

2910326

https://www.phoenixcontact.com/us/products/2910326

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

Set consisting of a 1 A measuring transducer and a Rogowski coil with signal line. Length of Rogowski coil: 300 mm, diameter: 95 mm. Length of signal line: 10 m. The Rogowski coil measures the AC current of busbars and power lines.



### Commercial data

Item number	2910326
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C444
Product key	CK4A12
Catalog page	Page 222 (C-5-2019)
GTIN	4055626437651
Weight per piece (including packing)	611 g
Weight per piece (excluding packing)	583.3 g
Customs tariff number	85437090
Country of origin	DE



2910326

https://www.phoenixcontact.com/us/products/2910326

# Technical data

# Product properties

Product type	Current transformer	
Insulation characteristics		
Insulation	double insulation	
Insulation characteristics Insulation	double insulation	
	double insulation  III (1000 V, to neutral conductor)	
Insulation		

### Electrical properties

Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
Typical measuring error	< 1 %
Protective circuit	Surge protection; 33 V suppressor diode
Temperature coefficients	0.005 %/K (+10 $^{\circ}\text{C}$ +70 $^{\circ}\text{C}$ , both components have the same ambient temperature)
	0.07 %/K (-20 $^{\circ}\text{C}$ +10 $^{\circ}\text{C}$ , both components have the same ambient temperature)

#### 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	<± 0.2 %

#### Measuring transducers

Linearity error	< 0.5 % (From the range end value)
Maximum transmission error	≤ 0.5 % (From the range end value)
Frequency range	45 Hz 65 Hz
Max. detectable harmonics	< 2 kHz
Current consumption	< 190 mA (at 19.2 V)
Test voltage	1.5 kV AC (Supply/input and output: 50 Hz, 1 min)

#### General

Can be calibrated	no
Class	1
Accuracy class	1
Converter type	Rogowski coil and 1 A measuring transducer

#### Supply: Measuring transducers



2910326

https://www.phoenixcontact.com/us/products/2910326

Nominal supply voltage	24 V DC -20 % +25 %
Nominal supply voltage range	19.2 V DC 30 V DC
Max. current consumption	190 mA
Power consumption	4 W

# Input data

#### Frequency

Designation	Measuring coil
Frequency measuring range	40 Hz 20000 Hz
Position error	<± 0.1 % (typical)
Linearity error	< 0.1 %

#### Signal

Input signal (at 50 Hz)	100 mV (1000 A)
Curve type	Sine
Input impedance	27 kΩ (smallest measuring range)

#### **Current transformers**

Configurable/programmable	Via DIP switches
Rated power	1.5 VA
Primary rated current I <sub>pn</sub>	0 A AC 100 A AC
	0 A AC 250 A AC
	0 A AC 400 A AC
	0 A AC 630 A AC
	0 A AC 1000 A AC
	0 A AC 1500 A AC
	0 A AC 2000 A AC
	0 A AC 4000 A AC
Phase angle	< 1 °
Can be calibrated	no
Class	1
Accuracy class	1
Converter type	Rogowski coil and 1 A measuring transducer

# 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 <sub>OUT</sub> = M * dl/dt
Output voltage (sinusoidal, in no-load operation)	100 mV (V <sub>OUT</sub> = 2 * $\pi$ * M * f * I (M = 0.318 $\mu$ H; example: At 50 Hz; I = 1,000 A))
Accuracy class	<1

#### Signal

Designation Measuring transducer	•	
	Designation	Measuring transducer



2910326

https://www.phoenixcontact.com/us/products/2910326

Current output signal	0 A AC 1 A AC
Rated power	1.25 VA
Load	0 Ω 1.25 Ω
Max. distances for copper cables at $P_{N \text{ max}}$	16 m (0.75 mm² (AWG 20))
	32 m (1.5 mm² (AWG 16))
	55 m (2.5 mm² (AWG 14))

#### Connection data

#### Measuring transducer side

Connection method	Screw connection
Stripping length	7 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	24 14
Tightening torque	0.5 Nm 0.6 Nm

### Signaling

## Dimensions

#### Item dimensions

Width	22.5 mm
Height	85 mm
Depth	70.4 mm

#### Measuring coil

Length	300 mm
Diameter	8.3 mm ±0.2 mm

### Measuring coil when installed

Diameter	95 mm
Signal line	
Length	10 m
Width	22.5 mm
Height	85 mm
Depth	70.4 mm

### Material specifications

Housing material	PC
	Polyamide
Coil material	Elastollan

#### Environmental and real-life conditions



2910326

https://www.phoenixcontact.com/us/products/2910326

Measuring coil degree of protection	IP67 (not assessed by UL)
Measuring transducer degree of protection	IP20
Ambient temperature (operation)	-30 °C 80 °C (Measuring coil)
	-20 °C 70 °C (Measuring transducer)
Ambient temperature (storage/transport)	-40 °C 80 °C (Measuring coil)
	-25 °C 85 °C (Measuring transducer)
Altitude	< 2000 m
Permissible humidity (operation)	5 % 95 % (non-condensing)

### Approvals

CE

Certificate	CE-compliant CE-compliant
UKCA	
Certificate	UKCA-compliant
CMIM	
Certificate	CMIM-compliant
UL, USA/Canada	
Identification	UL 61010 Recognized
Note	Measuring coil
UL, USA/Canada	

Identification	UL 508 Listed
Note	Measuring transducer

## EMC data

Noise immunity	EN 61000-6-3
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61000-6-4

### Standards and regulations

Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
Standards/regulations	IEC 61010-1
	IEC 61010-2-032

### Mounting

Mounting type	DIN rail mounting	



2910326

https://www.phoenixcontact.com/us/products/2910326

# **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2910326



EAC

Approval ID: RU\*DE\*08.B.01187/19



2910326

https://www.phoenixcontact.com/us/products/2910326

# Classifications

UNSPSC 21.0

### **ECLASS**

27210902			
27210902			
27210902			
ETIM			
EC002048			

39121000



2910326

https://www.phoenixcontact.com/us/products/2910326

# Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes		
Exemption	6(c), 7(a), 7(c)-l		
China RoHS			
Environment friendly use period (EFUP)	EFUP-50		
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.		



2910326

https://www.phoenixcontact.com/us/products/2910326

#### Accessories

PACT RCP-CLAMP - Holder

2904895

https://www.phoenixcontact.com/us/products/2904895



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.

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com