

## **PRODUCT DATA SHEET SURGE PROTECTIVE DEVICES (SPDs)**

Code: 68 54 150 Ed. 02/2020

Brand Name: SurgeTron T2 H 40 3+1 RC **Application: 230/400 V AC electrical networks** 

## **Description**

Four poles SPD T2 (class II), in 3+1 wiring (3P + N) suitable for installation in TT, TN S & TN CS systems. It is equipped with 3 protection modules of innovative design (protection between L - N). Each module combines in series a varistor (MOV) and a spark gap, thus providing high protection against temporary overvoltages (TOV) and limiting the leakage current between phase and neutral. It is also equipped with a heavy duty spark gap sealed into a noble gas filled cylinder (protection between N - PE), in order to prevent any leakage current to the earthing system, thus allowing its installation before the RCD, even in TT systems. The spark gap between N - PE is also providing optimum protection against temporary overvoltages (TOV) caused even by faults in medium voltage. It is capable to withstand surge currents up to 50 kA (8/20 µs) per pole, 200 kA (8/20 µs) per 4 poles, providing protection against surge currents. The residual voltage per pole is less than 1,5kV (@ 20 kA) providing complete protection to equipment of all categories of insulation level (category IV up to category I) according to IEC 60364-4-44.











## Protection type EN / IEC 61643-11

T2 / Class II

127 Glass II	
Technical characteristics	
Number of Poles	4
Connection between terminals	$L_1 - N$ , $L_2 - N$ , $L_3 - N & N - PE$
Installation in	TN S, TN CS, TT
Nominal operating voltage, U <sub>N</sub>	230/400 V, 50 Hz
Maximum operating voltage, U <sub>C</sub>	300 V (L-N) / 305 V (N-PE), 50 Hz
I <sub>max</sub> , "class II" test, (8/20μs), 1P	50 kA (L-N) / 65 kA (N-PE)
I <sub>n</sub> , "class II" test, (8/20μs), 1P	20 kA (L-N) / 40 kA (N-PE)
$U_p$ , (at $I_n$ )	<1,5 kV (L–N) / <1,5 kV (N–PE)
Response time, t <sub>A</sub>	<25 ns (L-N) / <100 ns (N-PE)
Maximum back up fuse	<315 A gG
Short circuit withstand, Isccr	25 kA / 50 Hz
Follow current interrupt rating (N–PE), If	100 A rms
Temporary Overvoltage (TOV), 120 min L–N	442 V withstand
Temporary Overvoltage (TOV), 200 ms N-PE	1200 V withstand
Thermal protection	YES
Residual current, I <sub>PE</sub>	<5 μA
Monitoring indication	YES
Installation location	Indoor
Protection level of housing	IP20 (built in)
Dimensions WxHxD	72x105x70 mm
Operating temperature, ∂	$-40^{\circ}\text{C} \div +80^{\circ}\text{C}$
Relative humidity	5% ÷ 95%
Rail mounting	DIN-3 (TS-35/EN50022)
Housing material	Polycarbonate halogen free
Maximum conductor for terminal	35 mm <sup>2</sup>
Conductor terminals tightening torque	4,5 Nm
Maximum conductor for remote contacts	1,5 mm <sup>2</sup>
Combined equivalent protection	T2 (CAT IV CAT III & CAT II) + T3 (CAT I)
as per TS 61643 – 12 & IEC 61643 – 12	12 (CAT IV CAT III & CAT II) + 13 (CAT I)
Certification	VDE, CE
Conformity with	LVD 2014/35/EU
Installation only by qualified electrician	IEC 60417 – 6182
ELEMKO management systems	

OHSAS 18001

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





ISO 14001





Unit: piece / Package: 1 piece

ISO 9001

**Country of Origin** 

Greece