



LIVE ELECTRICAL DISTRIBUTION UK LTD

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Ensure that these instructions are made available to the end user for future reference.

© Product installation and operation guide



SP140 1P+N/1

SP140 1P+N/2

## SURGE PROTECTION DEVICE

# SURGE PROTECTION DEVICE

This unit should be installed by a qualified competent person in accordance with all relevant legislation and regulations Including building regulations and wiring regulations BS7671. If in doubt contact a qualified competent person.

- Turn off all power supplying this equipment before working on or inside the equipment.
- Always use a properly rated volt-sensing device to confirm the power is off.
- Replace all devices, doors and covers before turning on the power to this equipment.

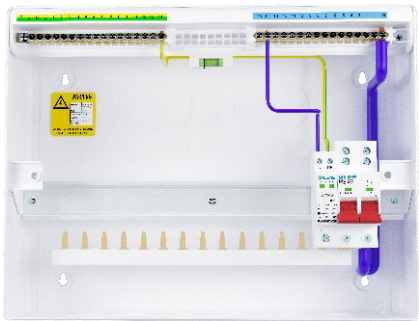
Failure to follow these instructions could result in serious injury or death.

Do Not Use Power Tool Screwdrivers On Electrical Connections.

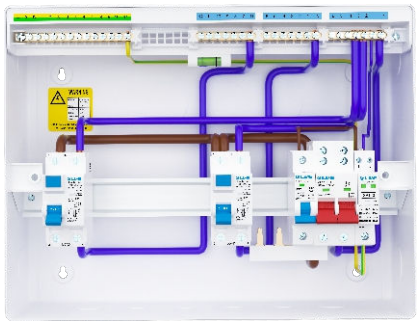
## Technical Data

- BSI Standard: BSEN61643-11
- Type Test Class: Type 2
- Uc-Max continuous operating voltage: 275 VAC
- Up- Voltage protection level (L-N), (N-PE): 1.5 kV
- In -Nominal discharge current for class II: 20 kA
- I<sub>max</sub> - Maximum discharge current: 40 kA
- I<sub>sc</sub> - Short circuit current rating: 25 kA
- Degree of protection: IP20

## Circuit Diagram for connection within a consumer unit

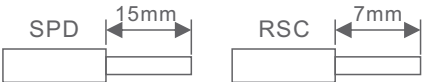


SP140 1P+N/1



SP140 1P+N/2

## SPD Cable connection sizes and Tightening Torque Values



### SPD140 1P+N/1

| Terminal      | Min.Cable Size | Max.Cable Size | Tightening Torque |
|---------------|----------------|----------------|-------------------|
| Live          | Φ6mm sq*       | Φ25mm sq*      | 2Nm               |
| Neutral/Earth | Φ6mm sq*       | Φ10 mm sq*     | 1.2Nm             |
| RSC           | Φ0.14mm sq*    | Φ1.5 mm sq*    | 0.25Nm            |

### SPD140 1P+N/2

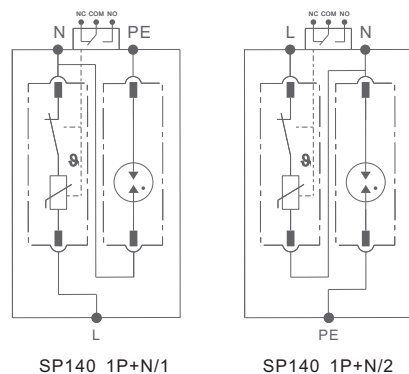
| Terminal     | Min.Cable Size | Max.Cable Size | Tightening Torque |
|--------------|----------------|----------------|-------------------|
| Earth        | Φ6mm sq*       | Φ25mm sq*      | 2Nm               |
| Neutral/Live | Φ6mm sq*       | Φ10 mm sq*     | 1.2Nm             |
| RSC          | Φ0.14mm sq*    | Φ1.5 mm sq*    | 0.25Nm            |

\*As per BS7671 the minimum sized cable for a Type 2 SPD is Φ6mm sq. Neutral & Earth cables are supplied with this SPD. Use the crimp supplied on final termination of the prepared Earth cable.

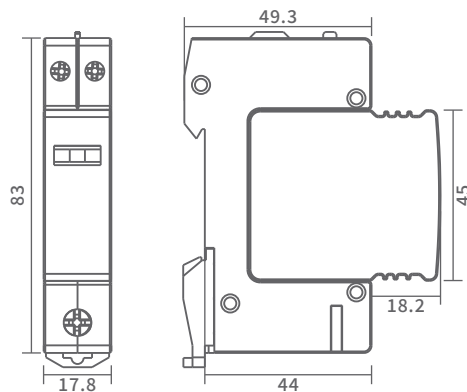
Use No.2 Pozidriv Screwdriver (PZ2) for all terminals.

It is good practice to check the tightness torque of all connections prior to re-fitting the enclosure or consumer unit cover.

### SPD Wiring



### Outline Dimensions



### Cartridge Indication

A full green window indicates a cartridge in good working order. Any red indication in the window means the cartridge is no longer working and must be replaced at the earliest opportunity.



### Replacement Cartridge

The cartridge is fitted with internal overload protection and can take numerous surges before it will need to be replaced. For replacements contact your local wholesaler.

### Cartridge Removal and Re-fitting

Remove the enclosure or consumer unit lid, slide the cartridge upwards from the base. Discard used cartridge in accordance with WEEE regulations.

**Tips:**

Waste electrical products should not be disposed of with household waste. Please recycle where waste disposal facilities exist.

Check with your retailer, wholesaler or local authority for recycling advice.