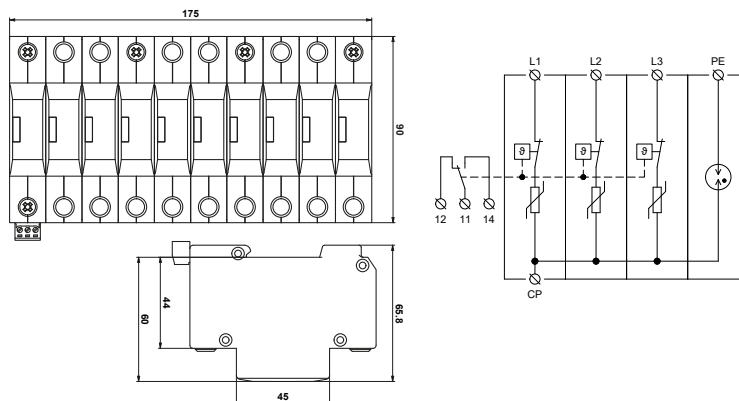


# Lightning and surge arrester / varistor + gas discharge tube / TYPE 1+2

TYPE 1+2 / CLASS I+II / IT / CE



## HLSA7-850/3+1 IT HLSA7-850/3+1 S IT

HLSA\* of the „G-Line“ range is a lightning and surge arrester according to EN 61643-11:2012 (IEC 61643-11:2011) consisting of high energy varistors in combination with gas discharge tube, which ensures zero leakage current in the PE conductor. Its parameters enable usage in buildings with considerable levels of protection LPL III and LPL IV, such as small administration complexes, residential buildings, family

houses or properties and halls without the incidence of persons and indoor equipment. The device is to be installed on the interface of LPZ 0 – LPZ 1 and higher zones according to standard EN 62305:2011 (IEC 62305:2010), closest to where overhead line enters the building i.e. in the main distribution boards. **S** indication specifies a version with remote monitoring.

Type		HLSA7-850/3+1 IT, HLSA7-850/3+1 S IT
Test class according to EN 61643-11:2012 (IEC 61643-11:2011)		TYPE 1+2, CLASS I+II
System		IT
Nominal line voltage	$U_N$	3 x 720 V IT
Max. continuous operating voltage	$U_C$	850 V AC
Maximum discharge current (8/20) L/PE	$I_{max}$	50 kA
Impulse discharge current for class I test (10/350) L/PE	$I_{imp}$	7 kA
Charge L/PE	$Q$	3,5 As
Specific energy for class I test L/PE	W/R	12,25 kJ/Ω
Impulse discharge current for class I test (10/350) CP/PE	$I_{imp}$	50 kA
Charge CP/PE	$Q$	25 As
Specific energy for class I test CP/PE	W/R	625 kJ/Ω
Total discharge current (10/350) L1+L2+L3+CP->PE	$I_{TOTAL}$	50 kA
Total discharge current (8/20) L1+L2+L3+CP->PE	$I_{TOTAL}$	100 kA
Nominal discharge current for class II test (8/20) L/PE	$I_n$	25 kA
Nominal discharge current for class II test (8/20) CP/PE	$I_n$	50 kA
Voltage protection level	$U_p$	< 3,3 kV
Temporary overvoltage (TOV) L/CP	$U_T$	1030 V / 5 s
Temporary overvoltage (TOV) L/PE	$U_T$	2050 V / 0,2 s
Response time L/CP	$t_A$	< 25 ns
Response time L/PE	$t_A$	< 100 ns
Max. back-up fuse		160 A gL / gG
Short-circuit current rating at 160 A gL / gG	$I_{SCCR}$	60 kA <sub>rms</sub>
LPZ		0-1 and higher
Housing material		Polyamid PA6, UL 94 V-0
Degree of protection of enclosure		IP20
Operating temperature range	$\vartheta$	-40 °C ÷ +70 °C
The minimal cross-section of the connected conductors according to standard HD 60364-5-534:2016 (at tightening moment of clamps 3 Nm; It's not valid for „V“ connection)		T1: 6 mm <sup>2</sup> (L, N), 16 mm <sup>2</sup> (PE, PEN) T2: 2,5 mm <sup>2</sup> (L, N), 6 mm <sup>2</sup> (PE, PEN)
Range of clamps fastening		1,5 ÷ 25 mm <sup>2</sup> (solid) / 1,5 ÷ 16 mm <sup>2</sup> (wire)
The mounting method / operating position		DIN rail 35 mm / any
Failure signalisation – optical function signalization		target clear – ok / target red – fault
Potential free signal contact (S) (recommended cross-section of remote monitoring max. 1 mm <sup>2</sup> )		AC: 250 V / 1,5 A, DC: 250 V / 0,1 A
Lifetime		min. 100 000 h
Weight	m	1312 g
Article number	HLSA7-850/3+1 IT	27 884
	HLSA7-850/3+1 S IT	27 890