

What is an electrical circuit in a distribution box



Article Overview

A distribution box contains multiple branch circuits, each protected by devices like MCBs, RCDs, or RCBOs, distributing power safely to lights, sockets, and appliances.

Overview of a Distribution Box

A distribution box (also called a consumer unit, breaker box, or panelboard) is the central point where incoming electrical power is divided into multiple subsidiary circuits. Its main functions are to distribute electricity, protect circuits from overloads or faults, allow isolation for maintenance, and organize live, neutral, and earth connections .

Types of Circuits

Inside a distribution box, the electrical supply is split into individual circuits, each serving a specific purpose:

- **Lighting Circuits:** Power for ceiling lights, wall lights, and other fixed lighting points.
- **Socket/Power Circuits:** Supply to general-purpose outlets for appliances and devices.
- **Dedicated Appliance Circuits:** For high-power equipment like ovens, water heaters, air conditioners, or washing machines.
- **Specialty Circuits:** For equipment requiring specific protection, such as computers, medical devices, or industrial machinery. Each circuit is connected to a circuit break...

Article Content

A Complete Guide to Distribution Boards

Its job is to split an incoming electrical power feed into multiple secondary or subsidiary circuits. Most of the time, each

Electrical Enclosure vs Distribution box vs Distribution board

A distribution box (DB) is a type of electrical enclosure specifically designed for the distribution of electrical power. It

The Ultimate Guide to Distribution Box Types

In any electrical system, the distribution box is the heart and brain, a critical component that safely manages and distributes power

Distribution Box: Types and Functions | Axis-Electricals

A distribution box ensures that electrical supply is distributed in the building, also known as a distribution board, panel board, breaker

Complete Guide For Distribution Boxes Types

Distribution boxes, also known as electrical distribution boards or panels, are pivotal components in electrical systems, ensuring the

What is an Electrical Distribution Box? A Comprehensive Guide

Each circuit breaker in the distribution box corresponds to a different circuit, like a lighting circuit, an appliance circuit,

Distribution Boards

Distribution boards, often referred to as electrical panels or breaker boxes, serve as the nerve center of any electrical system. Here

A Step-by-Step Guide to Wiring an Electrical Panel Box

The panel box contains a series of circuit breakers or fuses that control the distribution of electrical energy to individual circuits

The Essential Guide to Understanding Electrical Distribution System ...

Learn about the components and layout of an electrical distribution system diagram, including transformers, circuit breakers, and

Distribution board

Instead of just circuit breakers, the rack has a solid state electronic dimmer with its own circuit breaker for each stage circuit. This is

Distribution Circuits

A distribution circuit is a circuit that supplies a distribution board or other switchgear and does not extend directly to

Contact Us

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

Website: <https://www.gmarkconstruction.co.za>

Email: sales@gmarkconstruction.co.za

Phone: +31-6-15-38-72-94

Address: Herengracht 456, 1017 BS Amsterdam, Netherlands

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

