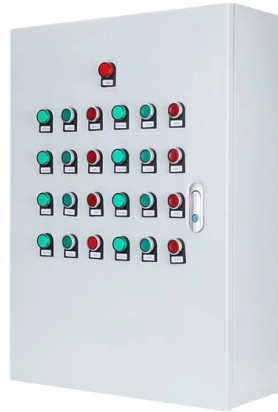


Wiring method for Level 4 distribution box



Article Overview

A Level 4 distribution box should be wired with proper phase, neutral, and earth connections, using protective devices like MCBs, RCDs, or RCBOs, while following safety standards and clear labeling.

Incoming Supply and Main Switch

The incoming power typically enters the distribution box through a main switch or circuit breaker, which isolates the entire system for maintenance or emergency purposes. For three-phase systems, the incoming lines are usually L1, L2, L3 (phase lines), N (neutral), and PE (protective earth), with color coding such as yellow, green, red for phases, light blue for neutral, and yellow-green for earth. Single-phase systems use one phase line, neutral, and earth.

Internal Components

Inside the box, the main components include:

- Busbars: Distribute live supply from the main switch to individual protective devices.
- MCBs (Miniature Circuit Breakers): Provide overcurrent protection for each circuit.
- RCDs (Residual Current Devices) or RCBOs (Residual Current Breaker with Overcurrent protection): Protect against earth faults and leakage currents.
- Neutral and Earth Bars: Collect all neutral and earth connections from outgoing cir...

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