

Data Sheet

GATEKEEPER SOLA Series Power Surge Diverter (SPD)



GKSIDS SPD

Product Description:

The GATEKEEPER GKSIDS surge diverter is a high quality low cost DIN compliant diverter of a modular design. Therefore when the device expires, you simply replace the module to reinstate the diverters full capacity. The unit has been designed for mounting at the PV panel and at the rectifier in the battery room or at the main switchboard/distribution board Cat C locations.

As with all LDU diverters, the GKSIDS surge diverter range has been designed to be fail-safe incorporating internal over voltage and thermal fusing.

Features:

- Class 11 Cat C applications.
- Modular design
- Differential and Common mode protection
- Internal fusing
- Status indication
- Remote alarm
- Long service life

Alarm:

The GKSIDS is supplied with external alarms consisting of a voltage free relay to remotely monitor the diverter status. The alarm terminal capacity is 1.5mm² and is configured as follows:

NC = Normally Closed
 NO = Normally Open
 C = Common

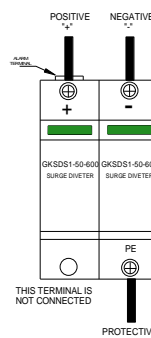
Closed when power is off or under fault conditions
 Open when power is off or under fault conditions

Installation:

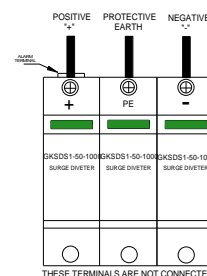
The GKSIDS should be installed at the PV (SOLAR) panels and at the input side of the rectifier in line with an appropriately sized circuit breaker.

If the battery room is more than 20 meters from the rectifier then install a GKSIDS1 on the output of the rectifier in line with an appropriately sized circuit breaker.

If the rectifier feeds into the grid then appropriate surge protection should be placed on the main switchboard at the point of entry to off the road.



GKSIDS1-50-600



GKSIDS1-50-1000

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Specification:

Order Code:		GKSDS1-50-600	GKSDS1-50-1000
Electrical Specification			
Application		Protector for Photovoltaic panels and electronics.	
Phases:		Single	
Primary surge protection	I_{MAX}	50KA – 1278 Joules	
Nominal input voltage:	U_O	600Vdc	1000Vdc
Maximum continuous operating voltage:		630Vdc	1060Vdc
Connection type:		Parallel	
Voltage protection level at In:		1900Vdc	3200Vdc
Modes of protection		Differential and Common Modes	
Response time	t_A	$\leq 100ns$	
Follow on current		Nil	
Earth leakage current:		$< 1mA$	
Display:		Thermal Disconnector – Green – normal	Red - Failure
Inline current limiting device size		20A	125A gL/gG
Operating temperature range		$-40^{\circ} - +80^{\circ}$	
Remote contact alarms		Yes	Optional
Remote contact alarms type		Floating Changeover Contact	
Alarm Isolation		4KV	
Switching capability	U_N/I_N	AC: 250V/0.5A DC: 250V/0.1A, 125V/0.2A, 75V/0.5V	
Standard Compliance		UL1449 4 th Edition / IEC61643-11 / EN 50539-11	
Surge Tested To		ANSI C62.41 Cat A, Cat B, Cat CAS/NZS 1768-2007 Cat A, Cat B, Cat C IEC/VDE I & II / B&C	
RCM Number (Aust Approval)		5140	
Mechanical Specifications:			
Connection type:		Disconnect terminals – Screw terminal	
Power terminal capacity:		35mm² single-strand or 25mm² multi-strand	
Alarm terminal capacity		1.5mm ² Max	
Enclosure material		Thermoplastic: extinguishing degree UL94 V-0	
IP index:		IP 20	
Mounting:		35mm DIN rail in accordance with EN50022/DIN46277-3	
Width:	mm	36	54
Depth:	mm	65	
Weight:	g	280	420

KEY: Example: GKSDS1-50-600

Gatekeeper	SOLA Version	KA Rating
GK SD	S	1 - 50 - 600
Surge Diverter	Number of Lines	DC Volts