GLOSO E39

GLOSO E39 Manual Reset Low Profile ATC/ATO Circuit Breaker User Manual

1. Introduction

This manual provides detailed instructions for the proper use, installation, and maintenance of the GLOSO E39 Manual Reset Low Profile ATC/ATO Circuit Breaker. Designed for reliable circuit protection, this device offers a resettable alternative to traditional one-time fuses, enhancing safety and convenience in various electrical systems. Please read this manual thoroughly before installation and operation to ensure optimal performance and safety.

2. Product Features

- **Amperage:** 3A @ 32Vdc (available in various amperages from 3A to 30A).
- **Type:** ATO/ATC Manual Reset (T3) Circuit Breaker.
- **Materials:** UL-Rated 94V0 thermoplastic body for flame retardancy. Tin-plated copper alloy terminals for optimal conductivity.
- **Termination:** 5.2mm wide blades, compatible with standard ATO/ATC type fuse blocks.
- **Compliances:** Meets SAEJ553 and SAEJ1171 (Ignition protected) standards.
- **Resettable:** Features a manual reset button for repeated use after an overload event.

Figure 2.1: GLOSO E39 circuit breakers in various amperage ratings. Each color corresponds to a specific ampere value, clearly marked on the body.

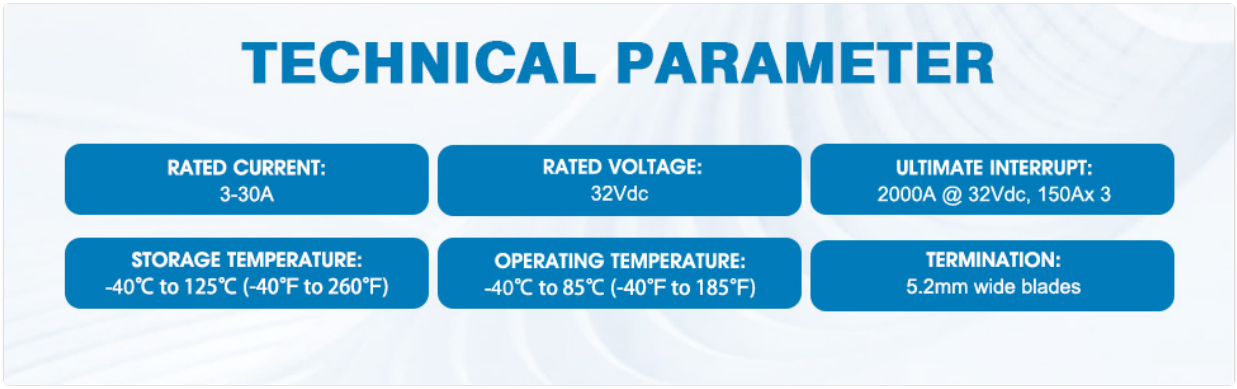

Figure 2.2: Detailed view of the manual reset button, printed specifications, and ATC/ATO compatible blades.

3. Technical Specifications

Specification	Value
Brand	GLOSO
Current Rating	3 Amps (available 3-30A)
Voltage	32 Volts DC
Circuit Breaker Type	Standard, Manual Reset (T3)
Mounting Type	Panel Mount (Blade type)
Number Of Poles	1
Termination	5.2mm wide blades
Storage Temperature	-40°C to 125°C (-40°F to 260°F)

Specification	Value
Operating Temperature	-40°C to 85°C (-40°F to 185°F)
Ultimate Interrupt	2000A @ 32Vdc, 150Ax 3
Item Model Number	E39
Item Weight	0.634 ounces
Package Dimensions	2.6 x 2.05 x 0.28 inches

Figure 3.1: Summary of GLOSO E39 technical parameters.

4. Installation and Setup

The GLOSO E39 circuit breaker is designed for direct replacement of standard ATO/ATC blade fuses. Ensure the replacement circuit breaker matches or is appropriately rated for the circuit's original fuse amperage.

4.1. Installation Steps

1. **Identify Fuse Box:** Locate the vehicle's fuse box, typically found under the hood or inside the passenger compartment. Refer to your vehicle's service manual for the exact location.
2. **Power Off:** Ensure the vehicle's ignition is off and disconnect the battery if working on critical circuits to prevent accidental shorts or electrical hazards.
3. **Remove Existing Fuse:** Carefully remove the existing ATO/ATC blade fuse from its slot. Use a fuse puller if available.
4. **Insert Circuit Breaker:** Insert the GLOSO E39 circuit breaker into the empty fuse slot, ensuring it is fully seated. The blades are designed for a snug fit.
5. **Restore Power:** Reconnect the battery (if disconnected) and turn on the ignition.
6. **Test Circuit:** Verify that the protected circuit is functioning correctly.

Your browser does not support the video tag.

Video 4.1: This video demonstrates the process of replacing standard ATO/ATC fuses with GLOSO ATO/ATC E37/E39 circuit breakers in a vehicle's fuse box. It shows how to remove existing fuses and install the new resettable circuit breakers.

Figure 4.2: Proper insertion of the GLOSO E39 circuit breaker into a fuse slot.

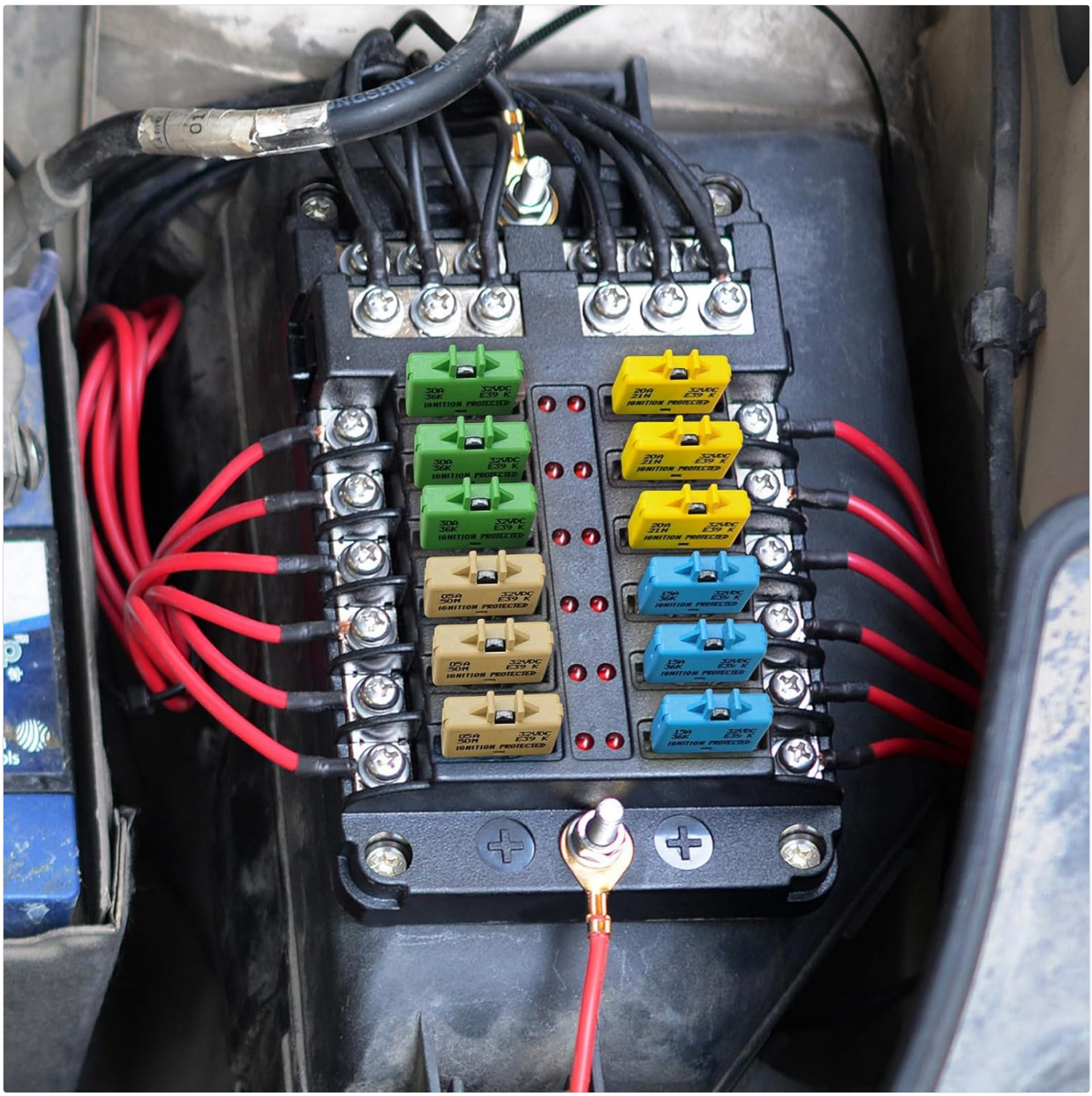

Figure 4.3: Example of a fuse box with multiple GLOSO E39 circuit breakers installed.

4.2. Dimensions and Compatibility

The GLOSO E39 circuit breaker has specific dimensions that should be considered for compatibility with existing fuse holders and covers.

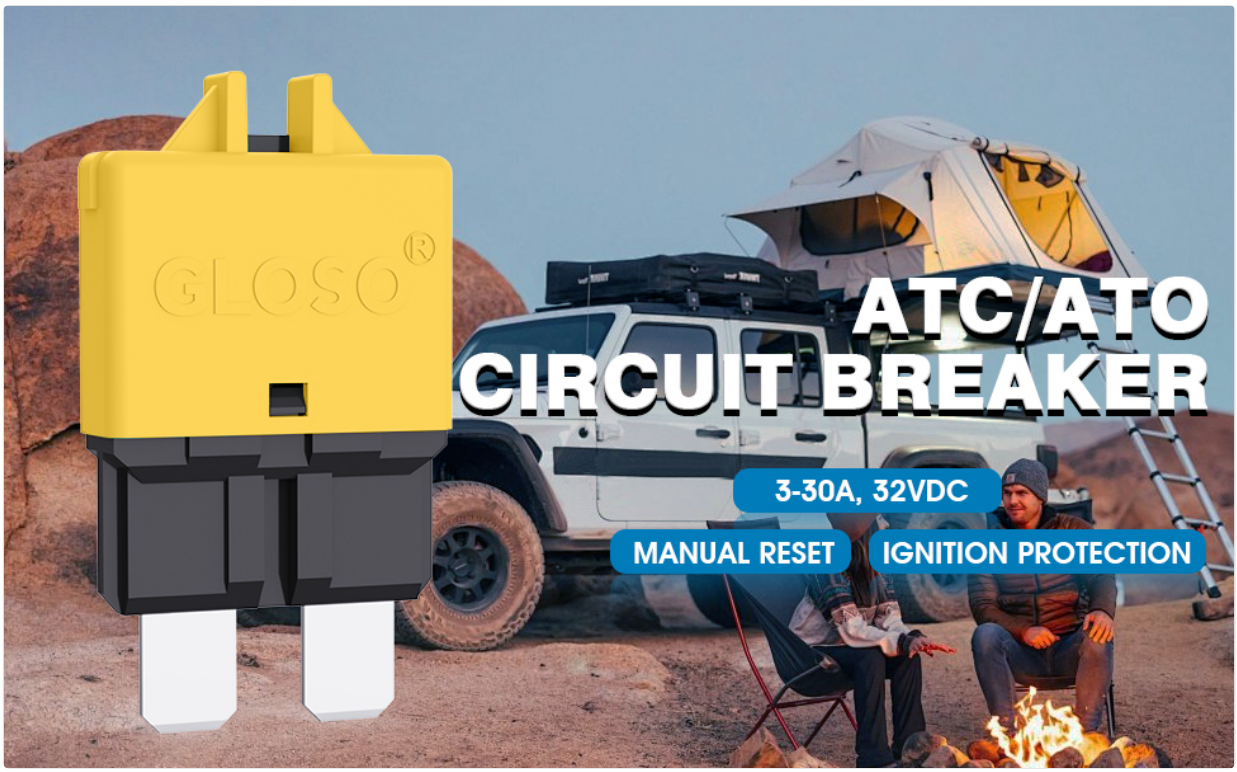

Figure 4.4: Detailed measurement diagram of the GLOSO E39 circuit breaker.

Figure 4.5: Comparison of GLOSO E39 circuit breaker height versus traditional fuses, highlighting potential fitment considerations.

5. Operation

The GLOSO E39 circuit breaker functions as an automatic protection device for electrical circuits. In the event of an overcurrent or short circuit, the internal mechanism will trip, causing the reset button to pop out and interrupt the circuit, preventing damage to the connected equipment.

5.1. Manual Reset

After the circuit breaker trips, it must be manually reset to restore power to the circuit. To reset, simply press the popped-out button back into the circuit breaker body. Before resetting, it is recommended to identify and resolve the cause of the overcurrent or short circuit to prevent immediate re-tripping.

Figure 5.1: Explanation of circuit breaker operation and manual reset function.

6. Applications

The GLOSO E39 circuit breaker is suitable for a wide range of 32Vdc applications where reliable circuit protection and easy resetting are desired. Common applications include:

- Automotive vehicles
- Marine vessels
- Recreational Vehicles (RVs)
- Motorcycles
- Heavy equipment (e.g., excavators, trucks)
- Solar panel systems

- Winch systems

Figure 6.1: Diverse applications for the GLOSO E39 circuit breaker.

7. Troubleshooting

If the GLOSO E39 circuit breaker trips repeatedly, it indicates an ongoing issue within the protected circuit. Do not attempt to force the reset button if it continues to trip immediately.

7.1. Common Issues and Solutions

- **Repeated Tripping:** This is typically caused by an overcurrent condition or a short circuit. Inspect the wiring and connected devices for faults, damaged insulation, or excessive load.
- **No Power After Reset:** Ensure the circuit breaker is fully reset by pressing the button firmly. If power is still not restored, check for other tripped circuit breakers or blown fuses in the system, or a persistent fault in the circuit.
- **Circuit Breaker Does Not Trip:** If an overcurrent condition is suspected but the breaker does not trip, verify the amperage rating of the installed breaker matches the circuit requirements. A breaker with too high an amperage rating may not trip under a fault condition that would damage components.

Unlike traditional fuses, which are single-use, the GLOSO E39 circuit breaker is resettable, offering a convenient solution for diagnosing intermittent faults without needing constant fuse replacement.

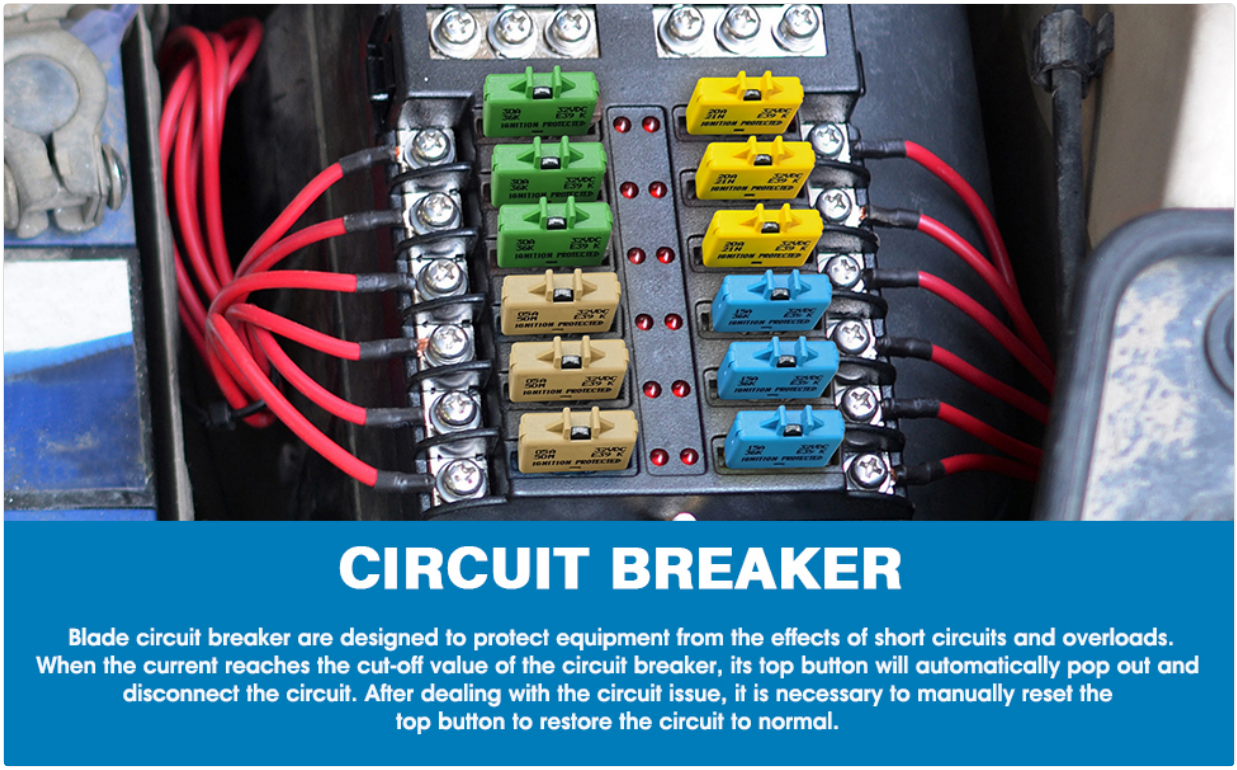

Figure 7.1: Comparison of resettable GLOSO circuit breakers versus traditional one-time fuses.

8. Maintenance

The GLOSO E39 circuit breaker requires minimal maintenance. Periodically inspect the circuit breaker and its terminals for any signs of corrosion, damage, or loose connections. Ensure the area around the fuse box is clean and free from debris that could interfere with the circuit breaker's operation or ventilation.

9. Warranty and Support

For warranty information or technical support regarding your GLOSO E39 Manual Reset Low Profile ATC/ATO Circuit Breaker, please refer to the product packaging or contact GLOSO customer service directly. Contact details can typically be found on the manufacturer's official website or through your point of purchase.