

Dc Disconnect Switch

LS60400 SERIES

1000 V Dc • 400 A

REACH ENE CE IEC UL 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 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	400 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
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Operational Current	
DC21B Rating	400 A/1000 V dc

Other Characteristics

Power Losses at 400 A	36.11 watts
Minimum Connection	
Wire Range/AWG	300 kcmil/MCM (152 mm ²)
Maximum Connection	
Wire Range/AWG	350 kcmil/MCM (177 mm ²)
Number of Circuits/Switches	1
Mechanical Operations	8,000
Tightening Torque	212 lbf-in (24 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 RoHS compliant REACH Spain
Environmental	
Country of Origin	

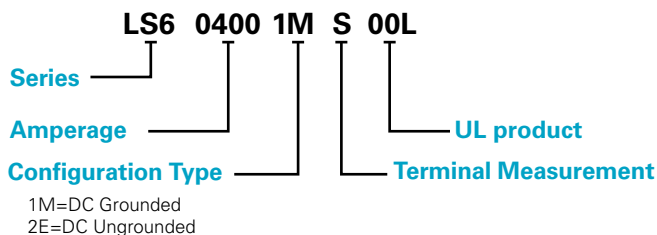
Recommended Accessories

- Panel handle with shaft LDSLA21** for closed panel door access
- Direct handle LDSLI21** for open panel door access
- Auxiliary contacts LD5LAU01** remotely indicate switch position
- Phase barriers LDRSF21 (Type 1M) and LDRSF23 (Type 2E)** isolate sections to eliminate arcing between the phases
- Terminal lug LDRTL22W** safely connects electrical and mechanical devices (phase barriers must be used in order to maintain the required clearance)
- Terminal shrouds LDRCU23W** offer protection against direct contact after wiring
- Spacers LDREL21W** increase distance between switch and mounting plate

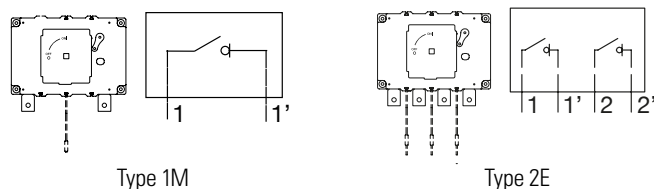
Dc Disconnect Switch

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Part Numbering System



Configuration

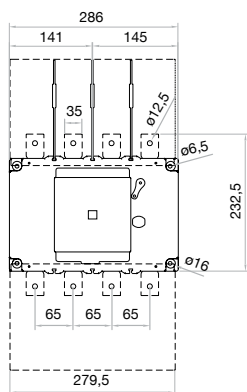


Ordering Information

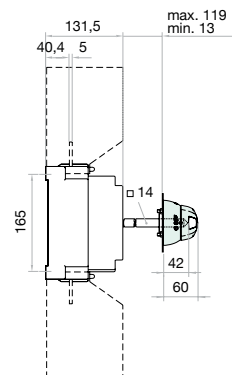
DC DISCONNECT SWITCH					
PART NUMBER	VOLTAGE	AMPERAGE	INSTALLATION	CONFIGURATION	SINGLE UNIT WEIGHT
LS604001MS00L	1000 V dc	400 A	Grounded	Type 1M	2 kg
LS604002ES00L	1000 V dc	400 A	Ungrounded	Type 2E	3 kg

Dimensions Millimeters

Dc Disconnect Switch

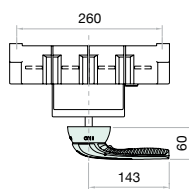


Switch + Direct Handle - Side View



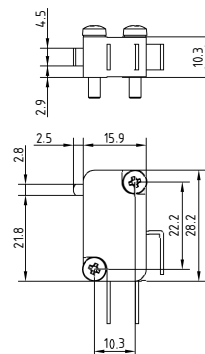
Panel Handle with Shaft

LDSLA21



Auxiliary Contact

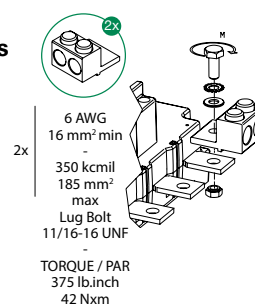
LD5AU01



Terminal Lug Measurements

LDRTL22W				
3/0 85 MM ² MIN. --- 400 KCMIL 240 MM ² MAX.	CONDUCTOR TEMPERATURE RATING	COPPER WIRE ONLY M (TERMINAL TORQUE) (+5% -10%)		
	75 °C		N•M	LB.INCH
		M10	24	212

Torque and Cable Capacity Instructions



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