## Bussmann TPS-30

# Bussmann TPS-30 Telpower Fuse User Manual

Model: TPS-30

## 1. Introduction

This manual provides essential information for the safe and effective installation, operation, and maintenance of the Bussmann TPS-30 Telpower Fuse. Please read this manual thoroughly before using the product and retain it for future reference. The Bussmann TPS-30 is designed for specific Telpower applications, providing critical circuit protection.

## 2. Safety Information

**WARNING: Electrical shock hazard. Installation and servicing should only be performed by qualified personnel.**

- Always disconnect power before installing, removing, or inspecting fuses.
- Ensure the replacement fuse has the correct voltage and current rating for the application.
- Do not use a fuse that has been dropped or appears damaged.
- 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 contact.
- Adhere to all local and national electrical codes.

## 3. Product Overview

The Bussmann TPS-30 is a small dimension cartridge fuse manufactured by Cooper Bussmann. It is designed to protect electrical circuits in Telpower systems by interrupting current flow when an overload or short circuit occurs. This fuse is made in the USA and meets UL and ISO specifications.

### 3.1 Features

- Designed for Telpower applications.

- Small dimension cartridge fuse.
- Manufactured by Cooper Bussmann.
- Made in USA.
- UL and ISO compliant.

### 3.2 What's in the Box

- 1 x TPS-30 Fuse

### 3.3 Product Image

Image 1: The Bussmann TPS-30 Telpower Fuse, a cylindrical cartridge fuse with a blue label indicating 'TPS-30' and manufacturer details.

## 4. Setup and Installation

The TPS-30 fuse is a surface mount type and must be installed in an appropriate fuse holder or circuit board designed for cartridge fuses in Telpower systems. Proper installation is crucial for safety and optimal performance.

1. **Power Disconnection:** Before beginning any installation, ensure that all power to the circuit is

completely disconnected and locked out according to safety procedures. Verify with a voltage tester.

2. **Identify Fuse Holder:** Locate the designated fuse holder or mounting points on the circuit board where the TPS-30 fuse is to be installed.
3. **Insert Fuse:** Carefully insert the TPS-30 fuse into the fuse holder. Ensure it is seated firmly and correctly to establish proper electrical contact. For surface mount applications, follow the specific mounting instructions for the equipment.
4. **Verify Installation:** Double-check that the fuse is securely in place and that there are no loose connections.
5. **Restore Power:** Once installation is complete and verified, restore power to the circuit.

***Note:*** *Always ensure the fuse rating matches the circuit requirements. Incorrect fuse ratings can lead to equipment damage or fire hazards.*

## 5. Operation

The Bussmann TPS-30 Telpower Fuse is a passive protection device. Its primary function is to automatically interrupt the flow of electrical current in a circuit when the current exceeds a safe level due to an overload or short circuit. This prevents damage to equipment and reduces fire risk.

- Under normal operating conditions, the fuse allows current to pass through unimpeded.
- When an overcurrent condition occurs, the fusible element within the TPS-30 melts, creating an open circuit and stopping the current flow.
- Once a fuse has blown, it must be replaced. It cannot be reset or repaired.

## 6. Maintenance

The Bussmann TPS-30 fuse itself requires no routine maintenance. However, periodic inspection of the fuse and its holder within the Telpower system is recommended to ensure continued reliability.

- **Visual Inspection:** Periodically inspect the fuse for any signs of physical damage, discoloration, or corrosion.
- **Replacement:** If a fuse blows, it must be replaced immediately. Always replace a blown fuse with a new fuse of the exact same type and rating (TPS-30). Using a fuse with a different rating can compromise circuit protection.
- **Cleanliness:** Ensure the fuse holder and surrounding area are free from dust, dirt, and moisture, which can affect electrical contact and performance.

## 7. Troubleshooting

If a circuit protected by a TPS-30 fuse loses power, the fuse may have blown. Follow these steps to troubleshoot:

1. **Disconnect Power:** Before inspecting or replacing any fuse, ensure the power to the affected circuit is completely disconnected.
2. **Locate the Fuse:** Identify the TPS-30 fuse in the circuit.
3. **Inspect the Fuse:** Visually check the fuse. A blown fuse may show a broken internal element, discoloration, or a darkened glass body (if applicable). For opaque fuses, a multimeter can be used to check for continuity. A blown fuse will show infinite resistance (open circuit).

4. **Identify the Cause:** A fuse blows for a reason, typically an overload or a short circuit. Before replacing the fuse, investigate and rectify the underlying cause of the overcurrent. Simply replacing a fuse without addressing the cause will likely result in the new fuse blowing as well.
5. **Replace the Fuse:** Replace the blown fuse with a new Bussmann TPS-30 fuse. Ensure the replacement fuse has the identical current and voltage rating.
6. **Restore Power:** Once the cause is resolved and the new fuse is installed, restore power to the circuit.

*If the fuse continues to blow after replacement and troubleshooting, consult a qualified electrician or the equipment manufacturer.*

## 8. Specifications

| Specification | Detail |
|---|---|
| Model Number | TPS-30 |
| Brand | Bussmann |
| Manufacturer | Cooper Bussmann |
| Mounting Type | Surface Mount |
| Specification Met | UL, ISO |
| Package Dimensions | 3 x 2 x 2 inches |
| Item Weight | 1 Pound |
| UPC | 051712197045 |

## 9. Warranty Information

Specific warranty details for the Bussmann TPS-30 Telpower Fuse are not provided in this manual. For information regarding product warranty, please refer to the official Bussmann (Eaton) website or contact your authorized distributor or point of purchase. Retain your proof of purchase for any warranty claims.

## 10. Support and Contact Information

For technical support, product inquiries, or further assistance with your Bussmann TPS-30 Telpower Fuse, please contact Bussmann (an Eaton brand) directly through their official website or customer service channels. Always refer to the model number TPS-30 when seeking support.

Image 2: The Cooper Bussmann logo, featuring 'COOPER' above 'Bussmann' in a yellow bar, with the tagline 'Productivity Through Protection'.