

FQ-RCT01

FLEXIBLE COIL



FQ-RCT01

Flexible AC Rogowski Coil

The FQ-RCT01 Flexible AC rogowski coil are designed for easy installed in tight spaces and without the need for dismantling the primary busbar or cables.

Applications

1. Power quality monitoring
2. Power meters
3. Smart logger
4. Energy sub-meters
5. Distributed measurement systems

Features

1. Flexible and lightweights
2. Easy & quick installation in tight spaces
3. No danger from open-circuited secondary
4. No core saturation or damage if overloaded
5. Excellent linearity
6. Multi-size are available

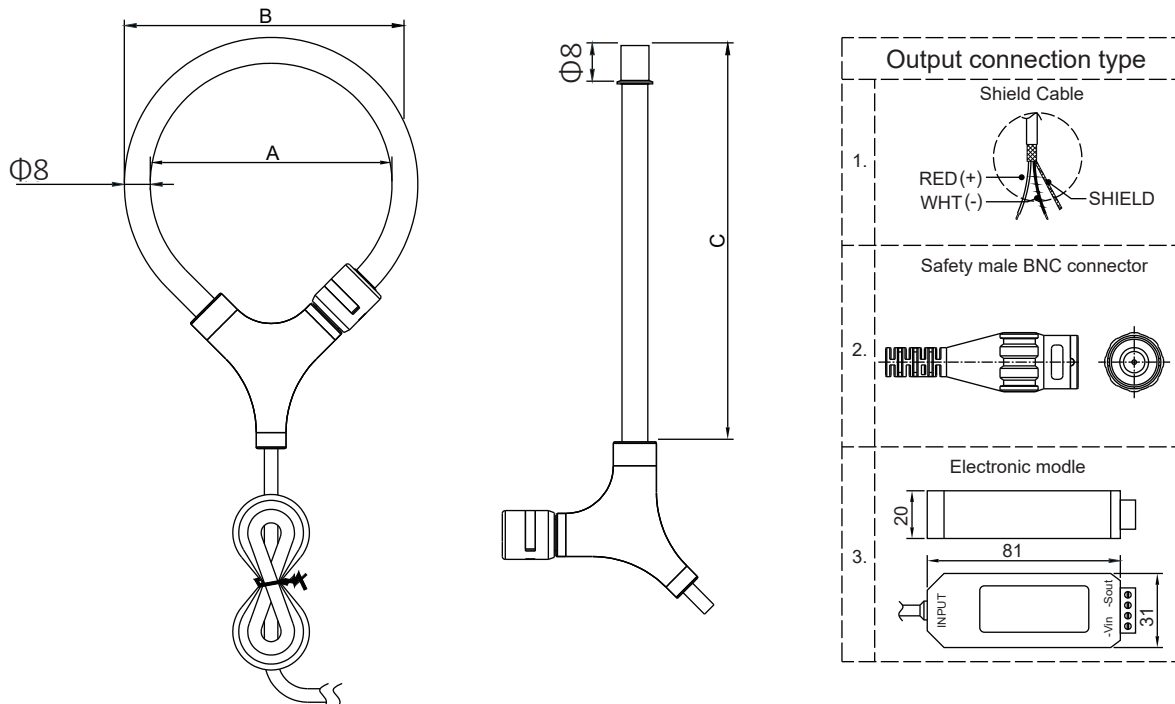


General Data

1. Ambient operating temperature: $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$
2. Ambient storage temperature: $-25^{\circ}\text{C} \sim +75^{\circ}\text{C}$
3. Standards Safety: IEC 61010-1:2001, 600 V CAT III

Dimension

Dimensions(mm)	FQ-RCT01-55	FQ-RCT01-80	FQ-RCT01-105
	FQ-RCTA01-55	FQ-RCTA01-80	FQ-RCTA01-105
Window A	55	80	105
Coil OD B	68.5	93.5	118.5
Coil Length C	200	300	380
Output connection	1. UL2586-ESB 2x24AWG L=150cm (as required)		
	2. Coax terminated with safety male BNC connector L=300cm (as required)		
	3. UL2586-ESB 2x24AWG L=150cm (as required) with integrator		

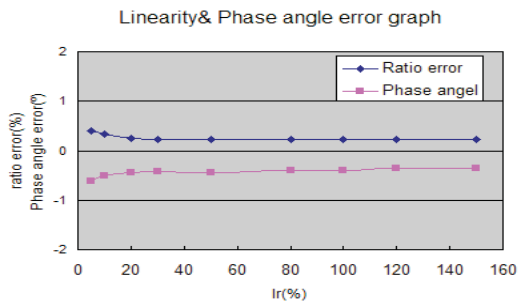


Parameter

Electrical parameters

Model	FQ-RCT01-55	FQ-RCT01-80	FQ-RCT01-105	FQ-RCTA01-55	FQ-RCTA01-80	FQ-RCTA01-105	
Current Range	10A~10kA			10A~6000A			
Frequency	25Hz~20kHz			45Hz~600Hz			
Output Voltage	Rated current	500A	1000A	2000A	250A, 500A 800A, 1000A	1000A, 1500A, 2000A, 2500A	1000A, 2000A, 2500A, 3000A
	50Hz	50mV AC	100mV AC	200mV AC	333mV 1mV/A		
Max output	/			3.0V AC max			
Accuracy	<1% @25°C (45-65Hz)			<1% @25°C (45-65Hz)			
Phase error	<60' @25°C (45-65Hz)			<60' @25°C (45-65Hz)			
Output sensitivity	±2% Max (No Calibration)			1%			
	±0.5% @25°C (With Calibration)						
Linearity error	±0.2% (10%-100%I1n)			±0.2%			
Position Sensitivity	±2%			±2%			
External Influence	±2% Max			±1.5% Max			
Power Supply	/			10-30VDC,30mA Max.			

Linearity & Phase Angle Error Graph



Current range 10~ 1000A @ 25°C

Position Sensitivity

	Bus bar Position		Window A of coil (Φmm)			Position error
			55	80	105	
	Φ (mm)		<12.5	<20	<35	<0.5%
	Phase Angle (°)		90°~270°			<1%
	Radius(mm)	r	<10	<15	<25	<2%

Usage Instruction

