

Q20A

HIGH ACCURACY MAGNETIC MINI CURRENT CLAMP ON CURRENT SENSORS

The model Q20A 100A/200A clamp on current sensor is ideal for using with electronic meter or other device with AC current input, it is suitable for 100A cable online measurement, max 120A. Only weight 300g, it has high accuracy class 0.1% and wide frequency range from 10Hz to 20KHz. Clamp type structure and non-contact measurement, mini design, easy to operate, fast, safe and reliable. it can be used for power analyzer, watt-hour meter tester & smart power meter etc. The Q20A series clamp current sensors is a economical current clamp, has been the first choice of many instrument manufacturers.

Features

1. UL, CE, CNAS mark;
2. Small, compact size;
3. With load capacity $\leq 10\Omega$;
4. With harmonic measurement;
5. Holding wire diameter: $\phi 20\text{mm}$;
6. Frequency 10Hz-20KHz Bandwidth;
7. With standard 4mm banana connector;
8. Measurement range of 1mA to 200A AC;
9. Low phase shift for power measurement;
10. High content nickel metal permalloy core;
11. Conforms to EN 61010-2-032, 600V CAT III;
12. High precision 0.1% for current measurement;
13. Improved ergonomic design & easy operation;
14. Designed for DMMs, recorders, calibrators, power and harmonic testers;



Application

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|-----------------------|----------------------------|-------------------------------------|
| 1. Multimeter; | 5. Phase angle meter; | 9. Energy meter field tester; |
| 2. Power meter; | 6. Oscilloscopes meter; | 10. Power and harmonic meters; |
| 3. Energy meter; | 7. Power load monitoring; | 11. Power quality analyzer(PQA); |
| 4. Energy sub-meters; | 8. Data logging/recording; | 12. Measuring around cable bundles; |

Parameters

Electrical parameters

Ratio	1000: 1, 2000:1 or 2500:1 (customized)
Accuracy class	0.1%, 0.2%, 0.5%
Primary current	0-5A, 0-10A, 0-20A, 0 - 100A, 0 - 200A AC
Secondary current	0 - 100mA AC, 0 - 200mA AC (customized)
Max. Cont. Input current	240A
Load capacity	≤10Ω , 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 200mV AC at nominal input current
Frequency range	10Hz-20KHz
Signal ratio	1mA/A, 1mV/A, 10mV/A, 100mV/A
Dielectric strength	3KV 50Hz/60Hz at 1 minute
Temperature range	-20°C to +55°C
Output	2.5 meter cable with D01 connector
Max. voltage not insulated conductors	720 V
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 customized
Connector	BNC, 4mm banana, Audio plug, customized

Mechanical parameters

Dimensions (L x W x H) (mm)	48 x 186 x 27
Weight (g)	300
Holding wire diameter (mm)	φ20
Max. jaw opening (mm)	20
Color	Black
Material	PC+ABS+Polycarbonate, UL94 V0

Selection guide

Model	Rate Current	Max Current	Secondary	Coil Ratio	Burden Resistance	Accuracy
Q20A-10-1	10A	12A	10mA	1000:1	customized	0.1%
Q20A-10-2	10A	12A	5mA	2000:1	customized	0.1%
Q20A-10-3	10A	12A	4mA	2500:1	customized	0.1%
Q20A-20-1	20A	24A	20mA	1000:1	customized	0.1%
Q20A-20-2	20A	24A	10mA	2000:1	customized	0.1%
Q20A-20-3	20A	24A	8mA	2500:1	customized	0.1%
Q20A-100-1	100A	120A	100mA	1000:1	customized	0.1%
Q20A-100-2	100A	120A	50mA	2000:1	customized	0.1%
Q20A-100-3	100A	120A	40mA	2500:1	customized	0.1%
Q20A-200-1	200A	240A	200mA	1000:1	customized	0.1%
Q20A-200-2	200A	240A	100mA	2000:1	customized	0.1%
Q20A-200-3	200A	240A	80mA	2500:1	customized	0.1%
Q20A-V10-1	10A	50A	100mV	1000:1	customized	0.1%
Q20A-V10-2	10A	12A	1V	1000:1	customized	0.1%
Q20A-V10-3	10A	12A	5V	1000:1	customized	0.1%
Q20A-V20-1	20A	50A	200mV	1000:1	customized	0.1%
Q20A-V20-2	20A	24A	2V	1000:1	customized	0.1%
Q20A-V20-3	20A	24A	5V	1000:1	customized	0.1%
Q20A-V100-1	100A	120A	100mV	1000:1	customized	0.1%
Q20A-V100-2	100A	120A	1V	1000:1	customized	0.1%
Q20A-V100-3	100A	120A	5V	1000:1	customized	0.1%
Q20A-V200-1	200A	240A	200mV	1000:1	customized	0.1%
Q20A-V200-2	200A	240A	2V	1000:1	customized	0.1%
Q20A-V200-3	200A	240A	5V	1000:1	customized	0.1%
Q20A-5-12	5A	6A	5mA	1000:1	customized	0.2%
Q20A-5-22	5A	6A	2.5mA	2000:1	customized	0.2%
Q20A-5-32	5A	6A	2mA	2500:1	customized	0.2%
Q20A-10-12	10A	12A	10mA	1000:1	customized	0.2%
Q20A-10-22	10A	12A	5mA	2000:1	customized	0.2%
Q20A-10-32	10A	12A	4mA	2500:1	customized	0.2%
Q20A-20-12	20A	24A	20mA	1000:1	customized	0.2%
Q20A-20-22	20A	24A	10mA	2000:1	customized	0.2%
Q20A-20-23	20A	24A	8mA	2500:1	customized	0.2%
Q20A-100-12	100A	120A	100mA	1000:1	customized	0.2%
Q20A-100-22	100A	120A	50mA	2000:1	customized	0.2%
Q20A-100-32	100A	120A	40mA	2500:1	customized	0.2%
Q20A-V5-12	5A	50A	50mV	1000:1	customized	0.2%
Q20A-V5-22	5A	6A	500mV	1000:1	customized	0.2%
Q20A-V5-32	5A	6A	1V	1000:1	customized	0.2%

Model	Rate Current	Max Current	Secondary	Coil Ratio	Burden Resistance	Accuracy
Q20A-V10-12	10A	50A	100mV	1000:1	customized	0.2%
Q20A-V10-22	10A	12A	1V	1000:1	customized	0.2%
Q20A-V10-32	10A	12A	5V	1000:1	customized	0.2%
Q20A-V20-12	20A	50A	200mV	1000:1	customized	0.2%
Q20A-V20-22	20A	24A	2V	1000:1	customized	0.2%
Q20A-V20-32	20A	24A	5V	1000:1	customized	0.2%
Q20A-V100-12	100A	120A	100mV	1000:1	customized	0.2%
Q20A-V100-22	100A	120A	1V	1000:1	customized	0.2%
Q20A-V100-32	100A	120A	5V	1000:1	customized	0.2%
Q20A-V200-12	200A	240A	200mV	1000:1	customized	0.2%
Q20A-V200-22	200A	240A	2V	1000:1	customized	0.2%
Q20A-V200-32	200A	240A	5V	1000:1	customized	0.2%

Notes: Can be customized current probe according to user requirements!