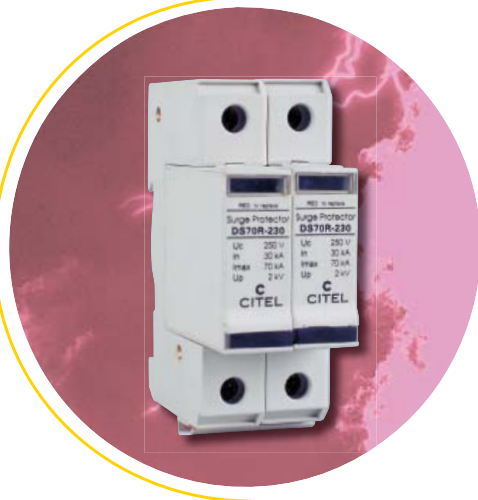


Type 2 AC power Surge Protector

DS70R



DS70R Type 2 AC Surge Protectors are used mainly for primary protection of single and three-phase networks at the main electrical panel. They provide common-mode protection (between the active conductors and protective wire) and are available in one-phase, single-phase, three-phase, and three-phase + neutral versions.

The DS70R high impulse discharge capability classifies this SPD as re-reinforced Type 2, useful in case of high lightning density areas. IEC60364 standard requests Type 2 SPD at the entrance of installation if the keraunic level $N_k > 25$.

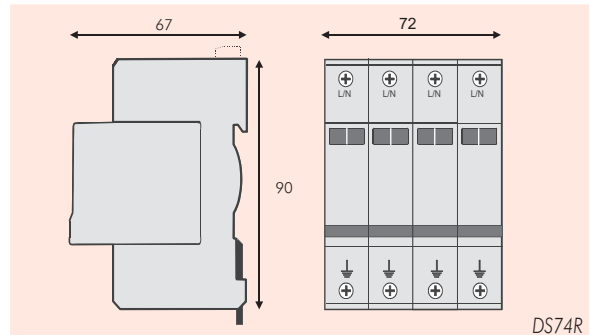
The SPD is based on association of high energy varistors equipped with thermal disconnecter and failure indicator, to comply with standards. Version with a remote signalling for disconnection indication is also available (DS7*RS).

DS70R features redundancy diagram to keep protection partially active in case of failure to give time for maintenance.

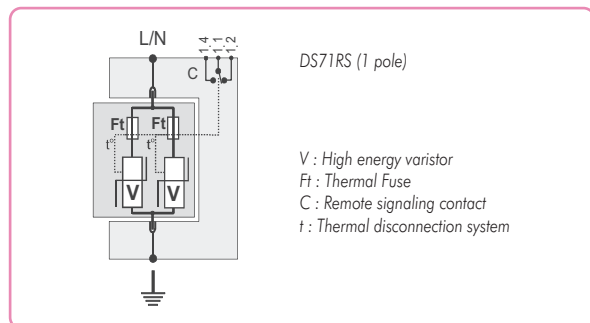
The DS70R is available for the main values of AC voltages. The DS70R is DIN rail compatible and is built with a plug-in module and a fixed base, which allows an easy and fast maintenance.

- **Re-reinforced Type 2 Surge Protector**
- **Discharge currents : I_n : 30 kA/ I_{max} : 70 kA**
- **Pluggable module by phase**
- **Redundancy**
- **Remote Signalling in option**
- **IEC 61643-11 and EN 61643-11 compliance**

Dimensions (in mm)



Electrical diagram



Characteristics

CITEL part number	DS70R-400	DS70R-230	DS70R-120
Network	230/400V	230/400V	120/208V
Max. operating voltage	U_c 400 Vac	250 Vac	150 Vac
Temporary overvoltage withstand	U_T 400 Vac	250 Vac	150 Vac
Operating current	I_c < 1 mA	< 1 mA	< 1 mA
Leakage current at U_c			
Follow current	I_f none	none	none
Nominal discharge current	I_n 30 kA	30 kA	30 kA
15 x 8/20 μ s impulses			
Maximum discharge current	I_{max} 70 kA	70 kA	70 kA
max. withstand 8/20 μ s			
Protection level (at I_n)	U_p 2,5 kV	2 kV	1 kV
Residual voltage at 10 kA	1,5 kV	1 kV	0,6 kV
Residual voltage at 5 kA	1,3 kV	0,8 kV	0,5 kV
Admissible short-circuit current	25000 A	25000 A	25000 A
Associated disconnection devices			
Thermal disconnecter	internal		
Fuses	Fuses type gG - 100 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	2 mechanical indicators by pole		
Remote signalling of disconnection	Option DS70RS - output on changeover contact		
Mounting	symmetrical rail 35 mm		
Operating temperature	-40/+85 °C		
Protection class	IP20		
Housing material	Thermoplastic UL94-V0		
Standards compliance			
EN 61643-11	Europe	Low Voltage SPD - Class II Test	
IEC 61643-11	International	Low Voltage SPD - Class II Test	
NF EN 61643-11	France	Parafoudre Basse Tension - Essais Classe II	
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 160 A). For further information, please consult product instructions.