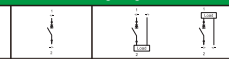
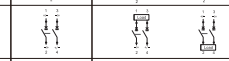
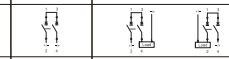
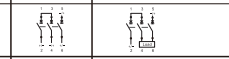
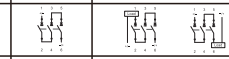
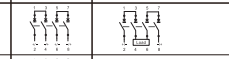
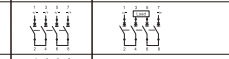
6 Wiring Diagram

Number of poles		Wiring diagram
1P	1A Default wiring method	
2P	2A Default wiring method	
	2B	
3P	3A Default wiring method	
	3B	
4P	4A Default wiring method	
	4B	
	4C	 Customized Wiring Method

Note: When the circuit breaker is in operation, it is essential to regularly inspect it to ensure the reliability of the manual operation.

9 Maintenance

The circuit breaker should be inspected regularly when in operation.

After the circuit breaker has been disconnected from the circuit for a period, it should be inspected for any faults before being reconnected.

10

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: SCM1-63DC

Nmae: Miniature Circuit Breaker

This product has been inspected and is found to be compliant with the standard IEC/EN 60947-2, 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
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NO:2023.12

SCM1-63DC
Miniature Circuit Breaker

User Instruction

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

Standard:IEC/EN 60947-2

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. Do not use direct contact methods to test the operational characteristics of the ground device or to create a short circuit between live and neutral wires.
4. When installing, maintaining, or repairing the product, ensure that the power supply is disconnected.
5. The protective characteristics of the product are determined by the manufacturer and should not be arbitrarily modified or adjusted.
6. The product must be installed and wired by qualified personnel and inspected regularly.
7. Children must not be allowed to play with the product or its packaging.
8. Foreign objects should be prevented from entering the product.
9. Do not install the product in areas where corrosive gases or substances can damage the metal and insulation.
10. 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.
11. This product is not designed to provide personal electric shock protection or to correct electrical imbalances.
12. During installation, the polarity must be strictly observed according to the markings on the product. The positive ("+") and negative ("-") terminals must not be reversed.

1 Main Applications and Applicable Scope

The SCB1-63DC DC circuit breaker complies with the IEC 60947-2 standard. It is suitable for use in DC systems with a rated current up to 63A and a rated voltage up to 1000V. It serves to provide overload and short-circuit protection and can also be used as a routine disconnection in normal operating conditions.

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.

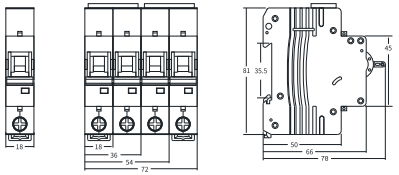
2.3 Operating and Storage Conditions

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

3 Main Technical Parameters

NO.	Technical Parameter	Parameter Value
1	Rated Voltage	1P：DC 125V/250V 2P：DC 250V/500V 3P：DC500V/750V 4P：DC 500V/1000V
2	Pole Number	1P、2P、3P、4P
3	IP Rating	IP20
4	Rated Short Circuit Capacity 6000A	1P 250V 2P 500V 3P 750V 4P 1000V

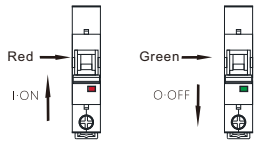
4 Dimensions and Installation Specifications



Dimensions and Installation Dimensions

5 Installation, Testing, and Operational Use

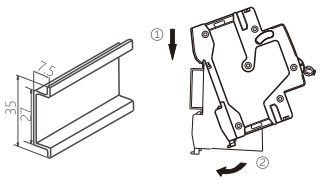
5.1 Before installation and use, check whether the circuit breaker indicator matches the working conditions. The status of the circuit breaker being closed or open is indicated.



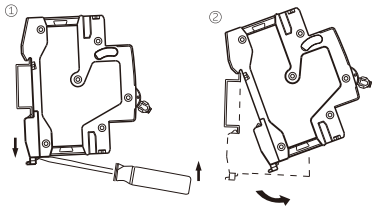
SCM1-63DC Circuit Breaker Closed and Open Status Indicator

5.2 Installation Method

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



Installation Diagram



Disassembly Illustration

5.3 Suitable for copper conductor connections, the wiring method and the length of wire stripping are as shown in the illustrative diagram.

Rated Current In(A)	Copper CSA mm²
1~6	1
10	1.5
13、16、20	2.5
25	4
32	6
40、50	10
63	16