

ASC SERIES

Factory-calibrated Current Sensing Switches

ASC Series Current Sensing Switches are precision calibrated at the factory per customers' specifications and guaranteed within 1% accuracy. Because the switch is factory calibrated eliminating the need to turn the potentiometer to the correct position in the field, installation time is substantially reduced resulting in a significant cost savings. The ASC combines a current transformer, signal conditioner and limit alarm into a single package for use in status monitoring or proof of operation applications and is perfect for OEM applications where the need for a limit alarm is required. Available in a solid-core or a split-core case to maximize ease of installation.

Current Sensing Switch Applications

Electronic Proof of Flow

- Current operated switches eliminate the need for multiple pipe or duct penetrations and are more reliable than electromechanical pressure or flow switches.

Conveyors

- Detects jams and overloads.
- Interlocks multiple conveyor sections.

Lighting Circuits

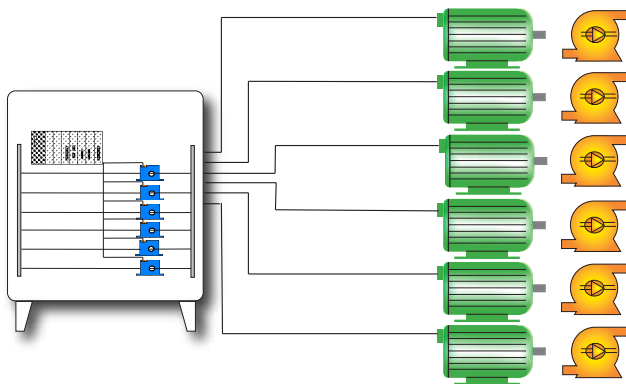
- Easier to install and more accurate than photocells.

Electrical Heaters

- Faster response than temperature sensors.

Air Handling Fan Protection

Factory-set trip points are ideal when there are several loads, all using the same motor to drive the fan blades.



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

OEMs

Test & Evaluation Units for OEMs

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



US Patent 8698426

Current Sensing Switch Features

Universal Output

- N.O. or N.C. solid-state switch for control circuits up to 135 VAC/DC.
- Compatible with most automation systems.

Self-powered

- Cuts installation and operating costs.

Precision-calibrated Factory Set Trip Point

- Speeds startup.
- Improves safety.

Solid- or Split-core Case

- Versions tailored for each installation.

LED Indication

- Provides quick visual indication of contact status.

Built-in Mounting Feet

- Simple, two-screw panel mounting or attach with DIN rail adapters (included).*

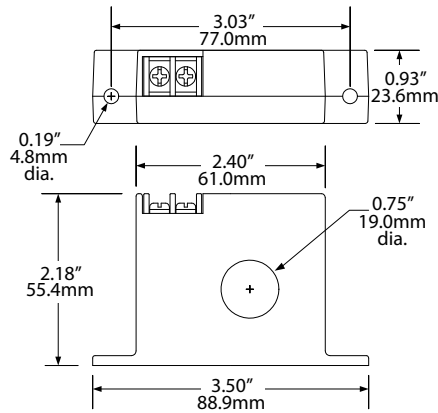
Designed for UL/cUL and CE Approval

- Accepted worldwide.

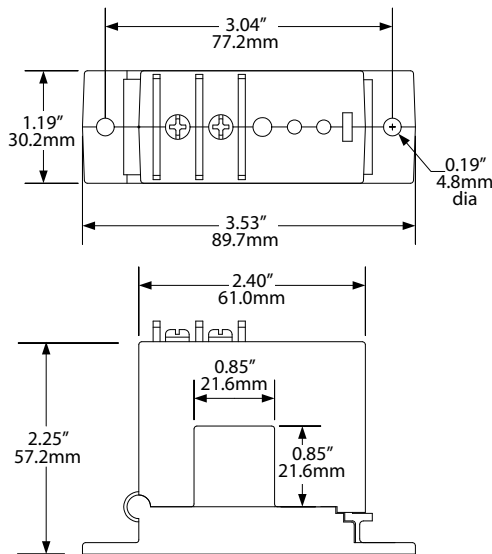
*For information on the DIN rail accessories kit, see page 144.

Current Sensing Switch Dimensions

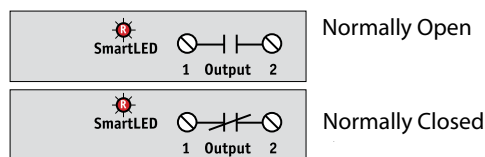
FT Case



SP Case



Current Sensing Switch Connections

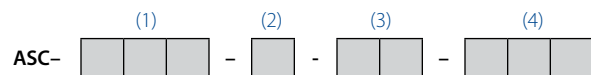


Current Sensing Switch Specifications

Power Supply	None, self-powered
Setpoint Range	• Solid-core: 2–150 A (factory set) • Split-core: 3–150 A (factory set)
Output Description	Isolated solid-state relay
Output Rating	• N.O. Version: 0.3 A @ 135 VAC or VDC • N.C. Version: 0.3 A @ 135 VAC or VDC • Not polarity sensitive
Off-state Leakage	<10 μ A
Response Time	120 ms
Time Delay	None
Hysteresis	5%
Overload	400 A @ 6 sec., 1000 A @ 1 sec.
Isolation Voltage	Tested to 5 KV
Frequency	6 - 100 Hz
Case	UL94 V-0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	Designed for UL/cUL and CE approval

Current Sensing Switch Ordering Information

Sample Model Number: ASC-NOU-6-SP-090
 Factory set AC current operated switch, normally open, 60 Hz frequency, split-core case, 90 A trip point. (DIN rail adapters are included)



(1) Output Rating

NOU	Normally Open
NCU	Normally Closed

(2) Primary Circuit Frequency

6	60 Hz
5	50 Hz

(3) Case Style

FT	Solid-core, top terminal
SP	Split-core

(4) Factory Set Trip Point

002 to 150	Solid-core model factory-set trip point in amps.
003 to 150	Split-core model factory-set trip point in amps.

