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Set consisting of a 4-way signal conditioner with push-in connection technology and a Rogowski coil 300 mm in length/95 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.



# **Key Commercial Data**

Packing unit	1 pc
GTIN	4 055626 048284
GTIN	4055626048284
Weight per Piece (excluding packing)	400.600 g
Country of origin	Germany
Sales Key	CK4A12

#### Technical data

#### **Dimensions**

Width	6.2 mm
Height	110.5 mm
Depth	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)
	-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 minimal deviations.



# Technical data

# 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)	$V_{OUT} = M * dI/dt$
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))

#### Measuring transducer signal output

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)
Voltage output signal	0 V 10 V (via DIP switch)
	2 V 10 V (via DIP switch)
	0 V 5 V (via DIP switch)
	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	300 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



# Technical data

# General data, measuring coil

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
Degree of pollution	2
Overvoltage category	П
Typical measuring error	< 1 %

#### Connection data

Connection name	Measuring transducer side
Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.2 mm² 2.5 mm²
Conductor cross section flexible	0.2 mm² 2.5 mm²
Conductor cross section AWG	26 12

# 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
Degree of pollution	2
Overvoltage category	Ш
Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
Conformance	CE-compliant

# **Environmental Product Compliance**

China RoHS	Environmentally Friendly Use Period = 50



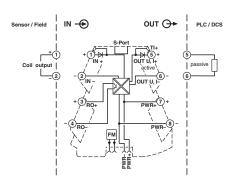
# Technical data

# **Environmental Product Compliance**

Category "Manufacturer's declaration"		For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"
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# **Drawings**

#### Block diagram



# Classifications

# eCl@ss

eCl@ss 4.0	27210902
eCl@ss 4.1	27210902
eCl@ss 5.0	27210902
eCl@ss 5.1	27210900
eCl@ss 6.0	27210900
eCl@ss 7.0	27210902
eCl@ss 8.0	27210902
eCl@ss 9.0	27210902

# **ETIM**

ETIM 3.0	EC002048
ETIM 4.0	EC002048
ETIM 5.0	EC002048
ETIM 6.0	EC002048
ETIM 7.0	EC002048

# UNSPSC

UNSPSC 13.2	39121032
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# Approvals

# Approvals



Approvals	
Approvals	
EAC	
Ex Approvals	
Approval details	
EAC <b>[H</b> ]	RU C- DE.A*30.B.01082

#### Accessories

Accessories

Mounting material

Holder - PACT RCP-CLAMP - 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.

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