

The Model SR704 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 SR704 works as a traditional current transformer (with a ratio of 1000:1) and provides current outputs in mA/A for use on DMMs, power and harmonic meters, data loggers, recorders or instruments with current ranges. The Model SR704 uses a custom Nickel Cove to improve accuracy and phase shift on the low end of the measurement range

## **Features**

- Measurement range of 1mA 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 mA 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	SR704*	
ELECTRICAL		
Nominal Range	1000A	
Measurement Range	1mA to 1200A	
Transformation Ratio	1000:1	
Output Signal	1mAac/Aac (1Aac @ 1000A)	
Accuracy (1000A Range)	(TAAC @ 1000A)	
1mA to 100mA	≤3% of Reading ± 5μV	
0.1 to 1A	≤2% of Reading ± 3µV	
1 to 10A	<1% of Reading ± 0.2mV	
10 to 100A	≤0.5% of Reading ± 0.2117	
100 to 1200A	≤0.3% of Reading ≤0.3% of Reading	
Phase Shift (1000A Range)	≤0.3 /0 01 ntaulity	
1 to 10A	≤2°	
10 to 100A	≤1°	
100 to 1200A	≤0.7°	
Overload	1200A for 40 min ON,	
	20 min OFF	
Frequency Range	30Hz to 5kHz;	
	current derating above 1kHz using	
	the formula:	
Load Impedance	$5\Omega$ max	
Working/Common Mode Voltage	600Vrms Cat. III	
Output Termination	5 ft Lead	
MECHANICAL		
Operating Temperature	-14° to 122°F (-10° to 50°C)	
Storage Temperature	-4° to 158°F (-20° to 70°C)	
Operating Relative 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	

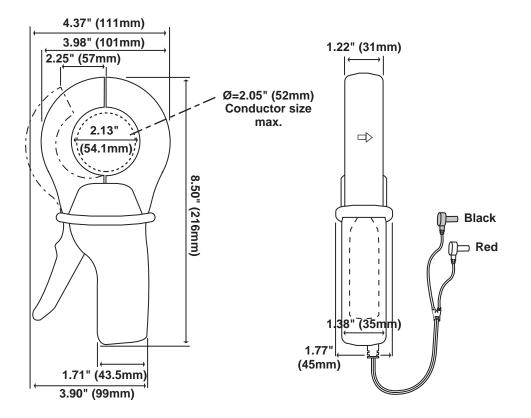
Note: Reference conditions:

 $23 \pm 3^{\circ}$ 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 5 $\Omega$ .

\*Diode Protection for open secondary (Output)



AC Current Probe Model SR704 (pdf) 10/05 Rev. 04





Leads: Double/reinforced 5 ft (1.5m) lead with safety 4mm banana plug

ORDERING INFORMATION	CATALOG NO.
AC Current Probe Model SR704 (Lead – 1mA/A – 1000A max)	Cat. #2116.30
Includes a user manual	
Accessories (Optional)	
Banana (Female) – BNC (Male) Adaptor.	Cat. #2118.46



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