AC Current Probe Model SR651



The Model SR651 is designed for use in industrial and utility environments. The unique ergonomic design allows it to easily clamp onto cables or small bus bars. It is built to the highest safety and performance standards including the CE Mark and is UL approved for Canada and United States.

Excellent transformation and low phase shift, plus a broad frequency response, permit accurate measurements of current for power and power quality measurements. The high quality magnetic cores and uniform windings provide sensitivity for very low level current measurements, as well as measurements up to 1200Aac. The Model SR651 provides an accurate voltage output of 1mV/A. This voltage output enables instruments without current ranges to measure, display log currents through an AC voltage range or measure very low AC.

## **Features**

- Measurement range of 100mA to 1200Aac
- Large jaw opening accommodates conductors up to two 500MCM conductors
- Ergonomic design and easy operation
- Conforms to EN 61010, 600V Cat. III safety standard
- Low phase shift for power measurements
- Available with mV output signals
- Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters
- UL approved for Canada and United States
- Double Insulation
- CE Mark

## **Applications**

- Power quality measuring
- Low industrial loads
- · Measuring around cable bundles
- · Power load monitoring
- Waveform analysis



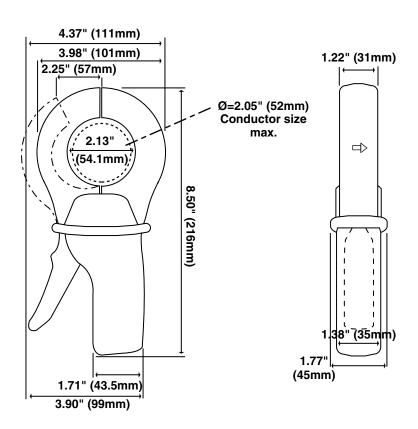
## **Specifications**

| MODEL                           | SR651   |
|---------------------------------|---|
| ELECTRICAL                      |   |
| Nominal Range                   | 1000A   |
| Measurement Range               | 0.1 to 1200A  |
| Transformation Ratio            | Voltage output  |
| Output Signal                   | 1mV/Aac/Aac (1Vac @ 1000A)  |
| Accuracy (1000A Range)          |   |
| 1 to 50A                        | ≤3% ± 0.1A  |
| 50 to 200A                      | 1.5% of Reading   |
| 200 to 1000A                    | 0.75% of Reading  |
| 1000 to 1200A                   | 0.5% of Reading   |
| Phase Shift (1000A Range)       |   |
| 50 to 200A                      | 1.5°  |
| 200 to 1000A                    | 0.75°   |
| 1000 to 1200A                   | 0.5°  |
| Overload                        | 1200A for 40 min ON, 20 min OFF   |
| Frequency Range                 | 30Hz to 5kHz; current derating above 1kHz using the formula: 1000A x 1/F (in kHz) |
| Load Impedance                  | 100kΩ min   |
| Working/Common<br>Mode Voltage: | 600V Cat. III   |
| Output Termination              | Jack  |
| MECHANICAL                      |   |
| Operating Temperature           | -14° to 122°F (-10° to 50°C)  |
| Storage Temperature             | -4° to 158°F (-20° to 70°C)   |
| Operating Relative<br>Humidity  | 0 to 85% @ 35°C   |
| Jaw Opening                     | 2.25" (57mm) max  |
| Maximum Conductor Size          | 2.05" (52mm)  |
| Maximum Bus Bar Size            | One 1.95 x 0.19" (50 x 5mm)   |
| Dimensions                      | 4.37 x 8.50 x 1.77" (111 x 216 x 45mm)  |
| Weight                          | 1.21 lbs (550g)   |
| Polycarbonate Material          | Handles: Polycarbonate + ABS, Gray, UL94 VO. Jaws: Polycarbonate, Red, UL94 VO    |
| SAFETY                          |   |
| Electrical                      | EN 61010-2-032  |
| UL Approval                     | Yes – Canada and United States  |
| Double Insulation 🗆             | Yes   |
| CE Mark                         | Yes   |

Note: Reference conditions:

 $23 \pm 3^{\circ}$ K, 20 to 75% RH, 48 to 65Hz, external magnetic field <40A/m, no DC component, no external current carrying conductor, test sample centered. Load impedance 1 $\Omega$ .







| ORDERING INFORMATION                                    | CATALOG NO.   |
|---|---------------|
| AC Current Probe Model SR651 (Jack – 1mV/A – 1000A max) | Cat. #2113.45 |
| Includes a user manual                                  |               |
| Accessories (Optional)                                  |               |
| Leads, set of two, 5 ft safety (1000V)                  | Cat. #2111.29 |
| Banana plug adaptor (Safety Leads to nonrecessed plug)  | Cat. #1017.45 |
| Banana (Female) – BNC (Male) Adaptor                    | Cat. #2118.46 |



