Specifications	
Power Required	None - self powered
Output Switch	Isolated solid-state switch, normally open
Switch Rating	0.15A, 240 VAC/VDC
Off State Leakage	<10 micro amps
Response Time	120ms
Hysteresis	Approximately 5% of setpoint
Setpoint	Fixed core: 0.75 A max
	Split core: 1.25 A max
Setpoint Adjust	Non-adjustable
Isolation Voltage	UL Listed to 1,270VAC
Monitored Circuit	600VAC line-to-line, 0-250A
Frequency Range	6-100 Hz
Aperture	Fixed core: 0.75" (19mm) ID
	Split core: 0.85" (21.7 mm) ID
Case	UL94V-0 Flammability Rating
Environmental	Operating temperature: -4 to122°F (-20 to 50°C)
	Relative humidity: 0-95% RH, Non-condensing
	Pollution Degree 2
	Altitude to 2000 meters
Agency Approvals	UL/cUL (E222847), CE

For products intended for the EU market, the following is applicable to the CE compliance of the product:

The ACSN250 series comply with EN61010-1 CAT III 300Vrms max line-to-neutral measurement category. If insulated cable is used for the primary circuit, the voltage rating can be improved according to the insulation characteristics given by the cable manufacturer.

WARNING! RISK OF DANGER:
SAFE OPERATION CAN ONLY BE GUARANTEED IF THE CURRENT SWITCH IS USED FOR THE PURPOSE FOR WHICH IT HAS BEEN DESIGNED FOR AND WITHIN THE LIMITS OF THE TECHNICAL SPECIFICATIONS. WHEN THIS SYMBOL IS USED, IT MEANS YOU MUST CONSULT ALL DOCUMENTATION TO UNDERSTAND THE NATURE OF POTENTIAL HAZARDS AND THE ACTION REQUIRED TO AVOID THEM.

WARNING! RISK OF SHOCK:
WHEN OPERATING THE CURRENT SWITCH CERTAIN PARTS OF THE MODULE MAY CARRY HAZARDOUS LIVE VOLTAGE (E.G. PRIMARY CONDUCTOR, CONTROLLED LOAD). THE SWITCH SHOULD NOT BE PUT INTO OPERATION IF THE INSTALLATION IS NOT COMPLETE.

Part Number Key

ACS N - 250 - A E - F

CASE STYLE:
F - Fixed Core
S - Split Core

OUTPUT (SOLID STATE SWITCH):
Normally Open, 0.15 A, 240 VAC/VDC

RANGE:
Up to 250A

ADJUSTMENT:
N - Non-adjustable setpoint

TRANSDUCER TYPE:
AC current operated switch

Maximum Amps				
Type	***Range***	***Maximum Input Amps***		
		Continuous	***6 Sec.***	***1 Sec.***
Fixed Core	0-250A	250	400	1000
Split Core	0-250A	250	400	1000

AUTOMATIONDIRECT.com
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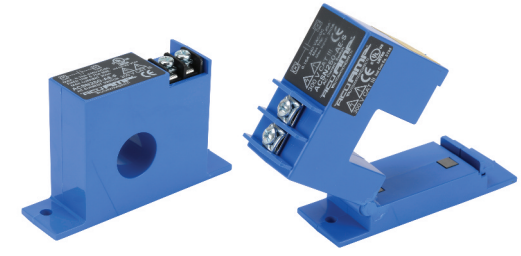
Fax: (770) 889-7876

ACSN2 - Inst - Rev 1 0914 P-N 392501103

ACUAMP®

ACSN250 SERIES INSTALLATION INSTRUCTIONS



Quick Start Guide

1. **Run the wire to be monitored through aperture.**
2. **Mount the sensor.**
3. **Connect output wiring.**
   - **A. Use 22AWG (0.33mm²) up to 14AWG (2.5mm²) copper wires, 75/90°C insulation.**
   - **B. Ensure load matches the output shown on the sensor label.**

Description

ACSN250 Series are self-powered, solid-state current-operated switches which trigger when the current level sensed through the aperature exceeds the setpoint. The solid state output contacts can switch AC or DC; this "universal" output makes them well suited for application in automation systems.

Installation

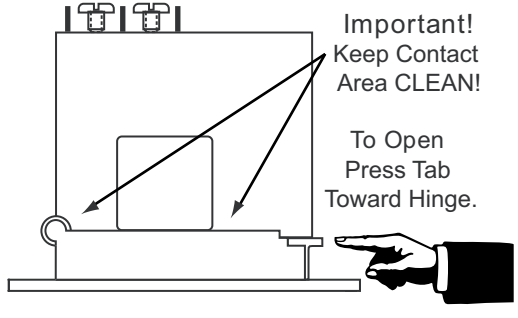
For All Versions

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

ACSN250 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.

Split-Core Versions (-S Suffix)

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



KEEP SPLIT-CORE SENSORS CLEAN.

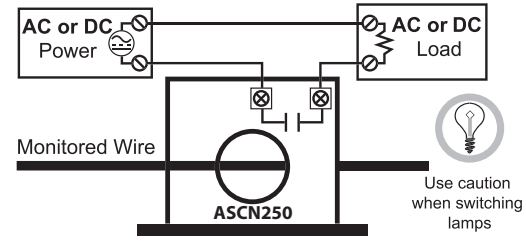
Silicone grease is factory applied on the mating surfaces to prevent rust and improve performance. Be careful not to allow grit or dirt onto the grease in the contact area. Operation can be impaired if the mating surfaces do not have good contact. Check visually before closing.

Output Wiring

Connect control or monitoring wires to the sensor. Use 22AWG (0.33mm²) up to 14AWG (2.5mm²) copper wire and tighten terminals to 5 in lbs (0.6 Nm) 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 ON AND OFF.*

The output connection is simple, and is not polarity sensitive. Bring the control circuit voltage to one terminal, and connect the controlled load to the other. When closed, the contact will pass the control circuit



voltage from the source to the load.

Setpoint Adjustment

ACSN250 series setpoint is fixed and non-adjustable:

1. Output contacts are solid-state. Check output status by applying voltage to the contacts and reading the voltage drop across the contacts. An ohmmeter set on "Continuity" will give misleading results.

Monitored Amps			Output
	Fixed	Split	N.O.
Below	0.75 A	1.25 A	OPEN
Above	0.75 A	1.25 A	CLOSED

Troubleshooting

1. Sensor is always tripped
   - A. Switch has been overloaded and contacts are burned out.
     Check the output load, remembering to include inrush or inductive loads (coils, motors, ballasts).
   - B. The setpoint may be too low.
     Verify monitored circuit amps are less than the fixed setpoint of the ACSN250.
2. Sensor will not trip
   - A. The setpoint may be too high.
     Verify monitored circuit amps are greater than the fixed setpoint of the ACSN250.
   - B. Split Core models: The core contact area may be dirty.
     Open the sensor and clean the contact area.
   - C. Monitored current is below fixed setpoint.
     Loop the monitored wire several times through the aperature until the "sensed" current rises above minimum. Sensed Amps = (Actual Amps) x (Number of Loops). Count loops on the Inside of the aperature.
   - D. Switch has been overloaded and contacts are burned out.
     Check the output load, remembering to include inrush on inductive loads (coils, motors, ballasts).