

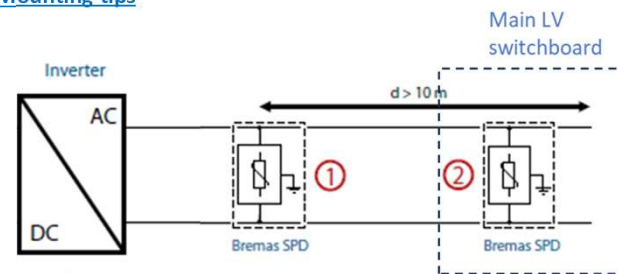
## SA40T121N032 – SA40T121N032R



|                                       |                               |                 |                 | SA40T121N032                   | SA40T121N032R |
|---------------------------------------|-------------------------------|-----------------|-----------------|--------------------------------|---------------|
| Standards                             |                               |                 |                 |                                |               |
| Applicable Standards                  |                               |                 |                 | IEC EN 61643-11                |               |
| Technical data                        |                               |                 |                 |                                |               |
| Nominal AC Voltage (50/60 Hz)         |                               | Un              | VAC             | 230                            |               |
| Maximum continuous operating voltage  | L-N                           | Uc              | VAC             | 320                            |               |
|                                       | N-PE                          | Uc              | VAC             | 255                            |               |
| Nominal discharge current (8/20 μs)   | L-N                           | In              | kA              | 20                             |               |
|                                       | N-PE                          | In              | kA              | 25                             |               |
| Maximum discharge current (8/20 μs)   | L-N                           | Imax            | kA              | 50                             |               |
|                                       | N-PE                          | Imax            | kA              | 50                             |               |
| Impulse discharge Current (10/350 μs) | L-N                           | Iimp            | kA              | 12,5                           |               |
|                                       | N-PE                          | Iimp            | kA              | 25                             |               |
| Specific energy                       | L-N                           | W/R             | kJ / Ω          | 36                             |               |
|                                       | N-PE                          | W/R             | kJ / Ω          | 156                            |               |
| Charge                                | L-N                           | Q               | As              | 6,25                           |               |
|                                       | N-PE                          | Q               | As              | 12,5                           |               |
| Voltage protection level              | L-N                           | Up              | kV              | 1,6                            |               |
|                                       | N-PE                          | Up              | kV              | 1,5                            |               |
| Follow current Interrupt Rating       | N-PE                          | Ifi             | Arms            | 100                            |               |
| Response time                         | L-N                           | tA              | ns              | < 25                           |               |
|                                       | N-PE                          | tA              | ns              | < 100                          |               |
| Back-up fuse (max)                    | gL / gG                       |                 | A               | 160                            |               |
| Short-circuit current rating          | L-N                           | Iscer           | kA              | 25 / 50                        |               |
| TOV withstand 5s                      | L-N                           | Ut              | V               | 335                            |               |
| TOV 120min                            | L-N                           | Ut              | V               | 440                            |               |
|                                       |                               | mode            |                 | Safe fail                      |               |
| TOV withstand 200ms                   | N-PE                          | Ut              | V               | 1200                           |               |
| Number of ports                       |                               | Nr              |                 | 1                              |               |
| Functional data                       |                               |                 |                 |                                |               |
| IEC/EN category                       | Type / Class                  |                 |                 | 1+2 / I+II                     |               |
| Protective elements                   |                               |                 |                 | High energy MOV and GDT        |               |
| Protection mode                       |                               |                 |                 | L-N / N-PE                     |               |
| Mechanical characteristics            |                               |                 |                 |                                |               |
| Terminal screw torque                 |                               | Mmax            | Nm              | 4,5                            |               |
| Conductor cross section (max)         |                               | Solid, Stranded | mm <sup>2</sup> | 35                             |               |
|                                       |                               |                 | AWG             | 2                              |               |
|                                       |                               | Flexible        | mm <sup>2</sup> | 25                             |               |
|                                       |                               |                 | AWG             | 4                              |               |
| Mounting                              |                               |                 |                 | 35 mm DIN rail, EN 60715       |               |
| Degree of protection                  |                               |                 |                 | IP20 (built-in)                |               |
| Housing material                      |                               |                 |                 | Thermoplastic                  |               |
|                                       |                               |                 |                 | Extinguishing Degree UL 94 V-0 |               |
| Thermal Protection                    |                               |                 |                 | Yes                            |               |
| Operating State / Fault Indication    |                               |                 |                 | Green ok / Red defect          |               |
| Remote Contact                        | Switching capacity            | AC              | V               | -                              | 250 / 125     |
|                                       |                               |                 | A               | -                              | 0,5 / 0,2     |
|                                       |                               | DC              | V               | -                              | 250 / 75      |
|                                       |                               |                 | A               | -                              | 0,1 / 0,5     |
|                                       | Conductor cross section (max) |                 | mm <sup>2</sup> | -                              | 1,5           |
|                                       |                               |                 | AWG             | -                              | 16            |
| Dimensions (W-D-H)                    |                               |                 | mm              | 36 x 81 x 90                   | 36 x 81 x 96  |
| Weight                                |                               |                 | g               | 25,25                          | 25,8          |
| Ambient conditions                    |                               |                 |                 |                                |               |
| Permissible operating humidity        |                               |                 | %HR             | 5 ÷ 95                         |               |
| Operating temperature                 |                               | Ta              | °C              | -40 ÷ +70                      |               |
| Atmospheric pressure and altitude     |                               |                 | k Pa            | 80 ÷ 106                       |               |
|                                       |                               |                 | m               | -500 / 2000                    |               |
| Installation                          |                               |                 |                 | Indoor                         |               |

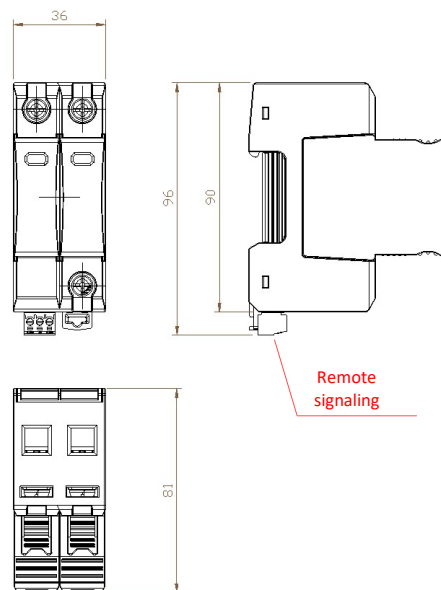


## Mounting tips



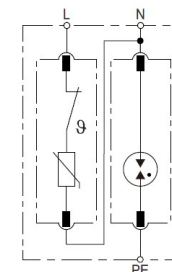
## Dimensions

Dimensions in mm

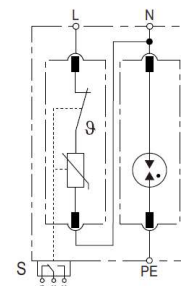


## Electrical circuit

SA40T121N032



SA40T121N032R



## Description

Surge Protective Device (SPD) for AC applications, engineered to protect low-voltage distribution boards against atmospheric surges. Certified as Type 1+2 / Class I+II according to IEC 61643-31 standards, it combines Metal Oxide Varistors (MOV) with Gas Discharge Tubes (GDT) to ensure superior surge discharge performance.

## Characteristics

- It allows replacement of plugs with the system powered on.
- Local indicator of the operating status conditions.
- Remote signaling of the operating conditions (optional).
- Internal switch to disconnect the SDP at the end of its lifetime.
- Fixing on DIN rail.

## Application

Ideal for protection against induced and conducted surges. Recommended for installation inside string boxes, combiner boxes, and inverter AC distribution panels for photovoltaic and general low-voltage applications.