

Logistical data

| Specification item | Value |
|-----------------------|-------------------------|
| Product name Logistic | Surge Protector : SPD 2 |
| code 12NC | 9290 014 29806 |
| Pieces per box | 50 |

Electrical specifications

| Specifications | Parameter | Value | Unit | Condition |
|--|---------------|-------------------------|---------|--|
| Designation | | Type 3 | | Acc. EN61643-11 |
| Classification | | Class III | | Acc. IEC61643-11 |
| Protection mode | | Diff. mode & Comm. mode | | |
| Nominal input voltage | U_n (L-N) | 240 | VAC | 50 ... 60 Hz, max. +10% |
| Max. continuous operating voltage | U_c (L-N) | 264 | VAC | 50 ... 60 Hz |
| Max. continuous operating voltage | U_c (L-GND) | 264 | VAC | 50 ... 60 Hz |
| Max. continuous operating voltage | U_c (N-GND) | 264 | VAC | 50 ... 60 Hz |
| Nominal discharge current | I_n (L-N) | 5 | kA | 8/20 μ s |
| Nominal discharge current | I_n (L-GND) | 5 | kA | 8/20 μ s |
| Nominal discharge current | I_n (N-GND) | 5 | kA | 8/20 μ s |
| Max. voltage protection level at I_n | U_p (L-N) | 1.5 | kV | See separate protection level table for other I_n values |
| Max. voltage protection level at I_n | U_p (L-GND) | 2 | kV | See separate protection level table for other I_n values |
| Max. voltage protection level at I_n | U_p (N-GND) | 2 | kV | See separate protection level table for other I_n values |
| Open-circuit voltage | U_{oc} | 10 | kV | |
| End of life | | yes | | Load OFF: SPD has reached end-of-life |
| Servicability | | n/a | | No user servicable parts inside |
| Max earth leakage current at U_c | | 50 | μ A | Max. rms, to GND |

Other specifications

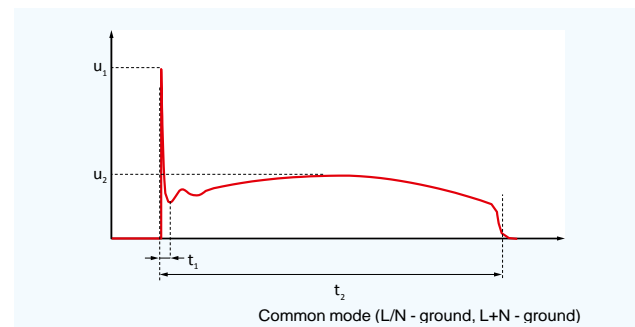
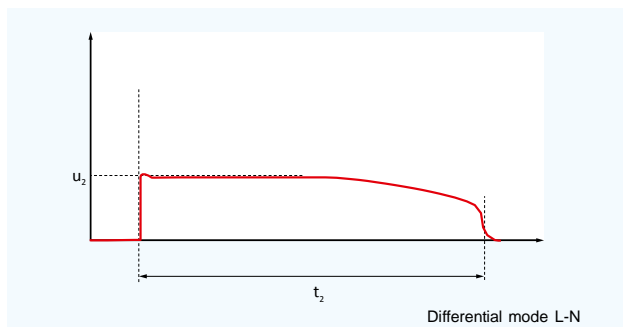
| Specifications | Parameter | Value | Unit | Condition |
|----------------------------|-----------|--------------|---------|------------------------------------|
| Surge withstand capability | | 1 | strike | max. at 10 kA |
| Surge withstand capability | | 50 | strikes | min. at 5 kA |
| Surge withstand capability | | 100 | strikes | min. at 3 kA |
| Nominal current | | 4 | A | Rated load current at 50 ... 60 Hz |
| Power consumption | | 0.01 | W | max. at $U_c = 264$ VAC |
| Suitable for luminaires | | Class I only | | Insulation Class acc. IEC60598 |

Protection levels U_p

Surge Protector Class-I

| I_c 8/20 μ s | Differential mode U_2 | Common mode U_1/U_2 |
|--------------------|-------------------------|-----------------------|
| 1 kA | 1100 V | 1100 V / 1050 V |
| 3 kA | 1250 V | 1700 V / 1300 V |

| I_c 8/20 μ s | Differential mode U_2 | Common mode U_1/U_2 |
|--------------------|-------------------------|-----------------------|
| 5 kA | 1350 V | 1800 V / 1450 V |
| 10 kA | 1500 V | 1900 V / 1850 V |



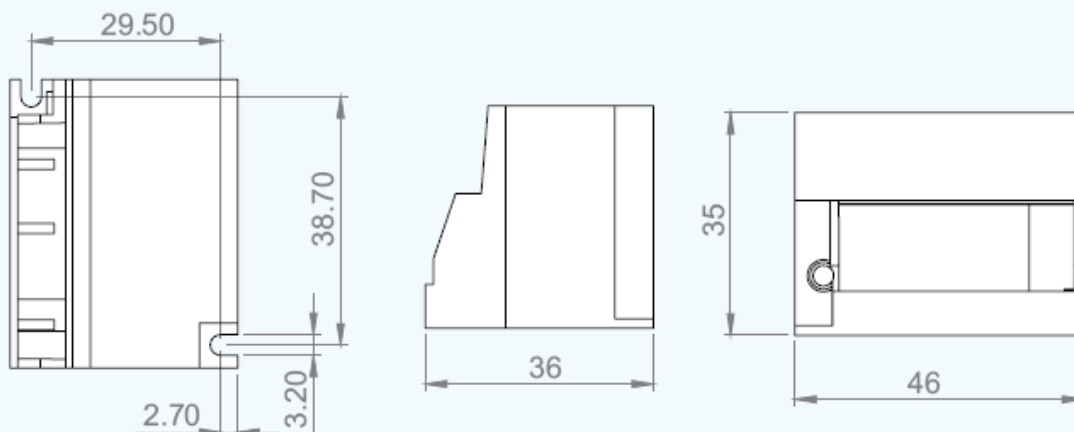
Environmental conditions

| Specification item | Value | Unit | Condition |
|---------------------------------|----------|------|----------------------|
| Ambient temperature | -40...70 | °C | |
| Tcase-max. | 80 | °C | Measured at Tc-point |
| Storage temperature | -40...85 | °C | |
| Relative humidity | 5...95 | % | Non-condensing |
| Suitable for outdoor luminaires | Yes | | Built-in only |

Lifetime

| Specification item | Value | Unit | Condition |
|--------------------|--------|-------|--|
| Lifetime | 50,000 | hours | Measured @ Tcase-max with min 90% survival |

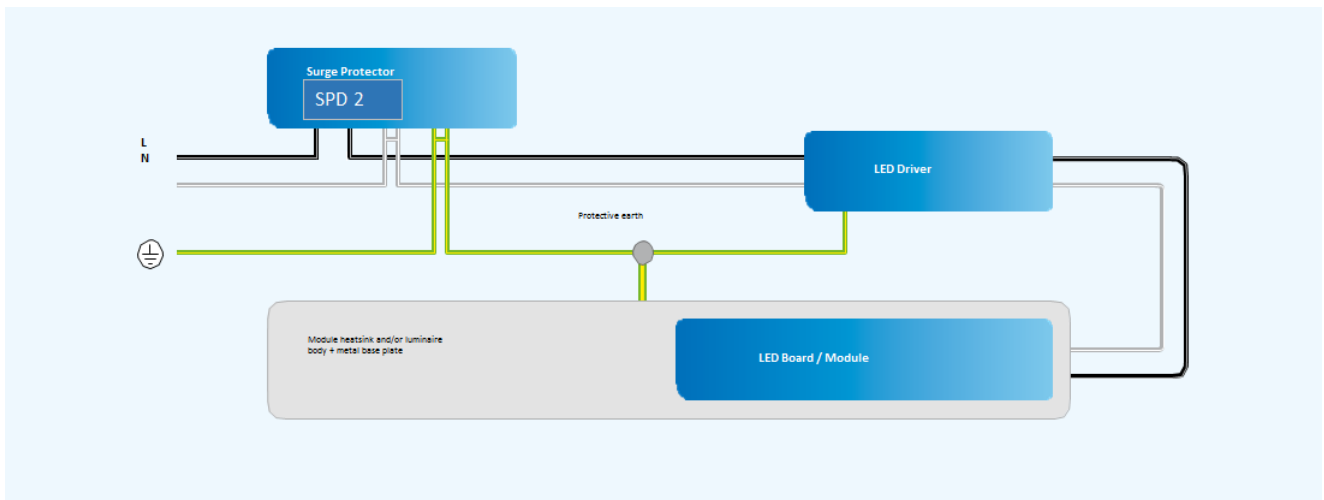
Product dimensions



| Specification item | Value | Unit |
|-------------------------|---------------|------|
| Mounting length & width | 29.50 , 38.70 | mm |
| Overall length | 36 | mm |
| Case Width | 46 | mm |
| Case Height | 35 | mm |
| Fixing hole diameter | M3 | |
| Weight | 35 | gms |

Wiring

| Specification item | Value | Unit | Condition |
|--------------------|----------------------|-----------------|----------------------------|
| Connector type | Screw type Connector | | Single / multi-strand wire |
| Wire diameter | 0.5...1.5 | mm ² | Solid and stranded |
| Wire strip length | 5...6 | mm | |



Wiring diagram of Series type surge Protector SPD 2

Electrical connections

| Signal | Description | Color |
|----------|--------------------|-------|
| LINE out | Line connection | Black |
| LINE in | Line connection | Black |
| NEUTRAL | Neutral connection | White |
| NEUTRAL | Neutral connection | White |
| GND | Ground connection | Green |
| GND | Ground connection | Green |



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