Type 1 PV Surge Protectors
DS50PV Series

DS50PVS-1000

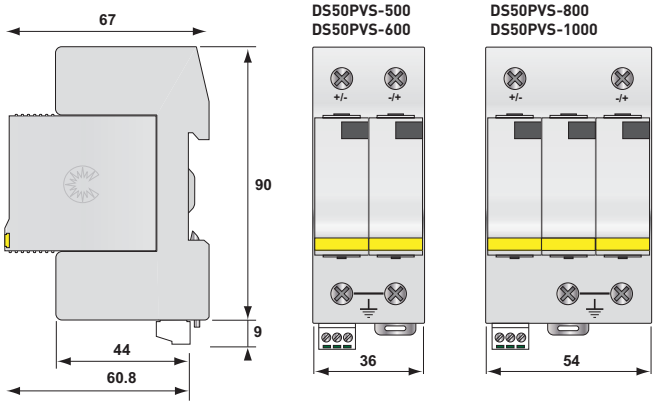
- **UL Type 1CA DC SPD**
- **Designed with High Energy MOV's**
- **Modular Design for Ease of Maintenance**
- **Integrated Status Indicator Window**
- **Imax : 40 kA /pole at 8/20µs**
- **In : 20 kA /pole at 8/20µs**
- **UL 1449 4th Edition Recognized**

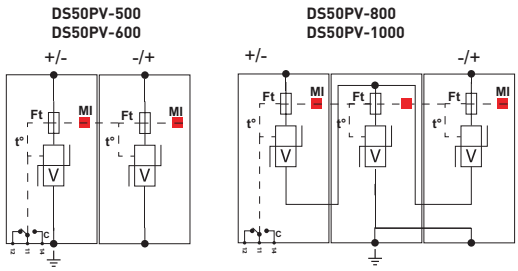
DS50PVS-xxx

- Network Voltage
- «S» = Optional Remote Signaling Status

Dimensions and Electrical Diagram

(in mm)





GSG: Gas-Filled Spark Gap
V : High energy MOV
MI : Disconnection indicator
Ft : Thermal fuse
t° : Thermal disconnection mechanism
C : Contact for remote signal (option DS50PVS-xxx)

Characteristics

CITEL part number		DS50PV-500	DS50PV-600	DS50PV-800	DS50PV-1000
Maximum PV Voltage	Uocstc	500 Vdc	600 Vdc	800 Vdc	1000 Vdc
Protection Mode *		CM/DM	CM/DM	CM/DM	CM/DM
Maximum Operating Voltage	Ucpv	530 Vdc	680 Vdc	840 Vdc	1060 Vdc
Current Withstand Short-Circuit	Iscwpv	>1000 A	>1000 A	>1000 A	>1000 A
Operating Current to the Voltage Ucpv	Icpv	< 0.1 mA	< 0.1 mA	< 0.1 mA	< 0.1 mA
Leakage Current to the Voltage Ucpv	Ipe	< 0.1 mA	< 0.1 mA	< 0.1 mA	< 0.1 mA
Nominal Discharge Current 15 x 8/20 µs Impulses	In	20 kA	20 kA	20 kA	20 kA
Maximum Discharge Current 8/20 µs Withstand	Imax	40 kA	40 kA	40 kA	40 kA
Protection Level (at In)	Up	<1.8 kV	<2.5 kV	<3 kV	<3.6 kV
Disconnector					
Thermal Disconnector		internal			
Mechanical Characteristics					
Dimensions		see diagram			
Connection		by screw terminal : 4-25 mm²			
End of Life Mode		disconnection of the SPD from PV line			
Disconnection Indicator		by mechanical indicator			
Remote Signaling of Disconnection		Option DS50PV**S**-xxx			
Mounting		symmetrical rail 35 mm			
Operating Temperature		-40/+85 °C			
Protection Class		IP20			
Housing Material		Thermoplastic UL94-V0			
Standards Compliance					
prEN50539- 11: Europe		PV Surge Protection - Class I and II Testing			
UL1449 4th Edition: USA		-	Type 1CA	-	Type 1CA
Part Number					
DS50PVS-500		480112			
DS50PVS-600		480411			
DS50PVS-800		480212			
DS50PVS-1000		480312			

(*) CM = Common mode (+/PE or -/PE) - DM = Differential mode (+/-)

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