



- HSA-720
- Surge arresters type T2+T3 ensure the equipotential bonding and reduce switching, induced and residual overvoltage in LV power supply systems.
- The products consist of varistors with big discharge ability.
- Configurations 1+1 and 3+1 are additionally combined with a gas discharge tube which ensures zero leakage current through the PE conductor.
- Installed at the boundaries of LPZ 1 LPZ 3 into subsidiary switchboards and control panels.
- 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.

| Туре | | HSA-720 |
|---|-------------------|---|
| Test class according to EN 61643-11:2012 (IEC 61643-11:2011) | | T2, T3 |
| System | | TN |
| Number of poles | | 1 |
| Rated operating AC voltage | U _N | 600 V |
| Maximum continuous operating voltage AC | U _c | 720 V |
| Maximum discharge current (8/20) | I _{max} | 40 kA |
| Nominal discharge current for class II test (8/20) | l _n | 15 kA |
| Open circuit voltage of the combination wave generator | U _{oc} | 6 kV |
| Voltage protection level at In | Up | < 2.6 kV |
| Voltage protection level at U _{oc} | Up | < 2 kV |
| Temporary overvoltage test (TOV) for $t_T = 5 s$ | U _T | 875 V |
| Temporary overvoltage test (TOV) for $t_T = 120$ min | UT | 1 143 V |
| Response time | t _A | < 25 ns |
| Maximal back-up fuse | | 160 A gL/gG |
| Residual current | I _{PE} | ≤ 600 μA |
| Short-circuit current rating at maximum back-up fuse | I _{SCCR} | 60 kA _{rms} |
| Lightning protection zone | | 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 T2 | S | 2.5 mm ² (L, N) 6 mm ² (PE, PEN) |
| Clamp fastening range (solid conductor) | | $1.5 \div 25 \text{ mm}^2$ |
| Clamp fastening range (stranded conductor) | | $1.5 \div 16 \text{ mm}^2$ |
| Tightening moment | | 3 Nm |
| Installation | | On DIN rail 35 mm |
| Modular width | | 1 TE |
| Operating position | | Any |
| | | |



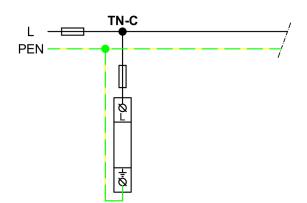
| Туре | | HSA-720 |
|--|---|---|
| Product placement environment | | Internal |
| Signalling at the device | | Optic |
| Importance of local signaling | | OK – clear target FAULT – red target |
| Remote signalling | | No |
| Modular design | | No |
| Lifetime | | > 100 000 h |
| Designed according to standards | | |
| Requirements and test methods for SPDs connected to low-voltage power systems | | IEC 61643-11:2011 |
| Safety of Flammability of Plastic Materials | | UL 94 |
| 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 | 111 g |
| Mass (including the packaging) | m | 122 g |
| Packaging dimensions (H x W x D) | | 26 x 98 x 73 mm |
| Packaging value | V | 0.19 dm ³ |
| ETIM group | | EG000021 |
| ETIM class | | EC000941 |
| Customs tariff no. | | 85363010 |
| EAN code | | 8590681115725 |
| Art. number | | 24 601 |



The link in the QR code leads to the online presentation of the **HSA-720**. 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

