

# Medium Voltage Switchgear



33KV VCB Panels  
VD4 VCB - ABB make

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## Key Features :

### Indoor Panels / Outdoor Kiosks

Panels are designed in accordance with ABB's guidelines and as per IEC / IS Standards.

Compact and Robust

Cassette mounted CB of ABB make with draw out feature with cubicle front door closed

Complies to latest standards of IEC 62271-200

Modular structure with metal clad design with inter panel metal segregation

Lockable Automatic Safety Shutters for Breaker Compartment

Mechanical indication of test and service positions

Long mechanical life with sturdy and proven operating mechanism

Electrical anti-pumping

Fully Compartmentalized construction with IP4X degree of protection externally and IP2X between compartments for Indoor Type

Bus Riser is provided in bus coupler panel itself for panels rated upto 33KV 2000A, leading to floor space saving.

### Emphasis on Operator's safety by:

Foolproof mechanical interlock to prevent rack-in and rack-out of closed breaker

Independent exhaust vent for all HT compartments

Multiple guides for safe, sure and enduring self aligning power contacts

Live parts are covered by automatic shutters when breaker is racked out

Integral Earthing switch (optional)



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**ABB**

System House



## MV Air – Insulated Switchgear Range

Medium Voltage family, mirroring all the Construction characteristics of the Standard version

### Indoor Type Panels :

Available with current ratings upto 4000A and Short Time Ratings of 26.3/40KA. Panel is designed and type tested to meet the requirements of IEC-60298 / IS :3427. Choice of Aluminium and Copper Busbars

### Outdoor Type Kiosks :

Available with current ratings upto 4000A and Short Time Ratings of 26.3/40/44KA. Panel is designed and type tested to meet the requirements of IEC-60298 & IS :3427. Degree of Protection for enclosure upto IP42 For Indoor and IP55 for Outdoor Applications.



| VCB Technical Data                           |        |                                   | Switchgear Panel Data        |   |
|--|--------|-----------------------------------|------------------------------|---|
| Type   |        | VD4                               | Specification                | SAF T 33  |
| Operating Method                             |        | Manual / Motor Spring Charge Type | Installation & Type          | Indoor Metal Clad   |
| Rated Voltage                                | KV     | 33                                | Insertion of Circuit Breaker | Horizontal draw-out and horizontal isolation                              |
| No. of Poles                                 | Nos    | 3                                 | Position of CB in the panel  | Service & Test  |
| Frequency                                    | Hz     | 50 / 60                           | Secondary contacts           | Manually engaged 16 /32 way plug & socket                                 |
| Rated Current                                | Amp    | 630 / 1250 / 2000                 | Degree of Protection         | IP4X (Enclosure)  |
| Short circuit Current                        | KA     | 13.1 / 20 /25/31.5                |                              | IP2X (Internal)   |
| Making Current                               | KAP    | 62.5                              | Rating of Bus Bar            | 1250 / 1600 / 2000 A  |
| Duration of short time current               | Sec.   | 3                                 | Space for CTs                | 1 Set CT in Cable Compartment   |
| Insulation Level Impulse Power Frequency rms | KVp    | 170                               | Space for PT                 | 1. With-drawable bus & cable PT. Top of Panel / CB Compartment (Optional) |
|  | KV     | 70                                |                              | 2. Fix type bus / cable PT. In cable Compartment (Optional)               |
| Contact travel                               | mm     | 7 (+1, -1)                        |                              |   |
| Opening Time                                 | Cycles | Less than 2 cycles                | Space heaters                | 230 V AC, 100 W / 200 W strip Type (Optional)                             |
| Interrupting Time                            | Cycles | Less than 3 cycles                | Cable Termination Height     | 700 mm From Bottom  |
| Closing Time                                 | Cycles | Less than 3 cycles                | Applicable Standard          | IEC 62271-200, IS 3427  |
| Duty cycle                                   | Cycles | 0-0.3 sec. -CO-3 min-CO           |                              |   |
| Applicable Standard                          |        | IEC 62271-100, IS 13118           |                              |   |



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