# SPD 10/275 P5 G2

## Surge Protection Device

Surge Protection Device is to offer comprehensive protection solution against high surges for Outdoor lighting systems.

#### **Benefits**

Maximize the lifetime of outdoor lighting system Lower maintenance costs
Suitable for luminaries of protection class I/II
Long lifetime & high working temperature
IP65 protection against vibration and water
High surge protection of up to 10kV / 10kA for all lighting applications
Failure indication LED
Fully comply with IEC 61643-11

#### **Applications**

Street and Urban lighting Industrial lighting All outdoor application





Color: Gray

## **Approval Marks**



In preparation, if not already printed on product label

# **Product Features**

- Mains voltage to 275Vac
- Suitable for luminaries of protection class I/II
- Fully LED Driver protection by Up
   <2kV</li>

- High surge protection of up to 10 kV /
   10 kA
- Fully comply with IEC 61643-11

Housing material: Plastic

IP65 production

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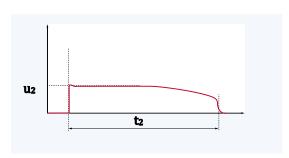
# **Electrical Specifications**

	Item	Value	Unit	Remarks
	Max. continuous operating voltage (L-N)	275	Vac	
	Nominal frequency	50 / 60	Hz	
	Classification	Class III (T3)		Acc. IEC61643-11
	Power grids	TN		Including all TN varieties TN-C, TN-C-S, TN-S
	Open-circuit voltage	10	kV	
	Nominal current	4	Α	Rated load current at 50/60 Hz
လ္ဆ	Power losses	0.1%	W	Of total system power
岜	Protection class	I/II		Insulation Class acc. IEC60598
<u> </u>	Over current protection	15	Α	Max.
RAIN	Temporary overvoltage	441.7 336.6	V	LV system fault: 255 V x 1.73 at tt = 120 m, TN LV system fault: 255 V x 1.32 at tt = 5 s, TN
4	Prospective short circuit current	150	Α	
ICAL	Protection mode	Different mode, Common mode		Please refer to Protection levels.
ELECTRICAL PARAMETERS	Nominal discharge current	5 5 5	kA	L-N; @ UOC=10KV, internal resistance=2Ω L-GND; @ UOC=10KV, internal resistance=2Ω N-GND; @ UOC=10KV, internal resistance=2Ω
ш		1.5		L-N; @ UOC=10KV, internal resistance=2Ω
	Max. voltage protection level	2 2	kV	L-GND; @ UOC=10KV, internal resistance=2Ω N-GND; @ UOC=10KV, internal resistance=2Ω
	Power consumption	0.1	%	Of total system power. Max. at UC = 275VAC;
	Max earth leakage current	50	μA	Max. rms, to GND
	ÿ	1		Max. at 10kA (L-N; L/N-PE)
	Surge withstand capability	30	strike	Min. at 5kA (L-N; L/N-PE)
		50		Min. at 3kA (L-N; L/N-PE)
	Ambient temperature range t <sub>a</sub>	-40+70	°C	
_	Max. case temperature at t <sub>c</sub> point	80	°C	
Ļω	Storage temperature range	-40+85	°C	
直る	Relative humidity	5 95	%	Not condensing
<u>₹</u>	Enviromental rating	Outdoor		Built-in only
윤恒	IP rating	IP 65		
ENVIRONMENT DIMENSIONS	End of life indication (by LED light)	Yes		Optical, light ON: SPD is functional. Light OFF: SPD has reached end-of-life.
	Dimensions	61.5 x 37.5 x 33	mm	
	Dillicipions	01.0 X 01.0 X 00		

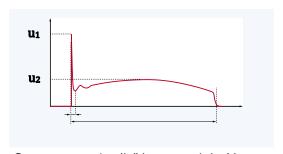
### Protection levels of **Up**

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IC 8/20 µs	Differential mode U2 (L-N)	IC 8/20 µs	Common mode U1/U2 (L/N-PE)
5kA	≤1500 V	5kA	≤2000 V / 1500 V



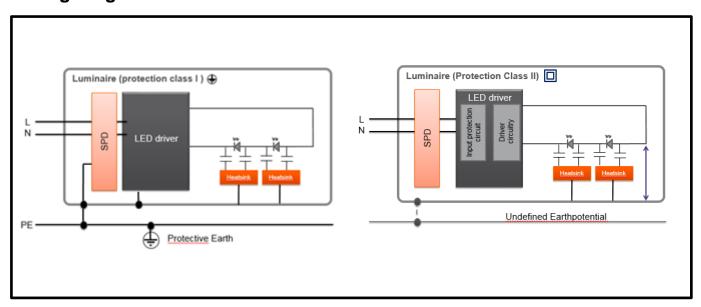
Differential mode L-N



Common mode (L/N - ground, L+N - ground)

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# **Wiring Diagram**



	Item	Value	Unit	Remarks
INPUT	Cable cross section	3*1	mm²	Solid and stranded
	Wire preparation length	810	mm	
	Type of wire	Cable,		
	Lead length	250	mm	
ООТРОТ	Cable cross section	3*1	mm²	Solid and stranded
	Wire preparation length	810	mm	
	Type of wire	Cable,		
	Lead length	250	mm	
Cable length from SPD to LED Driver		<3	m	

### **Standards**

IEC 61643-11 IEC 60598

Product name	EAN10	EAN40	Pieces / box	
SPD 10/275 P5 G2	4062172145404	4062172145411	50	

Manufacturer's address:

**Technical support:** 

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