

Type 2 AC power Surge Protector

DS10



DS10 Type 2 AC Surge Protectors are used mainly for primary protection of single and 3-Phase networks at the main electrical panel. They provide common-mode (between L and PE) or common and differential mode (L/PE and L/N) when associated with DS40G : refer to pages A28-A29. They are available in one-phase, single-phase, three-phase, and three-phase+neutral versions.

The DS10 impulse discharge capability classifies this SPD as secondary Type 2 or Type 3, useful downstream a Type 2 SPD (i.e. DS40) to protect a remote or sensitive equipment.

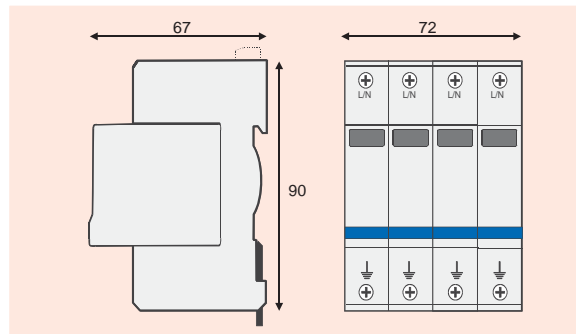
This SPD is based on high energy Varistor equipped with thermal disconnect and failure indicator, to comply with standards. Version with a remote signalling for disconnection indication is also available (DS1*S).

The DS10 is available for a large range of AC voltages.

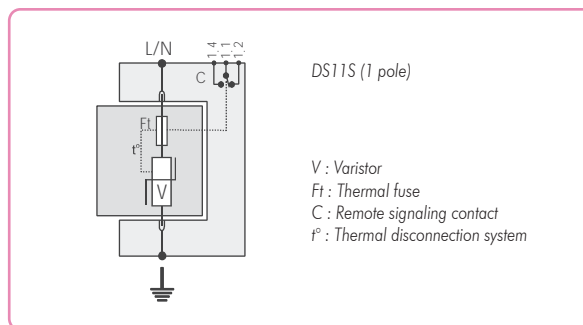
The DS10 is DIN rail compatible and is built with a plug-in module and a fixed base, which allows an easy and fast maintenance.

- Type 2 (or 3) Surge Protector
- Discharge current : I_n : 5 kA/ I_{max} : 10 kA
- Pluggable module by phase
- Remote signaling in option
- IEC 61643-11 and EN 61643-11 compliance

Dimensions (in mm)



Electrical diagram



Characteristics

CITEL part number	DS10-400	DS10-230	DS10-120
Single phase network	230/400V	230/400V	120/208V
Neutral configuration	TT-IT	TN	TN
Max. operating voltage	Uc 400 Vac	255 Vac	150 Vac
Temporary overvoltage withstand	U _T 400 Vac	255 Vac	150 Vac
Operating current	Ic < 1 mA	< 1 mA	< 1 mA
Leakage current at Uc			
Follow current	If none	none	none
Nominal discharge current	I _n 5 kA	5 kA	5 kA
15 x 8/20 μs impulses			
Maximum discharge current	I _{max} 10 kA	10 kA	10 kA
max. withstand 8/20 μs			
Protection level (at I _n)	Up 1.5 kV	1 kV	0.6 kV
Combination waveform test	Uoc 10 kV	10 kV	10 kV
Class III test			
Admissible short-circuit current	25000 A	25000 A	25000 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 : 4-25 mm ² / by bus		
Disconnection indicator	1 mechanical indicator by pole		
Remote signaling of disconnection	Option DS10S - output on changeover contact		
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 61643-11	International	Low Voltage SPD - Test Class II and III	
EN 61643-11	Europe	Low Voltage SPD - Test Class II and III	
UL1449 ed.2	USA	Low Voltage TVSS	

Note 1: Rating in compliance with nominal discharge current. In order to increase service continuity, higher rating can be used (up to 40 A). For further information, please consult product instructions.