

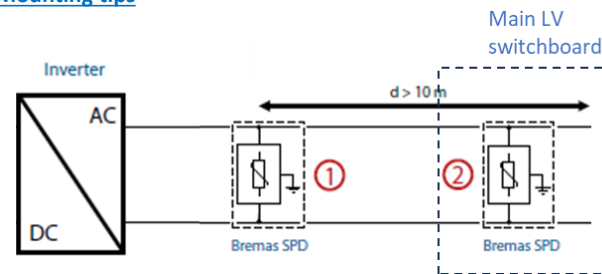
## SA40T123N032 – SA40T123N032R



|                                       |                               |                   |                  | SA40T123N032                                    | SA40T123N032R |
|---------------------------------------|-------------------------------|-------------------|------------------|-------------------------------------------------|---------------|
| Standards                             |                               |                   |                  |                                                 |               |
| Applicable Standards                  |                               |                   |                  | IEC EN 61643-11                                 |               |
| Technical data                        |                               |                   |                  |                                                 |               |
| Nominal AC Voltage (50/60 Hz)         |                               | U <sub>n</sub>    | V <sub>AC</sub>  | 230                                             |               |
| Maximum continuous operating voltage  | L-N                           | U <sub>c</sub>    | V <sub>AC</sub>  | 320                                             |               |
|                                       | N-PE                          | U <sub>c</sub>    | V <sub>AC</sub>  | 255                                             |               |
| Nominal discharge current (8/20 μs)   | L-N                           | I <sub>n</sub>    | kA               | 20                                              |               |
|                                       | N-PE                          | I <sub>n</sub>    | kA               | 25                                              |               |
| Maximum discharge current (8/20 μs)   | L-N                           | I <sub>max</sub>  | kA               | 50                                              |               |
|                                       | N-PE                          | I <sub>max</sub>  | kA               | 100                                             |               |
| Impulse discharge Current (10/350 μs) | L-N                           | I <sub>imp</sub>  | kA               | 12,5                                            |               |
|                                       | N-PE                          | I <sub>imp</sub>  | kA               | 50                                              |               |
| Specific energy                       | L-N                           | W/R               | kJ / Ω           | 39                                              |               |
|                                       | N-PE                          | W/R               | kJ / Ω           | 625                                             |               |
| Charge                                | L-N                           | Q                 | As               | 6,25                                            |               |
|                                       | N-PE                          | Q                 | As               | 25                                              |               |
| Voltage protection level              | L-N                           | U <sub>p</sub>    | kV               | 1,6                                             |               |
|                                       | N-PE                          | U <sub>p</sub>    | kV               | 1,5                                             |               |
| Follow current Interrupt Rating       | N-PE                          | I <sub>fi</sub>   | A <sub>rms</sub> | 100                                             |               |
| Response time                         | L-N                           | t <sub>A</sub>    | ns               | < 25                                            |               |
|                                       | N-PE                          | t <sub>A</sub>    | ns               | < 100                                           |               |
| Back-up fuse (max)                    | gL / gG                       |                   | A                | 160                                             |               |
| Short-circuit current rating          | L-N                           | I <sub>scrr</sub> | kA               | 25 / 50                                         |               |
| TOV withstand 5s                      | L-N                           | U <sub>t</sub>    | V                | 335                                             |               |
| TOV 120min                            | L-N                           | U <sub>t</sub>    | V                | 440                                             |               |
|                                       |                               | mode              |                  | Safe fail                                       |               |
| TOV withstand 200ms                   | N-PE                          | U <sub>t</sub>    | 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                 |                               | M <sub>max</sub>  | 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<br>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               | 72 x 81 x 90                                    | 72 x 81 x 96  |
| Weight                                |                               |                   | g                | 54                                              | 54.9          |
| Ambient conditions                    |                               |                   |                  |                                                 |               |
| Permissible operating humidity        |                               |                   | %HR              | 5 ÷ 95                                          |               |
| Operating temperature                 |                               | T <sub>a</sub>    | °C               | -40 ÷ +70                                       |               |
| Atmospheric pressure and altitude     |                               |                   | k Pa             | 80 ÷ 106                                        |               |
|                                       |                               |                   | m                | -500 / 2000                                     |               |
| Installation                          |                               |                   |                  | Indoor                                          |               |

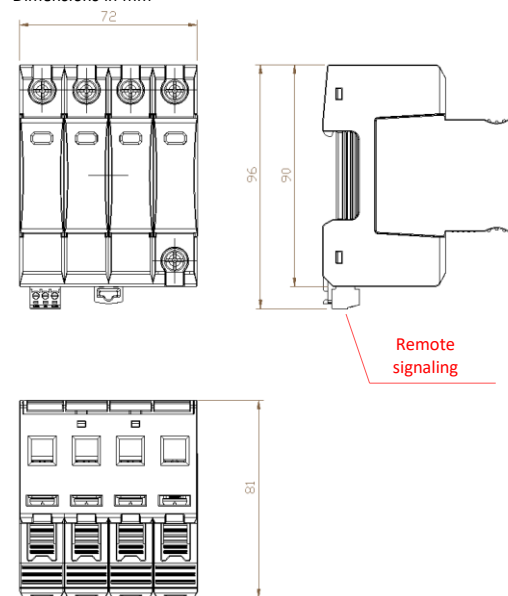


## Mounting tips

If  $d < 10$  m, the Bremas SPD ② is not necessary

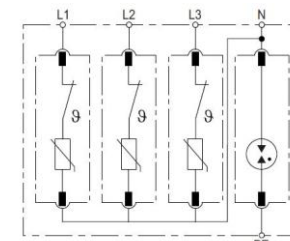
## Dimensions

Dimensions in mm

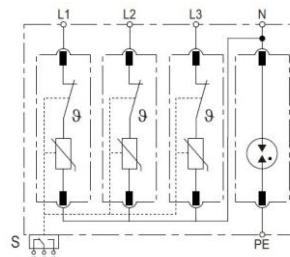


## Electrical circuit

SA40T123N032



SA40T123N032R



## Description

Surge Protective Device (SPD) for AC applications, engineered to protect low-voltage distribution boards against atmospheric surges. Certified as Type 2 / Class 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.