

# Dc Disconnect Switch

LS60250 1000 V DC SERIES

1000 V dc • 250 A • 1 Pole  
1000 V dc • 250 A • 2 Pole (500 V dc per pole)



2 Pole (Type 2E)  
Dc Ungrounded

1 Pole (Type 1M)  
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

REACH ENEC CE IEC UL RoHS

## 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 Rating Uimp	12 kV
Operational Current DC21B Rating	250 A/1000 V dc

### 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 mm <sup>2</sup> )
----------------	--------------------------------------

### Maximum Connection

Wire Range/AWG	500 kcmil/MCM (253 mm <sup>2</sup> )
----------------	--------------------------------------

### 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

### Approvals

UL 98B & UL 94  
UL Guide WHVA  
UL Listed E333311  
NEC Article 690 for PV systems  
IEC-60947-3  
CE  
EAC

### Environmental

RoHS compliant

### Country of Origin

REACH  
Spain

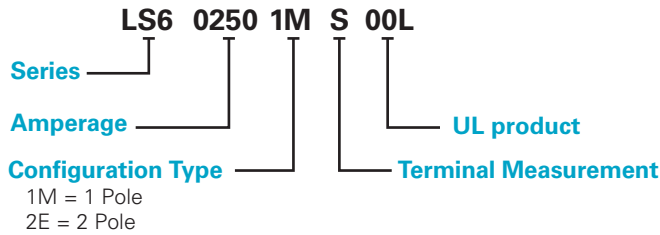
## Recommended Accessories

- Panel handle with shaft LDSSA11 for closed panel door access
- Direct handle LDSI11 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

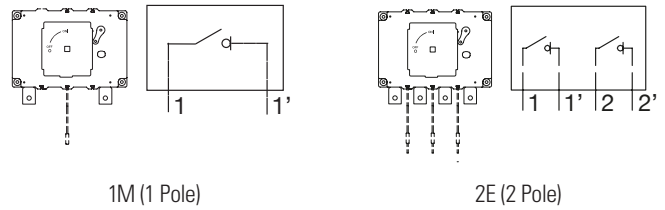
# Dc Disconnect Switch

## LS60250 1000 V DC SERIES

### Part Numbering System



### Configuration

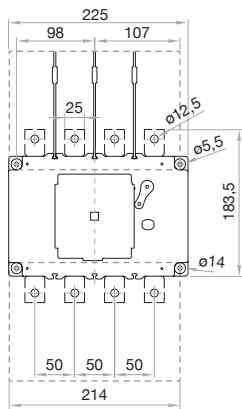


### Ordering Information

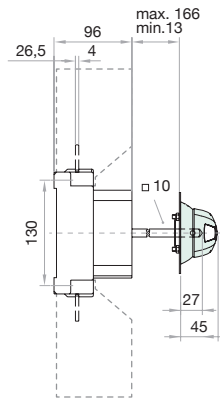
DC DISCONNECT SWITCH						
SERIES	TOTAL VOLTAGE	AMPERAGE	INSTALLATION	CONFIGURATION	POLES	SINGLE UNIT WEIGHT
LS602501MS00L	1000 V dc	250 A	Grounded	Type 1M	1	2 kg
LS602502ES00L	1000 V dc	250 A	Ungrounded	Type 2E	2	3 kg

### Dimensions Millimeters

#### Dc Disconnect Switch

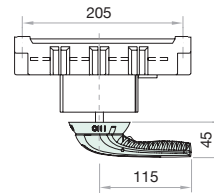


#### Switch + Direct Handle - Side View



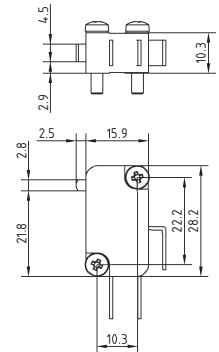
#### Panel Handle with Shaft

LDSSA11




#### Auxiliary Contact

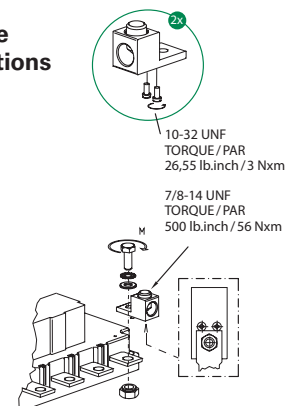
LD5AU01



### 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



**Disclaimer Notice** – Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at [www.littelfuse.com/product-disclaimer](http://www.littelfuse.com/product-disclaimer).