PRODUCT DATA SHEET

Surge Protective devices

SPDs for power systems

Code: 6852325-70

Description: SPD PVTron BOX5YT2, code 6852325-70

Description

Three poles SPD especially designed for surge protection of (DC / AC) inverters which are widely used in photovoltaic applications. It is made out of varistor (MOV) elements and have successfully passed the requirements of standard IEC 61643 – 31 and it is classified as type 2, providing protection to electrical systems of insulation level, category III and category IV according to IEC 60364-4-44. It is suitable for direct installation exactly at the input terminals of the inverter just after the entrance of the DC current arriving from the photovoltaic panels. Its main advantage is that no back up fuse is required for up to 9 kADC expected short circuit current.



Technical characteristics

Protection type EN / IEC 61643-31	T2
Number of poles	3
Connection between terminals	-ve ÷ +ve / -ve ÷ PE / +ve ÷ PE
Nominal operating voltage, Ucpv	Up to 1100 V DC
Maximum operating voltage, Uc	1100 V DC
Maximum operating current	35 A
Type of PV system	Not earthed / Earthed
Number of strings per MPPT	2 (5Y)
SPD failure mode	Open circuit failure mode (OCFM)
Imax, (8/20μs)	40 kA
In, (8/20μs)	20 kA
Up	4,2 kV
Responce time, ta	25 ns
Maximum back up fuse	Not required for up to 9 kADC expected short circuit current
Short circuit withstand, Iscpv	9 kA

Monitoring indication	YES
Residual current, IPE	1 mA (AC) / 50 μA (DC)
Installation location	Outdoor / Indoor
Protection level of housing	IP65
Dimensions WxHxD (mm)	160x120x91 mm
Operating temperature	-40 oC ÷ +85 oC
Relative humidity	5% ÷ 95%
Installation	Wall
Housing material	Polycarbonate halogen free
Maximum conductor for terminals	16 mm2 / 6 mm2 (in case of 2 conductors)
Conductor range for PE terminal	6 - 8 mm2
Cover screws tightening torque	1,5 Nm
Certification	VDE, CE
Conformity with	LVD 2014/35/EU
Installation only by qualified electrician	IEC 60417–6182
ELEMKO management systems	ISO 9001, ISO 14001, ISO 45001