

P18

100a Voltage Output 2m Hz Bandwidth Class 0.1 Ac Current Clamp

The round jaw design on the P18 Series AC current clamp along with the high content nickel metal core makes them well suited for power quality applications where high accuracy and low phase shift along with wide frequency are important. Measurement range is 1mA to 120A. The P18 is a general purpose 100A AC current clamp designed for use with DMMs, power loggers and energy meter calibration instruments that have a current input. It has a 1000:1 or 2000:1 ratio and output of 1mA per amp or 1mV per amp measured in the jaw. The P18 has an integral 2.5m lead terminated. The rounded jaw design on this current clamp makes it well-suited for power applications where high accuracy 0.1% and low phase shift and wide frequency response are important.

Features

1. UL, CE mark;
2. Holding wire diameter: $\phi 18\text{mm}$;
3. Frequency 10Hz-2MHz Bandwidth;
4. Conforms to EN 61010, 600V CAT III;
5. Measurement range of 1mA to 120A AC;
6. Low phase shift for power measurement;
7. High content nickel metal permalloy core;
8. Improved ergonomic design & easy operation;
9. Designed for DMMs, recorders, loggers, oscilloscopes, power and harmonic meters;



Application

1. Phase angle meter;
2. Power load monitoring;
3. Data logging/recording;
4. Energy meter calibrator;
5. Power quality analyzer(PQA);
6. Power and harmonic meters;
7. Measuring around cable bundles;
8. Waveform analysis(oscilloscopes meter);

Parameters

Electrical parameters

Ratio	1000: 1 or 2000:1 (customized)
Accuracy class	0.1%, 0.2%
Primary current	0 - 100A AC or 0-200A AC
Secondary current	0 - 100mA AC or 0 - 200mA AC (customized)
Secondary voltage	0 - 100mV AC, 0 - 1V AC or 0-5V AC (customized)
Max. Cont. Input current	120A or 240A
Load capacity	≤20Ω , Standard 4Ω
Over voltage category	CAT III 600V
Output signal (AC current)	From 0 to 200mA AC at nominal input current
Output signal (AC voltage)	From 0 to 5V AC at nominal input current
Frequency range	10Hz-2MHz
Dielectric strength	3KV 50Hz/60Hz at 1minute
Temperature range	-40°C to +55°C
Output	2.5 meter cable with D01 or BNC connector
Max. voltage not insulated conductors	600 V
Ratio type	single winding, or double winding
Standard	EN 61010-1, EN 61010-2-032, EN 61010-2-031 IEC60044-1, & IEC61869-2, 600V CAT III
Installation	clamp type
Output mode	lead output(2.5m, 5m or 10m)
Connector	BNC, 4mm banana, signal cable(2 cores),customized

Mechanical parameters

Dimensions (L x W x H)(mm)	52.5 x 137.5 x 28
Weight (g)	400
Holding wire diameter (mm)	φ18
Max. jaw opening (mm)	18
Color	Red, yellow, blue, green, black
Material	PC+ABS, UL94 V0

Selection guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
P18-5	5A	6A	5mA	1000:1	customized	0.1%
P18-10	10A	12A	10mA	1000:1	customized	0.1%
P18-20	20A	24A	20mA	1000:1	customized	0.1%
P18-100	100A	120A	100mA	1000:1	customized	0.1%
P18-200	200A	240A	200mA	1000:1	customized	0.1%
P18-10-2	10A	12A	10mA	1000:1	customized	0.2%
P18-20-2	20A	24A	20mA	1000:1	customized	0.2%
P18-100-2	100A	120A	100mA	1000:1	customized	0.2%
P18-200-2	200A	240A	200mA	1000:1	customized	0.2%
P18-5	5A	6A	2.5mA	2000:1	customized	0.1%
P18-10	10A	12A	5mA	2000:1	customized	0.1%
P18-20	20A	24A	10mA	2000:1	customized	0.1%
P18-100	100A	120A	50mA	2000:1	customized	0.1%
P18-200	200A	240A	100mA	2000:1	customized	0.1%
P18-10-2	5A	6A	2.5mA	2000:1	customized	0.2%
P18-10-2	10A	12A	5mA	2000:1	customized	0.2%
P18-20-2	20A	24A	10mA	2000:1	customized	0.2%
P18-100-2	100A	120A	50mA	2000:1	customized	0.2%
P18-200-2	200A	240A	100mA	2000:1	customized	0.2%
P18-10	10A	12A	2.5mA	4000:1	customized	0.1%
P18-20	20A	24A	5mA	4000:1	customized	0.1%
P18-100	100A	120A	25mA	4000:1	customized	0.1%
P18-200	200A	240A	50mA	4000:1	customized	0.1%
P18-10-2	10A	12A	2.5mA	4000:1	customized	0.2%
P18-20-2	20A	24A	5mA	4000:1	customized	0.2%
P18-100-2	100A	120A	25mA	4000:1	customized	0.2%
P18-200-2	200A	240A	50mA	4000:1	customized	0.2%
Model	Rate Current	Max Current	Secondary Voltage	Coil Ratio	Burden Resistance	Accuracy
P18V1-100	100A	120A	1V	1000:1	customized	0.1%
P18V2-100	100A	120A	2V	1000:1	customized	0.1%
P18V5-100	100A	120A	5V	1000:1	customized	0.1%
P18V10-100	100A	120A	10V	1000:1	customized	0.1%
P18V1-200	200A	240A	1V	1000:1	customized	0.1%
P18V2-200	200A	240A	2V	1000:1	customized	0.1%
P18V5-200	200A	240A	5V	1000:1	customized	0.1%
P18V1-100-2	100A	120A	1V	1000:1	customized	0.2%
P18V2-100-2	100A	120A	2V	1000:1	customized	0.2%
P18V5-100-2	100A	120A	5V	1000:1	customized	0.2%
P18V10-100-2	100A	120A	10V	1000:1	customized	0.2%
P18V1-200-2	200A	240A	1V	1000:1	customized	0.2%
P18V2-200-2	200A	240A	2V	1000:1	customized	0.2%
P18V5-200-2	200A	240A	5V	1000:1	customized	0.2%