

Square D MHL36600

Square D MHL36600 600 Amp 3-Pole Circuit Breaker Instruction Manual

1. INTRODUCTION

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Square D MHL36600 600 Amp 3-Pole Circuit Breaker. Please read this manual thoroughly before attempting any procedures with the device.

2. SAFETY INFORMATION

WARNING: Electrical shock hazard. Only qualified personnel should install, operate, or service this equipment. Failure to follow these instructions can result in death or serious injury.

- Always disconnect power before working on or near the circuit breaker.
- Use appropriate personal protective equipment (PPE).
- Ensure all wiring complies with national and local electrical codes.
- Do not operate the circuit breaker if it appears damaged.
- Replace lug covers after wiring to prevent accidental contact with live parts.

3. SETUP AND INSTALLATION

The Square D MHL36600 is a 3-pole circuit breaker designed for 600 Amp applications. Proper installation is crucial for safe and reliable operation.



Figure 1: Square D MHL36600 600 Amp 3-Pole Circuit Breaker. This image displays the Square D MHL36600 circuit breaker, a 600 Amp, 3-pole device. Key specifications such as interrupting ratings, voltage, and current are visible on the label. The 'ON' and 'OFF' positions of the handle are clearly marked, along with the magnetic trip adjustment dial.

3.1 Wiring Connections

Connect the appropriate conductors to the circuit breaker terminals. Ensure proper wire sizing and torque specifications are met.

- **UL/CSA/NEMA (AL900MA Lugs):**

Wire Type: Cu/Al

Wire Size: (1) #3/0 AWG - 500 kcmil, (2) #3/0 AWG - 500 kcmil, (3) #3/0 AWG - 500 kcmil

Torque: 300 lb-in (pound-inches)

- **IEC (AL900MA Lugs):**

Wire Type: Cu/Al

Wire Size: (1) 95-240 mm², (2) 95-240 mm², (3) 95-240 mm²

Torque: 34 N-m (Newton-meters)

Important: After completing all wiring, ensure that the lug covers are properly replaced to maintain safety and prevent accidental contact with energized terminals.

4. OPERATING INSTRUCTIONS

4.1 ON/OFF Operation

The circuit breaker handle has two primary positions:

- **ON:** Pushing the handle fully upwards engages the circuit, allowing current to flow.
- **OFF:** Pushing the handle fully downwards disengages the circuit, interrupting current flow.
- **TRIPPED:** If an overload or short circuit occurs, the handle will move to an intermediate (tripped) position. To reset, push the handle fully to the OFF position, then move it to the ON position.

4.2 Magnetic Trip Adjustment

The MHL36600 circuit breaker features a magnetic trip adjustment dial. This allows for fine-tuning of the instantaneous trip setting for short-circuit protection.

- **Adjustment Range:** LO 3000A to HI 6000A.
- Rotate the dial to select the desired instantaneous trip current setting. Consult system design specifications for the appropriate setting.

5. MAINTENANCE

Regular maintenance helps ensure the longevity and proper functioning of the circuit breaker.

- **Periodic Inspection:** Visually inspect the circuit breaker for any signs of physical damage, discoloration, or loose connections.
- **Cleaning:** Keep the circuit breaker free from dust and debris. Use a dry, non-conductive cloth for cleaning. Do not use solvents or abrasive cleaners.
- **Testing:** Periodic testing by qualified personnel may be required depending on application and local regulations.

6. TROUBLESHOOTING

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

- **Frequent Tripping:** This may indicate an overload or a short circuit in the protected circuit. Investigate the connected load and wiring for faults.
- **Failure to Reset:** Ensure the handle is pushed fully to the OFF position before attempting to move it to ON. If it still does not reset, there may be a persistent fault or internal damage.
- **Overheating:** Discoloration or a burning smell indicates overheating. Immediately disconnect power and investigate for loose connections or excessive load.

For persistent issues, contact a qualified electrician or Square D technical support.

7. SPECIFICATIONS

Feature	Specification
Brand	Square D
Model Number	MHL36600
Current Rating	600 Amps

Number of Poles	3
Voltage Rating	600V
Circuit Breaker Type	Standard (Magnetic)
UL/CSA/NEMA Interrupting Rating (AIR)	240V: 65 kA, 480V: 65 kA, 600V: 25 kA, 250V: 14 kA
IEC 947-2 Interrupting Rating (Ics/Icu)	415/240V: 33 kA Ics, 65 kA Icu
Rated Insulation Voltage (Ui)	750 V
Rated Impulse Withstand Voltage (Uimp)	6 kV
Magnetic Trip Range	LO 3000A - HI 6000A
Wire Compatibility (UL/CSA/NEMA)	Cu/Al, #3/0 AWG - 500 kcmil
Wire Compatibility (IEC)	Cu/Al, 95-240 mm ²
Manufacturer	Square D

8. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official Square D website or contact your authorized Square D distributor. Keep your purchase receipt for warranty claims.