



Imax  
10 kA

# Single-Phase Surge Protector and Filter

## DS-HF



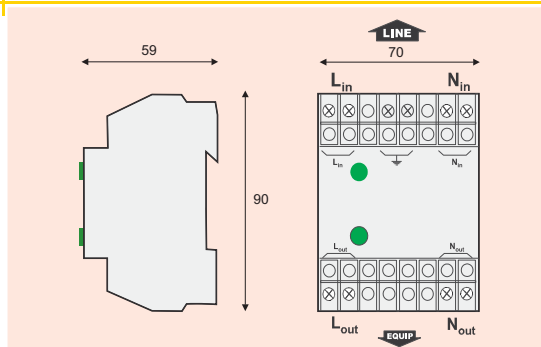
The DS-HF is a secondary Type 2 surge protector and RFI filter especially designed to protect sensitive equipment connected to single-phase networks.

The «surge protection» function is completed by RFI filtering : this combination of functions results in enhanced efficiency against transient overvoltages (improved protection level) and RF interferences.

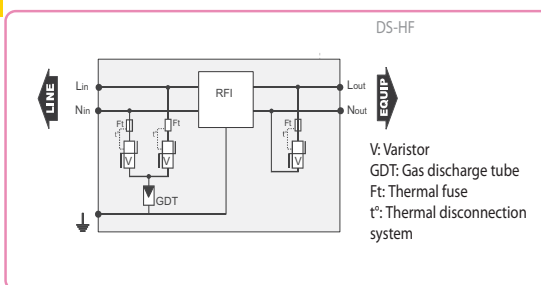
The DS-HF can be classified as secondary Type 2 or Type 3 SPD following IEC 61643-1. It is connected in series on AC network (maximum line current 16 A) , downstream of a primary Type 2 SPD (e.g. DS40), installed in the main electrical switchboard, to protect a remote or sensitive equipment.

- Surge protector with RFI filtering
- Discharge currents : In : 3kA / Imax : 10 kA
- Common and differential mode protection
- Low protection level
- Operating/disconnection indicators
- IEC 61643-1 and EN 61643-11 compliance

### Dimensions (in mm)



### Electrical diagram



### Characteristics

CITEL part number	DS-HF	DS-HF-120
Single-phase network	230 V	120 V
AC system	TN - TT - IT	TN - TT
Max. operating voltage $U_c$	255 Vac	150 Vac
Temporary overvoltage withstand $U_T$	400 Vac	150 Vac
Operating current $I_c$ leakage current at $U_c$	< 1 mA	< 1 mA
Max. line current $I_L$	16 A	16 A
Nominal discharge current $I_n$ <i>15 x 8/20 <math>\mu</math>s impulses</i>	3 kA	3 kA
Maximum discharge current $I_{max}$ <i>Max. withstand 8/20 <math>\mu</math>s</i>	10 kA	10 kA
Protection level (CM/DM) $U_p$	1 kV/ 0.8 kV	0.6 kV/ 0.5 kV
Combination waveform test $U_{oc}$ Class III test	6 kV	6 kV
RFI filtering	0.1 - 30 MHz	0.1 - 30 MHz
Admissible short-circuit current	10000 A	10000 A
Associated disconnection devices		
Thermal disconnector	internal	
Fuses	Fuses type gG - 20 A max. (see Note 1)	
Installation ground fault breaker	Type «S» or delayed	
Mechanical characteristics		
Dimensions	see diagram	
Connection	by screw terminals : 0,75 - 4 mm <sup>2</sup>	
Voltage/operating indicator	Green led(s) on	
Disconnection indicator	Green led off	
Remote signaling of disconnection	none	
Mounting	symmetrical rail 35 mm	
Operating temperature	-40/+85 °C	
Protection class	IP20	
Housing material	Thermoplastic UL94-V0	
Standards compliance		
NF EN 61643-11	France	Parafoudre Basse Tension - Essais Classe II et III
IEC 61643-1	International	Low Voltage SPD - Test Class II et III
EN 61643-11	Europe	Low Voltage SPD - Test Class II and III
UL1449 ed.2	USA	Low Voltage TVSS