TE Connectivity / AMP Brand 8341611

TE CONNECTIVITY / AMP 8-34161-1 Ring Tongue Terminal User Manual

Model: 8341611

Introduction

This user manual provides comprehensive instructions for the proper installation, operation, and maintenance of the TE Connectivity / AMP 8-34161-1 Ring Tongue Terminal. This terminal is designed for reliable electrical connections in various applications, accommodating 14-16 AWG wires. Please read this manual thoroughly before use to ensure safe and effective application.

Safety Information

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

- Ensure power is disconnected before installing or removing terminals.
- Use appropriate personal protective equipment (PPE), such as safety glasses and insulated gloves.
- Verify the terminal's specifications match the application's requirements (wire gauge, voltage, current).
- Use only proper crimping tools designed for insulated terminals to ensure a secure and reliable connection.
- Avoid touching live electrical circuits.
- Store terminals in a dry, clean environment to prevent corrosion.

Setup and Installation

Follow these steps for proper setup and installation of the ring tongue terminal:

1. **Prepare the Wire:** Strip approximately 6-8mm (0.25-0.31 inches) of insulation from the end of the wire. Ensure the stripped wire strands are clean and untwisted.
2. **Insert Wire:** Insert the stripped end of the wire fully into the barrel of the ring tongue terminal. Ensure no bare wire strands are exposed outside the terminal's insulation, and all strands are within the barrel.
3. **Crimping:** Using a suitable crimping tool for insulated terminals (typically color-coded blue for 14-16

AWG), place the terminal's barrel into the correct crimping die. Apply firm, even pressure to crimp the terminal onto the wire. A proper crimp will securely hold the wire without damaging the insulation or the terminal.

4. **Inspect Connection:** After crimping, gently pull on the wire to ensure it is securely fastened within the terminal. Inspect the crimp for any signs of damage or loose strands. The insulation should be flush with the terminal's insulation barrel.
5. **Mounting:** Once crimped, the ring tongue terminal can be secured to a stud or screw using its ring opening, providing a reliable electrical connection point.

Image: A blue insulated ring tongue terminal, showing the metal ring for connection and the blue insulated barrel for wire crimping. This terminal is designed for secure electrical connections.

Operating Principles

The TE Connectivity / AMP 8-34161-1 terminal functions by providing a secure, low-resistance electrical connection point. Once properly crimped onto a wire, the ring portion of the terminal is designed to be fastened to a stud, screw, or bolt, ensuring a robust mechanical and electrical bond. The insulation sleeve provides protection against accidental contact and helps prevent short circuits.

Maintenance

These terminals are designed for long-term reliability with minimal maintenance. However, periodic inspection is recommended, especially in environments subject to vibration, extreme temperatures, or corrosive elements.

- **Visual Inspection:** Regularly check for signs of corrosion, discoloration, or physical damage to the terminal or its insulation.
- **Connection Integrity:** Ensure the terminal remains securely fastened to its connection point and the wire remains firmly crimped.
- **Cleaning:** If necessary, clean the terminal and connection point using a non-conductive cleaner suitable for electrical components. Ensure the area is dry before re-energizing.
- **Storage:** Store unused terminals in their original packaging or a sealed container in a dry, cool environment to prevent oxidation and contamination.

Troubleshooting

If you encounter issues with your electrical connection, consider the following common problems and solutions:

- **Poor Connection/Intermittent Signal:**
  - *Cause:* Improper crimp, loose wire, corrosion at connection point, incorrect terminal size.
  - *Solution:* Re-crimp the terminal, ensure wire is fully inserted, clean connection surfaces, verify

terminal matches wire gauge and stud size.

- **Terminal Pulls Off Wire:**
  - *Cause:* Insufficient crimping pressure, wrong crimping tool, incorrect wire gauge for terminal.
  - *Solution:* Use the correct crimping tool and apply adequate pressure. Ensure the wire gauge is compatible with the terminal (14-16 AWG for this model).
- **Overheating at Connection:**
  - *Cause:* High resistance due to poor connection, undersized wire/terminal for current load.
  - *Solution:* Inspect crimp and connection for looseness or corrosion. Ensure the wire and terminal are rated for the expected current. Consult an electrician if unsure.

Specifications

Attribute	Value
Brand	TE Connectivity / AMP Brand
Model Number	8341611
ASIN	B00FRBW67C
Description	Ring Tongue Terminal 14-16AWG 22.12mm 8.71mm Tin Loose Piece
Wire Gauge Compatibility	14-16 AWG
Terminal Type	Ring Tongue
Insulation Type	Insulated (Blue)
Material Finish	Tin
UPC	013227110643
Date First Available	October 10, 2013

Warranty and Support

For specific warranty information regarding the TE Connectivity / AMP 8-34161-1 Ring Tongue Terminal, please refer to the official TE Connectivity documentation or contact their customer support directly. TE Connectivity products are manufactured to high standards, and support is available for product inquiries and technical assistance.
For further assistance, please visit the official TE Connectivity website or contact their authorized distributors.