

Current Probe Model PR 1200MACI

The PR 1200MACI current probe has been designed for use with multimeters, recorders, power analysers, safety testers etc. for accurate non intrusive measurement of AC current. Using the latest transformer technology, the PR 1200MACI can measure currents from 1 A to 1200 A over a frequency range of 30Hz to 10kHz.



Electrical Characteristics

Current Ranges I_N	: 250 / 500 / 1000 A _{RMS}
Measuring Range.....	: 1 A to 1.2 x I_N
Output Sensitivity.....	: 5 mA / A (250 A)
.....	: 2.5 mA / A (500 A)
.....	: 1 mA / A (1000 A)
Load Impedance	: ≤ 2.5 Ohm (250 A)
.....	: ≤ 5 Ohm (500 A)
.....	: ≤ 10 Ohm (1000 A)
Conductor Position Sensitivity.....	: 0.5% @ 50Hz
Error due to adjacent conductor	: ≤ 1mA / A @ 50 Hz
Phase Shift at 2 kHz @ 10A	: 2°
Frequency Range.....	: 30 Hz to 10 kHz (-3 dB)
Temperature Coefficient	: 0.01% / °C
Working Voltage (see Safety Standards section)	: 600 V AC _{RMS} or DC

Accuracy

250A

Primary Current	1 to 25A	25 to 50A	50 to 150A	150A to 300A
Accuracy (of rdg)	3.5% +5 mA	2%+2 mA	2%	2%
Phase Error	Not specified	3.5°	2.5°	2°

500A

Primary Current	10 to 50A	50 to 100A	100A to 600A
Accuracy (of rdg)	2.5%	1.5%	1%
Phase Error	4°	2.5°	2°

1000A

Primary Current	10 to 50A	50 to 100A	100 to 500A	500 to 1200A
Accuracy (of rdg)	2.5%	1.5%	1%	0.5%
Phase Error	3°	2°	1°	0.5°

LEM Probes

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General Characteristics

Maximum Conductor Size	: 54 mm diameter
Output Connection	: 4 mm safety socket
Operating Temperature Range	: -10 to +55 °C
Storage Temperature Range.....	: -40 to +70°C
Operating Humidity.....	: ≤ 85%
Weight.....	: 650 g

Reference conditions: Temperature : +18°C to 26 °C, humidity: 20 to 75% RH, sinusoidal current: 48 to 65Hz, distortion factor: < 1%, DC current: none, DC magnetic field: 40 A/m earth's magnetic field, alternating magnetic field: none, proximity of external conductor: none, primary conductor: centred in the aperture, load impedance: ≤1Ω for current output.

Safety Standards

BSEN61010-1: 1993 and Amendment A2: July 1995

BSEN61010-2-032: 1995

BSEN61010-2-031: 1995

600 V_{RMS}, Category III, Pollution Degree 2

Use of the probe on **uninsulated conductors** is limited to 600 V AC_{RMS} or DC and frequencies below 1 kHz.

EMC Standards

EN 61326 :1998

Dimension

