



Current Probe M3.U 200A / 1V

The M3.U 200A / 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 2A to 240 A over a frequency range of 30Hz to 10kHz.



Electrical Characteristics

Current Range I_N	: 200 A _{RMS}
Measuring Range.....	: 2 A to 240 A _{RMS}
Output Sensitivity	: 5 mV / A
Load Impedance	: > 10 kOhm
Conductor Position Sensitivity.....	: 0.5% @ 50/60Hz
Error due to adjacent conductor	: $\leq 15\text{mA} / \text{A}$ @ 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 (@ 50 Hz)	2 to 5A	5 to 20A	20 to 240A
Accuracy (of rdg)	3%	3%	2%
Phase Error (guaranteed)	4.5°	3.5°	3°

General Characteristics

Maximum Conductor Size	: 15 mm diameter, bus bar 15 x 17mm
Output Connection	: sockets 4mm or cable + connector
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: $\geq 1\text{M}\Omega$, $< 100\text{pF}$ 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

