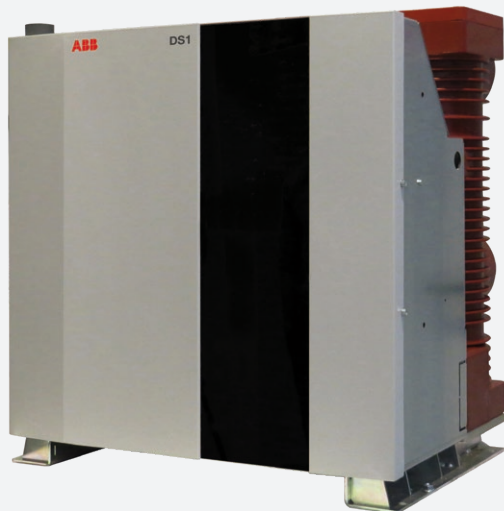


# DS1

## 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

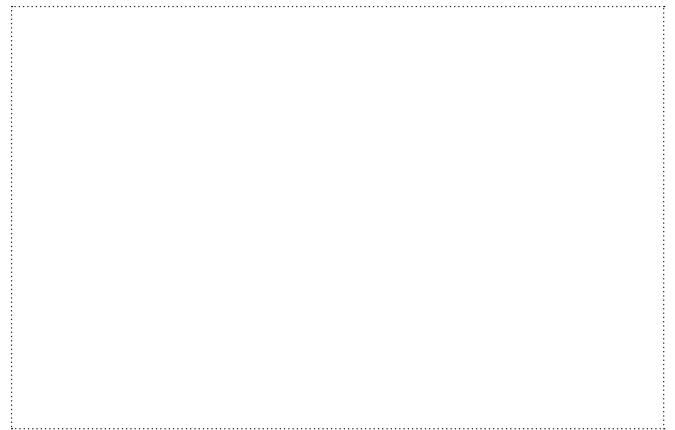
DS1 was developed from a combination of powerful electronics and high precision mechanics and represents a completely innovative switch concept

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 <sup>(1)</sup>	38 <sup>(1)</sup>
– 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
<b>Other characteristics</b>			
Mechanical operations		CO	50,000
Maximum overall dimensions		H (mm)	655
		W (mm)	618
		D (mm)	561
		P (mm)	210
		Weight	Kg
Working temperature range	°C	-15 ... + 55	
Maximum installation altitude	m.s.l.m.	1,000	
Dry air insulation - Rated absolute pressure	MPa	0.470	

<sup>(1)</sup> Contact ABB for 42 kV version.

For more information please contact:



More product information:

[abb.com/mediumvoltage](http://abb.com/mediumvoltage)

Your contact center:

[abb.com/contactcenters](http://abb.com/contactcenters)

More service information:

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