

HSA-275/3+1

- Surge arresters type T2+T3 ensure the equipotential bonding and reduce switching, induced and residual overvoltage in LV power supply systems.
- The products consist of varistors with big discharge ability.
- In 1+1 and 3+1 configurations they are additionally combined with a gas discharge tube, which ensures zero leakage current through the PE conductor.
- Installed at the boundaries of LPZ 1 – LPZ 3 into subsidiary switchboards and control panels.
- 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.

Type		HSA-275/3+1
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		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
Nominal discharge current for class II test (8/20)	I_n	20 kA
Open circuit voltage of the combination wave generator	U_{OC}	6 kV
Total discharge current (8/20) L1+L2+L3+N->PE	I_{Total}	50 kA
Voltage protection level at I_n (L/N)	U_p	< 1.2 kV
Voltage protection level at I_n (N/PE)	U_p	< 1.3 kV
Voltage protection level at U_{OC} (L/N)	U_p	< 0.8 kV
Impulse discharge current for class I test (10/350) N/PE	I_{imp}	20 kA
Temporary overvoltage test value (TOV) for $t_T = 5$ s (L/N)	U_T	337 V
Temporary overvoltage test value (TOV) for $t_T = 0,2$ s (N/PE)	U_T	1 200 V
Response time (L/N)	t_A	< 25 ns
Response time (N/PE)	t_A	< 100 ns
Maximal back-up fuse		160 A gL/gG
Short-circuit current rating at maximum back-up fuse	I_{SCCR}	60 kA _{rms}
Lightning protection zone		LPZ1, LPZ2, LPZ3
Housing material		Polyamid PA6, UL94 V-0
Degree of protection		IP20
Operating temperature	θ	-40 ÷ 70 °C
Minimum cross-section of connected Cu conductors accord. to HD 60364-5-534:2016 (doesn't apply to „V“ connection) for T2	S	2,5 mm ² (L, N) 6 mm ² (PE, PEN)
Clamp fastening range (solid conductor)		1.5 ÷ 25 mm ²
Clamp fastening range (stranded conductor)		1.5 ÷ 16 mm ²
Tightening moment		3 Nm
Installation		On DIN rail 35 mm

Type	HSA-275/3+1	
Modular width	4 TE	
Operating position	Any	
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 – Devices for protection against transient overvoltages	HD 60364-5-534:2016	
Selection and application principles for SPDs connected to low-voltage power systems	IEC 61643-12:2008	

Ordering, packaging and additional data

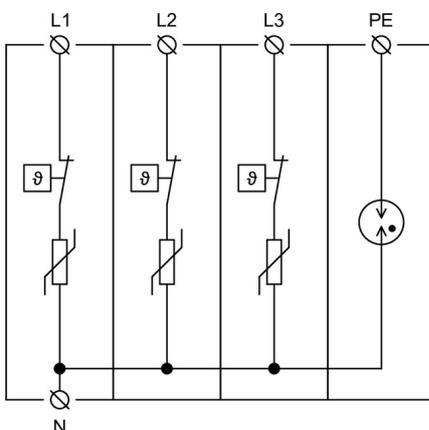
Mass	m	380 g
Mass (including the packaging)	m	408 g
Packaging dimensions (H x W x D)	112 x 74 x 73 mm	
Packaging value	V	0.61 dm ³
ETIM group	EG000021	
ETIM class	EC000941	
Customs tariff no.	85363010	
EAN code		



Art. number

24 531

Internal diagram



Application wiring diagram (installation)

