

FQ-RCTA03

3000a flexible rogowski coil ac current transformer ct

The FQ-RCTA03 rogowski coil flexible current transformer is designed for easy installed in tight spaces and without the need for dismantling the primary bus bar or cables. It includes a flexible Rogowski coil probe and electronic modules. The signal from the coil probe can be amplified by the electronic amplifier modules through the integration processing. The output signal can be directly used in oscilloscope, digital multimeters, power quality analyzer or data logger recording instrument. Excellent linearity, easy to use, measuring large current, three stall 6000A/3V, 600A/3V, 60A/3V or 3000A/3V, 300A/3V, 30A/3V, lower phase shift. In particular, it can be installed in tight spaces, around cable bundles, around wide or large bus bars, or even wrapped around irregular shapes. Models range from 1 to 100,000Arms with an accuracy of 1% of reading. Rated EN 61010, 600V CAT IV, 1000V CAT III. This feature facilitates positioning the ct sensor around the conductor, enhances user safety, and alleviates the drooping effect associated with other flexible sensors.

Features

1. CE, UL, CNAS mark;
2. With harmonic measurement;
3. Frequency 0.1Hz-2MHz Bandwidth;
4. Conforms to EN 61010, 1000V CAT III;
5. Measurement range of 1A to 6000A AC;
6. Low phase shift for power measurement;
7. High permeability magnetic material core;
8. Improved ergonomic design & easy operation;
9. Excellent linearity 0.2% for current measurement;
10. Holding wire diameter: ϕ 305mm/190mm/120mm;
11. 6000A/600A/60A/3V or 3000A/300A/30A/3V range
12. Designed for DMMs, power recorders, oscilloscopes, power and harmonic meters;



Application

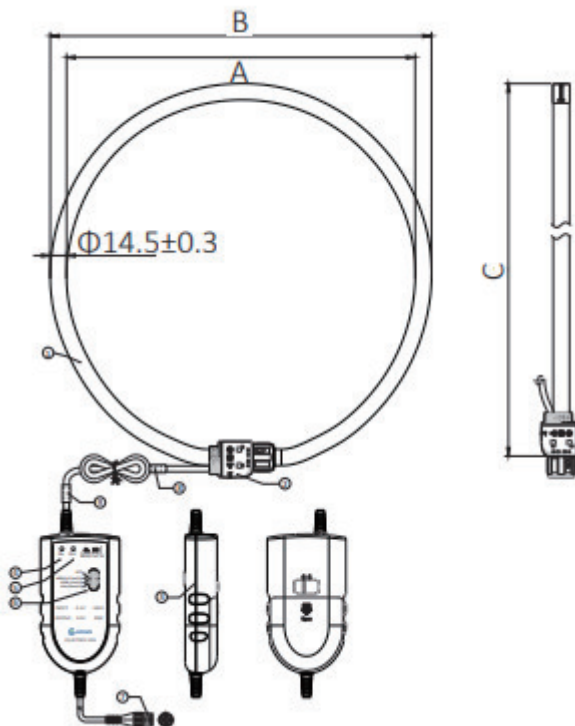
1. Multimeter;
2. Oscilloscope;
3. Power meter;
4. Phase angle meter;
5. Waveform analysis;
6. Energy sub-meters;
7. Power load monitoring;
8. Data logging/recording;
9. Energy meter calibrator;
10. Power quality analyzer(PQA);
11. Power and harmonic meters;
12. Measuring around cable bundles;

General Data

1. Standards Safety: IEC61010-1:2001, 600V CAT III
2. Operating environment: Indoor, altitude up to 2000 meters
3. Operating temperature & humidity 0 to 50°C (32-122 °F), ≤ 80%RH(No condensate)
4. Storage temperature & humidity: -10 to 60°C (14-140 °F), ≤ 80%RH(No condensate)

Dimension

Dimensions(mm)	FQ-RCTA03-120	FQ-RCTA03-190	FQ-RCTA03-305
Window A	120	190	305
Coil OD B	145	205	335
Coil Length C	400	600	1000
Output connection	<ol style="list-style-type: none"> 1. UL2586-ESB 2x24AWG L=150cm (as required) 2. Coax terminated with safety male BNC connector L=250cm (as required) 3. UL2586-ESB 2x24AWG L=150cm (as required) with integrator 		



Parameter

Electrical parameters					
Model		FQ-RCTA03-120	FQ-RCTA03-190	FQ-RCTA03-305	
Current range		60A/600A/6000A or 30A/300A/3000A			
Frequency		10Hz - 20kHz			
Output voltage	Rated current	6000A/3000A	6000A/3000A	6000A/3000A	
	50Hz	3V AC	3V AC	3V AC	
Max output		30kA			
Output sensitivity		50mV/A, 5mV/A, 0.5mV/A; 100mV/A, 10mV/A, 1mV/A			
Accuracy		<1% @25°C (45-65Hz)			
Phase error		<60' @25°C (45-65Hz)			
Ratio		50mV/kA, 85mV/kA, 100mV/kA (50Hz)			
Coil section diameter		8mm			
Output sensitivity		±2% Max (No Calibration)			
		±0.5% @25°C (With Calibration)			
Linearity error		±0.2% RD			
Position Sensitivity		±1%			
External Influence		±1% Max			
Bandwidth		0.1Hz - 2MHz(-3dB)			
Temperature coefficient		±0.08%/°C of the reading data			
Load impedance		Min 100KΩ			
Power Supply		9V DC battery or customized			
Lead length		2.5m			
Standard		EN 61010-1, EN 61010-2-032, EN 61010-2-031 IEC60044-1, & IEC61869-2, 1000V CAT III			
Output terminals		0.5m cable with Safety BNC plug			
Weight		150g - 360g			
Operation temperature		-30°C to +80°C			
Storage temperature		-40°C to +90°C			

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

Usage Instruction

