

Accessories

Split Core AC current sensor

Model ROG400



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- Split core AC current sensor
- Primary current up to 400AAC
- Output: 4 to 20mADC
- Accuracy: 1% full scale
- Max primary cable diameter: 40 mm

Product Description

The ROG400 is a split core AC TRMS current sensor able to measure a primary current (up to 400A) from a single phase power cable. The output signal is proportional to the measured input with a range from 4mA to 20mADC. The sensor has to be fixed directly around the main primary cable.

Ordering Key **ROG 400**

AC current sensor
 Measuring range

Type Selection

Ordering code	Input range	Output range	Min	Max
ROG400	from 0 to 400AAC	from 4 to 20mA	0AAC = 4mA	400AAC = 20mA

Input specifications

Rated inputs Current type	System type: 1-phase Galvanic insulation by means of the coil	External field influence due to external parallel cables	±0.5% of full scale (influence on measurement of other cables if distance from coil to other cables is >20mm.
Current range	See the above type selection table		
Accuracy (Analogue output) (@25°C ±5°C, R.H. ≤60%, 45 to 65 Hz)	In: see below , In = I _{max}	Temperature drift	≤150ppm/°C
ROG400	In = 400A	Sampling rate	3.6kHz
For all the models	1.0% full scale	Current Overloads Continuous	5 x In
Linearity	≤ 0.2% of reading from 5 to 100% In	Frequency	45 to 65 Hz
Additional errors Position sensitivity	±1.0% of full scale for cable with diameter > 20mm.	Measurements method	1- Phase AC coupled TRUE RMS current.
		Measurement noise ROG400	<5 µA



Output specifications

Analogue outputs Number of output Range Scale	1 From 4mADC to 20mADC 4 mADC = 0AAC, 20mADC = In	Max output rating Power-on delay until valid output	22mADC <2s
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Power supply specifications

Power Supply	From 10VDC (min) to 30VDC (max)	Power consumption	<40mA
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General specifications

Operating temperature	-20 to +65°C (-4 to 149°F) (R.H. < 95% non-condensing)	Immunity to conducted disturbances	10V/m from 150KHz to 80MHz
Storage temperature	-20 to +70°C (-4 to 158°F) (R.H. < 95% non-condensing)	Standard compliance Safety	IEC60664, IEC61010-1 EN60664, EN61010-1
Installation category	Cat. III (IEC60664, EN60664)	Approvals	CE
Insulation (for 1 minute)	6kV VRMS between input and output	Housing Dimensions (WxHxD) Material	29 x 54 x 17.4 mm Nylon PA66, self-extinguishing: UL 94 V-0
Dielectric strength	6kVAC RMS for 1 minute	Output cable	3m, double insulation
Noise rejection CMRR	100 80dB, 48 to 62 Hz	Weight	Approx. 170 g (packing included)
EMC Electrostatic discharges Burst	According to EN61000-6-2 15kV air discharge; On primary current cable and analogue 4-20mA output circuit: 4kV	Coil dimension Length Diameter Primary cable diameter	185 mm 8 mm 40 mm

Wiring diagram and dimension

