

AC Current Probe Model JM850A



The Model JM850A is high performance AC current probe for higher currents. Excellent transformation and low phase shift, plus a broad frequency response, permit accurate measurements of current and power. The high quality magnetic cores and uniform windings provide for accurate measurements up to 1000A_{AC}/2000A_{AC}/3400A_{AC}. The “squared” jaw permits multiple conductor or bus bar positioning. The Model JM850A provides excellent True RMS capabilities and reliable signal reproduction.

The Model JM850A works as a traditional current transformer providing current outputs (mA) over a broad range of transformation ratios. The Model JM850A is designed for use on DMMs, power and harmonic meters, recorders or instruments with AC current ranges.

Features

- Nominal range: 1000A, 2000A, 3000A (continuous cycle for the full temperature range)
- Transformation ratio: 1000:1 2000:1, 3000:1
- Output: 1mA_{AC}/A_{AC}, 0.5mA_{AC}/A_{AC}, 0.333mA_{AC}/A_{AC}
- Designed for use on DMMs, power and harmonic meters, recorders or instruments with AC current ranges

Applications

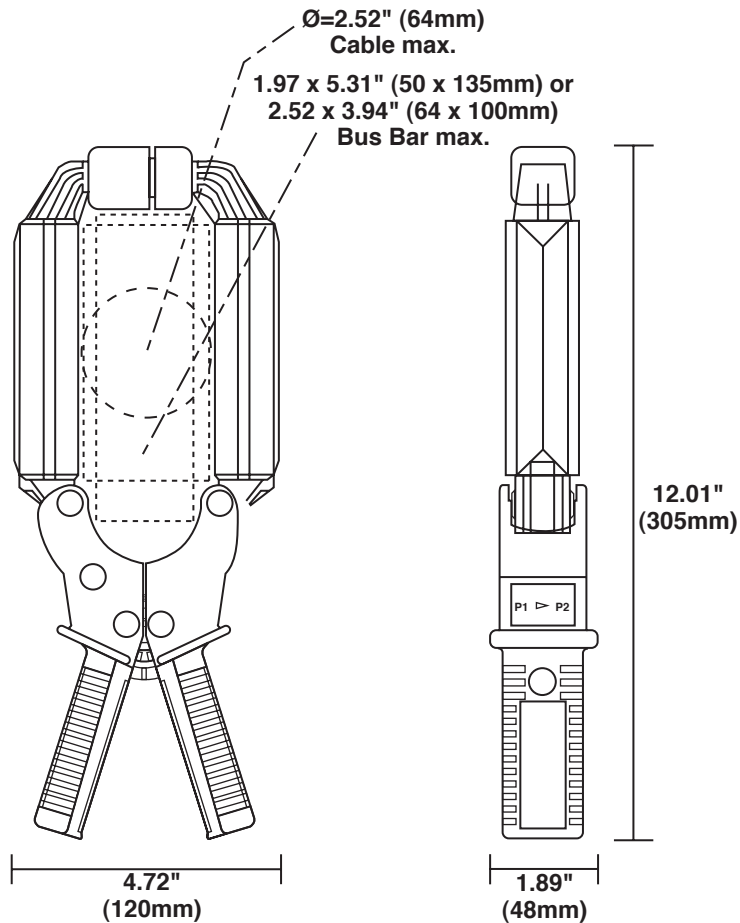
- Field testing
- Electrical utility
- HVAC
- Industrial maintenance
- Laboratory
- Plant maintenance

Specifications

MODELS	JM850A
ELECTRICAL	
Nominal Range	1000A, 2000A, 3000A
Measurement Range	1 to 3400A
Transformation Ratio	1000:1, 2000:1, 3000:1
Output Signal	1mA _{AC} /A _{AC} (1A @ 1000A) 0.5mA _{AC} /A _{AC} (1A @ 2000A) 0.333mA _{AC} /A _{AC} (1A @ 3000A)
Accuracy (1000A Range)	
50A	3% of Reading
200A	1.5% of Reading
1000A	1% of Reading
Phase Shift (1000A Range)	
50A	3°
200A	1.5°
1000A	1°
Accuracy (2000A Range)	
100A	1.5% of Reading
400A	0.75% of Reading
2000A	0.5% of Reading
Phase Shift (2000A Range)	
100A	1.5°
400A	0.75°
2000A	0.5°
Accuracy (3000A Range)	
150A	1.5% of Reading
600A	0.75% of Reading
3000A	0.5% of Reading
Phase Shift (2000A Range)	
150A	1.5°
600A	0.75°
3000A	0.5°
Overload	1400A for 10 min (1000A) 2400A for 10 min (2000A) 3400A for 10 min (3000A)
Frequency Range	30 to 1000Hz, current derating above 1000Hz for continuous use
Load Impedance	2.5Ω (1000A); 5Ω (2000A); 10Ω (3000A)
Working/Common Mode Voltage	600V _{AC}
Output Termination	Jack
MECHANICAL	
Operating Temperature	14° to 122°F (-10° to 50°C)
Storage Temperature	-13° to 176°F (-25° to 80°C)
Jaw Opening	3.54" (90mm)
Maximum Conductor Size	Cable: 2.52" Ø max (64mm); Bus bar: 1.97 x 5.31" (50 x 135mm); 2.52 x 3.94" (64 x 100mm)
Dimensions	4.72 x 12.40 x 1.89" (120 x 315 x 48mm)
Weight	2.65 lbs (1200g)
Polycarbonate Material	Handles: 10% fiberglass charged polycarbonate UL94 V0; Jaws: ABS UL V2
SAFETY	
Electrical	EN61010-2-32
Electromagnetic Compatibility	EN 50081-1 Class B; EN 50082-2 Electrostatic discharge IEC 1000-4-2; Radiated field IEC 1000-4-3; Fast transients IEC 1000-4-4; Magnetic field at 50/60Hz IEC 1000-4-4
Double Insulation ☐	Yes
CE Mark	Yes

Note: Reference conditions:

23°C ± 3°K, 20 to 85% RH, 45 to 65Hz, external magnetic field <40A/m, no DC component, no external current carrying conductor, test sample centered.



Jacks:
 Two standard
 safety banana
 jacks (4mm)

ORDERING INFORMATION

CATALOG NO.

AC Current Probe Model JM850A (Jack – 1mA/A – 1000A; .5mA/A – 2000A; 3.33mA/A – 3000A max) Cat. #2110.87

Includes a user manual

Accessories (Optional)

Banana plug adaptor (to nonrecessed plug) Cat. #1017.45

Leads, set of 2, 5 ft safety (1000V) Cat. #2111.29

Banana/BNC Connector XF-SS (4mm banana plug) Cat. #2111.32

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