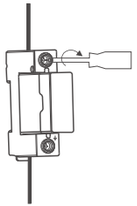
5.3 Installation Method

The product is installed using a TH35-7.5 rail mounting system.

SCSP-20	4-25mm²	2 Nm
	6-35mm²	3.5 Nm



	AC(Umax/Imax):250V/1A
	DC(Umax/Imax):250V/0.1A 125V/0.2A 75V/0.5A
	Max 1.5mm²

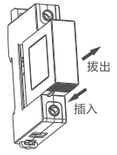
6 Maintenance

Regularly check whether the surrounding environment meets the normal operating conditions of the surge protector.

For surge protectors without remote signal output terminals or those not connected to remote signal indicators, regularly inspect their working status (especially after lightning strikes). If the indicator window on the surge protector module turns red, it indicates that the product has degraded and should be replaced promptly.

For surge protectors with remote signal output terminals, replace the protection module promptly when the indicator status changes.

When replacing the protection module, it should be pulled out vertically without being shaken left and right. Insert the new module vertically and check whether the specifications and direction match. If there is resistance when inserting, do not force it in, as it may be due to incorrect specifications or direction, and adjustments should be made accordingly.



Instruction for Replacing the Protection Module of SCSP-20

6 Fault Analysis and Troubleshooting

Failure to trip	Cause Analysis	Troubleshooting Method
No protection effect	Poor grounding or large grounding resistance	Ensure reliable grounding and reduce grounding resistance
	The working voltage of the surge protector does not match the protected equipment	Replace with the correct product
	The distance between the surge protector and the protected equipment is too long the protected equipment	Install the surge protector within 30m of the protected equipment or reduce the distance
	Loose connections causing poor conductivity	Tighten the connections as required

Fault Analysis and Troubleshooting Examples

7 Quality Assurance and Environmental Protection

Quality Assurance

Under normal storage conditions and with the product packaging intact, the product's quality assurance period is 36 months from the date of production. The following situations are not covered by the quality assurance:

Damage caused by improper use, maintenance, or storage by the user.
Damage caused by unauthorized disassembly or repair by non-designated personnel.
Damage due to natural disasters.
Damage caused by force majeure.

SOLARC

QC PASS

Model: SCSP-20

Nmae: Surge Protection Device

This product has been inspected and is found to be compliant with the standard IEC/EN 61643-1, and is approved for shipment.

Inspector: Check 14

Date: See product or packaging

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SOLARC Component Manual
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SOLARC
SOLARC NEW ENERGY

NO:2023.12

SCSP-20
Surge Protection Device

User Instruction

Thank you for purchasing this product. Before installing, using, or maintaining the product, please read the instruction manual carefully.

Standard:IEC/EN 61643-1

Safety Warning

1.The product must not be installed in environments containing flammable and explosive gases, damp and humid conditions, or severe dust. Operating the product with wet hands is strictly prohibited.
2.During operation, do not touch any conductive parts of the product.
3.Ensure the power supply is disconnected when installing, repairing, or maintaining the product.
4.The product must be installed and wired by qualified personnel and inspected regularly.
5.Children must not be allowed to play with the product or its packaging.
6.Prevent foreign objects from entering the product.
7.Do not install the product in areas where corrosive gases or substances can damage the metal and insulation.
8.When installing and using the product, ensure that the wiring screws are tightened securely to prevent loosening and disconnection of the wires. Select the wiring and external disconnectors according to the requirements.
9.If the red indicator protrudes from the front of the product, replace the product immediately

1 Main Applications and Applicable Scope

The SCSP series surge protector complies with the IEC 61643-1 standard. It is mainly used in DC power supply systems to absorb and dissipate overvoltages caused by sudden power disconnection, lightning strikes, and switching operations, thereby protecting equipment from damage. This product is suitable for protecting the DC side equipment of photovoltaic systems. It features a pluggable module design, equipped with a visible status indicator window and remote alarm contact for remote signaling. The green color indicates normal operation, while the red color indicates a fault, facilitating real-time monitoring of the equipment status.

2 Usage, Installation, TraConditionsnsport, and Storage

2.1 Usage Conditions

-Operating temperature range: Normally -5°C to +40°C, extreme range -40°C to +70°C.
-Humidity: 5% to 95%.
-Altitude: The installation site should not exceed an altitude of 2000m.
-Usage location: Indoor.
-Pollution level: Grade 2.
-Installation category: II, III.

2.2 Installation Conditions

The installation site must be free from significant vibrations, impacts, and shocks under safety warning conditions.

2.3 Operating and Storage Conditions

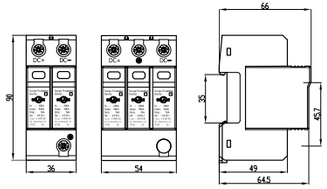
During storage and transportation, the surge protector must not be exposed to rainwater or corrosive gases.

3 Main Technical Parameters

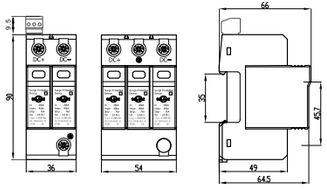
3.1 Classification
3.1.1 By Auxiliary Function
- With remote signal output terminal , without remote signal output terminal .

3.1.2 By Terminal Configuration
- Terminal configurations include 1P, 2P, 3P.

4 Dimensions and Installation Specifications



Dimensions and Installation Dimensions

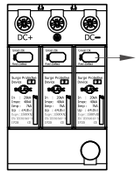


Dimensions and Installation Dimensions with Remote Alarm Contact

5 Installation, Testing, and Operational Use

5.1 Installation Conditions

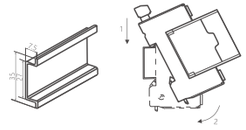
Before installation and use, first check whether the surge protector's indicator matches the working conditions. The status of the surge protector is indicated as follows.



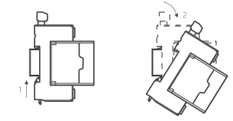
Green: Normal protection function
Red: Loss of protection function, requires immediate replacement.

5.2 Installation Method

The product is installed using a TH35-7.5 rail mounting system.



Installation Diagram



Disassembly Illustration