AcuCT A Series

AcuCT-100A

Revenue Grade Split-Core
Current Transformer Datasheet

The AcuCT-100A is a premium, revenue-grade split-core current transformer designed for high-accuracy energy measurements and power monitoring applications. Multiple output options and 0.2% accuracy across all rated currents make it ideal for metering and billing verification. The user-friendly press-open design with a durable, compact form factor enables fast installation. Optional bolt mount or DIN rail mounting accessories are available to support secure installation in challenging applications.

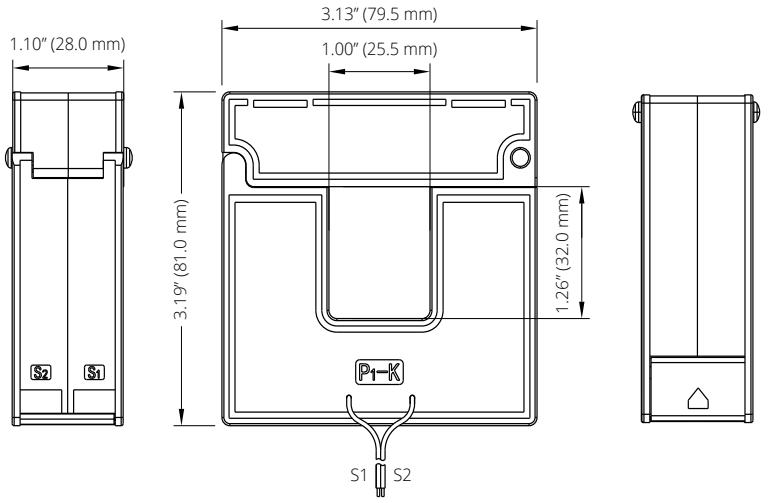
Features

- Revenue grade 0.2% accuracy from 5% – 120% of rated current, on all rated currents.
- Multiple output options including 80mA,100mA, 250mV and 333mV on all rated currents.
- Optional 50 – 400 Hz version for aerospace, marine, and shipboard power systems with an accuracy of 0.2% across the full range.
- Optional 50 Hz – 2 kHz version for motor current signature analysis, available on the 100 A rating with 333 mV output.
- Press-open split-core design enables quick and simple installation.

Specifications

RATED CURRENT	100A, 125A, 150A, 200A, 250A
Current Range	5% - 120% of Rated Current
Output	80mA, 100mA, 250mV, 333mV
Accuracy	0.2% 0.5% for Extended Frequency Variant
MECHANICAL/ENVIRONMENTAL	
Form Factor	Press Open Split-Core CT
Window Size	25.5 mm x 32.0 mm (1.00" x 1.26")
Exterior Dimensions	79.5 mm x 81 mm x 28 mm (3.13" x 3.19" x 1.10")
Case Material	UL 94V-0 Rated Flame Retardant
Lead Wires	2.5 m (8 ft), Twisted Pair, 16 / 18 AWG
Operating Temperature	-25°C to 70°C / -13°F to 158°F
Storage Temperature	-40°C to 80°C / -40°F to 176°F
Operating Humidity	Non-Condensing, 5% to 95% RH
Installation Conditions	Indoor Use
ELECTRICAL	
Wire Polarity	White=Positive, Black=Negative
Phase Orientation	P1-K Points Towards Source
Frequency Range	50 / 60 Hz (Standard) 50 Hz – 400 Hz (400 Hz Models Only) 50 Hz – 2 kHz (2 kHz Models Only)
Burden	2.5 Ω – 5 Ω @ 80 mA, 100 mA Output
Insulation Resistance	500 V / 100 MΩ min
Rated Continuous Thermal Current	120% of Rated Current
SAFETY/COMPLIANCE	
Withstand Voltage	5.0 kV / 1 mA / 1 min
Rated Voltage	600VAC, Rated CAT IV, PD3
Certifications & Compliance	CE, RoHS, UL Listed UL2808, CSA C22.2, IEC 61010-1

Dimensions



Typical Parameters

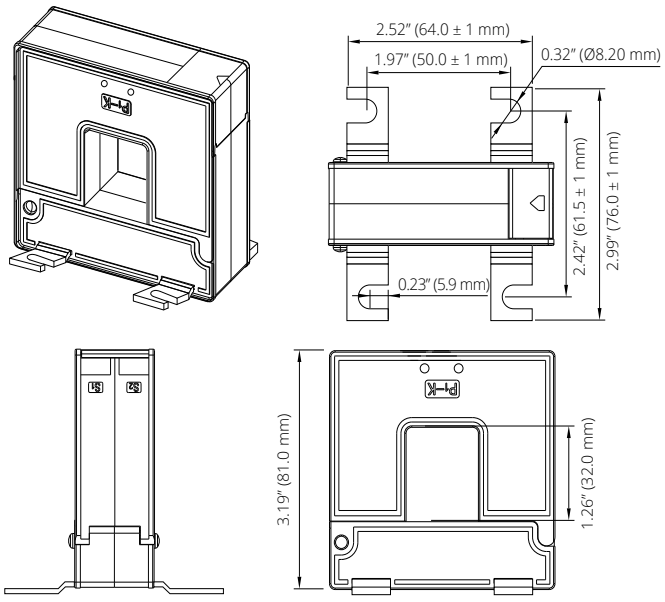
MODEL	CURRENT RATIO	FREQUENCY	ACCURACY	BURDEN / RESISTANCE	LEAD LENGTH
AcuCT-100A-100: 80mA	100 /80 mA	50 / 60 Hz	0.2%	2.5 Ω	2.5 m
AcuCT-100A-125: 80mA	125 / 80 mA	50 / 60 Hz	0.2%	2.5 Ω	2.5 m
AcuCT-100A-150: 80mA	150/ 80 mA	50 / 60 Hz	0.2%	2.5 Ω	2.5 m
AcuCT-100A-200: 80mA	200 / 80 mA	50 / 60 Hz	0.2%	2.5 Ω	2.5 m
AcuCT-100A-250: 80mA	250 / 80 mA	50 / 60 Hz	0.2%	5 Ω	2.5 m
AcuCT-100A-100: 100mA	100 / 100 mA	50 / 60 Hz	0.2%	2.5 Ω	2.5 m
AcuCT-100A-125: 100mA	125 / 100 mA	50 / 60 Hz	0.2%	2.5 Ω	2.5 m
AcuCT-100A-150: 100mA	150 / 100 mA	50 / 60 Hz	0.2%	2.5 Ω	2.5 m
AcuCT-100A-200: 100mA	200 / 100 mA	50 / 60 Hz	0.2%	2.5 Ω	2.5 m
AcuCT-100A-250: 100mA	250 / 100 mA	50 / 60 Hz	0.2%	5 Ω	2.5 m
AcuCT-100A-100: 250mV	100 / 250 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-125: 250mV	125 / 250 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-150: 250mV	150 / 250 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-200: 250mV	200 / 250 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-250: 250mV	250 / 250 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-100: 333mV	100 / 333 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-125: 333mV	125 / 333 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-150: 333mV	150 / 333 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-200: 333mV	200 / 333 mV	50 / 60 Hz	0.2%		2.5 m
AcuCT-100A-250: 333mV	250 / 333 mV	50 / 60 Hz	0.2%		2.5 m

Mounting Accessories

The optional ACUBRAC-SP9 mounting bracket includes both a bolt mounting kit and a DIN rail mounting kit.

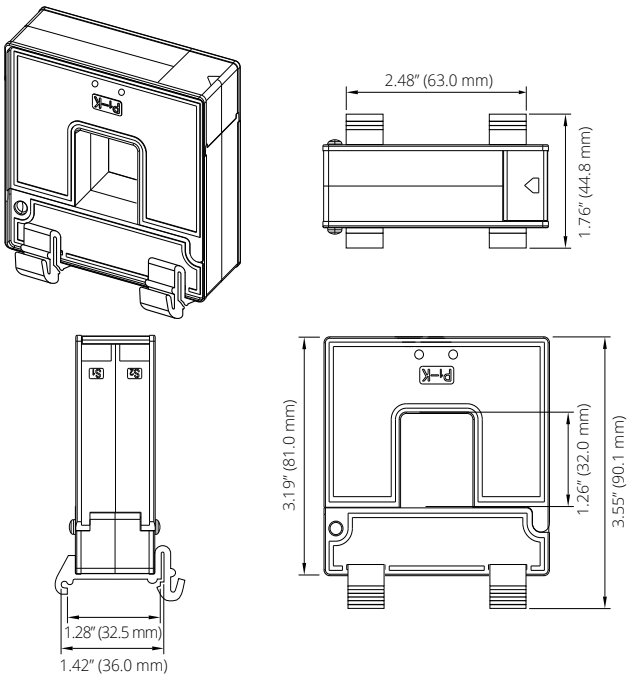
1. Bolt Mounting Kit

Optional bolt mounting kit with M8 U-shaped slot is available for secure installation.



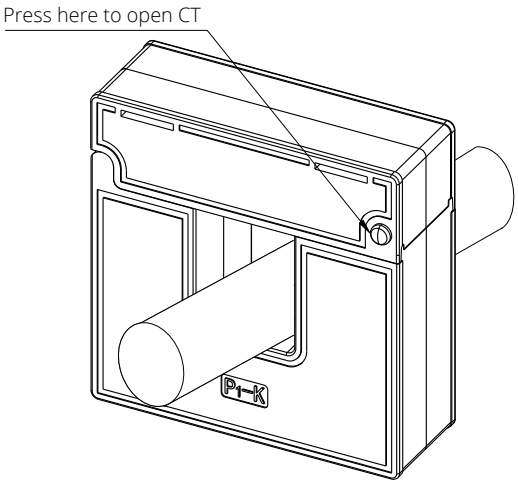
2. DIN Rail Mounting Kit

Compatible with standard 35mm DIN rail for convenient enclosure installation.

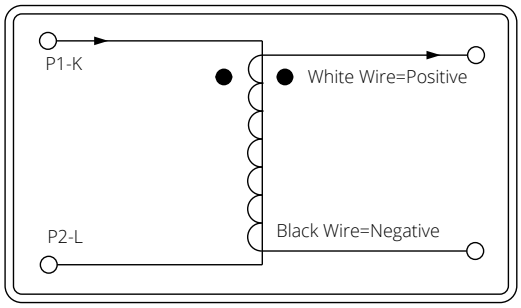


Installation Instructions

1. Press the buttons on both sides of the upper housing of CT to open it, so that the primary conductor cable can be passed through the current transformer window without disconnecting the cable.



2. Insert the primary conductor cable through the window from P1-K side, which must point towards the source. The white wire is the positive lead, and the black wire is the negative lead. This will ensure correct phase orientation during installation.



Ordering Information

	Model	-	*Rated Input*	:	*Rated Output*	-	*Frequency*
	AcuCT-100A		100: 100A		80mA		Blank: 50/60Hz
			125: 125A		100mA		400: 50-400Hz
			150: 150A		250mV		
			200: 200A		333mV		
			250: 250A				
Ordering Example	**AcuCT-100A**	**-**	**125**	**:**	**333mV**		
	AcuCT-100A	**-**	**100**	**:**	**100 mA**	**-**	**400**

Extended Frequency Variant

	Model	-	*Rated Input*	:	*Rated Output*	-	*Frequency*
	AcuCT-100A		100: 100A		333mV		2K: 50Hz – 2kHz
Ordering Example	**AcuCT-100A**	**-**	**125**	**:**	**333mV**	**-**	**2K**

+ **Accessory *(Optional)***

Model	*Accessory*
ACUBRAC	SP9
Ordering Example	**ACUBRAC - SP9**

Accuenergy Inc.
Los Angeles - Toronto - Pretoria
North America Toll Free: 1-877-721-8908
Web: www.accuenergy.com
Email: marketing@accuenergy.com

Revision Date: September 2026 Version: 1.0.1
Specs Subject To Change Without Notice.