

ASX SERIES

Current Sensing Switches

ASX Series Current Sensing Switches are high performance current sensing switches with field-adjustable time delay to help minimize nuisance trips during startup and operation. Designed for motor status applications where setpoint accuracy and repeatability are critical, the ASX Series offers a linear setpoint characteristic and constant hysteresis. Standard features include self-powering, jumper-selectable ranges and a choice of outputs and cases.



Current Sensing Switch Applications

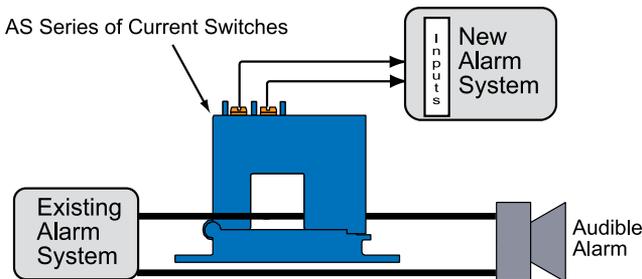
Motor Protection

- Serves as an electronic proof-of-operation; detects current draw changes in motors when they encounter problems such as pumps running dry or pending 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

- Adjustable startup/delay timer allows 0.2–15 second delay to eliminate nuisance trips from high inrush or short overload conditions.

Isolated Alarm System Interfacing



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

Current Sensing Switch Features

Adjustable Startup/Delay Timer

- Field-adjustable from 0.12 to 15 seconds to eliminate nuisance alarms due to startup inrush or temporary overcurrent conditions.

Choice of N.O./N.C. AC or Universal Outputs

- Contact ratings of 1.0 A @ 240 VAC or universal outputs of 0.15 A @ 240 VAC/DC (N.O. models) and 0.2 A @ 135 VAC/DC (N.C. models) for use with most standard motor control systems.

Improved Ease of Installation and Use

- 1.0 A AC rating eliminates need for time delay relay.
- Self-powered, split-core models simplify installation.
- Status LED provides visual indication of setpoint trip and contact action.

Industrial Grade Performance

- Constant hysteresis, linear response characteristics enhance setpoint accuracy.

UL/cUL and CE Approved

- Accepted worldwide.

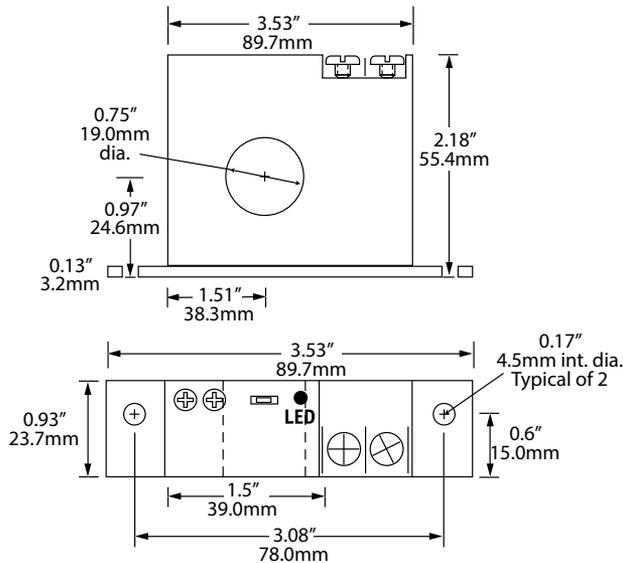


Test & Evaluation Units for OEMs

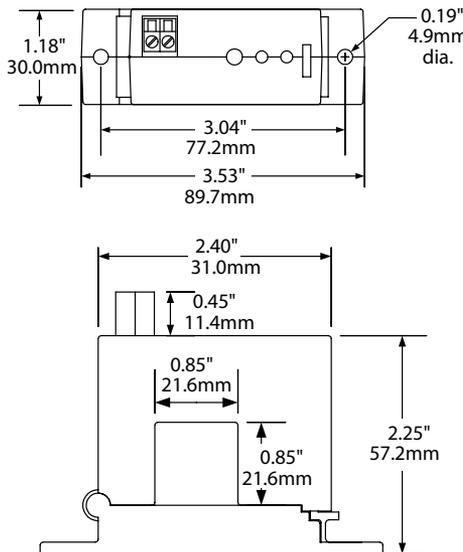
Free program expedites evaluation process. See page 3 for details.

Current Sensing Switch Dimensions

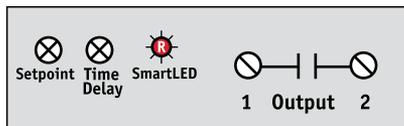
FT Case



SP Case



Current Sensing Switch Connections



Current Sensing Switch Specifications

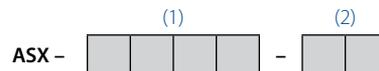


Power Supply	None, self-powered
Setpoint Range	-FT: 1.5-12, 12-55 and 50-175 A -SP: 2-12, 12-55 and 50-200 A
Output Description	Isolated solid-state relay
Output Rating	• NOAC/NCAC: 1 A @ 240 VAC • NOU: 0.15 A @ 240 VAC or VDC • NCU: 0.2 A @ 135 VAC or VDC
Off-state Leakage	NOU, NCU & NOAC versions: <10 micro A NCAC versions: 2.5 mA
Response Time	0.12–15 sec.
Time Delay	Adjustable
Hysteresis	5%
Overload	• 1.5–12 A range: 600 A max. • 12–55 A range: 800 A max. • 50–200 A range: 1200 A max.
Isolation Voltage	UL listed to 1270 VAC, tested to 5 kV
Frequency Range	50–100 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 Switches

Current Sensing Switch Ordering Information

Sample Model Number: ASX-NOAC-SP
Current sensing switch with adjustable time delay, N.O. 1.0 A @ 240 VAC output, jumper-selectable input ranges, split-core case. (DIN rail adapters are included)



(1) Output Type

NOAC	Normally Open, 1 A @ 240 VAC
NCAC	Normally Closed, 1 A @ 240 VAC
NOU	Normally Open, 0.15 A @ 240 VAC/DC
NCU	Normally Closed, 0.2 A @ 135 VAC/DC

(2) Case Style

FT	Solid-core
SP	Split-core

