

FQ-RCTA02

ROGOWSKI COIL 3000A FLEXIBLE CURRENT SENSOR WITH INTEGRATOR

The FQ-RCTA02 rogowski coil flexible current sensor is designed for easy installed in tight spaces and without the need for dismantling the primary busbar 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 multimeter or data logger recording instrument. good linearity, easy to use, measuring large current, 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 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. High permeability magnetic material core;
7. Low phase shift for power measurement;
8. Improved ergonomic design & easy operation;
9. Excellent linearity 0.2% for current measurement;
10. 6000A/600A/60A/3V or 3000A/300A/30A/3V range
11. Holding wire diameter: ϕ 305mm/190mm/120mm;
12. Designed for DMMs, power recorders, oscilloscopes, power and harmonic meters;



Application

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

Dimension

Dimensions(mm)	FQ-RCTA02-120	FQ-RCTA02-190	FQ-RCTA02-305
Window A	120	190	305
Coil OD B	145	205	335
Coil Length C	400	600	1000
Output connection	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		

Parameters

Electrical parameters				
Model		FQ-RCTA02-120	FQ-RCTA02-190	FQ-RCTA02-305
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		

Electrical parameters			
Model	FQ-RCTA02-120	FQ-RCTA02-190	FQ-RCTA02-305
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!