

HSG3-100-480-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

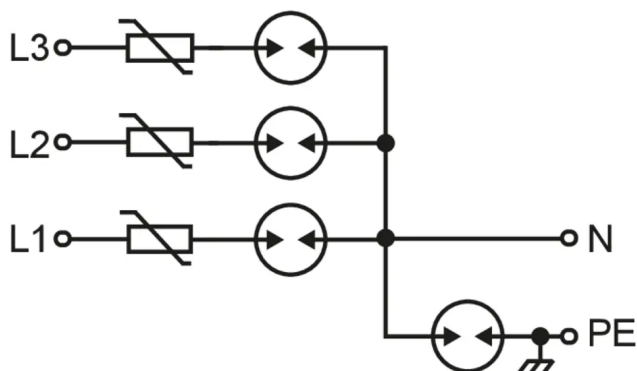
Novaris power protection products are housed in safe, all metal enclosures. In the event of a prolonged overvoltage they will not catch fire or explode.



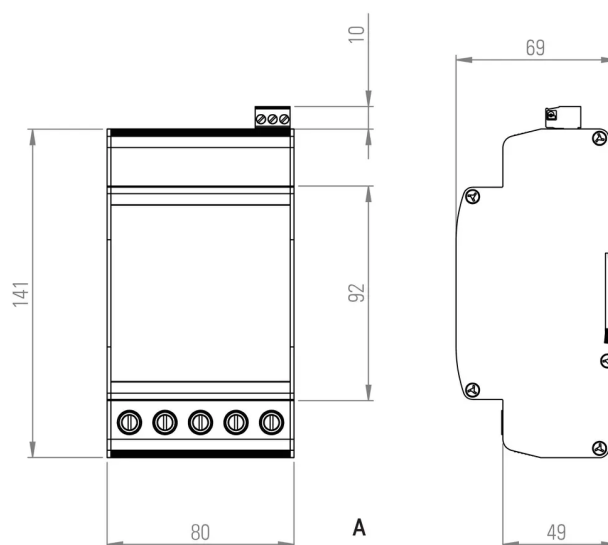
Image for illustrative purposes only

The colour of the grommets will change starting from 2026. All phases will be black, neutral will be black, and earth will be green

Wiring



Dimensions



Product Datasheet

Electrical Specifications

Connection type		Shunt
Modes of protection		L-N, L-PE, N-PE
Number of ports		1
Number of phases		3
Location		Indoor
Nominal voltage	U_0	230VAC
Short circuit withstand level	I_{SCCR}	50kA
Maximum backup fuse		63A
Recommended SCB		SCB1-3-80
Earth leakage current	I_{PE}	<10 μ A

Electrical (L-N) Specifications

Maximum continuous voltage AC	U_c	480VAC
Maximum discharge current (8/20 μ s)	I_{max}	100kA
Nominal discharge current (8/20 μ s)	I_n	40kA
Lightning impulse current (10/350 μ s)	I_{imp}	12.5kA
Voltage protection level (3kA 8/20 μ s)	U_p	<1000V
Voltage protection level (In)	U_p	<1400V
Response time	t_A	<25ns
Voltage withstand (5s)	U_T	690V
Voltage withstand (120min)	U_T	480V

Electrical (N-PE) Specifications

Maximum continuous voltage	U_c	255VAC
Maximum discharge current (8/20 μ s)	I_{max}	150kA
Nominal discharge current (8/20 μ s)	I_n	100kA
Lightning impulse current (10/350 μ s)	I_{imp}	30kA
Voltage protection level (1kV/ μ s)	U_p	<1200V
Voltage protection level (In)	U_p	<1800V
Response time	t_A	<25ns
Voltage withstand (200ms)	U_T	1200V
Follow current interrupt rating	I_{fi}	100A

Indication Specifications

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 ²
Terminal screw torque - power		2Nm
Terminal capacity - alarms		2.5mm ²
Terminal screw torque - alarms		0.5Nm
Length		141mm
Width		80mm
Height		69mm

Standard Specifications

IEC 61643-11	SPD connected to low-voltage power systems - Type 1, 2
AS 1768	AC power system SPD - Cat C, B
UL 1449	Low voltage SPD - Type 2
IEEE 62.41.2	Low voltage SPD - Cat B

Shipping Specifications

Weight		760g
Customs tariff		85363000, 85363010

Other Specifications

Product Code		HSG3-100-480-N
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