

# Current transformer - PACT RCP-4000A-UIRO-D95 - 2906231

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Set consisting of a 4-way signal conditioner with screw 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	
GTIN	4055626048147

## 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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## Technical data

### Measuring transducer supply

Power consumption	≤ 1 W (at I <sub>OUT</sub> = 20 mA, 9.6 V DC, 600 Ω load)
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### 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)	$V_{OUT} = M \cdot dI/dt$
Output voltage (sinusoidal, in no-load operation)	100 mV ( $V_{OUT} = 2 \cdot \pi \cdot M \cdot f \cdot I$ (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	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
Insulation	double insulation
Rated insulation voltage	1000 V AC (rms CAT III)

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## Technical data

### 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 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
Torque	0.5 Nm ... 0.6 Nm

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
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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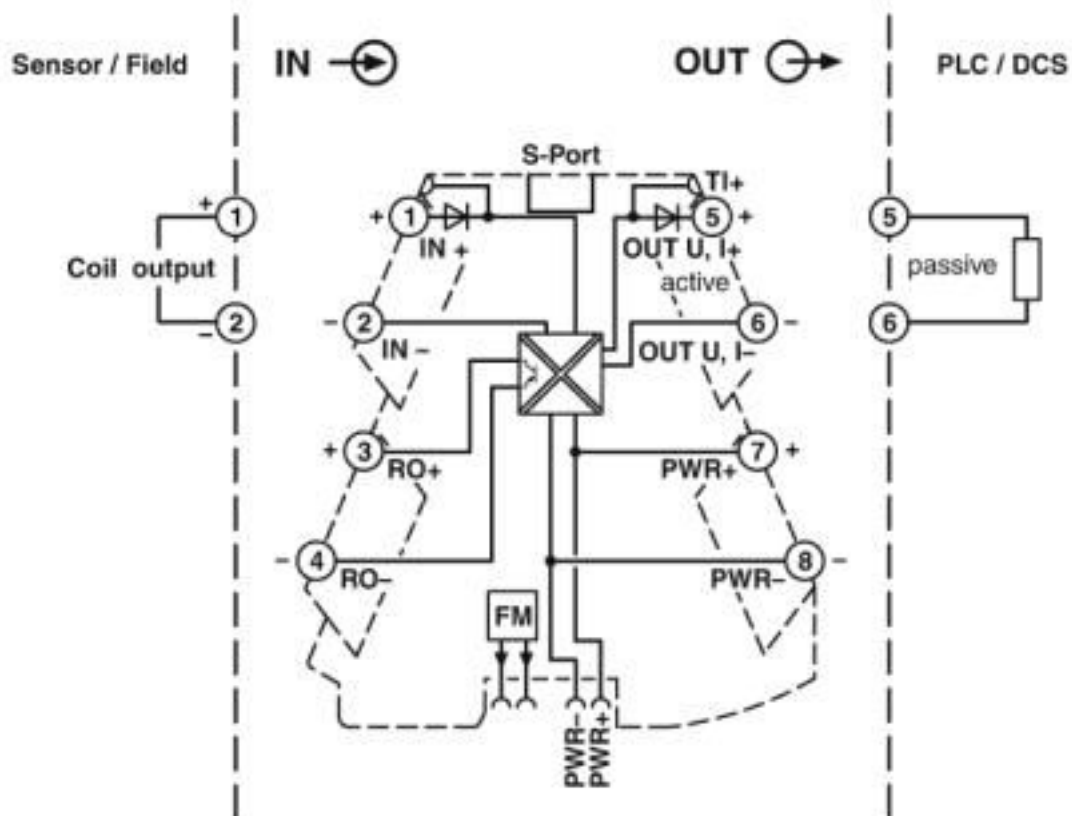
## Technical data

### 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 10.0.1	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 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

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#### Approvals

EAC

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#### Ex Approvals

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### Approval details

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