

Specifications of Level 3 Mobile Distribution Box



Overview

Understanding Distribution Boxes: A Comprehensive Guide The right distribution box depends on the installation environment, protection level, load requirements, and application type.

Key Takeaways

Level 3 Mobile Distribution Boxes are designed as final junction boxes for electrical appliances, following IEC 60439/61439 standards with full protection, mobility, and environmental resistance.

Definition and Purpose

A Level 3 distribution box refers to the final junction box in a three-level electrical distribution system, typically installed under the main and secondary distribution boxes. It is intended for direct connection to electrical appliances, either fixed or movable, and includes the last stage of leakage protection to ensure safety for end devices and users. This level is particularly suitable for construction sites, mobile setups, and temporary installations.

Applicable Standards

Level 3 mobile distribution boxes are generally designed according to the following standards: IEC 60439-3: Specifies requirements for low-voltage switchgear and controlgear assemblies, particularly for locations accessible to unskilled persons, ensuring safety and operational reliability.

IE

C 61439-1 and IEC 61439-2: Define general requirements, operating conditions, structural provisions, and technical characteristics for low-voltage distribution assemblies, including short-circuit withstand strength, clearances, and insulation coordination. National Electrical Code (NEC): Provides additional safety requirements for low-voltage installations, including grounding, short-circuit protection, and safe maintenance access.

Construction and Protection Features

Level 3 mobile distribution boxes typically include: Full metal or reinforced plastic enclosures for mechanical durability and corrosion resistance.

I

P protection ratings suitable for indoor or outdoor use, often IP30 for indoor and higher (IP54–IP65) for mobile or outdoor environments. Inner folding and crimping technology to enhance structural integrity and impact resistance. Leakage protection switches installed at the final stage to protect connected appliances.

Modular design with DIN rails, terminal blocks, and removable panels for easy wiring and maintenance. Environmental resistance against dust, water, and mechanical impacts, sometimes tested according to IP5X/IP6X and IPX7 standards for dust and water ingress.

Installation and Safety Considerations

Mobility: Designed for temporary or movable setups, allowing safe connection of multiple devices on construction sites or industrial environments. One machine, one switch, one protection principle: Each appliance is connected through a dedicated switch and leakage protection to prevent overload or cross-circuit hazards. Voltage and current ratings: Must match the expected load to prevent overheating or voltage drop, typically up to 600V for industrial applications.

Grounding and earthing: Essential for user safety and equipment protection. Regular inspection and maintenance: Ensures continued compliance with safety standards and operational reliability.

Summary

A Level 3 Mobile Distribution Box is the final protective junction box in a three-level distribution system, designed for mobility, safety, and compliance with IEC 60439/61439 standards. It integrates leakage protection, robust enclosures, modular components, and environmental resistance, making it suitable for construction sites, temporary installations, and mobile applications while ensuring safe operation for connected electrical appliances.

Article Content

Detailed Explanation of Level 2 and Level 3 Distribution Boxes

Understanding Distribution Boxes: A Comprehensive Guide The right distribution box depends on the installation environment, protection level, load requirements, and application type.

Technical catalogue Distribution Box

It supports both surface-mounted and flush-mounted installation methods. The enclosure complies with IEC 60439-3 and is suitable for accommodating various protection and control devices such as

SELECT YOUR DISTRIBUTION SYSTEM

With its new Increased Safety distribution system, Legrand offers three levels of service for so-called high criticality sites where it is impossible to shut down the network for maintenance (hospitals,

Mobile distribution boxes

Mobile Wall-mounted distributor boxes large scale power supply purposes. This group features varied component fitting options, practical handling (handle, brackets), various combination

Distribution box catalogue | PDF

It includes specifications for TOP-TS, TOP-TF, TOP-LS, TOP-PS, TOP-PF, and TOP-S distribution boxes that range from 1-way to 36-ways. Dimensions included are length, width, and height. -

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.

L.T. Distribution Box Specification | PDF | Fuse (Electrical)

Technical Specification of L.T Distribution Kiosk.pdf - Free download as PDF File (.pdf), Text File (.txt) or read online for free. The document provides specifications for low voltage distribution boxes used

MZ-3 L Distribution box module

MZ-3 L is an universal distribution box module designed for low-voltage electrical installations, including security alarm systems. Its purpose is to connect several wires without having

Technical Specifications for Outdoor LT Distribution boxes with ...

They shall be suitable for operation on 433 Volts, 3 Phase, 4 Line, AC 50 cycles systems and required to be installed at the secondary terminals of distribution transformer centers.

Computers, Monitors & Technology Solutions | Dell USA

Dell provides technology solutions, services & support. Buy Laptops, Touch Screen PCs, Desktops, Servers, Storage, Monitors, Gaming & Accessories

Mobile Distribution Boxes | DISTRO-DIRECT

mobile distribution boxes Users in over 68 countries worldwide appreciate the ruggedness, dependability, design and lifespan of our power distribution boxes.

Distribution Box

Our distribution boxes are perfect for industrial environments, catering to automation, robotics, and processing facilities. They provide cost-effective solutions through automated dispensing and

SELECT YOUR DISTRIBUTION SYSTEM

Distribution is an essential function for the electrical panels, as well as for control and circuit protection. As well as purely technical factors (intensity, number of outputs, etc.), the choice of a distribution

Outdoor Electrical Distribution Box Specifications: NEC

Complete specification guide for outdoor electrical distribution boxes covering NEC Article 312 requirements, NEMA ratings, sizing calculations, and

TECHNICAL SPECIFICATION FOR LT DISTRIBUTION BOX

E12-IX- LT DB Page-3 of 9 D R A W I N G for L.T Distribution Box for 63 KVA, 100KVA to 200 KVA Transformers ided for Neut connection VOL-II(TS)

TECHNICAL SPECIFICATION I.R.O. 63,100,160 & 315 KVA

1. SCOPE: This Specification covers the design, manufacture, testing at works and supply of Distribution Boxes made out of CRCA MS for controlling the L.T. feeders from the L.T. side of Distribution

Overview of Mobile Electrical Distribution Box: Composition,

Types of Mobile Electrical Distribution Boxes A mobile electrical distribution box is an essential component for safely managing and delivering electrical power in dynamic environments. These

DISTRIBUTION BOX

Technical Specification for Distribution Box (DB)- Accessory for LT AB Cables 1.

SCOPE 1.1 This Distribution Box (DB) should be made up of Weather & Moisture Proof Outer box with Spring loaded

Contact Us

Continue your research online:

Website: <https://metramarket.es>

Technical inquiry: <https://metramarket.es/contact.html>

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

