

## SDD3-50-275-A



Image for illustrative purposes only

**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.

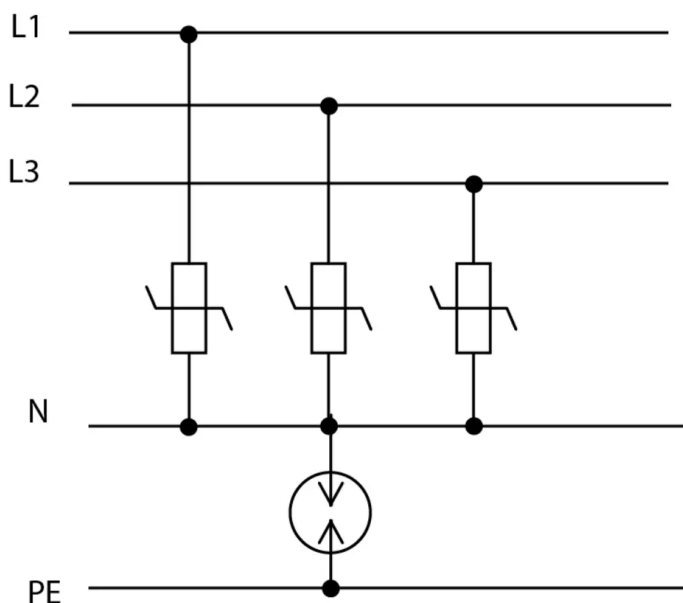
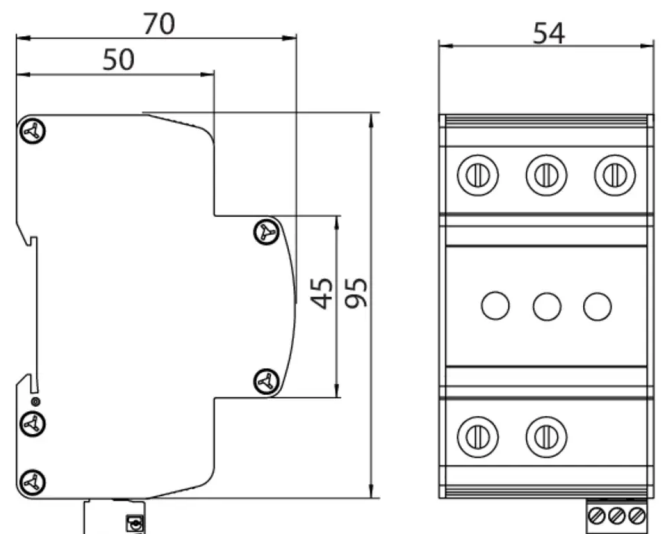
**LED Status Active Display**

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.

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               |  | Shunt           |
| Modes of protection           |  | L-N, L-PE, N-PE |
| Number of ports               |                                                                                   | 1               |
| Number of phases              |  | 3               |
| 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     |

## 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)               | $U_p$     | <1500V |
| Response time                               | $t_A$     | <25ns  |
| 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   |
| Lightning impulse current (10/350 $\mu$ s)  | $I_{imp}$ | 10kA   |
| Voltage protection level (1kV/ $\mu$ s)     | $U_p$     | <1000V |
| Voltage protection level (3kA 8/20 $\mu$ s) | $U_p$     | <1200V |
| Response time                               | $t_A$     | <25ns  |
| Voltage withstand (200ms)                   | $U_T$     | 1200V  |
| Follow current interrupt rating             | $I_{fi}$  | 100A   |

## Indication Specifications

|                 |                                                                                     |                                |
|-----------------|-------------------------------------------------------------------------------------|--------------------------------|
| Display         |  | LED power and thermal failure  |
| Alarm           |  | SPDT power and thermal failure |
| 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 <sup>2</sup>  |
| Terminal screw torque - power  |  | 2Nm                |
| Terminal capacity - alarms     |  | 2.5mm <sup>2</sup> |
| Terminal screw torque - alarms |  | 0.5Nm              |
| Length                         |  | 95mm               |
| Width                          |  | 54mm               |
| Height                         |  | 70mm               |

## Standard Specifications

|              |                                                        |
|--------------|--------------------------------------------------------|
| IEC 61643-11 | SPD connected to low-voltage power systems - Type 1, 2 |
| AS 1768      | Low voltage SPD - Type 2                               |
| IEEE 62.41.2 | Low voltage SPD - Cat B                                |
| UL 1449      | Low voltage SPD - Type 2                               |

## Shipping Specifications

|                |                                                                                       |                    |
|----------------|---------------------------------------------------------------------------------------|--------------------|
| Weight         |  | 410g               |
| Customs tariff |  | 85363000, 85363010 |

## Other Specifications

|              |                                                                                       |               |
|--------------|---------------------------------------------------------------------------------------|---------------|
| Product Code |  | SDD3-50-275-A |
|--------------|---------------------------------------------------------------------------------------|---------------|