

### 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

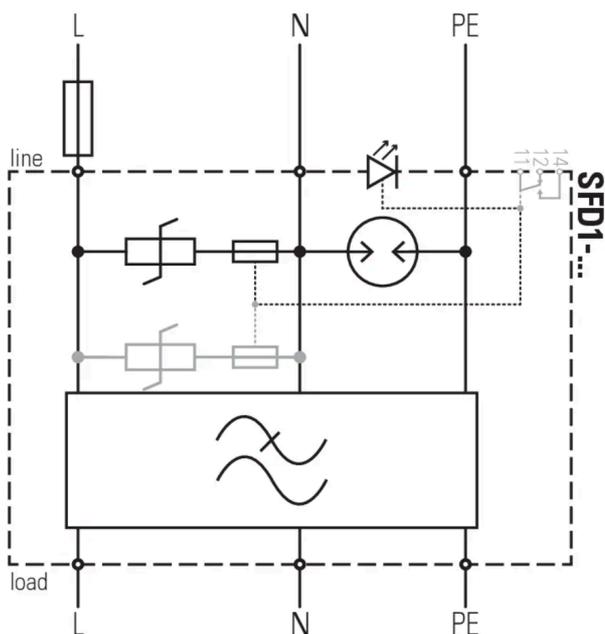
Novaris surge filters have 2 stages of varistor protection separated by a low pass LC filter. This 3 stage combination reduces the effects of high frequency noise and transients to provide the highest level of protection to sensitive loads.



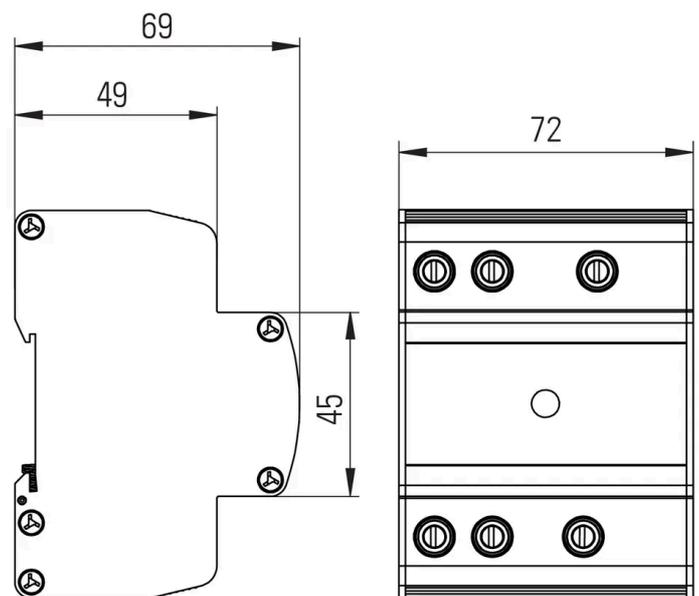
Image for illustrative purposes only

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		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	$I_{SCCR}$	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%
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
3dB frequency @ 50Q		800Hz
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
Nominal discharge current (8/20 $\mu$ s)	$I_n$	50kA
Lightning impulse current (10/350 $\mu$ s)	$I_{imp}$	15kA
Voltage protection level (1kV/ $\mu$ s)	$U_p$	<1200V
Voltage protection level (In)	$U_p$	<1500V
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
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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		95mm
Width		72mm
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		670g
Customs tariff		85363000, 85363010

## Other Specifications

Product Code		SFD1-20-100-275
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