

ASXP-MS SERIES

Current Sensing Switches

ASXP-MS Series Current Switches combine a current transformer and signal conditioner into a single package. The large, easy-to-install split-core design allows for installation over existing conductors without the need to disconnect the load, even in applications where there are multiple conductors per phase. For new installations, the installation is just as easy. Just remove the top portion of the sensing ring, place the conductors inside, and snap the top back in place. The switch output is powered from the primary circuit, and the setpoint is adjustable between a very wide range. The solid-state contact provides a trouble free, long lasting and very durable alarm or interlock, improving safety and overall system reliability.

Current Switch Applications

Monitor Large Machines

- Detect over or undercurrent conditions before they cause break downs, or interlock one process with another.

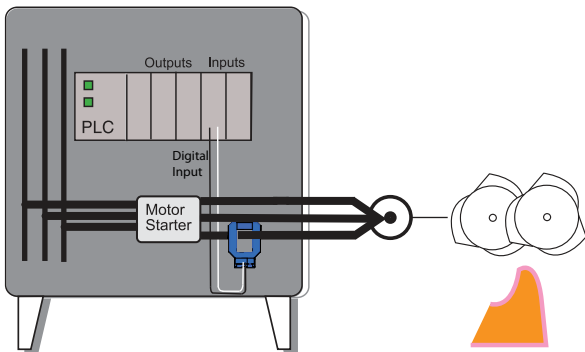
Water Delivery and Treatment

- Detect open discharge lines.
- Sense clogged filters or blocked intake to pumps.

Generators

- Shed noncritical loads when demand reaches a set level.

Crusher Monitoring



If the crusher drive draws too much current, the infeed belt can be stopped automatically, allowing the crusher to clear before restarting. The ASXP-MS also has a set of relay contacts for alarm or undercurrent conditions.

- For additional Application Examples, go to www.nktechnologies.com/applications

OEMs Test & Evaluation Units for OEMs
Free program expedites evaluation process. See page 1 for details.



Current Switch Features

Electromechanical Relay Output

- Provides both normally open and normally closed systems.
- Compatible with most automation and control systems.

Externally Powered

- Provides a choice of failsafe** or standard operation.

Simple Field Setpoint Adjustment

- Single turn potentiometer with setpoint shown on label.
- Adjustable start delay to bypass inrush current.

Split-core Case

- Sensing window provides ample space for bus bar, single or multiple conductors.

DIN Rail* or Panel Mounted Case

- Simply snap onto DIN rail or attach with screws to a panel for secure mounting.

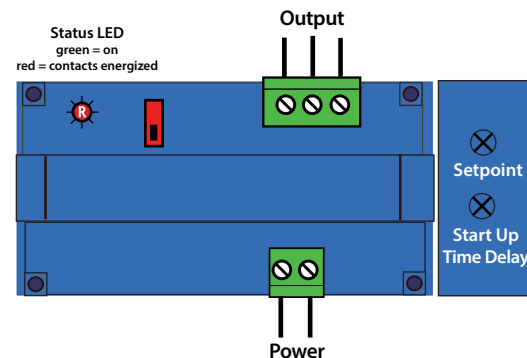
Designed for UL, CUL and CE Approval

- Accepted around the world.

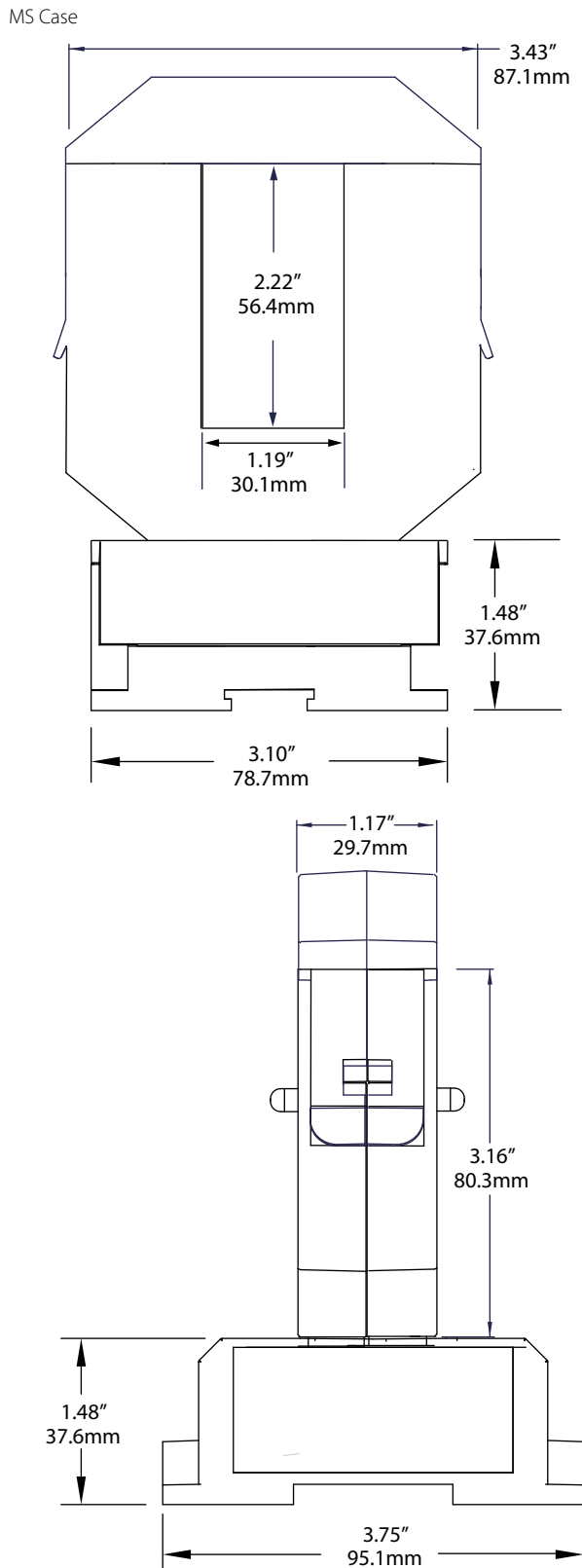
*For information on the DIN rail accessories kit, see page 116.

**For a description of failsafe operation, see the installation instructions.

Current Switch Connections



Current Switch Dimensions



Note: Drawings are not to scale.

Current Switch Specifications

Power Supply	120 VAC or 24 VAC/DC (22–36 V)								
Power Consumption	<4 VA								
Output	Electromechanical relay 1 A @ 120 VAC, 2 A @ 30 VDC max.								
Hysteresis	5% of setpoint								
Indicating Bi-color LED	Green: Power on, current within range Red: Power on, current over setpoint Off: Power off or current less than 20% of range								
Response Time	400–900 ms (Current 90% over setpoint)								
Output Operation	Selectable: Normal or failsafe**								
Start Delay	0.5 to 16 sec.								
Range	<table border="1"> <tr> <td>2</td> <td>50–200 A</td> </tr> <tr> <td>4</td> <td>100–400 A</td> </tr> <tr> <td>6</td> <td>150–600 A</td> </tr> <tr> <td>8</td> <td>200–800 A</td> </tr> </table>	2	50–200 A	4	100–400 A	6	150–600 A	8	200–800 A
2	50–200 A								
4	100–400 A								
6	150–600 A								
8	200–800 A								
Isolation Voltage	Tested to 5000 VAC								
Frequency Range	6–100 Hz								
Sensing Aperture	2.22" (56.4 mm) X 1.19"(30.1 mm)								
Case	UL94 V0 Flammability Rated DIN rail mounting								
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing								
Listings	Designed to meet UL 508 Industrial Control Equipment (USA & Canada)								

**For a description of failsafe operation, see the installation instructions.

Ordering Information

Sample Model Number: AXSP8-SDT-120-MS
AC current switch, 200–800 A range, SPDT relay output, 120 VAC powered, medium split-core case, DIN rail mounting.



(1) Range

2	50–200 A
4	100–400 A
6	150–600 A
8	200–800 A

(3) Output Type

SDT	Single pole, double throw relay
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(4) Power Supply

24U	24 VAC/DC
120	120 VAC

(3) Case Style

MS	Split-core, base terminals, DIN rail mounting
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