

## HSG1-25-480-N

**Hybrid Spark Gap**

Use Hybrid Spark Gap high energy surge diverters for point of entry protection at main switchboards where grid instability is an issue.

**Hybrid Protection**

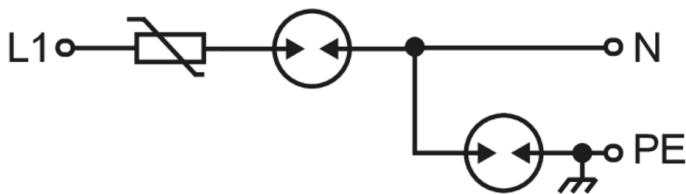
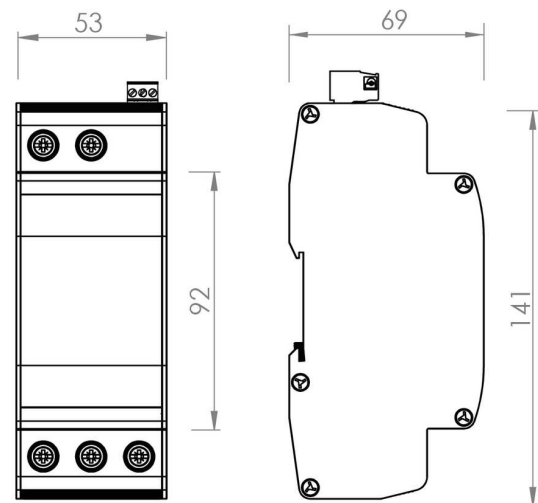
The Hybrid Spark Gap design combines a spark gap and MOV in series to improve the overvoltage tolerance of the surge protector. This combination allows the HSG to be exposed to continuous over voltage of up to 480V while still providing a low voltage protection level.

**LED Status Active Display**

The LED display indicates segment status and indicates normal operation when all LEDs are brightly lit. A dim LED phase segment indicates the failure of an external backup fuse and this will activate the external alarm. An extinguished LED indicates a component failure or thermal overload, also activating the external alarm.

**Safe Metal Enclosure**

Novaris power protection products are housed in safe, all metal enclosures. In the event of a prolonged overvoltage they will not catch fire or explode.





**Wiring****Dimensions****Standards**

IEC 61643-11:2011  
AS/NZS 1768:2007  
UL 1449 3rd edition  
IEEE 62.41.2:2002

SPD connected to low-voltage power systems - Type 1+2  
A.C. power system SPD - Cat C, B  
Low voltage SPD - Type 2  
Low voltage SPD - Cat B

## Product Datasheet

## Electrical Specifications

Connection type		Shunt
Modes of protection		L-N, L-PE, N-PE
Number of ports		1
Number of phases		1
Location		Indoor
Nominal voltage	$U_0$	230VAC
Short circuit withstand level	$I_{SSCR}$	50kA
Maximum backup fuse		125A
Recommended SCB		SCB1-3-25
Earth leakage current	$I_{PE}$	<10 $\mu$ A




## Electrical (L-N) Specifications

Maximum continuous voltage AC	$U_c$	480VAC
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	200kA
Nominal discharge current (8/20 $\mu$ s)	$I_n$	100kA
Lightning impulse current (10/350 $\mu$ s)	$I_{imp}$	25kA
Voltage protection level (3kA 8/20 $\mu$ s)	$U_p$	<1000V
Voltage protection level (In)	$U_p$	<1400V
Response time	$t_A$	<100ns
Voltage withstand (120min)	$U_T$	440V
Voltage withstand (5s)	$U_T$	690V
















## Electrical (N-PE) Specifications

Maximum continuous voltage	$U_c$	275VAC
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	150kA
Lightning impulse current (10/350 $\mu$ s)	$I_{imp}$	50kA
Nominal discharge current (8/20 $\mu$ s)	$I_n$	100kA
Voltage protection level (1kV/ $\mu$ s)	$U_p$	<1200V
Voltage protection level (In)	$U_p$	<1500V
Response time	$t_A$	<100ns
Voltage withstand (200ms)	$U_T$	1200V
Follow current interrupt rating	$I_{fi}$	300A

## Indication Specifications

Alarm contact voltage		230VAC
Alarm contact current		2A
Display		LED power and thermal failure
Alarm		SPDT power and thermal failure
Alarm isolation		4kV


## Mechanical Specifications

Minimum operating temperature		-40°C
Maximum operating temperature		70°C
Minimum operating humidity		5%
Maximum operating humidity		95%
Mounting method		TS35 DIN Rail
Environmental rating		IP20
Enclosure material		Aluminium
Enclosure finish		Black powdercoat
Terminal capacity - power		16mm <sup>2</sup>
Terminal screw torque - power		2Nm
Terminal capacity - alarms		2.5mm <sup>2</sup>
Terminal screw torque - alarms		0.5Nm
Length		141mm
Width		53mm
Height		69mm

## Other Specifications

Product Code		HSG1-25-480-N
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## Shipping Specifications

Weight		530g
Customs tariff		85354010