

ASXP-LS SERIES

Current Sensing Switches

ASXP-LS 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 externally powered, and the setpoint is adjustable between a very wide range. The mechanical relay contact provides a trouble free, long lasting, and very durable alarm or interlock, improving safety and overall system reliability.

Current Sensing Switch Applications

Monitor Large Machines

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

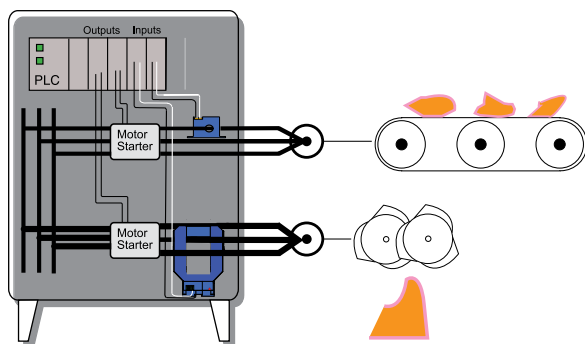
Water Delivery and Treatment

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

Generators

- Shed noncritical loads when demand reaches a set level.

Interlock Infeed Conveyor with Main Crusher



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



Rev. 7.15

Current Sensing Switch Features

Electromechanical Relay Output

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

Externally Powered

- Provides a choice of fail-safe* 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.

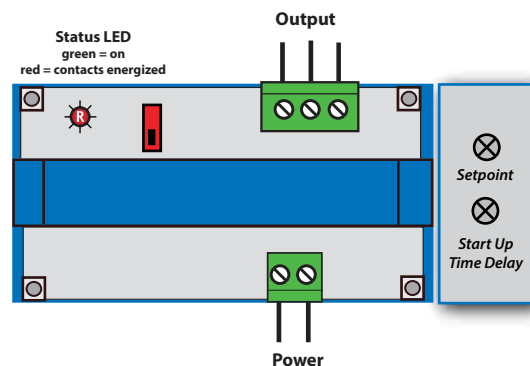
DIN Rail or Panel Mount

- Simple 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.

Current Sensing Switch Connections



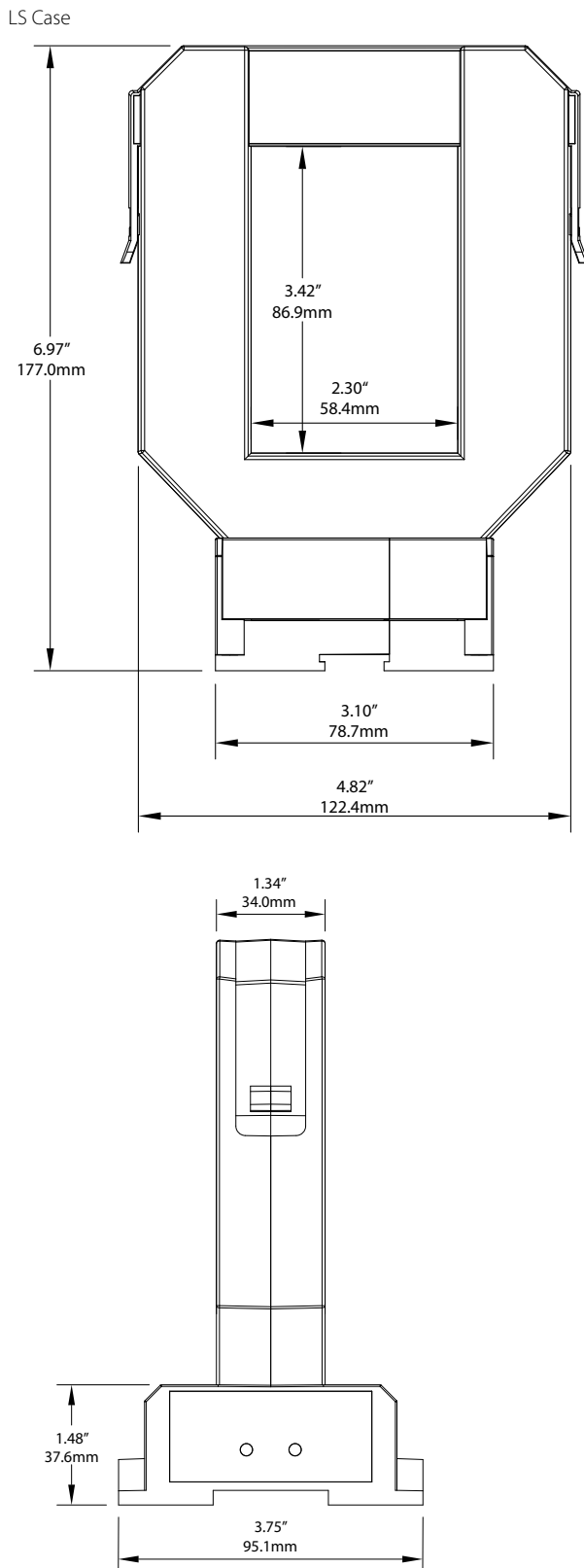
*For a description of fail-safe operation, see the installation instructions.

OEMs

Test & Evaluation Units for OEMs

Free program expedites evaluation process. See page 1 for details.

Current Sensing Switch Dimensions



Note: Drawings are not to scale

*For a description of fail-safe operation, see the installation instructions.

Current Sensing Switch Specifications

Power Supply	120 VAC or 24 VAC/DC (22-36 V)
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 Fail-Safe*
Start Delay	0.5 to 16 seconds
Ranges	8: 200–800 A 10: 400–1000 A 12: 600–1200 A 16: 1000–1600 A
Isolation Voltage	Tested to 5000 VAC
Frequency Range	10–100 Hz
Sensing Aperture	LS Case: 2.3" (58.42 mm) x 3.42" (86.87 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)

Current Sensing Switch Ordering Information

Sample Model Number: ASXP8-SDT-24U-LS
AC current transducer, 200–800 A range, single pole, SDT relay (Form C), 24 VAC/DC, split-core case, DIN rail mounting.



(1) Range

8	200–800 A
10	400–1000 A
12	600–1200 A
16	1000–1600 A

(2) Output Type

SDT	SPDT Relay (Form C)
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(3) Power Supply

24U	24 VAC/DC
120	120 VAC

(4) Power Supply

LS	Split-core, Base Terminals, DIN Rail mounting
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