



Current probe M3.UB 50A / 5V

The M3.UB 50A / 5V 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 50A / 5V can measure currents from 100mA to 50A 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 I_N	: 50 A AC _{RMS}
Measuring Range.....	: 100mA to 50A _{RMS}
Output Sensitivity.....	: 100mV / A
Load Impedance.....	: > 1 MOhm
Conductor Position Sensitivity.....	: < 0.5% @ 50/60Hz
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	100 to 500mA	500 to 5A	5 to 50A
Accuracy (of rdg)	3%	2%	1%
Phase shift (typ)	Not specified	3°	2°

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: $\geq 1\text{M}\Omega$, <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

