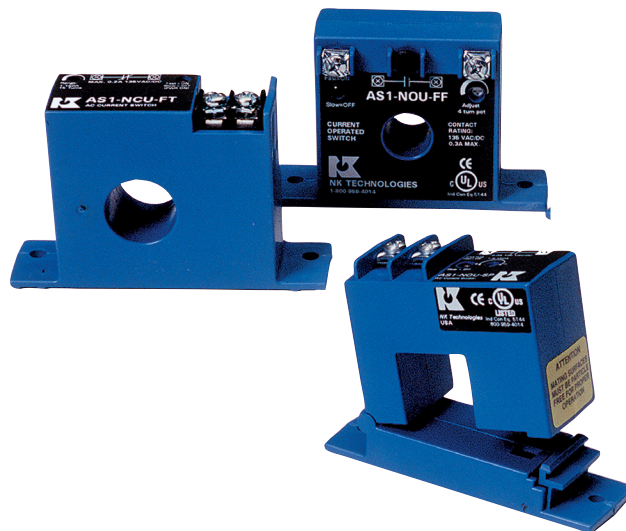


AS1 SERIES

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.

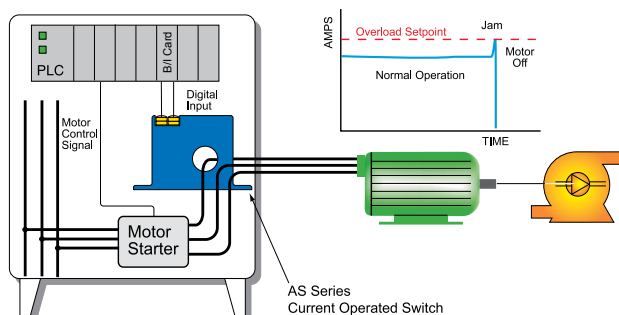
Electrical Heaters

- Faster response than temperature sensors.

Current Detection

- GO/No-GO version detects whether current is present.

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/VDC.
- Compatible with most automation systems.

Self-powered

- Cuts installation and operating costs.

User Adjustable Setpoint

- Speeds startup.

Solid or Split-core Case

- Versions tailored for each installation.

LED Indication

- Provides quick visual indication of contact status.

Built-in Mounting Feet

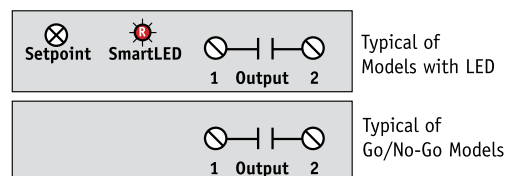
- Simple, two-screw panel mounting or attach with included DIN rail adapter kit (DIN-2)*

UL/cUL Listed and CE Certified

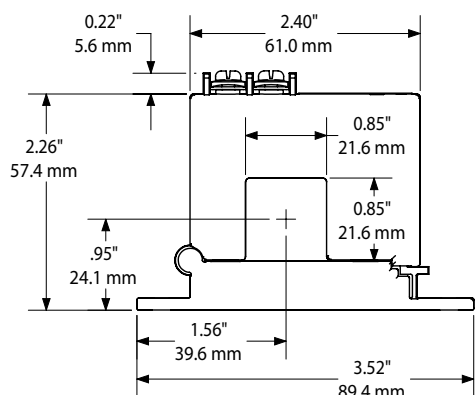
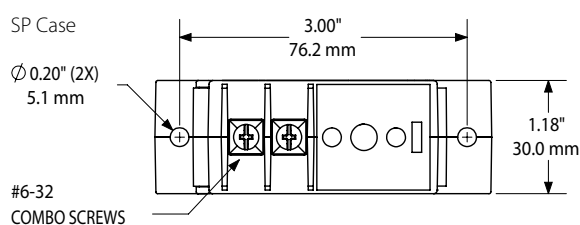
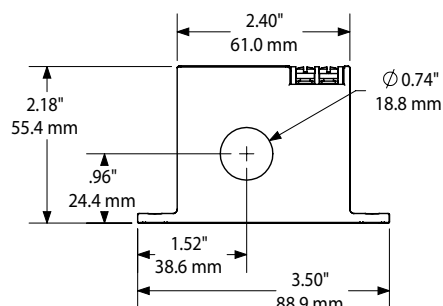
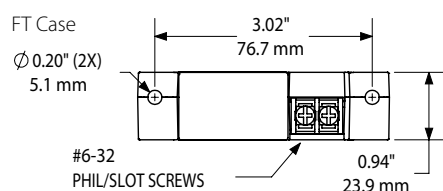
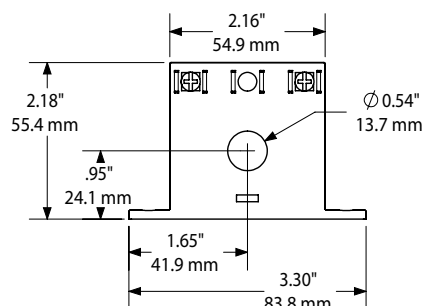
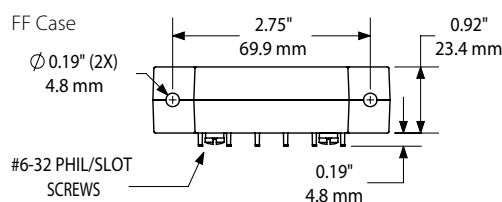
- Accepted worldwide.

*For information on the DIN rail accessories kit, see page 153.

Current Sensing Switch Connections



Current Sensing Switch Dimensions



Current Sensing Switch Specifications



Power Supply	None, self-powered																
Setpoint Range	<ul style="list-style-type: none">Solid-core: 1-150 A (user adjustable models) 0.75 A or less (GO models)Split-core: 1.75-150 A (user adjustable models) 1.25 A or less (GO models)																
Output Switch	Isolated solid-state switch																
Output Rating	<ul style="list-style-type: none">N.O. Version 0.15 A @ 240 VAC/VDCN.C. Version: 0.2 A @ 135 VAC/VDCNot polarity sensitive																
Off-state Leakage	<10 μA																
Response Time	120 ms max.																
Time Delay	None																
Hysteresis	5% of Setpoint																
Overload	<table><tr><td>MODEL</td><td>CONTINUOUS</td><td>6 SEC.</td><td>1 SEC.</td></tr><tr><td>• -GO (NOU)</td><td>250 A</td><td>500 A</td><td>1000 A</td></tr><tr><td>• -GO (NCU)</td><td>150 A</td><td>400 A</td><td>1000 A</td></tr><tr><td>• All other</td><td>150 A</td><td>400 A</td><td>1000 A</td></tr></table>	MODEL	CONTINUOUS	6 SEC.	1 SEC.	• -GO (NOU)	250 A	500 A	1000 A	• -GO (NCU)	150 A	400 A	1000 A	• All other	150 A	400 A	1000 A
MODEL	CONTINUOUS	6 SEC.	1 SEC.														
• -GO (NOU)	250 A	500 A	1000 A														
• -GO (NCU)	150 A	400 A	1000 A														
• All other	150 A	400 A	1000 A														
Isolation Voltage	UL listed to 1480 VAC																
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 Listed to UL 508 (NRNT.E129625), CE																

Current Sensing Switch Ordering Information

Sample Model Number: AS1-NOU-SP

Adjustable AC current sensing switch, normally open, split-core case.

DIN rail adapter kit (DIN-2) included.

AS1 - (1) - (2) - (3)

(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 or less, split-core 1.25 A or less)
NL	No LED
Y39	Output Bypass Switch (not UL listed) - available for FT case only

