

## LF-SPD-20-320 II A/B

Surge Protective Device



### Product family features

- Max. continuous operation voltage: 320Vac
- Surge protection: 20kV/10kA
- Voltage protection level(Up) L-N: <1.8kV
- According to IEC 61643-11 standard-T2&T3
- Suitable for Class II light fixtures
- IP20

### Product family benefits

- Surge level: 20kV(T3)/10kA(T2)
- Two terminals available: 45° push terminals or screw terminals
- With status indicator
- Fully compliant with IEC 61643-11

### Typical applications

- For street lighting, urban lighting, and industrial lighting
- Outdoor application: light fixture IP>54

## Electrical data

### Input data

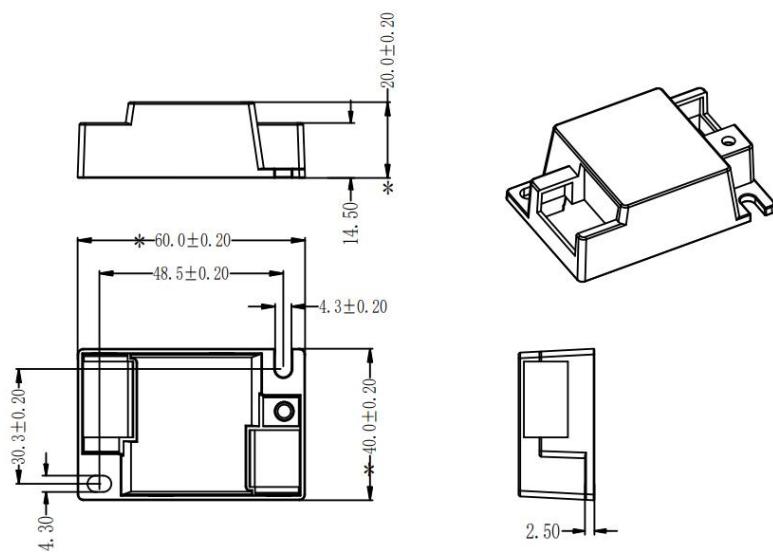
Rated supply voltage	100 ... 277V
AC voltage range	100 ... 305V
Max. continuous operation voltage (Uc)	320V
Mains frequency	50/60Hz
Protection mode	L-N
Combination wave generator/ Open-circuit voltage (Uoc)	20kV
Voltage protection level (Up)	L-N: <1.8kV
TOV in low-voltage systems (5 s/withstand mode) (U <sub>T</sub> )	403Vac
TOV in low-voltage systems (120 m/safe failure mode) (U <sub>T</sub> )	528Vac
TOV in high-voltage systems (200ms/safe failure mode) (U <sub>T</sub> )	1200Vac
Rated load current (I <sub>L</sub> )	10A
Nominal discharge current (8/20 µs) (In)	L-N: 10kA
Max. discharge current (8/20 µs) (In)	L-N: 20kA
Max. backup fuse	20A
AC system	TT, TN, IT
Classification	ClassII (T2) + ClassIII (T3)
Suitable for fixtures with prot. class	II

### Temperature & Operating conditions

Ambient temperature range	-40°C - +85°C
Maximum temperature at Tc test point	90°C
Warranty	8 years
Temperature range at storage	-40°C - +80°C (6 months in Class I environment)
Humidity range at storage	20-75%RH (no condensation)
Humidity during operation	20-95%RH (no condensation)
Atmospheric pressure	80-106KPa
RoHS	RoHS 2.0 (EU) 2015/863
IP rating	IP20
Certifications	CE

Note: A/B in LF-SPD-20-320 II A/B indicates different wiring terminals. A refers to 45° push terminal, while B refers to screw terminal.

## Dimensions

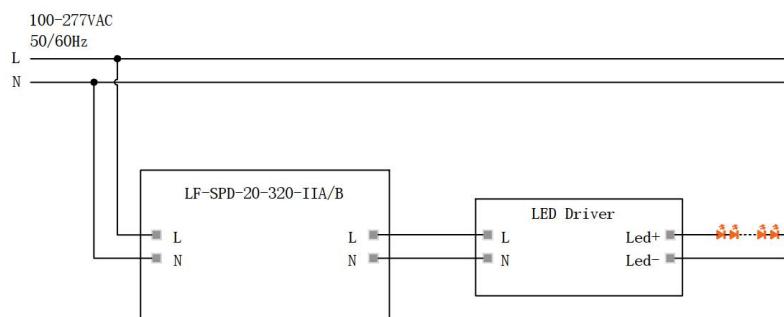


<b>Product weight</b>	35g
<b>Cable cross-section, output side</b>	0.75 ... 1.5 mm <sup>2</sup>
<b>Wire preparation length, input side</b>	7 ... 8mm
<b>Wire preparation length, output side</b>	7 ... 8mm
<b>Length</b>	60mm
<b>Width</b>	40mm
<b>Height</b>	20mm

## Colors & materials

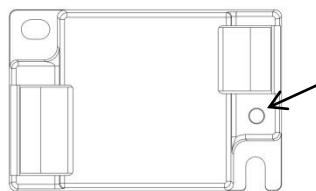
<b>Casing material</b>	PC
<b>Casing color</b>	White

## Wiring diagram



Note: Please strictly follow the wiring diagram for wiring. Do not reverse L and N.

## Status indicator



Status indicator

Green: SPD is powered on and functioning normally.

OFF: No power to the SPD or the unit is faulty.

## Certificates & standards

Approval marks	CE
Standards	IEC 61643-11
Type of protection	IP20

## Logistical data

Product	Packaging unit (Pieces/Unit)	Dimensions (L*W*H)	Volume	Gross weight
LF-SPD-20-320 II A/B	200	385mm*285mm*210mm	23.04 dm <sup>3</sup>	8kg±5%

## Test equipment & condition

Test equipment	AC power source: CHROMA6530, oscilloscope: Tektronix DPO3014, constant temperature and humidity chamber, ball pressure test device; lightning surge test & impulse platform: AT3181-025-E-S, impulse current generator: GIC200D100C/GIC40kA, hi-pot tester: EEC SE7440, lightning surge generator: SUR S6C, etc.
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If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C and humidity of 50%.

## Additional information

1. The final interpretation of the above parameters belongs to Lifud.

## Transportation & storage

Suitable transportation means: vehicles, boats and aeroplanes.

In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact on the product as much as possible.

The storage of the product shall conform to the standard of Class I environment. When using the products which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

## Cautions

Please use the product according to its parameters in the specification, otherwise the it may malfunction.

Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.

Man-made damage is beyond the scope of Lifud warranty service.

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## Disclaimer

Subject to change without notice. Errors and omissions excepted. Always make sure to use the most recent release.  
Lifud Technology Co., Ltd. reserves the right to interpret any content of this specification.