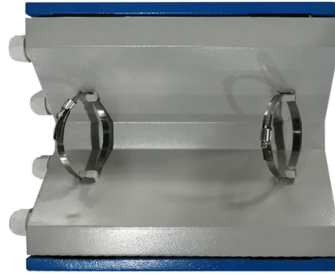


Wiring method for grounding the distribution box



Article Overview

Proper grounding of a distribution box involves connecting a suitable copper ground wire to the PE bar or grounding point, ensuring all components are grounded, and verifying low resistance to earth.

Step-by-Step Grounding Procedure

1. Identify the Grounding Point: Open the distribution box and locate the grounding bar (PE bar) or the position marked for grounding. This is the main connection point for the ground wire inside the box .
2. Select and Connect the Ground Wire: Use a yellow-green insulated copper wire with a cross-sectional area meeting local standards (e.g., 6 mm² internationally or 10 AWG in the US). Strip the wire end, attach it securely to the PE bar, and tighten the terminal screw to ensure a firm connection .
3. Ground Internal Components: If the distribution box contains electrical components that require grounding, connect each component to the PE bar using copper wires. This ensures safe operation and prevents electrical hazards .
4. Connect to External Grounding Electrode: Attach the other end of the ground wire to a ground rod or grounding electrode buried in the earth. Ensure the contact area is sufficient for effective grounding. For plastic boxes, connect the wire to a metal part of the box first, then to the ground rod .
5. Verify Ground Resistance: Use a voltmeter or ground resistance tester to measure the resistance between the distribution box and the earth. The resistance should meet safety standards, typically less than 25 ohms for general installations, and lower for sensitive equipment (e.g.,

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(1) Wiring method of distribution box 1) Generally, the incoming line of power distribution box adopts five wire system, that is, a, B

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DISTRIBUTION BOX

Each DISTRIBUTION BOX and controller must be grounded. On the US market, a 5.26 mm 2 (10 AWG) ground wire

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26 05 26 Grounding and Bonding Electrical Systems_06_15_16

Ground all equipment with insulated ground wires run in conduit with circuit conductors. Construct metal raceway systems to create

Contact Us

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