One-port Panel SPD

PSP E series

PROSURGE® PSP E series panel SPDs are extra compact UL Type 1 Surge Protective Devices (SPDs) designed to protect single phase electrical distribution systems against the harmful effects of transient surges. These surges are the result of:

– Direct and indirect lightning strikes
– Power company load switching
– Upstream load switching at other facilities

The PSP E is constructed with Prosurge's patented PTMOV, which has a thermally protected and arc extinguishing technology as the core of Prosurge's competency. PSP E has a significant advantage in abnormal over-voltage & high fault current safety and thus ensures industry's highest level of safety and performance.

PSP E is tested and listed as Type 1 SPD in ANSI / UL 1449 5th, CSA C22.2. It is constructed in a waterproof plastic enclosure, with a LED light to demonstrate the protection status of the SPD.

The SPD Types Per ANSI / UL 1449 5th:

Type 1 *– Permanently connected SPDs intended for installation between the secondary of the service transformer and the line side of the service equipment overcurrent device, as well as the load side, including watt-hour meter socket enclosures and Molded Case SPDs intended to be installed without an external overcurrent protective device.*

- **Typical Applications:**
  - Outdoor/Indoor and commercial LED lighting
  - Telecommunication equipment
  - Medical electronics
  - Security & Alarm equipment
  - Manufacturing Facilities
  - Other Critical Electronic Equipment

Outstanding PTMOV Technology

Thermally Protected MOV technology. Fast and safely disconnect in the case of abnormal over-voltage or current fault conditions.

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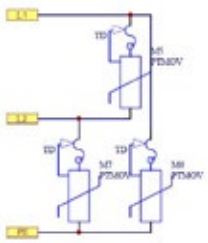
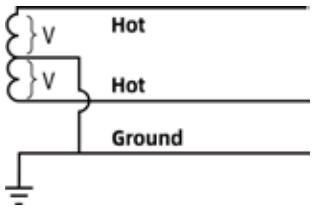
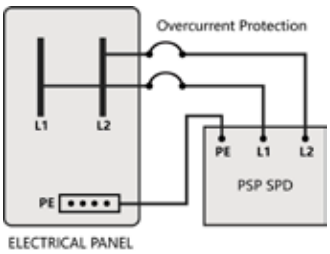
Features:

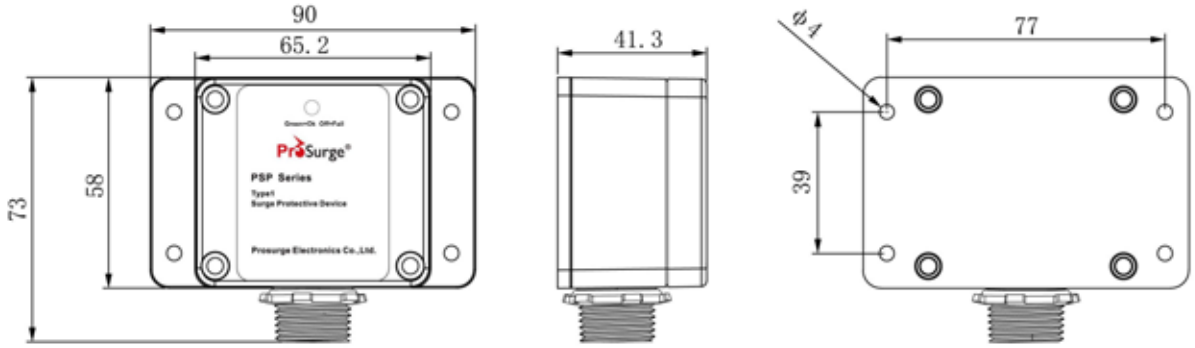
- UL 1449 5th Type 1 SPDs with SCCR up to 200kArms without external fuse or CB
- Prosurge Patented SCCR 200kArms thermally protected MOV technology(PTMOV) as key component
- Full modes protection
- High surge energy capability with compact size
- Low voltage protection rating
- 1/2" NPT for wire connection
- waterproof plastic enclosure to resist dirt, dust and water
- Failure indication

Basic circuit diagram

Basic circuit diagram of surge protection circuit	Un/ Power system (50/60 HZ)	Power distribution applied	Wire connection
PSPE120SP12/T1 	120/240 VAC Split phase (2W+G)		

Dimensions (unit: mm)

PSP series can be fixed with bolts. The dimension of the devices and bolt holes as below diagram:



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■ **General Specification:**

Part No.	PSPE120SP12/T1
System Voltage (50/60Hz)	120/240VAC split-phase
Operating frequency range	47 - 63 Hz
SPD category per UL 1449 5th	Type 1
Connection Type	Parallel Connected
Nominal discharge current	10kA
Max. Surge Capacity	50kA per Phase
Short circuit current rating	200kArms
Protection mode	L-G, L-L
VPR (Voltage Protection Rating)	L-G 700V, L-L 1200V
MCOV (Max. Continuous Operating Voltage)	150/320Vac
Power Status Indication	Normal=Green LED ON
Working Status Indication	Fail= LED OFF
Power Connecting	12AWG, 762mm (30") length
Working environments	Temperature –40℃ ~ +80℃, Humidity relative 5~95% (25℃), Altitude≤3km
Dimensions (W x D x H)	90 x 58 x 41 mm
Threaded NPT	1/2"NPT
Enclosure	Waterproof plastic enclosure
Storage	Temperature -10℃～+45℃, Humidity relative ≤75% (25℃)
Certification	ANSI/UL1449 5th edition, CSA C22.2