AS1 SERIES

Current Sensing Switches

AS1 Series Current Sensing Switches combine a current transformer, signal conditioner and limit alarm into a single package for use in status monitoring or proof of operation applications. Offering an extended setpoint range of 1–150 A and universal, solid-state outputs, the self-powered AS1 can be tailored to provide accurate and dependable digital indication of overcurrent conditions across a broad range of applications. Available in solid-core case styles or in a split-core case to maximize ease of installation.



Current Sensing Switch Applications

Electronic Proof of Flow

 Current sensing 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.

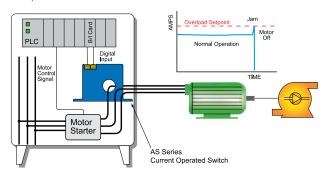
Lighting Circuits

• Proof positive that the lamp is energized.

Electrical Heaters

· Faster response than temperature sensors.

Pump Jam & Suction Loss Protection



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

Current Sensing Switch Features

Universal Output

- N.O. or N.C. solid-state switch for control circuits up to 240 VAC/DC.
- · Compatible with most automation systems.

Self-powered

· Cuts installation and operating costs.

Easily Adjustable Setpoint

· Speeds startup.

Solid or Split-core Case

Versions tailored for each installation.

LED Indication

• Provides guick visual indication of contact status.

Built-in Mounting Feet

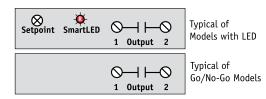
 Simple, two-screw panel mounting or attach with DIN rail brackets (ncluded).*

UL/cUL and CE Approved

· Accepted worldwide.

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

Current Sensing Switch Connections



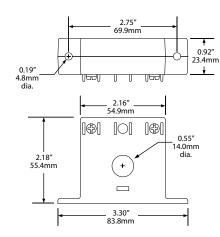




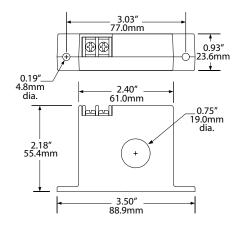


Current Sensing Switch Dimensions

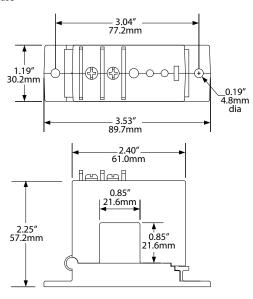
FF Case



FT Case



SP Case



Current Sensing Switch Specifications



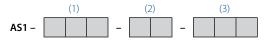


		0 00
Power Supply	None, self-powered	
Setpoint Range	Solid-core: 1–150 A (adjustable-specific models) Split-core: 1.75–150 A (adjustable-specific models)	
Output Description	Isolated solid-state relay	
Output Rating	N.O. Version 0.15 A @ 240 VAC or VDC N.C. Version: 0.2 A @ 135 VAC or VDC Not polarity sensitive	
Off-state Leakage	<10 μΑ	
Response Time	120 ms max.	
Time Delay	None	
Hysteresis	5%	
Overload	MODEL 6 SE	C. 1 SEC.
	•-GO (NOU) •500 •-GO (NCU) •400 •All other •400	• 1000 A
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: AS1-NOU-SP

Adjustable AC current sensing switch, normally open, split-core case. (DIN rail adapters are included)



(1) Output Rating

NOU	Normally Open
NCU	Normally Closed

(2) Case Style

FF	Solid-core, front terminal
FT	Solid-core, top terminal
SP	Split-core

(3) Options

	Standard, with LED (blank)
GO	Non-adjustable; output changes with min. current present (solid-core 0.75 A, split-core 1.25 A)
NL	No LED
Y39	Output Bypass Switch (not UL listed) – available for FT case only



