

VERIFICATION OF EMC COMPLIANCE

Applicant: Yueqing Xianglang Electric Co., Ltd.
 Address of applicant: Tantou, Liushi, Yueqing, Zhejiang, China.
 Manufacturer: The same as applicant
 Product Description: Surge Protective Device
 Model No: XLSPD-PV, XLSPD-20, XLSPD-40, XLSPD-80, XLSPD-100
 Sufficient samples of the product have been tested and found to be in conformity with
 Test Standard: EN 55014-1:2006+A1:2009+A2:2011,
 EN 55014-2:2015

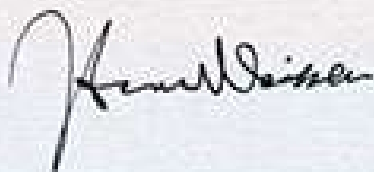
As shown in the

Test Report Number(s): TEZJ18100815660
 Date of issue: October 16th, 2018
 Date of expiry: October 15th, 2023

Conclusion

This Verification of EMC Compliance has been granted to the applicant based on the results of the tests, performed by laboratory of Global Testing Services Co., Ltd on the sample of the above-mentioned product in accordance with the provisions of the relevant specific standards and the Directive 2014/30/EU. The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and compliance with all relevant EC Directives. The affixing of the CE marking presumes in addition that the conditions in annexes III and V of the Directive are fulfilled.

Approved by: Hermann Weiher




Global Testing Services Co., Ltd
 Email: info@gts-lab.com, http://www.gts-lab.com
 Floor 2nd, Building D-1, No. 128, Shasha Road, Shibeiang District, Shanghai, China

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XLSPD-PV Photovoltaic Surge Protective Device



Visual Status Indication



Remote Signal
Contact Available



The Cooper suntree three-module photovoltaic Surge Protective Device (SPD) (with three-step DC switching device) features visual indication and optional remote contact signaling (floating changeover contact) for use in PV systems. These complete surge protective devices are suitable for all PV systems in accordance with IEC 60364-7-712. Includes a five year limited warranty.

These prewired solutions consist of a base and locking modules that feature a combined disconnection and short-circuiting (shunting) device with safe electrical isolation to prevent fire damage due to DC arcs. An integrated DC fuse allows safe module replacement without arc formation.

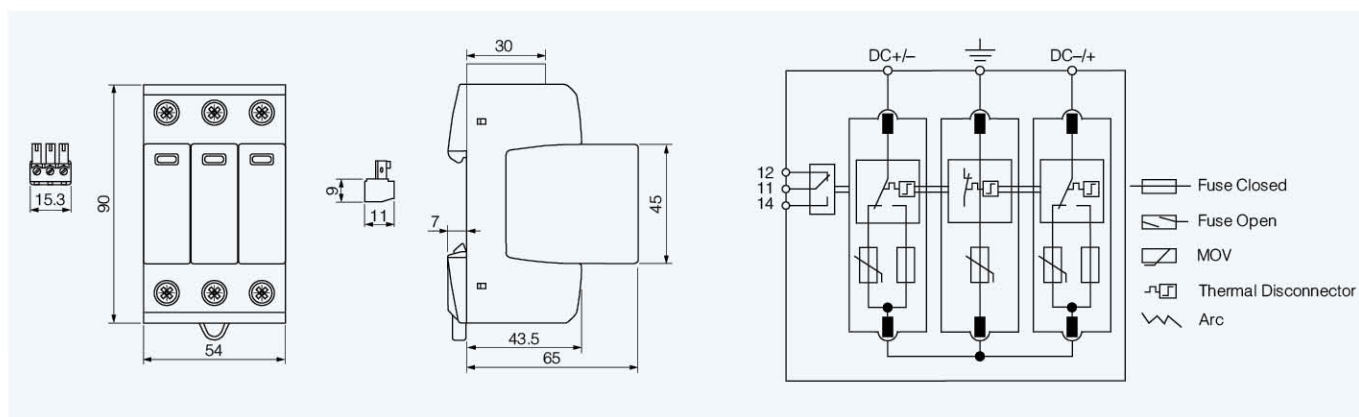
In case of insulation faults in the generator circuit, a reliable and tested fault-resistant Y circuit prevents damage to the surge protective devices.

The green and red visual indicator flags show the module protective status (green = good, red = replace). Apart from this visual indication, the remote signaling option features a three terminal floating changeover contact that can be used as a make or break contact depending on the particular monitoring system design employed.

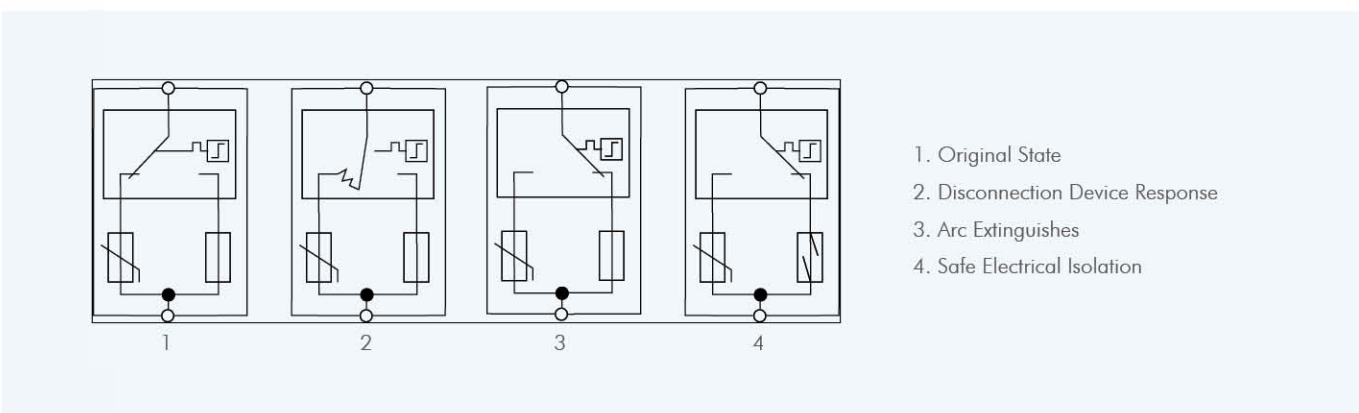


Dimensions(mm)

Module Circuit Diagrams



Short-Circuit Interrupting (SCI) Technology



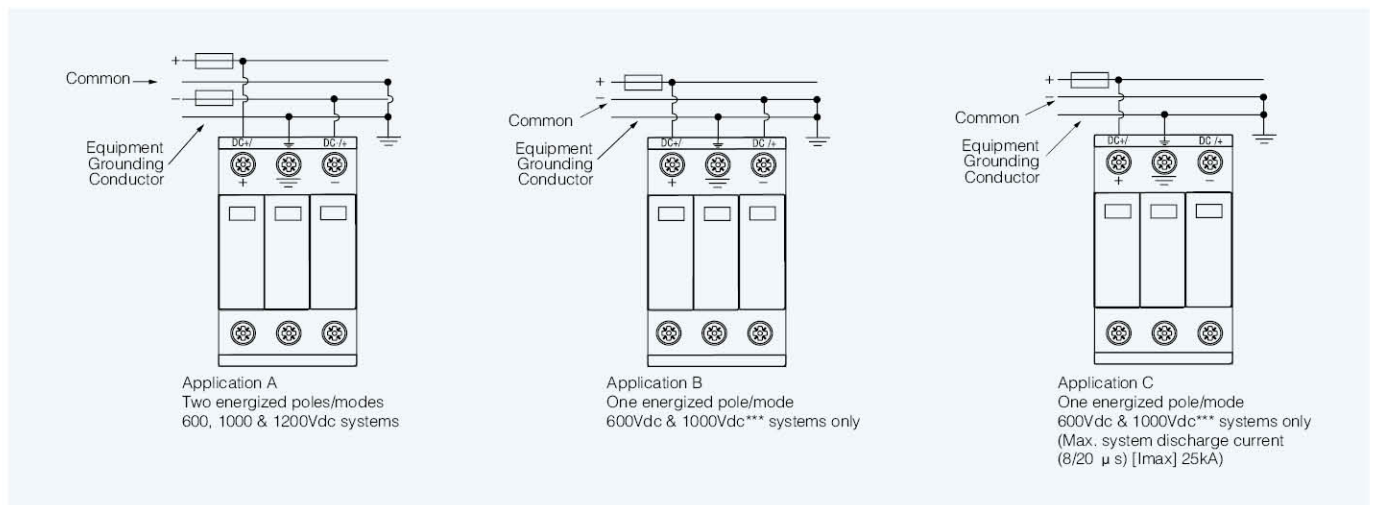
Specifications

Nominal PV System Voltage		600V	1000V	1200V
MCOV [UCPV]		700Vdc	1170Vdc	1200Vdc
Max System Discharge Current (8/20 μ s) [Imax]		40kA	40kA	30kA
Voltage Protection Level [UP]		$\leq$ 2.5kV	$\leq$ 4.0kV	$\leq$ 4.5kV
Voltage Protection Level at 5kA [UP]		$\leq$ 2.0kV	$\leq$ 3.5kV	$\leq$ 4.0kV
Integrated Fuse Breaking Capacity/Interrupting Rating		30kA/1000Vdc	30kA/1000Vdc	30kA/1200Vdc
Technology		Short-Circuit Interruption (SCI) Overcurrent Protection		
Operating Temperature Range [TU]		-40°C to +80°C		
Nominal Discharge Current (8/20 μ s) [(DC+/DC-) --> PE] [In]		12.5kA		
Response Time [tA]		<25ns		
Operating State/Fault Indication		Green (good)/Red (replace)		
Conductor Ratings and Cross-Sectional Area:	Minimum	60/75°C 1.5mm ² /14AWG Solid/Flexible		
	Maximum	60/75°C 35mm ² /2AWG Stranded/25mm ² /4AWG Flexible		
Mounting		35mm DIN Rail per EN 60715		
Enclosure Material		UL 94V0 Thermoplastic		
Degree of Protection		IP20		
Capacity		3 Modules, DIN 43880		
Standards Information:		IEC 61643-11 Type 2, IEC 61643-1 Class II		
Product Warranty		Five Years**		

Remote Contact Signaling

Remote Contact Signaling Type	Changeover Contact
AC Switching Capacity (Volts/Amps)	250V/0.1A
DC Switching Capacity (Volts/Amps)	250V/0.1A; 125V/0.2A; 75V/0.5A
Conductor Ratings and Cross-Sectional Area for Remote Contact Signal Terminals	60/75°C Max. 1.5mm ² /14AWG Solid/Flexible
Ordering Information	Order from Catalog Numbers Above

Typical Application Schematics

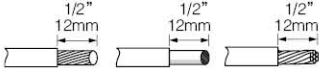


* Does not apply to 1200Vdc.

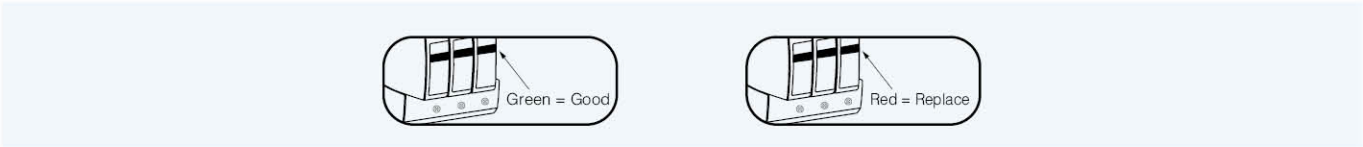
1. Use a suitable electrical insulator to keep a 10mm min. safety distance from the PV-SPD and other grounded parts in the housing.
2. No metal covers are in the area of the module release buttons as shown.

Conductors and Busbars for Use in Photovoltaic Systems

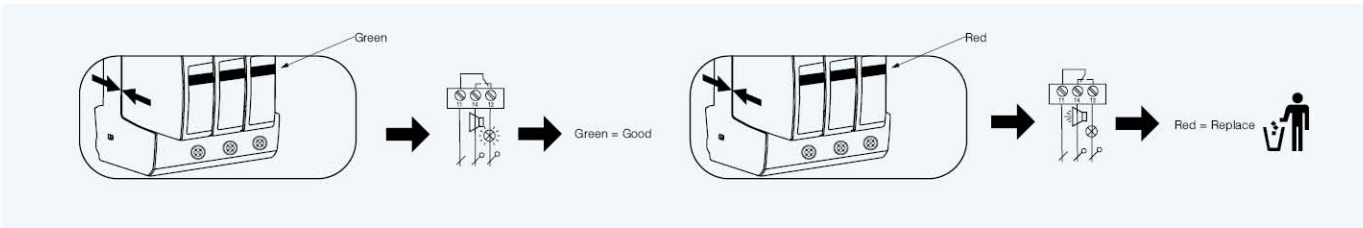
IEC 60364-7-712 (DIN VDE 0100 Part 712)

60/75°C Cu Conductors		
Min. □ DC±,DC±, ↓	1.5mm²/14AWG	
Max. □ DC±,DC±, ↓	25mm²/4AWG	35mm²/2AWG
Busbar	16mm² Cu  ≥ 15.5mm	

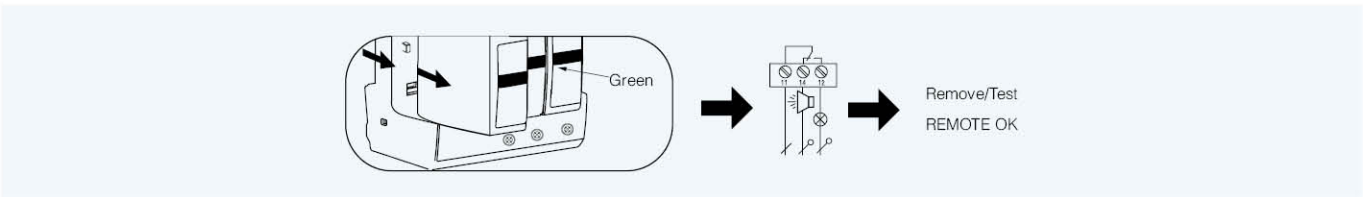
Visual Indication Status



Fault Indication & Remote Contact Signaling (with modules installed)



Testing Remote Contact Signaling (with modules removed)



Remote Contact Signaling

