Current transformer - PACT RCP-4000A-UIRO-D140 - 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.

Key Commercial Data

Packing unit	1 pc
GTIN	4 055626 048291
GTIN	4055626048291

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.

Measuring transducer supply

Nominal supply voltage	24 V DC
Nominal supply voltage range	9.6 V DC ... 30 V DC

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Measuring transducer supply

Power consumption	≤ 1 W (at I_{OUT} = 20 mA, 9.6 V DC, 600 Ω 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_{OUT} = 2 * π * M * f * I (M = 0.318 µH; 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	≤ 600 Ω (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)

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General data, measuring coil

	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	≤ 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 mm² ... 1.5 mm²
Conductor cross section flexible	0.2 mm² ... 1.5 mm²
Conductor cross section AWG	26 ... 16
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	II
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

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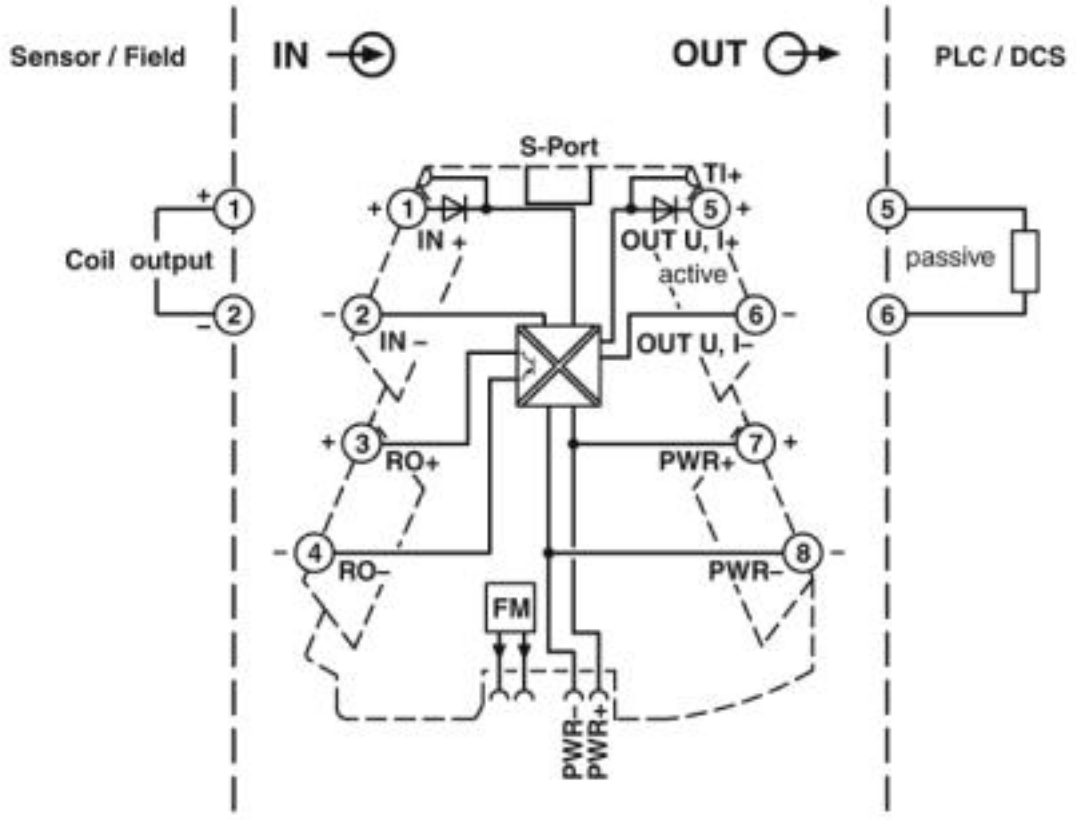
Technical data

Environmental Product Compliance

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 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 8.0	27210902
eCl@ss 9.0	27210902

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Classifications

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

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approval details

EAC	EAC	RU*DE*08.B.01187/19

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.

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Accessories

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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