

# Powering Solutions Concept to Commissioning



**Bush Electromech  
& Engineering Pvt. Ltd.**

**ABB**  
Authorized System Integrator  
Medium Voltage Switchgear



Bush Electromech & Engineering Pvt. Ltd. is a major switchgear manufacturing company based in Aurangabad and associated with ABB, A Global Leader in Power & Automation.

it is founded by Most Experienced Professionals worked in the switchgear industry for more than 18 years. The human resource is available with a high quality experience of working with domestic & multinational companies like ABB, Siemens, Crompton Greaves & Vijai Electrical. The experience of professionals varies from domestic to international projects of product management, product design, manufacturing, Business Development, Sales & Marketing.

The company started in 2010 and started manufacturing Low Voltage Distribution Box and 11kV Load Break Switch. In the process of giving more services to the customers and expansion of product portfolio, ABB and Bush Electromech & Engineering Pvt. Ltd. association made change of face in the region for Manufacturing & Distribution of World Class products.

Our association with ABB enhanced our Products and Services to a Unique level. We are working in following partnership with ABB...

1. Medium Voltage System Integrator
2. Medium Voltage Products Distributor
3. Medium Voltage Spares & Service Provider

Bush Electromech & Engineering Pvt. Ltd. has earned credibility through the supply of switchgear solutions & its site performance since years. We are also embarked as one stop Solution for "Concept to Commissioning" in medium voltage switchgear industry.

Our performance is justified by our Esteemed Domestic customers like Wockhardt, Vediocon, Varroc, Endurance and also multinational companies like Liebherr Appliances, Cahors Groupe- TransFix Transformers and many to mention.

We at Bush Electromech strive to exceed our capabilities to serve our customers in a different way. exceeding their expectations. We always intend to provide better switchgear & automation solution right from inception till charging the system with excellent high quality state of art products to power your dreams.

## **Bush Electromech & Engineering Pvt. Ltd.**

- **Manufacturing**

- Expertise in Providing MV & Automation Solutions
- 12kV Load Break Switch
- ABB System Integrator for Medium Voltage AIS Switchgear

- **Distributorship of Medium Voltage Switchgear**

- ABB Medium Voltage Products

- **Customer Service & Support**

- Asset Management System,
- Energy Management System
- Support for Erection, Testing & Commissioning of MV Switchgear
- Spares, Retrofit Solutions for VCB & Relays



## Bush Electromech Products



### 12kV Indoor VCB Panel

#### ABB Make VCB Vmax/VD4

Horizontal Draw-out–Horizontal Isolation, IP4X STC: 25kA/3Sec, 31.5kA/3Sec, 40kA/1Sec, Busbar : Copper / Aluminum, up to 2000A Incoming cum Outgoing / Cable in Cable Out, Multi-panel Switchboards



### 12kV Multi Pannel Switch Board (LBS - VCB)

#### ABB Make VCB Vmax/VD4

12kV LBS as incommer & Fixed type VCB as out going as per customer requirement with standard control panel available, IP54 STC: 25kA/1Sec, 31.5kA/1Sec, 40kA/1Sec, Busbar : Copper / Aluminum, upto 2000A Top Bushing (conductor connection), Incoming cum Outgoing / Cable in Cable Out, Multi-panel Switchboards



### 36kV Indoor VCB Panel

#### ABB Make VCB VD4

Horizontal Draw-out–Horizontal Isolation, IP4X STC: 25kA/3Sec, 31.5kA/3Sec, Busbar : Copper / Aluminum, upto 2000A Top Bushing (conductor connection), Incoming cum Outgoing / Cable in Cable Out, Multi-panel Switchboards



## Bush Electromech Products



### **12kV Outdoor / Indoor On Load Isolator Panel (Load Break Switch)**

**Spring-Spring Mechanism for LBS** IP54, Width: 600mm, Fuse Trip Mechanism, STC: 25kA/1Sec, Busbar : Copper / Aluminum, 630A Top Bushing (conductor connection), Incoming cum Outgoing / Cable in Cable Out, Multi-panel Switchboards



### **12kV Outdoor / Indoor Multi Panel Switchboard (Air Insulated with HT Fuse Protection)**

With Incomer & Outgoing configuration 1 Incomer & 2 Outgoing Completely customized upto 5 configuration of Any No. of Incomers & Outgoings Completely assembled at factory Ease of operation & Commissioning



### **12kV Outdoor / Indoor Switchboard combination of Fixed VCB & LBS with Fuse**

With Incomer as ABB VCB and/or LBS with Fuse and Outgoing as VCB and/or LBS with Fuse

Make VCB Completely customized upto 5 configuration of Fully assembled at factory Ease of operation & Commissioning





# Bush Electromech Products



## 36kV Outdoor VCB Panel

### ABB Make VCB VD4

Horizontal Draw-out–Horizontal Isolation, Fixed VCB Version, Ip54 STC: 25kA/1Sec, 31.5kA/1Sec, Busbar : Copper / Aluminum, upto 2000A Top Bushing (conductor connection), Incoming cum Outgoing / Cable in Cable Out, Multi-panel Switchboards



# Technical Details of Products

Technical Specifications												
Sr. No.	Parameter Description	Unit	12kV Switchgear Panel		36kV Switchgear Panel		12kV Load Break Switch Fuse		12kV Ring Main Unit (Air Insulated)		36kV Ring Main Unit (Air Insulated)	
			Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
1	Type	Drawout / Fixed	Drawout	Drawout	Drawout	Drawout	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
2	Rated voltage	kV	12, 17.5	12, 17.5	36	36	12, 17.5	12, 17.5	12, 17.5	12, 17.5	36	36
3	Rated frequency	Hz	50	50	50	50	50	50	50	50	50	50
4	Main busbar	Cu. / Al.					Copper / Aluminium					
5	Main Busbar rated current	A	upto 2000A	upto 2000A	upto 2000A	upto 2000A	upto 630A	upto 630A	upto 800A	upto 800A	upto 800A	upto 800A
6	Rated short-time withstand current( Functional / switchboard unit)	kA / 1 sec	20, 25	20, 25	25	25	25	25	20, 25	20, 25	25	25
7	Rated peak withstand current	kA	2.5 times of rated SC									
8	Mechanical life	Times	10000				1000		For VCB: 2000 & for LBS: 1000			
9	1 min P.F withstand	kV rms	28/35		70		28/35		28/35		70	
10	Lightning impulse withstand	kV peak	75/95		170		75/95		75/95		170	
11	Secondary circuit 1 min P.F. withstand voltage	kV rms	2kV									
12	Compact dimension (WxDxH) approx..	mm	600x1300x1800		1100x2700x2000		600x1100x1600		600x1100x1600		1100x2000x1700	



Partnering as Distributor



for Medium Voltage Products & Systems



**12kV – 24kV – 36kV Outdoor /  
Indoor Compact Substation**

12kV – 24kV CSS with HT as RMU, with Oil /  
Dry Trafo & LT Switchgear

36kV CSS with HT as RMU/HT Drawout AIS Panel,  
With Oil / Dry Trafo & LT Switchgear



**12V-36kV Indoor Air Insulated /  
Gas Insulated Switchboard**

12kV, 25kA/31.5kA/40kA for 3 Sec  
Air Insulated Switchgear

36kV, 25kA/31.5kA for 3 Sec  
Air Insulated Switchgear



**12kV – 36kV Outdoor  
Porcelain Clad  
Circuit Breaker**

1250A/1600A, 25kA/31.5kA  
for 3 sec MSEDCL Approved



**12kV – 24kV – 36kV Outdoor /  
Indoor Compact Substation**

12kV – 24kV CSS with HT as RMU, with upto 2MVA  
Oil / Dry Trafo & LT Switchgear

36kV CSS with HT as RMU/HT Drawout AIS Panel,  
With upto 2MVA Oil / Dry Trafo & LT Switchgear



**12kV – 24kV – 36kV Outdoor or Indoor  
SF6 Gas Insulated Ring Main Unit**

12kV – 24kV : 20KA/3Sec, 630A

36kV – 20kA/3Sec, 25kA/1Sec, 630A

Available as On-Load Isolator, VCB & Fuse Module

Front Cable or Side & Rear Cable Termination Available



## Services

Erection, Testing & Commissioning of HT Substation upto 33kV

Annual Maintenance Contracts of HT Equipments

- Non Comprehensive
- Comprehensive

ABB Spares for ABB Make Medium Voltage Switchgear, Systems & Components



## Services - Retrofits

Oil Retrofit – Vertical Isolation

MOCB Retrofit – ASEA / Alind / Voltas / Russian WB / NGEF / Alstom /

ABB HPA / Jyoti OZ /

Siemens 3AC / Fuji

ABB Modules

Relay Retrofit / Old Panel Extension / Door Interlocks / Isolator Replacement /  
Busbar Upgrades / RMU Motorization

Substation Revamping



## Services – Systems / Solutions

ABB MyRemoteCare, Asset Management System

**Janitza**<sup>®</sup>



Energy Management System - Power Quality / Harmonics Analysis  
- Active Harmonic Filters - Statcom



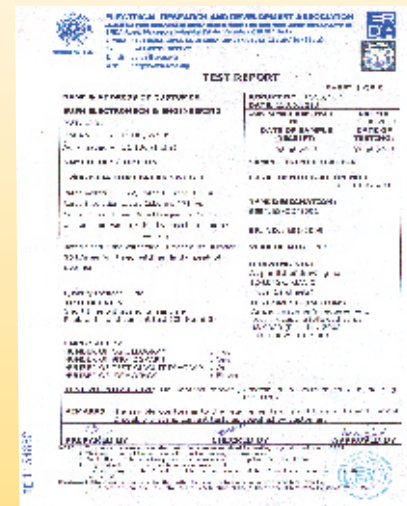
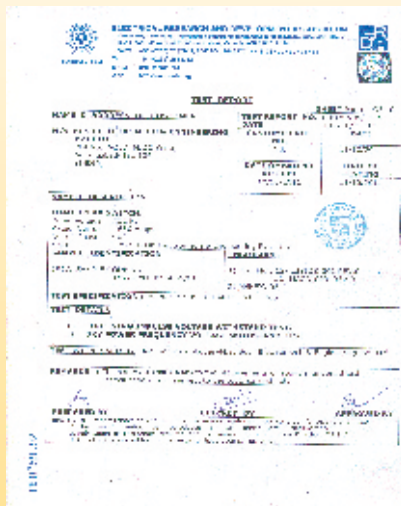


Power and productivity  
for a better world™



Authorized Medium Voltage System Integrator &  
Distributor of Medium Voltage Products

Authorized value provider



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