CURRENT MEASUREMENT PROBES

MINIFLEX® SERIES

MODEL MA114

Provide a welcomed solution when accessing electrical conductors in tight places or clamping onto cable bundles

FEATURES

- 14-inch flexible sensor capable of clamping around a 4.7 inch cable or bundle
- Waterproof sensor rated to IP 67
- User selectable ranges of 3, 30, 300 and 3000 Amps
- 600V CAT IV, 1000V CAT III rated
- Not effected by magnetic saturation, provides excellent linearity and low phase shift
- Battery or USB powered for long term use
- Red LED indicates overload condition
- Positive click locking sensor eliminates disconnection errors
- Banana plug termination compatible with multimeters, data loggers and other instruments



SPECIFICATIONS

MODEL	MA114	
Operating Voltage	600 Vnms (Cat. IV) 1000 Vnms (Cat. III)	
Battery	Two 1.5 V batteries (NEDA 15A, IEC LR6, AA) +5 VDC with type B micro-USB connector	
Battery life ⁽²⁾	300 hours typical 1,800 10-minute approx. measurements	
Consumption	10 µA (OFF position) 90 µA (sleep mode)	
Battery Level Indication	Flashing green LED (batteries voltage > 2 V)	
Influence of battery voltage	≤ 0.1% (0.02% typical) from 3.1 V to 2 V	
Influence of temperature	≤ 0.5% (0.15° typical) of output signal per 10°K	
Influence of relative humidity	≤ 0.5% (0.2% typical) of output signal	
Influence of conductor position in the sensor ⁽³⁾	≤ 2.5% (1% typical)	
Influence of sensor deformation ⁽⁴⁾	≤ 1% (0.2% typical)	
Influence of adjacent conductor(5)	≤ I _{ADJ} x 1% (2% near click-lock system) (0.2% typical)	
Input impedance of the measuring instrument	≥1 MΩ	
Common mode rejection ⁽⁸⁾	≤ 80 dB (100 dB typical)	
Influence of the measurement instrument's impedance Z	\leq 0.1% at 10 k Ω	

CALIBRE (I _N)	3A	30A	300A	3000A
Measurement Range	0.08 to 3Aac	0.5 to 30Aac	0.5 to 300Aac	0.5 to 3000Aac
Specified Measurement Range	0.5 to 3Aac	2A to 30A	5 to 300Aac	50 to 3000Aac
Output/input ratio	1 V/A (mV/mA)	100 mV/mA	10 mV/mA	1 mV/A
Bandwidth at -3 dB	10 Hz to 10 kHz	10 Hz to 20 kHz	10 Hz to 20 kHz	10 Hz to 20 kHz
Frequency limitation	Null See c			See curve
Accuracy	≤ 1% + 40 mV	≤ 1% + 4 mV	\leq 1.5% + 0.4 mV ($I \leq$ 10% I_N) \leq 1% + 0.4 mV ($I \geq$ 10% I_N)	\leq 1.5% + 0.04 mV ($ \geq$ 10% $ _{N}$) \leq 1% + 0.04 mV ($ \geq$ 10% $ _{N}$)
Phase shift	≤ 1° (0.5° typical)			

CATALOG NO.	DESCRIPTION
2153.41	MiniFlex* 14" Model MA114 (3A/1mV/A, 30A/100mV/A, 300A/10mV/A, 3000A/1mV/A)