

Current transformer - PACT RCP-4000A-1A-D140 - 2904922

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Set consisting of 2 components: 1 A measuring transducer and a Rogowski coil, length 450 mm. The measuring coil diameter when installed is 140 mm. The Rogowski coil is used for AC current measurement for busbars and power lines.

Key commercial data

package_quantity	1
GTIN	4046356900959

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))

Measuring transducer signal output

Current output signal	0 A AC ... 1 A
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Measuring transducer signal output

Load	0 Ω ... 1.5 Ω
Operating voltage display	Green LED

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))
Conductor structure signal line	1x 0.22 mm (Shielding (tinned))
Coil material	Elastollan
Housing material	PC
Insulation	double insulation
Rated insulation voltage	1000 V AC (rms CAT III)
Rated insulation voltage	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
Standards/regulations	IEC 61010-2-032
Insulation	double insulation
Degree of pollution	2
Overvoltage category	III (1,000 V, to neutral conductor)
Overvoltage category	IV (600 V, to neutral conductor)
Temperature coefficients	0.005 %/K (+10°C ... +70°C; both components have the same ambient temperature)
Temperature coefficients	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
Conductor cross section flexible min.	0.2 mm ²

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Connection data

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)
Ambient temperature (operation)	-20 °C ... 70 °C (Measuring transducer)
Ambient temperature (storage/transport)	-40 °C ... 80 °C (Measuring coil)
Ambient temperature (storage/transport)	-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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Standards/regulations	IEC 61010-2-032
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Environmental Product Compliance

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

Classifications

eCl@ss

eCl@ss 4.0	27210902
eCl@ss 4.1	27210902
eCl@ss 5.0	27210902
eCl@ss 5.1	27210902
eCl@ss 6.0	27210902

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Classifications

eCl@ss

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

UNSPSC

UNSPSC 13.2	39121032
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Accessories

Mounting material

PACT RCP-CLAMP - 2904895



PACT RCP-CLAMP-5-10 - 2907888



Drawings

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