

# PS Series Surge Protective Devices

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



## Introduction

The PS1 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 PS1 Series is for installation external to an electrical enclosure or panelboard. Application of PS1 Series units throughout a facility will help ensure that equipment is protected.

## Applications

PS1 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

- Tri-colored LED status indicators display
- thermally protected Metal Oxide Varistor (MOV) technology to safely shunt overvoltages to ground while its thermal disconnect capability eliminates the need for additional fusing
- 200kA Short-Circuit Current Rating (SCCR) meets the highest NEC requirements
- Models available to meet the overvoltage protection needs of Wye and Delta electrical systems.
- PS1 Series has the highest nominal discharge current (In) of 20kA per UL 1449 4th Edition.
- 120kA to 400kA surge current capacity (Imax) ratings meet the needs of larger switchgear and power distribution panel applications
- Optional Form C contact relay, EMI/RFI filtering and surge counter available to meet additional system requirements.

# PS Series

## Type 1CA

### (Din-rail Mounting SPDs)



#### Specifications

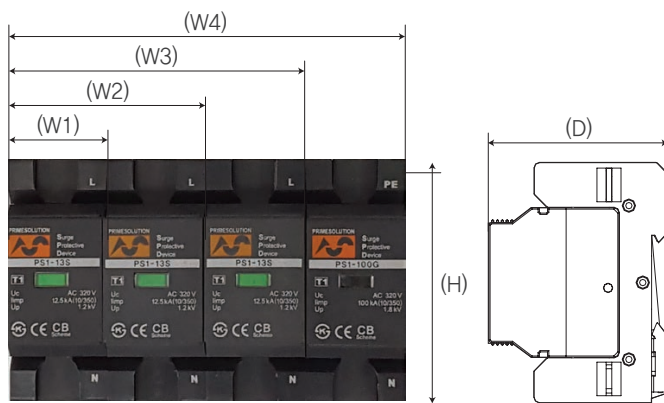
- Frequency (Hz) : 50/60
- Protection Mode : L-N / N-PE
- Degree of protection : IP 20
- Diagnostics : Green Flags (Protected) / Red Flags (Replace)
- Connection & Mounting Method : Parallel Connection Type / Wall Mounting
- Internal Disconnecter : Thermal Runaway Multi-Fusing Protection
- Size of connecting wire : 10 ~ 16 mm<sup>2</sup> (or # 7 ~ 5AWG)
- **Optional Functions** : **Remote Contact**

Model No.		PS1-13S	PS1-25S	PS1-50G	PS1-100G
Nominal Voltage Rating		Single-Phase 110~440V 1W+GND			
MCOV (Vac)		110 ~ 320			
$I_n$ (kA) / $I_{imp}$ (kA) -8/20 $\mu$ S- / -10/350 $\mu$ S-	L-N	40 / 12.5	80 / 25	-	-
	N-PE	-	-	50 / 50	100 / 100
VPR (Vpk)	L-N	1.2	1.3	-	-
	N-PE	-	-	1.8	1.8
SCCR (kA)		200	200	200	200

Model No.		PS1-13S2P	PS1-25S2P	PS1-13S/50G	PS1-25S/50G
Nominal Voltage Rating		Single-Phase 110~440V 2W+GND			
MCOV (Vac)		110 ~ 320			
$I_n$ (kA) / $I_{imp}$ (kA) -8/20 $\mu$ S- / -10/350 $\mu$ S-	L-N	40 / 12.5	80 / 25	40 / 12.5	80 / 25
	N-PE	-	-	50 / 50	50 / 50
VPR (Vpk)	L-N	1.2	1.3	1.2	1.3
	N-PE	-	-	1.8	1.8
SCCR (kA)		200	200	200	200

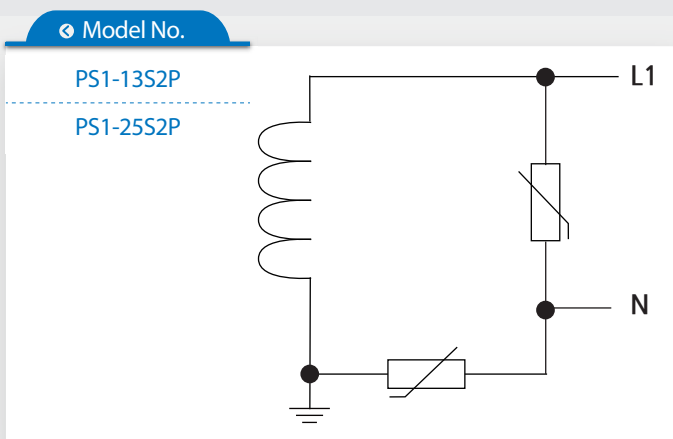
Model No.	PS1-13S3P	PS1-25S3P	PS1-13S3P/50G	PS1-25S3P/100G	
Nominal Voltage Rating	Tri-Phase 110~440V 3W+GND		Tri-Phase 110~440V 4W+GND		
MCOV (Vac)	110 ~ 320				
$I_n$ (kA) / $I_{imp}$ (kA) -8/20 $\mu$ S- / -10/350 $\mu$ S-	L-N	40 / 12.5	80 / 25	40 / 12.5	80 / 25
	N-PE	-	-	50 / 50	100 / 100
VPR (Vpk)	L-N	1.2	1.3	1.2	1.3
	N-PE	-	-	1.8	2.0
SCCR (kA)	200	200	200	200	

## ● Dimension

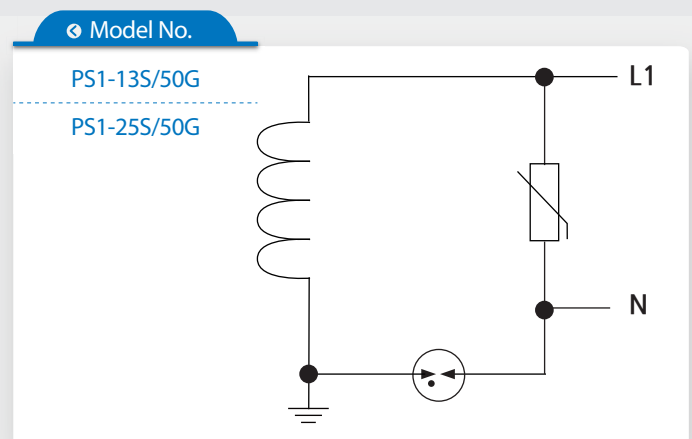


	Size (inch/mm)
W1	1.41 / 36
W2	2.83 / 72
W3	4.25 / 108
W4	5.66 / 144
H	3.54 / 90
D	2.63 / 67

## ● Circuit Diagram

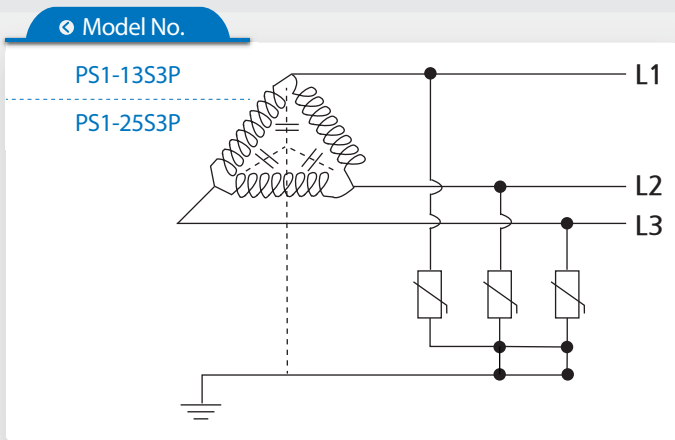


Single-Phase 110~440V 2W+GND

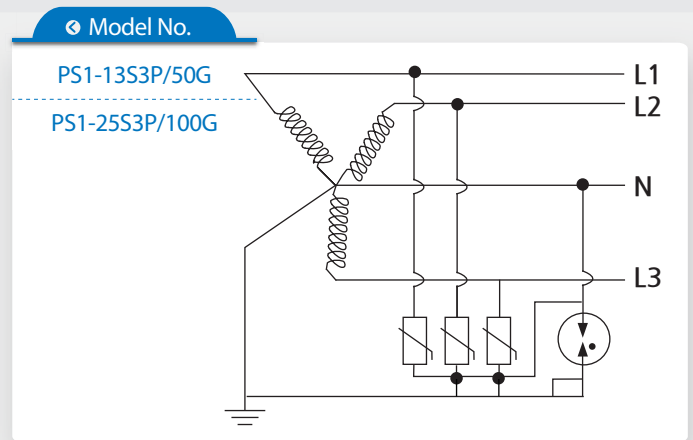


Single-Phase 110~440V 2W+GND

● **Circuit Diagram**



Tri-Phase 110~440V 3W+GND



Tri-Phase 110~440V 4W+GND

*memo*



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# PS Series

## Type 1,2 (AC Lines)



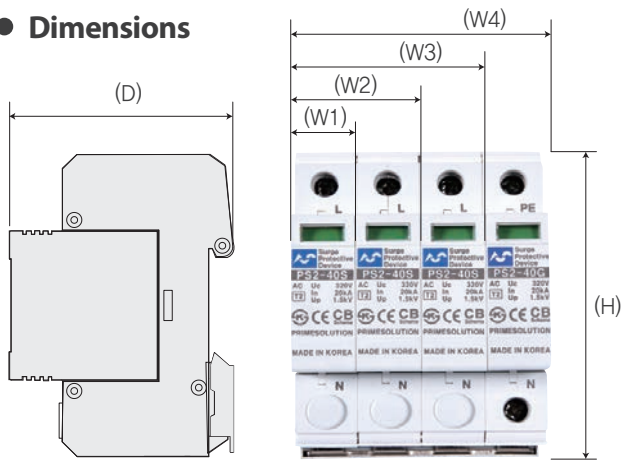
### Specifications

- Frequency (Hz)	: 50/60
- Protection Mode	: L-N / N-PE
- Degree of protection	: IP 20
- Diagnostics	: Green Flag (Protected) / Red Flag (Replace)
- Connection & Mounting Method	: Parallel Connection Type / Wall Mounting
- Internal Disconnecter	: Thermal Runaway Multi-Fusing Protection
- Size of connecting wir	: 10 ~ 16 mm <sup>2</sup> (or # 7 ~ 5AWG)
- <b>Optional Functions</b>	: <b>Remote Contact</b>

Model No.	PS2-40S	PS2-40G	PS2-40S2P	PS2-40S/40G
Nominal Voltage Rating	~275 1W+GND		Single-Phase ~275V 2W+GND	
MCOV (Vac)	110 ~ 320			
$I_n$ (kA) -8/20 $\mu$ S- / $I_{max}$ (kA) -8/20 $\mu$ S-	20 / 40	20 / 40	20 / 40	20 / 40
VPR (Vpk) (kV)	L-N	1.5	1.5	1.5
	N-G	-	1.5	1.5
SCCR (kA)	200	200	200	200

Model No.	PS2-40S3P	PS2-40S3P/40G
Nominal Voltage Rating	Tri-Phase 110~440V 3W+GND	Tri-Phase 110~440V 4W+GND
MCOV (Vac)	110 ~ 320	
$I_n$ (kA) -8/20 $\mu$ S- / $I_{max}$ (kA) -8/20 $\mu$ S-	20 / 40	20 / 40
VPR (Vpk) (kV)	L-N	1.5
	N-G	-
SCCR (kA)	200	200

## ● Dimensions

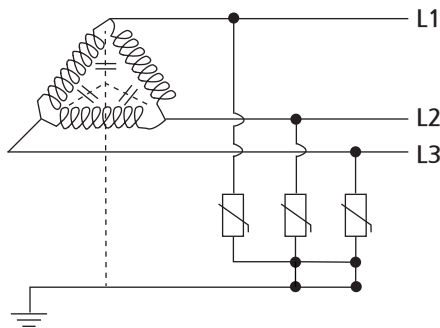


	Size(inch/mm)
W1	0.7 / 18
W2	1.41 / 36
W3	2.12 / 54
W4	2.83 / 72
H	3.54 / 90
D	2.57 / 65.5

## ● Circuit Diagram

### Model No.

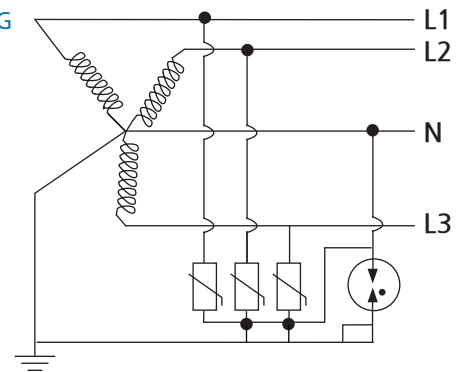
PS2-40S3P



Tri-Phase 110~440V 3W+GND

### Model No.

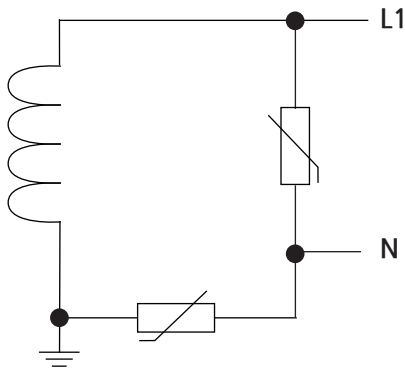
PS2-40S3P/40G



Tri-Phase 110~440V 4W+GND

### Model No.

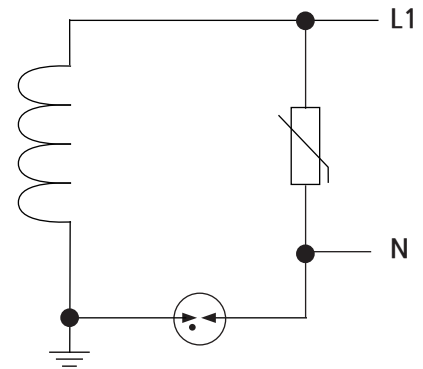
PS2-40S2P



Single-Phase 110~440V 2W+GND

### Model No.

PS2-40S/40G



Single-Phase 110~440V 2W+GND



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# PS Series

## Type 1,2 (Direct connection)

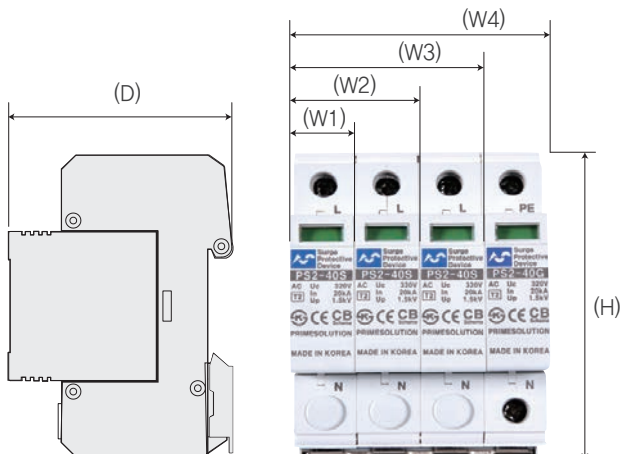


### Specifications

- Frequency (Hz) : 50/60
- Protection Mode : L-N / N-PE
- Degree of protection : IP 20
- Diagnostics : Green Flag (Protected) / Red Flag (Replace)
- Connection & Mounting Method : Parallel Connection Type / Wall Mounting
- Internal Disconnecter : Thermal Runaway Multi-Fusing Protection
- Size of connecting wir : 10 ~ 16 mm<sup>2</sup> (or # 7 ~ 5AWG)
- **Optional Functions** : **Remote Contact**

Model No.	PS2-40/750 1P	PS2-40/750 2P	PS2-40/1000 1P	PS2-40/1000 2P	PS2-40/1000 3P	PS2-40/1500 3P
Nominal Voltage Rating	~ DC 750V		~ DC 1000V			~ DC 1500V
MCOV (Vac)	750		1000			1500
$I_n$ (kA) -8/20 $\mu$ S- / $I_{max}$ (kA) -8/20 $\mu$ S-	20 / 40		20 / 40			20 / 40
VPR (Vpk) (kV)	2.8	3.8	3.8	3.8	3.8	2.8
SCCR (kA)						

### Dimensions



	Size(inch/mm)
W1	0.70 / 18
W2	1.41 / 36
W3	2.12 / 54
W4	2.83 / 72
H	3.54 / 90
D	2.57 / 65.5

# PS Series

## Type 1,2 (Direct connection)



### Specifications

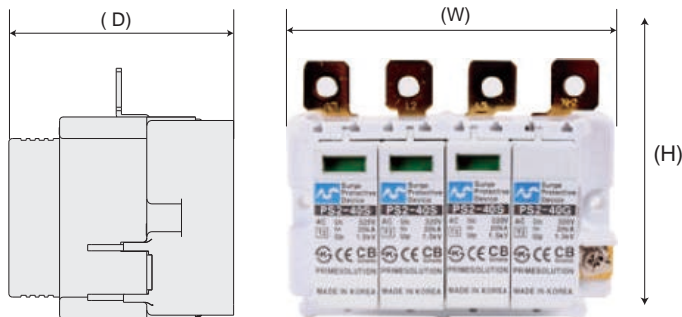
- Frequency (Hz) : 50/60
- Protection Mode : L-N / N-PE
- Degree of protection : IP 20
- Diagnostics : Green Flag (Protected) / Red Flag (Replace)
- Connection & Mounting Method : Parallel Connection Type / Wall Mounting
- Internal Disconnecter : Thermal Runaway Multi-Fusing Protection
- Size of connecting wir : 10 ~ 16 mm<sup>2</sup> (or # 7 ~ 5AWG)
- **Optional Functions** : **Remote Contact**

Model No.	PS2-40S3P-DM
Nominal Voltage Rating	Tri-Phase 110~440V 3W+GND
MCOV (Vac)	1000
$I_n$ (kA) -8/20 $\mu$ S- / $I_{max}$ (kA) -8/20 $\mu$ S-	20 / 40
VPR (Vpk) (kV)	1.5
SCCR (kA)	

Model No.	PS2-40S3P/40G-DM
Nominal Voltage Rating	Tri-Phase 110~440V 3W+GND
MCOV (Vac)	1500
$I_n$ (kA) -8/20 $\mu$ S- / $I_{max}$ (kA) -8/20 $\mu$ S-	20 / 40
VPR (Vpk) (kV)	1.5
SCCR (kA)	



### ● Dimensions

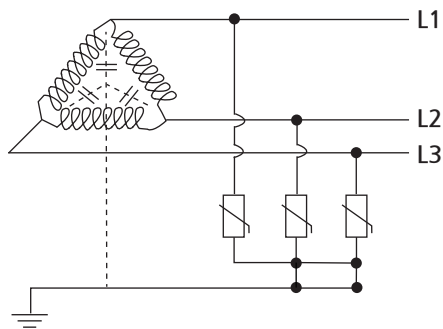


	Size(inch/mm)
W	3.9 / 99
H	2.9 / 74
D	2.5 / 64

### ● Circuit Diagram

Model No.

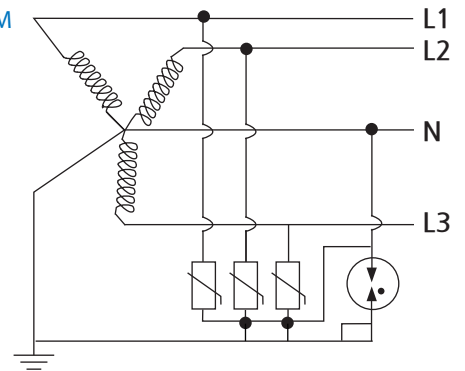
PS2-40S3P-DM



Tri-Phase 110~440V 3W+GND

Model No.

PS2-40S3P/40G-DM



Tri-Phase 110~440V 3W+GND



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