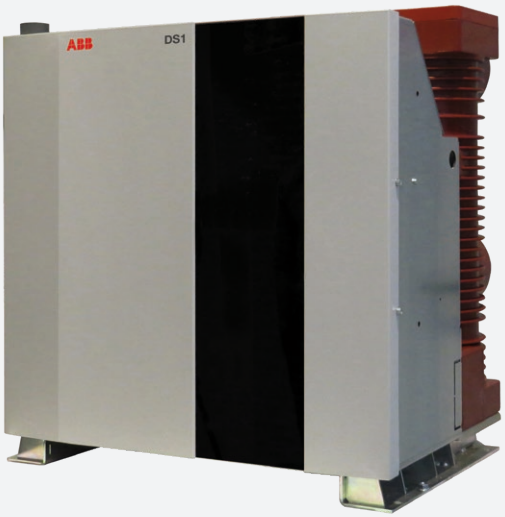
DISTRIBUTION SOLUTIONS

DS1

Diode-based transient-free capacitor switch



DS1 is the first diode-based synchronous switch, specifically devised and designed for capacitor banks, which increases network reliability and efficiency and prolongs the life of connected components thanks to transient-free operations.

Maximize your productivity

- Safe operations thanks to the DS1 integrated advanced interlocking system
- Long lasting life (50,000 maintenance-free operations)
- Reduced power losses thanks to elimination of inrush reactors

Protect your assets

- Increased stability thanks to prestrike and restrike-free switching
- Increased reliability thanks to embedded switch diagnostics
- Absolute protection of the circuit components sensitive to overvoltage switching

Optimize your investment

- Possibility to avoid additional components inside the panel thanks to DS1 ability to perform operations without transients
- Increased power quality thanks to transient-free switching
- Compact design and quick and easy installation without the need to redesign panels thanks to the layout compatible with ABB indoor circuit breakers

Technical data

DS1 was developed from a combination of powerful electronics and high precision mechanics and represents a completely innovative switch concept able to ensure network reliability, stability and efficiency never seen before.

Electrical characteristics		**DS1 50**	**DS1 60**
Rated frequency	Hz	50	60
Rated voltage	kV	17.5	15
Rated current	A	630	600
Withstand voltage			
– Phase to phase and phase to earth	kV	38 (1)	38 (1)
– Across the insulating distance	kV	45	45
Impulse withstand (BIL)			
– Phase to phase and phase to earth	kV	95	95
– Across the insulating distance	kV	110	110
Admissible rated short-time withstand current	kA (s)	20 (0.5)	20 (0.5)
Admissible short-time peak current	kAp	52	52
Other characteristics			
Mechanical operations	CO	50,000	
Maximum overall dimensions 	H (mm)	655	
	W (mm)	618	
	D (mm)	561	
	P (mm)	210	
Weight	Kg	130	
Working temperature range	°C	-15 ... + 55	
Maximum installation altitude	m.s.l.m.	1,000	
Dry air insulation - Rated absolute pressure	MPA	0.470	

(1) Contact ABB for 42 kV version.

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For more information please contact:

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

1VCP000561 Rev B, en – flyer DS1 – 2018.09 (DS1) (mt)