

PRODUCT DATA SHEET

SURGE PROTECTIVE DEVICES (SPDs)

Code: 68 54 150

Ed. 12/2021

Brand Name: SurgeTron T2 H 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 μ s) per pole, 200 kA (8/20 μ s) 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

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 _N	230/400 V, 50 Hz
Maximum operating voltage, U _C	300 V (L–N) / 305 V (N–PE), 50 Hz
I _{max} , “class II” test, (8/20 μ s), 1P	50 kA (L–N) / 65 kA (N–PE)
I _n , “class II” test, (8/20 μ s), 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 _a	<25 ns (L–N) / <100 ns (N–PE)
Maximum back up fuse	<315 A gG
Short circuit withstand, I _{scor}	25 kA / 50 Hz
Follow current interrupt rating (N–PE), I _f	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 _{PE}	<5 μ A
Monitoring indication	YES
Installation location	Indoor
Protection level of housing	IP20 (built in)
Dimensions WxHxD	72x105x70 mm
Operating temperature, ϑ	-40°C ÷ +80°C
Relative humidity	5% ÷ 95%
Rail mounting	DIN-3 (TS-35/EN50022)
Housing material	Polycarbonate halogen free
Maximum conductor for terminal	35 mm ²
Conductor terminals tightening torque	2,5 Nm
Maximum conductor for remote contacts	1,5 mm ²
Combined equivalent protection as per TS 61643 – 12 & IEC 61643 – 12	T2 (CAT IV CAT III & CAT II) + T3 (CAT I)
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

Country of Origin

Greece

Unit: piece / Package: 1 piece

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