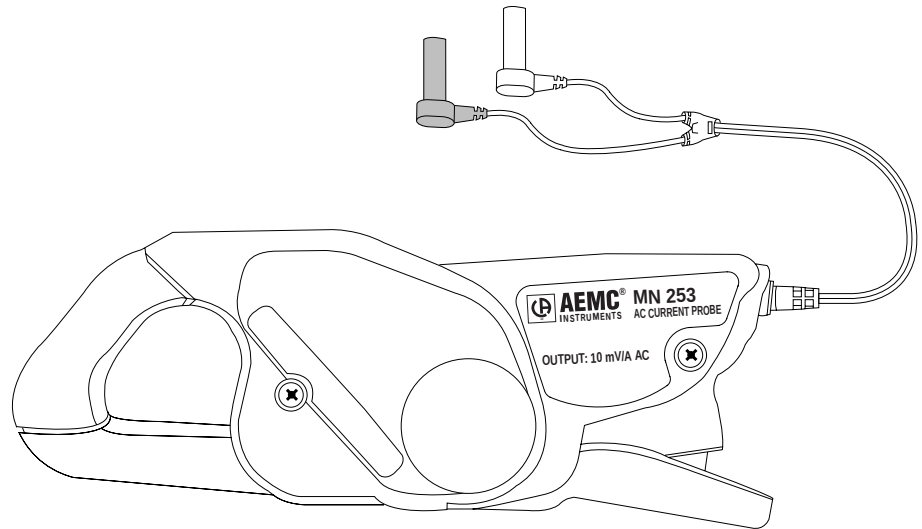


MN AC Current Probes

**Models MN210/211, MN212/213, MN250/251,
MN252/253, MN254/255, MN261, MN290/291**

Features

- Measurement range of 100 mA to 240 A AC
- Latest design in compact AC Current Probes
- Large jaw opening accommodates conductors up to 250 MCM
- Designed for DMMs, loggers, recorders, and oscilloscopes
- mA and mV output signals are available
- Conforms to IEC 1010 600 V Cat. III
- CE Mark



Description

The AEMC® Instruments MN 200 Series is the latest in compact AC current probes, designed to meet the most stringent demands in industry and electrical contracting. They meet IEC 1010 600 V and are CE marked.

Thirteen models are offered with mA or mV signal outputs proportional to the signal measured. Thirteen models are offered at introduction. Termination is through banana jacks (into probe), double insulated banana plug terminated leads, or BNC terminated coaxial lead.

The MN 200 series uses tape-wound cores to further improve its high and low end performance. Rated at 200 Arms (CF 3) it has a measurement range to 240 Arms. The MN 200 series has a 20 mm

(0.78") jaw opening, accommodates conductors up to 250 MCM, and in particular, may be used on new 225 A breaker panels. The unique hooked jaw design facilitates clamping and hooking onto conductors.

Polycarbonate materials and ultrasonic welding are used throughout to insure ruggedness and overall lasting reliability.

MN AC Current Probes

	MN210/211	MN212/213	MN250/251	MN252/253	MN254/255	MN261	MN290/291
ELECTRICAL SPECIFICATIONS							
Nominal Range	200 A	200 A	200 A	200 A	20 A, 200 A	20 A, 200 A	200 A
Measurement Range	0.5 to 240 A	0.5 to 240 A	0.1 to 240 A	0.1 to 240 A	20 A: 0.1 to 24 A 200 A: 0.1 to 240 A	100 mA to 240 A	0.5 to 240 A
Transformation Ratio	1000:1	1000:1	Voltage output	Voltage output	Voltage output	Voltage output	DC Voltage output
Output Signal	1 mA/A (on 1 Ω)	1 mA/A (on 1 Ω)	1 mV/A	10 mV/A	20 A: 100 mV/A 200 A: 10 mV/A	20 A: 100 mV/A 200 A: 10 mV/A	100 mV DC/A AC
Frequency Range	40 to 10 kHz	40 to 10 kHz	40 to 10 kHz	40 to 10 kHz	40 to 10 kHz	40 to 10 kHz	40 to 10 kHz
Accuracy (Typical)*	1% Reading	1% Reading	1% Reading	1% Reading	20 A: 1% Reading 200 A: 1% Reading	20 A: 2.5% Reading 200 A: 2% $\pm$ 50 mV	2% Reading
Phase Shift (Typical)*	$\leq 2.5^\circ$	$\leq 2.5^\circ$	$\leq 2.5^\circ$	$\leq 2.5^\circ$	20 A: — 200 A: $\leq 2.5^\circ$	20 A: — 200 A: $< 4^\circ$	—
Open Secondary Voltage	—	Protection w/diodes	—	—	—	—	—
MECHANICAL SPECIFICATIONS							
Output	MN210: Two standard safety banana jacks (4mm) MN211: 5 ft (1.5 m) lead with safety 4 mm banana plug	MN212: Two standard safety banana jacks (4mm) MN213: 5 ft (1.5 m) lead with safety 4 mm banana plug	MN250: Two standard safety banana jacks (4mm) MN251: 5 ft (1.5 m) lead with safety 4 mm banana plug	MN252: Two standard safety banana jacks (4mm) MN253: 5 ft (1.5 m) lead with safety 4 mm banana plug	MN254: Two standard safety banana jacks (4mm) MN255: 5 ft (1.5 m) lead with safety 4 mm banana plug	MN261: 5 ft (1.5 m) lead with BNC Connector	MN290: Two standard safety banana jacks (4mm) MN291: 5 ft (1.5 m) lead with safety 4 mm banana plug

MN AC Current Probes

Common Specifications

ELECTRICAL SPECIFICATIONS

Limit Operating Conditions:

200 A permanently to 1 kHz
Derating above 3 kHz:
200 A x (1/0.333 F), F in kHz

Crest Factor: 3 @ 200 Arms

Working Voltage:

600 Vrms

Common Mode Voltage:

600 Vrms

Influence of Adjacent Conductor:

< 15 mA/A at 50 Hz

Influence of Frequency:

< 3% of mA output from 40 Hz to 1 kHz
< 12% of mA output from 1 kHz to 10 kHz

Influence of Temperature: ≤ 150 ppm/°K,
or 0.15% of mA output per 10°K

Influence of Humidity (10 - 90% RH):

≤ 0.2% of mA output per 10°K @ 18°C
to 28°C

*Consult AEMC® Instruments for
detailed specifications per model.

MECHANICAL SPECIFICATIONS

Operating Temperature:

-14° to 131°F (-10° to +55°C)

Storage Temperature:

-40° to 158°F (-40° to +70°C)

Operating Relative Humidity:

10-35°C 85% RH
(without roll-off above 35°C)

Maximum Cable Diameter:

One Ø 0.78" (20 mm), bus bar 20 x 5 mm

Case Protection:

IP 40 (IEC 529)

Drop Test:

Test per IEC 68-2-32:
1.0 m drop on 38 mm of Oak on concrete

Mechanical Shock: Test per IEC 68-2-27

Vibration: Test per IEC 68-2-6

Dimensions:

5.47 x 2.00 x 1.18" (139 x 51 x 30 mm)

Weight:

180 g (6.5 oz)

Polycarbonate Material:

Jaws: Polycarbonate with 10% fiberglass
charge, Red, UL 94 V0

Case: Polycarbonate 920A Gray

Opening Operations - Life:

> 50,000

SAFETY SPECIFICATIONS

CE Mark

Electrical:

Double insulation or reinforced insulation
between the primary or secondary and the
outer case of the handle conforms to IEC
1010-2-32

Common Mode Voltage:

600 V Category III, Pollution Degree 2

ORDERING INFORMATION	CATALOG NO.
AC Current Probe MN210	Cat. #2115.72
AC Current Probe MN211	Cat. #2115.73
AC Current Probe MN212	Cat. #2115.74
AC Current Probe MN213	Cat. #2115.75
AC Current Probe MN250	Cat. #2115.76
AC Current Probe MN251	Cat. #2115.77
AC Current Probe MN252	Cat. #2115.78
AC Current Probe MN253	Cat. #2115.79
AC Current Probe MN254	Cat. #2115.80
AC Current Probe MN255	Cat. #2115.81
AC Current Probe MN261 (for Oscilloscopes & BNC terminated instruments)	Cat. #2115.82
AC Current Probe MN290	Cat. #2115.83
AC Current Probe MN291	Cat. #2115.84
Accessories and Replacements	
Leads, set of 2, 5 ft safety (1000V rated)	Cat. #2111.29
Banana plug adapter (to nonrecessed plug)	Cat. #1017.45