



Automatización Eléctrica
Especialistas en Automatización

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Current transformer - PACT RCP-4000A-1A-D190 - 2904923

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Set consisting of 2 components: 1 A measuring transducer and a Rogowski coil, length 600 mm. The measuring coil diameter when installed is 190 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 900935

Technical data

Measuring transducer supply

Nominal supply voltage	24 V DC -20 % ... +25 %
Nominal supply voltage range	19.2 V DC ... 30 V DC
Max. current consumption	190 mA
Power consumption	4 W

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
Phase angle	< 1 °
Rated power	1.5 VA

Measuring transducer signal input

Input signal (at 50 Hz)	100 mV (1000 A)
Input impedance	27 kΩ (smallest measuring range)

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))

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Technical data

Measuring transducer signal output

Current output signal	0 A AC ... 1 A
Load	0 Ω ... 1.5 Ω
Operating voltage display	Green LED

General data, measuring coil

Length of measuring coil	600 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

Linearity error	< 0.5 % (From the range end value)
Maximum transmission error	≤ 0.5 % (From the range end value)
Frequency range	45 Hz ... 65 Hz
Current consumption	< 190 mA (at 19.2 V)
Housing material	Polyamide
Degree of protection	IP20
Test voltage	1.5 kV AC (Supply/input and output: 50 Hz, 1 min)
UL, USA / Canada	UL 508 Listed

General data

Standards/regulations	IEC 61010-1
	IEC 61010-2-032
Insulation	double insulation
Degree of pollution	2
Overvoltage category	III (1,000 V, to neutral conductor)
	IV (600 V, to neutral conductor)
Temperature coefficients	0.005 %/K (+10°C ... +70°C; both components have the same ambient temperature)
	0.07 %/K (-20°C ... +10°C; both components have the same ambient temperature)
Typical measuring error	< 1 %

Connection data

Connection name	Measuring transducer side
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Technical data

Connection data

Conductor cross section flexible min.	0.2 mm ²
Conductor cross section flexible max.	2.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	2.5 mm ²
Conductor cross section AWG min.	24
Conductor cross section AWG max.	14
Screw thread	M3
Connection method	Screw connection
Stripping length	7 mm
Torque	0.5 Nm ... 0.6 Nm

Dimensions

Width	22.50 mm
Height	70.40 mm
Depth	85.00 mm

Ambient conditions

Ambient temperature (operation)	-30 °C ... 80 °C (Measuring coil)
	-20 °C ... 70 °C (Measuring transducer)
Ambient temperature (storage/transport)	-40 °C ... 80 °C (Measuring coil)
	-25 °C ... 85 °C (Measuring transducer)
Maximum altitude	< 2000 m
Measuring coil degree of protection	IP67 (not assessed by UL)

Standards and Regulations

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	IV (600 V, to neutral conductor)

Classifications

eCl@ss

eCl@ss 5.1	27200303
eCl@ss 6.0	27200303
eCl@ss 8.0	27210902

ETIM

ETIM 4.0	EC002048
ETIM 5.0	EC002048

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Approvals

Approvals

Approvals

EAC

Ex Approvals

Approvals submitted

Approval details

EAC

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Product	Code	Reference	Product link
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