

PRODUCT DATA SHEET SURGE PROTECTIVE DEVICES (SPDs)

Code: 68 32 302 Ed.07/2025

Brand name: T1 M spec 300 3+1

Application: 230/400 V AC electrical networks

Description

Four poles SPD T1 (class I), in 3+1 (P + N) wiring, suitable for installation in TT, TN S & TN CS systems. It is equipped with heavy duty varistors (protection between phases—neutral) and a spark gap (protection between neutral—protective earth). This wiring is preventing any leakage current to the earthing system, thus allowing their installation before the RCD, even in TT systems. Additionally they are especially designed to provide high protection against temporary overvoltages (TOV) caused even by medium voltage faults. They are capable to withstand high energy lightning currents up to 12,5 kA (10/350 μ s) per pole, 50 kA (10/350 μ s) per 4 poles, 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. 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.



Protection type EN / IEC 61643 - 11

T1 / Class I

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, 50Hz
Maximum operating voltage, Uc		300V (L-N) / 305V (N-PE), 50Hz
I _{imp} , "class I" test, (10/350μs), 1P		12,5kA (L-N) / 50kA (N-PE)
I _{max} , "class II" test, (8/20µs), 1P		50kA (L-N) / 100kA (N-PE)
I _n , "class II" test, (8/20μs), 1P		20kA (L-N) / 50kA (N-PE)
U _p , (at I _n)		<1,5kV (L-N) / <1,5kV (N-PE)
Response time, t _A		<25ns (L-N) / <100ns (N-PE)
Maximum back up fuse		<160 A gG
Short circuit withstand, Isccr		50 kA / 50 Hz
Follow current interrupt rating (N–PE), Ifi		100A rms
Temporary Overvoltage (TOV), 5 s		335 V withstand
Temporary Overvoltage (TOV), 120 min		440 V fail safe
Temporary Overvoltage TOV 200ms N-PE		1200V withstand
Residual current, IPE		< 5 μA
Monitoring indication		YES
Installation location		Indoor
Protection level of housing		IP20 (built in)
Dimensions WxHxD		72x90x78 mm
Operating temperature, ∂		-40°C ÷ +80°C
Relative humidity		5% ÷ 95%
Maximum conductor for terminal		35 mm ²
Rail mounting		DIN-3 (TS-35/EN50022)
Housing material		Polycarbonate halogen free
Combined equivalent protection		T1 (CAT IV) + T2 (CAT II & CAT III)
as per EN / IEC 61643 – 11		+ 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.







