

IFD2-20-50-460

**Two Phase DIN Mount Surge Filters**

The Novaris IFD2 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 IFD2 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

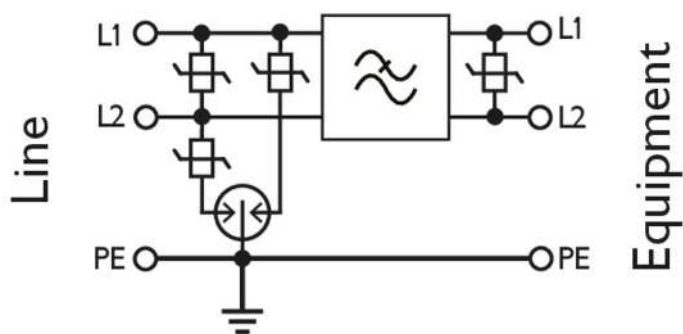
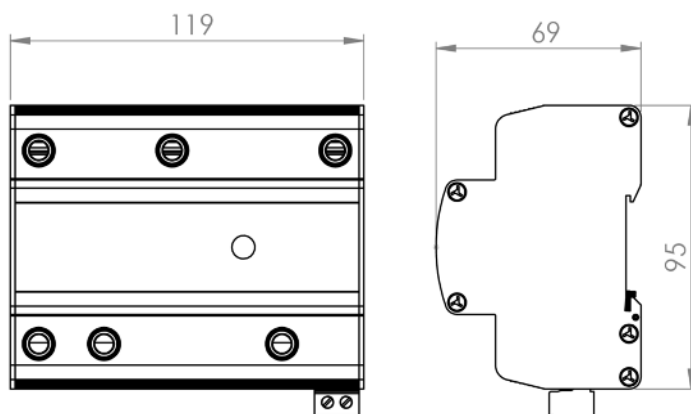
The IFD2 configuration results in zero earth leakage under normal operating conditions. The earth reference for the product is isolated using a spark gap. This means even in the event of a short circuit failure within the device, no current will pass to earth.

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 IFD 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

Product Datasheet

Electrical Specifications

| | | |
|---------------------|---|-----------|
| Connection type |  | Series |
| Modes of protection |  | L-L, L-PE |
| Number of ports | | 2 |
| Number of phases |  | 2 |
| Location | | Indoor |
| Nominal voltage | U_0 | 400VAC |
| Maximum backup fuse |  | 20A |

Shipping Specifications

| | | |
|----------------|---|----------|
| Weight |  | 950g |
| Customs tariff |  | 85354010 |




Electrical (L-L) Specifications

| | | |
|---------------------------------------|-----------|--------|
| Maximum load current | | 20A |
| Maximum continuous voltage AC | U_c | 460VAC |
| Maximum continuous voltage DC | U_c | 615VDC |
| 3dB frequency @ 50Ω | | 800Hz |
| Maximum discharge current (8/20 μs) | I_{max} | 50kA |
| Nominal discharge current (8/20 μs) | I_n | 20kA |
| Voltage protection level (3kA 8/20μs) | U_p | <700V |

Electrical (L-PE) Specifications

| | | |
|-------------------------------------|-----------|--------|
| Maximum discharge current (8/20 μs) | I_{max} | 40kA |
| Nominal discharge current (8/20 μs) | I_n | 40kA |
| Voltage protection level (1kV/μs) | U_p | <700V |
| Response time | t_A | <100ns |
| Voltage protection level (In) | U_p | <1000V |

Indication Specifications

| | | |
|-----------------|---|-------------------------------|
| Display |  | LED power and thermal failure |
| Alarm |  | Passive NC Alarm |
| Alarm isolation |  | 4kV |

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 ² |
| Terminal screw torque - power |  | 2Nm |
| Terminal capacity - alarms |  | 2.5mm ² |
| Terminal screw torque - alarms |  | 0.5Nm |
| Length |  | 95mm |
| Width |  | 119mm |
| Height |  | 69mm |

Other Specifications

| | | |
|--------------|---|----------------|
| Product Code |  | IFD2-20-50-460 |
|--------------|---|----------------|