



E-Star Power Development Co., Ltd. (E-STAR)  
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22069, Taiwan (R.O.C.)  
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## 20kA LED Driver power supply < SPD-20



### ■ Features :

- Type 2 component assemblies
- Line to Ground&Line to Line protected
- Parallel(3 wires) connection style
- LED status indicator
- Suitable for LED driver surge protection
- IP67 design for indoor or outdoor installations



(Only SPD-20-240P)



(Only SPD-20-240P)



IP67

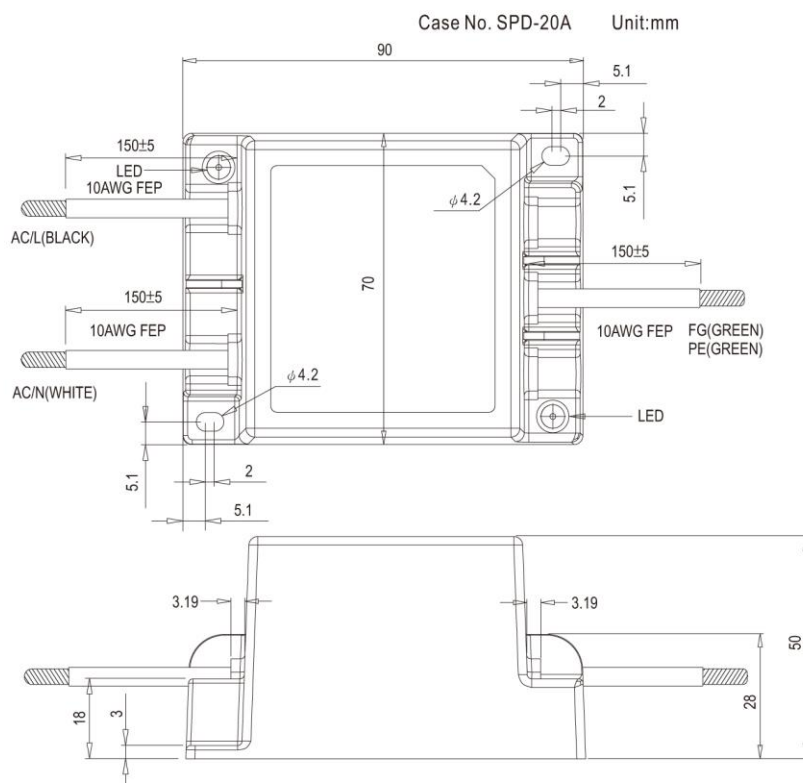
### SPECIFICATION

MODEL	SPD-20-240P	SPD-20-277P
OPERATING VOLTAGE	240VAC 50/60Hz	277VAC 50/60Hz
MCOV(MAX. CONTINUOUS OPERATING VOLTAGE)	300VAC	320VAC
UC(MAX. CONTINUOUS OPERATING VOLTAGE)Note.4	300VAC	-----
VPR (VOLTAGE PROTECTION RATING)	1500V(L-FG,N-FG,L-N)	-----
UP (VOLTAGE PROTECTION LEVEL)Note.5	1500V(L-PE,N-PE,L-N)	-----
IN (NOMINAL DISCHARGE CURRENT)	5kA	-----
MAX. SURGE CURRENT(8/20us)	20kA	-----
Imax. (MAX. DISCHARGE CURRENT) Note.6	20kA	-----
SCCR (SHORT CIRCUIT CURRENT RATING)Note.3	5kA	-----
SHORT-CIRCUIT WITHSTAND Note.7	1.5kA	-----
RESPONSE TIME	<25ns	-----
WITHSTAND Note.1	1600VAC 1minutes	-----
OPERATING TEMPERATURE	-40 ~ +70°C	-----
SAFETY STANDARDS	UL1449(Third Edition),CS22.2 NO.8,EN61643-11(only SPD-20-240P) approved	-----
DIMENSION	90*70*50mm (L*W*H)	-----
PACKING	0.39Kg; 18pcs/8Kg/0.84CUFT	-----

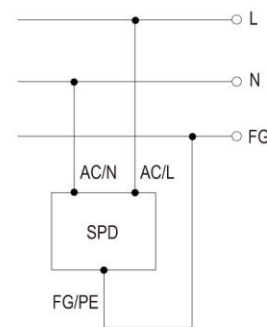
### NOTE

1. Varistors are to be removed during this test
2. Note.4,Note.5,Note.6,Note.7 are for EN61643-11(SPD-20-240P)
3. These devices have been subjected to Surge Testing and Current Test-short Circuit Current Rating by employing a class J Fuse Rated 30A and minimum 600VAC.

### ■ Mechanical Specification



### ■ CONNECTIONS

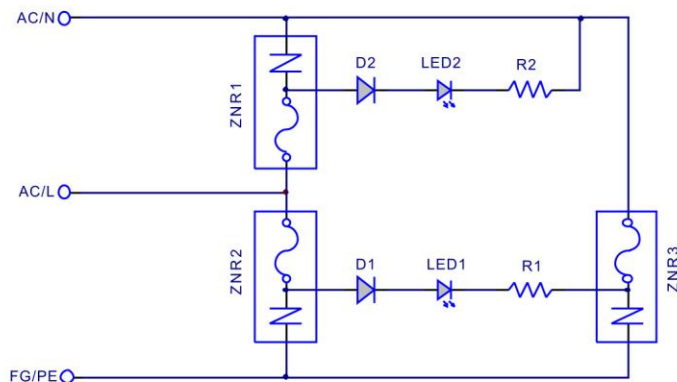




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### ■ Circuit Diagram



### ■ INSTALLATION

1. This document provides detailed information on how to install and operate the SPD-20 of Surge Protective Devices (SPDS).
2. The SPD-20 of Surge Protective Devices are installed/connected in parallel with the line of TN System
3. Incorrect installation may significantly impair the performance of the SPD. It is particularly important that all installation procedures and guidelines be followed exactly.
4. Before starting any installation procedures, verify service voltage (AC or DC) with a volt meter to ensure that the correct model has been selected for the supply voltage.
5. DO NOT INSTALL THE SPD IF MEASURED VOLTAGE EXCEEDS UNIT RATINGS.
6. REMOVE POWER FROM ELECTRICAL SYSTEM PRIOR TO INSTALLATION.
7. ENSURE THAT ALL CONNECTIONS ARE CORRECT BEFORE ENERGIZING.
8. Apply power (energize), LED indicator should illuminate. If LED is out, the SPD requires service.
9. Never install on an ungrounded system.

### ⚠ DANGER

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Thoroughly read and comprehend all instructions before commencing installation.

This equipment must be installed by qualified electrical personnel in accordance with all applicable codes which supersede these instructions.

Improper installation or misapplication of these devices may result in death or serious injury.

Failure to follow these instructions could result in damage to the electrical system(s) or related equipment.

### ⚠ CAUTION

#### HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

Never install this unit if it has fallen, has been dropped or looks damaged in any way. Return device to factory for diagnostic testing.