Flexible Rogowski coil 600A - 5000A

The ELEQ Rogowski coils (7 mm coil diameter) are flexible current transformers based on the Rogowski principle. Due to its specific features, a Rogowski coil is an extremely comfortable solution for current measurement and can be used in a wide range of applications where traditional current transformers are not the adequate solution due to size, weight or due to limited access. ELEQ Rogowski coils are shielded against the influence of external magnetic fields, which grants a stable measurement from low currents to hundreds of kA uniform at any position of the conductor inside the coil. In addition, an multiscale Rogowski integrator is available, which in combination with ELEQ's Rogowski coil is suitable for high power load analysis, impulsive current monitoring, and DC ripple measurement.

Technical Specifications

Environmental conditions	
This product is designed to be safe under the following conditions:	
Location:	Outdoor use
Operating temperature:	-40°C .. +75°C up to 2500A with 15…41 cm coil length;
	-40°C .. +60°C up to 5000A with 42…50 cm coil length
Storage temperature:	-40°C .. +90°C
Relative humidity:	0% .. 95%
Altitude:	Max. 2000m above sea-level
Protection degree:	IP68

Application conditions	
Standard:	IEC 61010-1; IEC 61010-2-032; IEC 60529

Electrical characteristics	
Nominal output rate (RMS values):	100mV / kA @ 50 Hz 120mV / kA @ 60 Hz
Max measurable current:	600A…5000A depending on coil length.
Coil resistance:	170 ... 690 Ω
Accuracy:	Class 1-A1 according to IEC 61869-10
Frequency:	50/60 Hz
Overvoltage category:	1000 V CAT III, 600 V CAT IV
Pollution degree:	3
Insulation test voltage:	7400 VRMS / 5s
Cable length:	3m calibrated
Weight:	150…500 gram

Ordering Specifications

Article Number	Max. measurable current	Ratio	Coil detail	
			Length (mm)	Internal diameter (mm)
2C4A10	600A	100mV/1kA	150	~40
2C4D10	600A	100mV/1kA	280	~80
2C4J10	5000A	100mV/1kA	500	~150

Provided with an accessory to secure the coil to the busbar.

Wiring Diagram

P1 — primary conductor — P2
S1   S2