

ASD SERIES

Current Sensing Switches

ASD series sensors provide a limit alarm contact with the easiest adjustment method ever designed. The single turn potentiometer, allows the trip point to be set before the sensor is installed, or before the monitored circuit is energized. The LED display provides a quick visual indication of where the contact changes.



Features a single turn potentiometer and LED display.

Current Sensing Switch Applications

Electronic Proof of Operation

- Current operated 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.

Pump Control

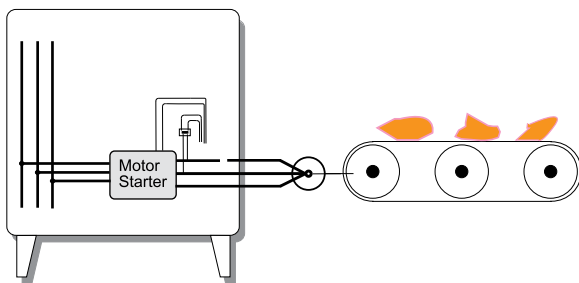
- Output contact is adjusted so it is closed during normal operation, opening if the pump runs dry or there is a loss of head pressure for any reason.

Cooling Towers

- Monitor for over-current conditions caused by open duct access doors or under-current from a broken drive belt or coupling.

Conveyor Protection

If the conveyor jams, the solid-state contact opens to stop the in feed or drive motor.



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

Current Sensing Switch Features

Solid-State Output

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

External Powered

- Allows for higher accuracy.

Easily Adjustable and Precise Setpoint

- Speeds startup.
- Improves the safety by allowing the trip point adjustment with no power through the sensing window.

LED Display

- Provides quick visual indication of where the contact changes.
- Easiest and most accurate setpoint adjustment available.

Built-in Mounting Feet

- Simple, two-screw panel mount or attach with optional DIN rail brackets.*

Designed for UL, CUL and CE Approval

- Accepted worldwide.

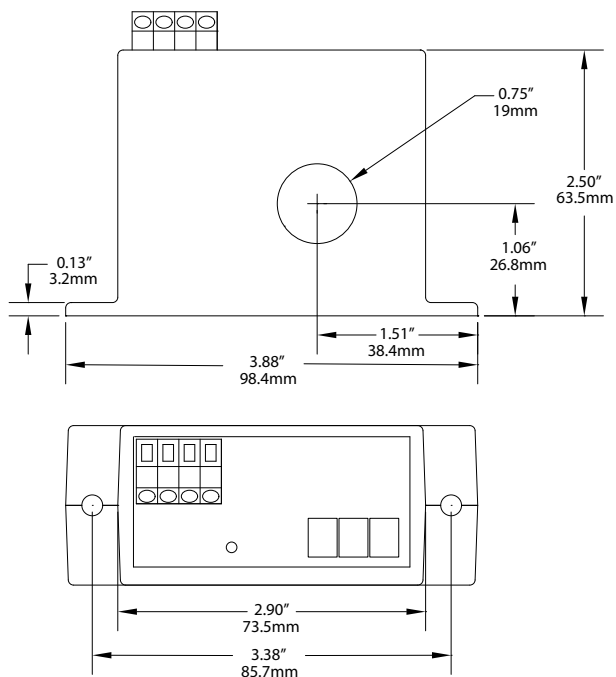
*For information on the DIN rail accessories kit, see page 111.

OEMs

Test & Evaluation Units for OEMs

Free program expedites evaluation process. See page 1 for details.

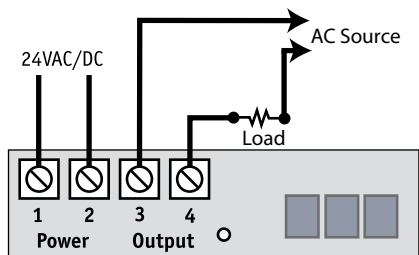
Current Sensing Switch Dimensions



Current Sensing Switch Specifications

Power Supply	24 VAC/DC (< 2 VA consumption)
Digital Output	Magnetically isolated solid-state switch
Output Rating	• Max.: 1.0 A up to 240 VAC • AC only
Off-State Leakage	• <10 μ A normally open • 2.5 mA normally closed
Contact Response Time	40–120 ms
Setpoint Range	• ASD1: 1–50 A (adjustable) • ASD2: 4–200 A (adjustable)
Hysteresis	5% of setpoint
Isolation Voltage	Tested to 5000 VAC
Frequency Range	6–100 Hz
Sensing Aperture	0.74" (19 mm) diameter
Case	UL94 V0 Flammability Rated
Environmental	-4 to 122°F (-20 to 50°C) 0–95% RH, non-condensing
Listings	Designed to meet UL 508 Industrial Control Equipment (USA & Canada)

Current Sensing Switch Connections



Ordering Information

Sample Model Number: ASD1-NOAC-24U-FL
Adjustable AC current operated switch, normally open, solid-core.



(1) Range	
1	1–50 switch adjustment
2	4–200 switch adjustment
(2) Output Contact	
NOAC	Normally Open, closes on current rise, AC control only
NCAC	Normally Closed, opens on current rise, AC control only
(3) Power Supply	
24U	24 VAC or DC
(4) Case Style	
FL	Solid-core

