Standard Finished Secondary Distribution Box

Article Overview

A Standard Finished Secondary Distribution Box (SDB) is a pre-fabricated, powder-coated enclosure designed to safely distribute electrical power from a main distribution source to branch circuits.

Overview

A Secondary Distribution Box (SDB) receives power from the main distribution board and distributes it to various branch circuits, often through snap-on extender cables or terminal blocks for custom wiring . It acts as a central hub for localized power management, ensuring safe and organized distribution in commercial, industrial, or institutional settings .

Construction and Finish

Standard SDBs are typically made from high-quality cold-rolled steel or other durable materials like ABS or stainless steel . They are finished with a powder-coated surface, commonly in black or light grey (RAL7035), providing protection against dust, dirt, mechanical impacts, and corrosion . The powder coating also ensures a professional appearance suitable for visible installations in offices, data centers, or industrial floors.

Key Components

A standard SDB may include:

o Bus Bars: Conduct electricity from the main input to multiple circuits .
o Circuit Breakers: Protect individual circuits from overloads.
o Fuses: Serve as fail-safes to prevent damage from excessive current.
o Residual Current Devices (RCDs): Protect against electric shock by detecting current imbalances.
o Surge Protection Devices: Shield the system from voltage spikes caused by lightning or other disturbances .

Applications

SDBs are widely used in:

o Raised floor systems (Intelligent Floor) or accessible ceilings (Intelligent Ceiling) for modular power distribution .
o Commercial buildings, data centers, and industrial facilities where multiple branch circuits require organized and safe power distribution .
o Custom wiring setups using terminal blocks for flexible circuit management .

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Advantages

o Durable and safe: Powder-coated steel or ABS enclosures provide mechanical and environmental protection.
o Modular and flexible: Can be pre-wired or customized for specific project requirements.
o Professional appearance: Smooth finish and standard colors enhance aesthetics in visible installations.
o Ease of installation: Designed for wall-mounting or integration into raised floor systems, reducing labor and installation time . A standard finished SDB ensures reliable, safe, and organized power distribution while offering flexibility for various electrical and architectural requirements.

For building owners, architects, construction managers, facilities engineers, and network administrators alike, ACS modular zone

From decentralized energy, signal and data distribution to distribution boxes for smart buildings, we offer

SDGE | San Diego Gas & Electric

The GB-terminal box, both distribution box and empty enclosure, is manufactured of high impact resistance, glass-fibre reinforced

Learn the step-by-step distribution box manufacturing process--from design and material selection to

Protection rating IK code 16 products (16 Variants) 30 60 90 Item no. 2008840 Distribution box, 3 division units, with terminal strip,

Compact final distribution boxes for safe, accessible, and precise power control across all electrical environments.

Read this comprehensive buyer"s guide on distribution boards, explaining what they are, their uses, types, how to

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

Follows the principle of "one machine, one switch, one RCD, one box, one lock," ensuring no single switch controls

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Generally, primary distribution should not directly supply power to electrical devices. Secondary distribution often

Subterranean cable systems equipped with distribution transformers and switchgear, situated

Different industries, different products have different technical requirements, in the electrical industry, distribution boxes, distribution

The SDB can be fitted with terminal blocks for custom wiring. The Secondary Distribution Box (SDB) is

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