



## Current Probe M3.U 100A / 1V

The M3.U 100A / 1V current probe has been designed for use with multimeters, recorders, safety testers etc. for accurate non intrusive measurement of AC current. Using the latest transformer technology, this probe can measure currents from 1A to 120 A over a frequency range of 30Hz to 10kHz.



### Electrical Characteristics

Current Range  $I_N$ .....: 100 A<sub>RMS</sub>  
Measuring Range.....: 1 A to 120 A<sub>RMS</sub>  
Output Sensitivity.....: 10mV / A  
Load Impedance.....: 1 MOhm  
Conductor Position Sensitivity.....: 0.5% @ 50/60Hz  
Error due to adjacent conductor.....: ≤ 15mA / A @ 50 Hz  
Frequency Range.....: 30 Hz to 10 kHz  
Temperature Coefficient.....: 0.01% / °C  
Working Voltage for input and output circuits.....: 600V on naked conductors  
(see Safety Standards section)

### Accuracy

Primary Current	1 to 10A	10 to 25A	25 to 100A
Accuracy (of rdg)	±2%	±1.5%	±1%
Phase Error (typ)	not specified	2.2°	2°

### General Characteristics

Maximum Conductor Size.....: 15 mm diameter, bus bar 15 x 17mm  
Output Connection.....: sockets 4mm  
Operating Temperature Range.....: -10 to +55 °C  
Storage Temperature Range.....: -40 to +70 °C  
Operating Humidity.....: 15% to 85% (non condensing)  
Weight.....: 188 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: ≥1MΩ, <100pF for voltage output.

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## 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

