

# ECM-UC-100A-UI - Current measuring transducer



1136513

<https://www.phoenixcontact.com/us/products/1136513>

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.



Current measuring transducers for measuring AC, DC, and distorted currents. Configuration via USB-C interface via the web server (without 24 V DC). Current measuring ranges: 0 A ... 125 A. Standard configuration, Push-in connection

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1136513       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | C444          |
| Product key                          | CMMA34        |
| GTIN                                 | 4063151072810 |
| Weight per piece (including packing) | 139.62 g      |
| Weight per piece (excluding packing) | 113.5 g       |
| Customs tariff number                | 85043129      |
| Country of origin                    | DE            |

## Technical data

### Product properties

|                            |  |
|----------------------------|--|
| Product type               | Current measuring transducer                     |
| Insulation characteristics |  |
| Insulation                 | Safe isolation in accordance with IEC/EN 61010-1 |
| Overvoltage category       | III (300 V)                                      |
| Pollution degree           | 2  |

### Electrical properties

|                                 |   |
|---------------------------------|---|
| Step response (10-90%)          | 200 ms (AC/DC)<br>20 ms (DC)                            |
| Maximum temperature coefficient | < 0.02 %/K  |
| Maximum transmission error      | 0.5 % (of nominal range value under nominal conditions) |
| Rated insulation voltage        | 300 V AC (to earth)                                     |

#### Electrical isolation IEC 61010-2-030

|                       |                 |
|-----------------------|-----------------|
| Standards/regulations | IEC 61010-2-030 |
| Measuring category    | III (300 V)     |

#### Electrical isolation Input/output

|              |                       |
|--------------|-----------------------|
| Test voltage | 4 kV AC (50 Hz, 60 s) |
|--------------|-----------------------|

#### Electrical isolation Input/power supply

|              |                       |
|--------------|-----------------------|
| Test voltage | 4 kV AC (50 Hz, 60 s) |
|--------------|-----------------------|

#### Electrical isolation Output/supply

|              |                       |
|--------------|-----------------------|
| Test voltage | 2 kV AC (50 Hz, 60 s) |
|--------------|-----------------------|

### Supply

|                              |                                     |
|------------------------------|-------------------------------------|
| Nominal supply voltage       | 24 V DC                             |
| Nominal supply voltage range | 12 V DC ... 24 V DC -20 % ... +25 % |
| Supply voltage range         | 9.6 V DC ... 30 V DC                |
| Power consumption            | ≤ 2 W (30 V DC)                     |

### Input data

#### Signal: digital

|                      |                    |
|----------------------|--------------------|
| Voltage input signal | 0 V DC ... 30 V DC |
| Current input signal | 2 mA ... 15 mA     |

#### Measurement

|                     |   |
|---------------------|---|
| Input current range | 0 A AC ... 100 A AC<br>-100 A DC ... 100 A DC         |
| Measuring range     | 0 A AC/DC ... 50 A AC/DC<br>0 A AC/DC ... 100 A AC/DC |

# ECM-UC-100A-UI - Current measuring transducer



1136513

<https://www.phoenixcontact.com/us/products/1136513>

|                                      |   |
|--------------------------------------|---|
| Setting range for min. input current | 0 A AC/DC ... 9.4 A AC/DC   |
|                                      | 0 A AC/DC ... 18.8 A AC/DC  |
| Setting range for max. input current | 0 A AC/DC ... 62.5 A AC/DC (DIN/EN 61010-1)                             |
|                                      | 0 A AC/DC ... 125 A AC/DC (DIN/EN 61010-1)                              |
|                                      | -125 A DC ... 125 A DC (DIN/EN 61010-1)                                 |
| Overload capacity                    | 2 x I <sub>N</sub> (continuous), depending on the fed-through conductor |
| Surge strength                       | 20 x I <sub>N</sub> (1 s), depending on the fed-through conductor       |
| Frequency measuring range            | 0 Hz ... 100 Hz   |
|                                      | 0 Hz ... 200 Hz   |
|                                      | 0 Hz ... 500 Hz   |
|                                      | 0 Hz ... 1000 Hz  |
| Curve type                           | AC, DC or distorted currents  |

## Output data

Signal: Voltage/current

|                                 |                |
|---------------------------------|----------------|
| Voltage output signal           | 0 V ... 10 V   |
|                                 | 0 V ... 5 V    |
|                                 | 1 V ... 5 V    |
|                                 | 2 V ... 10 V   |
|                                 | -10 V ... 10 V |
|                                 | -5 V ... 5 V   |
|                                 | 10 V ... -10 V |
|                                 | 5 V ... -5 V   |
|                                 | 10 V ... 0 V   |
|                                 | 5 V ... 0 V    |
| Current output signal           | 0 mA ... 20 mA |
|                                 | 4 mA ... 20 mA |
|                                 | 20 mA ... 0 mA |
|                                 | 20 mA ... 4 mA |
| Load/output load voltage output | > 10 kΩ        |
| Load/output load current output | < 500 Ω        |

## Connection data

|                                  |   |
|----------------------------------|---|
| Connection method                | Push-in connection                          |
| Stripping length                 | 10 mm                                       |
| Conductor cross-section rigid    | 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 ... 13                                   |

Circular conductor

|                               |                    |
|-------------------------------|--------------------|
| Conductor cross-section rigid | 25 mm <sup>2</sup> |
| Conductor cross-section AWG   | 3                  |

## Interfaces

# ECM-UC-100A-UI - Current measuring transducer



1136513

<https://www.phoenixcontact.com/us/products/1136513>

## WBM

|             |                                       |
|-------------|---------------------------------------|
| Designation | WBM: Default address, USB-C interface |
| IP address  | 192.168.128.1                         |

## Dimensions

### Item dimensions

|  |  |
|--|--|
| Width                                    | 22.6 mm  |
| Height                                   | 106.7 mm   |
| Depth                                    | 113.8 mm   |
| Depth (Device depth (DIN rail mounting)) | 114.5 mm (Snapped onto DIN rail NS 35/7,5 in accordance with EN 60715) |

### Circular conductor

|          |       |
|----------|-------|
| Diameter | 11 mm |
|----------|-------|

## Material specifications

|  |                 |
|--|-----------------|
| Color                                  | gray (RAL 7042) |
| Flammability rating according to UL 94 | V0 (Housing)    |
| Housing material                       | PA 6.6-FR       |

## Environmental and real-life conditions

### Ambient conditions

|   |                                       |
|---|---------------------------------------|
| Degree of protection                    | IP20                                  |
| Ambient temperature (operation)         | -40 °C ... 60 °C<br>-40 °F ... 140 °F |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C                      |
| Altitude                                | ≤ 4000 m                              |
| Permissible humidity (operation)        | ≤ 95 % (non-condensing)               |

## Approvals

### CE

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

### UL, USA/Canada

|                |                                |
|----------------|--------------------------------|
| Identification | Ind. Cont. Eq. E238705-E196811 |
|----------------|--------------------------------|

## EMC data

|                               |  |
|-------------------------------|--|
| Electromagnetic compatibility | Conformance with EMC directive         |
| Low Voltage Directive         | Conformance with Low Voltage Directive |
| Noise immunity                | EN 61000-6-2                           |

### Noise emission

|                       |              |
|-----------------------|--------------|
| Standards/regulations | EN 61000-6-4 |
|-----------------------|--------------|

# ECM-UC-100A-UI - Current measuring transducer



1136513

<https://www.phoenixcontact.com/us/products/1136513>

## Standards and regulations

|                       |                         |
|-----------------------|-------------------------|
| Standards/regulations | IEC 61010-1             |
| Standards/regulations | IEC/EN 61131-2 (type 3) |
| Standards/regulations | IEC/EN 61131-2 (type 3) |

## Mounting

|                   |                        |
|-------------------|------------------------|
| Mounting position | vertical or horizontal |
|-------------------|------------------------|

# ECM-UC-100A-UI - Current measuring transducer



1136513

<https://www.phoenixcontact.com/us/products/1136513>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1136513>



**cULus Listed**

Approval ID: E238705



**cULus Listed**

Approval ID: E196811



**cULus Listed**

Approval ID: E196811

# ECM-UC-100A-UI - Current measuring transducer



1136513

<https://www.phoenixcontact.com/us/products/1136513>

## Classifications

### ECLASS

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

### ETIM

|           |          |
|-----------|----------|
| ETIM 10.0 | EC002475 |
|-----------|----------|

### UNSPSC

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

1136513

<https://www.phoenixcontact.com/us/products/1136513>

## Environmental product compliance

### EU RoHS

|   |              |
|---|--------------|
| Fulfills EU RoHS substance requirements | Yes          |
| Exemption                               | 7(a), 7(c)-I |

### China RoHS

|  |   |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50   |
|  | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

### EU REACH SVHC

|                                     |  |
|-------------------------------------|--|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1)   |
|                                     | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol(CAS: 79-94-7) |

Phoenix Contact 2026 © - 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)