

SOBOUR 3P DC750V 100A

SOBOUR DC Circuit Breaker Instruction Manual

Model: 3P DC750V 100A

1. PRODUCT OVERVIEW

This manual provides essential information for the safe and effective installation, operation, and maintenance of your SOBOUR DC Circuit Breaker. This device is designed to protect DC circuits, commonly found in photovoltaic (PV) systems, from overcurrents and short circuits.

Important Safety Information:

- Always disconnect power before installing or servicing the circuit breaker.
- Installation should be performed by qualified personnel only.
- Ensure the circuit breaker's ratings (voltage, current, poles) match your system requirements.
- Do not operate the circuit breaker if it appears damaged.



Image 1.1: SOBOUR DC Circuit Breaker (3P DC750V 100A model shown on the right).

2. SETUP AND INSTALLATION

The SOBOUR DC Circuit Breaker is designed for DIN rail mounting. Follow these steps for proper installation:

1. **Mounting:** Securely attach the circuit breaker to a standard 35mm DIN rail in an appropriate enclosure. Ensure adequate ventilation.
2. **Wiring:** Connect the DC input and output wires to the designated terminals. Observe correct polarity for DC systems. The wiring diagram is typically printed on the side of the breaker.
3. **Tighten Connections:** Ensure all terminal screws are tightened to the manufacturer's recommended torque to prevent loose connections and overheating.
4. **Verification:** Double-check all connections and ensure no bare wires are exposed.

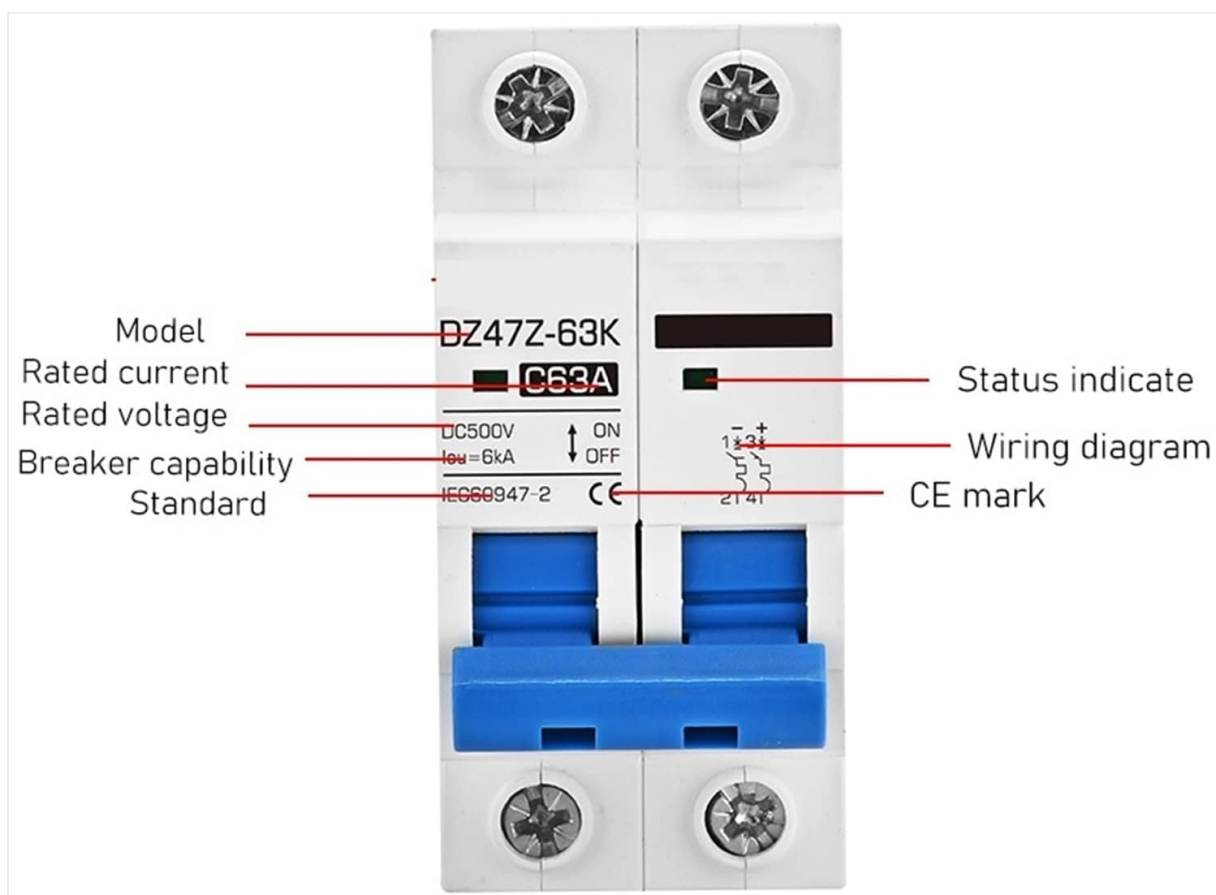


Image 2.1: Detailed view of the circuit breaker showing specifications and wiring diagram location.

The SOBOUR DC Circuit Breakers are available in various pole configurations (1P, 2P, 3P, 4P) and voltage ratings (DC250V, DC500V, DC750V, DC1000V) to suit different system requirements. Ensure you have selected the correct model for your application.

DZ47Z-63K Series



1P
DC250V

2P
DC500V

3P
DC750V

4P
DC1000V

DZ47Z-125K Series



1P
DC250V

2P
DC500V

3P
DC750V

4P
DC1000V

Image 2.2: Different pole configurations of SOBOUR DC Circuit Breakers.

3. OPERATING INSTRUCTIONS

Operating the DC circuit breaker is straightforward:

- **Turning On:** Push the blue handle upwards to the 'ON' position. The status indicator will typically show green or a similar 'ON' indication.
- **Turning Off:** Pull the blue handle downwards to the 'OFF' position. The status indicator will typically show red or a similar 'OFF' indication.
- **Tripping:** In case of an overcurrent or short circuit, the breaker will automatically trip, moving the handle to an intermediate or 'OFF' position. Before resetting, identify and resolve the fault.
- **Resetting:** After resolving a fault, fully push the handle down to the 'OFF' position, then push it up to the 'ON' position to reset the breaker.

Indicate

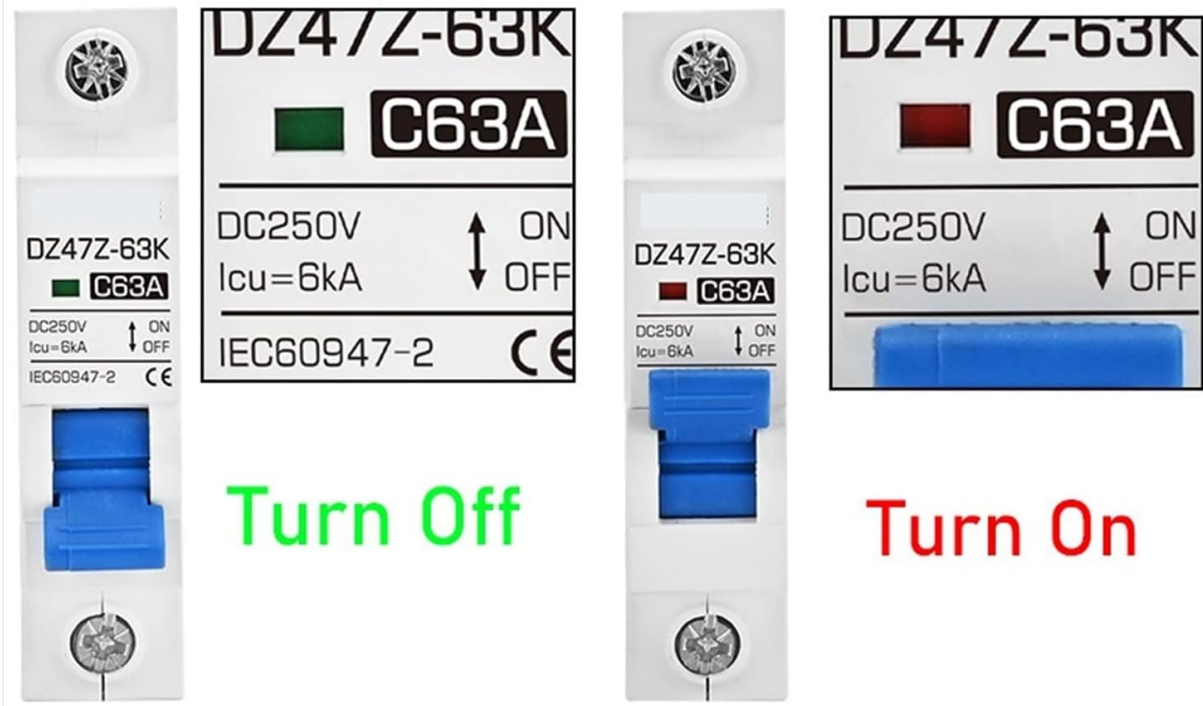


Image 3.1: Visual indication of 'Turn Off' and 'Turn On' states.

4. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your circuit breaker:

- **Visual Inspection:** Periodically inspect the circuit breaker for any signs of physical damage, discoloration, or loose connections.
- **Cleaning:** Keep the circuit breaker and its enclosure clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do not use liquids or abrasive cleaners.
- **Terminal Check:** Ensure terminal screws remain tight. Re-tighten if necessary, following recommended torque specifications.
- **Functionality Test:** If your system allows for safe testing, periodically test the trip mechanism according to system guidelines.

5. TROUBLESHOOTING

If your circuit breaker trips or fails to operate correctly, consider the following:

- **Breaker Trips Frequently:** This indicates an overcurrent or short circuit in the protected circuit. Investigate the connected load for faults, damaged wiring, or overloaded conditions. Do not repeatedly reset the breaker without addressing the underlying issue.
- **Breaker Does Not Reset:** Ensure the handle is fully pushed to the 'OFF' position before attempting to reset to 'ON'. If it still does not reset, there might be a persistent fault or internal damage to the breaker.
- **No Power to Load:** Check if the breaker is in the 'ON' position. Verify input power to the breaker and continuity of the output circuit.

If issues persist after basic troubleshooting, consult a qualified electrician or contact SOBOUR customer support.

6. SPECIFICATIONS

Feature	Specification
Brand	SOBOUR
Model	3P DC750V 100A
Poles	3P
Rated Voltage	DC750V
Rated Current	100A
Breaker Capability (Icu)	6kA
Standard	IEC60947-2
Item Weight	1.1 pounds
UPC	602227012233

7. WARRANTY AND SUPPORT

For information regarding product warranty or technical support, please refer to the documentation provided with your purchase or visit the official SOBOUR website. Specific warranty terms may vary by region and retailer.