

Rogowski Coil <u>Flexible Current Transformers</u>

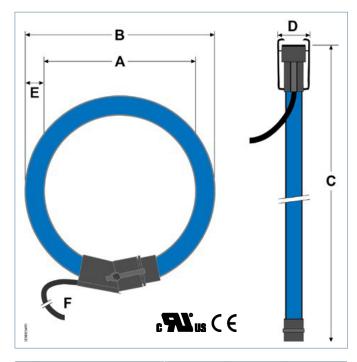
Technical Specification Sheet

Description

Siemens Rogowski Coil Flexible Current Transformers (CTs) have been designed for accurate, non-intrusive measurement of AC current, pulsed DC or distorted waveforms. These types of sensors may be used to measure AC current over a wide dynamic range and from 20 Hz to 5 kHz. They are targeted for use with the Siemens MD Series Power Meters.

Features

- Available in three sizes:
- 16" Coil (40 cm); creates a 4.5" (11.5 cm window
- 24" Coil (60 cm); creates a 7.0" (18 cm) window
- 36" Coil (90 cm); creates a 10.8" (28 cm) window
- Accuracy is <1.2%*
- 131 mVAC/1000A @ 60Hz 109.17 mVAC/1000A @ 50 Hz
- May be used with Siemens BACnet/Modbus Energy Meter
- * The Rogowski Coil CT is UL Rated to 100KA AC. The Siemens MD Model Power Meter is rated for 5 to 4000A.



Description		Dimensions in inches (cm)		
		R16	R24	R36
Α	Window Size	4.5 (11.5)	7.0 (18.0)	10.8 (27.5)
В	Transformer Coil O.D.	5.5 (13.9)	8.0 (20.3)	11.8 (29.9)
С	Transformer Length	16.0 (40)	23.6 (60.0)	35.4 (90.0)
D	Locking Connector O.D.	0.78 (2.0)		
Е	Transformer Coil Diameter	0.47 (1.2)		
F	Wire Lead Total Length	79 (200)		

Specifications

Electrical (All accuracies specified at 20°C [+ 2°C]. Rogowski	Output Signal	131 mV/1000A @ 60 Hz 109.17 mV/1000A @ 50 Hz
Coil installed using best practices with conductor centered in the CT window and ensure any external	Current Range	5 to 4000A AC
conductors are a minimum distance of > 2X the diameter of the RoCoil.)	Wire Colors	White = (+) positive Brown = (-) negative Bare wire = shield
	Frequency Range	20 Hz to 5 Hz
	Phasing Orientation	Arrow points towards load
	Phase Shift Linearity + 0.2%	< 0.2° at 50/60 Hz
	Conductor Position Sensitivity	+ 2% maximum
	Influence of External Field	+ 1.5% maximum
	Temperature Sensitivity	0.07% per °C
	Phase Error	<-0.5°
	Ratio Error	< 0.5%
Mechanical	Coil Materials	Blue thermoplastic rubber, flameretardant UL 94 V-0 rated
	Coupling Materials	PA6 UL 94 V-0 rated
	Shielding	100% transducer, 100% shielded output lead
	Operating Temperature	-4°F to 158°F (-20°C to 70°C)
	Maximum Storage Temperature	176°F (80°C)
	Weight	R16 5 oz (136 g) R24 6 oz (181 g) R36 8 oz (227 g)
Safety	Working Voltage	1000 Vrms, maximum
	Dielectric Strength	7400 Vac around coil 1000 Vac rated leads
	Certifications	UL Recognized to UL Standard 61010-1 cUL Recognized to CAN/CSA Standard C22.2 No. 61010-1
	CE Conformity	CE Low Voltage Directive 2006/95/EC

Ordering Information

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Catalog No.	Description
US2:SCTR16131OU	Rogowski Coil Current Transformer, 16" (40 cm); 4.5" (11.5 cm) opening; 4000A
US2:SCTR241310U	Rogowski Coil Current Transformer, 24" (60 cm); 7.0" (18 cm) opening; 4000A
US2:SCTR361310U	Rogowski Coil Current Transformer, 36" (90 cm); 10.8 (28 cm) opening; 4000A

Siemens Industry, Inc. 5400 Triangle Parkway Norcross, GA 30092

1-800-241-4453 info.us@siemens.com

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