



## Technical Description

InPower's ABS3 Series of 200 Amp continuous current Auxiliary Battery Switches are the ideal solution for charging and isolating an auxiliary battery from a vehicle's chassis battery and alternator. InPower's ABS3 Series is designed to replace outmoded battery isolators and unreliable mechanical battery separators.

The ABS3 uses InPower's advanced patented and patent pending solid-state contactor technology, incorporating sophisticated microprocessor algorithms to monitor over-current, over-temperature, and under-voltage sensing.

The auxiliary battery is charged from the chassis battery and alternator, while the chassis battery is protected from auxiliary battery load discharge. Since the ABS3 is bidirectional, a charging device (such as a battery charger or genset) connected to the auxiliary battery can also supply charging current to the chassis battery when needed.

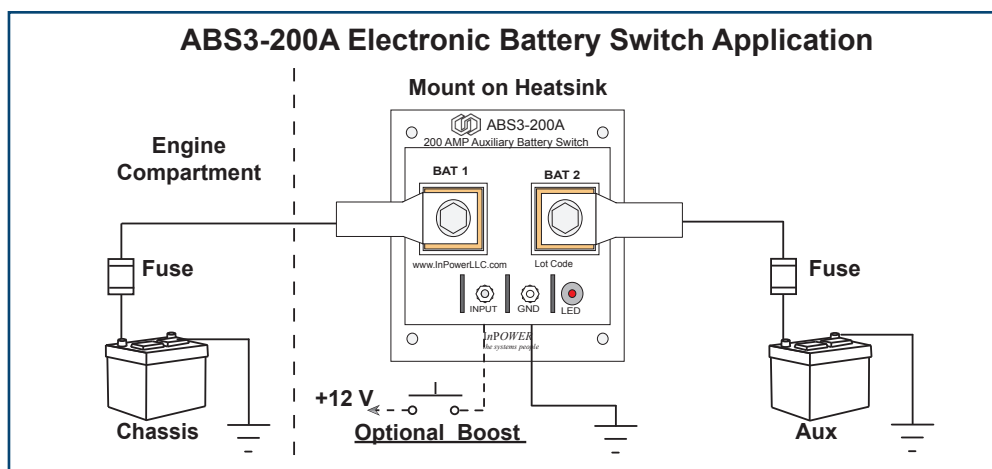
The ABS3-200 digitally monitors both current and voltage of the BAT1 and BAT 2 Battery connections. This monitoring allows for precise management of both the voltages and currents for the Chassis and Auxilliary Batteries optimum system performance.

InPower's advanced efficient design has switch on resistance that is less than 670 micro-ohms (0.000670 ohm), yielding unit design capabilities that are unmatched in the marketplace.

## Key Features

- Intelligent Auxilliary Battery Switch with dual voltage, dual current, and temperature integrated monitoring and control.
- All Solid State Surface Mount design with integrated metal heat pipe technology.
- Ultra-efficient, Ultra-reliable design
- Short Circuit, Overload, and Over-Temperature protected
- Reverse Battery Protection
- Bi-Directional Charging
- Designed to Waterproof IP67
- Proudly designed and made in the USA
- Order ABS3-200B for termination of more wires with the 4 Lug Version.

## ABS3-200A System Diagram



## Specifications

Current Rating: 200 Amps Continuous  
 Overcurrent Protection Trip: See **Current Trip Profile** figure  
 Overcurrent Reset: Module will Reset 30 Sec after Fault

### Manual/Boost Operation:

- Momentarily applying +12Vdc to **INPUT** terminal will cause the Module to turn **ON** if BAT 1 or BAT 2 Voltage is > 7.0Vdc

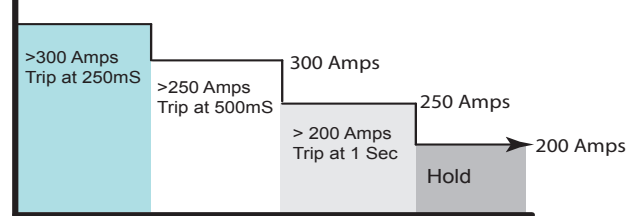
### Automatic Operation:

- Module will automatically turn **ON** when battery voltages on either BAT 1 or BAT 2 is >13.5Vdc for > 10 seconds.
- Module will automatically turn **OFF** when battery voltages on BAT 1 and BAT 2 are <12.80Vdc for > 10 seconds.

Temperature Range: -40 to +85 degrees Celsius  
 Over Temperature Shutdown: >85 degrees Celsius

Voltage Range: +7.0 to +18.0 Volts  
 Standby Current: <3.8mA  
 Environmental: Designed to meet IP67

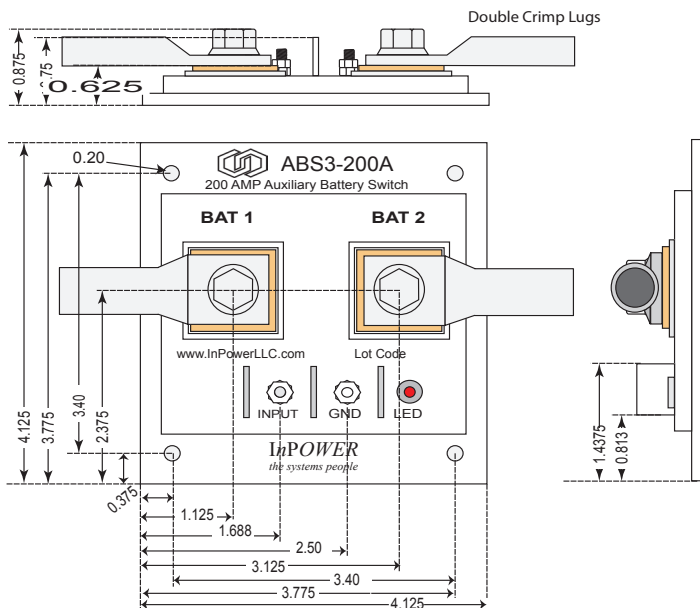
## Current Trip Profile



## Physical Specifications

Power Terminals: Engineered Brass Bus Bar  
 Power Terminal Bolts: Steel Hex Bolt  
**(No Substitutions)**  
 Power Terminal Torque: 10 to 15 ft-lb  
 Ground/Input Terminals: 8/32 Screw Terminal with Brass Nuts (4 to 5 Inch Lbs)  
 Weight: 0.25 lbs  
 Dimensions: 4.00 inches W x 4.00 inches L x 1.20 inches H  
 Mounting Screws (User Provided): #8-32 (4 to 5 Inch Pounds)

## Mechanical Drawing



### IMPORTANT!

- Mount unit with 144 sq. inches of > 0.125 sheet metal for proper heat dissipation.
- Only use the supplied 0.50 inch long 3/8 - 16 Stainless Steel Bolts - **Do Not Substitute**
- Torque Stainless Steel Bolts to:  
 Minimum: 10 Foot pounds  
 Maximum: 15 Foot pounds
- For 200 Amp service, use AWG 3/0 Double Crimp Lugs with a 3/8 Mounting hole, and AWG 3/0 Cable.



**Do Not Stack Lugs!**

If Multiple Terminations are necessary, please refer to the ABS3-200B or ABS3-300

## Mounting Instructions

