

OVB-VBF outdoor vacuum circuit breakers

Safe and reliable protection for your distribution networks and industrial applications



ABB offers its complete range of three phase, live tank outdoor vacuum circuit breakers for distribution substations up to 40.5kV system voltage in accordance to IEC 62271-100.

State of the art vacuum interrupters and most reliable operating mechanisms makes it ideal for protection of your distribution networks, industrial substations and wind/solar generating stations.



Reliable also in extreme conditions

- Hermetically sealed poles to avoid moisture ingress
- State of the art vacuum interrupters with silicone encapsulation ensures switching performance over life time even in extreme weather conditions
- Continuous rated coil with inbuilt self-protection feature to prevent coil failure and thus limit down time
- Operating mechanism with inbuilt mechanical anti-pumping feature
- Suitable even for 0.6 g seismic acceleration
- Option for -40 °C ambient temperature available



Safe, easy to install, operate & maintain

- Completely covered live electrical contacts and moving parts (mechanism) inside control cabinet to ensure safety of operating personnel
- Integrated closing spring charging lever for easy and safe operation even in emergency situation.
- Compact and robust operating mechanism with optimized components and low energy required for operation
- Easy plug and play accessories to ensure reduced and simple maintenance
- Standing pedestal available as option to carry out maintenance in control cabinet

Technical parameters	Unit	OVB-VBF 36kV	OVB-VBF 40kV
Standards IEC 62271-100			
Rated voltage	kV	24 / 36	40.5
Rated frequency	Hz	50 / 60	50 / 60
Rated continuous normal current	A	2000 / 2500	2500 / 3150
Rated short time current withstand capacity	kA	31.5 for 3 sec	31.5 for 3 sec
Rated peak withstand current	kAp	82	82
Rated lightning impulse withstand voltage (BIL)	kVp	170	195
Rated power frequency withstand voltage (1 min dry)	kV	70	95
Rated symmetrical interrupting current	kA	31.5	31.5
Rated line charging current (LC)	A	10	10
Rated cable charging current (CC)	A	50	50
Single capacitor bank switching current	A	400	--
Back to back capacitor bank switching current	A	--	750
Operating sequence		O-0.3s-CO-15s-CO	O-0.3s-CO-3min-CO
Minimum operation (CO cycles) at rated continuous current	Operations	10000	
Interrupting media		Vacuum Interrupter	
Ambient temperature range	° C	-25 to +50 ¹	
Minimum external creepage distance	mm/kV	25 / 31	25 / 31
Weight of circuit breaker (without structure)	Kg	380	650

¹ Circuit breakers for lower temperatures available on request

Optional provision to mount CT/PT and SS material for fabrication available on request.

—
01 OVB-VBF 36 kV

—
02 OVB-VBF 40 kV



01

02

—
ABB India Limited
Plot 79, Street 17
MIDC Estate, Satpur, Nashik, India 422007
Phone: +91 253-2201-200
Fax: +91 253-2351-260
Email: ppmvsupport@in.abb.com

new.abb.com/medium-voltage

The data and illustrations are not binding. We reserve the right to modify the contents of this document without prior notice following technical and product developments.

© Copyright 2017 ABB. All rights reserved