

LEAFLET

SACE Emax 2 MS/DC-E

Air switch disconnectors at 1500 V DC



The SACE Emax 2 MS/DC-E air switch-disconnectors further expand SACE's broad offering of low voltage devices providing a solution to all our customer's applications. Meeting both IEC and UL standards, this new range was designed with internationalization in mind. It offers to design engineers, panel builders and OEM manufacturers the chance to rely on a single provider and meet the specific requirements of a wide range of DC applications installed in any part of the world. A range that keeps pace with the times.



Global availability

Ensuring performances at 1500V DC under IEC and UL standards, SACE Emax 2 MS/DC-E range provide a unique solution for any projects around the world. Any version up to 3200A can also be ordered with IEC & UL & CCC approvals. This means that engineers, panel builders, inverter manufacturers and OEMs can find the right solution for any plant installed anywhere in the world.



Flexible installation

The SACE Emax 2 MS/DC-E range of air switch-disconnectors guarantee great flexibility for any installation. It is possible to insulate one polarity or both, and manage current flow in both directions. In addition, it is available in fixed and drawable version, and terminals can be setup vertically or horizontally.



Energy efficiency

The SACE Emax 2 MS/DC-E range is here to support the energy efficiency trend in Energy Storage and Photovoltaic systems. Achieving 1500V DC helps to cut power losses and make our planet a better place.

IEC Range

The SACE Emax 2 MS/DC-E IEC range has been developed for installations up to 1500V DC and 4000 A, with short-time withstand current up to 100 kA.

The SACE Emax 2 MS/DC-E is compliant with DC-PV2, the most demanding Utilization Category according to IEC 60947-3 Annex D, since it requires the ability to connect and disconnect PV circuits where significant overcurrents may occur and where current flow can be in either direction; these are common characteristics of centralized PV systems.

Because of dedicated shorting busbar (jumper) kits, all four poles can be connected in series to isolate a single polarity source, or alternatively for a dual polarity source 2 poles can be configured in series for the positive supply and the other 2 poles in series for the negative supply.

SACE Emax 2 MS/DC-E can be fitted with a vast assortment of electrical and mechanical accessories already available for the standard SACE Emax 2 range. The IEC version has also achieved China CCC certification.

Common data	
Rated service voltage Ue	[V] 1500
Rated insulation voltage Ui	[V] 1500
Rated impulse withstand voltage Uimp	[kV] 12
Number of poles	4
Version	Fixed - Withdrawable
Suitable for isolation according to	IEC 60947-3
Utilization category	DC22A, DC-PV2 (Annex D)



SACE Emax2 MS/DC-E for IEC		E4.2			
Performance levels		S	H	V	
Rated uninterrupted current I _u @ 40°C	[A]	1600	1600	1600	
	[A]	2000	2000	2000	
	[A]	2500	2500	2500	
	[A]	3200	3200	3200	
	[A]	4000	4000	4000	
Rated short-time withstand current I _{cw}	(1s)	[kA]	65	85	100
Rated short-circuit making capacity (peak value) I _{cm}	1500 V	[kA]	65	85	100
Dimensions	H - Fixed	[mm]	371		
	D - Fixed		270		
	W - Fixed 4p		510		
	H - Draw out	[mm]	425		
	D - Draw out	[mm]	393		
	W - Draw out 4p	[mm]	551		



UL Range

The SACE Emax 2 MS/DC-E range of switch-disconnectors covers 1500V DC installations in compliance with UL489B (for use with Photovoltaic systems) and UL489F (for use with Battery Power Supplies), with rated short-time current up to 100kA.

Sharing the same dimension as the standard Emax 2, these compact switch-disconnectors allow UL switchgear and inverters manufacturers to optimize their footprint.

Thanks to the factory-fitted shorting busbar (jumper) kits, all four poles can be connected in series to isolate a single polarity source, or alternatively for a dual polarity source 2 poles can be configured in series for the positive supply and the other 2 poles in series for the negative supply.

All products can be equipped with the most common UL listed mechanical and electrical accessories already available for the SACE Emax 2 air circuit-breaker range.

Common data	
Rated maximum voltage	[V] 1500
Rated voltage	[V] 1500
Number of poles	4
Version	Fixed - Withdrawable
UL file	E348799, E501222



SACE Emax2 MS/DC-E for UL			E4.2		
Performance levels			S-A	H-A	V-A
Rated current	UL489B, UL489F	[A]	1600	1600	1600
	UL489B, UL489F	[A]	2000	2000	2000
	UL489B, UL489F	[A]	2500	2500	2500
	UL489B	[A]	3200	3200	3200
Rated short-time withstand current I _{cw} (1s)		[kA]	65	85	100
Dimensions	H - Fixed	[in / mm]	14.61/371		
	D - Fixed	[in / mm]	10.63/270		
	W - Fixed (4p)	[in / mm]	20.08/510		
	H - Draw out	[in / mm]	16.73/425		
	D - Draw out	[in / mm]	15.47/393		
	W - Draw out (4p)	[in / mm]	21.69/551		

The SACE Emax 2 DC range includes a global multi-standard version compliant with IEC 60947-3, UL 489B, UL 489F and with CCC approval.





For further detail, please consult the SACE
Emax 2 MS/DC-E technical catalogue



Discover more by visiting the SACE
Emax 2 MS/DC-E dedicated webpage