

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 pc(s).

RCMC-5000-1A-P

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

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...65 °C
Humidity	5...95 %, no condensation		

Dimensions of live conductors

Type of conductor	Insulated conductor only	Installation location	Indoor use
-------------------	--------------------------	-----------------------	------------

Electrical attributes

Frequency band	50...60 Hz	Primary current	5,000 A
Secondary voltage	22,5 mV (@ 50Hz I _{primary} = 1 kA)		

Technical properties

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

Input

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		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
	± 0.1 % typ.		
Temperature coefficient	≤ 0.015 % / °C	Voltage supply	24 V DC ± 25 %

RCMC-5000-1A-P

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

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		

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

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](#)
[Application Note for cabinet installation](#)

Catalogues

[Catalogues in PDF-format](#)

RCMC-5000-1A-P

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

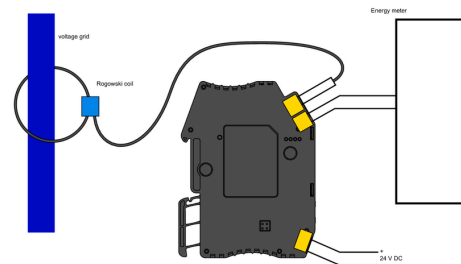
www.weidmueller.com

Drawings

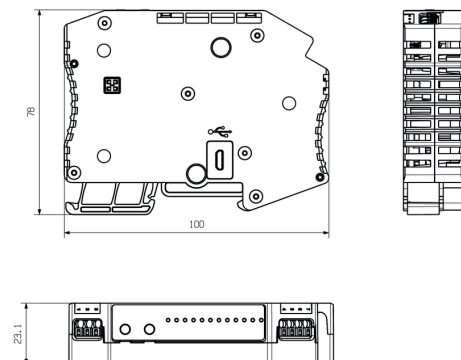
Application



use with Rogowski coil



Dimensioned drawing



RCMC-5000-1A-P

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

Rogowski coils



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

Type	RCMA-B22-D70-1.5	Version
Order No.	2593370000	Rogowski coil, Diameter: 70 mm, Cable length: 1.5 m, 100...5000 A,
GTIN (EAN)	4050118647815	Output : Pulse, mV signal
Qty.	1 pc(s).	
Type	RCMA-B22-D70-4.5	Version
Order No.	2593340000	Rogowski coil, Diameter: 70 mm, Cable length: 4.5 m, 100...5000 A,
GTIN (EAN)	4050118647761	Output : Pulse, mV signal
Qty.	1 pc(s).	
Type	RCMA-B22-D175-1.5	Version
Order No.	2593390000	Rogowski coil, Diameter: 175 mm, Cable length: 1.5 m, 100...5000 A,
GTIN (EAN)	4050118647792	Output : Pulse, mV signal
Qty.	1 pc(s).	
Type	RCMA-B22-D125-4.5	Version
Order No.	2593350000	Rogowski coil, Diameter: 125 mm, Cable length: 4.5 m, 100...5000 A,
GTIN (EAN)	4050118647778	Output : Pulse, mV signal
Qty.	1 pc(s).	
Type	RCMA-B22-D175-4.5	Version
Order No.	2593360000	Rogowski coil, Diameter: 175 mm, Cable length: 4.5 m, 100...5000 A,
GTIN (EAN)	4050118647785	Output : Pulse, mV signal
Qty.	1 pc(s).	
Type	RCMA-B22-D125-1.5	Version
Order No.	2593380000	Rogowski coil, Diameter: 125 mm, Cable length: 1.5 m, 100...5000 A,
GTIN (EAN)	4050118647808	Output : mV signal
Qty.	1 pc(s).	