

PACT RCP-D140 - Coil

2904891

<https://www.phoenixcontact.com/pc/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
Product key	CK4A12
Catalog page	Page 219 (C-5-2019)
GTIN	4046356898188
Weight per piece (including packing)	170 g
Weight per piece (excluding packing)	169 g
Customs tariff number	90309000
Country of origin	IT

Technical data

Product properties

Product type	Rogowski coil
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)
Basic accuracy	$< \pm 0.2 \%$

General

Converter type	Rogowski coil
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Input data

Frequency

Designation	Measuring coil
Frequency measuring range	40 Hz ... 20000 Hz
Position error	$< \pm 0.1 \%$ (typical)
Linearity error	$< 0.1 \%$

Current transformers

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

Dimensions

Measuring coil

Length	450 mm
Diameter	8.3 mm ± 0.2 mm

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Measuring coil when installed

Diameter	140 mm
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Signal line

Length	3 m
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Material specifications

Coil material	Elastollan
Housing material	PC

Environmental and real-life conditions

Ambient conditions

Measuring coil degree of protection	IP67 (not assessed by UL)
Ambient temperature (operation)	-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 61010-1
	IEC 61010-2-032

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Approvals

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cUL Recognized
Approval ID: FILE E 357804



UL Recognized
Approval ID: FILE E 357804

cULus Recognized

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Classifications

ECLASS

ECLASS-11.0	27210992
ECLASS-12.0	27210992
ECLASS-13.0	27210992

ETIM

ETIM 8.0	EC002498
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UNSPSC

UNSPSC 21.0	39121000
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Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

PACT RCP-CLAMP - Holder

2904895

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The optional holding device ensures the Rogowski coil is securely seated on busbars with a thickness of 10 ... 15 mm. During installation, the coil housing is pushed onto the flange of the holding device and snaps in automatically.

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