

HLSA12,5-275/2+1 S IT

- Lightning impulse current and surge arresters type T1+T2 ensure the equipotential bonding, eliminate the effects of lightning current and reduce switching, induced and residual overvoltage in single-phase and three-phase IT power supply systems.
- The products consist of varistors with big discharge ability in the combination with gas discharge tube they ensure zero leakage current in the PE conductor.
- Installed at the boundaries of zones LPZ 0 – LPZ 1 and higher, closest to where the overhead line enters the building i.e. in the main distribution boards.
- Suitable for objects with considerable levels of protection LPL III and LPL IV.
- **S** indication specifies a version with remote monitoring.

| Type | | HLSA12,5-275/2+1 S IT |
|---|-------------|--|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011) | | T1, T2 |
| System | | IT |
| Number of poles | | 3 |
| Nominal line voltage | U_N | 230 V |
| Maximum continuous operating voltage AC | U_C | 275 V |
| Maximum discharge current (8/20) L/PE | I_{max} | 50 kA |
| Impulse discharge current for class I test (10/350) L/CP | I_{imp} | 12.5 kA |
| Charge (L/CP) | Q | 6.25 As |
| Specific energy for class I test (L/CP) | W/R | 39 kJ/Ω |
| Impulse discharge current for class I test (10/350) CP/PE | I_{imp} | 50 kA |
| Charge (CP/PE) | Q | 25 As |
| Specific energy for class I test (CP/PE) | W/R | 625 kJ/Ω |
| Total discharge current (10/350) L1+L2+CP->PE | I_{Total} | 37.5 kA |
| Total discharge current (8/20) L1+L2+CP->PE | I_{Total} | 100 kA |
| Nominal discharge current for class II test (8/20) L/PE | I_n | 25 kA |
| Nominal discharge current for class II test (8/20) CP/PE | I_n | 50 kA |
| Voltage protection level at I_n | U_p | < 1.2 kV |
| Temporary overvoltage test (TOV) for $t_T = 5$ s (L/CP) | U_T | 337 V |
| Temporary overvoltage test (TOV) for $t_T = 0.2$ s (L/PE) | U_T | 1 455 V |
| Response time (L/CP) | t_A | < 25 ns |
| Response time (CP/PE) | t_A | < 100 ns |
| Maximal back-up fuse | | 160 A gL/gG |
| Short-circuit current rating at maximum back-up fuse | I_{SCCR} | 60 kA _{rms} |
| Lightning protection zone | | LPZ 0-1, LPZ 1-2, LPZ 2-3 |
| Housing material | | Polyamid PA6, UL94 V-0 |
| Degree of protection | | IP20 |
| Operating temperature | θ | -40 ÷ 70 °C |
| 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) |

| Type | | HLSA12,5-275/2+1 S IT |
|---|---|---|
| Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022 (doesn't apply to „V“ connection) for T2 | S | 2.5 mm ² (L, N) 6 mm ² (PE, PEN) |
| Clamp fastening range (solid conductor) | | 1.5 ÷ 25 mm ² |
| Clamp fastening range (stranded conductor) | | 1.5 ÷ 16 mm ² |
| Tightening moment | | 3 Nm |
| Installation | | On DIN rail 35 mm |
| Modular width | | 3 TE |
| Operating position | | Any |
| Signalling at the device | | Optic |
| Importance of local signalling | | OK – clear target FAULT – red target |
| Remote signalling | | Yes |
| Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm ²) | | AC: 250 V / 1.5 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 | 419 g |
| Mass (including the packaging) | m | 443 g |
| Packaging dimensions (H x W x D) | | 60 x 113 x 73 mm |
| Packaging value | V | 0.5 dm ³ |
| ETIM group | | EG000021 |
| ETIM class | | EC001457 |
| Customs tariff no. | | 85363010 |
| EAN code | | 8590681169858 |
| Art. number | | 27 575 |

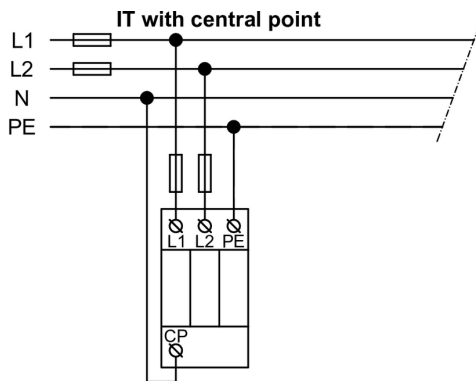
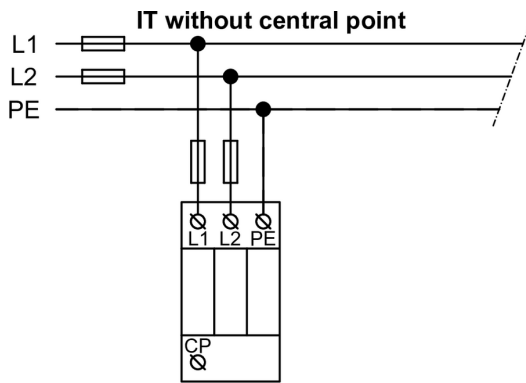


The link in the QR code leads to the online presentation of the **HLSA12,5-275/2+1 S IT**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit www.hakil.com



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Application wiring diagram (installation)



Internal diagram

