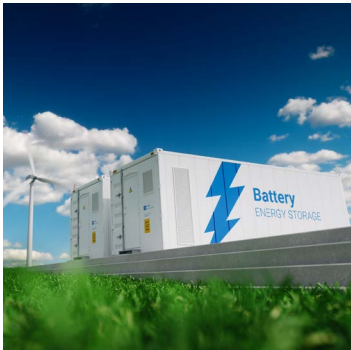


Section Overview

The Littelfuse switch products, designed for performance and reliability, come in a variety of voltage and amperage offerings to accommodate a range of applications. They are ideal for many markets including solar/PV, OEM, energy storage, oil and gas, railway, and uninterruptable power supply (UPS).



SWITCH PRODUCTS

Table of Contents

Dc Disconnect Switch LS6 Series (500 V) 189

Dc Disconnect Switch LS6 Series (1000 V)193

Dc Disconnect Switch LS6R Series (1500 V)197

LS60250 500 V DC SERIES

500 V dc • 250 A • 1 Pole

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

REACH     



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

Web Resources

For more information, visit:

littelfuse.com/DcDisconnectSwitch

Specifications

UL 98B Standards

| | |
|-----------------------------|-----------------------------|
| Total Voltage Rating | 500 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 / 500 V dc |

Other Characteristics

| | |
|------------------------------|--|
| Power Losses at 250 A | 2 Pole (2L): 5.15 watts/pole 1 Pole (1V): 10.08 watts total |
|------------------------------|--|

Minimum Connection

Wire Range / AWG 400 kcmil/MCM (203 mm²)

Maximum Connection

Wire Range / AWG 500 kcmil/MCM (253 mm²)

Number of Circuits/Switches

1

Mechanical Operations

Tightening Torque 159 lbf-in (18 N•m)

Material

Plastic housing
Silver-plated copper terminals

Base Mounting

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

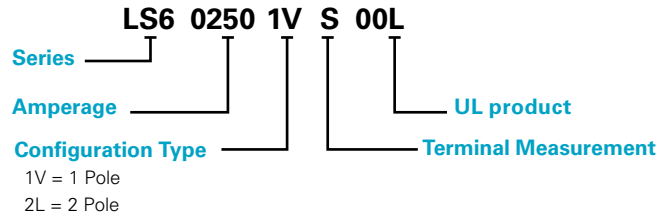
Country of Origin Spain

Recommended Accessories

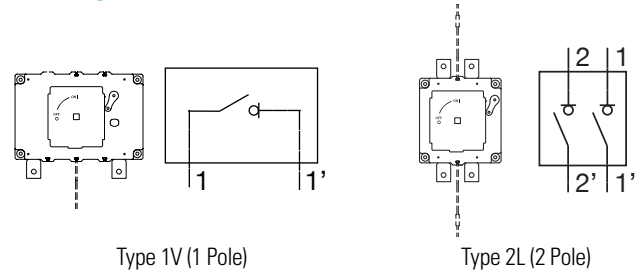
- Panel handle with shaft LDSSA11** for closed panel door access
- Direct handle LDSI11** for open panel door access
- Auxiliary contacts LD5LAU01** remotely indicate switch position
- Phase barriers LDRSF11 (Type 1V) and LDRSF12 (Type 2L)** isolate sections to eliminate arcing between the phases
- Terminal lug LDRTL11W** safely connects electrical and mechanical devices (phase barriers must be used in order to maintain the required clearance)
- Terminal shrouds LDRCU11W** offer protection against direct contact after wiring
- Spacers LDREL11W** increase distance between switch and mounting plate

LS60250 500 V DC SERIES

Part Numbering System



Configuration

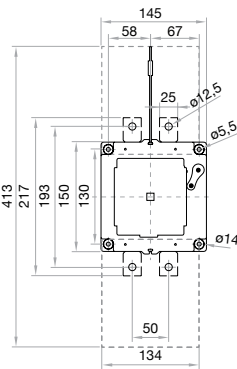


Ordering Information

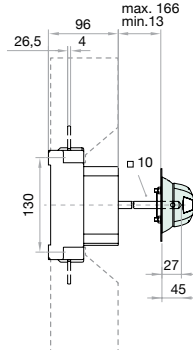
| DC DISCONNECT SWITCH | | | | | | |
|----------------------|---------------|----------|--------------|---------------|-------|--------------------|
| SERIES | TOTAL VOLTAGE | AMPERAGE | INSTALLATION | CONFIGURATION | POLES | SINGLE UNIT WEIGHT |
| LS602501VS00L | 500 V dc | 250 A | Grounded | Type 1V | 1 | 2 kg |
| LS602502LS00L | 500 V dc | 250 A | Ungrounded | Type 2L | 2 | 3 kg |

Dimensions Millimeters

Dc Disconnect Switch

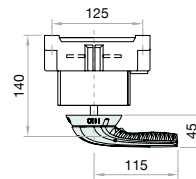


Switch + Direct Handle - Side View



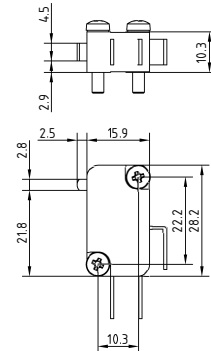
Panel Handle with Shaft

LDSSA11




Auxiliary Contact

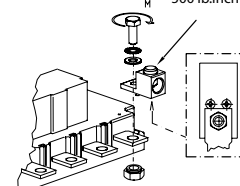
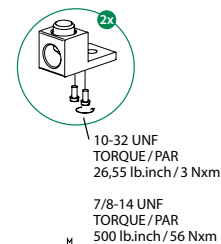
LD5AU01



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%) | |
| | 75 °C | | N·M | LB·INCH |
| | | M10 | 18 | 159 |

Torque and Cable Capacity Instructions



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     



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

Web Resources

For more information, visit:

littelfuse.com/DcDisconnectSwitch

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 Ui | 1500 V dc |
|-------------------------------------|-----------|

Impulse Withstand Voltage

| | |
|--------------------|-------|
| Rating Uimp | 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 |
|------------------------------|--|

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 |
|--|-----------------|

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

| | |
|--|----------------|
| | RoHS compliant |
|--|----------------|

| | |
|--|-------|
| | REACH |
|--|-------|

| | |
|--|-------|
| | Spain |
|--|-------|

Country of Origin

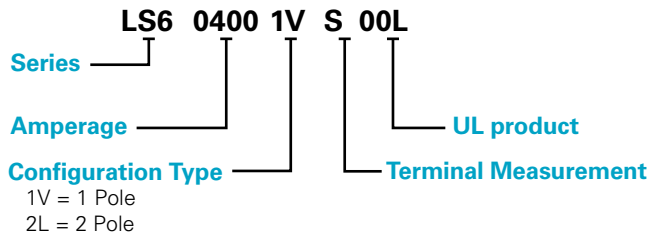
| | |
|--|-------|
| | Spain |
|--|-------|

Recommended Accessories

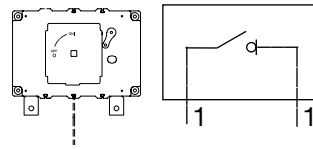
- Panel handle with shaft LDSLA21** for closed panel door access
- Direct handle LDSLI21** for open panel door access
- Auxiliary contacts LD5LAU01** remotely indicate switch position
- Phase barriers LDRSF21 (Type 1V) and LDRSF22 (Type 2L)** isolate sections to eliminate arcing between the phases
- 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

LS60400 500 V DC SERIES

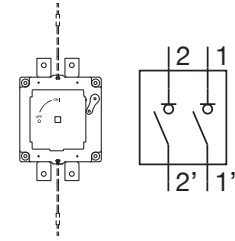
Part Numbering System



Configuration



Type 1V (1 Pole)



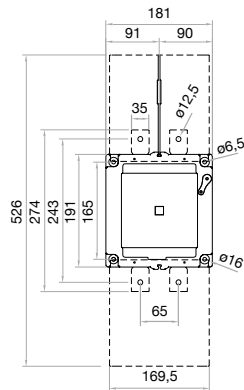
Type 2L (2 Pole)

Ordering Information

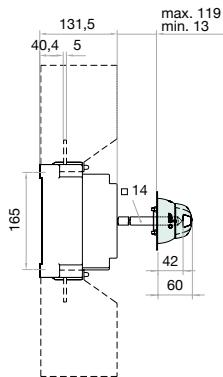
| DC DISCONNECT SWITCH | | | | | | |
|----------------------|---------------|----------|--------------|---------------|-------|--------------------|
| SERIES | TOTAL VOLTAGE | AMPERAGE | INSTALLATION | CONFIGURATION | POLES | SINGLE UNIT WEIGHT |
| LS604001VS00L | 500 V dc | 400 A | Grounded | Type 1V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

Dimensions Millimeters

Dc Disconnect Switch

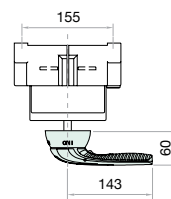


Switch + Direct Handle - Side View



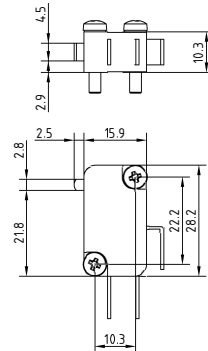
Panel Handle with Shaft

LD5LA21




Auxiliary Contact

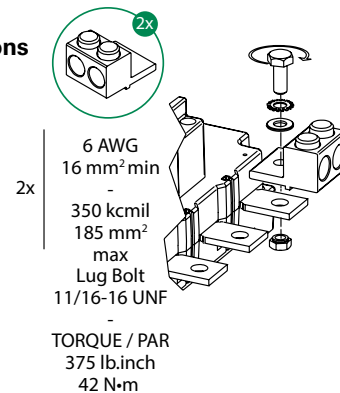
LD5AU01



Terminal Lug Measurements

| LDRTL22W | | | | |
|---|------------------------------------|---|--|---------|
| 16 MM² MIN --- 350 KCMIL 185 MM² 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



LS60250 1000 V DC SERIES

1000 V dc • 250 A • 1 Pole

1000 V dc • 250 A • 2 Pole (500 V dc per pole)

REACH     



2 Pole (Type 2E)
Dc Ungrounded



1 Pole (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

Web Resources

For more information, visit:

littelfuse.com/DcDisconnectSwitch

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 | 2 Pole (2E): 10.08 watts/pole 1 Pole (1M): 19.59 watts total |
|------------------------------|---|

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 |
| | RoHS compliant |
| | REACH |
| | Spain |

Environmental

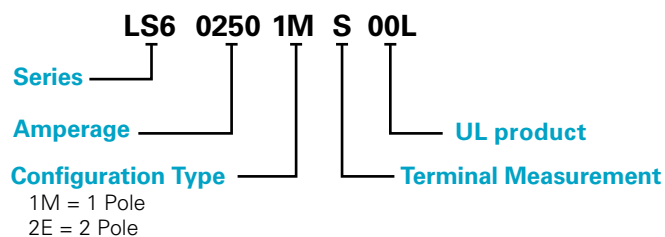
Country of Origin

Recommended Accessories

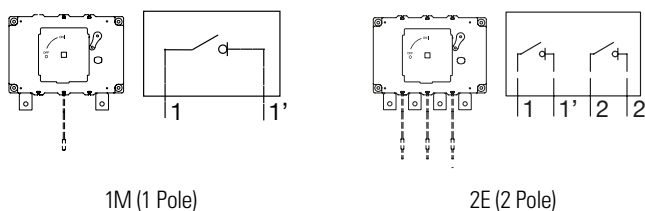
- Panel handle with shaft LDSSA11** for closed panel door access
- Direct handle LDSI11** for open panel door access
- Auxiliary contacts LD5LAU01** remotely indicate switch position
- Phase barriers LDRSF11 (Type 1M) and LDRSF13 (Type 2E)** isolate sections to eliminate arcing between the phases
- Terminal 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

LS60250 1000 V DC SERIES

Part Numbering System



Configuration

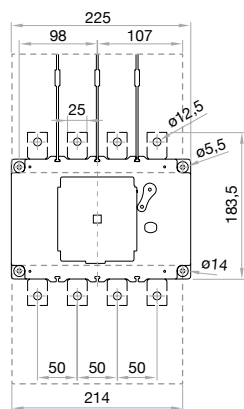


Ordering Information

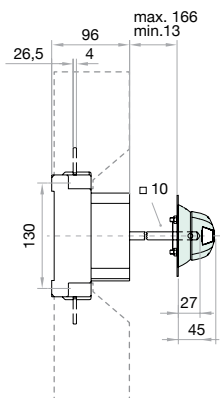
| DC DISCONNECT SWITCH | | | | | | |
|----------------------|---------------|----------|--------------|---------------|-------|--------------------|
| SERIES | TOTAL VOLTAGE | AMPERAGE | INSTALLATION | CONFIGURATION | POLES | SINGLE UNIT WEIGHT |
| LS602501MS00L | 1000 V dc | 250 A | Grounded | Type 1M | 1 | 2 kg |
| LS602502ES00L | 1000 V dc | 250 A | Ungrounded | Type 2E | 2 | 3 kg |

Dimensions Millimeters

Dc Disconnect Switch

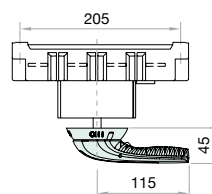


Switch + Direct Handle - Side View



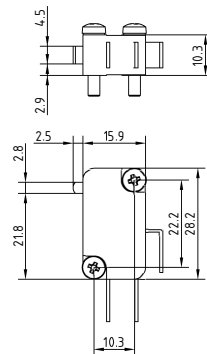
Panel Handle with Shaft

LDSSA11




Auxiliary Contact

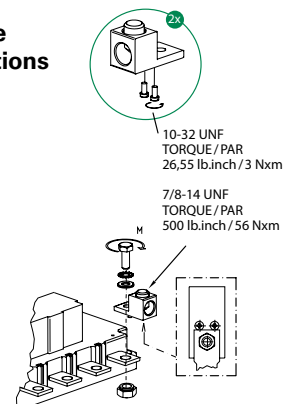
LD5AU01



Terminal Lug Measurements

| LDRTL11W | | | | |
|--|------------------------------------|---|---|---------|
| 3/0 85 MM ² MIN. --- 400 KCMIL 240 MM ² 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



LS60400 1000 V DC SERIES

1000 V dc • 400 A • 1 Pole

1000 V dc • 400 A • 2 Pole (500 V dc per pole)

REACH     



2 Pole (Type 2E)
Dc Ungrounded



1 Pole (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

Web Resources

For more information, visit:

littelfuse.com/DcDisconnectSwitch

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 | 12 kV |

| | |
|----------------------------------|-----------------|
| Rating Uimp | 12 kV |
| Operational Current DC21B | |
| Rating | 400 A/1000 V dc |

Other Characteristics

| | |
|------------------------------|--|
| Power Losses at 400 A | 2 Pole (2E): 18.4 watts/pole 1 Pole (1M): 36.11 watts total |
|------------------------------|--|

| | |
|---------------------------|--------------------------------------|
| 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 | 8,000 |
| Mechanical Operations | 212 lbf-in (24 N·m) |

Tightening Torque

| | |
|-----------------|---|
| Material | Plastic housing Silver-plated copper terminals |
|-----------------|---|

Base Mounting

| | |
|----------------------------|-----------|
| Flammability Rating | UL 94 V-0 |
|----------------------------|-----------|

Approvals

| | |
|----------------------|---|
| 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 |
| Environmental | Spain |

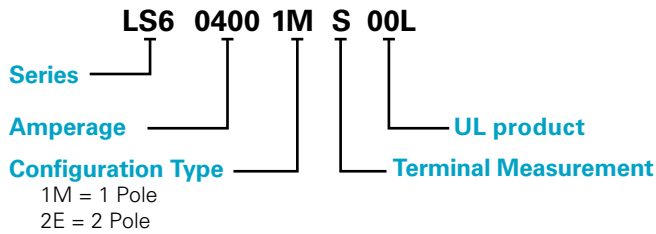
Country of Origin

Recommended Accessories

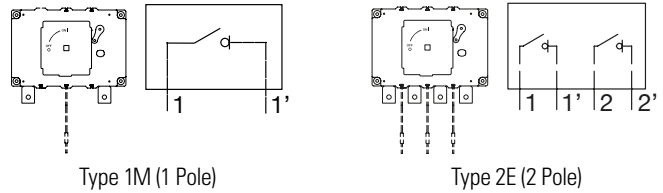
- Panel handle with shaft LDSLA21 for closed panel door access
- Direct handle LDSLI21 for open panel door access
- Auxiliary contacts LD5LAU01 remotely indicate switch position
- Phase barriers LDRSF21 (Type 1M) and LDRSF23 (Type 2E) isolate sections to eliminate arcing between the phases
- Terminal 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

LS60400 1000 V DC SERIES

Part Numbering System



Configuration

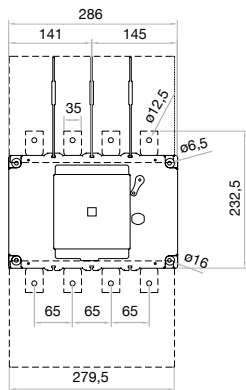


Ordering Information

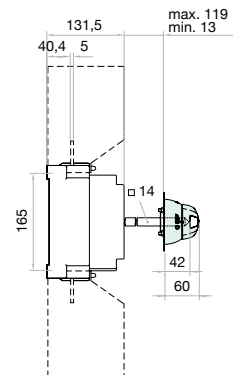
| DC DISCONNECT SWITCH | | | | | | |
|----------------------|---------------|----------|--------------|---------------|-------|--------------------|
| SERIES | TOTAL VOLTAGE | AMPERAGE | INSTALLATION | CONFIGURATION | POLES | SINGLE UNIT WEIGHT |
| LS604001MS00L | 1000 V dc | 400 A | Grounded | Type 1M | 1 | 2 kg |
| LS604002ES00L | 1000 V dc | 400 A | Ungrounded | Type 2E | 2 | 3 kg |

Dimensions Millimeters

Dc Disconnect Switch

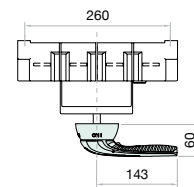


Switch + Direct Handle - Side View



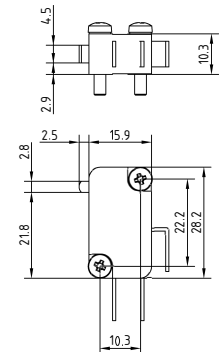
Panel Handle with Shaft

LDSL21




Auxiliary Contact

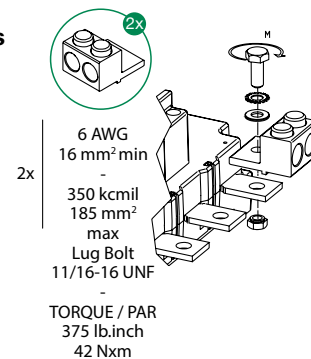
LD5AU01



Terminal Lug Measurements

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

Torque and Cable Capacity Instructions



LS6R0250 1500 V DC SERIES

1500 V dc • 250 A • 1 Pole
 1500 V dc • 250 A • 2 Pole (750 V dc per pole)

REACH     



2 Pole (Type CB)
Dc Ungrounded



1 Pole (Type 4D)
Dc Grounded with handle attached



Description

The Littelfuse LS6R 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

- 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

Specifications

UL 98B Standards

| | |
|-----------------------------|-----------------------------|
| Total Voltage Rating | 1500 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 / 1500 V dc |

Other Characteristics

| | |
|------------------------------|---|
| Power Losses at 250 A | 2 Pole (CB): 4.13 watts/pole 1 Pole (4D): 4.13 watts total |
|------------------------------|---|

Maximum Busbar

| | |
|-------------------------|--|
| Connection Range | 2 bars x 4 mm (.16") H x 30 mm (1.18") L |
|-------------------------|--|

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

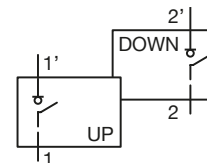
Recommended Accessories

- **Panel Handle with Shaft LDSSA11**
For closed panel door access
- **Direct Handle LDSI11**
For open panel door access
- **Auxiliary Contact LD5LAU01**
Remotely indicates switch position

LS6R0250 1500 V DC SERIES

Configuration

Type 4D (1 Pole)



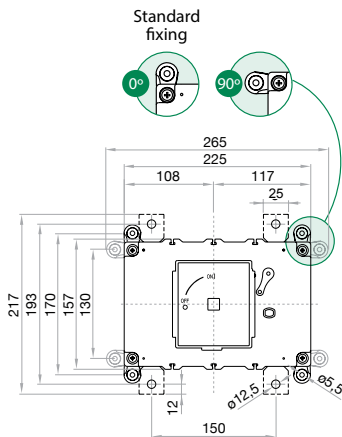
Type CB (2 Pole)

Ordering Information

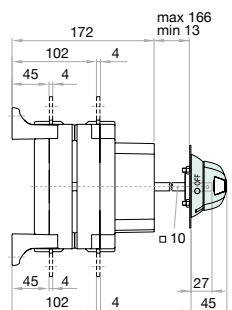
| DC DISCONNECT SWITCH | | | | | | |
|----------------------|---------------|----------|--------------|---------------|-------|--------------------|
| SERIES | TOTAL VOLTAGE | AMPERAGE | INSTALLATION | CONFIGURATION | POLES | SINGLE UNIT WEIGHT |
| LS6R02504DS00L | 1500 V dc | 250 A | Grounded | Type 4D | 1 | 4.5 kg |
| LS6R0250CBS00L | 1500 V dc | 250 A | Ungrounded | Type CB | 2 | 4.5 kg |

Dimensions Millimeters

Dc Disconnect Switch

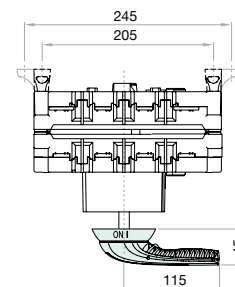


Switch - Side View



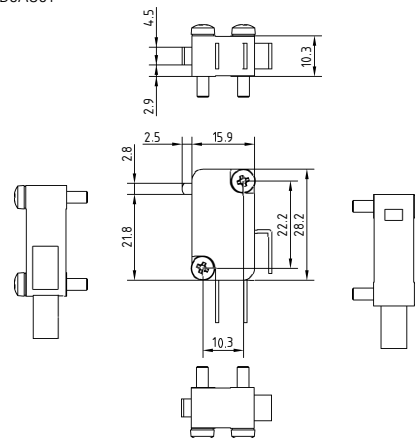
Panel Handle with Shaft

LDSSA11




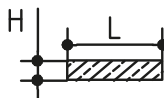
Auxiliary Contact

LD5AU01



Busbar

| BUSBAR H MAX (CU) | | BUSBAR L MAX (CU) | |  | COPPER BAR M (TERMINAL TORQUE) (+5 % -10 %) | |
|-------------------------|------|-------------------------|--------|---|--|---------|
| MM | INCH | MM | INCH | | N•M | LB•INCH |
| 4 | 5/32 | 36 | 1 3/16 | M12 | 24 | 212 |



LS6R0400 1500 V DC SERIES

1500 V Dc • 400 A • 1 Pole
 1500 V Dc • 400 A • 2 Pole (750 V dc per pole)

REACH EAC CE IEC UL RoHS



2 Pole (Type CB)
Dc Ungrounded



1 Pole (Type 4D)
Dc Grounded with handle attached



Description

The Littelfuse LS6R 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

- 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

Specifications

UL 98B Standards

| | |
|-----------------------------|-----------------------------|
| Total Voltage Rating | 1500 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 |

| | |
|---|-------------------|
| Operational Current DC21B Rating | 400 A / 1500 V dc |
|---|-------------------|

Other Characteristics

| | |
|------------------------------|---|
| Power Losses at 400 A | 2 Pole (CB): 10.58 watts/pole 1 Pole (4D): 10.58 watts total |
|------------------------------|---|

Maximum Busbar

| | |
|-------------------------|--|
| Connection Range | 2 bars x 4 mm (.16") H x 32 mm (1.26") L |
|-------------------------|--|

Number of Circuits/Switches

| |
|---|
| 1 |
|---|

Mechanical Operations

| |
|-------|
| 8,000 |
|-------|

Tightening Torque

| |
|---------------------|
| 212 lbf-in (24 N•m) |
|---------------------|

Material

| |
|-----------------|
| Plastic housing |
|-----------------|

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

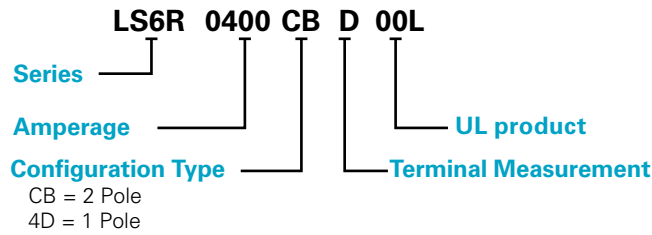
Country of Origin

Recommended Accessories

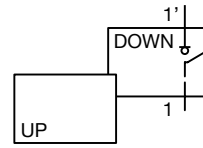
- **Panel Handle with Shaft LDSSA11**
For closed panel door access
- **Direct Handle LDSI11**
For open panel door access
- **Auxiliary Contact LD5LAU01**
Remotely indicates switch position

LS6R0400 1500 V DC SERIES

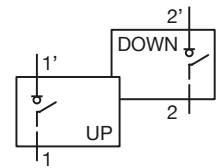
Part Numbering System



Configuration



Type 4D (1 Pole)



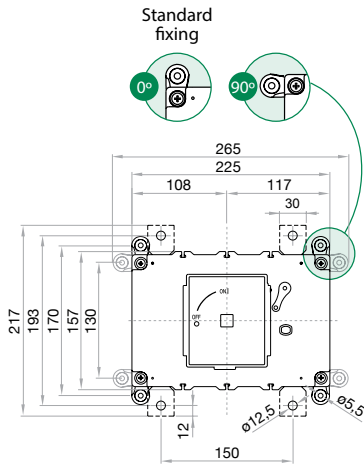
Type CB (2 Pole)

Ordering Information

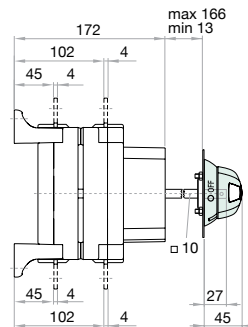
| DC DISCONNECT SWITCH | | | | | | |
|----------------------|---------------|----------|--------------|---------------|-------|--------------------|
| SERIES | TOTAL VOLTAGE | AMPERAGE | INSTALLATION | CONFIGURATION | POLES | SINGLE UNIT WEIGHT |
| LS6R04004DD00L | 1500 V dc | 400 A | Grounded | Type 4D | 1 | 4.5 kg |
| LS6R0400CBD00L | 1500 V dc | 400 A | Ungrounded | Type CB | 2 | 4.5 kg |

Dimensions Millimeters

Dc Disconnect Switch

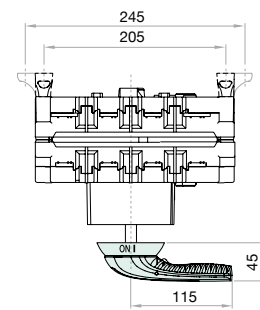


Switch - Side View



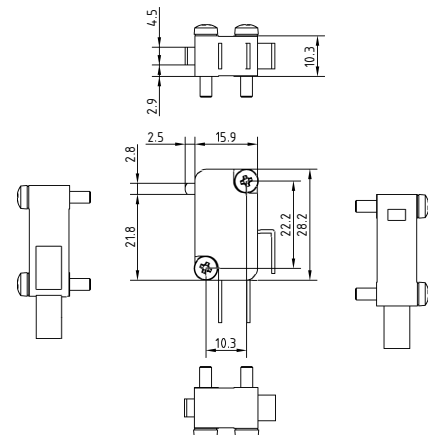
Panel Handle with Shaft

LDSSA11



Auxiliary Contact

LD5AU01



Busbar

| BUSBAR H MAX (CU) | | BUSBAR L MAX (CU) | | | COPPER BAR M (TERMINAL TORQUE) (+5 % -10 %) | |
|-------------------------|------|-------------------------|------|-----|--|---------|
| MM | INCH | MM | INCH | | N•M | LB•INCH |
| 4 | 5/32 | 32 | 1¼ | M12 | 24 | 212 |

