

Assembly steps for a three-level distribution box

Article Overview

Assemble a three-phase distribution box by sequentially connecting earth, neutral, and live phases, installing protective devices, and ensuring proper busbar and load connections.

Step 1: Prepare the Distribution Box

- Select a suitable enclosure with adequate dimensions to accommodate all components and allow for ventilation and safety ().
- Ensure the box is clean, dry, and free from dust or moisture.
- Gather all components: MCCB (main switch), MCBs (sub-circuit breakers), busbars, neutral and earth links, wiring, bolts, washers, and nuts ().

Step 2: Install the Main Protective Device

- Mount the MCCB at the designated input position. This acts as the main isolator for the entire distribution box ().
- Identify input terminals for the three phases (L1, L2, L3) and the neutral (N).
- Connect the incoming three-phase supply to the MCCB input terminals. Ensure proper torque and secure connections.

Step 3: Install Busbars and Sub-Circuit Breakers

- Install busbars to distribute power from the MCCB to the MCBs. Busbars are essen...

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