

## HLSA7-720/4+0

- Lightning impulse current and surge arresters type T1+T2 ensure the equipotential bonding, eliminate the effects of lightning current and reduce switching, induced and residual overvoltage in single-phase and three-phase power supply systems.
- Suitable for objects and halls without the incidence of persons and indoor equipment.
- Installed at the boundaries of LPZ 0 – LPZ 1 and higher zones, closest to where overhead line enters the building i.e. in the main distribution boards.
- 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.
- 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.

Type	HLSA7-720/4+0	
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)	T1, T2	
System	TN-S	
Number of poles	4	
Rated operating AC voltage	$U_N$	600 V
Maximum continuous operating voltage AC	$U_C$	720 V
Maximum discharge current (8/20)	$I_{max}$	50 kA
Impulse discharge current for class I test (10/350)	$I_{imp}$	7 kA
Charge	$Q$	3.5 As
Specific energy for class I test	W/R	12.25 kJ/Ω
Total discharge current (10/350) L1+L2+L3+N->PE	$I_{Total}$	28 kA
Total discharge current (8/20) L1+L2+L3+N->PE	$I_{Total}$	200 kA
Nominal discharge current for class II test (8/20)	$I_n$	25 kA
Open circuit voltage of the combination wave generator	$U_{OC}$	6 kV
Voltage protection level at $I_n$	$U_p$	< 2.6 kV
Temporary overvoltage test (TOV) for $t_T = 5$ s	$U_T$	875 V
Response time	$t_A$	< 25 ns
Maximal back-up fuse	160 A gL/gG	
Short-circuit current rating at maximum back-up fuse	$I_{SCCR}$	60 kA <sub>rms</sub>
Lightning protection zone	LPZ 0-1, LPZ 1-2, LPZ 2-3	
Housing material	Polyamid PA6, UL94 V-0	
Degree of protection	IP20	
Operating temperature	$\theta$	-40 ÷ 70 °C
Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022 (doesn't apply to „V“ connection) for T1	S	6 mm <sup>2</sup> (L, N) 16 mm <sup>2</sup> (PE, PEN)
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 <sup>2</sup> (L, N) 6 mm <sup>2</sup> (PE, PEN)
Clamp fastening range (solid conductor)	1.5 ÷ 25 mm <sup>2</sup>	
Clamp fastening range (stranded conductor)	1.5 ÷ 16 mm <sup>2</sup>	

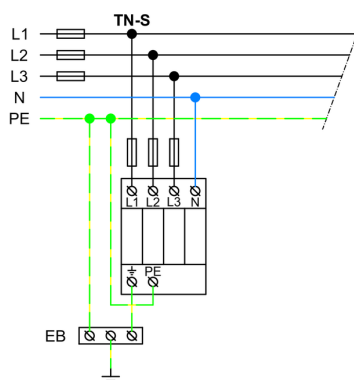
Type	HLSA7-720/4+0	
Tightening moment	3 Nm	
Installation	On DIN rail 35 mm	
Modular width	12 TE	
Operating position	Any	
Signalling at the device	Optic	
Importance of local signalling	OK – clear target FAULT – red target	
Remote signalling	No	
Modular design	No	
Lifetime	> 100 000 h	
<b>Designed according to standards</b>		
Requirements and test methods for SPDs connected to low-voltage power systems	IEC 61643-11:2011	
Safety of Flammability of Plastic Materials	UL 94	
<b>Application standards</b>		
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	
<b>Ordering, packaging and additional data</b>		
Mass	m	1.336 kg
Mass (including the packaging)	m	1.385 kg
Packaging dimensions (H x W x D)	70 x 228 x 95 mm	
Packaging value	V	1.52 dm <sup>3</sup>
ETIM group	EG000021	
ETIM class	EC001457	
Customs tariff no.	85363010	
EAN code	8590681169513	
<b>Art. number</b>	<b>10 605</b>	



The link in the QR code leads to the online presentation of the **HLSA7-720/4+0**. 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](http://www.hakel.com)



**Application wiring diagram (installation)**



**Internal diagram**

