

Current Probe Model PR 200ACI

The PR 200ACI 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 200ACI can measure currents from 0.5A to 300A over a frequency range of 40Hz to 10kHz.



PRELIMINARY

Electrical Characteristics

Current Range I_N	200 A AC_{RMS}
Measuring Range	0.5 A to 300 A RMS
Output Sensitivity	1 mA / A
Load Impedance	$\leq 10 \Omega$
Conductor Position Sensitivity	$< 0.5\%$ @ 50/60Hz
Error due to adjacent conductor	≤ 15 mA / A @ 50Hz
Phase Shift at 2 kHz @ 10A	± 1 degree
Frequency Range	40 Hz to 10 kHz (- 3 dB)
Temperature Coefficient	0.015% / °C
Working Voltage (see Safety Standards section)	600 V AC_{RMS} or DC

Accuracy

Primary Current	0.5 to 10A	10 to 50A	50 to 100A	100 to 300A
Accuracy (of rdg)	$\pm 3\% + 0.5mA$	$\pm 2\% + 0.5mA$	$\pm 1\% + 0.5mA$	$\pm 1\% + 0.5mA$
Phase Error	Not specified	5°	2.6°	2°

General Characteristics

Maximum Conductor Size	15 mm diameter, bus bar 15 x 17mm
Output Connection	4 mm safety sockets
Operating Temperature Range	-10 to +55 °C
Storage Temperature Range	-20 to +70 °C
Operating Humidity	15% to 85% (non condensing)
Weight	175 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, alternative magnetic field: none, proximity of external conductor: none, primary conductor: centred in the aperture, load impedance: $\leq 1\Omega$ for current output.

Safety Standards

BSEN61010-1: 1993 and Amendment A2: July 1995

BSEN61010-2-032: 1995

BSEN61010-2-031: 1995

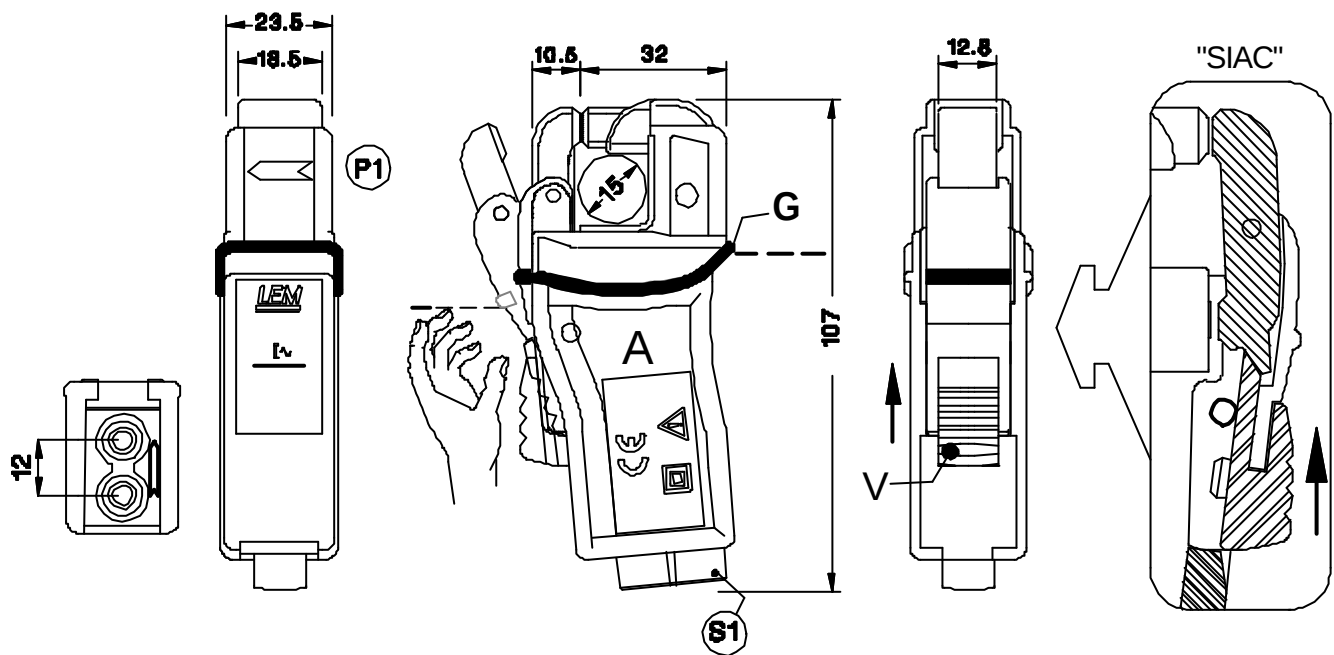
600 V_{RMS}, Category III, Pollution Degree 2

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

Dimensions



Dimensions mm