

CURRENT MEASUREMENT PROBES

MN SERIES AC CURRENT PROBES

MN SERIES



Compact sized probes ideal for measuring low currents and leakage currents. Standard millivolt or milli-amp outputs are compatible with multimeters, data loggers and oscilloscopes

SPECIFICATIONS

| MODELS | MN103 | MN106 | MN114 | MN185 |
|------------------------------------|---|--|---|---|
| ELECTRICAL | | | | |
| Nominal Range | 10, 100AAC | 150AAC | 10AAC | 120AAC |
| Measurement Range | 1mA to 10AAC 1A to 100AAC | 2 to 150AAC | 1mA to 10AAC | 50mA to 120AAC |
| Transformation Ratio | Voltage output | 1000:1 | Voltage output | 1000:1 |
| Output Signal | 1mV/mA, 1mV/A (10V _{AC} @ 10A, 100mV _{AC} @ 100A) | 1mA/A (150mA _{AC} @ 150A) | 100mV/A (1V _{AC} @ 10A) | 1mA/A (120mA _{AC} @ 120A) |
| Accuracy | (10A Range) 45 to 65Hz: ±3% of Reading ± 1mA 65 to 500Hz: -2, +6% of Reading ± 1mA (100A Range) 45 to 65Hz: ±2% of Reading ± 0.1A 65 to 500Hz: -2, +3% of Reading ± 0.1A | 45 to 65Hz: ±2.5% of Reading ± 0.15 A 65 to 1000Hz: ±4.5% of Reading ± 0.15 A | 1mA to 10A: 2% of Reading ± 2mA 40Hz to 3 kHz: 3.5% of Reading ± 2mA | 50mA to 100A: 1% of Reading ± 0.01A (with non-inductive load) 100 to 120A: 1.5% of Reading ± 0.01 A |
| Phase Shift | - | 2 to 120A, 50 to 60Hz: ≤10° | 10A to 100A, 45 to 65Hz: ≤8° | 1 to 100A, 50 to 60Hz: ≤3.5° |
| Overload | - | 170A continuous | 20A continuous | 170A continuous |
| Frequency Range | 45 to 500Hz | 45Hz to 1kHz | 30Hz to 5kHz | 30Hz to 10kHz |
| Load Impedance | ≥100 kΩ | ≤5Ω non-inductive | ≥100kΩ | ≤5Ω non-inductive |
| Working/Common Mode Voltage | 250V _{AC} /250V _{AC} | | | 250V _{AC} /30V _{AC} |
| Output Termination | 5ft (1.5m) lead with 4mm safety banana plugs | | | Two 4mm banana jacks |
| MECHANICAL | | | | |
| Operating Temperature | 14° to 122°F (-10° to 50°C) | | -13° to 122°F (-25° to 50°C) | |
| Storage Temperature | -40° to 176°F (-40° to 80°C) | | | |
| Jaw Opening | 0.78" (20mm) | | | |
| Maximum Conductor Size | 0.47"Ø max (12mm) | | | |
| Dimensions | 1.26 x 4.53 x 0.87" (32 x 115 x 22mm) | | | |
| Weight | 5.6 oz (160g) | | | |
| Material | Polycarbonate UL 94 | | | |
| SAFETY | | | | |
| Electrical | 3kV 50/60Hz dielectric for 1min | | | |

FEATURES

- Measurement range of 1mA to 150AAC
- Jaw opening of 0.78"
- Accommodates conductors up to 0.47" in diameter
- Ergonomic design and easy operation
- Compact size accommodates hard to reach locations
- Low phase shift for power measurements
- Available with mV or mA output signals
- Constructed with UL94VO flame retardant material
- Designed for DMMs, recorders, loggers and oscilloscopes

| CATALOG NO. | DESCRIPTION |
|-------------|------------------------------|
| 1031.02 | AC Current Probe Model MN103 |
| 1031.17 | AC Current Probe Model MN106 |
| 2110.71 | AC Current Probe Model MN114 |
| 100.185 | AC Current Probe Model MN185 |

