



日燭科技有限公司
JD Auspice Co., Ltd.

Disconnecting Switch New S7 series



note: subject to change without any notice, JDA pay no responsibility



New S7 series High performance switch-disconnector



The **photovoltaic market** has experienced a constant growth in the past years, and the forecasts suggest that this trend will continue with even greater intensity. Solar energy in large plants has a **lower cost** than other generation alternatives, which eases its consolidation. It also must be considered that the sun is a **clean, flexible and everlasting source**, something essential to address some of the challenges that we have to face as a society, such as the climate change or the sustainable management of natural resources.

Given this approach, there is a need for the industry to support this growth with new, more competitive and efficient technologies. This is what we understand in JDA, and that is why we have developed a new **high performance switch-disconnector** capable of reaching **500 A - 1500 Vdc** (750 Vdc per pole): **the new S7**.

Based on the innovative **Magic patented technology**, S7 is the result of years of research of our R&D team and the expertise provided by our successful experience being the preferred DC switch-disconnector supplier for solar plants since 2007.

MAIN BENEFITS



Maximized electrical performance

Effective breakdown: rotary, double per pole and at high-speed.

Contact resistance is kept unchanged throughout operations thanks to a fully optimized rotary break that restricts contact wear. Thermal performance and power losses are therefore stable over time.



High safety level

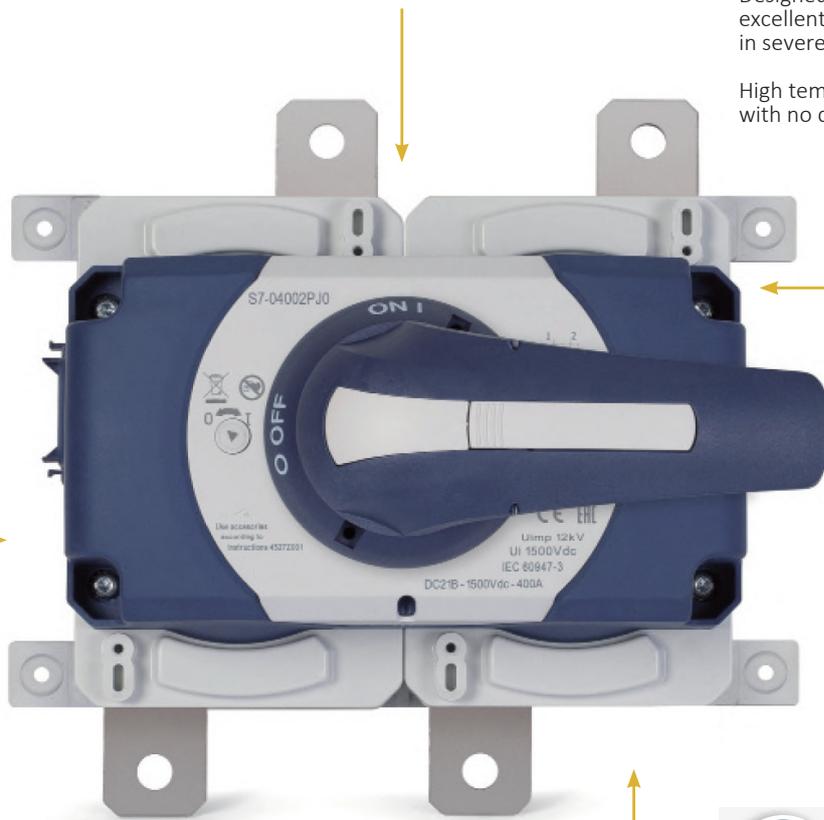
Fast breaking is ensured by a powerful spring mechanism. Movable magnets improve arc extinction, creating a rotating magnetic field.



Suitable for extreme environments

Designed for having an excellent performance even in severe conditions.

High temperature withstand, with no derating up to 70 °C.



Compact design

Up to 500A - 1500 Vdc in a 2 pole device with a small footprint.



Longer life

Fast breaking capacity helps to reduce the contact wear and, consequently, ensures a longer life.



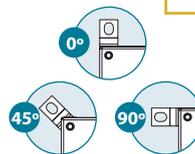
Easy to install

A reduced footprint, multiple mounting configurations and a non-polarized wiring all help to reduce installation time and space.

All mounting orientations are possible.

Electrical spacings are thoughtfully over engineered, resulting in an upgraded wiring space.

Bridging links are not required, avoiding potential hot spots and simplifying the installation in cost and time.





RANGE

Standard	Amperage	Connection	Code
IEC60947-3 (DC-21B)	400 A	30 mm	S7-04002PS0
	500 A	35 mm	S7-05002PS0
UL98B	400 A	30 mm	S7-04002PS00L
	500 A	35 mm	S7-05002PS00L

* Patented technology US 10,269,512 B2

ACCESSORIES

Item	Description	Code
	Direct handle	DS-SI11
	External handle (with shaft included)	DS-SA11
	Auxiliary contacts 1NO + 1NC (one or two auxiliary contacts)	DM-AU11 DM-AU12
	Captive nut * M10 M12	DM-PT11 DM-PT12
	Spacer Fixing Brackets (4 units)	DM-EL11

* IEC only





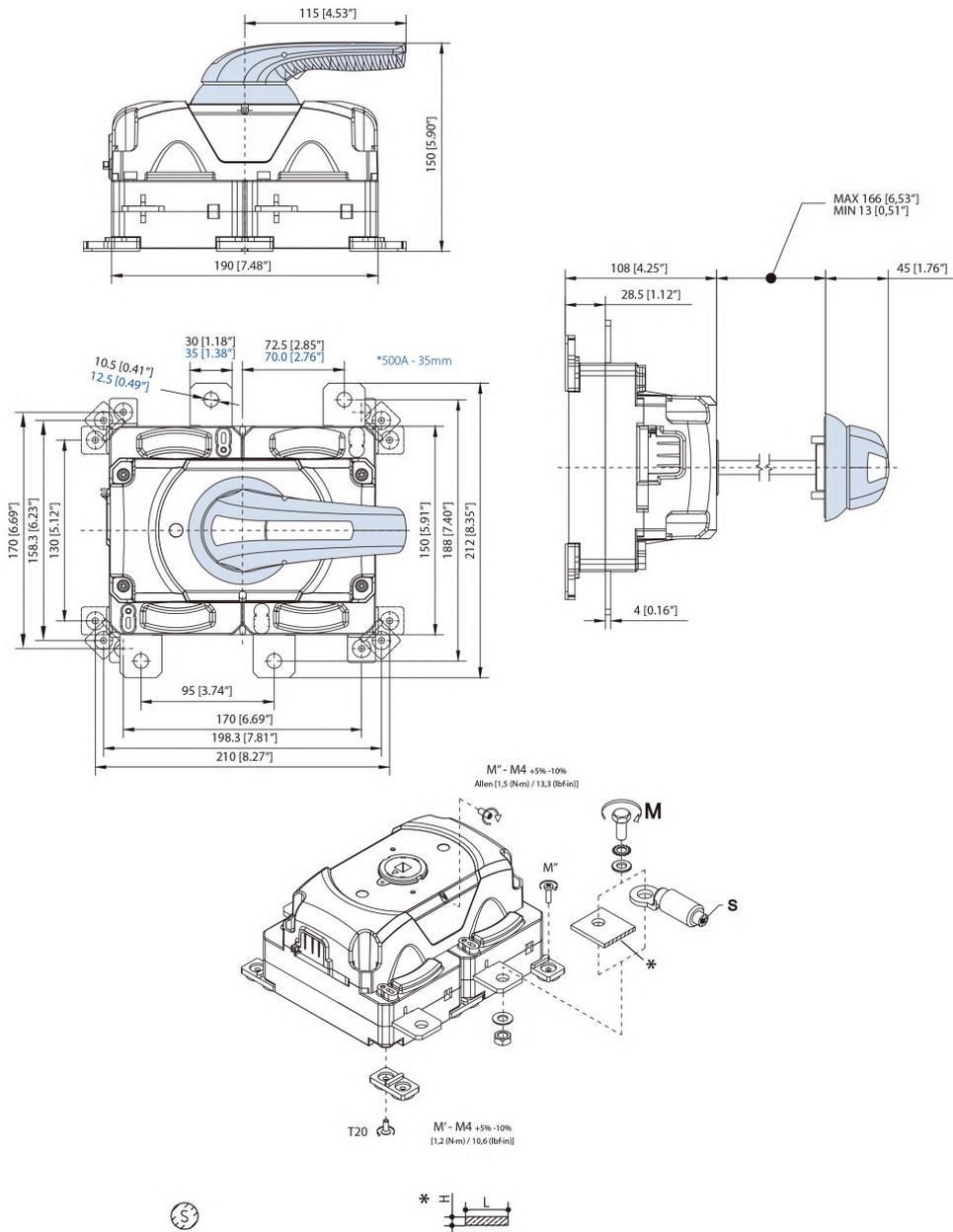
TECHNICAL DATA

IEC 60947-3 (DC-21B)		Type		400 A	500 A
Electrical characteristics	Rated thermal current HR 50%	I _{th}	40 °C	400 A	500 A
			50 °C		
			60 °C		
			70 °C		
	Rated insulation voltage (DC)	U _i		1500 Vdc	
Rated dielectric strength	50 Hz., 1 min.		5000 V		
Rated impulse withstand voltage	U _{imp}		12 kV		
Rated operational current (DC)	I _e (A)	1500V DC21B	400	500	
Short circuit behaviour	Rated short-circuit making capacity (peak value)	I _{cm}	kA (peak)	10	
	Rated short-time withstand current (1s)	I _{cw}	kA rms	10	
Power losses	Power losses	W loss/ pole		10,51	16,53
Mechanical data	Maximum number of operations without load	Cycles		1000	
	Maximum weight	Kg		≈2,7	
Connection capacity	Rigid cable min / max	mm ²		240 / 300	300 / 300
	Min. usbar (thickness/width)	mm		2 x (5/30)	2 x (5/32)
	Max. connecting copper bar	mm		2 x (5/35)	
	Tightening torque (+5% / -10%)	Nxm		18	24

UL98B		Type		400 A	500 A
Electrical characteristics	Current rating (-20°C to 50°C)	A		400 A	500 A
	Rating 1500 Vdc	A		400	500
Short circuit behaviour	Short-circuit rating	kA		10	
Power losses	Power losses	W loss/ pole		10,51	16,53
Mechanical data	Mechanical operations as per standard	Cycles		800	
	Maximum weight	Kg		≈2,7	
Connection capacity	Busbar (thickness)	mm in		4 5/32	5 13/64
	Quantity	uts		2	
	Max. connecting copper bar	mm in		32 1-1/4	
	Tightening torque (+5% / -10%)	Nxm		18	24



DIMENSIONS



	S min (only IEC)		H min/max		L max		T	M ^{+5%} _{-10%}	
	mm ²	MCM	mm	in	mm	in		Nxm	lbf-in
400 A	240	400	min. 4 max. 5	min 2x4/30 max 2x5/35	32	1-1/4	M10	18	159
500 A	300	500	min. 5 max. 5	min 2x5/32 max 2x5/35					



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