

Empowering Your Business with

LOW VOLTAGE SWITCHGEAR



POWERING CONNECTIONS



Engineered Power Distribution for Critical Infrastructure

- ✓ Custom-engineered Low Voltage Switchgear Solutions: Design and fabrication of modular and fixed-type LV switchgear, including Main Distribution Boards (MDBs), Sub Main Distribution Boards (SMDBs), and Final Distribution Boards (FDBs), tailored to specific project requirements and load profiles.
- ✓ Comprehensive Power Distribution and Control: Integration of advanced circuit breakers (ACB, MCCB, MCB), contactors, relays, and programmable logic controllers (PLCs) for precise power flow management, load balancing, and fault protection within industrial, commercial, and utility applications.
- ✓ Enhanced Safety and Operational Reliability: Implementation of arc-flash mitigation techniques, selective coordination studies, and robust interlocking mechanisms to ensure personnel safety and minimize equipment damage during fault conditions. Features include insulated busbar systems and compartmentalized designs.
- ✓ Seamless Integration with Existing Infrastructure: Compatibility with various communication protocols (Modbus RTU/TCP, Profibus, Ethernet/IP) for integration into existing SCADA, BMS, and energy management systems, facilitating centralized monitoring and control.

Technical Specifications

Features	Specifications
✓ System Type	✓ Low Voltage Switchgear (MDB, SMDB, FDB, Capacitor Banks)
✓ Rated Voltage	✓ Up to 690V AC, 3-phase, 4-wire + Earth
✓ Rated Current	✓ Main Busbar: Up to 6300A; Feeder: Up to 4000A
✓ Short-Circuit Withstand	✓ Up to 100kA for 1 second (Icw)
✓ Frequency	✓ 50/60 Hz
✓ Enclosure Protection	✓ IP31 (Indoor) to IP54 (Outdoor with canopy) as per IEC 60529
✓ Form of Separations	✓ Up to Form 4b (Type 1, 2, 3, 4) as per IEC 61439-2
✓ Busbar Material	✓ High-conductivity Electrolytic Copper, Tin-plated for corrosion resistance
✓ Switchgear Type	✓ Fixed, Withdrawable, or Plug-in Modules
✓ Protection Devices	✓ Air Circuit Breakers (ACB), Molded Case Circuit Breakers (MCCB), Miniature Circuit Breakers (MCB), Residual Current Devices (RCD)
✓ Metering	✓ Digital Multifunction Meters (Volts, Amps, kW, kVAR, kWh, Power Factor) with Modbus communication
✓ Compliance	✓ IEC 61439-1 & IEC 61439-2, BS EN 61439, KEMA/ASTA certified components

Why Choose Us?

- 01.** Unmatched Reliability and Uptime: Our LV switchgear systems are meticulously designed and manufactured to IEC 61439 standards, ensuring continuous, reliable power distribution with high availability, minimizing costly downtime and ensuring operational continuity for critical processes.
- 02.** Advanced Safety and Protection: Engineered with state-of-the-art protection relays, thermal imaging capabilities, and robust mechanical interlocks, our solutions provide superior protection against overcurrent, short-circuit, earth fault, and arc-flash hazards, safeguarding both personnel and valuable assets.
- 03.** Scalable and Future-Proof Architecture: Our modular and flexible designs allow for easy expansion and modification, accommodating future load growth and technological upgrades without significant operational disruption, thereby optimizing your long-term investment.

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