Current transformer - PACT RCP-4000A-UIRO-PT-D95 - 2906234

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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.

RoHS

Key Commercial Data

Packing unit	1 STK
GTIN	4 055626 048284
GTIN	4055626048284
Weight per Piece (excluding packing)	440.000 g
Custom tariff number	85437090
Country of origin	Germany

Technical data

Measuring transducer supply

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

Current transformer - PACT RCP-4000A-UIRO-PT-D95 - 2906234

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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	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)
	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

Current transformer - PACT RCP-4000A-UIRO-PT-D95 - 2906234

Technical data

General data for measuring transducer

Housing material	PBT
Degree of protection	IP20
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	II
Typical measuring error	< 1 %

Connection data

Connection name	Measuring transducer side
Conductor cross section flexible min.	0.2 mm²
Conductor cross section flexible max.	2.5 mm²
Conductor cross section solid min.	0.2 mm²
Conductor cross section solid max.	2.5 mm²
Conductor cross section AWG min.	26
Conductor cross section AWG max.	12
Screw thread	M3
Connection method	Push-in connection
Stripping length	10 mm

Dimensions

Width	6.20 mm
Height	110.50 mm
Depth	120.50 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
Measuring coil degree of protection	IP67 (not assessed by UL)

Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Noise emission	EN 61000-6-4

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Standards and Regulations

Standards/regulations	IEC 61010-1
	IEC 61010-2-032
Rated insulation voltage	300 V
Degree of pollution	2
Overvoltage category	II
Electrical isolation	Reinforced insulation in accordance with IEC 61010-1
Conformance	CE-compliant

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration”

Drawings

Block diagram