



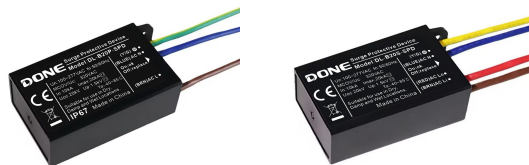
SPD SERIES Surge Protective Device

DL-B20S/B20P/B20KS/B20KP-SPD Spec. V1.2



Features

- Meet the safety and performance tests of Class II or Class III.
- Protection mode: L-N, L-PE, N-PE. (DL-B20P/B20S-SPD)
- Protection mode: L-N. (DL-B20KP/B20KS-SPD)
- Built in thermal separation function, higher safety.
- Parallel and series connection mode optional , with its own lead.
- Excellent surge impact resistance and low residual voltage.
- Miniature size and convenient for embedded installation.
- IP67 Water-proof and Dust-proof.



Applications

Street lighting、Digital signage、Tunnel lighting、Gas station lighting
 Stadium lighting、Traffic lighting、Port lighting、Industrial lighting



Description

DL-SPD series thermally protected Surge Protective Device is specially designed to be used in outdoor and commercial LED lighting fixtures for transient over voltage protection. It is mainly composed of thermally protected varistors and gas discharge tube components. Its built-in thermal disconnect function provides additional protection to prevent catastrophic failure and fire hazard even under the extreme circumstances of varistor end-of-life or sustaining over voltage conditions. The product is connected with LED power driver to provide reliable lighting surge protection, which can effectively prolong the service life and stability of luminaires.

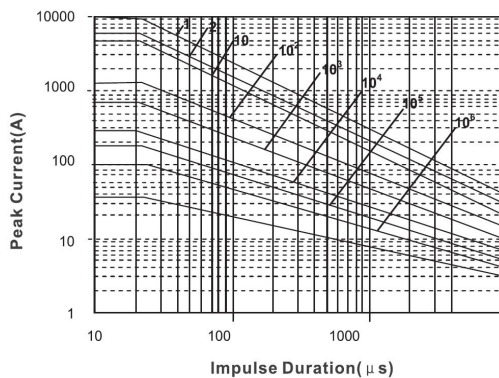
Model list

Model NO.	Input voltage	Protection voltage	Remark
DL-B20P-SPD	100-277V	20KV	Parallels connection
DL-B20S-SPD	100-277V	20KV	Series connection
DL-B20KP-SPD	100-277V	20KV	Parallels connection
DL-B20KS-SPD	100-277V	20KV	Series connection

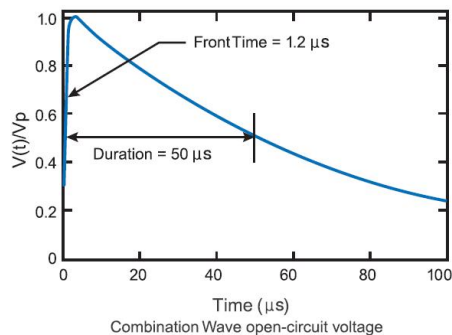
Electrical Data

Product model	DL-B20P-SPD	DL-B20S-SPD	DL-B20KP-SPD	DL-B20KS-SPD
Standards	EN 61643-11 IEC 61643-11	EN 61643-11 IEC 61643-11	EN 61643-11 IEC 61643-11	EN 61643-11 IEC 61643-11
Nominal operating voltage /Un	100- 277V (50/60Hz)	100- 277V (50/60Hz)	100- 277V (50/60Hz)	100- 277V (50/60Hz)
Max. continuous operating voltage /MCOV (Uc)	320V (50/ 60Hz)	320V (50/ 60Hz)	320V (50/ 60Hz)	320V (50/ 60Hz)
Rated load current/IL	-	16A	-	16A
Nominal discharge current /I.(8/20us)	10kA	10kA	10kA	10kA
Max. discharge current /Im»(8/20us)	20kA	20kA	20kA	20kA
Open-circuit voltage /Uc(1.2/50us&8/20us)	20kV	20kV	20kV	20kV
Voltage protection level /Up(@In)	Clamping Voltage≤ 1. 5kV(L-N,L/N-PE) Peak Voltage≤ 1. 8kV(L-N,L/N-PE)	Clamping Voltage≤ 1. 5kV(L-N,L/N-PE) Peak Voltage≤ 1. 8kV(L-N,L/N-PE)	Clamping Voltage≤ 1. 5kV(L-N) Peak Voltage≤ 1. 8kV(L-N)	Clamping Voltage≤ 1. 5kV(L-N) Peak Voltage≤ 1. 8kV(L-N)
Operating state /fault indication	on normally, off fault	on normally, off fault	on normally, off fault	on normally, off fault
Connecting wires	06 (RV) 1.0mm ²	06 (RV) 1.0mm ²	06 (RV) 1.0mm ²	06 (RV) 1.0mm ²
Connection mode	Parallel connection	Series connection	Parallel connection	Series connection
Operating temperature range	-40C~+85°C	-40C~+85°C	-40C~+85°C	-40C~+85°C
Degree of protection	IP67	IP67	IP67	IP67

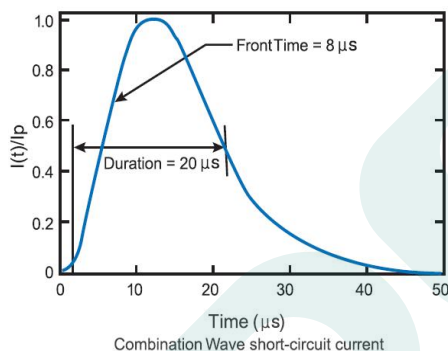
Repetitive surge capability



Test waveform

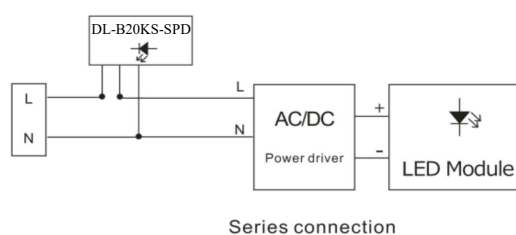
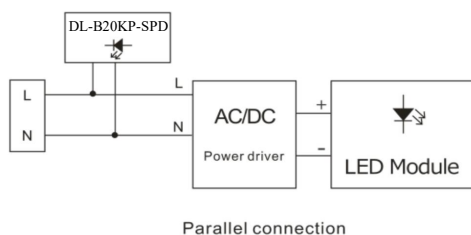
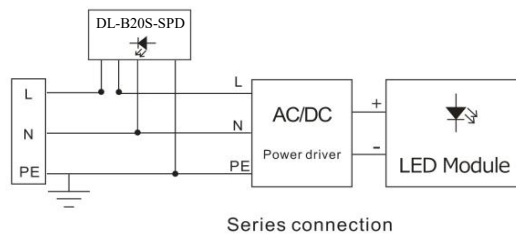
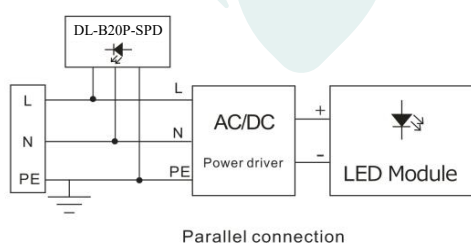


Lightning surge test (8/20us)	
Surge	Strikes
20000A	1
15000A	2
10000A	15



Lightning surge test (8/20us&(1.2/50us)	
Surge	Strikes
10KA/20KV	120

Application / Installation schematic

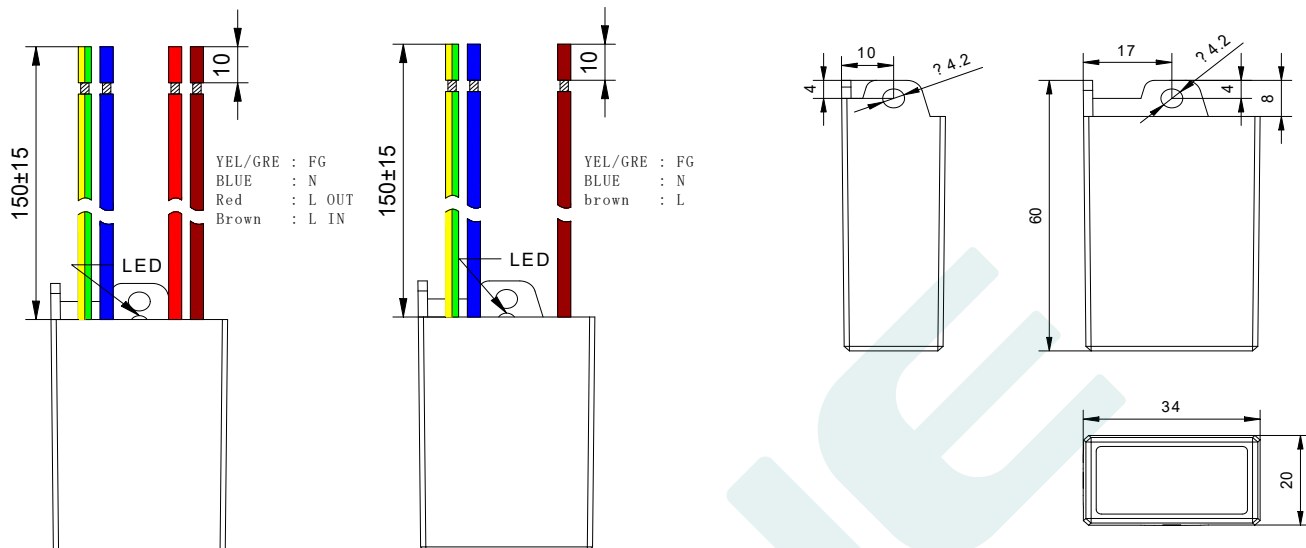


Warning: The phase line and neutral line of the SPD shall not be reversed. and the ground wire shall be reliably grounded.

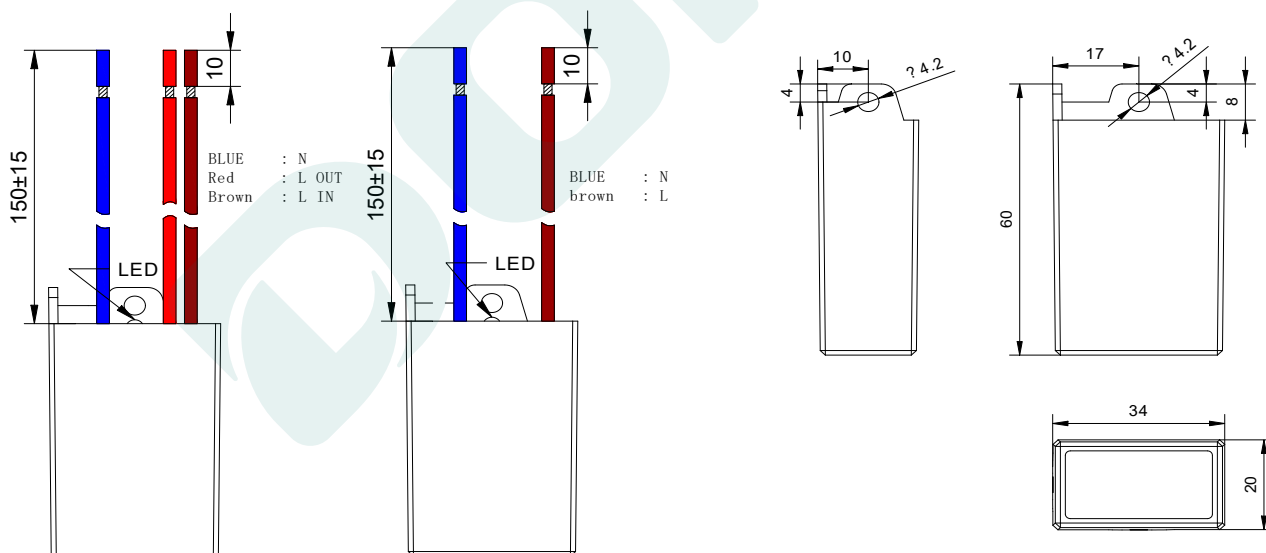
Mechanical specification

Size (mm) L60*W34*H20

DL-B20S/B20P-SPD



DL-B20KS/B20KP-SPD

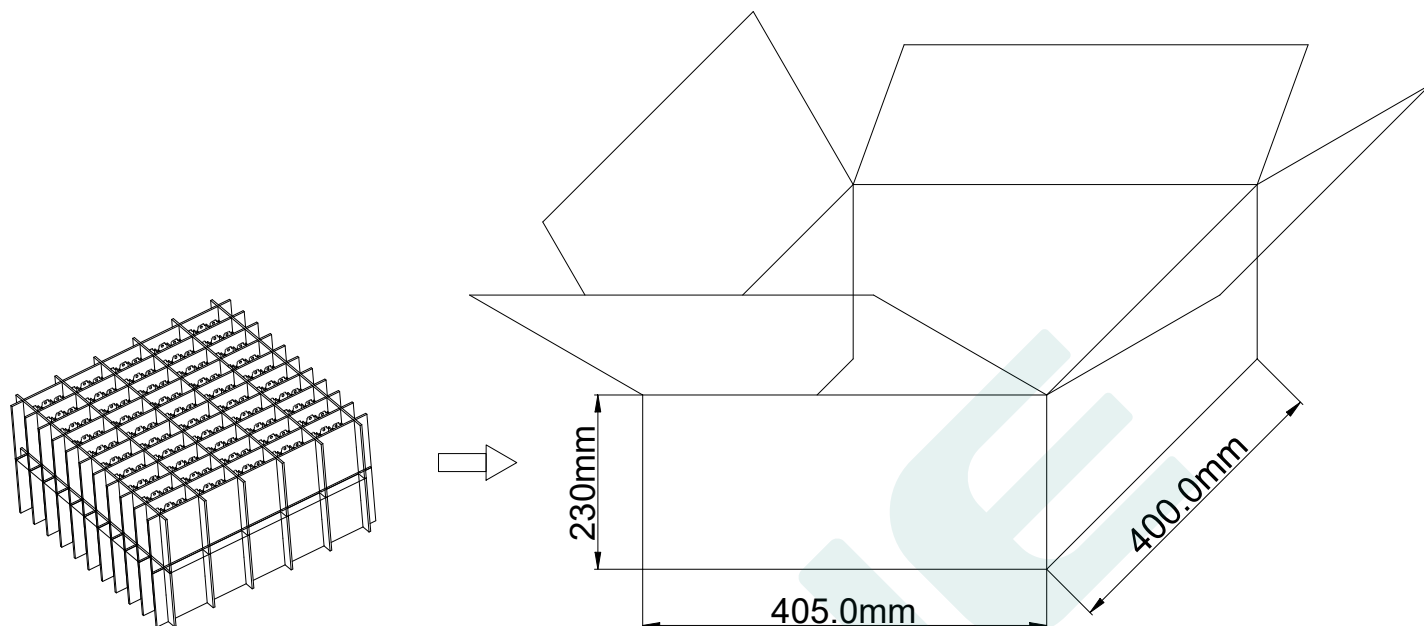


Weight

Weight 60 g

Packaging

Packaging (mm) L405 *W400*H230



Note: One Carton 2 layers and 150 pcs each layer, total 300pcs/carton.

Version

DATE	DESCRIPTION	REV.	CHECK
2025.3.26	Initial version.	V1.0	
2025.5.19	Modify the devices for the applicable lamps	V1.1	
2025.6.7	Add DL-B20KP-SPD、DL-B20KS-SPD model.	V1.2	

MANUFACTRUER		
EDIT	CHECK	APPROVE