

## GENERAL DESCRIPTION

The **SPD150 / SPD60** surge protection devices incorporate the latest in protection technology and ease of installation. These devices are designed to dissipate the harmful energy produced by lightning strikes and other power line transients. These voltage transients can be very damaging to the equipment, shortening its life and reducing its efficiency.

All SPD150 / SPD60 surge protection devices incorporate a visual indication—**GREEN LED**—that lets the user know that the equipment is being protected. In addition, these devices incorporate a second visual indicator—**RED LED**—which indicates the presence of electrical power. When both visual indicators are ON, the device is powered and the load is protected. When the GREEN indicator is OFF but the RED indicator is ON, the load is powered but not protected. If the RED indicator is OFF, power to the load is missing but protection may still be available so the user should check the electrical panel first.

Proper grounding of the surge protector is essential for optimum protection. Another important feature of this surge protector is that the—**RED LED**—glows dim or not at all if the ground is not connected or of poor quality.

## INSTALLATION INSTRUCTIONS

### WARNING : RISK OF ELECTRICAL SHOCK.

**Completely read these instructions before installing. Installation and service to be performed by a qualified licensed electrician. Confirm SPD is rated for the particular installation by comparing voltage measurements to the Line Voltage (L-L, L-N) on the SPD label.**

All SPD150 / SPD60 protection devices include two black wires and one white Grounded / Neutral wire. The recommended place of installation is at the electrical panel servicing the load. Since surge protectors work by shunting the voltage spikes to ground, it is imperative that proper grounding be provided as required by local electrical codes. Use on solidly grounded systems only.

For 240 VAC installations, connect one BLACK lead to L1 and the other to L2 and WHITE wire to the GROUND BUS BAR or GROUNDED NEUTRAL BUS BAR.



For 120 VAC installations, connect one BLACK wire to the HOT lead, the other BLACK wire to the NEUTRAL leg and the WHITE wire to the GROUND BUS. Connection may also be made to the neutral / ground bus bar if no separate ground bus bar is provided.

All conductor lengths should be as short as possible and bends should not be sharp; a 4" bend radius or wider is recommended. Do not loop or coil wires.

The SPD150 / SPD60 surge protectors can be installed by removing a knockout from the disconnect or the panel box, inserting the nipple end and the wires of the surge protector through the exposed hole and tightening the retaining ring nut. Use the mounting tabs **ONLY** on metal surfaces using sheet metal screws.

### Note:

- 1. These are TYPE 2 devices intended to be connected to the load side of the service panel. TYPE 2 are intended to be installed on a circuit with over current protection. (20A fuse or circuit breaker).**
- 2. Suitable for use on a circuit capable of delivering no more than 20,000 rms symmetrical amperes.**
- 3. SPD's may get hot while in service. We recommend the use of a metal enclosure or cement backer board when mounting near flammable materials, such as wood or vinyl siding.**



### LOSS OF SURGE SUPPRESSION

- **Turn off all power supplying the equipment and isolate the surge protective device before Megger® or hi-potential testing**

**FAILURE TO FOLLOW THESE INSTRUCTIONS  
CAN RESULT IN DEATH OR SERIOUS INJURY**



### INADEQUATE GROUNDING HAZARD

- **Do not use on ungrounded systems**

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CAN RESULT IN DEATH OR SERIOUS INJURY**

5 Commonwealth Ave  
Woburn, MA 01801  
Phone 781-665-1400  
Toll Free 1-800-517-8431

## SPECIFICATIONS

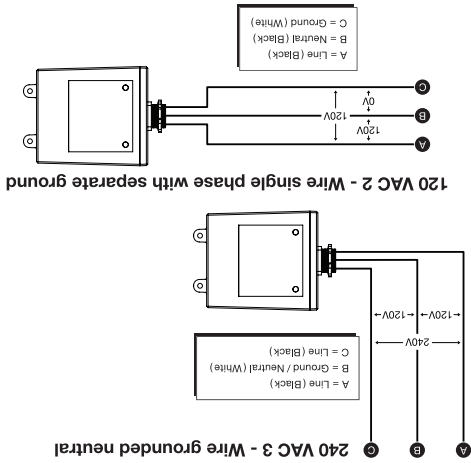
### SPD60

Service Type	120 / 240 single phase, 50 or 60 Hz
Maximum Surge Current	60,000 Amps
Response Time	< 5n seconds
Connection Method	Hardwired parallel to load
Installation Point	Electrical Disconnect or Electrical Panel
AC Protection Modes	Line - Line and Line - Ground
Indication	Green LED ( ON ) active protection and Red LED ( ON ) power applied
Approvals	UL-1449 4th Edition
Housing	Type 4X Enclosure IP67 Rated
Weight	1.0 lb ( 500 g )

### SPD150

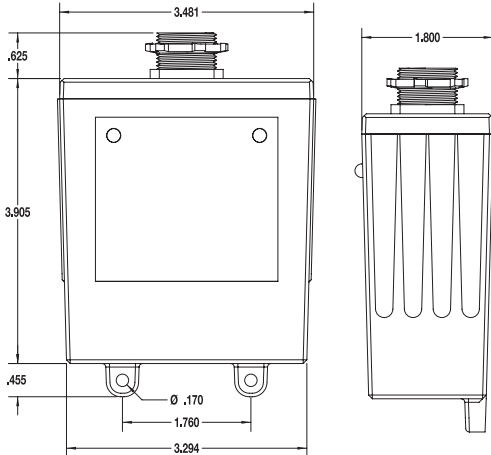
Service Type	120 / 240 single phase, 50 or 60 Hz
Maximum Surge Current	100,000 Amps
Response Time	< 5n seconds
Connection Method	Hardwired parallel to load
Installation Point	Electrical Disconnect or Electrical Panel
AC Protection Modes	Line - Line and Line - Ground
Indication	Green LED ( ON ) active protection and Red LED ( ON ) power applied
Approvals	UL-1449 4th Edition
Housing	Type 4X Enclosure IP67 Rated
Weight	1.0 lb ( 500 g )



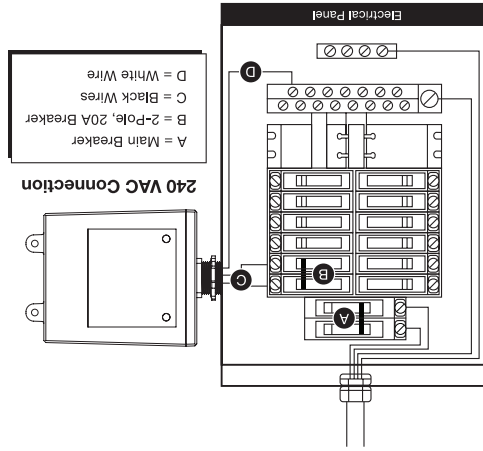


## INSTALLATION TO A / C DISCONNECT

## UNIT DIMENSIONS



## INSTALLATION TO ELECTRICAL PANEL



## TECHNICAL SUPPORT

Manufactured by CPS Products, Inc.



UL-1449 4th Edition

Certificate Number: U8U 16 08 83288 004

Designed in USA Assembled in China

#73-048C Rev. E

- HAZARD OF ELECTRICAL SHOCK, EXPLOSION OR ARC FLASH**
- Apply appropriate personal protective equipment (PPE) and follow safe electrical work practices. See NFPA 70E.
  - This equipment must only be installed and serviced by qualified electrical personnel.
  - Turn off all power supplying this equipment before working on or inside equipment.
  - Always use a properly rated voltage sensing device to confirm power is off.
  - Replace all devices, doors and covers before turning on power to this equipment.
  - This equipment must be effectively grounded per all applicable codes. Use an equipment-grounding conductor to connect this equipment to the power system-ground.
- FAILURE TO FOLLOW THESE INSTRUCTIONS WILL RESULT IN DEATH OR SERIOUS INJURY**

## ⚠ DANGER ⚠

# 5-2-1<sup>®</sup>

## COMPRESSOR SAVER<sup>™</sup>



## SPD60 / SPD150 INSTRUCTION MANUAL