

# 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

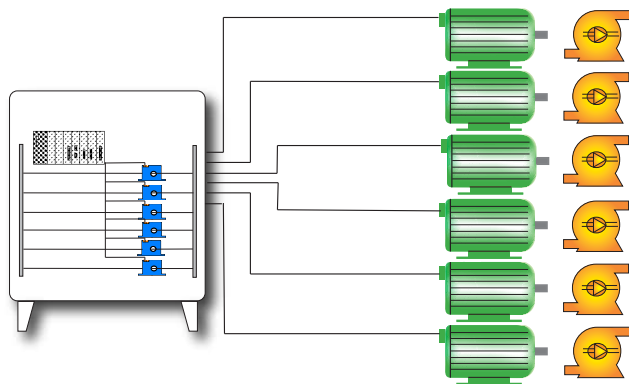
- Easier to install and more accurate than photocells.

#### 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.

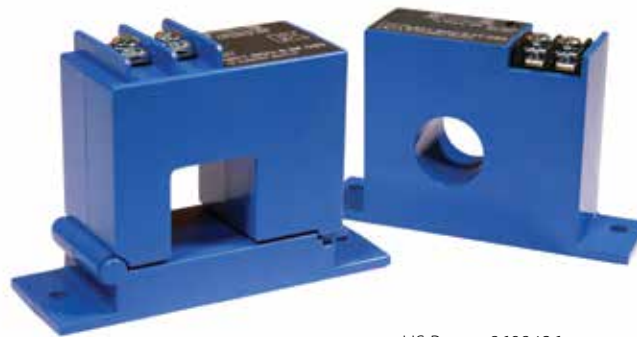


- For additional Application Examples, go to [www.nktechnologies.com/applications](http://www.nktechnologies.com/applications)

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).\*

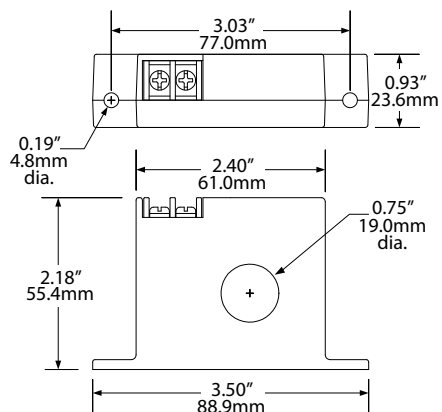
#### Designed for UL/cUL and CE Approval

- Accepted worldwide.

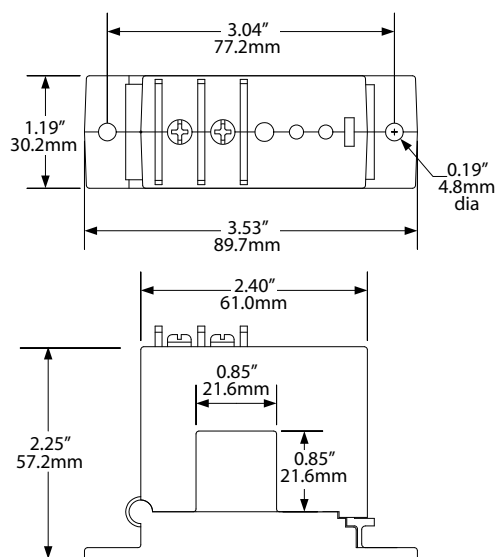
\*For information on the DIN rail accessories kit, see page 144.

## Current Sensing Switch Dimensions

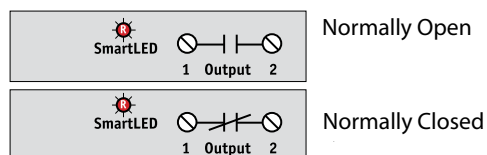
FT Case



SP Case



## Current Sensing Switch Connections



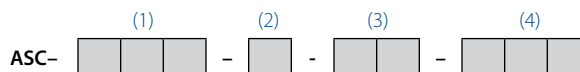
## Current Sensing Switch Specifications

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