

VCB SWITCHBOARDS

- Available in 12kV/24kV/36kV Ratings
- Available upto 3150A, 40kA
- Available in Indoor or Outdoor Version
- Stand-alone Switchboard (ICOG/CICO)
- Line-up Switchboard
- Draw-out Design Cassette Type or Roll-on-Floor Type
- Fully Compartmentalised Internal Arc Qualification to AFLR
- Spring Charged Mechanism
- Magnetic Actuator Mechanism
- Viewing Windows for Indications Adequate Termination Space
- Flexible LV Control & Protection
- Flexible Metering Options
- Interlocks as per IS/IEC Standards
- Degree of Protection: IP 4X (Indoor)
- Degree of Protection: IP 55 (Outdoor) SCADA/DMS/EMS/BMS/SAS compatible
- Various Optional Accessories
- Type Tested as per IS/IEC Standards

VCB INDOOR METAL CLAD SWITCHBOARD

VANSELECTROENGINEERINGS, offers Air-insulated, Indoor Metal-clad VCB Switchboards in 12kV/24kV/36kV Voltage Ratings. These switchboards incorporate highly reliable Vacuum Circuit Breakers as Switching Medium and are offered either as stand-alone units or as Line-up Switchboards.

INTERLOCK

- VCB cannot be closed in any intermediate position, other than in Service Position or in Test/Isolated Position
- The VCB Truck cannot be raked IN or raked OUT, when the VCB is ON
- The VCB Truck cannot be raked IN, unless the control plug is inserted in its socket
- The control plug cannot be removed from its socket in Service position
- Pad locking facility for the front door
- Door Interlock—prevents opening of the front door, while the VCB is ON & prevents closing of the VCB, when the front door is open (Optional)

SALIENT FEATURES

- Available in 12kV/24kV/36kV
- Available up to 3150A, 40kA
- Stand-alone Switchboard (ICOG)
- Cable-in-Cable-out Switchboard (CICO)
- Line-up Switchboard
- Draw-out Design
- Roll-on-floor Type
- Cassette Type (Optional)
- Fixed Type (Optional)
- Fully Compartmentalised
- Spring Charged Mechanism
- Magnetic Actuator Mechanism (Optional)
- Adequate Termination Space
- Flexible LV Control & Protection
- Flexible Metering Options
- Interlocks as per IS/IEC Standards
- Degree of Protection: IP 4X (Indoor)
- SCADA/DMS/EMS/BMS/SAS compatible
- Various Optional Accessories
- Type Tested as per IS/IEC Standards

OPERATING MECHANISM

- Manual/Electrical Stored Energy Spring Charged Mechanism
- Magnetic Actuator Mechanism (Optional)
- Suitable for rapid auto reclosing
- In-built anti-pumping
- Simple
- Robust
- Long Life
- Low Maintenance
- Tested for M2 Class (10, 000 Operations)

OPTIONAL ACCESSORIES

- Integral Earth Switch
- Earthing Truck–cable Side

- Earthing Truck–bus Side
- Fixed PT or Draw-out PT
- Rear mounted Draw-out PT
- Top mounted Draw-out PT
- Sealable CT/PT Chamber
- Sealable Metering Chamber
- Tariff Metering
- VCB handling Trolley (for Cassette Type VCBs)
- Metallic Safety Shutters
- Live Line Indicators
- Rear (Cable Chamber) Cover Interlocks
- Bus Chamber Cover Interlocks
- Remote Control Panel
- Remote Annunciation Panel
-

APPLICATION

- Utilities
- Incomers
- Bus Couplers
- Outgoing Feeders
- Residential Complex
- Commercial Complex
- Shopping Malls
- Hotels
- Hospitals
- Industries
- Power Plants
- Solar Power Plants
- Unitised Sub Stations
- EB Metering Panels
- Transformers
- Motors
- Reactors
- Capacitors
- Cable Feeders
- Overhead Feeders
- Line Feeders

Guaranteed Technical Particulars

PARAMETER	12kV	12kV	24kV	36kV
Rated Voltage (kV)	12	12	24	36
Rated Frequency (Hz.)	50/60	50/60	50/60	50/60
Rated Insulation Level (kV)	12/28/75	12/28/75	24/50/125	36/70/170
Rated Current-Busbar (A)	800 1250 1600	2000 3150	800 1250 1600 2000	800 1250 1600 2000 2500
Rated Current-Breaker (A)	800 1250 1600	2000 3150	800 1250 1600 2000	800 1250 1600 2000 2500
Rated Short Circuit Breaking Capacity (kA)	25 31.5 40	25 31.5 40	25	25 31.5
Rated Short Circuit Making Capacity (kAp)	62.5 78.75 100	62.5 78.75 100	62.5	62.5 78.75
Rated Short Time Withstand Current (kA)	25 31.5 40	25 31.5 40	25	25 31.5
Rated Short Time Withstand Duration (Sec.)	3	3	3	3
Rated Operating Sequence	O-300ms-CO-3min.-CO			
Spring Charge Motor Voltage	230V AC (85% to 110%)			

PARAMETER	12kV	12kV	24kV	36kV
Spring Charging Time	12 sec. @ rated motor voltage			
Rated Closing Coil Voltage	24/30/48/110/220V DC (85% to 110%)			
Rated Trip Coil Voltage	24/30/48/110/220V DC (70% to 110%)			
Closing Time	<65ms at rated close coil voltage			
Tripping Time	<45ms at rated trip coil voltage			
Mechanical Life	10000 Operations			
Electrical Life at Rated Current	20000 Operations			
Electrical Life at Rated Short Circuit Breaking Current	100 Operations			
Aux. Contact	6 N.O. + 6 N.C.			
Degree of Protection (Enclosure)	IP4X			
Standard	IS/IEC 62271-100/200			