

# AS3 SERIES

## Current Sensing Switches

AS3 Series Current Sensing Switches provide the same dependable indication of status offered by the AS1, but with the added benefit of increased setpoint accuracy. A choice of three, jumper-selectable input ranges allows the AS3 to be tailored to an application, providing more precise control through improved setpoint resolution. Self-powering, isolated solid-state outputs, 1–6 A, 6–40 A and 40–200 A input ranges, and a choice of split- or solid-core case are standard.

### Current Sensing Switch Applications

#### Electronic Proof of Flow

- No need for pipe or duct penetrations.
- More reliable than electromechanical pressure or flow switches.

#### Conveyors

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

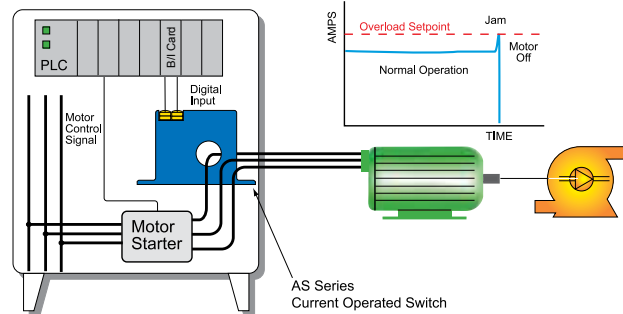
#### Lighting Circuits

- Easier to install and more accurate than photocells.

#### Electrical Heaters

- Faster response than temperature sensors.

### Pump Jam & Suction Loss Protection



- 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.



### Current Sensing Switch Features

#### Choice of N.O. or N.C. Solid-state Outputs

- 1 A @ 240 VAC, 0.15 A @ 30 VDC.
- 15 A @ 120 VAC (-15 model).
- 3 A @ 120 VAC (-03 model).

#### Self-powered

- Cuts installation and operating costs.

#### Easily Adjustable Setpoint

- Speeds startup.

#### Solid- or Split-core Case

- Choose the appropriate version for each installation.

#### LED Indication

- Provides quick visual indication of contact status.

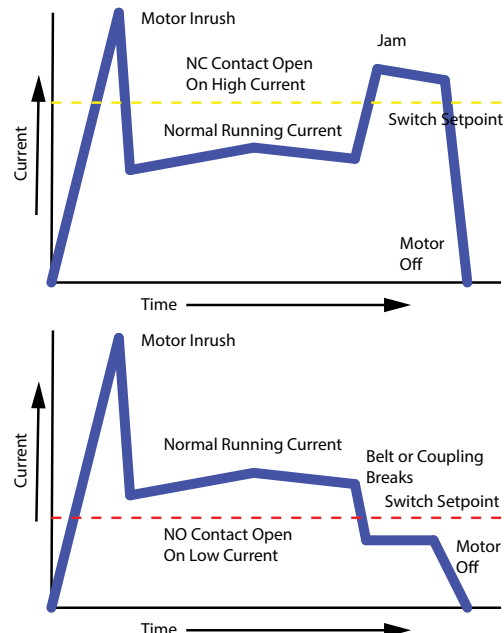
#### Built-in Mounting Feet

- Provides the secure installation inspectors require.

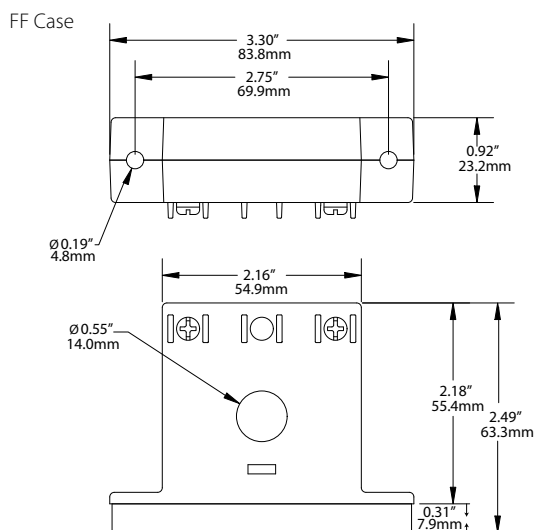
#### UL/cUL and CE Approved

- Accepted worldwide.

### AS1, AS3, ASX, ASXP Series Sample Output

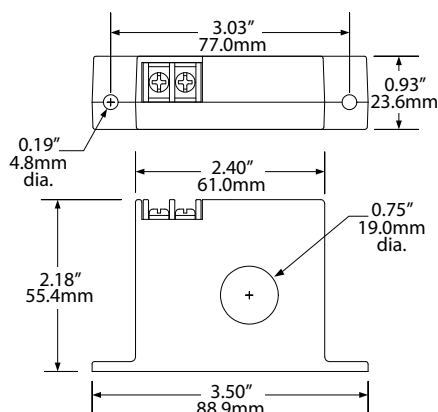


## Current Sensing Switch Dimensions

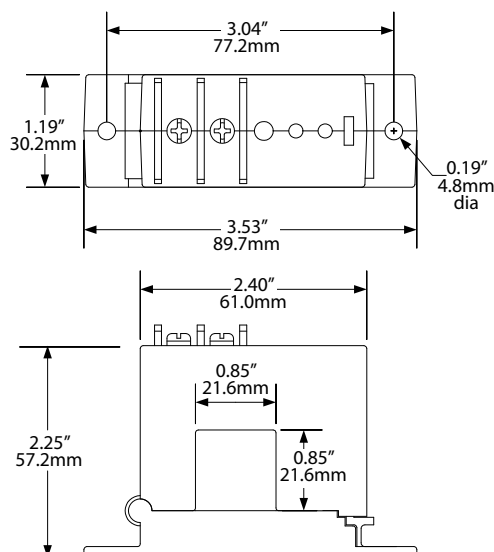


Note: The bottom 0.31" applies to -15 option only.

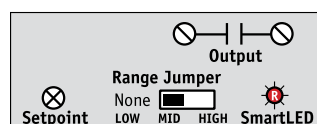
## FT Case



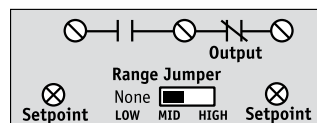
## SP Case



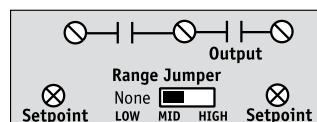
## Current Sensing Switch Connections



Typical of NOAC and NOAC-15  
NCAC and NCAC-15  
Similar



Typical of AS3-CCDC



Typical of AS3-AADC

Note: Terminals are #6 screws. DC contacts are polarity sensitive.

## Current Sensing Switch Specifications



<b>Power Supply</b>	None, self-powered		
<b>Setpoint Range</b>	<ul style="list-style-type: none"> <li>Solid-core: 1–6, 6–40 &amp; 40–175 A (adjustable)</li> <li>Split-core: 1.75–6, 6–40 &amp; 40–200 A (adjustable)</li> </ul>		
<b>Output Description</b>	Isolated solid-state relay		
<b>Output Rating</b>	<ul style="list-style-type: none"> <li>1.0 A @ 240 VAC (standard AC units)</li> <li>0.15 A @ 30 VDC (standard DC &amp; multi-pole units)</li> <li>3 A @ 120 VAC (-03 option)</li> <li>15 A @ 120 VAC, 10 A @ 240 VAC (-15 option)</li> </ul>		
<b>Off-state Leakage</b>	<ul style="list-style-type: none"> <li>NOAC: &lt;10 <math>\mu</math>A</li> <li>NCAC: 2.5 mA</li> <li>AADC: &lt;10 <math>\mu</math>A</li> <li>NODC: &lt;10 <math>\mu</math>A</li> <li>NCDC: 1.4 mA</li> <li>CCDC: 0.3 mA (N.C. Terminal)</li> </ul>		
<b>Response Time</b>	0.40 to 2.5 sec. max.		
<b>Time Delay</b>	None		
<b>Hysteresis</b>	5%		
<b>Overload</b>	RANGE	6 SEC.	1 SEC.
	• 1–6 A	• 400 A	• 600 A
	• 6–40 A	• 500 A	• 800 A
	• 40–175 A	• 800 A	• 1200 A
<b>Isolation Voltage</b>	UL listed to 1270 VAC, tested to 5 KV		
<b>Frequency Range</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>	UL/cUL, CE		

