



# 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 website, [www.workaci.com](http://www.workaci.com).**

### PRODUCT SPECIFICATIONS

<b>Monitored Current Type:</b>	AC Current
<b>Maximum AC Voltage:</b>	600 VAC
<b>Operating Frequency Range:</b>	50/60 Hz
<b>Core Style:</b>	Solid-Core and Split-Core Versions available (See Ordering Grid)
<b>Sensor Power:</b>	Induced from the Monitored Conductor (Insulated Conductors only)
<b>Amperage Range:</b>	See Ordering Grid
<b>Isolation Voltage:</b>	2200 VAC
<b>Trip Point Style   Adjustable Trip Point Range:</b>	Adjustable Trip Point   See Ordering Grid
<b>Hysteresis:</b>	10% Trip Point, typical
<b>Contact Type:</b>	Normally-Open "N/O"
<b>Contact Rating:</b>	1A Continuous @ 36 VAC/VDC
<b>Contact "On" Resistance   "Off" Resistance:</b>	< 0.5 Ohms (tripped)   > 1 Meg Ohms (Open)
<b>Response Time:</b>	<b>A/MCS-A:</b> < 90 mS, typical   <b>A/MSCS-A:</b> < 45 mS typical
<b>Status LED Indication <sup>1</sup>:</b>	Red LED (Current above trip point)   Blue LED (Current below trip point)
<b>Aperture Size (Diameter):</b>	0.53" (13.46 mm)
<b>Operating Temperature Range:</b>	-22 to 140°F (-30 to 60°C)
<b>Operating Humidity Range:</b>	0 to 95%, non-condensing
<b>Recommended Storage Temperature   RH Range:</b>	41 to 95°F (5 to 35°C)   40% to 85% RH, non-condensing
<b>Enclosure Material   Flammability Rating:</b>	PC/ABS (Polycarbonate/ABS Blend)   UL94-V0
<b>Wiring Connections:</b>	2 Position Screw Terminal Block (Not Polarity Sensitive)
<b>Wire Size:</b>	16 to 22 AWG (1.31 mm <sup>2</sup> to 0.33 mm <sup>2</sup> ) Copper Wires only
<b>Terminal Block Torque Rating:</b>	4.43 to 5.31 in.-lbs. (0.5 to 0.6 Nm)
<b>Minimum Mounting Distance:</b>	1" (2.6 cm) between current switch (Relays, Contactors, Transformers)
<b>Agency Approvals <sup>2</sup>:</b>	UL/CUL US Listed (UL 916) Energy Management Equipment (File # E334792), CE, RoHS2, WEEE
<b>Product Weight:</b>	<b>A/MCS-A:</b> 0.15 lbs. (0.068 kg)   <b>A/MSCS-A:</b> 0.20 lbs. (0.091 kg)
<b>Product Dimensions (L x W x H):</b>	<b>A/MCS-A (Solid-Core):</b> 2.510" (63.82 mm) x 0.940" (23.94 mm) x 2.000" (50.80 mm) <b>A/MSCS-A (Split-Core):</b> 2.650" (67.19 mm) x 0.940" (23.94 mm) x 2.380" (60.49 mm)

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

