

Article Overview

An air switch in a distribution box is a type of low-voltage circuit breaker that automatically disconnects the circuit when current exceeds its rated value, using air to extinguish the arc.

Function of the Air Switch

The air switch, also known as an air circuit breaker, is the main protective device in a distribution box. Its primary function is to connect, carry, and break the rated working current, as well as handle short-circuit, overload, and other fault currents. When the current exceeds the rated limit, the air switch automatically trips, cutting off the power supply to prevent damage to the circuit and connected devices (Index:).

Arc Extinguishing Mechanism

When the air switch trips, an electric arc forms between the separating contacts. The air switch uses air as the medium to extinguish this arc, which is why it is called an "air switch." This process ensures the circuit is safely disconnected without causing damage or fire (Index:).

Role in the Distribution Box

In a distribution box, the air switch serves as the main power switch for the electrical control cabinet. It works alongside other components such as:

- o Leakage switches: Protect against ground faults.
- o Dual power automatic transfer switches: Automatically switch between two power sources if one fails.
- o Surge protectors: Protect electronic equipment from voltage spikes.
- o Wiring terminals and relays: Facilitate control and signal transmission (Index:).

Benefits

Using an air switch in a distribution box provides:

- o Automatic protection against overloads and short circuits.
 - o Simplified maintenance, as the circuit can be quickly isolated.
 - o Enhanced safety, preventing electrical fires and equipment damage.
 - o Reliable operation in residential, commercial, and industrial low-voltage systems (Index:).
- In summary, the air switch is a critical component of a distribution box, ensuring safe and efficient power distribution while protecting circuits and devices from electrical faults.

Distribution box air switch

Presair Air Switch Kits use a pulse of air to control power on and off, providing safe, contact-free switching.

Control Features: For air distribution boxes, look for adjustable multi-directional vents to customize airflow and

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Electrical distribution boxes for modular power distribution and installation. Flexible distribution solutions for

Detailed information The Air Excellent distribution box DB206H125 is a versatile and efficient solution,

The Air Excellent distribution box DB808 is a versatile and efficient solution, complete with a stepped adaptor, 8 internal air restrictor

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Air-actuated switches are devices activated by air that often do not rely on electricity for their operation. Air-actuated switches may

Air switch is used in our home, as long as the current in the circuit exceeds the rated current

The Air Excellent distribution box DB208 is a versatile and efficient solution, complete with a stepped

When the distribution box is embedded in the wall, it should be vertical and horizontal, leaving 5-6mm gap in the

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Air switch concept The air switch, that is, the air circuit breaker, makes connection, breaking and carries the rated

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It is often set in substation, distribution room, etc. In addition to different functions, installation environment,

Distribution box air switch

Air break switches are extensively used in electrical distribution networks for switching and isolation purposes of

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