

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 NEMA 4X 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

■ 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
- NEMA 4X enclosure to resist dirt, dust and water
- Degradation failure indication.



Outstanding PTMOV Technology



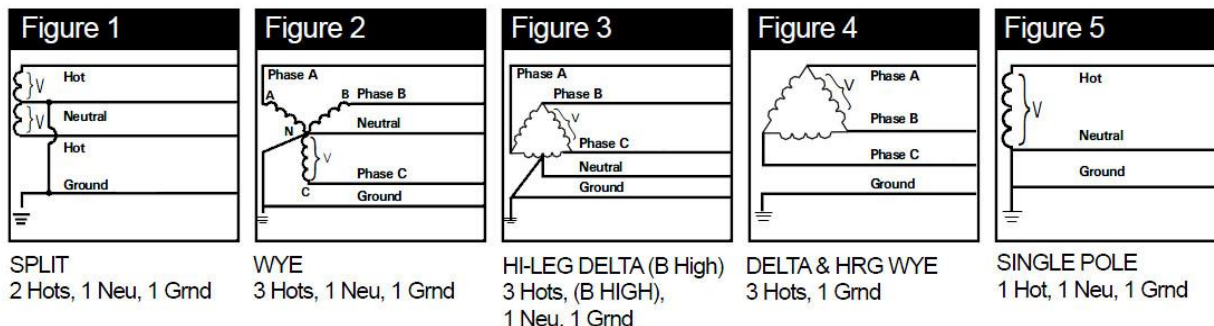
Thermally Protected MOV technology. Fast and safely disconnect in the case of abnormal over-voltage or current fault conditions.



One-port Panel SPDs

■ Voltage code for power distribution system

- 120SP, 240SP= 120/240V;240/480V-----Split-phase three-wire + ground (Figure1)
- 120S,127S,240S,277S,347S =120V,127V, 240V,277V, 347V-----Single-phase two-wire + ground (Figure5)

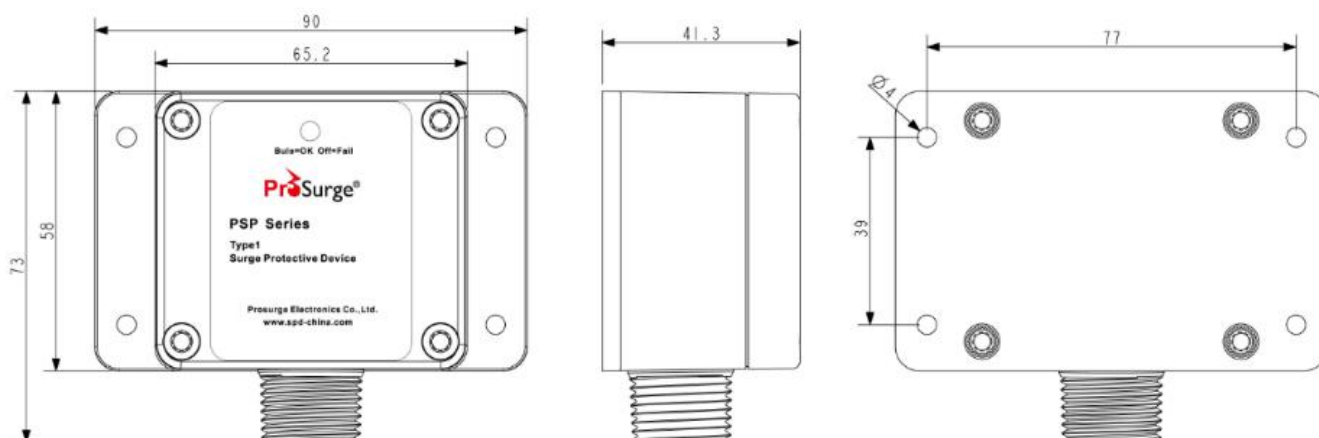


■ Basic circuit diagram

PSPE...	Un/ Power system (50/60 HZ)	Basic circuit diagram of surge protection circuit
PSPE... SP11 ...	120/240 VAC Split phase 240/480 VAC Split phase	
PSPE... SP12 ...	120/240 VAC Split phase 240/480 VAC Split phase ...	
PSPE... S11 ...	120 VAC single phase 127 VAC single phase 220 VAC single phase 230 VAC single phase 240 VAC single phase 277 VAC single phase 347 VAC single phase ...	
PSPE... S12 ...	120 VAC single phase 127 VAC single phase 220 VAC single phase 230 VAC single phase 240 VAC single phase 277 VAC single phase 347 VAC single phase ...	

■ Dimensions (unit: mm)

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



■ General Specification:

PSP Category	E
Certification	ANSI / UL 1449 5 th , CSA C22.2, Type 1
Connection Type	Parallel Connected
Surge Capacity	25-50kA per Phase
Nominal discharge current In	10kA
SCCR	200kArms
Power Status Indication	Normal= LED ON
Working Status Indication	Fail= LED OFF
Power Connecting	12AWG, 762mm (30") length, (L=black; N=white; PE=green)
Working environments	Temperature -40℃ ~ +80℃, Humidity relative 5~95% (25℃), Altitudes ≤ 3km
Dimensions (W x D x H)	90 x 58 x 41 mm
Enclosure	Plastic enclosure, NEMA 4X
Threaded NPT	1/2"NPT
Net Weight (typical value)	0.18 kg

One-port Panel SPDs

■ Technical Data:

Model No.	System Voltage(50 /60Hz)	In (kA)	protected mode				Voltage Protection Ratings (VPR @6KV/ 3kA)				Surge Capability	MCOV (Vac)
			L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L		
PSPE120SP11/T1	120/240V	10	✖	✓	✖	✓	-	700	-	1500	25kA/phase	150/300*
PSPE120SP12/T1	split-phase		✖	✓	✖	✓	-	700	-	1200	50kA/phase	150/320*
PSPE240SP11/T1	240/480V	10	✖	✓	✖	✓	-	1200	-	2500	25kA/phase	320/640*
PSPE240SP12/T1	split-phase		✖	✓	✖	✓	-	1200	-	1800	50kA/phase	320/550*

Note: “* “ MCOV for L1-L2;

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