

uxcell a16012800ux0116

Product Instruction Manual

uxcell 10 Pcs 500V 10A Low Breaking Capacity 6x30mm Cartridge Ceramic Fuses

1. INTRODUCTION

This manual provides essential information for the safe and effective use of uxcell 500V 10A Low Breaking Capacity 6x30mm Cartridge Ceramic Fuses. These fuses are designed to protect electrical circuits from overload and short-circuits. Please read this manual thoroughly before installation and operation to ensure proper usage and safety.

2. SAFETY INFORMATION

WARNING: Installation and replacement of fuses should only be performed by qualified personnel. Always disconnect power to the circuit before handling fuses to prevent electric shock or damage to equipment.

- Ensure the replacement fuse matches the original fuse's specifications (voltage, current, and dimensions).
- Do not use fuses with higher current ratings than specified for the circuit.
- Avoid touching metal parts of the fuse or circuit when power is on.
- Store fuses in a dry, cool place away from direct sunlight and corrosive substances.

3. PRODUCT OVERVIEW

The uxcell 6x30mm Cartridge Ceramic Fuses are fast-acting, low breaking capacity fuses. They are commonly used in various electrical and electronic applications to provide overcurrent protection.



Figure 1: A collection of uxcell 6x30mm ceramic fuses. Each fuse is cylindrical with metal caps on both ends and markings indicating "500V 10A" and "Ø 6X30".



Figure 2: Close-up view of two uxcell 6x30mm ceramic fuses, highlighting their specifications. The image also indicates that the product comes in a pack of 10 pieces.

4. SPECIFICATIONS

Feature	Specification
Product Name	Ceramic Fuse

Feature	Specification
Fuse Type	Fast Acting
Features	Low Breaking Capacity
Rated Voltage	500V
Rated Current	10A
Dimensions	6 x 30mm (Diameter x Length)
Material	Ceramic
Mounting Type	Through-Hole Mount

5. SETUP AND INSTALLATION

These fuses are designed for integration into existing electrical circuits or equipment.

- Power Disconnection:** Before any installation or replacement, ensure that the power supply to the circuit is completely disconnected and verified.
- Identify Fuse Holder:** Locate the fuse holder within your electrical device or circuit board.
- Remove Old Fuse (if applicable):** Carefully remove the existing fuse. Use appropriate tools if necessary.
- Verify Specifications:** Compare the specifications (voltage, current, and physical dimensions) of the new uxcell fuse with the requirements of your circuit and the old fuse. It is crucial that they match.
- Insert New Fuse:** Insert the new uxcell 6x30mm ceramic fuse into the fuse holder. Ensure it is seated firmly and correctly.
- Restore Power:** Once the fuse is securely in place, you may restore power to the circuit.

Note: These fuses are for through-hole mount applications.

6. OPERATING PRINCIPLES

The uxcell ceramic fuse operates on the principle of a sacrificial component designed to protect more expensive or sensitive electrical components from damage due to overcurrent.

- Normal Operation:** Under normal operating conditions, the fuse allows current to flow freely through its ceramic body and conductive element.
- Overcurrent Protection:** If the current flowing through the circuit exceeds the fuse's rated current (10A) for a specified duration, the internal metallic element melts, creating an open circuit. This action rapidly interrupts the flow of electricity, preventing damage to the protected equipment.
- Fast Acting:** As a fast-acting fuse, it is designed to open quickly when an overcurrent condition occurs, making it suitable for protecting sensitive electronic devices.
- Low Breaking Capacity:** This indicates the maximum current the fuse can safely interrupt without rupturing or causing an arc. Ensure the circuit's potential fault current does not exceed the fuse's breaking capacity.

7. MAINTENANCE

Fuses are generally maintenance-free components. However, periodic inspection is recommended.

- **Visual Inspection:** Periodically inspect fuses for any signs of physical damage, discoloration, or charring, which may indicate a past overcurrent event or improper installation.
- **Replacement:** A blown fuse must always be replaced with a new fuse of the identical type, voltage rating, and current rating. Never attempt to repair a blown fuse.
- **Cleaning:** Keep the fuse holder and surrounding area clean and free from dust or debris to ensure proper contact and heat dissipation.

8. TROUBLESHOOTING

If your electrical circuit or device stops functioning, a blown fuse is a common cause.

Problem	Possible Cause	Solution
Device not powering on	Blown fuse	Disconnect power, inspect the fuse. If the internal element is broken or discolored, replace it with a new fuse of the correct specifications.
New fuse blows immediately	Short circuit or persistent overload in the circuit	Do not replace the fuse again until the underlying electrical fault is identified and corrected by a qualified electrician.
Fuse appears intact but device still not working	Other electrical fault or device malfunction	Consult a qualified technician or refer to the device's specific troubleshooting guide.

9. WARRANTY AND SUPPORT

For specific warranty information regarding your uxcell fuses, please refer to the product packaging or contact uxcell customer support directly.

Manufacturer: uxcell

Model Number: a16012800ux0116

For further assistance or technical inquiries, please visit the official uxcell website or contact their customer service department.