

HLSA12,5G-255/4+0

- Lightning impulse current and surge arresters type T1+T2+T3.
- The products consist of varistors with big discharge ability.
- HLSA12,5 in configurations 1+1, 3+1 and HLSA12,5G 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 III and LPL IV.
- 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 T2 and T3 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.
- **M** indication specifies a type of construction with removable module.
- **S** indication specifies a version with remote monitoring.

Туре		HLSA12,5G-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_{c}	255 V
Maximum discharge current (8/20)	I _{max}	50 kA
Impulse discharge current for class I test (10/350)	l _{imp}	12.5 kA
Charge	Q	6.25 As
Specific energy for class I test	W/R	39 kJ/Ω
Total discharge current (10/350) L1+L2+L3+N->PE	I _{Total}	50 kA
Total discharge current (8/20) L1+L2+L3+N->PE	I _{Total}	200 kA
Nominal discharge current for class II test (8/20)	l _n	25 kA
Open circuit voltage of the combination wave generator	U _{oc}	6 kV
Voltage protection level at I _n	U_p	< 1.1 kV
Temporary overvoltage test (TOV) for $t_T = 5 s$	U_T	337 V
Temporary overvoltage test (TOV) for $t_T = 120 \text{ min}$	U_{T}	440 V
Response time	t _A	< 100 ns
Maximal back-up fuse		160 A gL/gG
Residual current	I _{PE}	≤ 5 μ A
Short-circuit current rating at maximum back-up fuse	I _{SCCR}	60 kA _{rms}
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	9	-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 T1	S	6 mm² (L, N) 16 mm² (PE, PEN)

Lightning and surge arresters T1+T2+T3



Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022 S 2.5 mm² (L, N) (dosen't apply to , V' connection) for T2 1.5 + 25 mm² (L, N) (dosen't apply to , V' connection) for T2 1.5 + 25 mm² (L, N) (dosen't apply to , V' connection) for T2 1.5 + 25 mm² (Lamp fastening range (solid conductor) 1.5 + 25 mm² (Lamp fastening range (stranded conductor) 1.5 + 16 mm² 1.5 + 16	Туре		HLSA12,5G-255/4+0
Clamp fastening range (solid conductor) 1.5 ÷ 25 mm² Clamp fastening range (stranded conductor) 1.5 ÷ 16 mm² Tightening moment 3 Nm Installation On DIN rail 35 mm Modular width 4 TE Operating position Any Product placement environment Internal Signalling at the device Optic Importance of local signaling OK - clear target Remote signalling No Modular design No Lifetime > 100 000 h Designed according to standards IEC 61643-11:2011 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 IEC 62305:2010 Selection 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 m 568 g Mass (including the packaging)	Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022	S	2.5 mm² (L, N)
Clamp fastening range (stranded conductor) 1.5 ÷ 16 mm² Tightening moment 3 Nm Installation On DIN rail 35 mm Modular width 4 TE Operating position Any Product placement environment Internal Signalling at the device Optic Importance of local signalling OK - clear target FAULT - red target FAULT - red target Remote signalling No Modular design No Lifetime > 100 000 h Designed according to standards IEC 61643-11:2011 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 IEC 62305:2010 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 m 568 g Mass (including the packaging) m 568 g	, , , , ,		
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	Customs tariff no.		85363010
Art. number 10 267	EAN code		8590681185858
	Art. number		10 267

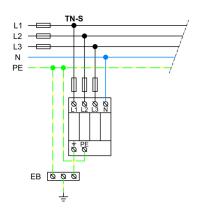


The link in the QR code leads to the online presentation of the **HLSA12,5G-255/4+0**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit **www.hakel.com**





Application wiring diagram (installation)



Internal diagram

