1500 V Dc • 320 A







# **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 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 Rating1500 V dcAmperage Rating320 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

12 kV

Rating Uimp Operational Current

320 A / 1500 V dc

DC21B Rating
Other Characteristics

Power Losses at 320 A 13.55 watts

**Maximum Busbar** 

**Connection Range** 1 bar x 5 mm (.20") **H** x 40 mm (1.58") **L** 

Number of Circuits/Switches

**Tightening Torque** 159 lbf-in (18 N•m) **Material** Plastic housing

Silver-plated copper terminals

Base MountingScrewsFlammability RatingUL 94 V-0ApprovalsUL 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 Contact LDMAU11
 Remotely indicates switch position

Spacers LDMEL11

Increase distance between switch and mounting plate

## **Part Numbering System**

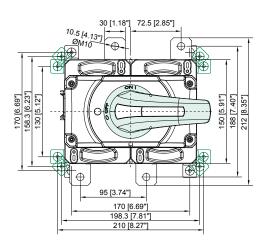


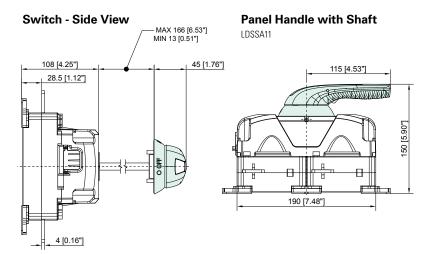
# **Ordering Information**

| DC DISCONNECT SWITCH |           |          |              |               |                    |  |  |  |  |
|----------------------|-----------|----------|--------------|---------------|--------------------|--|--|--|--|
| PART NUMBER          | VOLTAGE   | AMPERAGE | INSTALLATION | CONFIGURATION | SINGLE UNIT WEIGHT |  |  |  |  |
| LS7R03202PS00L       | 1500 V dc | 320 A    | Ungrounded   | Type 2P       | 3 kg               |  |  |  |  |

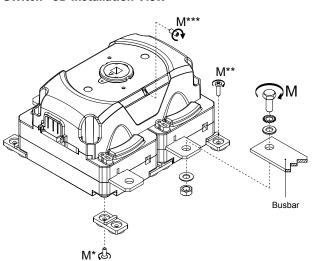
# **Dimensions Millimeters (Inches)**

### **Dc Disconnect Switch**





### **Switch - 3D Installation View**



### **Busbar**

| ΩТΥ |       |    | COPPER BUSBAR<br>M (TERMINAL TORQUE)<br>(+5 %   -10 %) |          | COPPER BUSBAR<br>H MAX<br>(CU)                |       | COPPER BUSBAR<br>L MAX<br>(CU) |         |
|-----|-------|----|--|----------|---|-------|--------------------------------|---------|
|     |       | N  | I•M  | LBF•INCH | MM  | INCH  | MM                             | INCH    |
| 1   | M10   |    | 18   | 159      | 5   | 13/64 | 40                             | 1 37/64 |
| М   | T     |    | (+5 %   -10 %)   |          | MINIMUM BUSBAR SECTION<br>ACCORDING TO UL 98B |       |                                |         |
|     |       |    | N•M  | LBF•INCH |   |       |                                |         |
| *   | T20   | M4 | 1.2  | 10.6     | H   | 1 1   | L                              | 1       |
| **  | _     | M4 | 1.5  | 13.3     |   | + 1/2 | //////                         | 1       |
| *** | Allen | M5 | 1.5  | 13.3     |   | + -   |                                | 4       |
|     |       |    | •  |          |   |       |                                |         |

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.