

## SFD1-20-100-275



## Single Phase Surge Filters

Novaris DIN mount Surge Filter are suitable for installation in circuits up to 32A. The SFD range has been engineered to protect sensitive loads.

## Compact Design

Their compact design makes them an ideal choice for space restricted applications.

## All Mode Protection

Protection is provided for all combinations of lines (L-N, L-PE, N-PE) ensuring the maximum level of protection is achieved at all times.

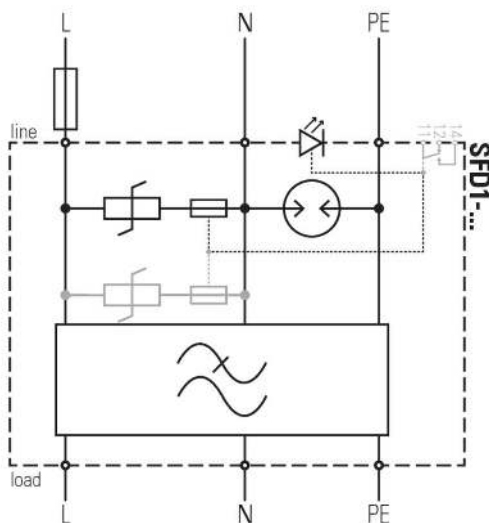
## Safe Metal Enclosure

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

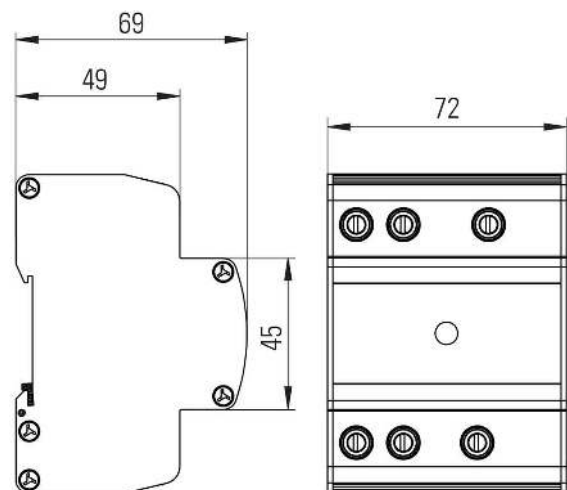
## Three Stages of Protection

Novaris surge filters have 2 stages of varistor protection separated by a low pass LC filter. This 3 stage combination reduces the effects of high frequency noise and transients to provide the highest level of protection to sensitive loads.

## 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		Series
Modes of protection		L-N, L-PE, N-PE
Number of ports		2
Number of phases		1
Location		Indoor
Nominal voltage	$U_0$	230VAC
Short circuit withstand level	$I_{SSCR}$	25kA
Maximum backup fuse		20A
Earth leakage current	$I_{PE}$	<10 $\mu$ A


### Electrical (L-N) Specifications

Maximum load current	$I_L$	20A
Maximum continuous voltage AC	$U_c$	275VAC
Maximum voltage drop (% of $U_0$ )		<1%
3dB frequency @ 50 $\Omega$		800Hz
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	100kA
Nominal discharge current (8/20 $\mu$ s)	$I_n$	40kA
Lightning impulse current (10/350 $\mu$ s)	$I_{imp}$	12.5kA
Voltage protection level (3kA 8/20 $\mu$ s)	$U_p$	<600V
Voltage protection level (In)	$U_p$	<2000V
Response time	$t_A$	Instantaneous
Voltage withstand (5s)	$U_T$	335V














### Electrical (N-PE) Specifications

Maximum continuous voltage	$U_c$	255VAC
Maximum discharge current (8/20 $\mu$ s)	$I_{max}$	60kA
Lightning impulse current (10/350 $\mu$ s)	$I_{imp}$	15kA
Nominal discharge current (8/20 $\mu$ s)	$I_n$	50kA
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	$I_n$	100A

### Indication Specifications

Display		LED power and thermal 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
Enclosure material		Aluminium
Enclosure finish		Black powdercoat
Terminal capacity - power		16mm <sup>2</sup>
Terminal screw torque - power		2Nm
Length		96mm
Width		72mm
Height		69mm

### Other Specifications

Product Code		SFD1-20-100-275
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### Shipping Specifications

Weight		625g
Customs tariff		85354010