

NEW PRODUCT BRIEF

Bourns® 1250A Series General Duty AC Surge Protective Device



INTRODUCTION

Providing an economical, easy-to-install surge protection solution, the [Bourns® Model 1250A Series SPDs](#) are a new family of Din-Rail AC surge protective devices with pluggable/replaceable modules. These protectors are designed specifically to meet high-risk electrical service entrance and branch panel protection requirements.

Model 1250A SPDs are intended to be installed on the load side at the front end of the installation, which is in the main switchboard, and positioned close to sensitive terminals or installations without LPS (lightning rods). The Model 1250A Series is a general duty AC SPD with a maximum discharge current rating of 50 kA (8/20 μ s). The Model 1250A Series complies with UL 1449 and IEC 61643-11 standards.

FEATURES AND BENEFITS

- Complies with UL 1449 and IEC/EN 61643-11 standards
- UL recognized Type 4, Type 2 Location SPD, passed short circuit current rating (SCCR) 200 kA without external fuse or circuit breaker
- Features high-reliability MOV with Advanced Thermal Disconnecter (TD+)
- Large surge energy capability – up to 50 kA per mode
- Degradation failure indication feature
- Din-Rail mountable for easy installation
- Pluggable module simplifies replacement
- RoHS compliant*

APPLICATIONS

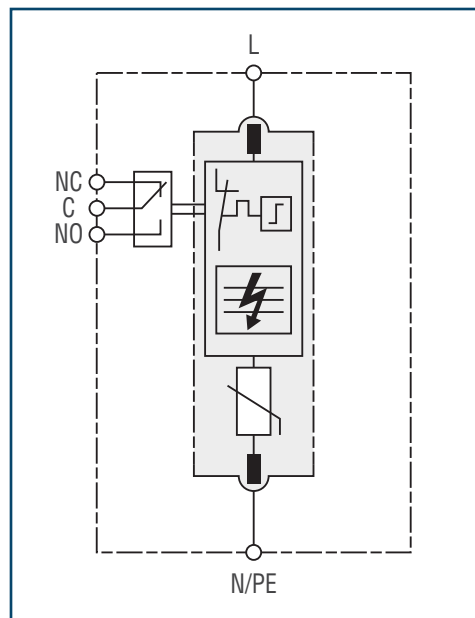
- Electrical service entrance
- Branch panels
- Broad range of power circuits
- Heavy industrial equipment
- EV charging stations

*RoHS Directive 2015/863, Mar 31, 2015 and Annex.

ELECTRICAL CHARACTERISTICS

Characteristic	Model No.					
	1250A-xS-120	1250A-xS-230	1250A-xS-277	1250A-xS-400	1250A-xS-480	1250A-xS-600
AC Network	120 / 240 V 120 / 208 V	220 / 380 V 230 / 400 V	240 / 415 V 277 / 480 V	277 / 480 V 347 / 600 V	347 / 600 V 480 V (Delta)	600 V (Delta)
Compliance	UL1449; EN/IEC 61643-11					
Category UL/EN/IEC	Type 4, Type 2 location / T2 / Class II					
Product Technologies	High energy MOV Technology Advanced Thermal Disconnecter (TD+)					
Connection Mode	1-Pole, L-N or L-G or N-PE					
AC System	IT, TT, TN, Single, Split Phase, Delta, Wye					
Max. Operating Voltage (MCOV)	150 V	275 V	320 V	420 V	550 V	690 V

ELECTRICAL DIAGRAM



MORE INFORMATION

- DC Power SPDs: [Model 1420 Series SPD](#)
- [High Energy MOVs](#)
- [High Current GDTs](#)
- [Power TVS Diodes](#)

UNIQUE CONSTRUCTION

Over time, sustained abnormal overvoltage high-energy surges can cause SPDs and/or MOVs to go into thermal runaway, resulting in overheating, smoke, or potentially leading to a fire hazard. SPDs that feature an Advanced Thermal Disconnecter (TD+) offer an enhanced protection solution that eliminates the need for upstream overcurrent protection.

Model 1250A Series SPDs also feature a window fault indicator and remote alarm to help monitor the operating status of the surge protector.

HOW TO ORDER

Model Designator **1250A - 4 S - 120**

1250A = Advanced Version of 1250 Series

Configuration (number of poles) **4** = Four Protected Poles

Remote Signaling Code **S** = Remote Signaling

Operating Voltage **120** = 120/240 V, 120/208 V
230 = 220/380 V, 230/400 V
277 = 240/415 V, 277/480 V
400 = 277/480 V, 347/600 V
480 = 347/600 V, 480 V (Delta)
600 = 600 V (Delta)

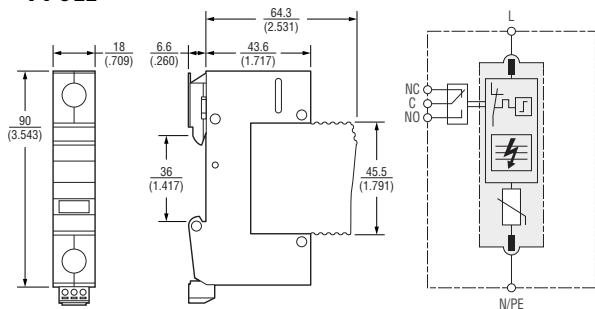
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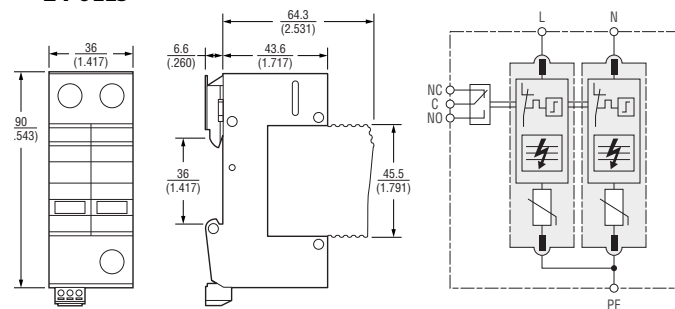


PRODUCT DIMENSIONS & SCHEMATICS

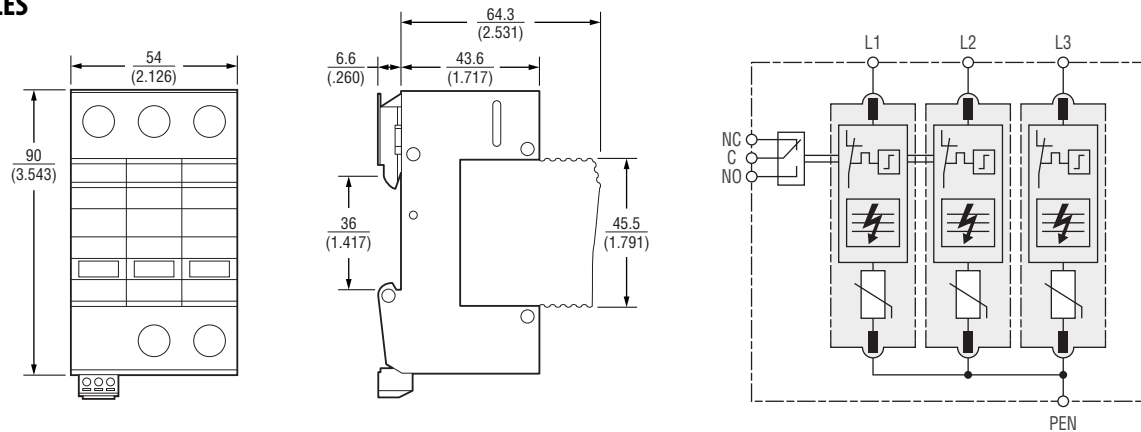
1 POLE



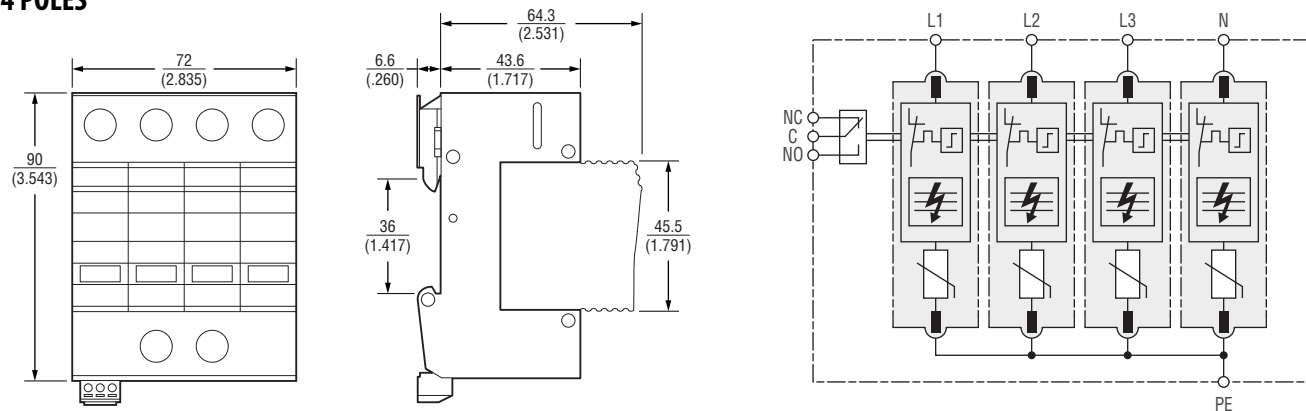
2 POLES



3 POLES



4 POLES



3D Models are available in STP format.

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