

HLSA25-275 S

- Lightning impulse current and surge arresters type T1+T2+T3.
- The products consist of varistors with big discharge ability.
- HLSA25 in configurations 1+1, 3+1 and HLSA25G are additionally combined with a gas discharge tube which ensures zero leakage current through the PE conductor.
- Suitable for objects with considerable levels of protection LPL I and LPL II.
- Installed at the boundaries of LPZ 0 – LPZ 1 and higher zones, closest to where overhead line enters the building i.e. in the main distribution boards.
- In case of the installation of a type T1+T2+T3 in the main switchboard, it is also necessary to install type T2 and T3 in any additional distribution boards in the electrical installation.
- If the product contains two PE (or PEN) terminals, it must not be used as a PE (PEN) bridge.
- **S** indication specifies a version with remote monitoring.

| Type  |            | HLSA25-275 S                 |
|---|------------|------------------------------|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011)  |            | T1, T2, T3                   |
| System  |            | TN                           |
| Number of poles   |            | 1                            |
| Rated operating AC voltage  | $U_N$      | 230 V                        |
| Maximum continuous operating voltage AC   | $U_C$      | 275 V                        |
| Rated load current for „V“ connection   | $I_L$      | 125 A                        |
| Maximum discharge current (8/20)  | $I_{max}$  | 50 kA                        |
| Impulse discharge current for class I test (10/350)   | $I_{imp}$  | 25 kA                        |
| Charge  | $Q$        | 12.5 As                      |
| Specific energy for class I test  | $W/R$      | 156 kJ/Ω                     |
| Nominal discharge current for class II test (8/20)  | $I_n$      | 25 kA                        |
| Open circuit voltage of the combination wave generator  | $U_{OC}$   | 6 kV                         |
| Voltage protection level at $I_n$   | $U_p$      | < 1.2 kV                     |
| Temporary overvoltage test (TOV) for $t_T = 5$ s  | $U_T$      | 337 V                        |
| Temporary overvoltage test (TOV) for $t_T = 120$ min  | $U_T$      | 440 V                        |
| Response time   | $t_A$      | < 25 ns                      |
| Maximal back-up fuse  |            | 250 A gL/gG                  |
| Maximal back-up fuse („V“ connection)   |            | 125 A gL/gG                  |
| Residual current  | $I_{PE}$   | ≤ 1 400 μA                   |
| Short-circuit current rating at maximum back-up fuse  | $I_{SCCR}$ | 80 kA <sub>rms</sub>         |
| 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                  |
| 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 <sup>2</sup> (L, N)     |
|   |            | 16 mm <sup>2</sup> (PE, PEN) |

| Type  |   | HLSA25-275 S  |
|---|---|---|
| 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 <sup>2</sup> (L, N)<br>6 mm <sup>2</sup> (PE, PEN) |
| Clamp fastening range (solid conductor)   |   | 2.5 ÷ 35 mm <sup>2</sup>                                  |
| Clamp fastening range (stranded conductor)  |   | 2.5 ÷ 25 mm <sup>2</sup>                                  |
| Tightening moment   |   | 3 Nm  |
| Installation  |   | On DIN rail 35 mm   |
| Modular width   |   | 2 TE  |
| Operating position  |   | Any   |
| Product placement environment   |   | Internal  |
| Signalling at the device  |   | Optic   |
| Importance of local signaling   |   | OK – clear target<br>FAULT – red target                   |
| Remote signalling   |   | Yes   |
| Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm <sup>2</sup> )              |   | AC: 250 V / 1.5 A, DC: 250 V / 0.1 A                      |
| Pluggable version   |   | No  |
| Lifetime  |   | > 100 000 h   |
| <b>Designed according to standards</b>  |   |   |
| Requirements and test methods for SPDs connected to low-voltage power systems   |   | IEC 61643-11:2011   |
| Safety of Flammability of Plastic Materials   |   | UL 94   |
| <b>Application standards</b>  |   |   |
| 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                                      |
| <b>Ordering, packaging and additional data</b>  |   |   |
| Mass  | m | 283 g   |
| Mass (including the packaging)  | m | 297 g   |
| Packaging dimensions (H x W x D)  |   | 45 x 102 x 74 mm  |
| Packaging value   | V | 0.34 dm <sup>3</sup>                                      |
| ETIM group  |   | EG000021  |
| ETIM class  |   | EC001457  |
| Customs tariff no.  |   | 85363010  |
| EAN code  |   | 8590681114216   |
| <b>Art. number</b>  |   | <b>10 456</b>   |

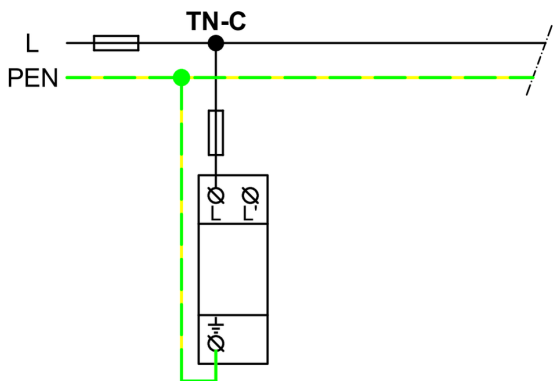


The link in the QR code leads to the online presentation of the **HLSA25-275 S**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit [www.hakil.com](http://www.hakil.com)



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Application wiring diagram (installation)



Internal diagram

