



## UL Listed Type 2 SPD 20kA / 20kV Surge Energy Protector Outdoor LED protection

The GRE Alpha's SEL-20kA Surge Energy Protector is an ideal accessory for maximum surge protection for your lighting investments. Complying with UL1449, EN 60.364-5-534 and EN 62.305-1, the UL Listed SEL-20kA provides complete 20kV/20kA surge protection against both surge overvoltages and overcurrents, providing effective coverage against both direct and indirect lighting strikes. The Surge Energy Protector comes in a compact housing and is universal input 100-277VAC and comes fully potted, making it effective for both indoor and outdoor installations.

### SEL-20kA 20kA / 20kV Surge Energy Protector



### Features

- UL Type 2 SPD
- Surge protection of up to 20kA / 20kV
- Operating voltage 100-277V AC
- Line to Line and Line to Ground protection
- LED indicator for device status
- IP65, fully potted suitable for outdoor use
- -40 to 70
- UL / cUL Listed, CE

### Applications

- Outdoor lighting
- Signage
- Street Lighting
- Parking Lot

Model	Operating Voltage Range (VAC)	Max. Continuous Operating Voltage (VAC)	Max. Open Voltage (V)	Voltage Protection Rating (V)	Nom. Discharge Current (A)	Max. Surge Current (A)
SEL-20kA	100-277	320	20k	1200	5000	20k

\* UL marking: for products manufactured in Vietnam only, effective October 2020.

## Operating Specification

Operating Voltage	100-277VAC	Input Frequency	50/60Hz
Max. Continuous Operating Voltage	320VAC	Max. Open Circuit Voltage	20kV
Voltage Protection Rating	1200 V ( L to N ) 2000 V ( L to FG ) 1800 V ( N to FG )	Nominal Discharge Current	5kA
Max. Surge Current (8/20 $\mu$ s)	20kA	Short Circuit Current Rating	5kA
No. of surges @ max. nominal surge 20kA (common/differential mode)	1/1	Response time	<25ns

## Environmental Specification

Operating Temperature	Storage Temperature	Relative Humidity
-40°C - 70°C	-40°C - 85°C	5% - 95 %

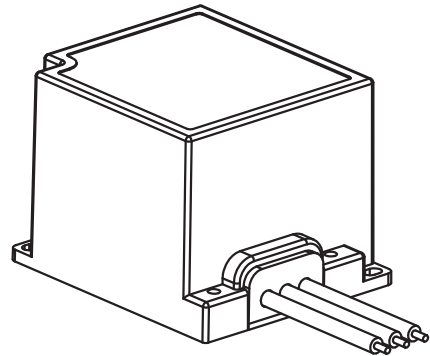
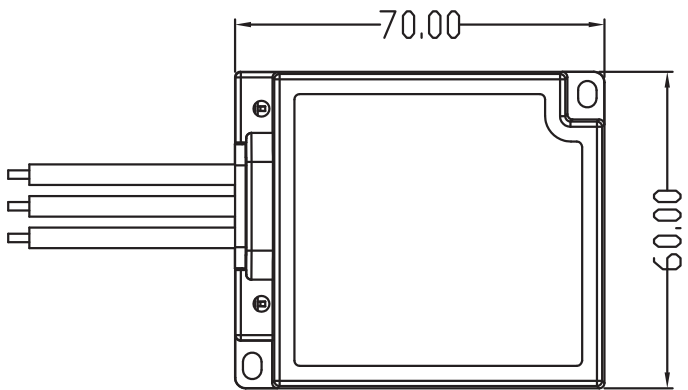
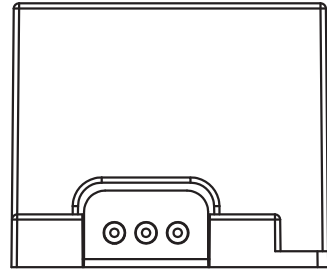
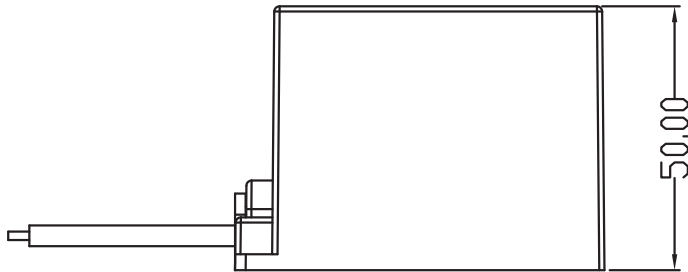
## Compliance / Safety

Safety Standards:	UL 1449, CSA C22.2 NO. 269.4-14, CSA C22.2 NO. 269.5-15, CE
Weatherability	IP65

## Mechanical Specification

Power Unit Dimensions	70mm (L) x 60mm (W) x 50mm (H)
Housing Material	Polycarbonate white
Wire size	10AWG
Wire length	15cm

## Mechanical Diagram



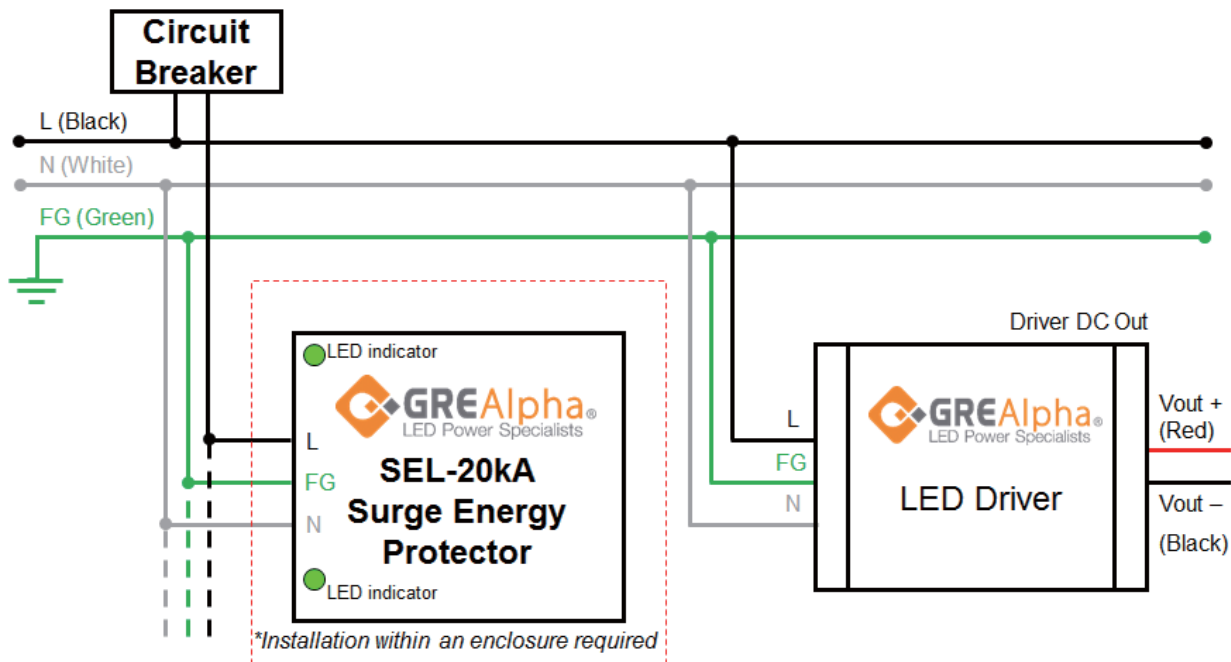
### Packing Information:

Weight: 0.323 kg/pc ; 15.62 kg/carton;

40pcs/ carton; L390xW248xH280 (mm)

# SEL-20kA Surge Energy Protector Installation Instructions

## Wiring Diagrams



N.B. During normal operation, both LED indicators will light on. If any one or both LED indicator is off, replacement is needed.

- Circuit Breaker can be used to connect to multiple Surge Energy Protector.

## Warnings

- Suitable For Use on a Circuit Capable of Delivering Not More Than 5000 rms symmetrical Amperes. Convient à des circuits produisant au plus 5000 A eff., when Protected by a circuit breaker rated: 16 A and minimum 277 Volts.
- Contains no serviceable parts.  
WARNING - Shock hazard - Do not open. ATTENTION - RISQUE DE CHOC - NE PAS OUVRIR.

## Wiring Instructions

- 1) Installation of the SEL-20kA Surge Energy Protector requires the proper wiring connection to the AC power lines. (Note: All electrical wiring should comply with local and national electrical codes. Installation should be performed by qualified electrical service personnel.)
- 2) Connect the L wire to the AC Line wire, the FG wire to the AC Frame Ground wire, and the N wire to the AC Neutral wire. Refer to the rating label affixed on the SEL-20kA Surge Energy Protector for AC wire connection.
- 3) Connect the LED drivers or other devices as per each device's installation instructions.
- 4) Once all wiring is completed, turn on the AC supply. Both LED indicators on the SEL-20kA Surge Energy Protector should light on.
- 5) If any or both LED indicator is off, replacement is needed.

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