

Dc Disconnect Switch

LS60400 500 V DC SERIES

500 V dc • 400 A • 1 Pole
500 V dc • 400 A • 2 Pole (250 V dc per pole)

REACH ENEC CE IEC UL RoHS



2 Pole (Type 2L)
Dc Ungrounded



1 Pole (Type 1V)
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

Specifications

UL 98B Standards

Total Voltage Rating	500 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 U_i	1500 V dc
Impulse Withstand Voltage Rating U_{imp}	12 kV
Operational Current DC21B Rating	400 A / 500 V dc

Other Characteristics

Power Losses at 400 A	2 Pole (2L): 9.2 watts/pole 1 Pole (1V): 18.4 watts total
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Minimum Connection

Wire Range / AWG	300 kcmil/MCM (152 mm ²)
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Maximum Connection

Wire Range / AWG	350 kcmil/MCM (177 mm ²)
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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 E333311
NEC Article 690 for PV systems
IEC-60947-3
CE
EAC

Environmental

RoHS compliant

REACH

Country of Origin

Spain

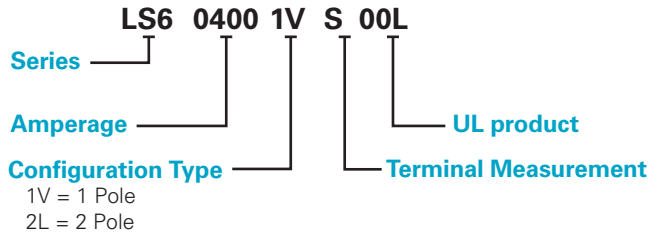
Recommended Accessories

- Panel handle with shaft 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 1V) and LDRSF22 (Type 2L) 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 LDRCU21W offer protection against direct contact after wiring
- Spacers LREL21W increase distance between switch and mounting plate

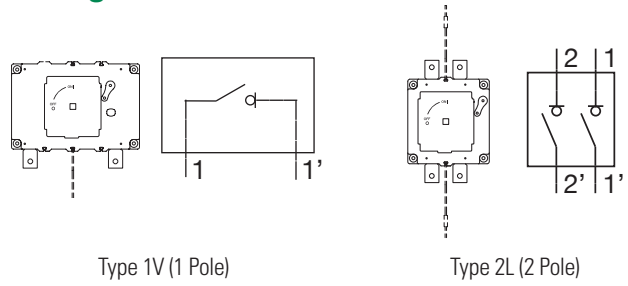
Dc Disconnect Switch

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Part Numbering System



Configuration

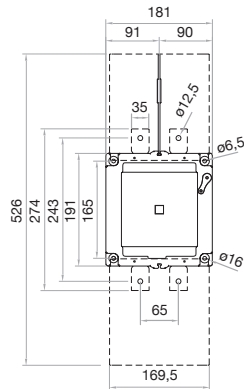


Ordering Information

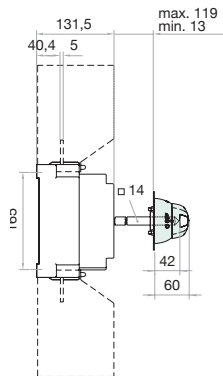
DC DISCONNECT SWITCH						
SERIES	TOTAL VOLTAGE	AMPERAGE	INSTALLATION	CONFIGURATION	POLES	SINGLE UNIT WEIGHT
LS604001VS00L	500 V dc	400 A	Grounded	Type 1V	1	2 kg
LS604002LS00L	500 V dc	400 A	Ungrounded	Type 2L	2	3 kg

Dimensions Millimeters

Dc Disconnect Switch

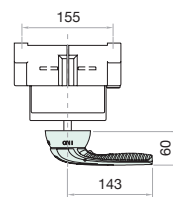


Switch + Direct Handle - Side View



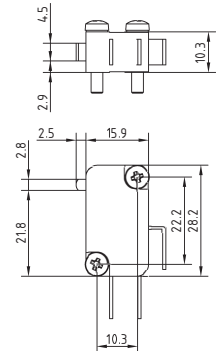
Panel Handle with Shaft

LDSL A21




Auxiliary Contact

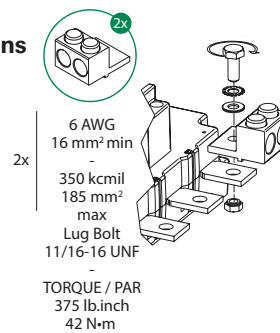
LD5AU01



Terminal Lug Measurements

LDRTL22W				
16 MM ² MIN --- 350 KCMIL 185 MM ² MAX	CONDUCTOR TEMPERATURE RATING		COPPER WIRE ONLY M (TERMINAL TORQUE) (+5% -10%)	
			N·M	LB·INCH
	75 °C	M10	24	212

Torque and Cable Capacity Instructions



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