

HSAA-2 NPE LED S

- Surge arresters type T3 specially adapted for the protection of LED lights.
- Intended for mounting directly to the lights.
- Installed at the boundaries of LPZ 2 LPZ 3, as close as possible to the protected device (no further than 5 m).
- A lightning and surge arrester T1 and T2 from HAKEL company must be installed in front of the HSAA-2 NPE LED S.
- **S** indication specifies a version with remote monitoring.

Туре		HSAA-2 NPE LED S
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		Т3
Number of poles		2
Rated operating AC voltage	U_N	230 V
Maximum continuous operating voltage AC	U _c	320 V
Rated load current	IL	10 A
Open circuit voltage of the combination wave generator	U_oc	6 kV
Voltage protection level at U _{oc} (L/N)	U_p	< 1.3 kV
Voltage protection level at U _{oc} (L/PE, N/PE)	U_p	< 1.5 kV
Nominal discharge current for class II test (8/20)	In	3 kA
Maximum discharge current (8/20)	I _{max}	8 kA
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⊤	1 200 V
Response time (L/N)	t _A	< 25 ns
Response time (L/PE, N/PE)	t _A	< 100 ns
Maximal back-up fuse		10 A gL/gG
Residual current	I _{PE}	≤ 5 μA
Lightning protection zone		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 %
Recommended cross-section of connected conductors	S	1.5 mm ²
Installation		Built-in installation, In the installation box, Wiring cable duct
Product placement environment		Internal
Signalling at the device		None
Remote signalling		Yes
mportance of remote signalling		Potential opening contact (voltage loss)
includes EMI / EMC filter		No
Modular design		No

Surge arresters T3 for LED lights



Туре		HSAA-2 NPE LED S
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	28 g
Mass (including the packaging)	m	39 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		EC000942
Customs tariff no.		85363010
EAN code		8590681186596
Art. number		32 010



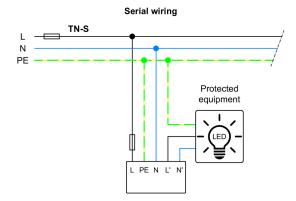
The link in the QR code leads to the online presentation of the **HSAA-2 NPE LED S**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit **www.hakel.com**





Application wiring diagram (installation)

Parallel wiring Protected equipment TN-S Remote monitoring



Internal diagram

