PRODUCT DATA SHEET
Surge Protective devices
SPDs for power systems

Code: 6852317-70
Description: SPD PVTron T1 1500 Y, code 6852317-70

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 European standard EN 50539 – 11 class I and II and it is classified as type 1, 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 30 kADC expected short circuit current.

Technical characteristics

Protection type EN / IEC 61643-11	T1 (Class I)
Number of poles	3
Connection between terminals	-ve ÷ +ve / -ve ÷ PE / +ve ÷ PE
Nominal operating voltage, Un	Up to 1500 V DC
Maximum operating voltage, Uc	1500 V DC
Iimp, "class I" test, (10/350µs), 1P / 2P	6,25 kA / 12,5 kA
Imax, "class II" test, (8/20µs), 1P	40 kA
In, "class II" test, (8/20µs), 1P	20 kA
Up, (at In)	<4,5 kV
Responce time, ta	<25 ns
Maximum back up fuse	Not required for up to 30 kADC expected short circuit current
Short circuit withstand, Iscpv	30 kA
Thermal protection & monitoring indication	YES

Residual current, IPE	<100 μA
Installation location	indoor
Protection level of housing	IP20 (built in)
Dimensions WxHxD (mm)	54x95x87 mm
Operating temperature	-40 oC ÷ +80 oC
Relative humidity	5% ÷ 95%
Rail mounting	DIN-3 (TS-35/EN50022)
Housing material	Polycarbonate halogen free
Maximum conductor for terminal	35 mm2
Conductor terminals tightening torque	2,5 Nm
Maximum conductor for remote contacts	No remote contacts
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