SSC3-200A

Intelligent Programmable Solid State Contactor



Key Features

- Custom Programmable Features Contact Inpower
- Sealed Case
- · Compact Size, Low Profile, for Easy Install
- · Status LED Indicator
- High Efficiency with much Longer Life than Mechanical Contactors (no moving parts or contacts)
- 100 % Solid State Construction
- Automatic Over-Current, Under-Voltage and Over-Temperature Fault Shutdown Protection
- · Loss of Ground Detection

Ordering Guide

ModelDescriptionSSC3-150Solid-state contactor, 150 AmpSSC3-200ASolid-state contactor, 200 Amp

Intelligent Solid state DC contactor with over-current shutdown protection offers many advantages over mechanical solenoid contactors

Technical Description

The SSC3 Series is InPower's third generation family of high current solid-state DC contactors. These single channel power switches are available in continuous current ratings of 150 and 200 amps. Low onresistance solid-state switches and high current fly back diodes provide not only outstanding surge current capability for starting high in-rush current loads but also maximum voltage spike suppression for high inductive loads.

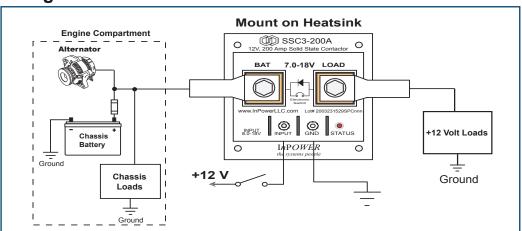
Applications include: high current DC loads such as master battery disconnect switching, blower motors, auxiliary air conditioner units, lights, and hydraulic motors.

Packaging: The solid-state contactors are sealed and packaged in rugged plastic case with an aluminum baseplate. Four corner mounting hole pads provide the mounting points. A Ground Terminal is provided for a positive connection to Battery Ground. Studs with accompanying nuts are provided for a positive connection to the Control Input and Battery Ground..

A **LED Status Indicator** displays a *steady on* when the contactor is on and operating normally, or *flashes* when the contactor has automatically turned off as a result of a detected fault such as loss of ground, overcurrent, under-voltage or over-temperature. A fault is automatically reset when the control input voltage is removed.

Voltage Hysteresis on the control input ensures high electrical noise immunity. An input control voltage greater than +8 volts will turn the contactor on and a voltage of less than +4 volts will turn the contactor off. The control input appears as 100K-Ohm resistance to ground.

System Diagram





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Specifications

Current Rating:
Overcurrent Protection Trip:
Overcurrent Reset:
On-resistance at maximum
temperature and current:

Manual SSC Operation:

200 Amps Continuous Type A Mount See Current Trip Profile figure Module will Reset 30 Sec after Fault

.1 milliohms

0.75 milliohms

 +12Vdc to INPUT terminal will cause the Module to turn ON and supply power to the load terminal (if BAT Voltage is > 7.0Vdc). If unit is ON then removing +12Vdc again will turn the unit OFF.

Temperature Range: Over Temperature Shutdown: Voltage Range:

Standby Current: Environmental:

Low Battery Voltage Trip: Loss of Ground Trip:

Over-Current Trip:

Logic Power Current Draw With Status LED Off: With Status LED On: Turn-On Delay: Turn-Off Delay: Control Connection: Control Input Voltage:

Control Input Resistance: BAT+ to LOAD Terminal Leakage Current: -40 to +85 degrees Celsius >85 degrees Celsius (+185° F)

7.0 to +18.0 Volts

<3.8mA

Designed to meet IP67

+7.25 to +7.50 Vdc for 250 mS

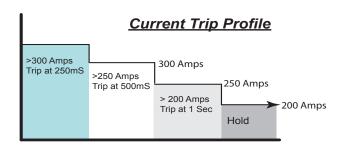
250 milliseconds

100% to 110% of rated amps for 500

mS

80 milliwatts 150 milliwatts 25 milliseconds 25 milliseconds 8/32 with brass nuts >+8.0 Vdc to activate, <+4.0 Vdc to deactivate 100 K Ohm to ground

75 microamps maximum



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 terminals with Brass Nuts

(4 to 5 Inch Lbs)

Weight: 0.4 lbs (0.181kg)

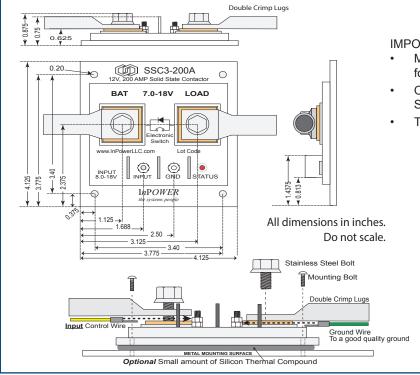
Dimensions: 4.00 inches W x 4.00 inches L x

1.20 inches H

Mounting Screws (User

Provided): #8-32 (4 to 5 Inch Pounds)

Mechanical Drawing



IMPORTANT!

- Mount unit with144 sq. inches of > 0.125 sheet metal for proper heat dissapation.
- Only use the supplied 0.50 inch long 3/8 16 Stainless Steel Bolts - <u>Do Not Substitute</u>
- Torque Stainless Steel Bolts to:

Minimum: 10 Foot pounds Maximum: 15 Foot pounds



Do Not Stack Lugs!

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