

RIVO MULTITRADE OPTICAL SYSTEMS

How to connect the grounding pin of the distribution box



Overview

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

Key Takeaways

The grounding pin of a distribution box should be connected from the box's grounding terminal to the main grounding system using a properly sized copper wire, ensuring a secure, low-resistance connection.

Step-by-Step Connection



1. Locate the Grounding Terminal: Open the distribution box and identify the grounding bar or PE (Protective Earth) terminal, usually marked with a grounding symbol or the letters "PE" inside the box . 2. Select the Correct Ground Wire: Use a yellow-green insulated copper wire. The cross-sectional area should meet local standards: typically 10 AWG (5.26 mm²) in the US or 6 mm² elsewhere . For industrial applications, larger wires may be required depending on cable length and number of connected devices . 3. Connect the Ground Wire to the Box: Strip the insulation from the wire end, attach it to the grounding terminal, and tighten the screw securely. For metal boxes, ensure the wire makes direct contact with the conductive surface. Use serrated washers or conductive grease if necessary to maintain low resistance and prevent corrosion . 4. Connect to the Main Grounding Point: Run a second wire from the distribution box's mounting plate or grounding terminal to the factory or building's central grounding point. Ensure the total ground resistance between all system parts is less than 0.1 Ohm . 5. Ground Internal Components: If the distribution box contains electrical components that require grounding, connect them to the PE bar using copper wires to ensure safe operation . 6. Verify and Label: After connections, measure the resistance with a multimeter to confirm proper grounding. Clearly label the grounding connections for inspection and maintenance .

Additional Tips

- Use flexible braided copper tape for connections between moving parts like doors and the box body .
- Ensure all screws and bolts are tightened to maintain continuity.
- Avoid loose connections, which can compromise safety and increase resistance .
- Follow local electrical codes and standards for grounding practices. By following these steps, the distribution box will be safely grounded, protecting both personnel and equipment from electrical hazards .

Article Content

Distribution box with standard cable (for up to 4 grounding products ...

With this convenient distribution box with a standard pin cable you can connect up to 4 grounding products with a grounded wall

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