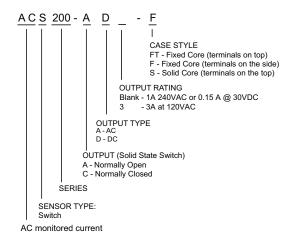
Specifications Specification Speci					
Power Supply	None - self powered				
Output	Isolated solid-state switch				
Switch Rating	DC Output Type: 0.15A @ 30VDC AC Output Type: 1.0A @ 240VAC. -AA3 model: 3A @ 120VAC				
Off State Leakage	<10μA AC or DC N.O., 2.5mA AC N.C., 1.4mA DC N.C.				
Response Time	40 to 250 ms				
Hysteresis	5%				
Input Ranges	Fixed core: 1-6, 6-40 & 40-175 A				
	Split core: 1.75-6, 6-40 & 40-200 A				
Setpoint Adjust	4 Turn potentiometer, 15 Turn potentiometer -FT Case Style				
Isolation Voltage	UL tested to 1480VAC				
Frequency Range	6 to 100 Hz				
Sensing Aperture	-F Case Style: 0.55 in (14mm) dia. -S Case Style: 0.85 in (21.7 mm) sq. -FT Case Style: 0.75 in (19mm) dia.				
Case	UL 94V-0 Flammability rated thermoplastic				
Environmental	-Temp -4 to 122°F (-20 to 50°C), 104°F (40°C) max for model ending in -03 -Humidity 0-95% RH, Non-condensing -Pollution degree 2 -Altitude 2000 meters				
Certifications	cULus listed E222847 CE				

Sensed Current Limit								
Range Jumper	Range Fixed Core	Range Split Core	Continuous	Max. 6 Seconds	Max.1 Second			
None	1 - 6A	1.75 - 6A	200A	400A	600A			
Mid	6 - 40A	6 - 40A	200A	500A	800A			
High	40 - 175A	40 - 200A	200A	800A	1200A			

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

The ACS200 Series may comply with EN 61010-1 CAT III 300V max line-to-neutral measurement category. If insulated cable is used for the primary circuit, the voltage rating of the measurement category can be improved according to the characteristics given by the cable manufacturer.

Part Number Key





Warning! Risk of hazardous voltage

When operating the device, certain parts may carry hazardous live voltage (e.g., primary conductor, secondary terminals). The device should not be put into service if the installation is not complete.



Warning! Risk of electric shock or personal injury

Safe operation can only be guaranteed if the device is used for the purpose for which it was designed and within the limits of the technical specifications. When this symbol is used, it means you should consult all documentation to understand the nature of potential hazards and the action required to avoid them.

VAUTOMATION DIRECT

AutomationDirect.com (ADC) 3505 Hutchinson Road, Cumming, GA 30040 Phone: (800) 633-0405 or (770) 889-2858

ACS200 - Inst - Rev 4 0820 P-N 391000212



ACS200 SERIES INSTALLATION INSTRUCTIONS



Quick Start Guide

- Run the wire to be monitored through the aperture.
- 2. Mount the sensor or suspend on conductor.
- 3. Connect output wiring.
 - a. Use 22-14AWG copper conductors rated 75°C min only and tighten terminals to 9 in-lbs torque.
 - b. Make sure the load matches the output shown on the sensor's label (volts, amps, AC/DC).
- 4. Adjust setpoint.
 - a. Choose correct range by positioning the Range Jumper.
 - b. Use the potentiometer to adjust the setpoint.
- Confirm Contact Operation.
 If the sensor has an LED, a quick flash indicates current over the setpoint and output has tripped; slow flash shows current under setpoint; output is shelf state condition.

Description

ACS200 Series are solid-state current operated switches. They operate (switch) when the current level through the sensing aperture exceeds the adjustable setpoint. Internal circuits are totally powered by induction from the line being monitored.

Installation

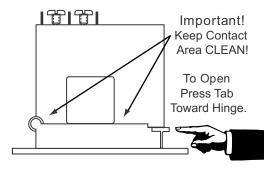
For All Versions

Run wire to be monitored through the opening in the sensor. ACS200 switches work in the same environment as motors, contactors, heaters, pull-boxes, and other electrical enclosures.

They can be mounted in any position. Leave at least one inch distance 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.

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 output wires to the sensor. Use Use 22-14AWG copper wire and tighten terminals to 9 in-lbs torque. Be sure the output load or loop power requirements are met.



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.

Setpoint Adjustment

ACS200 switches have two setpoint adjustment mechanisms, as follows:

- 1. Select the setpoint RANGE with the Range Jumper.
- 2. Fine tune the SETPOINT with the 4- or 15-turn potentiometer (pot). See the product label for the amp ranges and jumper positions.

The pot is shipped from the factory set fully clockwise (CW) to the lowest setpoint. Turning the pot counterclockwise (CCW) will increase the setpoint. The pot has a slip-clutch to prevent damage at either end of its rotation. To determine where the adjustment is, turn the pot at least 4 (or 15) times CW. This will return it to the minimum setpoint.

Adjustment Notes

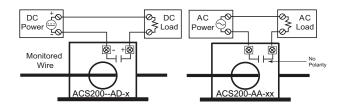
- 1. Output is solid-state. Check output status by applying voltage to the output and reading the voltage drop across the output. An ohmmeter set on "Continuity" will give misleading results.
- 2. It is recommended the setpoint be adjusted to allow for usual utility company voltage variations of 10-15%.

Typical Adjustment

- 1. Move the jumper to the desired range. Turn the pot to minimum setpoint (4 or 15 turns CW).
- 2. Have normal operating current running through sensor. The output should be tripped since the pot is at its minimum setpoint. LED should be flashing fast (2 to 3 times per second).
- 3. Turn the pot CCW until the unit output changes state. This is indicated by the slow flashing of the LED (once every 2 to 3 seconds), or by the changing of the output switch status.
- $4.\ \mbox{Now turn}$ the pot CW slowly until the unit trips again. It is now set at the current level being monitored.

A. To Set UNDERLOAD - Turn the pot about 1/8 turn further CW.

B. To Set OVERLOAD - Turn the pot about 1/8 turn further CCW.



Troubleshooting

- 1. Sensor is always tripped.
 - A. The jumper may be set in a range that is too low for current being monitored.

Move jumper to the correct range.

B. The setpoint may be too low.

Turn pot CCW to increase setpoint.

C. Mismatched Polarity (DC Output Only)

Check polarity on output wiring: output is corrected as needed.

- D. Switch has been overloaded and output is burned out.

 Check the output load, remembering to include inrush on inductive loads (coils, motors, ballasts).
- 2. Sensor will not trip.
 - A. The jumper may be set in a range that is too high for current being monitored.

Move jumper to the correct range.

B. The setpoint may be too high.

Turn pot CW to decrease setpoint.

C. 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.

Split Core models: the core contact area may be dirty.

Open the sensor and clean the contact output area.

D. Switch has overloaded and output is burned out.

Check the output load, remembering to include inrush on inductive loads (coils, motors, ballasts).

Monitored Amps	Output		I FD	
monitorea Amps	N.O.	N.C.	LLD	
None or less than minimum	Open	Closed	Off	
Below trip level	Open	Closed	Slow (2 sec.)	
Above trip level	Closed	Open	Fast (0.5 sec.)	