

## 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 1.5mm<sup>2</sup> and is configured as follows:

NC = Normally Closed  
NO = Normally Open  
C = Common

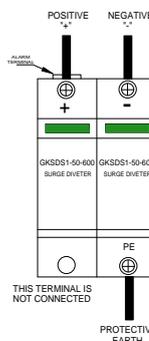
Closed when power is off or under fault conditions  
Open when power is off or under fault conditions

#### Installation:

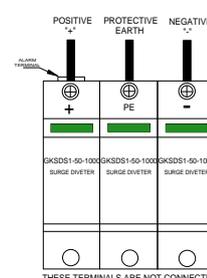
The GKSIDS should be installed at the PV (SOLAR) panels and at the input side of the rectifier in line with an appropriately sized circuit breaker.

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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### GATEKEEPER SOLA SERIES POWER SURGE DIVERTER (SPD)

#### Specification:

Order Code:		GKSDS1-50-600	GKSDS1-50-1000
<b>Electrical Specification</b>			
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 Disconnect – Green – normal	Red - Failure
Inline current limiting device size		20A	125A gL/gG
Operating temperature range		$-40^0 - +80^0$	
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		IEC 61643-1 2005, UL1449 ed 3	
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	
<b>Mechanical Specifications:</b>			
Connection type:		Disconnect terminals – Screw terminal	
<b>Power terminal capacity:</b>		<b>35mm<sup>2</sup> single-strand or 25mm<sup>2</sup> multi-strand</b>	
Alarm terminal capacity		1.5mm <sup>2</sup> 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	
<b>GK SD</b>	<b>S</b>	<b>1 - 50</b>	<b>- 600</b>
Surge Diverter	Number of Lines	DC Volts	