

AcuCT A Series

AcuCT-050A

Revenue Grade Split-Core
Current Transformer Datasheet



The AcuCT-050A is a premium, revenue grade split-core current transformer designed for high accuracy energy measurements and power monitoring applications. Multiple output options and class 0.5S accuracy, depending on the model, makes it ideal for metering and billing verification. The user-friendly press-open design with a durable, compact form factor enables fast installation. Optional zinc-plated mounting accessory provides stable connection and corrosion resistance for safety and quality in challenging applications.

Features

- Revenue grade accuracy compliant with IEC 61869-2 Class 0.5S from 1% - 120% of rated current.
- Multiple output options including 80mA, 100mA, 250mV, and 333mV.
- Wide frequency for reliable operation from 50Hz to 400Hz.
- Press-open split-core design enables quick and simple installation.



Specifications

RATED CURRENT	20A, 30A, 50A, 60A, 80A, 100A, 150A
Current Range	1% - 120%; 5% - 120% of Rated Current
Output	80mA, 100mA, 250mV, 333mV
Accuracy	0.2% @ 20A - 30A @ 250mV and 333mV 0.5% @ 20A - 30A @ 80mA and 100mA IEC 61869-2 Class 0.5S @ 50A - 150A

MECHANICAL/ENVIRONMENTAL

Form Factor	Press Open Split-Core CT
Window Size	Ø 13.0 mm (0.51")
Exterior Dimensions	83 mm x 83 mm x 45 mm (3.27" x 3.27" x 1.77")
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

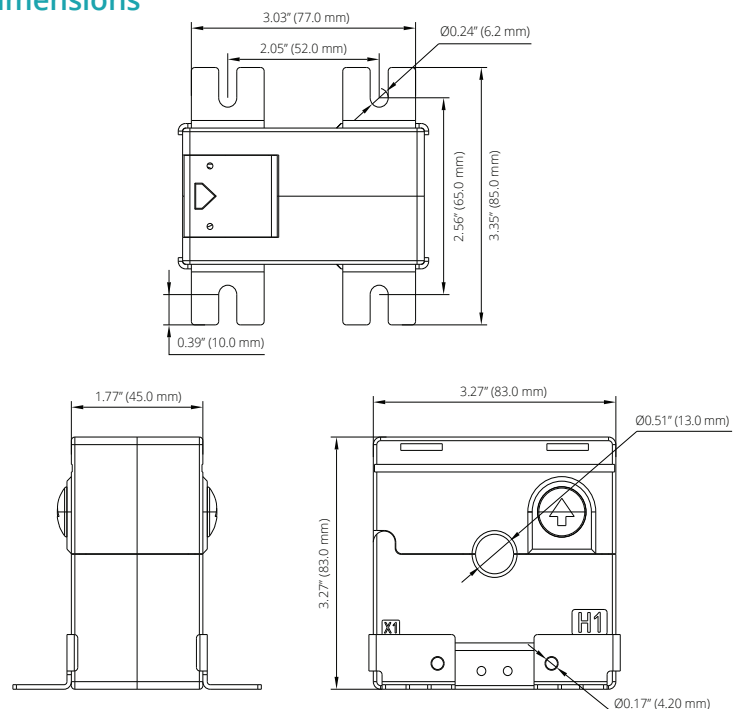
ELECTRICAL

Wire Polarity	White=Positive, Black=Negative
Phase Orientation	H1 Points Towards Source
Frequency Range	50 Hz - 400 Hz
Burden @ 80mA and 100mA Output	2.5 Ω - 10 Ω @ mA Output
Insulation Resistance	500 V / 100 MΩ min

SAFETY/COMPLIANCE

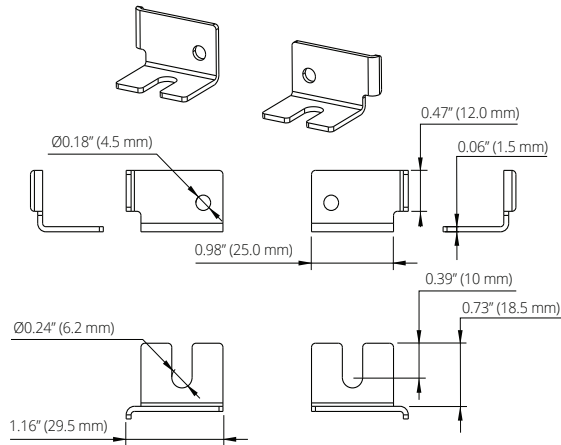
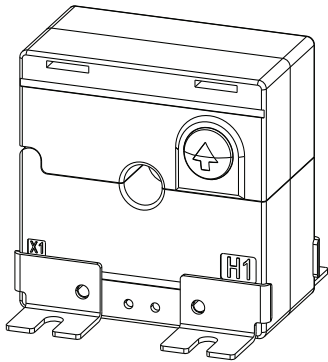
Withstand Voltage	5.0 kV / 1 mA / 1 min
Rated Voltage	600VAC, Rated CAT IV, PD3
Certifications & Compliance	CE, RoHS, UL Listed UL2808, CSA 22.2, IEC 61010-1, and IEC 61869-2

Dimensions



Mounting Accessory

Optional mounting kit is available which can be used to secure the device. Each kit includes 4 mounting brackets, 2 mounting screws (M4 x 55 mm), and 2 mounting nuts (M4 x 3 mm or M4 x 5 mm). The zinc-plated accessory provides corrosion protection and is recommended to be tightened at torque of 0.5 to 0.8 N·m.

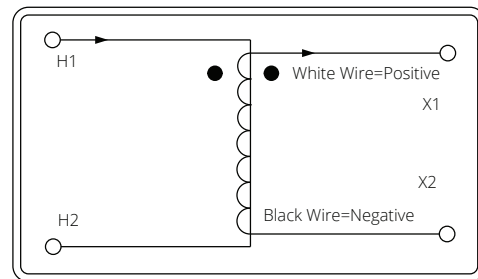
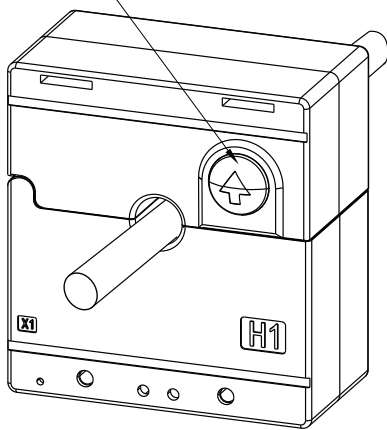


Installation Instructions

1. Press the buttons on both sides of the upper housing of CT to open it, so that the primary conductor cable is connected to the current transformer.

2. Insert the primary conductor cable through the window from H1 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.

Press here to open CT



Ordering Information

Model	-	Rated Input	:	Rated Output
AcuCT-050A		20: 20A		80mA
		30: 30A		100mA
		50: 50A		250mV
		60: 60A		333mV
		80: 80A		
		100: 100A		
		150: 150A		

Ordering Example AcuCT-050A - 20 : 333mV

+ **Accessory (Optional)**

Model	Accessory
ACUBRAC	SP5

Ordering Example ACUBRAC - SP5



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Revision Date: May 2026 Version: 1.0.0
 Specs Subject To Change Without Notice.