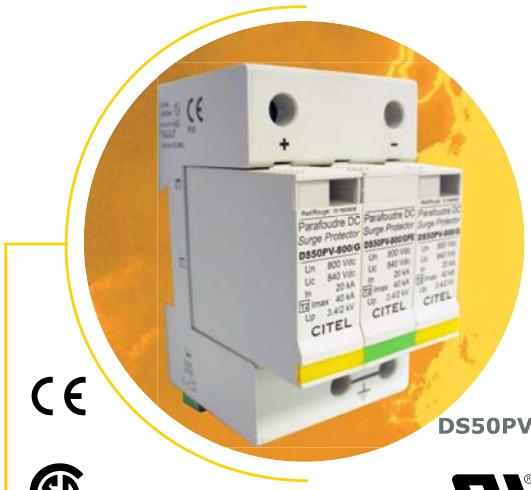
Imax 40kA

DS50PVS-500/G, DS50PVS-800/G, DS50PVS-1000/G



DS50PVS-800/G

DS50PVS/G is a DC Surge Protection Device (SPD) for medium risk DC power applications. The DS50PVS/G provides protection against the direct and indirect effects of lightning.

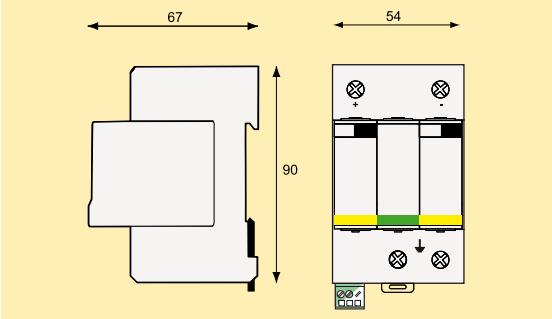
The DS50PVS/G is a dual pole module protecting both positive and negative to ground and is available for DC power system voltages of 500, 800 and 1000 Vdc. It is installed in parallel with the power system and is mounted on a din rail for application directly inside an Inverter or DC combiner box.

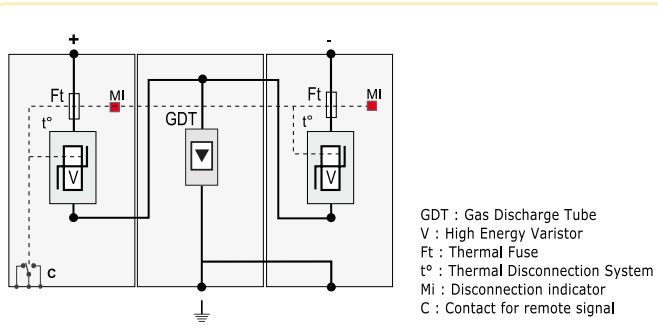
The DS50PVS/G incorporates a proven Metal Oxide Varistor (MOV) protection circuit with Gas Discharge Tube (GDT) and specific DC thermal fuses that allows for high surge current handling 40kA 8/20us and reliable disconnection. These units have visual fault indicators, replaceable protection modules and remote signalization.

Available Options

- Polycarbonate Enclosure, NEMA 4X
  Part# CDS50PVS-xxx/G
- 40A Fused Disconnect
  Part# CDS50PVS-xxx-/G-40

Dimensions and Diagram (in mm)





GDT : Gas Discharge Tube
V : High Energy Varistor
Ft : Thermal Fuse
t° : Thermal Disconnection System
Mi : Disconnection indicator
C : Contact for remote signal

Characteristics

CITEL part number		DS50PVS-500/G	DS50PVS-800/G	DS50PVS-1000/G
Network voltage	(Un) dc	500 Vdc	600 Vdc	1000 Vdc
Protection mode		MC/MD[1]	MC/MD[1]	MC/MD
Max. Operating Voltage	(Uc) dc	530 Vdc	840 Vdc	1060 Vdc
IEC/UL Nominal discharge current (In) *15 x 8/20 µs impulses*		20 kA	20 kA	20 kA
Maximum discharge current *Max. 10/350µs*	(Iimp)	-	-	-
Max. Lightning current by pole *Max. 8/20 µs*	(Imax)	40 kA	40 kA	40 kA
Protection level (at In)	(Up)	<1.8 kV	<3 kV	<3.6 kV
Residual voltage at 5 kA		<1 kV	<2.4 kV	<3 kV
Operating current Leakage current at Uc	(Ic)	none	Very Important	
Follow current	(If)	none		
Thermal Disconnector		Internal		
Dimensions		see diagram		
Connection		by screw terminal: #4 AWG MAX		
Disconnection indicator		1 mechanical indicator		
Remote signaling		250V/0.5 (AC) - 125V/3A (DC)		
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	Intl	Low Voltage SPD - Test Class II		
CSA C22.2	Canada	Class 90941 32		
UL1449 3rd Ed. for PV	USA	Type 4, Type 2 Location (Pending)		
DIN EN 61643-11	Ger	Surge Arrestor Type 2		

Note 1 MC =Common Mode (+/PE or -/PE) and MC/MD = Common Mode and Differential Mode (+/-)