

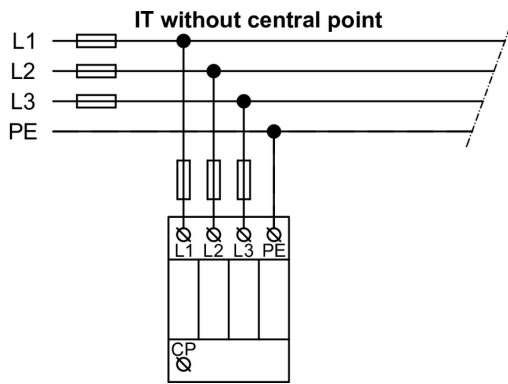
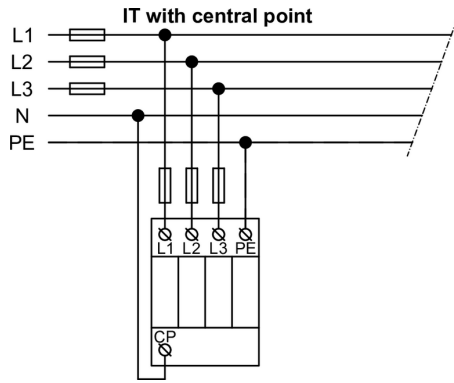
## HSA-275/3+1 IT

- Surge arresters type T2 ensure the equipotential bonding 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 with gas discharge tube, which ensures zero leakage current in the PE conductor.
- Installed at the boundaries of zones LPZ1 – LPZ2 into subsidiary switchboards and control panels.
- **S** indication specifies a version with remote monitoring.

| Type   |             | HSA-275/3+1 IT  |
|--|-------------|---|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011)   |             | T2  |
| System   |             | IT  |
| Number of poles  |             | 4   |
| Nominal line voltage   | $U_N$       | 230 V   |
| Maximum continuous operating voltage AC  | $U_C$       | 275 V   |
| Maximum discharge current (8/20) L/CP  | $I_{max}$   | 50 kA   |
| Nominal discharge current for class II test (8/20) L/CP  | $I_n$       | 20 kA   |
| Open circuit voltage of the combination wave generator   | $U_{OC}$    | 6 kV  |
| Total discharge current (8/20) L1+L2+L3+CP->PE   | $I_{Total}$ | 50 kA   |
| Voltage protection level at $I_n$ (CP/PE)  | $U_p$       | < 1.5 kV  |
| Voltage protection level at $I_n$ (L/CP)   | $U_p$       | < 1.2 kV  |
| Voltage protection level at $U_{OC}$ (L/CP)  | $U_p$       | < 0.8 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 <sub>rms</sub>                                      |
| Lightning protection zone  |             | LPZ1, LPZ2  |
| Housing material   |             | Polyamid PA6, UL94 V-0                                    |
| Degree of protection   |             | IP20  |
| Operating temperature  | $\theta$    | -40 ÷ 70 °C   |
| Minimum cross-section of connected Cu conductors accord. to HD 60364-5-534:2016 (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)  |             | 1.5 ÷ 25 mm <sup>2</sup>                                  |
| Clamp fastening range (stranded conductor)   |             | 1.5 ÷ 16 mm <sup>2</sup>                                  |
| Tightening moment  |             | 3 Nm  |
| Installation   |             | On DIN rail 35 mm   |
| Modular width  |             | 4 TE  |
| Operating position   |             | Any   |

| Type   |   | HSA-275/3+1 IT                          |
|--|---|---|
| Signalling at the device   |   | Optic                                   |
| Importance of local signaling  |   | OK – clear target<br>FAULT – red target |
| Remote signalling  |   | No                                      |
| Modular design   |   | 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 – 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                    |
| <b>Ordering, packaging and additional data</b>   |   |   |
| Mass   | m | 380 g                                   |
| Mass (including the packaging)   | m | 408 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   |   | EC000941                                |
| Customs tariff no.   |   | 85363010                                |
| EAN code   |   | 8590681169285                           |
| <b>Art. number</b>   |   | <b>27 604</b>                           |

## Application wiring diagram (installation)



## Internal diagram

