

RCMC-5000-1A-P

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany

www.weidmueller.com

Product image



Rogowski coil

A Rogowski coil is a closed air coil without a ferromagnetic core used for floating potential measurement of AC and pulse currents. Measurement with the Rogowski coil is used widely in technology, as it can be retroactively integrated without separating the primary electric circuit in existing systems. Because this method shows no saturation effect, even the smallest currents and high-frequency harmonics can be measured without loss of accuracy.

General ordering data

| | |
|------------|--|
| Version | Measuring transducer, every Rogowski coil, 100... 5000 A, Output : 0...1 A AC |
| Order No. | 2593400000 |
| Type | RCMC-5000-1A-P |
| GTIN (EAN) | 4050118647822 |
| Qty. | 1 Stück |

Erstellungs-Datum May 25, 2023 3:09:38 PM CEST

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Technische Daten

Dimensions and weights

| | | | |
|------------|---------|-----------------|------------|
| Depth | 78 mm | Depth (inches) | 3.071 inch |
| Height | 100 mm | Height (inches) | 3.937 inch |
| Width | 23.1 mm | Width (inches) | 0.909 inch |
| Net weight | 100 g | | |

Temperatures

| | | | |
|-----------------------------|---------------------------|-----------------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -25 °C...70 °C |
| Operating temperature, min. | -25 °C | Operating temperature, max. | 70 °C |
| Humidity | 5...95 %, no condensation | | |

Electrical attributes

| | | | |
|----------------|------------|-------------------|--|
| Frequency band | 50...60 Hz | Secondary voltage | 22,5 mV (@ 50Hz I _{primary} = 1 kA) |
|----------------|------------|-------------------|--|

Technical properties

| | |
|-------------------|------|
| Protection degree | IP20 |
|-------------------|------|

Input

| | | | |
|-------------------------|---|--------------|--|
| Input measurement range | 100 A, 200 A, 300 A, 400 A, 500 A, 600 A, 800 A, 1000 A, 1500 A, 2000 A, 4000 A, 5000 A | Input signal | every Weidmüller Rogowski coil RCMA-B22-D... |
|-------------------------|---|--------------|--|

Output

| | | | |
|------------------------|---------|----------------|------------|
| Load impedance current | ≤ 1,5 Ω | Output current | 0...1 A AC |
|------------------------|---------|----------------|------------|

General data

| | | | |
|-------------------------|----------------------------|--------------------|--|
| Accuracy | < 0.5 % of measuring range | Configuration | Keys and LED display |
| Current consumption | 100 mA @24V | Galvanic isolation | between input/ output/ supply |
| Linearity | ± 0.1 % typ. | Standard | EN 61000-6-2, 3, EN 61010-1: 2010, EN 61010-2-030:2010, EN 61326-1: 2013, EN 61000-6-2:2005, EN 61000-6-3:2007 |
| Temperature coefficient | ≤ 0.015 % / °C | Vibration | according to IEC 60721 |
| Voltage supply | 24 V DC ± 25 % | | |

Insulation coordination

| | | | |
|--------------------|--|--------------------|-------------------------------|
| EMC standards | UL 61010-1, EN 61326-1:2013 | Galvanic isolation | between input/ output/ supply |
| Insulation voltage | 1.5 kV AC 1 min. | Pollution severity | 2 |
| Standard | EN 61000-6-2, 3, EN 61010-1: 2010, EN 61010-2-030:2010, EN 61326-1: 2013, EN 61000-6-2:2005, EN 61000-6-3:2007 | | |

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Technische Daten

Connection data

Type of connection PUSH IN

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002475 | ETIM 7.0 | EC002475 |
| ETIM 8.0 | EC002475 | ECLASS 9.0 | 27-21-01-23 |
| ECLASS 9.1 | 27-21-01-23 | ECLASS 10.0 | 27-21-01-23 |
| ECLASS 11.0 | 27-21-01-23 | ECLASS 12.0 | 27-21-01-23 |

Important note

Product information The **RCMC-5000-XX** measuring transducer is designed for electronic measurement of AC current. The RCMC-5000-XX measuring transducer may only be used together with a Weidmüller RCMA-B22-DXX Rogowski coil.
 Functional description
 The RCMC-5000-XX measuring transducer converts the signal from the Rogowski coil into an analogue output signal with high phase fidelity.
 The device is configured using two front buttons.
 LEDs display the operating and configuration status.
 Features

- 12 selectable current measuring ranges
- USB connection: exclusively for power supply!

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate no. (cULus) | E469563 |

Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of Conformity |
| User Documentation | Instruction sheet |
| Catalogues | Catalogues in PDF-format |

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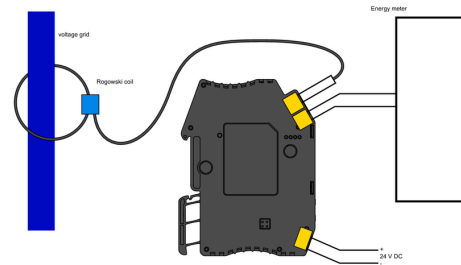
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Zeichnungen

Application



use with Rogowski coil



Dimensioned drawing

