

HSAF3/40 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 and HSAF3*S from the power grid during the MOV's overheating and thus prevents damage to the HSAF* S and 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 and 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.

| Type | | HSAF3/40 S |
|--|-------------|------------------|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011) | | T3 |
| System | | TN-C-S, TN-S |
| Number of poles | | 4 |
| Rated operating AC voltage | U_N | 230 V |
| Maximum continuous operating voltage AC | U_C | 275 V |
| Rated load current | I_L | 40 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) L1+L2+L3+N->PE | I_{Total} | 12 kA |
| Asymmetrical attenuation of filter at $f = 4$ MHz | | > 80 dB |
| Asymmetrical attenuation of filter at $f = 0.15 \div 30$ MHz | | > 35 dB |
| Temporary overvoltage test (TOV) for $t_T = 5$ s (L/N) | U_T | 337 V |
| Temporary overvoltage test (TOV) for $t_T = 120$ min (L/N) | U_T | 440 V |
| Temporary overvoltage test (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 | Pz | < 8 W |
| Maximal back-up fuse | | 40 A gL/gG |
| Residual current | I_{PE} | $\leq 5 \mu A$ |
| Lightning protection zone | | LPZ 2-3 |
| Housing material | | Steel plate 1 mm |
| Degree of protection | | IP20 |
| Operating temperature | θ | $-40 \div 55$ °C |

| Type | | HSAF3/40 S |
|--|----|--|
| Humidity range | RH | 5 ÷ 95 % |
| Recommended cross-section of connected conductors | S | 10 mm ² |
| Clamp fastening range (solid conductor) | | 2.5 ÷ 35 mm ² |
| Clamp fastening range (stranded conductor) | | 2.5 ÷ 25 mm ² |
| Tightening moment | | 3 Nm |
| Installation | | Using the M4 screws on the chassis |
| Operating position | | Any |
| Product placement environment | | Internal |
| 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 mm ²) | | AC: 250 V / 1.5 A, DC: 250 V / 0.1 A |
| Includes EMI / EMC filter | | Yes |
| Pluggable version | | 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 – 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 | 1.7 kg |
| Mass (including the packaging) | m | 1.837 kg |
| Packaging dimensions (H x W x D) | | 110 x 330 x 220 mm |
| Packaging value | V | 7.99 dm ³ |
| ETIM group | | EG000021 |
| ETIM class | | EC000942 |
| Customs tariff no. | | 85363030 |
| EAN code | | 8590681116975 |
| Art. number | | 30 190 |



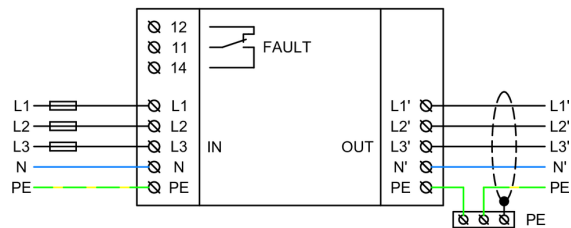
The link in the QR code leads to the online presentation of the HSAF3/40 S.

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



8590681116975

Application wiring diagram (installation)



Internal diagram

