

What size is the main switch in the distribution box



Summary of Content

The dimensions of a main switch in a distribution box vary by type and rating, typically ranging from 150–400 mm in width, 200–600 mm in height, and 100–300 mm in depth depending on amperage and enclosure design.

General Overview

The main switch in a distribution box, often an MCCB (Molded Case Circuit Breaker), isolator, or fused switch, serves as the primary protective device for the incoming electrical supply. Its physical size depends on the current rating, number of poles, and manufacturer design. For example, commercial and industrial boards may accommodate switches rated from 125A to 4000A, with larger amperages requiring deeper and taller enclosures to house the switch and busbars safely .

Typical Dimensions by Application

- Residential/Small Commercial Panels: Main switches rated 100–250A usually fit in enclosures 150–250 mm wide, 200–400 mm high, and 100–200 mm deep .
- Medium Commercial Panels: Switches rated 250–400A often require 200–300 mm width, 400–600 mm height, and 150–250 mm depth to accommodate MCCBs and busbar connections .
- Large Industrial Switchboards: For 600A–4000A, the main switch section may occupy a custom-sized compartment, sometimes 600 mm or more in depth, with front and side access for maintenance, as seen in Siemens SB2/SB3 and Eaton Pow-R-Line designs .

Article Content

How to determine your panel size

Find your panel size Now that you've found your main electrical panel, find your panel size in one of these three places: Main breaker

Electrical Distribution Box Design Guide | PDF | Amplifier

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

What is an Electrical Distribution Box? A

Why Distribution Boxes are Essential 2. Components Inside an Electrical Distribution Box

Main Switch Specifications for DB Design | PDF

The document discusses specifications for electrical distribution boards and main switches. It states that main switches come in

How to Size Main Panel, Load Center, and Consumer Unit?

Here, a double pole MCB is used as the Main MCB or Main switch. It has the highest capacity than other MCBs used in

Understanding Distribution Boxes: Your Guide to Power

What are Distribution Boxes and Their Importance? What are Distribution Boxes and Their

Size determination, installation method and wiring mode of distribution ...

The switch width plus 40mm on each side is the width of the electric box, the height is the switch height plus 40mm, and the depth is

Distribution board

In Canadian service entrance panelboards the main switch or circuit breaker is located in a service box, a section of the enclosure

Chapter 1: Overview of The Power Distribution System

Overview of the System Electricity enters the site from a Transformer through the "Service Entrance" to the main electrical panel

How to determine the size of distribution box

Of course, the size of the electrical box is not finalized. Consider the actual installation, see

Wiring of the Distribution Board From Energy Meter to the Consumer

How to Wire a Distribution Board? Distribution Board also known as “Panel Board”, “Switch & Fuse Board” or “Consumer Unit” is a

Distribution boards components

The incoming supply circuit breaker or main switch (see Fig. Q5) The consumer is allowed to operate this circuit

Switchboard fundamentals | Switch board | Eaton

What is the difference between switchboards and panelboards? Switchboards and panelboards provide similar functionality in a

Wiring of the Distribution Board with RCD (Single Phase Home Supply)

Wiring Accessories for Single Phase Distribution Board Main Distribution Board or Fuse Boards (Consumer Unit) usually contains on

Switchboard fundamentals | Switch board | Eaton

Switchboard structures A switchboard can consist of a single vertical structure or multiple structures depending on the number and

Electrical Distribution Panel Guide: Types, Sizing & 600 Amp Tips

From residential 100-amp panels to massive 600 amp main distribution panels in commercial facilities, this

The Ultimate Guide to Distribution Box Types

Discover the key types of distribution boxes with NUOMAK's comprehensive guide. Learn about Main

Distribution Box Guide: Types, Components & Solutions

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

Distribution Box Guide: Types, Components & Solutions

What is a Distribution Box? A distribution box, or DB box, is a circuit breaker enclosure. It is a vital part and central

Electrical Distribution Box Design Guide

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

10 Distribution Board Types Explained [July 2026]

Discover 10 types of distribution boards, from Main Distribution Boards to Fuse Boxes. Learn

Standard Heights for Electrical Switches

This document provides standard heights for various electrical switch boards and fittings in different rooms of a house. It lists the

The installation requirements for the distribution box

Learn how to install a distribution box safely and correctly. Covers wiring, placement, standards, and expert tips for a

Distribution Box and Selection Guide: Internal Structure, Components ...

Below is a simplified internal structure diagram for a typical single-phase AC distribution box using an incoming main

How to Choose a House Distribution Box | CHINT global

An optimal distribution box configuration ensures efficient power management and safety. The recommended

How to choose the size of the distribution board

Learn how to choose the right distribution board size by assessing load requirements, circuit needs, and future expansions for a safe

Calculate Size of Main ELCB & Branch MCB of Distribution Box

Design Distribution Box of one House and Calculation of Size of Main ELCB and branch Circuit MCB as following Load

Difference between Distribution board main switch and mains

Distribution box (aka distribution board, breaker panel, electric panel, breakerboard) is the the enclosure where the

Distribution board

A distribution board (also known as a panelboard, circuit breaker panel or box, electric panel, fuse box or DB box) is a component of

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