

Parameters of all models of low-voltage distribution boxes



Overview

Low-Voltage Power Distribution and Electrical Installation. This comprehensive portfolio for low-voltage power distribution and electrical installation.

Key Takeaways

Low-voltage distribution boxes vary by model, rated voltage, current, breaking capacity, and structural design, with common series including GGD, GDH, PGL, GCK, GCS, and MNS. Core Specifications¹.

Rated Voltage and Frequency

Most low-voltage distribution boxes operate at 380V AC for industrial three-phase systems, with some models supporting 660V AC for higher-power applications. Auxiliary circuits typically cover 220V AC/DC. Standard operating frequency is 50Hz, though some motor control-oriented models use 60Hz.

2.

Rated Current

Small distribution boxes: 400A
Large power distribution systems: up to 4000A
Example: GCK series vertical bus systems range from 400-800A, selected based on total load. 3.



Rated Breaking Capacity and Short-Time Withstand Current

Rated breaking capacity indicates the ability to interrupt short-circuit currents quickly: PGL1 type: 15kA PGL2 type: 30kA Short-time withstand current measures instantaneous fault tolerance: GCK series horizontal bus: 80kA for 1 second. 4.

Environmental Conditions

Operating temperature: -5°C to +40°C Maximum humidity: 50% at 40°C Some enclosures allow short-term exposure to +70°C and high humidity up to 90% at lower temperatures.

Model Series Overview

Fixed Switchgear GGD series: High breaking capacity, stable, used in substations and power plants.

GD

H series: Similar to GGD, with manufacturer-specific parameters.

PG

L series: Stable power supply for industrial and commercial applications.

Withdrawable Switchgear GCK series: Modular, includes power distribution and motor control centers, suitable for motor and lighting control.

GC

S series: Rated voltage up to 400V, used in high-consumption systems like power plants and high-rise buildings.

MN

S series: Compact, versatile, widely used in industrial, mining, and building applications.

Structural and Functional Features

Enclosures: Made of cold-rolled steel, stainless steel, or corrosion-resistant materials; IP54 protection or higher for industrial environments. Internal Components: Circuit breakers, contactors, relays, busbars, and protective devices for overload, short-circuit, and leakage protection. Mounting Options: Wall-mounted or floor-mounted with front access for maintenance and expansion.

Advanced Features: Remote monitoring, intelligent modules, and modular design for flexible power distribution and fault detection. Summary Low-voltage distribution boxes are designed to provide safe, reliable, and flexible power distribution. Selection depends on rated voltage, current, breaking capacity, environmental conditions, and application type.

Fixed and withdrawable switchgear models offer different levels of modularity and protection, while advanced MNS and GCK series provide versatility for industrial and commercial installations.

Article Content

Low-Voltage Power Distribution and Electrical Installation ...

This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement – from the switchboard to the socket outlet.

Distribution Box Specifications And Models

The above are only some common distribution box specifications and features. When making actual selections, it is necessary to comprehensively

Guide to LV Distribution Cabinets | Components

Master low voltage engineering with CNEEG's guide to lv distribution cabinets. Compare MDB/SDB specs, busbar configurations, and certified IEC

Low-Voltage Power Distribution and Electrical Installation Technology

The planning and operation of electrical power distribution systems are becoming more complex, and the technical demands placed on the underlying systems and products are rising – in particular with

Low Voltage Power Distribution catalogue 2025

Low Voltage Power Distribution catalogue 2025 Acti9 Isobar P | PowerPact 4 | Metering The evolution of low voltage electrical distribution continues with the demands for reliability,

Low Voltage Distribution Box Manufacturer – PZ30, XL-21, JXF Panels

What is a Low Voltage Distribution Box? A low voltage distribution box is an essential component used to receive, control, and distribute electrical power within systems operating below 1 kV.

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, earth bars, RCDs, RCBOs, SPDs, enclosure ratings, and wiring layout.

MNS® Low Voltage Distribution Board and Power Cabinet

In designing the distribution board and power cabinet, ABB drew upon its wealth of experience with low-voltage switchgear and placed a strong emphasis on the product's ease of installation, operations,

Low Voltage

Engineered for performance and protection, our indoor cabinet range includes multi-service distribution boards (MSDB) and sub-main distribution boards, all built to ensure easy installation, space

L.T. Distribution Box Specification | PDF | Fuse (Electrical)

Technical Specification of L.T Distribution Kiosk.pdf - Free download as PDF File (.pdf), Text File (.txt) or read online for free. The document provides specifications for low voltage distribution boxes used

Low voltage electrical distribution products | Schneider Electric

Discover our full range of safe and reliable solutions for low voltage electrical distribution products and systems, including circuit breakers, switches, and enclosures.

Usage, Principle, And Classification of Low Voltage Distribution Box

Uses of low-voltage distribution box It is convenient for management and it is conducive to maintenance when circuit faults occur. Distribution boxes and cabinets, distribution panels, and distribution

xEnergy Basic Low Voltage Power Distribution | Overview | Eaton

Eaton's xEnergy Basic Distribution board is a wall-mounted and floor-standing switchboard for low-voltage sub-distribution up to 630 A. Discover more!

A Complete Guide to LV Distribution Board | CHINT global

LV distribution boards, part of the electrical distribution system, securely distribute low-voltage power to facility circuits.

Distribution Box

Distribution Box Space and cost saving solution Amphenol LTW's distribution boxes facilitate efficient cable management, easy installation with pre-wired configuration, and provides a centralized

Catalog Extract from LV 10 · 04/2020

Which is why products and systems featuring maximum safety and optimum efficiency are in demand. This comprehensive portfolio for low-voltage power distribution and electrical installation technology

L.T. Distribution Box Specification | PDF

The document provides specifications for low voltage distribution boxes used with distribution transformers of various ratings. Key details include: 1) The boxes will be outdoor type made of glass

What is a Low Voltage Panel (Switchgear) Aktif

Learn what a low voltage panel is, explore its key components, safety standards, classifications, and discover the benefits it provides for safe and

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

