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 startup 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

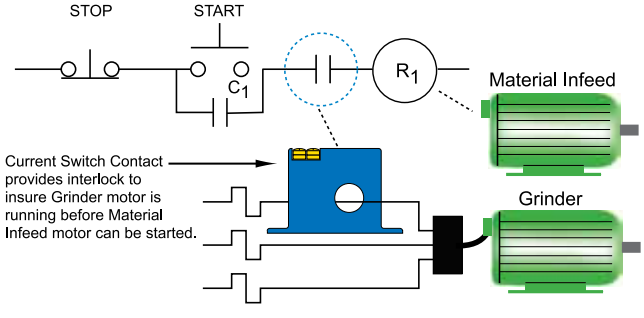
Motor Protection

- 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 0.2–20 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.

UL/cUL and CE Approved

- Accepted worldwide.

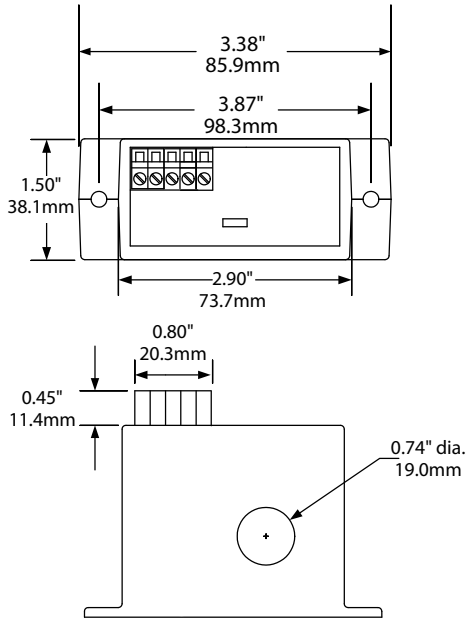
OEMs **Test & Evaluation Units for OEMs**
Free program expedites evaluation process. See page 3 for details.

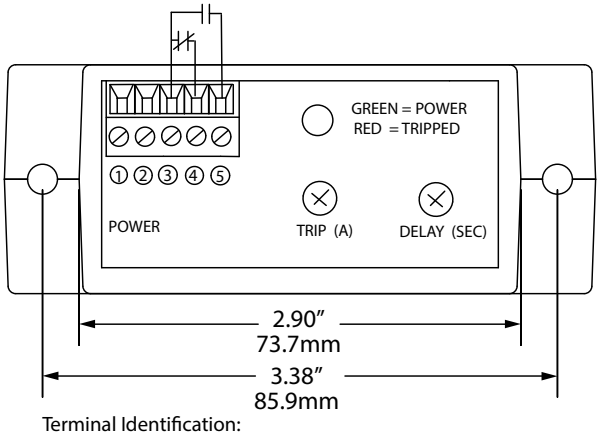
NK Technologies
3511 Charter Park Drive • San Jose, CA 95136
800.959.4014 • www.nktechnologies.com • sales@nktechnologies.com

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000

Current Sensing Switch Dimensions

FL Case

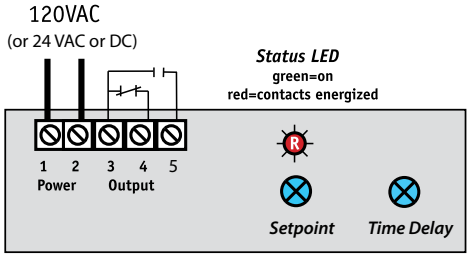




Terminal Identification:
1 & 2 - Power Connection
3 - Output Common
4 - Output Normally Closed Contact
5 - Output Normally Open Contact

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
Setpoint Range	• ASXP1: 1–20 A (adjustable) • ASXP2: 20–50 A (adjustable) • ASXP3: 50–80 A (adjustable)
Output Description	Electromechanical SPDT relay
Output Rating	1 A @ 120 VAC; 2 A @ 30 VDC
Time Delay	2.0 sec. (fixed on startup) 0.2–20 sec. (adjustable after startup)
Hysteresis	5%
Isolation Voltage	UL listed to 1270 VAC, tested to 5 KV
Frequency Range	40–100 Hz
Case	UL94 V-0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	UL/cUL, CE

Current Sensing Switch Ordering Information

Sample Model Number: ASXP1-SDT-120-FL
AC current sensing switch, fixed 2 sec. delay, SPDT 1 A output, 120 VAC supply, solid-core case. (DIN rail adapters are included)

	(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

Distribuída no Brasil pela LRI | vendas@lri.com.br | 51 2129-3000