Description
The Littelfuse LS6 dc series is an energy-efficient, compact disconnect switch that quickly breaks or resumes the flow of current safely to prevent shock hazards when trying to isolate circuits or repair systems.

Features/Benefits
- Streamline design eliminates the need for external bridging links (jumpers) to lower heat dissipation for increased energy efficiency, decreased installation and maintenance time, and reduced footprint for added design flexibility
- High-level disconnection insulation provides a barrier to stop conduction when switch is in off position for added safety
- The self-cleaning blade contacts eliminate performance degradation (from increased electrical resistance over time) to ensure consistent behavior across the product’s lifespan
- The internally-located “sandwich-type” 2-contact symmetrical design mitigates the electromagnetic force of repulsion to offer enhanced functionality in short-circuit conditions
- Meets UL 94 flammability requirements with self-extinguishing/non-flammable materials to prevent fires

Applications
- Solar/PV systems: combiner boxes, recombiner boxes and inverters
- Energy storage systems: disconnection of batteries, containerized batteries
- Oil & gas: dc drives
- Railway: earthing switches and battery disconnection
- UPS: switching and isolation of batteries

Specifications
UL 98B Standards
- Total Voltage Rating: 1000 V dc
- Amperage Rating: 250 A
- SCCR Rating: 10 kA
- Ambient Temperature: -20 to 50 °C (-4 to 122 °F)
IEC 60947-3 Standards
- Insulation Voltage Rating Ui: 1500 V dc
- Impulse Withstand Voltage: 12 kV

Other Characteristics
- Power Losses at 250 A
  - 2 Pole (2E): 10.08 watts/pole
  - 1 Pole (1M): 19.59 watts total
- Minimum Connection Wire Range/AWG: 400 kcmil/MCM (203 mm²)
- Maximum Connection Wire Range/AWG: 500 kcmil/MCM (253 mm²)

Number of Circuits/Switches: 1
- Mechanical Operations: 8,000
- Tightening Torque: 159 lbf-in (18 N•m)
- Material: Plastic housing, Silver-plated copper terminals
- Base Mounting: Screws
- Flammability Rating: UL 94 V-0

Environmental
- RoHS compliant
- REACH compliant
- Country of Origin: Spain

Recommended Accessories
- Panel handle with shaft LDSSA11 for closed panel door access
- Direct handle LDS111 for open panel door access
- Auxiliary contacts LD5LAU01 remotely indicate switch position
- Phase barriers LDRSF11 (Type 1M) and LDRSF13 (Type 2E) isolate sections to eliminate arcing between the phases
- Terminal lug LDRTL11W safely connects electrical and mechanical devices (phase barriers must be used in order to maintain the required clearance)
- Terminal shrouds LDRCU13W offer protection against direct contact after wiring
- Spacers LDREL11W increase distance between switch and mounting plate
Dc Disconnect Switch
LS60250 1000 V DC SERIES

Part Numbering System

<table>
<thead>
<tr>
<th>LS6</th>
<th>0250</th>
<th>1M</th>
<th>S</th>
<th>00L</th>
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<tbody>
<tr>
<td>Series</td>
<td>Amperage</td>
<td>Configuration Type</td>
<td>Terminal Measurement</td>
<td>UL product</td>
</tr>
</tbody>
</table>

Configuration

1M (1 Pole)  
2E (2 Pole)

Ordering Information

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<tr>
<th>SERIES</th>
<th>TOTAL VOLTAGE</th>
<th>AMPERAGE</th>
<th>INSTALLATION</th>
<th>CONFIGURATION</th>
<th>POLES</th>
<th>SINGLE UNIT WEIGHT</th>
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<tbody>
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<td>LS602501MS00L</td>
<td>1000 V dc</td>
<td>250 A</td>
<td>Grounded</td>
<td>Type 1M</td>
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<td>2 kg</td>
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<tr>
<td>LS602502ES00L</td>
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<td>250 A</td>
<td>Ungrounded</td>
<td>Type 2E</td>
<td>2</td>
<td>3 kg</td>
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</table>

Dimensions Millimeters

Dc Disconnect Switch

Switch + Direct Handle
- Side View

Panel Handle with Shaft
LDSSA11

Auxiliary Contact
LD5AU01

Terminal Lug Measurements

| LDRTL11W | CONDUCTOR TEMPERATURE RATING | COPPER WIRE N•M (TERMINAL TORQUE) (+5% | -10%) |
|----------|-----------------------------|---------------------------|
| 3/0      | 85 MM² MIN. 400 KCMIIL 240 MM² MAX. | | |
| 75 °C    | M10 | 18 | 159 |

Torque and Cable Capacity Instructions

10-32 UNF TORQUE/FIRM 26.55 lb.inch / 3 Nm
7/8-14 UNF TORQUE/FIRM 500 lb.inch / 56 Nm

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