

MICRO ~ flex FLEXIBLE AC Current Probes ACP 2000 SERIES

Accurate, Thin and Flexible

- *Three ranges 20/200/2000A*
- *3 Standard conductor diameters 50/70/100mm*
- *Easy to insert probe in confined spaces*
- *2 Models ACP 2005 (100kHz) and ACP 2015 (1MHz)*
- *Wide dynamic range 200mA to 2000A AC_{RMS}*
- *1000V, CAT III, Pollution degree 2*
- *Excellent response to rapid current changes*
- *External power supply option*
- *Compact lightweight design*
- *No magnetic hysteresis, saturation or non linearity*



High Accuracy and Wide Dynamic Range

Advanced coupling design results in minimal effect of external magnetic fields and off-centre conductor positioning on probe accuracy.

EN 61010-2-032:2002 and EMC Conformance

Safety features provide the user with confidence when making measurements in hazardous voltage areas. Conformance to EMC standards ensures high reliability through reduced susceptibility to electromagnetic interference.

TYPICAL APPLICATIONS

- o Connection to most measuring instruments including multimeters, oscilloscopes or recording devices
- o Development and servicing of power electronic equipment
- o Analysis of complex current waveforms
- o Analysis of harmonics, power measurements, measurement of peak loads in mains and in UPS.
- o Measurement of starting transients of electric motors

SPECIFICATIONS

NON-INVASIVE AC CURRENT MEASUREMENT

MODEL	ACP 2005	ACP 2015
Current Ranges (RMS)	20 / 200 / 2000A	
Output Sensitivity	100mV / 10mV / 1mV / A	
Noise (AC rms)	0.08A	0.08A / 0.6A / 6A
Linearity	$\pm 0.2\%$ of reading	
Basic Accuracy	$\pm 1\%$ of reading $\pm 0.2A$ (20/200A) / $\pm 1A$ (2000A range)	
Conductor position sensitivity	$\pm 2.5\%$ of reading	
Frequency Range (-2dB)	20Hz to 100kHz	20Hz to 1MHz
Phase shift (45 – 65Hz)	<1 degree	
Load Impedance	> 100 kOhms	
Output connection	0.5m coax terminated with safety male BNC connector	

ENVIRONMENTAL DATA

Operating Temperature	-20°C to +65°C (-4°F to 149°F)
Temperature Coefficient	$\pm 0.15\%$ of reading per °C ($\pm 0.1\%$ of reading per °F)
Storage Temperature (without battery)	-40°C to +75°C (-40°F to 167°F)

POWER SUPPLY

Battery type	2 x AA MN 1500 LR6
	Alkaline
Battery life	1000 hours ACP 2005 100 hours ACP 2015
External Power Supply	3V / 100mA

MECHANICAL DATA

Dimensions (mm)	
Probe cable diameter	6mm
Cable length	2m (Probe to Integrator)
Probe Conductor Diameters	50mm (2"), 70mm (3") and 100mm (4")

ACP 2005 *also available with 4mm
safety plugs for multimeters*

SAFETY

EN61010-2-032:2002,
EN 61010-031:2002
EN 61010-1:2001
1000V, Measurement Category III, Pollution Degree 2.
EMC Standard EN 61326-2-2:2006

MAXIMUM SAFE VOLTAGES

1000V AC RMS or DC
30V maximum between output and earth
All accuracies stated at 23°C $\pm 1^\circ\text{C}$ (73.4°F $\pm 1.8^\circ\text{F}$)

DEGREE OF PROTECTION

IP50 PROBE	IP40 Integrator
Part No's	MODEL
P-06.690.0	ACP 2005/2
P-06.690.1	ACP 2005/3
P-06.690.2	ACP 2005/4
P-06.690.8	ACP 2005/2_4mm
P-06.690.7	ACP 2005/3_4mm
P-06.690.6	ACP 2005/4_4mm
P-06.690.3	ACP 2015/2
P-06.690.4	ACP 2015/3
P-06.690.5	ACP 2015/4

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