

## HLSA25G-255/4+0

- Lightning impulse current and surge arresters type T1+T2+T3.
- The products consist of varistors with big discharge ability.
- HLSA25 in configurations 1+1, 3+1 and HLSA25G are additionally combined with a gas discharge tube which ensures zero leakage current through the PE conductor.
- Suitable for objects with considerable levels of protection LPL I and LPL II.
- 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.
- In case of the installation of a type T1+T2+T3 in the main switchboard, it is also necessary to install type 2 and 3 in any additional distribution boards in the electrical installation.
- 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		HLSA25G-255/4+0
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		T1, T2, T3
System		TN-S, TT
Number of poles		4
Rated operating AC voltage	$U_N$	230 V
Maximum continuous operating voltage AC	U <sub>c</sub>	255 V
Rated load current for "V" connection	IL	125 A
Maximum discharge current (8/20)	I <sub>max</sub>	50 kA
Impulse discharge current for class I test (10/350)	I <sub>imp</sub>	25 kA
Charge	Q	12.5 As
Specific energy for class I test	W/R	156 kJ/Ω
Total discharge current (10/350) L1+L2+L3+N->PE	I <sub>Total</sub>	100 kA
Total discharge current (8/20) L1+L2+L3+N->PE	I <sub>Total</sub>	200 kA
Nominal discharge current for class II test (8/20)	I <sub>n</sub>	25 kA
Open circuit voltage of the combination wave generator	U <sub>oc</sub>	6 kV
Voltage protection level at I <sub>n</sub>	Up	< 1.25 kV
Temporary overvoltage test (TOV) for $t_T = 5 \text{ s}$	U <sub>T</sub>	337 V
Temporary overvoltage test (TOV) for $t_T = 120 \text{ min}$	U <sub>T</sub>	440 V
Response time	t <sub>A</sub>	< 100 ns
Maximal back-up fuse		250 A gL/gG
Maximal back-up fuse ("V" connection)		125 A gL/gG
Residual current	I <sub>PE</sub>	≤ 5 μA
Short-circuit current rating at maximum back-up fuse	I <sub>SCCR</sub>	80 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	θ	-40 ÷ 70 ° C
Humidity range	RH	5 ÷ 95 %

## **Lightning and surge arresters T1+T2+T3**



Туре		HLSA25G-255/4+0
Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022	S	6 mm² (L, N)
(doesn't apply to "V" connection) for T1	J	16 mm² (PE, PEN)
Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022	S	2.5 mm² (L, N)
(doesn't apply to "V" connection) for T2		6 mm² (PE, PEN)
Clamp fastening range (solid conductor)		$2.5 \div 35 \text{ mm}^2$
Clamp fastening range (stranded conductor)		2.5 ÷ 25 mm <sup>2</sup>
Tightening moment		3 Nm
Installation		On DIN rail 35 mm
Modular width		8 TE
Operating position		Any
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	1.014 kg
Mass (including the packaging)	m	1.058 kg
Packaging dimensions (H x W x D)		71 x 177 x 106 mm
Packaging value	V	1.33 dm <sup>3</sup>
ETIM group		EG00021
ETIM class		EC001457
Customs tariff no.		85363010
EAN code		8590681114308
Art. number		10 465

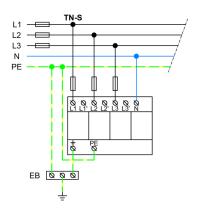


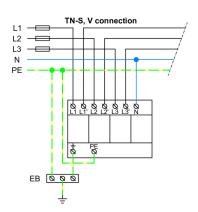
**The link in the QR code** leads to the online presentation of the **HLSA25G-255/4+0**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit **www.hakel.com** 

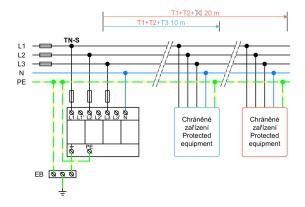




## Application wiring diagram (installation)







## Internal diagram

