



HLSA25-275

- 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		HLSA25-275
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		T1, T2, T3
System		TN
Number of poles		1
Rated operating AC voltage	U _N	230 V
Maximum continuous operating voltage AC	U _c	275 V
Rated load current for "V" connection	IL.	125 A
Maximum discharge current (8/20)	I _{max}	50 kA
Impulse discharge current for class I test (10/350)	I _{imp}	25 kA
Charge	Q	12.5 As
Specific energy for class I test	W/R	156 kJ/Ω
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 In	Up	< 1.2 kV
Temporary overvoltage test (TOV) for $t_T = 5 s$	UT	337 V
Temporary overvoltage test (TOV) for $t_T = 120$ min	U _T	440 V
Response time	t _A	< 25 ns
Maximal back-up fuse		250 A gL/gG
Maximal back-up fuse ("V" connection)		125 A gL/gG
Residual current	I _{PE}	≤ 1 400 μA
Short-circuit current rating at maximum back-up fuse	I _{SCCR}	80 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	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 mm² (L, N) 16 mm² (PE, PEN)



Minimum cross-section of connected Cu conductors accord. to HD 60364-5-53:2022 (doesn't apply to "V" connection) for T2Clamp fastening range (solid conductor)Clamp fastening range (stranded conductor)Tightening momentInstallationModular widthOperating positionProduct placement environmentSignalling at the deviceImportance of local signalingRemote signallingModular design	S	2.5 mm ² (L, N)
Clamp fastening range (stranded conductor) Tightening moment Installation Modular width Operating position Product placement environment Signalling at the device Importance of local signaling Remote signalling		6 mm ² (PE, PEN)
Tightening moment Installation Modular width Operating position Product placement environment Signalling at the device Importance of local signaling Remote signalling		$2.5 \div 35 \text{ mm}^2$
Installation Modular width Operating position Product placement environment Signalling at the device Importance of local signaling Remote signalling		$2.5 \div 25 \text{ mm}^2$
Modular width Operating position Product placement environment Signalling at the device Importance of local signaling Remote signalling		3 Nm
Operating position Product placement environment Signalling at the device Importance of local signaling Remote signalling		On DIN rail 35 mm
Product placement environment Signalling at the device Importance of local signaling Remote signalling		2 TE
Signalling at the device Importance of local signaling Remote signalling		Any
Importance of local signaling Remote signalling		Internal
Remote signalling		Optic
		OK – clear target FAULT – red target
Modular design		No
		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	280 g
Mass (including the packaging)	m	294 g
Packaging dimensions (H x W x D)		45 x 102 x 74 mm
Packaging value	V	0.34 dm ³
ETIM group		EG000021
ETIM class		EC001457
Customs tariff no.		85363010
EAN code		8590681114155
Art. number		000001114100



The link in the QR code leads to the online presentation of the HLSA25-275.

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







