



Current probe M3.UB 5A / 2V

The M3.UB 5A / 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, the M3.UB 5A / 2V can measure currents from 100mA to 6A over a frequency range of 30Hz to 10kHz. The very small head facilitates the insertion of the probe in places where ease of access is of crucial importance.



Electrical Characteristics

Current Range In..... : 6 A AC_{RMS}
Measuring Range..... : 100mA to 5A_{RMS}
Output Sensitivity : 400mV / A
Load Impedance : ≥ 500 kOhm
Conductor Position Sensitivity..... : $< 0.5\%$ @ 50/60Hz
Error due to adjacent conductor : ≤ 15 mA / A @ 50 Hz
Phase Shift at 2 kHz @ 10A : ± 1 degré
Frequency Range : 30 Hz to 10 kHz
Temperature Coefficient..... : 0.015% / °C
Working Voltage (see Safety Standards section) : 600 V AC_{RMS} or DC

Accuracy

Primary Current	100mA to 1A	1A to 2A	2A to 6A
Accuracy (of rdg)	$\pm 2\%$	$\pm 1.5\%$	$\pm 1\%$
Phase shift (typ)	Not specified	8.5°	7°

General Characteristics

Maximum Conductor Size : 15 mm diameter, bus bar 15 x 17mm
Output Connection : Safety sockets 4mm
Operating Temperature Range : -10 to +55 °C
Storage Temperature Range : -20 to +70 °C
Operating Humidity : 15% to 85% (non condensing)
Weight..... : 165 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: $\geq 1M\Omega$, <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

