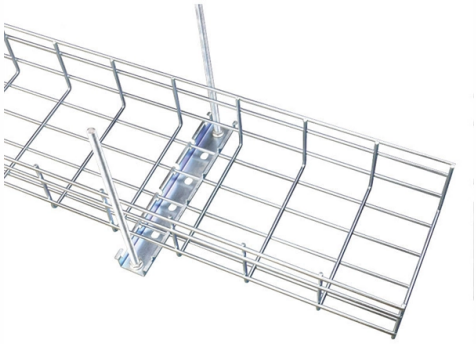
Control Line Distribution Box



Overview

Distribution Box vs Control Box vs Junction Box: Key Differences and. Learn the differences between distribution boxes, control boxes, and junction boxes.

Key Takeaways

A Control Line Distribution Box is an electrical enclosure that combines power distribution and control functions, enabling safe, organized, and efficient management of circuits and control devices.

Overview

A Control Line Distribution Box integrates the functions of a distribution box and a control box. It distributes electrical power to multiple circuits while simultaneously housing control devices such as switches, push buttons, motor starters, and indicators. These boxes are commonly used in industrial plants, automation systems, and hazardous environments where both power distribution and local control are required.

Key Features

Voltage and Current Handling: Typically designed for low to medium voltages (24V DC to 400V AC) and can handle currents from tens to hundreds of amps depending on the application. Material and Durability: Often made from stainless steel (AISI 304 or 316L) or GRP, with high-quality seals and protection channels to prevent water ingress and withstand harsh environments. Environmental Protection: Available with IP ratings such as IP54, IP65, or IP67, making them suitable for outdoor use, dustproof, and waterproof applications.

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

Explosion-

Proof Options: For hazardous areas, control line distribution boxes can be certified to ATEX or IECEx standards, ensuring safe operation in explosive atmospheres. Modularity and Customization: Many models allow mounting of multiple control elements under a single actuator, configurable internal layouts, and front-panel installation of switches and indicators for space efficiency.

Applications

Industrial Automation: Controlling machinery, pumps, and production lines while distributing power safely. Hazardous Areas: Oil, gas, and chemical plants where explosion-proof enclosures are required. Building Automation: Integration with smart building systems for decentralized power and signal distribution.

Outdoor Installations: Street lighting, irrigation systems, or solar panel arrays where environmental protection is critical.

Advantages

Safety: Protects circuits from overloads, short circuits, and environmental hazards. Efficiency: Simplifies wiring, troubleshooting, and system expansion. Flexibility: Customizable layouts allow integration of control devices and power distribution in a single enclosure.

Durability: Robust materials and sealing ensure long-term reliability in extreme temperatures and outdoor conditions. In summary, a Control Line Distribution Box is a versatile solution for combining power distribution and control in one enclosure, suitable for industrial, commercial, and hazardous applications, offering safety, modularity, and environmental protection.

Article Content

Distribution Box vs Control Box vs Junction Box: Key Differences and ...

Learn the differences between distribution boxes, control boxes, and junction boxes. Discover their functions, applications, and how E-abel provides customized electrical enclosure

Electrical Distribution Boxes for Power Distribution | Wieland

Unlike conventional installation, you can lay the lines first and install the distribution box at a later time. The robust sheet steel housing protects the sensitive electronic built-in devices even in a harsh

Control and distribution boxes made of stainless steel Series 8150

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

R. STAHL Series 8150 control and distribution boxes are made of brush-finished stainless steel (1.4301, AISI 304 or 1.4404, AISI 316L) and are extremely robust: High-quality seal materials make them

Distribution Box Guide: Types, Components & Solutions

Understand distribution boxes (DB boxes) in 5 minutes. Learn about types, components, functions, and uses. Find the perfect DB box for your needs.

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.

Electrical Control Panels & Distribution Boxes: Sizes,

This guide explores control panels, electrical boxes, breaker panels, bus bars, junction boxes, and custom enclosures to help you understand their

DC Distribution box

Generation, Transmission and Distribution panels. Test Benches and Laboratory Equipment. Uninterrupted Power Supply.Special OEM Application. Need Quick

Ex Local Control Stations & Distribution Boxes

Control devices and control units are assembled clearly in control stations. Every control stations is designed and custom made manufacture to order. The robust

Control Power Distribution Box: The Core Hub of the

Taking an automated production line as an example, the control of numerous production equipment can be centralized in the control power distribution box for

Final Power Distribution Boxes | Product Catalog | CHINT Global

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

Electrical Control Panels & Distribution Boxes: Sizes,

Learn about control panels, breaker boxes, junction boxes, and custom enclosures. Explore standard panel sizes, applications, and key

Electrical Distribution Boxes for Power Distribution

Electrical distribution boxes for modular power distribution and installation. Flexible distribution solutions for industrial and building electrical infrastructure.

Power Distribution Boxes Explained Simply

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved

Learn what a power distribution box is, how it works, key components, types, and why it''s vital for safe and efficient electrical systems.

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.

SIPROTEC Protection Relays | Siemens

SIPROTEC leads the way in integrating protection, control, measurement, and automation functions in one device. Secure your grid with SIPROTEC 5 – the benchmark

Personal Finance Advice and Information | Bankrate

Control your personal finances. Bankrate has the advice, information and tools to help make all of your personal finance decisions.

Amazon : Power Distribution Box

Browse power distribution boxes with circuit breaker protection and multiple outlet configurations. Shop durable solutions for construction and emergency use.

What is an Electrical Distribution Box? A

An electrical distribution box is often called the control hub of a building''s electrical system, and for good reason. It''s where power from the main

Contact Us

Continue your research online:

Website: https://ensaa.es
Technical inquiry: https://ensaa.es/contact.html

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

© 2026 ENSAA OPTICAL NETWORKS - All rights reserved