

# FIXED "STATUS" SWITCHES CS2, CSX2, SCS2 \& SCSX2 Series 

The ACI Fixed "Status" Current switches are designed for use in any AC current monitoring application in which you are looking for a "Go/No Go" or On/Off status for a particular piece of equipment. The current switches should be installed on the line side of the power to the motor, pump, compressor or other equipment. The current switches are available in both solid and split-core versions which also includes a Patented 35 mm Din Rail mounting foot for easy installation in panel mount applications. The solid-core versions are a great choice for new installations or OEM applications in which cost sensitivity, lower trip points and environmental issues may be of concern. The split-core version of the current switches work great in retrofit applications and for use in service vehicles since one part will work in most applications and can be installed without disconnecting any wires. The fixed current status switches can also be used to determine the run time of your equipment and basic load trending applications where you want to know when your piece of equipment runs and for how long it runs for when logging the contact closures on your building management system or PLC.

Applications: Pump Status, Fan Status, Compressors, Motor Status, Ovens, Industrial Equipment, Lighting Status and Usage, Electrical Load Status, Local Alarms (Strobes and Audible Alarms)

The Fixed Current Switches 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 ACl's website, www.workaci.com.

## PRODUCT SPECIFICATIONS

| Monitored Current Type: | AC Current |
| :---: | :---: |
| Maximum AC Voltage: | 600 VAC |
| Operating Frequency Range: | 40 to 1 kHz |
| Core Style: | Solid-Core and Split-Core Versions available (See Ordering Grid) |
| Sensor Power: | Induced from the Monitored Conductor |
| Amperage Range: | See Ordering Grid |
| Isolation Voltage: | 2200 VAC |
| Trip Point Style \| Trip Point: | Fixed Trip Point \| See Ordering Grid |
| Contact Type: | Normally-Open "N/O" or Normally-Closed "N/C" (See ordering Grid) |
| "Status" Contact Rating: | 0.2A @ 200 VAC/VDC |
| "Status" Contact "On" Resistance \| "Off" Resistance: | < 10 Ohms (tripped) \| > 1 Meg Ohms (Open) |
| Response Time: | See Response Time Table on back of data sheet |
| Status LED Indication ${ }^{\mathbf{1}}$ : | Red LED (Monitored current is above Trip Point) |
| Aperture Size: | 0.75 " ( 19.05 mm ) |
| Din Rail Size: | 35 mm \| (U.S. Patent No. 7,416,421) |
| Operating Temperature Range: | 5 to $104{ }^{\circ} \mathrm{F}\left(-15\right.$ to $40^{\circ} \mathrm{C}$ ) |
| Operating Humidity Range: | 0 to $95 \%$, non-condensing |
| Recommended Storage Temperature \| RH Range: | 41 to $95^{\circ} \mathrm{F}\left(5\right.$ to $\left.35^{\circ} \mathrm{C}\right) \mid 40 \%$ to $85 \%$ RH, non-condensing |
| Enclosure Material \| Flammability Rating: | PC/ABS (Polycarbonate/ABS Blend) \| UL94-V0 |
| Wiring Connections: | 2 Position Screw Terminal Block (Not Polarity Sensitive) |
| Wire Size: | 16 to 22 AWG ( $1.31 \mathrm{~mm}^{2}$ to $0.33 \mathrm{~mm}^{2}$ ) Copper Wires only |
| Terminal Block Torque Rating: | 4.43 to $5.31 \mathrm{in}-\mathrm{lbs}$. ( 0.5 to 0.6 Nm ) |
| Minimum Mounting Distance: | 1 1" ( 2.6 cm ) between current switch (Relays, Contactors, Transformers) |
| Agency Approvals: | UL/CUL US Listed (UL 508) Ind. Control Equipment (File \# E309723), CE, RoHS2, WEEE |
| Product Weight: | A/CS2 and A/CSX2: $0.216 \mathrm{lbs} .(0.099 \mathrm{~kg}) \mid$ A/SCS2 and A/SCSX2: $0.270 \mathrm{lbs} .(0.123 \mathrm{~kg})$ A/SCS2-L: 0.280 lbs . $(0.127 \mathrm{~kg})$ |
| Product Dimensions (L x W x H): | Solid Core Versions: $2.760^{\prime \prime}$ ( 70.11 mm ) $3.343^{\prime \prime}(84.92 \mathrm{~mm}) \times 1.050^{\prime \prime}(26.67 \mathrm{~mm})$ <br> Split Core Versions: $2.780^{\prime \prime}(70.51 \mathrm{~mm}) \times 3.238^{\prime \prime}(82.25 \mathrm{~mm}) \times 1.120^{\prime \prime}$ ( 28.45 mm ) |

Note ${ }^{1}$ : The LED should not be used to determine if current is present. At low currents the LED may not be visible
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## DIMENSIONAL DRAWING



| RESPONSE TMME |  | reen Boxes: response time at specified current above trip point \| Red Boxes: response time below specified trip point where sensors may trip |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model \# | 0.15 Amps | 0.20 Amps | 0.25 Amps | 0.50 Amps | 0.75 Amps | 1.0 Amp | 1.20 Amps | 1.50 Amps | 10 Amps | 20 Amps |
| A/CS2 | 156mS | 100 mS | 84mS | ---- | ---- | 32 mS | ---- | ---- | 26 mS | 24 mS |
| A/CSX2 | ---- | 189mS | 134mS | ---- | ---- | 48 mS | ---- | ---- | 42 mS | 41 mS |
| A/SCS2 | ---- | ---- | ---- | 484mS | ---- | 72 mS | ---- | 45 mS | 26 mS | 20 ms |
| A/SCSX2 | ---- | ---- | ---- | ---- | ---- | ---- | 194mS | 102mS | 42 mS | 42 mS |
| A/SCS2-L | ---- | 224mS | 144mS | 65mS | 47 mS | 39 mS | ---- | ---- | 25 mS | 22 mS |

Note: ---- = unit was not tested (below minimum trip point or for that range)

| STANDARD ORDERING |  |  |  |  |  |  |  | Model \# Example: A/SCSX2 -or- 142357 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model \# | Item \# | Trip Point Type | N/O | N/C | Solid-Core | Split-Core | Amp Range | Trip Point | Contact Rating |
| A/CS2 | 142340 | Fixed Trip Point | - |  | - |  | 0 to 250A | 0.25A or less | 0.2A @ 200 VAC/VDC |
| A/CSX2 | 142359 | Fixed Trip Point |  | - | - |  | 0 to 250A | 0.25 A or less | 0.2 A @ $200 \mathrm{VAC/VDC}$ |
| A/SCS2 | 142358 | Fixed Trip Point | - |  |  | - | 0 to 250A | 1.5A or less | 0.2 A @ 200 VAC/VDC |
| A/SCSX2 | 142357 | Fixed Trip Point |  | - |  | - | 0 to 250A | 1.5A or less | 0.2A @ 200 VAC/VDC |
| A/SCS2-L | 142356 | Fixed Trip Point | - |  |  | - | 0 to 250A | 0.5 A or less | 0.2A @ 200 VAC/VDC |

