



## Current Probe P40.3C 500A-4000A/ 2V

The P40.3C 500A-4000A/ 2V current probe has been designed for use with multimeters, recorders, power analysers, safety testers etc. for accurate non intrusive measurement of AC/DC current. Using Hall effect technology, the P40.3C 500A-4000A/ 2V can measure currents from 10 A to 4000 A over a frequency range of DC to 1kHz.



### Electrical Characteristics

Current Range $I_n$ .....	: 500A and 4000A
Measuring Range.....	: 10 A to 4000 AC/DC
Output Sensitivity.....	: 4 mV / A and 0.5 mV / A
Load Impedance.....	: $\geq 100$ kOhm
Conductor Position Sensitivity.....	: 0.5% @ 50Hz
Error due to adjacent conductor.....	: $\leq 10$ mA / A @ 50 Hz
Power supply.....	: 9 V Alkaline, 75 Hours, low battery indicator
Output zero.....	: Manual adjust via thumbwheel
Frequency Range.....	: DC Hz to 1 kHz
Working Voltage (see Safety Standards section).....	: 600 V AC <sub>RMS</sub> or DC

### Accuracy

#### 500A

Primary Current	10 to 100A	100 to 250A	250 to 500A
Accuracy (of rdg)	2%+ 4mV	1.5%+4mV	1% +4 mV
Phase Error	Not specified	2°	1.5°

#### 4000A

Primary Current	50 to 100 A	100 to 500A	500 to 2000A	2000 to 4000A
Accuracy (of rdg)	2%+1mV	1.5% +1mV	1% +1 mV	1% +1 mV
Phase Error	3°	2°	1°	1.5°



## General Characteristics

Maximum Conductor Size .....	: 83 mm diameter
Output Connection .....	: 4 mm sockets
Operating Temperature Range .....	: 0 to +50 °C
Storage Temperature Range .....	: -20 to +70°C
Operating Humidity .....	: ≤ 85%
Weight.....	: 2000 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: ≥1MΩ, <100pF for voltage output.

## Safety Standards

IEC61010-1: 2010  
IEC61010-2-032: 2012  
IEC61010-2-031: 2008

600 V<sub>RMS</sub>, Category III, Pollution Degree 2

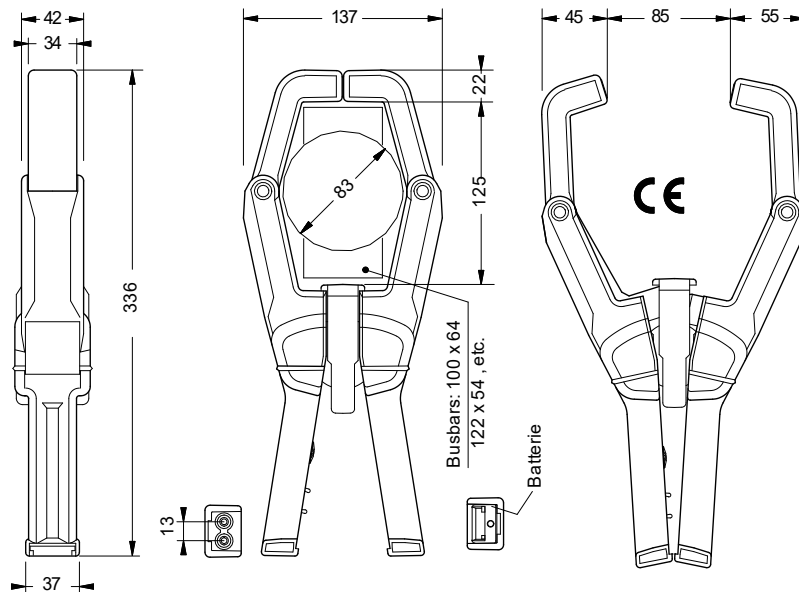
Use of the probe on **uninsulated conductors** is limited to 600 V AC<sub>RMS</sub> or DC and frequencies below 1 kHz.

## EMC Standards

EN 61326 : 1998

## Dimensions

in mm



P3C-CLP

Specifications subject to change without notice