



Current Probe M3.U 100A / 2V

The M3.U 100A / 2V 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 0.5 A to 120 A over a frequency range of 30Hz to 10kHz.



Electrical Characteristics

Current Range I_N : 100 A_{RMS}
Measuring Range..... : 0.5 A to 120 A_{RMS}
Output Sensitivity..... : 20mV / A
Load Impedance..... : > 100 kOhm
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..... : 0.015% / °C
Working Voltage for input and output circuits..... : 600V on naked conductors
(see Safety Standards section)

Accuracy

Primary Current	0.5 to 10A	10 to 25A	25 to 100A
Accuracy (of rdg)	±3% ±5mV	±1.5%	±1%
Phase Error (typ)	not specified	3°	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..... : 165g

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.

Safety Standards

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

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

in mm

