# **ASM SERIES** Self-calibrating Smart-Switches

The newly designed ASM Series Self-calibrating Smart-Switch is more accurate and easier to use than previous models. This Smart-Switch uses the actual load current to set the trip point. It takes just a couple of seconds of steady running conditions before the sensor locks onto the normal current level. The ASM Series is designed for overload, underload or operating window applications. Upon sensing an average operating current, the ASM self-learns and establishes a limit-alarm trip point based on 85–125% of normal current (overload/ underload model only). Available in a solid- or split-core case.



## **Current Sensing Switch Applications**

#### **Conveyors (-OL Option)**

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

## **Electronic Proof of Flow (-UL Option)**

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

## Pump Protection (-OU Option)

- Provides overload (jams) and underload (suction loss) indication.
- Interlocks multiple conveyor sections.

## **Current Sensing Switch Features**

#### Self-powered and Self-calibrating

· Speeds startups, cuts installation costs.

## Status Monitoring, Overload, and Operating Window Options

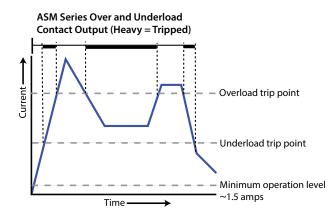
• Choose the operating style that matches your application.

## **Universal Output**

• AC or DC compatibility with any automation system.

## UL/cUL and CE Approved

· Accepted worldwide.



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

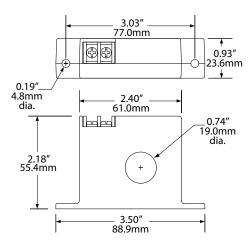
OEMs Test & Evaluation Units for OEMs Free program expedites evaluation process. See page 1 for details.



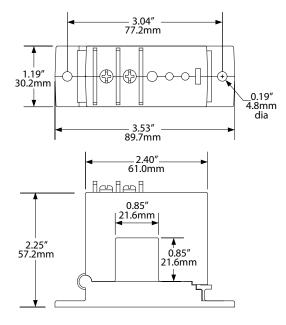


## **Current Sensing Switch Dimensions**

FT Case



SP Case



Current Sensing Switch Specifications		
Power Supply	None, Self-powered	
Setpoint Range	Solid-core: 1.5 – 150 A     Split-core: 2.8 – 150 A (self-calibrating)	
Output Description	Isolated solid-state relay	
Setpoint Calibration	Output changes with AC current between 85% and 125% of normal running current	
Output Rating	<ul> <li>N.O. Version: 0.30 A @ 135 VAC or VDC</li> <li>N.C. Version: 0.30 @ 135VAC/VDC</li> <li>Not polarity sensitive</li> </ul>	
Off-state Leakage	<10 µA	
Response Time	200 ms	
Time Delay	None	
Hysteresis	5%	
Overload	500 A @ 6 sec., 1000 A @ 1 sec.	
Isolation Voltage	UL listed to 1270 VAC, tested to 5 KV	
Frequency Range	6–100 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: ASM-NOU-OL-SP AC current sensing switch, normally open, self-calibrating overload operation in a split-core case. (DIN rail adapters are included)



(1) Output Rating

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NOU	Normally Open	
NCU	Normally Closed	
(2) Operation		

OL	Overload
UL	Underload
OU	Over/Underload

(3) Case Style

FT	Solid-core, Top Term
SP	Split-core



