## AC Current Probe Model MN307



The Model MN307 is the latest in compact AC current probes. It is designed to meet the most stringent demands in industry and electrical contracting. Model MN307 meets EN 61010, 600V, Cat. III safety standards and is CE Marked and UL approved for Canada and United States

The Model MN307 has a 0.78" (20mm) jaw opening and accommodate conductors up to 250MCM. The unique hooked jaw design facilitates clamping and hooking onto conductors. Polycarbonate materials and ultrasonic welding are used throughout to ensure ruggedness and overall lasting reliability.

The Model MN307 is a high performance model and uses a custom nickel core to improve accuracy and phase shift on the low end of the measurement range. The Model MN307 is an excellent probe to be used in power and low level current measurement applications.

## **Features**

- · Small, compact size
- Measurement range of 0.01 to 12A
- Large jaw opening accommodates conductors up to 250MCM
- Designed for DMMs, loggers, recorders and oscilloscopes
- · 40Hz to 10kHz response
- 100mV/A output signal
- Designed to EN 61010, 600V, Cat. III safety standard
- UL approved for Canada and United States
- · Double Insulation
- · CE Mark

## **Applications**

- · Measuring in breaker panels
- Industrial loads
- HVAC
- · Residential and commercial sites
- Data logging/recording





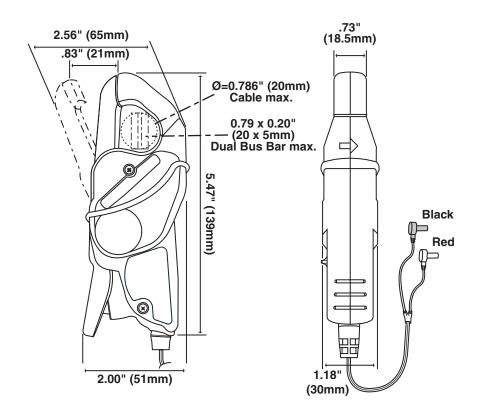
## **Specifications**

| MODEL                                   | MNIOOZ   |
|---|--|
|   | MN307  |
| ELECTRICAL                              |  |
| Nominal Range                           | 10A  |
| Measurement Range                       | 0.01 to 12A                                      |
| Transformation Ratio                    | Voltage output                                   |
| Output Signal                           | 100mV/A (1V @ 10A)                               |
| Accuracy (10A Range)                    | 0.50/ (P. II. 0.4 )/                             |
| 0.1 to 0.5A                             | ≤2.5% of Reading ± 0.1mV                         |
| 0.5 to 1A                               | ≤2.5% of Reading                                 |
| 1 to 12A                                | ≤1.0% of Reading                                 |
| Phase Shift (10A Range)<br>0.01 to 0.1A | Not Specified                                    |
| 0.1 to 1A                               | ≤5.0°  |
| 1 to 5A                                 | ≤3.0°  |
| 5 to 12A                                | ≤3.0°<br>≤2.5°                                   |
| Overload                                | 12A for Continuous                               |
| Frequency Range                         | 40 to 10kHz                                      |
| Limit Operating                         | 200A permanently to 3kHz;                        |
| Conditions                              | Derating above 3kHz: 200A x (1/0.333F), F in kHz |
| Crest Factor                            | 3 @ 10Arms with an error (due to CF) of 3%       |
| Working/Common                          | 600Vrms  |
| Mode Voltage Output Termination         | 5 ft Lead  |
| MECHANICAL                              | O II Leau  |
| Operating Temperature                   | 14° to 131°F (-10° to 55°C)                      |
| Storage Temperature                     | -40° to 158°F (-40° to 70°C)                     |
| Operating Relative                      | 1 /  |
| Humidity                                | 10 to 35°C 85% RH (without roll-off above 35°C)  |
| Jaw Opening                             | 0.83" (21mm)                                     |
| Maximum Conductor Size                  | 0.78" (20mm)                                     |
| Dimensions                              | 5.47 x 2.00 x 1.18" (139 x 51 x 30mm)            |
| Weight                                  | 6.5 oz (180g)                                    |
| Polycarbonate Material                  | Polycarbonate with fiberglass charge, UL94 V0    |
| SAFETY                                  |  |
| Electrical                              | EN 61010-2-32                                    |
| UL Approval                             | Yes – Canada and United States                   |
| Double Insulation 🗆                     | Yes  |
| CE Mark                                 | Yes  |

Note: Reference conditions: 20 to  $26^{\circ}$ C, 20 to  $75^{\circ}$  RH, external magnetic field <40A/m, 48 to 65Hz sine wave, distortion factor less than 1%, no DC component, no external current carrying conductor, test sample centered. Load impedance >1 $\Omega$ 









| ORDERING INFORMATION                                    | CATALOG NO.   |
|---|---------------|
| AC Current Probe Model MN307 (Lead – 100mV/A – 12A max) | Cat. #2116.23 |
| Includes a user manual                                  |               |
| Accessories (Optional)                                  |               |
| Banana plug adaptor (Safety Leads to nonrecessed plug)  | Cat. #1017.45 |
| Banana (Female) – BNC (Male) Adaptor                    |               |



