

Codes for distribution boxes and their circuits

Article Overview

Distribution boxes use standardized circuit codes and protective devices to safely allocate and manage electrical circuits according to BS 7671 and IEC 60364 standards.

Overview of Distribution Boxes

A distribution box (DB) or consumer unit is a central hub that distributes electrical power from a main supply to multiple circuits in residential, commercial, or industrial buildings . It houses key components such as:

- Circuit breakers (MCBs, RCBs) or fuses for overload and short-circuit protection
- Bus bars for neutral and earth connections
- Surge protective devices (SPDs) for transient voltage protection
- Enclosure made of metal or thermoplastics for safety and durability
- Indication lights and sometimes smart modules for monitoring and remote control

Circuit Codes and Allocation

Distribution boxes follow circuit coding and labeling standards to ensure safety and clarity:

- Circuit identification: Each circuit must be clearly labeled with a code or description indicating its purpose and location, as required by BS 7671 Regulation 514.9.1 .
- Typical domestic circuit codes include:
 - Lighting circuits: L1, L2, L3
 - Socket outlets: S1, S2, S3
 - Cooker or oven circuits: C1, C2
 - Shower circuits: SH1, SH2
 - Dedicated appliance circuits: DA1, DA2
- Commercial or industrial circuits may include codes for HVAC, motors, pumps, or machinery, often using a combination of letters and numbers to indicate function and phase.

Protective Devices and Configurations...



Article Content

Jun 23, 2026

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

Dec 26, 2025

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,

Dec 31, 2025

List of IEC standards

The International Electrotechnical Commission (IEC; French: Commission électrotechnique internationale) is an international

Feb 12, 2026

Understanding Distribution Boxes: Your Guide to Power

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

Nov 25, 2025

Junction box

In such an installation, the fireproofing around the incoming or outgoing cables must also be extended to cover the junction box to

May 08, 2026

Common Electrical Code Requirements Room-by-Room

A room-by-room look at the most common electrical code requirements you must follow when building or remodeling a

Nov 27, 2025

IEC / BS 7671 Codes for Consumer Unit and Distribution Board

All the protective devices used in the consumer unit for residential and distribution board for commercial and industrial application

May 20, 2026

Understanding Circuit Breaker Wiring Configurations in Distribution

Master the safest and most efficient circuit breaker wiring configurations. Learn about single-phase vs. three-phase setups, safety

Oct 17, 2025

[Home \[dcode .uk\]](#)

Licensed electricity distribution businesses, or Distribution Network Operators (DNOs) in Great Britain, are obliged under Condition

Oct 30, 2025

Electrical Codes for Electrical Circuits

Electrician Explains Electrical Codes for Wiring Home Electrical Circuits with Photos, Wiring Diagrams and Answers to Your Questions

Apr 15, 2026

National Electrical Code (NEC) Requirements for Panelboards

The National Electrical Code (NEC) provides comprehensive safety standards for electrical installations, including requirements for

Sep 23, 2025

Electrical Distribution Box: Complete Panel Types Guide 2025

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

Sep 20, 2025

Distribution boards components

Distribution boards (generally only one in residential premises) usually include the meter (s) and in some cases

May 06, 2026

General Wiring Guidelines

General Wiring Guidelines Here's sound planning advice on everything from circuit wiring, grounding, and boxes to circuit

Feb 01, 2026

Size configuration of multiple circuit breakers in the

Choose the right size and setup for multiple circuit breakers in your distribution box to ensure safety, code

May 01, 2026

Understanding Circuit Breaker Wiring Configurations in Distribution

Correct wiring methods for circuit breakers within distribution boxes are fundamental to ensuring electrical safety and

Oct 24, 2025

IEC / BS 7671 Codes for Consumer Unit and Distribution Board

According to BS 7671: 536 and IEC 61439: distribution boards, consumer units and related devices and equipment must be selected

Sep 11, 2025

Power Distribution Boards: Understanding their role

Learn the anatomy and functions of a power distribution boards, stay safe working with it,

Sep 03, 2025

Distribution Boards

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

Jan 04, 2026

Wiring Regulations Help | BS 7671 Technical Guidance

Get expert Wiring Regulations help with technical guidance on BS 7671. Browse practical answers to support safe, compliant

Dec 30, 2025

Electrical Codes for Home Wiring

Summary: Electrician Explains Home Electrical Wiring Codes including AFCI Circuit, Junction Boxes, Electrical Circuits, Codes for

Sep 16, 2025

Electrical Distribution Box Diagrams | PDF | Power Engineering

This document provides a list of components in an electrical distribution box with their names and associated wiring

May 08, 2026

Electrical Control Panels & Distribution Boxes: Sizes,

Introduction Electrical control panels and distribution boxes are the backbone of modern

Oct 03, 2025

Distribution Box Guide: Types, Components & Solutions

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

Dec 18, 2025

Circuit Numbering and Labeling for Electrical Equipment

This standard describes requirements for numbering and labeling of real property electrical distribution equipment, circuits, and site

Nov 21, 2025

Circuit Breaker Wiring Configurations in Distribution Boxes

Complete guide to circuit breaker wiring configurations in distribution boxes. Learn 1P/2P/3P/4P wiring, installation,

Apr 09, 2026

What is an Electrical Distribution Box? A

Distribution boxes vary widely based on their application and the environment they're used

May 14, 2026

Residential Electrical Code Requirements

NEC house code requirements address outlets, boxes, grounding, GFCI and AFCI protection and other parts of

Contact Us

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

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

Email: sales@iiss.co.za

Phone: +27 63 174 2895

Address: Unit 8, Innovation Park, 15 Rivonia Road, Sandton, Johannesburg,
2196, South Africa

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

