Q110

RING TYPE 1000A SPLIT CORE CURRENT CLAMP TRANSFORMER

The model Q110 ring type current clamp is a high accuracy CT, the advanced design ensures enhanced linearity 0.2% and the jaw opening system provides enhanced safety. 110mm large jaw ensures it can measure up to 1500A AC current, Frequency range from 10Hz to 20KHz, ratio 1000:1, 2000:1 or 1000:5 etc. Improved ergonomic designed, Q110 current clamp transformer suite for application on site. It can connect with phase detection analyzer, industrial control equipment, data recorder, oscilloscope, harmonic analyzer, electric power quality analyzer, high precision digital multi-meter & cable fault analysis etc. Conforms to EN 61010-2-032, 600V CAT III and IEC61869 & IEC60044-1 standard.

All of our current clamp transformer 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.

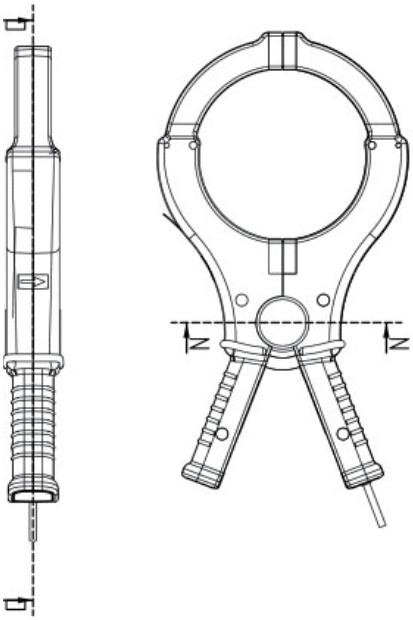
Features

1. UL, CE CNAS mark;
2. High content permalloy core;
3. 1mA/A or 1mV/A signal output;
4. Holding wire diameter: ϕ110mm;
5. Frequency 10Hz-20kHz Bandwidth;
6. Conforms to EN 61010, 600V CAT III;
7. Low phase shift for power measurement;
8. Industrial design & beautiful appearance;
9. Measurement range of 1mA to 1500A AC;
10. As a high accuracy current clamp transformer;
11. Improved ergonomic design & easy operation;
12. High precision 0.2% for current measurement;
13. Large jaw opening accommodates conductors up to two 500kcoil;
14. IEC/EN61010-2-032, IEC/EN 61010-2-031, IEC 61869-2 etc standard;
15. Designed for recorders, loggers, oscilloscopes, power and harmonic meters;

Appliations

1. Power meter;
2. Oscilloscopes;
3. Digital multi-meter;
4. Cable fault analysis;
5. Large industrial loads;
6. Power quality analyzer;
7. Power load monitoring;
8. Data logging/recording;
9. Ground resistance tester;
10. Phase volt-ampere meter;
11. Power quality monitoring;
12. Multi-function energy meter;
13. Power and harmonic meters;
14. Energy meter tester (on site);
15. CT primary current detection;
16. Calibration instrument on site;
17. Measuring around cable bundles;

Outline Drawing



Unit:mm

Parameters

Technical parameters	
Ratio	1000:5, 1000:1, 2000:1, 4000:1 (customized)
Accuracy Class	0.2%, 0.5%, 1%
Primary current	0-1000A AC, 0-500A AC, 0-200A AC, 0-100A AC
Signal output	1mA/A, 5mA/A, 1mV/A, 5mV/A, 10mV/A
Secondary voltage	0-333mV, 0-500mV, 0-1V, 0-5V, 0-10V AC;
Secondary current	0-250mA, 0-500mA, 0-1A or 0-5A AC
Max. Cont. Input current	1500A
Load capacity	≤20Ω, standard 4Ω
Over voltage category	CAT Ⅲ 600V

Technical parameters - continued	
Frequency range	40Hz-20kHz
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	100A, 200A, 400A, 500A, 600A, 1000A optional
Output mode	Lead output (2.5m, 5m, 10m or customized)
Output signal	333mV, 500mV, 1V, 2V, 5V, 10V AC at nominal input current
Connector	BNC, 4mm banana, signal cable(2 cores), customized
Accuracy (1000A Range)	
0-10A	≤0.5%
10-100A	≤0.2%
100-1000A	≤0.1%
Phase Shift(1000A Range)	
0-10A	≤0.5°
10-100A	≤0.2°
100-1000A	≤0.1°
Mechanical parameters	
Dimensions (L x W x H) (mm)	163 x 310 x 34
Weight (g)	900
Holding wire diameter (mm)	φ110
Max. jaw opening (mm)	110
Jaw color	Black
Material	PC+ABS, UL94 V0

Selection Guide

Model	Rate Current	Max Current	Secondary Current	Coil Ratio	Burden Resistance	Accuracy
Q110A5-200	200A	240A	5A	40:1	2.5VA	0.5%
Q110A5-300	300A	360A	5A	60:1	2.5VA	0.5%
Q110A5-400	400A	480A	5A	80:1	2.5VA	0.5%
Q110A5-500	500A	600A	5A	100:1	2.5VA	0.5%
Q110A5-600	600A	720A	5A	120:1	2.5VA	0.5%
Q110A5-800	800A	960A	5A	160:1	2.5VA	0.5%
Q110A5-1000	1000A	1200A	5A	200:1	2.5VA	0.5%
Q110A1-100	100A	120A	1A	100:1	customized	0.2%
Q110A1-200	200A	240A	1A	200:1	customized	0.2%
Q110A1-300	300A	360A	1A	300:1	customized	0.2%
Q110A1-400	400A	480A	1A	400:1	customized	0.2%
Q110A1-500	500A	600A	1A	500:1	customized	0.2%
Q110A1-600	600A	720A	1A	600:1	customized	0.2%
Q110A1-800	800A	960A	1A	800:1	customized	0.2%
Q110A1-1000	1000A	1200A	1A	1000:1	customized	0.2%
Q110A2-500	500A	600A	250mA	2000:1	customized	0.2%
Q110A2-1000	1000A	1200A	500mA	2000:1	customized	0.2%
Q110A3-500	500A	600A	200mA	2500:1	customized	0.2%
Q110A3-1000	1000A	1200A	400mA	2500:1	customized	0.2%
Q110A4-250	250A	300A	250mA	1000:1	customized	0.2%
Q110A4-500	500A	600A	500mA	1000:1	customized	0.2%
Q110A4-1000	1000A	1200A	250mA	4000:1	customized	0.2%
Model	Rate Current	Max Current	Secondary Voltage	Coil Ratio	Burden Resistance	Accuracy
Q110V1-500	500A	600A	500mV	1000:1	customized	0.2%
Q110V1-1000	1000A	1200A	1V	1000:1	customized	0.2%
Q110V2-1000	1000A	1200A	5V	1000:1	customized	0.2%
Q110V3-1000	1000A	1200A	10V	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%