Data sheet

RCMC-5000-1A-P

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

www.weidmueller.com



RoHS COMPLIANT

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 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	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 items

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Technical data

Approvals

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

Dimensions and weights

Depth	78 mm	Depth (inches)	3.0709 inch
Height	100 mm	Height (inches)	3.937 inch
Width	23.1 mm	Width (inches)	0.9094 inch
Net weight	100 g		

Temperatures

Storage temperature	-40 °C...85 °C	Operating temperature	-25 °C...65 °C
Humidity	5...95 %, 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	Insulated conductor only	Installation location	Indoor use

Electrical attributes

Frequency band	50...60 Hz	Secondary voltage	22,5 mV (@ 50Hz Iprimary = 1 kA)
Primary current	5000 A		

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

Standard	EN 61000-6-2, 3, EN 61010-1: 2010, EN 61010-2-030:2010, EN 61326-1: 2013, EN	Accuracy	<0.5 % of measuring range

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Technical data

	61000-6-2:2005, EN 61000-6-3:2007		
Protection degree	IP20	Supply voltage	24 V DC ± 25 %
Linearity	± 0.1 % typ.	Current consumption	100 mA @24V
Temperature coefficient	≤ 0.015 % / °C	Configuration	Keys and LED display

Insulation coordination

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	EMC standards	UL 61010-1, EN 61326-1:2013
Pollution severity	2	Galvanic isolation	between input / output / supply
Insulation voltage	1.5 kV AC 1 min.		

Part description

Product description	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!

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		

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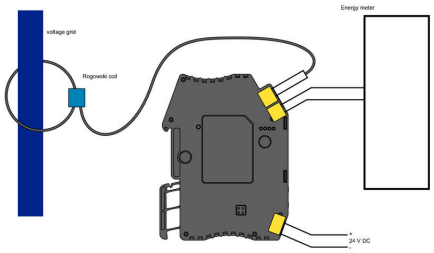
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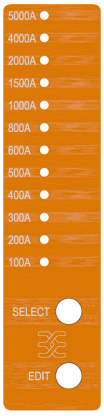
Drawings

Application

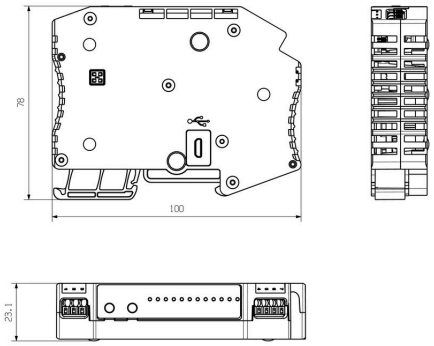


use with Rogowski coil





Dimensioned drawing



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Accessories

Rogowski coils



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 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

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

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