

PRODUCT DATASHEET

LVED SPD 10KV S IP67 Class I G3 - ENEC

LED SURGE PROTECTOR DEVICE



AREAS OF APPLICATION

- Surge protector device
- Uoc: 10KV
- Class I

PRODUCT BENEFITS

- Long lifetime and high working temperature
- Failure indication LED
- Low maintenance costs thanks to easy replacement

PRODUCT FEATURES

- Suitable for luminaires of protection class I
- High surge protection of up to 10 kV
- Maximize the lifetime of outdoor lighting applications
- Fully comply with IEC 61643-11
- Operating frequency: 50/60 Hz
- Compact design
- Type of protection IP67

TECHNICAL DATA

Electrical Specifications

Specifications	Parameter	Value	Unit	Condition
Classification		Class III(T3) Class II(T2)		IEC/EN 61643-11 GB/T18802.11-2020
Protection mode		Diff. mode & Comm. Mode Diff.Mode: P-10/II S-10P/II		
(L-N) Max. continuous operating voltage	Uc (L-N)	320	VAC	50 ... 60 Hz
(L-GND) Max. continuous operating voltage	Uc (L-GND)	320 P-10 S-10	VAC	50 ... 60 Hz
(N-GND) Max. continuous operating voltage	Uc (N-GND)	15 P-10 S-10	VAC	50 ... 60 Hz / The L N input line must be connected correctly and cannot be reversed.L N
Temporary overvoltage TOV	UT	336.6	V	LV system fault: 255 V x 1.32 at tt =5S, TN
Temporary overvoltage TOV	UT	441.6	V	LV system fault: 255 V x $\sqrt{3}$ at tt = 120m, TN
Power grids		TN: P-10 S-10 TT, IT P-10/II S-10/II		Incl. all TN varieties TN-C, TN-C-S, TN-S
(L-N) Nominal discharge current	In (L-N) In (L-GND) In (N-GND)	5 P-10 S-10	kA	8/20uS
Max discharge current	I _{max} (L-N) (L-GND) (N-GND)	12 P-10 S-10	kA	1 strike
(L-N) Max. voltage protection level at In	Up (L-N)	1.5	kV	5kA 8/20uS
(L-GND) Max. voltage protection level at In	Up (L-GND)	2 P-10 S-10	kV	5kA 8/20uS
(N-GND) Max. voltage protection level at In	Up (N-GND)	2 P-10 S-10	kV	5kA 8/20uS
Open-circuit voltage	Uoc	10	kV	
Backup fuse		16	A	Max., gG fuse
End of life indication		Yes		Light ON: SPD is functional. Light OFF: SPD has reached end-of-life
Max earth leakage current at Uc		50 P-10 S-10	μA	Max. rms, to GND
IP protection level		IP67		

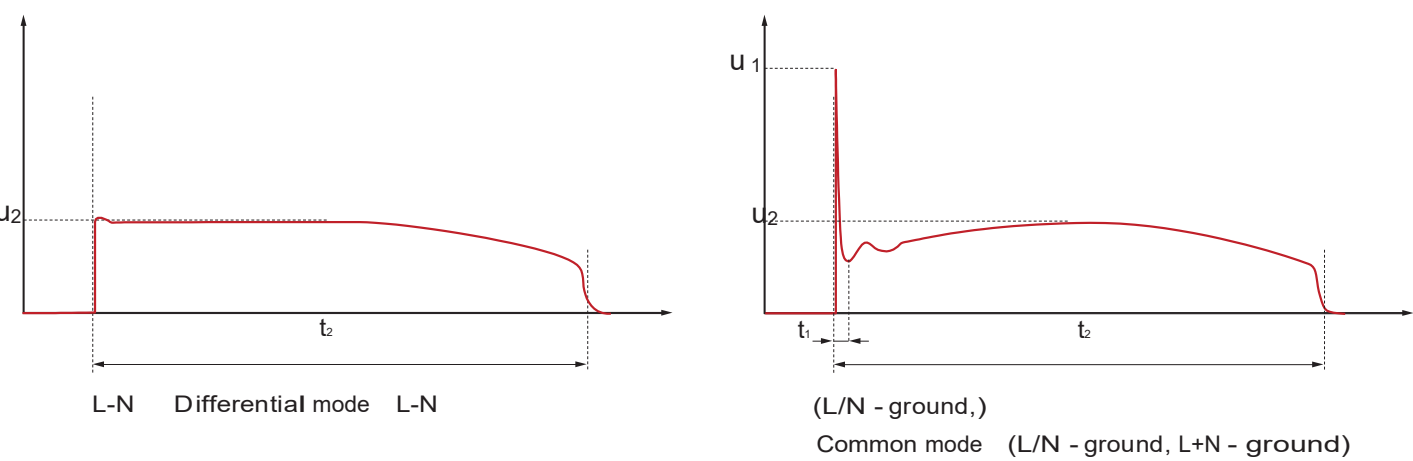
TECHNICAL DATA

Other Specifications

Specifications	Parameter	Value	Unit	Condition
Surge withstand capability		1	strike	Max. at 12kA
		20	strike	Min. at 5kA
		50	strike	Min. at 3kA
Nominal current		5 S-10 S-10/II	A	(50-60Hz) Rated load current at 50 ... 60 Hz
Power consumption		0.5	W	Max. at Uc = 320VAC; Load current=5A
Suitable for luminaires		Class I P-10 S-10 Class II P-10/II S-10/II		IEC60598 Insulation Class acc. IEC60598

Protection levels Up

Model	Ic 8/20 μs	Differential mode U2	(L-G) U1/U2 Common mode U1/U2	(N-G) U1/U2 Common mode U1/U2
LVED SPD 20kV IP20 I	DM:10kA / CM:7.5kA	≤1800 V	≤2000 V / 1400 V	≤2000 V /1000 V



Environmental conditions

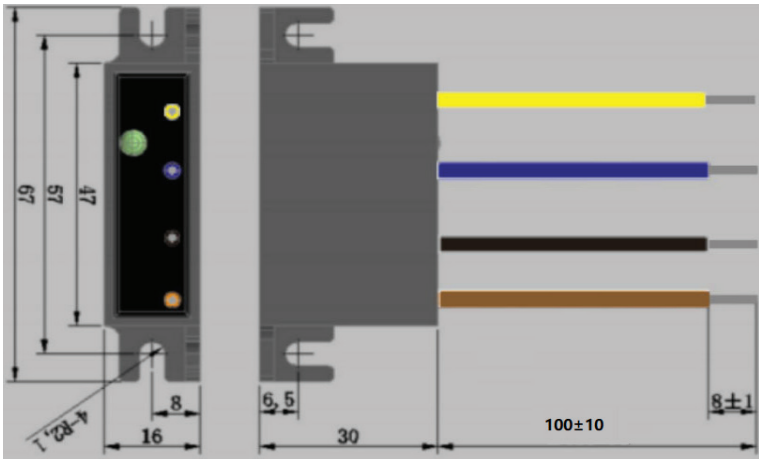
Specification item	Value	Unit	Condition
Ambient temperature	-40...80	°C	
Tcase-max.	85	°C	Measured at Tc-point
Storage temperature	-40...85	°C	
Relative humidity	5...95	%	Non-condensing
Suitable for outdoor luminaires	Yes		Built-in only

TECHNICAL DATA

Lifetime

Specification item	Value	Unit	Condition
Lifetime	100,000	hours	Measured @ Tcase-max with min 90% survival

Product Dimensions

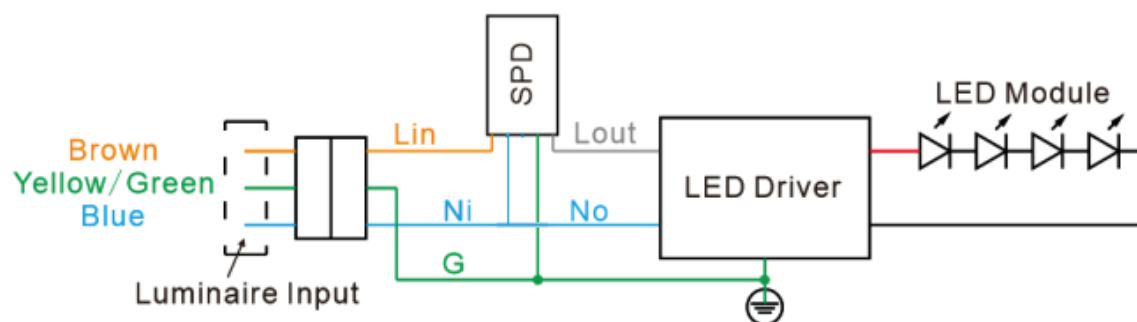


Dimensions

Mounting length	47 mm
Overall length	67 mm
Case Width	30 mm
Case Height	16 mm
Fixing hole diameter	M4 (57)

TECHNICAL DATA

Wiring diagram Insulation Class I application



Wiring diagram Insulation Class II application

