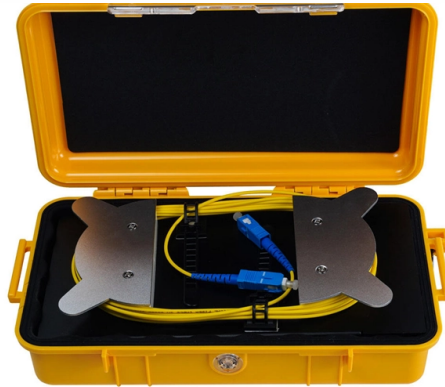


Installation of grounding copper strip in distribution box



AI Overview

A copper grounding strip should be securely connected to the PE bar in the distribution box, ensuring all electrical components are properly grounded and the system meets resistance standards.

Steps for Installation

1. **Locate the Grounding Bar (PE Bar)** Open the distribution box and identify the grounding bar, often marked with "PE" or a grounding symbol. This is the main connection point for all grounding conductors in the box.
2. **Prepare the Copper Strip** Use a copper strip or copper core wire with adequate cross-sectional area, typically 6 mm² or larger depending on local standards. Strip the insulation if using wire, and ensure the copper is clean and free of corrosion for optimal conductivity.
3. **Connect the Copper Strip to the PE Bar** Attach the copper strip to the PE bar using a screw or clamp. Tighten securely to prevent loosening over time. If multiple electrical components require grounding, connect them to the same PE bar using additional copper wires.
4. **Grounding Electrical Components** Any metallic parts or electrical devices inside the distribution box should be connected to the PE bar via copper wires or strips. This ensures that in case of a fault, stray currents are safely directed to the earth.
5. **Connect to the Main Grounding Electrode** The PE bar or copper strip should be connected to the main grounding electrode system, such as a copper-clad rod, buried metal pipe, or concrete-encased electrode. Ensure the connection is continuous and corrosion-resistant.
6. **Verify Grounding Resistance** Test the grounding system to ensure resistance is within safe limits. For distribution boxes, a resistance of less than 25 ohms is recommended, and in industrial setups, it may be as low as 0.1 ohm between system parts.
7. **Mark and Inspect** Clearly label all grounding connections for maintenance purposes. Regularly inspect the connections to ensure they remain tight.

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Attach a ground wire from one of the threaded studs (A) at the bottom of the housing, to the mounting plate (B). Attach a second grounding wire from the mounting plate (B), to the factory

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Generally, copper core wire is selected as the ground wire and connected to the PE wiring bar. When connecting, it is necessary to strip the wire

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