

PRODUCT DATA SHEET

SURGE PROTECTIVE DEVICES (SPDs)

Code: 68 25 050

Ed. 02/2021

Brand Name: TrigeTron T1 H 50 NPE 0+1
Application: 230/400 V AC electrical networks

Description

Single pole SPD T1 (class I), equipped with a heavy duty spark gap sealed into a noble gas filled cylinder. It is intended to be connected between N-PE and is suitable for installation in TT, TN S & TN CS systems. It should be combined with module(s) suitable for connection between L-N. In this combination it can be installed before the RCD, even in TT systems, providing optimum protection against temporary overvoltages (TOV) caused even by faults in medium voltage. It is capable to withstand high energy lightning currents up to 50 kA (10/350 μ s), providing protection to structures with external lightning protection system of classes III & IV and to equipment supplied by overhead electrical network exposed to direct lightning strikes*. Additionally, it is providing protection against surge currents up to 100 kA (8/20 μ s). The residual voltage 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*.



* Combined with module(s) suitable for connection between L-N.

Protection type EN / IEC 61643-11

- T1 / Class I

Technical characteristics

Number of Poles	1
Connection between terminals	N – PE
Installation in	TN S, TN CS, TT
Nominal operating voltage, U_N	230/400 V, 50 Hz
Maximum operating voltage, U_c	305 V, 50 Hz
I_{imp} , "class I" test, (10/350 μ s), 1P	50 kA
I_{max} , "class II" test, (8/20 μ s), 1P	100 kA
I_n , "class II" test, (8/20 μ s), 1P	50 kA
U_p , (at I_n)	<1,5 kV
Response time, t_A	<100 ns
Follow current interrupt rating (N-PE), I_f	100 A rms
Temporary Overvoltage (TOV), 200 ms N-PE	1200 V withstand
Residual current, I_{PE}	<5 μ A
Monitoring indication	YES
Installation location	Indoor
Protection level of housing	IP20 (built in)
Dimensions WxHxD	17,5x106x87 mm
Operating temperature, ϑ	-40°C ÷ +80°C
Relative humidity	5% ÷ 95%
Maximum conductor for terminal	35 mm ²
Conductor terminals tightening torque	2,5 Nm
Remote contacts	NO
Rail mounting	DIN-3 (TS-35/EN50022)
Housing material	Polycarbonate halogen free
Combined equivalent protection as per TS 61643 – 12 & IEC 61643 – 12	T1 (CAT IV) + T2 (CAT II & CAT III) + 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

Combined with

TrigeTron T1 H 50 1+0, ELEMKO code 68 25 112, connection between L-N

Unit: piece / Package 1 piece

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