

HSAF32

- Two-stage 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 generated in LV power supply systems.
- Contain an improved thermal fuse, which ensures timely disconnection of HSAF* S from the power grid during the MOV's overheating and thus prevents damage to the HSAF* 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 must be installed a lightning current and surge arrester T1 and T2 from HAKEL company.
- **S** indication specifies a version with remote monitoring.

| Туре | | HSAF32 |
|--|--------------------|------------------------|
| 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 | IL | 32 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 | < 0.8 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 | In | 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 $f = 0.15 \div 30 \text{ MHz}$ | | > 35 dB |
| Temporary overvoltage test (TOV) for $t_T = 5 \text{ s (L/N)}$ | U _T | 337 V |
| Temporary overvoltage test (TOV) for $t_T = 120 \text{ min (L/N)}$ | U_T | 440 V |
| Temporary overvoltage test (TOV) for $t_T = 0.2 \text{ s}$ (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 | Pz | < 4 W |
| Maximal back-up fuse | | 32 A gL/gG |
| Residual current | I _{PE} | ≤ 1 800 µA |
| Short-circuit current rating at maximum back-up fuse | I _{SCCR} | 6 kA _{rms} |
| Lightning protection zone | | LPZ 2-3 |
| Housing material | | Polyamid PA6, UL94 V-0 |
| Degree of protection | | IP20 |
| | | |

Surge arresters T3 with EMI/RFI filter for AC systems



| Operating temperature 9 .40 + 55 ° C Humidity range RH 5 + 95 % Recommended cross-section of connected conductors S 6 mm² Clamp fastening range (solid conductor) 2.5 ÷ 16 mm² Clamp fastening range (stranded conductor) 2.5 ÷ 10 mm² Clamp fastening range (stranded conductor) 2.5 ÷ 10 mm² Clamp fastening range (stranded conductor) 0.0 mm² Installation On DIN rail 35 mm Modular width 4 TE Operating position Any Product placement environment Internal Signalling at the device Optic Importance of local signalling No Remote signalling No Includes EMI / EMC filter Yes Modular design No Includes EMI / EMC filter Yes Melous of standards Requirements and test methods for SPDs connected to low-voltage power systems IEC 61643-11:2011 Melnods of measurement of the suppression characteristics of passive EMC filtering devices BIEC 61643-11:2011 Safety of Flammability of Plastic Materials UL 94 <td colsp<="" th=""><th>Туре</th><th></th><th>HSAF32</th></td> | <th>Туре</th> <th></th> <th>HSAF32</th> | Туре | | HSAF32 |
|--|--|------|-------------------------------|--------|
| Recommended cross-section of connected conductors S 6 mm² | Operating temperature | 9 | -40 ÷ 55 °C | |
| Clamp fastening range (solid conductor) 2.5 ÷ 16 mm² Clamp fastening range (stranded conductor) 2.5 ÷ 10 mm² Tightening moment 1,2 Nm Installation On DIN rail 35 mm Modular width 4 TE Operating position Any Product placement environment Internal Signalling at the device Optic Importance of local signaling OK – red light off Remote signalling No Includes EMI / EMC filter Yes Modular design No Lifetime > 100 000 h Designed according to standards Equirements 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 Safety of Flammability of Plastic Materials UL 94 Application standards UL 94 Protection against lightning IEC 62305:2010 Selection and erection of electrical equipment – Switchgear and controlgear HD 60364-5-53:2022 Selection and erection of electrical equipment and application principles for SPDs connected to low-voltage power syst | Humidity range | RH | 5 ÷ 95 % | |
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| | Customs tariff no. | | 85363030 | |
| Art. number 30 198 | EAN code | | 8590681167274 | |
| | Art. number | | 30 198 | |

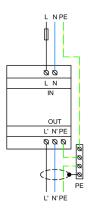


The link in the QR code leads to the online presentation of the **HSAF32**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit **www.hakel.com**





Application wiring diagram (installation)



Internal diagram

