

## FQ-RCTA02

### ACCURACY 1% 6000A/600A/60A/3V ROGOWSKI COIL 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 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.

All of our rogowski coil current sensors are strictly comply IEC60044-1, IEC 61869-2, ANSI/IEEE C57.13, IEC/EN61010-2-032, IEC/EN 61010-2-031.

## Features

1. CNAS, UL, CE mark;
2. Minimal positional error;
3. Zero power consumption;
4. With harmonic measurement;
5. Frequency 0.1Hz-2MHz Bandwidth;
6. Ø8 screw type flexible Rogowski coil;
7. Conforms to EN 61010, 1000V CAT III;
8. Measurement range of 1A to 6000A AC;
9. Low phase shift for power measurement;
10. No danger from open-circuited secondary;
11. High permeability magnetic material core;
12. Strong anti-interference and good stability;
13. Improved ergonomic design & easy operation;
14. Excellent linearity 0.2% for current measurement;
15. Holding wire diameter:  $\phi$ 305mm/190mm/120mm;
16. 6000A/600A/60A/3V or 3000A/300A/30A/3V range;
17. Designed for DMMs, oscilloscopes, recorders, power and harmonic meters;



## Applications

1. Multimeter;
2. Oscilloscope ;
3. Power recorders;
4. Energy sub-meters;
5. Smart power meter;
6. Power quality meter;
7. Power load monitoring;
8. Data logging/recording;
9. Power quality analyzer;
10. Energy meter calibrator;
11. Power monitoring device;
12. Power and harmonic meters;
13. Lightning current measurement;
14. Measuring around cable bundles;

## Dimension

Dimensions(mm)	FQ-RCT02-120	FQ-RCT02-190	FQ-RCT02-305
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 - 200kHz		
Output voltage	Rated current	3000A/6000A	300A/600A	30A/60A
	50Hz	3V AC	3V AC	3V AC
Max output		10kA or 30kA		
Output sensitivity		50mV/A, 5mV/A, 0.5mV/A; 100mV/A, 10mV/A, 1mV/A		
Accuracy		<1% @25°C (45-65Hz)		
Phase error		<30' @25°C (45-65Hz)		
Output sensitivity		50mV/kA, 85mV/kA, 100mV/kA (50Hz)		
Coil section diameter		8mm		

**Electrical parameters - continued**

Output sensitivity	$\pm 2\%$ Max (No Calibration) $\pm 0.5\%$ @25°C (With Calibration)
Linearity error	$\pm 0.2\%$ RD
Position Sensitivity	$\pm 1\%$
External Influence	$\pm 1\%$ Max
Bandwidth	0.1Hz - 2MHz(-3dB)
Temperature coefficient	$\pm 0.08\%/^{\circ}\text{C}$ of the reading data
Load impedance	Min 100K $\Omega$
Power Supply	9V DC or battery
Lead length	2.5m or 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
Degree of protection	IP54
Operation temperature	-30°C to +80°C
Storage temperature	-40°C to +90°C

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