

HLA50-440/3+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 | | HLA50-440/3+0 S |
|---|--------------------|--|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011) | | T1 |
| System | | TN-C |
| Number of poles | | 3 |
| 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) L1+L2+L3->PEN | I _{Total} | 150 kA |
| Nominal discharge current for class II test (8/20) | I _n | 50 kA |
| Voltage protection level at I _{imp} | U _p | < 2.5 kV |
| Temporary overvoltage test (TOV) for $t_T = 5 \text{ s}$ | U_T | 581 V |
| Temporary overvoltage test (TOV) for $t_T = 120 \text{ min}$ | U _T | 762 V |
| Response time | t _A | < 100 ns |
| Maximal back-up fuse | | 500 A gL/gG |
| Short-circuit current rating at maximum back-up fuse | I _{SCCR} | 3 kA _{rms} |
| Follow current interrupt rating | I _{fi} | 3 kA _{rms} |
| Lightning protection zone | | LPZ 0-1, LPZ 1-2 |
| Housing material | | Polyamid PA6, UL94 V-0 |
| Degree of protection | | IP20 |
| Operating temperature | 9 | -40 ÷ 70 °C |
| Humidity range | RH | 5 ÷ 95 % |
| Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022 (doesn't apply to $_{\rm n}$ V" connection) for T1 | S | 6 mm ² (L, N) 16 mm ² (PE, PEN) |
| Clamp fastening range (solid conductor) | | 2.5 ÷ 25 mm² |
| Clamp fastening range (stranded conductor) | | 2.5 ÷ 16 mm² |
| Tightening moment | | 4 Nm |
| Installation | | On DIN rail 35 mm |



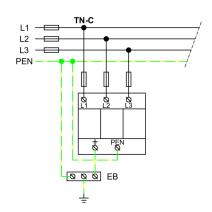
| Туре | | HLA50-440/3+0 S |
|---|---|---|
| Modular width | | 6 TE |
| Operating position | | Any |
| Product placement environment | | Internal |
| Signalling at the device | | Optic |
| Importance of local signaling | | OK – green light on FAULT – red light on |
| Remote signalling | | Yes |
| Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm²) | | 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 – Switchgear and controlgear | | HD 60364-5-53:2022 |
| Selection and application principles for SPDs connected to low-voltage power systems | | CLC/TS 61643-12:2009 |
| Ordering, packaging and additional data | | |
| Mass | m | 735 g |
| Mass (including the packaging) | m | 779 g |
| Packaging dimensions (H x W x D) | | 71 x 177 x 106 mm |
| Packaging value | V | 1.33 dm ³ |
| ETIM group | | EG000021 |
| ETIM class | | EC000381 |
| Customs tariff no. | | 85363010 |
| EAN code | | 8590681114759 |
| Art. number | | 10 959 |



The link in the QR code leads to the online presentation of the **HLA50-440/3+0 S**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit **www.hakel.com**



Application wiring diagram (installation)



Internal diagram

