

DISTRIBUTION SOLUTIONS

VD4-CS

Noise-free power quality by safe and reliable switching and protection of capacitor banks



ABB offers its new vacuum circuit breaker with servomotor actuation and new vacuum interrupter technology up to 38 kV, 1250 A, 31.5 kA and up to 20,000 operations with extremely low probability of re-strike, to support your business needs in reactive power compensation

Protect your assets

- Inrush elimination thanks to high accuracy in controlled switching technology
- High number B2B capacitive switching operations (10.000 times) with extremely low probability of restrike thanks to new vacuum interrupter technology
- Enables elimination of inrush limiting reactors and resistances, leading to significant cost and space savings
- Cost saving by as much as 20%, using same ratings, same interfaces of existing MV substation thanks to optimized footprint equivalent to standard distribution breakers

Maximize your output

- Reduced total cost of capacitor bank operation due to elimination of downtime for breaker overhaul and a lifespan 3 times the market standard, with predictive health indication
- Fast and reliable support thanks to ABB's global footprint

Optimize your investment

- Assets optimization having both circuit-breaker and capacitive switching devices in one single solution
- Enables increased lifespan of capacitors by more than 10% in e.g. 3 years

Technical Characteristics

Type tested according to IEC 62271-100 and IEC 62271-113 for synchronized switching

VD4-CS			
Rated and Insulation voltage		kV	38
Withstand voltage (1min)		kV	95
Impulse withstand voltage		kVp	185
Rated frequency		Hz	50-60
Rated capacitive current		А	1250
Rated breaking capacity and rated short-time withstand current (3s)		kA	31.5
Making capacity		kAp	104
Short time withstand current (2s)		kA	40
Mechanical endurance		Close-Open operations	20,000
Opening time (sim. mode)		ms	39
Closing time (sim. mode)		ms	58
Overall dimensions	P P P	H mm (inches)	1575 (62)
		W mm (inches)	1000 (39.4)
		D mm (inches)	550 (21.7)
		P mm (inches)	360 (14.2)
Weight	Fixed	Kg (lbs) (approx.)	230 (507)

H = Height of the circuit-breaker

W = Width of the circuit-breaker
D = Depth of the circuit-breaker
P = Pole horizontal centre distance