

List of Low-Voltage Distribution Box Specifications and Models

Article Overview

Low-voltage distribution boxes come in various models and specifications, designed for residential, commercial, and industrial applications, with compliance to IEC/EN standards for safety and performance.

Common Models and Series

1. Fixed Low-Voltage Switchgear

- o GGD Series: Used in substations and power plants, featuring high breaking capacity, stable performance, and AC 50Hz rated voltage of 380V.
- o GDH Series: Similar to GGD, with manufacturer-specific parameters for stable power supply.
- o PGL Series: Widely applied in areas requiring reliable power distribution, offering compact and robust design.

2. Withdrawable Low-Voltage Switchgear

- o GCK Series: Composed of power distribution and motor control cabinets, suitable for motor control or lighting, with 60Hz frequency and 660V working voltage.
- o GCS Series: Rated at 400V AC, used in power plants, high-rise buildings, and industrial facilities with high power consumption.
- o MNS Series: Compact, stable, and versatile, suitable for small power plants, industrial enterprises, and hotels.

3. Residential and Small Commercial Enclosures

- o xComfort KLV Series (Eaton): Flush or hollow-wall mounted, modular 1- to 5-row enclosures, compliant with IEC/EN 62208, IEC/EN 60670-24, and IEC/EN 61439-3. Supports pre-wired or customizable configurations with modular switching and protection devices.

4. Industrial Low-Voltage Distribution Cabinets

- o Main Distribution Boards (MDB): Heavy-duty cabinets with high continuous current ratings (1000A-6300A), integrating MCCBs, ACBs, smart meters, and copper busbars.
- o Sub-Distribution Boards (SDB) and Final Distribution Boards (FDB): Step down power from MDBs, allowing selective isolation of circuits for maintenance without full facility shutdown. Certified to IEC 61439-1/-2, with IP protection up to IP55 and robust short-circuit withstand capacity.

Key Specifications

- o Voltage Rating: Typically 380-660V AC for industrial applications; residential enclosures often rated for 230-400V AC.
- o Frequency: 50Hz or 60Hz depending on regional standards and application.
- o Protection: Integration of MCCBs, ACBs, RCDs, AFDDs, and overvoltage protection devices.
- o Ingress Protection: IP20-IP55 depending on indoor or outdoor installation.
- o Standards Compliance: IEC/EN 61439-1/-2/-3, IEC/EN 62208, IEC/EN 60670-24.

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o Modularity: Many series allow flexible assembly of switching, protection, and metering devices for customized layouts .

Applications

- o Industrial: Factories, mining, and power plants requiring high current capacity and fault tolerance.
- o Commercial: High-rise buildings, hotels, and office complexes with complex power distribution needs.
- o Residential: Small-scale energy distribution with modular, pre-wired, or customizable enclosures for safe and efficient power management .

Summary

Low-voltage distribution boxes are available in fixed, withdrawable, modular, and compact designs, each tailored to specific applications. They provide safe, reliable, and flexible power distribution, with compliance to international standards ensuring operational safety, fault tolerance, and ease of maintenance. Modern systems also integrate smart metering, modular protection devices, and pre-wired options to simplify installation and future expansion .

Extension box with CT's, wiring loom and MCB to pick up voltage. Can be mounted top or bottom of board. Modbus, maximum

Low Voltage Power Distribution catalogue 2025 Acti9 Isobar P | PowerPact 4 | Metering The evolution of low voltage

The provision of this Low Voltage Standard Technical Specification (LVSTS) applies in general as supplementary requirements for

Master low voltage engineering with CNEEG's guide to lv distribution cabinets. Compare

Explore Zoliov's full range of low voltage distribution boxes, designed to deliver safe, reliable, and efficient power distribution for a

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The planning and operation of electrical power distribution systems are becoming more complex, and the technical demands placed

MNS® Low Voltage Distribution Board and Power Cabinet Technical Info -- From the sub distribution

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to factory power supply, from

The document provides specifications for low voltage distribution boxes used with distribution transformers of various ratings. Key

Learn what a low voltage panel is, explore its key components, safety standards,

This document provides information on ABB's consumer units and distribution boards, including ordering details. It describes various

xComfort KLV is a flush and hollow-wall mounted compact distribution enclosure for residential and small commercial applications. In

There are many specifications and models of Distribution box. The following are some

This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement - from

The safety and efficiency of an electrical system depends on the selection of an LV (Low Voltage) distribution box.

This document provides technical specifications for low voltage distribution boards, including: - Scope and references for standards

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