

AcuCT Flex Series

Rogowski Coil CT Datasheet



Accuenergy's AcuCT Flex Series Rogowski coil current transformers are engineered for high-accuracy measurements of AC current. Ideal for precision power metering, PQ analysis, or general energy monitoring applications, the versatile AcuCT Flex is essential when space is limited and rigid-body current transformers won't fit. The rope-like form factor can easily wrap around irregularly shaped conductors in crowded panels or switchgear.

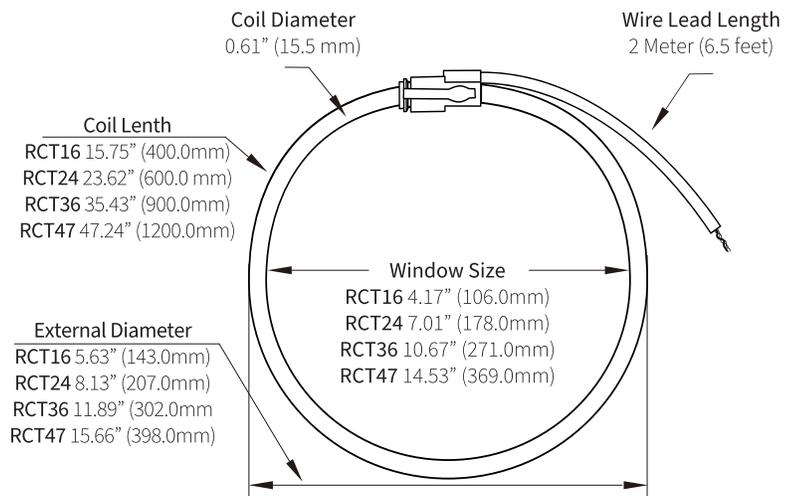
Features

- High accuracy measurements for rigorous applications
- Broad frequency range is well-suited for measuring harmonics & power quality
- Current input range: 5A – 50,000A AC
- Available in four, standard lengths: 16", 24", 36" or 47"
- Does not require an external power supply or integrator when used with Accuenergy meters
- Fully customize output ratio, input ratio, and length to adapt to any project

Specifications

RATED CURRENT	
Current Range	5A-50,000A
Accuracy	0.5% - IEEE C57.13 class 0.6
MECHANICAL/ENVIRONMENTAL	
Form Factor	Flexible Rope Like CT
Window Size	RCT16 - 106.0mm (4.17") RCT24 - 178.0mm (7.01") RCT36 - 271.0mm (10.67") RCT47 - 369.0mm (14.53")
External Diameter	RCT16 - 143.0mm (5.63") RCT24 - 207.0mm (8.13") RCT36 - 302.0mm (11.89") RCT47 - 398.0mm (15.66")
Length of Coil	RCT16 - 400.0mm (15.75") RCT24 - 600.0mm (23.62") RCT36 - 900.0mm (35.43") RCT47 - 1200.0mm (47.24")
Case Material	Orange thermoplastic rubber UL 94V-0 rated flame retardant
Lead Wires	1000V UL Style 20940, 26AWG
Operating Temperature	-20°C to 70°C / -4°F to 158°F
Temperature Drift	+/- 0.07% per °C
Operating Humidity	Non-condensing, 0 to 95% RH
Installation Conditions	IP61
ELECTRICAL	
Wire Polarity	White=Positive, Brown=Negative, Bare=Shield
Phase Orientation	Arrow Points Towards Load
Frequency Range	45Hz - 65Hz
Frequency Response	10Hz - 20KHz
SAFETY/COMPLIANCE	
Working Voltage	1000V CAT III, 600V CAT IV
Dielectric Strength	7400Vac @ 50/60Hz for 1 minute
Certifications	CE, RoHS, cURus (E359521)

Dimensions



mV/kA Output Standard & Custom Output

Multiple output ratio options are available such as 100mV/1000A, 40mV/1000A, 25mV/1000A, 10mV/1000A.

Model ¹	Output /1000A @60Hz	Output /1000A @50Hz	Calibrated Range with "RCT" input devices ²
RCTxx-200	600mV	500mV	1A-240A
RCTxx-500	240mV	200mV	2.5A-600A
RCTxx-1000	120mV	100mV	5A-1200A
RCTxx-2500	48mV	40mV	12.5A-3000A
RCTxx-5000	24mV	20mV	25A-6000A
RCTxx-10000	12mV	10mV	50A-12000A
RCTxx-50000	2.4mV	2mV	250A-60000A
RCTxx-Custom	Output any ratio of signal per your requirement. Contact Us at 1-877-721-8908 or email marketing@accuenergy.com		

¹"xx" denotes length of current transformer coil.

²When used with Accuenergy meters. Performance and range may vary when used with non-Accuenergy power meters or devices.

Accessories

BNC Connector

For a fast, secure, and reliable connection to devices, the AcuCT Flex Rogowski Coils comes with a BNC Connector option. It's ring-lock mechanism firmly secures the lead wire in place for peace of mind installation.

Part Number Example: **RCT36-5000-BNC**

Extended Temperature Rating

The Extended Temperature Rating is designed for the AcuCT Flex Series to perform continuously under extreme temperature environments ranging from -45C to 125C (-49 to 257F) without sacrificing high precision.

Part Number Example: **RCT24-2500-ET**

IP68 Environmental Protection

When environmental conditions are challenging, the AcuCT Flex IP68 Rated option confidently protects its electrical components from dust, dirt, and solid ingress and provides total water protection with its waterproof enclosure.

Part Number Example: **RCT16-1000-IP68**



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Specs Subject To Change Without Notice.

Ordering Information

	Model	Current Range	Lead Length
Ordering Number	-	:	
Ordering Example	RCT24	- 5000	: 25m
	RCT16	1000: 5A-1200A	Blank - 2 Meters/6.5ft
	RCT24	2500: 12A-3000A	5m - 5 Meters/16.4ft
	RCT36	5000: 25A-6000A	10m - Meters/32.8ft
	RCT47	10000: 50A-12000A	25m - 25 Meters/82ft
		50000: 250A-50000A	50m - 50 Meters/164ft