

THE LENGTH OF CONDUCTORS 200 mm
DÉLKA VODIČŮ 200 mm

HSA A-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 HSA A-2 NPE LED S.
- **S** indication specifies a version with remote monitoring.

Type		HSA A-2 NPE LED S
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		T3
Number of poles		2
Rated operating AC voltage	U_N	230 V
Maximum continuous operating voltage AC	U_C	320 V
Rated load current	I_L	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)	I_n	3 kA
Maximum discharge current (8/20)	I_{max}	8 kA
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
Maximal back-up fuse		10 A gL/gG
Residual current	I_{PE}	$\leq 5 \mu A$
Lightning protection zone		LPZ 2-3
Housing material		Polyamid PA6, UL94 V-0
Degree of protection		IP20
Operating temperature	θ	$-40 \div 70$ °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
Importance of remote signalling		Potential opening contact (voltage loss)
Includes EMI / EMC filter		No
Modular design		No

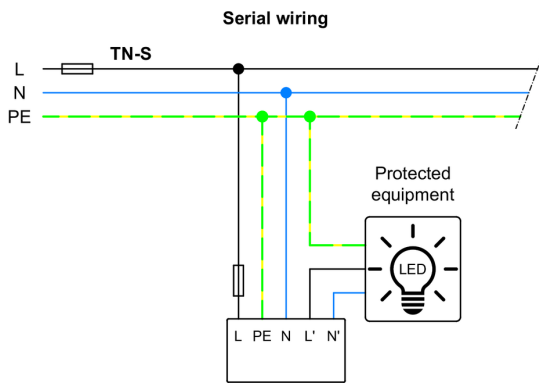
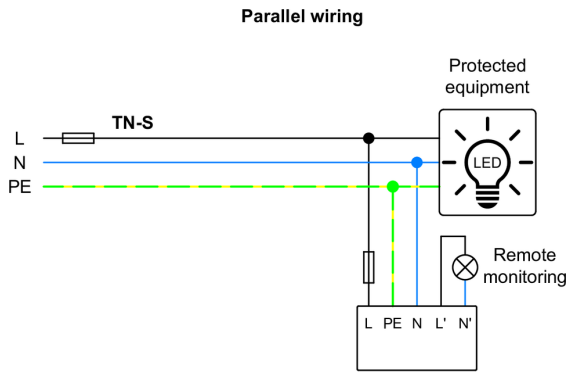
Type		HSAA-2 NPE LED S
Lifetime		> 100 000 h
Designed according to standards		
Requirements and test methods for SPDs connected to low-voltage power systems		IEC 61643-11:2011
Safety of Flammability of Plastic Materials		UL 94
Application standards		
Protection against lightning		IEC 62305:2010
Selection 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)



Internal diagram

