

HSAD-P M S

- Surge arresters type T3 for serial (HSAD-S M S) or parallel (HSAD-P M S) connection.
- Intended for protection of one-phase electronic appliances against the effects of switching, induced and residual overvoltage generated in LV power supply systems.
- 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 HSAD-S M S/HSAD-P M S must be installed a lightning current and surge arrester T1 and T2 from HAKEL company.
- Compact dimensions with a constructional modular width of 1 TE.
- A type of construction with a removable module.
- **S** indication specifies a version with remote monitoring.

Type		HSAD-P M S
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		T3
System		TN-C-S, TN-S
Number of poles		2
Rated operating AC voltage	U_N	230 V
Maximum continuous operating voltage AC	U_C	275 V
Open circuit voltage of the combination wave generator (L/N, L/PE)	U_{OC}	6 kV
Open circuit voltage of the combination wave generator (N/PE)	U_{OC}	10 kV
Voltage protection level at U_{OC} (L/N)	U_p	< 1 kV
Voltage protection level at U_{OC} (L/PE, N/PE)	U_p	< 1.5 kV
Nominal discharge current for class II test (8/20) L/N, L/PE	I_n	3 kA
Nominal discharge current for class II test (8/20) N/PE	I_n	5 kA
Total discharge current (8/20) L+N->PE	I_{Total}	6 kA
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
Response time (L/N)	t_A	< 25 ns
Response time (L/PE, N/PE)	t_A	< 100 ns
Maximal back-up fuse		10 A gL/gG
Residual current	I_{PE}	$\leq 5 \mu A$
Lightning protection zone		LPZ 2-3
Housing material		Polyamid PA6, UL94 V-0
Degree of protection		IP20
Operating temperature	θ	$-40 \div 55$ °C
Humidity range	RH	$5 \div 95$ %
Recommended cross-section of connected conductors	S	1.5 mm ²
Clamp fastening range (solid conductor)		$0.2 \div 4$ mm ²
Clamp fastening range (stranded conductor)		$0.2 \div 2.5$ mm ²
Tightening moment		0,5 Nm
Installation		On DIN rail 35 mm

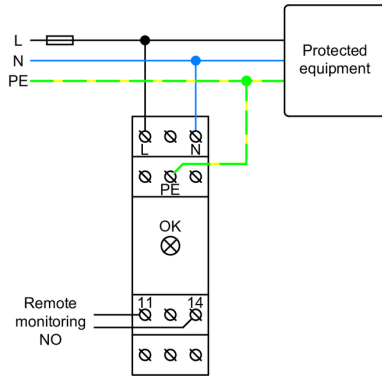
Type		HSAD-P M S
Modular width		1 TE
Operating position		Any
Product placement environment		Internal
Signalling at the device		Optic
Importance of local signaling		OK – green light on FAULT – green light off
Remote signalling		Yes
Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm ²)		AC: 250 V / 1.5 A, DC: 250 V / 0.1 A
Includes EMI / EMC filter		No
Modular design		Yes
Article number of spare module		30 390
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	75 g
Mass (including the packaging)	m	86 g
Packaging dimensions (H x W x D)		26 x 98 x 73 mm
Packaging value	V	0.19 dm ³
ETIM group		EG000021
ETIM class		EC000942
Customs tariff no.		85363010
EAN code		8590681173626
Art. number		30 380



The link in the QR code leads to the online presentation of the **HSAD-P M 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

