

## SDD1-50-275

**DINsafe Surge Diverter**

Use DIN compliant SDD Surge Diverters for distribution boards or for point of entry protection in small industrial and domestic applications. Installing two levels of surge protection, incoming and distribution boards, greatly increases the protection provided especially if there is a considerable distance between the two locations.

**All Mode Protection**

Protection is provided for all combinations of lines ensuring the maximum level of protection is achieved at all times.

**Thermal Sensing**

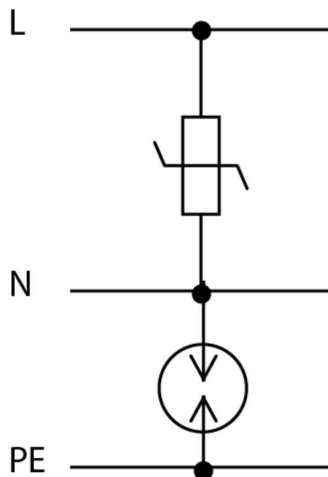
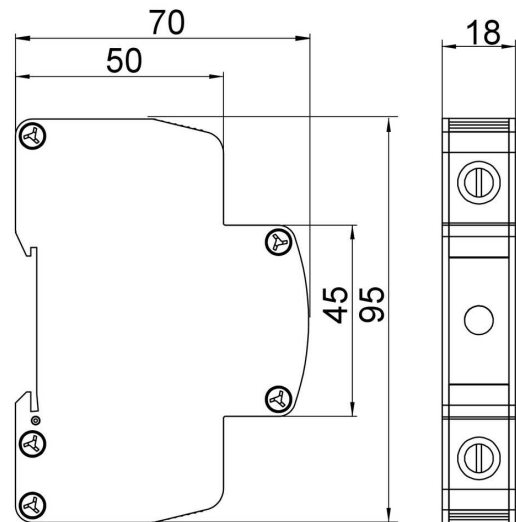
Sustained overvoltages can cause components to overheat and degrade. Thermal sensing warns of this condition without disconnecting the protection.

**LED Status Active Display**

An LED indicates that power is applied and the unit is healthy. An extinguished LED indicates that no power is present on the phase or that an internal overload has occurred.

**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.





**Wiring****Dimensions****Standards**

IEC 61643-11:2011  
AS/NZS 1768:2007  
IEEE 62.41.2:2002  
UL 1449 3rd edition

SPD connected to low-voltage power systems - Type 1 & Type 2  
Low voltage SPD - Type 2  
Low voltage SPD - Cat B  
Low voltage SPD - Type 2

## Product Datasheet

## Electrical Specifications

|                               |   |                 |
|-------------------------------|---|-----------------|
| Connection type               |  | Shunt           |
| Modes of protection           |  | L-N, L-PE, N-PE |
| Number of ports               |   | 1               |
| Number of phases              |  | 1               |
| Location                      |   | Indoor          |
| Nominal voltage               | $U_0$   | 230VAC          |
| Short circuit withstand level | $I_{SSCR}$  | 25kA            |
| Maximum backup fuse           |  | 32A             |
| Recommended SCB               |   | SCB1-3-80       |
| Earth leakage current         | $I_{PE}$  | <10 $\mu$ A     |

## Other Specifications

Product Code  SDD1-50-275

## Electrical (L-N) Specifications

|   |           |        |
|---|-----------|--------|
| Maximum continuous voltage AC               | $U_c$     | 275VAC |
| Maximum discharge current (8/20 $\mu$ s)    | $I_{max}$ | 50kA   |
| Nominal discharge current (8/20 $\mu$ s)    | $I_n$     | 20kA   |
| Lightning impulse current (10/350 $\mu$ s)  | $I_{imp}$ | 6.25kA |
| Voltage protection level (3kA 8/20 $\mu$ s) | $U_p$     | <800V  |
| Voltage protection level (In)               | $U_p$     | <1300V |
| Voltage withstand (5s)                      | $U_T$     | 335V   |


## Electrical (N-PE) Specifications

|   |           |        |
|---|-----------|--------|
| Maximum continuous voltage                  | $U_c$     | 255VAC |
| Maximum discharge current (8/20 $\mu$ s)    | $I_{max}$ | 25kA   |
| Nominal discharge current (8/20 $\mu$ s)    | $I_n$     | 10kA   |
| Voltage protection level (1kV/ $\mu$ s)     | $U_p$     | <1000V |
| Voltage protection level (3kA 8/20 $\mu$ s) | $U_p$     | <1200V |
| Response time                               | $t_A$     | <100ns |
| Voltage withstand (200ms)                   | $U_T$     | 1200V  |
| Follow current interrupt rating             | $I_{fi}$  | 100A   |






## Shipping Specifications

|                |   |                    |
|----------------|---|--------------------|
| Weight         |  | 165g               |
| Customs tariff |  | 85363000, 85363010 |

## Indication Specifications

Display  LED power and thermal failure

## 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                         |  | 18mm              |
| Height                        |  | 70mm              |