

Dc Disconnect Switch

LS7R0500

1500 V Dc • 500 A

REACH EAC CE IEC UL RoHS



Description

The Littelfuse LS7R 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. It is a 1500 V dc disconnect for ungrounded systems.

Features/Benefits

- The patented operation system minimizes damage caused by arcs upon disconnection to increase product reliability and longevity
- 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	1500 V dc
Amperage Rating	500 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	500 A / 1500 V dc

Other Characteristics

Power Losses at 500 A 33.05 watts

Maximum Busbar

Connection Range 2 bars x 5 mm (.20") H x 32 mm (1.25") L

Number of Circuits/Switches 1

Tightening Torque 212 lbf-in (24 N·m)

Material

Plastic housing

Silver-plated copper terminals

Screws

Base Mounting UL 94 V-0

Flammability Rating UL 98B & UL 94

Approvals 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 LDSS11**
For open panel door access
- **Auxiliary Contact LDMAU11**
Remotely indicates switch position
- **Spacers LDME11**
Increase distance between switch and mounting plate

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Part Numbering System

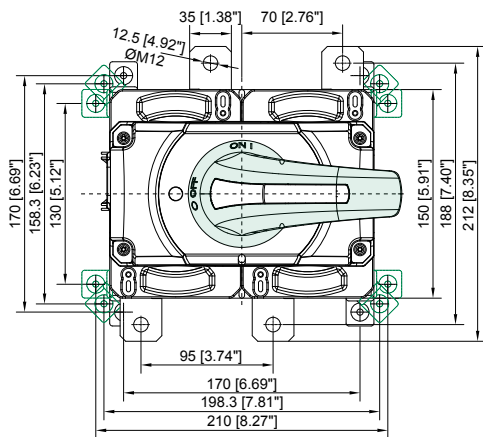


Ordering Information

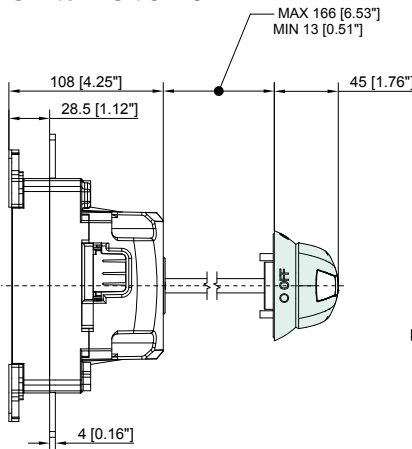
DC DISCONNECT SWITCH					
PART NUMBER	VOLTAGE	AMPERAGE	INSTALLATION	CONFIGURATION	SINGLE UNIT WEIGHT
LS7R05002PS00L	1500 V dc	500 A	Ungrounded	Type 2P	3 kg

Dimensions Millimeters (Inches)

Dc Disconnect Switch

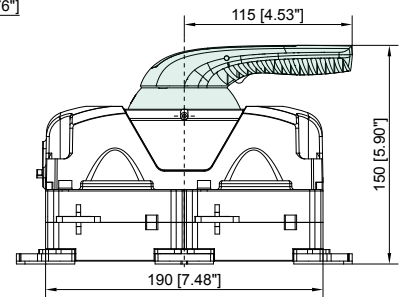


Switch - Side View

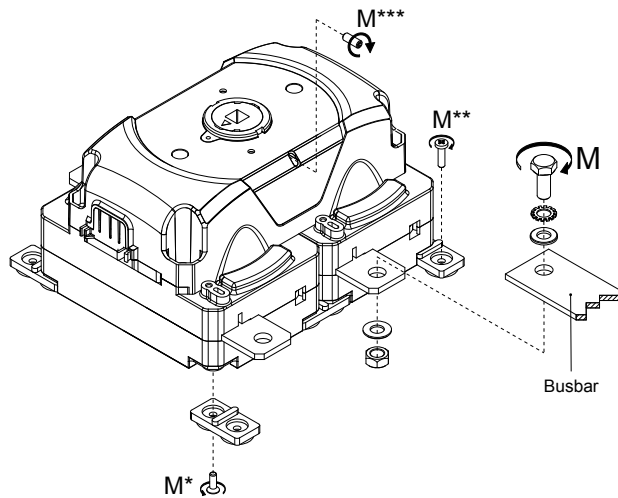


Panel Handle with Shaft

LDSSA11



Switch - 3D Installation View



Busbar

QTY	T	COPPER BUSBAR M (TERMINAL TORQUE) (+5% -10%)		COPPER BUSBAR H MAX (CU)		COPPER BUSBAR L MAX (CU)	
		N•M	LBF•INCH	MM	INCH	MM	INCH
2	M12	24	212	5	13/64	32	1¼
M	T	M (+5% -10%)		MINIMUM BUSBAR SECTION ACCORDING TO UL 98B			
		N•M	LBF•INCH				
*	T20	M4	1.2	10.6			
**	—	M4	1.5	13.3			
***	Allen	M5	1.5	13.3			

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