



HLSA12,5-275/3+1 M (S)

- 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.
- **Designed according to standards** IEC 61643-11:2011; UL 94
- **Application standards** IEC 62305:2010; HD 60364-5-53:2022; CLC/TS 61643-12:2009

Type	HLSA12,5-275/3+1 M, HLSA12,5-275/3+1 M S		
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	275 V	
Maximum discharge current (8/20)	I_{max}	50 kA	
Impulse discharge current for class I test (10/350)	I_{imp}	12,5 kA (L/N)	50 kA (N/PE)
Charge	Q	6.25 As (L/N)	25 As (N/PE)
Specific energy for class I test	W/R	39 kJ/Ω (L/N)	625 kJ/Ω (N/PE)
Total discharge current L1+L2+L3+N->PE	I_{Total}	50 kA (10/350)	100 kA (8/20)
Nominal discharge current for class II test (8/20)	I_n	25 kA (L/N)	50 kA (N/PE)
Open circuit voltage of the combination wave generator	U_{OC}	6 kV	
Voltage protection level at I_n	U_p	< 1.25 kV (L/N)	< 1.5 kV (N/PE)
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	
Maximal back-up fuse		160 A gL/gG	
Residual current	I_{PE}	≤ 5 μA	
Short-circuit current rating at maximum back-up fuse	I_{SCCR}	60 kA _{rms}	
Follow current interrupt rating (N/PE)	I_{fi}	0.1 kA _{rms}	
Housing material		Polyamid PA6, UL94 V-0	
Degree of protection		IP20	
Operating temperature	ϑ	-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 mm ² (L, N) 16 mm ² (PE, PEN)	
Clamp fastening range (stranded conductor)		1.5 ÷ 16 mm ²	
Installation		On DIN rail 35 mm	
Operating position		Any	
Importance of local signaling		OK – clear target, FAULT – red target	
Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm ²)		AC: 250 V / 1.5 A, DC: 250 V / 0.1 A	
Article number of spare module		16 086	
Article number	HLSA12,5-275/3+1 M	16 084	
	HLSA12,5-275/3+1 M S	16 094	