# Dc Disconnect Switch LS60250 SERIES

#### 1000 V Dc • 250 A

# REACH [III CE III (II) ROHS





Type 2E Dc Ungrounded

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 shortcircuit conditions
- Meets UL 94 flammability requirements with selfextinguishing/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**

Total Voltage Rating1000 V dcAmperage Rating250 ASCCR Rating10 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 19.59 watts

**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 98B & UL 94

UL Guide WHVA UL Listed E511898

NEC Article 690 for PV systems

IEC-60947-3 CE

EAC

**Environmental** RoHS compliant

**REACH** 

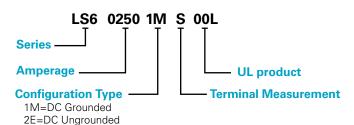
Country of Origin Spain

#### **Recommended Accessories**

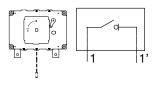
- Panel handle with shaft LDSSA11 for closed panel door access
- Direct handle LDSSI11 for open panel door access
- Auxiliary contacts LD5LAU01 remotely indicate switch position
- Phase barriers LDRSF11 (Type 1M) and LDRSF13 (Type 2E) isolate sections to eliminate arcing between the phases
- Terminal 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 SERIES

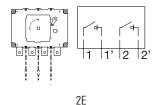
## **Part Numbering System**



## Configuration



1M

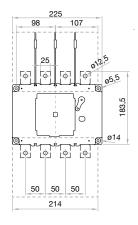


# **Ordering Information**

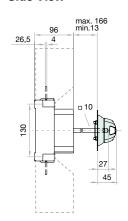
DC DISCONNECT SWITCH								
PART NUMBER	VOLTAGE	AMPERAGE	INSTALLATION	CONFIGURATION	SINGLE UNIT WEIGHT			
LS602501MS00L	1000 V dc	250 A	Grounded	Type 1M	2 kg			
LS602502ES00L	1000 V dc	250 A	Ungrounded	Type 2E	3 kg			

#### **Dimensions Millimeters**

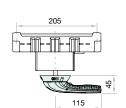
#### **Dc Disconnect Switch**



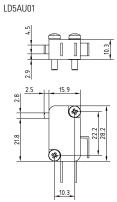
# Switch + Direct Handle - Side View



# Panel Handle with Shaft



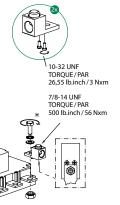
## **Auxiliary Contact**



## **Terminal Lug Measurements**

LDRTL11W								
3/0 85 MM² MIN.  400 KCMIL	CONDUCTOR TEMPERATURE RATING		COPPER WIRE ONLY M (TERMINAL TORQUE) (+5%   -10%)					
240 MM <sup>2</sup> MAX.			N∙M	LB.INCH				
	75 °C	M10	18	159				

Torque and Cable Capacity Instructions



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