

### NSP3-50-275-N

#### NSP Surge Diverter

The NSP3-50-275-N provides all mode protection (L-N and N-PE) in accordance with AS3000 for three phase sub-boards remote from the MSB. It is rated for both 8/20µs and 10/350µs impulses making it suitable for use in moderately high exposure locations, for example in a sub-board fed by overhead conductors. It is also suitable for main switchboard protection in non-MEN (TT) distribution systems and can be used in MEN systems although the N-PE protection may be redundant due to the presence of the MEN link.

#### Pluggable Top

The Novaris NSP range features pluggable modules, colour coded orange for L-N and black for N-PE, where applicable.

#### Display and Alarm

The NSP range features a display window with green indicating operational and red indicating that replacement is necessary. A voltage free changeover contact allows for external alarm indication.

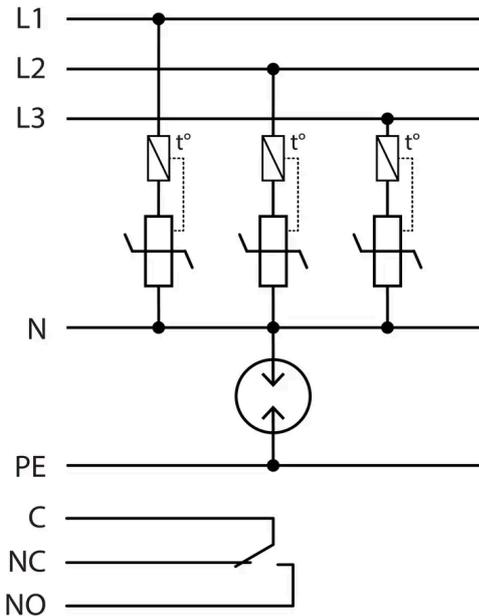
#### Overcurrent Protection

The NSP range requires external overcurrent protection as detailed in AS3000. Novaris surge circuit breakers (SCB) are recommended for this. The overcurrent protection function can also be provided by a conventional circuit breaker or fuses. Alternatively, the NSP can be paralleled with an existing power circuit. The NSP draws negligible current under normal conditions so it will not affect the circuit current loading.

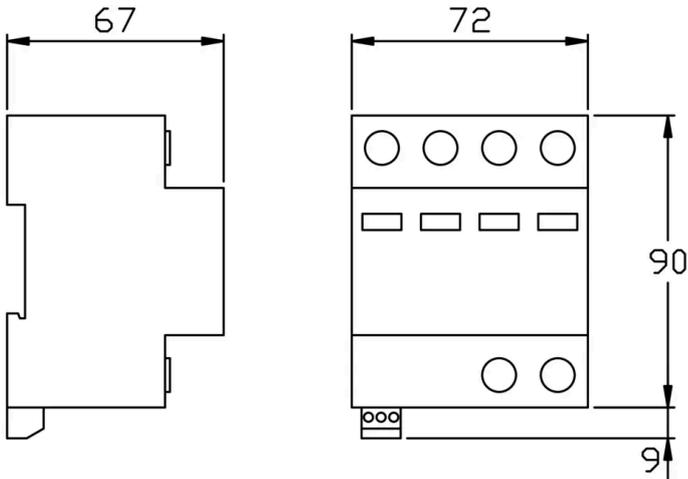


Image for illustrative purposes only

### 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	$I_{SCCR}$	25kA
Maximum backup fuse or CB		32A
Recommended SCB		SCB1-3-80
Earth leakage current	$I_{PE}$	<10 $\mu$ A

## Electrical (L-N) Specifications

Maximum continuous voltage AC	$U_c$	275VAC
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	50kA
Nominal discharge current (8/20 $\mu$ s)	$I_n$	20kA
Lightning impulse current (10/350 $\mu$ s)	$I_{imp}$	7.5kA
Voltage protection level (In)	$U_p$	<1200V
Response time	$t_A$	<25ns
Voltage withstand (5s)	$U_T$	335V

## Electrical (N-PE) Specifications

Maximum continuous voltage	$U_c$	255VAC
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	50kA
Nominal discharge current (8/20 $\mu$ s)	$I_n$	20kA
Lightning impulse current (10/350 $\mu$ s)	$I_{imp}$	12.5kA
Voltage protection level (1kV/ $\mu$ s)	$U_p$	<1500V
Response time	$t_A$	<25ns
Follow current interrupt rating	$I_{fi}$	100A

## Indication Specifications

Display		Thermal failure green normal red failure
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## 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
Terminal capacity - power		35mm <sup>2</sup>
Terminal capacity - alarms		1.5mm <sup>2</sup>
Length		67mm
Width		72mm
Height		90mm

## Standard Specifications

IEC 61643-11	SPD connected to low-voltage power systems - Type 2
AS 1768	Lightning protection - LPZ0B/1, LPZ1/2
AS3000	Electrical Installations: Wiring Rules

## Shipping Specifications

Weight		450g
Customs tariff		85363000, 85363010

## Other Specifications

Product Code		NSP3-50-275-N
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