Specifications

Power Required	None - self powered
Output	Isolated Solid State Switch
Output Rating (maximums)	NOU: 0.3Amp @ 135 VAC/VDC NCU: 0.3Amp @ 135 VAC/VDC
Off State Leakage	NONE
Response Time	0.12 Second (90% step change)
Setpoint Ranges	Fixed Core: 2-150 A Split Core: 3-150A
Setpoint	Factory Calibrated (2 or 3-150 amps)
Precision	Better than 1% of range
Hysteresis	Approximately 5% of Setpoint
Isolation Voltage	UL tested to 1,270 VAC Tested to 5,000 VAC
Frequency	Calibrated for 50 or 60 hertz
Sensing Aperture	-FT: 0.75" (19mm) -SP: 0.85" (21.5mm)
Environmental	-4 to 122 DegF (-20 to 60 DegC) 0-95% RH, Non Condensing
Listings	Designed to meet UL and ULC

Ranges & Maximum Amps

TYPE	RANGE	MAXIMUM INPUT AMPS		
		CONTINUOUS	6 SEC.	1 SEC.
FIXED CORE	1.5-150 A	150A	500A	1000A
SPLIT CORE	2.8 -150A	150A	500A	1000A

Model Number Key

ASC - NOU - 6 - 090 - FT

CASE STYLE:
FT - Fixed Core, Top Term.
SP - Split-Core

TRIP POINT:
sss -002-150 (amps) solid core
-003-150 split core

FREQUENCY:
6 - 60 Hertz
5 - 50 Hertz

OUTPUT:
NOU - Normally Open
NCU - Normally closed

SENSOR TYPE:
ASC - Factory Calibrated Current Operated Switch

Know Your Power

Other NK Technologies Products Include:
AC & DC Current Transducers
AC & DC Current Operated Switches
1ϕ & 3ϕPower Transducers
Current & Potential Transformers (CTs&PTs)

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NK Technologies

INSTRUCTIONS

ASC SERIES

Factory Calibrated
Current Operated Switch
Universal (AC or DC) Output

Quick "How To" Guide

1. Run the wire you are monitoring through aperture.
2. Mount the sensor to a surface if needed or secure to conductor with a nylon tie.
3. Connect output wiring.
   A. Use up to 14 AWG copper wires.
   B. Make sure the load matches the output shown on the sensors' label
4. Output will change state when current rises to set point

A. Turn load "On"
B. LED will flash slowly with current present, lower than set point
C. LED will flash quickly with current over the set point

ASC-Inst. Rev 1 12/13 P/N 695000007

Description

ASC Series are solid-state current operated switches. They operate (switch) when the AC current level through the hole exceeds the factory set amount. The output contacts are rated 0.3A up to 135 VAC or VDC. This "Universal" output make them well suited for application in automation systems.

Installation

For All Versions

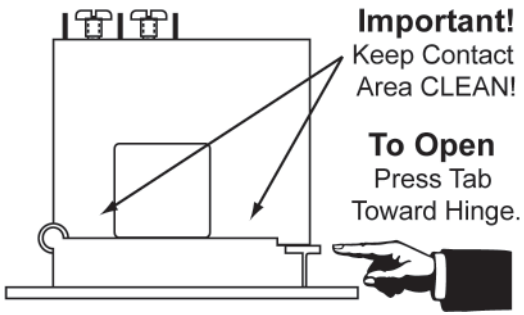
Run wire to be monitored through opening in the sensor.

ASC switches work in the same environment as motors, contactors, heaters, pull-boxes, and other electrical enclosures. They can be mounted in any position or hung directly on wires with a wire tie. Just leave at least one inch distance between sensor and other magnetic devices.

Split-Core Versions (SP Suffix)

Press the tab in the direction as shown to open the sensor. After placing the wire in the opening, press the hinged portion firmly downward until a definite click is heard and the tab pops out fully.

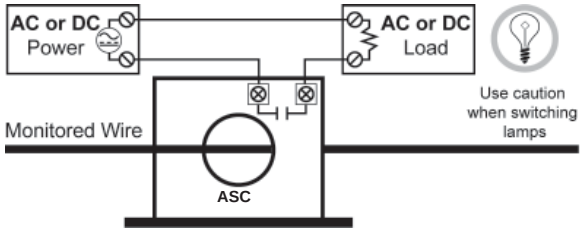
KEEP SPLIT-CORE SENSORS CLEAN.
Silicone grease is factory applied on the mating surfaces to prevent rust and improve performance. Be careful not to allow grit or dirt onto the grease in the contact area. Operation can be impaired if the mating surfaces do not have good contact. Check visually before closing.



Output Wiring

Connect control or monitoring wires to the sensor. Use up to 14 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 controlling lamps.



Setpoint Adjustment

ASC Series will be shipped factory set with your desired trip point. There is no field adjustment available. At AC current of the preset magnitude, the models with a normally open contact will close and the normally closed will open the solid state contact.

Operation

The ASC series current operated switches provide a solid state contact designed to be used as an input to a programmable logic controller, DCS or other solid state device. The normally open models will close the contact when AC current exceeds the factory set value, and the normally closed models will open the contact at this pre-determined level. The output will stay in the tripped condition (open or closed) as long as the current remains higher than the set point, and it will return to the original condition when current falls below the set point.

Trouble Shooting

1. **Sensor is always tripped**
   A. 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. Split Core models: The core contact area may be dirty. *Open the sensor and clean the contact area.*
   C. Switch has been overloaded and contacts are burned out. *Check the output load, remembering to include inrush on inductive loads (coils, motors, ballasts).*