





HSAF125 S

- Two-port surge arresters type T3 with high-frequency filters for serial connection.
- Intended for protection of electronic appliances against the effects of switching, induced and residual overvoltage in LV power supply systems.
- Contains an improved thermal fuse, which ensures timely disconnection of HSAF* S a HSAF3*S from the power grid during the MOV's overheating and thus prevents damage to the HSAF* S a HSAF3*S.
- Installed at the boundaries of LPZ 2 LPZ 3, as close to the device to be protected as possible (no further than 5 m).
- In front of HSAF* S a HSAF3*S must be installed a lightning current and surge arrester T1 and T2 from HAKEL company.
- Mounted on the main board of a switchboard using four screws.
- **S** indication specifies a version with remote monitoring.

| Туре | | HSAF125 S |
|--|--------------------|--------------------------|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011) | | Т3 |
| System | | TN-C-S, TN-S |
| Number of poles | | 2 |
| Rated operating AC voltage | U _N | 230 V |
| Maximum continuous operating voltage AC | U _c | 275 V |
| Rated load current | Ι _L | 125 A |
| Open circuit voltage of the combination wave generator (L/N, L/PE) | U _{oc} | 6 kV |
| Open circuit voltage of the combination wave generator (N/PE) | U_{oc} | 10 kV |
| Voltage protection level at U _{OC} (L/N) | U_p | < 0.85 kV |
| Voltage protection level at U _{OC} (L/PE) | U_p | < 1.5 kV |
| Voltage protection level at U _{OC} (N/PE) | U_p | < 1.2 kV |
| Nominal discharge current for class II test (8/20) L/N, L/PE | I _n | 3 kA |
| Nominal discharge current for class II test (8/20) N/PE | I _n | 5 kA |
| Total discharge current (8/20) L+N->PE | I _{Total} | 6 kA |
| Asymmetrical attenuation of filter at f = 4 MHz | | > 80 dB |
| Asymmetrical attenuation of filter at $f = 0.15 \div 30 \text{ MHz}$ | | > 40 dB |
| Temporary overvoltage test value (TOV) for $t_T = 5 \text{ s (L/N)}$ | U _T | 337 V |
| Temporary overvoltage test value (TOV) for $t_T = 0.2 s$ (N/PE) | U _T | 1 200 V |
| Response time (L/N) | t _A | < 25 ns |
| Response time (L/PE, N/PE) | t _A | < 100 ns |
| Power dissipation at 20 °C | Pz | < 20 W |
| Maximal back-up fuse | | 125 A gL/gG |
| Lightning protection zone | | LPZ2, LPZ3 |
| Housing material | | Steel plate 1 mm |
| Degree of protection | | IP20 |
| Operating temperature | Э | -40 ÷ 55 °C |
| Recommended cross-section of connected conductors | S | 35 mm ² |
| Clamp fastening range (solid conductor) | | 1.5 ÷ 50 mm ² |
| | | |

Surge arresters T3 with EMI/RFI filters for AC systems



| Туре | | HSAF125 S |
|---|---|--|
| Clamp fastening range (stranded conductor) | | $1.5 \div 35 \text{ mm}^2$ |
| Tightening moment | | 10 Nm |
| Installation | | Using the M4 screws on the chassis |
| Operating position | | Any |
| Signalling at the device | | Optic |
| Importance of local signaling | | OK – red light off FAULT – red light on |
| Remote signalling | | Yes |
| Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 $\mbox{mm}^2)$ | | AC: 250 V / 1,5 A, DC: 250 V / 0,1 A |
| Includes EMI / EMC filter | | Yes |
| 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 |
| Methods of measurement of the suppression characteristics of passive EMC filtering devices | | EN 55017:2011 / CISPR 17:2011 |
| Application standards | | |
| 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 | | IEC 61643-12:2008 |
| Ordering, packaging and additional data | | |
| Mass | m | 1.78 kg |
| Mass (including the packaging) | m | 1.862 kg |
| Packaging dimensions (H x W x D) | | 260 x 87 x 154 mm |
| Packaging value | V | 3.48 dm ³ |
| ETIM group | | EG000021 |
| ETIM class | | EC000942 |
| Customs tariff no. | | 85363030 |
| EAN code | | 8590681116951 |

Art. number

30 176



Internal diagram

Application wiring diagram (installation)



