

RCMA-B22-D70-4.5**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Rogowski coilA 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 | Rogowski coil, Diameter: 70 mm, Cable length: 4.5 m, 100...5000 A, Output : Pulse, mV signal |
| Order No. | 2593340000 |
| Type | RCMA-B22-D70-4.5 |
| GTIN (EAN) | 4050118647761 |
| Qty. | 1 items |

Technical data

Approvals

Approvals



| | |
|-------------------------|----------------------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (cURus) | E469563 |

Dimensions and weights

| | | | |
|----------|-------|------------|-------|
| Diameter | 70 mm | Net weight | 260 g |
|----------|-------|------------|-------|

Temperatures

| | | | |
|-----------------------------------|---------------------------|-----------------------|----------------|
| Storage temperature | -40 °C...80 °C | Operating temperature | -40 °C...80 °C |
| Humidity at operating temperature | 5 - 90 %, no condensation | | |

Environmental Product Compliance

| | |
|------------------------|-----------------------------|
| RoHS Compliance Status | Compliant without exemption |
| REACH SVHC | No SVHC above 0.1 wt% |

Dimensions of live conductors

| | | | |
|-------------------|---|-----------------|----------|
| Type of conductor | Conductor rail, Round conductor, Non-insulated conductors | Round conductor | 70.00 mm |
|-------------------|---|-----------------|----------|

Electrical attributes

| | | | |
|---------------------|------------------------------------|-------------------|--|
| Measurement error | <± 0.5% (of measuring range limit) | Tolerance class | 0,5 |
| Nominal turns ratio | 44.44 kA/V | Phase shift | 0.004 ° |
| Frequency band | 50...60 Hz | Secondary voltage | 22,5 mV (@ 50Hz Iprimary = 1 kA), 30 V (max) |
| Primary current | 5000 A | | |

Technical properties

| | | | |
|----------------|--------|-------------------|------|
| Cable length | 4.5 m | Protection degree | IP57 |
| Cable diameter | 6.1 mm | Coil resistance | 56 Ω |

General data

| | | | |
|-----------|--|-------------------|------|
| Standard | IEC 61010-1: 2010, IEC 61869-1: 2007, IEC 61869-2: 2012, IEC 61869-6: 2016, IEC 61869-10: 2017, UL 61010-1 | Protection degree | IP57 |
| Linearity | no linearity error | Configuration | none |

Insulation coordination

| | | | |
|----------|---------------------------------------|---------------------------|---------------------|
| Standard | IEC 61010-1: 2010, IEC 61869-1: 2007, | Impulse withstand voltage | 12.8 kV (1.2/50 ms) |
|----------|---------------------------------------|---------------------------|---------------------|

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| | IEC 61869-2: 2012, IEC 61869-6: 2016, IEC 61869-10: 2017, UL 61010-1 | | |
| Surge voltage category | III | Pollution severity | 2 |
| Tolerance class | 0,5 | Insulation voltage | 7.4 kVRMS(50 Hz, 1 min) |
| Rated insulation voltage | 1000V reinforced insulation according to IEC 61010-1, CAT III, PD2, 1000V basic insulation according to IEC 61010-1, CAT IV, PD2, 600V reinforced insulation in accordance with IEC 61010-1, CAT IV, PD2 | Tracking resistance (CTI) | 600 |

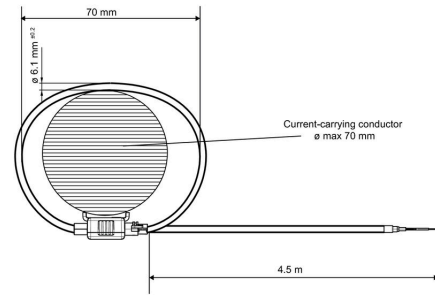
Part description

| | |
|---------------------|--|
| Product description | <p>The Rogowski coil RCMA-B22-DXX is intended for the electronic measurement of alternating current. The Rogowski coil must only be used in conjunction with a Weidmüller transducer RCMC-5000-XX.</p> <p>Functional description The primary circuit (power circuit) and the secondary circuit (measurement circuit) are galvanically isolated by the Rogowski coil. As there is no saturation effect, currents can be measured over a wide primary current range without any losses in accuracy.</p> <p>Features</p> <ul style="list-style-type: none"> • Conductor diameter of the measuring coil: 6.1 mm • Housing tabs for attachment with cable ties • Sealable bayonet fastening |
|---------------------|--|

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 8.0 | EC002475 | ETIM 9.0 | EC002475 |
| ETIM 10.0 | EC002475 | ECLASS 14.0 | 27-21-01-23 |
| ECLASS 15.0 | 27-21-01-23 | | |

Dimensioned drawing



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Accessories

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Rogowski coils



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General ordering data

| | | |
|------------|----------------------------|---|
| Type | RCMC-5000-AO-P | Version |
| Order No. | 2593410000 | Measuring transducer, every Rogowski coil, 100...5000 A, Output : |
| GTIN (EAN) | 4050118647754 | analogue V / mA |
| Qty. | 1 ST | |
| Type | RCMC-5000-1A-P | Version |
| Order No. | 2593400000 | Measuring transducer, every Rogowski coil, 100...5000 A, Output : |
| GTIN (EAN) | 4050118647822 | 0...1 A AC |
| Qty. | 1 ST | |