

# PS Series

## Type 1CA (Din-rail Mounting SPDs)

High capacity Type 1,2 SPDs for overvoltage protection on switchgear and power distribution panels



### Introduction

The PS Series of surge protective devices are tested by Underwriters Laboratory and Listed to UL 1449, 4th Edition to help ensure equipment is protected with highly reliable surge protection technology. Delta and Wye system units are available in three configurations to increase application flexibility. The PS Series is for installation external to an electrical enclosure or panelboard. Application of PS Series units throughout a facility will help ensure that equipment is protected.

### Applications

PS Series are available in all common voltage and system configurations, and in a variety of peak surge current capacity ratings from 50 through 200 kA per phase. Several feature package options (filtering, audible alarm and Form C contacts) extend application flexibility along with a range of configurable options suitable for most commercial and light industrial applications covering service entrances, distribution panelboards and point-of-use applications.

### ● Features

- UL recognized Type 1ca SPD, passed short circuit current rating (SCCR) 200kA without external fuse or CB.
- High reliability due to global patented thermally protected MOV with special arc-extinguish device (TPAE technology).
- Large surge energy capability up to 50KA per mode.
- DIN-rail mounting configuration.
- Pluggable module for easy replacement
- Degradation failure indication.
- Meet both standards of UL1449-4th and IEC61643-11:2012

## ● Specifications

- Cross-section of connection wire : Single-strand 35mm<sup>2</sup> or # 2AWG Multi-strand 25mm<sup>2</sup> or # 4AWG
- Mounting : 35mm DIN-rail in accordance with EN 50022/DIN46277-3
- Enclosure material : thermoplastic; extinguishing degree UL94 V-0
- Degree of protection : IP20
- Thermal disconnector : Internal green – normal ; red - failure
- Switching capability Un/In : AC : 250V/0.5A DC: 250V/0.1A 125V/0.2A 75V/0.5A
- Max. Size of Remote connecting wire : Max. 1.5mm<sup>2</sup>(or # 16AWG)

Model No.	PS150-S	PS180-S	PS275A-S	PS320-S	PS420-S	PS550-S	PS690-S
Rated System Voltage	Single Phase 2W						
	120V	127V	220/230V	240/277V	347V	480V	660V
MCOV (Vac)	150	180	275	320	420	550	690
$I_n$ (kA) -8/20 μs- / $I_{max}$ (kA) -8/20 μs-	20 / 50					20 / 40	
VPR(Vpk) (kV)	0.7	1.0		1.2	1.5	1.8	2.5
SCCR(kA)	200						

Model No.	PS150T-S	PS255T-S
Rated System Voltage	Single Phase 2W GDT for N-G	
	120V	220 / 230 / 240V
MCOV (Vac)	150	255
$I_n$ (kA) -8/20 μs- / $I_{max}$ (kA) -8/20 μs-	20 / 50	
VPR(Vpk) (kV)	0.9	
SCCR(kA)	200	

Model No.	PS150/2P-S	PS180/2P-S	PS275A/2P-S	PS320/2P-S	PS420/2P-S
Rated System Voltage	Single Phase 2W + GND				
	120V	127V	220 / 230V	240 / 277V	660V
MCOV (Vac)	150	180	275	320	420
$I_n$ (kA) -8/20 μs- / $I_{max}$ (kA) -8/20 μs-	20 / 50			20 / 40	
VPR(Vpk) (kV)	0.7	1.0		1.2	1.5
SCCR(kA)	200				

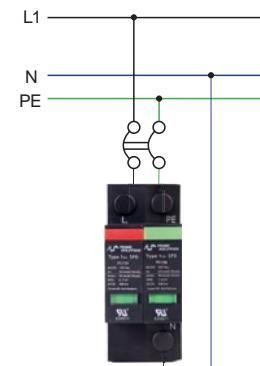
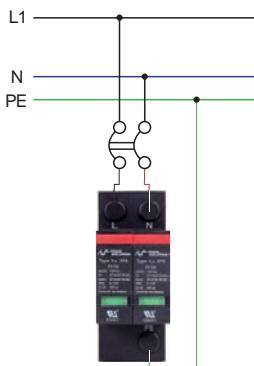
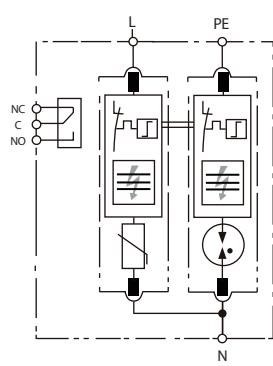
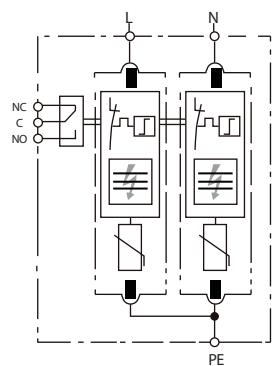
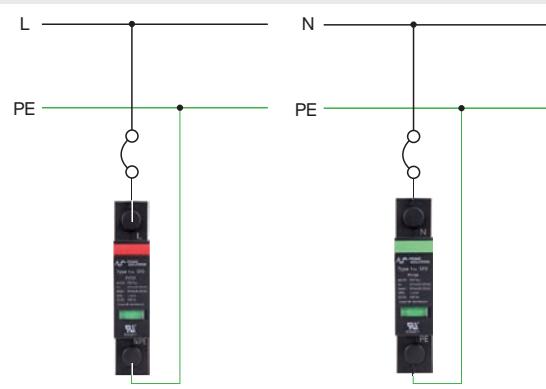
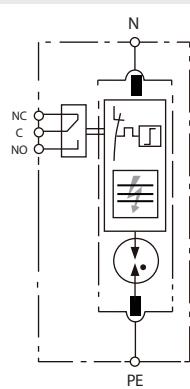
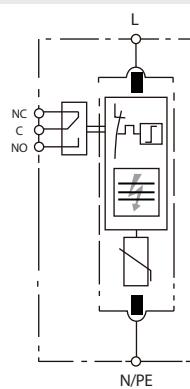
Model No.		PS150/PN-S	PS180/PN-S	PS275A/PN-S	PS320/PN-S	
Rated System Voltage		Single Phase 2W + GND GDT for N-G				
		120V	270V	220 / 230V	240V	
MCOV (Vac)	L-N	150	180	275	320	
	N-PE	150	150	255	255	
$I_n$ (kA) -8/20 $\mu$ s- / $I_{max}$ (kA) -8/20 $\mu$ s-		20 / 50				
VPR(Vpk) (kV)	L-N	0.7	1.0	1.0	1.2	
	N-PE	0.9	0.9	0.9	0.9	
SCCR(kA)		200				

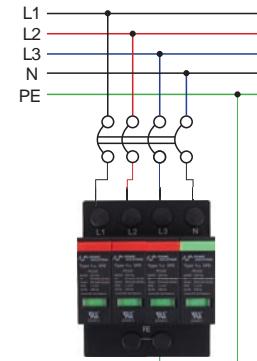
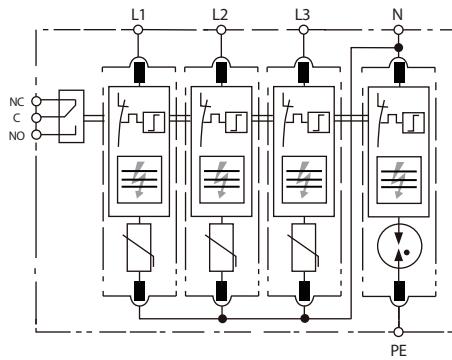
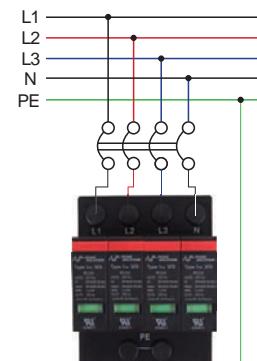
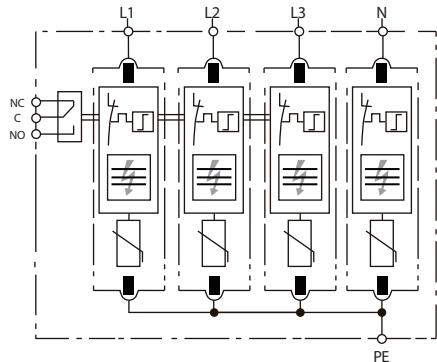
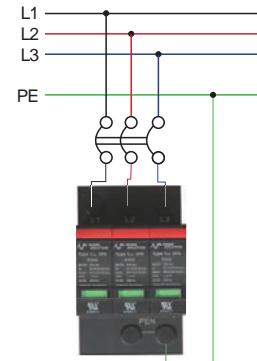
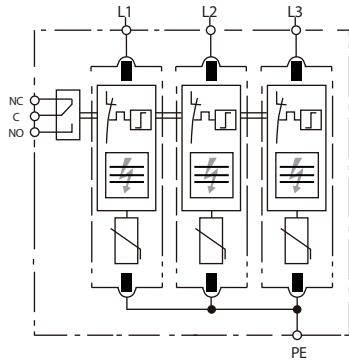
Model No.		PS150/3P-S	PS320/3P-S	PS320/3P-S	PS550/3P-S	PS690/3P-S	
Rated System Voltage		Double Phase 3W		Tri Phase 3W + GND			
		120V	240V	240V	277V	480V	690V
MCOV (Vac)		150	320	320	550	690	
$I_n$ (kA) -8/20 $\mu$ s- / $I_{max}$ (kA) -8/20 $\mu$ s-		20 / 50		20 / 50		20 / 40	
VPR(Vpk) (kV)		0.7	1.2	1.2	1.8	2.5	
SCCR(kA)		200		200			

Model No.		PS150/2P-S	PS180/2P-S	PS275A/2P-S	PS320/2P-S	PS420/2P-S
Rated System Voltage		Single Phase 2W + GND				
		120V	127V	220 / 230V	240 / 277V	660V
MCOV (Vac)		150	180	275	320	420
$I_n$ (kA) -8/20 $\mu$ s- / $I_{max}$ (kA) -8/20 $\mu$ s-		20 / 50				20 / 40
VPR(Vpk) (kV)		0.7	1.0		1.2	1.5
SCCR(kA)		200				

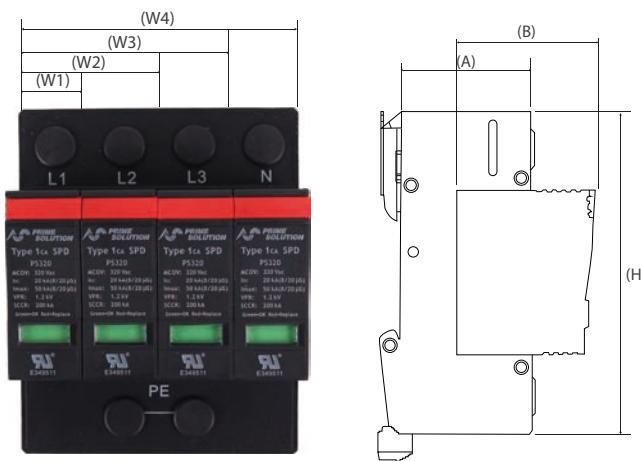
Model No.		PS150/3PN-S	PS275A/3PN-S		PS320/3PN-S
Rated System Voltage		Tri-Phase 4W + GND GDT for N-G			
		120/208V	220/380V	230/400V	240/415V
MCOV (Vac)	L-N	150	180	275	320
	N-PE	150	150	255	255
$I_h$ (kA) -8/20 $\mu$ s- / $I_{max}$ (kA) -8/20 $\mu$ s-		20 / 50			
VPR(Vpk) (kV)	L-N	0.7	1.0	1.0	1.2
	N-PE	0.9	0.9	0.9	0.9
SCCR(kA)		200			

## ● Basic Circuit Diagram





## ● Dimensions



	Size (inch/mm)
W1	0.71 / 18
W2	1.42 / 36
W3	2.13 / 54
W4	2.83 / 72
H	3.54 / 90
A	1.98 / 50.2
B	2.53 / 64.3