# AC Current Probe Model MN211



The Model MN211 is the latest in compact AC current probes. It is designed to meet the most stringent demands in industry and electrical contracting. Model MN211 meets EN 61010, 600V, Cat. III safety standards and is CE Marked and UL approved.

The Model MN211 has a 0.78" (20mm) jaw opening and can 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 MN211 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 240A
- Large jaw opening accommodates conductors up to 250MCM
- Designed for DMMs, loggers, recorders and oscilloscopes
- 40Hz to 10kHz response
- 1mAac/Aac output signals
- Conforms to EN 61010, 600V Cat. III safety standard
- CE Mark
- · UL approved

### **Applications**

- · Measuring in breaker panels
- Industrial loads
- HVAC
- · Residential and commercial sites
- 5A secondary current transformers (CTs) monitoring
- Data logging/recording

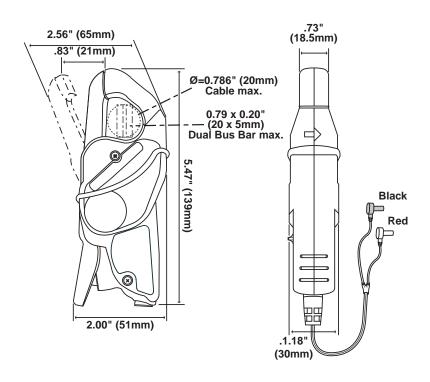


## **Specifications**

Nominal Range   200A	MODEL	MN211
Nominal Range         200A           Measurement Range         0.5 to 240A           Transformation Ratio         1000: 1           Output Signal         1mA/A on 1Ω           Accuracy (200A Range)         0.5 to 10A           0.5 to 10A         2.5% of Reading ± 0.5A           40 to 100A         2.0% of Reading ± 0.5A           10 to 240A         1.0% of Reading ± 0.5A           Phase Shift (200A Range)         Not Specified           0.5 to 10A         \$5.0°           40 to 100A         \$5.0°           40 to 10A         \$5.0°           40 to 10A         \$5.0°           40 to 10A         \$5.0°           40 to 10A         \$5.0°           40 to 10AA         \$20A permanently to 1kHz; Derating above 3kHz: 200A x (1/0.333F), Fin kHz           Crest Factor         3 @ 200A permanently to 1kHz; Derating above 3kHz: 200A x (1/0.333F), Fin kHz           Working/Common Mode Voltage         600Vrms           Output Termination         5 ft Lead           MECHANICAL         10 to 35°C 85% RH (w	ELECTRICAL	
Measurement Range         0.5 to 240A           Transformation Ratio         1000: 1           Output Signal         1mA/A on 1Ω           Accuracy (200A Range)         0.5 to 10A           0.5 to 10A         3.0% of Reading ± 0.5A           40 to 100A         2.5% of Reading ± 0.5A           40 to 100A         2.0% of Reading ± 0.5A           Phase Shift (200A Range)         0.5 to 10A           0.5 to 10A         Not Specified           10 to 40A         ± 5.0°           40 to 100A         ± 5.0°           40 to 100A         ± 2.5°           0verload         240A for 10 min ON, 30 min OFF           Frequency Range         40 to 10kHz           Limit Operating Common Mode Voltage         3@ 200A permanently to 1kHz; Derating above 3kHz: 200A x (1/0.333F), F in kHz           Crest Factor         3@ 200A million of the common size		200A
Transformation Ratio   1000: 1	-	0.5 to 240A
Accuracy (200A Range)   0.5 to 10A   10 to 40A   2.5% of Reading ± 0.5A   10 to 40A   40 to 100A   2.0% of Reading ± 0.5A   100 to 240A   1.0% of Reading ± 0.5A   100 to 240A   1.0% of Reading ± 0.5A   100 to 240A   1.0% of Reading ± 0.5A   100 to 40A   40 to 100A   5.5 to 10A   10 to 40A   40 to 100A   40 to 100 to 240A   40 to 100A   40 to 100 to 240A   40 to 100 to 25 to 2		1000: 1
0.5 to 10A	Output Signal	1mA/A on 1 $\Omega$
10 to 40A 40 to 100A 100 to 240A  Phase Shift (200A Range) 0.5 to 10A 10 to 40A 40 to 100A 10 to 240A  Phase Shift (200A Range) 0.5 to 10A 10 to 40A 40 to 100A 10 to 240A  Phase Shift (200A Range) 0.5 to 10A 10 to 40A 40 to 100A 100 to 240A  Poverload  Querload  Qu	Accuracy (200A Range)	
A0 to 100A   1.00 to 240A   1.0% of Reading ± 0.5A   Not Specified   1.0 to 40A   ≤5.0°   1.00 to 40A   ≤3.0°   1.00 to 240A   2.2.5°   1.00 to 240A   2.2.5°   1.00 to 240A   2.2.5°   1.00 to 240A   2.2.5°   1.00 to 240A   2.00 A permanently to 1 min ON, 30 min OFF   1.00 to 240A   2.00 A permanently to 1 kHz; Derating above 3kHz: 200A × (1/0.333F), F in kHz   2.00 to 10 to	****	
Phase Shift (200A Range)         Not Specified           0.5 to 10A         Not Specified           10 to 40A         ≤5.0°           40 to 100A         ≤3.0°           100 to 240A         ≥2.5°           Overload         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		
Phase Shift (200A Range) 0.5 to 10A 10 to 40A 10 to 40A 40 to 100A 10 to 240A         Not Specified 3.0°           40 to 100A 100 to 240A 100 to 240A 100 to 240A 240A 6cr 10 min ON, 30 min OFF           Frequency Range 2 40 to 10kHz           Limit Operating 3 200A permanently to 1kHz; Derating above 3kHz: 200A x (1/0.333F), F in kHz           Crest Factor 3 ② 200Arms with an error (due to CF) of 4%           Working/Common Mode Voltage 0 Uutput Terminatio Deprating Temperature 14° to 131°F (-10° to 55°C)           Storage Temperature 9 40° to 158°F (-40° to 70°C)           Operating Relative Humidity 10° tuning Relative Humidity 10° to 35°C 85% RH (without roll-off above 35°C)           Jaw Opening 10° Maximum Conductor Size 10° to 70° t		
Not Specified		1.0% of Reading ± 0.5A
10 to 40A		
40 to 100A   100 to 240A   22.5°		
Overload         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         0perating Temperature           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         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 VO           SAFETY         Electrical		
Overload         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         Poperating Temperature           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		
Frequency Range40 to 10kHzLimit Operating Conditions200A permanently to 1kHz; Derating above 3kHz: 200A x (1/0.333F), F in kHzCrest Factor3 @ 200Arms with an error (due to CF) of 4%Working/Common Mode Voltage600VrmsOutput Termination5 ft LeadMECHANICAL14° to 131°F (-10° to 55°C)Storage Temperature14° to 131°F (-10° to 55°C)Storage Temperature-40° to 158°F (-40° to 70°C)Operating Relative Humidity10 to 35°C 85% RH (without roll-off above 35°C)Jaw Opening0.83" (21mm)Maximum Conductor Size0.78" (20mm)Dimensions5.47 x 2.00 x 1.18" (139 x 51 x 30mm)Weight6.5 oz (180g)Polycarbonate MaterialPolycarbonate with fiberglass charge, UL94 VOSAFETYElectricalEN 61010-2-32	100 to 240A	≤2.5°
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  0utput Termination  MEGHANICAL  Operating Temperature  14° to 131°F (-10° to 55°C)  Storage Temperature  -40° to 158°F (-40° to 70°C)  Operating Relative Humidity Jaw Opening  Maximum Conductor Size  0.83" (21mm)  Maximum Conductor Size  0.78" (20mm)  Weight  5.5 oz (180g)  Polycarbonate Material  Polycarbonate with fiberglass charge, UL94 VO  SAFETY  Electrical  EN 61010-2-32	Overload	240A for 10 min ON, 30 min OFF
Crest Factor  Grest Factor  Gr	Frequency Range	40 to 10kHz
Working/Common Mode Voltage600VrmsOutput Termination5 ft LeadMECHANICAL14° to 131°F (-10° to 55°C)Operating Temperature14° to 131°F (-40° to 70°C)Storage Temperature-40° to 158°F (-40° to 70°C)Operating Relative Humidity10 to 35°C 85% RH (without roll-off above 35°C)Jaw Opening0.83" (21mm)Maximum Conductor Size0.78" (20mm)Dimensions5.47 x 2.00 x 1.18" (139 x 51 x 30mm)Weight6.5 oz (180g)Polycarbonate MaterialPolycarbonate with fiberglass charge, UL94 VOSAFETYElectricalEN 61010-2-32		200A permanently to 1kHz; Derating above 3kHz: 200A x (1/0.333F), F in kHz
Mode Voltage600VMISOutput Termination5 ft LeadMECHANICALCoperating Temperature14° to 131°F (-10° to 55°C)Storage Temperature-40° to 158°F (-40° to 70°C)Operating Relative Humidity10 to 35°C 85% RH (without roll-off above 35°C)Jaw Opening0.83" (21mm)Maximum Conductor Size0.78" (20mm)Dimensions5.47 x 2.00 x 1.18" (139 x 51 x 30mm)Weight6.5 oz (180g)Polycarbonate MaterialPolycarbonate with fiberglass charge, UL94 VOSAFETYElectricalEN 61010-2-32	Crest Factor	3 @ 200Arms with an error (due to CF) of 4%
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Storage Temperature  Operating Relative Humidity  Jaw Opening  Maximum Conductor Size  Dimensions  5.47 x 2.00 x 1.18" (139 x 51 x 30mm)  Weight  Polycarbonate Material  Polycarbonate with fiberglass charge, UL94 V0  SAFETY  Electrical  Find 158°F (-40° to 70°C)  10 to 35°C 85% RH (without roll-off above 35°C)  10 to 35°C 85% RH (without roll-off above 35°C)  0.83" (21mm)  0.78" (20mm)  6.5 oz (180g)  Polycarbonate Material  Folycarbonate with fiberglass charge, UL94 V0	MECHANICAL	
Operating Relative Humidity10 to 35°C 85% RH (without roll-off above 35°C)Jaw Opening0.83" (21mm)Maximum Conductor Size0.78" (20mm)Dimensions5.47 x 2.00 x 1.18" (139 x 51 x 30mm)Weight6.5 oz (180g)Polycarbonate MaterialPolycarbonate with fiberglass charge, UL94 V0SAFETYElectrical	Operating Temperature	14° to 131°F (-10° to 55°C)
Humidity		-40° to 158°F (-40° to 70°C)
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 VO           SAFETY         Electrical		10 to 35°C 85% RH (without roll-off above 35°C)
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Polycarbonate Material Polycarbonate with fiberglass charge, UL94 V0  SAFETY Electrical EN 61010-2-32	Dimensions	5.47 x 2.00 x 1.18" (139 x 51 x 30mm)
SAFETY Electrical EN 61010-2-32	Weight	6.5 oz (180g)
SAFETY Electrical EN 61010-2-32	Polycarbonate Material	Polycarbonate with fiberglass charge, UL94 V0
CE Mark Yes	Electrical	EN 61010-2-32
	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  $> 1\Omega$ 







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

ORDERING INFORMATION	CATALOG NO.
AC Current Probe Model MN211 (Lead – 1mA/A – 240A max)	Cat. #2115.73
Includes a user manual	
Accessories (Optional)	
Leads, set of 2, 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





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