

LVD3-200A-C-SPC444

Custom Program Automatic 200 Amp Low Voltage Disconnect



Key Features

- Custom Factory Programed Set points for Voltage Thresholds and Timers
- Prevents excessive battery discharge by automatically disconnecting loads.
- 100% solid state design - No moving parts to cause arcing and electrical noise.
- LoadLogic technology - Automatically compensates for different loads (load startup and faults).
- Automatic shutdown protection for short-circuit, over-current, loss of ground, shorted load, and high temperature.
- Compact size and low profile.
- Proudly Made in the USA

Technical Details

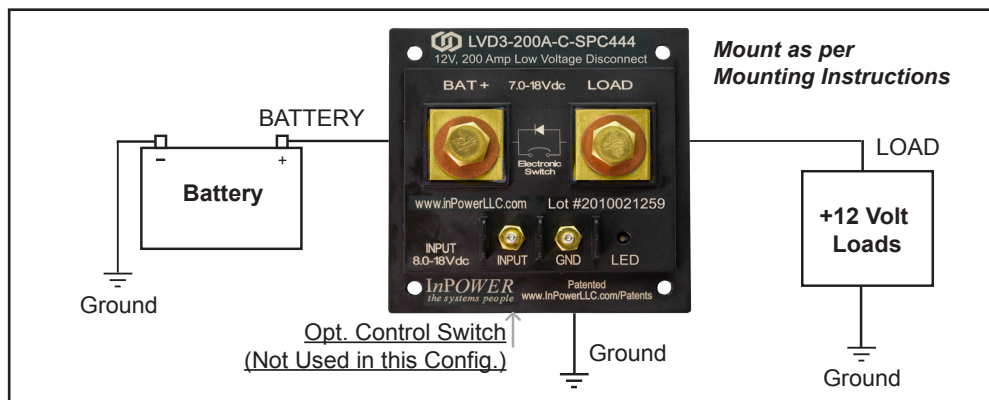
InPower's LVD3 Series of Low Voltage Disconnect switches are the ideal solution for isolating an auxiliary load from a vehicle's chassis battery to intelligently prevent total discharge of the chassis battery. InPower's LVD3 Series replaces dated, unreliable, mechanical-contactor-based Low Voltage Disconnects. The LVD3 uses proven patented solid-state contactor and Cool Terminal technology.

Sophisticated microprocessor algorithms monitor over-current, over-voltage, under-voltage, and over-temperature conditions.

LoadLogic technology automatically compensates for different types of loads, starting difficult loads (with large startup surge requirements), yet accurately detecting a dead short fault.

Part Number	Description
LVD3-200A-C-SPC444	Input Terminal Not Functional. This will be similar to the VCM-12 functionality where it automatically turns On and Off based upon voltage conditions. Overload trip off is >200Adc for >0.5seconds. Output On when voltage is greater than 13.25V (Alternator On). Output Off if less than 12.7Vdc but greater than 12.3Vdc for more than 2 hours (Alternator Off). Output Off if less than 12.3Vdc but greater than 11.8Vdc for more than 20 minutes (Alternator Off). Output Off if less than 11.8Vdc (Alternator Off or not keeping up). To Reset over current error condition, turn the truck off where battery drops below 13.0Vdc then restart the truck so the voltage again goes above 13.25Vdc.

System Diagram



LVD3-200A-C-SPC444

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Specifications

Maximum Current Rating:	200 Amps
Operating Voltage:	+7.0 to +18.0 volts
Operating Temperature:	-40° to +185°F (85°C)
Hi Temp Fault:	>185°F (85°C)
Loss of Ground Trip:	250 milliseconds
Shorted Load Detect:	250 milliseconds
Output ON:	Vbatt > 13.25V
Output OFF Immediate:	Vbatt < 11.8V
Timed Output OFF:	
Alternator OFF	12.3V<Vbatt<12.7 for more than 2Hr
Alternator OFF	11.8V<Vbatt<12.3 for more than 20m
Over-Current Trip:	200 Amps +/-2 Amps for 0.5 Sec
Fault Reset:	Turn Truck Off (Vbat <13.0V), Start Truck (Vbat >13.25V)
LED Indicator:	SW State (ON/OFF), FAULT (FLASH) On steady when disconnect switch is on. Off when the disconnect switch is off. Flashes during fault shut downs (Low Voltage Shutdown does not flash the LED).
Standby Current Draw:	12.5 milliamps max.
Turn-On/Off Delay:	25 milliseconds
INPUT Control Voltage:	Not Used
INPUT Resistance:	120 K Ohm to ground
BAT+ to LOAD Leakage:	0.075 milliamps maximum

Mechanical Specifications

Weight:	0.60 lbs
Dimensions:	4.0" W x 4.0"L x 1.2"H
Power Terminals:	3/8 - 16 Brass Bolts with Copper Washers
INPUT, GND Terminals:	8-32 4-5 Inch Pounds
Ground Connection:	8-32 Ground stud for connection
Power Terminal Torque:	10 to 15 Foot Pounds
Designed to IP67	

Ordering Guide

Model	Description
LVD3-200A-C-SPC444	Custom Low Voltage Disc, 200 Amp

Mounting Requirements !IMPORTANT!

- Mount unit with 144 sq. inches of > 0.125 sheet metal for proper heat dissipation.
- Not for under-hood mounting
- Only use the supplied 0.50 inch long 3/8 - 16 Brass Bolts and Copper Washers - **Do Not Substitute**
- Protect lugs with boots or dielectric grease

Mechanical Drawing

