

Article Overview

Distribution boxes come in various models and sizes, ranging from small residential units (1-12 ways) to large industrial switchgear, with dimensions and specifications determined by application, number of circuits, and standards compliance.

Residential and Light Commercial Boxes

Common plastic or modular distribution boxes are designed for residential or light commercial use. Examples include:

- o MB-ABC Series: Flush-mounted ABS plastic boxes, flame-resistant, suitable for AC 50Hz, 220V/380V circuits. Sizes include:
 - o MB-ABC500: 200 x 174 x 95 mm
 - o MB-ABC700: 255 x 172 x 95 mm
 - o MB-ABC900: 328 x 172 x 95 mmThese support multiple ways (outlets) and are compliant with BS EN60439-3 and JB/T7121-93 standards .
- o HA, HK, LGD Series: Plastic boxes with dimensions ranging from 100-415 mm in length, 105-323 mm in width, and 75-140 mm in height, suitable for small residential circuits .
- o TOP Series: Includes TOP-TS, TOP-TF, TOP-LS, TOP-PS, TOP-PF, and TOP-S models, ranging from 1-way to 36-ways, with detailed length, width, and height specifications for each model .

Industrial and Commercial Switchgear

For higher power or industrial applications, low-voltage fixed or withdrawable switchgear is used:

- o GGD Series: Fixed low-voltage switchgear for substations and power plants, AC 50Hz, 380V, high breaking capacity, stable performance .
- o GDH Series: Similar to GGD, with manufacturer-specific parameters.
- o PGL Series: Low-voltage fixed switchgear for stable power supply in commercial or industrial settings.
- o GCK Series: Withdrawable switchgear, AC 60Hz, 660V, suitable for motor control and lighting equipment.
- o GCS Series: AC 50Hz, 400V, used in high-consumption systems like power plants and high-rise buildings.
- o MNS Series: Compact, stable low-voltage distribution systems for industrial and mining enterprises .

Selection Considerations

When choosing a distribution box, consider:

Size Specifications and Model of Distribution Box

- o Number of outgoing circuits: Include spare ways for future expansion.
- o Rated current and short-circuit capacity: Based on actual load and fault current.
- o Enclosure protection: IP rating, UV and corrosion resistance, impact protection.
- o Internal layout: Busbar type, neutral and earth bar arrangement, DIN rail space, wiring room.
- o Standards compliance: IEC 61439, IEC 60670, IEC 60898, UL/NEC, BS 7671, or local codes .

Summary

Distribution boxes vary widely in size, model, and application. Small residential boxes like MB-ABC or TOP series are compact and modular, while industrial switchgear like GGD, GCK, or MNS series handle higher voltages and currents. Proper selection depends on application type, number of circuits, electrical load, and compliance with relevant standards.

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

If you're like most electrical professionals, picking the right distribution box for your project can feel like navigating a

This guide explores control panels, electrical boxes, breaker panels, bus bars, junction

Plastic Electrical Box, also known as a consumer control unit or electricity control unit. It is a device that is

DRAFT SPECIFICATION FOR L. T. DISTRIBUTION BOX OF DISTRIBUTION TRANSFORMER (DTR) OF DIFFERENT RATINGS

KV 1. DESCRIPTION OF MATERIALS:- The L.T. Distribution Cabinets shall be installed on D.P. Structure for Plinth Mounted 33/4

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

Distribution Home OUR PRODUCTS Energy distribution, protection and management Residential and small commercial panels

Wiring Accessories for Single Phase Distribution Board Main Distribution Board or Fuse Boards (Consumer

Size Specifications and Model of Distribution Box

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

TECHNICAL SPECIFICATION FOR LT DISTRIBUTION BOX VOL-II(TS) E12-IX- LT DB Page-2 of 9
L.T. DISTRIBUTION BOX FOR

Discover the key types of distribution boxes with NUOMAK's comprehensive guide. Learn about Main Distribution Boards (MDB),

1. SCOPE: This Specification covers the design, manufacture, testing at works and supply of Distribution Boxes made out of CRCA

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

The document provides details for designing the electrical distribution box and circuits for a residence. It includes specifications for

Mirage sub-main distribution boards have been designed for easy handling and quick, simple installation

Web: <https://www.kremgroup.co.za>

