Dc Disconnect Switch

LS60250 SERIES

1000 V Dc • 250 A



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 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	
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	19.59 watts
Minimum Connection Wire Range/AWG	400 kcmil/MCM (203 mm^2)
Maximum Connection Wire Range/AWG	500 kcmil/MCM (253 mm^2)
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 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

© 2021 Littelfuse, Inc.

Dc Disconnect Switch

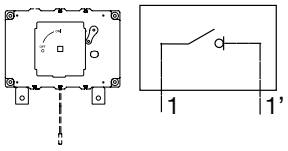
LS60250 SERIES

Part Numbering System

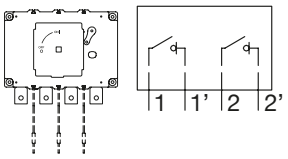
LS6 0250 1M S 00L

- **Series** — LS6
- **Amperage** — 0250
- **Configuration Type** — 1M
  - 1M=DC Grounded
  - 2E=DC Ungrounded
- **Terminal Measurement** — S
- **UL product** — 00L

Configuration



1M



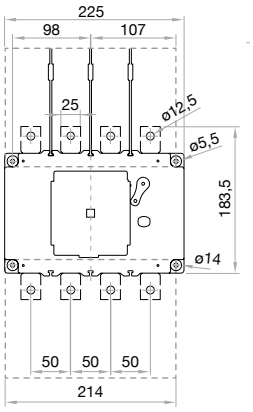
2E

Ordering Information

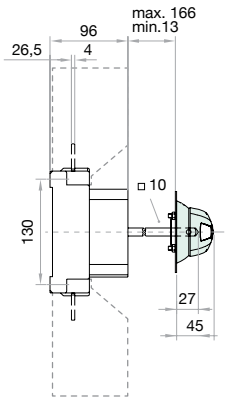
DC DISCONNECT SWITCH					
PART NUMBER	VOLTAGE	AMPERAGE	INSTALLATION	CONFIGURATION	SINGLE UNIT WEIGHT
LS602501MS00L	1000 V dc	250 A	Grounded	Type 1M	2 kg
LS602502ES00L	1000 V dc	250 A	Ungrounded	Type 2E	3 kg

Dimensions Millimeters

Dc Disconnect Switch

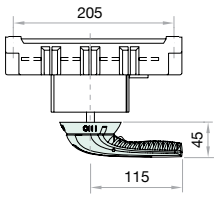


Switch + Direct Handle - Side View



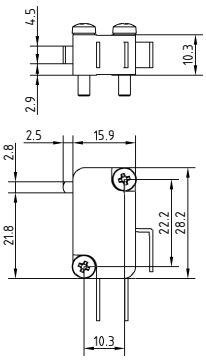
Panel Handle with Shaft

LDSSA11



Auxiliary Contact

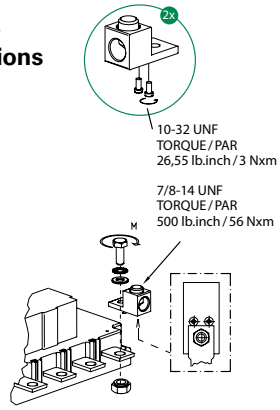
LD5AU01



Terminal Lug Measurements

LDRTL11W				
3/0 85 MM² MIN. --- 400 KCMIL 240 MM² 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.**

© 2021 Littelfuse, Inc.