ADJUSTABLE SWITCHES

ACS2, ACSX2, ASCS2 & ASCSX2 Series

The Adjustable Current Switches are designed for use in any AC current monitoring application in which you are looking to monitor a particular piece of equipment for equipment failure, preventative maintenance, status, and electrical load status. The current switches should be installed on the line side of the power to the electrical 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 on service technicians vehicles since one part will work in most applications and can be easily installed without disconnecting any wires. The adjustable current switches can be used to determine the run time of your equipment as well as basic load trending applications where you want to know when how long your piece of equipment runs when logging the contact closures on your building management system or PLC.

Applications: Overload Conditions, Underload Conditions, Normal Operating Conditions, Broken Belts, Belt Slippage, Locked Rotors, Equipment Failure, Fans, Pumps, Compressors, Motors, Ovens, Industrial Equipment, Lighting Status and Usage, Electrical Load Status, Local Alarms (Strobes and Audible Alarms), Preventative Maintenance Scheduling

The Adjustable 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 ACI's website, www.workaci.com.

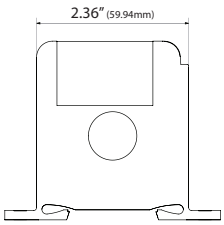
PRODUCT SPECIFICATIONS

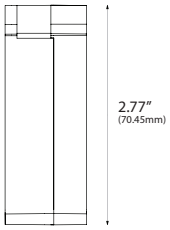
Monitored Current Type:	AC Current
Maximum AC Voltage:	600 VAC
Operating Frequency Range:	40 to 1 kHz
Core Style:	Solid-Core and Split-Core Versions available (See Ordering Grid)
Sensor Power:	Induced from the Monitored Conductor
Amperage Range:	See Ordering Grid
Isolation Voltage:	2200 VAC
Trip Point Style | Trip Point:	Adjustable Trip Point | See Ordering Grid
Hysteresis:	10% of trip point, typical
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 [1]:	Red LED (Current above Trip Point) | Blue LED (Current Below 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 104ºF (-15 to 40ºC)
Operating Humidity Range:	0 to 95%, non-condensing
Recommended Storage Temperature | RH Range:	41 to 95°F (5 to 35°C) | 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 mm2 to 0.33 mm2) Copper Wires only
Terminal Block Torque Rating:	4.43 to 5.31 in-lbs. (0.5 to 0.6 Nm)
Minimum Mounting Distance:	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, UKCA
Product Weight:	**A/ACS2** and **A/ACSX2:** 0.216 lbs. (0.097kg) | **A/ASCS2:** 0.270 lbs. (0.123 kg) **A/ASCSX2:** 0.266 lbs. (0.121 kg) | **A/ASCS2-L:** 0.280 lbs. (0.127 kg)
Product Dimensions (L x W x H):	**Solid Core Versions:** 2.760" (70.11 mm) x 3.343" (84.92 mm) x 1.050" (26.67 mm) **Split Core Versions:** 2.780" (70.51 mm) x 3.238" (82.25 mm) x 1.120" (28.45 mm)

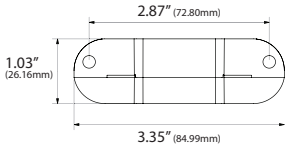
Note[1]: The LED should not be used to determine if current is present. At low currents the LED may not be visible

DIMENSIONAL DRAWING

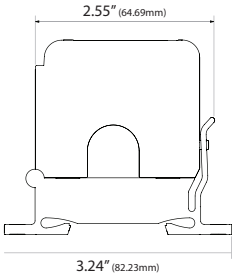
Solid-Core

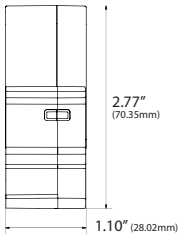


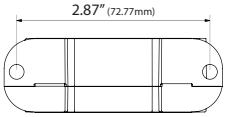




Split-Core







Front View	Right View	Bottom View

RESPONSE TIME

Model #	0.50 Amps	0.60 Amps	0.75 Amps	1.0 Amp	1.50 Amps	10 Amps	20 Amps
A/ACS2	221mS	----	144mS	109mS	----	63mS	59mS
A/ACSX2	260mS	----	169mS	130mS	----	82mS	74mS
A/ASCS2	----	----	----	----	248mS	68mS	65mS
A/ASCSX2	----	----	----	----	344mS	92mS	86mS
A/ASCS2-L	----	400mS	270mS	183mS	----	62mS	60mS

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

STANDARD ORDERING

Model # Example: A/ACS2 -OR- 142355

Model #	Item #	Trip Point Type	N/O	N/C	Solid-Core	Split-Core	Amp Range	Trip Point	Contact Rating
A/ACS2	142355	Adjustable	•		•		0 to 250A	0.5 to 220A	0.2A @ 200 VAC/VDC
A/ACSX2	142354	Adjustable		•	•		0 to 250A	0.5 to 220A	0.2A @ 200 VAC/VDC
A/ASCS2	142353	Adjustable	•			•	0 to 250A	1.5 to 220A	0.2A @ 200 VAC/VDC
A/ASCSX2	142370	Adjustable		•		•	0 to 250A	1.5 to 220A	0.2A @ 200 VAC/VDC
A/ASCS2-L	142352	Adjustable	•			•	0 to 250A	0.6 to 180A	0.2A @ 200 VAC/VDC

The Adjustable Current Switches are not intended to be used in Life / Safety Applications or in Hazardous / Classified Locations