

## Residual current transformer

111.7097.020 - 035 - 060 - 120

► For residual current measurement for PQI-DE in the range 0 ... 25 A with RCM option D1

### 1. Verwendung

The 111.7097 differential current sensors have been designed for use with the PQI-DE power quality analyser to accurately measure differential current across the RCM channel. Using the latest transformer technology, the 111.7097 series transducers can measure the smallest fault currents occurring in the event of a fault over a frequency range of up to 20 kHz.



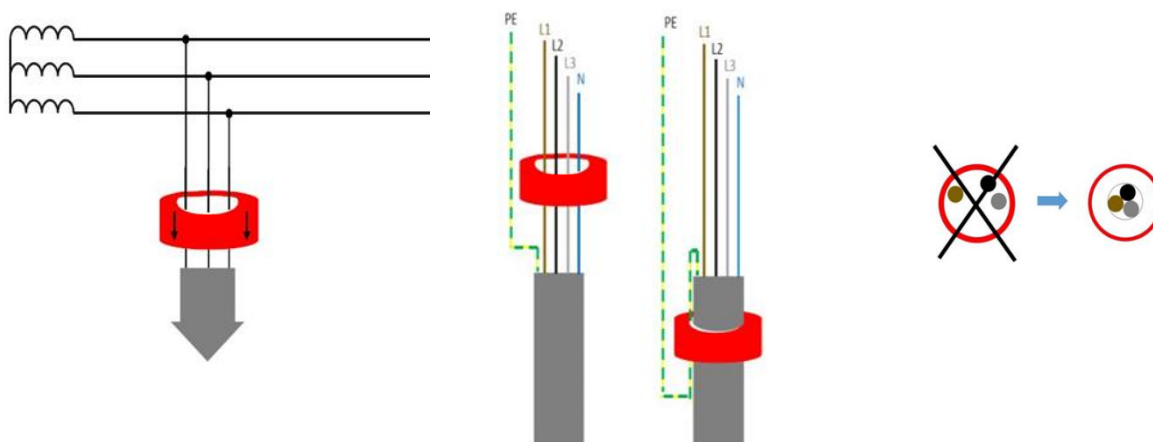
### 2. Technical data

Current range $I_N$	.....	: 25 A AC RMS
Measuring range	.....	: 2 mA to 25 A RMS
Transmission ratio	.....	: 600:1
Design burde	.....	: 100 $\Omega$
Frequency range	.....	: 30 Hz to 20 kHz
Voltage range	.....	: 800 V

### 3. General properties

Max. cross section	:	2,5 mm <sup>2</sup>
Max. wire length	:	1 m (single core wire) 10 m (single core wire, twisted) 30 m (shielded wire)
Working temperature	:	-10 to +70 °C
Storage temperature	:	-25 to +70 °C
Weight	:	145g – 950g

## 4. Connection



When installing the transducers, the routing direction of the individual cables must be observed!

Existing protective conductors must generally not be routed through the differential current transformer! It must be ensured that all conductors (phase and neutral) are fed through the transformer!

To ensure the highest possible measuring accuracy, make sure that all conductors to be measured are arranged as centrally as possible in the primary conductor window of the transformer!

## 5. Safety

IEC 60664-1

IEC 60664-3 600 V RMS, CAT III, Pollution Degree 3

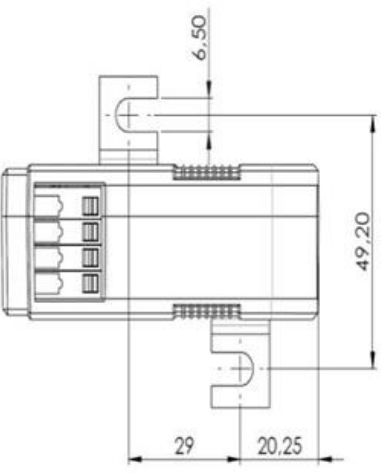
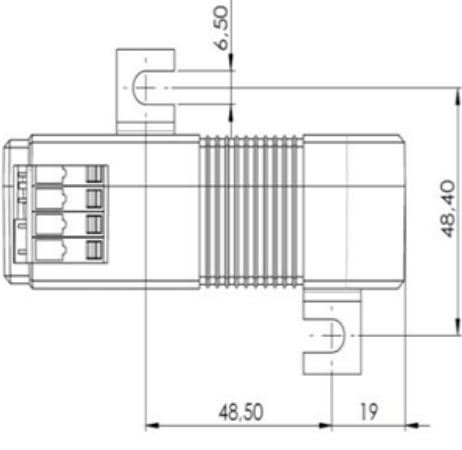
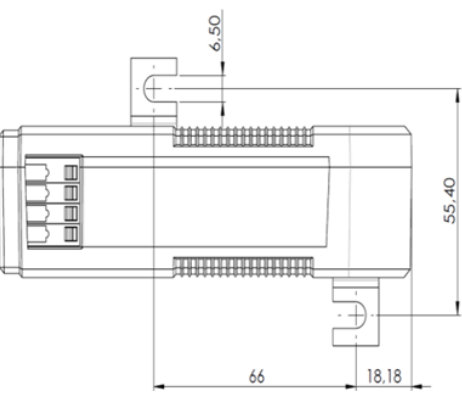
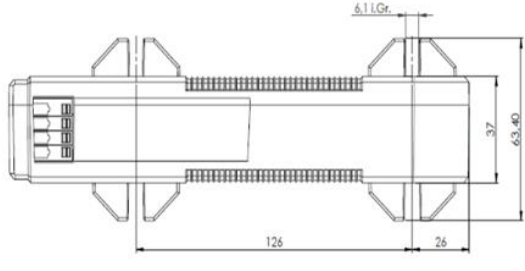
Rated impulse voltage: 8 kV Protection

IP class: Housing: IP 40; Terminals: IP 20

## 6. Dimensions

	111.7097.020	111.7097.035	111.7097.060	111.7097.120
Primary conductor window	∅ 20 mm	∅ 35 mm	∅ 60 mm	∅ 120 mm
Width	82 mm	104,5 mm	135 mm	210 mm
Height	63 mm	104,5 mm	117 mm	191,5 mm
Depth	30 mm	30 mm	37 mm	37 mm
Weight	Approx. 145 g	Approx. 240 g	Approx. 390 g	Approx. 950 g

## 7. Drawings (in mm)

<p>111.7097.020</p> 	<p>111.7097.035</p> 
<p>111.7097.060</p> 	<p>111.7097.120</p> 

## 8. Ordering information

MERKMAL	IDENT-Nr.
<b>Residual current sensor for highly accurate RCM measurement</b> ● For 20 mm conductor; type A; clip-on mounting; single	<b>111.7097.020</b>
<b>Residual current sensor for highly accurate RCM measurement</b> ● For 35 mm conductor; type A; clip-on mounting; single	<b>111.7097.035</b>
<b>Residual current sensor for highly accurate RCM measurement</b> ● For 60 mm conductor; type A; clip-on mounting; single	<b>111.7097.060</b>
<b>Residual current sensor for highly accurate RCM measurement</b> ● For 120 mm conductor; type A; clip-on mounting; single	<b>111.7097.120</b>

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