



Solid-Core

Split-Core

Analog Output

Sensors with 4 to 20 mA Output

The A/CTA and A/SCTA Series current sensors monitor the current flowing to electrical equipment or buildings. The magnitude of this current is then converted into a linear and proportional 4 to 20 mA output signal. The A/CTA Series current sensors are available in either an Average or True RMS output version. Nearly all of these sensors have jumper selectable input ranges, with the exception of the 0 to 5 Amp input range on the A/CTA-5 and A/SCTA-5 Series sensors. This series is fast-acting and extremely accurate from 1 to 100% of the full scale output. The sensors are factory calibrated using a NIST traceable standard. Every device on this cutsheet features a patented Din-Rail mounting system (Pat. no. US 7,416,421) for ease of installation.

The A/CTA and A/SCTA Series are covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, www.workaci.com.



Specifications

Sensor Supply Voltage	+12 to 30 VDC		
Amperage Rating	0-250A (See Ordering Information)		
Supply Current	36 mA maximum		
Output	4-20 mA, 2-wire Loop Powered		
Max Load Resistance (A/CTA & A/SCTA)	700 Ohms @ 24 VDC (Vs-9)/0.02-40.2		
Max Load Resistance (A/CTA-VFD & A/SCTA-VFD)	700 Ohms @ 24 VDC (Vs-10)/0.02		
Response Time	A/CTA & A/SCTA: <75mS	A/CTA-VFD & A/SCTA-VFD: <2 seconds	
Isolation Voltage	2,200 VAC		
Maximum Sensing Current Voltage	600 VAC		
Aperture (Hole) Size	0.75" DIA (insulated conductors required)		
Operating Temp Range (A/CTA & A/SCTA)	-15 to 40°C (5 to 104°F)		
Operating Temp Range (A/CTA-VFD & A/SCTA-VFD)	0 to 40°C (32 to 104°F)		
Operating Humidity Range	0 to 95% RH, non-condensing		
Product Dimensions	Split Core: (L) 3.33" (W) 1.08" (H) 2.70" Solid Core: (L) 3.38" (W) 0.98" (H) 2.27"		
Amp Range (A/CTA) (All Non-VFD Models)	15-200Hz: Not Rated	30-60Hz: +/- 0.5% Accuracy	30Hz-1KHz: +/- 0.5% Accuracy
Amp Range (A/SCTA) (All Non-VFD Models)	15-200Hz: Not Rated	30-60Hz: +/- 0.5% Accuracy	30Hz-1KHz: +/- 0.5% Accuracy
Amp Range (A/CTA-50-VFD) (10, 20 & 50A)	15-200Hz: +/- 1% Accuracy	30-60Hz: +/- 0.75% Accuracy	30Hz-1KHz: ----
Amp Range (A/SCTA-50-VFD) (10, 20 & 50A)	15-200Hz: +/- 2% Accuracy	30-60Hz: +/- 0.75% Accuracy	30Hz-1KHz: ----
Amp Range (A/CTA-250-VFD) (100A)	15-200Hz: +/- 1% Accuracy	30-60Hz: +/- 0.75% Accuracy	30Hz-1KHz: ----
Amp Range (A/CTA-250-VFD) (200 & 250A)	15-200Hz: Not rated	30-60Hz: +/- 0.75% Accuracy	30Hz-1KHz: ----
Amp Range (A/SCTA-200-VFD) (100, 150 & 200A)	15-200Hz: Not rated	30-60Hz: +/- 0.75% Accuracy	30Hz-1KHz: ----

Ordering

Select one Current Switch (A). **NOTE:** LEDs are intended to indicate whether power is applied. Current Switches are not to be used in Life & Safety applications, or in hazardous locations.

A Current Switches

- A/CTA-5 (Loop Powered, Solid-Core, 4-20 mA Average Output) (Jumper Selectable Range: 0-5A (Not Selectable)) CE Compliant
- A/CTA-50 (Loop Powered, Solid-Core, 4-20 mA Average Output) (Jumper Selectable Range: 0-10, 0-20, 0-50A) CE Compliant
- A/CTA-250 (Loop Powered, Solid-Core, 4-20 mA Average Output) (Jumper Selectable Range: 0-100, 0-200, 0-250A) CE Compliant
- A/CTA-50-VFD (Loop Powered, Solid-Core, True RMS, 4-20 mA Output) (Jumper Selectable Range: 0-10, 0-20, 0-50A) Not CE Compliant
- A/CTA-250-VFD (Loop Powered, Solid-Core, True RMS, 4-20 mA Output) (Jumper Selectable Range: 0-100, 0-200, 0-250A) Not CE Compliant
- A/SCTA-5 (Loop Powered, Split-Core, 4-20 mA Average Output) (Jumper Selectable Range: 0-5A (Not Selectable)) CE Compliant
- A/SCTA-50 (Loop Powered, Split-Core, 4-20 mA Average Output) (Jumper Selectable Range: 0-10, 0-20, 0-50A) CE Compliant
- A/SCTA-200 (Loop Powered, Split-Core, 4-20 mA Average Output) (Jumper Selectable Range: 0-100, 0-150, 0-200A) CE Compliant
- A/SCTA-50-VFD (Loop Powered, Split-Core, True RMS, 4-20 mA Output) (Jumper Selectable Range: 0-10, 0-20, 0-50A) Not CE Compliant
- A/SCTA-200-VFD (Loop Powered, Split-Core, True RMS, 4-20 mA Output) (Jumper Selectable Range: 0-100, 0-150, 0-200A) Not CE Compliant

Build your part number

After completing (A) from the above table, fill in the Part Number Table below. An example part number is offered.

A

EXAMPLE: A/SCTA-200-VFD



All Current Sensors, Switches and Command Relays have a UL94-5VB flammability rating for the enclosure.