



Features

- 50 kA max. discharge current rating
- Multi-pole uni-block design
- DIN Rail mountable
- UL 60691 compliant integrated thermal disconnect
- Visual fault indicator
- Remote signalling capability
- Compact design ideal for limited spaces
- Standards compliance: CE, RoHS, UL
- RoHS compliant*

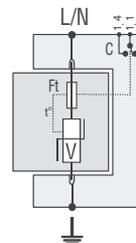
1250 Series General Duty AC Surge Protective Device

General Information

The Bourns® Model 1250 Series is a general duty Surge Protective Device (SPD) designed to protect high risk electrical service entrance and branch panels. This SPD is intended to be installed at the front end of the installation, in the main switchboard, close to sensitive terminals or in installations without LPS (lightning rods).

The Model 1250 Series is a single-pole module that can be configured for both common mode and differential mode protection in single and three phase applications up to 480 V.

Electrical Diagram



- V : High energy varistor
- Ft : Thermal fuse
- C : Remote signaling contact
- t° : Thermal disconnection system

Electrical Characteristics

| Characteristic | Model No. | | | |
|---|---|-------------------------|---------------------------------------|---------------------|
| | 1250-xS-120 | 1250-xS-230 | 1250-xS-400 | 1250-xS-480 |
| AC Network | 120/240 V, 120/208 V | 220/380 V, 240/415 V | 220/380 V, 277/480 V, 347/600 V | 347/600 V, 480 V |
| Connection Mode | 1-Pole, L-N or L-G | | | |
| AC System | IT, TT, TN, Single, Split Phase, Delta, Wye | | | |
| Max. Operating Voltage (MCOV) | 150 V | 275 V | 420 V | 550 V |
| TOV Withstand | 230 V | 440 V | 440 V | 770 V |
| Leakage Current at Uc | < 1 mA | | | |
| Follow Current | None | | | |
| UL Nominal Discharge Current (In) 15 Impulses 8/20 μs | 20 kA | | | |
| Max. Discharge Current (I _{max}) 1 Impulse 8/20 μs | 50 kA | | | |
| UL Voltage Protection Rating (VPR) | 700 V | 1000 V | 1200 V | 1800 V |
| Protection Level (Up) | 0.9 kV | 1.25 kV | 1.8 kV | 2.5 kV |
| UL Short-Circuit Current Rating (SCCR) | 100kAIC | | | |

General Characteristics

| Characteristic | Model No. | | | |
|-------------------------|---|-------------|-------------|-------------|
| | 1250-xS-120 | 1250-xS-230 | 1250-xS-400 | 1250-xS-480 |
| Thermal Disconnect | UL 60691 | | | |
| Overcurrent Protection | Time Delay - 125 A Max. | | | |
| Connection | By Screw Terminals, #6 AWG Max. | | | |
| Dimensions | 90 x 18 x 67 mm / (3.543 x 0.709 x 2.638 In.) | | | |
| Mounting | DIN Rail, 35 mm Symmetrical | | | |
| Remote Signal Indicator | 250 Vac Max., 2 A | | | |
| Enclosure Material | Thermoplastic UL 94V0 | | | |

Environmental Characteristics

| Characteristic | Model No. | | | |
|-----------------------|--|-------------|-------------|-------------|
| | 1250-xS-120 | 1250-xS-230 | 1250-xS-400 | 1250-xS-480 |
| Operating Temperature | -50 °C to +85 °C | | | |
| Operating Altitude | 13,000 ft. (4,000 m) | | | |
| Relative Humidity | 5 to 95 % Non-condensing, up to 100 % External | | | |
| Environmental Rating | IP 20 | | | |

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

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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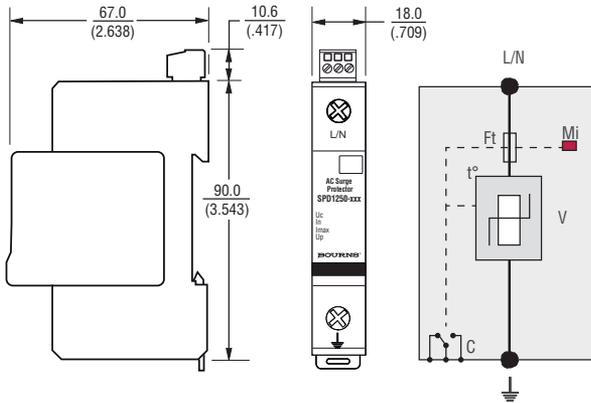
Applications

- Electrical service entrance
- Branch panels

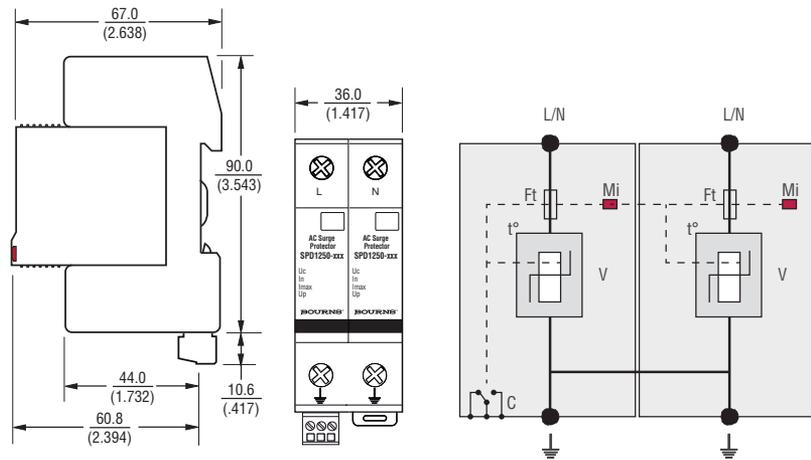
1250 Series General Duty AC Surge Protective Device **BOURNS®**

Product Dimensions and Schematics

1250-1S-xxx

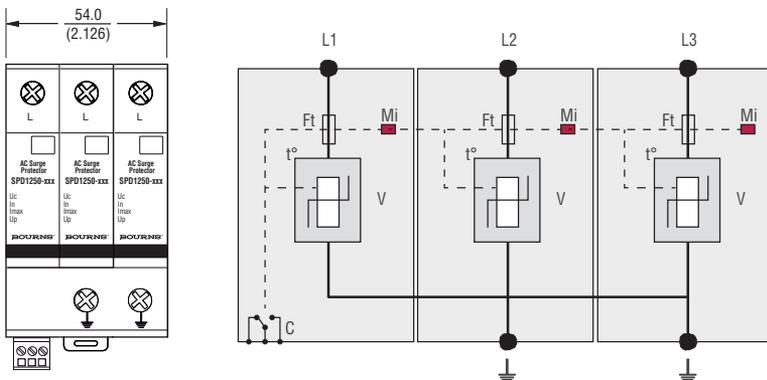


1250-2S-xxx



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

1250-3S-xxx



Specifications are subject to change without notice.

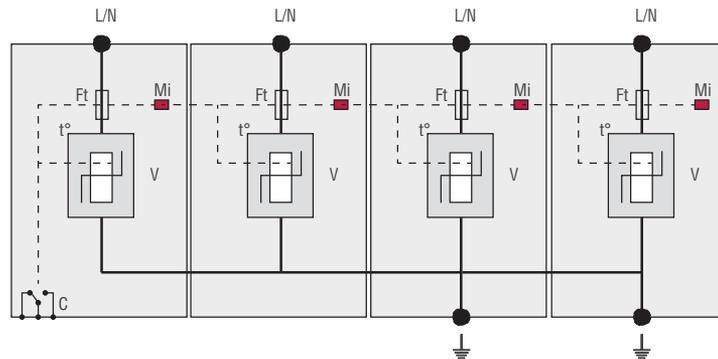
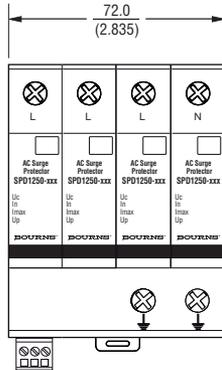
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1250 Series General Duty AC Surge Protective Device **BOURNS®**

Product Dimensions and Schematics (Continued)

1250-4S-xxx



DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

Standards Compliance

IEC61643-1 - International Class I, Class II
 EN 61643-11 - Europe Class I, Class II
 NF EN 61643-11 - France Class I, Class II
 UL1449 3rd Edition - USA Type 4, Type 2 Location
 UL1449 3rd Edition - Canada Type 4, Type 2 Location
 CSA C22.2 No. 8-M1986 Class 9091 32, Class 9091 92
 RoHS RoHS Directive 2002/95/EC
 Jan. 27, 2003 including annex and
 RoHS Recast 2011/65/EU June 8, 2011

How To Order

Series _____ **1250 - x S - xxx**
 Configuration _____
 1 = One Protected Pole
 2 = Two Protected Poles
 3 = Three Protected Poles
 4 = Four Protected Poles
 Remote Signaling Code _____
 S = Remote Signaling
 Operating Voltage _____
 120 = 120/240 V, 120/208 V
 230 = 220/380 V, 240/415 V
 400 = 220/380 V, 277/480 V, 347/600 V
 480 = 347/600 V, 480 V

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REV. 10/19

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