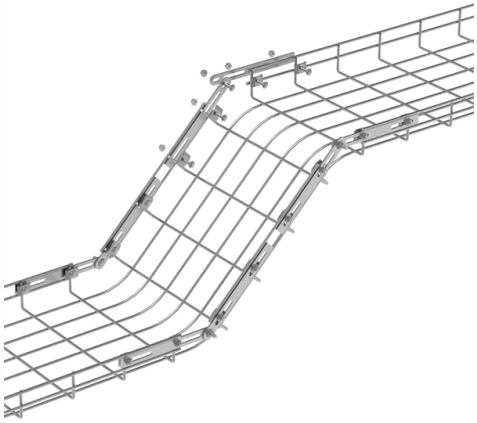
Distribution Box Line Head Number



Overview

Distribution Box and Selection Guide: Internal Structure, Components. Learn how to choose a distribution box and understand its internal structure, inclu.

Key Takeaways

The Distribution Box Line Head Number identifies the main incoming line or feeder in a distribution box, serving as a reference for circuit management and labeling.

Definition and Purpose

A line head number in a distribution box refers to the unique identifier assigned to the incoming line or main feeder entering the distribution panel. This number is used to: Track and reference the source of power entering the distribution boxIdentify which circuit breaker or isolator corresponds to a particular incoming lineFacilitate maintenance, troubleshooting, and load managementEnsure proper documentation in single-line diagrams and load schedules. Components Associated with Line Head NumberIn a typical distribution box, the line head number is linked to the following components: Incoming Line Part: Shows the source of power, which may be a single line or multiple lines (normal and backup supply), along with the circuit breaker model and rated breaking current.

Circuit Breakers or Isolators: Each incoming line is protected by a breaker or isolator, and the line head number helps identify which breaker corresponds to which source. Busbars and Feeders: The line head number is associated with the busbar and feeder droppers that distribute power to outgoing circuits. Dual Power Switch (if applicable): In systems with dual incoming lines, the line head number helps manage automatic switching between normal and backup power.

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Numbering and Labeling Standards

Each incoming line is assigned a unique reference number (e.g., RYB-01, RYB-02) that appears in the single-line diagram (SLD) and on the distribution box itself. The numbering system ensures that phase sequence (R, Y, B) and neutral connections are clearly documented. Outgoing circuits are also labeled in relation to the line head number to maintain clarity in load distribution and protection settings.

Practical Example

For instance, in a substation LT panel: Main Incoming Ckt.

CK

T REF.: RYB-03 indicates the third incoming line from the transformer or generator. The line head number is referenced in the load table and single-line diagram, showing which busbar and outgoing circuits it feeds. Protective devices, such as circuit breakers or isolators, are marked with the same reference to ensure proper identification during operation or maintenance.

Key Takeaways

The line head number is essential for safe and organized electrical distribution. It links the incoming power source to the distribution box, busbars, and outgoing circuits. Proper labeling according to standards ensures efficient maintenance, fault isolation, and load management.

Always refer to the single-line diagram and load schedule for accurate identification of line head numbers in any distribution system.

Article Content

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, earth bars, RCDs, RCBOs, SPDs, enclosure ratings, and wiring layout.

Basic Composition Of Distribution Box System Diagram

Electrical parameter description: Equivalent to the electrical nameplate, it provides basic electrical information of the distribution box, such as number, rated power, required coefficient, power

Electrical Distribution Box Diagrams

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

This document provides a list of components in an electrical distribution box with their names and associated wiring diagrams. It includes tables of diodes, fuses, relays, and other components like

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 hub of any electrical system. The hub distributes electrical power from a

1. Electrical Single Line Diagram Guidance

The single-line diagram is the blueprint for electrical system analysis. It is the first step in preparing a critical response plan, allowing you to become thoroughly familiar with the electrical distribution

How To Read The Distribution Box System Diagram

Analyze the incoming line part: Determine the incoming line source of the distribution box and the configuration of the incoming line circuit breaker, and

Electrical Distribution Boxes for Power Distribution | Wieland

From decentralized energy, signal and data distribution to distribution boxes for smart buildings, we offer the right solution. We mount any electronics in the manifolds! All options are open here, and the

Electrical Numbering System (Standardised) – PAKTECHPOINT

For lighting and small power supplies that are taken from a distribution board, run in armored cable, and scheduled, the cable numbers shall be formed from the distribution board reference, the sub-circuit

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

Area distribution boxes with connectors

4.1 Characteristics of the materials The area distribution box associated with the copper or optical feedthrough sockets allows total flexibility: the connections close to the workstation are centralised.

Electrical Identification

NOTE: The component identification number, or sequence number, is just a simple numbering of similar equipment on the same floor numbered from left to right as seen on the electrical distribution riser

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Circuit Numbering and Labeling for Electrical Equipment

LLNL-MI-823076 This standard describes requirements for numbering and labeling of real property electrical distribution equipment, circuits, and site lighting at Lawrence Livermore National Laboratory.

How to Install a Cable Distribution Box Safely and Correctly?

Reliable cable distribution boxes ensure safe, efficient power management for residential, commercial, and industrial systems. Learn installation and safety tips.

Wire Numbering Standards : r/PLC

We use a grid. wire numbers are labelled from origin. So for instance if we have an digital input coming from a switch, where ever the switch is represented on the drawing, the number is made from where

Pin header

Pin headers with a plastic guide box around them are known as a shrouded header or box header (BH) and are normally used in combination with insulation-displacement connectors (IDC) for ribbon cables.

Understanding Electrical Distribution Boards And Numbering

Periodically update the DB numbering after renovations or upgrades Electrical distribution boards may sit in corners or behind locked panels, but their design and organization directly impact

Understanding Distribution Boxes: A Comprehensive

A distribution box, also known as a power distribution box or electrical distribution box, is used to distribute electrical power safely to multiple

Understanding Distribution Boxes: Your Guide to Power

Understanding distribution boxes: Your guide to power distribution. Learn about power distribution box functions and shop power distribution options.

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Contact Us

Continue your research online:

Website: https://alfa-pro.co.za
Technical inquiry: https://alfa-pro.co.za/contact.html

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

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved