### **CLAMP-ON CURRENT PROBES - AC CURRENT MODELS**

## 1. Safety

The following terms or symbols are used on products:

**CE** European IEC 1010 compliance Double isolation - Class 2 Caution: refer to manual 

Maximum voltage for non isolated conductor: 30 Volts RMS except for SP270 (600V RMS)

Maximum voltage for non isolated IEC414 conductor: 640 Volts RMS

Maximum voltage for isolated conductor: 650 Volts RMS

Before any measurement, the user must check that the instrument is still in safe conditions. Special care should be taken with plastic parts for user safety. The cleanliness of jaws (metal section of aperture) has an impact on accuracy.

### 2. Specifications

2.1 Environmental conditions

Operating temperature: -10°C to +50°C Storage temperature: -20°C to +80°C Maximum altitude: 2000 meters

2.2 Electrical and mechanical specifications

	SP201	SP210	SP220	SP221	SP222	SP230	SP240	SP270
Nominal primary current	200A	200A	5A	10A	500A	1200A	1200A	2000A
Maximum current (1)	400A	400A	50A	400A	700A	1500A	1500A	3000A
Transformer ratio	100/1	1000/1	1/1	10/1	1000/1	1000/1	1000/1	1000/1
Output signal	10mV~/1A~	1mA~/1A~	1V~/1A~	100mV~/1A~	1mA~/1A~	1mV~/1A~	1mVDC/1A~	1mV~/1A~
External load	10K $\Omega$ min.	$20\Omega$ max.	300K $Ω$ min.	20K $Ω$ min.	10Ω max.	10K $\Omega$ min.	20K $Ω$ min.	10K $\Omega$ min.
Accuracy (2)	1%	1%	2%	1%	1%	1%	2%	1%
Frequency range (3)	40Hz - 5KHz	40Hz - 5KHz	40Hz - 60Hz	40Hz - 5KHz	40Hz - 5KHz	40Hz - 5KHz	40Hz - 5KHz	40Hz – 5KHz
Phase difference (typical)	0.6°at 2KHz	0.6°at 2KHz	14°at 50Hz	1°at 2KHz	1°at 2KHz	0.5°at 2KHz	-	0.5°at 2KHz
Internal impedance (typ.)	10Ω	-	$3000\Omega$	$267\Omega$	-	1Ω	(5)	$2\Omega$
Conductor Ø or size (mm)	15x17	15x17	15x17	15x17	Ø 50	Ø 50	Ø 50	Ø 70 or
								100x45
Dimensions (mm)	97x43x23	97x43x23	97x43x23	97x43x23	101x215x40	101x215x40	101x215x40	133x336x52
Weight	115g	115g	115g	115g	650g	650g	650g	1700g
IEC1010-2-031	Unlimited voltage for isolated conductor (4) Cat III -						Cat III - 600V	

<sup>(1): 5</sup>mn/hour max., 10s max. for each overload (2): Specification given for 5% to 120% of the nominal primary current (assuming jaws are properly closed)
(3): Specification given for ±5% accuracy at frequency limits. (4) < 30V for non isolated conductor (5) Time constant: 1.4s from 0 to full scale (1.2V)

## CLAMP-ON CURRENT PROBES - AC AND DC CURRENT MODELS

**1. Safety**The following terms or symbols are used on products:

**CE** European IEC 1010 compliance Double isolation - Class 2 Caution: refer to manual 

The models have been designed in accordance with IEC1010 Category III 600V, pollution degree 2.

Before any measurement, the user must check that the instrument is still in safe conditions. Special care should be taken with plastic parts for user safety.

# 2. Specifications

Maximum altitude: 2000 meters

2.1 Environmental conditions

Operating temperature: -10°C to +50°C

Storage temperature: -20°C to +80°C (without battery)

Temperature coefficient: ± 0.05% /°C

2.2 Electrical and mechanical specifications

	SP260	SP261
Nominal primary current	600A	1200A
Maximum primary current (5mn/hr)	800A	2000A
Transformer ratio	100/1 & 1000/1	1000/1
Output signal	10mV/1A & 1mV/1A	1mV/1A
External load	10KΩ min.	10K $\Omega$ min.
Accuracy (1)	2%	1%
Frequency range	DC to 400Hz	DC to 10KHz
Phase displacement (typical)	2°at 400Hz	2°at 2000Hz
Conductor diameter or size (mm)	34	50
Battery	9V 6F22	9V 6F22
Battery life time (alkaline type)	45 hours	75 hours
Dimensions (mm)	203x27x60	215x24x110
Weight	320g	450g
IEC1010-2-031	Cat. II 600V	Cat. III 600V

Battery replacement

<sup>(1):</sup> Specification given for 5% to 120% of the nominal primary current (after zeroing the instrument)