

HLA50-440 S

- Lightning impulse current arresters type T1 ensure the equipotential bonding and eliminate the effects of lightning current in single-phase and three-phase power supply systems.
- Products contain multiple non-exhausting spark gaps, thanks to which they are able to discharge the highest lightning impulse current.
- Suitable for objects with considerable levels of protection LPL I and LPL II, such as big industrial complexes and properties of particular importance – hospitals, banks, power plants.
- Installed as close as possible the overhead line enters the building i.e. the electric power substation, electrometer or the main distribution boards.
- If the product contains two PE (or PEN) terminals, it must not be used as a PE (PEN) bridge.
- **LED** indication specifies a version with LED fault signalisation.
- **S** indication specifies a version with remote monitoring and LED fault signalisation.

Type		HLA50-440 S
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		T1
System		TN
Number of poles		1
Rated operating AC voltage	U_N	400 V
Maximum continuous operating voltage AC	U_C	440 V
Impulse discharge current for class I test (10/350)	I_{imp}	50 kA
Charge	Q	25 As
Specific energy for class I test	W/R	625 kJ/Ω
Nominal discharge current for class II test (8/20)	I_n	50 kA
Voltage protection level at I_{imp}	U_p	< 2.5 kV
Temporary overvoltage test (TOV) for $t_T = 5$ s	U_T	581 V
Temporary overvoltage test (TOV) for $t_T = 120$ min	U_T	762 V
Response time	t_A	< 100 ns
Maximal back-up fuse		500 A gL/gG
Short-circuit current rating at maximum back-up fuse	I_{SCCR}	3 kA _{rms}
Follow current interrupt rating	I_{fi}	3 kA _{rms}
Lightning protection zone		LPZ 0-1, LPZ 1-2
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 (solid conductor)		2.5 ÷ 25 mm ²
Clamp fastening range (stranded conductor)		2.5 ÷ 16 mm ²
Tightening moment		4 Nm
Installation		On DIN rail 35 mm
Modular width		2 TE

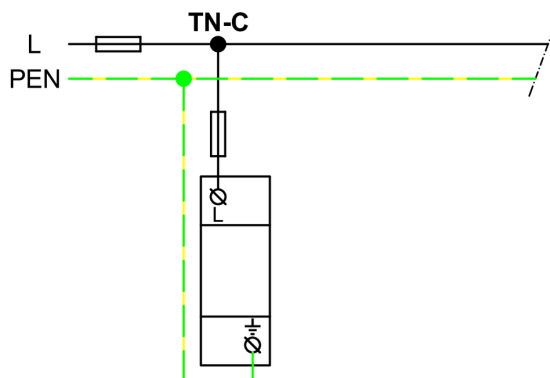
Type	HLA50-440 S	
Operating position	Any	
Product placement environment	Internal	
Signalling at the device	Optic	
Importance of local signalling	OK – green light on FAULT – red light on	
Remote signalling	Yes	
Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm ²)	AC: 250 V / 0.5 A, DC: 250 V / 0.1 A	
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	245 g
Mass (including the packaging)	m	259 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	EC000381	
Customs tariff no.	85363010	
EAN code	8590681114728	
Art. number	10 956	



The link in the QR code leads to the online presentation of the HLA50-440 S. 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

