

Mersen GDL3

Mersen GDL3 250V 3A Small Fuse Instruction Manual

1. INTRODUCTION

This manual provides essential information for the safe and effective use of the Mersen GDL3 Small Fuse. Please read these instructions carefully before installation and operation to ensure proper function and safety.

2. SAFETY INFORMATION

WARNING: Electrical work should only be performed by qualified personnel. Failure to follow these instructions can result in serious injury or death.

- Always disconnect power before installing or replacing fuses.
- Ensure the replacement fuse matches the original fuse's voltage, amperage, and interrupting rating.
- Do not use fuses that are damaged or appear altered.
- This product may contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm (Proposition 65 warning). Handle with care and wash hands after use.

3. PRODUCT OVERVIEW

The Mersen GDL3 is a miniature/subminiature glass tube fuse designed for overcurrent protection in various electrical circuits. It features time-delay characteristics, which allow it to withstand temporary overcurrents without blowing, making it suitable for circuits with inrush currents.

Key Features:

- Glass Tube construction
- Time Delay Characteristics
- Rated for 250 Vac
- 3 Ampere current rating
- Interrupting Rating: 100 Ampere at 250 Vac, 10 Kiloampere at 125 Vac
- Ferrule Terminal type
- Dimensions: 1/4 inch diameter, 1-1/4 inch length



An image showing the Mersen GDL3 small fuse. It is a clear glass tube with silver-colored ferrule terminals at both ends, containing a thin wire element visible through the glass.

4. TECHNICAL SPECIFICATIONS

Feature	Specification
Brand	Mersen
Model Number	GDL3
Voltage Rating	250 Volts AC
Current Rating	3 Amps
Interrupting Rating	100A @ 250 Vac, 10kA @ 125 Vac
Fuse Type	Miniature/Subminiature, Glass Tube
Characteristics	Time Delay
Terminal Type	Ferrule
Dimensions	1/4 inch (Diameter) x 1-1/4 inch (Length)
Material	Glass
Mounting Type	Through-Hole Mount
Approvals	UL, CSA
Item Weight	1.6 ounces
Package Dimensions	1.4 x 1.2 x 0.3 inches

5. INSTALLATION INSTRUCTIONS

- Power Disconnection:** Before attempting any fuse installation or replacement, ensure that the power supply to the circuit is completely disconnected at the main breaker or switch. Verify with a voltage tester.
- Identify Fuse Holder:** Locate the fuse holder in your electrical device or circuit.

3. **Remove Old Fuse (if applicable):** Carefully remove the existing fuse. Note its specifications (voltage, amperage, type) to ensure proper replacement.
4. **Verify Replacement Fuse:** Confirm that the Mersen GDL3 fuse matches the required specifications for your application (250V, 3A, time-delay, 1/4" x 1-1/4" dimensions). Using an incorrect fuse can lead to damage or fire.
5. **Insert New Fuse:** Gently insert the Mersen GDL3 fuse into the fuse holder, ensuring it is seated securely.
6. **Restore Power:** Once the fuse is correctly installed, restore power to the circuit.

6. OPERATION PRINCIPLE

The Mersen GDL3 fuse is a passive safety device. When installed correctly, it allows normal current to flow through the circuit. In the event of an overcurrent condition (current exceeding 3 Amperes for a sustained period, or a short circuit), the fuse's internal element will melt, opening the circuit and preventing damage to connected equipment or wiring. Its time-delay characteristic means it will tolerate brief, harmless current surges (like motor startup) without immediately blowing.

7. MAINTENANCE AND REPLACEMENT

Fuses are generally maintenance-free. Their primary function is to fail safely when an overcurrent occurs.

Replacement:

1. If a fuse blows, it indicates an electrical fault in the circuit. Before replacing the fuse, identify and rectify the cause of the overcurrent.
2. Follow the "Installation Instructions" above to safely replace the blown fuse with a new Mersen GDL3 fuse or an equivalent fuse with identical specifications.
3. Never replace a fuse with one of a higher amperage rating or bypass a fuse, as this can create a fire hazard and damage equipment.

8. TROUBLESHOOTING

Symptom: Circuit loses power, fuse appears blown (wire inside is broken or glass is discolored).

Possible Causes & Solutions:

- **Overload:** Too many devices are connected to the circuit, drawing more current than the fuse's rating.
Solution: Disconnect some devices, then replace the fuse.
- **Short Circuit:** A direct connection between live and neutral/ground wires, causing a very high current surge.
Solution: Immediately disconnect power. Inspect wiring and devices for damage, frayed insulation, or loose connections. Repair the fault before replacing the fuse.
- **Faulty Appliance/Device:** A connected appliance or device has an internal fault causing it to draw excessive current.
Solution: Disconnect all devices from the circuit. Replace the fuse. If the fuse blows again with no devices connected, the fault is in the circuit wiring. If it blows only when a specific device is connected, that device is faulty.

If fuses continue to blow after troubleshooting, consult a qualified electrician.

9. WARRANTY AND SUPPORT

Specific warranty information for the Mersen GDL3 fuse is typically provided by the point of purchase or Mersen directly. For technical support or further inquiries, please refer to the Mersen official website or contact their customer service.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question