## SDN3-100-475-NE150



## 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.

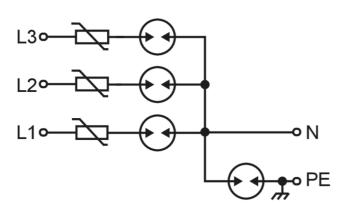
### **LED Status Active Display**

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.

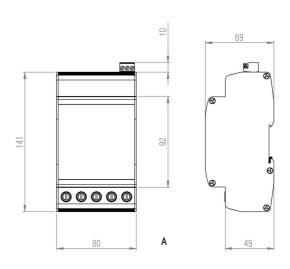
### Safe Metal Enclosure

Novaris power protection products are housed in safe, all metal enclousures. 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	'n	L-N, N-PE
Number of ports		1
Number of phases	∷≡	3
Location		Indoor
Nominal voltage	U <sub>o</sub>	230VAC
Short circuit withstand level	ISSCR	25kA
Maximum backup fuse	<b>=</b>	63A
Recommended SCB		SCB1-3-25
Earth leakage current	I <sub>PE</sub>	<10µA

# Electrical (L-N) Specifications

Maximum continuous voltage AC	U <sub>c</sub>	475VAC
Maximum discharge current (8/20 μs)	l <sub>max</sub>	100kA
Nominal discharge current (8/20 µs)	I <sub>n</sub>	50kA
Lightning impulse current (10/350 μs)	l <sub>imp</sub>	12.5kA
Voltage protection level (3kA 8/20µs)	U <sub>p</sub>	<800V
Voltage protection level (In)	U <sub>p</sub>	<1400V
Response time	t <sub>A</sub>	<5ns
Voltage withstand (5s)	U <sub>T</sub>	480V

# Electrical (N-PE) Specifications

Maximum continuous voltage	$\mathbf{U}_{\mathrm{c}}$	255VAC
Maximum discharge current (8/20 μs)	l <sub>max</sub>	150kA
Lightning impulse current (10/350 μs)	l <sub>imp</sub>	50kA
Nominal discharge current (8/20 µs)	I <sub>n</sub>	100kA
Voltage protection level (1kV/µs)	U <sub>p</sub>	<700V
Voltage protection level (3kA 8/20µs)	U <sub>p</sub>	<1200V
Response time	t <sub>A</sub>	<100ns
Voltage withstand (200ms)	U <sub>T</sub>	1200V
Follow current interrupt rating	l <sub>fi</sub>	100A

## **Indication Specifications**

Display	$\Box$	LED power and thermal failure
Alarm	$\Diamond$	SPDT power and thermal failure
Alarm isolation	<u>\$</u> 5	4kV

## **Mechanical Specifications**

Minimum operating temperature	P	-40°C
Maximum operating temperature		70°C
Minimum operating humidity	<b>%</b>	5%
Maximum operating humidity	<b>%</b>	95%
Mounting method	Æ	TS35 DIN Rail
Environmental rating	ŵ	IP20
Enclosure material	•	Aluminium
Enclosure finish	•	Black powdercoat
Terminal capacity - power	0	16mm²
Terminal screw torque - power	G	2Nm
Terminal capacity - alarms	•	2.5mm²
Terminal screw torque - alarms	C	0.5Nm
Length	~	141mm
Width	<b></b>	80mm
Height	1	69mm

## Other Specifications

Product Code SDN3-100-475-NE150

## **Shipping Specifications**

Weight	Â	800g
Customs tariff	*	85354010