

Burndy NS2121

Burndy NS2121 Copper Bolted Coupler Instruction Manual

Model: NS2121

1. INTRODUCTION

This manual provides essential instructions for the proper installation, operation, and maintenance of the Burndy NS2121 3-1/2 inch Copper Bolted Coupler. Designed for secure electrical connections, this coupler ensures reliable performance when installed correctly. Please read this manual thoroughly before proceeding with any installation or maintenance.

2. SAFETY INFORMATION

Always observe standard safety precautions when working with electrical components. Failure to do so may result in personal injury or damage to equipment.

- Ensure power is disconnected before installation or maintenance.
- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves.
- Consult local electrical codes and regulations for proper installation procedures.
- Do not modify the coupler. Use only as intended.

3. PRODUCT COMPONENTS

Each package contains two (2) Burndy NS2121 3-1/2 inch Copper Bolted Couplers. Each coupler consists of:

- Copper body halves
- Bolts
- Nuts
- Washers



Figure 1: Burndy NS2121 3-1/2 inch copper bolted coupler. This image displays the robust construction of the coupler, featuring its two copper body halves secured by multiple bolts, nuts, and washers, designed for reliable electrical connections.

4. SETUP AND INSTALLATION

Follow these steps for proper installation of the copper bolted coupler:

1. **Prepare Conductors:** Ensure the ends of the conductors to be joined are clean, free of insulation, and properly sized for the 3-1/2 inch coupler. Remove any burrs or sharp edges.
2. **Position Coupler:** Separate the two halves of the coupler. Place one half around one conductor end and the other half around the second conductor end, ensuring the conductors meet within the coupler's center.
3. **Align and Secure:** Align the two halves of the coupler over the conductors. Insert the bolts through the designated holes, ensuring washers are placed under the nuts.
4. **Tighten Bolts:** Gradually tighten the nuts in an alternating pattern to ensure even pressure distribution. Use a torque wrench to tighten to the manufacturer's recommended torque specifications (if available, otherwise tighten securely to prevent loosening). Over-tightening can damage the coupler or conductors; under-tightening can lead to poor electrical

contact.

5. **Inspect Connection:** After tightening, visually inspect the connection to ensure the conductors are fully seated and the coupler is securely fastened.

5. OPERATING PRINCIPLES

The Burndy NS2121 Copper Bolted Coupler functions as a permanent mechanical and electrical connection for conductors. Once properly installed and tightened, it provides a low-resistance path for electrical current, ensuring continuity and integrity of the circuit. No active operation is required after installation.

6. MAINTENANCE

Regular inspection and maintenance can prolong the life and ensure the reliability of your electrical connections.

- **Visual Inspection:** Periodically inspect the coupler for signs of corrosion, discoloration, or physical damage.
- **Tightness Check:** Over time, vibrations or thermal cycling can cause bolts to loosen. Periodically check the tightness of the bolts and re-torque if necessary, ensuring power is disconnected first.
- **Cleaning:** If necessary, clean the exterior of the coupler with a dry, non-abrasive cloth. Do not use harsh chemicals.

7. TROUBLESHOOTING

If issues arise with the electrical connection, consider the following:

- **Poor Electrical Contact:** This can be caused by loose bolts, corrosion, or improper conductor preparation. Ensure bolts are tightened to specification and conductors are clean.
- **Overheating:** An overheating connection indicates high resistance, often due to loose connections or inadequate contact area. Disconnect power and re-inspect the installation.
- **Physical Damage:** If the coupler shows signs of cracking, bending, or severe corrosion, it should be replaced immediately.

8. SPECIFICATIONS

Feature	Detail
Brand	Burndy
Model Number	NS2121
Type	Copper Bolted Coupler
Size	3-1/2 inches
Product Dimensions	1 x 1 x 1 inches
Item Weight	1 Pound
ASIN	B008SEONT4

9. WARRANTY AND SUPPORT

Specific warranty information for Burndy products is typically provided by the manufacturer or authorized distributors at

the time of purchase. For detailed warranty terms, technical support, or service inquiries, please refer to the documentation included with your purchase or contact Burndy directly through their official website or customer service channels.

