

HLA50-440/2+0

- 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 current.
- 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.

| Type | | HLA50-440/2+0 |
|---|-------------|--|
| 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_{Total} | 100 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 $t_T = 5$ s | U_T | 581 V |
| Temporary overvoltage test (TOV) for $t_T = 120$ 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 | ϑ | -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 „V“ connection) for T1 | S | 6 mm ² (L, N) 16 mm ² (PE, PEN) |
| Clamp fastening range (solid conductor) | | 2.5 ÷ 25 mm ² |
| Clamp fastening range (stranded conductor) | | 2.5 ÷ 16 mm ² |
| Tightening moment | | 4 Nm |
| Installation | | On DIN rail 35 mm |

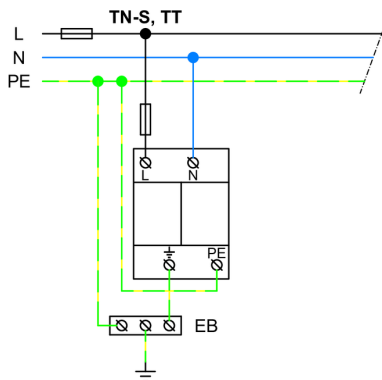
| Type | HLA50-440/2+0 | |
|--|----------------------|----------------------|
| Modular width | 4 TE | |
| Operating position | Any | |
| Product placement environment | Internal | |
| Signalling at the device | None | |
| Remote signalling | No | |
| Modular design | No | |
| Lifetime | > 100 000 h | |
| 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 | 460 g |
| Mass (including the packaging) | m | 488 g |
| Packaging dimensions (H x W x D) | 74 x 112 x 73 mm | |
| Packaging value | V | 0.61 dm ³ |
| ETIM group | EG000021 | |
| ETIM class | EC000381 | |
| Customs tariff no. | 85363010 | |
| EAN code | 8590681114681 | |
| Art. number | 10 952 | |



The link in the QR code leads to the online presentation of the **HLA50-440/2+0**. 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

