

ASO SERIES

Current Sensing Switches

ASO Series Current Sensing Switches are designed to detect very low AC current, and provide a solid-state contact to open or close at a setpoint adjustable from 3 to 350 mA across two ranges. Useful for signal or lamp status monitoring, detecting low level fault currents or fan status proofing, the ASO Series features solid-state outputs and jumper-selectable ranges, which make it a versatile choice for low-current status indication applications.



Current Sensing Switch Applications

Fan Monitoring

- Fan status in heating and drying applications.
- Identify lamp outages or other malfunctions through changes in current consumption.

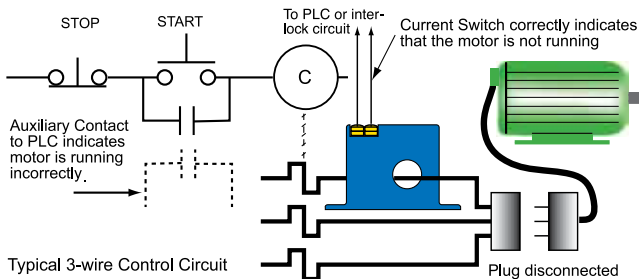
Fractional HP Motors

- Ideal for monitoring small motors used in critical applications, for example, fan status proofing on a crucial cooling fan.

LED Lamp Operation

- Switch can detect LED light sources drawing less than one half watt at 120 VAC.

Status Alarming



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

Current Sensing Switch Features

Wide Range of Output Options

- Dependable, solid-state relay N.O. or N.C. contacts rated at 240 VAC or 30 VDC.
- Compatible with most automation controllers.

Isolated Inputs and Outputs

- Inductive sensing eliminates insertion loads on monitored circuits, effectively isolating it from the unit.
- Isolated outputs simplify wiring and enhance safety.

Adjustable Setpoints

- Setpoints are field-adjustable from 3 mA to 350 mA, speeding installation and allowing for tailored applications.

UL/cUL and CE Approved

- Accepted worldwide.

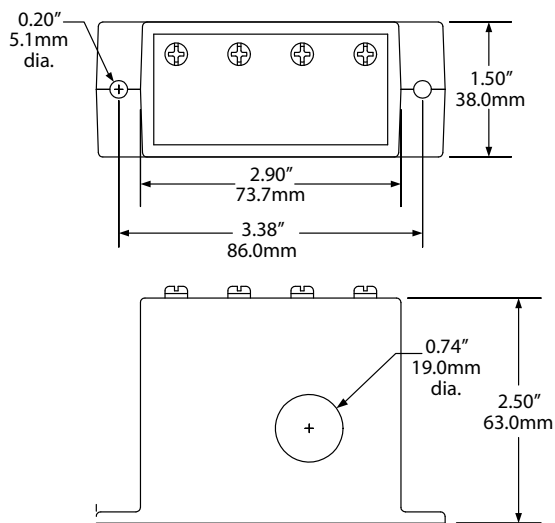
OEMs

Test & Evaluation Units for OEMs

Free program expedites evaluation process. See page 3 for details.

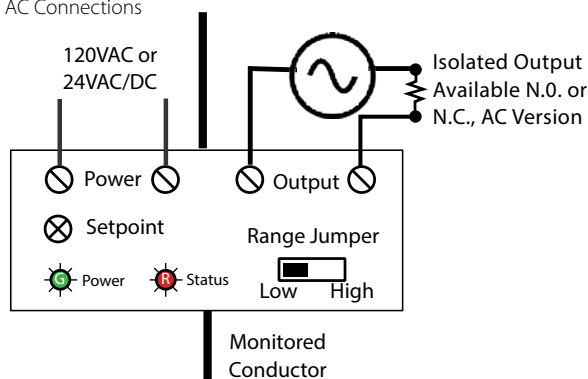
Current Sensing Switch Dimensions

Case

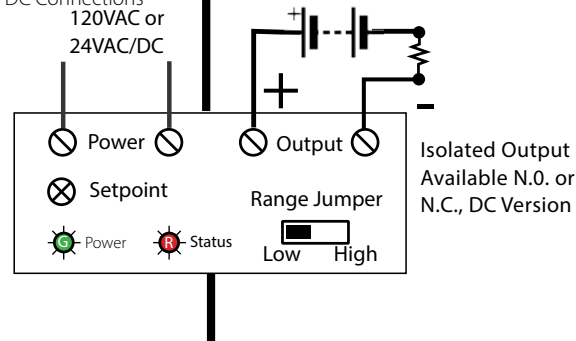


Current Sensing Switch Connections

AC Connections



DC Connections



Notes:

- Terminals are #6 screws.
- Use up to 14 AWG solid or stranded.
- Power connections are not polarity sensitive.
- DC output connections are polarity sensitive.

Current Sensing Switch Specifications

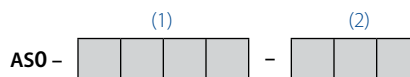


Power Supply	<ul style="list-style-type: none"> • 120 VAC (96–144 V) • 24 VAC/DC (19–29 V)
Power Consumption	2.5 VA
Setpoint Range	<ul style="list-style-type: none"> • Low Range: 3–15 mA (adjustable) • High Range: 15–350 mA (adjustable)
Input	10 A max.
Output Rating	<ul style="list-style-type: none"> • AC Version: 1 A @ 240 VAC • DC Version: 0.15 A @ 30 VDC
Response Time	<ul style="list-style-type: none"> • 150 ms @ 5% above setpoint • 100 ms @ 50% above setpoint
Time Delay	None
Hysteresis	<5%
Overload	10 A continuous
Isolation Voltage	1270 VAC, tested to 5 KV
Frequency Range	50–400 Hz
Case	UL94 V-0 Flammability Rated
Environmental	<ul style="list-style-type: none"> -4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	UL/cUL, CE

Current Sensing Switches

Current Sensing Switch Ordering Information

Sample Model Number: AS0-NODC-120
 Ultra low current sensing switch, normally open solid-state DC output and 120 VAC power supply. (DIN rail adapters are included)



(1) Output Type

NCAC	Normally Closed, 1 A @ 240 VAC
NOAC	Normally Open, 1 A @ 240 VAC
NCDC	Normally Closed, 0.15 A @ 30 VDC
NODC	Normally Open, 0.15 A @ 30 VDC

(2) Power Supply

24U	24 VAC/DC
120	120 VAC

