Identifying Box-Type Distribution Boxes



Overview

12 types of distribution boxes and how to choose themIn this guide, we'll break down the 12 main types of distribution boxes in a way that's easy to unders.

Key Takeaways

Distribution boxes are enclosures that safely divide electrical power into multiple circuits, and they come in various types based on application, mounting, and voltage requirements.

Overview of Distribution Boxes

A distribution box (DB Box) is a protective enclosure that houses circuit breakers, fuses, or switches to manage electrical currents in a building or facility. Its primary function is to distribute electricity from the main supply to multiple circuits while providing overcurrent protection and a safe disconnection point for maintenance. They are essential in residential, commercial, and industrial electrical systems.

Common Types of Box-

Type Distribution Boxes

Based on MountingSurface-Mounted Distribution Boxes: Installed directly on walls, suitable for retrofits and industrial environments.

Flush-

Mounted Distribution Boxes: Embedded into walls for a clean, aesthetic appearance, commonly used in residential and commercial buildings.

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

Pole-

Mounted Distribution Boxes: Designed for outdoor applications such as street lighting and utility networks. Based on Electrical PhaseSingle-Phase DB Boxes: Typically used in residential properties and small commercial loads.

Three-

Phase D

B Boxes: Used in industrial and large commercial facilities requiring higher power capacity. Based on FunctionLighting Distribution Boxes: Dedicated to managing lighting circuits with protective devices. Power Distribution Boxes: Support sockets, equipment, and heavy machinery.

Control Distribution Boxes: Integrate control components like relays, contactors, and timers for automation. Based on HierarchyMain Distribution Board (MDB): Central hub distributing electricity to various sections of a building or industrial unit, often including bus bars and MCCBs. Sub Distribution Board (SDB): Transfers electricity from the main board to specific areas like garages, parking lots, or secondary buildings.

Consumer Unit: Common in residential areas, containing fuses or circuit breakers to protect circuits from overloads. Meter Panels: Track electricity usage and may include RCDs for safety. Automatic Transfer Switches: Automatically switch power sources to maintain supply without manual intervention.

Enclosed Switchgear: Houses switches, breakers, and control devices for industrial power management. Based on Voltage LevelLow-Voltage Distribution Boards: Operate typically at 400V/690V for residential and commercial applications.

Medium-

Voltage Distribution Enclosures (Ring Main Units): Used in industrial or utility networks at 10kV–12kV, often sealed and maintenance-free.

Key Identification Features

Material: Usually cold-rolled or stainless steel with protective coatings for corrosion resistance. Components: Circuit breakers, fuses, bus bars, relays, and RCDs depending on type and application. Application Environment: Indoor vs. outdoor, residential vs. industrial, or specialized control functions.

Mounting Style: Surface, flush, or pole-mounted, which affects installation and accessibility. Understanding these distinctions helps in selecting the right distribution box for safety, compliance, and operational efficiency in any electrical project.

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

Article Content

12 types of distribution boxes and how to choose them

In this guide, we''ll break down the 12 main types of distribution boxes in a way that''s easy to understand. We''ll chat about what each one does, where it shines, and then dive into how to

Ultimate Guide To Distribution Boxes Db Boxes Types

This ultimate guide explains what a distribution box does, its internal components, common types, real-world applications, and how to select the right DB Box for

Distribution Box Guide: Types, Components & Solutions

Understand distribution boxes (DB boxes) in 5 minutes. Learn about types, components, functions, and uses. Find the perfect DB box for your needs.

Complete Guide For Distribution Boxes Types

The correct choice and installation of distribution boxes are crucial for electrical safety, efficiency, and reliability. This guide provides an exhaustive overview of the different types of distribution boxes,

The Ultimate Guide to Distribution Box Types

Discover the key types of distribution boxes with NUOMAK''s comprehensive guide. Learn about Main Distribution Boards (MDB), Consumer Units, Transfer Switches, and more to choose the perfect

Distribution Box Industry Comparison of Types and Uses

Compare types and uses of distribution boxes in the distribution box industry, covering residential, commercial, and industrial applications.

Electrical Distribution Boxes: Types, Components

Discover electrical distribution boxes types, components (MCB, RCCB, RCBO, SPD, busbar) and functions. Get expert selection guidance and

The Complete Guide to Distribution Box: Installation, Types & More

Modern distribution boxes also serve as monitoring centers, allowing users to quickly identify which circuits are experiencing problems. This centralized approach makes electrical

Distribution Boxes Types – The Complete Guide

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

The power distribution boxes deliver electricity from the main electrical main to other circuits. Several distribution boxes are designed for specific use in offices or industries. Types of

A comprehensive understanding of distribution box

Distribution boxes are at the heart of safe and organized electrical systems—whether in residential, commercial, or industrial settings. But how do you choose the right one for your application?

Power Distribution Boxes Explained Simply

Learn what a power distribution box is, how it works, key components, types, and why it''s vital for safe and efficient electrical systems.

What Is a Distribution Box?

Some distribution boxes have a longer cord than others. When choosing a distribution box, make sure the cord is long enough to reach the main power line. If it''s too short, you may not be

What Is Distribution Box (DB Box): Types, Functions,

You may be curious about them. They are distribution boxes (DB box), also known as distribution panels, which distribute electricity throughout a

What are the classifications of distribution boxes?

The distribution box is classified according to the structural features and purposes: (1) Fixed panel type switch cabinet, often called switch board or distribution

Power Distribution Box Essentials: Functions, Types

Both ordinary distribution and ex-proof distribution power boxes serve the same purpose of safe power distribution, but each is suitable for different

10 Distribution Board Types Explained [July 2026]

Discover 10 types of distribution boards, from Main Distribution Boards to Fuse Boxes. Learn about their features, and applications,

Electrical Distribution Box: Complete Panel Types

Learn what an electrical distribution box is in simple terms. Complete guide to panel types, NEC 408 requirements, and applications for home and

Overview of basic knowledge of distribution box and

Characteristics, types and functions of distribution box 1) It is convenient for management and maintenance in case of circuit failure. 2) Distribution box,

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved

Contact Us

Continue your research online:

Website: https://cgweb.co.za
Technical inquiry: https://cgweb.co.za/project-enquiry.html

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

© 2026 CGWEB NETWORK INFRASTRUCTURE - All rights reserved