



ROGOWSKI COIL

Standard Accuracy



The Rogowski Coil Current Transformers are designed to convert an AC operating current into a low voltage AC millivolt signal for use with microprocessor-based circuits that require the highest accuracy and precision. The Flexible Rogowski Coil is designed to use where regular solid or split core current transformers cannot fit and are ideal for power quality monitoring, such as harmonics. Advantages include high accuracy, wide measurement and frequency range, and no additional integrator or power supply is needed. Rogowski coils come standard unterminated stripped and tinned lead wires for easy connection to any of the Single or 3 Phase ACI power meter. Rogowski Coil models listed here are compatible with the ACI KW350-P1-D-S-RC, KW320-P1-D-W-RC-XX, KW320-P1-D-W-RC-PC, KW1850-P1-D-W, and KW1850-P1-D-S Power Meters where typical power measurements are required. For best accuracy, the coils should be selected based upon the size of the conductors being monitored by selecting the proper window size and referencing

the expected maximum and minimum currents for the targeted application. The acceptable Measurement Current Range and Window Size are referenced in the ordering grid table. Please contact ACI for more information regarding the Rogowski Coil Current Transformers.

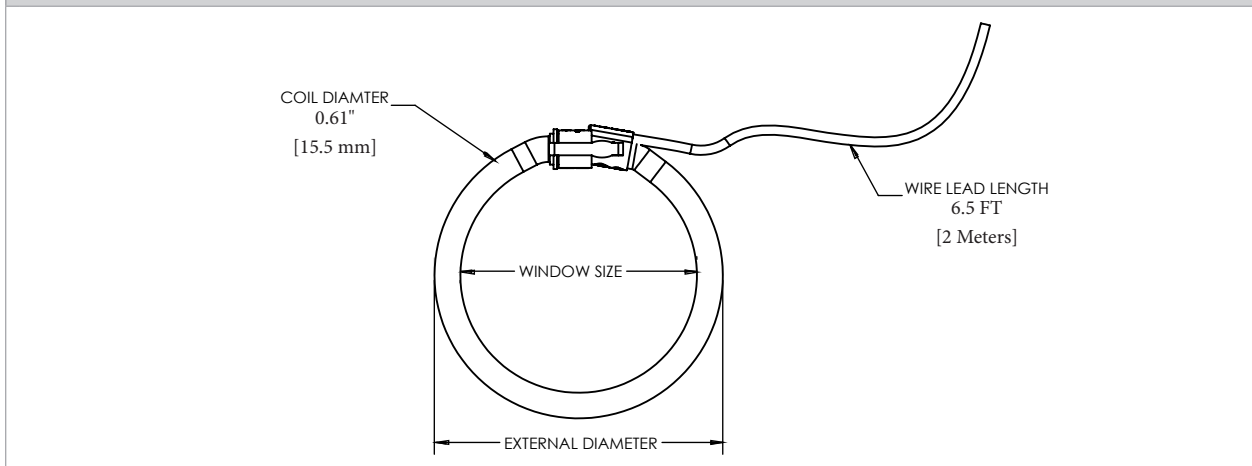
Applications: Tennant Billing, Energy and Demand Metering, Load Surveys, LEED/Green Projects, ROI / Project Justification

PRODUCT SPECIFICATIONS	
Monitored Current Type:	AC Current
Input Range:	5 to 5000A
Core Style:	Flexible Rope Styles Form Factor
Dielectric Strength:	7400Vac @ 50/60Hz for 1 minute
Operating Frequency Range:	20 Hz to 5 kHz
Withstand Voltage:	5,000VAC
Sensor Amperage Range:	See Ordering Grid
Accuracy:	0.5% From 10 to 120% of Rated Current
Polarity:	Arrow towards load (current flow direction)
Temperature Drift:	+/- 0.07%
Operating Temperature Range:	-4 to 158°F (-20 to 70°C)
Storage Temperature Range:	-40 to 185°F (-40 to 85°C)
Operating/Storage Humidity Range:	5 to 95%, non-condensing
Maximum Elevation:	9,842 ft (3 Kilometers)
Case Material/Flammability Rating:	Orange thermoplastic rubber, flame retardant UL 94 V-0 rated
Over Voltage Category:	1000V CAT III, 600V CATIV
Wiring Connections:	Stripped and Tinned Lead Wires
	White: Positive (+)
Lead Wire Colors:	Brown: Negative (-)
	Bare-Shield
Lead Wire Size:	26AWG
Cable Size:	1000V UL STYLE 20940; External diameter 5mm; Wires 2x 26AWG
Lead Length:	6.5 ft (15.5mm)
Coil Diameter:	0.61" (15.5mm)
Agency Approvals:	URL, CE and RoSH2 Compliant
Product Weight:	RCT16 - 0.2lbs (0.09kg) RCT24 - 0.4lbs (0.18kg) RCT36 - 0.6lbs (0.27kg) RCT47 - 1.0lbs (0.45kg)





DIMENSIONAL DRAWING



DIMENSIONAL MEASUREMENTS

Dimensions	RCT16	RCT24	RCT36	RCT47
Window Size	4.17" (106 mm)	7.01" (178 mm)	10.67" (271 mm)	14.53" (369 mm)
Coil Length	15.75" (400 mm)	23.62" (600 mm)	35.43" (900 mm)	47.24" (1200 mm)
External Diameter	5.63" (143 mm)	8.13" (207 mm)	11.89" (302 mm)	15.66" (398 mm)
Coil Diameter	0.61" (15.5 mm)			
Wire Lead Length	6.5 FT (2 Meters)			

ORDERING INFORMATION

Model #	Item #	Output/1000A @ 50Hz	Output/1000A @ 60Hz	Range Calibrated To ¹
RCT16-1000	148147	100mV	120mV	5 to 1200A
RCT16-2500	148148	40mV	48mV	12.5 to 3000A
RCT24-1000	148149	100mV	120mV	5 to 1200A
RCT24-2500	148151	40mV	48mV	12.5 to 3000A
RCT24-5000	148152	20mV	24mV	25 to 6000A
RCT36-1000	148153	100mV	120mV	5 to 1200A
RCT36-2500	148154	40mV	48mV	12.5 to 3000A
RCT36-5000	148155	20mV	24mV	25 to 6000A
RCT47-2500	148156	40mV	48mV	12.5 to 3000A
RCT47-5000	148157	20mV	24mV	25 to 6000A

Note¹: The range is when connecting to KW320, KW350 and KW1850.