------------|
| Linearity error                                 | $\leq \pm 1\%$ (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                      | $\leq \pm 1\%$ (of final value)           |
| Rated insulation voltage                        | 300 V AC                                  |

#### Electrical isolation Input/output

|              |                         |
|--------------|-------------------------|
| Test voltage | 3.5 kV AC (50 Hz, 60 s) |
|--------------|-------------------------|

#### Electrical isolation Input/power supply

|              |                         |
|--------------|-------------------------|
| Test voltage | 3.5 kV AC (50 Hz, 60 s) |
|--------------|-------------------------|

#### 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 x $I_{IN}$                 |
| 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 |
|-------------------|--------------------|

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



2308108

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

|                                  |                      |
|----------------------------------|----------------------|
| Stripping length                 | 10 mm                |
| Conductor cross-section rigid    | 0.25 mm² ... 2.5 mm² |
| Conductor cross-section flexible | 0.2 mm² ... 2.5 mm²  |
| Conductor cross-section AWG      | 24 ... 12            |
| Connection method                | Through connection   |

## Dimensions

### Item dimensions

|        |         |
|--------|---------|
| Width  | 90 mm   |
| Height | 33.8 mm |
| Depth  | 85 mm   |

### Circular conductor

|          |       |
|----------|-------|
| Diameter | 32 mm |
|----------|-------|

## Material specifications

|                  |                    |
|------------------|--------------------|
| Color            | green (RAL 6021)   |
| Housing material | Franyl B63 V0 GV30 |

## 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 |

## Approvals

### CE

|             |              |
|-------------|--------------|
| Certificate | CE-compliant |
|-------------|--------------|

### UKCA

|             |                |
|-------------|----------------|
| Certificate | UKCA-compliant |
|-------------|----------------|

### UL, USA/Canada

|                |                       |
|----------------|-----------------------|
| Identification | UL/C-UL Listed UL 508 |
|----------------|-----------------------|

## Mounting

|               |                   |
|---------------|-------------------|
| Mounting type | DIN rail mounting |
|---------------|-------------------|

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

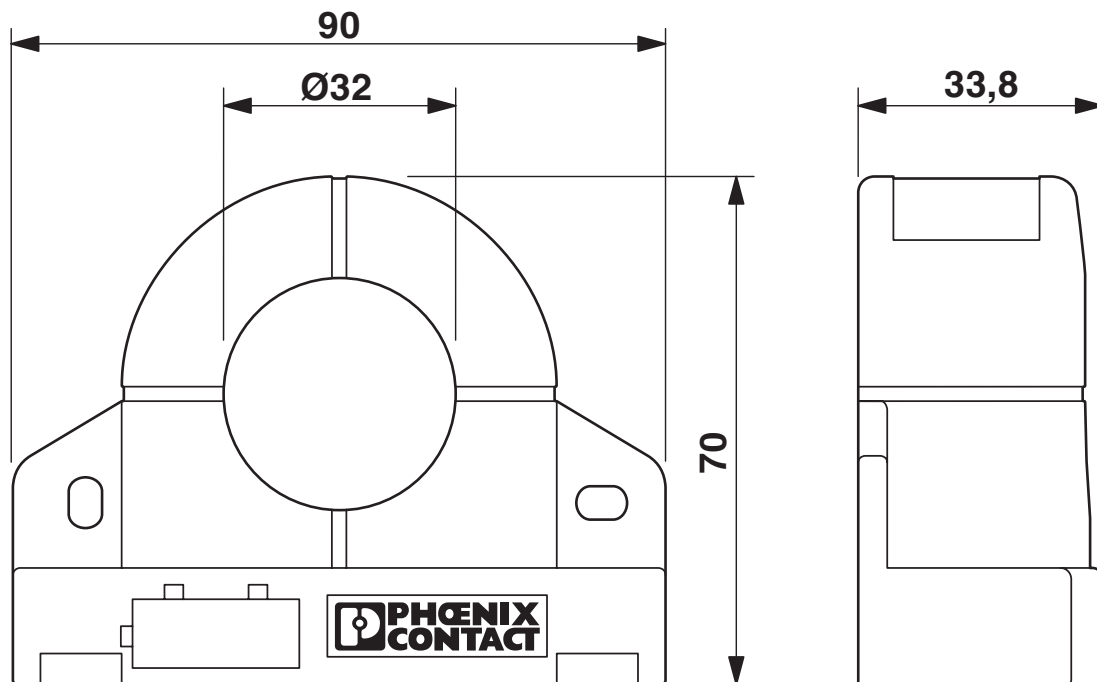
2308108

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



## Drawings

Dimensional drawing



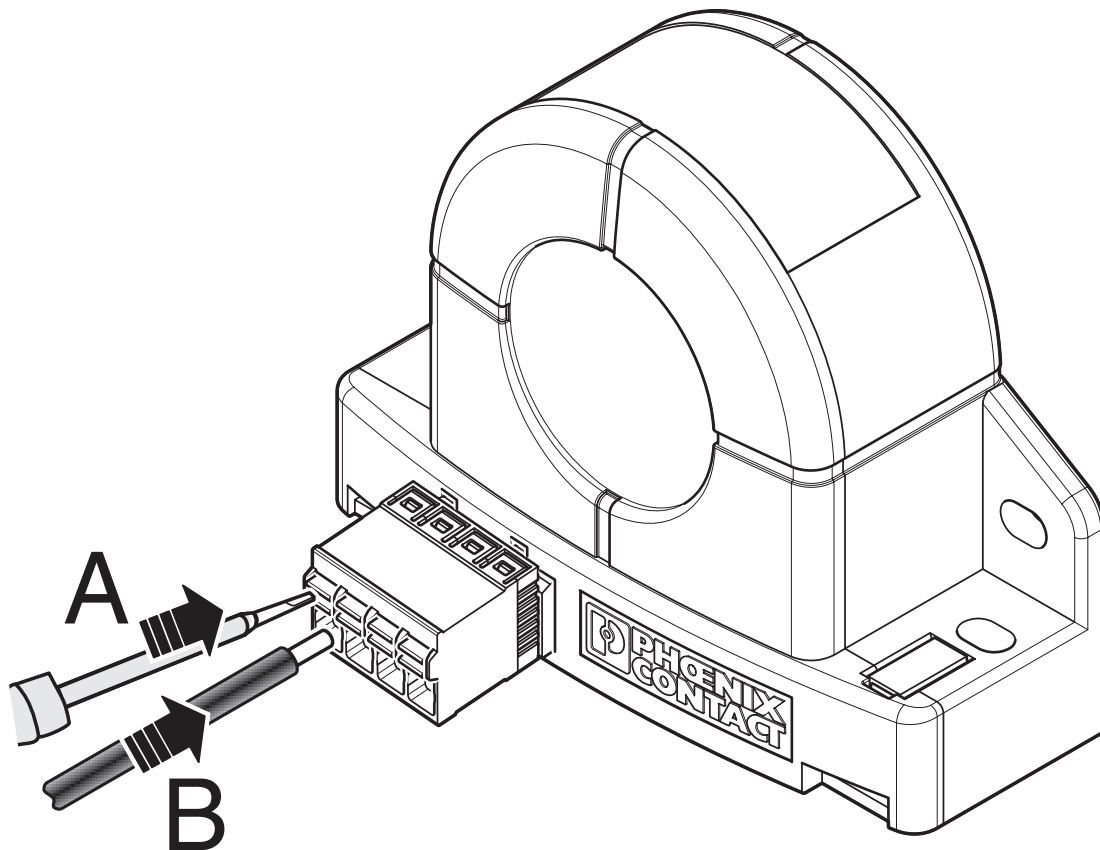
# MCR-SL-CUC-100-U - Universal current transducer

2308108

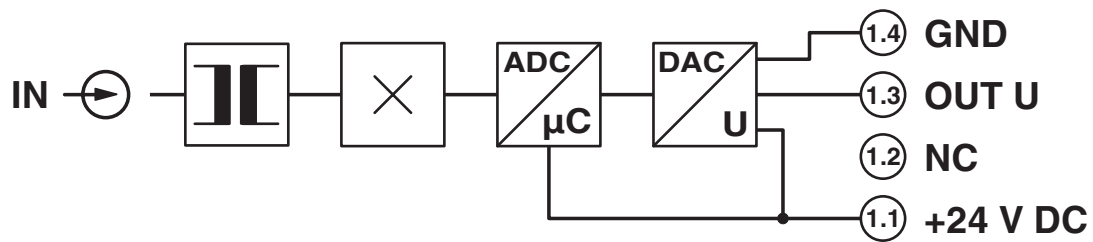
<https://www.phoenixcontact.com/us/products/2308108>



Schematic diagram



Circuit diagram



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



2308108

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

## Approvals

📄 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2308108>



**EAC**

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



**UL Listed**

Approval ID: E123528



**cUL Listed**

Approval ID: E123528

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



2308108

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

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27210123 |
| ECLASS-15.0 | 27210123 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002475 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121000 |
|-------------|----------|



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



2308108

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

## Environmental product compliance

### EU RoHS

|                                         |                    |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|-----------------------------------------|--------------------|

### China RoHS

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|                                        | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

Phoenix Contact 2025 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)