

DATASHEET

OVR PV T2 40-1000 P

Surge Protective Devices



Type 2 SPDs for Photovoltaic applications are capable of discharging the lightning currents within an electrical system resulting from indirect lightning events. They have effective voltage protection ratings keeping damaging voltage peaks from exceeding the withstand voltages of the protected equipment.

Application

They are typically installed inside the string/combiner boxes or inside the PV Inverter. Additional PV SPDs may be required for an optimal protection if cable lengths between SPDs are greater than 32ft.

Technical specifications and standards

Key features

Protection mode	DC+ to DC- / DC+ to G / DC- to G
Number of protected lines	2
End of life indicator	Green = functional / Red = replace
Technology	Thermally protected varistor

Electrical performances

Maximal discharge current	$I_{max} (8/20\mu s)$	40	kA
Nominal discharge current	$I_n (8/20\mu s)$	20	kA
Maximal continuous operating voltage	UCPV	1000	VDC
Intended power system application (UL)	VPVDC	1000	VDC
Voltage protection level	U_p (DC+ to DC- / DC+ to G / DC- to G)	4	kV
Voltage protection rating (UL)	VPR	3	kV
Surge circuit current rating	I_{scpv}	10	kA
Surge circuit current rating (UL)	SCCR	10	kAIC
Back up protection		Not needed up to I_{scpv}	
Leakage current	I_{cpv}, I_{pe}	Check Installation Leaflet	
Response time		< 25	ns



Type 2 / UL Type 1 C.A



$I_{max} : 40 \text{ kA}$



$U_p < 4 \text{ kV}$



IEC 61643-31
UL 1449 5th ed

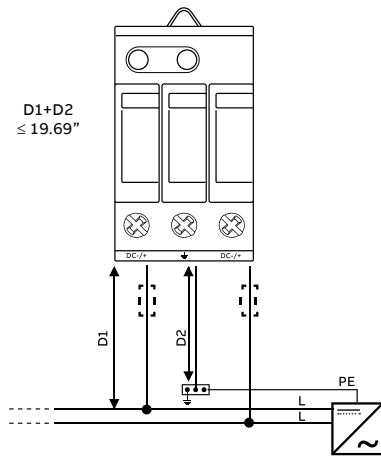
Mechanical features

Dimensions	L x W x D	3.54 x 2.12 x 2.87	in
Max. Solid/ Stranded wire (max)		4 - 2	AWG
Stripping length		0.47	in
Tightening torque		35.4	lbs
Maximal altitude		6561	ft
Operating temperature		-40 to 176	F
Relative humidity		95 (non condensing)	%HR
Degree of protection		IP 20	
Enclosure material rating and color		UL 94 V-0 / Grey RAL 7035	
Weight		.66 (300g)	lbs

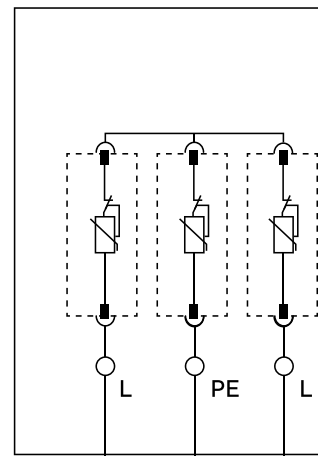
Replacement cartridge

Product ID / Model no	OVR PV T2 40-1000 C	2CTB802402R1000
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Installation wiring



Internal diagram



Physical dimensions

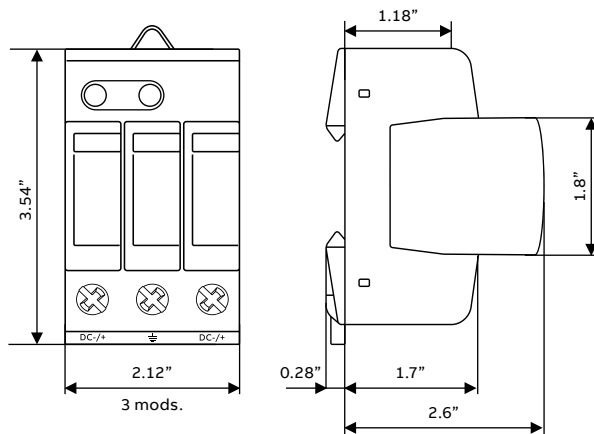


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