



Heavy Duty Surge Protector for Photovoltaic

DS60PV



DS60PV is a heavy duty DC Surge Protection Device (SPD) for high risk, low tolerance DC power applications. The DS60PV provides protection against the direct and indirect effects of lightning and is particularly useful in a high lightning area where the risk of heavy surge current or even direct strike is high, i.e. buildings equipped with lightning rods.

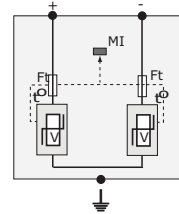
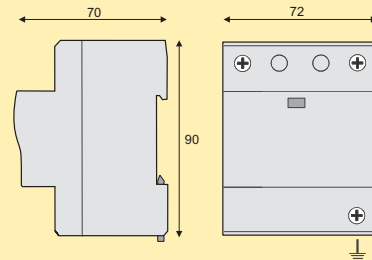
The DS60PV is a dual pole module that is installed in parallel with the network and provides common mode protection in systems up to 1000 Vdc. These devices are installed at both ends of the PV system at the Inverter and Solar Array to ensure maximum uptime of the power generation system. The DS60PV incorporates a multi-varistor protection circuit with specific DC thermal fuses that provides uncompromising surge current handling (12.5kA 10/350us) and reliable disconnection. The din rail mountable module has real-time visual fault indication and is available with optional remote signalization (DS60PVS-xxx).



Available Options

- Polycarbonate Enclosure
Part# CDS60PV-xxx
- 40A Fused Disconnect
Part# CDS60PV-xxx-40

Dimensions and Diagram



V : High energy MOV
Ft : Thermal fuse
t° : Thermal disconnection mechanism

Characteristics

CITEL part number		DS60PV-500	DS60PV-1000
Nominal voltage network		500 Vdc	1000 Vdc
Max. operating voltage	Uc	550 Vdc	1060 Vdc
Protection Mode		MC (1)	MC (1)
Follow current	If	none	none
Residual voltage (at Iimp)	Ures	1.6 kV	1.9 kV
Protection level (at In)	Up	1.7 kV	2.4 kV
Operating current	Ic	< 1 mA	< 1 mA
Leakage current at Uc			
Nominal discharge current	In	40 kA	40 kA
15 x 8/20 μs impulses			
Max. lightning current by pole	Iimp	12.5 kA	12.5 kA
tendue max. 10/350 μs			
Associated disconnection			
Thermal disconnecter		internal	
Mechanical characteristics			
Connection		by screw terminals : 6-35 mm /by bus	
Disconnection indicator		1 mechanical indicators	
Disconnect rating		40A; 600V	
Mounting		symmetrical rail 35 mm	
Disconnection indicator		1 mechanical indicators	
Disconnect rating		40A; 600V	
Mounting		symmetrical rail 35 mm	
Operating temperature		-40/+85 °C	
Protection class		IP65 NEMA	
Housing Material		Thermoplastic PEI UL94-5VA	
Standard Compliance		Surge Protection Device (SPD)	
NF EN 61643-11	France	Parafoudre Basse Tension - Essais Classe I et II	
IEC 61643-1	Intl	Low Voltage SPD - Test Class I and II	
EN 61643-11	Europe	Parafoudre Basse Tension - Essais Classe I et II	