KERHAM LED Driver

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datasheet

MST-SPD-277V Surge protector

Name:	MST-SPD-277V
Overview:	Surge protector
Version:	A00
Issue date:	2023-08-08

MST-SPD-277V LED driver Surge protector

Surge protector
-
MST-SPD-277V



E497998

Product Features:

- Input voltage range: 100-277 Vac.
- Surge voltage: 20kV (Max).
- discharge current: 10kA(Max).
- Safety standard: UL1499.
- Suitable for use in Damp Locations.

Product Overview:

MST-SPD-277V is a lightning surge protector for high reliability of SSL outdoor lighting, MST-SPD-277V surge protector for the rear LED lighting drive input L (Line), N (Neutral), G (Ground/Earth) to provide single-phase protection, while the product built-in overvoltage protection function, can provide efficient lightning protection for low-voltage power supply and distribution system and electrical equipment, the product adopts modular design, can be replaced independently, easy to install and maintain. In addition, the product has passed UL1499 standard certification.

Electrical characteristics:

Model	Electrical parameters				Note
	Item	Min	Typ.	Max	
MST-SPD-277V	Input voltage	100Vac		277Vac	
	Input frequency	47Hz	50/60Hz	63Hz	
	Continuous operating voltage			320Vac	
	Up (L – N)			1280Vpk	
	Up (L – G)			1440Vpk	
	Up (N – G)			1500Vpk	
	Maximum surge voltage			20kV	
	Maximum discharge current		5kA	10kA	8/20μS Induction lightning waveform

Note:

1. The surge protective device described in this specification is mainly used for lightning or other transient overvoltage surge protection of low-voltage LED drivers and electrical equipment.

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Structural properties

Model	Structural properties				Note
	Item	Min	Typ.	Max	
MST-SPD-277V	Weight	45g		55g	
	Wire		16AWG		150℃，600V

Safety standards

Model	Standards		Note
MST-SPD-277V	Safety	UL 1449: Transient Voltage Surge Suppressors, CSA-C22.2 No. 269.5	
	Flame retardant	VM-1	

Environmental requirements

Model	Structural properties				Note
	Item	Min	Typ.	Max	
MST-SPD-277V	Operating temperature	-40℃		+85℃	
	Operating humidity	0%RH		85%RH	
	Storage temperature	-10℃	25℃	+45℃	
	Storage humidity	10%RH		75%RH	

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Installation diagram

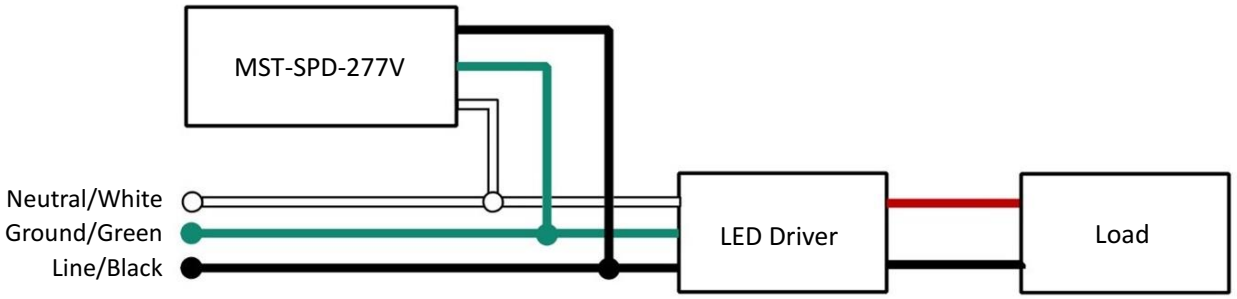

Figure 1 Installation diagram

Note:

1. The surge protector should be installed and maintained by an authorized professional. This product adopts the general parallel connection wire method to connect it to the front end of the drive input, the connecting wire is generally not less than 16AWG multi-stranded copper core insulated wire, and the total length L should be controlled within 0.3m.
2. The power input must be disconnected when installing the surge protector or maintenance, and it is strictly forbidden to operate with electricity to prevent electric shock accidents

Structural dimensions

Unit: mm

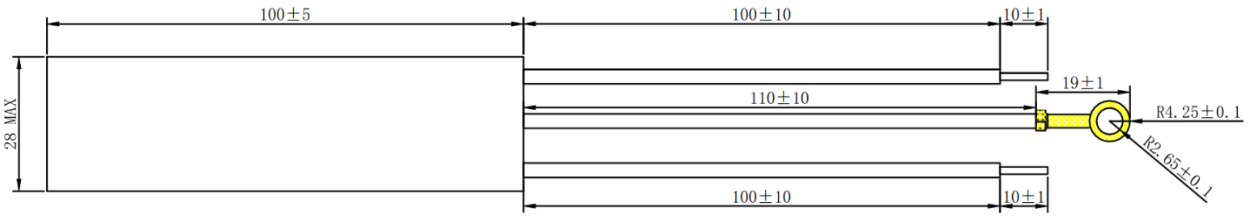

Figure 2 Structural dimensions

Product images



Figure 3 Product images

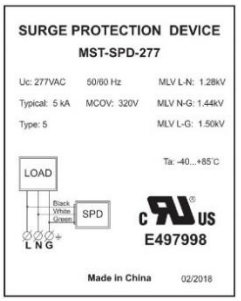

Figure 4 Label

MST-SPD-277V LED driver Surge protector



Precautions:

- The product output is a passive control type product, and attention should be paid to the polarity of the wiring during use.
- If only one function on the controller is used, do not connect excess lines to the controller terminals to avoid affecting power performance.

Transport:

- It is suitable for transportation by car, ship and plane. It should be covered, sun protected and handled in a civilized way.

Storage:

- Products with a storage life of more than one year shall be re inspected and can only be used after passing the inspection.
- The storage of the products shall comply with GB3873-83.

Change history

Version	Description	Issue Date	Note
V1.0	New Issue	2023.08.08	