

PACT RCP-D140 - Coil

2904891

<https://www.phoenixcontact.com/us/products/2904891>



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450 mm long Rogowski coil. The measuring coil diameter when installed is 140 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.



Commercial data

Item number	2904891
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C444
Product key	CMMA12
GTIN	4046356898188
Weight per piece (including packing)	169 g
Weight per piece (excluding packing)	169 g
Customs tariff number	90309000
Country of origin	DE

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Technical data

Product properties

Product type	Rogowski coil
Set comprises	2904922 PACT RCP-4000A-1A-D140
Insulation characteristics	
Pollution degree	2

Electrical properties

Measuring coil	
Conductor structure signal line	2x 0.22 mm (Signal (tinned))
	1x 0.22 mm (Shielding (tinned))
Insulation	double insulation
Rated insulation voltage	1000 V AC (rms CAT III)
	600 V AC (rms CAT IV)
Test voltage	10.45 kV DC (60 s)
Accuracy class	0.2 (IEC 61869-10: A1)

General

Converter type	Rogowski coil
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Input data

Frequency	
Designation	Measuring coil
Frequency measuring range	40 Hz ... 20000 Hz

Current transformer

Converter type	Rogowski coil
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Output data

Signal	
Designation	Measuring coil
Output signal (at 50 Hz)	100 mV (no load, at 1,000 A)
Output voltage (in no-load operation)	$V_{OUT} = M * dI/dt$
Output voltage (sinusoidal, in no-load operation)	100 mV ($V_{OUT} = 2 * \pi * M * f * I$ ($M = 0.318 \mu\text{H}$; example: At 50 Hz; $I = 1,000 \text{ A}$))

Dimensions

Measuring coil	
Length	450 mm
Diameter	8.3 mm ± 0.2 mm

Measuring coil when installed

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Diameter	140 mm
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Signal line

Length	3 m
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Material specifications

Housing material	PC
Coil material	Elastollan

Environmental and real-life conditions

Ambient conditions

Measuring coil degree of protection	IP54 (not assessed by UL)
Ambient temperature (operation) (Measuring coil)	-30 °C ... 80 °C (Measuring coil)
Ambient temperature (storage/transport)	-40 °C ... 80 °C (Measuring coil)
Altitude	< 2000 m
Permissible humidity (operation)	5 % ... 95 % (non-condensing)

Approvals

UKCA

Certificate	UKCA-compliant
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CMIM

Certificate	CMIM-compliant
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UL, USA/Canada

Identification	UL 61010 Recognized
Note	Measuring coil

Standards and regulations

Standards/regulations	IEC 61010-2-030
	IEC 61869-10

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Approvals

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cUL Recognized

Approval ID: FILE E 357804



UL Recognized

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Classifications

ECLASS

ECLASS-13.0	27210992
ECLASS-15.0	27210992

ETIM

ETIM 9.0	EC002498
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UNSPSC

UNSPSC 21.0	39121000
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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EF3.0 Climate Change

CO2e kg	6.847 kg CO2e
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