

Description

Surge Protective Device (SPD), type 5, with hybrid protection technology based on Metal Oxide Varistor (MOV) and Gas Discharge Tube (GDT) for electroelectronic equipment protection on power lines.

Characteristics

- Withstands voltage pulses up to 20 kV @ 1.2/50 μs;
- Withstands current surges up to 20 kA @ 8/20 μs;
- Connection in parallel with the load;
- UL Recognized Component (UL 1449, UL 935, UL 1029);
- Meets ANSI C82.77-5 2017: Category C High;
- RoHS compliant.

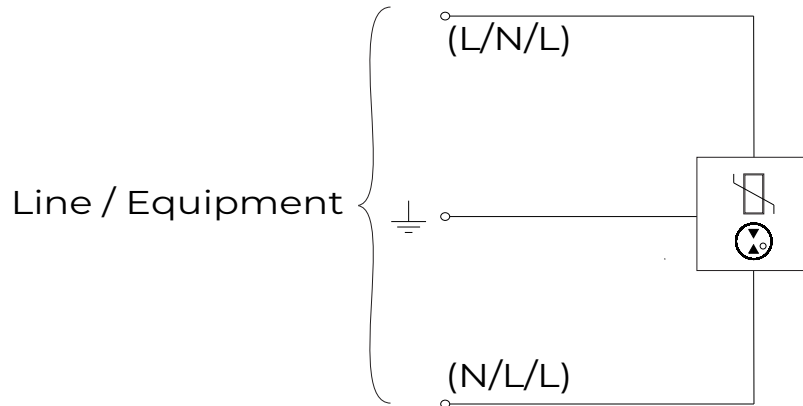
Applications

Protection of LED lighting systems applied in highways, public roads, tunnels, garages and parking lots.

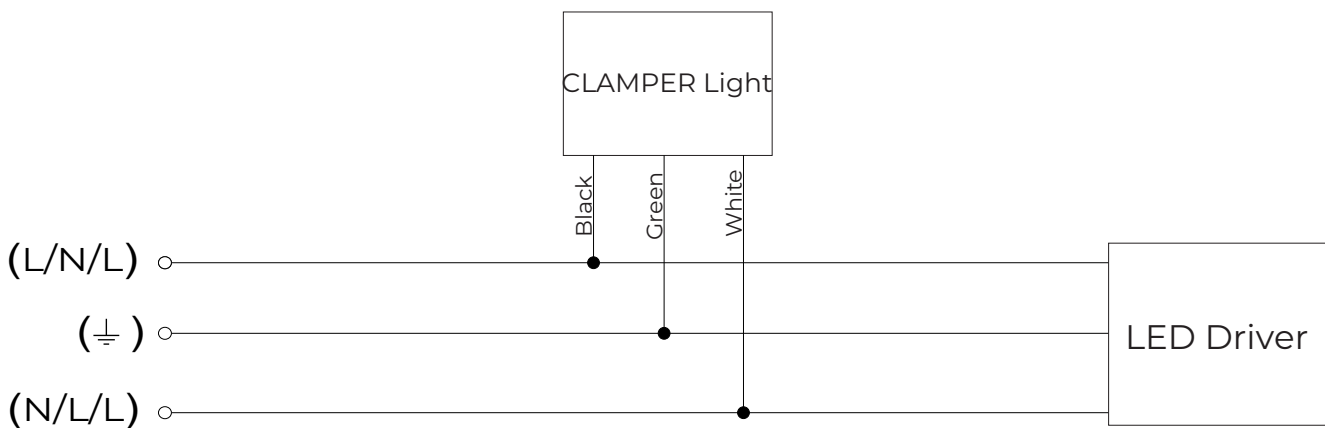
Agency	Standard	File N°
UL	UL 1449	E514682
UL	UL 935 / UL 1029	E517309

Technical characteristics	Unity	CLAMPER Light					
		017106	017091	023178	017109	023180	023181
Part number	-	017106	017091	023178	017109	023180	023181
Models	-	120V 10kV	277V 10kV	277V 20kV	347V 10kV	480V 10kV	480V 20kV
RoHS	-	Yes					
Applied standard	-	UL 1449 / UL 935 / UL 1029					
Protection technology	-	Metal Oxide Varristor (MOV)	Metal Oxide Varistor (MOV) and Gas Discharge Tube (GDT)				
Protection modes	-	L/N (differential mode); L/G - N/G (common mode)					
Typical response time	ns	< 25					
Nominal operating voltage	V _{CA}	120 (47 - 36 Hz)	120 - 277 (47 - 63 Hz)	120 - 277 (47 - 63 Hz)	120- 347 (47 - 63 Hz)	120 - 480 (47 - 63 Hz)	120 - 480 (47 - 63 Hz)
Nominal discharge current @ 8/20 μs - I _n	kA	5	5	10	5	5	10
Maximum discharge current @ 8/20 μs - I _{max}	kA	12	12	20	12	12	20
Maximum continuous operating voltage - MCOV	V _{CA}	150	320	320	420	550	550
Measured limiting voltage (8/20 μs @ I _n) - MLV	V	L/N L/G N/G < 900	L/N < 1210 L/G N/G < 1560	L/N < 1900 L/G N/G < 1900	L/N < 1340 L/G N/G < 1950	L/N < 2080 L/G N/G < 2400	L/N < 2550 L/G N/G < 2650
Clamping voltage (8/20 μs @ I _n)	V	L/N L/G N/G < 900	L/N < 1100 L/G N/G < 1300	L/N < 1200 L/G N/G < 1500	L/N < 1300 L/G N/G < 1800	L/N < 1900 L/G N/G < 2200	L/N < 2100 L/G N/G < 2400
Weight	g (lb)	77 (0.17)	77 (0.17)	77 (0.17)	77 (0.17)	77 (0.17)	168 (0.37)
Installation scheme	-	In parallel with the load					
Electrical connection	AWG	Flexible cables # 16					
Cables length	mm (in)	150 (5.9)					
Operating temperature	°C	-40 the +85					
Enclosure	-	Material with non-propagation and self-extinguishing characteristics					
Maximum dimensions	mm (in)	49 (1.93) x 25 (0.98) x 46 (1.81) (L x W x H)					49 (1.93) x 25 (0.98) x 46 (1.81) (L x W x H)

Electric diagram:



Connection diagram:



Mechanical drawing:

