AC Current Probe Model MN255



The Model MN255 is the latest in compact AC current probes. It is designed to meet the most stringent demands in industry and electrical contracting. Model MN255 meets EN 61010, 600V, Cat. III safety standards and is CE Marked and UL approved for Canada and United States.

The Model MN255 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 MN255 uses tape-wound cores to further improve its high and low end performance. Rated at 200Arms it has a measurement range to 240Arms.

Features

- Small, compact size
- Measurement range of 0.5 to 240Aac
- Large jaw opening accommodates conductors up to 250MCM
- Designed for DMMs, loggers, recorders and oscilloscopes
- 40Hz to 10kHz response
- 100mVac/Aac 10mVac/Aac output signals
- 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



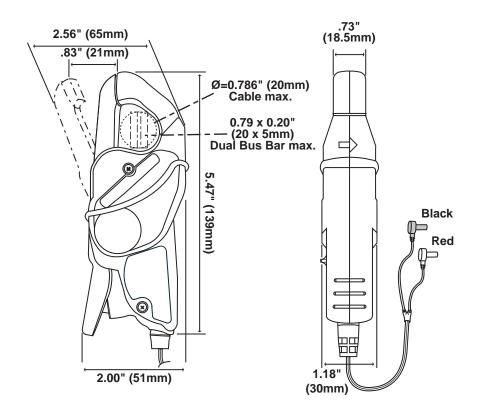
AC Current Probe Model MN255 (pdf) 10/05 Rev. 02

Specifications

MODEL	MN255
ELECTRICAL	
Nominal Range	20A & 200A
Measurement Range	0.5 to 240A
Transformation Ratio	Voltage output
Output Signal	20A: 100mV/A,
	200A: 10mV/Á
Accuracy (20A Range)	1.0% of Reading ± 50mV
Phase Shift (20A Range)	Not Specified
Overload (20A Range)	24A for 10 min ON, 30 min OFF
Accuracy (200A Range)	
0.5 to 10A	3.0% of Reading ± 5mV
10 to 40A	2.5% of Reading ± 5mV
40 to 100A	2.0% of Reading ± 5mV
100 to 240A	1.0% of Reading ± 5mV
Phase Shift (200A Range)	Net Creation
0.5 to 10A	Not Specified ≤5.0°
10 to 40A	
40 to 100A	≤3.0°
100 to 240A	≤2.5°
Overload (200A Range)	240A for 10 min ON, 30 min OFF
Frequency Range	40 to 10kHz
Limit Operating Conditions	200A permanently to 1kHz; Derating above 3kHz: 200A x (1/0.333F), F in kHz
Crest Factor	3 @ 200Arms with an error (due to CF) of 4%
Working/Common Mode Voltage	600Vrms
Output Termination	5 ft Lead
MECHANICAL	
Operating Temperature	14° to 131°F (-10° to 55°C)
Storage Temperature	-40° to 158°F (-40° to 70°C)
Operating Relative 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°C, 20 to 75% 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 >1Ω







ORDERING INFORMATION	CATALOG NO.
AC Current Probe Model MN255 (Lead – 100mA/A – 24A; 10mV/A – 240A max)	Cat. #2115.81
Includes a user manual	
Accessories (Optional)	
Banana plug adaptor (Safety Leads to nonrecessed plug)	Cat. #1017.45
Banana (Female) – BNC (Male) Adaptor	Cat. #2118.46



AC Current Probe Model MN255 (pdf) 10/05 Rev. 02