

Q13

HIGH PERFORMANCE EUROPE CE 5A/50A/100A AC CLAMP-ON CT

The Q13 clamp-on ct is a high accuracy mini current probe sensor for measurements to 120A AC. This clamp-on ct uses a special magnetic core to provide higher accuracy 0.1% and lower phase shift. It can output 1mA/A, 1mV/A, 10mV/A or 100mV/A etc. The Q13 Series clamp-on current ct is an excellent probe to be used in power and low level current measurement applications. This model Q13 clamp-on CT has been used for power analyzer, energy meter calibrator, Oscilloscopes etc high precision instruments.

All of our clamp-on ct are strictly comply IEC/EN61010-2-032, IEC/EN 61010-2-031, IEC60044-1, IEC 61869-2, ANSI/IEEE C57.13, GB1208-2006, GB/T 20840.1-2010, GB/T 20840.2-2014, GB/T 22071.1-2018.

Features

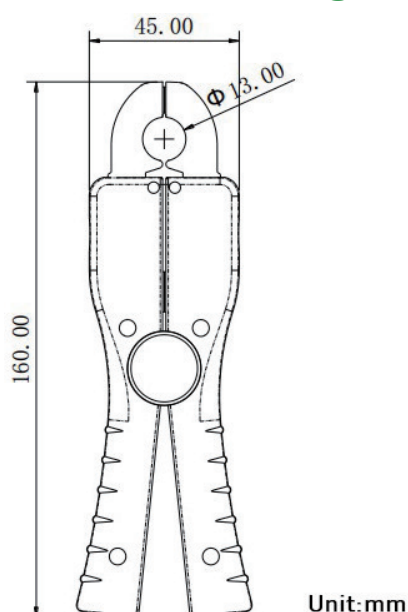
1. High precision 0.1% for current measurement;
2. Measurement range of 1mA to 120A AC;
3. 40Hz to 200kHz response;
4. 1mA/A, 1mV/A or 10mV/A AC output signals;
5. Low phase shift for power measurement;
6. Improved ergonomic design and easy operation;
7. High content nickel metal core;
8. Small, compact size;
9. Installation: clamp type design;
10. UL, CE, CNAS mark;
11. As a high accuracy clamp-on CT;
12. Can be customized 4mm banana/BNC connector;
13. Designed to EN 61010, 600V CAT III safety standard;
14. Designed for DMMs, loggers, recorders and oscilloscopes;
15. Jaw opening accommodates conductors up to 13mm diameter;



Applications

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|-------------------------------------|--|-------------------------------------|
| 1. Multimeter; | 2. Power meter; | 3. Energy sub-meters; |
| 4. Phase angle meter; | 5. Digital multi-meter; | 6. Oscilloscopes meter; |
| 7. Power quality analyzer; | 8. Power load monitoring; | 9. Data logging/recording; |
| 10. Power quality monitoring; | 11. Power and harmonic meters; | 12. Multi-function energy meter; |
| 13. CT secondary current detection; | 14. Energy meter calibrator (on site); | 15. Measuring around cable bundles; |

Outline Drawing



Parameters

Technical parameters	
Ratio	1000:1, 2000:1, 2500:1 (customized)
Accuracy Class	0.1%, 0.2%
Primary current	0 - 5A AC, 0 - 10A AC, 0 - 20A AC, 0 - 100A AC
Signal output	1mA/A, 1mV/A, 5mV/A, 10mV/A , 100mV/A
Secondary voltage	0 - 50mV, 0-100mV, 0-200mV, 0-1V, 0-5V AC (customized)
Secondary current	0 - 2.5mA, 0-5mA, 0-10mA, 0-100mA AC (customized)
Max. Cont. Input current	120A
Load capacity	≤20Ω, standard 4Ω
Over voltage category	CAT III 600V
Frequency range	10Hz-200kHz

Technical parameters - continued

Dielectric strength	3KV 50Hz/60Hz at 1minute
Temperature range	-20°C to +55°C
Output	2.5 meter cable with D01 or BNC 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
Range	5A, 10A, 20A, 100A optional
Output mode	Lead output(2.5m, 5m, 10m or customized)
Output signal	333mV, 50mV, 1V, 2V, 5V AC at nominal input current
Connector	BNC, 4mm banana, signal cable(2 cores), Audio plug, customized

Accuracy (100A Range)

0-100mA	≤0.5%
100mA-10A	≤0.2%
10A-120A	≤0.1%

Phase Shift(100A Range)

0-100mA	≤0.5°
100mA-10A	≤0.2°
10A-120A	≤0.1°

Mechanical parameters

Dimensions (L x W x H) (mm)	45 x 160 x 25
Weight (g)	300
Holding wire diameter (mm)	φ13
Max. jaw opening (mm)	13
Jaw color	black
Material	PC+ABS+Polycarbonate, UL94 V0

Selection Guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
Q13-5-1	5A	6A	5mA	1000:1	customized	0.1%
Q13-5-2	5A	6A	2.5mA	2000:1	customized	0.1%
Q13-5-3	5A	6A	2mA	2500:1	customized	0.1%
Q13-10-1	10A	12A	10mA	1000:1	customized	0.1%
Q13-10-2	10A	12A	5mA	2000:1	customized	0.1%
Q13-10-3	10A	12A	4mA	2500:1	customized	0.1%

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
Q13-20-1	20A	24A	20mA	1000:1	customized	0.1%
Q13-20-2	20A	24A	10mA	2000:1	customized	0.1%
Q13-100-1	100A	120A	100mA	1000:1	customized	0.1%
Q13-100-2	100A	120A	50mA	2000:1	customized	0.1%
Q13-100-3	100A	120A	40mA	2500:1	customized	0.1%
Q13-V5-1	5A	50A	50mV	1000:1	customized	0.1%
Q13-V5-2	5A	6A	500mV	1000:1	customized	0.1%
Q13-V5-3	5A	6A	1V	1000:1	customized	0.1%
Q13-V10-1	10A	50A	100mV	1000:1	customized	0.1%
Q13-V10-2	10A	12A	1V	1000:1	customized	0.1%
Q13-V10-3	10A	12A	5V	1000:1	customized	0.1%
Q13-V100-1	100A	120A	100mV	1000:1	customized	0.1%
Q13-V100-2	100A	120A	1V	1000:1	customized	0.1%
Q13-V100-3	100A	120A	5V	1000:1	customized	0.1%
Q13-5-12	5A	6A	5mA	1000:1	customized	0.2%
Q13-5-22	5A	6A	2.5mA	2000:1	customized	0.2%
Q13-5-32	5A	6A	2mA	2500:1	customized	0.2%
Q13-10-12	10A	12A	10mA	1000:1	customized	0.2%
Q13-10-22	10A	12A	5mA	2000:1	customized	0.2%
Q13-10-32	10A	12A	4mA	2500:1	customized	0.2%
Q13-20-12	20A	24A	20mA	1000:1	customized	0.2%
Q13-20-22	20A	24A	10mA	2000:1	customized	0.2%
Q13-100-12	100A	120A	100mA	1000:1	customized	0.2%
Q13-100-22	100A	120A	50mA	2000:1	customized	0.2%
Q13-100-32	100A	120A	40mA	2500:1	customized	0.2%
Q13-V5-12	5A	50A	50mV	1000:1	customized	0.2%
Q13-V5-22	5A	6A	500mV	1000:1	customized	0.2%
Q13-V5-32	5A	6A	1V	1000:1	customized	0.2%
Q13-V10-12	10A	50A	100mV	1000:1	customized	0.2%
Q13-V10-22	10A	12A	1V	1000:1	customized	0.2%
Q13-V10-32	10A	12A	5V	1000:1	customized	0.2%
Q13-V100-12	100A	120A	100mV	1000:1	customized	0.2%
Q13-V100-22	100A	120A	1V	1000:1	customized	0.2%
Q13-V100-32	100A	120A	5V	1000:1	customized	0.2%

Notes: Can be customized clamp on current transformers according to user requirements!

Clamp On Current Transformer Selection Model

Model	Current Range	Max Current	Secondary Output Signal	Ratio	Resistance	Accuracy
S50	0-1200A	1200A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	1000:1, 2000:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
S120	0-3000A	3600A	250mA, 500mA, 1A, 2A, 5A, 333mV, 1V, 2V , 5V, 10V etc	600:1, 1000:1, 2000:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
P8	0-10A	20A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1, 4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
P18	0-200A	240A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1, 4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
P50	0-1000A	1200A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	1000:1,2000:1, 2500:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
P110	0-1500A	1500A	250mA, 500mA, 1A, 2A, 5A, 333mV, 1V, 2V , 5V, 10V etc	200:1, 600:1, 1000:1, 2000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q8A1	20A	20A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q8A2	20A	20A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q13	100A	120A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q20A	200A	240A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q20B	200A	240A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q40	500A	600A	200mA, 250mA, 500mA, 333mV, 1V, 2V , 5V, 10V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q50A	1000A	1000A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	1000:1,2000:1, 2500:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q70	1000A	1200A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	200:1, 600:1, 1000:1, 2000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q110	1500A	1500A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	200:1, 600:1, 1000:1, 2000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
Q125	2000A	2400A	500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	200:1, 600:1, 1000:1, 2000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.2%, 0.5%
Q125B	3000A	3600A	250mA, 500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	600:1, 1000:1, 2000:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.2%, 0.5%
Q150	3000A	3600A	500mA, 1A, 5A, 333mV, 1V, 2V , 5V, 10V etc	600:1, 1000:1, 2000:1,4000:1 etc	2.5VA, 1VA, 4Ω, 10Ω, 20Ω etc	0.2%, 0.5%
XQ13	100A	120A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
XQ20	200A	240A	2mA, 2.5mA, 5mA, 10mA,20mA, 333mV, 1V, 2V , 5V, 10V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%
HQ15	100A	120A	2mA, 2.5mA, 5mA, 10mA, 20mA, 333mV, 1V, 2V , 5V etc	1000:1,2000:1, 2500:1,4000:1 etc	4Ω, 10Ω, 20Ω etc	0.1%, 0.2%, 0.5%