

AcuCT S165 Series

Solid-Core Current Transformer Datasheet



The AcuCT S165 solid-core current transformer delivers up to IEC 61869-2 Class 0.2 measurement accuracy at 5% to 120% rated current making it ideal for revenue-grade billing and load management solutions when paired with high-precision energy meters. Available in a wide range of rated current input options, from 100A to 1200A, as well as current output options, covering a wide range of applications across both commercial and industrial sectors.

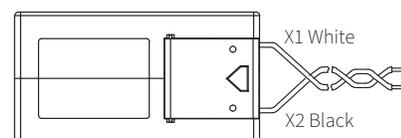
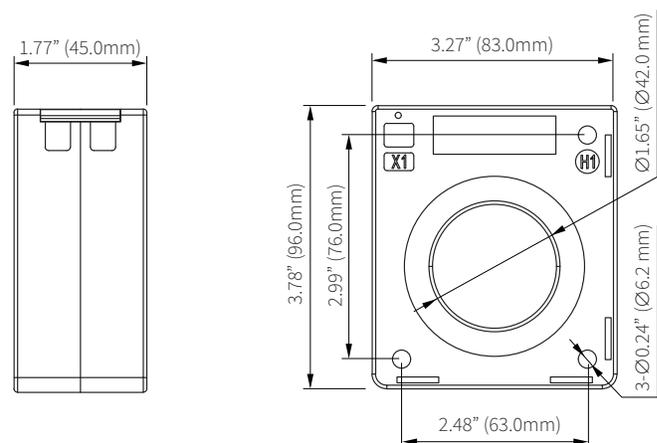
Features

- Accuracy class: 0.2
- Current Input Options: 100A, 200A, 300A, 400A, 500A, 600A, 800A, 1000A, 1200A
- Current Output Options: 5A, 1A, 100mA, 80mA, 333mV

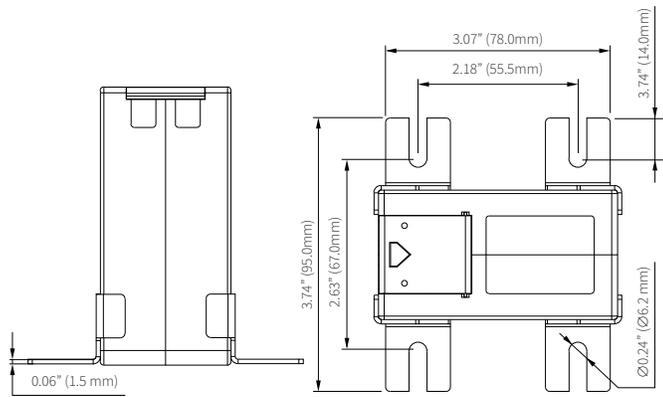
Specifications

RATED CURRENT	100A, 200A, 300A, 400A, 500A, 600A, 800A, 1000A, 1200A
Current Range	5%-120% of Rated Current
Output	5A, 1A, 100mA, 80mA, 333mV
Accuracy	IEC 61869-2 Class 0.2
MECHANICAL/ENVIRONMENTAL	
Exterior Dimensions	83mm x 96mm x 45mm 3.27" x 3.78" x 1.77"
Window Size	Ø 42.0mm (1.65")
Case Material	Epoxy Encapsulated Housing
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
Lead Wires	2.5m (8ft) Twisted Pair, 18AWG
Installation Conditions	Indoor Use
ELECTRICAL	
Wire Polarity	White=Positive, Black=Negative
Phase Orientation	H1 Points Towards Source
Frequency Range	50/60Hz
Burden	1.5-5VA@1/5A; 10Ω@mA; 0.83-10Ω@333mV
Insulation Resistance	500V / 100MΩ min
Rated Voltage	600VAC, Rated CAT IV
SAFETY/COMPLIANCE	
Certifications	CE, RoHS, UL Listed UL 2808

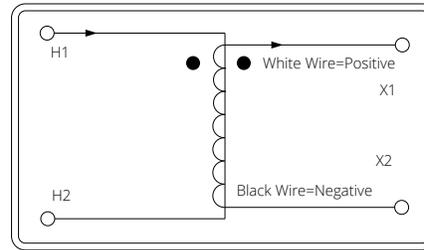
Dimensions



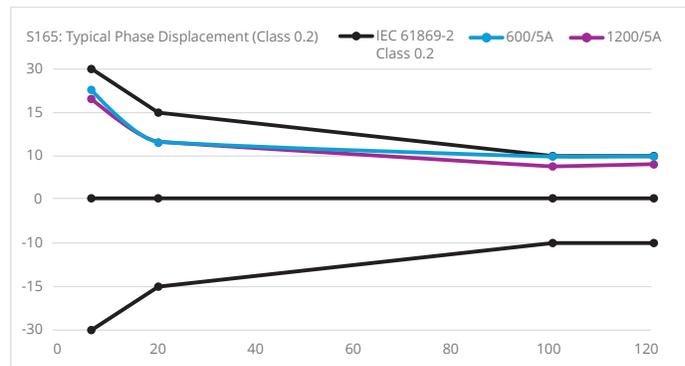
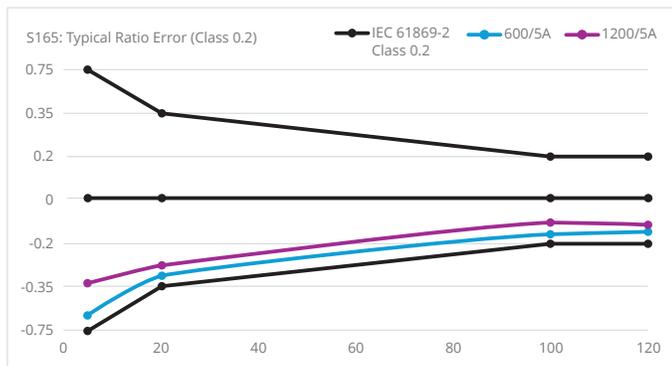
Mounting Dimension



Installation Instructions



IEC 61869-2 0.2 Compliance



Typical Parameter

MODEL	CURRENT RATIO	ACCURACY CLASS	BURDEN/RESISTANCE	LEAD LENGTH
AcuCT-S165-100:5A	100/5A	0.2	2.5VA	2.5M
AcuCT-S165-200:5A	200/5A	0.2	2.5VA	2.5M
AcuCT-S165-300:5A	300/5A	0.2	2.5VA	2.5M
AcuCT-S165-400:5A	400/5A	0.2	2.5VA	2.5M
AcuCT-S165-500:5A	500/5A	0.2	2.5VA	2.5M
AcuCT-S165-600:5A	600/5A	0.2	2.5VA	2.5M
AcuCT-S165-800:5A	800/5A	0.2	3.75VA	2.5M
AcuCT-S165-1000:5A	1000/5A	0.2	5VA	2.5M
AcuCT-S165-1200:5A	1200/5A	0.2	5VA	2.5M
AcuCT-S165-100:1A	100/1A	0.2	1.5VA	2.5M
AcuCT-S165-200:1A	200/1A	0.2	1.5VA	2.5M
AcuCT-S165-300:1A	300/1A	0.2	1.5VA	2.5M
AcuCT-S165-400:1A	400/1A	0.2	1.5VA	2.5M
AcuCT-S165-500:1A	500/1A	0.2	2.5VA	2.5M
AcuCT-S165-600:1A	600/1A	0.2	2.5VA	2.5M
AcuCT-S165-800:1A	800/1A	0.2	3.75VA	2.5M
AcuCT-S165-1000:1A	1000/1A	0.2	5VA	2.5M

AcuCT-S165-1200:1A	1200/1A	0.2	5VA	2.5M
AcuCT-S165-100:333mV	100/333mV	0.2	10Ω	2.5M
AcuCT-S165-200:333mV	200/333mV	0.2	5Ω	2.5M
AcuCT-S165-300:333mV	300/333mV	0.2	3.33Ω	2.5M
AcuCT-S165-400:333mV	400/333mV	0.2	2.5Ω	2.5M
AcuCT-S165-500:333mV	500/333mV	0.2	2Ω	2.5M
AcuCT-S165-600:333mV	600/333mV	0.2	1.665Ω	2.5M
AcuCT-S165-800:333mV	800/333mV	0.2	1.25Ω	2.5M
AcuCT-S165-1000:333mV	1000/333mV	0.2	1Ω	2.5M
AcuCT-S165-1200:333mV	1200/333mV	0.2	0.83Ω	2.5M
AcuCT-S165-100:100mA	100/100mA	0.2	10Ω	2.5M
AcuCT-S165-200:100mA	200/100mA	0.2	10Ω	2.5M
AcuCT-S165-300:100mA	300/100mA	0.2	10Ω	2.5M
AcuCT-S165-400:100mA	400/100mA	0.2	10Ω	2.5M
AcuCT-S165-500:100mA	500/100mA	0.2	10Ω	2.5M
AcuCT-S165-600:100mA	600/100mA	0.2	10Ω	2.5M
AcuCT-S165-800:100mA	800/100mA	0.2	10Ω	2.5M
AcuCT-S165-1000:100mA	1000/100mA	0.2	10Ω	2.5M
AcuCT-S165-1200:100mA	1200/100mA	0.2	10Ω	2.5M
AcuCT-S165-100:80mA	100/80mA	0.2	10Ω	2.5M
AcuCT-S165-200:80mA	200/80mA	0.2	10Ω	2.5M
AcuCT-S165-300:80mA	300/80mA	0.2	10Ω	2.5M
AcuCT-S165-400:80mA	400/80mA	0.2	10Ω	2.5M
AcuCT-S165-500:80mA	500/80mA	0.2	10Ω	2.5M
AcuCT-S165-600:80mA	600/80mA	0.2	10Ω	2.5M
AcuCT-S165-800:80mA	800/80mA	0.2	10Ω	2.5M
AcuCT-S165-1000:80mA	1000/80mA	0.2	10Ω	2.5M
AcuCT-S165-1200:80mA	1200/80mA	0.2	10Ω	2.5M

Note: In addition to the recommended accuracy classes listed above, custom accuracy class configurations are also available (e.g., 0.5, 0.5S, 0.2S).

Ordering Information

	<i>Model</i>	<i>Rated Input</i>	<i>Rated Output</i>
Ordering Example	AcuCT-S165	- 800	: 333mV
		100: 100A	5A
		200: 200A	1A
		300: 300A	333mV
		400: 400A	100mA
		500: 500A	80mA
		600: 600A	
		800: 800A	
		1000: 1000A	
		1200: 1200A	



Accuenergy Inc.

Los Angeles - Toronto - Pretoria

North America Toll Free: 1-877-721-8908

Web: www.accuenergy.com

Email: marketing@accuenergy.com

Revision Date: Revision Date: Dec 2025 Version: 1.0.1

Specs Subject To Change Without Notice.