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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.



COMPLETE line

RoHS

Packing unit	1 pc
GTIN	4 055626 048291
GTIN	4055626048291
Weight per Piece (excluding packing)	286.200 g
Custom tariff number	85437090
Country of origin	Germany

## Technical data

#### Dimensions

Width	6.2 mm
	6.2 mm
Height	110.5 mm
	110.5 mm
Depth	120.5 mm
	120.5 mm

#### Ambient conditions

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)



## Technical data

### Ambient conditions

Voltage output signal

	-40 °C 85 °C (Measuring transducer)
Maximum altitude	> 4000 m
Permissible humidity (operation)	5 % 95 % (non-condensing)
Measuring coil degree of protection	IP67 (not assessed by UL)
Measuring transducer degree of protection	IP20
Noise immunity	EN 61000-6-2 When being exposed to interference, there may be minima deviations.
Measuring transducer supply	
Nominal supply voltage	24 V DC
Nominal supply voltage range	9.6 V DC 30 V DC
Power consumption	$\leq$ 1 W (at I <sub>OUT</sub> = 20 mA, 9.6 V DC, 600 $\Omega$ load)
Measuring coil input data	
Frequency measuring range	40 Hz 20000 Hz
Position error	< 1 %
Linearity error	0.1 %
Measuring transducer input data	
Measuring ranges (current)	100 A 250 A 400 A 630 A 1000 A 1500 A 2000 A 4000 A
Configurable/programmable	Via DIP switches
Measuring transducer signal input	
Input signal (at 50 Hz)	100 mV (1000 A)
Input impedance	> 100 kΩ
Measuring coil signal output	
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 * π * M * f * I (M = 0.318 μH; example: At 50 Hz; I = 1,000 A))
Measuring transducer signal output	i
Current output signal	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)

0 V ... 10 V (via DIP switch)

2 V ... 10 V (via DIP switch) 0 V ... 5 V (via DIP switch)

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## Technical data

## Measuring transducer signal output

	1 V 5 V (via DIP switch)
	0 V 10.5 V (can be set via software)
Load/output load current output	$\leq$ 600 $\Omega$ (20 mA)

#### General data, measuring coil

Length of measuring coil	450 mm
Diameter of measuring coil	8.3 mm ±0.2 mm
Length of signal cable	3000 mm
Conductor structure signal line	2x 0.22 mm (Signal (tinned))
	1x 0.22 mm (Shielding (tinned))
Coil material	Elastollan
Housing material	PC
Insulation	double insulation
Rated insulation voltage	1000 V AC (rms CAT III)
	600 V AC (rms CAT IV)
Test voltage	10.45 kV (DC / 1 min.)
Basic accuracy	<± 0.21 %
UL, USA/Canada	UL 61010 Recognized

## General data for measuring transducer

Maximum transmission error	$\leq$ 0.5 % (From the range end value)
Frequency range	16 Hz 1000 Hz
Housing material	PBT
Test voltage	3 kV (50 Hz, 1 min.)
UL, USA/Canada	UL 508 Listed

### General data

Standards/regulations	IEC 61010-1
	IEC 61010-2-032
Typical measuring error	< 1 %

## Connection data

Connection name	Measuring transducer side
Connection method	Screw connection
Stripping length	10 mm
Screw thread	M3
Conductor cross section solid	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> 1.5 mm <sup>2</sup>
Conductor cross section AWG	26 16



## Technical data

### Connection data

Torque	0.5 Nm 0.6 Nm
Standards and Regulations	
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4
Standards/regulations	IEC 61010-1
	IEC 61010-2-032
Rated insulation voltage	300 V
Pollution degree	2
Overvoltage category	11
Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
Conformance	CE-compliant

#### Conformance/approvals

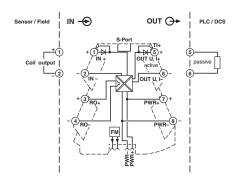
Designation	CE
Identification	CE-compliant

## **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

## Block diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27210902
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## Classifications

## eCl@ss

eCl@ss 11.0	27210902
eCl@ss 4.0	27210900
eCl@ss 4.1	27210900
eCl@ss 5.0	27210900
eCl@ss 5.1	27210900
eCl@ss 6.0	27210900
eCl@ss 7.0	27210902
eCl@ss 9.0	27210902

### ETIM

ETIM 3.0	EC002048
ETIM 4.0	EC002048
ETIM 6.0	EC002048
ETIM 7.0	EC002048

## UNSPSC

UNSPSC 13.2	39121032
UNSPSC 18.0	39121032
UNSPSC 19.0	39121032
UNSPSC 20.0	39121032
UNSPSC 21.0	39121032

## Approvals

Approvals

Approvals

EAC

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Ex Approvals

## Approval details

E	AC ERE	RU*DE*08.B.01187/19
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