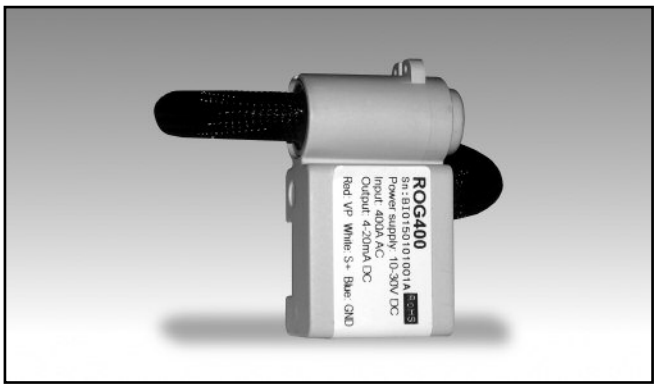
Accessories
Split Core AC current sensor
Model ROG400



- **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	System type: 1-phase
Current type	Galvanic insulation by means of the coil
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 = Imax
ROG400	In = 400A
For all the models	1.0% full scale
Linearity	≤ 0.2% of reading from 5 to 100% In
Additional errors	
Position sensitivity	±1.0% of full scale for cable with diameter > 20mm.
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.
Temperature drift	≤150ppm/°C
Sampling rate	3.6kHz
Current Overloads	
Continuous	5 x In
Frequency	45 to 65 Hz
Measurements method	1- Phase AC coupled TRUE RMS current.
Measurement noise	
ROG400	<5 µA

Output specifications

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

Power supply specifications

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

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**	
Installation category	Cat. III (IEC60664, EN60664)	Safety	IEC60664, IEC61010-1 EN60664, EN61010-1
Insulation (for 1 minute)	6kV VRMS between input and output	**Approvals**	CE
Dielectric strength	6kVAC RMS for 1 minute	**Housing**	
Noise rejection		Dimensions (WxHxD)	29 x 54 x 17.4 mm
CMRR	100 80dB, 48 to 62 Hz	Material	Nylon PA66, self-extinguishing: UL 94 V-0
EMC	According to EN61000-6-2	Output cable	3m, double insulation
Electrostatic discharges	15kV air discharge;	**Weight**	Approx. 170 g (packing included)
Burst	On primary current cable and analogue 4-20mA output circuit: 4kV	**Coil dimension**	
		Length	185 mm
		Diameter	8 mm
		Primary cable diameter	40 mm

Wiring diagram and dimension