

## PRODUCT DATA SHEET

### SURGE PROTECTIVE DEVICES (SPDs)

**Code: 68 10 305**

Ed. 10/2021

**Application: Photovoltaic systems**

#### Description

Two 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 II 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.



#### Protection type EN 50539-11

- T2 / Class II

#### Technical characteristics

Number of Poles	2
Connection between terminals	-ve ÷ PE / +ve ÷ PE
Nominal operating voltage, $U_N$	Up to 1000 V DC
Maximum operating voltage, $U_c$	1000 V DC
$I_{max}$ , "class II" test, (8/20 $\mu$ s), 1P	40 kA
$I_n$ , "class II" test, (8/20 $\mu$ s), 1P	20 kA
$U_p$ , (at $I_n$ )	<4 kV
Response time, $t_A$	<25 ns
Maximum back up fuse	Not required for up to 9 kA <sub>DC</sub> expected short circuit current
Short circuit withstand, $I_{sccr}$	9 kA
Thermal protection	YES
Monitoring indication	YES
Protection level of housing	IP20
Dimensions WxHxD	64x90x52,5 mm
Operating temperature, $\vartheta$	-40°C ÷ +80°C
Relative humidity	5% ÷ 95%
Maximum conductor for terminal	35 mm <sup>2</sup>
Conductor terminals tightening torque	4,5 Nm
Rail mounting	DIN-3 (TS-35/EN50022)
Housing material	Polycarbonate halogen free
Certification	CE
Conformity with	LVD 2014/35/EU
Installation only by qualified electrician	IEC 60417 – 6182

#### ELEMKO management systems

- ISO 9001
- ISO 14001
- ISO 45001

#### Country of Origin

Greece

**Unit: piece / Package: 1 piece**

We reserve the right to introduce changes in the component due to technical evolution.