

SFD2-6-10-275 - Two Phase DIN Mount Surge Filters



The Novaris SFD2 range of surge filters is designed for protecting floating AC or DC power supplies. Applications include DC power supplies, balanced circuits for rail applications and single phase IT systems.

Multistage Protection

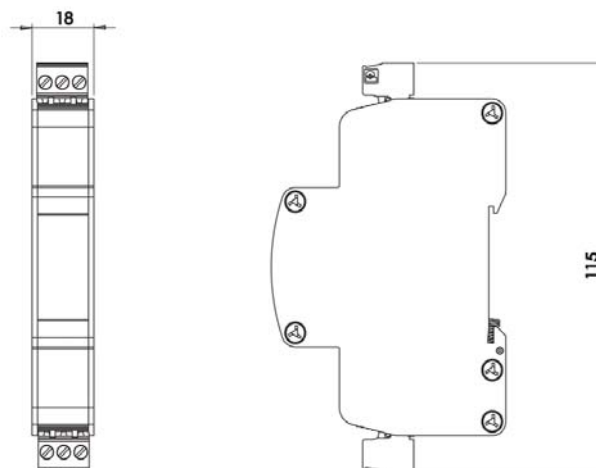
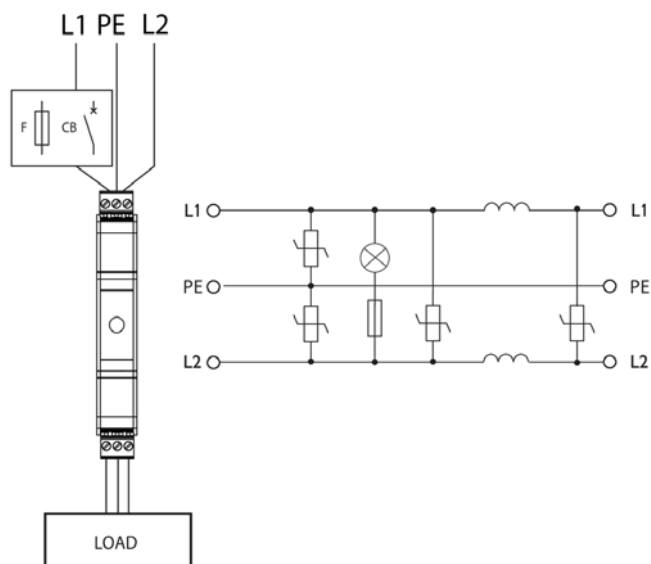
The SFD2 uses 3 stages of protection to provide a low let through voltage. The first stage comprises a delta configuration of metal oxide varistors to provide clamping between both lines and between each line and earth. The second stage is a low pass filter providing instantaneous protection against high frequency impulses. The third stage is a line to line metal oxide varistor to provide an extra level of protection against primary and load side surges.

No Earth Leakage

The SFD2 configuration results in zero earth leakage under normal operating conditions. The earth reference for the product is isolated using a spark gap. This means even in the event of a short circuit failure within the device, no current will pass to earth.

Installation Independent Performance

Series surge protectors such as the SSP and SFD range house the shunt (parallel) connection of the protection components internally within the device. This reduces the connection impedance to a minimum to guarantee optimal performance in all installations.



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 2+3
A.C. power system SPD - Cat C, B, A
Low voltage SPD - Type 2, 3
Low voltage SPD - Cat B

Technical Information Sheet

Specifications

Electrical Specifications

Connection type		Series
Modes of protection		L-N, L-PE, N-PE
Number of phases		2
Nominal voltage	U_0	230VAC
Short circuit withstand level	I_{SSCR}	10kA
Maximum backup fuse		6A
Earth leakage current	I_{PE}	<500 μ A

Electrical (L-N) Specifications

Maximum load current	I_L	6A
Maximum continuous voltage	U_C	275VAC
Maximum Continuous Voltage DC	U_C	Required spec absent
Maximum voltage drop (% of U_0)		<1%
Maximum discharge current (8/20 μ s)	I_{max}	10kA
3dB frequency @ 50 Ω		Required spec absent
Nominal discharge current (8/20 μ s)	I_n	4kA
Lightning impulse current (10/350 μ s)	I_{imp}	-
Voltage protection level (3kA 8/20 μ s)	U_p	<700V
Voltage protection level (In)	U_p	<900V
Response time	t_A	Instantaneous
Voltage withstand (5s)	U_T	440V

Electrical (N-PE) Specifications

Maximum continuous voltage	U_C	275VAC
Maximum discharge current (8/20 μ s)	I_{max}	10kA
Lightning impulse current (10/350 μ s)	I_{imp}	-
Nominal discharge current (8/20 μ s)	I_n	4kA
Voltage protection level (1kV/ μ s)	U_p	<500V
Response time	t_A	-
Voltage protection level (In)	U_p	<900V
Voltage withstand (200ms)	U_T	1200V
Follow current interrupt rating	I_{fi}	-

Indication Specifications

Display		LED power and thermal failure
Alarm		-
Alarm isolation		-

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		2.5mm ²
Terminal screw torque - power		0.5Nm
Terminal capacity - alarms		-
Terminal screw torque - alarms		-
Length		115mm
Width		18mm
Height		69mm

Other Specifications

Product Code SFD2-6-10-275

Shipping Specifications

Weight 350g
 Customs tariff 85354010