

Factory Main Distribution Box Configuration Standard



Summary of Content

A factory main distribution box (MDB) must be designed for safety, reliability, and compliance, with proper enclosure, protective devices, metering, and wiring configuration.

Enclosure Requirements

- Material: Cold-rolled steel sheet or flame-retardant insulating material; wooden boxes are prohibited .
- Thickness: Switch box ≥ 1.2 mm, distribution box ≥ 1.5 mm, generally 1.2-2.0 mm .
- Surface Treatment: Anti-corrosion treatment and uniform painting (commonly orange), .
- Protection: Enclosure must prevent dust and rain ingress; select IP/NEMA rating suitable for indoor or outdoor use .
- Mounting Height: Fixed type 1.4-1.6 m; portable/movable type 0.8-1.6 m .

Internal Configuration

- Main Switch/Isolator: Disconnects the incoming supply; may be a four-pole MCCB for three-phase systems .
- Protective Devices:
- MCBs/MCCBs for overload and short-circuit protection.

Article Content

The installation requirements for the distribution box

Learn how to install a distribution box safely and correctly. Covers wiring, placement, standards, and expert tips for a

Factory and Warehouse Electrical Construction Procedure

The precise process for installing electrical systems in warehouses and factories according to standards and the key

Distribution Box and Selection Guide: Internal Structure, Components ...

Learn how to choose a distribution box and understand its internal structure, including MCBs, busbars, neutral bars,

Distribution Box Specifications & IEC Protection Standards

Evaluate distribution box parameters, bus bar configurations, and overcurrent protection requirements for industrial

Power Distribution Systems: Complete Design Guide

Discover how industrial power distribution systems convert utility power into safe, reliable electricity—minimizing downtime,

Distribution Box Guide: Types, Components & Solutions

Understand distribution boxes (DB boxes) in 5 minutes. Learn about types, components, functions, and uses. Find

Main Distribution Board (MDB) for Industrial Manufacturing

How main distribution board (mdb) are designed and specified for industrial manufacturing — requirements, standards, and key

How to Choose the Right Distribution Box for Industrial Sites

Practical guidance to select the right distribution box for industrial sites: site assessment, IP ratings, thermal

Standard Configuration Requirements for Distribution Boxes in Factories

Comply with standards: Follow NEC, IEC, or local codes. In industrial power distribution systems, cable distribution boxes (also

Electrical Distribution Fundamentals Design Guide

This guide is intended to present the fundamentals of power system design for commercial and industrial power

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://benniedesignstudio.co.za>

Email: sales@benniedesignstudio.co.za

Phone: +27 82 391 4765

Address: The Towers, 1 St Georges Mall, Cape Town, 8001, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

