

DISTRIBUTION SOLUTIONS

VD4G generator circuit breaker

Small footprint, full protection for generator applications



ABB offers its new vacuum generator circuit breakers at 15 kV, 4000 A, 63 kA in accordance to the new Dual Logo IEEE/IEC 62271-37-013 standard to satisfy your business needs in power generation applications.



Protect your assets

- Use a solution completely in accordance with the latest global standards - IEC as well as IEEE
- Count on a generator circuit breaker suitable for all highly demanding conditions, including out-of-phase condition and island mode
- Be safe thanks to a completely tested solution for DC-component up to 130%, so no need to add any time delay in the protection



Maximize your output

- Experience the easy installation/ integration of VD4G, thanks to its interfaces and dimensions equivalent to the standard version VD4
- Accelerate your projects with the outstanding technical support granted by our Field Application Engineering team



Optimize your investment

- Choose ratings that fit your needs from 25/16 kA @ 15 kV to 63/50 kA @ 15 kV
- Take advantage of using the same compact switchgear setup like in power distribution systems

Technical characteristics

Standards IEEE/IEC 62271-37-013

Circuit breaker		VD4G-25		
Rated voltage	Ur [kV]	15		
Rated current (40° C)	Ir [A]	1250		
Rated frequency	fr [Hz]	50-60		
Rated insulation voltage	Us [kV]	15		
Withstand voltage at 50 Hz				
Rated value	Ud (1 min) [kV]	38(**)		
Impulse withstand voltage				
Rated value	Up [kV]	95		
Making current	Ip [kA]	68.5		
Rated breaking capacity (system-source)				
Symmetrical short-circuit current	IscSFF [kA]	25		
DC component of breaking capacity	%	75		
Asymmetrical short-circuit current (system-source)	lascSFF [kA]	36.5		
Rated breaking capacity (generator-source)				
Symmetrical short-circuit current Iscg Class G1 (generator-source)	IscGFF [kA]	16		
DC component of breaking capacity Class G1 (generator-source)	%	110		
Symmetrical short-circuit current Iscg Class G2 (generator-source)	IscGFF [kA]	16		
DC component of breaking capacity Class G2 (generator-source)	%	130		
Rated breaking current under out-of-phase conditions				
Symmetrical short-circuit current	IscOOP [kA]	12.5		
DC component of breaking current	%	75		
Rated operating sequence during short-circuit interruption		CO-10 min-CO		
Short-time withstand current (3s)	Ik [kA]	25		
Opening time	[ms]	3360		
Closing time	[ms]	3060		
P P	Pole center-distance P [mm]	150		
	Fixed	475		
Maximum	Withdrawable H [mm]	627		
overall	Fixed W [mm]	450		
dimensions	Withdrawable W [mm]	503		
W	Fixed	424		
VV	Withdrawable D [mm]	662		
lafai wha	Fixed [kg]	73		
Weight	Withdrawable [kg]	116		

⁽¹) 4000 A with forced ventilation (**) Contact ABB for higher values

VD4G-40		-		VD4G-50/25	VD4G-50		VD4G-63	
≤2000	2000	3150	4000 (¹)	≤2000	3150	4000 (¹)	3150	4000 (1)
115				144	137		173	
40				50	50		63	
75				75	75		75	
58.5				73	73		92	
25				25	50		50	
110				110	110		110	
25				25	37		37	
130				130	130		130	
20				25	25		31.5	
75				75	75		75	
CO-10 min-	СО			CO-30 min-CO				
40				50	50 (4s fixed	version)	63 (1s)	
					28 ÷ 40			
					≤ 55			
210	275	275	275	210	275	275	275	275
610	610	636	636	610	636	636	636	636
698	698	743	743	698	735	735	736	736
608	758	758	758	608	750	750	750	750
653	853	853	853	653	851	851	750	750
456	456	456	456	456	459	459	459	459
643	643	643	643	643	650	650	646	646
146	158	177	177	147	210	210	210	210
190	205	221	221	191	270	270	270	270

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More product information: abb.com/mediumvoltage Your contact center: abb.com/contactcenters More service information: abb.com/service