

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

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**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	Rogowski coil, Diameter: 70 mm, Cable length: 4.5 m, 100...5000 A, Output : Pulse, mV signal
Order No.	<a href="#">2593340000</a>
Type	RCMA-B22-D70-4.5
GTIN (EAN)	4050118647761
Qty.	1 pc(s).

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## Technical data

## Dimensions and weights

Diameter	70 mm	Net weight	260 g
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## Temperatures

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

## Dimensions of live conductors

Type of conductor	Insulated conductor only	Round conductor	70 mm
Installation location	Indoor use		

## Electrical attributes

Frequency band	50...60 Hz	Measurement error	<± 0.5% (of measuring range limit)
Nominal turns ratio	44.44 kA/V	Phase shift	0.004 °
Primary current	5,000 A	Secondary voltage	22,5 mV (@ 50Hz I <sub>primary</sub> = 1 kA), 30 V (max)
Tolerance class	0,5		

## Technical properties

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

## General data

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

## Insulation coordination

Impulse withstand voltage	12.8 kV (1.2/50 ms)	Insulation voltage	7.4 kV <sub>RMS</sub> (50 Hz, 1 min)
Pollution severity		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
Standard	2 IEC 61010-1: 2010, IEC 61869-1: 2007, IEC 61869-2: 2012, IEC 61869-6: 2016, IEC 61869-10: 2017, UL 61010-1	Surge voltage category	III
Tolerance class	0,5	Tracking resistance (CTI)	600

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## Classifications

ETIM 6.0	EC002475	ETIM 7.0	EC002475
ETIM 8.0	EC002475	ETIM 9.0	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	ECLASS 13.0	27-21-01-23
ECLASS 14.0	27-21-01-23		

## Environmental Product Compliance

REACH SVHC	/
RoHS Compliance Status	Compliant without exemption

## Important note

Product information	<p>The Rogowski coil <b>RCMA-B22-DXX</b> 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</p> <p>The primary circuit (power circuit) and the secondary circuit (measurement circuit) are galvanically isolated by the Rogowski coil.</p> <p>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"> <li>• Conductor diameter of the measuring coil: 6.1 mm</li> <li>• Housing tabs for attachment with cable ties</li> <li>• Sealable bayonet fastening</li> </ul>
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## Approvals

Approvals



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

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
User Documentation	<a href="#">Instruction sheet</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

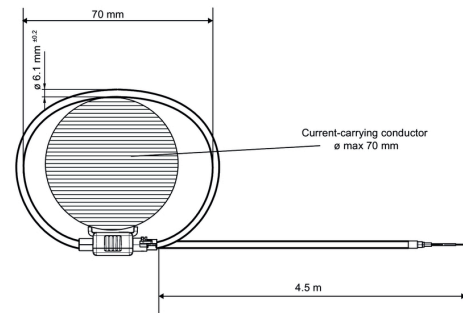
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## Drawings

### Dimensioned drawing



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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Rogowski coils****Rogowski coil**

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**General ordering data**

Type	RCMC-5000-1A-P	Version
Order No.	<a href="#">2593400000</a>	Measuring transducer, every Rogowski coil, 100...5000 A, Output : 0...
GTIN (EAN)	4050118647822	1 A AC
Qty.	1 pc(s).	
Type	RCMC-5000-AO-P	Version
Order No.	<a href="#">2593410000</a>	Measuring transducer, every Rogowski coil, 100...5000 A, Output :
GTIN (EAN)	4050118647754	analogue V / mA
Qty.	1 pc(s).	