

AC Current Probe Model JM830A



The Model JM830A is a 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 3600A_{AC}. The “squared” jaw permits multiple conductor or bus bar positioning. The Model JM830A provides excellent True RMS capabilities and reliable signal reproduction.

The Model JM830A works as a traditional current transformer providing current outputs (mA) over a broad range of transformation ratios. The Model JM830A is designed for use on DMMs, power and harmonic meters, recorders or instruments with AC current ranges.

Features

- Nominal range: up to 2400A_{AC} (continuous cycle for the full temperature range)
- Transformation ratio: 3000:1
- Output: 0.333mA/A
- Designed for use on DMMs, power and harmonic meters, recorders or instruments with AC current ranges

Applications

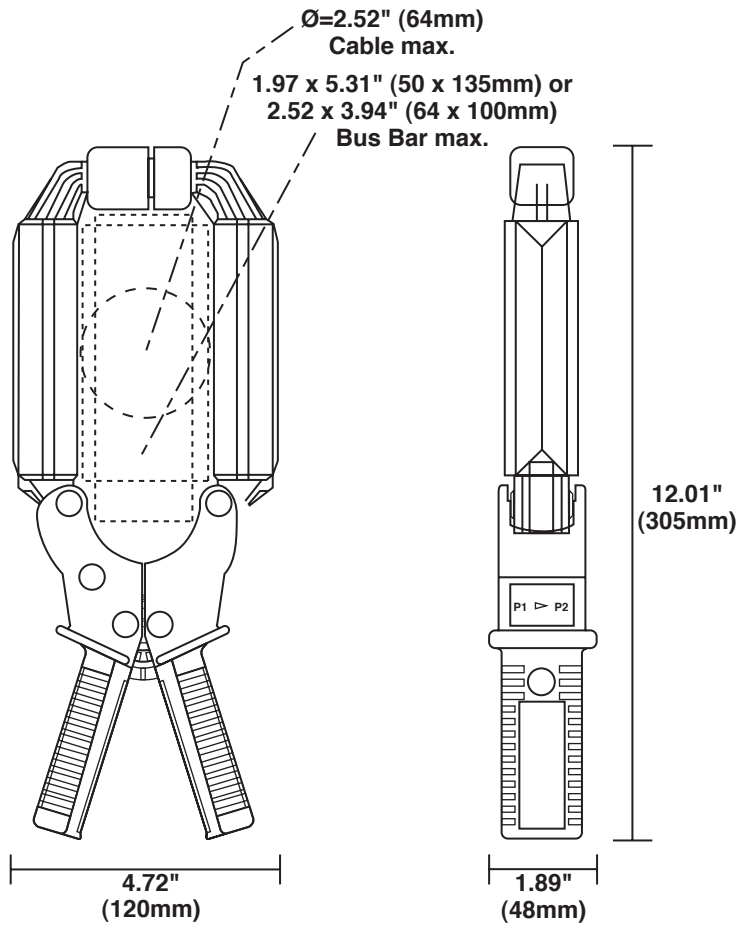
- Field testing
- Electrical utility
- HVAC
- Industrial maintenance
- Laboratory
- Plant maintenance

Specifications

MODEL	JM830A
ELECTRICAL	
Nominal Range	2400A
Measurement Range	1 to 3600AAC
Transformation Ratio	3000:1
Output Signal	0.333mAAC/AAC (1A @ 3000A)
Accuracy (500A Range)	
150A	1.5% of Reading
600A	0.75% of Reading
3000A	0.5% of Reading
Phase Shift (500A Range)	
150A	1.5°
600A	0.75°
3000A	0.5°
Overload	3600A for 5 min
Frequency Range	30Hz to 5kHz; current derating above 1kHz for continuous use
Load Impedance	≤5Ω
Working/Common Mode Voltage	600VAc
Output Termination	5 ft Lead
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 VO; Jaws: ABS UL V2
SAFETY	
Electrical	EN61010-2-32
Electromagnetic Compatibility	EN 50081-1 Class B; EN 50082-2 Electrostatic discharge IEC 100-4-2; Radiated field IEC 1000-4-3; Fast transients IEC 1000-4-4; Magnetic field at 50/60Hz IEC 1000-4-4
Double Insulation <input type="checkbox"/>	Yes
CE Mark	Yes

Note: Reference conditions:

23°C ± 3°K, 20 to 85% RH, 48 to 65Hz, external magnetic field < 40A/m, no DC component, no external current carrying conductor, test sample centered. Load impedance 5Ω.



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

ORDERING INFORMATION	CATALOG NO.
AC Current Probe Model JM830A (Lead – .333mA/A – 3000A max)	Cat. #2110.83
Includes a user manual	
Accessories (Optional)	
Banana plug adaptor (to nonrecessed plug)	Cat. #1017.45
Banana/BNC Connector XF-SS (4mm banana plug)	Cat. #2111.32

