# **CURRENT MEASUREMENT PROBES**

DC/AC MICROPROBES AND CURRENT PROBES

### **MD SERIES & K SERIES**

MD Series probes are rugged and designed for use on cables and bus bars. K Series small probes designed for high accuracy measuring low currents



**MD SERIES** 



# **SPECIFICATIONS**

MODELS		MD301	MD305
ELECTRICAL			
Nominal Range		500Aac	600 <b>A</b> ac
Measurement Range		2 to 500Aac	1 to 700Aac
Transformation Ratio		Voltage output	1000:1
Output Signal		1mV/A (0.5Vpc @ 500A)	1mA/A (0.6Aac @ 600A)
Accuracy	25A 100A 250A 500A 600A	(500A Range) 5% of Reading 2% of Reading 1% of Reading 1% of Reading	(600A Range) 3% of Reading 1.5% of Reading 1% of Reading 1% of Reading 2% of Reading
Phase Shift	25A 100A 250A 500A 600A	- - - -	3° 1.5° 1° 1°
Overload		700A for 10 min	
Frequency Range		48 to 1000Hz (error: add 2% to the ref.)	40 to 1000Hz (error: add 2% to the ref.
Load Impedance		≥100kΩ	5Ω max non-inductive
Working/Common Voltage		600Vrms	
Output Termination		Double-insulated 5ft (1,5m) lead with two 4mm safety banana plugs	
MECHANICAL			
Operating Tempera	iture	5° to 122°F (-15° to 50°C)	
Storage Temperatu	ire	-40° to 185°F (-40° to 85°C)	
Jaw Opening		1,3" (33mm)	
Maximum Conductor Size		1.18" (30mm), Max Bus Bar size: 2.48 x 0.20" (63 x 5mm)	
Dimensions		2.6 x 7.68 x 1.34" (66 x 195 x 34mm)	
Weight		14.82 oz (420g)	
Material		Polycarbonate UL 94	
SAFETY			
Electrical		EN 61010-2-032 600V CAT III, Pollution: 2; 300V CAT IV, Pollution: 2	
Electromagnetic Compatibility		EN 50081-1 Class B; EN 50082-2 Electrostatic discharge IEC 1000-4-2; Radiated field IEC 1000-4-3; Fast transients IEC 1000-4-4; Magnetic field at 50/60Hz IEC 1000-4-8	
Double Insulation		Yes	
CE Mark		Yes	







## **SPECIFICATIONS**

MODELS	K100	K110		
Current Range	0 to ±4.5Abc 0 to 3Arms	0 to ±450mA <sub>DC</sub> 0 to 300mArms		
Output Signal	1mV/mA	10mV/mA		
Resolution	DC: 50μA typical, AC: 100μA typical	DC: 50μA typical, AC: 100μA typical		
Accuracy	DC: $\pm 1\%$ of Reading, $\pm 200\mu A$ AC: $\pm 2\%$ of Reading, $\pm 200\mu A$			
Output Noise	<100μV, DC to 3kHz	<100µV, DC to 3kHz		
Frequency Response	DC to 2kHz (@ -3dB sine)	DC to 1.5kHz (@ -3dB sine)		
Output Termination	5ft (1.5m) lead with two 4mm safety banana plugs; standard ¾" (19mm) spacing			
Power Source	One 9V Alkaline battery (included)			
Battery Life	20 hours			

## **CHARACTERISTICS**

#### **K SERIES**

- Measures extremely low level DC from 100µA
- Outputs signal proportional to total current (DC + AC)
- Low noise
- Ultra-compact size and non-contact clamp-on convenience
- Simple plug-in operation
- Designed for use with digital multimeters and oscilloscopes
- Accurate display of waveforms
- No range or mode (AC/DC) switching required
- Red LED indicates momentary or continuous overload
- Green LED indicates power and battery condition

#### **MD SERIES**

- 600A range with mA or mV output
- Unique hook-shaped jaws that enable the user to "pry" into or "hook" onto cables
- Maximum conductor size is 2 x 500kcmil
- Works as a traditional current transformer with ratio of 1000:1
- AC/DC outputs available

CATALOG NO.	DESCRIPTION	
1200.67	DC/AC MicroProbe Model K100	
2111.73	DC/AC MicroProbe Model K110	
1201.07	AC Current Probe Model MD301	
1201.36	AC Current Probe Model MD305	
Accessories/Replace	ment - available on website store from www.aemc.com	
1017.45	Adapter - 4mm Non-insulated for Safety Leads	
2119.94	Adapter-BNC (Female) to 4mm Banana (Male) 600V CAT III	

