

## Specifications

Power Supply	None - self powered
Output Switch	Electromechanical relay
Output Rating	5 A@ 250 VAC (general use) 5 A @ 30 VDC (general use)
Off State Leakage	None
Response Time	120 ms
Hysteresis	8% of setpoint
Setpoint Range	5.8 A
Isolation Voltage	UL listed to 1500 VAC Tested to 5000 VAC
Frequency Range	6-100 Hz
Sensing Aperture	-FT 0.74" (18.8 mm)
Environmental	-4 to 122°F (-20 to 50°C) 0-95% RH, Non-condensing Pollution Degree 2 Altitude to 6561 ft (2000 meters)
Listings	UL/cUL

## Model Number Key

**AS1 - NOR - FT - GO**

### OPTIONS:

GO - Go/No-Go Sensor

### CASE STYLE:

FT - Solid-Core, Top Terminals

### OUTPUT (SPST Relay):

NOR - Normally Open, 5.0 A, 250 VAC/30 VDC

### SENSOR TYPE:

AS1 - AC current operated switch with a fixed 5.8 A setpoint



# INSTRUCTIONS



## AS1-NOR SERIES AC Current Operated Switch Go-No Go non-adjustable, Relay Output

## Ranges & Maximum Amps

### Setpoint Sensors (-GO)

TYPE	MIN. TRIP POINT	MAXIMUM INPUT AMPS		
		CONTINUOUS	6 SEC.	1 SEC.
SOLID-CORE, NOR	5.8 A	250 A	400 A	1000 A

## Know Your Power



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AC & DC Current Operated Switches  
1φ & 3φ Power Transducers  
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## NK Technologies

3511 Charter Park Drive, San Jose, CA 95136

Phone: 800-959-4014 or 408-871-7510

Fax: 408-871-7515

sales@nktechnologies.com, www.nktechnologies.com

## Quick "How To" Guide

1. Run the wire to be monitored through aperture.
2. Mount the sensor.
3. Connect output wiring.
  - A. Use 12-26 AWG copper conductors only rated 75°C minimum.
  - B. Ensure load matches the output shown on the sensor label.
4. Energize the load.
  - A. Output closes at 5.8 amps.

## Description

AS1 Series are self-powered, SPST relay output current-operated switches which trigger when the current level sensed through the aperture exceeds the minimum. The relay output contacts can switch up to 250 VAC or 30 VDC; this “universal” output makes them well suited for application in automation systems.

## Installation

### For All Versions

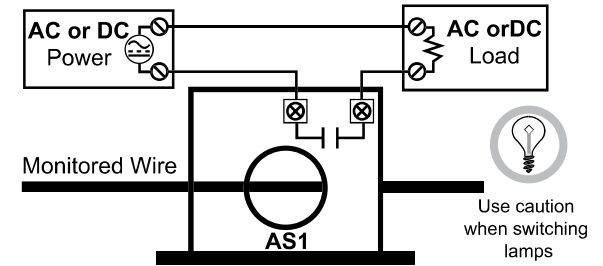
Run wire to be monitored through aperture (opening) in the sensor.

AS1 switches can be located in the same environment as motors, contactors, heaters, pull-boxes, and other electrical enclosures. Mounting can be done in any position or hung directly on wires with a wire tie. Ensure at least one inch clearance exists between sensor and other magnetic devices.

## Output Wiring

Connect control or monitoring wires to the sensor. Use 12-26 AWG copper wire and tighten terminals to 7 inch-pounds torque. Be sure the output load does not exceed the switch rating.

**CAUTION** Incandescent lamps can have “Cold Filament Inrush” current of up to 10 times their rated amperage. Use caution when switching lamps.



## Setpoint Adjustment

AS1-NOR Series is non-adjustable, meaning the output closes when there is current circulating in the primary conductor over the minimum.

### Adjustment Notes:

1. Output contacts are relay contacts. Check output status by checking continuity with a standard ohmmeter, or measuring the voltage across the open or closed contact.

### Typical Adjustment

No adjustment is needed. The relay will change state when AC current exceeds 5.8 amps. If the monitored conductor is passed through the sensing window multiple times, the output will close at a lower primary current. If the conductor passes through the sensor twice, the relay will close with primary current of 2.9 AC amps; if it is passed through the sensor three times, the relay will close at 1.93 amps. It is best to bundle the loops together with nylon ties.

## Trouble Shooting

### 1. Sensor is always tripped

- A. Load current may be too high to allow the output to open at “low current:” conditions.
- B. Switch has been overloaded and contacts are burned out. *Check the output load, remembering to include inrush on inductive loads (coils, motors, ballasts)*

### 2. Sensor will not trip

- A. Monitored current is below minimum required. *Loop the monitored wire several times through the aperture until the “sensed” current rises above minimum. Sensed Amps = (Actual Amps) x (Number of Loops). Count loops on the inside of the aperture.*

- B. Switch has been overloaded and contacts are burned out. *Check the output load, remembering to include inrush on inductive loads (coils, motors, ballasts).*