

#### 2906232

https://www.phoenixcontact.com/us/products/2906232

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Set consisting of a 4-way signal conditioner with screw connection technology and a Rogowski coil 450 mm in length/140 mm in diameter for AC current measurement on busbars and power lines.

The signal conditioner outputs 8 different standard signals on the output side and has one switching output.

### Commercial data

Item number	2906232
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C444
Product key	CK4A12
Catalog page	Page 223 (C-5-2019)
GTIN	4055626048291
Weight per piece (including packing)	422.45 g
Weight per piece (excluding packing)	422.45 g
Customs tariff number	85437090
Country of origin	DE



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### Technical data

#### Product properties Product type Current transformer Insulation characteristics Ш Overvoltage category Pollution degree 2 Electrical properties Electrical isolation Reinforced insulation in accordance with IEC 61010-1 Typical measuring error < 1 % Protective circuit Surge protection; 33 V suppressor diode Step response (0-99%) 110 ms Rated insulation voltage 300 V Measuring coil 2x 0.22 mm (Signal (tinned)) Conductor structure signal line 1x 0.22 mm (Shielding (tinned)) Insulation double insulation 1000 V AC (rms CAT III) Rated insulation voltage 600 V AC (rms CAT IV) 10.45 kV DC (60 s) Test voltage Basic accuracy <± 0.2 % Measuring transducers Maximum transmission error ≤ 0.5 % (From the range end value) Frequency range 16 Hz ... 1000 Hz Test voltage 3 kV (50 Hz, 1 min.) General Can be calibrated no Class 1 Accuracy class 1 Converter type Rogowski coil and 4-way signal conditioner Supply: Measuring transducers 24 V DC Nominal supply voltage 9.6 V DC ... 30 V DC Nominal supply voltage range $\leq$ 1 W (at I<sub>OUT</sub> = 20 mA, 9.6 V DC, 600 $\Omega$ load) Power consumption

### Input data

Frequency	
Designation	Measuring coil
Frequency measuring range	40 Hz 20000 Hz

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Position error	<± 0.1 % (typical)
Linearity error	< 0.1 %
Signal	
Input signal (at 50 Hz)	100 mV (1000 A)
Curve type	Sine
Input impedance	> 100 kΩ
Current transformers	
Configurable/programmable	Via DIP switches
Rated frequency: Standard converter	40 Hz 20000 Hz
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
Can be calibrated	no
Class	1
Accuracy class	1
Converter type	Rogowski coil and 4-way signal conditioner

#### Output data

Switching: Transistor	
Number of outputs	1
Contact switching type	1 N/O contact
Minimum switching voltage	1 V
Maximum switching voltage	30 V DC
Min. switching current	100 µA
Max. switching current	100 mA (at 30 V)

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 <sub>OUT</sub> = 2 * π * M * f * I (M = 0.318 μH; example: At 50 Hz; I = 1,000 A))
Accuracy class	1

Signal

Cigital	
Designation	Measuring transducer
Configurable/programmable	Yes
Voltage output signal	0 V 10 V (via DIP switch)
	2 V 10 V (via DIP switch)



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0 V 5 V (via DIP switch)
1 V 5 V (via DIP switch)
0 V 10.5 V (can be set via software)
≈℃℃
0 mA 20 mA (via DIP switch)
4 mA 20 mA (via DIP switch)
0 mA 10 mA (via DIP switch)
2 mA 10 mA (via DIP switch)
0 mA 21 mA (can be set via software)
24.6 mA
≥ 10 kΩ
≤ 600 Ω (20 mA)
< 20 mV <sub>PP</sub>
< 20 mV <sub>PP</sub>

### Connection data

Measuring transducer side

Connection method	Screw connection
Stripping length	10 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm² 1.5 mm²
Conductor cross section flexible	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Conductor cross section AWG	26 16
Tightening torque	0.5 Nm 0.6 Nm

### Dimensions

Item dimensions

Width	6.2 mm
Height	110.5 mm
Depth	120.5 mm
Measuring coil	
Length	450 mm
Diameter	8.3 mm ±0.2 mm
Measuring coil when installed	
Diameter	140 mm
Signal line	
Length	3 m
Width	6.2 mm
Height	110.5 mm

120.5 mm

Material specifications

Depth



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Coil material	Elastollan
Housing material	PC
	PBT

#### Environmental and real-life conditions

Ambient conditions	
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)
	-40 °C 70 °C (Measuring transducer)
Ambient temperature (storage/transport)	-40 °C 80 °C (Measuring coil)
	-40 °C 85 °C (Measuring transducer)
Altitude	< 2000 m
Permissible humidity (operation)	5 % 95 % (non-condensing)

#### Approvals

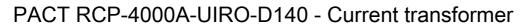
CE	
Certificate	CE-compliant
UKCA	
Certificate	UKCA-compliant
СМІМ	
Certificate	CMIM-compliant
UL, USA/Canada	
Identification	UL 61010 Recognized
Note	Measuring coil
UL, USA/Canada	
Identification	UL 508 Listed
Note	Measuring transducer

#### EMC data

Noise immunity	EN 61000-6-2
Note	When being exposed to interference, there may be minimal deviations.
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





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Mounting type

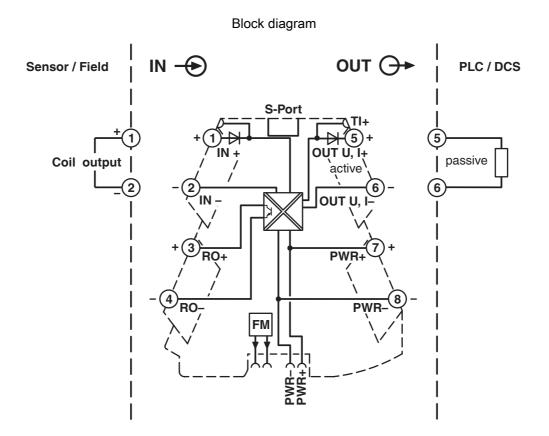
DIN rail mounting



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### Drawings





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### Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2906232

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



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### Classifications

#### ECLASS

ECLASS-11.0	27210902
ECLASS-13.0	27210902
ECLASS-12.0	27210902

#### ETIM

	ETIM 8.0	EC002048
UNSPSC		
	UNSPSC 21.0	39121000



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### Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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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.

#### PACT RCP-CLAMP-5-10 - Holder

#### 2907888

https://www.phoenixcontact.com/us/products/2907888



The optional holding device ensures the Rogowski coil is securely seated on busbars that are 5 ... 10 mm thick. During installation, the coil housing is pushed onto the flange of the holding device and snaps in automatically.

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