#### SFD2-10-40-50



#### 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.

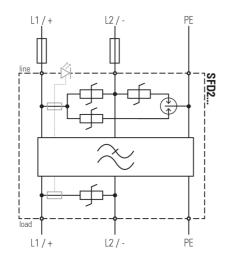
**Multistage Protection.** The SFD2 uses 3 stages of protection to provide a low let through voltage. The first stage comprises a delta configuration of metal oxide varistors to provide clamping between both lines and between each line and earth. The second stage is a low pass filter providing instantaneous 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.

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

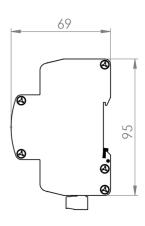
**Installation Independent Performance.** Series surge protectors such as the SSP and SFD range house the shunt (parallel) connection of the protection components internally within the device. This reduces the connection impedance to a minimum to guarantee optimal performance in all installations.

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

# **Specifications**

## **Electrical Specifications**

Connection type	×	Series
Modes of protection	'n	(+)-(-), (+)-PE, (-)-PE
Number of phases	≔	2
Nominal voltage	U <sub>o</sub>	48VAC
Maximum load current		10A
Earth leakage current	I <sub>PE</sub>	<10µA

## **Electrical (L-L) Specifications**

Maximum continuous voltage AC	U <sub>c</sub>	50VAC
Maximum continuous voltage DC	U <sub>c</sub>	65VDC
Maximum discharge current (8/20 μs)	l <sub>max</sub>	40kA
Nominal discharge current (8/20 µs)	I,	20kA
Voltage protection level (3kA 8/20µs)	U <sub>p</sub>	<200V
Response time	t <sub>A</sub>	<5ns

#### Electrical (L-PE) Specifications

Maximum discharge current (8/20 μs)	l <sub>max</sub>	40kA
Nominal discharge current (8/20 µs)	I,	20kA
Voltage protection level (3kA 8/20µs)	U <sub>p</sub>	<280V
Response time	t,	<5ns

## **Indication Specifications**

Display	₽	LED power
Alarm	$\Diamond$	thermal failure
Alarm isolation	<b>%</b>	4kV

## **Mechanical Specifications**

Minimum operating temperature	P	-40°C
Maximum operating temperature	I	70°C
Minimum operating humidity	<b>%</b>	5%
Maximum operating humidity	<b>&amp;</b>	95%
Mounting method	æ	TS35 DIN Rail
Environmental rating	Ŝ	IP20
Enclosure material	•	Aluminium
Enclosure finish	•	Black powdercoat
Terminal capacity - power	0	16mm²
Terminal screw torque - power	G	2Nm
Terminal capacity - alarms	0	2.5mm²
Terminal screw torque - alarms	G	0.5Nm
Length	~	95mm
Width	$\leftrightarrow$	118mm
Height	1	69mm

#### Other Specifications

Product Code SFD2-10-40-50

### **Shipping Specifications**

Weight	Â	850g
Customs tariff	*	85354010

