

## HLA50-440/2+0 S

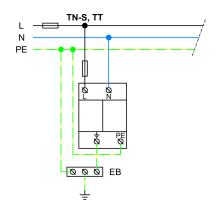
- Lightning impulse current arresters type T1 ensure the equipotential bonding and eliminate the effects of lightning current in single-phase and three-phase power supply systems.
- Products contain multiple non-exhausting spark gaps, thanks to which they are able to discharge the highest lightning impulse
- Suitable for objects with considerable levels of protection LPL I and LPL II, such as big industrial complexes and properties of particular importance – hospitals, banks, power plants.
- Installed as close as possible the overhead line enters the building i.e. the electric power substation, electrometer or the main distribution boards.
- If the product contains two PE (or PEN) terminals, it must not be used as a PE (PEN) bridge.
- LED indication specifies a version with LED fault signalisation.
- **S** indication specifies a version with remote monitoring and LED fault signalisation.

| Туре  |                    | HLA50-440/2+0 S                  |
|---|--------------------|----------------------------------|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011)  |                    | T1                               |
| System  |                    | TN-S                             |
| Number of poles   |                    | 2                                |
| Rated operating AC voltage  | $U_N$              | 400 V                            |
| Maximum continuous operating voltage AC   | $U_{c}$            | 440 V                            |
| Impulse discharge current for class I test (10/350)   | $I_{imp}$          | 50 kA                            |
| Charge  | Q                  | 25 As                            |
| Specific energy for class I test  | W/R                | 625 kJ/Ω                         |
| Total discharge current (10/350) L+N->PE  | I <sub>Total</sub> | 100 kA                           |
| Nominal discharge current for class II test (8/20)  | l <sub>n</sub>     | 50 kA                            |
| Voltage protection level at I <sub>imp</sub>  | $U_p$              | < 2.5 kV                         |
| Temporary overvoltage test (TOV) for $t_T = 5 s$  | $U_T$              | 581 V                            |
| Temporary overvoltage test (TOV) for $t_T = 120 \text{ min}$  | U <sub>T</sub>     | 762 V                            |
| Response time   | t <sub>A</sub>     | < 100 ns                         |
| Maximal back-up fuse  |                    | 500 A gL/gG                      |
| Short-circuit current rating at maximum back-up fuse  | $I_{SCCR}$         | 25 kA <sub>rms</sub>             |
| Follow current interrupt rating   | I <sub>fi</sub>    | 3 kA <sub>rms</sub>              |
| Lightning protection zone   |                    | LPZ0, LPZ1                       |
| Housing material  |                    | Polyamid PA6, UL94 V-0           |
| Degree of protection  |                    | IP20                             |
| Operating temperature   | Э                  | -40 ÷ 70 °C                      |
| Humidity range  | RH                 | 5 ÷ 95 %                         |
| Minimum cross-section of connected Cu conductors accord. to HD 60364-5-534:2016 (doesn't apply to "V" connection) for T1 $$ | S                  | 6 mm² (L, N)<br>16 mm² (PE, PEN) |
| Clamp fastening range (solid conductor)   |                    | 2.5 ÷ 25 mm <sup>2</sup>         |
| Clamp fastening range (stranded conductor)  |                    | 2.5 ÷ 16 mm <sup>2</sup>         |
| Tightening moment   |                    | 4 Nm                             |
| Installation  |                    | On DIN rail 35 mm                |



| Туре   |   | HLA50-440/2+0 S                             |
|--|---|---|
| Modular width  |   | 4 TE  |
| Operating position   |   | Any   |
| Product placement environment  |   | Internal                                    |
| Signalling at the device   |   | Optic                                       |
| Importance of local signaling  |   | OK – green light on<br>FAULT – red light on |
| Remote signalling  |   | Yes   |
| Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm <sup>2</sup> ) |   | AC: 250 V / 0.5 A, DC: 250 V / 0.1 A        |
| Modular design   |   | No  |
| Lifetime   |   | > 100 000 h                                 |
| Designed according to standards  |   |   |
| Requirements and test methods for SPDs connected to low-voltage power systems                              |   | IEC 61643-11:2011                           |
| Safety of Flammability of Plastic Materials  |   | UL 94                                       |
| Application standards  |   |   |
| Protection against lightning   |   | IEC 62305:2010                              |
| Selection and erection of electrical equipment – Devices for protection against transient overvoltages     |   | HD 60364-5-534:2016                         |
| Selection and application principles for SPDs connected to low-voltage power systems                       |   | CLC/TS 61643-12:2009                        |
| Ordering, packaging and additional data  |   |   |
| Mass   | m | 490 g                                       |
| Mass (including the packaging)   | m | 518 g                                       |
| Packaging dimensions (H x W x D)   |   | 74 x 112 x 73 mm                            |
| Packaging value  | V | 0.61 dm <sup>3</sup>                        |
| ETIM group   |   | EG000021                                    |
| ETIM class   |   | EC000381                                    |
| Customs tariff no.   |   | 85363010                                    |
| EAN code   |   | 8590681114742                               |
| Art. number  |   | 10 958                                      |

## Application wiring diagram (installation)



## Internal diagram

