



Solid-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 an 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.





**SPECIFICATIONS**

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

**ORDERING**

Select one Current Sensor (A). **NOTE:** 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 PART NUMBER**

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

<b>A</b>
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EXAMPLE: A/SCTA-200-VFD

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

