

1033482

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Rogowski coil, The Rogowski coil measures the AC current of rails and power lines.



Commercial data

| Item number | 1033482 |
|--------------------------------------|---------------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | C444 |
| Product key | CK4A12 |
| Catalog page | Page 219 (C-5-2019) |
| GTIN | 4055626539041 |
| Weight per piece (including packing) | 385.6 g |
| Weight per piece (excluding packing) | 372.4 g |
| Customs tariff number | 90309000 |
| Country of origin | DE |



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Technical data

Product properties

| Product type | Rogowski coil |
|----------------------------|------------------------------------|
| Set comprises | 1033483 PACT RCP-4000A-1A-D140-10M |
| Data management status | |
| Article revision | 03 |
| Insulation characteristics | |
| Pollution degree | 2 |

Electrical properties

Measuring coil

| Conductor structure signal line | 2x 0.22 mm (Signal (tinned)) |
|---------------------------------|---------------------------------|
| | 1x 0.22 mm (Shielding (tinned)) |
| Insulation | double insulation |
| Rated insulation voltage | 1000 V AC (rms CAT III) |
| | 600 V AC (rms CAT IV) |
| Test voltage | 10.45 kV DC (60 s) |
| Basic accuracy | <± 0.2 % |

General

| _ | |
|----------------|---------------|
| Converter type | Rogowski coil |

Input data

Frequency

| Designation | Measuring coil |
|---------------------------|--------------------|
| Frequency measuring range | 40 Hz 20000 Hz |
| Position error | <± 0.1 % (typical) |
| Linearity error | < 0.1 % |

Current transformer

Output data

Signal

| <u> </u> | |
|---|---|
| Designation | Measuring coil |
| 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 μ H; example: At 50 Hz; I = 1,000 A)) |

Dimensions



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| | | |

| Length | 450 mm |
|-------------------------------|----------------|
| Diameter | 8.3 mm ±0.2 mm |
| Measuring coil when installed | |
| Diameter | 140 mm |
| Signal line | |
| Length | 10 m |

Material specifications

| Housing material | PC |
|------------------|------------|
| Coil material | Elastollan |

Environmental and real-life conditions

Ambient conditions

| Measuring coil degree of protection | IP54 (not assessed by UL) |
|---|-------------------------------|
| Ambient temperature (operation) | -30 °C 80 °C (Measuring coil) |
| Ambient temperature (storage/transport) | -40 °C 80 °C (Measuring coil) |
| Altitude | < 2000 m |
| Permissible humidity (operation) | 5 % 95 % (non-condensing) |

Approvals

UKCA

| Certificate | UKCA-compliant |
|----------------|---------------------|
| CMIM | |
| Certificate | CMIM-compliant |
| UL, USA/Canada | |
| Identification | UL 61010 Recognized |
| Note | Measuring coil |
| | Weddaning oon |

Standards and regulations

| Standards/regulations | IEC 61010-1 |
|-----------------------|-----------------|
| | IEC 61010-2-030 |
| | IEC 61869-10 |



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Approvals

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cUL Recognized

Approval ID: FILE E 357804



UL RecognizedApproval ID: FILE E 357804



EAC

Approval ID: RU*DE*08.B.01187/19

cULus Recognized



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Classifications

UNSPSC 21.0

ECLASS

| | ECLASS-11.0 | 27210992 | |
|------|-------------|----------|--|
| | ECLASS-12.0 | 27210992 | |
| | ECLASS-13.0 | 27210992 | |
| ETIM | | | |
| | ETIM 9.0 | EC002498 | |
| UN: | SPSC | | |

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Environmental product compliance

EU RoHS

| Fulfills EU RoHS substance requirements | Yes, No exemptions | |
|---|--|--|
| China RoHS | | |
| Environment friendly use period (EFUP) | EFUP-E | |
| | No hazardous substances above the limits | |
| EU REACH SVHC | | |
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% | |

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