

Manufacturer of Temperature-Controlled Cabinets with Low Cold Aisle Loss

Article Overview

Leading manufacturers include EAE Electric, Legrand, EDP Europe, and Belden, all offering cold aisle containment solutions integrated with temperature-controlled cabinets to optimize energy efficiency.

Key Manufacturers and Solutions

EAE Electric - KabinPLUS Aisle Containment EAE Electric provides cold aisle containment systems with single or double sliding doors and sliding roof frames made from aluminum and polycarbonate. Their solutions are modular, adjustable to various cabinet heights and widths, and include seismic stands for stability. The system isolates cold and hot air effectively, reducing energy consumption and improving airflow management in data centers . **Legrand - Cold Containment and Contain-IT FLEX** Legrand offers cold aisle containment systems that deliver cold air through a raised floor into the aisle, creating a homogeneous air plenum. Their solutions include horizontal roof systems, doors, and glass panels for visibility and electrostatic discharge prevention. Legrand's Pod Master provides intelligent wireless monitoring for real-time temperature, airflow, and humidity management. Their systems are modular, scalable, and customizable for 42, 47, and 52U cabinets . **EDP Europe - Custom Cold Aisle Containment** EDP Europe specializes in bespoke cold aisle containment for existing data centers. Their systems are non-intrusive, adaptable to mixed cabinet sizes and IT infrastructure, and designed to prevent cold and hot air mixing. EDP emphasizes energy efficiency, allowing CRAC units to operate at higher temperatures and enabling free cooling, which can significantly reduce cooling costs . **Belden - Aisle Containment Solutions** Belden provides vendor-agnostic aisle containment systems with transparent panels that attach to cabinets using a universal rail system. Their solutions support both hot- and cold-aisle containment, improve energy efficiency, and integrate with fire suppression and safety systems. The lightweight, modular design allows flexible deployment and easy reconfiguration .

Benefits of Low Cold Aisle Loss Cabinets

- o **Energy Efficiency:** By isolating cold air from hot exhaust, these systems reduce bypass airflow and optimize cooling performance.
- o **Uniform Temperature:** Ensures consistent cooling across all servers, reducing hotspots and improving equipment reliability.
- o **Scalability and Flexibility:** Modular designs allow adaptation to different cabinet sizes, layouts, and future growth.
- o **Enhanced Safety:** Many systems integrate with fire suppression, seismic support, and monitoring solutions. These manufacturers provide comprehensive solutions for data centers seeking temperature-controlled cabinets with minimal cold aisle loss, combining modularity, energy efficiency, and advanced monitoring to optimize cooling performance.



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Altimir designs, fabricates, and installs energy-efficient, custom-engineered Hot Aisle and Cold Aisle Containment Systems.

How Aisle Containment Works Our solutions are available in hot aisle or cold aisle configurations, designed to integrate with your

Upright controlled room temperature cabinets are purpose-built for products that require storage at room temperature. When

Aisle Containment strategically improves airflow management in data centres and helps optimise cooling

Our aisle containment systems are vendor agnostic, featuring innovative, transparent panels that are lightweight and easily attached

Data Centre Aisle Containment Systems A data centre aisle containment system separates the supply of the cold air and hot exhaust

Get expert hot and cold aisle containment solutions for your data centres with Ardmac. Our tailored approach maximises efficiency.

Sheldon Manufacturing Humidity Cabinets are temperature controlled through heat or refrigeration. A low-pressure water vapor

Maintain optimal temperature control in your data center while ensuring easy equipment access with our

LEWCO Controlled Temperature Storage Cabinets are the most common and economically priced solution for temperature

Temei Rui, a China manufacturer and supplier specializing in data centers with its own factory, professionally researches and

Explore sliding and swinging options for cabinet-to-cabinet and cabinet-to-wall applications. Our easy-to-install doors are offered up

At Kardex, we recognize the critical challenges of managing temperature-sensitive goods.

Open vs Cold vs Hot aisle containment Let's see this in practice based on a typical 500kW facility: In an open aisle configuration,



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Cold aisle containment The system design fully contains the cold air to the front intake of the racks and prevents mixing with the hot

Hot Aisle: Exhaust air from servers is pushed into a separate aisle, which may be isolated or vented upward.
CAE

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