

Surge Protective Device 20kA T2 for LED drivers & luminaires

LED SPD 20kA T2

Features:

- Wide range of mains supply AC voltage 100-264V & 50/60Hz
- Long life time & high durability
- Suitable for insulation Class I luminaires, drivers, power supplies only
- High grade of ingress protection of body IP67
- High surge protection levels of up to 20kA
- Can use as common protection system for all low-voltage electrical installations
- For better surge protection of LED luminaires/drivers is recommended tandem use of T2 & T3 protectors

Applications:

- Highways lighting
- Rural roads lighting
- Industrial zones lighting



Protection

Protection mode	Diff. mode & Comm. Mode
Type of surge protection device according IEC/EN 61643-11	T2
Power grids	TNS, TNC-S, TT
Max. voltage protection level at In Up(L-N) & Up(L,N-GND)	1.5kV & 1.8kV ± 10%
Insulation class	Class I
Ingress protection	IP67

Electrical characteristics

Mains supply voltage Un(L-N) & Frequency	100 ... 264VAC & 50/60Hz
Max. continuous operating voltage Uc(L-N)	275VAC 50/60Hz
Max. continuous operating voltage Uc(L-GND)	275VAC 50/60Hz
Max. continuous operating voltage Uc(N-GND)	275VAC 50/60Hz
Temporary Overvoltage Ut (tt=5s; TN, TT-systems; LV system faults in consumer installation, 255VAC*1.32)	337VAC
Temporary Overvoltage Ut (tt=5s; TT-systems; LV system faults in consumer installation; L-PE 255VAC*√3)	442VAC
Temporary Overvoltage Ut (tt=120min; TT-systems; LV system faults in distribution system and loss of neutral, L-PE 255VAC*1.32)	337VAC
Nominal discharge current In(L-N)	10kA 8/20uS current wave
Nominal discharge current In(L-GND) & In(N-GND)	10kA 8/20uS current wave
Max. discharge current Imax	20kA 8/20uS current wave
Max. voltage protection level at In Up(L-N)	1.5kV ± 10%
Max. voltage protection level at In Up(L-GND) & Up(N-GND)	1.8kV ± 10%
Backup fuse	16A, max gG fuse
Max. earth leakage current at Uc	50uA, rms to GND

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Durability

Surge withstand capability	1 strike at 20kA max ≥ 20 strikes at 10kA max
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Ambient conditions

Allowable operating ambient temperature t_a	-30 ... +70°C
Max. allowable casing temperature t_c	+80°C
Storage & Relative humidity	-30 ... +80°C & 5 ... 95% non-condensing
Suitable for outdoor luminaires	Yes, built-in usage only
Expose of UV radiation and/or Sun light	Not allowable, do not expose
Air pressure and altitude	80 ... 106kPa & -500 ... +2000m

Connections

Connections to protect	Line - brown; Neutral - blue; PE - yellow-green
Length of wires	3x170mm , 16AWG

Sizes&Fixing

Dimensions	85*43*35mm (only body)
Fixing screw type	M8x10

Material

Material of Body	plastic
Weight (incl. nut)	166 ± 5 g
Replacable parts	No replacable parts

Warranty conditions

Lifespan at $t_c < 80^\circ\text{C}$	up to 100 000h in depends of strikes and T_c
Warranty	5 Years and/or according strikes and T_c

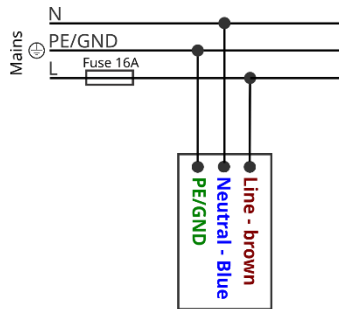
Sertification

Classification	Class II acc. EN61643-11
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Modified Date	Rev.	Description of Change		
		Item	From	To
29.2.2024	1.3	Datasheet Release	/	/

Surge Protective Device 10kA Type T2 for LED drivers & luminaires

Application diagram:



LED SPD 10kA&20kA T2
T2 type connections
when "end of life" is reached
the protector is no more
protects the line