

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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 Ragowski 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: 125 mm, Cable length: 4.5 m, 1005000 A, Output : Pulse, mV signal
Order No.	<u>2593350000</u>
Туре	RCMA-B22-D125-4.5
GTIN (EAN)	4050118647778
Qty.	1 pc(s).



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# **Technical data**

Dimensions and weights			
Diameter	125 mm	Net weight	270 g
Temperatures			
Storage temperature	-40 °C80 °C	Operating temperature	-40 °C80 °C
Humidity at operating temperature	5 - 90 %, no condensation	operating temperature	10 000 0
Dimensions of live conducto	ors		
Towns of some desired	la collete de car doctes carbo	Davis di casi divetasi	105
Type of conductor Installation location	Insulated conductor only Indoor use	Round conductor	125 mm
Electrical attributes	mador aso		
Liectrical attributes			
Frequency band	5060 Hz	Nominal turns ratio	44.44 kA/V
Phase shift	0.004 °	Primary conductor temperature	105 °C
Primary current		Secondary voltage	22,5 mV (@ 50Hz I <sub>primary</sub> =
Tolerance class	5,000 A 0,5		1 kA), 30 V (max)
	0,3		
Technical properties			
Cable diameter	6.1 mm	Cable length	4.5 m
Coil resistance	81 Ω	Protection degree	IP57
Input			
Outer cable diameter, max.	125 mm		
General data			
Linearity		Standard	IEC 61010-1: 2010,
	no linearity error		IEC 61869-1: 2007, IEC 61869-2: 2012, IEC 61869-6: 2016, IEC 61869-10: 2017, UL 61010-1
Insulation coordination			
land the second control of	10.011//10/50	la colletta a colte a c	7.413/ /5011- 1
Impulse withstand voltage Standard	12.8 kV (1.2/50 ms) IEC 61010-1: 2010, IEC 61869-1: 2007, IEC 61869-2: 2012, IEC	Insulation voltage Tolerance class	7.4 kV <sub>RMS</sub> (50 Hz, 1 min)
	61869-6: 2016, IEC 61869-10: 2017, UL 61010-1		0,5
Tracking resistance (CTI)	600		0,0
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

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#### Important note

Product information 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.

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.

Features

• Conductor diameter of the measuring coil: 6.1 mm

- Housing tabs for attachment with cable ties
- Sealable bayonet fastening

#### **Approvals**

Approvals CESSUS

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

#### **Downloads**

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



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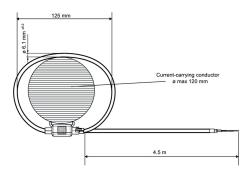
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# **Drawings**

## **Dimensioned drawing**







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## **Accessories**

### Rogowski coils



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#### **General ordering data**

Туре	RCMC-5000-1A-P	Version
Order No.	<u>2593400000</u>	Measuring transducer, every Rogowski coil, 1005000 A, Output: 0
GTIN (EAN)	4050118647822	1 A AC
Qty.	1 pc(s).	
Туре	RCMC-5000-AO-P	Version
Type Order No.	RCMC-5000-A0-P 2593410000	Version  Measuring transducer, every Rogowski coil, 1005000 A, Output: