

Features

- 249-528Vac Working Input Voltage
- Line-Line, Line-Earth Surge Protection Mode
- Maximum Discharge Current (I_{max}) 20kA, 8/20μs
- Nominal Discharge Current (I_n) 10kA, 8/20μs
- UL1449 Type 5 Recognized Component
- IEEE C62.41.2 Location Category C High Exposure
- High Temperature, 85°C Maximum Surface Temp Rating
- Compatible with Inventronics LED Drivers



Description

The PS-20KS10KHT is designed to be used in conjunction with LED Drivers to provide an additional level of surge or transient overvoltage protection in industrial and commercial applications. It is created for many lighting applications including street, tunnel and high mast to help to improve the lifetime of the LED drivers and luminaires.

General Specifications

Parameter	Min.	Typ.	Max.	Notes
Rated Voltage	277 Vac	-	480 Vac	
Max. Continuous Operating Voltage (MCOV) ⁽¹⁾	-	-	550 Vac	
Input Frequency	47 Hz	-	63 Hz	
Nominal Discharge Current (I _n) ⁽²⁾	-	-	10 kA	
Maximum Discharge Current (I _{max}) ⁽³⁾	-	-	20 kA	
Open Circuit Voltage (U _{oc}) ⁽⁴⁾	-	-	20 kV	Tested with a combination wave generator with 2Ω impedance.
Clamping Voltage (L-N) ⁽⁵⁾	-	-	3000 V	Measured at a 20kV/10kA combination wave
Clamping Voltage (L-G, N-G) ⁽⁵⁾	-	-	3000 V	Measured at a 20kV/10kA combination wave
Number of Surges				
20 kA	1	-	-	
10 kA	15	-	-	
4 kA	100	-	-	
2 kA	500	-	-	
1 kA	1000	-	-	
Net Weight	-	60 g	-	

Notes:

(1) Maximum Continuous Operating Voltage (MCOV): The maximum r.m.s. voltage that the SPD can support continuously.

(2) Nominal Discharge Current (I_n): The peak amount of current that the SPD can withstand for 15 impulses using the

- 8/20µs current wave. This measures the SPD's endurance capability.
- (3) Maximum Discharge Current (Imax): The peak amount of current that the SPD can withstand for 1 impulses using the 8/20µs current wave. This measures the SPD's maximum capability.
 - (4) Open Circuit Voltage (Uoc): The peak amount of voltage that the SPD can withstand using the combination wave. This measures the SPD's maximum voltage capability.
 - (5) Clamping voltage: The measured amount of residual, or "let-through", voltage that can pass through the SPD during the application of impulses of Open Circuit Voltage (Uoc).

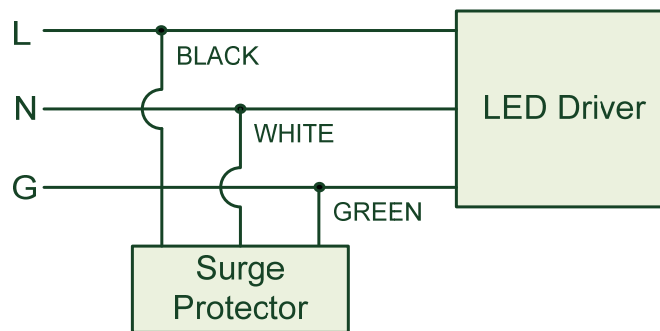
Environmental Specifications

Parameter	Min.	Typ.	Max.	Notes
Operating Temperature	-40 °C	-	+85 °C	
Storage Temperature and Humidity	-40 °C	-	+85 °C	Humidity: ≤ 75%RH
Recommended Storage Temperature and Humidity	-10 °C	-	+40 °C	Humidity: ≤ 75%RH

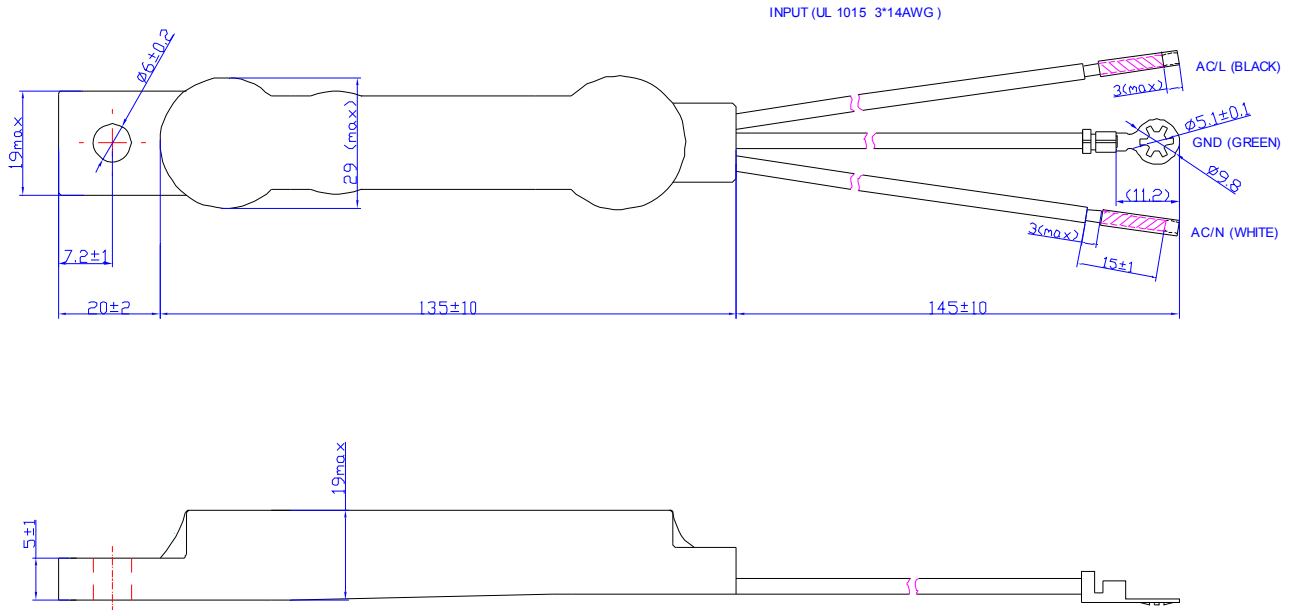
Safety & EMC Compliance

Safety Category	Standard
UL/CUL	UL 1449: Transient Voltage Surge Suppressors, CSA-C22.2 No. 269.5
IEEE C62.41	Guide on the Surge Environment in Low-Voltage (1000 V and Less) AC Power Circuits

Wiring



Mechanical Outline



Unspecified tolerance: ±1.5

Revision History

Change Date	Rev.	Description of Change		
		Item	From	To
2018-03-30	A	Datasheet Release	/	/
2018-04-20	B	Mechanical Outline	/	Updated
2018-08-28	C	Mechanical Outline	/	Updated