

## 1 phase Rogowski coil

111.7087.03

▶ 1 phase Rogowski coil

### 1. Application

The 111.7087.03 is a flexible current transformer based on the Rogowski principle, which is particularly suitable for measurements in combination with PQ measuring instruments. The coil is characterized by the length of 1800 mm and can be used in all applications where conventional instrument transformers are not suitable due to their size and/or weight.



### 2. Electrical properties

Rated range $I_N$ :	1 x 3000 A <sub>RMS</sub>
Measuring range:	1 - 3000 A <sub>RMS</sub>
Load impedance:	$\geq 1 \text{ M}\Omega$
Output signal (at 50Hz):	85 mV / 1000 A
Influence of conductor positioning:	$\pm 1 \%$ of the measured value
Accuracy (at 25°C, 50Hz):	$\pm 1 \%$ of measured value
Influence of electric fields (distance > 10cm):	$\pm 0.25 \%$ of the measured value
Repeatability:	$\pm 0.5 \%$ of the measured value
Fault due to adjacent conductors:	$\leq 15 \text{ mA} / \text{A} @ 50 \text{ Hz}$
Phase shift at 45...65Hz:	$\pm 1 \text{ degree}$
Frequency range:	40 Hz to 20 kHz
Temperature coefficient:	0,05 % / °C
Permissible voltage (see safety standards):	1000 V AC <sub>RMS</sub> , , CAT III

We'll handle it.

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### 3. General properties

Coil length, diameter :	1800mm, 600mm
Coil bobbin diameter:	8.3mm
Coil Material:	Thermoplastic UL94-V0
Cable length:	15 m
Temperature range, operation:	-30 to +80 °C
Temperature range, storage:	-40 to +80 °C
Humidity, operating:	15% to 85% (no condensate)
Protection class:	IP65
Weight:	660g

### 4. Connection

Blue	S1 (+)
white	S2 (-)
Umbrella	PE

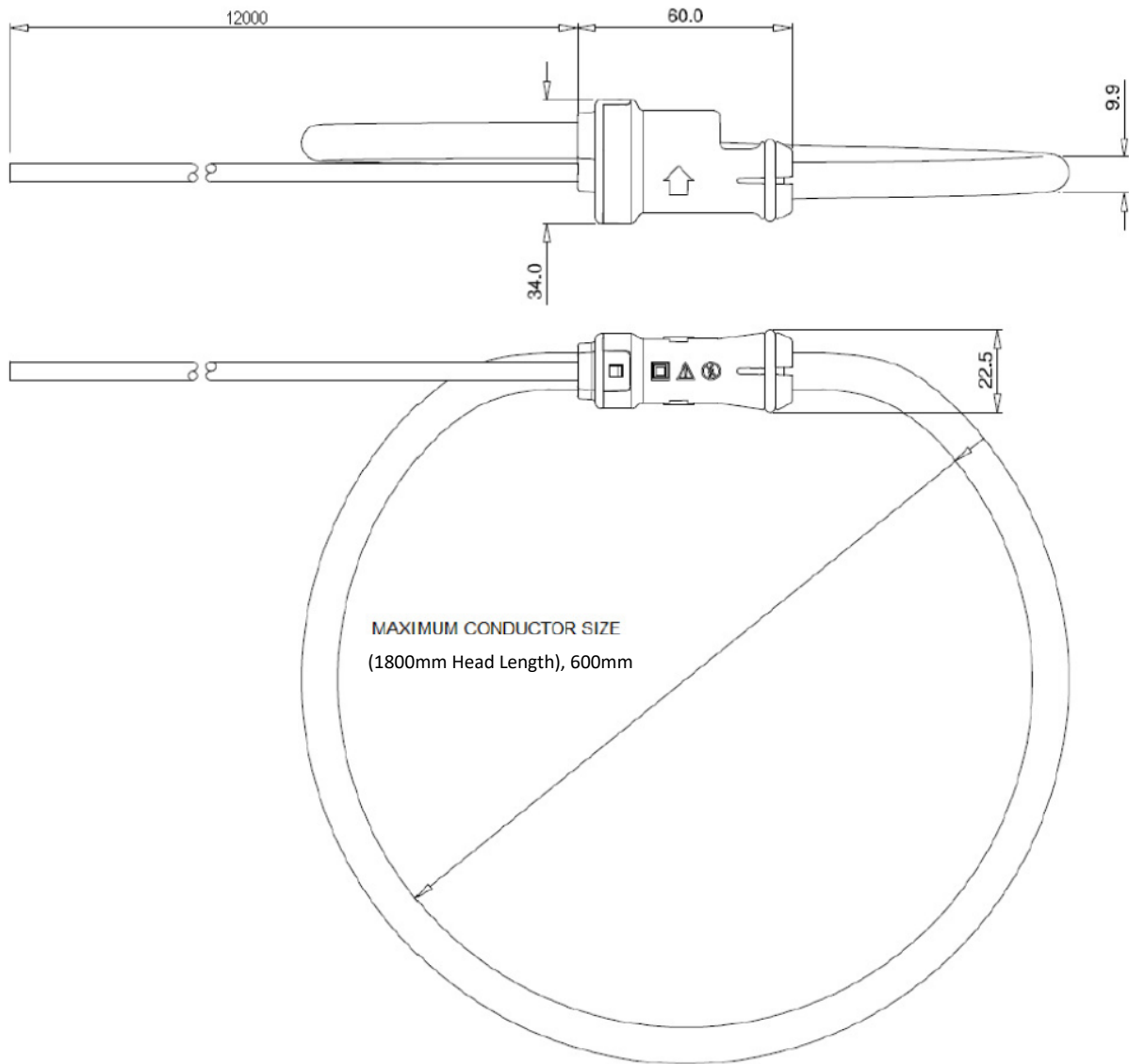
### 5. Security standard

61010-1,  
IEC 60529

1000 V<sub>RMS</sub> , CAT III  
600 V<sub>RMS</sub> , CAT IV

The use of Rogowski coils on **uninsulated conductors** is limited to 1000 V AC<sub>RMS</sub> and frequencies up to 1 kHz.

## 6. Dimensions



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## 7. Ordering information

FEATURE	IDENT no.
<b>1 phase Rogowski coil</b> ● 1 phase Rogowski coil, 1...3000A, 60cm, 15m connection cable	<b>111.7087.03</b>

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