

## Littelfuse FLA003

# Littelfuse FLA-3/FLA003 Cartridge Blade Fuse User Manual

Model: FLA003 | Brand: Littelfuse

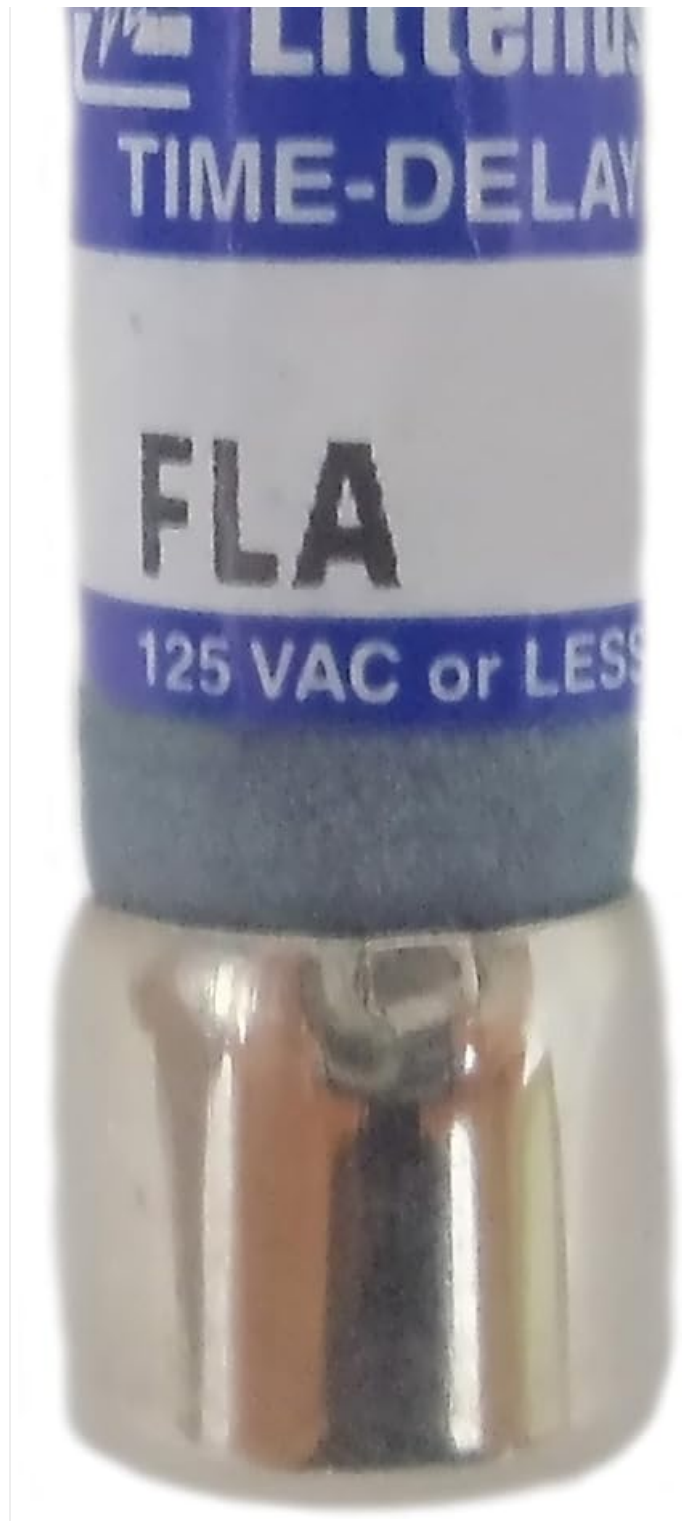
## 1. INTRODUCTION

This manual provides essential information for the proper understanding, installation, and use of the Littelfuse FLA-3/FLA003 3 Amp, 125 Volt Cartridge Blade Fuse. This fuse is designed to protect control circuit transformers, solenoids, and other circuits susceptible to high inrush currents.

## 2. PRODUCT OVERVIEW

The Littelfuse FLA series fuses are pin-indicating, time-delay cartridge fuses. They are engineered to withstand temporary overcurrents without opening, while still providing protection against sustained overloads and short circuits. The pin-indicating feature provides a visual indication when the fuse has opened.





This image displays the Littelfuse FLA-3 cartridge blade fuse, showing its cylindrical body, metallic end caps, and the label indicating 'Littelfuse', 'TIME-DELAY', 'FLA', and '125 VAC or LESS'.

### 3. SAFETY INFORMATION

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Always observe the following safety precautions when working with electrical components:

- **Disconnect Power:** Always ensure that the power supply to the circuit is completely disconnected before installing, replacing, or inspecting fuses.
- **Proper Rating:** Use only fuses with the correct amperage and voltage ratings for the specific circuit. Using an incorrectly rated fuse can lead to equipment damage or fire.
- **Qualified Personnel:** Installation and maintenance should only be performed by qualified electricians or personnel with appropriate electrical knowledge.

- **Avoid Overloading:** Do not attempt to bypass or repair a blown fuse. A blown fuse indicates an electrical issue that needs to be addressed.
- **Personal Protective Equipment (PPE):** Wear appropriate PPE, such as insulated gloves and safety glasses, when working with electrical circuits.

## 4. SETUP AND INSTALLATION

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The Littelfuse FLA-3/FLA003 fuse is designed for through-hole mounting in appropriate fuse holders.

1. **Verify Circuit Requirements:** Confirm that the circuit requires a 3 Amp, 125 Volt time-delay fuse.
2. **Power Disconnection:** Turn off all power to the circuit where the fuse will be installed. Use a voltage tester to confirm the circuit is de-energized.
3. **Select Fuse Holder:** Ensure you have a compatible fuse holder designed for cartridge blade fuses of this size and rating.
4. **Insert Fuse:** Carefully insert the FLA-3/FLA003 fuse into the designated fuse holder. Ensure it is seated firmly and correctly.
5. **Restore Power:** Once the fuse is securely installed, restore power to the circuit.
6. **Check Operation:** Verify that the circuit operates as expected.

*Note:* The pin-indicating feature will extend if the fuse has opened, providing a visual cue for replacement.

## 5. OPERATION

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Fuses are passive safety devices. The Littelfuse FLA-3/FLA003 fuse operates by interrupting the flow of current when an overcurrent condition (either a sustained overload or a short circuit) exceeds its rated capacity for a specific duration. As a time-delay fuse, it allows for temporary inrush currents without blowing, which is beneficial for circuits with motors or transformers that draw high current momentarily upon startup.

When the fuse opens, the internal element melts, breaking the circuit and protecting downstream components from damage. The pin indicator will protrude from the end of the fuse, signaling that it has blown and requires replacement.

## 6. MAINTENANCE AND REPLACEMENT

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Fuses are designed to be maintenance-free. If a fuse blows, it must be replaced. Do not attempt to repair a blown fuse.

### Fuse Replacement Procedure:

1. **Identify Blown Fuse:** Look for the extended pin indicator or use a multimeter to test for continuity across the fuse.
2. **Disconnect Power:** Crucially, turn off and lock out the power supply to the circuit before attempting to remove the fuse.
3. **Remove Blown Fuse:** Carefully extract the blown fuse from its holder. Use a fuse puller if available for safety.
4. **Install New Fuse:** Replace the blown fuse with a new Littelfuse FLA-3/FLA003 fuse (3 Amp, 125 Volt). Ensure the replacement fuse has identical ratings.
5. **Restore Power:** Re-energize the circuit and verify proper operation.

## 7. TROUBLESHOOTING

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The primary "troubleshooting" for a fuse involves identifying why it blew.

- **Repeated Fuse Blowing:** If a new fuse blows immediately or shortly after replacement, it indicates a persistent issue in the circuit. This could be:

- A short circuit.
- An overloaded circuit (too many devices drawing current).
- A faulty component drawing excessive current.
- Incorrect fuse rating (fuse is too small for the circuit's normal operating current).

**Action:** Do not continue replacing fuses without addressing the underlying problem. Consult a qualified electrician to diagnose and repair the circuit issue.

- **No Power After Fuse Replacement:**
  - Ensure the new fuse is correctly seated in the holder.
  - Verify that power has been restored to the circuit.
  - Confirm the replacement fuse is indeed a good fuse (not faulty itself).

## 8. SPECIFICATIONS

Attribute	Value
Brand	Littelfuse
Model Number	FLA003
Part Number	FLA-3
Current Rating	3 Amps
Voltage Rating	125 Volts AC
Fuse Type	Cartridge Blade Fuse, Time-Delay, Pin-Indicating
Mounting Type	Through-Hole Mount (for compatible fuse holders)
Dimensions (Approx.)	2 x 2 x 2 inches (Package Dimensions)
UPC	695526840744

## 9. WARRANTY AND SUPPORT

Littelfuse products are manufactured to high quality standards. For specific warranty information, please refer to the official Littelfuse website or contact their customer support directly. Fuses are consumable safety devices and are typically not covered by extensive warranties once installed, as their function is to sacrifice themselves to protect a circuit. For technical support or further inquiries regarding Littelfuse FLA series fuses, please visit the official Littelfuse website or contact their customer service department. Always provide the model number (FLA003) and relevant specifications when seeking support.

**Littelfuse Official Website:** [www.littelfuse.com](http://www.littelfuse.com)



