

# Dc Disconnect Switch

## LS60250 SERIES

500 V Dc • 250 A

REACH ENEC CE IEC UL RoHS



Type 2L  
Dc Ungrounded



Type 1V  
Dc Grounded with Handle Attached



### 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
- Electrical vehicle chargers

### Specifications

#### UL 98B Standards

<b>Total Voltage Rating</b>	500 V dc
<b>Amperage Rating</b>	250 A
<b>SCCR Rating</b>	10 kA
<b>Ambient Temperature</b>	-20 to 50 °C (-4 to 122 °F)

#### IEC 60947-3 Standards

<b>Insulation Voltage Rating Ui</b>	1500 V dc
<b>Impulse Withstand Voltage Rating Uimp</b>	12 kV

<b>Operational Current DC21B Rating</b>	250 A/500 V dc
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#### Other Characteristics

<b>Power Losses at 250 A</b>	10.08 watts
<b>Minimum Connection Wire Range/AWG</b>	400 kcmil/MCM (203 mm <sup>2</sup> )
<b>Maximum Connection Wire Range/AWG</b>	500 kcmil/MCM (253 mm <sup>2</sup> )
<b>Number of Circuits/Switches</b>	1
<b>Mechanical Operations</b>	8,000
<b>Tightening Torque</b>	159 lbf-in (18 N•m)
<b>Material</b>	Plastic housing Silver-plated copper terminals
<b>Base Mounting</b>	Screws
<b>Flammability Rating</b>	UL 94 V-0
<b>Approvals</b>	UL 98B & UL 94 UL Guide WHVA UL Listed E511898 NEC Article 690 for PV systems IEC-60947-3 CE EAC
<b>Environmental</b>	RoHS compliant REACH
<b>Country of Origin</b>	Spain

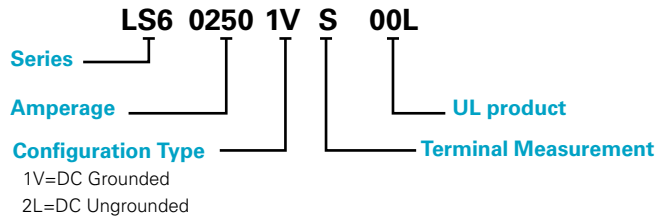
### Recommended Accessories

- Panel handle with shaft LDSSA11** for closed panel door access
- Direct handle LDSSI11** for open panel door access
- Auxiliary contacts LD5LAU01** remotely indicate switch position
- Phase barriers LDRSF11 (Type 1V) and LDRSF12 (Type 2L)** 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 LDRCU11W** offer protection against direct contact after wiring
- Spacers LDREL11W** increase distance between switch and mounting plate

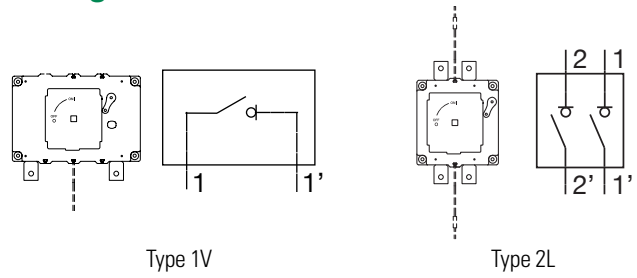
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### Part Numbering System



### Configuration

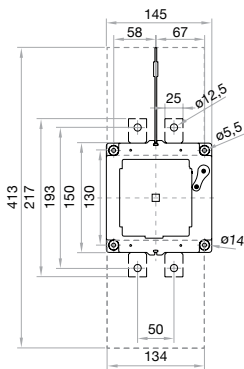


### Ordering Information

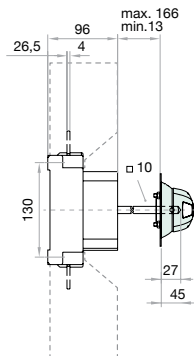
DC DISCONNECT SWITCH					
PART NUMBER	VOLTAGE	AMPERAGE	INSTALLATION	CONFIGURATION	SINGLE UNIT WEIGHT
LS602501VS00L	500 V dc	250 A	Grounded	Type 1V	2 kg
LS602502LS00L	500 V dc	250 A	Ungrounded	Type 2L	3 kg

### Dimensions Millimeters

#### Dc Disconnect Switch

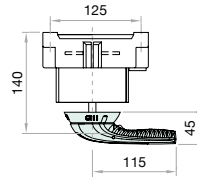


#### Switch + Direct Handle - Side View



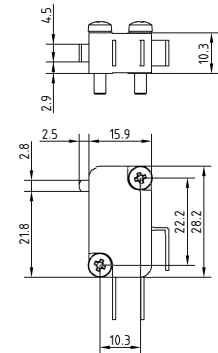
#### Panel Handle with Shaft

LDSSA11




#### Auxiliary Contact

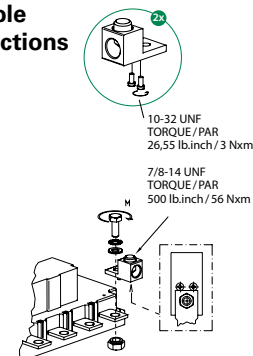
LD5AU01



### Terminal Lug Measurements

LDRTL11W				
3/0 85 MM <sup>2</sup> MIN --- 400 KCMIL 240 MM <sup>2</sup> MAX	CONDUCTOR TEMPERATURE RATING		COPPER WIRE ONLY M (TERMINAL TORQUE) (+5%   -10%)	
			N·M	LB·INCH
	75 °C	M10	18	159

### Torque and Cable Capacity Instructions



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