

HSAF16 S IT

- Surge arresters type T3 with high-frequency filters for serial connection.
- Intended for protection of electronic appliances against the effects of switching, induced and residual overvoltage in insulated power supply systems.
- Contain an improved thermal fuse, which ensures timely disconnection of HSAF* S from the power grid during the MOV's overheating and thus prevents damage to the HSAF* S.
- Installed at the boundaries of LPZ 2 – LPZ 3, as close to the device to be protected as possible (no further than 5 m).
- In front of HSAF* S must be installed a lightning current and surge arrester T1 and T2 from HAKEL company.
- **S** indication specifies a version with remote monitoring.

Type	HSAF16 S IT	
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)	T3	
System	IT	
Number of poles	2	
Rated operating AC voltage	U_N	230 V
Maximum continuous operating voltage AC	U_C	275 V
Rated load current	I_L	16 A
Open circuit voltage of the combination wave generator	U_{OC}	6 kV
Voltage protection level at U_{OC} (L1/L2)	U_p	< 1.4 kV
Voltage protection level at U_{OC} (L1/PE, L2/PE)	U_p	< 0.9 kV
Nominal discharge current for class II test (8/20)	I_n	3 kA
Total discharge current (8/20) L1+L2->PE	I_{Total}	6 kA
Asymmetrical attenuation of filter at $f = 4$ MHz	> 80 dB	
Asymmetrical attenuation of filter at $f = 0.15 \div 30$ MHz	> 35 dB	
Temporary overvoltage test (TOV) for $t_T = 5$ s (L1/L2)	U_T	337 V
Temporary overvoltage test (TOV) for $t_T = 0.2$ s (L1/PE, L2/PE)	U_T	1 455 V
Response time (L1/L2)	t_A	< 25 ns
Response time (L1/PE, L2/PE)	t_A	< 100 ns
Power dissipation	P_z	< 3.5 W
Maximal back-up fuse	16 A gL/gG	
Lightning protection zone	LPZ 2-3	
Housing material	Polyamid PA6, UL94 V-0	
Degree of protection	IP20	
Operating temperature	θ	$-40 \div 55$ °C
Recommended cross-section of connected conductors	S	2.5 mm ²
Clamp fastening range (solid conductor)	0.2 ÷ 6 mm ²	
Clamp fastening range (stranded conductor)	0.2 ÷ 4 mm ²	
Tightening moment	1,2 Nm	
Installation	On DIN rail 35 mm	

Type		HSAF16 S IT
Modular width		4 TE
Operating position		Any
Signalling at the device		Optic
Importance of local signaling		OK – red light off 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 / 1.5 A, DC: 250 V / 0.1 A
Includes EMI / EMC filter		Yes
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
Methods of measurement of the suppression characteristics of passive EMC filtering devices		EN 55017:2011 / CISPR 17:2011
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	180 g
Mass (including the packaging)	m	208 g
Packaging dimensions (H x W x D)		74 x 112 x 73 mm
Packaging value	V	0.61 dm ³
ETIM group		EG000021
ETIM class		EC000942
Customs tariff no.		85363010
EAN code		8590681169223
Art. number		30 501

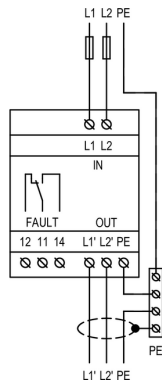


The link in the QR code leads to the online presentation of the **HSAF16 S IT**. There, in addition to the always up-to-date data sheet, you will also find all diagrams and drawings, declarations of conformity, or 2D or 3D models and other necessary materials. For more information, visit www.hakil.com



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Application wiring diagram (installation)



Internal diagram

