MINI ADJUSTABLE SWITCHES

MCS-A & MSCS-A Series

The Miniature Adjustable Current switches are designed for use in any AC current monitoring application in which you are looking for an adjustable current switch to monitor normal operating conditions, equipment failure or preventative maintenance scheduling for a particular piece of equipment. The adjustable current switches should be installed on the line side of the power to the motor, pump, compressor or other equipment. The miniature adjustable current switches are available in both solid and split-core versions in a smaller enclosure style than that of the A/ACS2 and A/ASCS2 Series adjustable current switches. 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 adjustable current status switches can also be used to determine the run time of your equipment where you want to know when your piece of equipment runs and for how long it runs when logging the contact closures on your building management system or PLC.

Applications: Overload Conditions, Under Load Conditions, Normal Load Conditions, Broken Belts, Belt Slippage, Locked Rotors, Electrical Failure, Load Status, Local Alarms such as Strobes/Audible Alarms, Pumps, Fans, Compressors, Lighting Status and Usage Information, Ovens, Process Control, Industrial Equipment, Equipment Maintenance, OEM

The Miniature 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

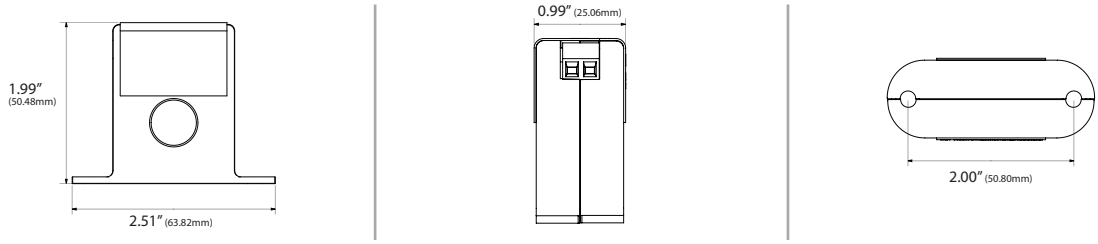
PRODUCT SPECIFICATIONS

Monitored Current Type:	AC Current
Maximum AC Voltage:	600 VAC
Operating Frequency Range:	50/60 Hz
Core Style:	Solid-Core and Split-Core Versions available (See Ordering Grid)
Sensor Power:	Induced from the Monitored Conductor (Insulated Conductors only)
Amperage Range:	See Ordering Grid
Isolation Voltage:	2200 VAC
Trip Point Style | Adjustable Trip Point Range:	Adjustable Trip Point | See Ordering Grid
Hysteresis:	10% Trip Point, typical
Contact Type:	Normally-Open "N/O"
Contact Rating:	1A Continuous @ 36 VAC/VDC
Contact "On" Resistance | "Off" Resistance:	< 0.5 Ohms (tripped) | > 1 Meg Ohms (Open)
Response Time:	**A/MCS-A:** < 90 mS, typical | **A/MSCS-A:** < 45 mS typical
Status LED Indication [1]:	Red LED (Current above trip point) | Blue LED (Current below trip point)
Aperture Size (Diameter):	0.53" (13.46 mm)
Operating Temperature Range:	-22 to 140ºF (-30 to 60ºC)
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 [2]:	UL/CUL US Listed (UL 916) Energy Management Equipment (File # E334792), CE, RoHS2, WEEE
Product Weight:	**A/MCS-A:** 0.15 lbs. (0.068 kg) | **A/MSCS-A:** 0.20 lbs. (0.091 kg)
Product Dimensions (L x W x H):	**A/MCS-A (Solid-Core):** 2.510" (63.82 mm) x 0.940" (23.94 mm) x 2.000" (50.80 mm) **A/MSCS-A (Split-Core):** 2.650" (67.19 mm) x 0.940" (23.94 mm) x 2.380" (60.49 mm)

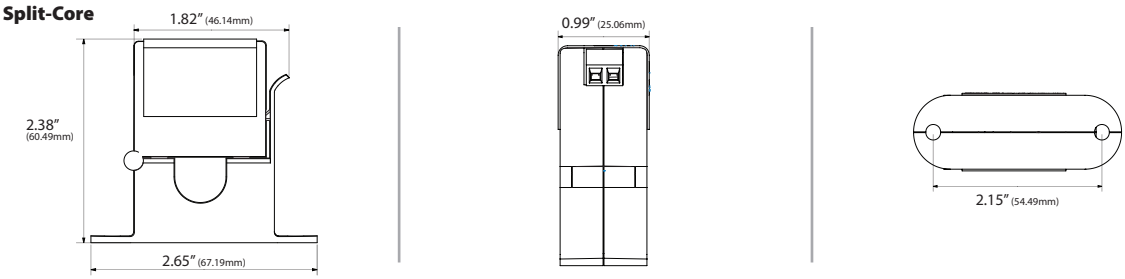
Note[1]: The LED should not be used to determine if current is present. At low currents the LED may not be visible | **Note[2]:** Maximum wire length not to exceed 98.4 Feet (30 meters) in order to meet the CE Requirements

DIMENSIONAL DRAWING

Solid-Core



Split-Core



Front View	Right View	Bottom View

STANDARD ORDERING

Model # Example: A/MCS-A -OR- 117854

Model #	Item #	Trip Point Type	N/O	Solid-Core	Split-Core	Amp Range	Trip Point	Contact Rating
A/MCS-A	117854	Adjustable	•	•		0.32 to 150A	0.32 to 150A	1A @ 36 VAC/VDC
A/MSCS-A	117855	Adjustable	•		•	0.70 to 150A	0.70 to 150A	1A @ 36 VAC/VDC

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