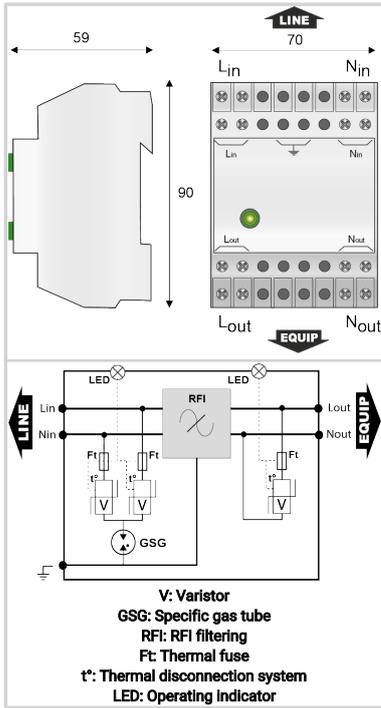# Type 2+3 single-phase surge protector and filter

DS-HF

▸Surge protector with RFI filtering

▸In : 3 kA

▸Imax : 10 kA

▸Common and Differential mode protection

▸Low protection level

▸Operating/disconnection indicators

▸EN 61643-11, IEC 61643-11, UL1449 ed.5 compliance

CE

LINE

L_{in} N_{in}

L_{in} N_{in}

L_{out} N_{out}

L_{out} N_{out}

EQUIP

V: Varistor
GSG: Specific gas tube
RFI: RFI filtering
Ft: Thermal fuse
t°: Thermal disconnection system
LED: Operating indicator

Electrical Characteristics		
SPD type	IEC	2+3
Network		230 V single-phase
AC system		TT-TN
Nominal line voltage	Un	230 Vac
Max. AC operating voltage	Uc	255 Vac
Max. load current @25°C	IL	16 A
Temporary Over Voltage (TOV) Characteristics - 5 sec. *Without disconnection*	UT	335 Vac withstand
Temporary Over Voltage (TOV) Characteristics - 120 mn *Without disconnection or with safety disconnection*	UT	440 Vac disconnection
Residual Current *Leakage current to Ground*	Ipe	< 1 mA
Follow current	If	None
Nominal discharge current *15 x 8/20 µs impulses*	In	3 kA
Max. discharge current *max. withstand @ 8/20 µs by pole*	Imax	10 kA
Total Maximum discharge current *max. total withstand @ 8/20 µs*	Imax Total	10 kA
Withstand on Combination waveform IEC 61643-11 *Class III test: 1.2/50µs - 8/20µs*	Uoc	10 kV
Withstand on overvoltages IEEE C62.41.1		10 kV
RFI Filtering		0.1 - 30 MHz
Connection mode(s)		L/N/PE
Protection mode(s)		Common/Differential mode
Protection level *@ In (8/20µs)*	Up	1 kV / 0.8 kV
Admissible short-circuit current	Isccr	10 000 A
Mechanical Characteristics		
SPD configuration		Single phase
Connection to Network		By screw terminals: 0.75-4mm²
Format		Plug-in modular box
Mounting		Symmetrical rail 35 mm (EN 60715)
Housing material		Thermoplastic UL94 V-0
Operating temperature	Tu	-40/+85°C
Protection rating		IP20
Failsafe mode		Disconnection from AC network
Disconnection indicator		Green LED(s) OFF
Dimensions		See diagram
Disconnectors		
Thermal disconnector		Internal
Installation ground fault breaker		Type 'S' or delayed
Back-up protection device		Fuses type gG - 20 A max. (if necessary)
Standards		
Standards compliance		IEC 61643-11 / EN 61643-11 / UL1449 ed.5
Certification		
Part number		
77945		