

Vertiv™ PowerBoard Medium Voltage Switchgear

Protecting Power Infrastructure at Data Centers, Industrial Companies, and Utilities



Benefits

- **Receive consultative support:** Our team of engineers can help you select the right switchgear for your application, voltage and current requirements, space constraints, heightened safety, and other requirements. As a result, you'll be able to value-engineer your solution for optimal results.
- **Sole-source your certified switchgear:** Vertiv offers MV switchgear at multiple voltage levels and current and fault ratings. Our products meet the International Electrotechnical Commission (IEC) 62271 standard for European applications.
- **Increase accountability with a single point of contact:** Customers will typically just work with one engineer, who will guide them from requirements gathering through design, fabrication, and logistics. There's no need to contact or coordinate other subcontractors, such as busbar manufacturers or metalworking firms.
- **Gain fast, cost-effective customization capabilities:** Vertiv can quickly incorporate your design feedback in-house, keeping projects on schedule for rapid completion. You benefit with faster deliveries of competitively priced, high-quality products.
- **Choose your own components:** Some manufacturers require that customers purchase specific vendors for breakers and power relays. Vertiv is supplier-agnostic, meaning that you can choose the solutions you want.

Companies need to ensure a continuous source of power supply at their mission-critical data center, commercial, and industrial facilities. However, they also need to protect valuable electrical infrastructure from current and voltage surges and short circuits.

Switchgear perform multiple functions to protect electrical circuits and equipment from abnormal power conditions. They sense and switch currents to prevent damage when faults occur, meter and regulate electricity, and isolate electrical equipment. Isolation of electrical equipment and components also ensures staff can safely maintain these solutions without risk of injury.

Medium-voltage (MV) switchgear is the workhorse of heavy industry. These solutions can be found at data centers, utilities, commercial and industrial facilities, renewable energy sites, and other locations. At utilities, they play an especially important role, helping prevent electrical damage that can cause widespread outages affecting businesses and consumers. Power blackouts cost the U.S. cost \$150 billion annually.

Vertiv offers an indoor MV switchgear line, ranging from 1kV to 40.5kV, for the US and EMEA markets. Vertiv™ PowerBoard Medium Voltage Switchgear is entirely manufactured in-house and is available in air-insulated and gas insulation options, as well as metal-clad and metal-enclosed options. Our switchgear line is entirely manufactured in-house, providing industry buyers with speed-to-market, customizability, and competitive costs.

Vertiv™ Air-Insulated Switchgear IEC

Voltage Level	Rated Current	Rated fault level
12kV	630A, 1250A & 2000A	31.5kA
12kV	1250A & 2000A	40kA
17.5kV	630A, 1250A & 2000A	31.5kA
17.5kV	1250A & 2000A	40kA
24kV	630A	25kA
24kV	1250A & 2000A	31.5kA
40.5kV	630A, 1250A & 2000A	31.5kA

Vertiv™ Gas-Insulated Switchgear IEC

Voltage Level	Rated Current	Rated fault level
12kV	630A (Secondary switchgear)	20kA
24kV	630A (Secondary Switchgear)	20kA
40.5kV	630A (Secondary switchgear)	20kA
24kV	630A, 1250A, 2000A & 2500A	31.5kA
40.5kV	630A, 1250A, 2000A & 2500A	31.5kA

¹Markets and Markets report synopsis

Vertiv™ Metal-Clad Switchgear ANSI/IEEE

Voltage Level	Rated Current	Rated fault level
15kV (Single Stack)	600A, 1200A & 2000A	31.5kA
15kV (Double Stack)	1200A, 2000A	40kA

Vertiv™ Metal-Enclosed Switchgear ANSI/IEEE

Voltage Level	Rated Current	Rated fault level
15kV (Loop Switch)	600A	25kA

Technical Specifications

- Compact and modular design for air-insulated and gas-insulated solutions
- IP4X, NEMA 1-rated for indoor applications
- Customization capabilities to meet specific requirements
- Offer both front and rear access
- Circuit breakers can be removed for proactive maintenance or safety reasons
- Mechanical and electrical interlocks increase safety and prevent maloperation
- All switchgear is arc-proof, with the exception of the double-stack solution
- Ability to choose circuit breakers from major manufacturers, such as ABB, Schenider, and Siemens
- Ability to choose protection relays from all major suppliers, such as ABB, Schneider, Fanox, Siemens & SEL
- Solutions are manufactured in the US, UK, and the Middle East
- Switchgear is IEC- and IEEE-certified