

Type

UL : Type 1 CA
IEC : Type 2



I_{max} : 40 kA



U_p : 4,2 kV

System

PV : 1500 V d.c



EN 50539-11
UL 1449 4 ed

Type 1 UL (Type 2 IEC) PV SPD's have characteristics of type 2, they are capable of discharging indirect lightning strikes causing induced or conducted overvoltages generally from earth to the Panel they have a low residual voltage (U_p), which is compatible with the withstand voltage of the Panel and the PV Inverter. Higher is the I_{max} , more powerful they are.




They are installed inside the string/combiner boxes but inside near the PV Inverter.

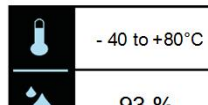
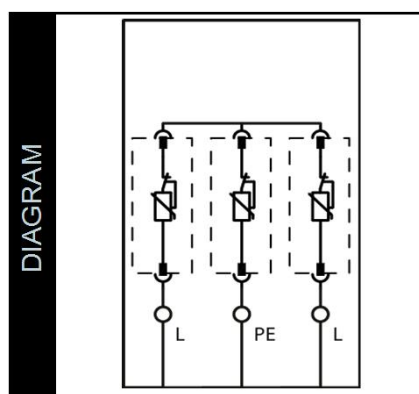
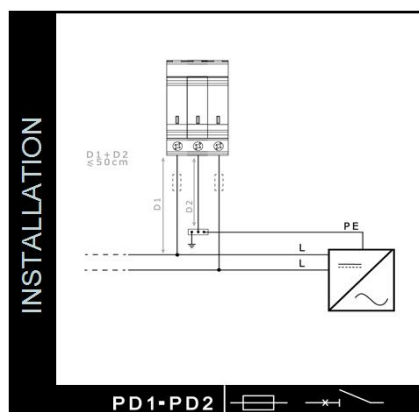
If the announced residual voltage (U_p) is not compatible with the withstand voltage of the equipment to protect or if the cable length to the equipment is longer than 10m, another level of coordination with another OVR PV T2 will be needed.

- Certified to latest UL 1449 4ed and according to EN 50539-11
- No back up protection required up to $I_{scpv}/SCCR$: 10 kA
- Bottom wiring
- Patented QuickSafe technology
- 3 MOV varistors (L+/L-; L+/PE; L-/PE)



CHARACTERISTICS

Key characteristics			
Protection mode	L-L/L-PE		
Number of protected lines	2		
Test class	II / 1 C.A		
Integrated thermal disconnecter	Yes		
End of life indicator	Yes		
Safety reserve	No		
Electrical characteristics			
Nominal discharge current	I_n (8/20)	kA	10
Maximal discharge current	I_{max} (8/20)	kA	40
Impulse current	I_{imp} (10/350)	kA	2
Maximal continuous operating voltage	U_{CPV} (L-L)	V	1500
Maximal continuous operating voltage according to 	MCOV	V	1500
Voltage protection level at I_n	U_p (L-PE)	kV	4,2
Voltage protection level at I_n	U_p (L-L)	kV	4,2
Voltage protection rating according to 	VPR (L+/G, L-/G, L+/L-)	kV	4 / 4 / 4
Short circuit current	I_{SCPv}	kA	10
Short circuit withstand according to 	S_{CCR}	kA	10
Ground residual current	I_{PE}	µA	< 1000
Required thermal/back up protection			
Curve B or C Circuit breaker	A		-
gG - gL fuse	A		-
Comments	If $I_{scpv} > 10kA$: 10A g PV		
Mechanical characteristics			
Dimensions	H x W x D	mm	88x53.4x58
Wire range : Solid wire	mm² / AWG	2.5 ... 35 / 2...14	
Wire range : Stranded wire	mm² / AWG	2.5 ... 25 / 4...14	
Stripping length	mm / inch	12.5 / 0.5	
Packing quantities	piece	Per 1	
Miscellaneous characteristics			
Maximal altitude	m / ft	2 000 / 6 562	
Weight	g / lb	360 / 0.75	
Response time	ns	< 25	
Fire resistance according to UL 94	V-0		
Replacement cartridges			
Phase / Product ID	OVR PV 40-1500H C U	2CTB802349R1700	
Neutral / Product ID	-	-	



UL US
VZCA2.E322885

ABB