

RIVO MULTITRADE OPTICAL SYSTEMS

Level 2 Construction Engineer Level 3 Distribution Box



Overview

The difference between the first, second, and third levels of. Third level distribution box: refers to the final junction box of each electrical appliance.

Key Takeaways

Level 2 distribution boxes serve as secondary power distribution with general isolation and circuit protection, while Level 3 boxes are the final control cabinets for individual electrical equipment with leakage protection. Level 2 Distribution Box

A Level 2 distribution box functions as the secondary power distribution unit on a construction site. It receives power from the primary distribution box and distributes it to temporary power points or smaller circuits. Key features include:

- Main circuit general isolation with main circuit fuse and circuit breaker for safety.
- Shunt isolation with shunt fuse and circuit breaker to protect individual circuits.
- Designed for construction site conditions, often with rainproof tops and durable exteriors.
- Installed typically 1.5 meters above ground for accessibility and safety.
- Supports two-level protection, meaning it works in conjunction with leakage protectors in the final switch boxes to ensure overall electrical safety.

- Ensures compliance with construction electricity standards and allows for one machine, one switch, one protection, one box, one lock principle, preventing multiple devices from being controlled by the same switchgear .

Level 3 Distribution Box

A Level 3 distribution box is the tertiary or final distribution unit, directly controlling individual electrical appliances or equipment. Its main characteristics include:

- Acts as the control cabinet for electrical equipment, which can be either fixed or movable.
- Equipped with leakage protection switches to safeguard users and equipment.
- Receives power from the Level 2 distribution box and ensures final circuit protection.
- Installation and configuration depend on the power consumption plan of the project, with adjustments made for specific appliances like air conditioners, water heaters, and sockets.
- Supports the principle of one machine, one switch, one leakage, one box, one lock, ensuring that each device is independently protected and controlled .

Summary of Differences	Feature	Level 2 Distribution Box	Level 3 Distribution Box
Function	Secondary power distribution	Final control of individual equipment	Main circuit isolation + shunt isolation
Protection	Isolation + leakage protection	Isolation + leakage protection	Isolation + leakage protection
Installation	1.5 meters above ground, rainproof	Near or under equipment, can be movable or fixed	
Role	Distributes power from primary box to temporary circuits	Directly powers and protects individual appliances	Safety Principle
	Two-level protection with upstream leakage protection	Last line of defense with leakage protection switch	

In construction projects, Level 2 boxes ensure safe and organized distribution of power, while Level 3 boxes provide precise control and protection for each electrical device, forming a complete three-level protection system for construction electricity .

Article Content

Choose & Install Low Voltage Distribution Boxes Practical Guide

Select and install low voltage distribution boxes . This guide covers sizing, mounting, cable management, maintenance

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

