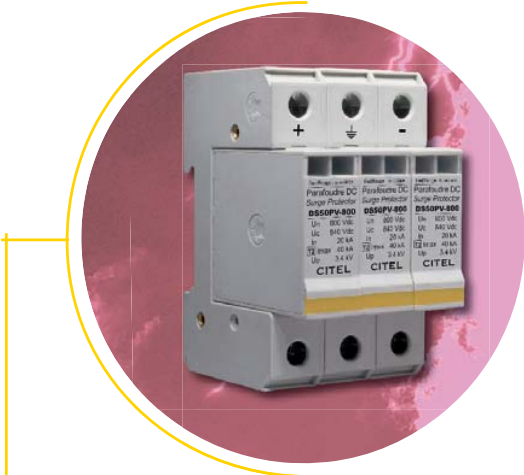




**Imax
40 kA**

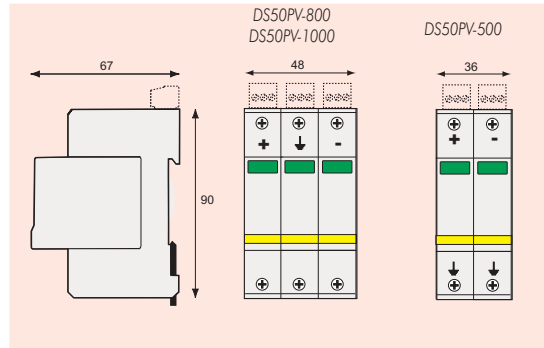
Type 2 Surge Protector for Photovoltaic DS50PV



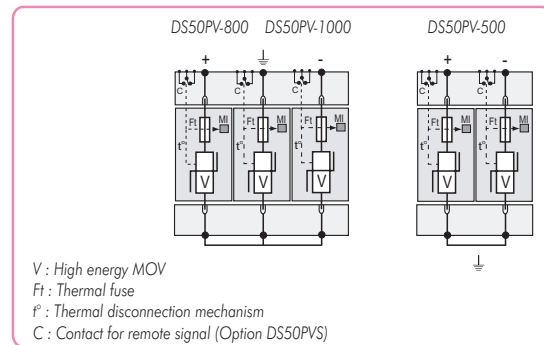
DS50PV are Type 2 Surge Protectors designed to protect against lightning surge voltages in photovoltaic power supply networks. These units must be installed in parallel on the DC networks to be protected and provide common and differential modes protection. The DS50PV is available for the main operating voltages in photovoltaic : 500, 800 and 1000 Vdc. The use of Type 2 surge protector is recommended at both ends of the DC power supply line (solar panel side and inverter/converter side), especially if the line routing is external and long. The electrical diagram of the DS50PV is based on high energy MOVs equipped with specific thermal disconnectors and related failure indicators. A remote signal feature is also available (DS50PVS-xxx) The DS50PV is made with plug-in modules to allow a fast and easy maintenance in case of failure (disconnection from the DC network).

- Type 2 Surge Protector for Photovoltaic
- Discharge currents I_n : 20 kA / I_{max} : 40 kA
- Plug-in modules
- Remote signal option
- IEC 61643-1 compliance

Dimensions and diagram



A45



Characteristics

CITEL part number	DS50PV-500	DS50PV-800	DS50PV-1000
Network voltage	500 Vdc	750-800 Vdc	1000 Vdc
Protection mode	MC (1)	MC/MD	MC/MD
Max. operating voltage	U_c 530 Vdc	840 Vdc	1060 Vdc
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 20 kA	20 kA	20 kA
15 x 8/20 μ s impulses			
Maximum discharge current	I_{max} 40 kA	40 kA	40 kA
tenue max. 8/20 μ s			
Protection level (at I_n)	U_p 1.5 kV	3.4 kV	4 kV
Residual voltage at 10 kA	1.2 kV	2.8 kV	3.4 kV
Residual voltage at 5 kA	1 kV	2.4 kV	3 kV
Disconnecter			
Thermal Disconnecter	internal		
Mechanical characteristics			
Dimensions	see diagram		
Connection	by screw terminals : 4-25 mm ² / by bus		
Disconnection indicator	1 mechanical indicator by pole		
Remote signaling	Option DS50PVS - 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	
IEC 61643-1	International	Low Voltage SPD - Test Class II	
EN 61643-11	Europe	Parafoudre Basse Tension - Essais Classe II	
UL1449 ed.2	USA	Low Voltage TVSS	

Note 1: MC = Common Mode (+/PE ou -/PE) et MC/MD = Common Mode and Differential Mode (+/A)