# **CURRENT MEASUREMENT PROBES**

MN SERIES AC CURRENT PROBES

# **MN SERIES**

Small and compact, ideal complement for any meter to measure AC currents in low-power secondary transformers or industrial applications



MODELS	MN01	MN02	MN03	MN05	MN09
ELECTRICAL					
Nominal Range	150Aac 100A		AC	10; 100Aac	150Aac
Measurement Range	2 to 150Aac	$50$ mA to $100$ Aac $(1\Omega \text{ load})$ $50$ mA to $90$ Aac $(10\Omega \text{ load})$	1 to 100 <b>A</b> ac	5mA to 10Aac 1A to 100Aac	1 to 150 <b>A</b> ac
Transformation Ratio	1000:1		Voltage output		N/A
Output Signal	1mA/A (150mAac @ 150A)	1mA/A (100mAac @ 100A)	1mV/A (100mVac @ 100A)	1mV/mA, 1mV/A (10Vac @ 10A, 100mVac @ 100A)	100mV/A (15VDC @ 150Aac)
Phase Shift	Not speci- fied	$<3^{\circ}$ (1 $\Omega$ load) $<6^{\circ}$ (10 $\Omega$ load)	Not specified		
Overload		10 min ON, nin OFF	150A	10A Range: 15A 100A Range: 150A	170A for 10 min ON, 30 min OFF
Frequency Range	48 to 500Hz	48Hz to 10kHz	48 to 500Hz		
Load Impedance	≤10Ω		≥1ΜΩ		$\geq 50 \text{K}\Omega$
Open Secondary Voltage	≤30V		-		≤30V
Output Termination	5 ft (1.5m) lead with two 4mm safety banana plugs				
MECHANICAL					
Maximum Conductor Size	Ø 0.39" (10mm)				
Dimension	5.12 x 1.5 x 1" (130 x 37 x 25mm)				
Weight Material	6.35 oz (180g) Polycarbonate UL 94 V2				
ENVIRONMENTA	ı		ruiycaibuila	IE OL 34 VZ	
Operating Temperature	14° to 122°F (-10° to +50°C)				
Storage Temperature	-40° to 176°F (-40° to +80°C)				
Operating Relative Humidity	0 to 85% RH decreasing linearly above 95°F (35°C)				
SAFETY		.=0.0.0.0.0.0.0			
Safety Rating	IEC 61010-2-32: 300 V CAT IV, 600V CAT III, Pollution Degree 2				
Ingress Protection	IP40				
Double Insulation	Yes				
CE Mark	Yes				

CATALOG NO.	DESCRIPTION
2129.17	AC Current Probe Model MN01 (150A, 1mA/A, Lead)
2129.20	AC Current Probe Model MN02 (100A, 1mA/A, Lead, 1% Accuracy)
2129.18	AC Current Probe Model MN03 (100A, 1mV/A, Lead)
2129.19	AC Current Probe Model MN05 (100A, 1mV/A & 10A, 1V/A, Lead)
2129.21	AC Current Probe Model MN09 (150A, 100mVVDc/AAc, Lead)









# **FEATURES**

- "Clothes pin" shape makes them ideal for use in tight areas, such as breaker panels, controller panels or outlets
- Jaw opening accommodates conductors up to 0.39" diameter

### MN01

- Measurements from 1mA to 150Aac
- Excellent companions to all DMMs. permits very low AC current measurements

#### **MN02**

- . Measurement ranges of 50mA to 100A  $(1\Omega \text{ load}) 50\text{mA to } 90\text{A} (10\Omega)$
- · Designed for DMMs, loggers, recorders and oscilloscopes
- 48 to 10,000Hz frequency range
- 1mA/A from  $1\Omega$  to  $10\Omega$  output signals

#### MN03

- Measurement range of 1 to 100Aac
- · Designed for DMMs, loggers, recorders and oscilloscopes
- 48Hz to 500Hz response
- 1mVac/Aac output signals
- Designed to EN 61010, 600V CAT III safety standard

## **MN05**

- Measurements from 5mA to 100Aac
- Measurements from 1mA to 10Aac
- Permits very low AC current measurements

#### **MN09**

- Measurements from 1 to 150Aac
- · DC voltage output enables you to overcome low AC sensitivity of certain measurement instruments

