ASXP SERIES
Current Sensing Switches

ASXP Series Current Sensing Switches are powered versions of our popular current switches with integral time delay. A fixed two-second delay upon initial energization of monitored load minimizes nuisance alarms during start-up and operation in motor or heater status applications. After startup a separate 0–20 second delay can be set. For use with 24 VAC/DC or 120 VAC supplies, this high performance product offers OEM-caliber accuracy, precision tolerances, low hysteresis and an operation range between 40 and 100 Hz. Available with status LED and solid-core case as standard.

Current Sensing Switch Applications

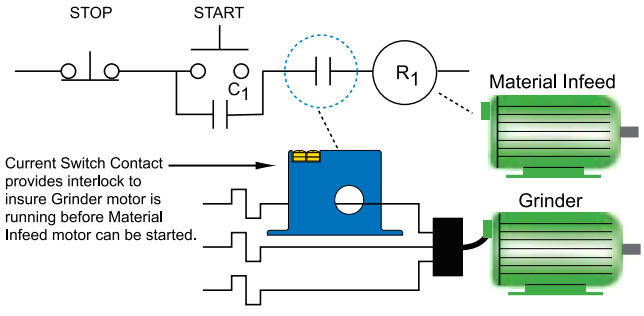
Motor Protection

- Serves as an electronic proof-of-operation; detects current draw changes in motors when they encounter problems such as pumps running dry or impending bearing failure.
- Non-intrusive, less expensive to install than differential pressure flow sensors or thermal switches.
- Much quicker response time than Class 10 overload switches.

High Inrush or Temporary Overload Current

- Factory-set two-second delay on startup eliminates nuisance trips from high inrush or short overload conditions. After startup, a second 0–20 second user-adjustable delay is available.

Safety Interlocks



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

Current Sensing Switch Features

Fixed Startup/Delay Timer

- Factory-calibrated trip timer set to 2 seconds to eliminate nuisance alarms due to startup inrush or temporary overcurrent conditions.

Form C Electromechanical Relay Output

- Contact rating of 1 A, up to 120 VAC, provides adequate switching capacity for use with most motor control systems.

Improved Ease of Installation and Use

- Eliminates need for separate time delay relay.
- Choice of 24 VAC/DC or 120 VAC supply models.
- LED provides indication of trip point contact status.
- Setpoint adjustable from 1–80 A.

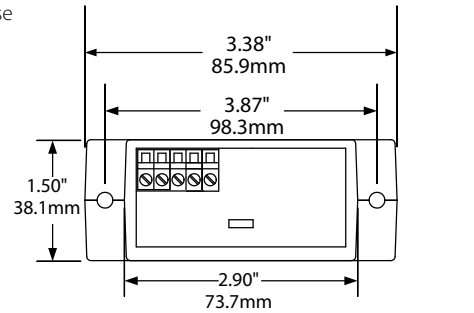
Industrial Grade Performance

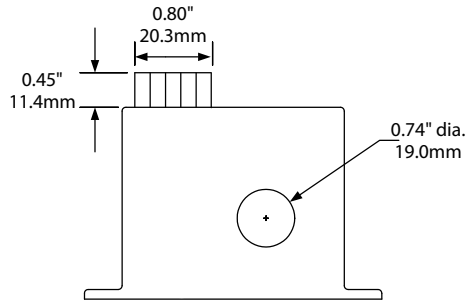
- Repeatable performance, precise time delay setpoint, constant hysteresis and linear trip point adjustment.

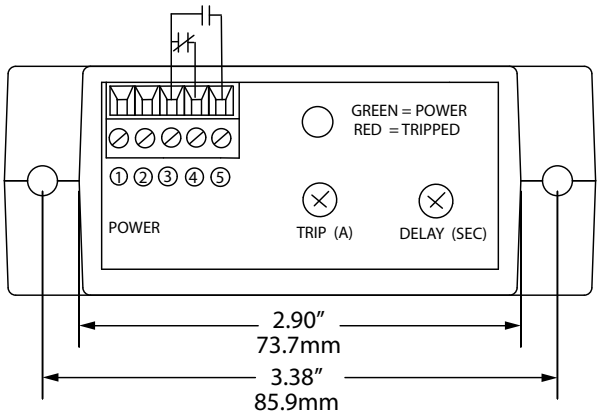
OEMs **Test & Evaluation Units for OEMs**
Free program expedites evaluation process. See page 1 for details.

Current Sensing Switch Dimensions

FL Case



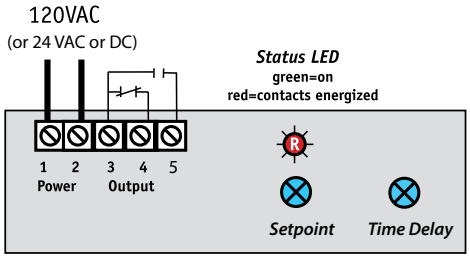




Terminal Identification:
1 & 2 - Power Connection
3 - Output Common
4 - Output Normally Closed Contact
5 - Output Normally Open Contact

Use up to 14 AWG copper wire.
Tighten terminals 4.4 to 5.3 lbs.- in. torque.

Current Sensing Switch Connections



Current Sensing Switch Specifications

Power Supply	• 120 VAC (108–136 V) • 24 VAC/DC (22–26 V)
Power Consumption	<2 VA
Output	Electromechanical SPDT relay, auto reset
Output Rating	1 A, up to 120 VAC
Trip Point Range	• ASXP1: 1–20 A • ASXP2: 20–50 A • ASXP3: 50–80 A
Time Delay	2.0 sec. (fixed on startup) 0–20 sec. (adjustable after startup)
Max. Inrush Current	500 A (5 sec. duration)
Hysteresis	5% (constant)
Isolation Voltage	Tested to 5 KVAC
Frequency Range	40–100 Hz
Sensing Aperture	0.74" (19.0 mm) dia.
Case	UL94 V0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	Designed to meet UL508 requirements

Current Sensing Switch Ordering Information

Sample Model Number: ASXP1-SDT-120-FL
AC current sensing switch, fixed 2 sec. delay, SPDT 1 A, 120 VAC output, 120 VAC/DC supply, solid-core case.

	(1)		(2)			(3)				(4)	
ASXP		–	**S**	**D**	**T**	–				–	**F**	**L**

(1) Input Range

1	1–20 A
2	20–50 A
3	50–80 A

(2) Output Type

SDT	SPDT 1 A @ 120 VAC

(3) Power Supply

24U	24 VAC/DC
120	120 VAC

(4) Case Style

FL	Solid-core

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